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OFFICIAL GAZETTE UNITED STATES PATENT OFFICE

VOL. 252-253

JULY-AUGUST

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ERRATA.

1,271,470, page 199, in heading, name of patentee, for "Tanajiro Ibaraki" read *Tanejiro Ibaraki*.
1,273,640, page 889, in heading, assignment, after the word "assignor" insert the words *of one-half*.
VOL. 252.

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Patents Nos. 1,270,762 to 1,271,530.

THE OFFICIAL GAZETTE OF THE United States Patent Office.

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[PUBLISHED JULY 20, 1918.]

The OFFICIAL GAZETTE is mailed under the direction of the Superintendent of Documents, Government Printing Office, to whom all subscriptions should be made payable and all communications respecting the Gazette should be addressed. Issued weekly. Subscriptions, $5.00 per annum; single numbers, 10 cents each.

Printed copies of patents are furnished by the Patent Office at 5 cents each. For the latter, address the Commissioner of Patents, Washington, D. C.

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Issue of July 2, 1918.

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Reissues	2	No. 14,490 to No.	14,491,	inclusive.
Total	881			

Notice—Photostat Copies.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., June 10, 1918.

Owing to difficulties encountered in obtaining the services of competent typists notice is hereby given that in order to avoid delays the Patent Office reserves the right to furnish photostat copies in lieu of type-written copies, in filling orders for copies of its records, on and after August 1, 1918, unless otherwise specifically directed.

J. T. NEWTON,
Commissioner.

Interference Notices.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., July 1, 1918.

Five Points Chemical Co., their assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of Harriet W. Belden, of 322 West Twenty-fifth street, Minneapolis, Minn., for registration of a trade-mark and trade-mark registered January 24, 1893, No. 22,373, to Five Points Chemical Co., of Rolla, Mo., and a notice of such declaration sent by registered mail to said Five Points Chemical Co. at the said address having been returned by the post-office undeliverable, notice is hereby given that unless said Five Points Chemical Co., their assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

R. F. WHITEHEAD,
First Assistant Commissioner.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., July 6, 1918.

Davis Chemical Co., its assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of the Fig-O-Lax Manufacturing Company, 521 Margin street, Grenada, Miss., for registration of a trade-mark and trade-mark registered April 26, 1892, No. 21,056, to the Davis Chemical Co., Ypsilanti, Mich., and a notice of such declaration sent by registered mail to the said Davis Chemical Co. at the said address having been returned by the post-office undeliverable, notice is hereby given that unless said Davis Chemical Co., its assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

R. F. WHITEHEAD,
First Assistant Commissioner.

Suspension of Actions on Applications.

RULE 77. If an applicant neglect to prosecute his application for one year after the date when the last official notice of any action by the Office was mailed to him, the application will be held to be abandoned, as set forth in Rule 171.

Suspensions will only be granted for good and sufficient cause, and for a reasonable time specified. Only one suspension may be granted by the Primary Examiner; any further suspension must be approved by the Commissioner.

Whenever action upon an application is suspended upon request of an applicant, and whenever an applicant has been called upon to put his application in condition for interference, the period of one year running against the application shall be considered as beginning at the date of the last official action preceding such actions.

Whenever, during a time when the United States is at war, publication of an invention by the granting of a patent might, in the opinion of the Commissioner, be detrimental to the public safety or defense or might assist the enemy or endanger the successful prosecution of the war, he may suspend action on the application therefor.

Interference Defined.

RULE 93. An interference is a proceeding instituted for the purpose of determining the question of priority of invention between two or more parties claiming substantially the same patentable invention. In order to ascertain whether any question of priority arises the Commissioner may call upon any junior applicant to state in writing the date when he conceived the invention under consideration. All statements filed in compliance with this rule will be returned to the parties filing them. In case the applicant makes no reply within the time specified, not less than ten days, the Commissioner will proceed upon the assumption that the said date is the date of the oath attached to the application. The fact that one of the parties has already obtained a patent will not prevent an interference, for, although the Commissioner has no power to cancel a patent, he may grant another patent for the same invention to a person who proves to be the prior inventor.

12521

APPLICATIONS UNDER EXAMINATION.

Condition at Close of Business June 28, 1918.

Room No.	Divisions and subjects of invention.	Oldest new application and oldest action by applicant awaiting office action. New.	Amended.	No. of applications awaiting action.
314	1. Closure Operators; Fences; Gates; Harrows and Diggers; Plows; Railway Gates; Planting; Scattering Unloaders; Trees, Plants, and Flowers.	May 16	May 27	150
128	2. Bee Culture; Curtains, Shades, and Screens; Dairy; Label Pasting and Paper Hanging; Paper Files and Binders; Medicines; Pneumatics; Presses; Tents, Canopies, Umbrellas, and Canes; Tobacco.	Mar. 19	Apr. 5	259
175	3. Annealing and Tempering; Electric Heating and Rheostats; Electrochemistry; Heating; Metal-Founding; Metallurgical Apparatus; Metallurgy; Plastic Metal Working.	Apr. 22	May 8	208
284	4. Conveyers; Elevators; Excavating; Hoisting; Material or Article Handling; Pneumatic Despatch; Pushing and Pulling Implements; Railway Mail Delivery; Store-Service; Traversing Hoists.	May 23	June 12	165
167	5. Bookbinding; Harvesters; Jewelry; Music	Mar. 23	May 14	219
318	6. Bleaching and Dyeing; Chemicals; Explosives; Fertilizers; Liquid Coating Compositions; Plastic Compositions; Preserving; Substance Preparation.	Mar. 7	May 2	379
312	7. Educational Appliances; Games and Toys; Optics; Velocipedes	Feb. 19	May 16	322
131	8. Beds; Chairs; Flexible-Sheet Securing Devices; Furniture; Kitchen and Table Articles; Store Furniture; Supports.	May 15	June 3	240
221	9. Air and Gas Pumps; Hydraulic Motors; Motors, Fluid; Motors, Fluid-Current; Pumps; Marine Propulsion.	Feb. 9	June 12	427
235	10. Carriages and Wagons; Motor Vehicles	Mar. 11	May 20	541
154	11. Boot and Shoe Making; Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Spring Devices; Whips and Whip Apparatus.	Apr. 20	May 21	193
322	12. Journal-Boxes, Pulleys, and Shafting; Machine Elements	Mar. 13	May 1	722
329	13. Ammunition and Explosive Charge Making; Bolt, Nail, Nut, Rivet, and Screw Making; Button Making; Chain, Staple, and Horseshoe Making; Driven, Headed, and Screw-Threaded Fastenings; Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Tools and Implements, Making; Metal Working; Needle and Pin Making; Nut and Bolt Locks; Turning.	Feb. 27	May 4	525
323	14. Compound Tools; Cutting and Punching Sheets and Bars; Farriery; Metal-Bending; Sheet-Metal Ware, Making; Tools; Wire Fabrics and Structure; Wire-Working.	Apr. 10	Apr. 29	167
308	15. Bread, Pastry, and Confection Making; Coating; Fuel; Glass; Laminated Fabrics and Analogous Manufactures; Paper-Making and Fiber Liberation; Plastic Block and Earthenware Apparatus; Plastics.	May 29	June 5	241
112	16. Electric Signaling-A; Radiant Energy; Telegraphy; Telephony	Feb. 25	Apr. 8	494
307	17. Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet Material Associating or Folding; Sheet Feeding or Delivering; Type Setting.	Apr. 24	May 3	109
229	18. Fluid-Pressure Regulators; Injectors and Ejectors; Liquid Heaters and Vaporizers; Miscellaneous Heat-Engine Plants; Speed Responsive Devices; Steam and Vacuum Pumps; Steam-Engines; Steam-Engine Valves.	Feb. 15	Apr. 1	359
236	19. Dampers, Automatic; Furnaces; Heating Systems; Stoves and Furnaces; Domestic Cooking Vessels	Apr. 11	Apr. 1	356
179	20. Artificial Body Members; Builders' Hardware; Cutlery; Dentistry; Locks and Latches; Safes; Undertaking.	May 8	June 10	150
212	21. Brakes and Gins; Carding; Cloth-Finishing; Continuous-Strip Feeding; Cordage; Felt and Fur; Knitting and Netting; Silk; Spinning; Weaving; Winding and Reeling.	Mar. 5	Apr. 20	233
249	22. Aeronautics; Firearms; Ordnance	Apr. 2	June 1	286
217	23. Acoustics; Coin-Handling; Horology; Recorders; Registers; Sound Recording and Reproducing; Time-Controlling Mechanism.	Mar. 25	May 16	266
144	24. Apparel; Apparel Apparatus; Sewing-Machines; Garment Supporters	May 6	May 20	202
315	25. Agitating; Butchering; Centrifugal Bowl Separators; Mills; Threshing; Vegetable Cutters and Crushers; Gas Separation.	May 13	May 16	165
105	26. Electricity, Generation; Motive Power	Dec. 8	Apr. 1	502
214	27. Brushing and Scrubbing; Grinding and Polishing; Laundry; Washing Apparatus	Apr. 27	June 5	251
225	28. Internal-Combustion Engines	Mar. 18	May 3	376
147	29. Boring and Drilling; Coopering; Fire-Escapes; Ladders; Wheelwright-Machines; Wooden Buildings; Wood-Sawing; Wood-Turning; Woodworking; Woodworking Tools.	Feb. 23	Mar. 1	458
152	30. Illuminating-Burners; Illumination; Liquid and Gaseous Fuel Burners; Type-Writing Machines	Mar. 21	May 18	368
172	31. Alcohol; Ammonia, Water, and Wood Distillation; Charcoal and Coke; Gas, Heating and Illuminating; Hides, Skins, and Leather; Hydraulic Cement and Lime; Mineral Oils; Oils, Fats, and Glue; Sugar and Salt.	Apr. 3	Apr. 26	259
278	32. Gas and Liquid Contact Apparatus; Heat Exchange; Packaging Liquids; Refrigeration	Jan. 12	May 4	637
70	33. Bridges; Hydraulic Engineering; Masonry and Concrete Structures; Metallic Building Structures; Paving; Roofs.	Apr. 13	May 18	215
304	34. Railways; Railway Rails and Joints; Railway Rolling Stock; Railway Ties and Fasteners	June 6	June 6	86
57	35. Buckles, Buttons, Clasps, Etc.; Card, Picture, and Sign Exhibiting; Signals; Toilet	Feb. 15	Jan. 26	527
204	36. Driers; Geometrical Instruments; Measuring Instruments; Photography; Force Measuring	May 4	May 31	447
107	37. Electric Lamps; Electricity, Circuit Makers and Breakers; Electricity, Conduits; Electricity, General Applications.	Feb. 19	Feb. 21	686
378	38. Animal Husbandry; Earth Boring; Fishing and Trapping; Stationery; Stone-Working; Wells	June 8	May 21	137
220	39. Water Distribution; Multiple Valves	Feb. 23	Mar. 11	350
273	40. Baggage; Bottles and Jars; Check-Controlled Apparatus; Cloth, Leather, and Rubber Receptacles; Deposit and Collection Receptacles; Metallic Shipping and Storing Vessels; Package and Article Carriers; Paper Receptacles; Special Receptacles and Packages; Wooden Receptacles.	Apr. 5	Apr. 11	477
125	41. Railway Draft Appliances; Resilient Tires and Wheels	Mar. 25	May 7	291
114	42. Electricity, Conductors; Railway Signaling; Electricity-Transmission to Vehicles; Electric Signaling	Jan. 16	Jan. 25	628
262	43. Baths and Closets; Dispensing; Dispensing Beverages; Electricity, Medical and Surgical; Fire-Extinguishers; Sewerage; Surgery; Water Purification.	Apr. 3	May 18	214
268	44. Air-Guns, Catapults, and Targets; Ammunition and Explosive Devices; Boats and Buoys; Ships	May 1	May 31	154
279	45. Clutches; Lubrication; Motors; Railway Brakes	Mar. 7	Mar. 25	328

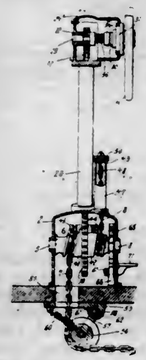
Oldest new case, Dec. 8; oldest amended, Jan. 25.
Total number of applications awaiting action 14,769

163	TRADE-MARKS, DESIGNS, LABELS AND PRINTS:			
	Trade-Marks	May 20	June 15	735
	Designs	Mar. 30	May 23	461
	Labels and Prints	May 31	May 29	123

PATENTS

GRANTED JULY 2, 1918.

1,270,762. BRAKE MECHANISM. GRIFFIN S. ACKLEY, Brooklyn, N. Y., assignor to G. S. Ackley & Co., New York, N. Y., a Copartnership consisting of Griffin S. Ackley and Helen P. Ackley. Filed Apr. 16, 1917. Serial No. 162,290. (Cl. 254—149.)



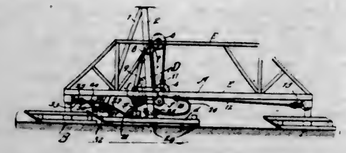
1. In a brake mechanism, a winding drum, a housing therefor, a pair of pipes projecting upwardly from said housing, a casing mounted on the upper ends of said pipes, a handwheel shaft mounted in said casing, and means for rotating said drum from said handwheel shaft, including a flexible member extending through said pipes.

3. In a brake mechanism, a winding drum comprising two sections each increasing in diameter from the end toward the center of the drum, a brake chain attached to one of said sections and a check chain attached to the other section.

8. In a brake mechanism, in combination with a brake chain and a winding drum therefor, of a bodily movable pulley over which said brake chain passes, and means acting to automatically move said pulley in a direction to unwind the brake chain from the drum when the brake chain is released.

[Claims 2, 4 to 7, 9, and 10 not printed in the Gazette.]

1,270,763. PROPELLING APPARATUS. VINCENT G. ANDERSON, Thief River Falls, Minn., assignor to Frederick C. Austin, Chicago, Ill. Filed May 7, 1917. Serial No. 167,052. (Cl. 180—8.)



1. In a propelling apparatus in which a main frame and an auxiliary frame alternately move forward, instrumentalities supported by the auxiliary frame to lift the main frame, when it is desired to move the main frame forward, and means connected with the auxiliary frame adjacent to the base thereof for exerting a backward pull thereon when said instrumentalities are operated to pull the main frame forward.

5. The said structure, as specified in claim 1, in which said instrumentalities comprise a tilting lever pivoted on the auxiliary frame, a sheave on one end of said lever, a carrier in which the main frame slides forward, a sheave on said carrier, an operating cable arranged on said sheaves, and a lifting connection between said carrier and the other end of said lever.

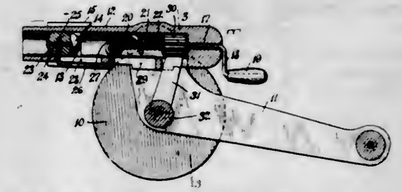
6. In a propelling apparatus in which a main frame and an auxiliary frame alternately move forward, instrumentalities supported by the auxiliary frame to lift the main frame, when it is desired to move the main frame forward, and means connected with said instrumentalities to lift the auxiliary frame, while the main frame is standing still, so that the auxiliary frame will move forward with more or less of the weight thereof imposed on the main frame.

8. The said structure, as specified in claim 6, in which said means include a connection for exerting a forward pull on the base of said auxiliary frame, and a connection to exert an upward pull on said auxiliary frame.

10. The said structure, as specified in claim 6, said instrumentalities comprising a tilting lever pivoted on the auxiliary frame, a sheave on one end of said lever, a carrier in which the main frame slides forward, a sheave on said carrier, an operating cable arranged on said sheaves, and a lifting connection between said carrier and the other end of said lever.

[Claims 2 to 4, 7, and 9 not printed in the Gazette.]

1,270,764. TOY CANNON. THOMAS RAYMOND ARDEN, New York, N. Y., assignor to T. R. Arden Co., Inc., New York, N. Y., a Corporation of New York. Filed May 23, 1917. Serial No. 170,364. (Cl. 124—13.)



1. In a toy cannon, the combination of a barrel, a plunger reciprocable therein, rotary spiral means for retracting said plunger in the barrel, and extensible means for protracting the plunger in the barrel.

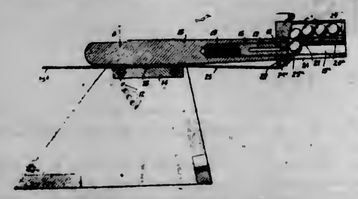
6. In a toy cannon, the combination of a barrel, a plunger reciprocable therein, a rod mounted for rotation in said barrel, a connection between said plunger and said rod whereby when the latter is rotated the plunger is retracted in the barrel, means for protracting the plunger in the barrel, a ratchet on said rod, and a pawl extending into engagement with said ratchet.

[Claims 2 to 5 not printed in the Gazette.]

1,270,765. TOY CANNON. THOMAS RAYMOND ARDEN, Guttenberg, N. J., assignor to Arden Manufacturing Corporation, Guttenberg, N. J., a Corporation of New York. Filed Jan. 16, 1918. Serial No. 212,008. (Cl. 124—14.)

1. A toy cannon, comprising a barrel having a bore therein, a plunger reciprocable in said bore, plunger pro-

tracting means, and plunger retracting means comprising a rectilinearly movable rod having a portion thereof movable into and out of contact with the face of the plunger.



8. A toy cannon, comprising a carriage, a barrel pivotally supported thereby, said barrel having a bore therein and an opening communicating with said bore, a magazine superimposed on the barrel and having an inclined floor for directing projectiles to said opening, a plunger reciprocable in said bore, a coiled spring in rear of said plunger and adapted to protect the same, an operating rod for the plunger having a hooked end to engage the face of the plunger and an inclined portion adjacent said hooked end, and an inclined guide along which said inclined portion is adapted to glide during movement of the rod to elevate or lower said hooked end.

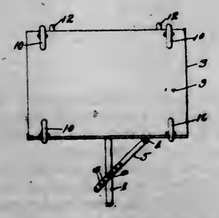
[Claims 2 to 7 not printed in the Gazette.]

1,270,766. NUT AND BOLT HOLDING WRENCH. GEORGE D. ARMSTRONG, Guthrie Center, Iowa. Filed Oct. 12, 1917. Serial No. 196,209. (Cl. 81—55.)



A wrench including a U-frame brace, a yoke member including a pair of arms, one of said arms being formed with an opening receiving the shank slidably therethrough, the other of said arms being formed with a wrench opening also receiving the shank therethrough, a bolt disposed through the yoke and slidably engaging with the shank, a socket member carried by the end of the shank, and resilient means for holding the shank and yoke in proper relation to each other.
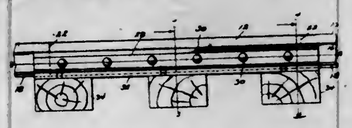
1,270,767. MUSIC-HOLDER. VESPER I. ARMSTRONG, Carterville, Mo. Filed Dec. 4, 1916. Serial No. 135,024. (Cl. 45—61.)



1. A music holder comprising a plate, a standard pivotally connected to the plate at a point near the center thereof, so as to permit the plate to swing in its own plane, the lower marginal edge of the said plate at a point at one side of the center being provided with an ear, the said standard having a pin fastened thereto at a point considerably below the lower marginal edge of the said plate, and an arm pivotally connected to the said ear and having a plurality of apertures removably engageable with the said pin.

2. A music holder comprising a rectangular plate, a standard pivotally connected to the plate at a point near the center thereof, for permitting swinging movement of the said plate on the standard in its own plane, and an ear fastened to the lower marginal edge of the plate at a point near one end thereof, and an arm having one end pivotally connected to the ear and adapted to be normally obliquely disposed and having its opposite end projected across the said standard at an angle thereto, and means carried by the standard and engageable with the end of the arm to longitudinally adjust the arm with respect to the standard for retaining the said plate in angularly adjusted position.

1,270,768. RAIL-JOINT. WILLIAM C. AVIS, North Kansas City, Mo., assignor of one-fourth to Charles F. Schooling and one-fourth to Edward Raymond Bell, Kansas City, Mo. Filed Nov. 23, 1917. Serial No. 203,586. (Cl. 239—6.)



1. A rail joint comprising end rail portions having their base flanges cut away on opposite sides and the webs of said end portions left entire and arranged in overlapping relation, the ball of each of said rail end portions being cut away diagonally at an angle to the plane of the web and partly across the same, thereby exposing a portion of the top of the web of each rail end portion and bringing it into engagement with an overlying portion of the cut away side of the ball of the other rail end portion.

2. A rail-joint comprising rail end portions having the webs thereof left entire and the webs and balls of said end portions arranged in overlapping relation, the base flanges of said rail end portions being each cut entirely through by a single diagonal cut extending at an angle to the plane of the web and partly across the same and terminating at the end of the corresponding rail end portion, thereby exposing a portion of the lower edge of the web of each end portion for bringing it into engagement with an underlying portion of the cut away side of the flange of the other rail end portion and leaving each web with a supporting flange extending at one side thereof throughout the length of the web.

3. A rail-joint comprising rail end portions having the webs thereof left entire and arranged in overlapping relation, the balls and base flanges of said end portions being each cut away by a single diagonal cut extending entirely through said balls and flanges and at an angle to the planes of the webs and partly across the same and terminating at the end of the corresponding rail end portion, thereby exposing portions of the upper and lower edges of the webs for bringing said exposed portions of each web into engagement between portions of the cut away sides of the ball and base flange of the other rail end portion and leaving each web with a supporting flange extending at one side thereof throughout the length of the web.

4. A rail joint comprising rail end portions having the webs thereof arranged in overlapping relation, the balls and base flanges of said end portions being cut away diagonally at an angle to the planes of the webs and partly across the same, thereby exposing portions of the upper and lower edges of the webs and bringing said exposed portions of each web into engagement between portions of the cut away sides of the ball and base flange of the other rail end portion, and fish plates secured to the opposite faces of the joint and provided with inturned portions in engagement with the fillets of the rails and abutting against the ends of said webs.

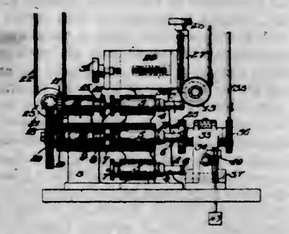
5. A rail joint comprising rail end portions having the webs thereof arranged in overlapping relation, the balls and base flanges of said end portions being cut away diagonally at an angle to the planes of said webs and partly across the same, thereby exposing portions of the upper and lower edges of the webs and bringing said exposed portions of each web into engagement between portions of the cut away sides of the ball and base flange of the other rail end portion and fish plates secured to the opposite faces of the joint and provided with inturned portions engaging the fillets of the rail and abutting against the ends of said webs, one of said fish plates having a horizontal plate portion extending across beneath the rail joint and provided with an upwardly inclined margin in abutting relation with the bottom edge of the other fish plate.

1,270,769. SAFETY NECKLACE-CLASP. CHARLES H. BALCH, Boston, Mass. Filed May 9, 1917. Serial No. 167,570. (Cl. 24—230.)



In a device of the character described, a socketed member, the socket in which is of uniform size in cross section throughout its length, a U-shaped resilient member removably inserted within the socket and having its legs substantially parallel and in contacting relation to opposite walls of said socket, retaining projections extending from opposite points interiorly of the socket and engaged with the legs of the resilient member, and means carried by said members for the connection of a chain therewith.

1,270,770. LENS-GRINDING MACHINE. FREDERICK W. BARNES, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Mar. 24, 1916. Serial No. 86,865. (Cl. 51—8.)

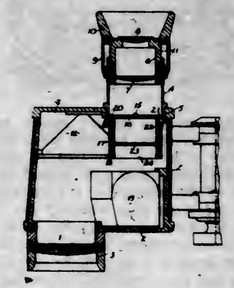


In a lens grinding machine, the combination with a revoluble support, a plurality of rotary work supports on said revoluble support, a plurality of grinders one of which is arranged in substantially the same plane with the faces of said work supports and another of which is arranged in a plane substantially perpendicular thereto and adapted to coöperate with different pieces of work simultaneously, means for rotating the work supports during the grinding operations, and other means for successively rotating said supports for centering the work thereon.

1,270,771. TELESCOPE. EDWARD BAUSCH, Rochester, N. Y., assignor to Bausch & Lomb Optical Company, Rochester, N. Y., a Corporation of New York. Filed Apr. 17, 1916. Serial No. 91,533. (Cl. 88—33.)

1. In an optical instrument, the combination with an objective, and an ocular tube closed at one end by an ocular mounted therein, of a tubular mounting having a fiducial mark and a closure plate mounted therein, in spaced relation to the mark, said mounting being adapted to be attached to the ocular tube at a point between the objective and the ocular with the fiducial mark in the focal plane of the ocular and with the closure plate beyond said focal plane, out of focus of the ocular.

5. In an optical instrument, the combination with a body or casing, an objective mounted at the forward end of the casing, an ocular tube secured to the rear end of the casing, a lens system in the ocular tube, and a prism system interposed in the optical axis of the objective and ocular lens systems, of a tubular mounting attached at the forward end of the ocular tube and having an internal shoulder and internal screw-threads, a transparent plate carrying a fiducial mark and placed within the mounting against its shoulder and in the



focal plane of the ocular lens system, a transparent closure plate in the mounting guarding the fiducial mark from dust and located out of the focus of the ocular lens system, and sleeve means engaging the internal threads of the mounting and securing the fiducial mark carrying plate and the dust-guard closure plate to the mounting in the aforesaid relative positions.

[Claims 2 to 4 not printed in the Gazette.]

1,270,772. REINFORCED EYEPIECE-CAP AND SIMILAR ARTICLE. JOHN J. BAUSCH, Rochester, N. Y., assignor to Bausch & Lomb Optical Company, Rochester, N. Y., a Corporation of New York. Original application filed Jan. 25, 1917, Serial No. 144,362. Divided and this application filed Nov. 21, 1917. Serial No. 203,220. (Cl. 88—32.)

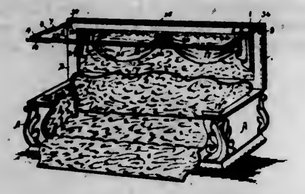


1. The combination with an article having a rim formed of material having relatively low intrinsic strength, of a reinforcing and attaching ferrule formed of material of relatively higher intrinsic strength and having a serrated end embedded and anchored in the article to form a part of the rim thereof.

6. The combination with an internally screw threaded metallic ring having a flared and serrated end, of an annular body of material of relatively lower intrinsic strength molded while in a plastic state about the ring and subsequently solidified, that portion of the ring adjacent to and including its flared and serrated end being intimately embedded within the body wall and the remaining portion of the ring lining the adjacent inner portion of the body wall, thereby reinforcing the body and providing it with a screw threaded attaching rim.

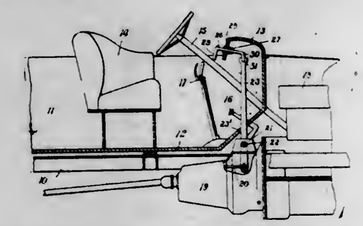
[Claims 2 to 5 not printed in the Gazette.]

1,270,773. CANOPY DEVICE FOR BURIAL-CASKETS. JOHN C. BECK, Milton, Ind., assignor to The Diddridge-Beck Co., Milton, Ind., a Corporation of Indiana. Filed Nov. 18, 1916. Serial No. 132,086. (Cl. 27—3.)



In combination with a burial casket having a lid adapted to stand in vertical position when open, a canopy device comprising a frame composed of extensible side-arms and an extensible front arm hinged at its ends to the outer ends of the side-arms, a hinge connecting the two halves of the front arm whereby the front arm is made foldable, brackets carried by the inner ends of the side arms and each having a cavity in its face adjoining the lid, a right angular corner plate covering the inner end of each of the side arms and extending over a portion of the respective cavities above mentioned, there being an inverted U-shaped slot extending upward through the lower edge portion of the center of each of said corner plates, and a screw inserted in the contact face of the upper corners of the lid with their heads adapted to enter the respective cavities mentioned and to engage the respective corner plates to detachably lock the device in extended position in connection with the lid, a length of elastic detachably connecting the rear ends of the side arms, and a fabric canopy attached to the elastic and adapted to extend out over the frame formed by the side arms and the front arm and to extend down around the body of the casket, all substantially as shown.

1,270,774. MOTOR-VEHICLE. EDWARD H. BELDEN, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Aug. 19, 1916. Serial No. 115,808. (Cl. 180—77.)



1. In a motor vehicle, in combination, a body having a dash cowl, gear operating mechanism, and controlling means for said mechanism mounted in said cowl.

10. In a motor vehicle, in combination, change speed gear mechanism, gear shifter rods, bars oscillatably mounted on said mechanism and adapted to operate said rods, and means reciprocably and oscillatably mounted in said motor vehicle adapted to select and actuate one of said bars.

15. In a motor vehicle, in combination, change speed gear mechanism, gear shifter rods, rotatably mounted uprights connected to said rods, and reciprocatory and oscillatory means mounted in said motor vehicle adapted to select by an oscillatory movement and to rotate by a reciprocatory movement one of said uprights.

21. In a motor vehicle, in combination, sliding gear shifter elements, levers connected thereto, and a hand operated device adapted to slide substantially parallel to said elements and to operate the latter through said levers.

30. In a motor vehicle, in combination, gear shifter elements, a hand device mounted to move from one operating position to another, and to be moved longitudinally when in either of said operating positions, and connections between said device and said elements to cause a shifting of one of said elements by the longitudinal movement of said device when in one of its said operating positions, and a shifting of the other of said elements by such movement of the device when in the other of its said operating positions.

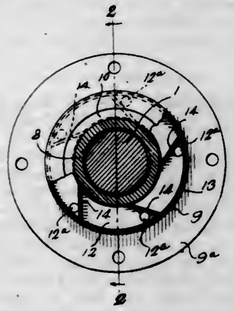
[Claims 2 to 9, 11 to 14, 16 to 20, 22 to 29, and 31 not printed in the Gazette.]

1,270,775. CHALKING DEVICE FOR BILLIARD-TABLES. ZAVERIO C. BIANCHI, San Jose, Cal. Filed Dec. 20, 1917. Serial No. 208,082. (Cl. 46—6.)

1. In a chalking device for billiard tables the combination of a spool frame, an engaging pin fastened to the spool frame, spools having a hollow portion therein positioned in the spool frame, a steel spring positioned in the hollow portion of each spool, a metal bar, adapted to retain the steel spring in position in the hollow portion of each spool, a metal outside casing being convex on the outside, and concave on the inside thereof, a band flange at the upper end of the metal casing, an offset groove in the band flange, adapted to engage the engaging pin in the spool frame with the offset groove in the band flange, as and for the purpose described.

2. In a chalking device for billiard tables the combination of a spool frame, an engaging pin fastened to the spool frame, spools having a hollow portion therein, a steel spring positioned in the hollow portion of each spool, a metal bar, adapted to retain the steel spring in position in the hollow portion of each spool, a metal outside casing, tension adjustments fastened one on each side of the metal outside casing, a wire rope placed on an incline, a plurality of pulley hangers of different lengths on which the wire rope rests and is operated; a stop bar, fastened to the wire rope, adapted to prevent the wire rope from being drawn back in the casing by the spring beyond a predetermined point, pull-down pulleys, pull-down pulley frames, a cord attached to each pull-down pulley frame, a metal chalk holder attached to the lower end of the cord, adapted to hold the chalk, means by which the chalk is held in the chalk holder, a spring, adapted to feed the chalk down positioned in the chalk holder, as and for the purpose described.

1,270,776. OIL-PROTECTOR FOR BRAKE-DRUMS. ADAM BOOMERSHINE, Dayton, Ohio. Filed Oct. 18, 1917. Serial No. 197,216. (Cl. 64—22.)



1. In a structure of the character described, a rotatable element, a bearing for the same, and a rotatable

force feed device arranged between said element and bearing to prevent lubricating material from escaping from said bearing, said device comprising a series of vanes.

7. In a structure of the character described, a rotatable element, bearings for the same, a chambered element rotatably connected with said rotatable element and surrounding said bearings to receive lubricant escaping from said bearings, and a force feed device associated with said chambered element arranged to receive the lubricant at the point of escape from said bearings and force it back into said bearings at another point so as to induce a circulation of lubricant through said chambered element.

[Claims 2 to 6, 8, and 9 not printed in the Gazette.]

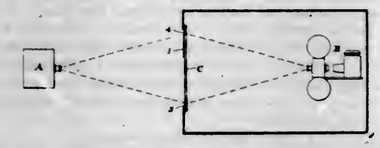
1,270,777. SPINNING-FRAME ROLL. ORSON U. BRADLEY, North Adams, Mass. Filed Jan. 2, 1917. Serial No. 140,156. (Cl. 154—2.)



1. The herein described process of covering spinning rolls which consists in covering the same with a layer of cushioning material, binding the same with one or more layers of adhesive tape, subsequently applying to the tape one or more layers of paper and finally coating the paper with a solution of cellulose or one of its derivatives.

[Claims 2 to 4 not printed in the Gazette.]

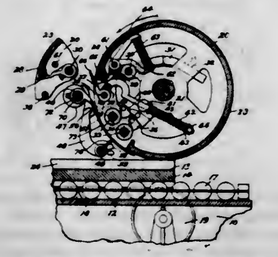
1,270,778. MOVING-PICTURE FILM AND METHOD OF MAKING. AUSTIN D. BRIXEY, New York, N. Y. Filed Feb. 3, 1915, Serial No. 5,812. Renewed May 14, 1918. Serial No. 234,536. (Cl. 88—16.)



1. The method of producing a moving-picture film which consists in successively photographing a moving object, projecting one or more of the pictures thus obtained upon a screen bearing an inscription, and photographing the projected picture or pictures and the inscription.

[Claims 2 to 4 not printed in the Gazette.]

1,270,779. PRINTING-PRESS. ABRAHAM T. H. BROWER, Chicago, Ill. Original application filed Nov. 23, 1912, Serial No. 733,165. Divided and this application filed Jan. 22, 1917. Serial No. 143,576. (Cl. 101—409.)



1. In a printing press, the combination with a frame, type bed, cylinder and cylinder supporting brackets, of paper grippers carried by said cylinder, a releasing trip for said grippers and a transverse, manually operable rock shaft journaled in said cylinder brackets for actuating and adjusting said releasing trip, said rock shaft having operating handles at opposite sides of the press.

4. In a printing press, the combination with the frame, cylinder and reciprocating type bed, of a pair of spring-held rock shafts mounted within said cylinder, grippers and front paper guides fixed respectively to said rock shafts, the portion of the tympan surface engaged by said grippers being cut away so that the latter in normal position, are arranged within the cylindrical portion of the tympan surface, means for tripping said gripper rock shaft, an arm on said front guide rock shaft, and a cam on the frame coöperating with said arm to shift said front guides inwardly and hold the same in such position to thereby clear the type and type chase as the cylinder is rotated in opposite directions, substantially as described.

[Claims 2, 3, and 5 to 8 not printed in the Gazette.]

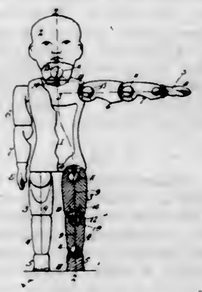
1,270,780. MATTRESS. OWEN T. BUGG, Rutherford, N. J. Filed Apr. 28, 1917. Serial No. 165,066. (Cl. 5—12.)



1. In a device of the character described the combination of upper cutaway end and side members; oblong cushioning means located in the cutaway portions of said members; lower end and side members; means rigidly securing said upper and lower members together; a plurality of projections carried by said lower end and said side members; and a flexible cover provided with holes adapted to slip over said projections and adapted to pass over and rest on said cushioning members, substantially as described.

2. In a device of the character described the combination of a pair of cutaway upper side members; a pair of cutaway upper end members detachably attached to said side members; a pair of lower side members provided with projections; a pair of lower end members provided with projections; cushioning means carried by each cutaway upper member; and hinged supporting means attached to said lower members, substantially as described.

1,270,781. BALL-AND-SOCKET JOINT FOR TOYS. CHARLES CABANA, Buffalo, N. Y. Filed Nov. 10, 1917. Serial No. 201,210. (Cl. 46—40.)

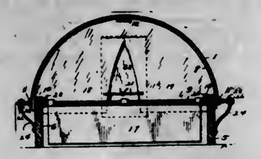


1. The combination of two relatively movable members of a toy, one of which is provided with a socket, and a

ball mounted on the other member and engaging said socket, said ball comprising two hollow semi-spherical sections which telescope one into the other.

2. The combination of two relatively movable members of a toy, one of which is provided with a socket, a ball engaging with said socket and composed of two semi-spherical sections which have their concave sides facing each other, spring arms connected at their front ends with the corresponding rear edges of said ball sections, a base connected with the rear ends of said arms and secured to the other doll member, and a spring interposed between the inner sides of said ball sections.

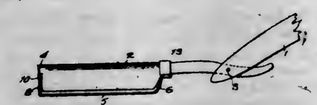
1,270,782. SHEEP-SHELTER. ALLIE OREN CARR, Alzada, Mont., and HENRY RAY MILLS, Bellefourche, S. D. Filed Mar. 11, 1918. Serial No. 221,710. (Cl. 119—16.)



1. A device of the character described, comprising a pair of skids, bows extending therebetween, rigid tie-rods extending therebetween, a fabric cover for the bows and closures hinged upon some of said tie-rods.

[Claims 2 and 3 not printed in the Gazette.]

1,270,783. SAFETY-RAZOR. OSCAR CARTLIDGE, Gillespie, Ill. Filed Oct. 15, 1915. Serial No. 56,055. (Cl. 30—12.)



1. A safety razor comprising a blade having a projection formed on one end thereof, said projection provided with a groove in the end and top thereof, a guard adapted to be secured to the blade, said guard provided on one end with an L-shaped extension adapted to engage the under side of the blade, the opposite end of the guard provided with an extension adapted to enter the groove in the projection, and a clamp carried by the blade and adapted to engage the L-shaped extension on the guard, said clamp provided with a notch adapted to receive the extension.

2. A safety razor comprising a blade having a projection formed on one end thereof, said projection provided with a groove in the end and top thereof, a guard adapted to be secured to the blade, said guard provided on one end with an L-shaped extension adapted to engage the underside of the blade, the opposite end of the guard provided with an extension adapted to enter the groove in the projection, and a spring-clamp carried by the blade and adapted to engage the L-shaped extension on the guard, said clamp comprising a bottom plate having a notch to receive the extension, sides to engage the sides of the blade, and flanges on the sides to overlie the top of the blade.

1,270,784. ELECTROLYTE FOR ELECTROLYTIC CELLS, SUCH AS LIGHTNING-ARRESTERS, CONDENSERS, AND THE LIKE. LEWIS W. CHUBB, Edgewood Park, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 2, 1914. Serial No. 864,666. (Cl. 176—315.)

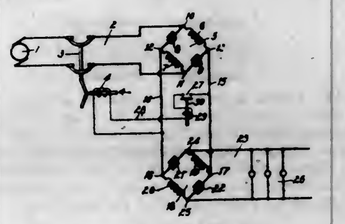
1. A film-forming electrolyte containing a solution of an acid and a solution of a salt, the number of gram-molecules of acid present being 45% to 98% of the total gram-molecules of the soluble material.

2. A film-forming electrolyte containing a solution of an acid and a solution of an ammonium salt, the number of gram-molecules of acid present being 45% to 98% of the total gram-molecules of the soluble material.

13. An electrolyte containing a solution of boric acid and a solution of ammonium borate, the number of gram-molecules of boric acid present being substantially 97% of the total gram-molecules of the soluble material.

[Claims 3 to 12, 14, and 15 not printed in the Gazette.]

1,270,785. CIRCUIT-INTERRUPTING SYSTEM. LEWIS W. CHUBB, Edgewood Park, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 29, 1915, Serial No. 64,153. Renewed Dec. 13, 1916. Serial No. 136,811. (Cl. 175—294.)

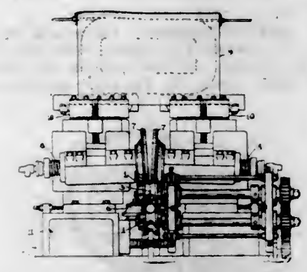


1. In an electric circuit, the combination with a reactor and a condenser connected therein and adjusted for resonant operation under predetermined conditions, of means responsive to the potential across a portion of the resonant circuit for short circuiting a portion of the circuit to thereby reduce the current traversing the same.

14. In an electric circuit, the combination with a reactor and a condenser connected therein and adjusted for resonant operation under predetermined conditions, of means responsive to the potential across a portion of the circuit for short circuiting a portion of circuit under predetermined conditions.

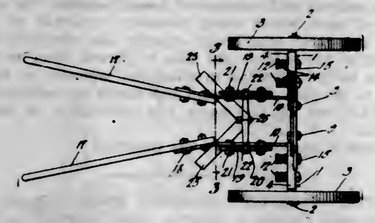
[Claims 2 to 13 not printed in the Gazette.]

1,270,786. APPARATUS FOR ELECTRIC WELDING. JOSEPH B. CLAPPER, Lakewood, Ohio, assignor, by mesne assignments, to The Standard Parts Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 18, 1916. Serial No. 126,316. (Cl. 219—13.)



In apparatus of the character described, the combination of welding electrodes adapted to contact with parts to be welded together, respectively; two transformers each having a secondary and a primary coil, such secondary coils being connected with said electrodes; and switch means adapted to connect such two primary coils of said transformers in parallel or in series, substantially as described.

1,270,787. WHEEL WEEDER-HOE. HENRY COAD, Ainsworth, Nebr. Filed Dec. 21, 1917. Serial No. 208,261. (Cl. 97—45.)



1. In a walking cultivator, a carrying frame; rearwardly extended supports having angular ends coöperating with the frame, the ends and the frame having enlarged openings; securing devices loosely mounted in the openings and provided with heads; compression springs about the securing devices and coöperating with the heads, the springs constituting means for holding the ends of the supports yieldingly in parallel relation to the frame; rearwardly extended grips carried by the supports; and laterally acting cutters assembled with the supports.

3. A walking cultivator comprising a carrying frame; rearwardly extended handles; weed cutters secured to the handles intermediate the front and rear ends of the handles and disposed to the rear of the frame, the inner ends of the cutters being disposed in meeting relation; and means for securing the forward ends of the handles on the frame movably, to permit a horizontal separation of the cutters by means of the handles.

4. A walking cultivator comprising a carrying frame; rearwardly extended handles; weed cutters secured to the handles intermediate the front and rear ends of the handles and disposed to the rear of the frame, the inner ends of the cutters being disposed in meeting relation; and means for securing the forward ends of the handles to the frame movably, to permit a lateral separation of the handles and the cutters, and to permit a vertical adjustment of the handles and the cutters.

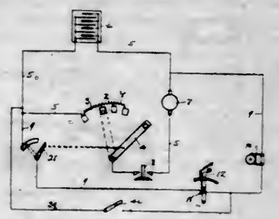
[Claim 2 not printed in the Gazette.]

1,270,788. PERFORATING AND SCORING ATTACHMENT FOR PRINTING-PRESSES. GEORGE H. COLE, Wenona, Ill. Filed Aug. 28, 1917. Serial No. 188,567. (Cl. 164—98.)



A perforating or scoring attachment for printing presses, having a gripper bar provided with a longitudinal slot, a blade disappearingly mounted in the slot of the gripper bar, a carrier of a length exceeding that of said slot and provided with a blade receiving seat registering and coextensive with the slot of the gripper bar, means for detachably securing the blade in said seat, a guide pin connecting the carrier with the gripper bar beyond each extremity of the seat in the former and on the line thereof and having stops for limiting the separation of the carrier and gripper bar, and springs engaging the extremities of the carrier beyond the guide pins for yieldingly maintaining the separation of said parts.

1,270,789. CONTROLLER FOR ELECTRIC VEHICLES. DE WITT C. COOKINGHAM, Lakewood, and JOHN H. HEBERNE, Cleveland, Ohio, assignors to The Baker R & L Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 20, 1913. Serial No. 755,636. (Cl. 177—311.)



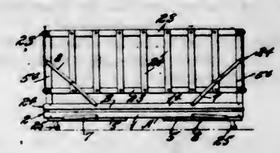
1. In an electric motor driven vehicle, or the like, the combination of a motor controller; a brake; an electric signal device; a circuit for said device, said circuit being in shunt with said controller; and means operable conjointly with said brake adapted to close said circuit.

13. In an electric motor driven vehicle, or the like, the combination of a motor controller; a brake; an electric signal device; a circuit for said device; a switch operable conjointly with said brake adapted to close said circuit; a lever for operating said controller; a member pivoted about the same axis as said lever; a contact carried by said member and another contact fixed on said lever, said contacts forming a switch adapted to close said circuit; a spring connected with said member and tending to move the same to bring said contacts together; and a stop adapted to engage said member to hold said contacts apart when said lever is moved into "off" position.

14. The combination with a brake; of a lever for operating the same; an electric signal device; a circuit for said device; a movable member adapted to lock said lever in place; and a switch in said bell circuit operatively connected with said member, said switch being closed only in the locking position of said member.

[Claims 2 to 12 not printed in the Gazette.]

1,270,790. FOLDING COT. RUDOLPH COOPERSMITH, St. Louis, Mo. Filed Aug. 14, 1911. Serial No. 856,719. (Cl. 5—58.)



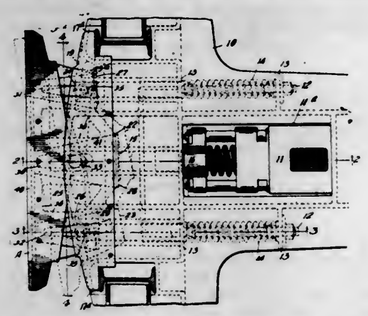
1. A combined cot and crib comprising U-shaped sections connected together at their open ends flush with the upper surfaces thereof whereby they are adapted to fold together, each of said sections having legs connected thereto, the legs of the upper section when said sections are folded together extending upwardly, and means adapted to be attached to the legs of said upper section and forming a barrier.

6. A collapsible and convertible cot comprising two U-shaped sections hinged together end to end at their open ends flush with the upper surfaces thereof whereby they are adapted to fold together to convert said cot into a new article of furniture of half its length without changing the operative position of the lower section, a flexible bottom secured to said sections in the plane of the hinges, each section having two legs pivoted thereto near each end thereof, the legs near the adjacent ends

of said sections extending side by side when said sections are unfolded, and detachable panels adapted to be secured to the legs of one of said sections.

[Claims 2 to 5 not printed in the Gazette.]

1,270,791. RAILROAD-CAR-BUFFER CONSTRUCTION. GEORGE E. COUTANT, Peru, Ind., and ARTHUR E. LEHMANN, St. Charles, Mo. Filed June 16, 1917. Serial No. 175,139. (Cl. 213—39.)

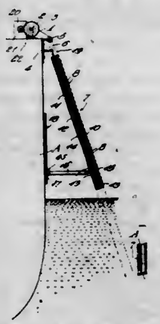


1. In car construction, the combination with a buffer beam having a central, horizontal recess extending transversely of the beam and open along its forward edge, of a buffer plate having a central, horizontal extension on the inner side thereof, said extension being slidable within said recess and forming the support for the buffer plate, pin and slot connections between said extension and the buffer beam for limiting the outward movement of the buffer plate and at the same time permitting the necessary sliding and swinging movement thereof, and a buffer for yieldingly resisting inward movement of the buffer plate.

4. In car construction, the combination with a buffer beam having a horizontally extending recess in its forward face, of a buffer plate having an integral extension on its inner side slidably mounted within said recess, said extension forming the support for the buffer plate, said extension being provided with slots, pins carried by the buffer beam extending through said slots and adapted to limit the outward movement of the buffer beam while at the same time permitting sliding and swinging movements thereof, a buffer mechanism, and means for yieldingly pressing the lateral portions of said extension to maintain the buffer plate in proper position.

[Claims 2 and 3 not printed in the Gazette.]

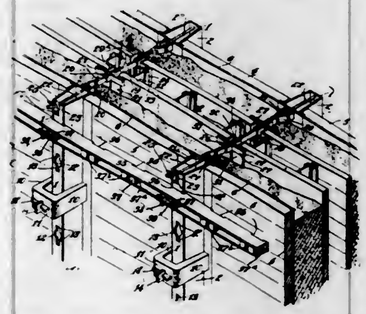
1,270,792. SHIP-PROTECTOR. THOMAS A. DALTON, Hazleton, Pa. Filed July 26, 1917. Serial No. 183,001. (Cl. 114—240.)



1. The combination with a ship; of a plurality of rods pivotally mounted at their upper ends to the side of the ship, a protector slidable upon said rods and movable in and out of the water, braces disposed between the lower ends of said rods and the side of the ship to hold said lower ends of said rods spaced from the latter, the outer ends of said braces being pivotally connected to said rods and their other ends slidably and pivotally connected to the side of the ship to permit them to fold into a vertical position to allow the protector to swing close to the side of said ship and means for raising said protector out of the water and holding it in raised position.

[Claim 2 not printed in the Gazette.]

1,270,793. CONCRETE-MOLDING FORM. HARRY O. DAVIDSON, Cleveland Heights, Ohio., assignor to The Hydraulic Pressed Steel Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 21, 1917. Serial No. 150,040. (Cl. 25—131.)



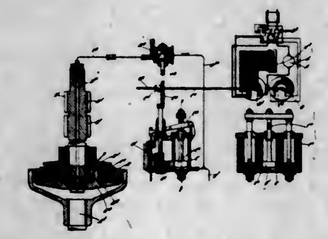
10. As a means for forming cores in hollow walls, the combination, with a pair of tie rods each having transversely spaced braces extending therefrom, of a pair of mold plates interposed between said braces, a pair of supporting members for the work-facing sides of the lateral ends of said plates, each of said members being adapted to engage and be supported by the coöperating braces of said tie rods, and means removably inserted between such plates for the purpose of holding the lateral edges thereof in engagement with said supporting members.

18. A mold plate for forms of the character set forth having its opposite lateral edges provided each with a tenon or shoulder, the outer face of each tenon or shoulder being longer than the inner face, a lining plate applied to the inner face of the said mold plate and extending as far as the tenon or shoulder, a plate insertible between each lateral edge of the lining plate and the mold plate body and having an extension adapted to overlap the inner face of the tenon or shoulder, a pair of channels each having flanges coöperating respectively with the outer face of a tenon or shoulder and the extension of the second plate, and an angle iron applied to the top and bottom edges of the mold plate body and having its flange interposed between the lining plate and the said plate body.

[Claims 1 to 9, 11 to 17, and 19 to 23 not printed in the Gazette.]

1,270,794. CONTROLLING APPARATUS FOR USE IN CONNECTION WITH HYDRAULIC PUMPS. ARTHUR TREVOR DAWSON, Westminster, and JAMES HORNE, Barrow-in-Furness, England, assignors to Vickers Limited, Westminster, England. Filed May 9, 1917. Serial No. 167,621. (Cl. 103—87.)

1. The combination with a hydraulic pump, of an electric motor for driving same, means responsive to and actuated by the pressure of the liquid in the pump system, a switch for controlling the speed of the motor and operated by said means so that the speed of the motor is controlled in accordance with the pressure of the liquid, a hydraulically operated clutch for connecting the motor to the pump and a device operated by said liquid responsive means for allowing pressure liquid to actuate said clutch and thus disconnect the motor from the pump.

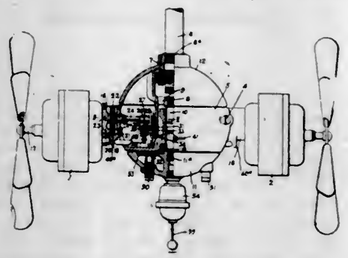


2. The combination with a hydraulic pump, of an electric motor for driving same, means responsive to and actuated by the pressure of the liquid in the pump system, a regulating device actuated by said means for controlling the speed of the motor in accordance with the liquid pressure in the system by controlling resistances in the armature and field circuits of the motor, a hydraulically operated clutch for connecting the motor to the pump and a valve operated by said liquid responsive means when the speed of the motor reaches a predetermined low limit for allowing liquid pressure to actuate said clutch and thus disconnect the motor from the pump.

5. The combination with a hydraulic pump of a motor for driving same, a clutch for connecting the motor to the pump, a device for controlling the speed of motor, a motor actuated by and in accordance with the pressure in the pump system for operating said speed controlling device and said clutch.

[Claims 3 and 4 not printed in the Gazette.]

1,270,795. REVOLVING FAN. EARL W. DENMAN, Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 4, 1916. Serial No. 70,259. (Cl. 24—34.)



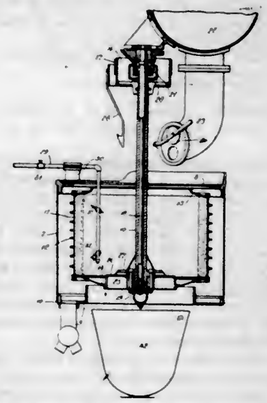
1. The combination with a rotatable support, of a motor pivotally mounted thereon, reduction gearing carried by said motor and driven thereby, a flexible coupling device, and relatively movable members in adjustable frictional engagement operatively connected to said gearing through said flexible coupling device for rotating said support, whereby the angular positions of the said motor and gearing around the motor pivot may be adjusted without affecting the frictional engagement of the said members.

2. The combination with a rotatable support, of a motor mounted thereon, relatively stationary means for supporting the said rotatable support, reduction gearing driven by said motor and rigidly carried by said rotatable support, a member carried by said stationary support, and a second pivotally mounted member in frictional engagement with said first-named member and flexibly connected to said reduction gearing for rotating the said rotatable support.

3. The combination with a rotatable support, of a motor mounted thereon, relatively stationary means for supporting the said rotatable support, reduction gearing driven by said motor and rigidly carried by said rotatable support, a flexible coupling mechanically associated with said reduction gearing, a member carried by said stationary support, and a second member in adjustable frictional engagement with said first-named member and connected to said reduction gearing by said flexible coupling device for rotating the said rotatable support.

[Claim 4 not printed in the Gazette.]

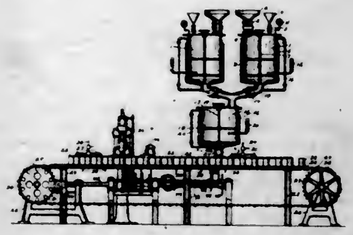
1,270,796. METHOD AND APPARATUS FOR TREATING SUGAR. JOHN E. DRURY and RUFUS C. FOLSOM, Boston, Mass., assignors to The American Sugar Refining Company, a Corporation of New Jersey. Filed Dec. 28, 1917. Serial No. 209,284. (Cl. 210—28.)



1. The method of operating a centrifugal machine in the treatment of sugar which consists in admitting a batch of the sugar to the basket of the machine, rotating the basket at high speed to throw off the syrup, thereby causing the sugar to become packed against the screen of the basket, opening an outlet at the bottom of the basket, directing a jet of water against the wall of sugar packed against the screen while the said outlet is open to detach the sugar from the screen, and allowing the sugar and the water mixed therewith to pass by gravity through the open outlet; substantially as described.

[Claims 2 to 11 not printed in the Gazette.]

1,270,797. CANNING. MELVILLE E. DUNKLEY, Kalamazoo, Mich. Filed Aug. 3, 1914. Serial No. 854,643. (Cl. 99—8.)



1. In a machine of the class described, the combination of suitable base members, a steam chest supported thereon,

means for supplying jets of steam to said chest, a chain having an intermittent motion carrying the cans to be filled through said steam chest, said cans being brought to rest beneath said steam jets, an opening in said steam chest beneath which said cans come to rest, a filling device discharging a measured quantity of sterile material through said opening at predetermined intervals, a sterilizer supplying said filling device, a second opening in said steam chest beneath which said cans come to rest, a mechanism for feeding tops through said opening to the cans, a third opening in the steam chest beneath which said cans come to rest, and a mechanism for fastening said tops to the cans, said steam chest being filled with live steam throughout its length, all coacting substantially as described for the purpose specified.

4. In a structure of the class described, the combination with a sterilizer, a steam chest suitably supported beneath said sterilizer, means carrying the cans to be filled through said steam chest, means supplying a plurality of steam jets thereto, means delivering from said sterilizer into the cans to be filled, means for sterilizing the tops for said cans and automatically delivering said tops to the cans to be filled, all coacting substantially as described for the purpose specified.

[Claims 2 and 3 not printed in the Gazette.]

1,270,798. CANNING. MELVILLE E. DUNKLEY, Kalamazoo, Mich. Filed Apr. 9, 1917. Serial No. 160,820. (Cl. 99—8.)

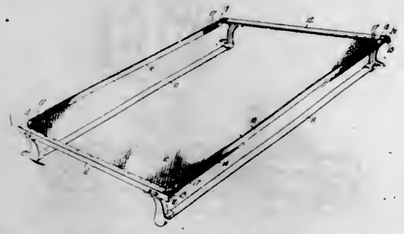
1. The canning process consisting of first subjecting the material to be canned to a sterilizing temperature for a length of time sufficient to insure sterilization, injecting steam at a sterilizing temperature into the cans to be filled, surrounding said cans with a sterile vapor and maintaining said vapor, filling said cans with the sterile material, subjecting the tops for said cans to steam at a sterilizing temperature, placing said tops on said filled cans in sterile vapor, and hermetically sealing the tops upon said cans in said sterile vapor, substantially as described for the purpose specified.

3. The canning process consisting in sterilizing the material to be canned, sterilizing the cans to be filled and surrounding them with sterile vapor, maintaining said vapor, filling said cans with sterile material, placing sterile tops on said sterile cans, and sealing said tops on said cans, all of said operations being conducted in an envelop of said sterile vapor, substantially as described for the purpose specified.

8. The canning process consisting of introducing cans to be filled into a sterile atmosphere, filling said cans with sterile material, and sealing tops on said cans, all of said operations being conducted without passing from said sterile atmosphere, substantially as described for the purpose specified.

[Claims 2 and 4 to 7 not printed in the Gazette.]

1,270,799. BED-SPRING OR SPRING BED-BOTTOM. JAMES H. DYETT, Buffalo, N. Y., assignor to Hard Manufacturing Company, Buffalo, N. Y. Filed Apr. 21, 1915. Serial No. 22,751. (Cl. 5—39.)



1. A bed spring comprising a frame, a resilient wire bottom fabric stretched between the ends of said frame and having double portions forming hollow casings along the side edges of said bottom fabric, thin flexible strips extending lengthwise through said casings, and means which connect the ends of said strips to the ends of said frame and hold said strips on edge under tension whereby said strips hold said hollow casings substantially perpendicular to the plane of the bottom fabric to form mattress guards at the side edges of the bed springs.

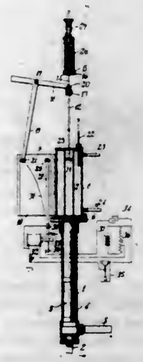
4. A bed spring comprising a frame, a flexible woven wire bottom fabric stretched between the ends of said frame and having the side edge portions thereof folded over to form perpendicular tubular casings, the ends of said tubular casings terminating in flattened webs which are attached to the ends of said frame, vertically stiff and laterally flexible strips of substantially the same length as the tubular casings extending through said casings and a plurality of springs connecting the ends of said strips to the ends of the frame to hold said strips under tension and said tubular casings substantially upright to form mattress guards for the bed spring.

6. A bed spring comprising a frame, a resilient bottom stretched between the ends of said frame and having longitudinal casings at its side edges, metal strips extending lengthwise in said casings, twisted anchoring plates having horizontal ends secured to the ends of said frame and vertical inner ends, and a plurality of springs at each end of said strips arranged one above the other and connecting the strips to the vertical inner ends of said anchoring plates for holding said casings substantially upright.

9. A bed spring comprising a frame, a flexible bottom fabric stretched between the ends of said frame and having casings extending lengthwise along its side edges, the ends of said casings decreasing in height toward the ends of said spring and being disconnected at their upper portions from the ends of said frame, strips extending lengthwise in said casings, and means for holding said strips under tension for holding said casings substantially upright.

[Claims 2, 3, 5, 7, and 8 not printed in the Gazette.]

1,270,800. MEASURING INSTRUMENT. HENRY R. EDGECOMB, Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 11, 1913. Serial No. 784,043. (Cl. 265—11.)



1. A measuring instrument comprising a container for holding a sample of material to be tested, means for moving said container, a movable pressure member located within said container but yieldingly supported exteriorly thereof, and means for recording the movement of said pressure member.

4. A measuring instrument comprising a container for holding a sample to be tested, means for moving said container, a movable piston within said container, means for recording the movement of said piston when said container is moved, and means for recording the time during which said container moves.

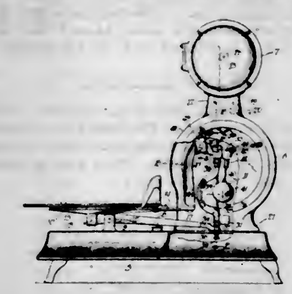
9. A measuring instrument comprising a container for holding a sample to be tested, means for moving said container at a uniform rate, a movable piston within said container, means for recording the movement of said poston when said container is moved, and means for recording the time during which said container moves.

12. A measuring instrument comprising a cylinder, means for axially moving said cylinder, means for jacketing said cylinder, a piston slidably mounted within said cylinder, resilient means for opposing the motion of said piston, means for recording the movement of said piston, and means for recording the time during which said cylinder moves.

17. A viscosimeter for heavy oils and grease comprising a containing cylinder, hydraulic means for operating said cylinder, means for maintaining said cylinder at a predetermined temperature, a piston slidably mounted in said cylinder, an adjustable spring for opposing the motion of said piston, means for operatively connecting said spring and said piston, a record sheet attached to said cylinder, means for recording the movement of said piston on said record sheet, and means for recording on said record sheet the time of operation of said cylinder.

[Claims 2, 3, 5 to 8, 10, 11, and 13 to 16 not printed in the Gazette.]

1,270,801. SCALE. STONE E. EKLUND, Toledo, Ohio, assignor to The Toledo Scale Company, Toledo, Ohio, a Corporation of New Jersey. Filed Apr. 15, 1912. Serial No. 690,792. (Cl. 265—37.)



1. In a weighing scale, a lever of the first order having a long and a short arm, a goods receiver mounted on the short arm, a pendulum, and a thrust rod having a cone and socket connection with the long arm of the lever and connected to and adapted to raise the pendulum when a load is placed on the goods receiver.

5. In a weighing scale, a lever of the first order, having a long and a short arm, a goods receiver mounted on the short arm thereof, a pendulum having a bearing intermediate its ends, a thrust rod connected to the long arm of the beam and engaging the bearing on the pendulum to raise the latter.

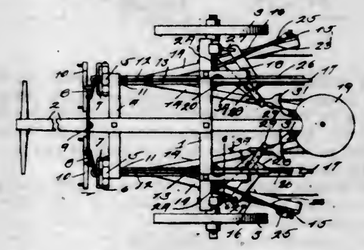
7. In a weighing scale, a lever of the first order having a long and a short arm, a goods receiver mounted on the short arm of the lever, a pendulum articulated intermediate its ends, and a thrust rod interposed between the lever and the pendulum and adapted to raise the latter when a load is imposed upon the receiver.

10. A weighing scale comprising a lever of the first order having a long and a short arm, a thrust rod connected to the long arm, a pendulum pivotally mounted upon the thrust rod, a downwardly faced bearing upon a stationary part of the scale, a pivot upon the pendulum engaging and bearing upwardly against said bearing and a goods receiver mounted upon the short arm of the lever and adjusted to slightly overbalance the weight upon the long arm of the lever.

12. In a weighing scale, a lever of the first order having a long and a short arm, a goods receiver mounted on the short arm of the lever, a pendulum pivoted independently of the lever and comprising a laterally extending arm and a rod there being an adjustable pivotal connection between the arm and rod, and a thrust rod between the long arm of the lever and said pendulum arm.

[Claims 2 to 4, 6, 8, 9, 11, 13, and 14 not printed in the Gazette.]

1,270,802. RIDING-CULTIVATOR. DELBERT ELLIOTT, Jackson, Mich. Filed Sept. 5, 1916. Serial No. 118,526. (Cl. 97—35.)



1. In a cultivator, the combination with an axle and a tongue extending therefrom; of arms depending from said tongue, shovel frames carried by said arms for horizontal and vertical pivotal movement and including an intermediate and diverging end bars, levers carried by said axle for effecting said vertical movement, guiding means carried by said intermediate bar, pedal means engaging said guiding means for effecting the horizontal movement in one direction, and resilient means for effecting horizontal movement in the opposite direction.

3. In a cultivator, the combination with a wheel supported axle and a tongue extending therefrom; of a horizontally and vertically pivoted shovel carrying frame including diverging bars, a rod having one end secured to the forward portion of said frame and having a loop intermediate its ends extending transversely of the frame, the other end of said rod being secured to the rear end of one of said diverging bars, a lever carried by said axle and having a sliding connection with said loop, pedal operated means for moving the frame on its vertical pivot, and resilient means for moving the frame horizontally in one direction.

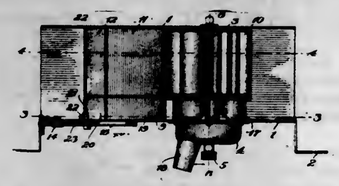
5. In a cultivator, the combination with a wheel supported axle and a tongue extending therefrom, of a shovel carrying frame connected to said axle and movable horizontally and vertically, means for effecting the vertical movement of the frame, means for effecting the horizontal movement in one direction, which means includes a rod carried by the adjacent portion of the axle, a bar extending obliquely with relation to the frame, a pedal lever slidably and pivotally mounted on the rod and having a roller contacting with the said bar, and resilient means for moving the frame horizontally in one direction and for maintaining the bar constantly in contact with the roller.

[Claims 2 and 4 not printed in the Gazette.]

1,270,803. WIND-MOTOR. WILLIAM F. FOLMER, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Nov. 28, 1917. Serial No. 204,302. (Cl. 170—13.)

1. In a wind motor, the combination with a casing including an exhausting chamber, of a shaft extending therethrough, a wind wheel fixed to the shaft, a wind driven exhauster mounted to turn freely on the shaft in connection with the exhaust chamber and a partition for separating air currents directed against the wind wheel and exhauster, respectively.

2. In a wind motor, the combination with a shaft and a wind wheel fixed to the shaft, of a wind driven exhauster mounted to turn freely on the shaft, an exhaust pipe connection to the exhauster and means for directing air currents differentially against the wind wheel and the exhauster, respectively.

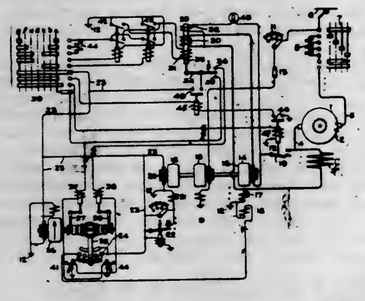


3. In a wind motor, the combination with two wind wheels adapted to turn independently of each other, of two gates for regulating the air currents admitted to each, respectively, and a common operating device for the gates connected to adjust one to selective position and to open the other entirely whenever operated.

4. In a wind motor, the combination with two wind wheels adapted to turn independently of each other, of two pivoted gates for regulating the air currents admitted to each, respectively, an operating lever directly connected to turn one gate slowly to different positions of adjustment and to turn the other gate quickly to an extreme position.

5. In a wind motor, the combination with two wind wheels adapted to turn independently of each other, of two pivoted gates for regulating the air currents admitted to each, respectively, one of said gates being provided with a short arm on the opposite side of the pivot, an operating lever directly connected to turn one gate to different positions of adjustment, and a lever coöperating with the short arm of one of the gates and normally held by the operating lever to maintain said gate closed.

1,270,804. ELECTRICAL SYSTEM OF POWER TRANSMISSION AND REGENERATIVE BRAKING. PETER W. FORSBERG, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 29, 1917. Serial No. 198,994. (Cl. 172—179.)



1. The combination with a dynamo-electric machine adapted to operate as a generator and comprising an armature and a field winding, of a circuit adapted to be traversed by current generated by said machine, and automatic means adapted to maintain the current in said circuit substantially constant as the speed of the dynamo-electric machine increases through a lower speed range and to cause the current in said circuit to increase as the speed of the dynamo-electric machine increases through a higher speed range.

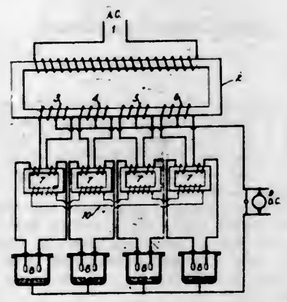
2. The combination with a dynamo-electric machine adapted to operate as a generator to produce a braking torque and comprising an armature and a field winding, of a circuit adapted to be traversed by the current generated by said machine, and automatic means controlled by the current in said circuit for varying the current in said field winding and thereby regulating the current generated by said dynamo-electric machine and hence the current traversing said circuit, said automatic means being adapted to maintain the current traversing said circuit substantially constant as the speed of the dynamo-electric machine increases through a relatively lower speed range and to cause the current in said circuit to increase as the speed of the dynamo-electric machine increases through a relatively higher speed range to an extent sufficient substantially to prevent a decrease in the braking torque of said machine as the speed thereof increases.

6. The combination with a dynamo-electric machine adapted to operate as a generator and comprising an armature and a field winding, of a source of voltage adapted to maintain a voltage across said field winding, a circuit adapted to be traversed by the current generated by said machine, and automatic means for varying the voltage maintained across said field winding, comprising a winding energized in accordance with the current in said circuit and a winding energized in accordance with a function of the current in said field winding.

11. The combination with a dynamo-electric machine adapted to operate as a generator and comprising an armature and a field winding, of a separate source of voltage adapted to maintain a voltage across said field winding, a circuit adapted to be traversed by the current generated by said machine, and automatic means, for varying the voltage maintained across said field winding, comprising a winding, energized in accordance with the current in said circuit, and a winding connected, in series with a tungsten resistor, in shunt to said field winding.

[Claims 3 to 5, 7 to 10, and 12 to 18 not printed in the Gazette.]

1,270,805. RECTIFIER-EQUALIZING SYSTEM. CHARLES LE G. FORTESCUE, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed May 6, 1915. Serial No. 26,435. (Cl. 175—363.)



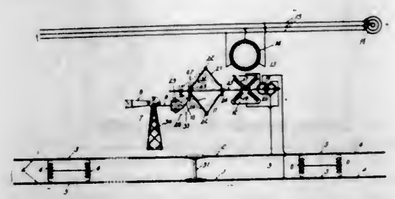
1. The combination with a direct current consumption circuit, of a plurality of rectifiers for supplying current thereto, and means providing an auxiliary load-distributing circuit interlinked therewith for adjusting the relative loads on each of said rectifiers in accordance with a predetermined ratio.

2. The combination with a direct current consumption circuit, of a plurality of rectifiers connected to supply current thereto, means for supplying alternating current to said rectifiers, and an auxiliary circuit inductively interlinked with the alternating current connections of each of said rectifiers for maintaining a predetermined load distribution therebetween.

3. The combination with a plurality of rectifiers, of connections for supplying alternating current thereto, a transformer associated with each of said rectifiers and having its primary winding inserted in the alternating current connections thereof, and a circuit connecting the secondary windings of all of said transformers, whereby the relative loads on said rectifiers will be adjusted in accordance with a predetermined ratio.

4. The combination with a plurality of rectifiers, each of which is provided with a plurality of anodes, of an alternating current lead connected to each of said anodes, a transformer core associated with each of said rectifiers, a primary winding inserted in each alternating current lead, all of the primary windings associated with each rectifier being mounted on a corresponding core, a secondary winding on each of said transformer cores and an auxiliary circuit connecting all of said secondary windings in series relation.

1,270,806. RAILWAY SIGNALING SYSTEM. CHARLES LE G. FORTESCUE, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed June 4, 1915. Serial No. 32,186. (Cl. 246—36.)



1. In a railway signaling system, the combination with a track circuit and a signaling device, of an operating means for said signaling device comprising relatively rotatable primary and secondary members one of which has a winding connected to the track circuit and provided with resistance in its circuit that is controlled by track circuit conditions.

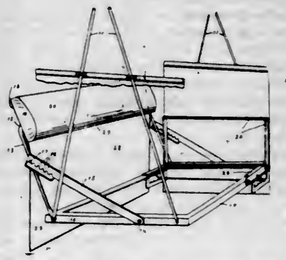
3. In a railway signaling system, the combination with a track circuit and a signaling device, of an operating means for said signaling device comprising an induction motor the primary member of which is supplied with alternating current energy, and the rotatable secondary member of which has windings displaced in phase relationship with one another and connected to said track circuit.

7. In a railway signaling system, the combination with track rails, bonds for connecting them to each other, and a signaling device, of an operating means for said signaling device comprising an induction motor the primary member of which is supplied with alternating currents to generate a rotating field and the rotatable secondary member of which has windings connected in parallel relationship to the track rails comprising a block section of the railway system in order that said block section may normally be connected in a closed circuit with said secondary windings.

[Claims 2, 4 to 6, 8, and 9 not printed in the Gazette.]

1,270,807. MOVABLE CUSHION FOR COUCH-HAMMOCK BACKS AND THE LIKE. WILLIAM B. FOSTER, Utica, N. Y., assignor to Foster Brothers Manufacturing Company, Utica, N. Y., a Corporation. Filed Nov. 27, 1914. Serial No. 874,141. (Cl. 5—61.)

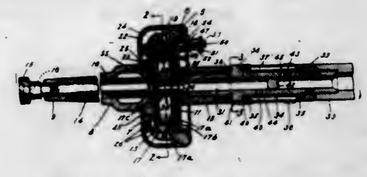
1. In combination with a seat, a back rod above the rear of the seat, end rods pivotally connected at their lower ends to the seat and at their upper ends holding the back rod swingingly spaced from the seat, means to hold the end rods at desired angle to the seat and a body-support of considerable thickness pivotally mounted upon said back rod with one side immediately adjacent said back rod and adapted to form a body-engaging surface when turned to upright position toward the seat, the other side adapted when turned to upright position toward the seat



to form a body-engaging surface extending farther toward said seat.

[Claims 2 to 4 not printed in the Gazette.]

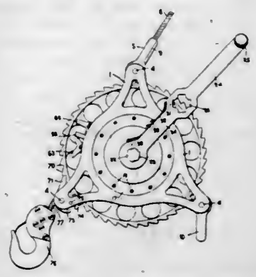
1,270,808. ROTARY TOOL. CHARLES H. FRANKLIN, Schenectady, N. Y. Filed Nov. 24, 1916. Serial No. 133,246. (Cl. 253—2.)



1. In an apparatus of the character described, the combination of a casing, a sleeve projecting from the front wall of the casing, a shaft journaled in said sleeve, a tool on the outer end of said shaft, a turbine wheel in the casing carried by said shaft, said turbine wheel having a flange with openings therein for the passage of motive fluid, said casing having openings which coöperate therewith, and a sleeve projecting from the rear wall of the casing through which motive fluid is led to the central portion of the turbine wheel from which it flows radially outward, said two sleeves serving as handles for the apparatus.

[Claims 2 to 6 not printed in the Gazette.]

1,270,809. PORTABLE WINCH. JOHN R. FREEMAN, Providence, R. I. Filed May 21, 1915. Serial No. 29,639. (Cl. 74—34.)



1. A winch comprising a frame having a fixed gear, a winding drum rotatably mounted in said frame and having an internal gear, a crank disk having means adapted to be engaged by a crank, planetary gearing consisting of a plurality of composite gears journaled in said crank disk, each of said gears having members of different

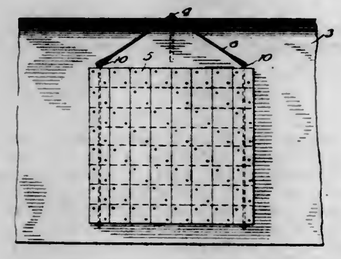
pitch engaging respectively said fixed gear and said internal gear, and a crank adapted to engage said crank disk to actuate said planetary system.

2. A winch comprising a frame having a pair of fixed annular gears, a winding drum having an internal gear mounted between said fixed gears, planetary gearing comprising composite members each having a pair of outer gears engaging said fixed gears and an inner gear of different pitch engaging said internal gear, a central actuator engaging the outer gears, and means for rotating said actuator.

3. A winch comprising a frame having a fixed annular gear, a drum rotatably mounted in said frame, an annular gear within said drum, planetary gearing within said annular gear comprising gears of different pitch in operative relation respectively to the annular gear of said drum and to said fixed gear, a central actuator within said planetary gearing, and alternative means for revolving said planetary gearing directly, or indirectly through said actuator, whereby differential movements having different speeds of rotation may be imparted to said drum.

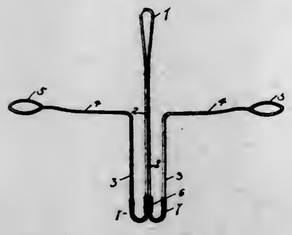
[Claims 4 to 16 not printed in the Gazette.]

1,270,810. FENDER FOR DOCKS. EDWARD J. FUCIK, Chicago, Ill., assignor to Great Lakes Dredge and Dock Company, Chicago, Ill., a Corporation of New Jersey. Filed Feb. 24, 1917. Serial No. 150,682. (Cl. 61—31.)



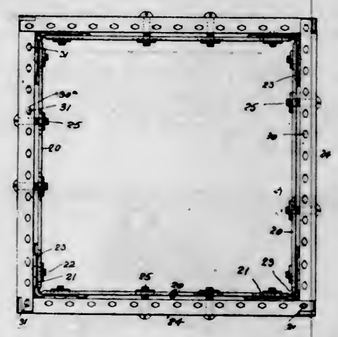
A fender for docks and the like consisting of a large rectangular mat composed of a series of layers of timbers, the grain of the adjacent layers being at an angle to each other, and means for suspending the fender against the face of a dock.

1,270,811. SHOE-RACK. PHILIAS GARANT, Woburn, Quebec, Canada. Filed June 15, 1917. Serial No. 174,859. (Cl. 211—17.)



As a new article of manufacture a shoe rack formed of one continuous strand of wire, the medial portion of said wire being bent to form a loop and two vertically extending portions, means for connecting the lower ends of said vertically extending portions, a pair of spaced vertical portions extending parallel with and lying in the same plane with the medial portion, right angular arms formed with the upper ends of said vertical spaced portions, loops formed with the outer ends of said arms, said loops extending in a horizontal plane, said arms being bent to the configuration of the sole of a shoe and wires wound around the portion connecting the vertical portions of the strand of wire for reinforcing the same substantially as and for the purpose specified.

1,270,812. TOY BUILDING CONSTRUCTION. ALFRED C. GILBERT, New Haven, Conn., assignor to The A. C. Gilbert Company, New Haven, Conn., a Corporation of Connecticut. Filed Dec. 18, 1915. Serial No. 67,613. (Cl. 46—35.)



1. In toy building construction, the combination of a hollow elongated sill member of U-shaped cross-section, a plurality of upright anchoring rods secured therein, and blocks laid on said sill member and having means engaging said anchoring rods; substantially as described.

2. In toy building construction, the combination of a channeled sill horizontally arranged with one of its side flanges lowermost, a plurality of upright anchoring rods, extending downward through the other side flange of said channeled sill, and blocks laid in courses on said sill and having perforations engaging said anchoring rods; substantially as described.

3. In toy building construction, a channeled sill member constructed of sheet metal and having a longitudinal series of perforations in each of the side flanges thereof, and anchoring rods engaging certain of said perforations so that said rods are sustained from beneath by said sill; substantially as described.

4. In toy building construction, a skeleton framework, a plurality of upright anchoring rods applied to the outside of said framework, and building blocks laid in courses on the outside of said framework, and having means engaging said anchoring rods; substantially as described.

5. In toy building construction, the combination of a skeleton framework, upper and lower sill members applied to the outside of said framework, anchoring rods secured in and extending between said sill members, and blocks mounted on said rods; substantially as described.

[Claims 6 to 23 not printed in the Gazette.]

1,270,813. MEANS FOR PREVENTING WHIPPING OUT OF ENDS OF FLAGS. THOMAS G. GOWEN, Boonville, Ind. Filed Sept. 6, 1917. Serial No. 189,924. (Cl. 116—12.)

1. A flag provided with a pocket at its outer end, closed on all sides except that facing toward the wind when the flag is hoisted, whereby said pocket will be inflated by the wind.

3. A flag provided with a series of pockets extending across its outer end, said pockets being open toward the inner or pole end of the flag and closed on all other

[illegible]es, each of said pockets being located upon one of the red and white stripes of the flag.



5. A flag provided with a pocket at its outer end comprising a tube extending along a stripe of the flag and open toward the inner or pole end of the flag.

[Claims 2 and 4 not printed in the Gazette.]

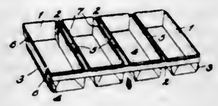
1,270,814. RESTRAINING DEVICE. ANTON L. GROVE, Hot Springs, Mont. Filed Jan. 7, 1918. Serial No. 210,643. (Cl. 119—126.)



1. An animal restraining device, comprising in combination, a pair of side bars, a cross bar pivotally carrying the side bars, clamping members on the lower ends of the side bars for engagement around the hocks, and a continuous cable length passing around the animal's neck and in two strands along its back, and having its extremities connected to the upper ends of the side bars.

[Claims 2 to 4 not printed in the Gazette.]

1,270,815. MULTIPLE BAKING-PAN. HARRY J. HAIGH, Stapleton, N. Y. Original application filed July 11, 1916, Serial No. 108,692. Divided and this application filed Sept. 15, 1917. Serial No. 191,566. (Cl. 53—6.)



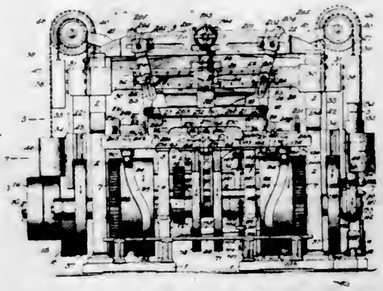
1. A multiple baking pan comprising a plurality of spaced pans each having a reinforcing wire extending around the upper edge thereof, connecting bars secured to the ends of the pans, and spacing members between the side walls of adjacent pans formed with a horizontally extending spacing portion and depending end portions, each of said end portions being curved outwardly and downwardly from said flat spacing portion and doubled back upon itself from a point opposite the under side of the adjacent reinforcing wire to a point opposite the outer side of said wire, portions of the upper edges of the side walls of the pans extending downwardly and inwardly between the doubled and curved end portions of the spacing members from points above the adjacent reinforcing wires to points below said wires.

2. A pan spacing device comprising a flat metal plate of relatively narrow width the end portions of which are doubled back upon themselves in spaced relation and bent downwardly and outwardly from opposite sides of a flat intermediate portion of single thickness to form downwardly and outwardly curved pockets, the open upper ends of which are substantially flush with said flat intermediate portion of the device.

3. The combination of a plurality of spaced pans each having a reinforcing wire extending around the upper edge thereof, the upper edges of the side walls of the pans being bent downwardly and inwardly about said wires to points below the under side thereof, connecting bars secured to the ends of the pans, and means for positively holding the adjacent side walls of the pans from movement toward or from each other embodying a relatively narrow sheet metal member interposed between each two pans intermediate the ends of the side walls thereof having a substantially horizontal central portion extending between the pan walls and downwardly and outwardly curved end portions doubled upon themselves throughout their length, the two thicknesses of the doubled end portions being spaced apart to receive offset portions of the downwardly and inwardly bent edges of the side walls of the pan therebetween.

[Claim 4 not printed in the Gazette.]

1,270,816. MACHINE FOR MAKING BAKING-PANS. HARRY J. HAIGH, Stapleton, and IRVING S. BODKIN, New York, N. Y.; said Bodkin assignor to said Haigh. Filed Nov. 2, 1917. Serial No. 199,917. (Cl. 153—13.)



1. In a machine of the class described, the combination of a female die having relatively movable parts, a male die, means for moving the dies into and out of engagement, means for imparting a relative movement between the female die parts, and means actuated by said die-part-moving means for positioning a blank to be shaped by said dies.

18. In a machine of the class set forth, the combination of a vertically reciprocable male die, a female die having open corners and vertically-reciprocable oppositely-disposed walls having beveled ends, means for moving the male die into and out of engagement with the female die, means for bending the radially extending folds of surplus material forced through the open corners of the female die against the beveled ends of the reciprocable walls of the female die opposite the walls of the article formed by said reciprocable die walls, means for subsequently moving the reciprocable walls of the female die out of coöperative relation with the other walls thereof, and means for pressing said bent folds of material against the walls of the article exposed by said movement of the female die walls prior to the return movement of the male die.

19. In a machine of the class described, the combination of means for pressing a blank into a substantially rectangular receptacle having folds of surplus material extending radially from the corners thereof, means shiftable diagonally past the corners of the receptacle and transversely of the plane of said radially extending corner folds for bending pairs of said folds toward each other around the corners of said receptacle, and means for pressing said pairs of bent folds flatly against opposite sides of the receptacle.

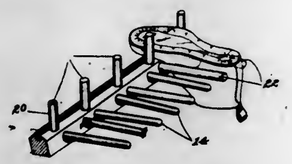
23. In a pan stamping machine, the combination of a die-block, relatively reciprocable devices coöperating with said die block to bend up the edges of a blank, and independent mechanisms coöperating respectively with said

relatively reciprocable devices and said die block for folding the surplus material at the corners of the blank against the bent up edges of the blank.

28. In a pan stamping machine, the combination of relatively shiftable means adapted to simultaneously bend up the four sides of a substantially rectangular blank, and relatively shiftable successively acting groups of devices adapted to coöperate in succession with different parts of said relatively shiftable side-bending means to bend and flatten the folds of surplus material at the corners of the partially shaped blank in pairs against opposite sides of the partially shaped blank.

[Claims 2 to 17, 20 to 22, 24 to 27, and 29 to 35 not printed in the Gazette.]

1,270,817. SHOE-RACK. WILLIAM PARKER HAMMOND, Boston, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed May 1, 1914. Serial No. 835,729. (Cl. 211—14.)



In a shoe rack, the combination with a toe rest comprising a toe supporting bar having a groove in its upper surface extending longitudinally thereof and a strip of yielding non-abrasive material in said groove with its edge projecting above the surface of said bar, of a series of pairs of pins projecting laterally from said rest, each pair of pins being constructed and arranged to support a shoe between them with the shoe in its inverted position and its toe on said strip of material, and a series of spacing pins projecting upwardly from said toe rest and located between said strip of material and said series of shoe supporting pins, said spacing pins being positioned, respectively, between the adjacent pairs of said shoe supporting pins.

1,270,818. REFRACTORY AND PROCESS OF MAKING SAME. JAMES O. HANDY and ROBERT M. ISHAM, Pittsburgh, Pa., assignors, by mesne assignments, to Allen S. Davison Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Jan. 22, 1917. Serial No. 143,678. (Cl. 106—11.)

1. The process of making refractory material of a nature resistant to atmospheric action which comprises moistening a carbonated refractory material with a liquid containing a small amount of a soluble chlorid, drying and calcining at a high temperature, the temperature being finally carried high enough to expel most of the chlorin of the chlorid so added.

12. As a new material, a brick of granules of a hard calcined refractory material containing magnesia and also containing a little chlorin, the amount of chlorin not being over 1 per cent., said material being substantially free of carbon dioxid and resisting the action of air, steam and hot water.

[Claims 2 to 11 not printed in the Gazette.]

1,270,819. REFRACTORY MATERIAL AND PROCESS OF MAKING SAME. JAMES O. HANDY and ROBERT M. ISHAM, Pittsburgh, Pa., assignors, by mesne assignments, to Allen S. Davison Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Jan. 30, 1917. Serial No. 145,530. (Cl. 106—11.)

1. The process of making magnesia refractories which comprises calcining dolomite, extracting so as to remove the major portion but not all of the lime and reheating to produce refractory materials.

2. The process of making magnesia refractories which comprises calcining dolomite, extracting with cold water to remove the major portion but not all of the lime and reheating to produce refractory materials.

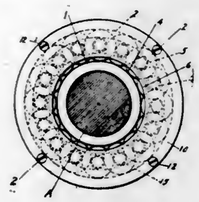
3. The process of making magnesia refractories which comprises calcining dolomite, extracting so as to remove the major portion but not all of the lime and reheating in the presence of small amounts of bonding material to produce refractory materials.

4. The process of making magnesia refractories which comprises calcining dolomite, extracting with cold water to remove the major portion but not all of the lime and reheating in the presence of small amounts of bonding material to produce refractory materials.

5. The process of making magnesia refractories which comprises calcining dolomite, extracting lime till the lime content is reduced to between 3 and 10 per cent. and reheating to produce refractory materials.

[Claims 6 to 14 not printed in the Gazette.]

1,270,820. ROLLER-BEARING. ORLANDO W. HART, Fall River, Mass. Filed July 6, 1917. Serial No. 178,910. (Cl. 64—61.)



1. In a device of the class described, a pair of concentric relatively rotatable members, a plurality of annular series of rolls disposed between said members, the rolls in adjacent series being in staggered relation, shafts on which the rolls of each series are respectively mounted and which coact with the rolls to maintain the same in such staggered relation, said shafts extending beyond the end roll surfaces of the bearing, and means applied to one of said members and provided with annular shoulders respectively disposed adjacent to the extending end portions of said shafts and adapted to coact with the latter to maintain the rolls in assembled position.

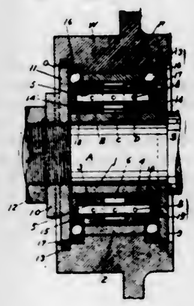
3. In a roller bearing, a pair of relatively rotatable members, an annular series of rolls disposed between said members, shafts on which said rolls are loosely mounted, said shafts being unattached to each other and said rolls and shafts coacting so as to be maintained in proper relative position, and means coacting with one of said members to form an oil well in which a portion of the bearing runs, said means coacting with said rolls independently of said shafts to transmit end thrusts from one to the other of said members.

6. In a roller bearing, a pair of relatively rotatable members, a series of rolls disposed between said members, shafts on which said rolls are respectively loosely mounted, said shafts being unattached to each other and said rolls and shafts coacting with each other so as to be maintained in proper relative position, and a device applied to one of said members and adapted to transmit end thrusts from one to the other of said members independently of said shafts.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,270,821. ANTIFRICTION-BEARING. ORLANDO W. HART, Fall River, Mass. Filed July 6, 1917. Serial No. 178,911. (Cl. 64—61.)

1. In a device of the class described, a pair of concentric relatively rotatable members, a roller bearing comprising an annular series of rolls disposed between said members, shafts on which said rolls are respectively mounted, and devices at the ends of said bearing respectively provided with means for transmitting end thrusts from one of said members to the other and with means adapted to coact with said shafts to hold the same in proper relative position when said members are separated.



4. In a device of the class described, a pair of concentric relatively rotatable members, the outer member being provided with an internal hardened sleeve rigidly secured thereto, a roller bearing comprising an annular series of rolls disposed and closely fitting in the space between said sleeve and the inner member, shafts on which said rolls are respectively mounted and which extend beyond the ends of the rolls, a pair of plates respectively secured to the inner one of said members beyond the ends of said bearing and provided with annular bearing surfaces respectively opposed to the ends of said sleeve, a pair of annular plates respectively loosely disposed between said opposed bearing surfaces and between the ends of said bearing and the plates secured to the inner members, said annular plates being each provided with an annular groove into which the corresponding extending end portions of said shafts extend, and balls loosely mounted in each of said annular plates and projecting from either side thereof for engagement with the corresponding annular bearing surface and opposed sleeve end.

10. In a roller bearing, a pair of relatively rotatable members, rollers disposed between said members, and devices at the ends of said bearing respectively having provision for transmitting end thrusts from one to the other of said members and adapted to act to maintain said rollers in proper position relative to each other.

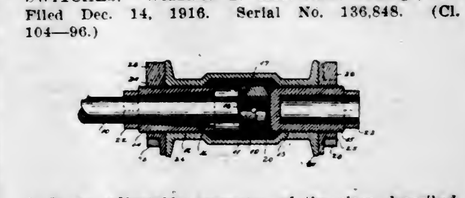
16. In a roller bearing, an annular roller assembly comprising bearing rollers and portions projecting beyond the end bearing roller surfaces of the bearing, and an annular plate adjacent one end of the bearing assembly having an annular groove for the reception of said portions at such end of the bearing, said plate being provided inwardly of said groove with a portion extending beyond the rest of the plate toward the bearing rollers.

[Claims 2, 3, 5 to 9, 11 to 15, and 17 not printed in the Gazette.]

1,270,822. CIRCUIT-INTERRUPTER. RUDOLF E. HELLMUND, Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 6, 1917. Serial No. 178,952. (Cl. 175—294.)

1. In an electric circuit, the combination with a circuit controlling member, of means for actuating the same when an overload obtains on the circuit and for preventing its operation when a surge obtains thereon.

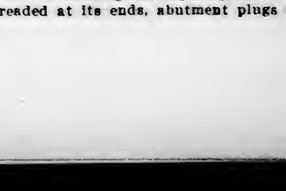
10. In an alternating-current circuit, the combination with a movable member and resilient means for actuating the same, of two cam members for permitting the movement of the movable member when an overload having a symmetrical current wave traverses the circuit and for



preventing its movement when the current wave is unsymmetrical.

[Claims 2 to 9 not printed in the Gazette.]

1,270,823. TRIMMING-BOARD. HUGO F. HOEFLE and GEORGE W. ADAMS, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Apr. 18, 1917. Serial No. 163,048. (Cl. 164—44.)



1. In a trimming board, the combination with a bed, a shearing blade at one end thereof and a raised guide on the bed transverse to the blade and having a scale thereon, of a gage arm supported by and slidable lengthwise of the raised guide and extending over and in spaced relation to the bed parallel with the shearing blade.

3. In a trimming board, the combination with a bed, a shearing blade at one end thereof and a sheet guide on the bed transverse to the blade, of a gage arm slidable on the guide having a base portion spanning the same and a shoulder coöperating with a side face thereof, a clamping jaw pivoted on the base portion of the arm and coöperating with the opposite face of the guide, and a clamping screw arranged to act between the jaw and base portion.

[Claim 2 not printed in the Gazette.]

1,270,824. ADJUSTABLE CONNECTION FOR SWITCHES. WILLIAM T. HOLDEMAN, Chicago, Ill. Filed Dec. 14, 1916. Serial No. 136,848. (Cl. 104—96.)

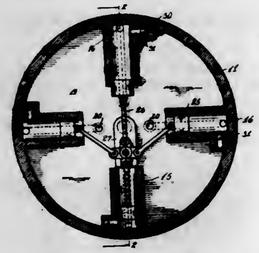
1. In an adjustable connector of the class described, the combination of a housing having its ends internally threaded, threaded abutment plugs adjustable in said ends, one of said plugs having a passageway therethrough of greater diameter at the inner end than at the outer end, a rod extending through said passageway and fitting the outer end thereof, and a head at the inner end of said rod for coöperating with said abutment plugs during relative movement of the rod and housing.

2. In a connector device of the class described, the combination of a housing having a passageway therethrough threaded at its ends, abutment plugs adjustable

in said ends and extending part-way into said housing, one of said plugs having a passageway therethrough, and a rod extending through said passageway to shift longitudinally therein, a head at the inner end of said rod for coöperating with said abutment plugs, said passageway through said plug being of increasing diameter inwardly whereby said rod may have lateral play in said housing.

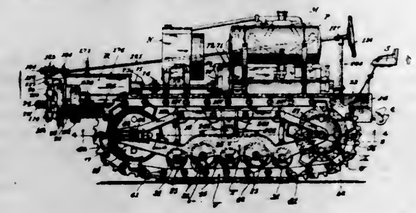
[Claims 3 and 4 not printed in the Gazette.]

1,270,825. POWER-TRANSMITTING MEANS. WILLIS L. HOOKER, Scottsburg, Ind., assignor of one-ninth to James Hooker, Indianapolis, Ind. Filed Dec. 19, 1914. Serial No. 878,161. (Cl. 192—18.)



Power transmitting means comprising a driving shaft, a driven shaft in alinement therewith, a wheel secured to one of said shafts and surrounding the other shaft, a crank in the latter shaft centrally located in said wheel, said wheel having a fixed wall and a removable wall, radially disposed dash pot cylinders integral with the fixed wheel and open at their inner ends, said fixed wall having radial conduits extending from the outer ends of said cylinders to a point beyond the inner ends thereof, said conduits having ports at their outer ends communicating with the outer ends of the cylinders, valves coöperating with said ports for preventing the return of the contents of the conduits into said cylinders, said conduits also having ports adjacent their inner ends communicating with the interior of said wheel, said latter ports being tapered a portion of their length, shafts extending transversely through said conduits, conical valves carried by said shafts for coöperation with said tapered seats of the inner set of ports, means to adjust said shafts longitudinally for controlling the passage of the contents of the conduits through the tapered ports, said cylinders also having at their outer ends ports communicating with the interior of the cylinders and the chamber in said wheel and valves coöperating with said ports to prevent the passage of oil from the interior of the cylinders through said latter ports into the chamber of the wheel.

1,270,826. MOTOR-DRIVEN VEHICLE. ORLEY C. HOUGHTON, Chicago, Ill., assignor to Frederick C. Austin, Chicago, Ill. Filed Sept. 6, 1917. Serial No. 189,925. (Cl. 180—9.)



1. In a power driven vehicle, the combination, of a chassis, a motor mounted on said chassis, a main transmission shaft connected to said motor, said main transmission shaft being located in the longitudinal center of said chassis, a transmission gear case at the forward end of said chassis, gearing in said transmission gear case connected to said main transmission shaft, a pair of driving shafts, one on each side of said chassis, a friction device at the forward end of each driving shaft, said friction devices being operated by said gearing, a worm at the rear end of each driving shaft, a pair of trucks, one on each side of said chassis, endless track bands mounted in said trucks, a driving sprocket wheel for each track band, and a worm wheel connected with each driving sprocket to rotate said driving sprocket, and mechanism for controlling the movement of each track band, said mechanism including a single hand wheel.

8. In a motor driven vehicle, the combination of a chassis, a motor mounted on said chassis at the rear end thereof, traction means at each side of said chassis, and means for connecting said motor to said traction means, said means including two operating shafts in parallel spaced relationship, each of said shafts being operatively connected to its correlated traction means, each of said operating shafts having at its forward end a friction device connected to said motor, and means for disengaging one of said friction devices from said operating shaft independently of the other of said friction devices.

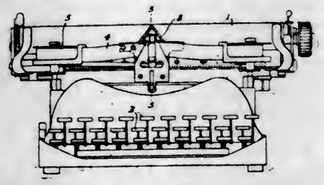
10. In a motor driven vehicle, the combination of a chassis, a motor on said chassis at the rear end thereof, traction means at each side of said chassis, and means for connecting said motor to said traction means, said means including a gear case at the forward end of said chassis, gearing in said gear case for operatively connecting said motor to said traction means, said gearing including a pair of gear wheels, said gear wheels being fixed to sleeves rotatably mounted in said gear case, a friction drum for each of said pair of gear wheels, a pair of operating shafts passing through said sleeves at their forward ends, and extending to within a short distance of the rear end of said chassis, the rear ends of said operating shafts being operatively connected to said traction means, an arm secured to the forward end of each operating shaft, a brake band surrounding each friction drum, a lever on each arm and pivotally connected thereto, said arm being connected to one end of said brake band, said lever being connected to the other end of said brake band, and means for operating said levers to cause said arms to engage said drums, the latter means including a cone at the forward end of each operating shaft, a vertically disposed shaft in front of said gear case, arms pivotally mounted on said vertical shaft, said arms being connected to said cones, a bifurcated element on said vertical shaft, the fork-members of which engage said pivotally mounted arms, and means for operating said bifurcated element.

15. In a motor driven vehicle, the combination, of a chassis, a motor mounted on said chassis, a pair of trucks, one at each side of said chassis, a pair of sprocket wheels mounted in each of said trucks, means for connecting said sprocket wheels to said motor, an endless track band trained over each pair of coacting sprocket wheels, said trucks comprising each a pair of skeleton frames, said frames being rigidly connected to each other, said skeleton frames having V-shaped ends, the upper bars of each V being integrally connected to each other by a bar, said latter bar having bearings, carrying rollers rotatably mounted in said bearings, said carrying rollers supporting the upper runs of said endless track bands, the lower members of said V's being connected by a bar, said bar having in its lower margin a series of notches, non-rotating axles, said non-rotating axles having squared ends engaging said notches, clamping plates for retaining said axles in said notches, track wheels rotatably mounted on said axles, said track wheels being constructed to run on the lower stretch of said endless track bands.

19. In a motor driven vehicle, the combination, of a chassis, a motor mounted on said chassis, traction means at each side of said chassis, and trucks for supporting said chassis, said trucks comprising each two skeleton members in spaced relationship, each of said members having V-shaped ends, the members of the V's being connected by bars, there being formed at the opposing flanks of each member tubular bosses, bolts passing through said bosses, nuts on said bolts which when tightened will securely fasten the two members together, there being bearings at the apexes of the V's the outer members of said skeleton frames being straight, the inner members being offset at one end, the driving mechanism for the traction means being located at the latter end, there being notches in the lower margins of the skeleton frames, and clamping plates bolted below said notches, non-rotating axles mounted in said notches and track wheels rotatably mounted on said axles to run on the lower stretch of said traction means.

[Claims 2 to 7, 9, 11 to 14, 16 to 18, 20, and 21 not printed in the Gazette.]

1,270,827. PRINTING-MACHINE. CHARLES HOUSEMAN, Rochester, N. Y., assignor, by direct and mesne assignments, to Underwood Typewriter Co., New York, N. Y., a Corporation of New York. Filed Oct. 10, 1917. Serial No. 195,841. (Cl. 197—180.)



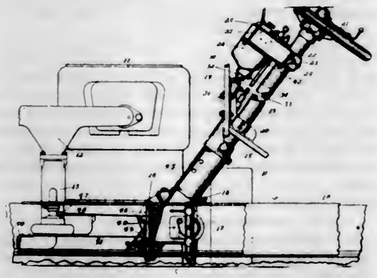
1. In a printing machine, the combination with a printing mechanism and a platen, one of which is movable in the direction of the printing line and one of which is movable toward and from the other to produce the printing, of a paper rupturing device for rupturing the paper to one side of the printing area on each relative movement of the platen and the printing mechanism.

3. In combination with a typewriting machine, having a type bar printing mechanism and a platen, a paper rupturing device engaged by the printing mechanism on each operation thereof to rupture the paper to one side of the printing point.

7. In combination with a platen, and a printing mechanism, a paper rupturing device mounted independently of said printing mechanism for engagement with work on the platen, said device being operated by the printing mechanism to one side of the printing point.

[Claims 2, 4 to 6, and 8 to 13 not printed in the Gazette.]

1,270,828. CONTROL DEVICE. RUSSELL HUFF, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Aug. 22, 1913. Serial No. 786,193. (Cl. 74—39.)



1. In a motor vehicle, the combination with the control devices, of a casing therefor non-rotatably mounted upon the steering column and said casing having a cover secured thereto independently of the steering column.

4. In a motor vehicle, the combination with the steering column, of a tube extending upwardly substantially parallel with the steering column, and a casing mounted on the steering column adjacent its upper end and having an underneath cover secured to it independently of the steering column, said tube extending into said cover, and said cover being slidable on said tube to open the casing.

8. In a motor vehicle, the combination with the electrical and mechanical control devices, of a support, and a control board mounted on said support and comprising a casing for said control devices said casing having a plurality of compartments, the electrical control devices being in one of said compartments and the mechanical control devices being in the other of said compartments.

[Claims 2, 3, 5 to 7, and 9 to 13 not printed in the Gazette.]

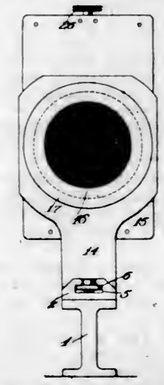
1,270,829. MATTRESS-FRAME. ALFRED E. IRELAN, Sharon Hill, Pa., assignor to Simmons Manufacturing Company, Kenosha, Wis., a Corporation of Wisconsin. Filed Jan. 8, 1916. Serial No. 70,961. (Cl. 5—64.)



1. In a mattress frame, the combination with a tubular side rail, of means for supporting said side rail on a bed frame comprising a riser or supporting bracket having a bearing portion adapted to rest on the bed frame and a socket portion extending partially around the side rail and having interlocking engagement with the latter.

2. The combination with a tubular member, of a supporting bracket therefor, said bracket comprising a bearing portion and an open loop portion clamped around the tubular member and having an internally extending lug projecting through a suitable aperture in the frame member.

1,270,830. APPARATUS FOR AND METHOD OF TESTING VISUAL ACUITY. HERBERT E. IVES, Philadelphia, Pa., assignor to Bausch & Lomb Optical Company, Rochester, N. Y., a Corporation of New York. Filed Dec. 14, 1916. Serial No. 136,897. (Cl. 88—20.)



1. A test object for determining visual acuity comprising means for producing symmetrical patterns within a given area, said means comprising two sets of straight lines, one set extending at right angles to those of the other, and means for varying the size and number of the patterns and preserving their symmetry.

6. An apparatus for testing eyes comprising a support having an aperture and two plates pivoted on the support

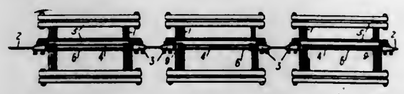
and capable of rotation in opposite directions, a grating carried by one of said plates having equi-distantly spaced lines ruled at right angles to each other and a separate grating mounted in the other plate having lines thereon ruled in one direction, said last mentioned grating being removably mounted on its supporting plate.

11. In an apparatus for testing eyes, the combination with a support, two apertured plates spaced apart and pivoted at points beneath the apertures and having gear racks located above the latter, a pinion carried by the support and coöperating with said racks, and two gratings covering the apertures in the plates and carried thereby.

18. In a visual acuity eyetesting apparatus, the combination with two superposed and pivotally mounted opaque line gratings, of an index member mounted to move with one of the gratings, a scale member mounted to move with the other grating, a plurality of rows of indices lying in the path of the index member and indicating fractional divisions of Snellen acuity units, said indication in each row being differently spaced for corresponding distances of observation.

[Claims 2 to 5, 7 to 10, 12 to 17, and 19 to 23 not printed in the Gazette.]

1,270,831. STATIC PROTECTIVE APPARATUS. RAY P. JACKSON, Edgewood Park, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed July 29, 1913. Serial No. 781,758. (Cl. 175—30.)



1. A protective device comprising a choke coil, a high-resistance and non-inductive element, and a strain insulator providing a housing for said resistance element, the insulator being positioned axially in said choke coil and mechanically connected to the end turns thereof.

5. A protective device comprising a plurality of choke coils which have substantially the same co-efficient of self induction, and a plurality of resistance elements each of which is connected in shunt relation with its respective choke coil, the ohmic resistance of each of the resistance elements varying from that of the others.

6. A protective device comprising a choke coil the turns of which are spaced from one another, a strain insulator mechanically connected to the end turns thereof and a resistance element electrically connected in shunt to the choke coil and housed in said strain insulator, the choke coil and strain insulator being spaced from each other to provide an air space therebetween.

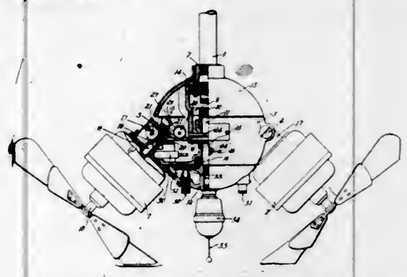
[Claims 2 to 4 not printed in the Gazette.]

1,270,832. REVOLVING FAN. OLIVER S. JENNINGS, Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 6, 1915. Serial No. 791. (Cl. 230—1.)

1. The combination with a rotatable support, of a motor mounted on the said support, and belt-operated means driven by the said motor for rotating the said support.

5. The combination with a rotatable support, of a motor mounted on the said support, a pulley also mounted on the said support and adapted to be driven by the said motor, a relatively stationary pulley disposed adjacent to the said support upon an axis substantially perpendicular to the axis of the said first-named pulley, a belt passing over both of the said pulleys and a third pulley adapted to engage the said belt and change its direction so that it engages both of the other pulleys in planes perpendicular to their axes.

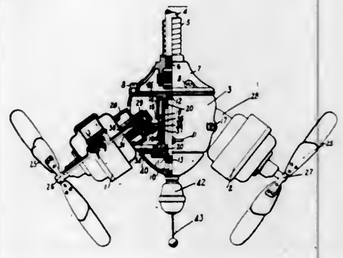
9. The combination with a support, and a plurality of fans pivotally mounted thereon, of a manually operable linkage for simultaenously adjusting the pivotal position of the said fans.



16. A revolving fan mechanism including the combination of a stationary pedestal member, a frame revoluble thereon, a fan and its operating motor carried by the frame and adjustable to vary the inclination of the fan's axis, and gearing comprising a member the axis of which is coincident with the axis of adjustment of the fan and its motor and constituting a positive driving connection between the shaft of the fan motor and the pedestal, whereby the frame and the fan are revolved around the pedestal member at a speed which has a constant definite relation to the speed of the fan-motor shaft.

[Claims 2 to 4, 6 to 8, and 10 to 15 not printed in the Gazette.]

1,270,833. REVOLVING FAN. OLIVER S. JENNINGS, Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 6, 1915. Serial No. 790. (Cl. 230—1.)



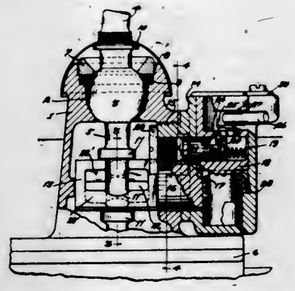
3. The combination with a rotatable support, of a motor pivotally mounted on the said support, a stationary annular track having a regularly curved exterior surface, and a gear wheel meshing with the said track and adapted to be driven by the said motor and to be pivotally moved therewith, the said track and the said gear wheel being adapted to mesh in a plurality of positions of the said motor and of the said gear wheel.

4. The combination with a rotatable support, of a motor pivotally mounted upon the said support, a stationary track disposed adjacent to the said support and having a curved exterior surface, a gear wheel adapted to be driven by the said motor and meshing with the said track for rotating the said support, and means for adjusting the said motor around a pivot that is maintained concentric with the center of curvature of the surface of the said track.

[Claims 1, 2, and 5 not printed in the Gazette.]

1,270,834. LOCKING UNIT FOR LEVERS. GEORGE C. JENSEN, Oakland, Cal. Filed Feb. 13, 1918. Serial No. 216,967. (Cl. 70—128.)

1. In combination with a support having a shift lever mounted therein for swinging movement, a member formed with a slot providing a pair of arms between which said lever operates, means for reducing the working area of said slot to lock said lever from movement by rotating said member to move said arms toward said lever, and lock controlled means for retaining said arms in their latter position.

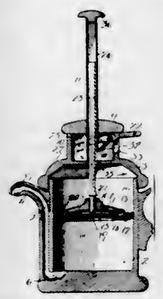


2. In combination with a tubular support having a shift lever mounted therein for swinging movement, an axially rotatable locking bolt or member extending into said support and provided with an elongated slot within which said lever operates, said member capable of axial rotation to reduce the working area of said slot by moving the side walls of said slot toward said lever, and lock controlled means for controlling the operation of said member.

3. In combination with a tubular support having a shift lever mounted therein for swinging movement, a locking member extended into said support at substantially right angles to said lever and provided with an elongated slot within which said lever operates, means for axially moving said member to reduce the working area of said slot to lock said lever from movement by moving the side walls thereof toward said lever.

[Claims 4 to 8 not printed in the Gazette.]

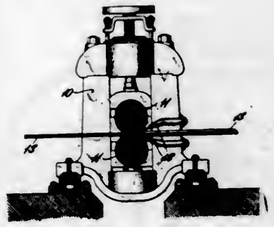
1,270,835. FLUID OR SEMIFLUID DISPENSING DEVICE FOR TABLE USE. MAX JERSEMANN, Brooklyn, N. Y. Filed July 23, 1915. Serial No. 41,435. (Cl. 221—78.)



1. A device of the class described comprising a tubular receptacle and a piston for displacing material therein, comprising a washer extending across the bore of said receptacle and engaging around its periphery with the inner surface of the receptacle, said washer having a normally arched central portion and being formed of flexible material, and means for operating said piston, comprising means adapted to first depress said normally arched portion and then the outer portion of the piston, for the purpose set forth.

[Claims 2 and 3 not printed in the Gazette.]

1,270,836. MEANS FOR ROUGHENING BARS. ALBERT L. JOHNSON, Hamburg, N. Y. Filed Mar. 6, 1916. Serial No. 82,318. (Cl. 80—31.1.)



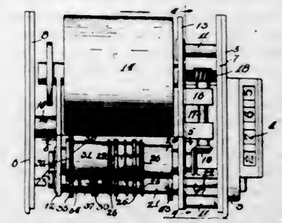
1. The improvement in apparatus for producing rolled metal which comprises coöperating roughened rolls and means for maintaining the roughened surfaces of the rolls throughout the rolling operation.

5. The improvement in the process of rolling which consists in continuously indenting the final rolls of the mill during the operation of rolling.

7. The improvement in the process of rolling reinforcing bars which consists in delivering sand or the like between the finishing rolls and the bar on the entering side of said rolls.

[Claims 2 to 4 and 6 not printed in the Gazette.]

1,270,837. TICKET MUTILATING, CANCELING, AND COUNTING DEVICE. JAY M. JOHNSON, Chicago, Ill., assignor to William P Butler, Berwyn, Ill. Filed Jan. 19, 1916. Serial No. 72,924. (Cl. 235—32.)



1. In a machine of the class described, coacting rolls, mechanisms mounted thereon to cut through a ticket and simultaneously place a defacing mark on the surface thereof as it is passed between said rolls, means for constantly driving one roller, and a mechanism controlled by the tickets for driving the other roller from the constantly driven roller when the tickets are inserted in the machine.

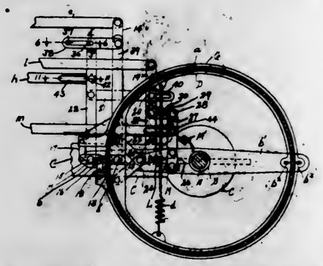
7. In a machine of the class described, coacting mechanisms adapted to receive a ticket therebetween to move the same therethrough, devices forming a part of said mechanisms to cut and deface the ticket passed therethrough, and a register connected to said mechanisms and automatically caused to operate due to insertion of a ticket into said mechanisms for registering the number of tickets collected.

15. In a device of the class described, a mutilating and canceling member, a register, a mutilating and canceling member connected to operate the register and means controlled by the insertion of a ticket for driving one of the canceling members from the other.

20. In a device of the class described, ticket canceling members, a clutch member for connecting the same to operate together, a mechanism operated by insertion of a ticket for adjusting the clutch into operative position and a ticket registering device connected to be operated from the canceling device.

[Claims 2 to 6, 8 to 14, and 16 to 19 not printed in the Gazette.]

1,270,838. **BRAKE MECHANISM FOR AUTOMOBILES OR MOTOR-VEHICLES.** HENRY JOSEPHSON, Cleveland, Ohio. Filed Sept. 6, 1917. Serial No. 189,927. (Cl. 21—8.)



1. In brake-mechanism for an automobile, two rods movable endwise independently of each other, two brake-shoes normally in their non-braking position, and such a connection between each rod and both brake-shoes that said brake-shoes are actuated into their braking position during the actuation of either of the rods endwise in the required direction independently of the other of said rods.

2. In brake-mechanism for an automobile, two rods movable endwise independently of each other, two brake-shoes, and such a connection between each rod and both brake-shoes that said brake-shoes are shifted into their braking position during the actuation of the one or the other of said rods endwise in the required direction, each brake-shoe being shiftable into its braking position independently of the other brake-shoe.

3. In brake-mechanism for an automobile, the combination with two brake-shoes, of two rods shiftable independently of each other, and such a connection between each rod and the brake-shoes that both brake-shoes are simultaneously actuated into their braking position during movement of one or the other of said rods endwise in the required direction.

4. In brake-mechanism for an automobile, the combination, with two brake-shoes shiftable into their braking position independently of each other, of means for shifting one of said brake-shoes independently into its braking position, other means for shifting the other of said brake-shoes independently into its braking position, an endwise shiftable rod, and such an operative connection between said rod and both brake-shoes that said brake-shoes are actuated into their braking position during the actuation of said rod endwise in the required direction, each brake-shoe being shiftable into its braking position independently of said rod.

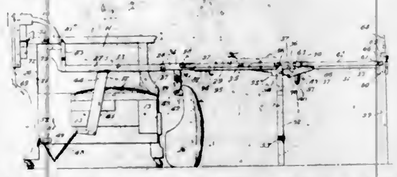
5. In brake-mechanism for an automobile, the combination, with two brake-shoes, of means for shifting one of said brake-shoes independently into its braking position, two rods *e* and *l* shiftable endwise independently of each other, and such an operative connection between each of said rods and both brake-shoes that said brake-shoes are actuated into their braking position during the actuation of either of said rods endwise in the required direction.

[Claims 6 to 23 not printed in the Gazette.]

1,270,839. SOFA-BED. WILLIAM J. KELLY, Clinton, Iowa. Filed May 12, 1915. Serial No. 27,550. (Cl. 5—47.)

1. In a sofa-bed, the combination with its frame and foldable mattress-sections adapted to be swung into the back portion of the bed, of a plate secured to the inner side of the end of the frame, an angle-shaped plate secured at its upper end to the top rail of the frame and fitting flatwise against the first referred to plate, means for securing these plates together, and locking means for locking the mattress-sections in position in the back sections of the sofa-bed, including a latch-lever pivotally supported on said second-named plate.

2. In a sofa-bed, the combination with a frame, of a pivotally-supported mattress formed of sections pivotally connected together, a supporting member for supporting the mattress sections at certain points when said sections are extended, pivotally connected with the mattress and foldable into substantially parallel relation therewith, and a slidably supported gravity-operated locking device adapted when the mattress-sections are swung from substantially horizontal folded condition, into the back portion of the sofa-bed, to interlock with said supporting member to hold it in folded condition and to automatically move to non-interlocked position in the unfolding of the mattress-sections.



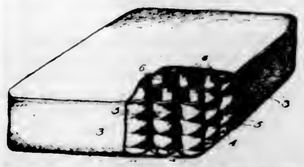
3. In a sofa-bed, the combination of a frame, a plurality of mattress-sections adapted to be folded together, levers pivoted on said frame and supporting said mattress-sections, said sections, in the sofa-forming position, being disposed in the back portion of the sofa-bed, springs operatively connected with said levers for counterbalancing the movable parts of the sofa-bed, members, having openings therein at intervals, connected with said springs and extending through openings in said frame, and pins adapted to enter any of said openings and interlock with said frame to vary the tension of said springs.

5. In a sofa-bed, the combination of a pivotally-supported mattress formed of five pivotally-connected mattress-sections, the pivotal support for said mattress-sections being at one of the end-sections thereof, said sections folding upon each other in succession from the outermost end-section, and a single means for releasably securing all of said mattress-sections together in folded condition, involving coöperating members, one of which is carried by the innermost end mattress-section and the other one of which is carried by the intermediate mattress-section next to the outermost end mattress-section.

8. In a sofa-bed, the combination with the frame thereof and mattress-sections adapted to be folded and supported to be moved into and out of the back portion of the sofa-bed, shouldered levers fulcrumed on said frame to move through a substantially vertical plane, and positioned to automatically interlock with parts carried by said mattress-sections when the latter are swung into the back portion of the sofa-bed, springs tending to hold said levers in interlocking position, levers extending lengthwise of said sofa-bed and pivotally supported on said frame to swing in a substantially vertical plane at angles to the plane in which said first-named levers swing, the outer ends of said second-named levers operatively engaging said first-named levers for swinging the latter against said springs, and means connecting said second-named levers together for simultaneous operation.

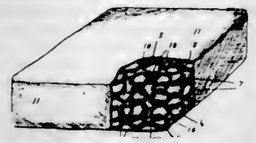
[Claims 4, 6, 7, and 9 not printed in the Gazette.]

1,270,840. CUSHION-SEAT AND MATTRESS. WILLIAM J. KELLY, Clinton, Iowa, assignor to Foster Brothers Manufacturing Company, Utica, N. Y. Filed Aug. 2, 1915. Serial No. 43,181. (Cl. 5—13.)



A pocketed-spring structure comprising a spring and a pocket-forming cover formed of a sheet of material surrounding the spring circumferentially and glued to the outer surfaces of the convolutions of the spring.

1,270,841. CUSHION-SPRING STRUCTURE. WILLIAM J. KELLY, Clinton, Iowa, assignor to Foster Brothers Manufacturing Company, Utica, N. Y. Filed Feb. 5, 1916. Serial No. 76,251. (Cl. 5—13.)



In a cushion spring structure a spiral spring covered with loose fiber held thereon by an adhesive.

1,270,842. PRODUCTION OF METALLIC TUNGSTEN POWDER. FREDERICK G. KEYES, East Orange, N. J., assignor to Cooper Hewitt Electric Company, Hoboken, N. J., a Corporation of New Jersey. Filed July 6, 1914. Serial No. 849,272. (Cl. 75—17.)

1. The method of removing from metal compounds having free energy constants the ingredients combined therewith, which consists in subjecting the said compounds to the influence of a metal dissolved in ammonia, the corresponding compound of which has a greater free energy constant than that of the said compounds to be treated, and heating the mixture.

3. The method of removing from tungsten compounds the ingredients combined with the tungsten, which consists in subjecting the compounds to the influence of a metal of the alkali group dissolved in ammonia and heating the mixture.

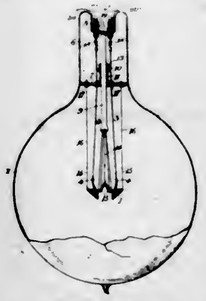
4. The method of removing oxygen from tungsten compounds of oxygen, which consists in subjecting said compounds to the influence of metals of the alkali group dissolved in liquid ammonia and heating the mixture.

5. The method of removing the strong negative electro elements from tungsten compounds, which consists in subjecting the compounds to the influence of metals of the alkali group while dissolved in liquid ammonia and heating the mixture.

7. The method of reducing an intimate and complete mixture of powdered tungsten oxid and an alkali metal, which consists in dissolving the metal in liquid ammonia, adding an oxid of tungsten, stirring the mixture, distilling off the ammonia and heating the resulting mixture slowly to about 500 to 600 degrees centigrade.

[Claims 2, 6, 8, and 9 not printed in the Gazette.]

1,270,843. ELECTRIC LAMP. FREDERICK G. KEYES, East Orange, N. J., assignor to Cooper Hewitt Electric Company, Hoboken, N. J., a Corporation of New Jersey. Filed June 26, 1914. Serial No. 847,403. (Cl. 176—39.)



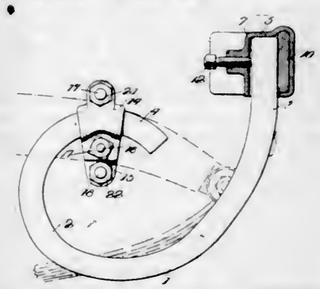
1. In a tungsten filament lamp, a container, a heavy filament therein, an extension of the container and supporting means for the said filament comprising a nonconducting depending arbor centrally disposed within the extension, anchor wires for connection with different parts of the filament and an insulated metal disk and sleeve surrounding the said arbor.

2. In a tungsten filament lamp, a container, a heavy filament therein, an extension of the container and supporting means for the said filament comprising a nonconducting depending arbor centrally disposed within the extension, anchor wires for connection with different parts of the filament and an insulated metal disk and sleeve surrounding the said arbor, the terminals of the filament being connected to the lamp seals by insulated rods extending through the disk.

3. In a tungsten filament lamp, a container, a heavy filament therein, an extension of the container and supporting means for the said filament comprising a nonconducting depending arbor centrally disposed within the extension, the said arbor having an upset portion, and an insulated supporting metal disk carrying a sleeve adapted to engage said upset portion.

4. Supporting means for heavy tungsten filaments comprising a non-conducting arbor having an upset portion, an insulated supporting disk carrying a sleeve adapted to engage the said upset portion and means for binding the upper end of the sleeve to the arbor above the upset portion.

1,270,844. BUMPER FOR AUTOMOBILES. ABRAHAM S. KIRSHNER, Philadelphia, Pa., assignor to William H. Rapeport, Philadelphia, Pa. Filed Oct. 27, 1916. Serial No. 128,073. (Cl. 293—55.)



1. In a bumper for automobiles and in combination with the frame thereof, bumper springs each having one end formed on an arc of a circle, clamps for securing the arc-shaped ends of said springs to said frame, and a bumper bar secured to and supported by the free ends of said springs, the arc-shaped ends of said springs permitting the springs to be adjusted to obtain the best spring effect.

4. In a bumper for automobiles and in combination with the frame thereof, a bumper spring, a clamp for securing said spring to said frame comprising two members between which the end of the spring is clamped, a bolt for holding said members in place, and a U-shaped bolt securing said clamp to said frame, one of the ends of said U-shaped bolt coöperating with the aforesaid bolt to clamp the spring between said clamping members.

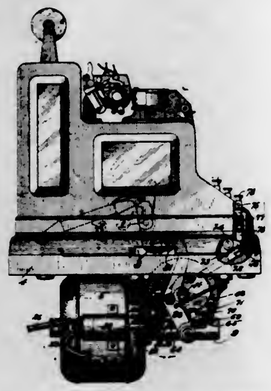
5. In a bumper for automobiles and in combination with the frame thereof, a bumper spring, a clamp for securing said spring, and a U-shaped bolt for securing said clamp to said frame, said bolt having a recessed part having two gripping edges contacting with said frame.

[Claims 2 and 3 not printed in the Gazette.]

1,270,845. ADDING-MACHINE. HARRY LANDSIEDEL, Poplar Bluff, Mo., assignor, by mesne assignments, to The Dalton Adding Machine Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Aug. 6, 1913. Serial No. 783,299. (Cl. 172—239.)

1. The combination with an element to be actuated, a motor for actuating said element, means controlling the operation of said element by said motor, a circuit for supplying power to said motor, a switch in said circuit and a

lever for operating said switch to open and close the circuit, of gearing permanently entrained with and maintained in constant movement by the running of the motor, and connections between said gearing and said lever whereby said gearing will operate said lever to open the switch after said controlling-means remains idle a definite period of time.



2. In a machine of the character described, the combination with a motor for operating the machine, a shaft maintained in constant rotation by the running of the motor, a pinion on said shaft, and a switch for turning the power off and on, of gearing permanently entrained with said pinion and maintained in constant operation hy the running of the motor, a device driven by said gearing for operating said switch to turn off the power, and means for preventing said gearing from operating said switch to turn off the power.

7. In a machine of the character described, the combination with a motor and a switch for controlling the admission of power to said motor and arranged to be opened and closed to turn the power off and on, of an actuator for said switch, gearing driven by the motor to move said actuator in a direction to open the switch, and yielding elements between said actuator and said switch enabling said actuator to move a desired distance before opening the switch.

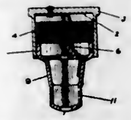
12. In a machine of the character described, the combination with a motor for operating the machine, and a switch for turning the power off and on, of a spring actuated device for operating said switch to turn on the power, a yielding connection between said device and said switch, a cam for moving said device to turn off the power, a pinion for operating said cam, and means for driving said pinion from said motor.

23. In an adding machine and in combination with the machine proper, a motor, manipulative motor controlling means controlling the starting of the motor, normally inoperative connections between the motor and the machine proper for driving the latter, means controlled by the manipulative motor controlling means for rendering the connection operative to effect an operation of the machine, mechanism constantly driven by the motor during the operation of the latter for controlling the operation of the motor, connections controlled by said mechanism for controlling the operation of the motor whereby the latter is stopped after a predetermined period has elapsed since an operation of said manipulative means.

[Claims 3 to 6, 8 to 11, 13 to 22, and 24 to 28 not printed in the Gazette.]

1,270,846. LUBRICANT-CUP. GEORGE L. LANG, Newark, N. J., assignor to Splitdorf Electrical Company, Newark, N. J. Filed Dec. 15, 1916. Serial No. 137,255. (Cl. 184—48.)

1. A lubricant device having in combination, a cap member of circular cup-shaped formation and having internal threads therein, a hollow body member having threads at one end adapted to receive the internal threads of said cup, a substantial portion of said body member intermediate its ends being formed to give a series of intersecting flattened surfaces both on the outside and inside of the body member, and a resilient member having a semicircular portion at one end of substantially the same diameter as said cap and adapted to be secured within said cap in such a manner that said semicircular portion engages the walls of the cap to hold said resilient member against displacement, the other end of said resilient member extending downward to yieldingly engage said internal flattened surfaces to thereby hold the cap member in its adjusted position, the flattened surfaces on the exterior of said body member serving as a wrench-hold.

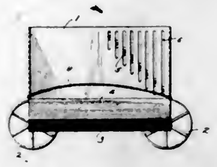


2. A lubricant device having in combination, a cap member of cup-shaped formation having internal threads therein, a hollow body member having threads on one end adapted to engage said internal threads, a substantial portion of said body member intermediate its ends being formed to give a series of angular surfaces within said body, and a resilient member having a semicircular portion at one end by means of which the same is securely fastened within said cap member, the free end of said resilient member being V-shaped and disposed in a manner to flexibly coöperate with the internal angular surfaces of said body, thereby holding said cap securely in its adjusted position upon said body member.

3. A lubricant device having in combination, a hollow body member constructed of flat material, a cap member screw threaded thereupon for axial movement relative thereto, a leaf spring having an enlarged semi-circular portion at one end by means of which the same is securely fastened to the bottom of said cap, and an orifice in the end of the body member, said body member having a substantial portion of its length formed to give a series of corresponding internal and external flat surfaces, said external surfaces serving as a means to apply the body member in its working position, said leaf spring having its free end disposed so as to engage at the intersections of said internal flat surfaces for the purpose of holding said cap securely in its adjusted position upon the body member.

[Claims 4 and 5 not printed in the Gazette.]

1,270,847. BOLL-WEEVIL CATCHER. JESSE P. LEE, Stockton, Ga. Filed Mar. 21, 1918. Serial No. 223,749. (Cl. 43—1.)

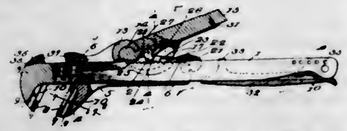


1. An insect catcher comprising a body provided with longitudinal troughs arranged upon opposite sides of a medial line and spaced apart laterally, deflecting members disposed approximately in line with the space formed between the troughs and knocking means for agitating the plants and causing the dislodged insects to be received in the troughs.

[Claim 2 not printed in the Gazette.]

1,270,848. WRENCH. WILLIAM T. LONG, Auburn, Wash. Filed Oct. 4, 1917. Serial No. 194,768. (Cl. 81—139.)

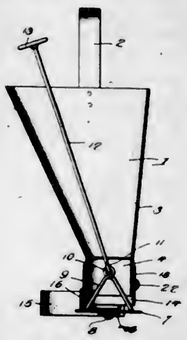
1. The combination of a shank having a fixed jaw at one end, a movable jaw mounted on the shank and having extensions projecting across the shank, a lever fulcrumed upon the said extensions at the opposite side of the shank, a dog fulcrumed upon said lever and adapted to engage the shank, means carried by the lever for normally holding the dog in engagement with the shank, and means carried by the movable jaw for releasing the dog from engagement with the shank.



3. The combination of a shank having a fixed jaw at one end, a movable jaw having side plates extending alongside the shank, webs connecting the side plates and extending across the shank, one of said webs being overhanging and the side plates having notches in their ends, a lever having a lug at one end rockingly engaging the overhanging web, a dog fulcrumed on the lever to engage the shank, and a releasing cap having circular projections engaging the notches in the ends of the side plates and also having a finger engaging under the end of the dog.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,270,849. FERTILIZER-DROPPING DEVICE. CHARLES G. LUNDSTROM, Vero, Fla. Filed Aug. 9, 1917. Serial No. 185,330. (Cl. 221—119.)



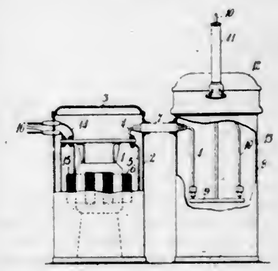
1. A fertilizer dropper comprising a hopper open at its lower end, a rotatable feed member permanently located at the lower end of said hopper, a yoke rising from said feed member and having an eye at its crown, and an operating rod in said hopper having at its lower end an eye engaged loosely with said first named eye, the upper end of said rod having a handle.

2. A fertilizer dropper comprising a hopper having an open lower end, a horizontally rotatable feed member spaced below said hopper to provide an annular discharge space, a pair of legs secured to opposite sides of said hopper, a horizontally disposed U-shaped supporting foot secured at its ends to said legs, and a horizontal U-shaped shield adapted to be secured to said legs for closing said discharge space throughout a portion of its circumference.

[Claims 3 and 4 not printed in the Gazette.]

1,270,850. COMBINATION TRANSFORMER AND CIRCUIT-BREAKER. WILLIAM M. MCCONAHEY, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 31, 1913. Serial No. 798,479. (Cl. 175—361.)

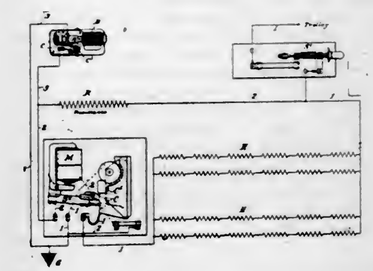
1. The combination with a main electrical apparatus, a containing case therefor, and a second case containing an auxiliary apparatus, of a rigid condenser type insulating bushings that project into both of said cases for the electrical connectors between said main and auxiliary apparatus.



2. The combination with a main electrical apparatus, a fluid-containing case therefor, an auxiliary apparatus, and a separate fluid containing case therefor, of condenser-type insulating bushings common to both cases and supported in the walls thereof, and conductors which extend through said bushings and interconnect the said main and auxiliary apparatus.

3. The combination with a main electrical apparatus, a containing case therefor, a case containing circuit interrupting means for said main electrical apparatus, said second case being spaced a short distance from said first containing case, of condenser-type insulating bushings common to both cases and supported in the walls thereof, whereby connectors between said main and auxiliary apparatus may be electrically insulated from the said cases.

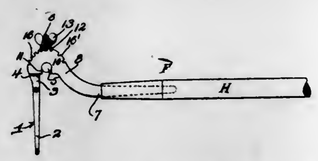
1,270,851. THERMOSTATICALLY-CONTROLLED CIRCUIT. JAMES F. MCELROY, Albany, N. Y., assignor to Consolidated Car-Heating Company, a Corporation of West Virginia. Filed Nov. 3, 1914. Serial No. 870,079. (Cl. 219—20.)



1. An improvement in thermostatically controlled circuits comprising means for providing a heater circuit, an electric heater within said circuit, a switch controlling said circuit, means for providing a branch circuit from said heater circuit, a magnet permanently in said branch circuit, an external resistance also in said branch circuit, means for providing a second branch circuit in parallel with the magnet and in series with the resistance, and a thermostat controlling the last mentioned branch circuit.

2. An improvement in thermostatically controlled circuits comprising means for providing a heater circuit, an electric heater within said circuit, a switch controlling said circuit, means for providing a branch circuit from said heater circuit, a magnet permanently in said branch circuit, an external resistance in said branch circuit in series with said magnet, means for providing a second branch circuit in parallel with said magnet and in series with the resistance, and a thermostat for controlling the last mentioned branch circuit.

1,270,852. AGRICULTURAL IMPLEMENT. JAMES ED. MCLAUGHLIN and DONAT BORDELEAU, Grandmere, Quebec, Canada. Filed June 28, 1917. Serial No. 177,540. (Cl. 55—38.)



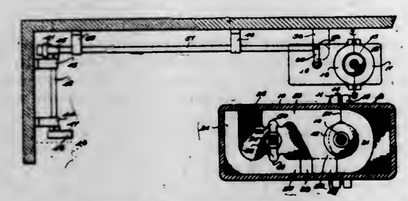
1. In an implement of the class described, a handle, a shank carried thereby and having a pair of semi-circular laterally spaced arms with registering notches in their straight edges, a tool having a tang disposed between said arms and provided with journals for pivotal engagement with said notches, and means for locking said tang to said arms to hold the tool in adjusted position.

3. In an implement of the class described, a handle, a shank carried thereby and having a pair of semi-circular laterally spaced arms at its free end, bearings formed in the straight edges of said arms, transversely extending ribs arranged on the curved edges thereof, the ribs on one arm registering with those on the other, a tool having a tang provided with a quadrant shaped arm adapted to be positioned between the arms of the shank and having laterally extending journals at its free end on its lower edge for pivotal engagement with the bearings in said shank arms, a threaded stud extending from the free end of the curved edge of said quadrant shaped arm and projecting beyond the ribbed edges of the shank arms, a clamp mounted on said stud and having flanges for insertion between said ribs, and a wing nut disposed on said stud outside said clamp for locking the clamp in adjusted position whereby the tool may be held at any desired angle.

5. A device of the class described comprising a handle having a tool carrying shank, bifurcated at its free end, the furcations of which are semi-circular in form with peripherally spaced notches in their curved edges and registering bearings in their straight edges, a tool having a tang for insertion between said furcations and provided with laterally extending journals adapted to be rotatably engaged with the bearings of said shank, and means carried by said tang for detachably engaging the notches in said furcations whereby the tool may be adjusted and held at different angles in relation to the shank.

[Claims 2 and 4 not printed in the Gazette.]

1,270,853. ELEVATOR SAFETY-LOCK. BURT H. MACY, Somerville, Mass. Filed Mar. 18, 1915. Serial No. 15,242. (Cl. 187—47.)



1. In an elevator installation, the combination with a shipper cable and separated stops on said cable, of a lock mounted in a stationary location and having relatively movable separable jaws embracing said cable and adapted to occupy a position between said stops in the path thereof, whereby to prevent movement of the cable into the position for starting the car, an actuator for said jaws, an endwise movable rod connected to said actuator and having a tappet, and a rock shaft having a plurality of arms one of which is arranged to engage said tappet and the other is arranged to be engaged and moved by an elevator gate.

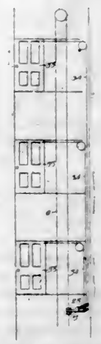
2. In an elevator installation, the combination with the return stretch of a shipper cable, of locks mounted adjacent to each of the floors or stages of said installation, each lock being provided with relatively movable jaws embracing the cable, a pair of separated stops on the cable adjacent to each of the several locks, the stops of each pair being disposed on opposite sides of said jaws when the cable is in the neutral position, and the jaws normally in position to interfere with said stops, a gate or guard at each stage of the installation, an operating lever arranged with both jaws and arranged for operation to move the jaws apart, and mechanism through which each gate is adapted to turn the operating lever of the lock at the same stage in the manner which causes the jaws of that lock to be separated, or opened.

3. In an elevator installation, the combination with a lock having separable jaws and an operating lever engaged with said jaws, of an arm connected with said lever, a link joined to said arm and having an abutment, and a rock shaft having a tappet arranged to bear on said abutment and having an arm adapted to be moved by pressure applied thereto.

4. An elevator lock comprising a casing having guideways at opposite sides thereof, slides movable in said guideways each having a jaw element projecting toward the opposite guideway, said jaws passing one another and formed with a space between them adapted to admit an elevator shipper rope, said slides each having on the side toward the other a socket, and a lever pivoted in the casing between said slides having arms entering said sockets whereby said lever is operable to move said slides simultaneously in relatively opposite directions and also to transmit movement from one slide to the other.

[Claims 5 to 7 not printed in the Gazette.]

1,270,854. ELEVATOR-LOCKING SYSTEM. BURT H. MACY, Somerville, Mass. Filed May 18, 1915. Serial No. 28,938. (Cl. 187—47.)



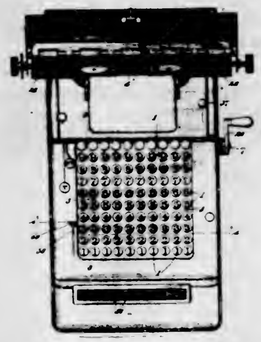
1. An elevator controlling mechanism comprising in combination with a shipper cable, a lock including locking jaws adapted to prevent operation of said cable when closed and to permit such operation when open, a plurality of levers mounted in association with said lock and each operable independently of the others, a plurality of doors opening into the elevator well, and motion-transmitting elements each in permanent connection with one of said levers and with one of said doors, each door being connected by said elements with a separate one of said levers.

7. A lock for the shipper cable of an elevator comprising a locking element adapted to prevent movement of such cable when in one position and to permit movement thereof when in another position, a plurality of operating members mounted side by side and each capable of independent operation, and motion transmitting means between said levers and said locking element, arranged for actuation by any one of said operating members for shifting said locking element from one of its positions to the other.

9. An elevator lock comprising independently mounted movable slides each having a jaw and being guided and arranged to travel in substantially parallel paths, one of said slides having a tailpiece, a spring interposed between said tailpiece and the other slide arranged and operative to hold the slides and jaws in a predetermined position, external actuating means arranged and operable to act against one of said slides to displace it from the position in which it is held by said spring, and transmission means engaged with both slides for causing the other slide to be moved simultaneously with and oppositely to the slide which is moved by the actuating means.

[Claims 2 to 6 and 8 not printed in the Gazette.]

1,270,855. ADDING-MACHINE. JOHN MAGNUS, Poplar Bluff, Mo., assignor, by mesne assignments, to The Dalton Adding Machine Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Apr. 4, 1913. Serial No. 758,848. (Cl. 235—60.)



1. In a machine of the character described, the combination with rows of depressible number keys, elements normally in inoperative position and movable to operative position for effecting depression of keys in one row of corresponding value to previously depressed keys in an adjacent row, means for setting said elements in operative position by operation of said previously depressed keys, latching devices retaining said elements in operative position independently of the previously depressed keys, and means for actuating said elements to effect depression of keys.

2. In an adding machine, the combination with rows of depressible keys, appliances for effecting depression of a key in one row moved to operative position by keys of corresponding value in an adjacent row depressed in a preceding operation, actuators for moving said appliances to and normally holding them in inoperative positions, latching devices holding said appliances in operative position independently of the previously depressed keys, and a manipulative device for actuating said appliances.

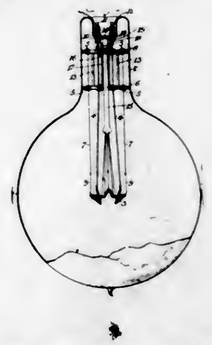
3. In a machine of the character described, the combination with rows of depressible keys, levers for effecting depression of keys in one row under control of keys in an adjacent row, means normally holding said levers out of operative positions, means actuated by keys as an incident to depression thereof for moving said levers to operative position for depression of keys of corresponding value in adjacent rows, automatic means for holding said levers in operative position independently of the previously depressed keys, and means for releasing said automatic means to enable said levers to be restored to inoperative positions.

10. In a machine of the character described, the combination with denominational rows of number keys, of means for operating keys in one row under control of previously operated keys of corresponding value in an adjacent row of higher denominational value, and means for operating keys in another row, of lower denominational value, also under control of said previously operated keys.

11. In an adding machine, the combination with rows of depressible keys, of mechanism for effecting depression of keys in one row under control of previously depressed keys of corresponding value in an adjacent row of lower denominational value depressed in a preceding operation, and independent means for effecting depression of keys in another row, of lower denominational value, also under control of said previously depressed keys.

[Claims 3, 4, 6 to 9, and 12 to 14 not printed in the Gazette.]

1,270,856. SUPPORT FOR ELECTRIC-LAMP FILAMENTS. ROY D. MAILEY, East Orange, N. J., assignor to Cooper Hewitt Electric Company, Hoboken, N. J., a Corporation of New Jersey. Filed June 27, 1914. Serial No. 847,601. (Cl. 176—38.)



1. In an electric lamp, a container and a tubular extension thereof, a heavy filament of tungsten supported within the container, the supporting means consisting of disks spaced apart and rigidly secured together within the said extension, and the filament being supported at its ends by the said disks as intermediate means of support, and anchors holding up the filament at various points, the said anchors being directly suported by the said disks.

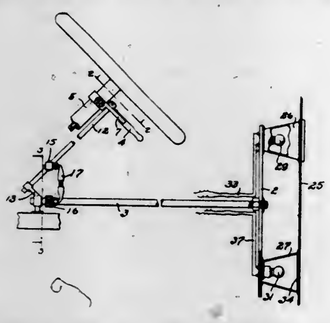
3. In an electric lamp, a container and a tubular extension thereof, a heavy filament of tungsten supported within the container, a nonconducting arbor centrally disposed within the tubular extension and anchor wires connected with different parts of the filament, and insulated disks spaced apart but rigidly connected with each other within the said extension, the said arbor being provided with an up-set portion and the said disks being provided with a sleeve surrounding the arbor and adapted to engage the said up-set portion.

[Claims 2 and 4 to 6 not printed in the Gazette.]

1,270,857. AUTOMOBILE-SIGNAL. CHRISTOPHER B. MICHEL, Oakland, Cal. Filed Sept. 6, 1916. Serial No. 118,615. (Cl. 116—31.)

2. An automobile signal comprising a shaft, a frame secured to said shaft and adapted to move when said shaft is rotated, a conical reflector casing arranged at each end of said frame, a tail light arranged in one of said casings, an independently illuminable signal light in the

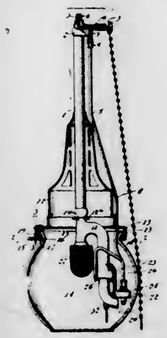
other casing, an arm for indicating direction lying across and supported by said reflector casings, and having aper-



tures therein above said lights, and means for turning said shaft to move said frame and signal arm.

[Claim 1 not printed in the Gazette.]

1,270,858. LAMP. THEODORE NAGEL, Chicago, Ill. Filed Oct. 14, 1915. Serial No. 55,782. (Cl. 67—50.)



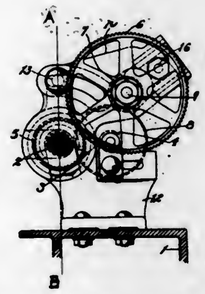
1. In a hydro-carbon lamp comprising a mixing-chamber, a burner, a feed pipe leading to the mixing-chamber, a vaporizer extending transversely across the mixing-chamber; an aperture in the vaporizer; a rod arranged to enter the aperture; said rod extending from the transverse portion of the vaporizer, and a tubular extension having a lateral projection; said extension surrounding said rod and having an end constructed to engage the mixing-chamber above the transverse portion of the vaporizer, and said rod having a construction which permits of its being reciprocated within the tubular projection.

3. In a hydro-carbon lamp comprising a mixing-chamber, a burner, a feed pipe leading to the mixing-chamber, a vaporizer connected to the feed pipe, a tubular extension leading from the mixing-chamber, the end of said tubular extension remote from the mixing-chamber being bent laterally, a rod extending from the vaporizer through an aperture in the laterally extending portion of the tubular extension.

[Claims 2, 4, and 5 not printed in the Gazette.]

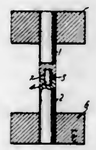
1,270,859. GEARING. HARMON O. NELSON, Whitinsville, Mass., assignor to Whitin Machine Works, Whitinsville, Mass., a Corporation of Massachusetts. Filed Feb. 24, 1917. Serial No. 150,652. (Cl. 74—7.)

In a machine of the character described, the combination of draft rolls comprising a front and a back roll; a train of gears, transmitting motion between the rolls, comprising a gear fixedly mounted on each roll, and gears forming a compound gear meshing with the roll gears respectively; a swing arm, the axis of rotation of which is coincident with the axis of rotation of the front roll gear;



the swing arm having slides 15 integral therewith, a bearing 14 for the shaft of the compound gear, having a foot 17 adjustably mounted on the slides 15; means to securely fasten the foot to the swing arm, and means for fastening the swing arm in a fixed relation with a stationary part of the machine.

1,270,860. ELECTRIC WELDING PROCESS. HAROLD A. NEWCOMB, Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed May 11, 1914. Serial No. 837,727. (Cl. 219—10.)



1. The process of welding metals that consists in pressing together the surfaces of two bodies of metals having different melting points, and simultaneously heating the said bodies unequally in substantial proportion to their melting points until surface diffusion is effected.

5. The process of welding metals that consists in passing an electric current through two engaging bodies of metals having different melting points and such relative proportions that the engaging portions of both bodies are heated, at substantially the same time, to such condition of plasticity as to cause surface diffusion between them, applying longitudinal pressure to the said bodies, interrupting the electric current, and applying additional longitudinal pressure to the said bodies.

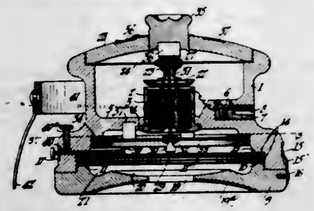
11. The process of welding metals that consists in forming recesses in the ends of two iron or steel bodies, seating a body of a refractory metal of the tungsten type in the said recesses and applying heat and pressure to the said metal bodies to weld the ends of the refractory-metal body to the bottoms of the recesses in the iron or steel bodies.

[Claims 2 to 4 and 6 to 10 not printed in the Gazette.]

1,270,861. COMBINED TELEGRAPH AND TELEPHONE INSTRUMENT. HERMAN G. PAPE, New York, N. Y. Filed Feb. 1, 1915. Serial No. 5,384. (Cl. 178—100.)

1. An electro-responsive sound reproducing instrument comprising an electro-magnet and its armature, said armature movable in response to magnetic impulses due to electrical impulses in the electro-magnet, a sounder or sound producing diaphragm, a striker carried by the armature in

position to strike the sounder or diaphragm when the armature is actuated by a current impulse in the electro-magnet, and a sound deadening means interposed between the striker and the electro-magnet.



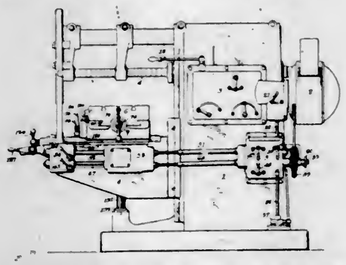
5. In a sound reproducing instrument, the combination with an electro-magnet, of an armature therefor, elastic means by which the armature is supported and permitted to move when attracted by the electro-magnet, said elastic means returning the armature when the magnet is de-energized, a sounder or diaphragm, a striker, a connection between the armature and striker for causing the latter to strike the sounder or diaphragm when the armature is actuated, a cushion forming a yielding stop determining the normal position of the armature and striker, and means for adjusting said cushion to adjust the striker toward or from the sounder or diaphragm.

12. In a sound reproducing instrument adapted to be applied to the ear, the combination with a casing, of an electro-magnet and a sounder or diaphragm mounted in the casing, an armature for the electro-magnet, a striker actuated by the armature to strike the sounder or diaphragm, a sleeve secured to the armature, a rod extending into said sleeve, said striker connected to the rod, a spider mounted in the casing to form an elastic support for the armature, and cement forming a connection between the spider and said sleeve and between the sleeve and rod, said cement adapted to be applied in a liquid or plastic state and self hardening to rigidly unite the parts.

26. A telegraphic ticker in combination with a concussion or pneumatic impact diverting ear piece for the private delivery of the telegraphic ticks to the ear of the listener, and adjustable means for converting the ticker into a telephone sounder or articulate speech reproducer.

[Claims 2 to 4, 6 to 11, 13 to 25, 27, and 28 not printed in the Gazette.]

1,270,862. TRANSMISSION MECHANISM FOR MACHINE-TOOLS. FRED A. PARSONS, Milwaukee, Wis., assignor to The Kempsmith Manufacturing Co., West Allis, Wis., a Corporation of Wisconsin. Filed Sept. 29, 1917. Serial No. 194,020. (Cl. 90—21.)



1. In transmission mechanism for machine tools the combination with a reciprocatory member, two feed elements adapted respectively to impart relatively slow forward and backward movement to said member, two quick traverse elements adapted respectively to impart relatively rapid forward and backward movement to said member, connections whereby such movements are imparted from said elements to said member, and manually operated means adapted to operatively connect any one of said elements with said member and to determine the operative and inoperative relation of such element to said member.

9. In transmission mechanism for machine tools the combination with a reciprocatory member, of a feed transmission comprising two driving elements, adapted respectively to impart relatively slow movement to said member in opposite directions, a quick traverse transmission comprising two driving elements adapted respectively to impart relatively rapid movement to said member in opposite directions, connections whereby such movements are imparted from said elements to said member, shifting devices adapted to operatively connect and to disconnect said member and either of said feed elements or either of said quick traverse elements, means coacting with said shifting devices to automatically disconnect said member from either feed element when said member is operatively connected with the oppositely working rapid traverse element and vice versa and permit simultaneous connection of said member with unidirectional feed and quick traverse elements, an adjustable trip on said member adapted to cooperate with one of said shifting devices to operatively connect said member with one of said driving elements, and a stop on said member adapted to cooperate with said coacting means to disconnect said member from said driving element.

11. In transmission mechanism for machine tools the combination with a reciprocatory member of a feed transmission comprising two driving elements adapted to impart relatively slow movement to said member in opposite directions, a quick traverse transmission comprising two driving elements adapted to impart relatively rapid movement to said member in opposite directions, connections whereby such movements are imparted from said elements to said member, means for operatively connecting and disconnecting said member and any of said driving elements, and a yieldable coupling device in one of said transmissions.

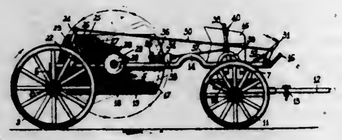
39. In transmission mechanism for machine tools the combination with a frame, a vertically movable knee mounted thereon, a horizontally movable saddle mounted on said knee, and a table mounted on the saddle and movable transversely thereto, of feed and quick traverse transmissions comprising two primary parallel shafts mounted on said frame, change-speed gearing for imparting a relatively slow variable movement to the feed shaft, two secondary parallel shafts mounted on and movable with the knee and connected by universally jointed telescopic shafts with the primary shafts, two sets of driving gears, each set comprising two gears mounted on each shaft and meshing with corresponding gears on the other shaft, clutches for operatively connecting either of each pair of gears with the shaft on which they are mounted, one set of gears and clutches being connected and movable with the saddle and shiftable therewith lengthwise of the secondary shafts, a branch transmission including reversing gearing for connecting either of each pair of said shiftable gears with the table and imparting thereto relatively slow and variable movement or relatively rapid movement in opposite directions, two branch transmissions including reversing gearing common to both for connecting either of each pair of the other set of driving gears with the saddle or knee and imparting thereto relatively slow variable movement or relatively rapid movement in opposite directions, and a clutch in each branch transmission for rendering the same operative or inoperative.

[Claims 2 to 8, 10, 12 to 38, and 40 to 43 not printed in the Gazette.]

1,270,863. DUMP-WAGON. EDMUND PAULSEN, Omaha, Nebr. Filed June 23, 1916. Serial No. 105,387. (Cl. 21—20.)

1. In a dump-wagon, a wheeled vehicle-frame, a wagon-body mounted on said frame and rotatable about a horizontal transverse axis unidirectionally from a normal horizontal position to an inverted position and thence to the normal position again, connecting means between one

of the vehicle-wheels and said body for rotating the latter, a lock-bar slidably mounted on the frame, means on the rotatable body forming a socket for engagement with said lock-bar, a stop on the body alined with said socket, and means for moving the lock-bar to positions for engaging the stop only, for engaging both the stop and socket, and for disengagement from both the socket and stop, for the purpose described.



2. In a dump-wagon, a wheeled vehicle-frame having longitudinal side-members, a wagon-body mounted between said side-members and adapted for complete rotation therebetween about a transverse axis, means actuatable by the vehicle-wheels for rotating said body, releasable means for fixedly connecting the frame and body when the latter is in a normal horizontal position, and a stop carried by the body and engageable with said releasable means to prevent rotation of the body past the normal position.

3. In a dump-wagon, a wagon-body having laterally extending trunnions, a wheeled vehicle-frame having side-bars on which said trunnions are revolubly mounted to enable complete rotation of the body about the trunnion-axis, rotary actuating means connected with one of the trunnions, means for frictionally engaging said rotary actuating means with one of the vehicle-wheels to actuate the body therefrom, a longitudinally movable lock-bar carried on the frame, a stop on the body engageable with said lock-bar when the latter is in one position, and socket-forming means on the body engageable by said lock-bar at another position thereof.

1,270,864. CUE-TIP HOLDER. JOSEPH PERLMUTTER, Jersey City, N. J. Filed Sept. 1, 1917. Serial No. 189,264. (Cl. 46—9.)



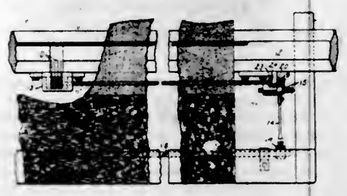
1. A cue tip holder, comprising two semi-cylindrical separable members, integrally describing a cylinder, having a recess, with an internal annular flange at the opening thereof, in one end, and a circular recess for seating the end of the cue in the other end, and screw means for attaching to billiard cues and the like.

2. A cue tip holder, comprising two semi-cylindrical members, dowel means for removably maintaining the members in register, a recess at one end with inwardly inclined flange means at the opening thereto, for retaining a cue tip, and at the other end, a circular channel or groove for seating the end of a cue, and screw means for attaching the members to a cue or the like.

3. A cue tip holder, comprising two semi-cylindrical members, dowel means for removably maintaining the members in juxtaposition, cylindrically, a recess at one end with inwardly inclined flange means, at the opening thereto, and in the other end a circular channel or groove, for seating and gripping the cue end, and screw means for attaching the device to a billiard cue or the like.

4. The combination in a cue tip holder, of two semi-cylindrical members, integrally describing a cylinder, having in one end thereof a cylindrical recess, contracted as a flange at the opening thereto, and the opposite end having at the center thereof screw means, integral with the main member, adapted for attaching the device to a billiard cue, and a circular channel or recess interposed between the outer edge and the screw means, for retaining and gripping the end of a billiard cue.

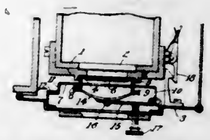
1,270,865. CENTER STOP-MOTION. GEORGE PFEIFFER, Providence, R. I., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Dec. 26, 1917. Serial No. 208,744. (Cl. 139—54.)



1. A center stop motion comprising a filling fork, a dagger, a crank disk, a bearing for said disk, a link connecting said disk to said dagger, and connections between said disk and said filling fork, said connections including a longitudinally extended rod on which said filling fork is mounted, and means to firmly secure said rod and disk together, said means permitting relative angular adjustment of said rod and disk but preventing longitudinal movement of said disk relatively to said bearing.

2. A center stop motion comprising a filling fork, a dagger, a crank disk, a bearing for said disk, a link connecting said disk to said dagger, and connections between said disk and said filling fork, said connections including a split hollow hub for said disk extending through and beyond said bearing, a longitudinally extended rod to which said filling fork is secured, the end of said rod fitting loosely in said hollow hub, a collar on the extension of said hub adjacent said bearing, and means to secure said collar on said hub and to simultaneously bind said hub on said rod.

1,270,866. TENSION DEVICE FOR MOVING-PICTURE MACHINES. NICHOLAS POWER, Brooklyn, N. Y., assignor to Nicholas Power Company, New York, N. Y., a Corporation of Delaware. Filed June 6, 1916. Serial No. 102,069. (Cl. 88—17.)



1. A tension device for moving picture machines comprising a gate hinged to the machine frame, a supporting member detachably connected to said gate and tension devices for both marginal edges of the film wholly supported on said detachable member, said supporting member and tension devices being detachable as a unit from said gate.

3. In a tension device for moving picture machines a supporting member detachably connected to the machine frame, a pair of film engaging members movably supported in said supporting member and having shoes positioned to engage the opposite margins of the film, a spring for each of said members pressing said shoes against the film and a member supporting both said springs pivotally mounted on said supporting member.

7. In a moving picture machine having a fixed frame part provided with a projection aperture, a hinged gate mounted for movement toward and from said aperture, a tension device for the film at the aperture carried by said gate, said tension device comprising a supporting member detachably mounted on said gate and a plurality of separate film engaging parts for yieldingly engaging both margins of the film mounted on said supporting member, separate springs for said parts positioned between said gate and said member, a common support for said springs, said support being mounted on said member, and means operatable from the opposite gate for adjusting said spring-carrying member to vary the tension of said springs.

[Claims 2 and 4 to 6 not printed in the Gazette.]

1,270,867. FUSE. CHARLES S. PRICE, Rutherford, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 3, 1916. Serial No. 112,989. (Cl. 175—273.)

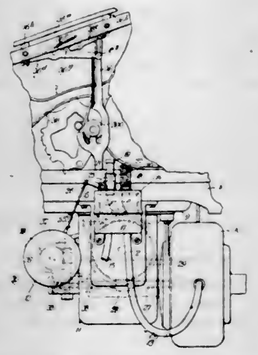


1. A protective device comprising a tubular sheath vented at or near one end, metal caps inclosing the ends of said sheath, a fusible conductor extending between said caps and means for causing the rupture of said fusible conductor at a point near the non-vented end of the sheath.

4. The combination with a fuse cartridge comprising a tubular sheath vented at or near one end, a fusible conductor therein, a porous non-conducting material surrounding said conductor, and means for determining the rupture point of said conductor at or near the non-vented end of the sheath, of an inclosing casing larger in diameter than and surrounding said cartridge so as to form an interposed air space, said casing being vented at or near the end opposite to the vented end of said cartridge sheath.

[Claims 2 and 3 not printed in the Gazette.]

1,270,868. ADDING-MACHINE. JOSEPH RABER, Detroit, Mich., assignor to Burroughs Adding Machine Company, Detroit, Mich., a Corporation of Michigan. Filed May 20, 1912. Serial No. 698,568. (Cl. 172—239.)



1. In an adding machine and in combination with the machine proper, a motor, motor controlling means, normally inoperative connections between the motor and the machine proper for driving the latter, manipulative means for rendering the connection operative to effect an operation of the machine, timing mechanism constantly driven by the motor during the operation of the latter, connections controlled by the timing mechanism for controlling the operation of the motor whereby the latter is stopped after a predetermined period has elapsed since an operation of said manipulative means.

4. In a device of the class described, the combination of the machine proper, an electric motor for driving the same, a timing mechanism driven by the motor, a clutch between the motor and machine, a switch for starting and stopping the motor when the clutch is open and connections between the timing mechanism and switch for controlling the latter.

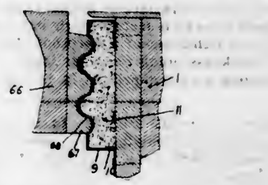
5. In a device of the class described, the combination of the machine proper, a motor for driving an element thereof, manipulative means for controlling the operation of said element by the motor, timing means continuously and positively driven by the motor, and connections whereby the timing means shuts off power from the motor after a predetermined period has expired since the operation of the manipulative means has ceased.

9. In a machine of the class described, and in combination with the adding machine proper, a motor, timing mechanism continuously driven from the motor, connections under the control of the timing mechanism for stopping the motor and connections to the timing mechanism under control of a manipulative element of the machine proper for preventing the stoppage of the motor.

18. An adding machine, a motor for driving the same, a motor governor, means for manually setting said governor to start the motor, a trip for operating the governor to stop the motor, means under control of a manipulative part of the machine to restrain said trip from operation and a timing device constantly driven by the motor when in operation adapted and arranged to prevent operation of the trip for a period after the operation of the manipulative part.

[Claims 2, 3, 6 to 8, 10 to 17, and 19 to 21 not printed in the Gazette.]

1,270,869. SEAL FOR CAR-DOORS. MARTIN THORSEN RELLING, Butler, Pa. Original application filed June 8, 1915, Serial No. 32,967. Divided and this application filed Jan. 25, 1916. Serial No. 74,159. (Cl. 20—69.)

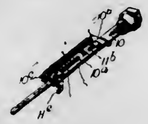


The combination with a door jamb having each of its sides, its top and bottom provided with a strip having its front face corrugated, of a lateral movable door body adapted to be shifted toward said jamb, and a compressible member consisting of a flexible element secured to the inner face of the door body at the top, bottom and side marginal portions thereof, and providing a pocket containing a compressible packing, said member capable of being compressed by said corrugated strip to provide a seal when the door body is closed, said strip of less width than the width of said member, and said pocket being rectangular in cross-section.

1,270,870. ADDING-MACHINE. FRANK C. RINSCHE, Detroit, Mich., assignor to Burroughs Adding Machine Company, Detroit, Mich., a Corporation of Michigan. Filed Aug. 18, 1913. Serial No. 785,376. (Cl. 235—82.)

1. In a machine of the class described the combination of a registering lever; a series of keys constructed and arranged to act upon said lever at increasing distances from the latter's pivot and with lost motion as to certain of said keys which act at the greater distances; and compensating means applied directly to the said certain key or keys only whereby to create substantially uniform resistance to their depression though displacement of the lever by such keys is less proportionately to the extent of

their depression than is displacement of said lever by other keys proportionate to similar extent of depression of the latter, such other keys acting independently of said compensating means.



2. In a machine of the class described the combination of a registering lever; a series of keys constructed and arranged to act upon said lever at increasing distances from the latter's pivot and with lost motion as to certain of said keys which act at the greater distances; and spring-heid lost-motion contact pieces mounted upon certain of the keys which act at the greater distances, substantially as and for the purpose described.

3. In a machine of the class described, the combination of a registering lever, a series of keys constructed and arranged to act upon said lever at increasing distances from its pivot; and spring-held lost-motion contact pieces slidably mounted upon certain of the keys which act at the greater distances, substantially as and for the purpose described.

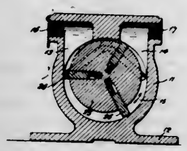
1,270,871. COMPOSITE METALLIC STRUCTURE. OSCAR C. RIXSON, New Rochelle, N. Y. Filed Sept. 11, 1917. Serial No. 190,789. (Cl. 29—181.)



1. A composite metallic structure comprising a base of a metal which is attacked by moisture and a sheathing over said base of a metal which is unattacked by moisture, and a thin layer of waterproof elastic cement of uniform thickness binding the parts into a unitary structure.

[Claims 2 to 5 not printed in the Gazette.]

1,270,872. ROTARY PUMP. ISAAC ROBERTS and WILLIAM SHAW, Brooklyn, N. Y., assignors to said Isaac Roberts. Filed June 24, 1915. Serial No. 36,062. (Cl. 230—30.)

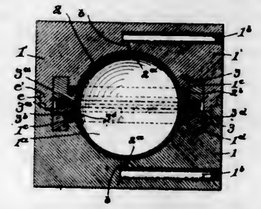


1. In a rotary pump, in combination, a piston carrying drum, a cylinder providing a pump chamber in which said drum is eccentrically mounted, cylinder heads one of which is provided with intersecting grooves leading from opposite sides of the pump chamber, and a valve at the intersection of said grooves adapted to regulate the volume of fluid that can pass through said grooves from one side of the pump chamber to the other.

[Claims 2 to 4 not printed in the Gazette.]

1,270,873. METHOD OF AND APPARATUS FOR SHAPING PLASTIC SHEETS. ISAAC W. ROBERTSON, Akron, Ohio. Filed Mar. 7, 1917. Serial No. 153,091. (Cl. 18—19.)

1. The hereindescribed method of shaping plastic sheets which comprises supporting a plastic sheet upon a perforated elastic diaphragm lying across a mold cavity, and then producing a partial vacuum within said mold cavity.



9. A device for forming hollow articles from plastic sheets comprising a pair of mold mating sections having mold cavities, an elastic diaphragm clamped across the mouth of each cavity, means for exhausting air from said cavities, and means carried by said sections for simultaneously severing the shaped portions of said sheets and uniting the edges thereof as the mold sections are brought together.

[Claims 2 to 8 not printed in the Gazette.]

1,270,874. CASE-HARDENING MATERIAL. HUGH RODMAN, Edgewood, Pa., assignor to Rodman Chemical Company, Verona, Pa., a Corporation of Pennsylvania. Filed Aug. 29, 1914. Serial No. 859,228. (Cl. 148—30.)

1. The method of carburizing, which consists in packing the metal to be carburized in the by-product of fiber making, commonly known as black ash, and then in subjecting the metal and the packing material to heat.

8. A carburizing material comprising a by-product of wood fiber manufacture known as black ash and an energizing agent.

10. The method of carburizing which consists in packing a metal part to be carburized in a mixture of charred resins and lignose and then subjecting the metal part and the carburizing material to a red heat.

[Claims 2 to 7 and 9 not printed in the Gazette.]

1,270,875. FOOD PRODUCT AND METHOD OF MAKING THE SAME. HUGH RODMAN, Edgewood, Pa., assignor to Rodman Chemical Company, a Corporation of Pennsylvania. Filed Jan. 25, 1917. Serial No. 144,305. (Cl. 99—11.)

1. The method of treating finely ground or powdered material which consists in agitating it in a dry state, in adding small particles of liquid to the agitated mass, and in maintaining the temperature of the mass above the vaporizing temperature of the liquid while adding the liquid.

5. The method of treating flour, which consists in heating it above the boiling point of water, agitating it, and adding small particles of water to the agitated mass.

9. A manufactured food product consisting of a complete shell of cooked edible material entirely surrounding a hollow space.

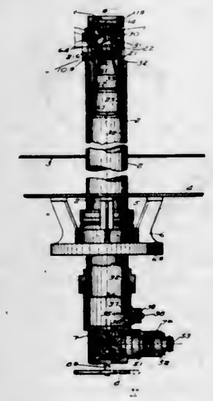
[Claims 2 to 4, 6 to 8, 10, and 11 not printed in the Gazette.]

1,270,876. PERISCOPE AND OPTICAL SYSTEM THEREFOR. GEORGE N. SAEGMULLER and GUSTAV A. H. KELLNER, Rochester, N. Y., assignors to Bausch & Lomb Optical Company, Rochester, N. Y., a Corporation of New York. Filed Dec. 6, 1915. Serial No. 65,209. (Cl. 88—2.6.)

2. In an optical instrument, the combination with a tubular casing, an ocular and an objective head having an opening admitting light rays longitudinally of the casing and also provided with an opening admitting light rays in a direction laterally of the casing, said openings being arranged with intersecting axes, of means comprising a deflecting optical element and a mounting therefor, said optical element being movable into and out of said axes and adapted when located in operative relation to

the last mentioned opening to deflect the light rays entering therein toward said ocular and also serving to intercept the light rays entering the first mentioned opening.

5. In an optical instrument, the combination with a tubular casing, an ocular and an objective head having an opening in the end and an opening in the side thereof, of a mounting adjustable in the head having apertures coöperating with said openings, a lens mounted in one of said openings and light deflecting means positioned in the other opening.



10. In an optical instrument, the combination with a casing having an objective head having an opening in the axis of the casing and provided with a second opening admitting light rays at an angle to said axis, of a telescope system arranged co-axially within the casing with its objective disposed in proximity to both openings, one or more negative lenses, mounted co-axial with and in proximity to the first named opening, a positive lens and an objective prism mounted to be alternately interposed in the axis of the objective and coöperating respectively with the first named opening and the objective and with the last named opening and the objective, a movable mounting for the positive lens and objective prism, and means for operatively moving the mounting.

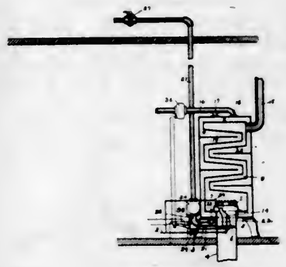
18. An optical system for periscopes having a pair of light admitting apertures, said system comprising, a telescope system adapted to be wholly or in part common to both apertures, a supplementary optical system individual to each of said apertures, each of said supplementary optical systems being adapted, in turn, to selectively cooperate with their respective apertures and the telescope system, and means for rendering the arrangement of the telescope system with each of the supplementary systems par-focal.

21. In a sighting apparatus, the combination of a lens tube, and an image-forming optical system comprising a side lens, a sky lens, the axes of said lens intersecting, and an objective reflecting surface having one position at said intersection, and another position out of line with the axis of said sky lens.

[Claims 1, 3, 4, 6 to 9, 11 to 17, 19, and 20 not printed in the Gazette.]

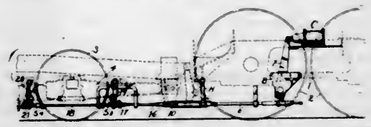
1,270,877. AUTOMATIC REGULATING DEVICE FOR HEATERS. FRED SCHULZ, Oakland, Cal. Filed Mar. 2, 1914. Serial No. 822,054. (Cl. 236—5.)

1. An automatic regulating device for heaters, comprising a gas supply pipe, an inlet valve in said pipe, a pipe for the delivery of air for combustion, an air supply valve, a pipe for the delivery of the substance to be heated, a fan placed in said pipe, and adapted to force air through the same, an electric motor adapted to run said fan, an electric switch to control the current to said motor, a pipe for the discharge of the heated substance, a thermostat placed in said pipe and connected to said valves and to said switch, the connection to said valves being so arranged as to increase their openings when the temperature in said thermostat falls, and to diminish said openings when it rises; while the connection with said switch to be such as to close the circuit when the temperature falls to the lowest extreme, and to break the circuit when it rises to the other extreme of the predetermined range of temperatures.



2. An automatic regulating device for heaters, comprising a gas supply pipe and a gas supply valve, a pipe for the delivery of the substance to be heated, a fan and an electric motor for the circulation of said substance through the heater, a switch to control the electric current to said motor, a pipe for the discharge of the heated substance, a thermostat box located in said discharge pipe, a thermal member, comprising two strips of metal, soldered together, and wound into a spiral, located in the interior of said box, one end of said spiral being fastened to said box, while the other free end is connected to operate said valve and said switch.

1,270,878. INDEPENDENT CLASP-BRAKE FOR TRAILER-TRUCKS. FRANCIS E. SCHWENTLER, St. Louis, Mo., assignor to The American Brake Company, St. Louis, Mo., a Corporation of Missouri. Filed Nov. 11, 1914. Serial No. 871,437. (Cl. 188—24.)



1. In a brake rigging for locomotives with trailer trucks, the combination with the main frame, and the trailer truck frame, of brake shoes applied to both sides of the trailer truck wheels, two sets of truck levers and pull rod connections, one on each side of the truck, for actuating said brake shoes, a cross equalizer located substantially at the pivot of the trailer truck frame and having full rod connections with the truck levers, and a brake cylinder mounted on the main frame and having connections for actuating said cross equalizer.

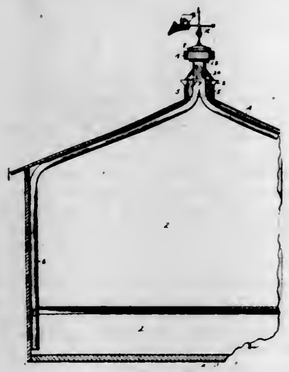
2. In a brake rigging for locomotives with trailer trucks, the combination with the main frame, and the trailer truck frame, of brake shoes applied to both sides of the trailer truck wheels, two sets of truck levers and pull rod connections, one on each side of the truck, for actuating said brake shoes, a cross equalizer located substantially at the pivot of the trailer truck frame and having pull rod connections with the truck levers, means for restraining said equalizer against lateral movement, and a brake cylinder mounted on the main frame and having connections for actuating said cross equalizer.

4. In a brake rigging for locomotives with trailer trucks, the combination with the main frame, and the

trailer truck frame, of brake shoes applied to both sides of the trailer truck wheels, two sets of equalizer truck levers and pull rods, one on each side of the truck, for actuating said brake shoes, a cross equalizer having pull rod connections with one pair of truck levers, the other pair of truck levers having fixed fulcrums, a main pull rod connected to said cross equalizer, and a triangular guide hanger mounted on the main frame and pivotally connected to said main pull rod.

[Claim 3 not printed in the Gazette.]

1,270,879. BARN-VENTILATOR. JOHN G. SHODRON, Milwaukee, Wis., assignor to James Manufacturing Company, Fort Atkinson, Wis., a Corporation of Wisconsin. Filed Sept. 13, 1913. Serial No. 789,646. (Cl. 98—27.)



1. The combination with a barn having a plurality of compartments, of a stationary ventilator connected with one of said barn compartments, a wind actuated revoluble aspirating ventilator, and a ventilating duct leading thereto from one of the other barn compartments through the stationary ventilator.

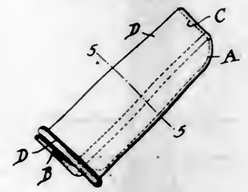
4. The combination with a barn comprising a compartment for live stock and another compartment for fodder, of a stationary ventilator rigidly affixed to the roof of the barn and having open communication with the fodder compartment of such barn, and a wind actuated revoluble aspirating ventilator supported from said stationary ventilator and communicating with the stock compartment of said barn through said stationary ventilator.

8. A ventilator, including a revoluble dome provided with a bottom inlet and also having lateral inlet and outlet openings, an open ended aspirating member extending transversely from the inlet side of said revoluble dome in the direction of the outlet, and provided with converging walls adapted to concentrate air delivered through said passage under pressure of the wind, and a wind actuated vane operatively connected with and adapted to rotate the revoluble dome to positions with the lateral inlet on the windward side, whereby the movement of air through said passage under wind pressure will exert an aspirating effect at the outlet, in combination with a dome supporting ventilating duct communicating with the bottom inlet of the dome, and an upwardly projecting spindle extending into the dome, and a shaft sleeve carried by the dome and adapted to receive said spindle, whereby the dome is supported revolubly on said spindle.

10. A ventilator including a revoluble dome provided with a bottom inlet, and also having lateral inlet and outlet openings, an open ended aspirating member extending transversely from the inlet side of said dome in the direction of the outlet, and provided with converging walls adapted to concentrate air delivered through said passage under pressure of the wind, a wind actuated vane connected with the dome, a ventilating duct leading to the bottom inlet of the dome and provided with a centrally disposed spindle upon which the dome is revolubly mounted, a set of skirtings at the upper end of said duct, and a ring shaped storm hood encircling said skirtings and supported from the duct, said duct having openings for the escape of air from between the skirtings.

[Claims 2, 3, 5 to 7, and 9 not printed in the Gazette.]

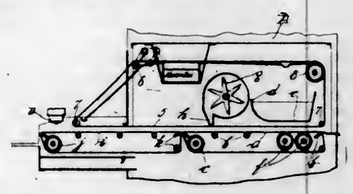
1,270,880. SELF-RETAINING SPLINT. BERNARD SCHEINKMAN, New York, N. Y. Filed July 1, 1916. Serial No. 107,030. (Cl. 128—28.)



6. As a new article of manufacture, a self retaining splint embodying a single splint member only, a supporting foot at its base, an encircling band at its free end, and a tubular elastic sleeve secured at one of its ends to the band and adapted to be drawn back over the splint member for securing it in position.

[Claims 1 to 5, 7, and 8 not printed in the Gazette.]

1,270,881. COATING-MACHINE. WILLIAM CHRISTOPHER SCHOPPNER, New York, N. Y., assignor to National Equipment Company, Springfield, Mass., a Corporation of Massachusetts. Filed Sept. 15, 1917. Serial No. 191,510. (Cl. 91—3.)



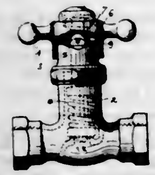
1. The combination with a conveying means for articles, of a device to operate on the articles while on said means, and a member traveling in spaced relation with said means and at the same speed and in the same direction as said means, said member arranged to hold the articles to said means during the operation of said device solely by exerting a portion of its weight on each article.

2. The combination with a conveying means for articles, of devices to operate on the latter while on said means, and an endless belt movable in the same direction and at the same speed as the conveying means, said belt arranged to sag in a portion of its travel and to be slightly raised by the incoming articles, whereby part of the weight of the belt may be exerted upon the articles to hold them against relative movement on said conveying means during the operation of said devices.

5. The combination in a coating machine, of a conveying means for articles to be coated, means above the conveying means to coat the articles while on the latter, and an endless band permeable by the coating material and arranged to travel at the same speed as and in spaced substantially parallel relation with and above the conveying means, said band arranged to sag in a portion of its travel to engage and by its weight hold the articles from moving on the conveying means during the operation of said coating means.

[Claims 3 and 4 not printed in the Gazette.]

1,270,882. SELF-CLOSING FAUCET. FRED SCHULDER, Cleveland, Ohio, assignor to United Brass Manufacturing Company, Cleveland, Ohio, a Partnership composed of Wm. J. Schoenberger and Benjamin F. Klein. Filed Sept. 20, 1915. Serial No. 51,721. (Cl. 137—4.)



2. In a device as described two members having opposed circular undulating inclines, a set of solid rollers having short integral trunnions on opposite sides thereof, and a flexible retainer for said rollers having holes in which said trunnions are engaged.

5. In a device substantially as described, a set of solid rollers having trunnions, and a removable retainer for said rollers comprising a spring sheet-metal body having a series of rectangular openings at equi-distant points radially to accommodate said rollers and a central opening with an encircling flange, and said body being flexible intermediate said openings and having the opposite edge portions of said radial openings bent at substantially right angles and provided with holes to receive and hold the trunnions of said rollers.

8. An article of manufacture and sale, comprising a sheet metal body having a central round opening and flexible portions provided with a series of substantially rectangular openings at equi-distant points radially thereof and said body having parallel flanges formed at the inner and outer sides of said radial openings and the outer flanges bent at substantially right angles to the plane of the body and having a reinforcing corner at each end thereof, in combination with rollers having trunnions engaged in said flanges.

[Claims 1, 3, 4, 6, and 7 not printed in the Gazette.]

1,270,883. SIGN. LESTER F. SCOTT, Jr., Los Angeles, Cal. Filed Apr. 19, 1917. Serial No. 163,269. (Cl. 40—125.)



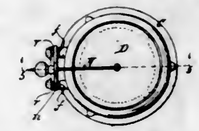
1. In a sign, a frame, a plurality of sign plates slidably supported in said frame, and removable means encompassing the frame contacting the sign plates to clamp the latter collectively on the frame.

4. A sign comprising a pair of inverted U-shaped frame members spaced apart, a series of cross bars connecting the side portions of said members, removable sign plates interposed between said frame members and supported on the cross bars, a sheath encompassing the frame members for holding said sign plates in place, said sheath formed with a channel in which the frame members seat, and means for clamping the sheath on said frame members.

6. A sign comprising a pair of spaced frame members of ∩ shaped form, a series of spaced cross bars connecting the side portions of said frame members, sign plates carried on said cross bars and slidable between said frame members, a hook carried on one of the side portions of the frame, a loop projecting from the other side member, a sheath conforming to the outer edge of the frame members adapted to be detachably engaged with the hook and to encompass the frame members, a stem carried by said sheath adapted to be inserted through the loop, and means acting on said stem for clamping the sheath on the frame members.

[Claims 2, 3, 5, 7, and 8 not printed in the Gazette.]

1,270,884. DIAPHRAGMATIC SOUND-PRODUCER. JAMES T. SIBLEY, New York, N. Y. Filed Sept. 5, 1916. Serial No. 118,333. (Cl. 274—35.)



1. In diaphragmatic sound producing apparatus of the character designated, the combination with the diaphragm and its casing of a needle arm mount comprising two stationary V-shaped fulcrums, opposed rockable members contacting with the needle arm in alinement with the apices of said fulcrums, a bearing plate formed with concave seats for said rockable members, and means for adjusting said bearing plate on an axis medial between said stationary V-shaped fulcrums for the purpose of imparting a torsional strain to the needle arm and diaphragm as set forth.

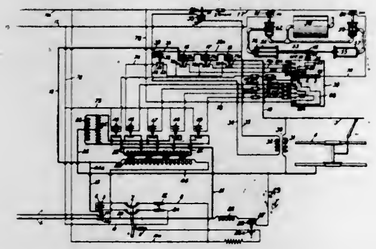
2. In diaphragmatic sound producing apparatus of the character designated, the combination with the diaphragm and its casing of a needle arm mount comprising two stationary V-shaped knife-edged fulcrums, opposed anti-friction rollers contacting with the needle arm in alinement with the apices of said V-shaped knife-edged fulcrums, and a rigid bearing plate formed with concave seats for said anti-friction rollers and movable to impart a torsional strain to the needle arm and diaphragm, for the purpose set forth.

3. In diaphragmatic sound producing apparatus of the character designated, the combination with the diaphragm and its casing of a needle arm mount comprising a plurality of stationary V-shaped knife-edged fulcrums upon and protruding outward from the casing, and diametrically opposed rockable members contacting with the needle arm in alinement with the apices of said protuberant V-shaped knife-edged fulcrums, a rigid bearing plate fixedly attached to the casing and provided with a concavity, said rockable member being movably mounted to impart torsional strain to the needle bar and being seated in said concavity in said rigid bearing plate, for the purpose set forth.

1,270,885. SYSTEM OF DISTRIBUTION. KARL A. SIMMON, Edgewood Park, and PAUL L. MARDIS, Wilkinsburg, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 3, 1916. Serial No. 75,961. (Cl. 171—119.)

1. A system of electrical distribution comprising an alternating-current supply circuit, a variable-load circuit, and means interposed between said two circuits for automatically regulating the voltage impressed upon said load circuit in accordance with the loads obtaining therein, said means being operative only when the voltage variations in the load circuit are greater or less than predetermined values.

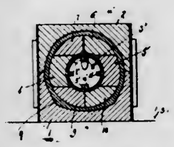
7. A system of distribution comprising an alternating-current supply circuit, a variable-load circuit, a voltage-generating winding adapted to be connected in series circuit with the load circuit, automatic means for varying the active portions of said winding to be connected in series with the load circuit in accordance with the loads obtaining therein, and an automatic switch for deënergizing said voltage-generating winding when abnormal conditions obtain on the load circuit and for affecting the said automatic means whereby the minimum active length of the voltage-generating winding may be initially connected in the load circuit when normal conditions are reestablished thereon.



8. A system of distribution comprising an alternating-current supply circuit, a variable-load circuit, a voltage-generating winding adapted to be connected in series circuit with the load circuit, automatic means for varying the active portions of said winding to be connected in series with the load circuit in accordance with the loads obtaining therein, and additional means associated with said automatic means for precluding any increase or decrease in the length of the active portion of the voltage-generating winding connected in circuit with the load circuit when the voltage obtaining in the load circuit is greater or less than predetermined values, respectively.

[Claims 2 to 6 not printed in the Gazette.]

1,270,886. MOLD. PAUL SIPTROTT, New York, N. Y. Filed Aug. 7, 1917. Serial No. 184,823. (Cl. 18—45.)



A core for molding dolls' heads comprising a hollow tubular section closed at its inner end and provided with a number of longitudinal incisions or recesses, a number of external sections clustered around said tubular section and each formed with an inner flange having a hooked portion to fit in said recesses and to engage the inner surface of said tubular sections so as to be locked in position, the flanges of the upper and lower sections being arranged at their inner edges so that those of two adjoining sections will abut against one another and the flanges of the lateral section being arranged substantially centrally, the longitudinal recesses for the ribs of the upper and lower sections being of a width corresponding to the total thickness of the flanges of two adjoining sections.

1,270,887. PROCESS OF COAGULATING LATEX AND PRODUCT THEREOF. EDWARD MARK SLOCUM, Medan, Sumatra, Dutch East Indies, assignor to General Rubber Company, a Corporation of New Jersey. Filed Feb. 23, 1917. Serial No. 150,352. (Cl. 18—50.)

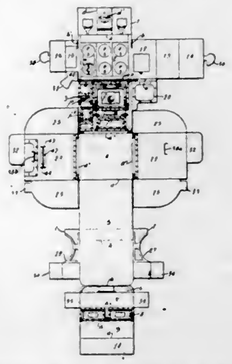
1. A mass comprising rubber obtained from latex treated with a reactive agent substantially free from tendency to accelerate coagulation and adapted to form an insoluble material in said latex.

7. A process for treating latex which comprises adding thereto a reactive agent adapted to form an insoluble material in said latex without accelerating coagulation thereof, coagulating the latex, and adding a vulcanizing agent thereto.

12. A process for treating latex which comprises adding thereto a metalloid compound adapted to form an insoluble material in said latex without accelerating coagulation thereof, and coagulating the latex.

[Claims 2 to 6 and 8 to 11 not printed in the Gazette.]

1,270,888. IMITATION STOVE. KENNETH CLAIRE SMITH, Beaver Dam, Wis., assignor to Malleable Iron Range Company, Beaver Dam, Wis., a Corporation of Wisconsin. Filed Dec. 30, 1915. Serial No. 69,349. (Cl. 46—37.)



1. An imitation stove comprising a strip of material having one face formed to represent in a lineal series of flexibly joined members, the back, bottom, front and top of a stove, laterally extending members flexibly connected with the bottom member of the stove and adapted to fold upwardly therefrom to form the sides thereof, and a set of interlocking flaps adapted to hold the members together when assembled to the form of a stove.

2. An imitation stove comprising a strip of material having one face formed to represent in a lineal series of flexibly joined members, the back, bottom, front and top of a stove, in combination with end members of said lineal series adapted to form a raised warming oven supported from the back of the stove above the top thereof, laterally extending members flexibly connected with the bottom member and adapted to fold upwardly to form the sides of the stove and other laterally extending members connected with the raised portion of the back member and adapted to be folded at right angles to the back member and close the ends of the warming oven, the top of the stove being also provided with slits adapted to engage the lower margins of said last mentioned laterally extending members when the latter are bent or folded at right angles to the back.

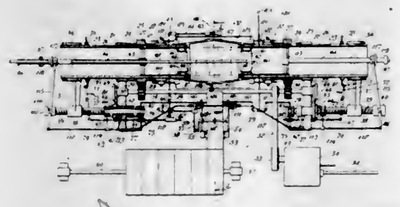
3. An imitation stove formed integrally from a single piece of cardboard, sub-divided by crease lines into a lineal series of members forming the upper warming oven, the back, bottom, front, and top of a stove, and laterally extending flaps connected with the bottom member and adapted, when folded upwardly, to form the side walls thereof, said members being figured to represent the respective walls of the stove, and means for locking the members in assembled position.

4. An imitation stove formed integrally from a single piece of cardboard, sub-divided by crease lines into a lineal series of members forming the upper warming oven, the back, bottom, front, and top of a stove, and laterally extending flaps adapted, when folded, to connect the top and bottom members, all of said members being figured to represent the respective walls of the stove, and means for locking the members in assembled position, said locking means comprising interlocking flaps engaging between the edges of the wall members.

9. A structural blank composed of an elongated strip provided with two sets of laterally extending flaps, said strip and the flaps having crease lines and formed to be folded on said crease lines to construct two spaced connected receptacles.

[Claims 5 to 8 not printed in the Gazette.]

1,270,889. APPARATUS FOR MANUFACTURING HOLLOW WARE. GEORGE C. SNYDER, New York, N. Y., assignor to William H. Davis, trustee, New York, N. Y. Filed July 23, 1917. Serial No. 182,166. (Cl. 93—80.)

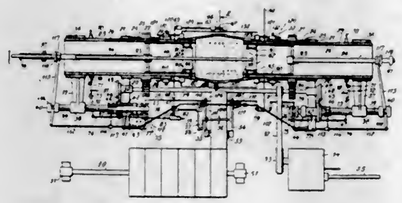


18. Apparatus for making hollow articles, comprising means for holding material previously coated with adhesive, means for moistening the material, means for slitting the material, means for winding the strips of slitted material and means for causing longitudinal displacement of said winding means in opposite direction to cause the strips of material to assume the form of oppositely directed spirals having axially displaced convolutions united to each other by the adhesive.

24. Apparatus for making hollow articles, comprising means for slitting a band of material into a plurality of strips, means for winding the strips thus produced in the form of adjacent flat spirals, means for separating the spirals while continuing the winding operation to cause the strips to assume the form of elongated spirals, means for rendering the separating means and the slitting means ineffective while permitting the winding means to continue to wind material about the central portion of the article, and means actuated when the central portion of the article reaches a predetermined diameter to cause the winding means to be withdrawn from within the article.

[Claims 1 to 17, 19 to 23, and 25 not printed in the Gazette.]

1,270,890. MANUFACTURE OF HOLLOW WARE. GEORGE C. SNYDER, New York, N. Y., assignor to William H. Davis, trustee, New York, N. Y. Filed July 23, 1917. Serial No. 182,167. (Cl. 93—81.)



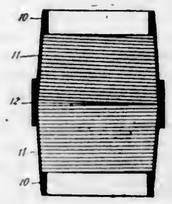
7. The process of making hollow articles which consists in convolutely winding strips of material in paths at right angles to the axis of the convolutions to form end rings and then winding said strips in integral convolutions having oppositely displaced spaced edges to form body portions.

12. The process of making hollow articles by simultaneously forming two tapered body portions by winding integral strips of material in similar oppositely directed spiral paths.

15. The process of making hollow articles, which consists in winding strips of material into the form of oppositely directed elongated spirals, winding one end of each strip as a cylindrical band about one end of each spiral, and permanently uniting the convolutions of material to each other.

[Claims 1 to 6, 8 to 11, 13, 14, and 16 to 23 not printed in the Gazette.]

1,270,891. HOLLOW WARE. GEORGE C. SNYDER, New York, N. Y., assignor to William H. Davis, trustee, New York, N. Y. Filed July 23, 1917. Serial No. 182,168. (Cl. 229—67.)



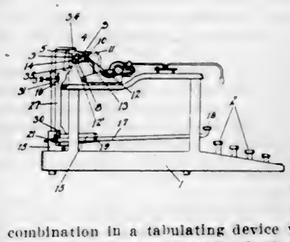
1. A new article of manufacture comprising a hollow article which consists of a strip of material divided into two parts which are wound into the form of oppositely directed spirals with the convolutions thereof displaced out of the normal planes of the spirals and a strip of undivided material wound about the meeting ends of the spirals to join them together.

11. A new article of manufacture, comprising a hollow article consisting of a plurality of oppositely directed convolute sections connected together by an intermediate portion composed of matched overlapping convolutions.

15. A new article of manufacture, comprising a hollow article consisting of a plurality of oppositely directed convolute sections of strip material connected together by an intermediate portion formed as a continuation of the same material.

[Claims 2 to 10 and 12 to 14 not printed in the Gazette.]

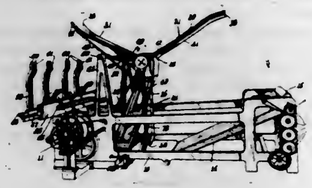
1,270,892. TABULATING DEVICE. DENNIS FRANK STANLEY, Bozeman, Mont. Filed Aug. 20, 1917. Serial No. 187,160. (Cl. 197—179.)



1. The combination in a tabulating device with a rack bar and a stop, of a hinge plate and a hook on the stop to pivotally engage said plate, a locking plate, and means on the stop to engage said locking plate, and means for lifting the stop to inoperative position, or lowering the stop to operative position.

[Claims 2 to 6 not printed in the Gazette.]

1,270,893. BAG-TURNING MACHINE. DAVID F. STEIN, Montreal, Canada. Filed July 8, 1916, Serial No. 108,112. Renewed Dec. 24, 1917. Serial No. 208,702. (Cl. 139—47.)

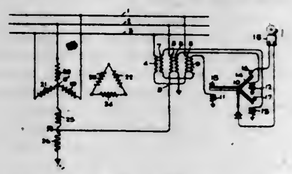


2. In a machine of the character described, the combination of bag supporting mechanism comprising spaced arms, means for reciprocating said arms in a rectilinear path, rotary arms adapted to receive bags from said supporting mechanism, means carried by and coöperable with said rotary arms to engage bags and turn the same, and means for rotating the rotary arms in a plane substantially at right angles to the path of reciprocation of the bag supporting mechanism.

4. In a machine of the character described, the combination of reciprocatory bag supporting mechanism comprising spaced arms, means for adjusting the distance between said arms, means for reciprocating said bag supporting mechanism in a rectilinear path, bag turning mechanism comprising rotary arms and means for adjusting the distance between said rotary arms, and means for rotating said bag turning mechanism in a plane substantially at right angles to the path of reciprocation of said bag supporting mechanism.

[Claims 1, 3, and 5 not printed in the Gazette.]

1,270,894. PROTECTIVE DEVICE. CHARLES P. STEINMETZ, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Sept. 17, 1917. Serial No. 191,728. (Cl. 177—311.)



1. In a polyphase system of distribution, means for establishing a fixed neutral therefor, a connection to ground from said neutral, means for establishing a point in said ground connection between which and any phase of said system upon which a fault to ground occurs a greater drop in potential always occurs on the phase at fault than on the other phases independent of the resistance of the fault to ground, and electroresponsive means operative in response to the voltage between each phase and said point to selectively indicate the phase having the greatest drop in potential.

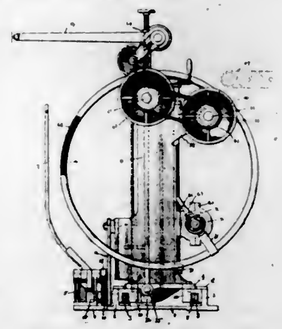
5. In combination with a polyphase system of distribution, means responsive to voltage unbalancing on said system caused by a fault to ground to selectively indicate the phase having the greatest drop in potential, and means for causing the greatest drop in potential to occur on the phase at fault independent of the resistance of the fault to ground.

8. In combination with a polyphase system of distribution having a fixed neutral point, electrical connections for producing a fictitious neutral point for said system such that a fault to ground on any phase causes a greater drop in potential between that phase and said fictitious neutral than occurs on any other phase independent of the resistance of the fault to ground, and a phase selective device operative in response to the voltage relations between each phase and said fictitious neutral point to selectively indicate that phase which has the greatest drop in potential.

9. The combination with a polyphase system of distribution, means for establishing a fixed neutral point for said system, a connection to ground from said neutral point including resistance and reactance elements of substantially the same ohmic resistance, a fictitious neutral point established by said elements, and electroresponsive means responsive to the voltage drop between each phase and said fictitious neutral caused by a fault to ground in any phase to selectively indicate the phase at fault independent of the resistance of the fault to ground.

[Claims 2 to 4, 6, 7, and 10 to 14 not printed in the Gazette.]

1,270,895. MOTOR-TIRE-HARD-BASE-APPLYING MACHINE. WILLIAM C. STEVENS, Summit, Ohio, assignor to The Firestone Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Aug. 8, 1917. Serial No. 185,169. (Cl. 18—11.)

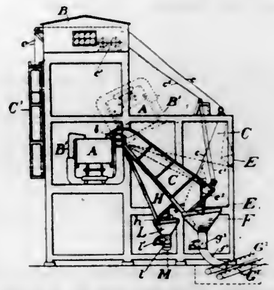


1. In a machine for applying a layer of rubber to a rim, the combination of a delivery conveyer, a carriage, two sets of rim supporting and rotating means on said carriage, and means for moving said carriage transversely of said conveyer whereby either set of rim supporting means may be presented to it.

9. In a machine for applying a layer of rubber to a rim, the combination of a support, a roller on said support on which the rim may be suspended, means for rotating said roller to revolve the rim, a compacting roller above the rim adapted to force the rubber on to the rim, means for pressing said roller against the rim, a guiding finger at the side of the rim and means for moving the finger from the side of the rim.

[Claims 2 to 8 not printed in the Gazette.]

1,270,896. APPARATUS FOR LOADING AND UNLOADING. FRANCIS LEE STUART, Baltimore, Md. Filed May 12, 1916. Serial No. 96,987. (Cl. 83—56.)



The combination of a main lowering bin pivoted to move about a horizontal axis, means for lowering the bin, a delivery gate at the outer end of said bin for retaining material while the bin is being lowered, a supplemental bin of less length than the main bin and located below it but mounted to turn therewith, a screen interposed between said bins, a delivery gate at the outer end of said supplemental bin, a hopper to which the main bin delivers when lowered to its full extent, and another hopper to which the supplemental bin delivers arranged in rear of the first-mentionad hopper.

1,270,897. DIFFERENTIAL MECHANISM. CLARENCE W. TAYLOR, Chicago, Ill., assignor to Natural Differential Co., Chicago, Ill., a Corporation of Illinois. Filed Sept. 5, 1916. Serial No. 118,334. (Cl. 74—7.)



1. In mechanism of the class described, the combination with a driving member and a driven member, of a coupling-unit comprising a clutch-member and a resilient element, both operable by the driving member, and a friction element between the clutch-member and the driven member.

2. In mechanism of the class described, the combination of a driving member and a driven member, a coupling-unit having a rocking clutch-member and a resilient member having a movement relative to the clutch-member, and a separate friction element between the clutch-member and the driven member.

4. In mechanism of the class described, the combination of a coupling-unit comprising a resilient element and a clutch-member having clutch teeth for engagement with a driven member the resilient element and the clutch-member being formed and mounted for relative movement, and a separate friction element between the clutch-member and the driven-member for drag effort therebetween.

7. In mechanism of the class described, the combination of a driving member carrying one or more cams and a driven member having an internal annular series of clutch teeth, a coupling-unit comprising a resilient member mounted for lever action against the driven member and a rocking clutch-member having a plurality of series of clutch teeth for engagement with the clutch teeth of the driven member and formed on the other side to be actuated by a cam on the driving member, and a separate friction element between the clutch member and the driven member for additional drag effort therebetween.

8. In mechanism of the class described, the combination of independent shafts and a clutch-drum fixed to one end of each shaft, a driving member, a resilient member formed or flexed to the arc of each clutch-drum, a rocking-clutch-member held in normal disengaged position by the respective resilient member and formed on one side to be operated by the driving member, the resilient members and the clutch-members having relative movement, and a separate friction member in each clutch-drum between the clutch-member and the clutch-drum.

[Claims 3, 5, 6, and 9 not printed in the Gazette.]

1,270,898. DASH-POT. HAROLD E. TRENT, Murraysville, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 30, 1916. Serial No. 123,202. (Cl. 74—69.)

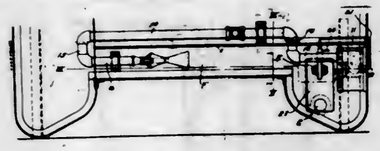
5. A dash pot comprising two coöperating members having engaging surfaces, means for actuating the said members and means for so connecting the actuating means to one of the said members that, when the members are separated, the engaging surface thereof, may assume various angles with respect to each other.



10. A suction device comprising coöperating members, means normally acting along the line of maximum disengaging force for disengaging the members, and means for varying the line of action of the disengaging means.

[Claims 1 to 4 and 6 to 9 not printed in the Gazette.]

1,270,899. LOCOMOTIVE-FEED-WATER HEATER. HENRY H. VAUGHAN, Montreal, Canada, assignor of one-third to Le Grand Parish, New York, N. Y., and one-third to Thorwald E. Grahn, Cleveland, Ohio. Filed Sept. 20, 1913. Serial No. 790,845. (Cl. 122—434.)



1. In combination in a tender having a coal compartment with a downwardly inclined bottom and water compartments at the sides of and beneath the said coal compartment, a heating compartment beneath the said inclined bottom at the front end thereof and extending transversely of the tender, means for supplying steam to the said heating compartment, a communication for supplying water to the said heating compartment from the other water compartments, and means for conducting the heated water from said heating compartment.

3. In combination with a heater having a coal compartment with a downwardly inclined bottom and water compartments at the sides of and beneath the said coal compartments, a heating compartment beneath the said inclined bottom at the front end thereof and extending transversely of the tender, means for supplying steam to the said heating compartment, a passageway between one end of the heating compartment and an adjacent water compartment, means for supplying steam into the heating compartment in the direction of the other end of said heating compartment, and an outlet pipe leading from said other end of the heating compartment.

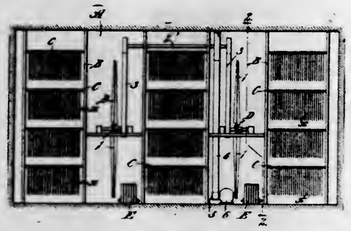
5. In combination in feed water heating apparatus, a compartment having a portion of relatively small cross sectional area and a portion of larger cross sectional area, a steam supply pipe leading into the compartment adjacent the smaller end thereof, and a pair of conical nozzles connected at their reduced ends and fitting over the end of the said steam supply pipe with such end adjacent the reduced portions of the nozzles but spaced away therefrom.

[Claims 2 and 4 not printed in the Gazette.]

1,270,900. APPARATUS FOR DRYING MACARONI, SPAGHETTI, AND SIMILAR FOODS. SALVATORE VIVIANO, St. Louis, Mo. Filed Aug. 22, 1917. Serial No. 187,614. (Cl. 34—19.)

1. An apparatus for drying macaroni and the like, comprising a room or compartment, a rack in said room on

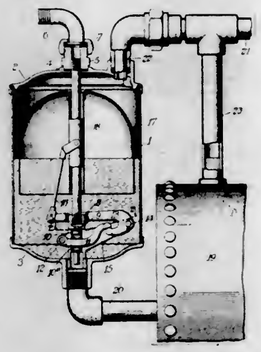
which the macaroni is placed, and a fan arranged in said room in close proximity to said rack with no baffle or similar obstruction between the fan and the rack, said fan being provided with blades which gradually diminish



in width toward their outer ends, thereby insuring an equal and uniform distribution of air over all of the macaroni in the room when the fan is in operation.

[Claim 2 not printed in the Gazette.]

1,270,901. AUTOMATIC SUPPLY-VALVE. EARL G. WATROUS, Chicago, Ill. Filed Sept. 19, 1914. Serial No. 862,615. (Cl. 137—68.)



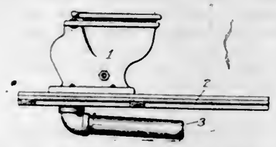
1. An automatic supply valve device comprising a casing, a supply pipe extending thereinto and having a port and valve seat at its lower end, a valve governing said port and adapted to seat upon such seat, a float having a central tube surrounding and arranged to slide upon the supply pipe, and an operating connection between the float tube and valve for controlling the opening and closing movements of the latter.

5. An automatic supply valve device comprising a casing, a top inlet and bottom outlet, a valve seat body secured in said outlet and having an inlet port adapted to communicate with the interior of the casing, a valve arranged within said body and governing said port, a supply pipe secured at its upper end in said inlet in the casing and at its lower end in said body to communicate with said inlet port, a float within the casing and means for operatively connecting the float and valve for actuating the latter, comprising lever mechanism pivoted upon said body and operatively connected with the float and valve respectively.

8. An automatic supply valve device comprising a casing, a supply pipe extending thereinto and having an inlet port, a valve proper governing said port, compound levers pivoted within the casing, on one of which levers the valve is mounted, and a float arranged to slide upon the supply pipe and operatively connected with said levers.

[Claims 2 to 4, 6, 7, and 9 to 14 not printed in the Gazette.]

1,270,902. WATER-CLOSET SYSTEM FOR RAILWAY-CARS. EARL G. WATROUS, Chicago, Ill. Filed May 6, 1915. Serial No. 26,206. (Cl. 4—18.)



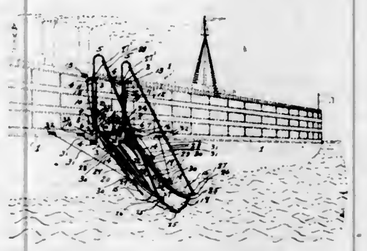
1. A water closet system comprising a water closet and its discharge connection, a storage tank, a substantially horizontal pipe communicating with the closet discharge connection and having a substantially vertical connection extending downwardly into the tank, said vertical connection acting both as a supply and a discharge for the tank and having a discharge outlet on a lower level than said horizontal pipe and above the lower end of such vertical connection.

10. A water closet system comprising a water closet and its discharge connection, a storage tank, a pipe communicating with said discharge and having a discharge opening, at the top of the tank, the said pipe entering the tank and extending to near the bottom thereof, and combined means for admitting air under pressure to the top of the tank to discharge the contents thereof through said opening and for releasing the air therefrom.

19. A water closet system comprising a water closet and its discharge connection, a storage tank, a pipe having a substantially horizontal portion and a substantially vertical portion entering the tank and extending to near the bottom thereof, said horizontal portion communicating with such discharge connection and said vertical portion having intermediate its length and extraneous of the tank a discharge outlet, means for supplying fluid under pressure to the space above the contents of the tank for discharging such contents upwardly through said vertical portion of the pipe and thence through said discharge outlet, said vertical portion acting both as a supply and discharge for the tank, and a valve under control of said means for governing said discharge outlet.

[Claims 2 to 9, 11 to 18, 20, and 21 not printed in the Gazette.]

1,270,903. LAUNCHING APPARATUS FOR STEAM OR SAILING VESSELS. JOSEPH WEISMANTEL, Irvington, N. J. Filed Aug. 15, 1917. Serial No. 186,288. (Cl. 9—22.)



1. In a device of the kind described a pair of laterally spaced vertical rails connected with the side of a ship, riders slidably mounted on said rails, hoisting tackle for vertically adjusting said riders upon said rails, a launching chute having means of pivotal connection at its inner end with said riders, and supporting tackle connected with the outer end of said chute for raising and lowering the same upon its pivotal connection, said chute being hull-shaped in cross-section, and the outer end of said chute being curved upward to cause a boat descending the same to enter the water on substantially even keel.

10. In a device of the kind described, a pair of laterally spaced vertical rails connected with the side of a ship, sleeves slidably mounted on said rails, hoisting tackle for adjusting said sleeves upon said rails, a pair of longitudinally parallel laterally spaced skid-rails, means for pivotally connecting the inner ends of said skid-rails respectively with said sleeves, the outer ends of said skid-rails being curved upward, means laterally interconnecting said skid-rails, anti-friction rollers associated with said skid-rails to slidably support a boat descending the latter, and a hoisting tackle connected with the outer ends of said skid-rails for raising and lowering the same.

[Claims 2 to 9 not printed in the Gazette.]

1,270,904. COMBINED BOWL-HANGER AND SOCKET-SUPPORT. EDWIN L. WHITE, Brooklyn, N. Y. Filed Feb. 20, 1918. Serial No. 218,191. (Cl. 240—91.)



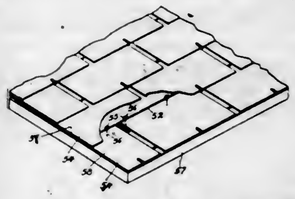
2. A device of the character described, comprising a member formed from one piece of flat metal having a horizontal portion adapted to rest upon the top surface of a bowl flange, its forward end being bent to conform to the outer edge of said flange and extend under the same, the rear end of said member being bent downwardly and then upwardly forming a recess and provided with alined threaded holes in said bends, the upper end of said portion being formed to receive a hook or link of a chain, another member formed of a flat piece of metal provided at its lower end with a stud to receive a lamp socket, and at its upper end with an opening through which the rear end of the first member may be passed, the top of said opening being cut in a straight line to seat upon the bottom of said recess, said second member being fitted within said recess and provided with a hole registering with said threaded holes in the first member, and a screw passing through said holes by means of which said first member is clamped to the bowl and said second member held in position.

3. In a lighting fixture, the combination of a bowl provided with a flange having a flat top and straight vertical outer edge, of a hanger formed of one piece of flat metal having a horizontal portion adapted to rest upon the top of said flange, its forward portion being bent to conform to the outer edge of the flange and extend under the same, its rear end being bent downwardly and then upwardly forming a recess and provided with alined threaded holes in said bends, a member formed of a flat piece of metal provided at its lower end with a stud to receive a lamp socket and having its upper end fitted within said recess in the hanger and provided with a hole registering with said threaded holes in said hanger, a screw passing through said holes by means of which said hanger is clamped to the bowl and said member held in position, and a supporting chain connected with said hanger.

[Claim 1 not printed in the Gazette.]

1,270,905. ASPHALT-SHINGLE FASTENER. HENRY W. WHITE, New Orleans, La. Filed May 26, 1916. Serial No. 100,147. (Cl. 108—9.)

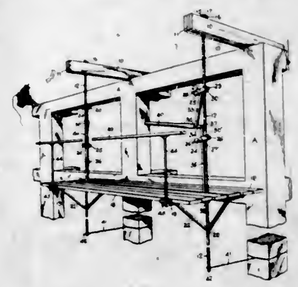
1. A shingle fastener formed from wire in one piece and comprising a series of connected pairs of oppositely facing over-hanging loops, the pairs of loops being spaced apart in accordance with the width of the shingles and the adjacent ends of the two loops of each pair being separated in accordance with the spacing of the shingles on the roof.



2. A shingle fastener formed from wire in one piece and comprising a series of connected pairs of oppositely facing over-hanging loops and eyes for receiving an attaching means in the portions of the wire connecting the pairs of loops.

3. A fastener for shingles of uniform width formed from wire in one piece and comprising a series of connected permanent hooks produced by doubling the wire upon itself, the said hooks being spaced apart in accordance with the width and spacing of the shingles and forming sockets for receiving the exposed margins of the shingles and eyes for receiving an attaching means in the hook connecting portions, each of the said eyes being so positioned with respect to an adjacent hook as to be covered by the shingle engaged with the said adjacent hook.

1,270,906. SUSPENDED SCAFFOLDING. EGBERT WHITNEY, Omaha, Nebr., assignor to Eclipse Scaffolding Company, Omaha, Nebr., a Corporation of Nebraska. Filed Aug. 15, 1916. Serial No. 115,104. (Cl. 20—81.6.)



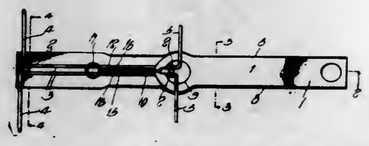
1. Suspended scaffolding including a cross frame composed of spaced horizontal frame-members provided between their ends with spaced connecting means forming an upper guide and spaced continuous pendent bracing means secured at their ends to the horizontal frame-members and having intermediate portions spaced from the said frame-members and provided with spaced connecting means forming a lower guide, said guides being disposed in vertical alinement, a rigid vertical member passing through the said guides and a climbing device connected with the cross-frame and provided with means for engaging the vertical member.

3. Suspended scaffolding including a cross-frame comprising spaced horizontal frame members provided between their ends with spaced connecting means forming an upper guide and spaced continuous pendent bracing members secured at their ends to the horizontal frame-members and having intermediate portions spaced therefrom and provided with connecting means spaced apart to form a lower guide, a rigid vertical member passing through the upper and lower guides, horizontal bars located beneath the frame-members at opposite sides of the vertical member and a climbing device associated with the vertical member and provided at opposite sides of the same with substantially vertical bars extending downwardly to the said hori-

zontal bars and connected therewith and a platform supported by the frame members and located above the said horizontal bars.

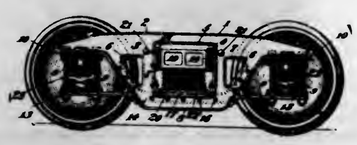
[Claims 2, 4, and 5 not printed in the Gazette.]

1,270,907. TRAP. CORNELIUS R. WIGNESS, Harlan, Iowa, assignor of one-half to Charlie G. Sorensen, Harlan, Iowa. Filed Apr. 23, 1917. Serial No. 163,899. (Cl. 43—23.)



A trap comprising a base formed of a single narrow strip of sheet metal having its edges bent upwardly throughout the greater part of its length to form reinforcing flanges, said flanges being bowed outwardly near the center of the base, a C-shaped spring having one arm disposed above the other, the free ends of said arms having vertically alined openings, the lower end of said spring resting on said base between and in contact with said flanges and having an enlarged free end received between and in contact with said outwardly bowed portions of said flanges, part of the length of said flanges being clenched downwardly upon said lower arm of the spring to secure the latter in place, a pair of longitudinal rock shafts mounted on said base and having their inner ends received under said enlarged end of the lower spring arm and provided with operating arms extending through the openings of both arms of said spring, the outer ends of said shafts having lateral jaws, a latch pivoted to the lower spring arm and adapted for passage through the opening of the other arm to hold this arm lowered, and a trigger pivoted to the base for holding said latch in set position.

1,270,908. TRUCK-FRAME. RALPH E. WILDER, Johnstown, Pa. Filed Apr. 25, 1918. Serial No. 230,829. (Cl. 105—243.)



1. In a truck frame an integral plate forming the top, side and bottom members, the sides of which extend substantially parallel and downwardly from the upper member.

2. In a truck frame an integral metal plate composing the top, side and bottom members, the top member having longitudinal extensions, the bottom and sides being provided with integral outwardly extending flanges, bearing plates secured to the longitudinal extensions, and a bent plate secured between and to the lower portions of the side members.

3. In a truck frame an integral metal plate composing the main members, the sides being bent downwardly from the upper portion of the top member, longitudinally extending end portions forming journal bearing portions, and bolster openings in the side members provided with outwardly extending flanges around the edges thereof.

4. In a truck frame a main member comprising an integral plate forming the top and bottom members and the sides and provided with longitudinal extensions forming journal bearing portions, integral outwardly extending flanges on the side and bottom portions, and a bent plate with flanges adjacent and secured thereto.

5. In a truck frame an integral metal plate comprising the main structure, provided with longitudinal extending portions forming journal bearings, the side portions being bent downwardly from and extending substantially parallel below the upper portion, the lower portions being provided with externally projecting flanges, bolster openings at the central portion of said side frame provided with integral outwardly projecting flanges surrounding the same, triangular openings adjacent to said central opening, the margins of which are provided with integral inward projections.

[Claims 6 to 8 not printed in the Gazette.]

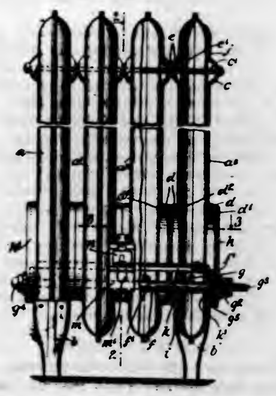
1,270,909. ROTARY MOTOR. JOHN O. WINKS, San Francisco, Cal. Filed Mar. 20, 1917. Serial No. 156,162. (Cl. 121—63.)



1. A rotary motor including a stator formed with a deviating surface, a rotor journaled within said stator, a cylinder extending diametrically of said rotor, a reciprocal sleeve mounted within said cylinder, two pistons reciprocally mounted in the respective ends of said sleeve and bearing at their outer ends upon said deviating surface, said cylinder being provided with an inlet and an exhaust port to aline with an inlet and exhaust port in said sleeve arranged between the inner ends of said pistons, means for controlling said ports, consisting of a cam slot on said motor, and means on the sleeve engaging said cam for operating said port controlling means.

[Claims 2 to 5 not printed in the Gazette.]

1,270,910. HEATING APPARATUS. AARON H. WOLFF, New York, N. Y. Filed Aug. 13, 1917. Serial No. 185,847. (Cl. 126—91.)



1. A heating apparatus embodying therein a plurality of elements or sections, having registering openings in the side walls adjacent the bottom thereof, rings about said openings whereby said elements or sections are spaced apart and a continuous chamber common to all

of said elements or sections having a plurality of upwardly extending unobstructed domes is formed, closure means for the opposite ends of said chamber, a feed pipe common to all of said elements or sections adjacent the bottom of said chamber, a plurality of burners carried by said pipe, one of said burners being positioned below each of said domes, and said rings being spaced away from said burners sufficiently to prevent the flame therefrom impinging upon the material of any element or section, each of said elements having draft openings below the burner therein and adjacent the top thereof, and means securing all of said elements or sections together in a unitary structure.

2. A heating apparatus embodying therein a plurality of elements or sections, each of which is closed at the top and at the bottom thereof, said elements or sections having registering openings in the side walls thereof, rings about said openings whereby said elements or sections are spaced apart and a continuous chamber common to all said elements or sections having a plurality of upwardly extending unobstructed domes is formed, closure means for the opposite ends of said chamber, a feed pipe common to all said elements or sections, adjacent the bottom of said chamber, a plurality of burners carried by said pipe, one of said burners being positioned below each of said domes, and said rings being spaced away from said burners sufficiently to prevent the flame therefrom impinging upon the material of any element or section, each of said elements or sections having an air inlet intermediate said ring and the closed bottom, and an air outlet adjacent the top, thereof, and means securing all of said elements or sections together in a unitary structure.

3. A heating apparatus embodying therein a plurality of elements or sections each of which is closed at the top and at the bottom thereof, said elements or sections having registering openings in the side walls thereof, rings about said openings whereby said elements or sections are spaced apart and a continuous chamber common to all said elements or sections having a plurality of upwardly extending unobstructed domes is formed, closure means for the opposite ends of said chamber, a feed pipe common to all said elements or sections, adjacent the bottom of said chamber, a plurality of burners carried by said pipe, one of said burners being positioned below each of said domes, and said rings being spaced away from said burners sufficiently to prevent the flame therefrom impinging upon the material of any element or section, each of said elements or sections having air inlets through the side walls thereof below and on opposite sides of the burner therein, and an air outlet adjacent the top thereof, and means securing all of said elements or sections together in a unitary structure.

4. A heating apparatus embodying therein a plurality of elements or sections, having registering openings in the side walls adjacent the bottom thereof, rings about said openings whereby said elements or sections are spaced apart and a continuous chamber common to all of said elements or sections having a plurality of upwardly extending unobstructed domes is formed, closure means for the opposite ends of said chamber, a feed pipe common to all of said elements or sections adjacent the bottom of said chamber, a plurality of burners carried by said pipe, one of said burners being positioned below each of said domes and said rings being spaced away from said burners sufficiently to prevent the flame therefrom impinging upon the material of any element or section, each of said elements having a plurality of small air inlets through the side walls thereof below and on opposite sides of the burner therein, and a plurality of small air outlets opening through the walls thereof adjacent the top thereof and upon opposite sides of the element, and means securing all of said elements or sections together in a unitary structure.

5. A heating apparatus embodying therein a plurality of elements or sections having registering openings therein forming a continuous chamber adjacent the bottom thereof, the side wall of said chamber having an ignition port intermediate the ends thereof, means uniting said elements or sections, a feed pipe common to all of said elements or sections adjacent the bottom of said chamber, a plurality of burners carried by said pipe, one of said burners being positioned in each of said elements or sections, a movable member adapted to be positioned above all of said burners and to accumulate the gas emerging therefrom and discharge it adjacent said ignition port, a pivotal closure for said ignition port, and operative connections between said closure and said movable member.

[Claims 6 to 11 not included in the Gazette.]

1,270,911. LOCK FOR AUTOMOBILES. JOSEPH M. WOODS, Chicago, Ill., assignor to The Imperial Brass Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 8, 1917. Serial No. 153,272. (Cl. 137—4.)

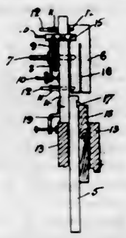


4. A locking device for automobiles, comprising a casing provided with a passage adapted to be inserted in a fuel line supply, a valve in said casing adapted to move to open and close said passage, a diaphragm within said casing, a flexible connector connected at one end with said valve and at the other end with a lock conveniently mounted on the automobile, and means in said casing for automatically returning said valve to its closed position when said connector permits its movement.

5. A locking device for automobiles, comprising a casing having a passage adapted to be inserted in a fuel line supply, a valve arranged to move therein to open and close said passage, a valve stem extending upwardly from said valve, a flexible connector connected at one end with said valve stem and at its opposite end with a lock mounted in convenient position on the automobile, a chamber in said casing, a flexible diaphragm in said chamber and arranged to permit the movement of said valve relative to said passage, a nut on said stem on each side of said diaphragm to secure said diaphragm to said stem, and a compression spring engaging the roof of said chamber, and pressing down on the upper nut automatically to return said valve to closed position when the connector is released.

[Claims 1 to 3 not printed in the Gazette.]

1,270,912. ADJUSTABLE DEVICE FOR USE IN CUTTING TENONS. JOHN ALFRED ERNEST WOOLCOCK, Heidelberg, Victoria, Australia. Filed Nov. 7, 1916. Serial No. 129,982. (Cl. 143—86.)

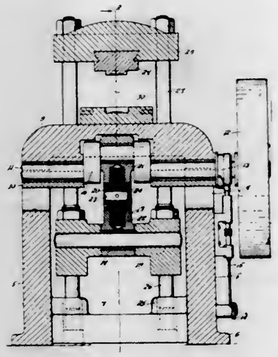


1. A hand tenoning device comprising a main plate; a holding plate against which the work is placed, attached to the main plate; a saw guide mounted upon the main plate to slide transversely thereof and above the holding plate; and means for moving the saw guide.

2. A hand tenoning device comprising a main plate; a holding plate against which the work is placed, attached to the main plate; a saw guide mounted upon the main plate to slide transversely thereof and above the holding plate; means for moving the saw guide; and a dovetailed removable bead transversely disposed in and near the top of the holding plate.

3. In a hand tenoning device, a main plate; a holding plate attached to the main plate against which the work is placed; a saw guide mounted upon and movable with respect to said main plate, and having a narrow slot therein provided with roughened faces; and means for moving said saw guide.

1,270,913. DIEING-MACHINE. DANIEL M. WRIGHT, Hartford, Conn. Filed Jan. 10, 1917. Serial No. 141,595. (Cl. 113—38.)



1. A dieing machine comprising a frame including a table adapted to receive a die, a single member adapted to have a reciprocating movement with respect to said die, a single means for reciprocating said member, a plurality of supports exceeding two in number projecting from and rigid with said reciprocating member and guided in said frame, and a die holder rigidly secured to said supports and adapted to receive a die to act in connection with the die on the table.

5. A dieing machine including a frame whose top comprises a table adapted to receive a die, a single plate mounted for reciprocating movement underneath said table, an eccentrically formed member located underneath the table and above said plate, a single connection between said member and said plate for reciprocating the latter, a plurality of supporting columns exceeding two in number rising from and rigid with said plate and extending to a location above said table, and a die holder rigidly secured to said supporting columns above said table and adapted to receive a die to act in connection with the die on said table.

11. A dieing machine including a frame whose upper portion provides a table adapted to receive a die, a driving shaft journaled transversely of and in said frame beneath the table and having an eccentric member substantially midway between its ends, a reciprocable plate beneath said table having a single connection with said member, a plurality of supports exceeding two in number rigid with said plate and each extending upwardly from a different portion thereof through guide openings in the frame to a location above the table, and a die holder rigidly secured to the upper ends of said supports.

[Claims 2 to 4 and 6 to 10 not printed in the Gazette.]

1,270,914. CLUTCH-PENCIL. JOHN B. ZIMDARS, San Francisco, Cal. Filed June 7, 1916. Serial No. 102,214. (Cl. 120—21.)

1. A pencil including a clutch, a casing embracing the clutch, and spring means for retracting the clutch longitudinally of the casing and means for automatically locking said spring.

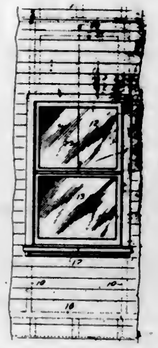


3. A pencil including a lead clutch, a casing embracing said clutch, means for automatically retracting the working end of the clutch within the casing, and opposed spring fingers at the writing end of the casing to check the downward feed of lead from the clutch when the latter is retracted and the lead released.

19. In a pencil, a casing, a lead clutch operatively mounted in said casing to project and retract the lead point beyond and within the end of the casing, said clutch comprising an outer clutch member mounted within said casing, an inner tubular member slidably mounted within said outer member, the lower end of said outer member being conical, the inner tubular member being split longitudinally at its lower end, jaws on the lower ends of said split portions of the inner member, a threaded head screwing on the upper end of said outer member and engaging the upper end of said inner member for effecting relative longitudinal movement of the inner and outer clutch members when the head is turned in one direction or the other to cause said jaws to grip or release the lead.

[Claims 2, 4 to 9, and 11 not printed in the Gazette.]

1,270,915. WINDOW CONSTRUCTION. SAMUEL B. ZIMMER, El Centro, Cal. Filed June 19, 1917. Serial No. 175,614. (Cl. 156—14.)



1. In a window construction, a frame having vertical sash and screen guides and provided with upper and lower pockets for the sashes, of which the upper pocket is also adapted to receive the upper portion of a screen frame, upper and lower sashes slidable in said guides in the same vertical plane and respectively movable into the upper and lower pockets of the window frame in open position, and a screen having its frame movable in connection with said guides at the inner side of the vertical plane of the sashes and connected at its lower end to the upper edge of the lower sash, and a connection between said sashes whereby to simultaneously shift the same into open and closed positions.

2. In a window construction, a frame having vertical sash and screen guides and provided with upper and lower pockets, upper and lower sashes slidable in said guides in the same vertical plane and respectively movable into the upper and lower pockets of the frame, and a screen movable in connection with the said guides inwardly beyond the said sashes, the upper portion of which screen extends into the upper pocket of the frame, and the lower portion of which is connected to the upper portion of the lower sash.

3. In a window construction, a frame having vertical sash guides and upper and lower pockets, a pulley in the upper portion of the upper frame and pocket, upper and lower sashes slidable in said guides in the same vertical plane and respectively movable into and out of the upper and lower pockets, a flexible connection extending over the said pulley, one end of which is secured to the upper portion of the upper sash and the opposite end of which is secured to the upper portion of the lower sash and a screen movable in a plane parallel to the plane of movement of the sashes, and connected to the lower sash for the purpose described.

1,270,916. LINK FOR WATCH-CHAINS, BRACELETS, &c. OTTO P. BAILER, Memphis, Tenn. Filed Oct. 23, 1916, Serial No. 127,269. Renewed Dec. 7, 1917. Serial No. 206,077. (Cl. 59—91.)



1. A link blank comprising a disk or body portion having its periphery provided with opposite hooks and notches, one end of each hook being integral with the disk and the other free and adapted to enter and engage the adjacent notch.

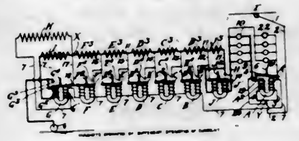
2. A link blank formed of a central body portion having its periphery provided with a notch and a hook, the bottom of the notch and the engaged end of the hook being formed on a curve concentric with the central body as described.

3. A link comprising a disk provided with diametrically opposite notches and hooks, the latter engaging the adjacent hooks, and the face of the metal being crowded over the lines of contact of the hook ends with the central portion of the blank.

1,270,917. ELECTRIC REGULATOR. HAMILTON BALUSS, Kennett Square, Pa. Filed Nov. 22, 1915. Serial No. 62,841. (Cl. 171—312.)

4. In an electric system, the combination of a supply circuit, a work circuit, a plurality of resistors in series with the work circuit, means for cutting in and out the respective resistors by changes in the voltage of the supply circuit, an additional resistor in the work circuit, and means actuated by the work circuit for cutting into or out of the work circuit said additional resistor.

8. In an electric system, the combination of a supply circuit, a work circuit, a series of main resistors in the work circuit, a relatively weak resistor also in the work circuit, a shunt circuit for each resistor, a switch for each shunt circuit, a series of magnets for the switches of the respective main resistors, said magnets being included in the supply circuit, and responsive to changes in the supply circuit, and a magnet for the switch of the shunt circuit of the relatively weak resistor, the strength of the magnets increasing from the magnet of the relatively weak resistor progressively throughout the series of magnets for the main resistors.



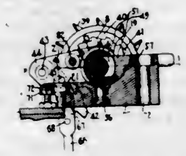
9. In an electric system, the combination of a supply circuit, a work circuit, a plurality of resistors in series with the work circuit, means for successively cutting in or out the respective resistors by successive changes in the voltage of the supply circuit, and means actuated by further change of voltage when all of the resistors have been cut in or out to restore said resistors to their former condition and to permit repeated successive cutting in or out thereof by further change in voltage in the supply circuit.

13. In an electric system, the combination of a supply circuit, a work circuit, a plurality of resistors in series with the work circuit, means for successively cutting in or out the respective resistors by successive changes in the voltage of the supply circuit, a supplemental resistor in series with the work circuit and substantially equal to the sum of the series of resistors, a shunt circuit for said supplemental resistor including a switch, and a magnet having two windings for the switch, one winding of the magnet being in shunt with the supply circuit, and one winding of the magnet being in series with the work circuit, said magnet being responsive to further changes in voltage to cut in or out the supplemental resistor when the series of resistors has been cut in or out.

22. In an electric system, the combination of a supply circuit, a work circuit, regulating means for the work circuit, said regulating means being responsive to the electric conditions in one of said circuits, and additional means responsive to electric conditions in one or both of the circuits for extending the range of the regulating means.

[Claims 1 to 3, 5 to 7, 10 to 12, 14 to 21, 23, and 24 not printed in the Gazette.]

1,270,918. TYPE-WRITING MACHINE. EDWIN E. BARNEY, Ilion, N. Y., assignor to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Filed Nov. 22, 1916. Serial No. 132,792. (Cl. 197—91.)

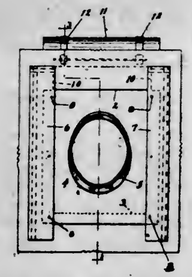


1. In a typewriting machine, the combination of a back-spacing pawl-carrier formed with a bearing opening and a slot extending from said opening to the edge of the carrier, said slot being narrower than the diameter of the bearing opening, and a supporting member received through said slot into the bearing opening and on which said carrier receives a pivotal bearing and from which it is detachable.

2. In a typewriting machine, the combination of a back-spacing pawl-carrier formed with a key hole slot therein, the larger portion of said slot forming a bearing opening, and a support having a bearing which is of larger diameter in one direction than another and when turned to one position relatively to the carrier may be introduced into said bearing opening and when turned to another position relatively to the carrier prevents a detachment of the carrier from its support and provides a pivotal bearing therefor.

[Claims 3 to 12 not printed in the Gazette.]

1,270,919. TENT. FREDERICK O. BERG, Spokane, Wash. Filed Aug. 20, 1917. Serial No. 187,287. (Cl. 108—26.)



The combination with the tent top, and the tent pipe passing through an opening therein, of pockets fastened along the sides of the opening and a shield having cut away, upper corners with the upper edge adapted to fit under the edge of the upper wall of the opening, its sides incased in said pockets and secured thereto, and its lower edge overlapping the edge of the lower wall of said opening.

1,270,920. TRANSMITTER OR RECEIVER. KONRAD BOTZ, New York, N. Y. Filed June 28, 1917. Serial No. 177,491. (Cl. 179—114.)

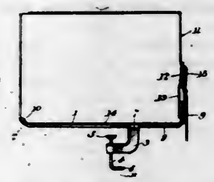


1. A device of the class described including a non-metallic diaphragm, a conical helix of conducting and magnetic material having one end fastened to the diaphragm and the other end fixed, means for connecting the ends of the helix in an electric circuit, and means for enveloping the helix in a magnetic field.

2. A device of the class described including a non-metallic diaphragm, a conical helix of conducting and magnetic material having one end fastened to the diaphragm and the other end fixed, means for connecting the ends of the helix in an electric circuit, a magnetizing coil surrounding the helix, and a source of continuous current connected with the coil.

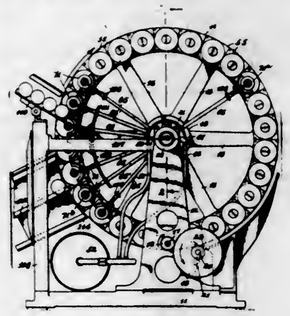
1,270,921. LUGGAGE-FASTENER. CHARLES ROBERT BRAWNER, Los Angeles, Cal. Filed May 8, 1917. Serial No. 167,194. (Cl. 224—29.)

2. A luggage fastener comprising a flat bar having an eye at one end and having ears extending laterally from its edges adjacent the opposite end, a clamping member having straight arms shiftably engaging the ears, means connected with the bar to fasten the bar to a support, a buckle, and a strap rove through the clamping member between the arms thereof and through the eye and lying on the upper face of the bar and fastened to the clamping member and forming a loop rove through the buckle, the buckle being slidable along the strap.



[Claim 1 not printed in the Gazette.]

1,270,922. CAN-TESTING MACHINE. JULIUS BRENZINGER, Mount Vernon, N. Y. Filed June 7, 1916. Serial No. 102,126. (Cl. 73—51.)



1. In a can testing machine, the combination, with a continuously revolving wheel having mounted on each side and near the periphery thereof means for progressively advancing a plurality of open-ended can bodies, each of said means including a series of yieldingly elastic seats and a corresponding series of mechanisms for pressing the open end of each can body against and retaining the same upon its seat, of means for exhausting air from the interior of can bodies on both sides of said wheel at a fixed point in the orbit of revolution thereof, said exhausting means including a common primary source of air exhaustion, means subsequently operable to successively release said can bodies from their pressing and retaining mechanism, and means for restoring equilibrium of air pressures within and without each can body after appreciable further movement thereof and while in such condition of release.

7. In a can testing machine, the combination, with a revolving wheel having mounted on each side and near the periphery thereof a circularly arranged series of yieldingly elastic seats and a corresponding series of mechanisms for pressing the open end of each can body against and retaining the same upon its seat, of means for exhausting air from the interior of can bodies on both sides of said carrier, at a fixed point in the orbit of revolution of said wheel, said exhausting means including a common primary source of air exhaustion, means subsequently operable to first successively release can bodies from their pressing and retaining mechanisms, then restore effective operation of said mechanisms, and finally again release said bodies, and means for restoring equilibrium of air pressures within and without each can body after appreciable further movement thereof during the second period of release.

20. In a can testing machine, the combination, with means for progressively advancing a plurality of open-ended can bodies, said means including a series of yieldingly elastic seats and a corresponding series of mechanisms for pressing the open end of each can body against and retaining the same upon its seat, of means for exhausting air from the interior of each can body in turn at a fixed point in the path of movement of said bodies, means subsequently operable to release each of said can bodies in turn from its pressing and retaining mechanism, means providing a passage from the atmosphere to the interior of each seated can body, a valve in said passage, means open to the interior of each can body and actuated by the external air pressure to close said valve and retain the same in a closed condition while the degree of said air pressure is maintained, and means for restoring equilibrium of air pressures within and without each can body after appreciable further movement thereof in condition of mechanical release.

25. In a can testing machine, the combination, with means for progressively advancing a plurality of open-ended can bodies, said means including a series of yieldingly elastic seats and a corresponding series of mechanisms for pressing the open end of each can body against and retaining the same upon its seat, of means for exhausting air from the interior of each can body in turn at a fixed point in the path of movement of said bodies, means subsequently operable to release each of said can bodies in turn from said pressing and retaining mechanism, means providing a passage from the atmosphere to the interior of each seated can body, a valve in said passage, a hollow member open to the interior of each can body and including a diaphragm movable under influence of external air pressure, connecting means between said diaphragm and said valve to close the latter and retain the same in a closed condition, said last-mentioned means including a yieldingly compensative connection to dissipate impelling forces after initial application thereof, and means for restoring equilibrium of air pressures within and without each can body after appreciable further movement thereof in condition of mechanical release.

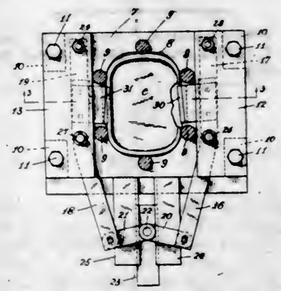
33. In a can testing machine, the combination, with a revolving wheel mounted on a rotating shaft and carrying means for hermetically seating open-ended can bodies, of a stationary sleeve on said shaft having two passages therethrough leading through suitable connections to a common source of air exhaustion, a collar on said sleeve rotating with said wheel and having passages therethrough each leading through suitable connections to the interior of a seated can body, the interior ports of said collar-passages being in staggered arrangement and so located that they successively register alternately with one and the other exterior port of said sleeve-passages upon rotation of said collar.

[Claims 2 to 6, 8 to 19, 21 to 24, and 26 to 32 not printed in the Gazette.]

1,270,923. CAN-COVER-FEEDING DEVICE. JULIUS BRENZINGER, Fairfield, Conn., assignor to Sanitary Can Machinery Company, Ellsworth, Me., a Corporation of Maine. Filed June 25, 1917. Serial No. 176,666. (Cl. 113—114.)

1. In a device of the character described, the combination, with primary means for supporting a stack of can covers and secondary supporting means adapted to be interposed between the bottom cover and the remainder of the stack, both of said supporting means having reciprocatory movement only, of separate means each common to portions of both said primary and said secondary supporting means and having common actuating means for successively rendering the two supporting means alternately effective.

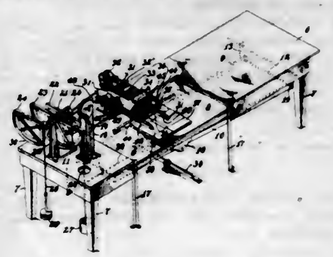
3. In a device of the character described, the combination, with primary means for supporting a stack of can covers and secondary supporting means adapted to be interposed between the bottom cover and the remainder of the stack, both of said supporting means having reciprocatory movement only, of pairs of oppositely oscillating levers for supporting and actuating both of said supporting means, and means for oscillating said levers to successively render the two supporting means alternately effective, said last-mentioned means including separate connecting means each common to a lever in each pair thereof.



6. In a device of the character described, the combination, with primary means for supporting a stack of can covers from opposite side edges of the bottom cover of the stack, and similar secondary supporting means adapted to be interposed between the bottom cover and the remainder of the stack, of two pairs of levers in superposed arrangement, said primary supporting means being supported and actuated by the lower pair of levers and said secondary supporting means being supported and actuated by the upper pair of levers, and means common to a lever in each pair thereof for oscillating operative portions of the levers of both pairs in opposite directions.

[Claims 2, 4, 5, 7, and 8 not printed in the Gazette.]

1,270,924. MACHINE FOR TAPING BOX-BLANKS AND THE LIKE. GEORGE H. BRODERICK, Lawrence, Kans., assignor to Irving Hill, Lawrence, Kans. Filed Aug. 6, 1915. Serial No. 43,947. (Cl. 271—62.)



1. In a machine of the character described, the combination, with a table or the like, of a balanced depressible section in the top thereof adapted to receive material thereon, and means for slightly and uniformly overbalancing an increasing or diminishing load on said section.

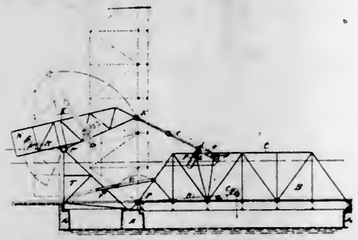
3. In a machine of the character described, the combination, with a table or the like, of a balanced depressible section in the top thereof adapted to receive material thereon, means for guiding vertical movement of said section and retaining the same in a horizontal position, and means for slightly and uniformly overbalancing an increasing or diminishing load on said section.

9. In a machine of the character described, the combination, with a table or the like, of a depressible section in the top adapted to receive material thereon, a vertically oscillating support for said section may be held in a horizontal position in all positions thereof, means for

guiding vertical movement of said section and retaining the same in a horizontal position, means for counterbalancing the weight of said section and its support, and means for slightly and uniformly overbalancing an increasing or diminishing load on said section.

[Claims 2 and 4 to 8 not printed in the Gazette.]

1,270,925. DRAWBRIDGE. THOMAS E. BROWN, New York, N. Y. Filed Nov. 9, 1916. Serial No. 130,364. (Cl. 14—36.)



1. In a drawbridge, the combination of a hinged span, a counterweight, a balancing beam carrying said counterweight, a support for said beam, a tensional connection from said beam to said span, and pivoted links joining said connection to said span, said links being so pivoted that said span is balanced throughout its motion.

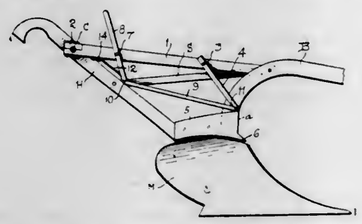
2. In a drawbridge, the combination of a hinged span, a counterweight, a balancing beam carrying said counterweight, a support for said beam, a tensional connection from said beam to said span, and means to vary the point of rotation of said connection relatively to said span to balance said span in all its positions.

3. In a drawbridge, the combination of a hinged span, a counterweight, a pivoted beam carrying said counterweight, a support for said beam, a tensional connection from said base to said span, said tensional connection being at an angle with the line joining the hinge of said span and the pivot of said beam when said span is in its lowered and raised positions and means to balance said span in all its positions.

4. In a drawbridge, a hinged span, a counterweight, a balancing beam carrying said counterweight and constraining said counterweight to move in a curved path, a tower supporting said beam, a connection from said beam to said span and means to change the point of rotation of said connection on said span as said span moves to its various positions.

[Claims 5 to 16 not printed in the Gazette.]

1,270,926. PLOW ATTACHMENT. JAMES F. CARTER, Houston, Va. Filed Mar. 18, 1918. Serial No. 223,138. (Cl. 97—21.)

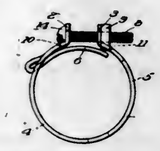


1. In combination with the moldboard and handles of a turning plow, a member positioned above and in close proximity to the upper edge of the moldboard and extending substantially across the space between the handles, and means for imparting upward and forward movement to the member.

8. In combination with the moldboard of a turning plow, a member supported for swinging movement in a vertical plane, the lower end portion of the member being provided with a wing normally extending above and in close proximity to the upper edge of the moldboard, and means for imparting upward and forward movement to the member.

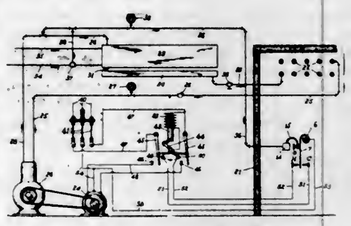
[Claims 2 to 7 not printed in the Gazette.]

1,270,927. HOSE-CLAMP. JOHN R. CLANCY, Syracuse, N. Y. Filed Mar. 11, 1916. Serial No. 83,487. (Cl. 24—19.)



A hose clamp comprising a flat metal band bent into substantially circular form and having on its ends outwardly extending short ears and provided with apertures at the junction of the ears with the body of the band, a tightening bolt fitted to the apertures and a nut threaded on the bolt, said apertures being arranged to position the bolt to exert the tightening stress on the clamp in alinement with the body and said apertures being extended into the body portion to permit of the bolt being so positioned and to provide a locking means for the nut, and an integral tongue bent inwardly from the body portion of the band and underlying the nut, substantially as described.

1,270,928. CONTROLLING MEANS FOR REFRIGERATING APPARATUS. JOHN H. COESFELD, Omaha, Nebr., assignor to Baker Ice Machine Company, Omaha, Nebr., a Corporation of Nebraska. Filed Oct. 30, 1916. Serial No. 128,598. (Cl. 62—4.)



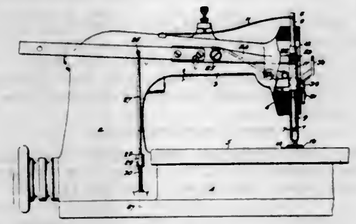
1. Controlling means for refrigerating apparatus, comprising a pair of contacts, an arm movable between the same, thermostatic means tending to move said arm in accordance with temperature-variations, and pressure-actuated means for moving said arm irrespective of the tendency of the thermostatic means to actuate the same.

[Claims 2 and 3 not printed in the Gazette.]

1,270,929. PRESSER-FOOT MECHANISM FOR SEWING-MACHINES. ALBERT H. DE VOE, Westfield, N. J., assignor to The Singer Manufacturing Company, a Corporation of New Jersey. Filed Sept. 2, 1915. Serial No. 48,594. (Cl. 112—13.)

1. In a sewing machine, in combination, a presser-foot, a lifter therefor, and means movable by and adapted to continue its movement independently of said lifter for detaining the presser-foot raised when desired.

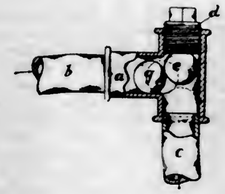
3. In a sewing machine, in combination, a presser-foot, a lifter therefor, and a detent for maintaining the presser-foot raised and controllable through said lifter by a single application of force to be either effective or ineffective in maintaining the presser-foot raised after it has been elevated.



9. In a sewing machine, a presser-foot, a lever, a treadle connection for moving said lever and thereby lifting said presser-foot, and means operatively arranged with relation to said lever and presser-foot for securing said presser-foot in raised position whereby through rapid and slow applications of foot power the presser-foot may be elevated with or without respectively a securing thereof in raised position.

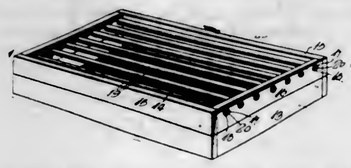
[Claims 2, 4 to 8, and 10 not printed in the Gazette.]

1,270,930. AUTOMATIC GAS SHUT-OFF. JOHN P. DOYLE, Wellesley, Mass. Filed May 16, 1917. Serial No. 169,065. (Cl. 137—92.)



The improved automatic gas shut-off consisting of an inlet pipe and an outlet pipe arranged in angular relation to each other, a ball secured normally by fusible means over the open end of the outlet pipe, and a supplemental ball adapted to block the first named ball in its closed position.

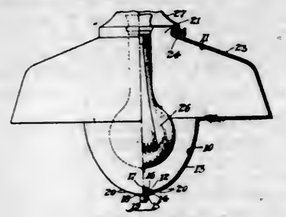
1,270,931. EGG-TURNING TRAY. WILLIAM J. DUDLEY and THOMAS AUGUSTUS RICHARD, Wilmington, Ohio. Filed Mar. 11, 1918. Serial No. 221,764. (Cl. 119—44.)



1. In an incubator, a hollow frame provided with a row of bearings at each of two opposite sides, a plurality of egg-supporting rollers journaled in said bearings and terminating substantially at the outer surfaces of said opposite sides, a casing normally inclosing said frame and preventing access to the ends of said rollers, and means engageable with the ends of said rollers for turning them and the eggs thereon when said frame is removed from said casing, said means being disengaged from said rollers when said frame is within said casing, whereby it is essential that the eggs on said rollers be exposed to the air extraneous to said casing when the rollers are turned by said means.

[Claims 2 to 4 not printed in the Gazette.]

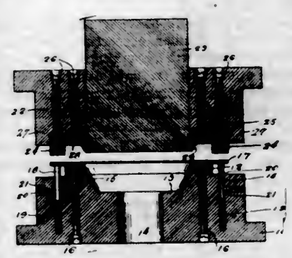
1,270,932. LIGHTING-FIXTURE. FLORENZ M. EGAN, Mount Vernon, N. Y. Filed Jan. 15, 1917. Serial No. 142,359. (Cl. 240—92.)



1. An inclosing globe for illuminants, comprising, in combination, an upper dome of translucent glass having a polished inner surface to reflect light rays downward, an opposed lower bowl of translucent glass having a polished inner surface to reflect light rays upward, said dome having an open end diameter greater than said bowl whereby a clear space is afforded therebetween for the light rays reflected from said dome, an integral body member of transparent glass supporting and spacing said dome and bowl and sealing the latter from foreign matter, said body member having an upper portion for attachment to a fixture support, and means disposed through the apex of said bowl for removably securing the latter to said body member.

[Claims 2 and 3 not printed in the Gazette.]

1,270,933. COMBINATION BLANKING AND FORMING DIE. CHARLES C. ELSENER, Waterloo, Iowa. Filed Mar. 20, 1917. Serial No. 156,043. (Cl. 113—42.)

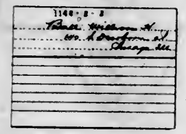


In a device of the character described a die element having an outer cutting edge therearound, an intermediate holding face and an inner forming face, a support therefor; a second die element comprising a blanking ring conforming to the cutting edge of the first die, a forming and holding element within and in fixed relation to the blanking ring, having a face adapted to coengage snugly upon a blank with the upper side of the first die element to hold the blank against inward slip, an inner downward extension on said forming and holding element adapted to coöperate with the forming face of the first named member, and having an opening therethrough, and a punch element having forming surfaces thereon certain of which form a continuation of the forming surface of said extension on the forming and holding element when projected therethrough as described.

1,270,934. METHOD OF AND MEANS FOR MECHANICAL INDEXING. ALAN ROBB FERGUSSON, New York, N. Y. Filed Jan. 2, 1918. Serial No. 210,103. (Cl. 129—16.5.)

1. An indexing element bearing numerical digits between 1 and 9 inclusive, each letter of a selected number of the letters forming the name indexed being represented by a single digit between 1 and 9 inclusive, and said numerical digits appearing on said indexing element in a given color selected according to a predetermined plan.

3. An indexing element bearing numerical digits between 1 and 9 inclusive, each letter of a selected number of the letters forming the name indexed being represented by a single digit between 1 and 9 inclusive, varying significance being assigned to numbers by color variation according to a predetermined plan and all of said digits being formed on said indexing element of the particular color belonging to the first digit of the number being indexed.



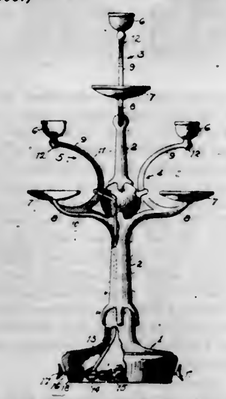
5. The method of indexing which consists in transforming the name being indexed into a numerical number made up of digits between 1 and 9, each of said digits representing one letter of a selected number of the letters of said name, placing said name and said number on an indexing element, either the number or name, or both, being formed in a color determined by a predetermined plan from the first letter of the name, and arranging a plurality of said elements according to number and color.

7. An indexing element bearing two sets of characters, one set being a number and the other set being a name, the number being formed of digits between 1 and 9, and each of the digits in said number representing one letter of a selected number of the letters forming said name, and both of said sets of characters being formed in one of a plurality of colors, the particular color used being determined by a predetermined plan, whereby said name may be quickly indexed according to both numerical and alphabetical sequence.

8. An indexing element bearing numerical digits, each letter of a selected number of letters forming the name indexed being represented by a single digit, and said numerical digits appearing on said indexing element in a given color selected according to a predetermined plan.

[Claims 2, 4, and 6 not printed in the Gazette.]

1,270,935. **WATER-FOUNTAIN.** JOSÉ FERNANDEZ, Los Angeles, Cal. Filed Sept. 25, 1916. Serial No. 122,037. (Cl. 137—109.)

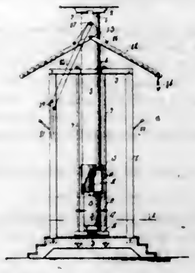


1. A water fountain, comprising a base, a standard, brackets carried by the standard, drink-bowls carried by the brackets, drip-basins below and axially concentric with the drink-bowls, a water supply main within the base, valves and supply pipes forming communication between the supply main and the drink-bowls, and foot pedals to operate the valves.

2. In a water fountain, a base, a standard thereon, fountain drink-bowls carried by the standard, drip-basins beneath the drink-bowls to receive the overflow, water supply pipes for the drink-bowls, spring actuated valves to control the supply pipes, and foot-pedals to actuate the valves.

3. A device for dispensing water, comprising fountain drink-bowls, drip-basins therebeneath, a base, a standard on the base and carrying the bowls and basins, water supply pipes leading to the drink bowls, controlling valves in the supply pipes, and foot-pedals to actuate the controlling valves.

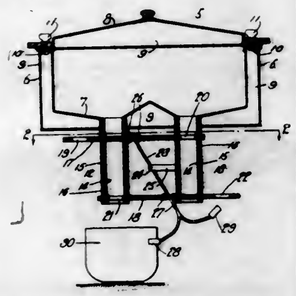
1,270,936. **ADJUSTABLE COAT AND HAT RACK.** OLIVER HOWARD GENTRY, Rochester, N. Y. Filed Mar. 27, 1918. Serial No. 225,015. (Cl. 45—13.)



2. In a rack of the type described, the combination with a skeleton structure having within it a pair of upright guide rods, and a loop in its upper portion between said rods; of a two-part post whereof the upper member passes movably through said loop and the lower member has eyes slidably mounted on said guides, an expansive spring interposed between the adjacent ends of said members, a collar secured to the upper member and inclosing the spring and the upper end of the lower member, and clamping means on the latter for engaging said guides after the lower member has been raised sufficiently to put the spring under tension.

[Claims 1 and 3 to 7 not printed in the Gazette.]

1,270,937. **MEASURING DEVICE.** JAMES W. GIBBONS, Boston, Mass. Filed May 16, 1917. Serial No. 169,079. (Cl. 221—112.)



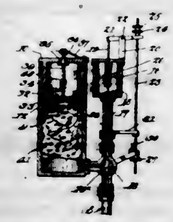
1. A measuring device having, in combination, a pair of chutes, two valves slidably mounted in and extending across both of said chutes, one above the other, each of said valves having two holes therethrough, and means adapted to simultaneously move said slide valves in opposite directions, all of the holes in said valves being adapted to be moved out of alinement with said chutes at the same time.

4. A measuring device having, in combination, a pair of chutes, two valves slidably mounted in and extending across both of said chutes, one above the other, each of said valves having two holes therethrough, and means adapted to simultaneously move said slide valves in opposite directions, the holes in said slide valves so arranged that a hole in one of said slides is in alinement with one of said chutes, while the other hole in said slide is out of alinement with the other of said chutes.

6. A measuring device having, in combination, a pair of chutes, two valves slidably mounted in and extending across both of said chutes, one above the other, each of said valves having two holes therethrough, and a lever pivoted to said chutes and connected on opposite sides of its pivot to said slide valves, the holes in said valves being so arranged that they may alternately be brought into and out of alinement with said chutes, but so arranged that no two of the holes in said slide valves may be in alinement with the same chute simultaneously.

[Claims 2, 3, and 5 not printed in the Gazette.]

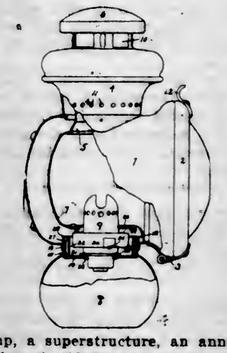
1,270,938. **FUEL-ECONOMIZER FOR INTERNAL-COMBUSTION ENGINES.** OSCAR GLOVER, Louisville, Ky., assignor to Glover Fuel Economizer Company Incorporated, Louisville, Ky. Filed June 7, 1916, Serial No. 102,307. Renewed Apr. 3, 1918. Serial No. 226,530. (Cl. 123—180.)



1. The combination with an internal-combustion engine; of a chamber having an air inlet and an outlet connected to the intake of the engine, a plug closing one end of the chamber, said plug being hollow to serve as a fuel reservoir, the inner end of the plug having an outlet port into the chamber, and its outer end having a vent port, and valves for said ports.

2. The combination with an internal-combustion engine; of a chamber having an air inlet and an outlet connected to the intake of the engine, a plug closing one end of the chamber, said plug being hollow to serve as a fuel reservoir, the inner end of the plug having an outlet port into the chamber, and its outer end having a vent port, valves for said ports, and an operative connection between the valves.

1,270,939. **OIL-LAMP-FONT FASTENER.** CHARLES E. GODLEY, Detroit, Mich., assignor, by mesne assignments, to Edmunds & Jones Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 19, 1916. Serial No. 72,897. (Cl. 240—50.)

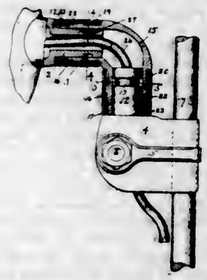


1. In a lamp, a superstructure, an annular flange on the lower portion of said superstructure, an oil receptacle, an annular flange carried by the upper portion of the said receptacle, locking means to secure one of said flanges within the other, a burner mounted on the oil receptacle, means mounted on the superstructure to hold the burner in position, a depending sealing flange separate and apart from the burner mounted on the superstructure, and a second sealing flange projecting up from the oil receptacle into engagement with the sealing flange on the superstructure.

2. In a lamp, the combination of a body and an oil font, a pair of telescoping locking flanges, one mounted on the body and the other on the font, a pair of telescoping sealing flanges one connected to the body and the other to the font, a burner on the font separate from but within said flanges, and means to hold the burner in position.

[Claims 3 to 11 not printed in the Gazette.]

1,270,940. **LAMP-MOUNTING.** CHARLES E. GODLEY, Detroit, Mich., assignor to Edmunds and Jones Corporation, Detroit, Mich., a Corporation of New York. Filed Jan. 23, 1917. Serial No. 144,088. (Cl. 240—57.)



2. In a lamp mounting, the combination of a cylindrical circumferentially-grooved hub on a lamp body, a second similar hub on a supporting member, a tubular connecting member between the two hubs provided with a socket in each end to receive the hubs, a screw mounted in the wall of each socket and extending into the groove in the hub within the socket, and means extending across the groove in one of the hubs to limit the rotation of the connection relative to said hub.

[Claims 1 and 3 not printed in the Gazette.]

1,270,941. **VALVE-OPERATING MEANS.** WILLIAM M. GOODWIN, Central Square, N. Y. Filed Apr. 5, 1918. Serial No. 226,901. (Cl. 121—97.)



1. In combination with the cam shaft and valve of an internal combustion engine, a spring for closing the valve

and connections between the cam shaft and valve for opening the same against the action of said spring, including a reciprocatory support, and a rocker pivotally mounted thereon and spring-pressed against the face of the cam.

[Claims 2 and 3 not printed in the Gazette.]

1,270,942. ARTIFICIAL TOOTH. GEORGE W. GRIMM, West Hoboken, N. J. Filed Nov. 13, 1917. Serial No. 201,752. (Cl. 32—9.)



1. In an artificial tooth, the combination, with a crown having a cavity therein, of a pin anchored in the bottom of said cavity, and a headed member connected to said pin and adapted to be embedded in plastic material to which the crown is to be attached.

2. In an artificial tooth, the combination, with a crown having a cavity therein, of a pin anchored in the bottom of said cavity, and a headed member connected to said pin and having an inclined under face, said headed member being adapted to be embedded in plastic material to which the crown is to be attached.

3. In an artificial tooth, the combination, with a crown having a cavity therein provided with an inwardly extending ridge, of a pin anchored in the bottom of said cavity, and a headed member connected to said pin and arranged between the bottom of the cavity and said ridge, said headed member being adapted to be embedded in plastic material to which the crown is to be attached.

4. In an artificial tooth, the combination, with a crown having a cavity therein and a bore in the base of the cavity, of a screw-threaded pin anchored in the bottom of the bore and extending into the cavity, and an internally threaded tubular member to fit said pin, said tubular member having a shank to loosely fit in said bore and a head extending into the cavity where it may be embedded in plastic material to which the crown is to be attached.

1,270,943. ARTIFICIAL TOOTH. GEORGE W. GRIMM, West Hoboken, N. J. Filed Dec. 31, 1917. Serial No. 209,680. (Cl. 32—9.)

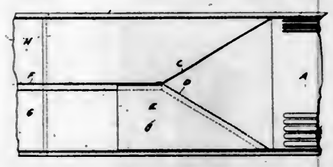


1. In an artificial tooth, the combination with a crown having a cavity therein, of an anchoring device comprising a bottom member secured in said cavity and having a screw-threaded socket in its upper end, a top member adapted to be embedded in the plastic material to which the crown is to be attached, said top member having a screw threaded passage, and a connecting pin having threads on its ends to engage the threaded socket in the bottom member and the passage in the top member, respectively.

2. In an artificial tooth, the combination with a crown having a cavity therein, of an anchoring device comprising a bottom member secured in said cavity and having a screw-threaded socket in its upper end, a top member adapted to be embedded in the plastic material to which the crown is to be attached, said top member having the screw threaded passage, and a connecting pin having oppositely inclined threads on its ends to engage the threaded socket in the bottom member and the passage in the top member, respectively.

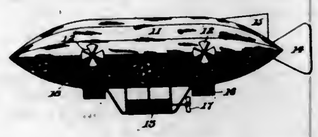
3. In an artificial tooth, the combination with a crown having a bore therein with diverging walls, of an anchoring device comprising a bottom member arranged between the diverging walls of the bore, and a headed member connected to said bottom member and adapted to be embedded in plastic material to which the crown is to be attached, and a plastic filling around said bottom member within the diverging walls of the bore for securing said bottom member in place said bottom member having an annular groove also occupied by said plastic filling.

1,270,944. DEVICE FOR SEGREGATING BY MEANS OF DEFLECTING-SURFACES. HARRY H. HASLER, Cresson, Pa. Filed May 19, 1917. Serial No. 169,785. (Cl. 83—54.)



In combination, a reciprocating screen provided with a deck receiving the undersize and reciprocating with the screen, an extension of said deck projecting beyond said screen at an inclination adapted to retain material sufficiently for inspection, said extension being longitudinally subdivided into a plurality of channels, means leading from the screen to one of the channels and adapted to divert the oversize thereto, means for diverting the undersize on the deck to another channel, said extension and the diverting means being connected to the screen to reciprocate therewith.

1,270,945. AEROPLANE-PROTECTOR. NYKYFOR HAWRYLASZ, Tarentum, Pa. Filed Sept. 25, 1917. Serial No. 193,082. (Cl. 244—1.)

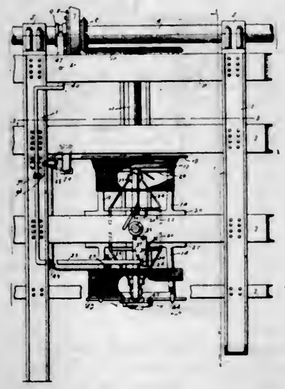


1. In combination with an aircraft having a gas bag, a bed of packed feathers surrounding the lower half thereof and a wire retaining gauze overlying the feathers and secured to the bag.

2. A device of the class described comprising a gas bag, a car depending therefrom, a canvas covering for the bag, a layer of matted feathers surrounding the lower portion of the bag in contact with the said covering and a retaining net carried by the covering and surrounding the feather layer.

1,270,946. APPARATUS FOR DRAWING WIRE. JOSEPH HERMAN, Peoria, Ill., assignor to Keystone Steel & Wire Company, South Bartonville, Ill., a Corporation of Illinois. Filed Feb. 7, 1916. Serial No. 76,710. (Cl. 205—16.)

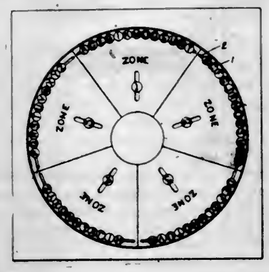
2. In an apparatus of the character described, in combination, a wire drawing block, means for rotating said block, a reel support, a pair of reels carried on said support, said support being invertible so as to place first one reel and then the other into operative relation with said block to rotate therewith and to receive the drawn wire which strips itself from the block and onto the reels during the drawing operation, the inverting of the reels, allowing the bundles of drawn wire to be stripped from said reels.



4. In an apparatus of the character described, in combination, a wire drawing block having a depending annular body, means for rotating said block, a support, a shaft swingable on said support, a reel on opposite ends of said shaft and rotatably and slidably carried on said shaft, means for holding either of said reels in operative relation with said block to rotate therewith, and means on said reels adapted to act as a stop for the bundle of wire when the reel is inverted, said last mentioned means adapted to be retracted to permit the reels to be moved into operative relation with said block.

[Claims 1 and 3 not printed in the Gazette.]

1,270,947. MATHEMATICAL PUZZLE. ARNOLD HERMANN, Sharpsburg, Pa. Filed Aug. 13, 1917. Serial No. 185,903. (Cl. 46—41.)

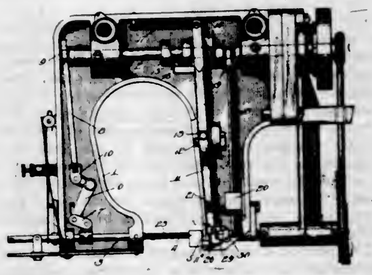


1. In a puzzle, a plurality of groups of symbols, each symbol having an assigned numerical value, and each group of symbols having an assigned numerical value, the sum of the numerical values of all groups in which a given symbol is found being the numerical value of such symbol.

4. In a word building puzzle, five groups of letters of the alphabet, each letter being assigned the numerical value of its position in the alphabet, the groups being assigned numerical values of one, two, four, eight and sixteen, and each letter appearing in groups of which the sum of their assigned numerical values equals the numerical position of the letter in the alphabet.

[Claims 2 and 3 not printed in the Gazette.]

1,270,948. LOOPER MECHANISM FOR SEWING-MACHINES. GEORGE HOEPNER, Chicago, Ill. Original application filed Oct. 27, 1916, Serial No. 128,104. Divided and this application filed Aug. 15, 1917. Serial No. 186,257. (Cl. 112—5.)



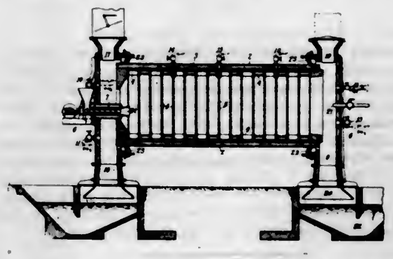
1. In a sewing machine, a driving shaft having a crank therein, a reciprocable needle arranged parallel with said shaft, a looper rod connected at one end to said crank, a looper at the other end of said rod arranged in proximity to the path of said needle, and means for supporting said rod at a point between its ends in a manner to cause the looper to describe a path lying in a plane at right angles to the path of travel of the needle and passing entirely around the path of travel of the needle.

6. In a sewing machine, a main driving shaft, a reciprocable needle bar parallel with the shaft, an oscillatory feeder arm extending transversely of the shaft, a driving connection between the shaft and said bar including a connecting rod and lever mechanism and a driving connection between the shaft and said arm.

8. In combination, a looper rod, a head secured to one end of said rod and projecting laterally therefrom, said head being adjustable in the direction of the length of the rod and also angularly of the axis of the rod, and a looper mounted in said head at some distance from the rod and lying approximately parallel with the rod, said looper being adjustable in the direction of its length and also angularly about its axis.

[Claims 2 to 5 and 7 not printed in the Gazette.]

1,270,949. METHOD OF MAKING PRODUCER-GAS. JOHN W. HORNSEY, Summit, N. J., assignor to General Reduction Gas and By-Products Company, a Corporation of Delaware. Filed Oct. 9, 1911, Serial No. 653,522. Renewed Nov. 24, 1917. Serial No. 203,861. (Cl. 48—203.)



1. The process of continuously making producer gas from carbonaceous material, which consists in introducing carbonaceous material into a heated revolving vessel, causing the material to be retarded in its travel through the vessel and to be picked up and showered down in the interior of the vessel to maintain the material in a finely divided and comminuted condition, introducing an oxidizing agent into the vessel while it is being revolved, thus

exposing the separated particles of the material to the action of the oxidizing agent and the heat, the shock of the falling particles being adapted to disrupt their seared surfaces and to present fresh surfaces to the action of the heat and oxidizing agent with each revolution of the vessel, the material and the oxidizing agent being introduced into the vessel continuously.

2. The process of continuously making producer gas, which consists in continuously introducing carbonaceous material and an oxidizing agent into a heated vessel, retarding the travel of the material through the vessel, repeatedly elevating it, thereby maintaining the particles of the material in a series of falling showers down through the vessel, whereby each particle has all of the surfaces repeatedly exposed to the action of the heat and the oxidizing agent, the seared surfaces of the particles being again and again broken off and fresh surfaces being again and again presented to the action of the heat and the oxidizing agent, whereby gasification of the material is substantially completed.

3. The process of continuously making producer gas, which consists in continuously introducing carbonaceous material and an oxidizing agent into a closed vessel in the presence of heat, constantly agitating the material to maintain it in a finely subdivided and comminuted condition by interrupting its travel through the vessel, and by repeatedly picking it up and dropping it down through the oxidizing agent in substantially uniform showers of individual particles whereby the oxidizing agent is baffled by said particles, and a thorough contact of the material with the heat and the oxidizing agent is insured.

4. The process of continuously making producer gas, which consists in continuously introducing carbonaceous material and an oxidizing agent into a closed vessel in the presence of heat, constantly agitating the material to maintain it in a finely divided condition by repeatedly picking it up and dropping it in a plurality of series of showers, the shower of one series falling out of alinement with the showers of an adjacent series, whereby the oxidizing agent is baffled by said particles and a thorough contact of the material with the heat and oxidizing agent insured.

1,270,950. IRREVERSIBLE GEARING. EMIL GOTTFRIED JOHANSON, Rockford, Ill. Filed Oct. 25, 1913. Serial No. 797,244. (Cl. 74—35.)

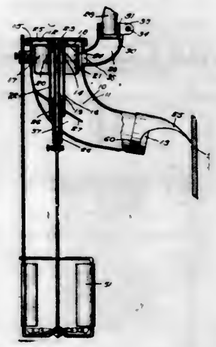


A gearing comprising, in combination, a fixed internal gear member, a second internal gear member rotatable relatively thereto, said members being provided with an unequal number of teeth, the teeth of the respective members being of the same pitch, and the member having the smaller number of teeth being of a diameter which is less than the diameter of the member having the larger number of teeth, and a driving pinion located eccentrically within said gears and in mesh therewith, said pinion having portions of different diameters to conform to the difference in the diameters of the internal gears.

1,270,951. WATER-MOTOR. ARTHUR W. JOHNSON, Minneapolis, Minn., assignor of one-fifth to John G. Erickson and one-fifth to Geo. F. Johnson, Minneapolis, Minn. Filed Nov. 29, 1915. Serial No. 63,950. (Cl. 258—138.)

1. In combination with the shaft of a water motor, a bearing for said shaft, and means including a water table for preventing water from leaking through said bearing.

5. In combination with the faucet and back board of a sink, a water motor attachable to the faucet, and means for directing the discharge against said back board to prevent splashing and cause the same to drain into the sink.

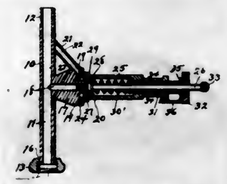


8. A water motor comprising a casing in the shape of an elbow, a water wheel situated in the top of the casing, a shaft for said water wheel extending through the lower bent part of the casing, a cap attachable to the top of the casing for inclosing the water wheel, a bearing within the casing attached to said cap for suspending and journaling the upper end of the shaft, and a water-tight bearing in the lower portion of the casing for journaling the lower portion of the shaft.

9. The combination with a faucet, of a motor, and an elbow joint between said faucet and motor, removably attached to the faucet, said elbow joint being constructed and arranged to permit of a rotary adjustment of the motor casing.

[Claims 2 to 4, 6, and 7 not printed in the Gazette.]

1,270,952. TIRE-PRESSURE VALVE AND SIGNAL. GUERDON O. JONES, Bouton, Iowa. Filed May 3, 1917. Serial No. 166,149. (Cl. 284—16.)

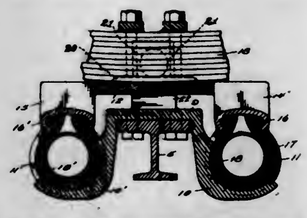


1. A tire-pressure valve, gage and signal, comprising a tubular body, means for securing an air hose to said body, means for securing said body to a valve casing in a tire, a tubular lateral on said body and communicating therewith, a valve-seat in said lateral, the lateral being formed with a chamber surrounding said valve-seat, a branch connected obliquely to said lateral and body, said branch being formed with a bore opening at one end to said chamber, a whistle-notch being formed in said branch, a barrel on said lateral, an adjusting screw in said barrel, a valve stem mounted loosely in said screw, barrel and lateral, a head on said stem within said barrel, a washer on said stem between said head and valve-seat and adapted to engage the latter, and a pressure spring on said stem within said barrel, said spring impinging at its ends on said head and screw respectively.

2. In a device of the class described, a casing formed with a tubular body, a tubular lateral communicating therewith, a tubular branch connecting the body and lateral, said lateral being formed with a valve-seat and also being formed with an annular chamber surrounding said seat and communicating with the bore of the branch, said branch being formed with a whistle notch, all of said parts being integral.

3. A tire-pressure valve, gage and signal, comprising a tubular body, means for securing an air-hose to said body, a coupling pivoted on said body and adapted to engage a tire-valve-casing, a tubular lateral on said body and communicating therewith, a valve-seat being formed in said lateral, said lateral being formed with an annular chamber surrounding said valve-seat, a branch integrally connected obliquely to said body and lateral, said branch being formed with a bore opening at one end to said annular chamber, said branch being formed with a whistle-notch between the lateral and body, a barrel screwed in said chamber and spaced from said valve-seat, the axis of the barrel being coincident with the center of the bore of the lateral, an adjusting screw screwed into said barrel in line with said valve-seat and formed with a bore having an axis coincident with the axis of the bore of the lateral, a valve-stem mounted loosely in the bore of the adjusting screw and extending through the barrel into the bore of the lateral and through the valve-seat, said stem also extending outside of the adjusting screw, a handle on the outer end of said stem, longitudinal ribs on the inner end of said stem, a head on said stem within said barrel, a washer on said stem between the head and valve-seat and adapted to seat on the latter, a pressure-spring on said stem within the barrel, said spring impinging at its ends on the screw and head respectively, said barrel being formed with a peripheral depression and also being formed with annular graduations in the bottom of said depression, a collar mounted on said adjusting screw, and a pointer formed on said collar, said pointer extending to and terminating in wedge-shape in the depression.

1,270,953. VEHICLE-SPRING. LYMAN D. JONES, Bridgeport, Conn. Filed Apr. 3, 1916. Serial No. 88,453. (Cl. 267—25.)



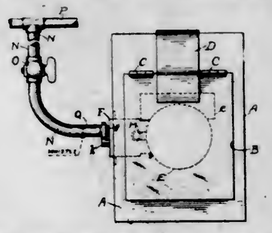
1. In a device of the character described, the combination, with the axle of a vehicle, of relatively elongated pneumatic cushions carried thereby, said cushions being disposed parallel to said axle and arranged in pairs at each end thereof, a vehicle-body-supporting frame mounted on said cushions and being supported in such manner as to have both vertical and lateral movements relative to said axle, and means for yieldingly resisting the reactive forces of said cushions.

3. In a device of the character described, the combination, with the axle of a vehicle and supporting frame for the vehicle body, of a pair of relatively elongated pneumatic cushions carried at each end of and paralleling said axle and in substantially counterbalanced arrangement with reference thereto, said supporting frame being mounted on said cushions and being provided with means engaging the ends of said cushions, and means for yieldingly resisting the reactive forces of said cushions.

[Claim 2 not printed in the Gazette.]

1,270,954. AUTOMATIC HOT-BOX ALARM FOR JOURNAL-BOXES OF RAILROAD-CARS. EDWARD JORDAN, Oak Park, and JOHN F. REINERT, South Elgin, Ill., assignors of one-third to Edward J. Roche. Filed Aug. 18, 1917. Serial No. 187,015. (Cl. 188—1.)

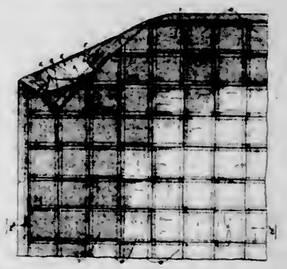
5. In an automatic alarm for journal boxes having movable doors, the sides of said boxes adjacent to said doors provided with recesses, plates on said doors adapted to cover said recesses, a base, and means to attach said base to said door, in combination with a member movably attached to said base, and arranged to extend through said plates and, when said doors are closed, to be positioned in said recesses, said member provided with passageways and provided with a communicating way adapted



to form, in combination with said passageways, a continuous passageway extending into and discharging outside of said box, a fusible member arranged to obstruct said communicating way when at climatic temperature, a rotatably mounted shaft, and means to yieldingly hold said movably attached member in an advanced position and in contact with said shaft.

[Claims 1 to 4 not printed in the Gazette.]

1,270,955. TEXTILE FABRIC. CHARLES E. KALTENBACH, Cranford, N. J. Filed Oct. 23, 1917. Serial No. 198,078. (Cl. 154—50.)



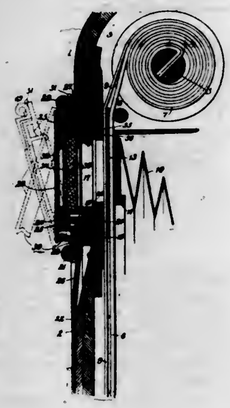
1. In a textile fabric of the character set forth, the combination of two series of ribbons of equal width, the ribbons of each series being arranged edge to edge parallel to one another and being interlaced with the ribbons of the other series in alternate relation forming two plies of ribbons throughout the fabric, and a double row of stitching extending along each pair of adjacent edges of ribbons in each series throughout the fabric, substantially as set forth.

2. In a textile fabric, the combination of two series of ribbons of equal width interwoven edge to edge and at right angles to each other throughout the fabric, a flexible lining arranged against one face of the ribbon combination, double rows of stitching extending in both directions throughout the fabric along adjacent selvage edges of the ribbons, such stitching passing through both plies of ribbons and the lining, and means to render the fabric waterproof.

1,270,956. PRINT-TITLING ATTACHMENT FOR FILM-CAMERAS AND METHOD OF PRODUCING TITLED NEGATIVES. ELMER G. KESLING, Bloomfield, Mo. Filed Dec. 6, 1916. Serial No. 135,452. (Cl. 95—1.1.)

1. A print titling film camera provided with a film having a backing strip of white paper of a character to receive the strokes of an inscription in material resistant to the passage of actinic light, means for protecting the film from the effects of actinic light while the backing is receiving the strokes of the inscription, and means for reducing the actinic value of the light while light-print-

ing the strokes of the inscription upon the film, said reducing means being located on the side of the white paper remote from the film and in spaced relation to said white paper.



8. A print titling film camera having an opening for view of and access to the backing sheet of the film to apply an inscription to the visible surface of said backing sheet by a pencil or other writing implement, means for protecting the sensitized surface of the film from access of actinic light while the inscription is being applied to the backing sheet, and light dimming means located at the opening exterior to the backing sheet, whereby the actinic value of light reaching the backing sheet and passing through the latter to the sensitized film is reduced so that over exposure of the sensitized film at the inscription area is avoided irrespective of said backing sheet.

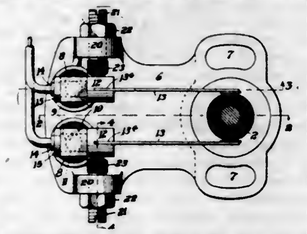
12. A print-titling film camera, having an opening for the transmission of light and exposing to view the face of the backing sheet of the film remote from the film, said opening being of a size to permit access to the backing sheet for the application of an inscription thereto by a writing implement, means for protecting the sensitized surface of the film at the inscription area from access of actinic light during the application of the inscription, and a cover member for the opening having a portion of a size to cover the opening and composed of a plate of darkened material indifferently transmissible of actinic light and another part movable into covering relation to the darkened plate and at the same time to the opening and opaque to actinic light to prevent access of the latter to the interior of the camera through said opening.

16. The method, in the production of titled negatives with film cameras for the subsequent production of titled prints from such negatives, consisting in first inscribing the title on the face of the backing of the film remote from the sensitized film in a material resistant to the passage of light, and then exposing the sensitized surface to the action of actinic light over an area immediately surrounding the inscribed surface with the actinic value of the light so reaching the sensitized surface reduced with respect to the actinic value of the light exterior to the camera.

[Claims 2 to 7, 9 to 11, 13 to 15, and 17 not printed in the Gazette.]

1,270,957. ADJUSTABLE SUPPORT FOR COMMUTATOR-BRUSHES. PETRUS VAN SANTEN KOLFF, Philadelphia, Pa., assignor, by mesne assignments, to The Electric Tachometer Corporation, a Corporation of Delaware. Filed Dec. 10, 1915. Serial No. 66,054. (Cl. 200—24.)

1. In a commutator brush support, the combination of rotatable blocks having cylindrical portions and also having openings extending transversely thereof, the said blocks being arranged in parallel relation to the commutator, bearings in which the said cylindrical portions are secured whereby the said blocks are rotatably supported and commutator brushes extending through the said openings and being rotatably secured therein.



2. In a commutator brush support the combination of an upright supporting member having projections adjacent to its upper end at its opposite edges, rotatable devices supported in said supporting member intermediate said projections, said devices having transverse openings extending therethrough, brush holders rotatably supported in said openings and adjusting devices supported in said projections and contacting with the outer sides of said brush holders to pivotally adjust the same.

3. In a commutator brush support the combination of an adjustable upright supporting member having projections adjacent to its upper end at its opposite edges, rotatable devices supported in openings adjacent to the upper end of said supporting member said devices having openings extending transversely therethrough, brush holders rotatably secured and supported in said transverse openings, and adjustable devices secured in said projections for contacting with the outer sides of said brush holders for adjusting the same.

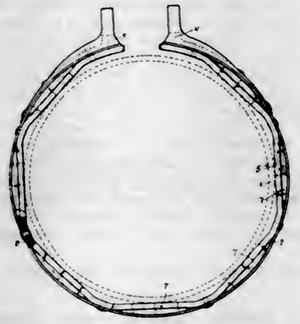
1,270,958. THREAD-CUTTING TOOL. JOHN W. LANE, Los Angeles, Cal. Filed Feb. 24, 1917. Serial No. 150,800. (Cl. 10—115.)



1. In a tool of the class described, a pair of jaws pivoted together, die members carried by the jaws and pivoted thereto, a rod carried by each jaw and extending into the die-supporting portion of the other jaw, said rod being adapted to form a locking pin for the die member of said other jaw and being movable to locking position by the closing movement of the jaws.

2. In a tool of the class described, a pair of jaws pivoted together, die members carried by the jaws and pivoted thereto, a resilient rod carried by each jaw and extending into the die-supporting portion of the other jaw, said rod being adapted to act as a spring to crowd the jaws apart and being also adapted to form a locking pin for the die member of said other jaw, the rod being movable to locking position by the closing movements of the jaws.

1,270,959. LINING FOR BRAKE-BANDS. WILLIAM JOHN LAWTON, Genoa Junction, Wis. Filed June 14, 1917. Serial No. 174,645. (Cl. 74—13.)



1. The combination, with a brake band, of a lining therefor consisting of a strip of fabric provided with a plurality of fabric pads disposed between the strip and the brake band and spaced apart from each other, and means for securing said lining to the brake band at points between the pads to form an inner contacting surface of polygonal shape.

[Claim 2 not printed in the Gazette.]

1,270,960. HOSE-CLAMP. SIDNEY J. LINTON, Groveland, N. Y. Filed Mar. 26, 1918. Serial No. 224,839. (Cl. 24—19.)

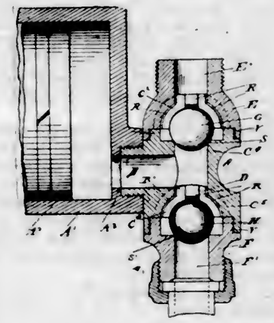


1. A hose clamp comprising a circumferential band including two flexible curved parts each having a broad and a narrow portion and hinged together at the ends of their broad portions and having attaching means at the ends of their narrow portions which lie edge to edge when the band is applied around a hose, and means adapted to draw upon said narrow portions to tighten the applied band.

[Claim 2 not printed in the Gazette.]

1,270,961. VALVE. SAMUEL LIPPERT, East Cleveland, Ohio. Filed Aug. 21, 1915. Serial No. 46,710. (Cl. 103—66.)

1. In a valve, the combination of a T shaped union or casing provided with a central passage and vertical transverse passages communicating therewith in the central and vertical transverse arms of said casing, said arms being provided with valve chambers and each valve chamber having in the lower part thereof a circular sharp edge valve seat and each chamber having in the upper part thereof a plurality of circumferentially spaced checking and alining devices and a globular metallic valve vertically reciprocal in each chamber and adapted to coöperate with said valve seats and said alining ribs for the purpose designated.



3. In a valve, the combination of a T shaped union or casing provided with a central passage and vertical transverse passages communicating therewith in the central and vertical transverse arms of said casing, capping members detachably secured to the extremity of each transverse arm, each capping member being provided with a passage in continuation of the transverse passage in its respective transverse arm and having a semi-circular chamber formed in the approximated extremity thereof, a globular valve in each chamber, a circular sharp edged valve seat in the bottom of each chamber, and each chamber having upon the upper side thereof a plurality of circumferential checking and alining ribs preventing the closing of the passage, but permitting the passage of fluid therethrough around the valve when the valve is lifted from its seat, said ribs being symetrically arranged with reference to the valve seat for the purpose described.

1,270,962. FEEDING MECHANISM FOR GAS-PRODUCERS. CHARLES W. LUMMIS, Worcester, Mass., assignor to Morgan Construction Company, Worcester, Mass., a Corporation of Massachusetts. Filed Mar. 10, 1916. Serial No. 83,396. (Cl. 48—86.)



1. In a fuel feeding mechanism for gas producers, a rotatable charging member and a seating surface cooperating with said member to form a substantially gas tight seal against the escape of gas from the producer chamber in every position of said member, said surface comprising a section held yieldingly against said member, whereby free movement of said member away from the remainder of said seating surface is permitted.

2. In a fuel feeding mechanism for gas producers, a rotatable charging member and a seating surface cooperating with said member to form a substantially gas tight seal against the escape of gas from the producer chamber in every position of said member, said surface comprising a rigid section and a yielding section, whereby

free movement of said member away from said rigid section is permittel.

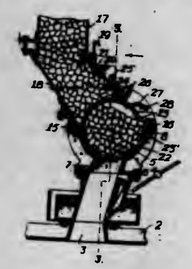
8. In a fuel feeding mechanism for gas producers, a rotatable charging member and a seating surface cooperating with said member to form a substantially gas tight seal against the escape of gas from the producer chamber in every position of said member, said surface comprising a rigid section embracing not more than one half the circumference of said member, whereby free movement of said member away from said rigid section is permitted, and a section adapted to adjust itself to the position of said member.

4. In a fuel feeding mechanism for gas producers, a rotatable charging member and a seating surface cooperating with said member to form a substantially gas tight seal against the escape of gas from the producer chamber in every position of said member, said surface comprising a rigid section, a yielding section, and a substantially gas tight joint between said sections, said yielding section permitting free movement of said member away from said rigid section.

5. In a fuel feeding mechanism for gas producers, a rotatable charging member having an opening, a supporting means for said member providing a concave seat with a passage to the producer chamber for registration with said opening, and a sealing surface on each side of said passage, one of said surfaces having a yielding section, whereby free movement of said member away from said seat is permitted.

[Claims 6 to 9 not printed in the Gazette.]

1,270,963. FEEDING MECHANISM FOR GAS-PRODUCERS. CHARLES W. LUMMIS, Worcester, Mass., assignor to Morgan Construction Company, Worcester, Mass., a Corporation of Massachusetts. Filed Oct. 12, 1915. Serial No. 55,551. (Cl. 48—86.)



1. In a fuel feeding mechanism for gas producers, a rotatable charging member, a supporting means for said member providing a seating surface therefor effective with respect to not more than one half the circumference of said member, whereby the free movement of said member away from said seating surface is permitted, and means for restraining the escape of fuel from said member, beyond said seating surface.

2. In a fuel feeding mechanism for gas producers, a rotatable member having a fuel discharge opening, a supporting means for said member providing a seating surface therefor effective with respect to not more than one half the circumference of said member, whereby the free movement of said member away from said seating surface is permitted, and means for preventing the escape of fuel past said discharge opening as the latter is moved toward said seating surface by the rotation of the member.

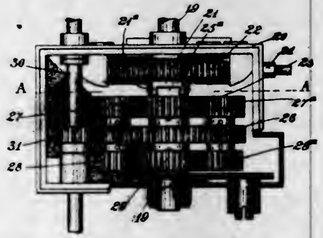
3. In a fuel feeding mechanism for gas producers, a rotatable member having a fuel discharge opening, a supporting means for said member providing a seating surface therefor effective with respect to not more than one half the circumference of said member, whereby the free movement of said member away from said seating surface is permitted, and means, above said seating surface, for preventing the escape of fuel past said discharge opening as the latter is moved toward said seating surface by the rotation of the member.

4. In a fuel feeding mechanism for gas producers, a rotatable charging member, and a supporting means therefor providing a concave seating surface effective with respect to not more than one half the circumference of said member, whereby the free movement of said member away from said seating surface is permitted, and also providing an extension from said seating surface in non-contacting relation to said member.

5. In a fuel feeding mechanism for gas producers, a rotatable charging member, a supporting means therefor providing a sealing edge, said supporting means effectively embracing more than one-half the circumference of said member, whereby free movement of said member away from said supporting means is permitted, and means for guiding the fuel within said member past said sealing edge.

[Claims 6 to 15 not printed in the Gazette.]

1,270,964. POWER-TRANSMISSION MECHANISM. EDWARD H. MCCLOUD, Columbus, Ohio, assignor to The Kinnear Manufacturing Company, Columbus, Ohio, a Corporation of West Virginia. Filed Dec. 12, 1913. Serial No. 806,318. (Cl. 74—34.)



1. A power transmission mechanism including, in combination, a driven shaft, a spur gear fixed thereto, and a spur gear loose with reference thereto, a carrier wheel, planetary pinions carried by said carrier wheel, said pinions engaging said spur gears, a driver for the carrier wheel, a driver for the second mentioned spur gear and means whereby the last named driver may be locked from operation.

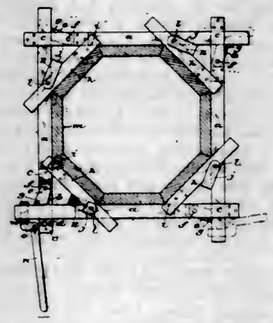
3. A power transmission mechanism including, in combination, a driven shaft, a loose spur gear, a second spur gear of different diameter fixed to said shaft, a rotary member carrying a shaft having pinions thereon to engage the two first mentioned spur gears, and means whereby the first mentioned spur gear is held and the rotary member rotated to drive the driven shaft, said holding means adapted to be driven to drive the driven shaft when the rotary member is held.

5. A power transmission mechanism including, in combination, a shaft, a spur gear loose on said shaft, a second spur gear fixed on said shaft, a rotary member carrying a shaft having pinions to engage the two first mentioned spur gears, means for holding and driving the first mentioned spur gear and separate means for holding and driving the rotary member.

[Claims 2 and 4 not printed in the Gazette.]

1,270,965. COLUMN-CLAMP. CHARLES M. MARKHAM, Milwaukee, Wis. Filed Oct. 25, 1915. Serial No. 57,657. (Cl. 144—291.)

1. A column clamp comprising a number of similar and separable bar members, each having adjacent to one end a transverse slot adapted to receive an adjoining member disposed transversely thereto and freely movable lengthwise in working position therein, a locking dog adapted by frictional engagement with each member to hold it against withdrawal lengthwise from an adjoining member, and separate means for forcing the slotted end of each member lengthwise of an adjoining member toward the opposite member.

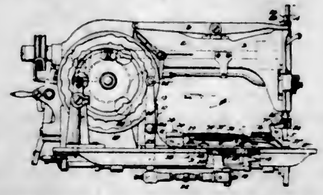


2. A column clamp comprising a number of similar bar members each having a transverse slot adjacent to one end thereof through which another member is freely adjustable lengthwise in working position, a dog adapted to lock each member in adjusted relation to an adjoining member, a friction grip removably fitted on and adjustable lengthwise of each of the several members, and a lever pivotally connected with said grip and adapted by engagement with the slotted end of an adjacent member to force it into adjusted position on the member passing through it.

3. A column clamp comprising a number of main bar members each having a transverse slot adjacent to one end thereof through which another member is adjustable lengthwise, means for locking the members in adjusted relation to one another, a number of auxiliary bar members each having a fork at one end to embrace the side of a main member obliquely thereto, and forked clips provided with screws for adjustably connecting the auxiliary members at a distance from their forked ends with adjoining main members obliquely thereto.

4. A column clamp comprising a number of main bar members each having a transverse slot adjacent to one end through which another of said members is adjustable lengthwise, dogs for locking said members in adjusted relation to one another, a number of auxiliary bar members each having a fork with an inclined crotch adapted to embrace one side of a main member obliquely thereto, and forked clips with wedge-shaped crotches adapted to embrace and adjustably connect the auxiliary members with the adjoining main members obliquely thereto, the wedge-shaped crotches of the clips fitting into the angles between the main and auxiliary members.

1,270,966. MEANS FOR ATTACHING HOOKS AND EYES TO FABRICS. WAYLAND D. MICHENER, Roselle Park, N. J., assignor to The Singer Manufacturing Company, a Corporation of New Jersey. Filed Mar. 3, 1915. Serial No. 11,668. (Cl. 112—32.)



1. In a machine for attaching garment-hooks to fabrics, in combination, article attaching mechanism including a reciprocating fastening inserting element, a work-support, means above said work-support for pressing the fabric against the latter, said means including opposed hook-supporting elements adapted to position the hook for reception of initial fastening means to be applied about the hook-shank outside of the eyes, means for lifting said hook-supporting elements to release the fabric to permit the slipping of the initial fastening means into a position adjacent the bend of the hook, and means for effecting a shift of said hook-supporting elements laterally of the fastening inserting element, while maintaining control of the hook, to shift and position the hook for reception of subsequent fastening means to be applied through the eyes.

5. A work-holder for sewing machines comprising spaced jaws formed with recesses in their lower faces at the adjacent edges, and a spring supporting plate opposed to said jaws and extending beneath said recesses and provided with an intermediate stitch-supporting tongue.

7. A work-holder for sewing machines comprising a carrier and an article-holder mounted thereon for movement relatively thereto while maintaining control of the article, and means for securing the article holder in different operative positions upon the carrier.

[Claims 2 to 4, 6, and 8 to 11 not printed in the Gazette.]

1,270,967. ARMATURE FOR DYNAMO-ELECTRIC MACHINES. FRED N. MIZER, Elyria, Ohio, assignor to The Garford Manufacturing Company, Elyria, Ohio, a Corporation of Ohio. Filed Nov. 8, 1916. Serial No. 130,116. (Cl. 200—12.)



1. In an armature for dynamo-electric machines, the combination of an armature shaft having a plurality of recesses therein, each of which is provided with a top opening and end walls tumbled in to restrict the said top opening, linings of insulating material for said recesses, a commutator segment in each recess within said lining, each segment provided with a recess in one end and electric conductor connectors, one for each commutator segment, each connector having a short limb extending under its associate commutator segment and into the recess under the end thereof, said connectors being provided with relatively long limbs extending each along one of the ends of the commutator slots and insulated from the walls of said slots by an insulating lining, said long limbs being adapted to be folded over along the armature shaft, armature windings connected one to each of said long limbs of said connectors and threads wound around said armature shaft over the long limbs of said connectors and the ends of the armature windings attached thereto binding the long limbs of the connectors and the ends of the armature windings attached thereto to the armature shaft.

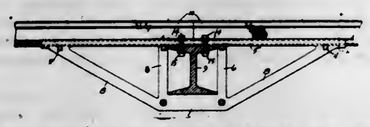
3. In an armature for dynamo-electric machines, the combination of an armature shaft, a commutator slot in said shaft, a commutator segment in said slot, means for insulating the segment from the walls of the slot, a circuit connector provided with a flexible portion connected to said segment, the flexible portion being bent away from the segment along the armature shaft, an armature winding connected to the flexible portion of the commutator and means to bind the flexible portion of the connector and the end of the armature winding to the armature shaft.

4. In an armature for dynamo-electric machines, the combination of an armature shaft, a commutator segment connected to and insulated from said shaft, a circuit connector connected at one end to said segment and folded away from said segment along said shaft, an arma-

ture winding connected to said connector and means to bind the end of the connector folded along said shaft and the end of the armature winding to the armature shaft.

[Claim 2 not printed in the Gazette.]

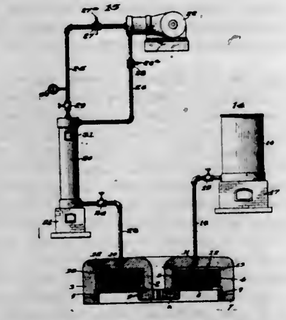
1,270,968. RAILROAD-JOINT. VERNON A. NEWPORT, Dayton, Pa. Filed Jan. 25, 1918. Serial No. 213,779. (Cl. 239—12.)



1. In a rail joint of the class described, the combination of a plurality of similarly constructed sections, each section comprising an elongated flat bar having gripping portions thereon to fit around the base of a rail, and depending portions extending from the outer edges of said flat bar, thus causing said depending portions to be in parallel planes extending across the outer edges of the base of a rail, to allow said depending portions to be spaced apart for the same distance as the breadth of the base of a rail, thus permitting the depending portions to be fitted over a supporting element to hold the ends of the abutting rails in alinement and exert pulls upon the ends of said rails at the edges of the bases thereof, thus preventing the rails from tipping over when strain is brought to bear thereon.

2. In a rail joint of the class described, the combination of a pair of similarly constructed sections, each section comprising an elongated flat bar, depending extensions projecting from said bar adjacent its outer edge, braces extending from the ends of said bar adjacent its outer edge and being connected to the lower portions of said extensions, a bridge connecting the lower portions of said extensions, thus causing said extensions, said braces and said bridge to be in alinement with the outer edge of said bar, lugs formed on the outer edge of said bar and extending inwardly therefrom, thus causing the bar to fit upon the base of a rail, whereby when said sections are in use, said extensions, braces and bridges will extend parallel in planes extending along the side edges of the base of a rail, whereby when a supporting tie is interposed between said extensions and said bridges, said sections will pull upon the tie in direct alinement with the edges of the base of the rail, thus presenting an increased leverage for the sections for preventing the rail from tipping over.

1,270,969. PROCESS AND APPARATUS FOR SEALING ELECTROMAGNETIC WINDINGS. FRANK I. PARKER, Milwaukee, Wis., assignor, by mesne assignments, to The Cutler-Hammer Mfg. Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Mar. 24, 1910. Serial No. 551,321. (Cl. 91—46.)

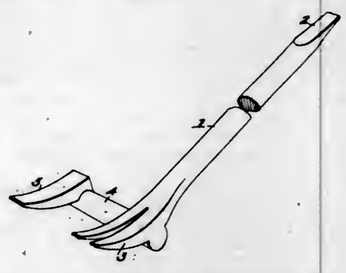


1. The process or method of treating electromagnets consisting in impregnating the magnet winding and sealing the same in its magnetic frame at a single operation by vacuating the magnetic frame and introducing therein an impregnating and sealing material heated to a flowing point and adapted to solidify upon cooling.

6. Apparatus for impregnating and permanently sealing a magnet winding within a substantially fluid tight magnetic frame in which the former has been assembled comprising a main receptacle for impregnating and sealing medium, an auxiliary receptacle for said medium, both of said receptacles being adapted for direct connection to said frame and having heating means for maintaining the therein contained medium in fluid condition and combined vacuating and compressing pumping means directly connected with said auxiliary receptacle for first vacuating the same and said frame and later subjecting the contents of said receptacle to a substantial pressure to completely fill the interior only of said frame therewith.

[Claims 2 to 5 not printed in the Gazette.]

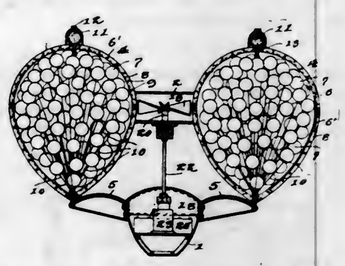
1,270,970. TOOL FOR RAZING BUILDINGS, SCAFFOLDS, AND ANALOGOUS WORK. WILLIAM HENRY RICH, Wrentham, Mass. Filed Feb. 11, 1918. Serial No. 216,519. (Cl. 254—131.)



2. An implement of the kind described, comprising a handle having one end terminating in a claw having its upper and lower surfaces upwardly inclined and tapering, said claw having a lateral extension formed upon and extending from the lower face thereof and formed integral therewith, and a finger portion carried by and extending from the upper surface of said lateral extension, said finger portion being similarly formed with respect to the claw end of said handle.

[Claim 1 not printed in the Gazette.]

1,270,971. AIRSHIP. GEORGE E. RICHMOND, Austin, Tex. Filed June 6, 1917. Serial No. 173,198. (Cl. 244—3.)



1. In an airship, a driving propeller, a lifting propeller, a main motor for actuating the driving propeller, an electric motor for actuating the lifting propeller, a storage battery for supplying current to said electric motor, a generator driven in the operation of the propeller by the main motor for furnishing current to replenish the battery, and means for reversing the flow of the current for supplying current from the battery to the generator so as to convert said generator into a motor for driving the propeller in the event of the stoppage or derangement of the main motor.

2. In an airship, an aerostat comprising an envelop having an upper imperforate portion and a lower perforate portion, and a plurality of separate and independent gas bags disposed in spaced relation within the aerostat.

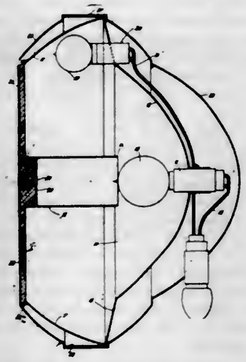
3. In an airship, an aerostat comprising an envelop having an upper imperforate portion and a lower perforate portion, and provided with fore-and-aft air inlet and air discharge openings, and a plurality of separate and independent balloons arranged in spaced relation within said envelop.

4. In an airship, an aerostat comprising an envelop having an upper imperforate portion and a lower perforate portion and provided with fore-and-aft air intake and discharge openings, a series of separate and independent gas bags arranged within said aerostat, and tethering cords connected with the respective balloons at their upper ends and with the bottom portion of the envelop at their lower ends and flexibly maintaining said gas bags in position.

5. In an aerostat, an envelop comprising a body of sheet metal made up of assembled sections, said envelop having an imperforate upper portion and a perforate lower portion, and provided with fore-and-aft intake and discharge openings at about the medial longitudinal line thereof, and a plurality of separate and independent captive balloons arranged in massed formation within said envelop.

[Claim 6 not printed in the Gazette.]

1,270,972. ILLUMINATING APPARATUS. JOSEPH T. ROFFY, Pittsburgh, Pa., assignor, by mesne assignments, to Hawthorne Manufacturing Company, Incorporated, Bridgeport, Conn., a Corporation of Connecticut. Filed Dec. 1, 1915. Serial No. 64,512. (Cl. 240—41.)



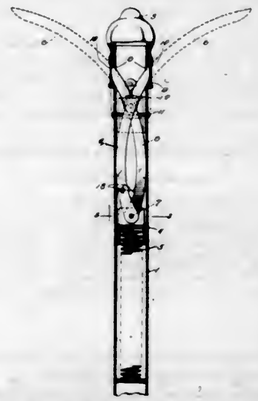
11. A vehicle lamp comprising a light source, a concave projecting reflector, an opposed peripherally located return reflector for rays falling beyond the angle of the aperture of the first reflector and forming an annular pocket, a screen extending in a generally axial direction and adapted to cut off from said aperture obliquely propagated direct rays from the light source, a second source of light located within said pocket and concealed by the return reflector, said screen shielding an opposed portion of the concave reflector from rays incident from said second course.

12. A vehicle lamp comprising a source of light, a concave reflector partly enveloping said source and reflecting a parallel beam therefrom, a second reflecting surface surrounding the aperture of said concave reflector for returning to said source heat and light falling beyond the angle of the aperture of the first reflector, and forming an annular pocket, said return reflector having a forward central orifice commensurate with the parallel beam and defining with the center of said light source a central cone of projection, an axially disposed screen in front of said source, terminating substantially at the imaginary surface of such cone of projection, and a second source of light located within said pocket and concealed by said second reflector.

13. A vehicle lamp comprising a source of light, a concave reflector partly enveloping said source and reflecting a parallel beam therefrom, a second reflecting surface surrounding the aperture of said concave reflector for returning to said source heat and light falling beyond the angle of the aperture of the first reflector, and forming an annular pocket, said return reflector having a forward central orifice commensurate with the parallel beam and defining with the center of said light source a central cone of projection, an axially disposed opaque tube in front of said source, terminating substantially at the imaginary surface of such cone of projection, and a second source of light located within said pocket and concealed by said second reflector.

[Claims 1 to 10 not printed in the Gazette.]

1,270,973. COMBINED WALKING-STICK AND GARMENT-RACK. MORRIS ROSENWASSER, New York, N. Y. Filed June 4, 1914. Serial No. 842,838. (Cl. 45—13.)



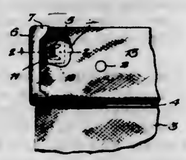
2. A combined walking stick and garment rack comprising a casing, a plunger within said casing, a plurality of members pivotally connected to said plunger by one of their ends and having their opposite ends disposed adjacent apertures formed in said casing, means for actuating said plunger to move said members through said apertures, and means for retaining said plunger against movement comprising a sleeve exteriorly of the casing movable longitudinally thereof to close said apertures.

[Claims 1 and 3 to 7 not printed in the Gazette.]

1,270,974. LOOSE-LEAF BINDER. JOHN SCHADE, Holyoke, Mass., assignor to National Blank Book Company, Holyoke, Mass., a Voluntary Trust Association of Copartnership having as trustees J. W. Towne, F. B. Towne, E. S. Towne, J. M. Towne, and F. W. Wilson. Filed July 17, 1917. Serial No. 181,060. (Cl. 129—12.)

1. In a loose leaf binder, a bar comprising a flattened tubular casing having openings in its upper and lower walls and adjacent one end, a fabric covering for the bar extended over said end thereof, and a sheet metal end cap cut and stamped to form a body having a pair of opposing and depending walls extending inwardly over and embracing the outer surface of the fabric covering, and a second pair of opposing walls inturned to provide shoulders and extended downwardly inside the casing, said second walls having spurs stamped therefrom to interlock

in the casing openings for holding the end cap on the bar and the shoulders against the end of the bar to clamp the fabric covering.



2. In a bar for loose leaf binders, a casing bent from sheet metal into tubular form and provided with opposing openings adjacent an end, a fabric covering for the casing having its end inturned over the end of the casing, and an end cap having means embracing both the interior and exterior of the casing for securing the fabric thereto.
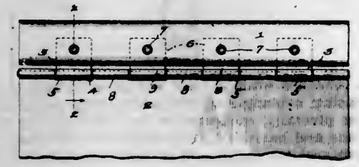
4. In a bar for loose leaf binders, a casing bent from sheet metal into tubular form and provided with opposing openings adjacent an end, an end cap having opposing walls inturned to provide shoulders which set snugly against the end of the casing and spurs struck out from the walls for interlocking with the casing openings.

6. An end cap for the bars of a transfer binder comprising a body having opposing walls formed with struck out spurs and being outturned above the latter to form abutment shoulders.

7. An end cap for the bars of a transfer binder tube comprising a body having opposing walls formed with struck out spurs and being outturned above the latter to form abutment shoulders, and spaced opposing walls interposed between the others for embracing the exterior of a top bar.

[Claims 3, 5, and 8 not printed in the Gazette.]

1,270,975. LOOSE-LEAF BINDER. JOHN SCHADE, Holyoke, Mass., assignor to National Blank Book Company, Holyoke, Mass., a Voluntary Trust Association of Copartnership having as trustees J. W. Towne, F. B. Towne, E. S. Towne, J. M. Towne, and F. W. Wilson. Filed July 17, 1917. Serial No. 181,061. (Cl. 129—12.)



1. In a loose leaf binder, a casing constructed by bending over a sheet of metal to form a tubular casing having its free edges defining a slot, said casing having spaced sets of registering perforations, and a plurality of hinge knuckles each formed of a strip of metal bent transversely to form a knuckle part and then extended to provide a neck portion for disposal in the casing slot to reinforce the casing against collapsing, the ends of said strip being extended from the neck portion in spaced relation to provide cheek pieces, each of which is formed with an outwardly extending eyelet, the oppositely extending eyelets of each of the cheek pieces engaging in a set of registering perforations of the casing and expanded to secure the cheek pieces to the casing.

2. In a hinge for loose leaf binders, a casing having a pair of registering perforations, and a slot, and a hinge knuckle comprising a pintle receiving knuckle part, a neck part for disposal in the casing slot, and spaced cheek pieces each having an outwardly projecting eyelet engaged on one of the registering perforations of the casing and expanded for securing the cheek piece in the latter.

3. In a loose leaf binder, a casing having registering openings, and a hinge knuckle having a support formed with oppositely extending eyelets engaging in the openings of the casing and expanded for securing the knuckle to the latter.

4. In a loose leaf binder, a casing having registering openings, and a hinge knuckle having a part extending within the casing and formed with rivets passing through the casing openings for securing the knuckle to the casing.

5. In a loose leaf binder, a casing having registering openings, a hinge knuckle having spaced cheek pieces extending within the casing, and means extending through the openings of the casing for securing the cheek pieces to the latter.

[Claim 6 not printed in the Gazette.]

1,270,976. FRICTION-CLUTCH DEVICE FOR TELESCOPING ELEMENTS. JOHN SCHADE, Holyoke, Mass., assignor to National Blank Book Co., Holyoke, Mass., a Voluntary Trust Association of Copartnership having as trustees J. W. Towne, F. B. Towne, E. S. Towne, J. M. Towne, and F. W. Wilson. Original application filed Dec. 26, 1916, Serial No. 138,846. Divided and this application filed July 31, 1917. Serial No. 183,789. (Cl. 248—3.)



1. In a friction clutch, a male member and a female member, said female member comprising a base plate having an opening to receive the male member and an integral annular shell flaring upwardly from the edge of the plate opening, a contractible clutch element normally in the larger end of the shell and adapted to be wedged into the smaller end thereof between the shell and male member, a follower for operatively disposing the clutch resting on the latter and inclosing the upper edge of the shell, outwardly extending finger lifts on the follower, and means supported by the lifts for urging the follower toward the clutch.

5. In a friction clutch, a male member and a female member, said female member comprising a base plate having an opening to receive the male member and an integral annular shell flaring upwardly from the edge of the plate opening, a contractible clutch element normally in the larger end of the shell and adapted to be wedged into the smaller end thereof between the shell and male member, a follower for operatively disposing the clutch resting on the latter and inclosing the upper edge of the shell, outwardly extending finger lifts on the follower, a casing inclosing the follower and seating on the base plate, and a spring seating on the finger lifts and bearing upwardly against the casing.

[Claims 2 to 4 not printed in the Gazette.]

1,270,977. FRICTION-CLUTCH DEVICE FOR TELESCOPING ELEMENTS. JOHN SCHADE, Holyoke, Mass., assignor to National Blank Book Co., Holyoke, Mass., a Voluntary Trust Association of Copartnership having as trustees J. W. Towne, F. B. Towne, E. S. Towne, J. M. Towne, and F. W. Wilson. Original application filed Dec. 26, 1916, Serial No. 138,846. Divided and this application filed July 31, 1917. Serial No. 183,790. (Cl. 248—3.)

1. In a friction clutch, a male member and a female member, the latter comprising a base plate formed with an opening to receive the male member and provided with a flared annular shell integral with the edge of the plate opening, a coiled spring wound open and having its ends secured together to form a contractible clutch ring, said ring normally disposed in the larger end of the shell for movement into the smaller end thereof for contraction about the male member, a follower comprising a top wall having spaced depending walls receiving the larger end of the shell therebetween, said depending walls being concentrically related with the inner one resting on the clutch ring, and means yieldably urging the follower toward the shell.



3. In a friction clutch, a male member and a female member, the latter comprising a base plate formed with an opening to receive the male member and provided with a flared annular shell integral with the edge of the plate opening, a coiled spring wound open and having its ends secured together to form a contractible clutch ring, said ring normally disposed in the larger end of the shell for movement into the smaller end thereof for contraction about the male member, a follower comprising a top wall having spaced depending walls receiving the larger end of the shell therebetween, said depending walls being concentrically related with the inner one resting on the clutch ring, the outer depending wall having a peripheral flange on its free edge, and a pair of leaf springs secured to the base plate on opposite sides of the follower and having their free ends bearing on the flange.

[Claims 2 and 4 not printed in the Gazette.]

1,270,978. LOOSE-LEAF LEDGER. JOHN SCHADE, Holyoke, Mass., assignor to National Blank Book Co., Holyoke, Mass., a Voluntary Trust Association of Copartnership having as trustees J. W. Towne, F. B. Towne, E. S. Towne, J. M. Towne, and F. W. Wilson. Filed Aug. 15, 1917. Serial No. 186,342. (Cl. 129—13.)



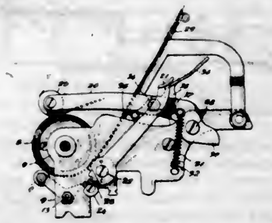
1. In a loose leaf binder, a pair of opposing members having corresponding free edges bent backwardly upon themselves in spaced relation and provided with apertures at the bends of said free edges, and hinge knuckles secured beneath the bent free edges and extending through the apertures of said bars.

5. In a loose leaf binder, a pair of opposing members having corresponding free edges bent backwardly upon themselves in spaced relation and provided with apertures at the bends of said free edges, hinge knuckles secured beneath the bent free edges and extending through the apertures of said bars, each knuckle comprising a pintle-receiving socket supported by a neck portion from a comparatively wide base extending from opposite sides of the neck to provide shoulders, the socket and neck being inserted through the respective aperture to seat the shoulders against the inner side of the bend of said bar, said necks being curved outwardly, covers having edge recesses for receiving the sockets of the hinge knuckles and pivot pins passed through the sockets and covers for hinging the latter to the bars.

[Claims 2 to 4 not printed in the Gazette.]

1,270,979. PLATEN AND PRESSURE-ROLL FEEDING MEANS. ALBERT A. SCHWARTZ, New York, N. Y., assignor to Royal Typewriter Company, Inc., New York, N. Y., a Corporation of New York. Filed May 11, 1917. Serial No. 167,869. (Cl. 197—138.)

1. A platen, an overhead pressure roll for engagement with the platen above the line of print, framing for supporting the platen, arms carrying said pressure roll pivotally supported in the framing, and a member carried by the arms and engaging with the framing for lifting the pressure roll out of contact with the platen.

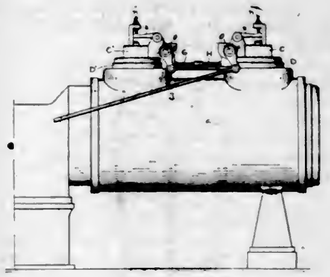


2. A platen, an overhead pressure roll for engagement with the platen above the line of print, framing for supporting the platen, arms carrying said pressure roll pivotally supported in the framing, and a member carried by the arms and engaging with the framing for lifting the pressure roll out of contact with the platen and for sustaining it in a paper guiding position above the platen.

3. A platen, an overhead pressure roll for engagement with the platen above the line of print, framing for supporting the platen, arms carrying said pressure roll pivotally supported in the framing, a cam on the framing, and a member mounted to move with the arms and engaging with the cam for lifting the pressure roll out of contact with the platen.

[Claims 4 to 10 not printed in the Gazette.]

1,270,980. COMPENSATING VALVE-GEAR. LE GRAND SKINNER, Erie, Pa. Filed Oct. 13, 1917. Serial No. 196,378. (Cl. 121—97.)



1. The combination with an engine cylinder and a valve therefor, of an operating device for the valve, an operating mechanism for said device, and a support for said device slidably mounted on the cylinder, to permit movement of the valve incident to expansion or contraction of the cylinder without varying the position of said device relative to said mechanism.

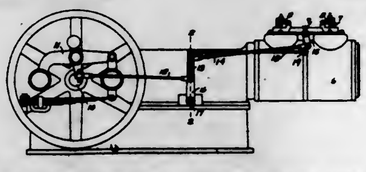
8. The combination with an engine cylinder and valves at opposite ends thereof, of an operating device for each valve, a support for each device, mounted on the cylinder, and means to maintain a fixed distance between said devices, while permitting expansion of the cylinder, said means including a sliding joint between at least one of said supports and the cylinder.

[Claims 2 to 7 not printed in the Gazette.]

1,270,981. VALVE-GEAR. LE GRAND SKINNER, Erie, Pa. Filed Feb. 6, 1918. Serial No. 215,565. (Cl. 121—97.)

1. The combination with an engine cylinder and valve, of a lever operatively connected to the valve, means to operate the lever, a shifting fulcrum for the lever, and a connection between said fulcrum and the cylinder ar-

ranged to shift the fulcrum according to expansion or contraction of the cylinder.



2. The combination with an engine cylinder and valve, of a lever operatively connected to the valve, means to operate the lever, a shifting fulcrum for said lever, and means actuated by expansion or contraction of the cylinder to shift the fulcrum accordingly.

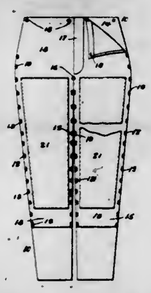
3. The combination with an engine cylinder and valve, of a valve gear operatively connected to the valve and including a pivoted rocker and means to operate the same, a swinging arm on which the rocker is pivoted, and a link connecting the cylinder and arm adapted to swing the latter in consequence of expansion of the cylinder.

4. The combination with an engine cylinder and valve, of a valve gear operatively connected to the valve and including a pivoted rocker and means to operate the same, a swinging arm on which the rocker is pivoted, and a connection between said arm and the cylinder, adapted to swing said arm in consequence of expansion of the cylinder.

5. The combination with an engine cylinder, valve and crank shaft, of a valve gear, including connecting rods, between the crank shaft and valve, and means to automatically vary the effective length of the connecting rods according to expansion or contraction of the cylinder.

[Claims 6 and 7 not printed in the Gazette.]

1,270,982. GARMENT-PROTECTOR. WILLIAM LEVI SPENCER, Houston, Tex. Filed Oct. 25, 1916. Serial No. 127,632. (Cl. 2—122.)



A garment protector made of the same material and same size as the portion of a garment to be protected and having button holes at the top edge thereof, a row of eyelets secured along each side edge of the protector, combined with a garment to be protected having like eyelets similarly disposed adjacent the seams of the part to be protected, and a lacing string threaded in the eyelets of the protector and the garment.

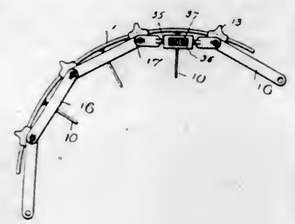
1,270,983. AUTOGRAPHIC CAMERA. ALEXANDER S. SPIEGEL, Chicago, Ill. Filed Dec. 2, 1914. Serial No. 875,163. (Cl. 95—1.1.)

1. A film camera having an opening through which a stylus may be inserted into contact with the film backing, a holder in line with said opening, said holder having a flat surface and overturned side edges, a sheet of material designed to act on the film and having its margins held by said overturned edges of the holder, said edges also normally holding the film spaced from said sheet, and projections at the ends of the holder securing it to the back of the camera.



2. A film camera having an opening through which a stylus may be inserted into contact with the film backing, and a holder for a sheet of abrasive material, said holder having a flat surface and overturned side edges, a sheet of abrasive material having its side margins held under said overturned edges of the holder, said edges also normally holding the film spaced from said abrasive sheet, and integral projections at the ends of the holder for securing it to the back of the camera.

1,270,984. REMOVABLE SPUR FOR TREADS OF TRACTOR-WHEELS. CHARLES M. STEWARD, Plano, Ill. Filed Aug. 7, 1916. Serial No. 113,544. (Cl. 21—215.)



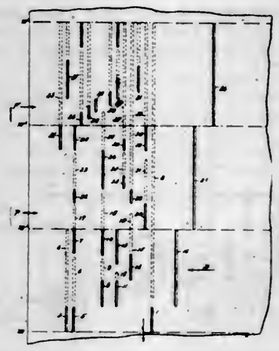
1. In combination with a vehicle wheel having depressions in the tread thereof, a plurality of spurs adapted to extend upon the surface of the tread of said wheel, said spurs being provided with studs adapted to enter and coöperate with the depressions in the tread of said wheel, studs extending laterally from the ends of said spurs, and links pivotally secured to said laterally projecting studs adapted to connect the respective spurs.

2. In combination with a vehicle wheel having depressions in the tread thereof, a plurality of spurs adapted to extend upon the surface of said tread, said spurs being provided with studs adapted to enter said depressions, lateral extension at the end of each spur adapted to extend over and engage the edge of the wheel tread, and links pivotally connecting said spurs.

3. In combination with a vehicle wheel having a substantially flat tread that is provided with depressions, a plurality of spurs disposed transversely on said tread and at substantially right angles to the edges thereof, studs on the under surface of said spurs adapted to enter and coöperate with the depressions in said wheel tread, the ends of each spur provided with inwardly projecting flanges adapted to engage the opposite side edges of the wheel tread and elongated devices the ends whereof are pivotally connected to said flanges.

1,270,985. NOTE-SHEET FOR PLAYER-PIANOS AND THE LIKE. CHARLES F. STODDARD, Boston, Mass. Filed Apr. 23, 1912, Serial No. 692,649. Renewed Oct. 28, 1916. Serial No. 128,344. (Cl. 84—162.)

1. A note-sheet for player-pianos and the like, having note perforations therein with their advance ends relatively located to sound their notes in desired musical sequence; and having desired perforations prolonged beyond lengths corresponding to the notation on the score or record from which the sheet is made, said prolongations extending beyond the rear ends of other perforations which are terminated to eliminate their tones from the volume of tone being sustained; certain of said prolongations having their rear ends positioned as close as practicable to the advance ends of corresponding resounding perforations to cause the resoundings to occur during residual vibration of the strings; and certain selected prolongations being terminated sufficient distances from the advance ends of corresponding resounding perforations to permit residual vibration of the strings substantially to cease prior to the resoundings.



4. A note-sheet for player-pianos and the like, having note perforations therein with their advance ends relatively located to sound their notes in desired musical sequence; and having desired perforations prolonged beyond lengths corresponding to the notation on the score or record from which the sheet is made, said prolongations extending beyond the rear ends of other perforations which are terminated to eliminate their tones from the volume of tone being sustained; and certain prolongations having their rear ends positioned close to the advance ends of corresponding resounding perforations but spaced far enough from said advance ends to permit residual vibration of the strings substantially to cease prior to the resoundings

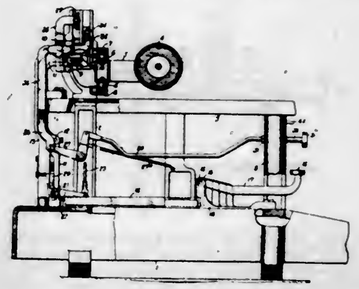
8. A note-sheet for player-pianos and the like, having note perforations therein with their advance ends relatively located to sound their notes in desired musical sequence, and arranged to correspond with a succession of musical phrases; sections of the note-sheet corresponding to the respective phrases being characterized by having perforations prolonged beyond lengths corresponding to the notation on the score or record from which the sheet is made, said prolonged perforations overlapping in succession along the lengths of the respective phrase sections and coöperating to produce a substantially continuous singing tone within the respective phrases; and certain of said prolongations being terminated respectively at different distances from the advance ends of corresponding resounding perforations to cause different degrees of contrast between the resounding tones and other concurrently sounding tones.

12. A note sheet for player-pianos and the like, having note perforations therein with their advance ends relatively located to sound their notes in desired musical sequence, and comprising initial perforations and corresponding resounding perforations; certain initial perforations being prolonged beyond lengths corresponding to the notation in the score or record from which the sheet is made, and said prolongations being terminated as near as practicable to the advance ends of the corresponding resounding perforations substantially to minimize the emphasis of the resoundings.

19. A note-sheet for player pianos and the like, having note perforations therein with their advance ends relatively located to sound their notes in desired musical sequence and comprising sounding perforations and, corresponding resounding perforations; the imperforate bridges between certain of said sounding perforations and their corresponding resounding perforations having different lengths to cause different contrasts in the respective resoundings, the lengths of said bridges being predetermined arbitrarily to suit said purpose regardless of the length of bridges corresponding to the score or record from which the note-sheet is made.

[Claims 2, 3, 5 to 7, 9 to 11, and 13 to 18 not printed in the Gazette.]

1,270,986. TYPE-WRITING MACHINE. JOSEPH E. STRAUB, Ilion, N. Y., assignor to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Filed Apr. 14, 1917. Serial No. 162,003. (Cl. 197—179.)

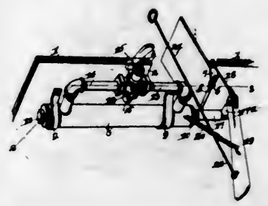


1. In tabulating mechanism for type-writing machines, the combination of a stop magazine, a stop bar, stops, key actuated devices for controlling said stops in their movements between said magazine and said stop bar, devices becoming automatically effective, after said key-actuated devices are started, to lock said key actuated devices against retraction until the key stroke is completed, means for automatically releasing said locking devices, and hand actuated means for also releasing said locking device.

10. In tabulating mechanism for type-writing machines, the combination of stop setting and retracting mechanism including a key rod, and full stroke devices comprising a pawl member, a sleeve provided with ratchet teeth and projections or ribs, said sleeve coöperating with said pawl, and means for detachably securing said sleeve on said rod.

[Claims 2 to 9 and 11 to 13 not printed in the Gazette.]

1,270,987. FLUID-CONTROLLED SWITCH-OPERATING MECHANISM. JOHN BELL STROUD, Pass Christian, Miss. Filed May 13, 1916. Serial No. 97,281. (Cl. 104—171.)



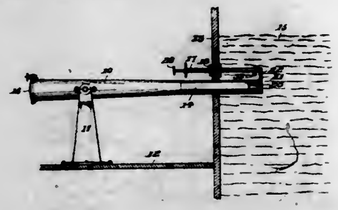
4. A fluid controlled operating mechanism for switches comprising a cylinder, means for controlling the flow of the fluid to and from the respective ends of the cylinder, a switch operating arm, a sectional piston rod connecting the arm to the piston, one of the sections being rigid with the piston and the other pivoted to the first named section, and the arm being connected to the pivoted section, and means for constraining the pivoted section of the rod to swing at right angles to the rod with the arm depending when the piston is at the adjacent end of the cylinder.

5. An operating means for switches comprising a cylinder having a plunger, a switch operating arm, a sectional

plunger, one of the sections being rigid with the plunger, and the other pivoted to the first named section, the arm being pivoted to the last named section, means for holding the pivoted section at right angles to the other section, and extending horizontally therefrom when the plunger is at the adjacent end of the cylinder, means for turning the arm to move the switch points, and means for moving the plunger.

[Claims 1 to 3 not printed in the Gazette.]

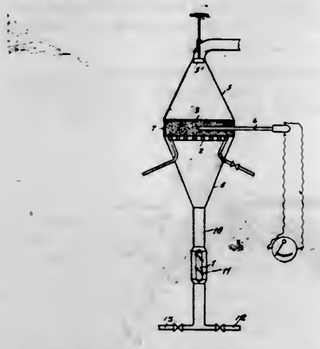
1,270,988. UNDERWATER GUN. WLADISLAW SWIDERSKI, Peshtigo, Wis. Filed Aug. 7, 1917. Serial No. 184,845. (Cl. 89—5.)



1. A gun adapted for firing projectiles beneath the water from a ship, comprising a barrel arranged with its muzzle portion projecting through the side of the ship beneath the water line, a tube arranged adjacent the barrel having one end within the ship and the other terminating adjacent the outer end of the barrel and arranged with a vertical slot, a closure cap for the outer end of the barrel hinged to the outer end of the tube and having an extension adapted for movement through the said slot and a rod arranged through the tube adapted for engaging the said extension for retaining the cap closed when the rod is projected.

[Claim 2 not printed in the Gazette.]

1,270,989. APPARATUS FOR THE CATALYTIC OXIDATION OF AMMONIA. MICHELE TALIANI, Isola Liri, Italy. Filed Apr. 26, 1918. Serial No. 230,997. (Cl. 23—1.)

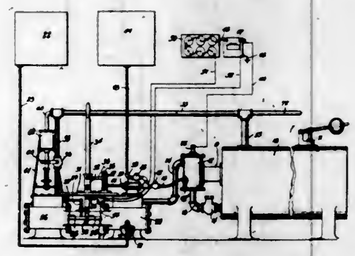


3. In an apparatus for the catalytic oxidation of ammonia, a chamber comprising two funnel-shaped sections connected together at their large ends, a catalytic mass located at the large ends of said sections, means for admitting air and ammonia to the small end of one of said sections, and means for imparting a whirling motion to the air and ammonia, whereby the same will be intimately mixed and spread in the last named section and uniformly distributed over the catalytic mass.

4. An apparatus for the catalytic oxidation of ammonia comprising a chamber consisting of two funnel-shaped sections connected together at their large ends by a ring, a cooling coil located in the large end of one section and supporting a catalytic mass within the ring, a pipe for admitting air and ammonia to the smaller end of one section, means for imparting a whirling motion to the incoming air and ammonia so as to spread the same in the chamber and uniformly distribute the air and ammonia over the catalytic mass, and a pressure valve for controlling the pressure in the chamber.

[Claims 1 and 2 not printed in the Gazette.]

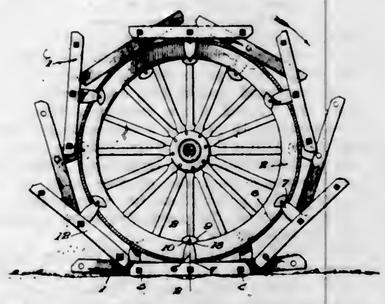
1,270,990. APPARATUS FOR THE GENERATION OF STEAM. PERCY ELMER TUCKER, Bremerton, Wash. Filed July 25, 1917. Serial No. 182,720. (Cl. 60—33.)



1. In an apparatus for the generation of steam, the combination of a reservoir, a combustion chamber communicating with the reservoir, means for intermittently delivering charges of combustible gas to said chamber, means for intermittently feeding water in small quantities to the chamber alternately relatively to the charges of gas, and means for igniting the gas whereby said gas when burning is adapted to convert the preheated water into steam and force the same by its expansion into the reservoir.

[Claims 2 to 4 not printed in the Gazette.]

1,270,991. TRACTION-WHEEL. CHARLES R. TWITCHELL, Artesia, Cal., assignor of one-half to Edmund A. Miller, Los Angeles, Cal. Filed Apr. 11, 1917. Serial No. 161,225. (Cl. 21—150.)



1. In a traction wheel, the combination with a wheel rim having a slot, of a tread shoe having a link passed through said slot, and a knob loosely mounted on the inner end of the link, said link having its edges curved to taper the link toward the knob.

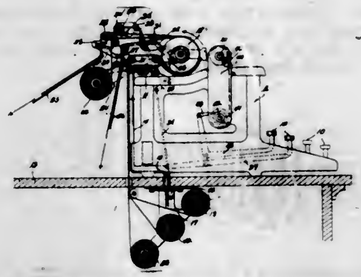
2. In a traction wheel, the combination with a wheel rim having a slot, of a tread shoe having a link passed through said slot, and a knob of convex formation to provide a rolling surface on the wheel rim and loosely mounted on the inner end of the link, said link having its edges curved to taper the link toward the knob.

3. In a traction wheel, the combination with a wheel rim having a slot, of a tread shoe comprising a pair of blocks and a casting between and secured to said blocks, a link integral with said casting and passed through said slot, and a knob fulcrumed on the inner end of said link.

4. In a traction wheel, the combination with a wheel rim having a slot, of a tread shoe comprising a pair of blocks and a casting between and secured to said blocks, a link integral with said casting and passed through said slot, and a knob fulcrumed on the inner end of said link, said knob being wider than said slot and of convex formation to provide a rolling surface on the wheel rim.

5. In a traction wheel, the combination with a wheel rim having a slot, of a tread shoe comprising a pair of blocks and a casting between and secured to said blocks, a link integral with said casting and passed through said slot, said link having its edges curved to taper the link, and a knob fulcrumed on the inner end of said link, said knob being wider than said slot and of convex formation to provide a rolling surface on the wheel rim.

1,270,992. CONTINUOUS-FEEDING TYPE-WRITER. JOHN VAUDREUIL, Milwaukee, Wis. Filed Jan. 13, 1917. Serial No. 142,147. (Cl. 197—134.)



1. The combination with a typewriter including a movable carriage, of a plate slidably mounted beneath the typewriter, a plurality of supply rolls of paper revolubly carried by said plate, said paper on the supply rolls passing upwardly and engaging a platen roller mounted in the carriage, and means for procuring the simultaneous movement of said plate with the supply rolls of paper with the movable carriage comprising an arm secured thereto and extending upwardly therefrom to engage the movable carriage.

[Claim 2 not printed in the Gazette.]

1,270,993. KNITTING-NEEDLE. EMMA M. VENESS, Millers, N. Y. Filed Sept. 24, 1917. Serial No. 192,942. (Cl. 66—17.)



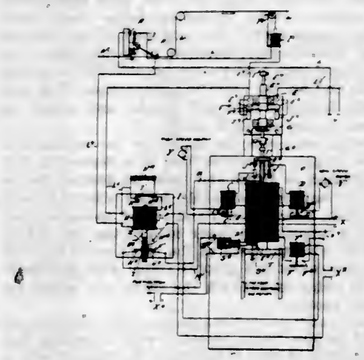
1. A knitting needle having a substantially uniform non-circular cross section, said needle having a point at one end thereof and having a hook formed therein near the pointed end on one side.

[Claims 2 and 3 not printed in the Gazette.]

1,270,994. CONTROLLER FOR POWER-OPERATED MECHANISM. SAMUEL THOMAS WALKUP, New York, N. Y., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Nov. 29, 1911. Serial No. 663,150. (Cl. 273.)

5. The combination of means adapted to drive at different speeds, a web feeding machine adapted to be driven by said means, a web actuated circuit controller, and an electromagnetically actuated controller for controlling said means to drive the machine at different speeds and rendering said circuit controller effective.

10. A controller for power operated web feeding machines, comprising a threading speed motor, an operating speed motor, a relay for controlling said threading speed motor, a relay for controlling said operating speed motor, a master relay, circuit connections affected by said master relay for controlling a circuit for either of the other relays dependent upon the condition of said master relay, and means affected by breakage of the web for stopping the machine.

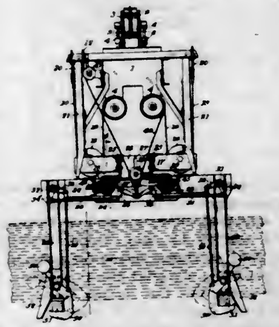


13. In a control system for a machine adapted to be driven at threading and operating speeds and feed a web of material, a web severing device, a web condition detector, and a master relay controlling the threading and operating speed conditions of the machine and rendering said detector effective to cause the operation of said severing device to cut the web and to stop the machine.

15. A control system for a machine adapted to operate upon a web of material and to be run at threading and at operating speeds, having a relay for controlling both speed conditions, a web condition detector, and means affected by said relay when said relay is in position to affect operating speed but not when it is in position to affect threading speed to render said detector effective to stop the machine.

[Claims 1 to 4, 6 to 9, 11, 12, and 14 not printed in the Gazette.]

1,270,995. HOISTING AND CONVEYING APPARATUS. HENRY WEICKEL, Milwaukee, Wis., assignor to Pawling and Harnischfeger Company, West Milwaukee, Wis., a Corporation of Wisconsin. Filed July 17, 1913. Serial No. 779,442. (Cl. 57—9.)



1. In hoisting and conveying apparatus the combination of a vertically movable frame provided with legs, hooks pivoted to said legs adjacent to their lower ends, rocker shafts mounted in said frame above and parallel with the hook pivots and provided with arms some of which are connected by rods with the hooks, bell crank levers having their fulcrums in said frame parallel with the rocker

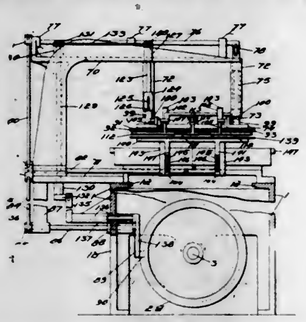
shafts and connected by rods with arms on said shafts, a sheave pivotally connected with the inwardly projecting arms of said bell crank levers, a hook operating cable looped around said sheave, and means for taking up and paying out said cable.

2. In hoisting and conveying apparatus the combination of a vertically movable frame provided with legs having outwardly inclined guides extending below their lower ends, pivoted hooks carried by said frame and adapted when turned into operative position to project below the lower ends of said legs, a vertically movable sheave guided in said frame and having operating connections with said hooks, a cable looped around said sheave, and means for taking up and paying out said cable.

3. In hoisting and conveying apparatus the combination of a portable grapple frame provided with depending legs which are adapted to direct and limit its descent over a pile of material supported on skids, hooks pivoted to said legs and movable laterally into and out of operative position below and opposite the lower ends of the legs, which by engagement with the tops of the skids serve as stops to limit the descent of the grapple frame with the hooks in position to swing underneath the skids, and means for operating said hooks.

4. In hoisting and conveying apparatus, the combination of a portable grapple frame provided with depending legs which are adapted to direct and limit its descent over a pile of material supported on skids, inclined guides attached to the legs and extending below and to one side of their lower ends to direct them into position on the skids, hooks pivoted to the legs adjacent to their lower ends and movable toward and from said guides into and out of operative position below and opposite the lower ends of the legs, which by engagement with the tops of the skids serve as stops to limit the descent of the grapple frame with the hooks in position to swing underneath the skids, and means for operating said hooks.

1,270,996. WORK-HOLDER FOR AUTOMATIC SEWING-MACHINES. OMAR A. WHEELER, Portland, Oreg., assignor, by direct and mesne assignments, to Wheeler Automatic Machine Co., a Corporation of Oregon. Filed July 30, 1914. Serial No. 854,083. (Cl. 112—24.)



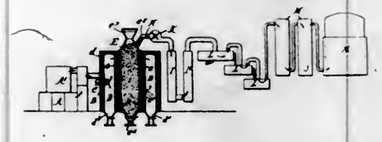
1. A material loading and holding mechanism for automatic sewing machines comprising a frame, a carriage reciprocatively mounted thereon, clamps adapted to open and close and carried by said frame, material holders mounted upon said carriage, means for actuating the carriage so as to place the material blanks between the clamps and means for actuating the clamps so as to grasp and hold the material in position to be sewed.

6. In a machine of the character referred to, two clamping members adapted to be brought together facewise and to engage each other around the outer edges of their faces, whereby to clamp material blanks therebetween with their edges projecting outwardly therefrom, and a plate member interposed between said clamping members inside the meeting edges thereof, one of said clamping members being adapted to have said plate member and the middle portion of a material blank pressed flatwise thereinto as said clamping members are closed together, and means for mechanically supporting and operating said members automatically for the purpose described.

18. In a device of the character described, a frame, upper and lower clamp members reciprocatively carried by said frame, collapsible crimping plates carried by said clamps and adapted to be inserted and extended between them, means for actuating the clamps and crimping plates, a carriage reciprocatively mounted upon the frame, slidably mounted loading frames carried by the carriage, loading frames pivotally mounted upon the first mentioned loading frames, gripping jaws revolubly mounted in the ends of the loading frames for gripping material therein, means for actuating the gripping jaws, means for swinging the pivotally mounted loading frame over and onto the first mentioned loading frame and means for reciprocatively actuating the carriage so as to carry the material to and between the clamps.

[Claims 2 to 5, 7 to 17, and 19 to 22 not printed in the Gazette.]

1,270,997. APPARATUS FOR USE IN THE MANUFACTURE OF SULFURIC ANHYDRID AND THE LIKE. ERWIN L. WILKE, Buffalo, N. Y. Filed Oct. 4, 1916. Serial No. 123,680. (Cl. 23—1.)



1. In an apparatus for use in the manufacture of sulfuric anhydrid and the like, the combination of an inner contact chamber, an outer chamber surrounding said inner chamber, and a plurality of passages connecting said inner and outer chambers and spaced at intervals about the circumference of said inner chamber to supply gas from said outer chamber to all portions of said inner chamber.

2. In an apparatus for use in the manufacture of sulfuric anhydrid and the like, the combination of an inner contact chamber, an outer chamber surrounding said inner chamber, a dividing wall between said two chambers, and a plurality of passages connecting said two chambers, said passages being formed in said dividing wall and opening at one end into the upper portion of said outer chamber and at the other end into the lower portion of said contact chamber.

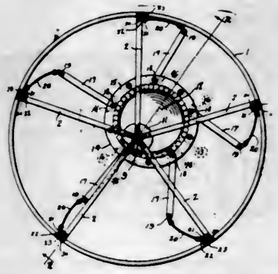
3. In an apparatus for use in the manufacture of sulfuric anhydrid and the like, the combination of an inner contact chamber, an outer chamber surrounding said inner chamber, means for admitting gases to said outer chamber below the upper portion thereof, and means for withdrawing the gases from the upper end of said outer chamber and passing the gases to said contact chamber, whereby the dust is separated from the gases in said outer chamber.

8. In an apparatus for use in the manufacture of sulfuric anhydrid and the like, the combination of an inner contact chamber, an outer annular chamber surrounding said contact chamber, a dividing wall between said chambers, means for admitting gas tangentially into said outer chamber below the upper portion thereof, and a plurality of passages in said dividing wall terminating at their upper ends in the upper portion of said outer chamber and at their other ends in the lower portion of said contact chamber.

11. In an apparatus for use in the manufacture of sulfuric anhydrid and the like, the combination with means for supplying sulfur dioxid gas, of a contact chamber adapted to contain a heated contact mass, a blower for forcing the gas from said source into said contact chamber and through said contact mass, a discharge passage in said contact chamber for the gas which has passed through said contact mass, and a damper in said discharge passage which can be regulated for increasing and decreasing the opening in said discharge passage for controlling the pressure of gas in said contact chamber, the volume of gas passing through the contact mass being kept substantially constant.

[Claims 4 to 7, 9, and 10 not printed in the Gazette.]

1,270,998. GYROSCOPE-PROPELLER. OTTO WILL, San Francisco, Cal. Filed June 11, 1917. Serial No. 174,061. (Cl. 170—151.)



1. In a gyroscope propeller having a stationary shafting; a rotatable shaft with a stub bearing in a recessed portion of said stationary shaft; a hub secured to said rotatable shaft having extending arms connecting to a circular rim; similar connecting arms to said rim secured to a disk in a grooved bearing portion on said stationary shafting; a central eccentric secured to said stationary shafting between said disk and hub; said eccentric provided with ball bearings for mounting thereto a rotatable ring; said ring having links pivoted thereto; curved blades pivoted to said links and to the circular rim; means to operate the rotatable shaft and hub thereon with arms therefrom, for revolving the circular rim, which actuates connecting links to the rotatable ring in a reciprocating movement upon the central eccentric; said eccentric set on an angle off center of driving shaft to produce a lifting and pushing force for said curved blades when in their operation.

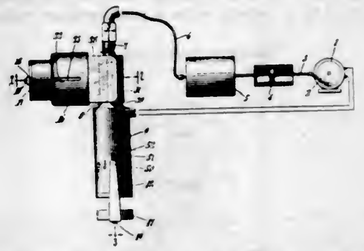
2. In a gyroscope propeller having a central rotatable shafting; a hub secured thereon having extending arms connecting to a circular rim; a stationary eccentric bearing having thereon a rotatable ring provided with ball bearings; links pivoted to recessed portions in said rotatable ring; a cover plate secured thereon for retaining said ball bearings and links; curved blades pivoted to said links and to circular rim; said central shafting set on an angle off the center of said stationary eccentric bearing; means to operate said central shafting, hub and connecting rim to produce a reciprocating movement to said links and curved blades.

1,270,999. TIRE-INFLATION NOZZLE. CURLES T. WILLIAMS, Trenton, N. J. Filed Mar. 16, 1915. Serial No. 14,791. (Cl. 230—24.)

1. In combination, a device for connecting air supply apparatus to a tire air-inlet valve, a release for excessive pressure comprising an air-releasing device movable with the increase of pressure and a stop coöperating therewith to release the air, a motor-operated air-pump to supply compressed air to the tire and means to start the motor by the application of the device to the tire valve.

11. In combination, a motor-operated air-pump, a device for connecting the same to a tire air-inlet valve, and means operated by the application of the device to the valve to start the motor comprising a rotary sleeve to screw the device onto the air valve.

21. In combination, an electric motor-operated air-pump, a device for connecting the same to a tire air-inlet valve, and circuit breaking and making means operated by the application of the device to the valve to start the motor comprising a rotary sleeve to screw the device onto the air valve, a circuit breaker movable toward its closed position as the sleeve is screwed onto the air valve, an automatic lock for the sleeve when the device is withdrawn from the air valve, and an insulating



circuit terminal block attached to the device and coöperating with the circuit breaker.

[Claims 2 to 10, 12 to 20, and 22 not printed in the Gazette.]

1,271,000. CODE DEVICE. JOHN WILLIAM WULF, San JUAN, Porto Rico, assignor of one-third to Waldemar Hepp, San Juan, Porto Rico. Filed July 7, 1915, Serial No. 38,595. Renewed Nov. 27, 1917. Serial No. 204,276. (Cl. 35—13.)



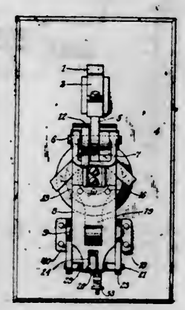
1. A code device comprising disks having their centers substantially in line, said disks including a reading disk, a code disk, said disks having the alphabet disposed thereon in regular order and in the same direction on each disk, one letter of each disk being differentiated to have cardinal value, the second disk being turnable relatively to the first disk to change the key by changing the relative positions of said cardinal letters, and a translating disk having the alphabet disposed in regular order and in the same direction as those of the other two disks, and having a letter differentiated to have cardinal value, the said translating disk being freely turnable relatively to the other two disks to variously position its cardinal letter relatively to the cardinal letter of the key disk, the reading and key disks being adapted to maintain a given adjustment during the turning of the translating disk, so that the turning of the translating disk through a given angle relatively to the key disk will give a corresponding movement of the translating disk relatively to the reading disk and thus will position a message or code letter on the translating disk in radial alinement with its equivalent on the reading disk.

[Claim 2 not printed in the Gazette.]

1,271,001. ELECTROMAGNETIC SWITCH. PAUL H. ZIMMER, Milwaukee, Wis., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed June 6, 1913. Serial No. 772,088. (Cl. 175—28.)

2. An electromagnetic switch comprising a switch arm, an electromagnet for actuating the arm, a latch adapted to lock the switch arm against movement, a tripping member adapted when moved to trip said latch, and means whereby movement of the switch arm permits the tripping member to move and release the latch unless the tripping member is held against movement by magnetic flux from said electromagnet.

5. An electromagnetic switch comprising a switch arm, an electromagnet for actuating the same, a latch normally held in operative position for locking the switch arm against movement, and means whereby movement of the switch arm releases the latch when the electromagnet is energized by a current below a predetermined value.



8. A magnetic switch comprising a switch arm, an electromagnet for actuating the same, a latch adapted to lock the switch arm against movement, said latch being weighted so that it is normally in its operative position, tripping means for tripping the latch, said tripping means being permitted to operate when the switch arm is actuated by the electromagnet but arranged to be magnetically held agninst movement when the electromagnet is energized by a current above a predetermined value.

9. A magnetic switch comprising a switch arm, an electromagnet for actuating the same, a latch adapted to lock the switch arm against movement, said latch being normally biased to its operative position, a tripping member adapted to trip the latch, a spring acting on said tripping member tending to move it and thereby trip the latch, means whereby said switch arm normally prevents movement of the tripping member, said means permitting the tripping member to move and release the latch when the switch arm is actuated by the electromagnet and means whereby said tripping member is magnetically held against movement when the electromagnet is energized by a current above a predetermined value, said means whereby said tripping member is magnetically held against movement when the electromagnet is energized by a current above a predetermined value.

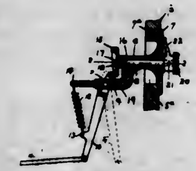
[Claims 1, 3, 4, 6, and 7 not printed in the Gazette.]

1,271,002. PROCESS OF PRODUCING FERRIC PHOSPHATES. WILLIAM H. ALLEN, Detroit, Mich. Filed Sept. 25, 1916. Serial No. 122,149. (Cl. 23—13.)

1. The process of converting ferrous phosphates in the presence of phosphoric acid in aqueous solution to ferric phosphates which consists in bringing substantially every part of the same into contact with air.

2. The process of converting ferrous phosphates in the presence of phosphoric acid in aqueous solution to ferric phosphates which consists in passing finely divided currents of air through the solution.

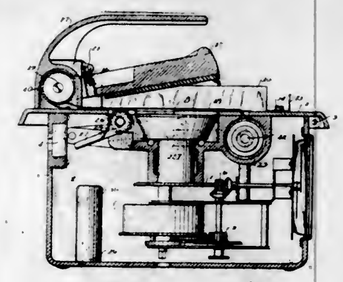
1,271,003. DASHBOARD CONTROLLING MECHANISM FOR CARBURETERS. FREDERICK O. BALL, Detroit, Mich., assignor to Ball and Ball Carburetor Company, Detroit, Mich., a Corporation of Michigan. Filed Jan. 8, 1917. Serial No. 141,232. (Cl. 74—39.)



4. In a dash-board controlling mechanism for carburetors, the combination with a carbureter control actuating means; a dash-board mounting; and a cam carried by the mounting and actuating said means, said cam having a cam face of varying pitch.

[Claims 1 to 3 and 5 to 7 not printed in the Gazette.]

1,271,004. TIME-STAMP. ARTHUR M. BARRETT and WALTER F. STONE, Chicago, Ill.; said Stone assignor to said Barrett. Filed June 22, 1917. Serial No. 176,385. (Cl. 234—55.)



2. A time stamp comprising a clock, a casing therefor having a hinged lid, a rotatable printing member mounted on said lid, a platen to tap said member, externally mounted on the lid of said casing, an inked ribbon to pass between said platen and member, a guard over said platen, a spool mounted in said guard to wind said ribbon, having a ratchet, a pawl mounted on said platen to turn said ratchet to wind the ribbon through the movement of said platen, a free turning spool attached to the other end of said ribbon to rewind the ribbon, said pawl being counterpoised to disengage said ratchet to permit the rewinding of the ribbon when the lid is raised.

9. A time stamp comprising a clock, a rotatable pointer adapted to be moved by said clock and a dating device, all mounted in a casing adapted to be locked, an inked ribbon to pass over said pointer, mechanism for setting said dating device including an oscillating actuating member, said casing having a hole opposite said actuating member through which a pencil or other similar object may be passed to coöperate with said member to change the date to be registered without unlocking the casing, elongated walls surrounding said hole and serving as guides to direct the pencil to the dating mechanism and to prevent it from interfering with the timing mechanism.

[Claims 1, 3 to 8, and 10 not printed in the Gazette.]

1,271,005. FLOOR-COVERING. CHARLES A. BARTLETT, Edwardsville, Ill. Filed May 4, 1917. Serial No. 166,302. (Cl. 154—49.)



1. A floor covering comprising a body of impervious material provided on its underneath surface with a series of undulations, and a woven fabric embedded in said body of impervious material sufficiently to completely cover the weft and warp threads of said fabric and leaving the pile of said fabric projecting through and extending above the top surface of said material.

3. A floor covering comprising a body of impervious material provided on its underneath surface with a series of undulations, a woven fabric embedded in said body of impervious material sufficiently to completely cover the weft and warp threads of said fabric and leaving the pile of said fabric projecting through and extending above the top surface of said material, and an impervious margin for said covering completely surrounding the fabric and having a plain lower face and beveled upper face.

4. A floor covering comprising a body of impervious material, a woven fabric having a tufted or nappy surface, said woven fabric being embedded in the body of the impervious material to such an extent that the body of impervious material completely surrounds the fabric sufficiently as to leave only a portion of the tufted or nappy surface exposed, the said impervious material completely surrounding the outer margins of the floor covering.

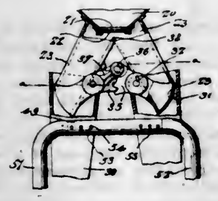
[Claim 2 not printed in the Gazette.]

1,271,006. PROCESS FOR PRINTING AND TRANSFERRING DECALCOMANIAS TO CHINA, METAL, WOOD, &c. ALBERT S. BECKER, Jersey City, N. J., assignor to The Palm Brothers Company, New York, N. Y. Filed Sept. 2, 1915. Serial No. 48,748. (Cl. 41—33.)

2. The process of printing decalcomanias on transfer paper, consisting in applying a coating of starch and glue to the transfer paper, then applying a solid backing of color to the coating, and then printing in positive colors the design to be transferred onto the backing of color, the design being adapted to be removed from the transfer paper after the same has been moistened by sliding the design from the paper onto the article to be decorated and the coating forming the means by which the design is caused to adhere to the article.

[Claim 1 not printed in the Gazette.]

1,271,007. FERTILIZER-DISTRIBUTING MACHINE. ERNEST L. BEEZLEY and FRANK LANE, Mount Pleasant, Iowa. Filed May 3, 1915. Serial No. 25,567. (Cl. 193—46.)



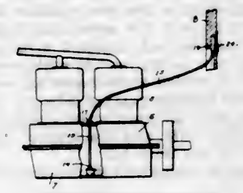
1. In a fertilizer distributer structure, a hopper having a dispensing outlet, a pair of spouts communicating with said outlet, delivery chutes positioned for receiving fertilizer from said spouts, shafts rockably carried by the upper end of said chutes, valves mounted upon said shaft and normally closing the outlets of said spouts, means for rocking one of said shafts for moving one of said valves into an opened position, and means connecting said valves for moving them in unison.

2. In a fertilizer distributer structure, a hopper having a dispensing outlet, a pair of spouts communicating with said outlet, delivery chutes positioned for receiving fertilizer from said spouts, shafts rockably carried by said chutes, valves mounted upon said chutes and normally closing the outlets of said spouts, means for rocking one of said shafts for moving one of said valves into an opened position, co-engaging gear segments formed upon said valves for operating the valves in unison, and means for controlling the flow of fertilizer from said hopper into said spouts.

[Claims 3 and 4 not printed in the Gazette.]

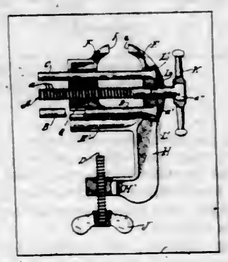
1,271,008. FLOAT-OPERATED INDICATOR. GEORGE G. BELDEN, Spokane, Wash.. Filed Aug. 12, 1916. Serial No. 114,564. (Cl. 73—82.)

1. In combination, an oil indicator adapted for use in connection with an engine crank case of the sectional oil-containing type comprisig an upper and a lower section, an actuating float for the indicator and adapted for location in the crank case, a housing for said float having an apertured lower terminal, an inwardly directed flange at the lower terminal of the housing, preventing displacement of the float and constituting a supporting base adapted to movably engage the bottom of the lower section of the crank case, and means for adjustably suspending the housing from the upper section of the crank case independently of the lower section thereof.



2. In combination, an engine provided with a crank case, said crank case including an upper section and a lower section detachably secured thereto, and an oil indicator suspended from the top crank case section and being independent of the lower detachable section, whereby the latter may be removed independently of the indicator to expose the internal mechanism thereof.

1,271,009. CLAMPING-VISE. LEO BETHKE, Milwaukee, Wis., assignor to Luther Grinder Manufacturing Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed June 10, 1916. Serial No. 102,822. (Cl. 81—33.)



1. A vise, comprising a steel screw bar provided with an unthreaded portion having a channel therein, in combination with a guide rod in parallel relation to said screw and spaced therefrom, a set of cast metal clamping jaws embracing said guide rod and screw bar, one of said jaws having an integral annular swivel flange permanently interlocked in said annular channel in the screw bar and the other of said jaws having integral cast metal threads engaging the screw threaded portion of said screw bar.

3. In a vise, a steel screw bar provided with an unthreaded portion having an annular channel therein, a flattened end portion, a body of cast metal completely encircling the channeled portion and the unchanneled portion adjacent thereto, and having a continuous integral cast metal tongue extending into said channel, said bar being rotatable in said body of cast metal, an operating bar crossing the end of the first mentioned bar, and a connecting body of cast metal in interlocking relation to the first mentioned bar and through which said operating bar extends and is adapted to slide in a longitudinal direction.

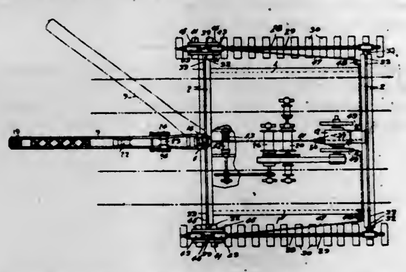
4. In a vise, a steel screw bar and a set of parallel unthreaded bars, a cast metal clamping jaw in which said steel scerw bar is rotatably mounted and with which it is interlocked by a body of cast metal integral with the cast metal jaw, said parallel bars each having one end embedded in said cast metal jaw and integrally locked therewith to prevent rotation, and one of said parallel bars being supported on the side opposite the screw bar by a projection of said cast metal body which partially embraces said parallel bar.

6. In a vise, a steel screw bar and a set of parallel unthreaded bars, a cast metal clamping jaw in which said

steel screw bar is rotatably mounted and with which it is interlocked by a body of cast metal integral with the cast metal jaw, said parallel bars each having one end embedded in said cast metal jaw and integrally locked therewith to prevent rotation, and one of said parallel bars being supported on the side opposite the screw bar by a projection of said cast metal body which partially embraces said parallel bar, together with a second cast metal clamping jaw embracing the other unthreaded bar and the threaded portion of the screw bar and having integral cast metal threads engaged between the threads of the screw bar, said last mentioned clamping jaw being movable along said bars, and also having a bearing upon the inner face of the third bar.

[Claims 2 and 5 not printed in the Gazette.]

1,271,010. DITCH-DREDGING MACHINE. WILLIAM W. BILLINGTON and WILLIAM BURNETT, Bay City, Mich., assignors to Bay City Dredge Works, a Corporation of Michigan. Filed September 25, 1913. Serial No. 791,728. (Cl. 105—11.)

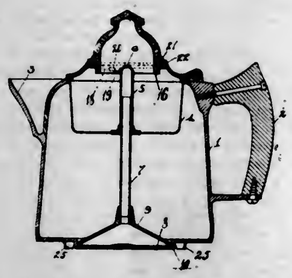


1. In a ditching machine, the combination of a machine frame adapted to span the ditch, chairs supported in cross beams of said machine frame and axles clamped in said chairs and longitudinally adjustable to vary the width of the machine, said axles carrying the supporting wheels at the ends thereof.

3. In a ditching machine, the combination of a machine frame having the cross beams set close to each other, axle chair castings fitting within said beams and having axle seats formed on their inner faces, an axle fitting within said chairs and means for clamping the chairs around said axles, and supporting wheels at the ends of the axle, substantially as and for the purpose set forth.

[Claim 2 not printed in the Gazette.]

1,271,011. PERCOLATOR. ROBERT O. BINGHAM, Sidney, Ohio, assignor to The Wagner Manufacturing Company, Sidney, Ohio, a Corporation of Ohio. Filed May 25, 1915. Serial No. 30,450. (Cl. 215—52.)



2. In a percolator, the combination of a top having a circular opening therein and a recess along one side of such opening, a cover adapted to fit into such opening and having a lug adapted to pass through such recess, a flange on said cover adjacent said top, a cam on the lower surface of said top adapted to be engaged by said lug upon rotation of said cover and to thereupon draw said cover inward, a socket adjacent to said cam to receive said lug upon continued rotation of said cover, and a helical, resilient split ring mounted on said cover between said flange and said top and adapted to frictionally press against said flange to prevent rotation of said cover.

[Claims 1, 3, and 4 not printed in the Gazette.]

1,271,012. BREATHING AND FACE-PROTECTING APPARATUS FOR ROCK-DRILLS. AIMÉ BLANC, Aspen, Colo. Filed May 21, 1917. Serial No. 170,018. (Cl. 128—42.)



1. In a face protecting attachment for rock drills, the combination with an air hose for conveying air under pressure, of a substantially inverted conical shaped hood of flexible material having its apex secured about said hose near the outlet end thereof, said hood having one side cut away to receive a portion of the face of a wearer, an elastic band attached to the upper base end of said hood for engagement over the head of a wearer and to draw the hood into binding engagement with the face of the wearer, the flexibility of said hood permitting it to conform to the configuration of and fit snugly against the face of the wearer.

3. In a face protecting attachment for rock drills, the combination of a substantially inverted conical shaped hood formed of flexible material and having one side cut away to permit the insertion of the face of the wearer therein, an elastic band attached to the upper base end of said hood and adapted to fit about the head of a wearer to cause the upper portion of the hood to conform to the configuration of and snugly fit against the face of the wearer.

5. In a face protecting attachment for rock drills, the combination of a substantially inverted conical shaped hood formed of flexible material and having one side cut away to permit the insertion of the face of the wearer therein, an elastic band attached to the upper base end of said hood and adapted to fit about the head of a wearer to cause the upper portion of the hood to conform to the configuration of and snugly fit against the face of the wearer, a hose for conducting air under pressure entering the apex end of said hood, a nozzle upon the end of said hose within said hood, a flexible neck engaging strap attached to said hose and adapted to be fastened about the neck of the wearer.

[Claims 2 and 4 not printed in the Gazette.]

1,271,013. HYDROGENIZATION AND DEHYDROGENIZATION OF CARBON COMPOUNDS. CARL BOSCH, ALWIN MITTASCH, and CARL KRAUCH, Ludwigshafen-on-the-Rhine, Germany, assignors to Badische Anilin & Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany, a Corporation. Filed June 4, 1914. Serial No. 842,955. (Cl. 23—28.)

2. The process of hydrogenizing compounds containing carbon by treating such compounds with hydrogen in the presence of a heated intimate mixture of a metal of the iron group and a precipitated difficultly reducible oxygen-containing compound which is capable of forming only a weak basic oxid.

4. The process of hydrogenizing compounds containing carbon by treating such compounds with hydrogen in the presence of a heated intimate mixture of nickel and a precipitated oxygen-containing compound of aluminium.

5. The process of hydrogenizing compounds containing carbon by treating such compounds with hydrogen in the presence of a heated intimate mixture of nickel and aluminium oxid prepared by precipitation.

8. A catalyst comprising co-precipitated nickel and a difficultly reducible oxygen compound of a metal which is capable of forming only a weak basic oxid, said nickel having the catalytic powers of nickel reduced at temperatures around 300° C.

[Claims 1, 3, 6, 7, and 9 not printed in the Gazette.]

1,271,014. SEWING-MACHINE BELT. AMELIA J. F. BOWER, Breckenridge, Minn. Filed Apr. 14, 1916, Serial No. 91,133. Renewed Nov. 17, 1917. Serial No. 202,647. (Cl. 74—66.)



1. A belt of the class described including a spirally coiled spring provided at its terminals with a plurality of end coils of less diameter than the other coils, and a coupling member composed of a cylindrical stem extending through the end coils of the spring and terminal substantially spherical heads arranged at the ends of the stem and fitting within the spring at the inner sides of the reduced terminal coils and engaged by the same.

2. A belt of the class described including a spirally coiled spring provided at its terminals with a plurality of end coils of less diameter than the other coils, a coupling member composed of a cylindrical stem extending through the end coils of the spring and terminal substantially spherical heads arranged at the ends of the stem and fitting within the spring at the inner sides of the reduced terminal coils and engaged by the same, and a centrally arranged disk carried by the stem and interposed between the reduced coils of the spring and being of greater diameter than the same.

1,271,015. TIRE-SEALING COMPOSITION. ERNEST CAMPBELL, Calgary, Alberta, Canada, assignor of one-half to Thomas Francis Cashman, Calgary, Alberta, Canada. Filed Feb. 3, 1917. Serial No. 146,413. (Cl. 134—17.5.)

1. The herein described composition of matter for the purpose specified, comprising an adhesive, white lead, talc, cork and water, substantially as and for the purpose specified.

3. The herein described composition of matter consisting of water, granulated cork, powdered cork, talc, white lead and gum arabic, substantially as and for the purpose specified.

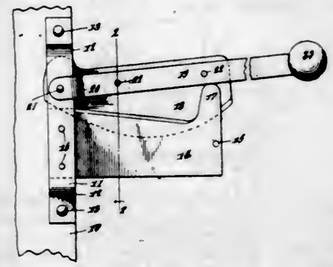
4. The herein described composition of matter for use in sealing up and preventing air escaping from automobile tires, pneumatic or other air inflated tires through punctures, such composition consisting of:

Water	2 quarts.
Granulated cork	4 oz.
Powdered cork	2 oz.
Talc	1 lb.
White lead	8 oz.
Gum arabic	2 oz.

substantially as described.

[Claim 2 not printed in the Gazette.]

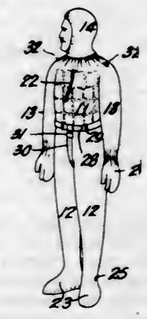
1,271,016. CHICKEN-BEHEADER. ANDREW CARLSON, Mullen, Nebr. Filed Aug. 13, 1917. Serial No. 185,983. (Cl. 17—30.)



1. A device of the character specified, comprising a fixed blade supported at one end in horizontal position and provided at its opposite end with a vertically extending element forming a guide and double stop, a pivoted blade disposed against a side of the fixed blade and the vertically extending element thereof, and a handle bar pivoted in line with the pivoted blade and secured to the upper edge thereof and disposed in the plane of the fixed blade and engageable with the top of the vertical element thereof.

2. A device of the character specified, comprising a bar, a fixed blade secured at one end to the bar and having an integral guide and stop element projecting from its outer end in the plane of the blade, a second blade disposed against a side of the fixed blade and the projecting element thereof, a handle-bar secured to a side of the second blade with the upper edge thereof and engageable with the top of the projecting element of the fixed blade, and pivot means constituting the handle-bar and second blade to each other and to the before mentioned bar.

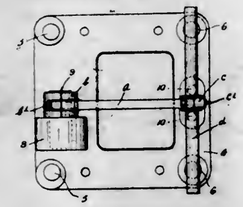
1,271,017. LIFE-SAVING SUIT. JOHN HUNTER CASSIDY, Montreal, Quebec, Canada. Filed Sept. 28, 1915, Serial No. 53,034. Renewed Nov. 24, 1917. Serial No. 203,867. (Cl. 9—20.)



In combination in a life saving suit, a one-piece garment completely covering the wearer with the exception of the

face, a vest filled with buoyant material extending from the neck to waist and normally attached to the garment, means securing the vest to the garment at the back of the neck, a strap attached to the back of the vest and passing between the garment legs to the vest front arranged to adjust the garment to the wearer's body independently of the vest.

1,271,018. CONNECTING-ROD JIG. WILLIAM D. CHAMBERLAND, Minneapolis, Minn., assignor of one-half to Theodore J. Pagel, Minneapolis, Minn. Filed June 11, 1917. Serial No. 174,111. (Cl. 33—174.)



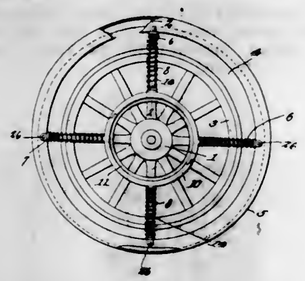
1. A jig for use in truing connecting rods and the like, comprising a gage rod, a base having a raised stud supported at one end only, and laterally spaced pairs of relatively long rear and relatively short front gage posts for engagement with the gage rod held in the common bearing sleeve of a connecting rod having its other bearing sleeve applied on said stud.

2. A jig for use in truing connecting rods and the like, comprising a gage rod, a base having a raised stud supported at one end only, laterally spaced pairs of relatively long rear and relatively short front gage posts for engagement with the gage rod held in the common bearing sleeve of a connecting rod having its other bearing sleeve applied on said stud, and laterally spaced alining pins secured on said base between said short front gage posts.

4. A jig for use in truing connecting rods and the like, comprising a base having laterally spaced pairs of relatively long rear gage posts and relatively short front gage posts, and provided with a raised bearing lug between said rear gage posts, and a stud secured to and projecting laterally from said lug, said base between said short front gage posts having a pair of upright alining pins.

[Claims 3, 5, and 6 not printed in the Gazette.]

1,271,019. TIRE-PROTECTOR. SMALY EPHRAIM CLARK, Gage, Okla. Filed June 14, 1917. Serial No. 174,736. (Cl. 152—33.)



In a device of the class described, a wheel; a tread of greater diameter than the wheel and spaced therefrom, and in which the wheel rolls; a fixed annular track on the wheel; a ring mounted to rotate on the track; cooperating fingers carried by the tread and by the ring and provided with abutments; and compression springs surrounding the fingers and engaged terminally with the abutments.

1,271,020. TEMPLE. GEORGE H. DAY, Rochester, N. Y., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Apr. 11, 1918. Serial No. 227,884. (Cl. 88—52.)

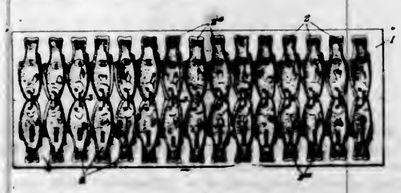


1. The combination with a non-metallic ear hook having a kerfed end, of a metallic temple side having one end engaged within the kerfed end of the ear hook, a ferrule arranged over the joint, and means whereby the ferrule is secured against movement and at the same time forces the material of the ear hook into engagement with the end of the metallic temple side whereby to prevent relative movement of the ear hook and temple side.

5. The combination with a non-metallic ear hook having a slot in one end extending longitudinally of the end of the hook, of a metallic temple side, a flat head on one end thereof having a slot therein, said head being adapted to be engaged within the slot of the ear hook and having its edges flush with the outside of the body of the ear hook, a ferrule arranged over the meeting ends of the temple side and ear hook and bearing against the sides of the head, said ferrule being forced inwardly into the non-metallic material of the ear hook thus forcing the material into the head of the temple side to hold the joint against movement.

[Claims 2 to 4, 6, and 7 not printed in the Gazette.]

1,271,021. MAGNETIC FISH AND PROCESS OF MAKING THE SAME. WILLIAM DEATS, Yonkers, N. Y., assignor to McLoughlin Bros., Inc., New York, N. Y., a Corporation of New York. Filed Feb. 1, 1918. Serial No. 214,832. (Cl. 46—49.)

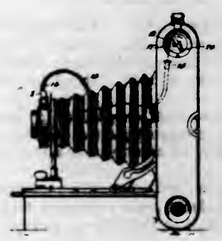


1. An imitation fish or similar object, comprising a non-magnetic body, and a piece of magnetic wire passing through the fish and having its ends extended to or near the mouth of the fish.

9. The process of making artificial fish, comprising printing fish in pairs on a card, the noses of each pair of fish being adjacent to each other, driving a staple through the heads of said fish, and bending the legs of said staple toward each other, and severing the fish and staples from each other.

[Claims 2 to 8 and 10 to 13 not printed in the Gazette.]

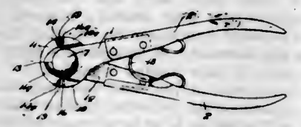
1,271,022. PHOTOGRAPHIC CAMERA. OSCAR DUPERLY, Medellin, Colombia. Filed June 22, 1916. Serial No. 105,110. (Cl. 95—31.)



In a camera, the combination of a shutter, means for automatically locking the shutter after it has been opened

and closed, a winding reel for film said reel having an operating key outside the camera case and a push member one end of which engages the shutter locking means while the other end is supported outside the camera and in position to be engaged and pushed either by the finger at will or by a part of the operating key whereby the shutter is again unlocked, the operating key and the winding reel being connected together by an intermediate member with reference to which said key has a determined amount of angular play, as and for the purpose described.

1,271,023. BUTTON-REMOVING TOOL. WILLIAM E. ELLIOTT, Grand Rapids, Mich. Filed Jan. 3, 1916. Serial No. 69,887. (Cl. 164—81.)

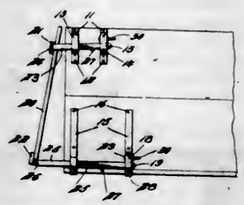


1. In a device of the character described, the combination of a pair of members arranged side by side and pivotally connected together and also provided with spaced sectors projecting therefrom in the same plane and also having opposing radial cutting edges extending to the periphery of the sectors and also having radial plane surfaces in the plane of the cutting edges and peripheral surfaces to engage a fabric and prevent the cutting edges from cutting the same.

3. In a device of the class described, the combination of a pair of members arranged side by side and centrally pivoted pivoted to each other, each member having two oppositely projecting spaced sectors, the sectors being offset into the same plane and alternately interposed, the opposing radial surfaces of the sectors being provided with only sufficient clearance to admit a wire of predetermined size therebetween and also provided with opposing plane radial surfaces throughout, and one or more pair of said sectors also provided with opposing cutting edges extending to the periphery thereof to sever a wire, and peripheral surfaces at each side of the outer ends of said cutting edges.

[Claims 2, 4, and 5 not printed in the Gazette.]

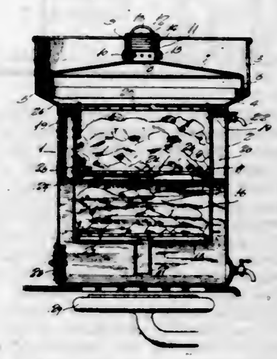
1,271,024. END-GATE. BENJAMIN F. ERWIN, Fairfax, Mo. Filed May 16, 1916. Serial No. 97,861. (Cl. 21—21.)



1. In combination with a wagon body and an end gate therefor, upper and lower arms pivoted to the end gate near the top and the bottom thereof, respectively, and extending along the sides of the wagon body and having depending catches in their rear ends, upper and lower bearings at the sides of the wagon body to receive the respective arms, means co-acting with the said catches and constituting stops to hold the end gate in both closed and open position, and cams on the wagon body to hold the catches in the path of the said stops.

2. The combination of a wagon body, an end gate therefor, lower supporting members pivotally connected to the lower portion of the end gate, upper supporting members pivotally connected to the upper portion of the end gate, lower guiding members on the wagon body and carrying said lower supporting members and allowing the latter to move horizontally with relation thereto, upper guiding members carrying said upper supporting members and allowing the latter to move horizontally with relation thereto, and securing devices coöperative with said lower supporting members and upper supporting members for holding said end gate in its closed position and allowing it to move into such position as to provide a downwardly diverging outlet opening, the construction of said upper and lower supporting members being such as to allow a greater movement of the lower end of said end gate than of its upper end and to arrest said end gate's movement away from the wagon body.

1,271,025. WASHING APPARATUS. WILLIAM C. FORSEE, Kansas City, Mo. Filed Dec. 3, 1917. Serial No. 205,189. (Cl. 68—30.)



2. A washing apparatus comprising a water boiler, a receptacle in said boiler for the soiled article, the bottom and wall of said receptacle being spaced from the bottom and wall of said boiler, the space between the upper ends of the two walls being sealed in a steam-tight manner and the upper portions of said boiler and receptacle forming a sealed chamber for supplying an impulse of steam to said receptacle when sufficient steam pressure has been generated in said boiler to overcome the resistance of the water, said receptacle having means communicating with said sealed chamber and through which said impulse of steam takes place.

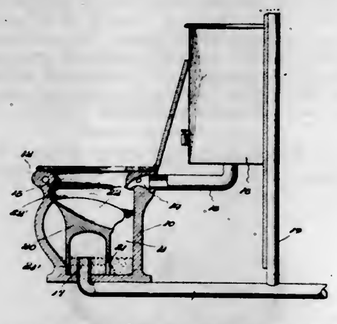
4. A washing apparatus comprising a water boiler, a receptacle in said boiler for the soiled articles, the bottom tom and wall of said receptacle being spaced from the bottom and wall of said boiler, the space between the upper ends of the two walls being sealed in a steam-tight manner and the upper portions of said boiler and receptacle having no means of communication, the lower end of said receptacle having a passage for supplying an impulse of steam to said receptacle when sufficient steam pressure has been generated in said boiler to overcome the resistance of the water, a continuous water seal trough adjacent the upper end of said receptacle, the wall of said boiler extending above said trough, an inclined cover having a continuous depending flange extending into said trough, a steam vent rising from said cover and having outlet perforations opening laterally, and steam retarding means spaced outwardly from said perforations for causing partial condensation of escaping steam, whereby the water of condensation will drip onto said inclined cover and trickle into said trough.

[Claims 1, 3, and 5 not printed in the Gazette.]

1,271,026. CLOSET-BOWL. CHARLES B. FRECK, Asheville, N. C. Filed Aug. 21, 1916. Serial No. 116,119. (Cl. 4—22.)

1. A device of the character described including a bowl provided with a shoulder, an outlet pipe projecting into

the bowl, and a bell portion resting upon the bowl over the inner extremity of the said pipe to coöperate therewith and form a trap with the said shoulder engaging the lower extremity of the bell portion and holding the bell portion against lateral displacement relative to the said pipe.

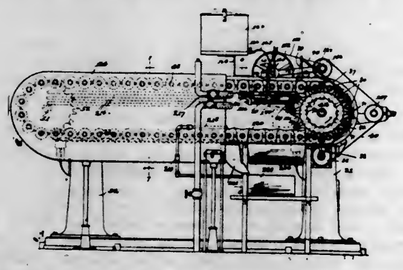


4. A device of the character described including a bowl having a water deflecting shoulder formed in the wall thereof adjacent the upper extremity of the bowl, an outlet pipe projecting through the bottom wall of the bowl, and a bell portion seating upon the said bottom wall over the inner extremity of the said pipe to cooperate therewith and form a trap, the said bell portion being provided with a flange at its upper extremity terminating adjacent the inner extremity of said shoulder whereby water flowing over the said shoulder will be directed onto the upper end of the bell portion.

8. The combination with a siphonic closet bowl having a hollow rim and provided with an inlet pipe communicating interiorly of the rim for distributing water from the rim around the sides of the bowl, and an outlet pipe projecting upwardly within the bowl, of a bell portion fitted within the bowl over the said outlet pipe to cooperate therewith and form a trap with the upper extremity of the bell portion disposed below said rim.

[Claims 2, 3, and 5 to 7 not printed in the Gazette.]

1,271,027. AUTOMATIC POLISHING AND LACQUERING MACHINE. JOHN F. GAIL, Kenosha, Wis., assignor to The Simmons Manufacturing Company, Kenosha, Wis., a Corporation of Wisconsin. Filed Oct. 20, 1915. Serial No. 56,973. (Cl. 91—45.)



3. In a machine of the class described, the combination of an endless continuously traveling conveyer provided with a series of object-supports, bodily movable coating means adapted to direct a supply of liquid finish toward the surface of said objects while on said conveyer, and intermittently operating engaging means synchronized with the movement of the conveyer for successively effecting operative relation between said coating means and each of said objects on said conveyer.

8. In a machine of the class described, the combination of an endless, continuously traveling, chain conveyer composed of a series of articulated bearing members, object supports comprising spindles mounted transversely of the chain and adapted to rotate in said bearing members, pulleys on said spindles, means for supporting said chain during a portion of its movement, a belt adapted to engage the pulleys on said spindles in the supported zone of said chain to rotate said spindles, a polishing member for engaging the objects during such rotation, and means for coating said objects during a subsequent portion of the movement of said conveyer.

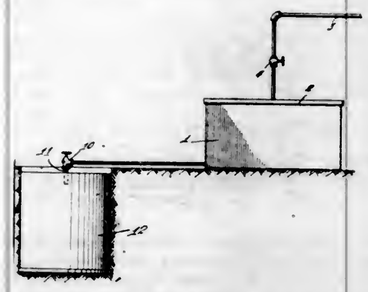
11. In a machine of the class described, the combination of an endless continuously traveling conveyer provided with a series of object-supporting spindles, chucks on said spindles, means for rotating said spindles, polishing means adapted to operate upon said objects during a portion of their travel with said conveyer, means for coating said objects with finishing material after they have been polished, and means for effecting a successively endwise axial movement of said objects away from said conveyer prior to said coating operation.

16. In a machine of the class described, the combination of a continuously traveling endless chain conveyer provided with a series of object-supporting spindles projecting therefrom, means for coating said objects during a portion of their travel on said conveyer, and a series of overlapping articulated guard-plates mounted on said conveyer for preventing access of coating material to said conveyer.

28. In a machine of the class described, the combination of a continuously traveling endless chain conveyer provided with a series of object-supports mounted thereon, means for rotating said objects, a coating head adjacent to the line of travel of said objects, mechanical means adapted to engage said head and effect a synchronized movement thereof substantially parallel with the line of travel of said objects on said conveyer and for a limited portion of its travel, means for retracting said coating head operable after said limited movement, means for effecting a relative change in the angular position of said coating head during said synchronized movement, means for admitting coating material to said head during said synchronized movement, and means for closing said supply during the retractive movement of said head.

[Claims 1, 2, 4 to 7, 9, 10, 12 to 15, 17 to 27, and 29 to 35 not printed in the Gazette.]

1,271,028. APPARATUS FOR EXTRACTING OIL. WALTER J. GARNETT, Eastport, Me. Filed Oct. 3, 1917. Serial No. 194,606. (Cl. 87—13.)



In an apparatus of the class described, the combination with a cooker vat, of a reservoir having its upper end below the plane of the bottom of said cooker vat, a drain pipe opening into the cooker vat at its bottom, and positioned above the reservoir a considerable distance by the positioning of the upper end of the reservoir below the plane of the bottom of the cooker vat, said drain pipe provided at its other end above the reservoir with an elbow, a bushing carried by the lower end of said elbow, a reduced valved discharge pipe carried by said bushing, and a steam supply pipe extending into said cooker vat.

1,271,029. PRACTICE-BOMB. EMIL GATHMANN, Baltimore, Md. Filed Apr. 3, 1918. Serial No. 226,371. (Cl. 102—2.)

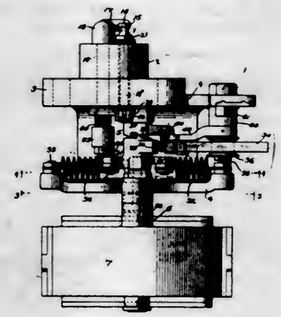


1. A practice bomb, comprising a body portion, a core within the body, and vanes at one end of the bomb attached to the core.

12. A practice bomb having front and rear portions made of plastic material with a space between them, a cylinder inclosing said space, vanes formed with perforations, a core connecting the front and rear portions of the bomb, and a wire embedded in the rear portion of the body and extending through the perforations in the vanes.

[Claims 2 to 11 not printed in the Gazette.]

1,271,030. IGNITION SYSTEM. HARRY F. GEIST, Racine, Wis., assignor, by mesne assignments, to Webster Electric Company, Racine, Wis., a Corporation of Wisconsin. Filed Feb. 23, 1915. Serial No. 9,770. (Cl. 123—149.)



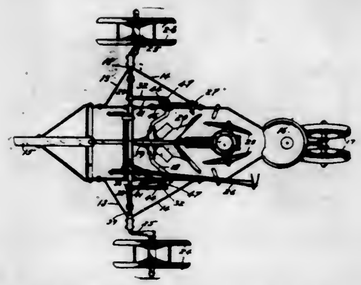
1. Ignition apparatus of the class described comprising in combination with spark electrodes and a magneto, an oscillatory member arranged when operated to impart movement to said magneto and the movable spark electrode, a reciprocating push rod arranged successively to engage, move and release said oscillatory member and means operated by said oscillatory member for releasing the latter from the push rod.

2. Ignition apparatus of the class described comprising in combination with spark electrodes and a magneto, an oscillatory yoke, springs normally retaining said yoke in a certain position, such oscillatory yoke arranged when actuated to operate said magneto and the movable spark electrode, a reciprocating push rod arranged successively to engage, move and release said oscillatory yoke, and means operated by said yoke for releasing the latter from the push rod.

3. Ignition apparatus of the class described comprising in combination with spark electrodes and a magneto, an oscillatory member arranged when operated to impart movement to said magneto and the movable electrode, a reciprocating push rod adapted successively to engage, move and release said oscillatory member, means operated by said oscillatory member for releasing the latter from the push rod, and devices for varying the time at which said last mentioned means is operated by the oscillatory member.

[Claims 4 and 5 not printed in the Gazette.]

1,271,031. LISTER-PLOW. WILLIAM S. GRAHAM, Canton, Ill., assignor to Parlin & Orendorff Company, Canton, Ill., a Corporation of Illinois. Filed Jan. 2, 1918. Serial No. 209,917. (Cl. 97—36.)



1. In a lister-plow, the combination with a frame, axle members attached thereto, wheels on said axle members, a plow-body, a rock-shaft journaled in the frame in rear of said axle members, and means for turning said shaft to raise and lower the plow-body, of a guiding device located between said wheels and connected with said shaft and movable with the plow-body when said shaft is rocked, the parts being positioned relative to each other so that one of said wheels will travel in one furrow and the guiding device in another furrow while the plow-body is making still another furrow.

2. In a lister-plow, the combination with a frame, axle-members attached thereto, wheels on said axle members, a plow-body, a rock-shaft journaled in the frame in rear of said axle members, with which rock-shaft the plow-body is connected, and means for turning said shaft to raise and lower the plow-body, of a guiding device pivotally attached to one of said axle members and connected with said shaft so as to be movable with the plow-body when said shaft is rocked, the parts being so positioned relative to each other that one of said wheels will travel in one furrow and the guiding device in another furrow while the plow-body is making still another furrow.

7. In a lister-plow, the combination with a frame, axle members thereon, supporting wheels on said axle members, a bail, and a plow-body connected therewith, of two guiding devices supported respectively on said axle members at opposite sides of the longitudinal center of the frame, a connection between each guiding device and the plow-bail, each of said guiding devices being positioned to run in a furrow at one side of the furrow being made by the plow-body, and means for simultaneously raising and lowering the plow-body and the two guiding devices.

[Claims 3 to 6 and 8 to 14 not printed in the Gazette.]

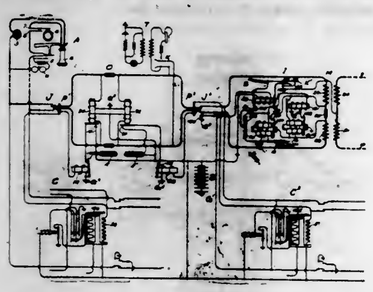
1,271,032. AUTOMATIC TELEPHONE SYSTEM. BERNARD C. GROH, Chicago, Ill., assignor to Automatic Electric Company, Chicago, Ill., a Corporation of Illinois. Filed July 19, 1915. Serial No. 40,705. (Cl. 179—27.)

1. In a telephone system, a first circuit, a signal in said circuit, a Wheatstone bridge, said signal under the control of said bridge, a second circuit, a relay in said second circuit, said bridge under the control of said relay whereby said signal may be operated over said second circuit.

2. In a telephone system, a first circuit, a signal in said circuit, a Wheatstone bridge, said signal under the control of said bridge, a second circuit, a relay in said second circuit, said bridge under the control of said relay whereby said signal may be operated over said second circuit, and means in said second circuit for operating said relay.

93. In a telephone system, means for connecting calling and called lines including a trunk line and an automatic switch, an operating circuit for said switch comprising the two sides of a portion of the talking conductors of said trunk line in parallel, a source of current for said

circuit, and a signal controlled from the called line by altering the current flow in said circuit.

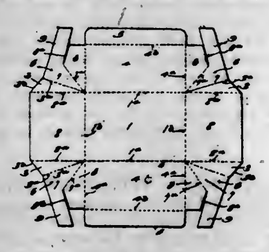


120. In a telephone system, two exchanges, a trunk line for establishing connections between said exchanges in either direction, a branch at each end of said trunk line leading to an automatic switch, another branch at each end thereof leading to an operator's position, means controlled by the operator at either end of said trunk line for disconnecting the branch leading to the automatic switch at the same end and for closing a control circuit for the automatic switch at the other end over a circuit including the two sides of said trunk line in parallel, and means controlled by the operation of the switch at the opposite end for rendering said trunk line busy to calls in the opposite direction.

121. In a telephone system, the combination with two exchanges and an interconnecting toll line, of means including automatic switches at both ends of said toll line for establishing talking connections thereover in either direction, and means at each end of said toll line for closing a control circuit for the automatic switches at the other end, said control circuit including the two conductors of said toll line in parallel.

[Claims 3 to 92 and 94 to 119 not printed in the Gazette.]

1,271,033. PASTEBOARD TRAY. HARRY G. HALL, Atlanta, Ga. Filed July 21, 1916, Serial No. 110,507. Renewed Dec. 5, 1917. Serial No. 205,683. (Cl. 229—31.)



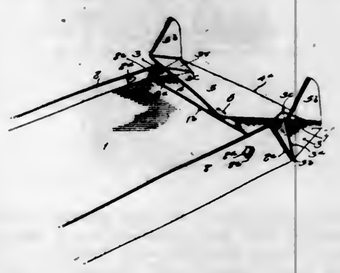
1. In a receptacle formed from a one piece blank, the combination with a bottom section and upwardly foldable side and end sections, of off-setting wings carried by said end sections, the outer lateral edges of said wings being adapted to register with those of said side sections, corner portions situated intermediate the lateral edges of said wings and side sections, said portions being formed in sections conjointly foldable exterior of the side sections, locking members carried by said corner portions and adapted to extend longitudinal of the side sections, and locking flaps formed on the upper edges of said side sections, said flaps being downwardly foldable into engagement with said locking members, substantially as and for the purpose set forth.

2. In a receptacle formed from a one piece blank, the combination with a bottom section and side and end sections folded upwardly therefrom; of a sectional corner portion intermediate the lateral edges of said side and end sections, the sections of said corner portion being conjointly foldable exterior of the side sections, locking members carried by said corner portions and adapted to extend longitudinal of the side sections, and locking flaps formed on the upper edges of said side sections, said flaps being downwardly foldable into engagement with said locking members, substantially as and for the purpose set forth.

3. In a receptacle formed from a one piece blank, the combination with a bottom section, and upwardly foldable side and end sections; of offsetting wings carried by said end sections, the outer lateral edges of said wings being adapted to abut those of said side sections, corner portions situated intermediate the lateral edges of said wings and side sections, said portions being formed in sections conjointly foldable exterior of the side sections, and interlocking means in connection with said side sections and corner portions, substantially as and for the purpose set forth.

4. In a receptacle formed from a one piece blank, the combination with a bottom section and upwardly foldable side and end sections; of offsetting wings carried by said end sections, corner portions situated intermediate the lateral edges of said wings and side sections, said portions being formed in sections conjointly foldable exterior of the side sections, locking members carried by said corner portions and adapted to extend longitudinal of the side sections, and locking flaps formed on the upper edges of said side sections, said flaps being downwardly foldable into engagement with said locking members, substantially as and for the purpose set forth.

1,271,034. COLLAPSIBLE BOX. HARRY G. HALL, Atlanta, Ga. Filed July 21, 1916, Serial No. 110,508. Renewed Dec. 5, 1917. Serial No. 205,684. (Cl. 229—31.)

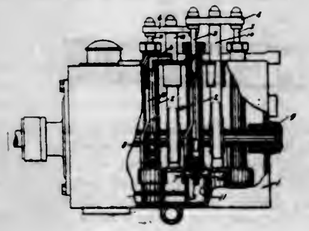


In a box member, the combination of end and side sections in folded relation at the corners, inturned staying flaps on the end sections, locking members coextensive with the lateral edges of said staying flaps and projecting inwardly in parallelism and adjacent the inner surfaces of the side sections, effecting a double ply of material contiguous the extremities of said side sections, and producing a reinforcing corner interior of the corner folds, and tongues on said side sections adapted to engage the upper edges of said locking members, constituting in connection therewith a lock, substantially as and for the purpose set forth.

1,271,035. SCREEN FOR LUBRICATOR-PUMPS. JOSEPH D. HARRIS, Detroit, Mich., assignor to McCord Manufacturing Company, Detroit, Mich., a Corporation of Maine. Filed June 11, 1917. Serial No. 174,022. (Cl. 103—64.)

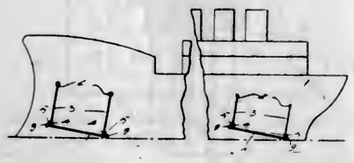
1. In a lubricator pump, the combination with a reservoir having an oil well at its bottom, of a suction tube extending down into said well and provided with a hood surrounding the upper portion of said well but spaced therefrom and extended to a level below the top of said well.

2. In a lubricator pump, the combination with a reservoir having an oil well at its bottom, of a suction tube extending down into said well and provided with a hood



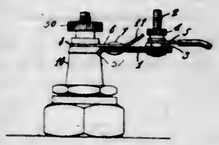
surrounding the upper portion of said well but spaced therefrom and extended to a level below the top of said well, and an air vent extending from said hood to the upper portion of said well.

1,271,036. FIN FOR VESSELS. HENRY A. JENKINS, Fayetteville, N. C. Filed May 26, 1917. Serial No. 171,212. (Cl. 114—126.)



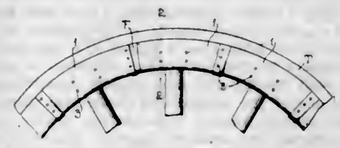
A stabilizing apparatus including in combination a vessel, eye-bolts arranged in pairs and secured to the opposite sides of the vessel and one eye-bolt of each pair located forwardly of and above the other eye-bolt, rectangular plates, a rod journaled to the rear edge of each plate and projecting beyond the side edges thereof, said projecting ends of the rods of each plate being journaled in the spaced pairs of eyes on each side of the vessel, ears formed integrally with the upper sides of the plates at the outer edges thereof, rods having their outer ends pivotally secured to the ears and having their inner ends slidably arranged through the side of the vessel above the eyes, and suitable mechanism for raising and lowering the rods.

1,271,037. SPARK-PLUG INTENSIFIER. HENRY W. KAKASKA, Mandan, N. D. Filed May 8, 1917. Serial No. 167,229. (Cl. 175—183.)



The combination with a spark plug having a binding member thereon, of a metal strip having a flat end the opposite faces of which are engaged directly by the plug and by the binding member to afford an increased contact; an insulated plate overlapped upon the strip; a securing device uniting the plate and the strip; and a binding post carried by the outer end of the plate, the outer end of the strip being disposed at an acute angle to the plate to point toward the post, the plate terminating at the periphery of the post and bearing thereagainst to prevent a swinging of the plate upon the securing device and a circumferential shifting of the outer end of the strip with respect to the post should the securing device loosen its hold.

1,271,038. FELLY. MARCUS L. KELLY, Garfield, Ark. Filed Nov. 12, 1917. Serial No. 201,554. (Cl. 21—165.)

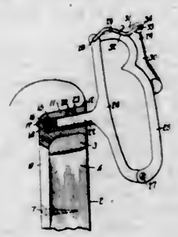


1. In combination with the felly of a wheel, metallic plates secured to the felly and overlying the side faces thereof, marginal portions of the plates being provided with inwardly directed flanges overlying the inner and outer faces of the felly, the plates at each side of the felly being arcuate, the end portions of adjacent plates overlying.

2. In combination with the felly of a wheel, plates overlying the side faces of the felly and having marginal portions provided with flanges overlying the outer and inner faces of the felly, and members disposed through the felly and the plates for holding said plates in applied position.

3. In combination with the felly of a wheel, and a tire mounted thereon, plates overlying the side faces of the felly, and means for securing the plates to the felly, said plates being provided with marginal flanges overlying the outer and inner faces of the felly, the flanges overlying the outer face of the felly being positioned intermediate the outer face of the felly and the tire.

1,271,039. VEHICLE-TOP SUPPORT. FREDERICK KIEHLER, Detroit, Mich., assignor to Cadillac Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed July 8, 1914. Serial No. 849,633. (Cl. 21—62.)



1. In combination with the body of a vehicle and a top mounted to swing in respect thereto from a raised to a collapsed position, two members, one a bracket secured to the body and the other a support for the bows of the top when in collapsed position, a projection on one of the members co-acting with a slot in the other for securing the members together upon relative angular movement of one of the members in respect to the other, and resilient means tending to separate the members when they are secured together, and means for preventing reverse angular movement of the angularly movable member.

2. In combination with the body of a vehicle and a top mounted to swing in respect thereto from a raised to a collapsed position, two members, one a bracket secured to the body and the other a support for the bows of the top when in collapsed position, a projection on one of the members co-acting with a slot in the other for securing the members together upon relative angular move-

ment of one of the members in respect to the other, resilient means tending to separate the members when they are secured together, and means for preventing reverse angular movement of the angularly movable member, except by a force of such character as to overcome the tension of the resilient means.

3. In combination with a sheet metal automobile body having a longitudinal reinforcing strip along its upper side edge, a bracket attached thereto, said bracket having an arm that extends longitudinally along said reinforcing strip and is secured thereto, a top mounted to swing in respect to the body from a raised to a collapsed position, a support for the bows of the top when in collapsed position, said bracket and said support constituting two members, one of the members having a slot therein and the other member having a projection received in the slot for securing the members together upon relative angular movement of the support in respect to the bracket, and resilient means tending to separate the members when they are secured together.

1,271,040. STEEL TIE. JAMES L. KIMBALL, Virginia, Minn. Filed Mar. 1, 1918. Serial No. 219,878. (Cl. 238—3.)



1. In a railway tie, a sheet metal element formed integrally with a struck-up spike-engaging tongue and having a spike-receiving opening at the free end of said tongue, and a concrete block coöperative with the extreme free end of said tongue for locking a spike in said opening.

2. In a railway tie, a sheet metal element formed integrally with a struck-up spike-engaging tongue and having a spike-receiving opening at the free end of said tongue, a metal element coöperative with the extreme end of said tongue for locking a spike in said opening, and a concrete block securing the second said metal element in fixed relation to the first said metal element and supporting the latter.

4. In a railway tie, a metal element provided with an opening and with slits extending respectively from one end and from the middle part of said opening so as to form a spike-engaging tongue having its free end disposed at only one side of said opening, said opening being considerably wider than the shank of an ordinary railway spike, whereby a spike may be moved laterally out of engagement with said tongue.

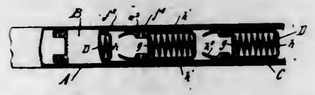
6. In a railway tie, the combination of a metal element provided with a spike-receiving opening which is considerably longer than the width of the shank of an ordinary railway spike, a flat spring of a width considerably less than the length of said opening and supported at right angles to said spike-receiving opening and in position to engage its extreme end with a spike when the latter is in one end of the opening, said spring being out of engagement with the spike when the spike is in the other end of said opening, and a metal element supported in fixed relation to the first said metal element and being coöperative with said spring for securely holding a spike against outward longitudinal movement.

[Claims 3, 5, and 7 not printed in the Gazette.]

1,271,041. CHAIN OR BRACELET. CLIFFORD G. KING, Providence, R. I. Filed Oct. 25, 1916. Serial No. 127,582. (Cl. 59—79.)

4. In a chain or bracelet, a shell, a tube embraced by the shell and projecting beyond the shell, a compressible member in the tube engaging the shell, and a spring in said member.

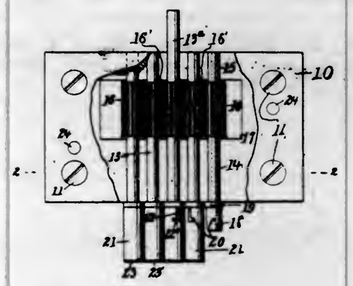
8. In a chain or bracelet, the combination of a series of tubes provided with slots in one end, lugs upon the same ends, flanges on the opposite ends of the tubes, a series of shells upon the tubes slidably overlapping adjacent tubes, tongues upon one end of the shells register-



ing in the slots, connecting members in the tubes extending into adjacent tubes comprising bodies, and arms upon the bodies, said arms being provided with cavities adapted to receive the tongues and lugs, and springs between the arms pressing against the bodies and the flanges.

[Claims 1 to 3 and 5 to 7 not printed in the Gazette.]

1,271,042. BUTTON-CUTTING MACHINE. FRANK E. KRASNY, Irvington, N. J. Filed Oct. 16, 1917. Serial No. 196,840. (Cl. 79—16.)

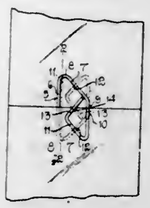


1. In a button cutting machine, a series of parallel spindles located close together and having gear teeth formed thereon and meshing with one another, and hollow cutters on said spindles, said cutters being located side by side and substantially in contact with one another, whereby the annular cut out portions between adjacent button blanks merge together and a maximum production is obtained.

2. In a button cutting machine, a plurality of parallel spindles provided with integral spur gear teeth, the gear teeth on adjacent spindles meshing together, and closely adjacent hollow cutters of substantially sleeve form and fitting over said spindles.

3. In a button cutting machine, a plurality of hollow cutters arranged in a line and spaced closely adjacent to one another, and means for rotating the adjacent cutters in the series in opposite directions, the adjacent cutters having oppositely directioned cutting teeth.

1,271,043. SPRING-CLIP. TRUEL T. LEE, Amos, Ark. Filed Dec. 22, 1917. Serial No. 208,360. (Cl. 24—261.)

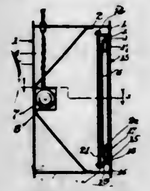


1. A clip formed from a single length of resilient wire having intersecting gripping portions at each end of the clip and other intersecting gripping portions at the approximate center of the clip, and additional gripping portions laterally spaced from the last named intersecting portions of the clip, all of said gripping portions operatively engaging an article held by the clip.

3. A clip comprising a single length of resilient wire consisting of a straight side portion 6, inclined portions 7 and additional side portions 9 extending longitudinally in relatively opposite directions and lapped upon each other at their inner ends to afford gripping portions, the said wire being extended inwardly from said side portions 6 and 9 to provide intersecting portions 7, 11 at opposite ends of the clip affording additional gripping portions, the terminals of the wire forming an angle with said intersecting portions and also disposed in intersecting relation to afford additional gripping portions 13 at the approximate center of the clip.

[Claim 2 not printed in the Gazette.]

7,271,044. SIGN. AUBREY B. LEECH, Los Angeles, Cal., assignor of one-half to Joseph Neu, Los Angeles, Cal. Filed Feb. 28, 1917. Serial No. 151,459. (Cl. 40—133.)



1. In combination, a translucent panel, an outer frame on one side of said panel, an inner frame within and spaced from the outer frame to form a border space between said frames, and stenciled sign plates detachably mounted in the inner frame.

2. In combination, a translucent panel, an outer frame on one side of said panel, an inner frame within and spaced from the outer frame to form a border space between said frames, and stenciled sign plates shiftably mounted in the inner frame.

3. In combination, a cabinet having one side partly formed by a translucent panel, a lamp in the cabinet, said cabinet forming a frame along the outside of the panel and spaced therefrom and provided with a ledge extending along the bottom portion of the frame in the space between said frame and panel, and stenciled sign plates having their upper and lower margins inserted between the frame and panel, the lower edges of said sign plates shiftably resting on said ledge.

4. In combination, a cabinet having one side partly formed by translucent panels, one beneath the other, a lamp in the cabinet, said cabinet forming a frame along the outside of the upper and lower panels and spaced therefrom and provided with a ledge extending along the bottom portion of the frame in the space between said frame and lower panel, said frame having a division member longitudinally thereof between the top and bottom of the frame provided with a ledge extending substantially to the upper panel, and stenciled sign plates resting on the ledges.

5. In combination, a panel, and letter plates mounted on one side of the panel, each letter plate being provided along one edge with an inwardly extending offset portion 27 and provided along its opposite edge with an inturned flange 28, the edge of said flange being adapted to rest against the outer face of the offset portion of the next adjacent letter plate.

1,271,045. LIFE-SAVING SUIT. JOSEPH E. LEPAGE, Montreal, Quebec, Canada. Filed Sept. 18, 1917. Serial No. 191,069. (Cl. 9—20.)

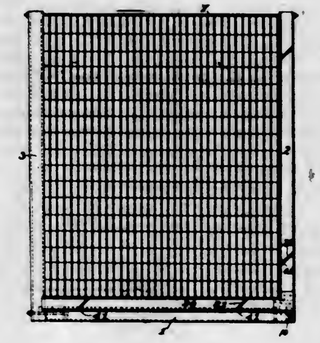
1. A life saving suit having an ingress opening at the top thereof, a cap secured within the suit adjacent the top, clamping means carried by the cap comprising two parts, one mounted on the other, with means for operating them and means for gathering the upper edge of the suit between said clamping means, substantially as described.



3. A life saving suit having an ingress opening at the top, clamping means secured within the suit near the top, including a base plate, a post carried thereby, a cover plate sliding on the post and means mounted on the post for clamping the cover plate to the base plate, a draw string passing around the edge of the suit secured at one end to the base plate and passing at its opposite end through the base plate and out of the suit.

[Claim 2 not printed in the Gazette.]

1,271,046. LUMBER-BUNDLING FRAME. CARL A. LOHMAN, Seattle, Wash. Filed Nov. 6, 1916. Serial No. 129,686. (Cl. 34—16.)



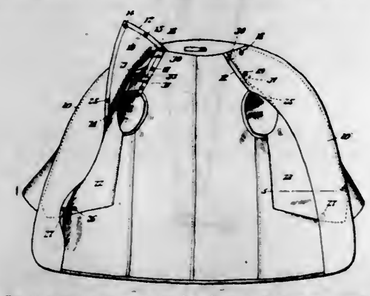
3. A bundling frame for lumber comprising a bundle encircling frame containing two bars secured by their ends in right angular relation, and two other bars secured together in like relation, means for detachably securing said pairs of bars together to form a rectangle, said securing means providing for a limited adjustment in the size of the rectangle, a bundle clamping bar secured in parallel relation with one of the bars of said rectangular frame, and means actuated by the weight of the lumber to bind said clamping bar against the pile of lumber.

4. A bundling frame for lumber comprising a bundle encircling frame containing two bars secured by their ends in right angular relation, and two other bars se-

cured together in like relation, means for detachably securing said pairs of bars together to form a rectangle, said securing means providing for a limited adjustment in the size of the rectangle, a bundle clamping frame having two bars adapted to engage adjacent sides of the bundle inwardly of the inner edges of the bars of the other frame, the bars of said two frames being secured together by means permitting diagonal relative movement between the two.

[Claims 1, 2, and 5 not printed in the Gazette.]

1,271,047. COMBINED COAT AND VEST. JAMES A. MCQUARRIE, Joggin Mines, Nova Scotia, Canada. Filed May 18, 1917. Serial No. 169,504. (Cl. 2—61.)

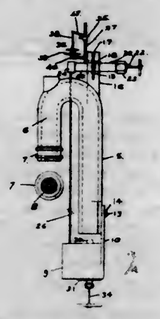


1. In a garment, a coat having a facing extending inwardly from each of the front edges thereof, said facings having unattached upper ends, detachable means for temporarily securing said upper ends, a plurality of vest members secured to the coat along lines extending downwardly from the arm holes, detachable means for securing the upper ends of the vest members to the facing near the top thereof, and on that side of the facing next to the wearer and detachable means for securing said upper ends at times between the facing and coat proper.

3. In a garment, a coat having a facing extending inwardly from each of the front edges thereof, said facings having unattached upper ends, detachable means for temporarily securing said upper ends, a plurality of tabs secured to the coat adjacent to the detachable means, a plurality of vest members secured to the coat along lines extending downwardly from the arm-holes, detachable means for securing the upper ends of the vest members to the facings near the top thereof, and detachable means for securing said upper ends of the vest members at times between the facing and the coat proper and to the aforesaid tabs.

[Claim 2 not printed in the Gazette.]

1,271,048. GAS-LAMP. HUSTON H. MARRS, Denver, Colo. Filed Nov. 8, 1915. Serial No. 60,292. (Cl. 67—50.)

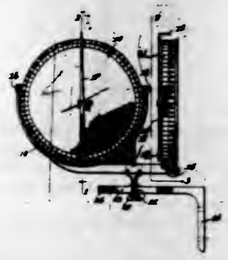


1. A gas lamp, comprising a pipe, a receptacle disposed below one extremity of said pipe and having an arm adjustably connecting the same with said pipe, a vaporizing pipe having one extremity in communication with said receptacle, a feed valve housing with which the other extremity of said vaporizing pipe is in communication, said receptacle having a discharge orifice disposed to discharge the fuel into said first named pipe, and said first named pipe being adjustably connected with said feed valve housing and said receptacle.

3. A hydrocarbon burner, comprising a fuel mixing pipe, a receptacle disposed below one extremity of said fuel mixing pipe, a vaporizing pipe having one extremity in communication with said receptacle, a valve housing with which the other extremity of said vaporizing pipe is in communication, said fuel mixing pipe having an arm thereon, said valve housing being adjustably connected with said arm, said receptacle having a part forming an adjustable connection with said fuel mixing pipe, the receptacle having a discharge orifice disposed in alinement with the induction extremity of said fuel mixing pipe and separated from the latter, and a valve adjustable to control the discharge of fuel through said orifice.

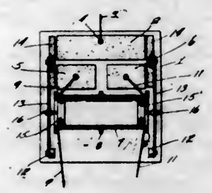
[Claims 2 and 4 not printed in the Gazette.]

1,271,049. INCLINOMETER. JAMES E. MARSHALL, Caney, Kans. Filed Aug. 29, 1917. Serial No. 188,858. (Cl. 33—215.)



An inclinometer including an angular bracket having a slot in one arm, a threaded member extending therethrough, a wing nut applied to said threaded member to secure the same in place, a plate mounted on said threaded member and having at each end a pair of upstanding horizontally spaced arms, said pairs of arms being located at relative right angles, a drum pivotally mounted within the extremities of each pair of arms for oscillation in a vertical plane, said drums bearing graduations upon one side face, and their peripheries, and a weighted pointer pivotally mounted upon the center of each drum and having one end bent at right angles to extend across the periphery of the drum.

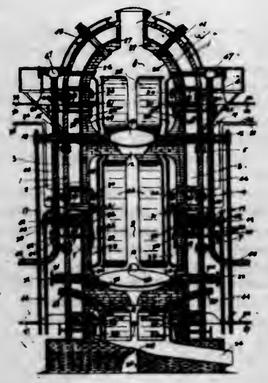
1,271,050. LIGHTNING-ARRESTER. CLARENCE H. MARTIN, Endeavor, Wis. Filed May 23, 1917. Serial No. 170,488. (Cl. 175—214.)



1. A lightning arrester comprising a base, an electrode mounted thereon, a ground wire connected with said electrode, a pair of electrodes mounted on said base and spaced from said first mentioned electrode and from each other with their outer ends in alinement with the ends of said first mentioned electrode, a hollow hard rubber spool having a flange extending radially therefrom intermediately of its ends, a pair of wires coiled on said spool one on each side of said flange, one end of each wire being connected with one of said pair of electrodes, cores mounted in the ends of said spool, plate springs secured at one end to said support and having electrodes at their other ends positioned to engage said above mentioned electrodes, on the inward movement of the springs, said springs being connected intermediately of their ends with said cores.

[Claims 2 and 3 not printed in the Gazette.]

1,271,051. SMELTING AND REFINING FURNACE. OTTO JOSEPH THOMAS GUSTAVE RICHARD MARTIN, Vancouver, British Columbia, Canada. Filed July 28, 1917. Serial No. 183,348. (Cl. 204—64.)



1. In a smelting and refining furnace, a pair of superposed compartments the upper one of which has an ore charging aperture in the crown and a discharge aperture in its lower end opening to the lower compartment, the lower compartment having a discharge outlet, both of said compartments being provided with means for subjecting their contents to intense electrical heat, means for opening and closing said discharge aperture, and means for indicating the height of various levels of the contents of the lower compartment.

6. In a smelting and refining furnace, superposed compartments having a communicating passage therebetween and means for opening or closing same, the upper compartment having a charging aperture, carbon slabs mounted on the inner walls of said compartments and spaced therefrom, one or more fixed carbon terminals in each compartment arranged between said slabs and said walls, one or more movable carbon terminals adapted to co-act respectively with the fixed terminals, said terminals being connected to suitable electric circuits, and means for operating the movable terminals.

[Claims 2 to 5 not printed in the Gazette.]

1,271,052. LINING FOR FURNACES. OTTO JOSEPH THOMAS GUSTAVE RICHARD MARTIN, Vancouver, British Columbia, Canada. Filed Sept. 21, 1917. Serial No. 192,604. (Cl. 106—9.)

1. The herein described plastic composition including brick clay and infusorial earth rendered plastic by water having dissolved therein salt in the proportion of one-quarter ounce to the gallon.

5. The herein described plastic composition consisting of brick clay fifteen parts, infusorial earth eight parts, soapstone four parts, and asbestos six parts, rendered plastic by water having dissolved therein salt in the proportion of one-quarter ounce to the gallon.

[Claims 2 to 4 not printed in the Gazette.]

1,271,053. MOTOR-VEHICLE. LLOYD L. MELTON and HARRY R. WHOMES, Chicago, Ill., assignors to Dearborn Truck Company, Chicago, Ill., a Corporation of Illinois. Filed May 4, 1917. Serial No. 166,438. (Cl. 180—16.)



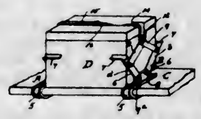
1. Means for attaching a rear axle housing of an automobile to a supplemental frame including hangers for the axle housing; supplemental housing sections carried by said hangers and having tapered enlargements which inclose the outer ends of the housing for the axle; tapered contractible collars interposed between said housing enlargements and the axle housing; means for forcing said housing enlargements into collar contracting engagement with said collars to assemble the axle housing in alinement with said supplemental housing sections; and bearings for the outer ends of the axle that are disposed within said supplemental housing sections.

2. Means for attaching a rear axle housing of an automobile to a supplemental frame including hangers for the axle housing; supplemental housing sections carried by said hangers and having enlargements which inclose the outer ends of the axle housing; means for assembling the enlargements of the supplemental housing sections and the axle housing to aline the supplemental housing sections and the axle housing; and bearings for the outer ends of the axle that are disposed within said supplemental housing sections.

3. Means for attaching a rear axle housing of an automobile to a supplemental frame including hangers for the axle housing; supplemental housing sections carried by said hangers and having enlargements which inclose the outer ends of the axle housing; contractible collars interposed between said housing enlargements and the axle housing; means for forcing the housing enlargements into collar contracting engagement with said collars to assemble the axle housing in alinement with said supplemental housing sections; and bearings for the outer ends of the axle that are disposed within said supplemental housing sections.

4. Means for attaching a rear axle housing of an automobile to a supplemental frame including hangers for the axle housing; supplemental housing sections carried by said hangers; means for assembling and maintaining said axle housing and said supplemental housing sections in alinement; and bearings for the outer ends of the axle that are disposed within said supplemental housing sections.

1,271,054. CARRIER. JAMES M. MERRITT, Los Angeles, Cal., assignor to Boyle Manufacturing Company, Los Angeles, Cal., a Corporation of California. Filed Aug. 20, 1917. Serial No. 187,220. (Cl. 224—29.)



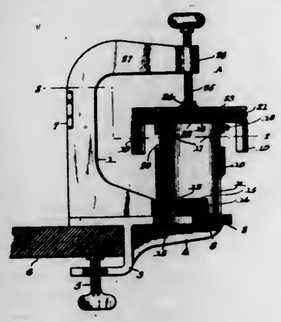
1. An improved carrier, comprising a pair of toggle devices provided each with separate load-engaging portions, means for attaching each of said toggle devices to a support, and means coöperating with and connecting said toggle devices to hold said load-engaging portions against the load, and to hold said load upon the support; each of said toggle devices and its attaching element comprising a part adapted to be directly applied to and secured to a vehicle running board or the like, shanks pivotally con-

nected with said part and provided with heads angularly directed from the shanks, and links pivotally connected with said shanks; and said means for connecting said devices comprising flexible load-engaging and securing means with which said links are pivotally connected.

5. A carrier of the character disclosed, comprising attaching members adapted to be mounted upon a load support, load-engaging members pivotally connected with each of said attaching members and adapted to embrace and hold a load upon said support, connections between the load-engaging members on each attaching member, and a connection detachably secured to said connections and tending to hold the load-engaging members in operative position so that the load is held upon the support.

[Claims 2 to 4 not printed in the Gazette.]

1,271,055. VULCANIZER. JOHN MICHEL, Philadelphia, Pa. Filed May 25, 1917. Serial No. 170,947. (Cl. 18—18.)



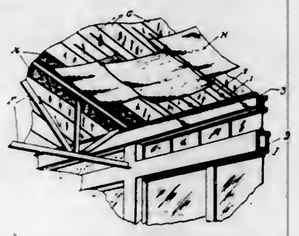
1. In a vulcanizer, the combination with a frame, a vertically extending heating drum mounted upon the frame and having an opening in the wall thereof, a fuel cup adapted to be positioned within the drum through the opening to rest upon the frame, a heating table closing the upper extremity of the drum, said drum having exhaust openings adjacent the upper end, baffles depending from the peripheral edge of the table to deflect the heat escaping through the openings, a clamping plate coöperating with said table to impart pressure upon articles positioned upon the table, means for effecting an adjustment of said clamping plate, and means formed on the frame for attaching the latter to either a vertical or horizontal support with the drum vertically disposed.

4. In a vulcanizer, the combination with a frame having a horizontally disposed ledge, a heating drum supported endwise upon said ledge, a burner supported upon said ledge within the drum and spaced from the walls of the latter, said drum having heat exhaust openings adjacent its upper end, a table closing the upper end of the drum, lugs depending from the table and engaged against the inner wall of the drum, fastening elements carried by the drum, and engaging said lugs for removably holding the table in proper position upon the latter, baffles depending from said table for deflecting the heat escaping from the drum through said openings, a combined clamping and bracing plate arranged above the table, and means for adjusting said plate to impart pressure upon articles positioned upon the table.

[Claims 2 and 3 not printed in the Gazette.]

1,271,056. LIGHT-DIFFUSING MEANS FOR MOTION-PICTURE STUDIOS. ROBERT P. MILLER, Los Angeles, Cal., assignor to Union Iron Works of Los Angeles (Incorporated), Los Angeles, Cal., a Corporation of California. Filed Nov. 21, 1917. Serial No. 203,188. (Cl. 95—82.)

1. In improvements of the character disclosed, a building structure including side walls and trusses extending from wall to wall; of light diffusing means for preventing direct rays of light from being cast upon the surface of the structure beneath the trusses and being disposed above the lower portion of said trusses for rendering such lower portions available for hanging or supporting purposes.



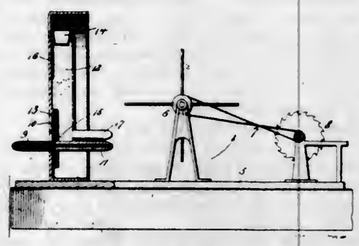
3. In improvements of the character disclosed, the combination with a building construction including upright walls, members secured to and extending between said walls and constituting the roof of said building structure; of light diffusing means disposed above the lower portions of said members which may be used to suspend or hang articles therefrom, said light diffusing means preventing direct light rays from being cast upon the zone beneath said members.

11. In improvements of the character disclosed, in combination with a motion picture studio including roof trusses; of cables extending between and above the lower portions of said trusses, and sheets of translucent light diffusing material slidably mounted upon said cables; said sheets being mounted in planes one above the other and in overlying relation to one another.

14. In improvements of the character disclosed, in combination with a motion picture studio including upright side walls, roof trusses supported by the side walls, and a transparent roof supported by said trusses; of cables disposed between and above the lower sides of the trusses, and sheets of translucent light diffusing material mounted upon the cables, and translucent light diffusing panels incorporated with the roof and disposed upon and in engagement with opposite sides of the trusses, said cables and said sheets being disposed in sets located one above the other with the sheets in overlying relation to one another.

[Claims 2, 4 to 10, 12, 13, 15, and 16 not printed in the Gazette.]

1,271,057. TRICK TOY. HENRY MILLHOUSE, Chicago, Ill., assignor of one-half to George Victor Lillig, Chicago, Ill. Filed Oct. 29, 1917. Serial No. 199,065. (Cl. 46—41.)

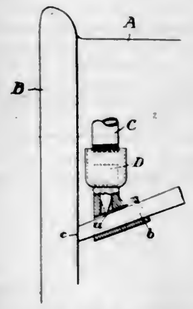


1. A toy comprising a wind motor, a blowpipe positioned to discharge on the motor, a mouthpiece for the blowpipe slidably mounted to come into and out of registry therewith, a powder receptacle having an outlet and an air inlet aperture, and a cover plate for the inlet aperture carried by the mouthpiece, said plate covering the aperture when the mouthpiece registers with the blowpipe, and said mouthpiece registering with the aperture when slid out of registry with the blowpipe.

2. A toy comprising a wind motor, a blowpipe positioned to discharge on the motor, a powder receptacle having an outlet and an air inlet aperture, a mouthpiece, a slidable support for the mouthpiece adjustable to register the mouthpiece alternately with the blowpipe and the aforesaid aperture.

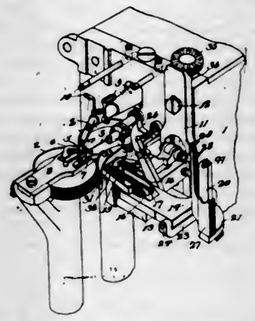
[Claim 3 not printed in the Gazette.]

1,271,058. FLANGE-LUBRICATOR. JAMES H. MINER, Lumberton, Miss. Filed June 7, 1917. Serial No. 173,318. (Cl. 184—3.)



In a flange lubricator a bar supported in an inclined position with one end against the flange of the wheel, an oil supply and a vertically arranged valve controlling the oil supply and bearing on the inclined face of the bar, the oscillation of the bar actuating the valve, substantially as described.

1,271,059. SEWING-MACHINE AND FOLDING MECHANISM THEREFOR. JAMES R. MOFFATT, Chicago, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 6, 1914. Serial No. 829,912. (Cl. 112—24.)



1. A sewing machine including in combination, a stitch-forming mechanism having a needle, a folding device for folding a fabric and placing the edges thereof side by side, a trimming device for trimming said edges, a common support for said folding device and said trimming device, and means for adjusting said support relative to the needle.

3. In a sewing machine, stitch forming mechanism, including a needle entering and emerging on the same face of the fabric, and coöperating stitch forming mechanism, a folding device having side portions for folding the side edges of the fabric, and means for crimping the body portion of the fabric, said crimping means extending to the stitching point and being arranged in a plane which intersects the path of movement of the needle, whereby said needle will pass through both side portions and through the central portion of the fabric.

10. In a sewing machine, a pair of feeding cups, a needle reciprocating above said cups and a loop taker coöperating therewith, a work support disposed in advance of said cups and having a part extending forwardly between the cups to a point substantially in line with said needle, and a folding device mounted on said support.

11. In a sewing machine, a pair of feeding cups having vertically disposed feeding surfaces one of said cups being movable, a stop to retain said movable cup in spaced relation to the other cup, means for yieldably retaining said cup in said spaced relation, a folding device including a support having a rib projecting between said feeding surface, and means for laterally adjusting the position of said rib relative to said feeding surface.

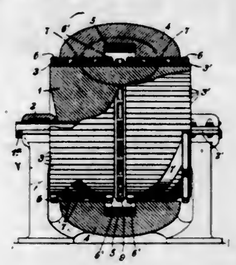
14. In a sewing machine having horizontal cup-feeding devices, and an overseaming stitch forming mechanism, a folding device including fixed wings extending forwardly between the cups, a swinging member carrying a wing cooperating with the stationary wings to fold the fabric, said wing being slidably supported on said swinging member.

[Claims 2, 4 to 9, 12, 13, and 15 to 26 not printed in the Gazette.]

1,271,060. PROCESS AND FORMULA FOR TANNING HIDES. RUFUS N. MOORE, Thorp Spring, Tex. Filed July 19, 1917. Serial No. 181,579. (Cl. 149—4.)

A tanning solution comprising the several constituents in the proportions named; two pounds of gum gambier, one-half pound of alum, one pint of vinegar, one ounce of fluid extract of white oak bark, one pound of nitrate of sodium, one ounce of fluid extract of poke root, and perfume oil.

1,271,061. DYNAMO-ELECTRIC MACHINE. ROBERT V. MORSE, Ithaca, N. Y. Filed Mar. 18, 1912. Serial No. 684,433. (Cl. 171—212.)



1. In a dynamo electric machine, means for producing a plurality of annular fields in the same magnetic circuit, in combination with plurality of corresponding zones of numerous narrow armature conductors, and series connected brushes bordering said zones, the armature conductors being arranged to make electrical connection successively in rotation with different series connected brushes.

2. A dynamo electric machine having means for producing a plurality of annular fields of different polarity in combination with an armature having a corresponding plurality of zones of armature conductors, bands of brushes bordering said zones and arranged to successively connect electrically with different armature conductors in rotation.

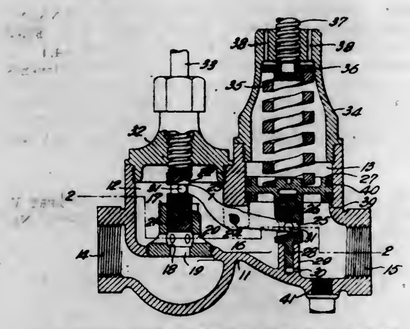
3. A dynamo electric machine having a field magnet with two effective homopolar fields of different polarity in a common magnetic circuit, a zone of numerous armature conductors in each field, series brushes electrically connecting with successive armature conductors in rotation, said conductors carrying current of different voltage when connecting with different series brushes.

19. In a dynamo electric machine, the combination of a field structure producing two effective homopolar fields in the same magnetic circuit, a substantially cylindrical ar-

mature which the magnetic flux enters and leaves in a substantially radial direction so that the effective fields are cylindrical and extend axially, numerous narrow armature conductors insulated from each other extending in a general axial direction and arranged in zones corresponding to the effective fields, bands of closely spaced brushes bordering the zones and encircling the armature, the spaces between succeeding brushes of a band being only wide enough to prevent a short-circuit through a narrow armature conductor whereby the bands are substantially continuous and produce a uniformity in the magnetic flux distribution, the armature conductors passing in rotation successively under the different pairs of brushes of their zone, each pair of brushes connecting a group of armature conductors in parallel circuit with each other, so that as each conductor in rotation leaves a group there are the other conductors of the group in parallel circuit with it to carry the interrupted current and minimize sparking at the brush tips, and stationary conductors exterior to the rotating armature connecting the brushes in series.

[Claims 4 to 18 not printed in the Gazette.]

1,271,062. VALVE. ALFRED F. MURPHY, Montreal, Quebec, Canada. Filed Apr. 17, 1914. Serial No. 832,668. (Cl. 50—38.)



In a device of the character described, a body, a pair of plungers therein, cross-shaped slots formed diametrically in said plungers, a rocking lever pivoted to the body and having its ends projecting into said slots and operable in the vertical arms of the slots, and lugs on the ends of said lever engageable in the latter portions of said slots.

1,271,063. CAR-DOOR. WALTER P. MURPHY, Chicago, Ill. Original application filed Dec. 27, 1913, Serial No. 809,031. Divided and this application filed Aug. 7, 1915. Serial No. 44,360. (Cl. 189—46.)

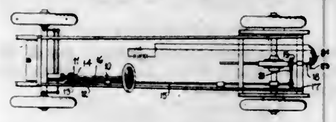


1. In a car door, a gusset plate having an integral flange depending below the lower edge of the door and offset from the vertical plane of the gusset plate and constituting a door shoe offset from the vertical plane of the gusset plate.

[Claims 2 and 3 not printed in the Gazette.]

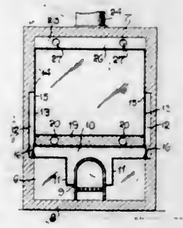
1,271,064. DIRECTION-INDICATOR FOR AUTOMOBILES. DIRK W. NEERHOF, Oostburg, Wis. Filed Jan. 4, 1917. Serial No. 140,591. (Cl. 116—31.)

The combination with an automobile including a steering shaft, of a sprocket wheel mounted upon the steering shaft, a shaft section mounted upon the frame of the automobile and extending upward and rearward and having a sprocket gear wheel operatively connected to the first named sprocket gear wheel, a second named shaft mounted upon the frame of the automobile and extending rearward therefrom and connected by a universal joint to the



first named shaft section and carrying at its rear end a sprocket wheel, a longitudinally extending shaft mounted at the rear end of the automobile and having a sprocket gear wheel operatively connected to the last named gear wheel, and a signaling arm mounted upon the last named shaft.

1,271,065. BAKER'S FURNACE. ELOF NELSON, Oak Creek, Colo. Filed Sept. 22, 1917. Serial No. 192,750. (Cl. 107—55.)



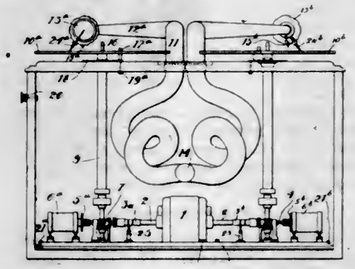
1. In a furnace of the character described, a furnace structure, a fire box therein, an oven above the fire box, a hot air chamber disposed between the oven and the fire box and having vertical portions extending upwardly along the side walls of the furnace and substantially the entire length of the oven and communicating at their upper ends with the interior of the oven, and pivotally mounted longitudinally extending damper plates operable to open and close communication between the body portion of the hot air chamber and the vertical extensions thereof.

2. In a baker's furnace, a furnace structure, a longitudinally extending firebox therein, an oven proper above said firebox, a hot air chamber extending across the entire width of the furnace between the firebox and the oven and spaced from the bottom wall of the oven, said hot air chamber having extensions disposed longitudinally along opposite sides of the firebox and also provided with portions extending vertically in the side walls of the furnace for substantially the entire length of the oven, the side walls of the oven being provided with openings communicating with the latter portions of the hot air chamber, a bridge wall arranged between the rear end of the oven and the top wall of the hot air chamber and having spaced ports therein, the rear wall of the oven being spaced from the rear wall of the furnace to provide a flue and the top wall of the oven being also spaced from the top wall of the furnace affording a communicating flue for the products of combustion, a smoke stack at the forward end of the furnace, and a bridge wall between the furnace wall and the top wall of the oven adjacent said stack and also having spaced ports through which the products of combustion issue from the latter flue into the smoke stack.

1,271,066. SYNCHRONIC TWIN PHONOGRAPH. INDALECIO NORIEGA, Mexico, Mexico. Filed Sept. 12, 1917. Serial No. 191,091. (Cl. 274—10.)

1. In a sound recording and reproducing apparatus, the combination, with a pair of record supports, a tone arm

movable across each support, and a shaft whereon each support is mounted; of a motor; and an electrical system for driving said shafts in alternation from said motor, comprising alternately-acting means for determining the shaft to be driven, a pair of magnets connected to actuate said determining means, a pair of normally-open magnet circuits, a pair of stationary contact plates, one in each circuit, located beneath the record supports, a contact pin mounted in each record support and extending vertically above and below the same, the lower end of each pin slidably engaging the adjacent contact plate, and a contact member in each circuit and connected to move with one of said tone arms so as to engage the upper end of the adjacent contact pin at the conclusion of playing of a record on the corresponding support.



4. In a sound-recording and reproducing apparatus, the combination, with a pair of record supports, a tone arm movable across each support, and a shaft whereon each support is mounted; of a motor; a hollow driving shaft associated therewith; an endwise movable spindle mounted in said hollow shaft to rotate therewith and projecting beyond the same at opposite ends; a driving connection between each end of said spindle and the adjacent record support shaft, each driving connection including a device which is alternately coupled and uncoupled by the movements of said spindle in one direction or the other; and an electrical system for automatically effecting the endwise movement of said spindle at the conclusion of the playing movement of each tone arm across the record on the corresponding support, thereby to uncouple the driving connection between said spindle and the corresponding record support shaft and simultaneously couple the driving connection between the spindle and the other record support shaft; said system comprising a pair of magnets connected with the opposite ends of said spindle, a pair of magnet circuits, and circuit-closing means for each circuit embodying a pair of coöperating contacts, one connected to move with the record support, and the other to move with the tone arm into engagement with the first-named contact.

[Claims 2 and 3 not printed in the Gazette.]

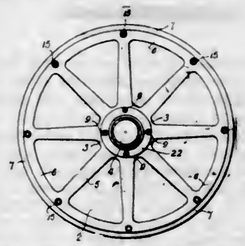
1,271,067. DYEING PROCESS. FRANCIS J. OAKES and SIDNEY O. DILLON, New York, N. Y. Filed July 2, 1915. Serial No. 37,672. (Cl. 8—5.)

1. The herein described process for dyeing vegetable fibers which consists in first producing a lake by adding the coloring matter to a bath containing a salt of a heavy metal and an alkali, then dissolving the lake in an acid and then applying the same to a vegetable fiber

2. The herein described process for dyeing cotton and other vegetable fibers which consists in first producing a lake by adding coloring matter to a bath containing a salt of a heavy metal and an alkali, then dissolving the lake in an acid in the presence of a neutral salt, then immersing the vegetable fiber to be dyed in the solution.

3. The herein described process for dyeing cotton fiber and fabric, which consists in first producing a lake by adding a vegetable coloring matter to a bath containing copper sulfate and sodium carbonate, then dissolving the lake in a hot solution containing acetic acid and sodium sulfate, in a copper vessel, and then immersing the cotton fiber to be dyed in the solution.

1,271,068. WHEEL FOR ROAD-VEHICLES. CHARLES EDWARD OLIVER, London, England. Filed May 22, 1916. Serial No. 99,197. (Cl. 21—69.)



1. A wheel made up of two sections each comprising a felly, a central open boss and integral spokes connecting the felly and boss, combined with a hub, means securing the inner boss to said hub, means securing the inner and outer bosses to said hub, and means near the periphery of the wheel for securing the two sections together.

2. A wheel made up of two sections each comprising a felly, a central open boss, and spokes connecting the felly and boss, combined with a hub, a series of bolts securing the inner boss to the hub, a series of longer bolts passed through both bosses and secured to the hub, and bolts near the periphery fastening the two sections together.

3. A wheel made up of two sections each comprising a felly, central open boss, and integral spokes, combined with a hub and an attaching plate on the hub, a series of short bolts attaching said plate to the inner boss, a series of longer bolts passed through both bosses and securing the outer boss to the plate, and bolts near the periphery of the wheel securing the two sections together.

4. A vehicle wheel including a tire carrying rim, and comprising a hub plate, a series of short bolts screw threaded at their outer ends and rigid with said plate, a series of longer bolts screw threaded at their outer ends and rigid with said plate, a wheel portion having openings and countersunk recesses to fit over said short bolts and nuts in the recesses on the bolts, a second wheel section having bolt openings and recesses and nuts on the longer bolts located in said recesses, and a gasket interposed between said wheel portion and section.

1,271,069. CLAMPING SHOE-HORN. ROBERT P. ORR and RUSSELL A. ORR, Albany, N. Y. Filed Nov. 5, 1917. Serial No. 200,253. (Cl. 132—30.)



A clamping shoe-horn, consisting of a single piece of sheet-metal having a body with parallel edges having integral widened rounded ends, complementally curved to form clamping-jaws, and the body looped between the ends to form a handle with the jaws opposed to one another, the entire width of the body being reinforced to double its thickness between the said jaws, thereby doubling its stiffness and elasticity.

1,271,070. METHOD OF SCREW-THREADING SHEET-METAL TUBULAR OBJECTS. GEORGE D. PALECHECK and THEODORE W. PALECHECK, Milwaukee, Wis. Filed Nov. 6, 1917. Serial No. 200,536. (Cl. 113—116.)



The herein described method of constructing threaded tubular objects from sheets of material which consists in providing a metallic sheet of certain and predetermined length and while the same is in a flat state forming a plurality of alternate parallel ridges and furrows at one side and throughout its entire length, said alternate ridges and furrows extending obliquely of said side edge, rolling said sheet transversely of the alternate ridges and furrows to procure a tubular member, alining the ends of the alternate ridges and furrows, thereafter overlapping the alternate ridges and furrows and the adjacent portion of the sheet, and finally securing the overlapped and alined portions of the sheet together.

1,271,071. METHOD OF DESTRUCTIVELY DISTILLING WOOD. ROBERT C. PALMER, Pensacola, Fla., assignor, by mesne assignments, to the Government of the United States and the people thereof. Filed Mar. 23, 1917. Serial No. 157,058. (Cl. 203—6.) (Dedicated to the public.)

1. The process of adding a suitable amount of water to wood tar, distilling the mixture under pressure whereby methyl alcohol is produced from the wood tar, condensing the vapors and recovering methyl alcohol, acetic acid, acid phenols and tar oils from the condensed vapors.

2. The process of adding to wood tar a suitable amount of water and of a chemical catalyzer such as phosphoric acid, distilling the mixture whereby methyl alcohol and acid phenols are formed from the wood tar constituents, condensing the vapors and recovering methyl alcohol, acetic acid, acid phenols, and tar oil from the condensed vapors.

3. The process of adding to wood tar pitch, a suitable amount of water and of a chemical catalyzer such as phosphoric acid, distilling the mixture whereby methyl alcohol and acid phenols are formed from the wood tar constituents, condensing the vapors and recovering methyl alcohol, acetic acid, acid phenols, and tar oil from the condensed vapors.

4. The process of adding to any of the fractions of crude wood tar a suitable amount of water and of a chemical catalyzer such as phosphoric acid, distilling the mixture whereby methyl alcohol and acid phenols are formed from the wood tar constituents, condensing the vapors and recovering methyl alcohol, acetic acid, acid phenols, and tar oil from the condensed vapors.

5. The process of distilling mixtures of wood with wood tar at a temperature necessary to carbonize the wood, confining the vapors in the retort under pressure, condensing the released vapors, and recovering methyl alcohol, acetic acid, acid phenols and tar oils from the condensed vapors.

[Claim 6 not printed in the Gazette.]

1,271,072. FLUID-PUMP, TURBINE, AND THE LIKE. RICHARD CLERE PARSONS, London, England. Filed Jan. 30, 1917. Serial No. 145,531. (Cl. 103—43.)

1. A centrifugal pump, turbine type fluid pump, water turbine or the like of the type in which the inner surface of the pump chamber and the impeller are lined with an impervious resilient material, having the metallic portion of the casing constructed as a true surface of revolution, the required inner volute form being obtained by a packing of rubber or suitable elastic material of varying thickness.

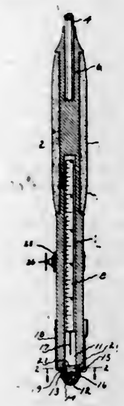
3. A centrifugal pump of the type in which the inner surface of the pump chamber and the impeller are lined with an impervious resilient material, said material being vulcanized to metal plates on the inner surface of the pump chamber in the neighborhood of the pump axis



where the pressure is below atmospheric pressure, and the surface of said material being in compression toward the circumference of the pump chamber where the pressure is above atmospheric pressure, as set forth.

[Claim 2 not printed in the Gazette.]

1,271,073. FISHING-ROD. MILTON KUBAN PATTEN, Torrington, Conn. Filed Apr. 19, 1918. Serial No. 229,481. (Cl. 43—16.)

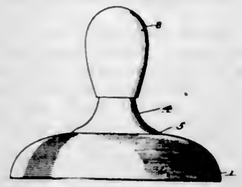


1. A fishing rod handle having a bore, a plug insertible in the bore and provided with a rule connected therewith for insertion also into the bore, the plug having an annular groove, and the handle having an annular spring therein which fits the groove to positively prevent accidental removal of the plug, the plug when the spring is seated in the groove therein abutting against the rear end of the handle.

[Claims 2 and 3 not printed in the Gazette.]

1,271,074. BOBBIN. WILLIAM PICKARD, Laporte, Ind. Filed Apr. 10, 1917. Serial No. 161,057. (Cl. 242—130.)

1. A device for holding a ball of cotton comprising in combination, a base having a pin mounted thereon, a circular recess formed in said base concentric with said pin, a bobbin comprising a spindle having a flange at its lower end about which the ball of cotton is disposed the latter resting on said flange, said bobbin adapted to project into said recess, a hole formed in the flange end of said bobbin adapted to engage the pin in the base, and a retaining member adapted to engage the free end of said spindle of the bobbin and partly disposed in said ball of cotton.



2. A device for holding a ball of cotton comprising in combination a base having a pin mounted thereon, a circular recess formed in said base concentric with said pin, a bobbin comprising a conical flange terminating in a spindle at its small end about which the ball of cotton is disposed, the latter resting on said flange, the said flange being adapted to project into said recess, a hole formed on the flange end of said bobbin adapted to engage the pin in the base, and a conical retaining member having a recess at its small end adapted to engage the free end of said spindle and partly disposed in said ball of cotton.

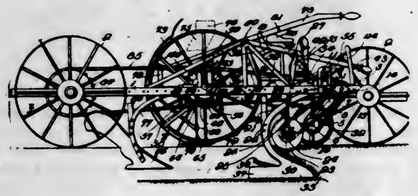
1,271,075. SPRING BEARD-NEEDLE. ALBERT M. PIGEON, Norristown, Pa., assignor to Wildman Mfg. Co., Norristown, Pa., a Corporation of Pennsylvania. Filed Feb. 16, 1916. Serial No. 78,695. (Cl. 66—5.)



1. A spring beard needle having the head bent forward toward the beard at a point above the lower end of the beard, and the nose having two angular bends, with a substantially straight portion between said bends.

[Claim 2 not printed in the Gazette.]

1,271,076. BEET-HARVESTER. WILSON PRATT, Salt Lake City, Utah. Filed Sept. 11, 1916. Serial No. 119,461. (Cl. 55—107.)



1. The combination with a beet-harvester, of means for elevating the beets in the soil before they have been topped, means for penetrating the beet crowns and for forcing the elevated beets back into the soil until their crowns are at a uniform height or level, and means for cutting the same amount of top from the beets, said penetrating and forcing means also conveying the tops after they have been severed.

2. In a beet harvesting and topping machine, the combination with means for elevating the beets in the soil, of a single means for depressing the elevated beets back into the earth until their crowns are a uniform height or level and for conveying the beet crowns after the beets have been topped, and means for topping the beets.

3. In a beet harvester and topping machine, the combination with means for elevating the beets, of a rotatable wheel having a spiked periphery for penetrating the beet crowns and for depressing the elevated beets back into the earth until their crowns are at a uniform height or level, and for conveying the beet crowns after the beets have been topped, and means for topping said beets.

4. In a beet harvesting machine, a traveling frame, means carried by said frame for elevating the beets a predetermined distance in the earth, a vertically adjustable wheel carried by said frame and provided on its periphery with spikes which are adapted to enter the crowns of the beets which have been raised and depress said beets back into the earth until their crowns are at a uniform height or level, and means for topping said beets, said spikes being adapted to convey the beet crowns after the beets have been topped.

5. A beet harvesting machine comprising a traveling frame, means carried by said frame for elevating the beets a predetermined distance in the soil, a horizontal shaft mounted in said frame, a plurality of vertically movable frames carried by said shaft, vertical shafts carried by said movable frames and provided with topping disks for severing the crowns of the beets, gearing connecting said vertical shafts and the horizontal shaft, and a leveling wheel rigidly mounted upon said horizontal shaft between said movable frames and provided on its periphery with spikes for penetrating the crowns of the raised beets and depressing said beets back into the earth until their crowns are at a uniform height or level before they have been topped by the disks, said wheel also conveying the beet tops after they have been severed.

1,271,077. PISTON-RING. PAUL FRANCES PROBASCO, Kansas City, Mo. Filed Sept. 1, 1917. Serial No. 189,363. (Cl. 121—108.)



1. A piston ring comprising interlocking means including a head on one end of the ring, and inter-engaging means including prongs carried by the inter-locking means, the other end of the ring having means for receiving said inter-locking and inter-engaging means.

[Claims 2 to 6 not printed in the Gazette.]

1,271,078. TICKET-HOLDER. FRANK WILLIAM RAFFE, Ottawa, Ontario, Canada. Filed Jan. 25, 1918. Serial No. 213,771. (Cl. 206—40.)

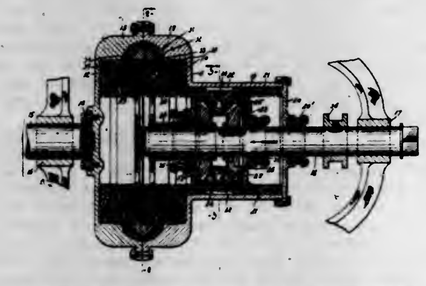


1. A ticket holder comprising a casing with slots for the discharge of the tickets, a longitudinally extending division wall in the casing having an upper offset end and subdividing the casing into two compartments, means on said division wall to prevent the tickets being lost out of the rear end of the casing, a dispensing member in each compartment comprising a resilient wire bent in U shape and coiled intermediate of its length, the free ends of the wire being bent in curvilinear shape and with pointed ends, a button working in a slot in the casing and operatively connected to the dispensing member and resilient means for returning the dispensing member to a normal position.

3. A ticket holder comprising a casing having slots in the upper end and open in the lower end, a dividing wall in the casing, projections on the lower end of the dividing wall, movable dispensing means in the casing and resilient means for returning the dispensing means to a normal position.

[Claims 2 and 4 not printed in the Gazette.]

1,271,079. POWER-TRANSMITTING APPARATUS. CARLTON R. RADCLIFFE, New York, N. Y. Filed Aug. 12, 1916. Serial No. 114,518. (Cl. 74—34.)



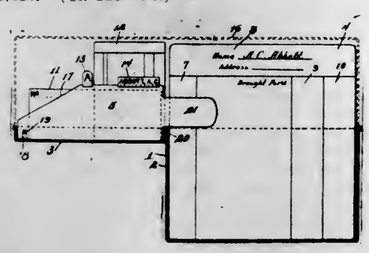
2. The combination with driving and driven shafts, of a planetary gearing connecting the same, and an automatically acting hydraulic clutch for causing one element of the gearing to become a fulcrum for certain other elements thereof, said clutch including three members each of which is connected with an element of said gearing.

3. The combination with driving and driven shafts, of a gearing connecting the the same, and an automatically acting hydraulic clutch for changing the normal speed of one element of the gearing in relation to other elements thereof whereby the same is caused to become the fulcrum for certain other elements of the gearing, said clutch including three members, one of which is connected with the element which becomes the fulcrum, another one with the driving shaft and the third one with the driven shaft.

5. The combination with driving and driven shafts, of a planetary gearing associated therewith, said gearing including driving and driven members and an intermediate fulcrum member, the driving member being connected with the driving shaft and the driven member of said gearing with said driven shaft, and a hydraulic clutch connected with said gearing, said clutch including three elements, one of which is connected with said driving shaft, another one with said driven shaft and the third one with said intermediate fulcrum member.

[Claims 1, 4, and 6 to 32 not printed in the Gazette.]

1,271,080. ACCOUNT SYSTEM. CLIFTON K. RAINEY, Knoxville, Tenn. Filed Oct. 13, 1917. Serial No. 196,430. (Cl. 129—16.)



1. An account system comprising a cabinet having compartments arranged side by side, account sheets in one of the compartments, division sheets in the other compartment for separating therein slips bearing account memoranda pertaining to different accounts to be posted upon the account sheets, and means for indicating the account sheets to which the memoranda separated by the division sheets relate.

2. An account system comprising a pair of adjacent receptacles, account sheets arranged in one of said receptacles, indicating and division cards in the other receptacle for separating different account slips bearing items to be posted upon the account sheets, and means associated with the indicating and division cards for indicating the sheets to which the cards pertain.
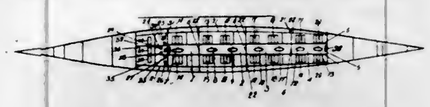
4. An account system comprising a pair of adjacent receptacles, account sheets arranged within one of said receptacles in alphabetical order and provided with suitably designated spaces to receive items pertaining to different accounts, division and indicating cards arranged within the other receptacle and bearing data in relationship to the respective sheets, said indicating cards being adapted for separating debit and credit slips of different accounts within said second named receptacle, and integral projections upon said indicating and division cards projecting over the first receptacle and between the sheets for indicating the sheets to which the slips separated by the cards apply.

6. An account system comprising a pair of adjacent receptacles, account sheets arranged within one of said receptacles, the other receptacle being of suitable shape and size for receiving sorted sets of debit and credit memoranda from which items are to be posted to the account sheets, division and indicating cards arranged within the second named receptacle for separating the memoranda pertaining to the various accounts, and tongues on said cards projecting between the sheets to indicate the sheets to which the memoranda separated by the cards apply.

7. An account system comprising a pair of adjacent receptacles, account sheets within one of said receptacles, the other receptacle being of suitable form and size to receive sorted debit and credit memoranda slips from which the items are to be posted to the account sheets representing the different accounts, and indicating and division cards arranged within the second named receptacle and separating the sorted sets of slips from each other, said cards having portions cut away to expose portions of certain slips and having indicating projections extending between the sheets to indicate the sheets to which the cards relate.

[Claims 3 and 5 not printed in the Gazette.]

1,271,081. SHIP. JOHN REID, New York, N. Y. Filed Feb. 19, 1916, Serial No. 79,396. Renewed June 4, 1917. Serial No. 172,797. (Cl. 114—78.)

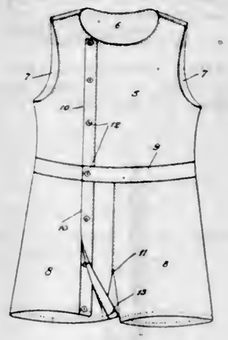


1. In a ship, a hull, a plurality of motive machinery rooms, a chamber above said rooms forming a closed longitudinal passage, airlocks guarding the entrances to said passage, the walls and flooring of said rooms offering no means of ingress and egress to or from said rooms and the flooring of said airlocks having openings leading to said rooms, and motive machinery in said rooms.

4. In a ship, a hull, a plurality of bulkheads, longitudinal and lateral and dividing the interior of the hull into chambers, certain of said chambers being allotted to the motive machinery and affording no access, except through the opening in the roof, other chambers being allotted to fuel, a walled-in passage provided with air locks, the latter also in communication with the roof openings, cables carried in said passage, and control stations connected with said cables.

[Claims 2 and 3 not printed in the Gazette.]

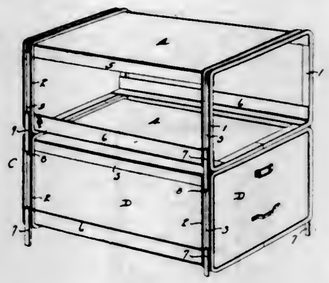
1,271,082. UNDERGARMENT. JOHN REINSCHMIDT, New York, N. Y. Filed Sept. 1, 1917. Serial No. 189,261. (Cl. 2—144.)



1. A union suit having a permanently closed crotch and permanently closed at the back and having opposed front sections forming a front opening extending from the neck opening to the lower end of one leg section, at least those portions of the opposed edges of said front sections which project downwardly from the waist line extending along a common continuous line offset relatively to and substantially parallel with the longitudinal median line of the front of the garment and located in close proximity to the closed crotch and means for detachably connecting the front sections.

2. A union suit having a closed crotch and closed at the back and having a front opening extending along a continuous straight line from the neck opening to the lower end of one of the leg sections, said opening being off-set relatively to and substantially parallel with the longitudinal median line of the garment and located within easy reaching distance of the closed crotch.

1,271,083. INTERLOCKING DRAWER UNIT. ADOLF H. SCHAFFERT, Youngstown, Ohio, assignor to The General Fireproofing Company, Youngstown, Ohio, a Corporation of Ohio. Filed Oct. 1, 1914. Serial No. 864,444. (Cl. 45—2.)

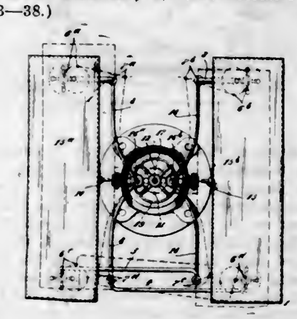


1. A drawer unit for filing cabinets comprising channel-bar end-frames presenting external grooves, and having at their bottom corners projecting locking tenons rigidly secured within the groove portions of the said end frames, and adapted to slidably interlock within the upper corner portions of the end frames of a similar juxtaposed unit.

2. A drawer unit for filing cabinets comprising channel-bar end-frames presenting external grooves, a casing plate connecting the tops of said frames and having depending side flanges, angle members connecting the lower portions of the frames, and locking tenons rigidly secured within the groove portions of said end frames at the lower corners thereof, and adapted to slidably interlock within the upper corner portions of the end frames of a similar juxtaposed unit.

3. A drawer unit for filing cabinets consisting of a skeleton frame work including flanged-metal end-frames having their flanges turned outward forming external grooves and provided at the bottom corners of their upright portions with downwardly projecting locking tenons extending below the bottom of the unit and adapted to slidably interlock within the upper corner portions, and between the flanges, of the end frames of a similar juxtaposed unit, and metal plates connecting the opposite frames.

1,271,084. PLANSIFTER. ALFRED SCHÄR, Flawil, Switzerland. Filed May 3, 1918. Serial No. 232,390. (Cl. 83—38.)



1. In a plansifter, in combination, a driving shaft, a double crank fixed to said shaft, two sieve boxes arranged diametrically with regard to said driving shaft, means connecting the sieve boxes to said crank, and two levers arranged symmetrically with regard to the driving shaft and coupling the two boxes crosswise, so that the latter are moved upon an actuation of the plansifter simultaneously toward and away from each other.

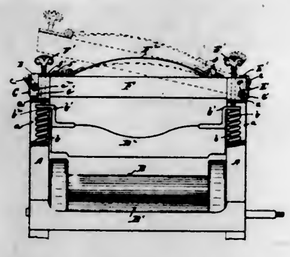
2. In a plansifter, in combination, a driving shaft, a double crank fixed to said shaft, two sieve boxes arranged diametrically with regard to said driving shaft, means connecting the sieve boxes to said double crank, and two levers arranged symmetrically with regard to said driving shaft and coupling the two boxes crosswise, each of said levers comprising two arms pivoted at a point outside the driving shaft, the two points being arranged symmetrically with regard to the driving shaft.

3. In a plansifter, in combination, a driving shaft, a double crank fixed to said shaft, two sieve boxes arranged diametrically with regard to said driving shaft, means connecting the sieve boxes to said double crank, two levers arranged symmetrically with regard to said driving shaft, a pivot for each of said levers, the two pivots lying outside the driving shaft and arranged symmetrically with regard to said shaft and each lever comprising two arms, and a rod connected to an end of each of said levers and one rod of each lever being pivotally connected to one sieve box and the other rod fixed to the same lever being pivotally connected to the second sieve box at a point lying with regard to the driving shaft diametrically opposite the point at which said first mentioned rod is connected to the first sieve box.

1,271,085. CLOTHES-WRINGER. PAUL H. SCHENDLER, Erie, Pa. Filed Jan. 4, 1918. Serial No. 210,282. (Cl. 68—32.)

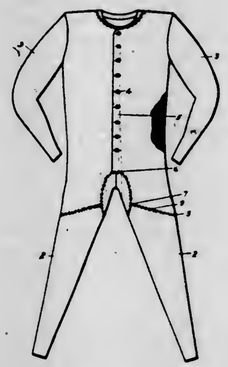
1. A clothes wringer comprising a frame having pressure rolls and pressure means for said rolls mounted therein, a movable top-bar mounted in said frame having means for adjusting said pressure means, means secured to said wringer frame to retain one end of said movable top-bar in place, a U-shaped latch member pivoted to said frame adapted to overlap the opposite end of said mov-

able top-bar and retain it in place, a slidable plate secured on the upper surface of said movable top-bar adapted to engage said U-shaped latch member, a hinge member secured to the inner end of said slidable plate, a hinge member secured to the upper side of said movable top-bar adjacent to the opposite end thereof, and a convexed spring member secured to the inner free ends of said hinge members, substantially as set forth.



2. In a device of the class described, a wringer frame end-post, a U-shaped latch, the arms of which extend downwardly along the front and rear faces of said end-post, a plate secured across the upper end face of said end-post, ears on the lower corners of said plate bent so as to overlap outside the lower ends of the arms of said U-shaped latch so as to form a stop for said latch, screws passing through said ears and the lower ends of the arms of said U-shaped latch, and into the front and rear faces of said end-post, substantially as set forth.

1,271,086. GARMENT. WALDERMA C. SCHAUFLER, Mohawk, N. Y. Filed Nov. 16, 1916. Serial No. 131,621. (Cl. 2—144.)
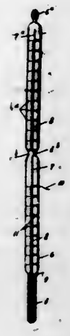


1. A knitted undergarment comprising a body portion, a leg portion and a crotch portion, said body portion and said leg portion having the courses running horizontally, said crotch portion being joined to said body portion along a seam forming substantially an ellipse to which the wales of the crotch are approximately radial, and said body portion and said leg portion being joined by an elastic seam bias to the fabric, running diagonally downward from the crotch portion.

2. An undergarment of knitted material comprising a body portion and a crotch portion, said crotch portion being joined to said body portion by an elastic seam to form substantially an ellipse to which the wales of the crotch portion are approximately radial.

6. A garment of the character described comprising, in combination, a body portion and a leg portion of different texture and a crotch portion seamed to the body portion and the leg portion, said body portion and said leg portion being joined by a seam running from the crotch portion to the outer side of the leg portion and intersecting the seam joining the crotch portion to the body and leg portions.

[Claims 3 to 5 not printed in the Gazette.]

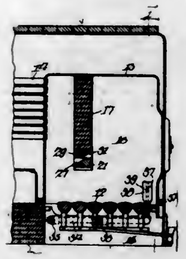
1,271,087. THERMAL CIRCUIT-CLOSER. RALPH F. SCHNEIDER, New York, N. Y. Filed May 15, 1914. Serial No. 838,625. (Cl. 200—32.)



9. A mercurial thermometer compriaing a main tube, a bulb terminal and a tube terminal combined with said main tube and adapted to be connected by the mercury column at a predetermined degree of temperature, an auxiliary tube connected with said main tube and adapted to receive a portion of the mercury column whereby the normal length of the latter is reduced and the degree at which the connection between the terminals takes place may be varied, a scale on said auxiliary tube adapted to indicate the reduction in length of said mercury column and the degree at which said connection will take place after said column has been reduced in length and a connection between said tubes whereby that portion of the mercury in the auxiliary tube is prevented from readily returning to the main tube.

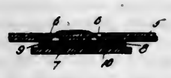
[Claims 1 to 8 not printed in the Gazette.]

1,271,088. FURNACE. NIKOLAUS SCHOEPKO, Chicago, Ill. Filed June 18, 1917. Serial No. 175,524. (Cl. 110—93.)



A support for the smoke wall of a furnace, comprising a lower course of bricks upheld by the side walls of the furnace, and a second course of bricks directly superposed upon and vertically above said lower course, there being straight smoke passageways formed in said support which intersect only the rear and upper faces of the bricks of the lower course and only the under and forward faces of the bricks of said second course.

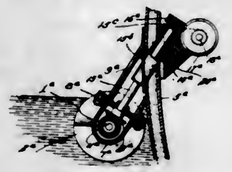
1,271,089. CUFF-LINK. LAURA C. SCHUTTE, Hilland, S. D. Filed Jan. 4, 1918. Serial No. 210,330. (Cl. 24—103.)



1. A cuff link formed from a length of sheet material bent intermediate its ends and extended reversely and thence bent again and again extended reversely to afford a tongue, and means for securing the tongue to the first reversely extending portion.

[Claims 2 to 4 not printed in the Gazette.]

1,271,090. TORPEDO-GUARD FOR SHIPS. ROBERT JOHN SHIELDS, Hobgood, N. C. Filed Apr. 13, 1918. Serial No. 228,397. (Cl. 114—240.)



1. A torpedo guard for vessels comprising a shaft rotatably supported adjacent the side of the vessel, and provided with a helical vane extending longitudinally thereof, said shaft being journaled in bearings projecting from the side of the vessel and said vane being slightly removed from said side and its peripheral portion extending slightly above the water line.

4. A torpedo guard for vessels comprising two rotatable shafts disposed end to end, and each provided with a helical vane extending beside the vessel slightly removed therefrom and having its peripheral portion above the water line and the major part thereof submerged longitudinally thereof, supporting means, common to both shafts, for rotatably supporting the adjacent ends thereof, a gear carried at the opposite end of each shaft, a watertight box inclosing each of said gears, a bracket carrying each box and adapted to be attached to the side of the ship, and means for driving said gears from the inside of the ship.

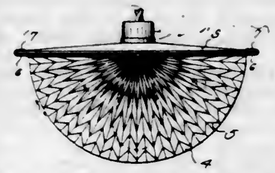
5. A torpedo guard for vessels comprising two rotatable shafts disposed end to end, and each provided with a helical vane extending beside the vessel slightly removed therefrom and having its peripheral portion above the water line and the major part thereof submerged longitudinally thereof, supporting means, common to both shafts, for rotatably supporting the adjacent ends thereof, a gear carried at the opposite end of each shaft, a water-tight box inclosing each of said gears, a hollow, water-tight bracket detachably connected with each of said boxes, and means for driving said gears from the inside of the ship, including gears meshing with said first-mentioned gears and carried at the ends of shafts projecting through said brackets.

[Claims 2 and 3 not printed in the Gazette.]

1,271,091. LAMP-SHADE. SHINICHIRO SITO, Prairie City, Oreg. Filed Feb. 27, 1918. Serial No. 219,475. (Cl. 240—108.)

3. A lamp shade comprising a pair of semi-circular frame sections hingedly connected at their ends, a semi-spherical shade connected with said sections and foldable to conform to the shape of said sections when collapsed, and means for adjustably and detachably connecting said frame sections to a support.

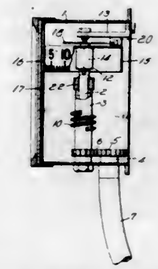
4. A lamp shade comprising a pair of semi-circular frame sections hingedly connected at their ends, and reinforcing superposed arcuate strips carried by said sections and secured thereto, a shade semispherical in shape when opened, and collapsible to conform to the shape of the sections when closed, and adjustably connected ele-



ments slidably mounted between the frame sections and their reinforcing members.

[Claims 1 and 2 not printed in the Gazette.]

1,271,092. SPEEDOMETER. CHARLES G. SMITH, Cambridge, Mass., assignor of one-half to Charles F. MacGill, Cambridge, Mass. Filed June 11, 1917. Serial No. 173,990. (Cl. 264—13.)

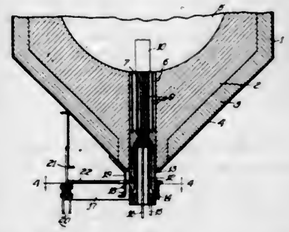


1. A speedometer, having, in combination, a casing, a hermetically sealed fluid containing member journaled for rotary movement within the casing, a second member journaled within the containing member for rotation about the same axis and having a portion of magnetic material, and a magnet supported coaxially with the two members and constructed and arranged to move with the inner member.

4. A speedometer, having, in combination, a casing, a sealed fluid containing cylinder of non-magnetic material journaled for rotary movement within the casing, a second cylinder journaled within the fluid cylinder for rotation about the same axis, a plate of magnetic material within the second cylinder, a drive shaft and a magnet connected to the drive shaft and having its opposite pole faces positioned in close proximity to the fluid cylinder, and constructed and arranged to cause the inner cylinder to rotate with the magnet.

[Claims 2 and 3 not printed in the Gazette.]

1,271,093. ELECTRIC-FURNACE CONTACT. FREDERICK T. SNYDER, Oak Park, Ill. Filed Mar. 1, 1917. Serial No. 151,718. (Cl. 204—64.)



1. A contact for electric furnaces, comprising a member having a small cross sectional area in proportion to

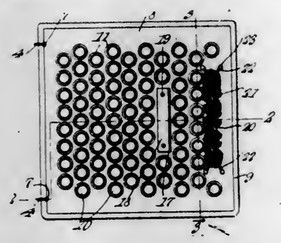
its cross sectional perimeter, whereby said contact has high conductivity for alternating electric current and a low conductivity for heat.

6. A contact for electric furnaces, comprising a hollow portion adapted to contain a cooling medium and ribs projecting therefrom inside and outside said hollow portion.

18. The combination with an electric furnace, of a contact therefor adapted to extend through the bottom thereof, one end of said contact extending below said bottom, a strap adapted to encircle said end, a support for said strap, and means for clamping the ends of conductors between the ends of said strap, thereby affording means for the conduction of current to said contact, and means for protecting said strap and said conductors against injury.

[Claims 2 to 5, 7 to 17, and 19 to 23 not printed in the Gazette.]

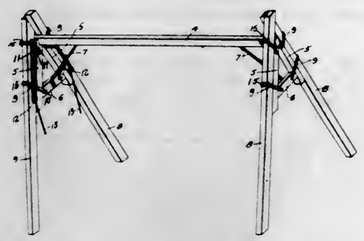
1,271,094. DOOR-MAT. CHRISTIAN SPICKERMAN, Sandwich, Ill. Filed Sept. 18, 1916. Serial No. 120,798. (Cl. 15—63.)



1. In a device of the class described, a box-like receptacle; a lid for the receptacle, having a cleaning surface; and hinge means for connecting the lid with the receptacle; the periphery of the lid being upwardly concaved to form a continuous seat receiving the upper edge of the receptacle.

2. A device of the class described comprising a receptacle and a lid on the receptacle; an arched support carried by the lid adjacent one wall of the receptacle; bristles engaged with the support to form an arched brush; and an upright scraper secured to the lid to the rear of the support.

1,271,095. ADJUSTABLE HORSE. GUY GARFIELD STAINES, Albion, N. Y., assignor to Myrtle O. Staines, Toronto, Canada. Filed Oct. 20, 1917. Serial No. 197,550. (Cl. 20—83.)



1. An adjustable trestle or horse comprising a top bar; a plurality of fixed legs carried by and rigidly connected with said top bar; a plurality of adjustable legs in contact with and extending one along each of said fixed legs; and a plurality of clamping mechanisms for securing said adjustable legs one to each of said fixed legs—each of said clamping mechanisms comprising two spaced pivotally supported clamping members the free ends of which are adapted to engage the outer or free edge of the adjustable leg with which they are associated; and a connecting bar operatively connected with each of said clamping members and whereby said members may be operated to release said adjustable leg.

2. An adjustable trestle or horse comprising a top bar; a plurality of fixed legs carried by and rigidly connected with said top bar; a plurality of adjustable legs in contact with and extending one along each of said fixed legs; and a plurality of clamping mechanisms for securing said adjustable legs one to each of said fixed legs—each of said clamping mechanisms comprising two spaced pivotally supported U-shaped clamping members extending about an adjustable leg and the free ends of which are adapted to engage the outer or free edge thereof; a connecting bar pivotally connected with each of said clamping members; and a spring operatively connected with said bar and adapted to force the free outer ends of said clamping members into engagement with the free outer edge of said adjustable leg.

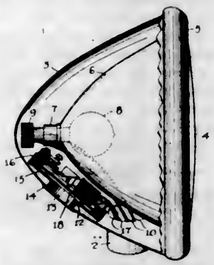
[Claims 3 to 5 not printed in the Gazette.]

1,271,096. LOCK FOR BOXES. JOHN P. STEWART and JAMES R. CHILDS, Kansas City, Mo. Filed May 2, 1917. Serial No. 165,876. (Cl. 70—27.)



A device of the class described including a box, a lock having apertured ears and arranged within and resting upon the bottom of said box, said lock being provided with a keyhole in the top wall thereof, means extending through said ears and the bottom of the box for securing said lock within said box and for securing the box to a support, a cover for said box having a keyhole therethrough coincident with the keyhole of said lock, and means including said lock for securing the cover on said box.

1,271,097. COMBINATION LAMP AND HORN. GEORGE STOWE, New York, N. Y., and GEORGE E. MOLYNEUX, Bayonne, N. J., assignors of one-third to R. M. Owen. Filed Aug. 22, 1916. Serial No. 116,274. (Cl. 116—1.)



1. A lamp casing having a reflector set therein with a space between the two, the reflector being held suspended in the casing by a connecting bezel which entirely closes the front of the casing; said casing having an aperture therethrough near its back; a ferrule or casing set in said aperture; a signaling device mounted on said ferrule, and having its sound-producing members arranged over the opening at the inner end of said ferrule, substantially as described.

2. A lamp having its casing provided with an aperture near the rear thereof; means for supporting the lamp in a predetermined position in said casing so as to entirely close the front of said casing; the said aperture being directed through the casing downwardly and backwardly relatively to the horizontal diameter of the casing; and a signaling device mounted in the casing with its sound-producing element directly over the aperture, substantially as described.

3. A lamp having its casing entirely closed at the front and provided with an aperture near its rear; and an electric signaling device mounted within the casing with its sound-producing members directly over and closing one end of said aperture, the frame of the signaling device and said casing being in engagement at several points so as to firmly support said device and prevent it from jarring loose or rattling.

1,271,098. PAPER YARN AND PROCESS OF MAKING SAME. BERTRAND S. SUMMERS, Port Huron, Mich., assignor to The National Fiber Textile Company, Neenah, Wis., a Corporation of Wisconsin. Filed Feb. 6, 1917. Serial No. 146,998. (Cl. 28—5.)

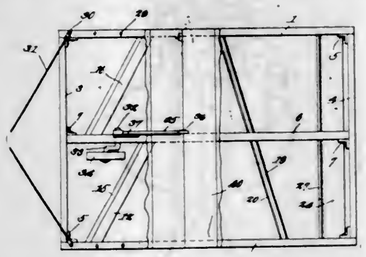


1. The improvement in the process of making yarn from paper strip, which consists in condensing the strip, moistening and twisting the same, permitting a substantial percentage of the moisture to evaporate, and subsequently twisting the product in the reverse direction.

4. As an article of manufacture, twisted paper yarn, in the surface of which are formed permanent twist markings formed by pre-twisting the yarn in a direction reverse to the warn twist, while in slightly moistened condition.

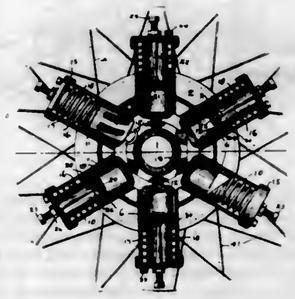
[Claims 2 and 3 not printed in the Gazette.]

1,271,099. ROAD-DRAG. ALPHEUS H. TANNAR, Mapleton, Kans. Filed Nov. 17, 1916. Serial No. 131,904. (Cl. 37—5.)



A road drag comprising a frame made up of ends, side bars connecting the ends, and an intermediate bar connecting the ends; a pair of horizontal knives disposed in approximate parallelism and placed at an acute angle to the draft line, the outer ends of the knives being secured to the side bars, and the inner ends of the knives being spaced apart longitudinally of the draft line and being secured to the intermediate bar; a lifting device carried by the intermediate bar and located between the inner ends of the knives; a scraper extended from one side bar to the other and located to the rear of the knives, the scraper being disposed at an acute angle to the draft line and at an acute angle to both knives; and a fixed smoother disposed to the rear of the scraper, the smoother extending from one side bar to the other and being disposed at right angles to the draft line, the lower surface of the smoother being upwardly and forwardly inclined at an angle to the horizontal.

1,271,100. RESILIENT WHEEL. HORACE H. TAYLOR, Oakland, Cal., assignor of one-third to Frank J. Mayhew, San Francisco, Cal. Continuation of application filed July 24, 1916, Serial No. 110,921. This application filed July 30, 1917. Serial No. 183,480. (Cl. 152—44.)



1. In a wheel, the combination of a hub, a movable hub connected to the spokes of the wheel, a circular series of cylinders carried by said movable hub, hollow pistons reciprocatively mounted in said cylinders, and having their inner ends closed, said cylinders and hollow pistons containing a fluid, springs pressing said cylinders toward the aforesaid hub, and means controlling communication between said cylinders and pistons.

3. In a wheel, the combination of an inner hub, an outer hub attached to the spokes of the wheel, a circular series of radiating cylinders carried by said outer hub, hollow pistons reciprocatively mounted within said cylinders, and having their inner ends closed, said cylinders and hollow pistons containing a fluid, springs pressing said cylinders toward said inner hub, and a valve for controlling communication between said cylinders and said pistons, and means for adjusting said valves to regulate the valve passage.

5. In a wheel, an inner hub, an outer hub, attached to the spokes of the wheel, a plurality of cylinders carried by said outer hub, a plurality of hollow pistons reciprocatively mounted in said cylinders, means for pressing said cylinders toward said inner hub, said cylinders and said hollow pistons containing a fluid, the inner ends of said pistons being closed, and means controlling the passage of fluid from said cylinders into said hollow pistons and vice versa.

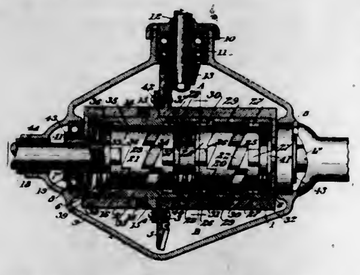
9. In a wheel, the combination of an inner hub, an outer hub attached to the spokes of the wheel, a series of radiating outer cylinders carried by said outer hub, hollow pistons carried within said outer cylinders, and forming spaces between the outer cylinders and pistons, the inner ends of said pistons being closed, plunger-cylinders mounted to reciprocate in said outer cylinders upon said pistons and within said spaces, said hollow pistons and plunger-cylinders containing a fluid, means for forcing said plunger-cylinders toward said inner hub, means controlling the flow of fluid from said plunger-cylinders to said hollow piston and vice versa, and an air inlet valve for admitting air into said spaces to be compressed therein by said plunger-cylinders.

[Claims 2, 4, and 6 to 8 not printed in the Gazette.]

1,271,101. DIFFERENTIAL GEARING. WILLIAM FLORIAN TAYLOR, El Reno, Okla. Filed May 19, 1917. Serial No. 169,714. (Cl. 74—7.)

1. A differential gearing, comprising a driving member and two driven members, a double-faced ratchet mounted

on each of said driven members, a pair of ratchets mounted to coöperate with each of said double-faced ratchets and driven by said driving member, and means for effecting the interengagement of one of each of said pairs of ratchets with said double-faced ratchets to drive said driven members.



2. A differential gearing, comprising a housing, a sleeve mounted in said housing and adapted to turn therewith, ratchets mounted in said sleeve to turn therewith and capable of longitudinal movement therein and shafts extending through said housing and into said sleeve and supplied with ratchets engaging said first-mentioned ratchets, whereby said shafts are driven.

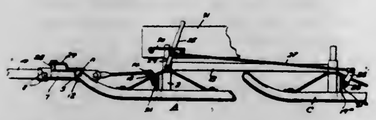
3. A differential gearing, comprising a housing, a sleeve mounted in said housing to turn therewith and having a limited longitudinal movement therein, a pair of shafts extending into said housing from opposite ends and provided with ratchets adapted to turn therewith, ratchets slidably mounted in said sleeve and turning therewith and coacting with said first-mentioned ratchets to impart motion thereto, and means to drive said housing.

8. The combination of a rotary housing, a sleeve mounted therein, a slot and lug connection between the two whereby a combined rotary and endwise movement is imparted to the sleeve in either direction, a divided shaft mounted to turn in said sleeve and having ratchets fixed to turn therewith, and means to turn said shaft in either of two directions, comprising floating ratchets connected to move and turn with the sleeve and springs to exert pressure upon the floating ratchets.

13. The combination of a divided shaft, double-faced ratchets mounted upon adjacent ends of said shaft and having the teeth of opposite faces running reversely and provided with laterally extending hubs on both faces and turning with the shaft, a pair of single-faced ratchets for each double-faced ratchet arranged upon opposite sides thereof and loose upon their hubs and having teeth complementary to the teeth on the double-faced ratchets opposite thereto, means to move the single-faced ratchets in pairs into and out of desired relation to the double-faced ratchets to effect the rotation of the latter forward or reversely, and means to control such movements of the pairs of single-faced ratchets comprising an adjustable sleeve with which the single-faced ratchets are operatively connected, and a reversibly driven housing in which the sleeve is mounted and with which it turns.

[Claims 4 to 7 and 9 to 12 not printed in the Gazette.]

1,271,102. SLEIGH. HYRUM THORSEN, Annabella, Utah. Filed Aug. 25, 1917. Serial No. 188,138. (Cl. 21—46.)

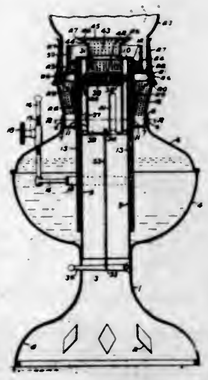


1. In a sleigh, spaced runners, a transverse beam secured thereto, plungers slidably mounted on said beam adjacent each end thereof and operative through the runners, said runners being provided with apertures to accommodate the plungers, said plungers being provided with rack bars, a transverse shaft rockably mounted on the beam, pinions secured on said shaft adjacent each end thereof and meshing with the rack bars of the plungers, a tongue secured to said runners adjacent the forward ends thereof and slidable longitudinally of the sleigh, and connections between said shaft and tongue for rocking the shaft in such direction as to move the plungers downwardly when the tongue is moved rearwardly and for rocking the shaft in the reverse direction when the tongue is moved forwardly.

2. In a sleigh, spaced runners, a transverse beam secured on said runners, guide casings mounted on the front of said beam adjacent each end thereof, plungers slidable in said casings and operative through the runners, said runners being provided with apertures to accommodate the plungers, a transverse shaft rockably supported by the casings, said plungers being provided with integral racks, pinions secured on said shaft at each end thereof and meshing with said racks, an upwardly directed arm secured to the shaft, a tongue secured to the forward ends of said runners and slidable longitudinally of the sleigh, and a link pivotally secured at its forward end to the rearward end of the tongue at its rearward end of said arm.

3. In a sleigh, spaced runners, a transverse beam secured on said runners, vertically disposed guide casings secured to the front face of said beam adjacent each end thereof, plungers slidable in said casings each provided with a central rack and laterally projecting flanges, said casings being provided with lateral grooves for receiving said flanges so as to guide and brace the plungers, a transverse shaft rockably supported by said casings, pinions secured on the shaft at each end thereof and meshing with said racks, a tongue secured to the forward ends of the runners and slidable longitudinally of the sleigh, and connections between said tongue and shaft for rocking the shaft in accordance with movement of the tongue.

1,271,103. LAMP-BURNER. JOHN PHILEMON TAVESDELL, Tiverton, R. I., assignor of one-half to James K. Lanning, trustee, Fall River, Mass. Filed Feb. 23, 1915. Serial No. 10,107. (Cl. 67—38.)



1. A liquid-fuel burner comprising in combination, means to contain a liquid fuel supply, a wick support, an air admission tube positioned interiorly of and having a portion spaced from said wick support, thereby to afford an air passage therebetween, said tube having a sliding engagement with said wick support, and a vertical wall outside of the wick support and coöperating with said tube to form an upwardly uncontracted chamber above the wick.

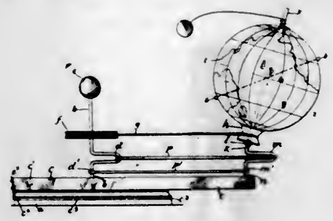
3. A liquid-fuel burner comprising in combination, means to contain a liquid fuel supply, a wick support, a tube 32 spaced throughout a substantial portion of its length from

but supported by said wick support, the upper portion of said tube being perforated and extending above said wick support, whereby air is admitted to the flame both between the wick support and said tube and through the tube, and an upright wall radially outside of said wick support and coöperating with said tube to form a chamber.

5. A liquid-fuel burner comprising in combination, means to contain a liquid fuel supply, a wick support, an air admission tube mounted within said wick support and having a closed, flat, upper end, and a short, imperforate, upright wall 30 radially outside of said wick support and terminating below the upper end of said tube, said tube and wall forming a chamber, means for admitting air to said chamber both interiorly and exteriorly of the wick support, and means for admitting air radially outside of said outer wall.

[Claims 2, 4, and 6 to 9 not printed in the Gazette.]

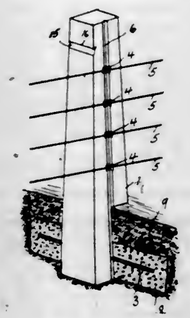
1,271,104. TELLURIAN. LEONIDAS H. VAN SYCKLE, deceased, Fort Lee, N. J., by John Fletcher Creamer, executor, Fort Lee, N. J. Filed Oct. 20, 1917. Serial No. 197,746. (Cl. 35—5.)



1. In a tellurian, the combination consisting of an inclined axis, a revoluble vertical axis supporting said inclined axis and provided with loops integral or otherwise connected therewith, a fixed base, a vertical axis formed with loops secured to said base, and means connecting corresponding loops of the vertical axes.

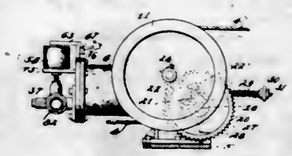
[Claims 2 to 4 not printed in the Gazette.]

1,271,105. REINFORCED PLASTIC FENCE-POST WITH BASE. LAWRENCE A. WAGNER, Youngstown, Ohio. Filed Aug. 14, 1916. Serial No. 114,669. (Cl. 72—85.)



In a fence post of the class described, the combination of a body portion of a post formed of plastic material, metallic reinforcing members extending longitudinally of and embedded within the post, said reinforcing members spaced apart and passing directly underneath a bonding rod extending through the post at right angles to the fence wires attached to the post, said reinforcing members extending longitudinally near the corners of the post, with down-turned ends of said reinforcing members crossing and projecting beyond opposite ends of reinforcing members, a recess formed immediately below the projection formed by the crossing of the ends of reinforcing members above described.

1,271,106. TROLLEY-CATCHER. GEORGE E. WALDO and EDWARD FAY WILSON, Chicago, Ill.; said Wilson assignor to said Waldo. Filed Aug. 16, 1917. Serial No. 186,648. (Cl. 191—90.)



1. In a trolley catcher, the combination of a cylinder, a piston fitted thereto, a piston rod secured in said piston, and operative connection between said piston and the trolley pole, said connection comprising a rack on the piston rod, a shaft, a pinion secured to rotate therewith which meshes with the rack on said piston rod, a gear wheel, driving connection between said pinion shaft and said gear wheel constructed and arranged to permit limited rotation of said gear wheel independently of said shaft, the relation being such that when said gear wheel is in position corresponding to less than full advancement of the piston, movement of said piston to full advancement will impart rotation to said gear wheel, and the relation being such also that when said gear wheel is in position corresponding to full advancement of said piston, it will be unaffected by movement of said piston, substantially as described.

7. In a trolley catcher, the combination of a motor and means for connecting said motor to two trolley poles and for operating said poles separately, substantially as described.

10. In a trolley catcher, the combination of a cylinder, a piston fitted thereto, a piston rod secured in said piston, and operative connections between said piston rod and the trolley poles of a trolley car equipped with two trolley poles, said connections comprising a rack on said piston rod, a shaft, a pinion secured to rotate therewith which meshes with the rack on the pinion shaft, rotatable gear wheels, and means connecting said pinion shaft and gear wheels for rotating said gear wheels separately and for permitting said gear wheels to rotate independently of said pinion shaft, substantially as described.

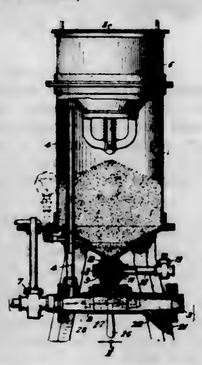
23. In a trolley catcher of the type described, the combination of the cylinder, a pipe adapted for connecting said cylinder with a source of supply of fluid under pressure, a main valve which controls said supply pipe, said valve comprising a casing provided with a valve bore, a valve plug fitted to and movable endwise in said valve bore, said valve bore and valve plug both comprising corresponding sections of different sizes, said valve casing also being provided with a chamber in which the smaller end of said valve plug is exposed and which communicates with the fluid supply pipe, a passageway which connects said chamber with the larger section of said valve bore adjacent to its outer end, and with a vent passage, a vent valve which controls said vent passage, means controlled by engagement of the trolley wheel with the trolley wire for maintaining said vent valve closed, and a spring applied to said valve plug adapted for reseating the same, substantially as described.

27. In a trolley catcher of the type described, the combination of the cylinder, a pipe adapted for connecting said cylinder with a source of supply of fluid under pressure, a main valve which controls said supply pipe constructed and arranged to be held closed by fluid pressure in a chamber formed in said valve casing, provided with a passageway by which it communicates with the supply

pipe and with a vent passage, a vent valve which controls said vent passage, and electrical means for maintaining said valve closed, said means comprising an electromagnet in circuit with the trolley wheel the core of which is provided with an axial bore, a stem on said vent valve which extends through and is slidably fitted to the bore in the core of the magnet, whereby, when the magnet is energized, the armature thereof will strike the projecting end of said valve stem and will close said valve and maintain the same closed, substantially as described.

[Claims 2 to 6, 8, 9, 11 to 22, and 24 to 26 not printed in the Gazette.]

1,271,107. SPRAYING APPARATUS. CARL WELLER, Zurich, Switzerland. Filed Oct. 13, 1917. Serial No. 196,469. (Cl. 91—44.)



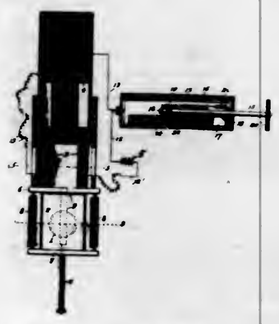
1. A spraying apparatus, such as a sand-blast-machine, white-washing or painting sprayer and the like, comprising a spraying material tank, a compressed air feed-pipe, a mixing-pipe connected to said feed-pipe, means provided with a passage for the spraying material and adjustably arranged between the material tank and the mixing pipe, a member removably secured to the spraying apparatus and a cleaning-pipe also arranged intermediate the material tank and the mixing-pipe and adapted to establish a communication between said adjustable means and the atmosphere, said adjustable means effecting according to its adjustment either a communication between the material tank and the mixing-pipe, or between the latter and the cleaning-pipe, or, after removal of the detachable member, either between the material tank and the atmosphere or between the mixing-pipe and the atmosphere.

2. A spraying apparatus, such as a sand-blast-machine, white-washing or painting sprayer and the like, comprising a spraying material tank, a compressed air feed-pipe, a mixing-pipe connected to said feed-pipe, means provided on the mixing-pipe for controlling the quality of the air and sand mixture, means for supplying compressed air from the mixing-pipe to the material tank, a casing arranged intermediate the tank and the mixing-pipe and connected with said tank and mixing-pipe, means adjustably arranged in said casing and provided with a passage for the spraying material, a cover detachably secured to said casing and a cleaning-pipe adapted to establish a communication between the casing space occupied by the adjustable means and the atmosphere, the adjustable means effecting according to its adjustment a communication between the material tank and the mixing-pipe or between the latter and the cleaning-pipe, or, after removal of the detachable cover, either between the material tank and the atmosphere or between the mixing-pipe and the atmosphere.

3. A spraying apparatus, such as a sand-blast-machine, white-washing or painting sprayer and the like, comprising a spraying material tank, a compressed air feed-pipe, a mixing-pipe connected to said feed-pipe, means provided on the mixing-pipe for controlling the quality of the air and sand mixture, means for supplying compressed air from the mixing-pipe to the material tank, a casing arranged intermediate the tank and the mixing-pipe and connected with said tank and mixing-pipe, means adjustably arranged in said casing and provided with a passage for the spraying material, a cover detachably secured to said casing, a cleaning-pipe adapted to establish a communication between the casing space occupied by the adjustable means and the atmosphere and a further pipe adapted to supply compressed air to the casing space occupied by the adjustable means, the latter effecting according to its adjustment a communication between the material tank and the mixing-pipe, or between the pipe supplying compressed air to said casing and the cleaning-pipe on the one hand and the atmosphere on the other hand or, after removal of the detachable cover, either between the material tank and the atmosphere or the mixing-pipe and the atmosphere.

[Claims 4 and 5 not printed in the Gazette.]

1,271,108. MAGNETIC VALVE. LOUIS ALFRED WHITE, Brooklyn, N. Y. Filed June 6, 1916. Serial No. 102,109. (Cl. 137—5.)



1. The combination with a valve, of a magnet for moving the same, a source of electrical energy connected with said magnet, controlling means including a resistance coil, and a movable contact adapted to be brought in engagement therewith for regulating the current passing to the magnet for allowing the valve to be moved various distances, and indicating means associated with said controlling means for designating the position of the valve.

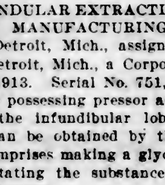
4. The combination with a valve, of an electromagnet for moving the same, a source of electrical energy in connection with the magnet, means for regulating the strength of the current passing to the magnet to permit the valve to be moved various distances, and means carried by said regulating means for indicating the extent of movement of the valve, said last mentioned means comprising a movable pointer.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,271,109. SPRING-TIRE. HARRY WHITESELL, Browerville, Minn. Filed Nov. 7, 1917. Serial No. 200,748. (Cl. 152—8.)

1. In a vehicle wheel, the combination with a rim; of a tire formed of a coil spring mounted upon said rim, clamping members for securing said tire in position and each having a head insertible between adjacent convolutions of said tire and provided with recesses for receiving said adjacent convolutions, and means connecting the clamping members for securing the same together.

2. In a vehicle wheel, the combination with a rim; of a tire formed of a coil spring and mounted upon said rim, clamping members for securing said tire in position and each having a head insertible between adjacent convolutions of said tire and provided with recesses for receiving said adjacent convolutions, one of said clamping members extending partly around the felly of the wheel and having an apertured plate upon the end opposite the head thereon, the other clamping member also having an apertured plate, and a bolt connecting said plates for securing said clamping members together.



3. In a vehicle wheel, the combination with a rim; of a tire formed of a coil spring and mounted upon said rim, clamping members for securing said tire in position and each having a head insertible between adjacent convolutions of said tire and provided with recesses receiving said adjacent convolutions, one of said clamping members extending partially around the felly of the wheel and having an apertured plate upon the end opposite the head thereon, the other clamping member also having an apertured plate, a bolt connecting said plates for securing said clamping members together, and a guard interposed between the first named clamping member and said felly.

1,271,110. HAND-COVERING. PERRY D. ZEIGLER, Olean, N. Y. Filed Sept. 4, 1917. Serial No. 189,614. (Cl. 2—9.)

1. A hand covering provided with a thumb; a transverse strip beneath which the thumb may be inserted when folded; and means for attaching the ends of the strip to the hand covering, both longitudinal edges of the strip being free, whereby the thumb may extend entirely across the strip and project therebeyond, thus permitting the thumb to lie flat irrespective of the length of the thumb and irrespective of the position of the strip with respect to the butt of the thumb and the tip thereof.

[Claims 2 and 3 not printed in the Gazette.]

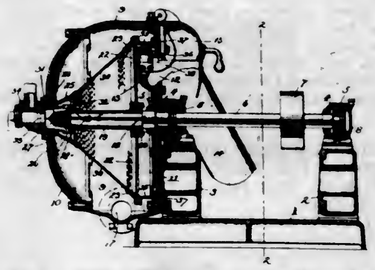
1,271,111. GLANDULAR EXTRACTIVE PRODUCT AND PROCESS OF MANUFACTURING SAME. THOMAS B. ALDRICH, Detroit, Mich., assignor to Parke, Davis & Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 3, 1913. Serial No. 751,962. (Cl. 167—7.)

1. A substance possessing pressor and oxytocic activity extracted from the infundibular lobe of the pituitary gland such as can be obtained by the herein described process which comprises making a glycerin extract of said lobe and precipitating the substance from said extract with alcohol or acetone.

4. The process of extracting a substance possessing pressor and oxytocic activity from the infundibular lobe of the pituitary gland which consists in dehydrating and defatting said lobe making a glycerin extract thereof and precipitating the said material therefrom by a suitable precipitant.

[Claims 2 and 3 not printed in the Gazette.]

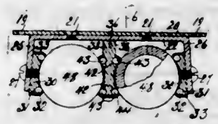
1,271,112. CENTRIFUGAL DRIER. FRANK B. ANDERSON, Cleveland, Ohio, assignor of one-third to Charles O. Anderson and one-third to Albert D. Anderson, Cleveland, Ohio. Filed Mar. 6, 1917. Serial No. 152,822. (Cl. 210—31.)



1. In a centrifugal drier, the combination of a horizontally-disposed shaft; a cone-shaped screen rotatable therewith; a casing surrounding the screen and having an offtake for the moisture; means for feeding the material to be dried to the smaller end of the screen; means for arresting the dried material at the opposite end of the screen; a discharge spout leading from the casing; and means for continuously removing the dried material and discharging it into the spout.

[Claims 2 to 11 not printed in the Gazette.]

1,271,113. ROLLER-BEARING CASTER. ABRAHAM ARMBAND, New York, N. Y., assignor to Maurice L. Farber, New York, N. Y. Original application filed Aug. 9, 1907, Serial No. 387,853. Divided and this application filed Aug. 26, 1913, Serial No. 786,676. Renewed Nov. 26, 1917. Serial No. 204,102. (Cl. 16—151.)



1. In a roller bearing caster the combination of a cage having end walls, roller bearing seats for said end walls having annular bearing grooves, ball bearings in said grooves, ring covers over the ends of the ball bearings and a ball roller maintained in proper position by said ball bearings.

2. In a roller bearing caster the combination of a cage having inclined end walls, roller bearing seats detachably fastened to said end walls and having annular bearing grooves, ball bearings in said grooves, ring covers over the ends of the ball bearing seats, a central ball bearing seat detachably connected to the cage and between the ball bearing seats attached to said end walls and having annular grooves, ball bearings in the latter grooves, a ring cover over the central ball bearing seats and ball rollers between the ball bearings of the central bearing seat and the ball bearings of the other ball bearing seats.

1,271,114. LIQUID FUEL. ARTHUR A. BACKHAUS, Baltimore, Md., assignor to U. S. Industrial Alcohol Co., a Corporation of West Virginia. Filed Oct. 12, 1917. Serial No. 196,179. (Cl. 44—8.)

1. A fuel comprising a petroleum distillate, an alcohol and an aromatic nitro compound adapted to blend the other constituents.

6. A fuel comprising gasolene, an alcohol and a nitrobenzol adapted to blend the other constituents.

18. A fuel comprising gasolene, kerosene, ethyl alcohol and a nitrobenzol adapted to blend the other constituents.

[Claims 2 to 5 and 7 to 17 not printed in the Gazette.]

1,271,115. LIQUID FUEL. ARTHUR A. BACKHAUS, Baltimore, Md., assignor to U. S. Industrial Alcohol Co., a Corporation of West Virginia. Filed Oct. 12, 1917. Serial No. 196,180. (Cl. 44—8.)

1. A fuel comprising a petroleum distillate, an alcohol and a phenol adapted to blend the other constituents.

9. A fuel comprising gasolene, ethyl alcohol and a phenol adapted to blend the other constituents.

12. A fuel comprising gasolene, kerosene, ethyl alcohol and cresol adapted to blend the other constituents.

[Claims 2 to 8, 10, and 11 not printed in the Gazette.]

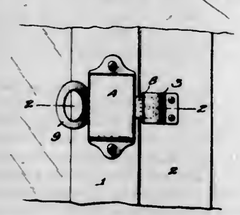
1,271,116. COMBINED CORNER-PLATE AND SPRING-SUPPORT FOR BEDS. ADOLPH BALLENBERG, New York, N. Y. Filed June 16, 1917. Serial No. 175,112. (Cl. 5—55.)



4. A device of the class described comprising a pair of members arranged to be placed at an angle to one another, projections on each of said members, the projections on one of said members comprising a plurality of upturned wedge shaped hooks, the projections on the other plate comprising a plurality of down turned wedge shaped hooks, a connecting plate having a pair of vertical angularly disposed sides provided with oppositely disposed apertures through which the hooks on the members project and are movable and a supporting plate formed on the lower end of the vertical sides.

[Claims 1 to 3 not printed in the Gazette.]

1,271,117. LATCH. CHARLES S. BARNARD, Bridgeport, Conn., assignor to The Bassick Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Oct. 25, 1917. Serial No. 198,421. (Cl. 70—42.)



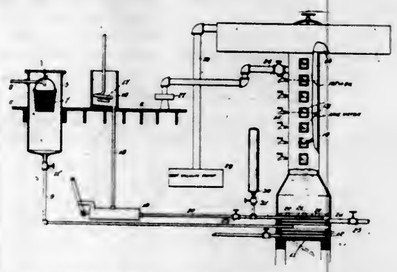
1. A latch comprising a box-like casing provided in its front and rear walls with slots, the slot in the front wall being in a plane nearer the base of the casing than the slot in the rear wall, a flat sheet metal bolt slidable in said slots and having its ends normally projecting beyond the respective slots, stop means on the bolt to engage the casing to limit the withdrawal of the bolt, and a handle formed on the rear end of the bolt outside the casing, that portion of the bolt adjoining said handle being curved at the point where the bolt passes through the slot in the rear wall so as to throw the handle outwardly in a plane farther removed from the base of the casing when the bolt is withdrawn.

2. A latch comprising a box-like casing opened at its base and provided in a pair of opposing side walls with slots, one of which is arranged in a higher plane from the base than the other slot, a latch bolt slidably arranged in the casing slots and projecting at each end from the casing, a teat struck from one projecting end of the bolt to serve as a stop against withdrawal, a handle formed on the opposite projecting end of the bolt, and spring means for projecting the bolt.

4. A latch comprising a box-like casing opened at its base and provided in a pair of opposing side walls with slots, one of which is arranged in a higher plane from the base than the other slot, a latch bolt slidably arranged in the casing slots and projecting at each end from the casing, a teat struck from one projecting end of the bolt to serve as a stop against withdrawal, a handle formed on the opposite projecting end of the bolt, one edge of the bolt having a pair of inclined slots defining a tongue, a normally alined tongue in the casing, and a coiled spring engaging over the tongues for projecting the bolt.

[Claim 3 not printed in the Gazette.]

1,271,118. METHOD OF SUPERREFINING FATS. STEWART R. BARNETT, Belleville, Wis. Filed June 4, 1917. Serial No. 172,581. (Cl. 87—12.)



1. A method of super-refining fats and oils to remove free fatty acids therefrom which comprises agitating the fat or oil with heated lime water, precipitating the excess of lime with carbon dioxid, and separating the sludge including the lime soaps from the fat or oil.

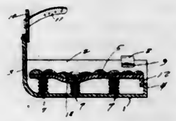
4. A method of super-refining fats and oils to remove free fatty acids therefrom which comprises combining said acids with lime in the presence of a catalytic agent and separating the lime soaps from the fat or oil.

5. A method of super-refining fats and oils to remove free fatty acids therefrom which comprises combining said acids with lime in the presence of sodium bicarbonate and separating the lime soaps from the fat or oil.

11. A method of super-refining fats and oils to remove free fatty acids therefrom which comprises agitating the fat or oil with lime water in the presence of a catalyzer to form lime soaps and subsequently precipitating the excess of lime and impregnating the fat or oil with carbon dioxid to prevent oxidation thereof.

[Claims 2, 3, and 6 to 10 not printed in the Gazette.]

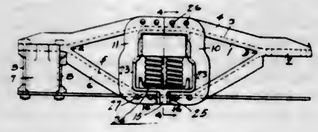
1,271,119. KNEE-PROTECTOR. HOMER L. BARRETT, Cyril, Okla. Filed Jan. 7, 1918. Serial No. 210,760. (Cl. 2—130.)



1. A knee protector, consisting of a casing having a base, side walls, a front end wall rising above the upper edges of the side walls and a rear end wall of less vertical extent than the side walls, a plurality of springs mounted upon the base of the casing, a plate inclosed within the walls of the casing and carried by said springs, and means for securing the casing to a wearer's leg with the plate overlying the knee.

[Claim 2 not printed in the Gazette.]

1,271,120. TRUCK SIDE PEDESTAL. SAMUEL A. BENNER, Pittsburgh, Pa. Filed Sept. 22, 1913. Serial No. 791,051. Renewed Nov. 23, 1917. Serial No. 203,623. (Cl. 105—243.)



1. In car truck construction the combination with the compression and tension members of the side frame, of a pedestal formed of a rolled section having its web split transversely in a plane parallel with its opposite flat faces, said split sections being formed up in the shape of a pedestal frame with one extremity of the web forming laterally reinforcing webs extending laterally to each side of the tension member beneath the spring plank base of the pedestal.

2. In car truck construction, the combination with the compression and tension members of the side frame, of a pedestal formed of a rolled section having a web, said web being split transversely from one end at a point adjacent the opposite end in a plane parallel to the flat faces of the web, said split sections being shaped up to form the spring plank base side wall and top walls of the pedestal and said unsplit portion forming reinforcing webs beneath the spring plank base portion extending laterally to each side of the tension member.

7. In car truck construction the combination with a truck side frame having a compression member consisting of an upwardly opening continuous channel portion, and a tension member consisting of a downwardly opening continuous channel portion, of a pedestal having reinforcing webs extending laterally beneath its spring plank base, the flanges of the pedestal section extending along each side of the side walls of the compression and tension members, respectively, and being secured thereto.

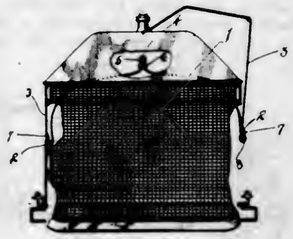
8. In car truck construction, the combination with a truck side frame having a compression member consisting of an upwardly opening continuous channel, and a tension member consisting of a downwardly opening continuous channel portion, of a pedestal formed of a rolled section having its web split transversely in a plane parallel with its opposite flat faces, said split sections being formed up in the shape of a pedestal frame with one extremity of the web forming laterally reinforcing webs extending laterally to each side of the tension member beneath the spring base of the pedestal, the flanges of the pedestal section extending along each side of the side walls of the compression and tension members, respectively, and being secured thereto.

[Claims 3 to 6 and 9 not printed in the Gazette.]

1,271,121. HOOD-HOLDER. GUY M. A. BIANCO, Denver, Colo. Filed Nov. 5, 1917. Serial No. 200,274. (Cl. 180—69.)

1. As a new article of manufacture, a holder for automobile hood sections, consisting of a single strip of metal, means formed centrally of the strip for detachably engaging the radiator rod of the automobile, both ends of said strip being free and provided with pockets for detachably engaging the lower edges of the hood sections.

3. As a new article of manufacture, a holder for automobile hood sections, consisting of a single strip of resilient metal, said strip being disposed transversely within the automobile hood, and having a resilient clamping loop formed between its free ends for detachably engaging the radiator rod of the automobile, and resilient pockets formed on the free ends of the strip for detachably engaging the lower edges of the hood sections to hold the same elevated.



5. In combination with the radiator rod of an automobile, a hood holder consisting of a single strip of resilient metal having pockets formed upon its ends for engaging the lower edges of the hood sections to hold the same elevated, said pockets having extensions carried thereby for yieldably engaging the hood sections when the same are in their lowered positions, and a clamp carried by the strip between the pockets for detachably engaging the radiator rod.

7. In combination with the radiator rod of an automobile, a hood holder formed from a strip of metal having pockets upon its ends for engaging the hood sections to hold the same in raised positions, said strip being bent intermediate its ends to provide a loop for clampingly engaging the radiator rod, said loop being disposed above the plane of said pockets, as and for the purpose set forth.

[Claims 2, 4, and 6 not printed in the Gazette.]

1,271,122. FLEXIBLE COUPLING. FRANK ROSS BLAIR, Glen Ridge, N. J., assignor to F. R. Blair & Co., Inc., New York, N. Y., a Corporation of New York. Filed Mar. 12, 1917. Serial No. 154,167. (Cl. 64—13.)



1. A device of the character described comprising, in combination, two driving members and means for connecting them together including a flexible power transmitting element and parts having engaging surfaces in planes perpendicular to the axis of the shaft and means for clamping said surfaces against each other for the transmission of torque at any position of angular adjustment between the driving members.

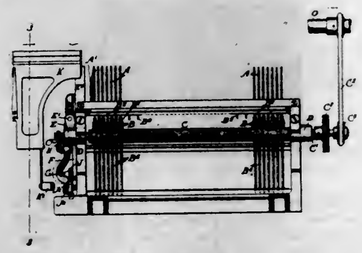
2. A device of the character described comprising, in combination, two driving members and means for connecting them together including a flexible power transmitting element and parts having engaging surfaces in planes perpendicular to the axis of the shafts, means for clamping said surfaces against each other for the transmission of torque at any position of angular adjustment between the driving members, and means to prevent slipping of said surfaces when so clamped.

3. A device of the character described, comprising in combination, two members, means for flexibly connecting

said members together, a power transmitting element and means for clamping said power transmitting element to one of the members, said means comprising a washer having teeth.

[Claims 4 to 24 not printed in the Gazette.]

1,271,123. TYPOGRAPHICAL MACHINE. ROBERT OTIS BOARDMAN, Springfield, Ill., assignor to Mergenthaler Linotype Company, a Corporation of New York. Filed Apr. 12, 1917. Serial No. 161,405. (Cl. 199—25.)



1. A keyboard mechanism including key selected actuating elements and a power driven operating roll therefor mounted to be shifted axially or longitudinally to different operative positions, for the purpose described.

4. In a typographical machine, the combination of a series of escapement actuating reeds, a power driven operating roll, rotary members adapted to be engaged by said roll for imparting movement to the actuating reeds, and finger keys controlling the engagement of the rotary devices with the operating roll, said roll being shiftable axially or longitudinally to different operative positions to present different portions of its surface in position for engagement with the rotary members.

9. A keyboard mechanism including key selected actuating elements and a power driven operating roll therefor mounted to be shifted axially or longitudinally to different operative positions, in combination with means adapted by its repeated actuations to shift the operating roll alternately in opposite directions, the said means comprising a pivoted lever connected to the operating roll, a rotary cam for rocking the lever in opposite directions, and devices for rotating the cam.

11. A keyboard mechanism including, in combination, a power driven operating roll, and a key-controlled rotary member adapted to be engaged with the roll, the said parts being shiftable, one relatively to the other longitudinally of the roll, to present different portions of the roll's surface in position for engagement with the rotary member.

[Claims 2, 3, 5 to 8, and 10 not printed in the Gazette.]

1,271,124. SWITCHING DEVICE. WILLIAM T. BOOTH, East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 30, 1916. Serial No. 139,805. (Cl. 179—164.)



1. In a switching device, a mounting plate, a bracket having a flat main portion and a plurality of angular extensions thereto, a plurality of circuit controlling members mounted on one of said extensions, an actuating member mounted on said main portion and in operative relation to said circuit controlling members, means on said main portion for mounting the device in a position whereby the actuating member is in a plane parallel with the plane of said mounting plate, and corresponding means on one of said angular extensions for mounting the device in a position whereby the actuating member is in a plane perpendicular to the plane of said mounting plate.

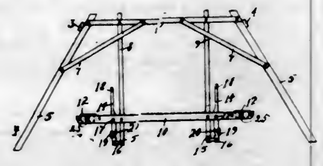
2. In a switching device, a mounting plate, a bracket comprising a flat main portion and a plurality of angular extensions, a plurality of contact springs mounted upon one of the angular extensions, an actuating member pivotally mounted upon the main portion of the bracket in operative relation to the free ends of the contact springs, and means corresponding with openings provided in the main portion and the other angular extensions for mounting the bracket on the mounting plate with the actuating arm in a plane parallel with or at an angle to the plane of the mounting plate.

1,271,125. WELDING COMPOUND. FREDERICK G. BRAUND and LOUIS J. VARGO, Cleveland, Ohio. Filed Dec. 26, 1916. Serial No. 138,926. (Cl. 75—187.)

3. A welding compound consisting of boracic acid, sodium bicarbonate, and ultramarine blue, in substantially the proportions stated.

[Claims 1 and 2 not printed in the Gazette.]

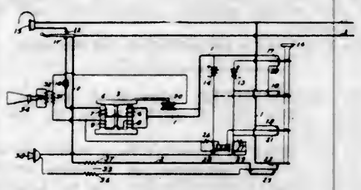
1,271,126. SWING. DON C. BRETZ, Fort Worth, Tex. Filed July 31, 1916. Serial No. 112,288. (Cl. 155—35.)



1. A swing comprising a supporting frame and hangers pivotally connected thereto, seat supporting beams pivotally mounted on said hangers and having extensions beyond said hangers, seats mounted on said extensions, said hangers having downward extensions, levers fulcrumed on said beams, link bars pivotally connected to said levers and to said downward extensions, and foot rests on said levers.

[Claims 2 and 3 not printed in the Gazette.]

1,271,127. TELEPHONE SYSTEM. WILLIAM G. BRITTEN, Fanwood, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 15, 1916. Serial No. 91,406. (Cl. 179—81.)



3. In a telephone system, a line circuit, a transmitter and a receiver, an amplifier, sources of current for said system, switching means for disconnecting said transmitter and connecting said sources of current in parallel, one with the other, to supply current to said amplifier; switching means for connecting said sources of current in series, one with the other, and in turn in series with said transmitter, and derived circuit means for retaining said amplifier connected to its original potential point on said sources of current.

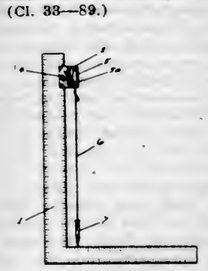
4. In a telephone system, a line circuit, a transmitting and a receiving means associated with said line circuit, sources of current for said transmitting and receiving means, and an electroresponsive means for regulating the strength of working current supplied to said transmitting and receiving means.

7. In a telephone system, a telephonic device, sources of current for said system, electro-responsive means included with said sources of current to regulate the working current supplied to said device, switching means to vary the arrangement of said sources of current in said system from one condition to another, and means to momentarily interrupt the inclusion of said electro-responsive means with said sources of current on operation of said switching means.

10. In a telephone system, a line circuit, an amplifier, a receiver associated with said amplifier, a transmitter for connection with the said line circuit, means to control the connection of said transmitter with said line circuit, current sources to supply current to said amplifier and transmitter, and switching means to interchangeably connect said sources of current in series or in parallel one with the other, depending on whether or not the transmitter is connected with said line circuit.

[Claims 1, 2, 5, 6, 8, and 9 not printed in the Gazette.]

1,271,128. PLUMB AND LEVEL GAGE. CHARLES BRIZENDINE, Stockton, Cal. Filed Aug. 20, 1917. Serial No. 187,239. (Cl. 33—89.)



A device of the character described comprising a plate, a means for fixing the plate to a square, the plate being provided with a slot terminating in a notch whereby a plumb line may be suspended therein.

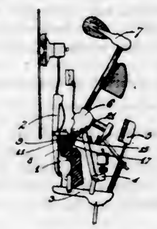
1,271,129. BOX-STRAP SEAL. WINFRED MUDGE BROOKS, East Orange, N. J., assignor to E. J. Brooks & Co., New York, N. Y., a Corporation of New York. Filed Mar. 22, 1918. Serial No. 223,922. (Cl. 24—23.)



3. An improved seal member for sealing box traps consisting of a sleeve of substantially rigid metal having a flat body portion, two parallel sides bent therefrom down and under to receive and embrace the edges of the overlapped ends of a box strap, said sleeve having a waist part defined by two slits extending in from each of said parallel sides, said waist part being adapted to being constricted by the pressing down and under of the parts between said slits on each side, such constriction operating to shear and turn down and under with said parts of the portions of box straps embraced thereby.

[Claims 1, 2, and 4 not printed in the Gazette.]

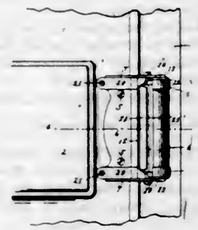
1,271,130. FLANGE FOR PIANO-ACTIONS. JULIUS N. BROWN, Chicago, Ill. Filed May 14, 1917. Serial No. 168,382. (Cl. 84—101.)



3. In a piano action flange, a flange-plate having an aperture therein, a grooved lug integral therewith, a spring plate on said flange-plate having a slot therein adapted to register with said aperture, a clamping tongue integral with said spring plate adapted to register with said grooved lug for pivotally holding a piano-hammer in position, a hook integrally formed on said spring plate adapted to engage around one edge of said flange-plate to hold the spring plate alined therewith, and a screw engaged through said slot and aperture to hold said grooved lug and clamping tongue together.

[Claims 1, 2, and 4 to 6 not printed in the Gazette.]

1,271,131. LATCH. LEE S. CHADWICK, East Cleveland, Ohio, assignor to the Cleveland Metal Products Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 1, 1914. Serial No. 859,719. (Cl. 70—49.)



1. The combination, with a pair of elements comprising one a frame and the other a closure therefor, of a bracket that is carried by one element and having a stop, a latch member pivoted to the bracket and having a keeper engaging portion, means for moving the latch member toward the stop, and a yielding keeper supported by the other element that is arranged to be engaged by the keeper engaging portion of the latch member, said keeper, when engaged, serving to hold the latch member out of contact with the stop of the bracket.

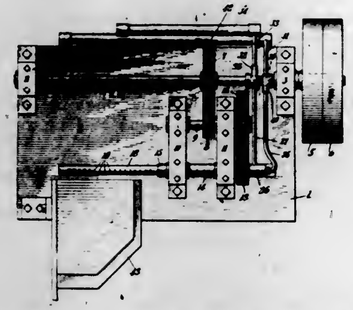
2. The combination, with a pair of elements comprising one a frame and the other a closure therefor, of a base plate that is carried by one element, a pair of brackets which extend from the base plate and beyond the edge of the closure, one of said brackets having a stop, a latch member which comprises a pair of end plates that are connected by a bar, pivotal connections between the end plates and the aforesaid brackets, a spring for moving the latch member into engagement with the aforesaid stop, and a keeper of resilient material that is supported by the other element in a position to be engaged by the bar of the latch member, said keeper, when engaged, serv-

ing to hold the latch member out of contact with the aforesaid stop.

3. The combination, with a frame and a closure therefor, of a base plate that is carried by the closure, a pair of brackets which extend from the base plate and beyond the edge of the closure where they are provided with stops, a latch member which comprises a pair of end plates that are connected by a bar, pivotal connections between the end plates and the aforesaid brackets, springs for moving the latch member so that its end plates engage the aforesaid stops, and a keeper of resilient material that is supported by the frame in a position to be engaged by the bar of the latch member when the closure is in closed position.

[Claims 4 to 7 not printed in the Gazette.]

1,271,132. PAPER-SHELL MACHINE AND MANDREL FOR SAME. JOHN CHESNEY, Paulsboro, N. J., assignor to E. I. du Pont de Nemours Powder Company, Wilmington, Del., a Corporation of New Jersey. Filed Sept. 18, 1915. Serial No. 51,342. (Cl. 93—81.)

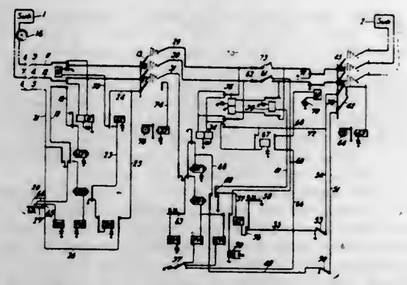


1. A mandrel for paper shells having lateral apertures and a head stationary with regard to the mandrel, said head having an end aperture.

14. A hollow mandrel for paper shells having apertures and means responsive to pressure upon the interior surface of the said mandrel for applying such pressure to move a shell relative to the mandrel.

[Claims 2 to 13 not printed in the Gazette.]

1,271,133. TELEPHONE SYSTEM. HENRY P. CLAUSEN, Mount Vernon, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 1, 1917. Serial No. 183,873. (Cl. 179—9.)



1. In a telephone exchange system, subscribers' lines, selector and connector switches for establishing a connection between said lines, means associated with the selector switches for recording the number of calls that fail to secure service due to all of the connectors being simultaneously busy, and means associated with said connector switches for recording the number of calls extended to a group of subscribers' lines.

2. In a telephone exchange system, subscribers' lines, selector and connector switches for establishing a connection between said lines, registering devices associated with the selector switches adapted to register the number of calls failing to secure service due to all the connectors apportioned to such calls being busy, and registering means associated with said busy connector switches for recording the number of calls extended to a group of subscribers' lines.

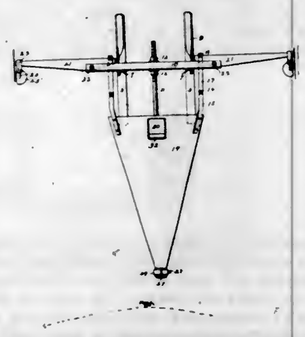
3. In a telephone exchange system, subscribers' lines, selector and connector switches for establishing a connection between said lines, said connectors being arranged in groups, a group of trunks extending from said selectors to each group of connectors, a registering device associated with each group of trunks and operated by the selector switches to register the number of calls lost by any of said groups due to all the connectors apportioned to such group being busy at the time the calls were made, and registering devices adapted to be associated with any such group of busy connectors and operated thereby for registering the number of calls extended to said group.

4. In a telephone exchange system, selector and connector switches, a group of subscribers' lines arranged in sub-groups and terminating in said connector switches, means including said selectors and connectors for connecting a calling line to any line in said group, means operated by the selector switches for detecting the number of unsuccessful calls due to the simultaneous busy condition of all connectors apportioned to said group, and means associated with each of said sub-groups of lines for recording the number of calls to said sub-group.

5. In a telephone system, subscribers' lines, selector switches having terminal banks arranged in levels and brushes coöperating with said banks, groups of connector switches having terminal banks arranged in levels and brushes coöperating with said banks, a group of trunks interconnecting each selector level and a group of connectors, the subscribers' lines terminating in the terminals of said connectors, operating means for moving the selector brushes over the terminals of any level to seize an idle trunk thereof, operating means for moving the brushes of the connector associated with the trunk seized over any level of said connector terminals to connect with a desired line therein, a registering device associated with each selector level and operated each time a selector finds all the connectors of a group busy, and a registering device associated with each level of such a busy connector group for counting the total number of calls made into said level.

[Claims 6 to 8 not printed in the Gazette.]

1,271,134. TAILINGS-DISPOSAL APPARATUS. IRWIN S. CLIFFORD and FRED C. TOMPKINS, Miami, Ariz. Filed Mar. 12, 1918. Serial No. 221,948. (Cl. 83—82.)



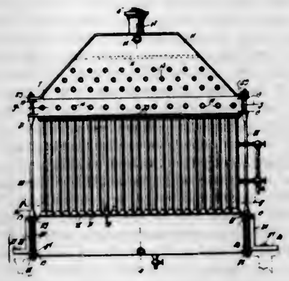
1. A device of the character described comprising a pair of counterweighted levers, a tank suspended therebetween, a fixed valve with which said tank coöperates and an overflow located at the upper portion of said tank.

2. A device of the character described comprising a supporting frame work, a pair of counterweighted levers pivoted thereon, a conical receptacle lying between and suspended from said levers, a fixed rod carried by said framework and a valve carried by said fixed rod, the weights acting to move the receptacle into such position as to engage the valve and close the discharge from the receptacle, and the receptacle being movable under the weight of accumulated sand therein to discharging position, an overflow compartment within said receptacle adjacent the top thereof and a lateral discharge from said overflow compartment.

3. A device of the character described comprising a supporting frame, a pair of oppositely projecting, pivoted, counterweighted levers carried by said frame, said levers having concave seats formed in their upper faces adjacent their inner ends, convex members seated in said recesses, links hung from said convex members, a conical receptacle, members by which the conical receptacle is supported, said members being pivotally connected to the lower ends of the links, a vertically adjustable rod carried by the frame, a valve carried by the rod and disposed within the receptacle and a lateral overflow from the receptacle.

4. In a device of the character described the combination with a fixed valve, a vertically movable counterweighted receptacle coöperating therewith and acting under the weight of material contained therein to move away from said valve to thereby discharge the contents of the receptacle, an opening formed in the side wall of the receptacle below the top thereof, a compartment, the upper edge of which terminates below the upper edge of the receptacle and which embraces the opening in the wall of the receptacle, a lateral discharge spout carried by and bodily movable with the receptacle, and leading from said opening and a discharge conduit independent of the receptacle disposed below and in spaced relation to the spout whereby vertical movement of the receptacle is permitted while the relation between the spout and the conduit is maintained.

1,271,135. RADIATOR. JOHN C. COLTRIN, Lucas, Kans. Filed Sept. 9, 1916. Serial No. 119,257. (Cl. 257—129.)

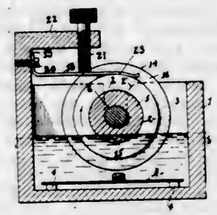


1. In a device of the class described, a pair of superimposed tanks, the said tanks being provided with vertically alined openings, tubes extending loosely at their ends into said openings to establish communication between said tanks, a shoulder projecting outwardly from each of said tubes at the lower end thereof, threads upon the upper ends of said tubes, nuts upon said threads, and gaskets between said shoulder and the lower tank and between said nuts and upper tank.

2. In a device of the class described, upper and lower tanks, pipes establishing communication between said tanks, the upper tank having its upper end open, an inwardly projecting flange defining the open end of said tank, a cap piece having its lower end open, an inwardly projecting flange defining said open end and being adapted to rest upon the flange of said upper tank, outwardly projecting apertured ears on said tanks and cap piece and the said ears having their apertures alined, rods extending through said apertures, and shoulders on said rods engaged with said ears for maintaining said tanks in spaced relation.

3. In a device of the class described, upper and lower tanks, pipes establishing communication between said tanks, outwardly projecting ears at the upper and lower ends of said tanks, rods extending through said ears, shoulders adjacent the upper and lower ends of said rods engaged with said ears to maintain the said tanks in spaced relation, a cap piece resting on said upper tank, ears projecting outwardly from said cap piece and resting upon the ears at the upper end of said upper tank, the said rods extending through said cap ears, and nuts on the ends of said rods.

1,271,136. PROCESS AND APPARATUS FOR ELECTRODEPOSITION UNDER COMPRESSION. EDWARD G. COOK, Long Island City, N. Y., assignor, by mesne assignments, to Copper Products Company, a Corporation of Maine. Filed May 13, 1916, Serial No. 97,227. Renewed May 11, 1918. Serial No. 234,016. (Cl. 204—11.)



1. The hereinbefore described process for the formation of metallic articles which consists of the following steps:—(1) forming a conducting-mold-blank; (2) positioning such mold-blank upon and in contact with a cathode; (3) positioning insulation upon the cathode to wall such mold-blank to form a molding-cavity outward of such mold-blank; (4) immersing the cathode in an electrolytic-bath; (5) electrolytically depositing upon the face of the conducting-mold-blank the required quantity of deposition to form the article desired to be produced; (6) during such deposition subjecting the deposition to mechanical smearing or burnishing pressure so as to by such pressure consolidate, densify and compact the same so as to form a homogeneous metallic structure; (7) removing the conducting mold-blank and article from the cathode; and (8) separating the mold-blank from the article.

2. The hereinbefore described process for the formation of metallic rings, which consists of the following steps:—(1) forming an annular conducting-mold-blank or ring, or a plurality thereof; (2) positioning the same upon and in contact with the periphery of a cylindrical-conducting-cathode; (3) interposing upon such cylindrical-cathode insulating-rings to form an annular molding-cavity outward of the peripheral surface of each of such mold-blank-ring or rings; (4) immersing the cathode so supplied in an electrolytic depositing bath; (5) electrolytically depositing upon the face of the conducting-mold-blank ring or rings within the insulating rings the required quantity of deposition to form the ring or rings desired to be produced during rotation of the cathode; (6) during such deposition subjecting the deposition to mechanical smearing or burnishing pressure so as to by such pressure consolidate, densify and compact the same so as to form a homogeneous metallic structure; (7) removing the conducting-mold-blank or blanks, article or articles from the cathode; and (8) separating the two.

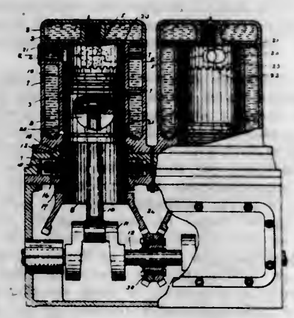
3. In a device of the class described, an electrolytic-bath-tank or receptacle adapted to contain electrolytic

fluid; an electrolytic-cathode located in the tank; an electric-anode also located in the tank; a conducting-mold-blank or blanks positioned on and in contact with the cathode; walls of insulating material adjacent to the mold-blank or blanks, also mounted on the cathode extending beyond the mold-blank or blanks to form a deposition cavity or cavities wherein the article or articles required to be produced may be electrolytically deposited; and means for compressing the foliated electrolytically deposited laminæ during such deposition, by a smearing and burnishing pressure.

4. In a device of the class described, a receptacle adapted to contain an electrolytic-fluid; an anode located in the receptacle; a cathode adapted to be removably and revolubly mounted in the receptacle; a plurality of conducting-mold-blanks in contact with such revoluble cathode carried thereby; walls of insulating material walling the mold-blanks, and extending beyond the outer surface thereof so as to form molds of the shape and contour of the articles desired to be electrolytically produced; means for mechanically compressing the foliated electrolytically deposited laminæ during such deposition by a smearing and burnishing pressure; and means for moving the cathode and its accompanying mold-blank or blanks in the bath, during such deposition and mechanical compression and consolidation.

5. In a device of the class described, a tank or receptacle for holding an electrolytic-depositing bath; an anode located in said receptacle; a cathode located in such receptacle removably and revolubly mounted in such receptacle; an annular conducting mold-blank-ring, or a plurality thereof, located upon and in contact with the periphery of the cathode; and insulating rings also mounted upon the cathode, and extending beyond the outer peripheral surface of such conducting mold-blank-ring or rings so as to leave a cavity or cavities of the form of the ring or rings to be deposited; a source of electrical supply connected with the cathode and anode; means for rotating the cathode; and a revolubly mounted wheel or wheels fitting in the molding-cavity or cavities exerting mechanical pressure upon the rings being electrolytically deposited therein, during the rotation of the cathode, which pressure wheels are rotated reversely to the rotation of the cathode, with a yielding pressure so as to compact, densify and consolidate the foliated laminæ being deposited while in a substantially nascent state during such deposition.

1,271,137. INTERNAL-COMBUSTION ENGINE. DORSETT ALLEN DAVISON, Richmond, Va. Filed Dec. 13, 1915. Serial No. 66,491. (Cl. 123—80.)

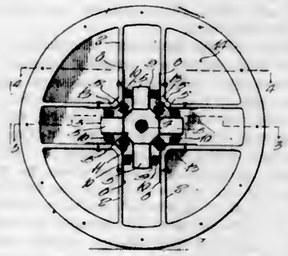


1. In an internal combustion engine of the rotary valve type, the combination with a cylinder having inlet and exhaust ports therein, of a liner rotatable in the cylinder, a piston working in the liner, and an annular expansible ported valve adapted to control the flow of gas through the ports of the cylinder, and connected with the adjacent end of the liner, and adjustable therewith to change the relation between the position of the port in the valve and the position of the piston.

12. In an internal combustion engine, the combination of a cylinder having inlet and exhaust ports therein, an elastic annular valve making close contact with the inner wall of the cylinder and adapted to control the flow of gas through the ports in the cylinder, a liner rotatable within the cylinder and of less outside diameter than the inside diameter of the cylinder so as to form an annular space for the reception of lubricant, and having adjacent its crank end one or more packing rings to impede the escape of lubricant; the said liner being connected at its head end with the adjacent edge of the valve by means of serrations so arranged that the rotating liner will rotate the valve, means for rotating the liner, and means for introducing lubricant between the inner wall of the cylinder and the outer surfaces of the liner and the annular valve.

[Claims 2 to 11 not printed in the Gazette.]

1,271,138. SPRING-WHEEL. FRANK G. DAWSON, Scottsville, Va. Filed Oct. 8, 1917. Serial No. 195,370. (Cl. 152—44.)

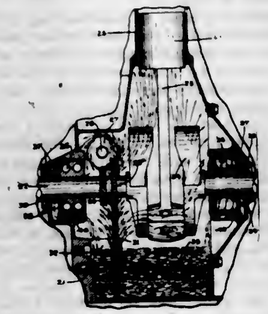


A spring wheel comprising a wheel body having a cross shaped axial recess therein, the portions of said body at the junction of the adjacent walls of the adjacent radial portions of said recess being disposed angularly to said radial portions of said recess, plates secured to said body and disposed around the corners formed by the adjacent walls of the adjacent radial portions of said recess, said plates fitting flat against the walls of the radial portions of said recess and the above mentioned angularly arranged portions of said body, a hub disposed axially in said recess and having arms extending radially therefrom and disposed in said radial portions of said recess, the portions of said hub disposed between the inner ends of said arms being arranged angularly to the adjacent sides of the latter, additional plates secured to said hub and fitting flat against the sides of said arms and the angularly arranged portions of said hub disposed between said arms, sets of oppositely extending coil springs disposed between the opposite sides of said arms and the adjacent walls of said recess, one of the ends of said springs being secured to the first mentioned plates and their outer ends being secured to the last mentioned plates, and radially extending coil springs disposed between the portions of said hub between said arms and the angular portions of said recess between its radially extending portions, one of the ends of said radially extending springs being secured to the first mentioned plates and their other ends being secured to the last mentioned plates.

1,271,139. COMPOSITION OF MATTER TO BE USED AS A FLOUR. RICHARD W. DICKENSON, Jr., Sioux Falls, S. D. Filed Nov. 16, 1917. Serial No. 202,326. (Cl. 99—10.)

The herein described composition of matter, consisting of bran, whole wheat flour, corn meal, shorts, rye flour and wheat flour, substantially as described and for the purpose specified.

1,271,140. OILING SYSTEM. ERNEST DICKEY, Dayton, Ohio, assignor to The Domestic Engineering Company, a Corporation of Ohio. Filed Sept. 13, 1916. Serial No. 119,888. (Cl. 184—13.)



1. In an oiling system for combustion engines, the combination with a combustion engine, including a crank case constituting an oil reservoir; a crank shaft mounted in said crank case; means associated with said crank case for extending into said oil reservoir and adapted to pump oil therefrom; a cam shaft gearing adapted to be driven by said crank shaft and so associated therewith as to lie in the path of the pumped oil; and means associated with the crank shaft, adapted to receive oil from the oil pumping means, and also from the cam shaft gearing whereby said oil will be thrown into contact with other moving parts of the engine.

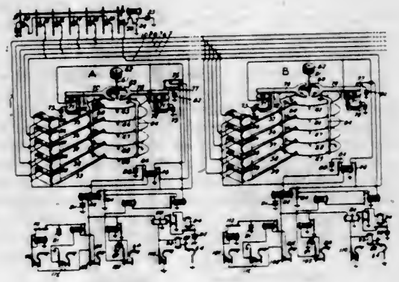
2. In a device of the character described, the combination with a combustion engine having a crank case adapted to contain a body of lubricant; a crank shaft mounted in said crank case, and having a gear element mounted thereon; a coöperating gear wheel associated therewith and adapted to normally rotate in the body of lubricant, the gear element on the crank shaft of said gear wheel constituting a geared pump for transferring the lubricant from the bottom of the crank case; a cam shaft provided with a driven pinion; a driving pinion for said cam shaft, coöperating with the driven pinion and mounted upon the crank shaft, the said driven cam shaft pinion being so positioned as to lie in the path of the pumped lubricant; and a counter-weight mounted upon the crank shaft and so associated with the geared pump as to receive a portion of the pump lubricant and adapted to transfer the lubricant to other moving parts of the engine.

3. In a device of the character described, the combination with a combustion engine, having a crank case adapted to contain a body of lubricant; a crank shaft mounted in said crank case; a pair of coöperating gear elements driven by said crank shaft and so associated in the crank case as to pump a portion of the lubricant into contact with the moving parts of the engine, one of said gear elements being mounted directly on the crank shaft and the other of said gear elements being mounted on the crank case.

[Claims 4 and 5 not printed in the Gazette.]

1,271,141. PRINTING-TELEGRAPH SYSTEM. AMOS F. DIXON, Newark, N. J., assignor, by mesne assignments, to Western Electric Company, Incorporated, a Corporation of New York. Filed Apr. 15, 1915. Serial No. 21,542. (Cl. 178—31.)

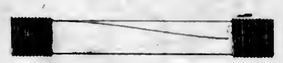
1. A printing telegraph system comprising a current controller, a plurality of transmission lines associated therewith, a plurality of electrical selecting devices, one associated with each said line, and energized solely thereby, whose coöperation causes the performance of any desired operation, and means operated first by said controller and later through the influence of said selecting devices for restoring the controller and the selecting devices to normal after the completion of an operation.



2. A printing telegraph system comprising a plurality of transmission lines for interconnecting a plurality of stations, selecting apparatus at each station for performing the desired operations, a current controller associated with said lines for effecting the operation of said apparatus, and a self-locking clear-out relay coöperating with said system for restoring the controller and the selecting apparatus to normal after the completion of an operation.

[Claim 3 not printed in the Gazette.]

1,271,142. METHOD OF MAKING BOLTS. ETHAN I. DODDS, Zelienople, Pa., assignor to Kerner Manufacturing Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Mar. 31, 1914. Serial No. 828,494. Renewed June 26, 1916. Serial No. 106,056. (Cl. 10—27.)



1. The method of making bolts, which consists in piercing the central portion of a blank and spreading apart the portions on each side of the opening, then closing the opening in the body and reducing the blank to its initial size and contour; substantially as described.

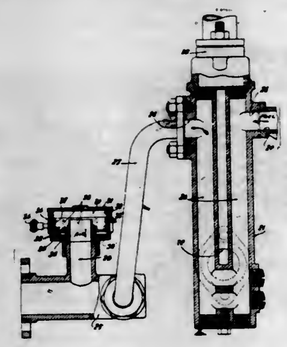
2. The method of forming stay-bolts which consists in longitudinally piercing the intermediate portion of a blank between the ends thereof without removing any metal and spreading apart the portions on each side of the opening, and then forcing the spread apart portions toward each other and twisting the blank; substantially as described.

3. The method of forming stay-bolts which consists in longitudinally slitting the intermeditae portion of a blank between the ends thereof without removing any metal and spreading apart the portions on each side of the opening, then forcing the spread apart portions toward each other and twisting the blank, and then upsetting enlarged heads on the ends thereof; substantially as described.

1,271,143. FUEL-HEATER. ALEXANDRE DOUAUD, Nantes, France. Filed Dec. 12, 1913. Serial No. 806,198. (Cl. 257—241.)

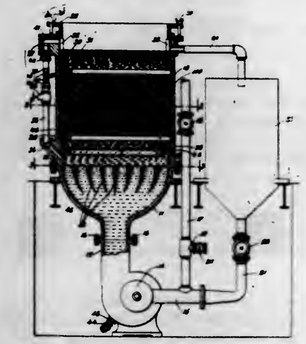
A heater or vaporizer for carbureting apparatus using heavy fuel comprising in combination a tubular chamber, rectilinear conduits formed in said chamber extending through the whole length thereof and arranged so that the fuel passes through them successively, throughout their entire length, removable stoppers closing the ends

of said conduits, and a rectilinear passage formed between the fuel conduits and through which the exhaust



gases are adapted to pass, substantially as described and for the purpose set forth.

1,271,144. DYEING-MACHINE. HOWARD M. DUDLEY, Philadelphia, Pa. Filed Aug. 3, 1917. Serial No. 184,200. (Cl. 8—19.)



1. In a dyeing machine, in combination, a receptacle having imperforate sides, two foraminous plates within and extending across the receptacle, means for moving the plates with respect to each other, a downwardly converging and curved liquid distributing chamber below the lower foraminous plates, a series of downwardly and inwardly extended blades within the distributing chamber, and means for forcing a liquid through the device.

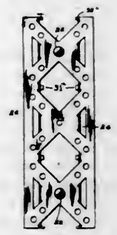
2. In a dyeing machine, in combination, a receptacle having imperforate sides, two foraminous plates within and extending across the receptacle, each plate having a series of extended hollow cones with openings therein, means for moving the plates with respect to each other, a downwardly converging and curved liquid distributing chamber below the lower foraminous plates, a series of downwardly and inwardly extended blades within the distributing chamber, and means for forcing a liquid through the device.

4. In a dyeing machine, in combination, a receptacle having imperforate sides, two foraminous plates within and extending across the receptacle, means for moving the plates with respect to each other, a downwardly converging and curved liquid distributing chamber below the lower foraminous plates, a series of downwardly and inwardly extended blades within the distributing member, a smaller testing device containing foraminous plates and a dyeing chamber similar and proportionate to those of the larger device, means whereby a fiber within the testing device may be examined without interrupting the passage of the liquid within the larger device, connecting means below the two lower foraminous plates for the passage of a liquid, and means for passing a liquid through the two devices.

6. In a dyeing machine, in combination, a receptacle having imperforate sides, two foraminous plates within the receptacle, each plate comprising a series of extended hollow cones having vertical openings in the sides thereof, means for spacing the plates from each other, a downwardly converging distributing chamber spaced below the lower foraminous plate, a series of parallel downwardly and inwardly curved blades within the distributing chamber, a pump connected with the lower portion of the distributing chamber, an over-flow pipe above the upper foraminous plate, a smaller testing device exterior to the larger device and containing foraminous plates and a dyeing chamber similar and proportionate to those of the larger device, means whereby a fiber within the testing device may be examined without interrupting the passage of the liquid within the larger device, connecting means below the two lower foraminous plates for the passage of a liquid, and means for passing a liquid through the two devices.

[Claims 3 and 5 not printed in the Gazette.]

1,271,145. TOY BUILDING CONSTRUCTION. JAMES E. ECWER, Topeka, Kans., assignor to The A. C. Gilbert Company, New Haven, Conn., a Corporation of Connecticut. Filed July 12, 1916. Serial No. 108,946. (Cl. 189—34.)



1. In a toy building set, a flat sheet metal strip having its edges lying in the same plane as the main body portion thereof, said strip having portions cut therefrom whereby intersecting diagonal members are produced connecting the side edges of the strip and having a double series of small projections bent up from the strip adjacent the diagonal members at opposite sides of its median line to form parallel seats for the side edges of similar strips; substantially as described.

2. In a toy building set, a flat strip having a plurality of polygonal openings formed therein to produce integral intersecting members, and lugs struck up at the edges of said openings to form longitudinal double rows of lugs on opposite sides of the median line of said strip; substantially as described.

3. In a toy construction block the combination of four sheet metal strips arranged in box-like form, two of said strips set in between the other two to space them apart, the outer strips having flat side margins located in the same plane as the body portions thereof, and being provided with projections struck up from the body portions thereof remote from the side edges to form parallel longitudinal seats for the inner spacing strips, said inner strips having plain side edges engaging said seats, and a fastening member passing through the outer strips at each end of the box-like structure for clamping them on the inner strips; substantially as described.

4. In a toy construction block, the combination of four sheet metal strips arranged in box-like form, two of said strips arranged opposite each other and having cut away portions presenting diagonals, said strips having plain side edges located in the same plane as the body portion thereof, and being also provided with struck up lugs forming longitudinal parallel seats on the inner faces thereof, each of said seats being located intermediate of the median line of the strip and the extreme side edge thereof, the other two strips being set in between the first two and having plain side edges engaging said longitudinal seats, and means for clamping the parts in assembled relation; substantially as described.

[Claims 5 to 8 not printed in the Gazette.]

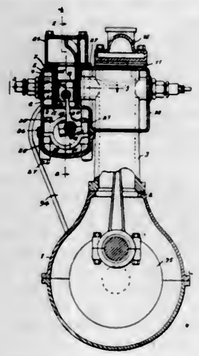
1,271,146. METHOD OF RECOVERING GRAPHITE FROM SLAG. EDWARD C. EWEN, Saginaw, Mich. Filed Dec. 17, 1917. Serial No. 207,548. (Cl. 266—38.)

1. The method of obtaining graphite from slag, which consists in pouring the metal into a ladle, emptying the same but holding back the slag, pouring another charge of metal upon the residue from the first pouring, and finally removing the metal from the ladle while holding back the slag.

3. The method of obtaining graphite from slag, which consists in pouring the metal into a ladle, emptying the same but holding back the slag, pouring another charge of metal upon the residue from the first pouring, removing the metal from the ladle while holding back the slag, screening the slag and finally subjecting the screened material to the action of an air separator.

[Claim 2 not printed in the Gazette.]

1,271,147. INTERNAL-COMBUSTION ENGINE. THOMAS J. FAY, Brooklyn, N. Y., assignor, by mesne assignments, to The Standard Parts Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 4, 1915. Serial No. 53,926. (Cl. 123—84.)



1. In an internal combustion engine, a cylinder, a hollow barrel integral therewith, there being a passageway communicating with said cylinder and opening through the wall of said barrel intermediate its ends, lining means fixed in said barrel, the portion of said means adjacent to said passageway being reduced in external diameter to provide an annular passageway, a port communicating with said passageway and opening into the interior of said lining means, and a movable valve member located inside said lining means and adapted to cover and uncover said port.

2. In an internal combustion engine, a cylinder, a hollow barrel integral with said cylinder, there being a passageway leading from said cylinder to a point intermediate the ends of said barrel, a hollow sleeve located in said barrel and having its exterior diameter decreased at a point adjacent to said port so as to provide an annular passageway inside said barrel, there being a port establishing communication between said passageway and the interior of said sleeve, and a movable valve member located inside said sleeve and adapted to be moved to open or close said port.

3. In an internal combustion engine, a hollow barrel, a pair of hollow sleeves located in said barrel with their adjacent ends spaced apart to define a narrow port, and a movable valve member in said sleeve adapted to be moved to cover and uncover said port, the external diameter of the sleeves being reduced adjacent to their meeting ends to define an annular passageway communicating with said port, there being a passageway leading from said annular passageway to the engine cylinder.

4. In an internal combustion engine, a cylinder having a hollow branch transverse to the cylinder axis, a pair of hollow barrels arranged one on each side of said branch and intersecting the sides thereof at a point intermediate the ends of the barrels, fixed sleeves in said barrels and having ports between their ends communicating with the interior of said branch, and valve means movably supported within said sleeves and adapted to alternately cover and uncover said ports.

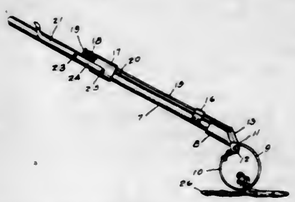
1,271,148. STORAGE BATTERY. BRUCE FORD, Philadelphia, Pa. Filed May 21, 1917. Serial No. 169,896. (Cl. 204—29.)



2. A combing piece for storage batteries provided with a head and a web and having a series of spaced notches extending in the direction of the web and underneath the head and having open ends affording drainage.

[Claim 1 not printed in the Gazette.]

1,271,149. LAUNDRY DEVICE. HARRIET L. FORD, Seattle, Wash. Filed Nov. 15, 1916. Serial No. 132,478. (Cl. 68—6.)



1. A device of the class described, comprising jaw members, a handle secured thereto, a slidable member on said handle, a jaw-actuating bar pivotally connected with one of said jaw members and extending lengthwise of said handle through said slidable member, a knob on the end of said actuating bar, a compression spring interposed between said knob and the end of said slidable member, a lever arm pivoted on said handle and links connecting said lever arm with said slidable member.

[Claim 2 not printed in the Gazette.]

1,271,150. METHOD OF MAKING BOLTS. JOSEPH A. FRAUENHEIM, Zelienople, Pa., assignor to Kerner Manufacturing Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Apr. 7, 1914. Serial No. 830,140. (Cl. 10—27.)

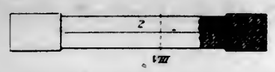


1. The herein described method of manufacturing stay bolts, having ends of larger diameter than its body por-

tion, which consists in providing a blank of substantially the diameter of the enlarged head portions of the finished bolt, removing from the central body-forming portion thereof a longitudinally extending portion of the metal terminating at said end portions, then squeezing in said central portion, and then twisting said squeezed-in portion about its longitudinal axis, substantially as described.

2. The method of making stay bolts having threaded end heads of a larger diameter than the body, consisting in providing a cylindrical blank of substantially uniform diameter throughout its length, said diameter being approximately equal to the final diameter of the threaded head, transversely forming a longitudinal opening through the intermediate portion only of the blank and stopping short of the head-forming portions thereof, squeezing inwardly the said intermediate portion of the blank, twisting the said intermediate portion, and threading the larger diameter end portions, substantially as described.

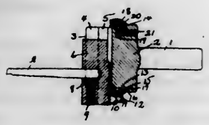
1,271,151. BOLT. JOSEPH A. FRAUENHEIM, Zelienople, Pa., assignor to Kerner Manufacturing Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Original application filed Apr. 7, 1914. Serial No. 830,140. Divided and this application filed May 12, 1915. Serial No. 27,599. (Cl. 85—1.5.)



2. A stay bolt having a head at each end and a body portion between the heads, said body portion comprising a plurality of members, there being a greater number of longitudinally extending fibers in the heads than in the body portion, some of the fibers merely extending from the ends of the heads to the junctions of the heads and body, the other fibers extending from end to end of the bolt through the heads and body portions, said last mentioned fibers flaring outwardly at the junction of the heads and body about the fibers which merely extend from the ends of the heads to the junctions of the heads and body portion; substantially as described.

[Claim 1 not printed in the Gazette.]

1,271,152. BORING-TOOL HOLDER. KENNETH M. FRITTS, Millcreek township, Erie county, Pa. Filed Aug. 31, 1916. Serial No. 117,870. (Cl. 29—108.)

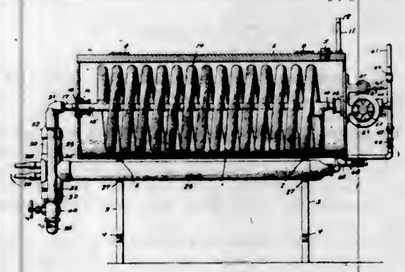


2. In a boring tool holder, the combination of a head having a guide-way extending transversely across its axis and across its face; a slide carried by the guide-way, said slide extending across the axis and having curved threads on its rear surface and means thereon for securing a boring tool; and an adjusting ring rotatively mounted on the head and having scroll threads on its front face engaging the threads on the slide.

6. In a boring tool holder, the combination of a head having a shoulder bearing thereon and a guide-way on its face having an under-cut groove therein; a tool-holding slide arranged in said guide-way and extending across the axis, said slide having curved threads on its rear face and means for securing a boring tool thereon; an adjusting ring rotatively mounted on the bearing on the head having scroll threads on its face engaging the threads on the slide, said ring having a spring-receiving groove therein and a key-receiving groove on its inner surface; a spring mounted in the head and acting on the ring for holding the ring in spring-pressed engagement with the threads; and a ball-key operating in the groove in the interior of the ring for locking the ring on the head.

[Claims 1 and 3 to 5 not printed in the Gazette.]

1,271,153. MILK-PASTEURIZER. JOHN GAPKO, Avella, Pa. Filed Nov. 29, 1916. Serial No. 134,070. (Cl. 257—79.)



1. A device of the class described, consisting of an elongated horizontally arranged receptacle, a rotary, tubular tempering conductor having an inlet and an outlet for a tempering fluid, an external tubular tempering conductor arranged beneath the receptacle having an inlet and an outlet, tubular connection between said inlets and said outlets, and means for supplying tempering means to the connection between the inlets through one of a plurality of supply pipes, each being controlled by a valve, and means for exhausting the connection between said outlets through one of a plurality of pipes, each being controlled by a valve.

2. A device of the class described, consisting of an elongated horizontally arranged receptacle, a horizontal rotatable tubular fluid conductor having an inlet and an outlet arranged within the receptacle, an external tubular fluid conductor arranged beneath the receptacle having an inlet and an outlet, a tubular connection between said inlets in communication with a plurality of valve-controlled supply pipes, tubular connection between said outlets and a plurality of valve-controlled exhaust pipes therefrom.

3. A device of the class described, consisting of an elongated horizontally arranged receptacle, a rotary fluid tempering conductor mounted within the receptacle and provided with an inlet and an outlet extending beyond the ends of the receptacle, a tubular fluid tempering conductor arranged beneath the receptacle having an inlet and an outlet, tubular connection between the inlets and tubular connection between the outlets, a plurality of tempering fluid supply pipes at one end, a plurality of exhaust pipes in communication with the connection between said outlets, and means for rotating the internal tubular tempering conductor.

4. A device of the class described, consisting of an elongated horizontally arranged receptacle, a rotary tubular tempering coil mounted within the receptacle and adapted to be rotated at different speeds, a relatively large tubular fluid tempering conductor arranged beneath the receptacle, said internal and external tempering means being provided with inlets and outlets, tubular connections between the inlets and tubular connections between the outlets, and a plurality of supply pipes and a plurality of exhaust pipes.

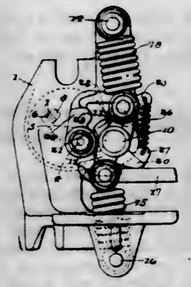
1,271,154. LIFE-PRESERVER. CHARLES GARRISON, Brookline, Mass. Filed Nov. 17, 1916. Serial No. 131,869. (Cl. 9—17.)

1. A life preserver comprising front and back sections stuffed with light buoyant material, and permanently connected shoulder and arm pit straps connecting said sections and arranged with openings between them for the head and arms of the wearer, the arm pit straps giving support under the arms to the wearer when in the water, and by reason of their permanent connection with the sections being incapable of becoming unfastened, and the front section extending downwardly beyond the arm pit straps and being separated from the rear section, whereby when otherwise unconfined, it is effective to keep the face of the wearer from falling forward into the water.



2. A life preserver constructed of skins or coverings of flexible fabric and a stuffing of light buoyant material, said preserver being formed with front and rear sections and connecting straps, two of said straps being arranged to pass over the shoulders on opposite sides and close to the neck of the wearer, and two other straps arranged to pass under the arm pits to afford support to the wearer at those points when in the water, said straps being so permanently connected with the front and rear sections as to be incapable of becoming accidentally disconnected, and the front and rear sections being otherwise separate and unconnected with one another and having portions which extend below the arm pit straps, the flexible construction of such sections enabling them to bend, whereby when otherwise unconfined, the depending part of either section is adapted to be raised by its buoyancy when in the water.

1,271,155. IGNITION DEVICE. HARRY FOREST GEIST, Sumter, S. C., assignor to Splitdorf Electrical Company, Newark, N. J., a Corporation of New Jersey. Filed Feb. 15, 1918. Serial No. 217,336. (Cl. 123—149.)

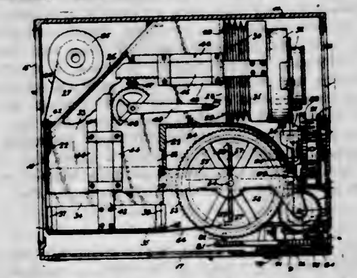


1. An ignition device comprising ignition points, a movable electrode carrying one of said points, a generator, spring means associated with the generator, a trip lever connected to the spring means for operating the generator, means for moving the trip lever and for releasing the same, means whereby said trip lever when released actuates the movable electrode, spring means for normally holding the ignition points in contact, said spring means including devices whereby the tension of the spring is increased while said points are in contact and as the trip lever is moved toward releasing position.

2. An ignition device comprising ignition points, a movable electrode carrying one of said points, a generator, spring means associated with the generator, a trip lever connected to the spring means for operating the generator, means for moving the trip lever and for releasing the same, means whereby said trip lever when released actuates the movable electrode, a spring of relative light tension for normally holding the ignition points in contact and devices for increasing the tension of said spring between the times of separation of the ignition points.

3. An ignition device comprising ignition points, a movable electrode carrying one of said points, a generator, spring means associated with the generator, a trip lever connected to the spring means for operating the generator, means for moving the trip lever and for releasing the same, means whereby said trip lever when released actuates the movable electrode, an arm carried by the movable electrode, an arm carried by the trip lever and a spring normally of relative light tension connecting said arms and holding the ignition points in contact, said arms and spring being so disposed that a movement of the trip lever toward releasing position increases the tension of said spring.

1,271,156. PHOTOGRAPHIC CAMERA. MARGARET GIVLER and ROBERT CHENAULT GIVLER, Seattle, Wash. Filed Aug. 14, 1917. Serial No. 186,236. (Cl. 88—18.)



1. A camera of the class described, which embodies an inclosing case provided with a door in its front end wall; a photographic lens box disposed within said inclosing case and adapted to be adjustably movable in directions parallel with the adjacent side wall; means for disposing successive portions of a sensitized photographic film in a vertical plane within said inclosing case adjacent to and parallel with the rearward portion of the other side wall of said inclosing case; a mirror within the rearward end portion of said inclosing case and disposed in a vertical plane that is at an angle of 45 degrees with relation to the plane of the adjacent vertical side wall and rearward end wall to adapt it to reflect rays of light from said lens box to said successive portions of said film; operative mechanism for intermittently moving said film successively to dispose different portions thereof in a position to expose its sensitized side to the action of light reflected from said mirror in response to a continuous operation of said mechanism; automatic means associated with said mechanism and with the shutter mechanism of said lens box whereby the shutter of said lens box shall be opened momentarily when a portion of said film is momentarily stopped in a position to expose it to rays of light reflected from said mirror; and means for indicating at any time the number of said portions of said film that have been exposed.

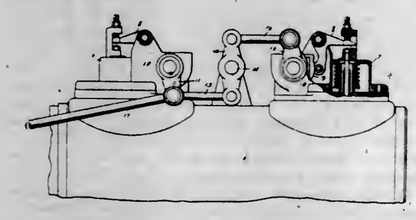
2. A camera of the class described, which embodies an inclosing case provided with a door in its front end wall; a photographic lens box disposed within said inclosing case and adapted to be adjustably movable in directions parallel with the adjacent side wall; means for disposing successive portions of a sensitized photographic film in a vertical plane within said inclosing case adjacent to and parallel with the rearward portion of the other side wall of said inclosing case; a mirror within the rearward end portion of said inclosing case and disposed in a vertical plane that is at an angle of 45 degrees with relation to the plane of the adjacent vertical side wall and rear-ward end wall to adapte it to reflect rays of light from said lens box to said successive portions of said film; operative mechanism for intermittently moving said film successively to dispose different portions thereof in a position to expose its sensitized side to the action of light reflected from

said mirror in response to a continuous operation of said operative mechanism; and automatic means associated with said mechanism and with the shutter mechanism of said lens box whereby the shutter of said lens box shall be opened momentarily when a portion of said film is momentarily stopped in a position to expose it to rays of light reflected from said mirror.

3. A camera of the class described, which embodies an inclosing case provided with a door in its front end wall; a photographic lens box disposed within said inclosing case and adapted to be adjustably movable in directions parallel with the adjacent side wall; means for disposing successive portions of a sensitized photographic film in a vertical plane within said inclosing case adjacent to and parallel with the rearward portion of the other side wall of said inclosing case; and a mirror within the rearward end portion of said inclosing case and disposed in a vertical plane that is at an angle of 45 degrees with relation to the plane of the adjacent vertical side wall and rearward end wall to adapt it to reflect rays of light from said lens box to said successive portions of said film.

4. A camera of the class described, which embodies an inclosing case; an adjustably movable lens box disposed in said inclosing case; a mirror disposed in a vertical plane within said inclosing case in a position rearwardly from said lens box and at an angle of 45 degrees with relation to the axis of the object lens of said lens box; and operative mechanism associated with said inclosing case and adapted intermittently to move a sensitized photographic film to cause contiguous portions thereof successively to be exposed to rays of light reflected from said mirror.

1,271,157. COMPENSATING VALVE-GEAR. WALTER B. GORR, Erie, Pa., assignor to Skinner Engine Company, Erie, Pa., a Corporation. Filed Nov. 8, 1917. Serial No. 200,913. (Cl. 121—97.)



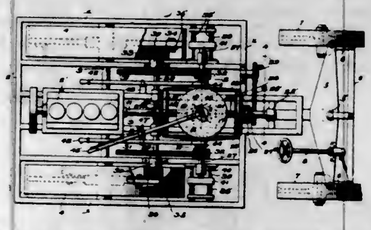
1. The combination with an engine cylinder and valve, and a reciprocating operating rod for the valve, of means to compensate for relative variation of position of the rod and the valve incident to expansion of the cylinder, said means including a lever fulcrumed on the cylinder and movable therewith as the latter expands or contracts, said lever being operatively connected to the rod and the valve.

6. The combination with a cylinder, and valve operating device at opposite ends thereof, of operating connections between said devices, to compensate for variation in distance therebetween incident to expansion or contraction of the cylinder, said connections including a lever pivoted on the cylinder.

[Claims 2 to 5 not printed in the Gazette.]

1,271,158. FRICTION-DRIVE. THOMAS W. GRAHAM, Graham, Colo. Filed Aug. 7, 1916. Serial No. 113,528. (Cl. 74—26.)

1. In a power transmission, the combination with a power shaft, of a pair of oppositely disposed friction drive wheels rotated in opposite directions by said power shaft, and a pair of friction disks disposed one at each side of the friction drive wheels, both of said friction disks being adapted to contact with and be driven at the same time by both of the driving friction wheels, the friction disks engaging the friction driving wheels at opposite sides of their axes of rotation.



2. In a power transmission, the combination with a power shaft, of a pair of oppositely disposed friction drive wheels rotated in opposite directions by said power shaft, a pair of friction disks disposed one at each side of the friction drive wheels, both of said friction disks being adapted to contact with and be driven at the same time by both of the driving friction wheels, the friction disks engaging the friction driving wheels at opposite sides of their axes of rotation, said drive wheels being supported for movement toward and from each other over the faces of the friction disks to vary the points of contact therewith and the speed of rotation of the friction disks, and means for synchronously shifting the drive wheels toward and from each other.

5. In a power transmission, the combination with a power shaft, of a friction drive wheel rotated thereby, a driven member movable into and out of engagement with said drive wheels and adapted to be driven in one direction thereby, a reversing drive wheel rotated by said power shaft and movable into and out of engagement with said driven member to rotate the same in a reverse direction, means for shifting the driven member out of driving relation with the forward drive wheel, and means for shifting the reversing drive wheel into and out of engagement with said driven member.

[Claims 3, 4, and 6 to 15 not printed in the Gazette.]

1,271,159. CIGAR AND CIGARETTE HOLDER. WILLARD C. GREENE and LOUIS E. SHAW, East Orange, N. J. Filed Nov. 28, 1913. Serial No. 803,490. (Cl. 131—10.)

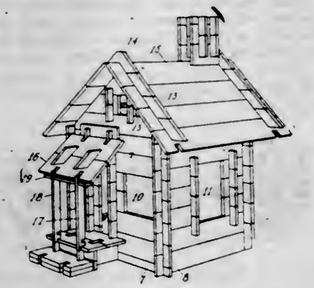


1. A waterproof and fireproof cigar and cigarette holder, comprising a cylindrical mouthpiece having a frusto-conical ring at one end and a frusto-conical flexible and distensible tobacco holder of a length materially less than the length of the mouth piece, telescoping the ring end of said mouthpiece and adapted to be moved into binding engagement therewith and a rigid ring reinforcing the larger end of said holder.

2. A device of the class described, comprising a mouthpiece having a ring adjacent one end thereof and a holder of slightly distensible material having a tapered bore containing the end of the mouthpiece having the ring, said flexible holder adapted to be moved into engagement with and partially lap about said ring.

1,271,160. INTERLOCKING BUILDING-BLOCK. RAY H. GROVES, Portland, Oreg., assignor of twenty-eight one-hundredths to E. J. Clough and thirty-six one-hundredths to Glenn W. Percival, Portland, Oreg. Filed Nov. 5, 1917. Serial No. 200,382. (Cl. 46—35.)

1. In interlocking building blocks of the character described, the combination of single, double and triple width elements into a toy structure designated as Fig. I, the single and double width elements forming the walls, gables, columns and chimneys, the triple width elements forming sloping roofs, said roofs having a pronounced overhang at their gable ends, substantially as described.

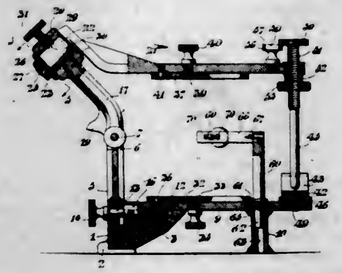


2. As an article of manufacture, interlocking building blocks of equal thickness but various lengths, having a width approximately four times their thickness, having one or more square notches either on one or both of their longitudinal edges, and having either one or both of their ends cut slantingly, with the direction of the notches adjacent to the slant being parallel to said slant.

3. As an article of manufacture, an interlocking building block, having two square notches opposite each other and the width of each notch equaling twice the thickness of the block; said block being designated as Fig. XIII.

4. As an article of manufacture, an interlocking building block, having a width approximately three times, and a length approximately four times its thickness, having two square notches opposite each other, and designated as Fig. XIV.

1,271,161. DENTAL ARTICULATOR. RUPERT E. HALL, Philadelphia, Pa. Filed Mar. 30, 1917. Serial No. 158,518. (Cl. 32—1.)



1. A dental articulator comprising a lower jaw model holder, an upper jaw model holder pivotally connected therewith on an axis inclined with respect to the plane of occlusion, and means adjustable to vary the angle of inclination of said axis.

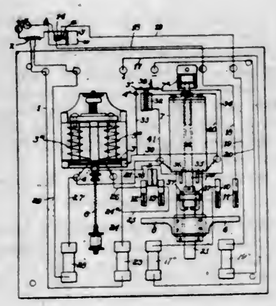
3. A dental articulator comprising a lower jaw model holder, an upper jaw model holder pivotally connected therewith and arranged to oscillate with the medial point of the upper jaw model, describing a geodesic line about the surface of a cone, and means arranged to vary the angle of inclination of the axis of relative movement.

5. A dental articulator comprising upper and lower jaw model holders, a hinge joint interposed between said jaw model holders, having its axis substantially in the occlusal plane, a pivotal connection between said jaw model holders, whereby they may be laterally oscillated upon an inclined axis whose angle of inclination may be varied about the axis of said hinge joint.

6. A dental articulator comprising upper and lower jaw model holders, a pivotal connection between said jaw model holders having its axis inclined with respect to the plane of occlusion, means to vary the angle of inclination of said axis, and means adjustable to vary the longitudinal relation of said jaw model holders.

[Claims 2, 4, and 7 to 18 not printed in the Gazette.]

1,271,162. MECHANISM FOR CONTROLLING CARBONS OF ARC-LAMPS. ARTHUR W. HARRIS, Erdington, England, assignor to Bertrand F. Wyler, New York, N. Y. Filed Feb. 25, 1916. Serial No. 80,474. (Cl. 176—16.)



1. In combination with the carbon feeding mechanism of an arc lamp for motion picture machines, controlling means therefor, comprising a magnetic relay, the coil of which is in a shunt circuit from the arc lamp circuit, a resistance in said shunt circuit in series with the coil of said relay, electromagnetic means controlling a high tension circuit to the carbon feeding mechanism, said electromagnetic mechanism including a circuit closer for said high tension circuit, and a cut-out for said resistance, to effect a temporary increase in the strength of the magnetic field of the relay, and a branch shunt circuit for energizing the said electromagnetic high tension circuit closer controlled by the said relay, substantially as described.

8. In combination with the carbon feeding mechanism of an arc lamp, an electromagnetic switch controlling circuit connections leading thereto, a main electromagnetic relay in a shunt from the main arc circuit and controlling a circuit leading to said electromagnetic switch, a supplemental relay in multiple with the electromagnetic switch and energized simultaneously therewith, said supplemental relay controlling a contact in a branch or local circuit which includes said electromagnetic switch, a second contact in said branch or local circuit which is controlled by the electromagnetic switch itself, said electromagnetic switch being initially energized through the main relay and thereafter maintained in service by the closing of the local circuit by the supplemental relay and the said second contact and independent of the contacts controlled by the main relay, means for reducing the resistance in the shunt circuit which includes the main relay, said means being operated by the said electromagnetic switch and thereby causing the main relay to break the branch shunt circuit, the said second contact in the local circuit being thereafter broken by the continued movement of the electromagnetic switch, whereupon said switch and the supplemental relay are restored to normal position, substantially as described.

[Claims 2 to 7 not printed in the Gazette.]

1,271,163. ELECTRICALLY-OPERATED BRAKE MECHANISM. EDWARD V. HARTFORD, Deal, N. J. Filed Aug. 27, 1914. Serial No. 858,958. (Cl. 74—13.)

1. In a brake system, the combination of brake applying means, including a brake drum, a brake band, and means for automatically supplying lubrication to the drum and band during the application of the latter, the

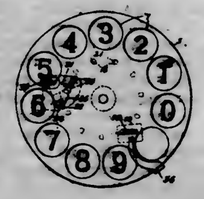
quantity of lubrication supplied being directly proportionate to the power exerted in applying the brake.



5. In an electrically operated brake mechanism for automobiles, the combination of a brake drum, a brake band coöperatively associated therewith, an oil reservoir, a self-closing valve for controlling the feed of the oil from said oil reservoir, brake-applying cable and means associated with the brake band and the brake applying cable adapted to operate the valve of the oil reservoir during the application of the brake band to furnish lubrication to the latter and the brake drum.

[Claims 2 to 4 and 6 not printed in the Gazette.]

1,271,164. IMPULSE-TRANSMITTER. HENRY HOVLAND, East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 8, 1917. Serial No. 147,362. (Cl. 179—90.)



1. In an impulse transmitter, a finger hold dial arranged for movement in a single direction, and impulse contacts operated by said finger hold dial during the movement thereof.

2. In an impulse transmitter, a finger hold dial, impulse springs, and means controlled in the movement of said finger hold dial for regulating the length of time of separation of said impulse springs regardless of the speed of movement of said dial.

3. In an impulse transmitter, a finger hold dial, impulse springs, a pivotal hammer adapted to strike and separate said springs, and means carried by said finger hold dial for intermittently operating said hammer in the movement of said dial by the operator.

4. In an impulse transmitter, a finger hold dial, impulse springs intermittently opened by the finger hold dial during the movement thereof by the operator, a set of normally open spring contacts, and means controlled by said finger hold dial in its movement, to maintain the normally open spring contacts closed.

5. In an impulse transmitter, a finger hold dial, impulse springs, projections on said finger hold dial adapted to intermittently operate said impulse springs in the movement of said finger hold dial, a set of normally open spring contacts, and means controlled by said projections on said finger hold dial for maintaining said normally open spring contacts closed during the movement of said dial.

[Claim 6 not printed in the Gazette.]

1,271,165. CHAIN-LINK-FORMING MACHINE. FRANK H. HOWARD, Reading, Pa. Filed Mar. 18, 1918. Serial No. 223,004. (Cl. 59—27.)

1. In a link forming machine, the combination of a frame having a bed plate, a duplicate set of toggles mounted on the frame, means for actuating said toggles, a slidable yoke movable horizontally by the action of one of said toggles and a bending block movable horizontally by the other toggle, a pair of rods pivotally attached to opposite ends of said yoke, a backing block on the bed plate between said rods, a pair of bending fingers pivotally attached to said rods and to said block, one of said fingers having a jointed portion at its extremity, and a vertically movable mandrel around which said fingers are adapted to move.



2. In a link forming machine, the combination of a vertically movable mandrel, a bed plate through which the mandrel is adapted to move, means for actuating the mandrel, a horizontally movable yoke on the bed plate, pivotally mounted bending fingers carried by said yoke, one of which fingers is formed with a jointed extremity, means including a toggle for imparting slidable movement to said yoke and fingers, a backing block to which the fingers are pivoted, a horizontally movable bending block, means including a toggle, for imparting a slidable movement to said bending block, and means for raising the jointed portion of the bending finger.

3. In a link forming machine, a frame, a bed plate, a vertically movable mandrel in the bed plate, means for actuating the mandrel, a pair of bending fingers adapted to embrace the mandrel, one of said fingers having a jointed portion, means for raising said jointed portion as the fingers embrace the mandrel, a yoke to which the fingers are pivoted, a toggle device for moving the yoke and fingers, a bending block and a toggle for moving said bending block.

1,271,166. CHIMNEY-CAP. LOUIS PERCIVAL HUTTON, Orlando, Fla. Filed Jan. 2, 1917. Serial No. 140,114. (Cl. 98—6.)



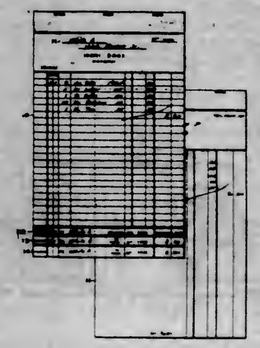
1. The combination with a chimney or flue of a protecting hood, a support having its lower end secured to said flue and having a collar at its upper end, and means arranged upon the under side of said protecting hood and resting upon the upper end of said collar, said means comprising a portion received within said collar, whereby said protecting hood is tiltingly supported upon said support, substantially as specified.

2. The combination with a chimney or flue of a protecting hood, a support having its lower end secured to said flue and having a collar at its upper end, means arranged upon the under side of said protecting hood and resting upon the upper end of said collar, said means comprising a portion received within said collar, whereby said protecting hood is tiltingly supported upon said support, and means secured to said protecting hood and to said support and extending through said collar to maintain said hood in operative relation with said support, substantially as specified.

[Claim 2 not printed in the Gazette.]

1,271,167. SET OF BOOKKEEPING-RECORDS. ROBERT K. ISERI, Sacramento, Cal. Filed June 2, 1917. Serial No. 172,430. (Cl. 283—1.)

1. A bookkeeping set which comprises charge and credit sheets appropriately ruled and designated, each of said sheets having detachable strips ruled with ledger and journal columns to be filled out with the totals of the debits or credits represented by the main body of the sheet at the time of the transaction, said strips being gummed on their back surface for pasting in a ledger or journal, with the credits in one column and the debits in another.



3. A bookkeeping set which comprises charge and credit sheets appropriately ruled and designated, each of said sheets having detachable strips ruled with ledger and journal columns to be filled out at the time of the original transaction, with the totals of the debits or credits appearing on the main body of the sheet, there being one strip for ledger entries and one for journal entries on each sheet.

4. A bookkeeping set which comprises charge and credit sheets appropriately ruled and designated, each of said sheets having detachable strips ruled with ledger and journal columns to be filled out at the time of the original transaction, with the totals of the debits or credits appearing on the main body of the sheet, there being one strip for ledger entries and one for journal entries on each sheet, and said strips being gummed on their back surfaces to permit them to be pasted into position within the journal and ledger.

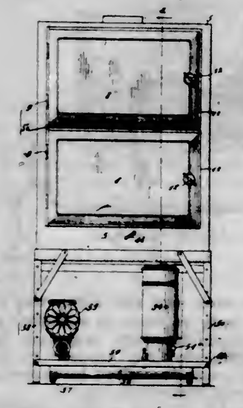
7. A bookkeeping set which comprises charge and credit sheets appropriately ruled and designated, each of said sheets having a detachable strip at its bottom margin ruled and designated to receive the balance to date of the account of the customer to whom the sheet is addressed, said strips being gummed and adapted to be pasted in a daily balance book when detached, subsequent strips referring to each customer's account being pasted over those already in place and representing his previous balance.

[Claims 2, 5, and 6 not printed in the Gazette.]

1,271,168. APPARATUS FOR COOKING. WILLIAM R. JEAVONS, Cleveland, Ohio. Filed Feb. 15, 1912. Serial No. 677,799. (Cl. 126—45.)

1. The combination of a vertical series of compartments, each having one or more inlet openings adjacent to the upper end thereof and one or more outlet openings near the bottom thereof on the side opposite the inlet opening or openings, there being a common flue for supplying heated gases to said inlet openings, and means for supplying heated gases at regulated temperatures beneath the lowest compartment, said compartment having a damper controlled inlet in the bottom for admitting the heated gases directly thereinto.

2. In a cooking apparatus, the combination of a casing, a vertical series of compartments therein, there being a flue extending beneath the lowest compartment and upwardly between a side of each compartment and the casing wall and there being a downwardly directed flue on the opposite side of the compartments from the first-mentioned flue, said compartments being provided each with one or more openings near its upper end communicating with the first-mentioned flue and with one or more openings near the bottom thereof communicating with the second flue, and a source of heated gas supply beneath the lowest compartment, there being a damper controlled inlet opening in the bottom of the said lowest compartment.



9. In a cooking apparatus, the combination of an oven, a casing forming a flue with each side of the oven and having an inlet and an outlet in a flue beneath the oven, means for circulating heated gases through the inlet, beneath said oven and upwardly in one of said flues, through the oven from the upper to the lower portion thereof, downwardly through the opposite flue, and beneath the oven to the discharge outlet.

13. In a cooking apparatus, the combination of an oven having an aperture in the bottom thereof, a lid for said aperture, a casing surrounding said oven and having flues located at opposite sides thereof and being spaced from the bottom of the oven, the flues communicating with the last-mentioned space, a partition extending across the space between the casing and the oven bottom, means for discharging heated gases into said space beneath said lid, the oven being provided with apertures communicating with said flues, there being an outlet from the space beneath the oven on the opposite side of the partition from the inlet for heated gases, and means for operating said lid to permit the heated gases to enter the oven directly.

18. In an oven, the combination, with outer top, bottom, and side walls of a bottom liner plate removably seated on the bottom wall, side liner plates having outturned flanges and adapted to rest on the bottom liner plate and having inwardly projecting shelf seats, one or more shelves on said seats, and a top liner plate removably seated on the flanges of the side plates.

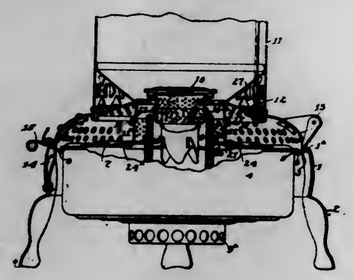
[Claims 2, 4 to 8, 10 to 12, and 14 to 17 not printed in the Gazette.]

1,271,169. OIL-STOVE. WILLIAM R. JEAVONS and ARNOLD R. WHITTAKER, Cleveland, Ohio. Filed Aug. 4, 1914. Serial No. 855,045. (Cl. 158—94.)

1. In a stove of the character described, the combination of a reservoir, an inner and an outer wick tube projecting above the same, a drum pivotally supported with respect to said reservoir, a gallery removably mounted about the outer wick tube, a collar depending from the drum and adapted to engage the top of the gallery, and means holding the drum out of operative relation to the parts therebeneath in the event that the gallery is inverted.

5. In a stove of the character described, the combination of a reservoir, an inner and an outer wick tube projecting above the reservoir, a drum pivotally supported

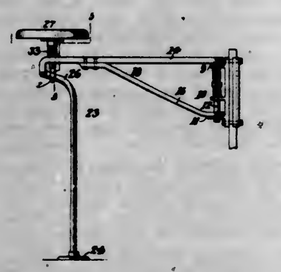
with respect to the reservoir, latch members for securing the drum in closed position above the reservoir, the drum being provided with an annular bottom plate having an opening, a collar depending from the said opening and having at its lower end a depending skirt of greater diameter than the body of the collar, a gallery removably



mounted about the outer wick tube and having an upper end of a diameter to be overhung by said skirt and having at its bottom an outwardly projecting flange of greater diameter than the inner diameter of said skirt whereby the latch members cannot be engaged in the event that the gallery is inverted.

[Claims 2 to 4 and 6 to 19 not printed in the Gazette.]

1,271,170. CHAIR. CHARLES JELLINEK and DAVID STERN, New York, N. Y. Filed Aug. 8, 1916. Serial No. 113,779. (Cl. 155—22.)



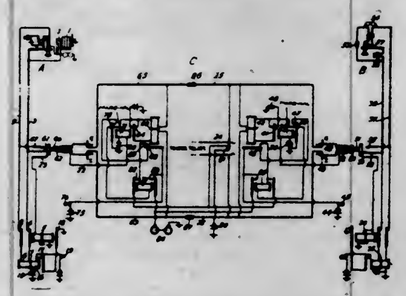
10. In a device of the class described, the combination with a support including a pivoting pin mounted therein and provided with a plate having a socket therein, a seat supporting bracket mounted to swing about said pin above said plate, a spring acting on said bracket for swinging the same about the pin, said bracket provided with a projection designed to seat in said socket to prevent rotary movement of the bracket when downward pressure is exerted on said bracket, and a spring normally acting on said pin to hold the projection clear of the socket whereby the bracket may be swung freely when free of weight thereon.

13. In a device of the class described, a supporting member, a prop pivoted to the member and designed to reach to the ground, a seat provided with a spindle mounted for substantially vertical movement in said supporting member and connected to said prop to swing the same into engagement with the ground when the seat is depressed and means for holding the prop normally in an inoperative position.

14. In a device of the class described, a supporting member, a prop pivoted to the supporting member, said prop when in supporting position having a substantially vertical portion extending upwardly from the ground and an upper portion extending at an angle to the vertical portion, a seat provided with a spindle mounted for vertical movement in said support and connected to the angularly disposed portion of the prop to move the same.

[Claims 1 to 9, 11, 12, and 15 not printed in the Gazette.]

1,271,171. TELEPHONE SYSTEM. LEWIS H. JOHNSON, Bloomfield, N. J., assignor, by mesne assignments, to Western Electric Company, Incorporated, a Corporation of New York. Filed Jan. 22, 1915. Serial No. 3,666. (Cl. 179—51.)



1. A telephone system comprising common battery and local battery telephone lines terminating at a central office, a link circuit thereat for interconnecting the lines, a signaling device for the link circuit, a source of current and interrupter mechanism at the central office, a local relay for the link circuit, a relay therein controlled over a connected line of either character and coöperating with the local relay when controlled from a common battery line for including the source of current in circuit with the signaling device to furnish a continuous signal, and a third relay in the link circuit energized upon the energization of the second-mentioned relay when controlled from a local battery line and coöperating with the first relay to include the source of current and interrupter mechanism in circuit with the signaling device to furnish an intermittent signal.

9. A telephone system comprising common battery and magneto telephone lines terminating at a central office, a link circuit thereat for interconnecting the lines, a signaling device, a source of current and interrupter mechanism at the central office, a relay operating upon connection of the link circuit with a common battery line and not operating upon connection with a magneto line, a second relay controlled over a line of either character and coöperating with the first mentioned relay when energized to include the source of current in circuit with the signaling device to furnish a continuous signal, and a third relay actuated upon the energization of the second relay when the first relay is deënergized and coöperating with the first relay when deënergized to include the source of current and interrupter mechanism in circuit with the signaling device to furnish an intermittent signal.

10. A telephone exchange system comprising common battery and magneto telephone lines terminating at a central office, a link circuit thereat for interconnecting the lines, a signaling device for the link circuit, a relay in the link circuit responsive to the connection thereof with a line of one character but non-responsive when connected to a line of the other character, a relay in the link circuit responsive to direct current when controlled from a connected common battery line and responsive to alternating current when controlled from a connected magneto line, an operating circuit for the signaling device established through the coöperation of the relays when the second relay is controlled from a connected common battery line, a third relay in the link circuit controlled by the second relay when operatively responsive to alternating current, a second operating circuit for the signaling device controlled by the third relay, and means associated with one of the operating circuits and effective upon the closure thereof to cause the signaling device to furnish a signal differing in character from that furnished when the other operating circuit is closed.

[Claims 2 to 8 and 11 not printed in the Gazette.]

1,271,172. CADMIUM-EVOLVING PROCESS. WOOLSEY MCA. JOHNSON, Hartford, Conn. Filed July 30, 1914. Serial No. 854,169. (Cl. 75—153.)

1. A process of the nature disclosed for deriving cadmium from sulfur-bearing ores which consists in preliminarily effecting an incomplete roasting of the ore to reduce the sulfur contained therein to not materially less than about 3%, and thereafter subjecting the partially-roasted material to reducing conditions to reduce and evolve cadmium contained therein.

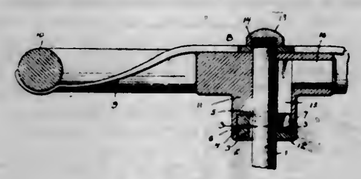
3. A process of the nature disclosed for differentially reducing a cadmium-zinc bearing material; comprising obtaining the material with a considerable sulfur-content and then subjecting the said sulfur-bearing material under reducing conditions to a temperature sufficiently high to evolve cadmium vapors but too low to evolve zinc vapors.

8. A process of the nature disclosed for the deriving of cadmium from a sulfur-bearing material which comprises the preliminary step of incompletely eliminating sulfur from said material and the subsequent step of subjecting the material while containing considerable amounts of sulfur to reducing conditions in the presence of a current of gas effective to carry off the evolved cadmium vapors.

10. A process of the nature disclosed for treating unsmelted ores containing Cd and Zn which comprises first reducing CdO to Cd at a temperature below the reduction temperature of zinc oxid; evolving same in a gaseous condition; collecting same in a condenser; then immediately treating the decadmiumized residue at a materially higher temperature to make a spelter containing a trace only of Cd.

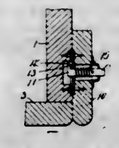
[Claims 2, 4 to 7, 9, and 11 to 15 not printed in the Gazette.]

1,271,173. AUTOMOBILE-LOCKING DEVICE. JAMES D. KING, Ellensburg, Wash. Filed May 2, 1917. Serial No. 165,949. (Cl. 70—129.)



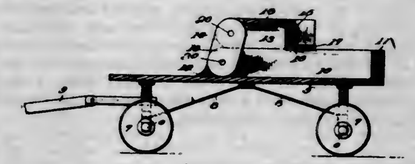
The combination with a steering post having a steering wheel carried thereby, of a collar closely fitting and keyed to said post with a socket in its inner end, said wheel having a hub with an annular recess in its inner end communicating with the bore of the hub to encompass said collar and turn loosely thereon, said hub extending over the full length of said collar and completely housing one end and the periphery thereof, the other end of said collar being flush with the lower end of the hub, said hub having a longitudinal passage extending inwardly from and communicating with said recess and adapted to register with the socket in said collar when the parts are assembled, a bolt movable longitudinally in said passage to move into and out of said collar socket for connecting and disconnecting the wheel from the post, and key controlled means for projecting or retracting said bolt and for locking it in either position.

1,271,174. WINDOW-FRAME. ISRAEL KLAYMAN, Baltimore, Md., assignor of one-half to Benjamin Klayman, Baltimore, Md. Filed Jan. 9, 1918. Serial No. 211,092. (Cl. 20—11.)



The combination with a window frame, of a stop strip disposed along one edge thereof, said window frame having an apertured plate covered by said stop strip, and a spring tensioned latch mounted on the stop strip having a hooked end engaging the apertured plate and holding said stop strip in position thereon, substantially as set forth.

1,271,175. CHILD'S VEHICLE. CHARLES J. KNOELL, Tonawanda, N. Y. Filed Dec. 15, 1917. Serial No. 207,308. (Cl. 21—183.)



1. A vehicle comprising running gear, a continuous closed bottom supported thereon, front and rear wall sections, the rear section being fixed to the bottom and the front section being movable between a position on the bottom in advance of the rear section and a position upon said rear section, and a seat carried by the front section and located across the front portion of the bottom when the front section is thereon, said seat being disposed in elevated position when the front wall section is upon the rear wall section.

2. A vehicle comprising running gear, a continuous closed bottom supported thereon, front and rear wall sections, the rear section being of greater length than the front section and being fixed to the bottom, and the front section being movable between a position on the bottom in advance of the rear section and a position upon said rear section and when in the latter position leaving an open portion within the rear wall section in rear of said front section, and a seat carried by the front section and movable therewith.

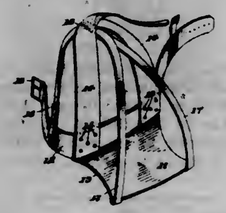
3. In a vehicle, a body comprising a bottom, rear side wall sections mounted thereupon, movable front side wall sections in advance of the rear sections, links connecting the corresponding front and rear side wall sections and permitting the former to extend in advance of the latter and to be placed thereupon, and a cross seat carried by the movable front wall sections in connecting the same.

4. In a vehicle, a body comprising a bottom, rear side wall sections fixed to the bottom, front side wall sections removable from the bottom, links connecting the corresponding front and side wall sections, a front end wall carried by the front wall sections, a cross bar connecting the front ends of the front side wall sections, and a seat bar also connecting the front side wall sections and extending rearwardly of the front wall, said seat bar being disposed in elevated relation when the front side wall sections are upon the rear side wall sections.

1,271,176. MAN-CARRIER. PETKO KUBECZKA, Clearfield, Pa. Filed Dec. 13, 1917. Serial No. 206,958. (Cl. 224—11.)

1. A holder adapted for use by ambulance attendants for carrying wounded soldiers comprising a belt adapted

to be worn by the attendant, a rigid seat rearwardly projecting from the belt arranged adjacent the hip line of the wearer, shoulder straps connected to the belt adjacent the forward corners of the seat with their free ends detachably connected to the forward portions of the belt and rigid straps having their lower ends attached to the rear corners of the seat with their upper ends secured to the shoulder straps at a point adjacent the shoulder line when the device is being worn.



2. A carrier of the type described comprising a detachable belt, a rigid seat attached substantially centrally to the belt, shoulder straps secured together intermediate their ends with corresponding ends rigidly attached to opposite corners of the seat adjacent the belt and their other ends detachably secured to the opposite forward portions of the belt and curved rigid straps attached to the free corners of the seat and to the crossing point of the shoulder straps providing a body engaging portion at the said last named point of connection.

1,271,177. HORSESHOE. FRED KUSIAK, New York, N. Y., assignor of one-half to Nik Kusiak, New York, N. Y. Filed Jan. 2, 1918. Serial No. 209,975. (Cl. 168—4.)

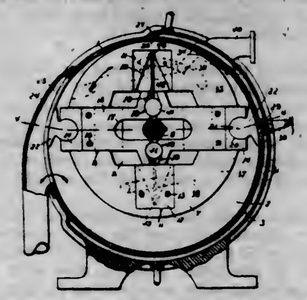


A horseshoe provided with a rubber body having openings therethrough, said openings being provided with recesses at their opposite ends, sleeves fitted within said openings and having flanges fitted within said recesses, each of said sleeves having a centrally disposed opening, said openings being adapted to have nails driven therethrough so that their heads project partlly below the respective sleeves, and the latter having serrations formed on their lower faces.

1,271,178. ROTARY ENGINE. HENRY M. LAMBERT, Portland, Oreg. Filed Oct. 13, 1916, Serial No. 125,473. Renewed Dec. 26, 1917. Serial No. 208,979. (Cl. 123—16.)

1. In a rotary engine, an annular casing having shaft bearings, an operating shaft journaled in said bearings and located eccentrically to the center of curvature of said casing, a rotator disk concentrically mounted on said shaft and adapted to engage the peripheral surface of said casing at one place, a pair of sliding abutments radially slidable on and carried by said rotator, abutment pistons journaled in the ends of said abutments to engage the periphery of said casing, and pendulum devices operntively engaging said abutments for separating the same to maintain the piston in contact with the peripheral wall of the casing and inlet and outlet ports for said casing.

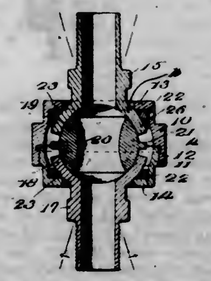
4. In a rotary engine, a casing having two chambers separated by a partition wall, shaft bearings carried by said casing and arranged eccentrically to the center of curvature of the casing, a shaft journaled in said bearings, rotators on said shaft, one located in each chamber, each of said rotators including disks concentrically mounted on said shaft and engaging the peripheral wall of said casing at one place, sliding abutments mounted on said rotators and having inner opposing ends, casing engaging pistons journaled in the outer ends of said abutments, pendulum devices mounted on said rotators and projecting between and coöperatively engaging the opposing ends of said abutments to maintain said abutment pistons in contact with the peripheral wall of said casing, said dividing wall having a cross port and a leading groove in one side of the wall communicating with the chamber of the casing on that side and having a blind groove in the other side of the wall, one of said rotators having a compressed charge duct, one end of which opens into said casing and the other end is ported to register with said blind groove at intervals, a new charge inlet port to one of the chambers of said casing and an exhaust duct from the other chamber of said casing, all being arranged whereby a new charge is drawn into one of said casing chambers, compressed in said chamber and transferred to the other chamber, and means for exploding said compressed charge in said other chamber before exhausting the same to atmosphere.



8. In a rotary engine, a piston casing having inlet and outlet ports, a rotator disk, a shaft journaled in said casing on which said disk is carried, a pair of sliding abutments radially slidable on and carried by said rotator to divide the piston chamber into compartments, said casing having inlet and outlet ports, and pendulum devices operatively engaging said abutments for separating the same to maintain the abutments in contact with the peripheral wall of the piston chamber of the casing.

[Claims 2, 3, and 5 to 7 not printed in the Gazette.]

1,271,179. FLEXIBLE PIPE-COUPLING. GEORGE H. LANGTON and JOHN W. SMALL, Portsmouth, Va. Filed July 18, 1917. Serial No. 181,369. (Cl. 285—95.)



1. A flexible pipe coupling including a body split medially to provide coacting sections connected at their inner extremities, flanges formed on the outer extremities of the sections and projecting radially inward, coacting pipe sections fitted through the outer ends of the body sections and formed at their inner extremities with confronting sockets, a bearing member interposed between the pipe sections and engaging in said sockets, and seating rings for the pipe sections interposed between the sockets and the said flanges, the said rings being freely shiftable within the body for removal at the inner ends of the body sections.

2. A flexible pipe coupling including a sectional body internally chambered from end to end thereof, flanges formed on the outer extremities of the sections of the body and projecting radially inward to overhang said chamber, the said chamber being open and unobstructed between the inner faces of said flanges, coacting pipe sections fitted through the ends of the body and formed at their inner extremities with confronting sockets, a bearing member interposed between the pipe sections and engaging in said sockets, and seating rings for the pipe sections interposed between the sockets and the said flanges and held against inward displacement within the said chamber of the body by the said sockets.

3. A flexible pipe coupling including a sectional body, flanges formed on the outer extremities of the sections of the body and projecting radially inward, the body being internally open and unobstructed between the said flanges to form an annular chamber, seating rings fitted within the sections from the inner ends thereof to lie against the said flanges and freely shiftable within the said chamber to be removed at the inner ends of the sections, coacting pipe sections fitted through the outer ends of the sections of the body and formed at their inner extremities with confronting sockets engaging said seating rings, and a bearing member interposed between the pipe sections to coact with said sockets and formed with an annular flange freely received within said chamber, the said flange being interposed between the inner ends of the said sockets for maintaining the bearing member in position establishing communication between the pipe sections.

1,271,180. TOY BUILDING ELEMENTS. GUSTAVE LAVANCHY, Neuchâtel, Switzerland. Filed Jan. 24, 1918. Serial No. 213,610. (Cl. 46—35.)

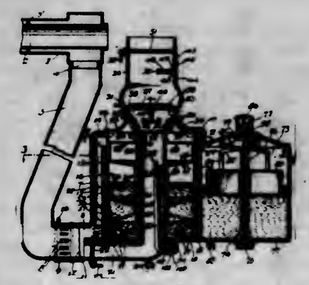


1. A toy building construction comprising a plurality of rigid members each provided with a plurality of notches, and a plurality of flexible elements resting in said notches and being retained in various curved shapes by the engagement of the flexible elements with the walls of said notches.

2. A toy building construction comprising a plurality of rigid members each provided on its opposite edges with a plurality of parallel notches, and a plurality of flexible elements resting in said notches and being retained in various shapes by the engagement of the flexible elements with the walls of said notches.

1,271,181. CARBURETER. WILLIAM S. LENHART, Atlantic City, N. J. Filed June 17, 1916. Serial No. 104,226. (Cl. 261—123.)

1. A carbureter comprising a casing having an air inlet, an annular passageway at the upper end thereof, a vertical duct communicating with said passageway and the air inlet, a carbureting chamber having an outlet, small vertical air inlet ducts surrounding the carbureting chamber in communication with the annular passageway and the carbureting chamber at the lower end thereof, a cover for said casing provided with a depending cup shaped member said member having openings therein, means for regulating the size of said openings, a valve and throttle controlled outlet pipe carried by the cover and in communication with the cup shaped member, and a baffle member provided with a plurality of perforated walls situated in the carbureting chamber, the perforations diminishing in size successively from the lower to the upper end.



3. A carbureter comprising a casing having an air inlet, an annular passageway at the upper end thereof, a vertical duct communicating with said passageway and the air inlet, a carbureting chamber having an outlet, small vertical air inlet ducts surrounding the carbureting chamber in communication with the annular passageway and with the carbureting chamber at the lower end thereof, a cover for said casing provided with a depending cup shaped member said member having openings therein, means for regulating the size of said openings, a valve and throttle controlled outlet pipe carried by the cover and in communication with the cup-shaped member, a baffle member provided with a plurality of perforated walls situated in the carbureting chamber, the perforations diminishing in size successively from the lower to the upper end, a standpipe within the carbureter chamber extending from top to bottom in communication with the air inlet and the cup shaped member, means communicating with the carbureting chamber and with said standpipe whereby a charge of gasolene may be sprayed into said standpipe, and comprising a shell formed integral with the bottom of the carbureter casing at the lower end of the standpipe, said shell having a valve chamber and a plunger chamber therein separated from each other, and in communication through a hole, the valve chamber being in communication with the carbureting chamber, a valve situated within said valve chamber, the plunger chamber having holes leading to the carbureting chamber, a plunger situated in said chamber, a rib in the standpipe having a longitudinal duct or passageway, a canal leading from the plunger chamber to the longitudinal duct, and a reservoir in communication with the carbureting chamber at the lower end thereof, the upper end of said reservoir being in communication with the cup shaped member.

[Claim 2 not printed in the Gazette.]

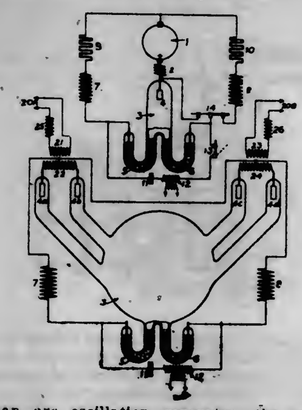
1,271,182. COLLAR-BUTTON. EDWARD LESCH, New York, N. Y. Filed Sept. 11, 1917. Serial No. 190,816. (Cl. 24—90.5.)



1. A collar button comprising a shank, a back plate carried by said shank, an inclosing member for said shank, said inclosing member having a flange, and means engaged around said shank within said inclosing member to cause the flange of said inclosing member and said back plate to grip a member through which the button is engaged.

[Claims 2 to 5 not printed in the Gazette.]

1,271,183. ARC OSCILLATION-GENERATOR. BENJAMIN LIEBOWITZ, New York, N. Y. Filed Jan. 28, 1915. Serial No. 4,965. (Cl. 250—36.)



1. In an arc oscillation generator, the combination with a source of supply and a system of supply circuits, of a pair of arcing cathodes discharging through a common positive column, means for stabilizing parallel discharges from said cathodes, and an oscillatory circuit connected between said cathodes.

7. In an oscillation generator, the combination with a source of supply and a vapor electric device, of a pair of arcing cathodes discharging through a common positive column in said vapor electric device, an inductance and resistance in series with each of said cathodes and an oscillatory circuit connected between said cathodes.

13. In an oscillation generator, the combination of an exhausted vessel, a pair of vaporizable cathodes and an anode in said exhausted vessel, said cathodes discharging through a common positive column to said anode, an inductance in series with said anode, a high voltage source of direct current, an inductance and resistance in series with each of said cathodes, through which inductance and resistance each of said cathodes is connected to the negative terminal of said source of direct current, said anode being connected to the positive terminal of said source of direct current, and an oscillatory circuit connected between said cathodes.

17. In an oscillation generator, the combination with a source of supply and a vapor electric device, of a pair of arcing cathodes in said vapor electric device, an inductance in series with each of said cathodes, and an oscillatory circuit having large ratio of inductance to capacity connected between said cathodes.

[Claims 2 to 6, 8 to 12, and 14 to 16 not printed in the Gazette.]

1,271,184. BULB. MARSHALL Y. LUCAS, Boise, Idaho. Filed May 3, 1917. Serial No. 166,112. (Cl. 230—3.)



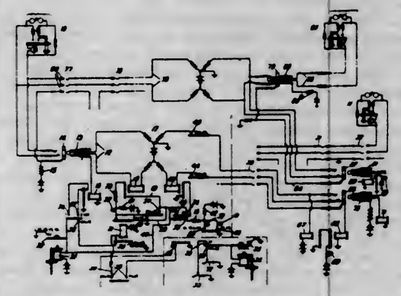
1. A pliable bulb containing weighting material which is readily movable with its movement confined to a region of the bulb, all of which lies in one direction from the center of the bulb.

2. A pliable bulb provided with a separate chamber containing readily movable weighting material.

6. A pliable bulb provided with an auxiliary chamber having a filling opening, a heavy easily movable substance inserted into said chamber and means for sealing said filling opening.

[Claims 3 to 5 not printed in the Gazette.]

1,271,185. TELEPHONE-EXCHANGE SYSTEM. ALBEN E. LUNDELL, New York, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 22, 1915. Serial No. 68,209. (Cl. 179—27.)



1. In a telephone exchange system, a plurality of lines, a connecting circuit by means of which two lines may be interconnected, a plurality of supervisory signals individual to said circuit, and means under the sole control of one end of said circuit for operating said signals.

2. In a telephone exchange system, a plurality of lines, means for extending a calling line to a called line, a clearing-out signal, means jointly controlled through said calling and called lines for lighting said signal, and means operative upon the extension of a calling line to another called line for lighting said signal under the sole control of said last mentioned line.

3. In a telephone exchange system, a plurality of lines, means for establishing a connection between a calling and a called line, two supervisory signals, means operable upon the establishment of a certain connection for controlling one of said signals from the calling and the other of said signals from the called end of said certain connection, and means responsive to the establishment of a certain other connection for controlling both of said signals from the called end of said certain other connection.

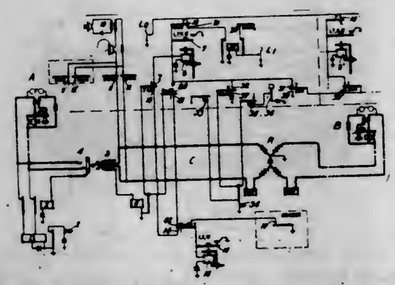
4. In a telephone exchange system, a plurality of lines, operators' positions, means for establishing a connection between a calling and a called line, two supervisory signals, means for controlling one of said supervisory signals through the calling line, means operative upon the establishment of a connection between two of said lines for controlling the other supervisory signal through the called line, and means operative upon the establishment of a connection to an operator's position for controlling both said supervisory signals through the called end of the connection.

5. In a telephone exchange system, a plurality of lines, two supervisory signals, a connecting circuit, means for extending the same to a calling line, means operative thereupon for actuating one of said supervisory signals, means for extending said connecting circuit to a called line, means operative thereupon for actuating the other supervisory signal, and means operable through said called line for controlling the operation of both said supervisory signals.

[Claims 6 to 12 not printed in the Gazette.]

1,271,186. TELEPHONE-EXCHANGE SYSTEM. ALBEN E. LUNDELL, New York, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 13, 1916. Serial No. 131,046. (Cl. 179—27.)

1. In a telephone exchange system, a line, a trunk, means for extending said line to said trunk, a variably operable switching device having a listening-in and a listening-out position, a signal, means operated upon the extension of said line to said trunk for moving said switching device into the listening-in position, means for moving said switching device into the listening-out position, means for moving said switch out of said listening-out position, and means operative thereupon for actuating said signal.

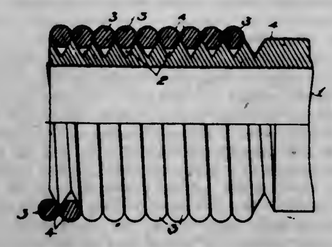


2. In a telephone exchange system, a subscriber's line, an operator's trunk circuit, means for extending the line to said trunk circuit, a variably operable switching device having a listening-in and a listening-out position, means responsive to the extension of said line for moving said device into the listening-in position, means for moving said device into the listening-out position, operator controlled means for moving said device out of said listening-out position, and subscriber controlled means for moving said device out of the listening-out position.

3. In a telephone exchange system, a subscriber's line, an operator's trunk circuit, means for extending said line to said circuit, a listening key switch movable to a listening-in and listening-out position, a signal associated with the trunk, operator controlled means moving said switch out of the listening-out position, subscriber controlled means for moving said switch out of the listening-out position, means controlled by said switch when moved out of the listening-out position for actuating said signal, said last mentioned means being operative only when said subscriber controlled means is actuated.

4. In a telephone exchange system, a line, a trunk, a calling signal associated with said line, operator-controlled means for extending the line when calling to said trunk, a recall signal at said trunk, a variably operable switching device associated with said trunk and having a normal, a listening-in and a listening-out position, means for moving said switching device into said listening-in position in response to the extension of said line to said trunk, manually operable means for moving said switching device from its listening-in to its listening-out position, and means controllable through the calling line to operate said switching device for actuating said recall signal.

1,271,187. MEANS FOR PROTECTING CONDUIT OR PIPE THREADS. GEORGE A. LUTZ, Cranford, N. J., assignor to American Circular Loom Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Nov. 23, 1916. Serial No. 132,925. (Cl. 137—91.)



1. The combination of a conduit having a threaded portion, with a protector comprising a helical coil of pliable wire upon the threaded portion of the conduit, the windings of the coil being free to elongate and uncoil for removal from the conduit.

5. A conduit-thread protector comprising a helical coil of pliable wire adapted to be screwed upon such thread and to elongate and unwind when pulled lengthwise from the conduit.

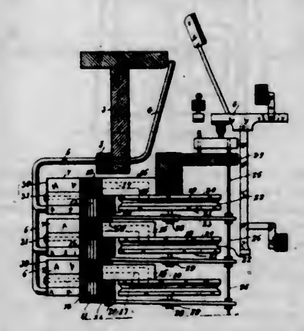
6. A conduit-thread protector comprising a helical coil of pliable wire adapted to be screwed upon such thread and to elongate and unwind when pulled lengthwise from the conduit, the coils of the protector being disconnected from each other.

7. A conduit-thread protector comprising a helical coil of pliable wire adapted to be screwed upon such thread and to elongate and unwind when pulled lengthwise from the conduit, the coils of the protector being disconnected from each other and spaced apart to freely follow the thread of a conduit when being screwed thereon.

8. A conduit-thread protector comprising a helical coil of pliable wire adapted to be screwed upon such thread and to elongate and unwind when pulled lengthwise from the conduit, the outer end of the coil being offset with respect to the curvature thereof and terminating without the bore of the coil.

[Claims 2 to 4 and 9 not printed in the Gazette.]

1,271,188. PNEUMATIC ACTION. FRANK G. LYNDE, Newark, N. J., assignor to Lauter Company, Newark, N. J., a Corporation of New Jersey. Filed Feb. 20, 1914. Serial No. 819,883. (Cl. 84—232.)



1. In a player piano, an element constituting a removable unit comprising a three-ply veneered board having an inner and two outer plies, said board having a lateral extension from one face thereof adapted to support a pneumatic and to prevent warping of said board in the direction of its least dimension, the inner ply having a passageway therein, adapted to be connected with a source of pneumatic power, the ply opposite the extension having ports extending transversely therethrough communicating with said passageway and adapted to lead to valvular pneumatic controlling members positioned exteriorly of the boards and said board having ports extending transversely therethrough for placing the valvular members in communication with the pneumatics.

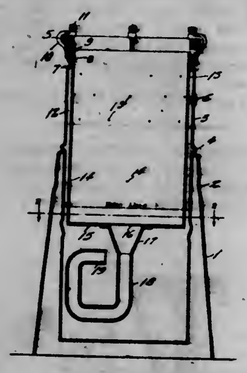
2. A piano action forming a unitary structure and comprising a tension box, having a pneumatic affixed to one face and a pneumatic controlling valve element mounted on the opposite face thereof, a guide board mounted on the side of the box having the pneumatic, a hammer actuating jack guided for movement in said board, and operatively connected to said pneumatic to be actuated thereby, said action being bodily removable from the piano without affecting its parts.

3. In a player piano, the combination with a member adapted to be removed from the piano as a unit, means at opposite ends for removably supporting said member in place, said member having a longitudinally extending passageway contained entirely therein and constituting a pneumatic reservoir having a conduit leading therefrom

to one face of the member and having a straight uninterrupted passageway extending transversely within said member adjacent the reservoir, a hammer actuating pneumatic carried by the member and opening into said passageway, a unitary valvular member in the form of a block removably affixed to said member containing all of the necessary mechanism for controlling communication between the conduit leading from said reservoir and the passageway leading to said pneumatic, and means passing through the block member for removably securing the same in place.

[Claims 4 to 11 not printed in the Gazette.]

1,271,189. WASHBOILER. JAMES W. MCFARLAND, Brownwood, Tex. Filed Feb. 20, 1918. Serial No. 218,185. (Cl. 68—30.)



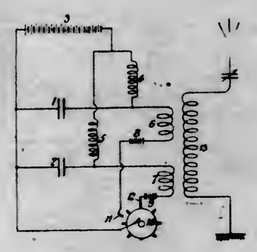
2. In a wash boiler, a cylindrical water receptacle having an internal projection near its upper end, a supporting casing surrounding the lower portion of the water receptacle, a gasket mounted on the projection within the upper end of the water receptacle, a cylindrical clothes receptacle having its upper ends resting on the gasket within the water receptacle, means mounted on the water receptacle for clamping the upper end of the clothes receptacle on the gasket whereby steam-tight joint is had, the clothes receptacle being slightly spaced from the water receptacle to form an annular vertical space therebetween closed by the steam-tight joint at its upper end, the clothes receptacle having a plurality of minute perforations grouped together at the upper end of the space between the receptacles, an opening in the bottom of the clothes receptacle, and a tubular water holding and releasing member depending from the opening and having a laterally directed discharge opening below the bottom of the clothes receptacle.

[Claim 1 not printed in the Gazette.]

1,271,190. WIRELESS-TELEGRAPH TRANSMITTER. GUGLIELMO MARCONI, London, England, assignor to Marconi Wireless Telegraph Company of America, New York, N. Y., a Corporation of New Jersey. Filed Apr. 30, 1914. Serial No. 835,845. (Cl. 250—37.)

1. In a wireless telegraph transmitter, the combination of an aerial, a plurality of circuits each including a condenser and an inductance in series therewith, means separate from said inductances for charging each condenser through its inductance, and means including a quenched spark gap and a movable circuit-making and breaking device for discharging the condensers independently in succession and in synchronism with the aerial.

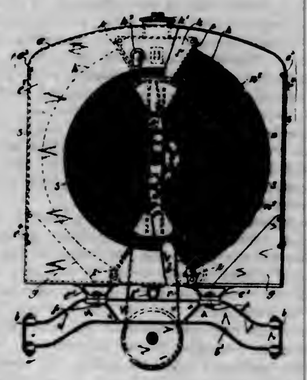
6. In a wireless telegraph transmitter, the combination of an aerial, a plurality of condensers, an inductance in series with each condenser, means for charging each condenser independently through its inductance, a disk discharger, an inductance between each condenser and the discharger, and a winding in the aerial adapted to act as



a common secondary to the primaries formed by the last mentioned inductances.

[Claims 2 to 5 not printed in the Gazette.]

1,271,191. RADIATOR FOR AUTOMOBILES. ALFRED F. MASURY, New York, N. Y., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed Feb. 26, 1915. Serial No. 10,674. (Cl. 257—126.)



A radiator for automobiles comprising a casing having its end and side walls perforated, water reservoirs, semi-cylindrical bundles of tubes secured to the reservoirs, plates into which the ends of the tubes are expanded, the reservoirs being provided with inclined and flanged side walls to receive said plates, means to secure the plates detachably to the flanges, a fan rotatably mounted within the bundles of tubes and in the plane thereof, and supports for the fan extending diametrically across the circular bundles and secured detachably to the outer sides of the radiator.

1,271,192. PROCESS OF MAKING SODIUM ALUMINATE. WALTER L. MELICK, Columbus, Ohio. Filed May 7, 1917. Serial No. 166,932. (Cl. 23—13.)

2. The herein described process which consists in heating to its boiling point a mixture consisting of a substantially saturated solution of sodium hydroxid in water and ground bauxite of a degree of fineness of at least seventy mesh, the mixture having approximately the consistency of a thick paste or mud, boiling the mixture at atmospheric pressure, maintaining the consistency of the mixture by the addition of water, and finally separating the sodium aluminate formed from the remainder of the mass.

[Claims 1 and 3 not printed in the Gazette.]

1,271,193. PNEUMATIC ACTION FOR PLAYER-PIANOS. HARRY MEYER, Wellston, Mo. Filed Oct. 17, 1914. Serial No. 867,048. (Cl. 84—178.)



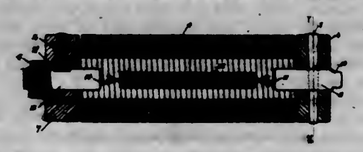
1. A unit pneumatic action for mechanical pianos consisting of a plurality of pneumatics arranged in tiers, said tiers being selectively removable, and the pneumatics in each tier being secured transversely beneath a horizontal valve-block composed of top and bottom boards in continuous contact along their side margins, the bottom or channel-board having a longitudinal channel in its top face, and the top or valve-board being removably secured to the top face of said channel-board and having a series of valve-chambers registering with said channel, valves mounted in said valve-chambers for operating the pneumatics in said tier and having stems projecting downwardly into said channel, and diaphragms for operating said valves secured in separate pockets in the bottom of said channel below said valves, said valve-board and said channel-board having separately detachable end supporting means whereby they may be removed selectively and the removal of either said valve-board or said channel-board exposes all of the valve stems and diaphragms in said tier.

2. A pneumatic action for mechanical pianos comprising a horizontal channel-board having a longitudinal channel in its top face and a series of pockets in the bottom of said channel, a valve-board removably secured to the top face of said channel-board, said valve-board having recesses in its top face communicating with said channel in vertical alinement with said pockets, a valve in each recess having a stem projecting down through said valve-board, said stems positioning said valves in their recesses, annular valve caps removably secured to the top face of said valve-board over the recesses therein, and diaphragms for operating said valves secured in the pockets in the bottom of said channel, whereby said valves are separately removable from said recesses and said valve-board and valves are removable all together to expose said diaphragms, said valve-board and said channel-board having separately detachable end supporting means whereby they may be removed selectively.

4. A unit pneumatic action for mechanical pianos consisting of a plurality of pneumatics arranged in tiers, each tier comprising a channel-board and a valve-board having continuous edges detachably secured together in contact throughout their length and forming a horizontal low pressure chamber between them, said valve-board having recesses in its top face which constitute valve chambers, single disk valves mounted in said valve chambers and having leather facings on their under sides, annular valve caps removably secured over said recesses and having leather seats on their under sides, said channel-board having recesses therein which constitute diaphragm chambers, bleeder ducts connecting said diaphragm chambers and low pressure chamber, and diaphragms for operating said valves secured over said last-mentioned recesses, whereby removal of said valve board exposes all of said valve stems, bleeder ducts and diaphragms, each of said valve-boards and channel-boards having separately detachable end supporting means whereby each one of them may be removed independently of the others.

[Claim 3 not printed in the Gazette.]

1,271,194. SPRING-ROLL. PETER MEYER, Newark, N. J. Filed Nov. 26, 1917. Serial No. 203,871. (Cl. 69—13.)

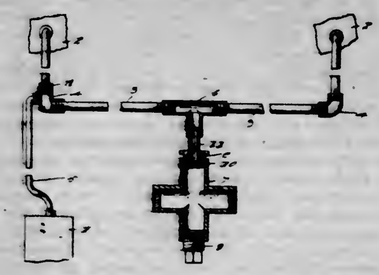


1. A roll consisting of a series of superimposed convolutions of wire wound alternately in opposite directions, a flange at each end of said roll in which the ends of the wires are secured, and a flexible connection between said flanges.

3. A roll consisting of a series of superimposed convolutions of wire wound alternately in opposite directions, a flange at each end of said roll in which the ends of the wires are secured, and a tension member connecting said flanges.

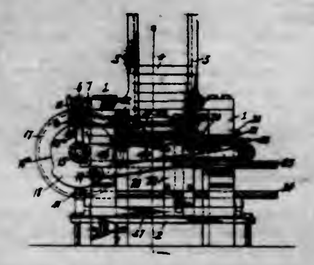
[Claims 2 and 4 to 6 not printed in the Gazette.]

1,271,195. WATER-TRAP FOR LIGHTING SYSTEMS. JOHN F. MIDDELSTADT, Crabtree, Oreg. Filed July 14, 1916. Serial No. 109,307. (Cl. 137—103.)



In a carbid light system the combination with a distributing pipe formed of sections, of a T-joint connecting the sections to each other, a nipple removably connected to the T-joint, a collector disposed below the T-joint and including a cross shaped body, a hollow nut removably connecting the upper end of the vertical member of the body to the lower end of the nipple, a plug removably mounted in the lower end of said vertical member, and plugs secured in the ends of the horizontal member of the body.

1,271,196. ENGRAVING-MACHINE. FRANK H. MOONEY, Toledo, Ohio, assignor to The Conklin Pen Manufacturing Company, Toledo, Ohio, a Corporation of Ohio. Filed Apr. 7, 1916. Serial No. 89,566. (Cl. 33—22.)



1. In a machine of the class described, a reciprocatory frame, a member carried by said frame for vibratory

movements transversely of its reciprocatory movements, means urging a movement of said member into work coacting position with respect to said frame, means operable to periodically move said member out of work coacting position, and means for imparting vibratory movements to the member when in work coacting position and reciprocated by said frame.

10. In a machine of the class described, means operable to hold and rotate a work piece, a vibrator shaft, means for rotating said work holding means and shaft in unison, a work engraving member mounted for reciprocatory movements lengthwise of said shaft and vibratory movements transversely thereof, and having a part for contacting with said shaft when the member is reciprocally moved for vibrating the member, and means for reciprocating said member.

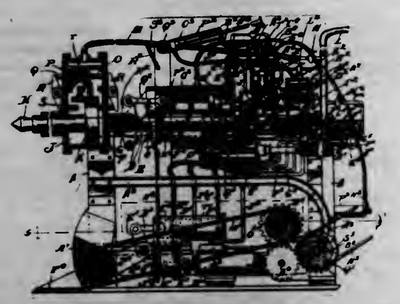
15. In a machine of the class described, a work guiding chute, means operable to hold a work piece in predetermined position with respect to said chute and then to release the same to permit one work piece to move from, and another to move into work operating position, and a delivery table disposed below the discharge end of said chute and operable to coöperate with the released work piece to support the other in position to be engaged by said holding means and then to lower to permit a discharge of the released work piece from said chute, and means for periodically raising and lowering said table.

19. In a machine of the class described, a rotatable and axially movable work holding spindle, a longitudinally movable vibrator member, a work engraving tool, means for imparting reciprocatory movements to said tool lengthwise of a work-piece held by said spindle and coöperating with said vibrator member to impart vibratory movements to said tool, and means for simultaneously rotating said spindle and imparting predetermined and axial movements to said vibrator member.

20. In a machine of the class described, a rotatable and axially movable work holding spindle, a rotatable and axially movable vibrator shaft, a work engraving tool, means for imparting reciprocatory movements to said tool lengthwise of a work-piece held by said spindle and coöperating with said vibrator shaft to impart vibratory movements to said tool, and means for simultaneously rotating said spindle and imparting rotary and predetermined axial movements to said vibrator shaft.

[Claims 2 to 9, 11 to 14, and 16 to 18 not printed in the Gazette.]

1,271,197. MINING-MACHINE. EDMUND C. MORGAN, New York, N. Y., assignor to American Morgan Company, Chicago, Ill., a Corporation of South Dakota. Filed May 28, 1904. Serial No. 210,174. Renewed Nov. 28, 1917. Serial No. 204,452. (Cl. 125—14.)



1. In a mining machine, a main frame, a reciprocating mining tool mounted thereon for universal movement, and means for actuating said mining tool, in combination with fluid-pressure power-actuated mechanism for advancing and anchoring said main frame.

28. In a mining machine, a reciprocable mining tool, means for operating said tool, means for individually supporting the tool for swinging movement in vertical and horizontal directions, means for imparting such movements to the tool as to adjust the same to any desired radial position, a scoop and means for operating same and means operating below the plane of operation of said tool for directly receiving the dislodged material from said scoop and immediately carrying it away.

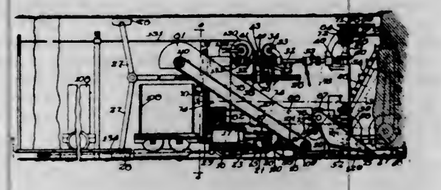
34. A mining machine including a portable platform, a puncher mounted thereon, and yielding means for swinging the puncher laterally.

37. A mining machine including a portable platform, a puncher mounted thereon, means for adjusting the puncher longitudinally and yielding means for swinging the puncher vertically.

43. In a mining and loading machine, the combination with a supporting frame, of a pick machine mounted thereon, a conveyer carried by said frame, a scoop in position to receive the material dislodged by said pick machine and move it onto said conveyer, and means for feeding the frame forwardly.

[Claims 2 to 27, 29 to 33, 35, 36, 38 to 42, and 44 to 49 not printed in the Gazette.]

1,271,198. MINING AND LOADING MACHINE. EDMUND C. MORGAN, Chicago, Ill. Original application filed Nov. 10, 1896, Serial No. 611,603. Divided and this application filed Feb. 10, 1911. Serial No. 607,753. (Cl. 37—39.)



9. In loading apparatus, the combination with a wheel-mounted vehicle, of propelling mechanism connected to one or more of the wheels of said vehicle, for transporting said vehicle forwardly and rearwardly, an endless belt conveyer mounted on said vehicle and extending from a low position at the front end of said vehicle on an incline longitudinally to a higher position toward the rear of said vehicle, a scoop mounted on said vehicle in advance of said conveyer and in alinement therewith for delivery of material to said conveyer, and additional propelling mechanism comprising a pair of anchored screw-threaded rods spaced apart and extending longitudinally to move said vehicle forward more powerfully than said first named propelling mechanism to force said scoop under material to obtain a load.

11. In loading apparatus, the combination with a scoop, of mechanism confining the rear portion of said scoop to movements in a general horizontal direction and to turning movements, a laterally movable support for said scoop, a conveyer on said support and behind said scoop, driving mechanism for moving the scoop forward and rearward by reciprocating the rear portion thereof in a general horizontal direction along said confining mechanism, another driving mechanism for tilting the forward portion of said scoop about a pivot at such confining mechanism to effect the discharge of the load therein out of the rear end of said scoop onto said conveyer, and mechanism for moving the machine forward.

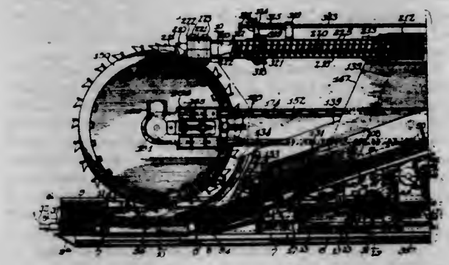
12. In loading apparatus, the combination with a frame, of a scoop, a conveyer on said frame behind said scoop, mechanism for confining the rear portion of said scoop to a rearward and forward movement over an approximately horizontal path, driving mechanism for moving said scoop bodily forward and rearward, additional driving mechanism for turning said scoop on an axis substantially at said path of reciprocation of the rear portion of said scoop, and means for controlling at will either of said driving mechanisms independently of the other.

19. A scoop or bucket, and cutting members carried thereby and adjustable with respect thereto.

30. In a loading machine, the combination with spaced-apart guideways extending forwardly and rearwardly, of an endless belt conveyer between said guideways, slide blocks confined in said guideways, a scoop pivotally connected to the forward ends of said slide blocks at the rearward portion of said scoop, means for reciprocating said slide blocks in a general horizontal direction, and mechanism for turning said scoop to discharge the contents thereof onto said conveyer mechanism.

[Claims 1 to 8, 10, 13 to 18, 20 to 29, and 31 to 34 not printed in the Gazette.]

1,271,199. MINING-MACHINE. EDMUND C. MORGAN, Chicago, Ill. Filed Jan. 17, 1912. Serial No. 671,601. (Cl. 125—14.)



6. In a machine of the class described, the combination of breaking down means mounted for pivotal movement upwardly and downwardly, means for automatically and intermittently moving the said breaking down means about its pivot in one direction, and means for rendering the last said means inactive for permitting the breaking down means to move about the pivot in the opposite direction and by gravity.

19. In a machine of the class described, the combination of a pivotally mounted cutter support, a cutter reciprocably mounted on the support, resilient means tending to force the cutter forwardly into the material to be mined, retracting means, means for operating the latter to retract the cutter upon each operation of the retracting means to create a stress upon the said resilient means whereby the cutter support will be moved about its pivot, and means for causing the said retracting means to operate one or more times without retracting the cutter.

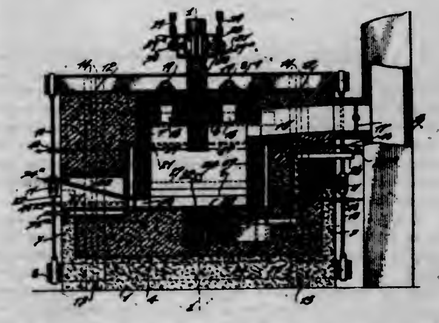
67. In a machine of the class described, the combination of means for making a horizontal cut, means for making a vertical cut, means disposed to operate in the angle between the first two said means for breaking down the material, said breaking down means being adapted for movement upwardly and downwardly, and means for intermittently feeding the breaking down means upwardly.

72. In a machine of the class described, the combination of means for making a horizontal cut, means for making a vertical cut, means disposed to operate in the angle between the first two said means for breaking down the material, said breaking down means being adapted for movement upwardly and downwardly, means for intermittently feeding the breaking down means in a constant direction, and a conveyer for receiving the material directly as it is broken down for conveying it away and above which conveyer the said breaking down means operates.

160. In a mining and loading machine, the combination with a stationary supporting frame, of a supplemental frame movable thereon, a rearwardly extending endless belt conveyer having superposed traveling portions mounted on said supplemental frame, an undercutting kerf-cutter mounted on said supplemental frame, means for feeding said supplemental frame forward to effect the operation of said under-cutter and move the forward portion of said conveyer into the kerf produced by said under-cutter, and mechanism for dislodging the material above the under-cut onto said conveyer.

[Claims 1 to 5, 7 to 18, 20 to 66, 68 to 71, 73 to 159, and 161 to 217 not printed in the Gazette.]

1,271,200. METHOD OF AND APPARATUS FOR SMELTING TIN. EDMUND N. MORRILL, Warren, N. H., assignor to Andes Exploration & Smelting Corporation, a Corporation of Delaware. Filed Nov. 27, 1917. Serial No. 204,176. (Cl. 204—64.)



1. The process of smelting tin ore in an electric incandescent furnace, which consists in forming a molten slag bath in said furnace by its resistance to an electric current passing therethrough, introducing at intervals into said bath a charge of tin ore, slag and reducing materials, each freshly introduced charge being smaller in quantity than the volume of said molten material already in said furnace, and maintaining the temperatnre of said bath approximately uniform and slightly below the boiling point of tin.

4. The process of smelting tin ore in an electric incandescent furnace, which consists in forming a molten slag bath in said furnace by its resistance to an electric current passing therethrough, introducing at intervals into said bath, a charge of tin ore, slag and reducing materials in approximate proportion of 60% concentrated tin ore—1000 lbs., slag—100 lbs., lime CaO—35 to 50 lbs., silica SO_2—50 to 70 lbs., coal—125 to 150 lbs., each freshly introduced charge being smaller in quantity than the volume of said molten material already in said furnace, and maintaining the temperature of said bath approximately uniform and slightly below the boiling point of tin.

8. An electric incandescent furnace comprising a crucible lined with magnesite brick, said lining being surrounded by a backing of fire-brick and the whole supported upon a solid base of concrete having a raised border wall to prevent leakage of molten material from said furnace into the earth, the hearth of said crucible being surrounded by water-cooled plates located adjacent said magnesite lining, tap holes for said slag and for said molten metal at different levels, each of said tap holes having outwardly flaring mouths and being surrounded with a water jacket.

[Claims 2, 3, 5 to 7, 9, and 10 not printed in the Gazette.]

1,271,201. POSTING-BOX. HELMUTH G. MUEGGE, Baker, Oreg. Filed July 17, 1917. Serial No. 180,968. (Cl. 129—43.)

1. A posting box, comprising a pair of box sections, arranged so as to be telescoped one within the other and forming conjointly a single compartment for the storage of

statement blanks or other posting mediums, locking means brought into action by the relative movement of the sections to lock the same in their telescoped position and a hinged connection between the sections permitting the same, when in their extended position, to be disposed in angular relation to each other, to constitute said sections as separate receptacles to facilitate the shifting of the blanks from one receptacle to the other.



2. A posting box, comprising a pair of sections arranged so as to be telescoped one within the other, forming conjointly a single compartment for the storage of statement blanks or other posting mediums and coöperating structures for connecting the sections together, said structures constituting a hinge for permitting the sections to be swung apart when in their extended position and for constituting a lock for locking the sections against relative movement when the sections are telescoped.

3. A posting box, comprising a pair of sections arranged so as to be telescoped one within the other, forming conjointly a single compartment for the storage of statement blanks or other posting mediums and coöperating structures for connecting the sections together, said structures constituting a hinge for permitting the sections to be swung apart when in their extended position and for constituting a lock for locking the sections against relative movement when the sections are telescoped and means detachably mounted on said sections for supporting the same when swung apart.

1,271,202. CHAIN-LINK. EDWARD T. MUELLER, Chicago, Ill., assignor of one-half to Edward A. Christoph, Chicago, Ill. Filed May 21, 1917. Serial No. 169,910. (Cl. 59—85.)



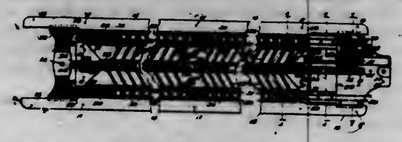
10. A chain connection of the kind described, comprising a plurality of parts, each part consisting of a wire shank bent back upon itself at one end to constitute a hook and formed with a loop at the opposite end at substantially a right angle to the plane of the shank and opposite end, the looped part bent back toward the opposite end, said looped portion bent slightly backward toward the free end of the hook with the center of the loop adjacent the free end of the hook, and arranged to engage a link at the juncture of the loop and shank, said parts constructed to detachably engage each other, with the hook of each one engaging in the loop of the opposite one.

[Claims 1 to 9 not printed in the Gazette.]

1,271,203. POWER-TRANSMITTING MECHANISM. CHARLES NATHANIEL MUNDELL, Los Angeles, Cal. Filed July 7, 1917. Serial No. 179,213. (Cl. 74—14.)

1. In a power transmitting mechanism the combination with a supporting frame, of driving and driven crossheads reciprocally mounted in said frame, a series of eccentrics interposed between said heads, and means for rotating said eccentrics in reverse directions to transmit power from one of said heads to the other.

3. In a power transmitting mechanism the combination with a supporting frame, of driving and driven crossheads reciprocally mounted in said frame, a series of eccentrics interposed between said heads in contact and alinement, forcing levers extending alternately in opposite directions from said eccentrics, and means whereby said levers may be collectively actuated in both directions by agency of the driving crosshead aforesaid to transmit power from the latter to said driven crosshead.

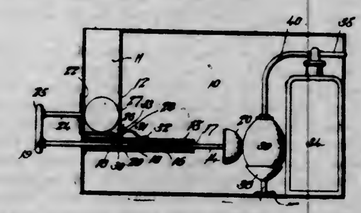


6. In a power transmitting mechanism the combination with a supporting frame, of driving and driven crossheads reciprocally mounted in said frame, a series of forcing levers interposed between said heads having eccentric inner ends, means under control of the driving head whereby said eccentrics are partially rotated in reverse directions, and means whereby the driven head is actuated in both directions by agency of said eccentrics.

8. In a power transmitting mechanism the combination with a supporting frame, of driving and driven crossheads reciprocally mounted in opposite ends of said frame, a series of forcing levers interposed between said heads having eccentric inner ends in contact and alinement, means whereby said eccentrics are turned over by reciprocation of the driving head, means whereby the driven head is reciprocated in both directions by agency of said eccentrics when crowded together, and a momentum safety clutch adapted to reciprocate the driving head by momentum of the driven head when power is shut off, substantially as described.

[Claims 2, 4, 5, and 7 not printed in the Gazette.]

1,271,204. PERFUME-VENDING MACHINE. HOBART L. NEEDHAM, McMinnville, Oreg. Filed Dec. 30, 1915. Serial No. 69,456. (Cl. 194—60.)



1. A coin-controlled actuating device comprising in combination a housing having therein a slot for receiving a coin, one of the walls of said slot comprising a movable section, a pusher spaced from said movable section, a member operable for actuating an extraneous object, a stop carried by said movable section of the coin slot wall and adapted to prevent unauthorized operation of said member and means common to said pusher and said member for actuating them when a coin is interposed between said pusher and said movable section, whereby said movable section causes said stop to allow operative movement of said member.

4. A coin-controlled actuating device comprising in combination a housing having therein a slot for receiving a coin and also having a cavity communicating with the slot, a coin-actuating element normally seated in said cavity so as to be flush with the adjacent wall of said slot, a pusher for actuating said coin-actuating element, a coin-actuated element normally forming a portion of a wall of said slot and being pivotally mounted and provided with a stop, a member movable to actuate an extraneous object, a stop carried by said member and coöperating with said coin-actuated element for preventing unauthorized actuation of said member, said coin-actuating element and said coin-actuated element being spaced to receive a coin therebetween, and means common to said pusher and said member for actuating them simultaneously when a coin is in position between the coin-actuating element and the coin-actuated element.

[Claims 2 and 3 not printed in the Gazette.]

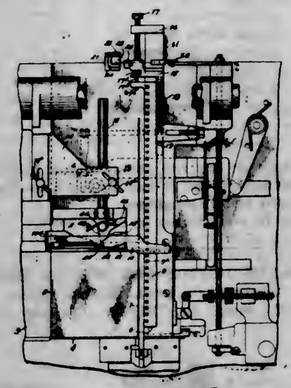
1,271,205. HEAD-REST. AUGUST W. NELSON, Spokane, Wash. Filed June 10, 1916. Serial No. 102,978. (Cl. 5—15.)



5. In a headrest, a skeleton frame provided with end sections each comprising a yoke and the limbs of said yoke having terminal hooks opening endwise outwardly with respect to said frames, a pair of supporting rods for each end section and a supporting rod having its lower end loosely connected with a portion of its respective yoke and an intermediate portion seated in one of said hooks, a head supporting member connected to the upper end of said rod, shade supporting rods one secured to each of said aforementioned rods between the point of attachment of said head supporting member of said hooks, and a shade mounted upon the upper ends of said shade supporting rod in overhanging relation with respect to said head supporting member, substantially as described.

[Claims 1 to 4 not printed in the Gazette.]

1,271,206. LINE-PUSHING MEANS FOR TYPE CASTING AND COMPOSING MACHINES. WILLIAM NICHOLAS, N. Y., and WILLIAM ACKERMAN, Larchmont, N. Y., assignors, by mesne assignments, to United States Graphotype Company, a Corporation of New York. Filed July 7, 1914. Serial No. 849,573. (Cl. 199—95.)

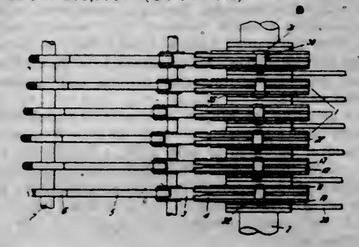


1. In a type casting and composing machine, means for stopping the operations thereof during line delivery when a line of type not of normal length has been composed thereon, said means comprising line controlled mechanism for disconnecting the source of power of said machine and mechanical line actuating means comprising mechanism operated by a line of abnormal length to set in position circuit breaking mechanism to be operated by the line delivering mechanism.

5. In a type casting and composing machine, a line delivering mechanism comprising a line pushing block and a slidable member thereon; means for adjustably attaching to said slidable member a line engaging stop pivotally attached to a swivel support and adapted to engage said slidable member; said stop being actuated by direct contact of the line as it advances while being composed therein and means comprising a second sliding member having a pin adapted to contact a cam portion on said line engaging stop adapted to vibrate said stop horizontally to actuate said sliding member on the line pushing block when said second slide is engaged by frictional contact with a tight line.

[Claims 2 to 4 not printed in the Gazette.]

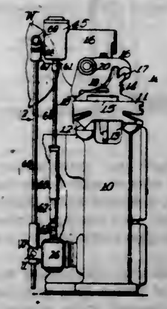
1,271,207. VARIABLE REVERSIBLE SHAFT-DRIVE. GEORGE S. NICKUM, Glendale, Cal. Filed July 5, 1917. Serial No. 178,533. (Cl. 74—53.)



1. In a shaft driving apparatus, a sleeve fastened to the shaft, a driving device mounted on said shaft and having means for causing it to oscillate around said shaft and provided with a plurality of bearing recesses, a plurality of gripping members rotatably mounted in said bearing recesses and having inner faces extending substantially tangentially with respect to the center of the shaft when the parts are in neutral position, a plurality of chocks movably mounted between said inner faces of the gripping members and the surface of said sleeve, and means for moving said gripping members to such positions that oscillation of said driving device will cause said gripping members to grip said chocks between said gripping members and said sleeve so as to rotate the shaft.

[Claims 2 to 4 not printed in the Gazette.]

1,271,208. WORK-DRIVE FOR GRINDING-MACHINES. CHARLES H. NORTON and JOSEPH S. WILCOX, Jr., Worcester, Mass., assignors to Norton Grinding Company, Worcester, Mass., a Corporation of Massachusetts. Filed Oct. 24, 1916. Serial No. 127,394. (Cl. 51—4.)



1. A work drive for a grinding machine having, in combination, a base, a table slidable thereon, a rotatable work support on said table, a cross shaft extending transversely of said table and connected to rotate said support, a driving shaft extending transversely of said base and mounted in fixed bearings therein, said shafts being pe-

sitioned in parallel horizontal planes, transmission shafts mounted in bearings movable about the axes of said first mentioned shafts, and positive driving connections between the several shafts.

2. A work drive for a grinding machine having, in combination, a base, a table slidable thereon, a rotatable work support on said table, a cross shaft extending transversely of said table and connected to rotate said support, a driving shaft extending transversely of said base and mounted in fixed bearings therein, said shafts being positioned in parallel horizontal planes, transmission shafts mounted in bearings movable about the axes of said first mentioned shafts, and positive driving connections between the several shafts including connecting elements between said transmission shafts which permit changes to be made in the distance between said shafts without interrupting their driving function.

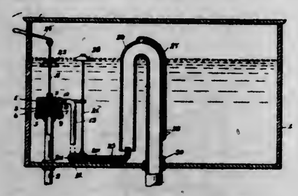
8. In a grinding machine having a work-head, a work-drive comprising a shaft mounted in a bearing movable about a fixed horizontal axis, a second-shaft mounted in a bearing movable about a horizontal axis in said work-head, and telescoping universal driving connections between said shafts.

9. In a grinding machine, a base, a table slidable thereon, a work-head adjustable on said table, a work-driving rotary member mounted in said head, a horizontal intermediate shaft mounted transversely in said head, a transmitting shaft mounted in a bearing movable about the axis of said intermediate shaft, gearing connecting said shaft and rotary member, and means to drive said transmitting shaft.

12. In a grinding machine, a base, a table slidable thereon, a work-head adjustable on said table, a work-driving member mounted in said head, a horizontal intermediate shaft mounted transversely in said head above the axis of said member, a transmitting shaft mounted in a bearing movable about the axis of said intermediate shaft, gearing connecting said shaft and and spindle, a horizontal driving shaft mounted in said base, a transmitting shaft mounted in bearings movable about the axis of said drive shaft, gearing connecting said drive shaft and the latter transmitting shaft, a telescoping universal driving connection between said two transmitting shafts, and means to maintain said transmitting shafts in operative relation in every position of the work head.

[Claims 3 to 7, 10, and 11 not printed in the Gazette.]

1,271,209. NOISELESS FLUSHING-TANK. WILLIAM H. OLDFIELD, Rochester, N. Y. Filed Sept. 21, 1916. Serial No. 121,501. (Cl. 4—5.)

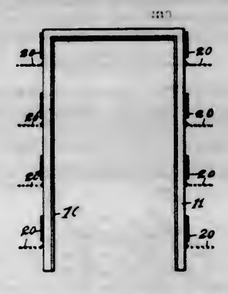


1. In a flushing tank the combination of a tank, a valve controlling the flow of water into said tank, a float for closing said valve, a second valve placed in series with the first named valve and having a plurality of ways therethrough to cause the water to flow to different parts of the tank.

3. In a flushing tank the combination of a tank, a valve controlling the flow of water into said tank, a float for closing said valve, a second valve placed in series with said first named valve and having a plurality of ways therethrough, a siphon in said tank, said second valve operating to send a jet into said siphon when in one position and passing the water into the bottom of the tank when in the other position.

[Claim 2 not printed in the Gazette.]

1,271,210. SHEET-METAL STRUCTURE. OTHO M. OTTE, Jamestown, N. Y. Filed Aug. 8, 1917. Serial No. 184,993. (Cl. 189—46.)

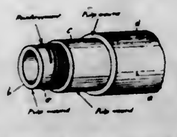


1. In combination with a channel shaped metal frame having inwardly extending sides with the outer edges thereof free, a cross bar having its ends formed with angular parts to engage over said outer edges of the sides, so as to prevent relative spreading of the latter, said sides having their free edges provided with slits and the metal to one side of the slits being bent outwardly and displaced therefrom to engage and support said bar and to extend into the mortar.

10. In combination with a channel frame having spaced side flanges converging toward their free side edges, a cross brace extending across the space between said side flanges, and spaced means on the cross brace to engage on opposite side faces of the respective side flanges to prevent relative spreading thereof, said means of the cross brace being formed so as to be movable along the lengths of said side flanges of the channel frame.

[Claims 2 to 9 not printed in the Gazette.]

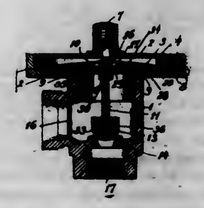
1,271,211. MANUFACTURE OF PIPES, TUBES, AND LIKE HOLLOW BODIES. HOWARD PARKER, Berlin, N. H., assignor to Berlin Mills Company, Portland, Me., a Corporation of Maine. Filed Apr. 19, 1916. Serial No. 92,284. (Cl. 92—55.)



1. A pipe, tube or the like comprising a plurality of tubular sections formed one on another, each section being individually dried and impregnated.

[Claims 2 to 19 not printed in the Gazette.]

1,271,212. VALVE DEVICE FOR USE IN HEATING SYSTEMS. ANDREW G. PAUL, Boston, Mass. Filed Aug. 10, 1912. Serial No. 714,389. (Cl. 236—10.)



1. In a valve device for use in heating systems, the combination of a chamber for an expansible fluid, the outer wall of said chamber being adapted to be exposed to the temperature of the room to be heated, the inner wall of said chamber consisting of a movable diaphragm adapted to be exposed to the temperature of the fluid passing through said valve device on the inlet side of the valve proper, the casing of the valve device being provided with a surface to act as a stop to limit the motion of the diaphragm toward the valve seat, a valve proper adapted to be moved by the diaphragm and a seat for said valve.

3. In a valve device for use in heating systems, the combination of a chamber for an expansible fluid, the inner wall of said chamber consisting of a movable diaphragm adapted to be exposed to the temperature of the fluid passing through said valve device, a spring disk between the diaphragm and the wall of the casing adapted to resist the motion of the diaphragm toward the valve seat, a valve proper adapted to be moved by the diaphragm, and a seat for said valve.

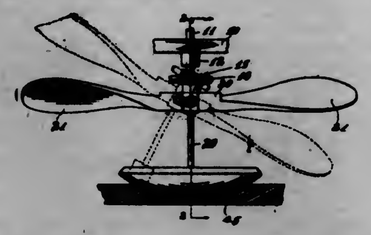
7. In a valve device for use in heating systems, the combination of a chamber for an expansible fluid, the inner wall of said chamber consisting of a movable diaphragm adapted to be exposed to the temperature of the fluid passing through said valve device, a plurality of spring disks of different sizes between the diaphragm and the wall of the casing adapted to resist the motion of the diaphragm toward the valve seat, a valve proper adapted to be moved by the diaphragm and a seat for said valve.

15. In a valve device for use in heating systems, the combination of a chamber for an expansible fluid, the inner wall of said chamber consisting of a movable diaphragm adapted to be exposed to the temperature of the fluid on the inlet side of the valve device, a spring disk between the diaphragm and the wall of the casing and forming a fluid pressure chamber between it and the diaphragm and adapted to resist the motion of the diaphragm toward the valve seat, a second spring disk between the first disk and the casing and perforated to permit the passage of fluid, a valve stem extending through the disks, both disks carried by the valve stem and adapted to be moved by the diaphragm, a passage through said stem connecting the fluid pressure chamber with the discharge passage beyond the valve proper when the valve is closed, a valve proper carried by the stem and a seat for said valve.

16. In a valve device for use in heating systems, the combination of a chamber for an expansible fluid, the outer wall of said chamber being adapted to be exposed to the temperature of the room to be heated, the inner wall of said chamber consisting of a movable diaphragm adapted to be exposed to the temperature of the fluid passing through said valve device, a spring disk between the diaphragm and the wall of the casing adapted to resist the motion of the diaphragm toward the valve seat, a valve proper adapted to be moved by the diaphragm, and a seat for said valve.

[Claims 2, 4 to 6, 8 to 14, and 17 to 22 not printed in the Gazette.]

1,271,213. DIRIGIBLE PROPELLER-MOUNTING. PAUL PETREE, Astoria, N. Y. Filed Aug. 8, 1916, Serial No. 113,731. Renewed Mar. 23, 1918. Serial No. 224,387. (Cl. 244—25.)



1. In a dirigible propeller mounting, the combination with the propeller blades, a yoke therefor, and means for rotating said blades, of a universal joint interposed between said yoke and said driving means, a shaft extending from the said yoke oppositely from said driving means, a slide engaged with said shaft, and a guide for said slide whereby it may be moved rectilineally in either of two opposite paths at right angles one to another.

3. In a dirigible propeller mounting, the combination with a propeller, a driving shaft therefor, a rigid support for said driving shaft, a yoke containing the hub of said propeller, universal joint connections between said yoke and said driving shaft, an arm extending outward from said yoke perpendicular to the blades of said propeller, arcuate guides rigidly mounted opposite to said yoke, and means formed on said arm operable within said arcuate guides whereby the angularity of the propeller blades may be controlled.

[Claim 2 not printed in the Gazette.]

1,271,214. FLY-TRAP FOR SCREEN-DOORS. WILLIAM E. PETTY, Pipestone, Minn. Filed June 20, 1913. Serial No. 774,921. (Cl. 43—22.)



1. A fly trap comprising an elongated body, a door removably positioned in one end of the body and provided with a fly entrance opening, a conical trap screen secured to the inner side of the door about the opening therein, an angular rod having one end secured to the inner side of the door at one side of the trap screen and extending inwardly beyond the trap screen, a brace arm secured at one end to the inner side of the door at the opposite side of the trap screen and extending inwardly beyond the trap screen and having its other end curved in the direction of the rod and attached to the rod at a point beyond the trap screen, and a sponge carried by the free end of the rod.

[Claim 2 not printed in the Gazette.]

1,271,215. BOX KNOCK-OUT. CLARENCE D. PLATT, Bridgeport, Conn. Filed Aug. 11, 1917. Serial No. 185,668. (Cl. 247—7.)



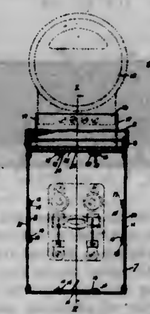
1. In a knock-out construction, a sheet-metal body having a portion of the wall thereof drawn up into an integral tubular bushing and rolled over at the inner end of such bushing into a rounded bearing edge and the opposite or entrance end of such integral tubular bushing having also a rounded bearing edge, whereby to permit the introduction of conducting wires directly through such bushing and said integrally formed bushing being further substantially severed from the metal surrounding the base portion of the bushing whereby the bushing as a whole may be knocked out of the wall of which it is formed to provide an opening to receive a separate independent bushing of larger size.

2. In a knock-out construction, a sheet metal body having a hole punched in the wall thereof and the disk provided by the punching of such hole retained frictionally in place therein, said disk having a portion thereof drawn up and into an integral tubular bushing provided with rounded bearing edges at its opposite ends, whereby conducting wires may be passed directly through said in-

tegral bushing or the disk carrying the integral bushing may be entirely removed from the hole to enable the insertion of a separate bushing.

3. In a knock-out construction, a sheet metal body having a portion of the wall thereof thinned out and drawn up into an integral tubular bushing, said thinned bushing having the inner end thereof rolled over to form a rounded bearing edge and the opposite or entrance end of the bushing having a rounded bearing edge, whereby to enable insertion of conducting wires directly in said bushing, and a section of the material surrounding the base portion of the bushing being substantially severed from the wall of which it is formed to thereby enable said bushing as a whole to be knocked out of the wall to permit insertion of a separate bushing of larger size in the hole thus provided.

1,271,216. SWITCH-BOX. CLARENCE D. PLATT, Bridgeport, Conn. Filed Dec. 21, 1917. Serial No. 208,220. (Cl. 247—17.)



1. A meter protective box comprising a box body, a cover hinged thereto, said box body having a wiring opening in one side thereof and slots at opposite sides of said wiring opening and a wiring housing adapted to extend from the box body over the wiring chamber of a meter, said housing having hooks on the box end thereof engaging in the slots aforesaid, and said cover overlying the housing to prevent disengagement thereof from the box body when the cover is closed.

4. A meter protective box comprising, a box body having a wiring opening in one side thereof and substantially parallel slots at opposite sides of said opening, a meter adapter applied to the box body over said wiring opening provided with hooks on the box-engaging end thereof engaged in said slots and with an up-standing flange disposed in the wiring opening and provided with holding lugs engaging the inner wall of the box body.

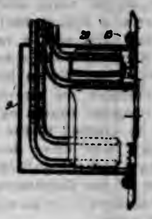
6. A meter protective box comprising, a box body, a meter adapter applied to said box body provided with a hook member engaged with the box body and an up-standing flange on said meter adapter provided with an inclined portion engaging the box body to wedge the adapter into proper engagement with the box body.

13. A box for electrical apparatus of sheet metal and having spaced apart sections thereof severed from the main body of metal and bent parallel to the box wall to thereby provide slots in the box wall and jaws in rear of said slots, a box attachment engageable beneath the jaws so provided on the box wall and a box attachment having hooked portions engageable through the slots provided in the box wall.

16. In a device of the character described, a box having a slot and an attachment engageable with said box having a hook engageable in said slot and a spring-support carrying said hook and adapted to draw the attachment yieldingly into engagement with the box.

[Claims 2, 3, 5, 7 to 12, 14, 15, and 17 to 20 not printed in the Gazette.]

1,271,217. ELECTRICAL RECEPTACLE. CLARENCE D. PLATT, Bridgeport, Conn. Original application filed Feb. 15, 1917, Serial No. 148,785. Patent No. 1,251,083. Divided and this application filed June 9, 1917. Serial No. 173,699. (Cl. 247—5.)



1. In a receptacle of the character described, an insulating base having a projecting terminal seat extended beyond the general outline of said base and rearwardly extending wire-receiving grooves at each side of said projecting terminal seat to thereby provide a projection over which a wire may be looped from the rear of the base and laid in the grooves at opposite sides of said projection, and a terminal on the face of the projecting terminal seat for securing the wire looped thereover.

2. In a receptacle of the character described, a base of insulating material having a central body portion with an extended end portion narrower than said central body portion and a projecting terminal seat at one side of and spaced away from the narrowed end portion, whereby to provide wire-receiving grooves at each side of said projecting terminal seat and a terminal on the face of said projecting terminal seat intermediate said wire-receiving grooves.

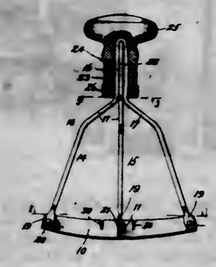
3. In a device of the character described, a base of insulating material having a projecting terminal seat near one end, a terminal mounted on said seat, a binding screw in the terminal and grooves in the sides of the base on opposite sides of said projecting terminal seat whereby attaching wires may be looped over the terminal on the projecting terminal seat from the back of the base and through the grooves in the base.

4. In a receptacle of the character described, an insulating base having a projecting terminal seat extended beyond the general outline of said base and rearwardly extending wire-receiving grooves at each side of said projecting terminal seat to thereby provide a projection over which a wire may be looped from the rear of the base and laid in the grooves at opposite sides of said projection, a terminal on the face of the projecting terminal seat for securing the wire looped thereover and supporting members secured to the insulating base and projecting beyond the ends of the same for securing the receptacle in a wall box or the like.

1,271,218. FRUIT SLICER AND CORER. ALFRED H. POWELL, American Fork, Utah. Filed Aug. 20, 1917. Serial No. 187,233. (Cl. 146—7.)

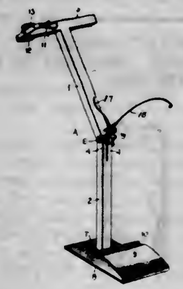
1. A device of the character described comprising a pair of intersecting blades having notches on opposite edges to interlock said blades, an annular knife having notches on opposite edges so disposed as to engage cooperating notches in the intersecting blades for holding the annular knife in place on said blade, a two-part support for the knives, each part being connected to the outer ends of one of said blades and extending upwardly therefrom, a duplex stem formed on the upper end of each support part, one or more of said stem parts being bowed outwardly, and a handle having a central bore adapted to fit over said stems, and frictionally engage therewith for securing all of said parts together.

2. A device of the character described comprising a pair of blades intersecting each other at right-angles and having notches in opposite edges to interlock said blades together in operative relation, an annular knife having notches in its opposite edges adapted to engage and interlock coöperating notches in said blades for holding said annular knife in concentric relation with the crossing of said blades, a two part support each part connected to the ends of one of said blades and converging upwardly therefrom, a stem formed on the upper end of each of said support parts, said stems adapted to interengage one with the other, and a handle having a longitudinal bore adapted to frictionally engage said stems to secure all of said parts in operative relation.



3. A device of the character described comprising a pair of oppositely notched intersecting blades adapted to be disassembled, an annular knife also formed with notches on opposite edges to engage coöperating notches on the intersecting blades, said knife being held concentric to the crossing of said blade by said notches, a support connected to each of said blades having a stem on its upper end, said stems interengaging one with the other, and a handle having a longitudinal bore adapted to frictionally engage said stems to secure all of said parts in operative position and when removed to permit separation of the blades and the annular knife.

1,271,219. STENOGRAPHER'S NOTE-BOOK HOLDER. PAUL PRATT, Hackensack, N. J. Filed Dec. 28, 1916. Serial No. 139,268. (Cl. 120—28.)

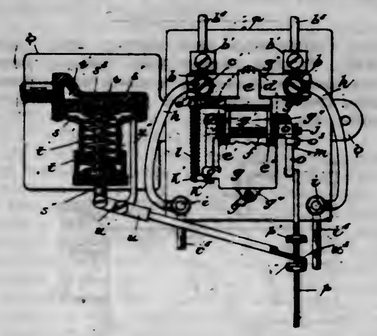


1. A copy holder of the class described including a standard, a cross-head on the standard in the form of a bar, a pair of clamping members arranged respectively at the front and rear of the standard and tensioned normally to engage therewith to hold the front and back leaves of the copy, and a member carried by the cross head and arranged above the clamping members to engage over the turned back leaves of the copy, all of said members being fastened to one end of the cross-head.

[Claims 2 and 3 not printed in the Gazette.]

1,271,220. ELECTRIC SWITCH. MARTIN J. QUINN, Toronto, Ontario, Canada. Filed June 12, 1916. Serial No. 103,194. (Cl. 175—308.)

3. An electric switch comprising stationary contacts, movable contacts opposed thereto, a rockable insulated support for the movable contacts, a rock-shaft, a crank at one end of the rock-shaft swinging to opposite sides of the fulcrum of the rockable support, a spring connected to the crank and to the rockable support inoperative during the movement of the crank, and adapted to bring the



movable contacts instantaneously into open and closed relation with the stationary contacts when the crank swings respectively to opposite sides of the fulcrum, and a push and pull device at the other end of the rock-shaft actuating it for the movement of the movable contacts.

[Claims 1, 2, and 4 not printed in the Gazette.]

1,271,221. ELECTRIC SWITCH. MARTIN J. QUINN, Toronto, Ontario, Canada. Filed Jan. 15, 1917. Serial No. 142,506. (Cl. 175—282.)



1. An electric switch comprising a switch case of insulating material having a plurality of cylindrical receptacles, a rotatable contact in each receptacle, always in pressure against its cylindrical wall, and fixed contacts in the cylindrical walls of said receptacles arranged to be engaged by the rotatable contacts, one of said fixed contacts extending through the walls of two of the receptacles, and conductors combined with the fixed and movable contacts completing the circuit through the switch.

[Claims 2 and 3 not printed in the Gazette.]

1,271,222. WHEEL-RIM. HARRY RAFLOVICH, New York, N. Y. Filed Feb. 26, 1917. Serial No. 150,914. (Cl. 152—7.)

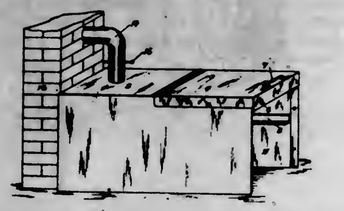


5. The combination with the felly of a wheel provided with a rim, means for securing the rim to the felly comprising a plurality of clamp devices secured to one side of the felly, said clamp devices being provided with central apertures, and clamp hook members provided with

shanks which are passed between the rim and the felly from the opposite side of the felly and which are passed through the apertures in said clamp devices and provided with nuts, said clamp devices and clamp hook members serving to support the rim therebetween.

[Claims 1 to 4 not printed in the Gazette.]

1,271,223. COMBINED ASH SIFTER AND RECEPTACLE. WILLIAM ROBERT REED, Toronto, Ontario, Canada, assignor of one-half to Albert Welch, Toronto, Ontario, Canada. Filed Nov. 27, 1917. Serial No. 204,179. (Cl. 83—60.)



1. A casing for the reception of the ashes having an unobstructed open front and closed upper side and rear walls, and a draft-flue connecting with the interior of the casing to carry off the dust therefrom.

2. A casing for the reception of the ashes having an unobstructed open front and bottom and closed upper side and rear walls, and a draft-flue connecting with the interior of the casing to carry off the dust therefrom.

1,271,224. NEEDLE FOR TALKING-MACHINES. ANTON H. RINTELMAN, Chicago, Ill. Filed Jan. 4, 1915. Serial No. 324. (Cl. 274—38.)

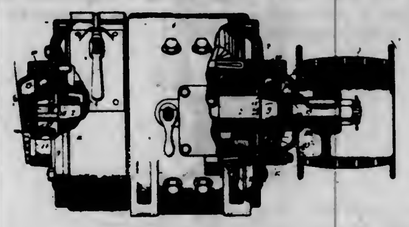


1. A needle for sound reproducing instruments which consists of a bar of crystalline material, polygonal in cross section, and having blade-like points on one end formed by channels placed in the sides of the bar, said channels commencing at some distance from the end of the bar and increasing in depth and width to said end, the width, depth and shape of the channels at the end being such as to form on the end a figure consisting of radiating pointed portions with the tips of the pointed portions located at the edges of the bar.

2. A needle for sound reproducing instruments which consists of a bar of crystalline material, having blade-like points on one end formed by channels placed in the side of the bar, said channels commencing at some distance from the end of the bar and increasing in depth and width to said end, the width, depth and shape of the channels at the end being such as to form on the end a figure consisting of radiating pointed portions.

1,271,225. BEARING. JOHN ROEDEL, Niagara Falls, N. Y., assignor, by mesne assignments, to U. S. Light & Heat Corporation, Niagara Falls, N. Y., a Corporation of New York. Filed June 2, 1913. Serial No. 771,144. (Cl. 64—36.)

1. In a generator provided with an armature shaft, said shaft having a reduced cylindrical end portion, a unitary split sleeve having a conical outer surface, and a cylindrical inner surface adapted to fit said reduced end, a second split sleeve having a cylindrical outer surface and a conical inner surface fitting said first sleeve, a ball race encircling said second sleeve, and means for forcing said second sleeve over said first sleeve, whereby one of said sleeves is contracted to closely fit said reduced end and the other sleeve is expanded to secure said ball race in position.



4. In combination, a tapered shaft, a split sleeve fitting said shaft, a ball race encircling said sleeve, a nut for forcing said sleeve on to the tapered shaft to expand said sleeve to secure said ball race in position, and means cooperating with said sleeve and ball race to force said ball race to position before the expanding action of said sleeve is effective to lock said parts.

6. In combination, a tapered member, a split sleeve fitting said member, a ball race encircling said sleeve, a resilient washer held in position on said sleeve and bearing against said ball race to force the same toward one end of said sleeve, and a nut for forcing said sleeve on to the tapered member to expand said sleeve to secure said ball race in position.

10. In combination, an armature shaft, a ball race encircling said shaft, a pair of unitary split sleeves between said race and said shaft, said shaft being screw-threaded, a nut on the screw-threaded portion of said shaft adapted to cause one of said sleeves to contract to grip said shaft and to cause the other sleeve to expand to secure said race in position.

[Claims 2, 3, 5, and 7 to 9 not printed in the Gazette.]

1,271,226. ELECTRICAL CONNECTOR. JAMES E. ROAK, Kalamazoo, Mich. Filed June 18, 1917. Serial No. 175,387. (Cl. 173—269.)



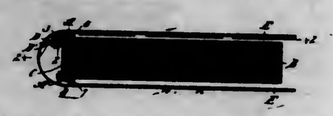
1. In a structure of the class described, the combination with a flexible cable, of a terminal secured to each end thereof comprising a coil of wire formed with a plurality of convolutions and having its ends extended in spaced substantially parallel relation, one of its ends being provided with a hook, the other end forming a shank joined to one end of said cable, and a lead sleeve surrounding the joint between said cable and said shank and extending along said cable and said shank whereby it forms a handle for manipulating said terminal.

4. In a structure of the class described, a terminal comprising a coil of wire, the ends of said coil extending from opposite sides thereof in spaced substantially parallel relation, one of said ends forming a shank adapted to be connected to a conductor and the other end being provided with a hook adapted to engage said shank, substantially as described.

6. In a structure of the class described, a terminal comprising a coil of wire having a pair of adjacent convolutions and extended ends, one of said ends being adapted for engagement with the other end, substantially as described.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,271,227. LOOSE-LEAF BINDER. ADOLPH RUBIN, St. Louis, Mo., assignor to Sieber Products Mfg. Co., St. Louis, Mo., a Corporation of Missouri. Filed Apr. 16, 1917. Serial No. 162,324. (Cl. 129—41.)



1. A loose leaf binder of the type described provided with a winding shaft, a leaf-clamping member on which said shaft is rotatably mounted, a toothed portion on said shaft, and a torsion spring on said leaf-clamping member that coöperates with said toothed portion to prevent the winding shaft from being turned in one direction.

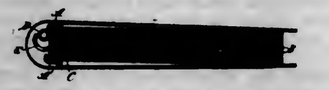
2. A loose leaf binder of the type described provided with a winding shaft, a leaf-clamping member on which said winding shaft is rotatably mounted, a ratchet wheel on said shaft, a torsion spring arranged in bearings on said leaf-clamping member, means for connecting one end of said spring to said leaf-clamping member, and a portion at the opposite end of said spring that coöperates with said ratchet wheel to prevent the winding shaft from turning in one direction.

3. A loose leaf binder of the type described provided with a winding shaft, a leaf-clamping member on which said shaft is rotatably mounted, a ratchet wheel on said shaft, a torsion spring arranged in bearings on said leaf-clamping member and extending the entire length of same, a laterally- projecting arm at one end of said spring provided with an extension that coöperates with said ratchet wheel, and a laterally-projecting arm at the opposite end of said spring provided with an extension that fits in an opening in said leaf-clamping member.

4. A loose leaf binder, comprising leaf-clamping members, tapes or bands that pass through slots in the leaves, a flange on one of said leaf-clamping members, and clips secured to said flange and arranged so that they embrace portions of said tapes that are wrapped around said flange.

5. A loose leaf binder, comprising leaf-clamping members, one of which is provided with a flange, tapes or bands that pass through slots in the leaves and through slots in said leaf-clamping members, one end of each of said tapes being lapped over said flange, and substantially U-shaped clips arranged over the portions of the tapes that lap over said flange and secured to said flange by portions on said clips that are pressed into holes in said flange.

1,271,228. LOOSE-LEAF BINDER. ADOLPH RUBIN, St. Louis, Mo., assignor to Sieber Products Mfg. Co., St. Louis, Mo., a Corporation of Missouri. Filed Apr. 16, 1917. Serial No. 162,497. (Cl. 129—41.)



1. In a loose leaf binder of the type described, a winding shaft, a part in which said shaft is rotatably mounted, cooperating friction elements on said shaft and part, and means for moving said shaft longitudinally of said part so as to cause said friction elements to snugly engage each other and thus lock said shaft.

3. In a loose leaf binder of the type described, a winding shaft, a part provided with a bearing in which said shaft is rotatably mounted, and coöperating friction elements that are adapted to be moved into engagement with each other so as to lock the shaft by exerting an endwise thrust on said shaft.

8. In a loose leaf binder of the type referred to, a winding shaft, a part in which said shaft is rotatably mounted, coöperating friction surfaces on said shaft and part that are adapted to be moved into locking engagement with each other when said shaft is subjected to an endwise thrust, and a device for turning said shaft and also exerting an endwise thrust on same.

14. A loose leaf binder, comprising leaf-clamping members, tapes or bands that pass through slots in the leaves, a winding shaft for said tapes rotatably mounted on one of said leaf-clamping members, coöperating friction elements on said shaft and on the leaf-clamping member on which it is mounted for locking said shaft after the tapes have been tightened, a substantially ring-shaped member arranged at one end of said shaft in such a manner that it can be turned into a position substantially parallel to the shaft or into a position substantially at right angles to the shaft, and means for causing said coöperating friction elements to snugly engage each other and thus lock the shaft when said ring is turned into a position at right angles to the shaft.

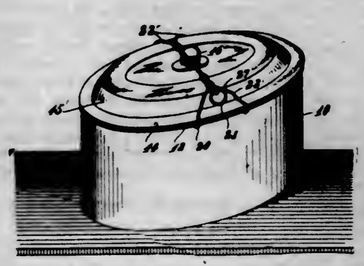
16. In a loose leaf binder of the type described, a winding shaft, a tape, a tapered recess in said shaft in which a portion of said tape is arranged, and a substantially wedge-shaped device permanently connected to the end of the tape and arranged in said recess above the portion of the tape that lies in the recess.

[Claims 2, 4 to 7, 9 to 13, and 15 not printed in the Gazette.]

1,271,229. PROCESS OF MAKING HIGH-PERCENTAGE CALCIUM CARBID. DUKE ROBERT RUSSELL, Chicago, Ill. Continuation of application Serial No. 215,406, filed Feb. 4, 1918. This application filed Mar. 25, 1918. Serial No. 224,648. (Cl. 204—62.)

The process of making high percentage calcium carbid by the use of a pitch coke made of the pitch of completely distilled by-product coke oven coal tar, for the carbon content of a conglomerate of lime and carbon, inserting electrodes in said conglomerate and smelting to high percentage calcium carbid.

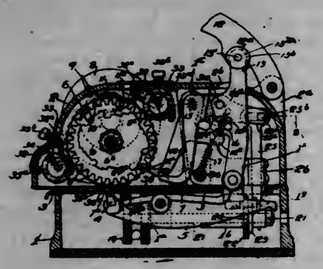
1,271,230. CONTAINER-COVER FASTENER. JOSEPH W. SABÓ, Van Meter, Pa. Filed May 24, 1917. Serial No. 170,673. (Cl. 70—82.)



In a device as described, in combination, a pair of substantially similarly-constructed claws, each claw consisting of a loop portion carrying opposing spring legs, said legs diverging outwardly from the loop portion and formed with hook terminals, a clip secured by an integral eye upon the loop portion of one claw and held against displacement therefrom by the diverging legs thereof, an expansible coiled spring having its opposite ends attached to the loop portions of said claws, and a ring attached

to said clip and providing a hand-hold, said ring adapted to slide on the legs of said claws so as to draw the legs together.

1,271,231. CHECK-WRITER. FRED F. SCHRODER, Chicago, Ill., assignor to The Stewart Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 2, 1916. Serial No. 75,705. (Cl. 197—6.4.)



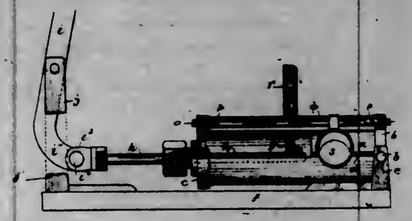
3. In combination with a rotatably adjustable type wheel, a platen movable toward and from the type wheel for coöperation therewith in printing; a lever which carries the platen; means acting on the lever to withdraw the platen from the type wheel; operating connections for the lever comprising a link connected thereto; a notched locking element rigid with the type wheel; a locking dog for engaging the locking element; a spring tending to engage the dog with said element, and an abutment on the link and an abutment on the dog which are brought into encounter in the direction for withdrawing the dog in the movement of the lever for carrying the platen out of printing position.

6. In combination with a rotatively adjustable type wheel; a platen movable toward and from the type wheel for printing; a lever which carries the platen; a spring which holds the lever normally retracting the platen from the type wheel; a locking element rigid with the type wheel; a locking dog coöperating with said element; a spring re-acting for engaging the dog with the locking element; a gage rigid with the type wheel; a gage finger pivoted for coöperation with the gage; a spring reacting on the gage finger for thrusting it to the gage; means for actuating the platen lever against its spring to move the platen toward the type wheel; means moving with the platen lever for withdrawing the dog from the locking element in the platen-retracting movement of the lever; said means being positioned for withdrawing from the dog to allow the dog-actuating spring to move the dog for engagement with the locking element in the beginning of the opposite movement of the platen lever; means by which said link stops the gage finger out of range of the gage at said normal position of the platen lever, adapted to release said gage finger for movement under the actuation of its spring toward the gage in the initial movement of the platen toward the type wheel; feeding devices, and connections by which they are actuated by the opposite movement of the gage finger in the opposite movement of the platen lever.

[Claims 1, 2, 4, 5, and 7 to 9 not printed in the Gazette.]

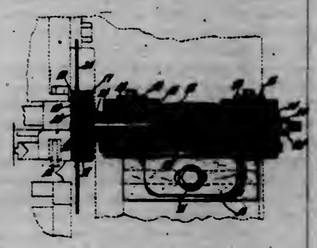
1,271,232. AIR-PUMP. GEORGE SCRIVER, Creemore, Ontario, Canada, assignor to William Thomas Müller, Collingwood, Ontario, Canada. Filed July 12, 1916. Serial No. 108,882. (Cl. 230—27.)

An air pump comprising a cylinder having valve-controlled air inlets and outlets, a piston operable within the cylinder, a piston rod for the piston extending through one of the cylinder heads and bifurcated at its outer end, trunnions for the other cylinder head, brackets in which said trunnions are journaled, a stationary base for the brackets, a pump handle formed with a curved arm, knuckled to the piston rod, and brackets secured to the base, to which the pump handle is fulcrumed above the point of attachment to the piston rod, the pump handle



during its operation causing the reciprocating movement of the piston, and the rocking or oscillating movement of the cylinder, to compensate for the variation in changes of location of the knuckle during the rocking of the pump handle on its fulcrum.

1,271,233. SAW-MOUNTING. WILLIS S. SHERMAN, Milwaukee, Wis. Filed May 15, 1916. Serial No. 97,472. (Cl. 143—155.)



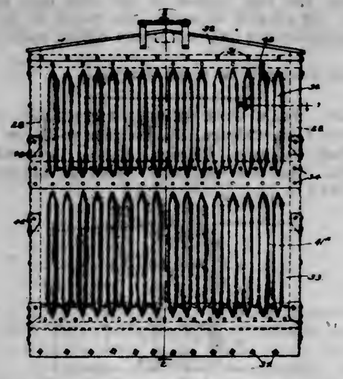
1. A saw mounting, comprising a rotatably mounted arbor having an axial opening extending therethrough and a concentric flange at one end thereof, a circular saw having a central opening, a flanged member fitting within the saw opening and within the arbor flange to center the saw, and a clamping bolt passing through the opening of the arbor and engaging the flanged member for clamping the saw between the flange of said member and the flange of the arbor.

4. In a saw mounting, a rotatably mounted arbor having a head provided with a concentric annular flange, a flanged arbor collar fitting within the annular flange of the arbor head, a saw blade having a central opening fitting upon the arbor collar and having its edge around said opening clamped between the flange of the arbor collar and the annular flange of the arbor head, and means for clamping the arbor collar and the arbor together.

5. In a saw mounting, a rotatably mounted arbor having a cup-shaped head with a concentric annular flange around its edge, an arbor collar having a cylindrical surface fitting within the bore of said annular flange and provided with an outwardly extending flange around such cylindrical surface, a saw blade having a central opening fitting around the cylindrical surface of the arbor collar and held between the flange of the arbor collar and the edge of the annular flange of the arbor head, a centrally threaded stud on the arbor projecting into the cup-shaped head thereof and having its screw threads fitting within the arbor collar by which the arbor collar may clamp the saw blade in place.

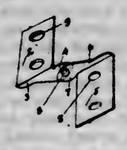
[Claims 2 and 3 not printed in the Gazette.]

1,271,234. SHEET-METAL END STRUCTURE FOR RAILWAY-CARS. VINTON E. SISSON, Chicago, Ill., assignor to Walter P. Murphy, Chicago, Ill. Continuation of application Serial No. 775,294, filed June 23, 1913. This application filed Jan. 22, 1915. Serial No. 3,761. (Cl. 105—192.)



The combination with the framing of a railway car, of a plate steel wall element formed with parallel stiffening corrugations of substantially the same width for the major portion of their length, and spaced one from another so that the stiffened portion of the plate presents a series of contiguous rib-like formations of substantially equal width which project alternately in opposite directions from each other, said corrugations extending across the plate and terminating within the edges thereof so as to leave flat margins for attachment to the car framing, the terminal portions of the corrugations being tapered in width and depth and merging into said flat margins.

1,271,235. BUTT-HINGE. WILLIAM J. SMITH, Waterbury, Conn., assignor to Waterbury Clock Co., Waterbury, Conn., a Corporation. Filed Sept. 11, 1917. Serial No. 190,738. (Cl. 16—106.)



A butt-hinge for doors, comprising complementary right and left hand axially parallel leaves perforated for the reception of fastening-screws and having their adjacent ends bent transversely in opposite directions to form flanges which are extended toward each other beyond the adjacent edges of the said leaves and terminate in overlapping knuckles which are united by a pintle, whereby when the hinge is closed, the said flanges are registered and their knuckles concealed in a transverse slot in a bead or molding-strip applied to the door in position to cover the joint or "crack" between the door and door-frame.

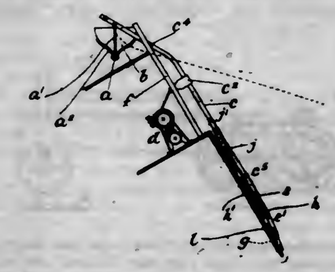
1,271,236. RADIATOR. HARRY SOSSKIN, Philadelphia, Pa. Filed Oct. 8, 1917. Serial No. 195,416. (Cl. 257—130.)

1. A radiator core including complementary sheet metal units each having spaced plaits formed therein and portions projecting laterally from each plait and each portion being reversely and arcuately curved, said units at their opposite ends being secured together and the opposed arcuate portions thereof disposed in concentric relation to provide a vertically extending water passage, and an additional sheet metal unit disposed between the units of adjacent water passages and secured to the plaits thereof to provide two series of horizontally disposed air passages between the adjacent water passages.



2. A radiator core including complementary sheet metal units each having spaced plaits formed therein and portions projecting laterally from each plait and each portion being reversely and arcuately curved, said units at their opposite ends being secured together and the opposed arcuate portions thereof disposed in concentric relation to provide a vertically extending water passage, and an additional single sheet metal unit disposed between adjacent water passages and also having reversely curved arcuate sections extending longitudinally thereof and of the same radii as the curved sections of the first named units, said additional sheet metal unit at the junctures of its reversely curved portions being secured to the plaits of the first named units and in conjunction therewith providing two tiers of horizontally extending air passages between the adjacent water passages.

1,271,237. APPARATUS FOR RAISING AND LOWERING SHIPS' BOATS. JAMES STORIE, Edinburgh, Scotland. Filed June 20, 1916. Serial No. 104,741. (Cl. 9—22.)



1. A boat-lowering apparatus comprising a cradle, a supporting arm for said cradle, a downwardly movable pivotal bearing for said arm whereby the arm is adapted to gravitate under its load, and a guide and link members coöperating with said supporting arm forcing it outwardly and causing it to clear the hull as it gravitates.

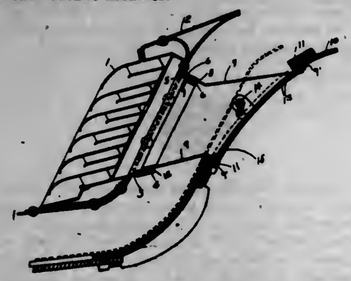
3. A boat-lowering apparatus comprising a cradle, a supporting arm for said cradle, a downwardly and outwardly swinging pivoted lever, a pivotal bearing for the supporting arm mounted on said lever whereby the arm is adapted to gravitate under its load, and a guide and link members coöperating with said supporting arm to force it outwardly during its descent.

[Claim 2 not printed in the Gazette.]

1,271,238. VENTILATOR. FRANK C. STOWELL, Medford, Mass. Filed June 25, 1915. Serial No. 36,364. (Cl. 98—22.)

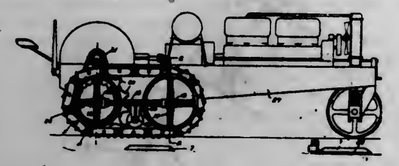
1. A ventilator for a vehicle having a double wall consisting of an air intake member fastened to the outer member of the wall and having certain of its edges flanged and extending into the space between the members of the double wall, double folded strips secured to said flanges, and an air duct arranged in the space between said double wall and secured at its inner end to the inner member of said double wall and having certain of its edges at its outer end unformed and adapted to slid-

ingly fit in the recesses provided by the double folded devices of said intake member.



2. A ventilator for a vehicle having a double wall consisting of an air intake member adapted to be fastened to the outer member of the wall and having an unformed edge and flanged edges all extending into the space between the members of the double wall as flanges, double folded strips secured to said flanges, and an air duct arranged in the space between said double wall and secured at its inner end to the inner member of said double wall and having certain of its edges at its outer end unformed and adapted to slidingly fit in the recesses provided by the double folded devices of said intake member and having a single edge at said outer end bent back upon itself to receive said unformed edge of the intake member.

1,271,239. TRACTION BELT-CHAIN. EDWARD F. SULLIVAN, Oakland, Cal. Filed May 5, 1915. Serial No. 25,981. (Cl. 21—150.)



1. A belt comprising pairs of links, one link having side bars, connecting bars, and end lugs, formed integral, the other set of links consisting of side bars terminating in end lugs for intermeshing engagement with the lugs of the first set of links, and bolts detachably connecting the side bars of the said other set of links.

2. A belt comprising links and connectors therefor, the links having side bars provided with means for detachably connecting the same in spaced parallel relation, and the ends of the side bars having lugs, the connectors consisting of side bars, connecting bars and end lugs for intermeshing engagement with the lugs of the side bars of the links.

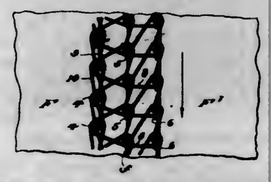
3. A belt comprising links and connectors therefor, the links having side bars and means for separably connecting the bars in spaced parallel relation, the connectors having integral side bars and connecting bars for the side bars, said links and connectors having their end portions shaped for interlocking pivotal engagement.

4. An endless traction belt comprising a plurality of pairs of links, one link of said pair comprising side bars and cylindrical integrally formed cross bars, the other link of said pair comprising separate side bars, hook shaped lugs formed on said first-mentioned links and substantially hook shaped lugs formed on said second-mentioned link, said lugs being adapted to interlock and hold said links in longitudinal relation.

5. A link belt comprising a plurality of pairs of links, one link of each pair comprising side bars and cylindrical cross bars formed integrally, hook shaped lugs formed on the outer faces of said side bars at each end thereof, the lugs of one set of bars having the recesses in the hook portion opening toward each other and the bottom of said recess being in alinement with the axes of said cross bars, the other link of each pair having independent side bars, lugs formed on the inner faces of said side bars and having recesses adapted to receive the lugs of the adjacent link, and lugs formed on said side bars having a rounded end adapted to seat in the recess of the lug of said first-mentioned link and form a rolling contact therewith.

[Claim 6 not printed in the Gazette.]

1,271,240. SEAM FOR SEWED ARTICLES. SAMUEL GEORGE TATE, Chicago, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed July 23, 1917. Serial No. 182,262. (Cl. 112—34.)



1. In a seam, the combination with fabric sections having meeting edges, of two parallel rows of needle thread loops respectively extending downwardly through the fabric sections adjacent the meeting edges thereof, the needle thread loops of one row being staggered relative to the needle thread loops of the other row, a looper thread having loops extending through the needle thread loops in one of said rows, said looper thread loops being extended laterally across the meeting edges of the fabric sections and secured by the needle thread loops in the other row and a looper thread formed into loops concatenated with said last named row of needle thread loops to form therewith locked stitches.

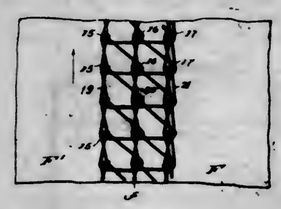
3. In a seam, the combination with fabric sections having their meeting edges abutted, of two parallel rows of needle thread loops respectively extending downwardly through the fabric sections adjacent the meeting edges thereof, another row of needle thread loops arranged intermediate and parallel with said first mentiond rows and extending downwardly between the fabric sections, a looper thread looped through all the needle thread loops of two of said rows and around the needle thread loops of the other rows, a second looper thread locking the needle thread loops of said other or remaining row and the loops of said first mentioned looper thread, and a single covering thread looped around each of the needle thread loops of the first mentioned rows on the upper face of the fabric and forming a two-point support for the needle thread of the intermediate row between adjacent needle thread loops thereof.

4. In a seam, the combination with fabric sections having their meeting edges abutted, parallel rows of needle thread loops, a looper thread formed in the loops which are passed through the needle thread loops of all the rows but one and concatenated with the needle thread loops in the remaining row, and a looper thread having loops contenated with the needle thread loops only in said remaining row, said last mentioned looper thread and needle thread loops coöperating to lock the first mentioned looper thread.

6. In a seam, the combination with fabric sections having their meeting edges abutted, of two parallel rows of needle thread loops respectively extending downwardly through the fabric sections adjacent the meeting edges thereof, another row of needle thread loops arranged intermediate and parallel with said first mentioned rows and extending downwardly between the fabric sections, means for securing all of said needle thread loops, and a single covering thread looped around each of the needle thread loops of the first mentioned rows on the upper face of the fabric and forming a two-point support for the needle thread of the intermediate row between adjacent needle thread loops thereof.

[Claims 2 and 5 not printed in the Gazette.]

1,271,241. SEAM FOR SEWED ARTICLES. SAMUEL GEORGE TATE, Chicago, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed July 23, 1917. Serial No. 182,263. (Cl. 112—34.)

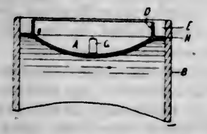


1. In a seam the combination with fabric sections having meeting edges of parallel rows of stitching, each row including a needle thread and a looper thread, the looper thread in one of said rows being concatenated with the needle thread loops thereof to form locked stitches, the looper thread in the next adjacent row being extended laterally across the meeting edges and secured by said locked stitches.

2. In a seam the combination with fabric sections having meeting edges of parallel rows of stitching, each row including a needle thread and a looper thread, the looper thread in one of said rows being concatenated with the needle thread loops thereof to form locked stitches, the looper thread in the next adjacent row being extended laterally across the meeting edges and secured by said locked stitches, and a covering thread joining the lines of stitching on the opposite face of the fabric sections from the looper threads.

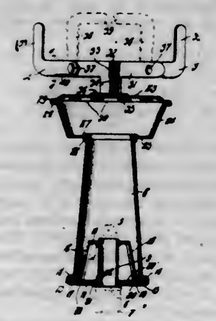
3. In a seam the combination with fabric sections having meeting edges between two parallel rows of needle thread loops respectively extending downwardly through the fabric sections adjacent the meeting edges thereof, another row of needle thread loops arranged intermediate and parallel with said first mentioned rows and extending downwardly between the fabric sections, a looper thread for each row of needle thread loops, the looper thread in one of the outer rows being concatenated with the needle thread loops thereof only to form locked stitches, the looper thread in the intermediate row secured by the needle loops therein and also extended laterally and secured by the needle loops of the locked stitches, and the looper thread in the other outer row being secured by the needle thread loops therein and also extended laterally and secured by the needle thread loops in the intermediate row.

1,271,242. MEANS FOR CLOSING OR SEALING UP VESSELS. ALBERT GEORGE HENDY THATCHER, West Bridgford, England. Filed Dec. 27, 1917. Serial No. 209,198. (Cl. 215—80.)



The combination, with a storage vessel, of a cover comprising a pan having a single annular flange at its lower edge adapted to slide in the said vessel, and having a cylindrical portion extending upwardly from the inner periphery of the said flange and forming an annular space in the vessel above the said flange into which sealing material is poured, said pan having also a concavo-convex bottom portion of sufficient buoyancy to float the pan on the liquid contents of the vessel without submerging the said flange.

1,271,243. GAS-STOVE. ROBERT THOMPSON, Jersey City, N. J. Filed Oct. 19, 1916. Serial No. 126,566. (Cl. 126—251.)

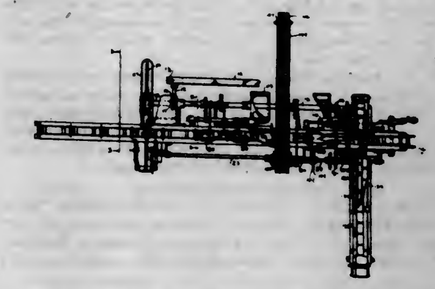


1. A stove having a burner and a gas tube leading thereto, an attaching member disposed axially of the tube and having a laterally extending lug, said tube having an outwardly extending flange at its lower edge, a frame having an opening through which said tube extends, said frame resting on said lug, said frame having a leg overlapping said flange of the tube, a plate mounting said attaching member and having a flange overlapping said flange of the tube, a second plate, said second plate being journaled on said attaching member and having a flange overlapping said flanges, and said plates having coöperating openings whereby they serve as adjustable air inlet valve means.

3. A stove having a burner and a gas tube leading thereto, an attaching member having a laterally extending lug, said tube having a flange at its lower edge, a frame having an opening to accommodate said tube, said frame having a leg overlapping said flange of the tube, a mounting member for said attaching member and having a flange overlapping said flange of the tube, a plate journaled on said attaching member and having a flange overlapping said flanges, said plate and said mounting member having coöperating openings whereby they serve as adjustable air inlet valve means.

[Claims 2 and 4 not printed in the Gazette.]

1,271,244. PACKAGE-FILLING MACHINE. EDWARD VAN HOOFSTADT, New York, N. Y., assignor, by mesne assignments, to Harry Schreier, New York, N. Y. Filed Sept. 28, 1916. Serial No. 122,724. (Cl. 93—3.)

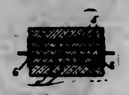


1. In a machine of the class described means for feeding blanks successively from beneath a stack upon a conveyer moving at an angle thereto, means for forming a box while passing along said conveyer, means for feeding material into said box while upon said conveyer, means for folding the sides of said box thereafter and means for

then turning over the ends of said box and stitching the same in place.

[Claims 2 and 3 not printed in the Gazette.]

1,271,245. SEAL FOR VAPOR ELECTRIC APPARATUS. MAX VON RECKLINGHAUSEN, Suresnes, France, assignor to Cooper Hewitt Electric Company, Hoboken, N. J., a Corporation of New Jersey. Filed July 12, 1913. Serial No. 778,686. (Cl. 176—126.)



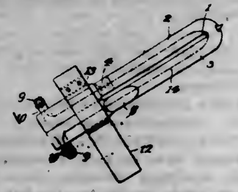
1. In a seal for an evacuated container, a metallic conductor embedded air-tight in an insulator of quartz with an expansion coefficient practically equal to zero characterized by putting into the quartz a conductor made of a metal of higher or the same melting point as quartz, the conductor being of such cross section that the thickness of the metal in one of the axes perpendicular to the length axis of the conductor is very small in comparison with the thickness in the other axis perpendicular to the length axis of the conductor.

3. A seal for an evacuated container comprising a wall of quartz, a conductor leading through said quartz, said conductor having a flattened portion, said quartz being sealed to and including the natural irregular edge of said flattened portion.

4. A seal for a quartz container comprising a wall of quartz and a gridiron having extremely thin strips of metal for its transverse members whereby the expansion of the metal is maintained below the safe maximum, said gridiron being embedded air-tight in said quartz wall.

[Claim 2 not printed in the Gazette.]

1,271,246. STERILIZING LIQUIDS. MAX VON RECKLINGHAUSEN, ANDRÉ HELBRONNER, and VICTOR HENRI, Paris, France, assignors, by mesne assignments, to The R. U. V. Company, Inc., a Corporation of New York. Original application filed Dec. 21, 1912, Serial No. 738,069. Divided and this application filed July 15, 1915. Serial No. 40,086. (Cl. 250—35.)



1. The combination in a mercury vapor device of means for causing an interchange of heat between the electrodes of said device and means for preventing injury to the wall of the container due to the passage of the electric discharge through said device.

2. The combination in a mercury vapor device having its electrodes arranged adjacent to each other, of means for deflecting the passage of the electric discharge away from the wall through said device comprising an inwardly extending projection formed upon the wall of said device.

[Claims 3 and 4 not printed in the Gazette.]

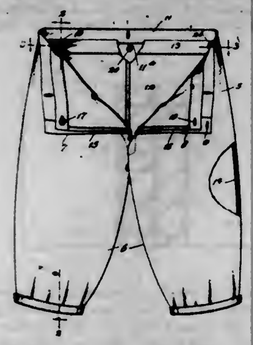
1,271,247. CINEMATOGRAPHIC FILM. JESSIE WADE, West Kensington, London, England, assignor of one-half to Oliver Prescott MacFarlane, London, England. Filed Mar. 19, 1918. Serial No. 223,351. (Cl. 88—19.5.)



1. A cinematograph film composed of a series of sections or lengths which are hinged or connected together by transverse flexible strips, substantially as hereinbefore described.

[Claims 2 and 3 not printed in the Gazette.]

1,271,248. KNICKERBOCKERS. HARRY WALCOFF, New York, N. Y. Filed Feb. 11, 1916. Serial No. 77,564. (Cl. 2—122.)



The combination of a pair of knickerbockers comprising a body and leg sections, an interior waist-band combined with said knickerbockers, a series of tabs depending from said waist-band at intervals, fastening devices carried by said tabs, a lining comprising a body and leg sections fitted within the corresponding portions of the knickerbockers and fastening means on said lining adapted to coöperate with the fastening devices on said tabs to removably secure said lining in said knickerbockers.

1,271,249. SAFETY-RAZOR. ALONZO A. WARNER, New Britain, Conn., assignor to Landers, Frary & Clark, New Britain, Conn., a Corporation of Connecticut. Filed Jan. 19, 1916. Serial No. 73,044. (Cl. 30—12.)



1. A holder for safety razor blades, comprising a handle with a base plate fixedly secured to the upper end thereof, a spring arranged under and longitudinally of said base plate, a support in which the central portion of said spring is removably mounted, and a clamp plate operatively positioned above said base plate and engaged by the ends of said spring.

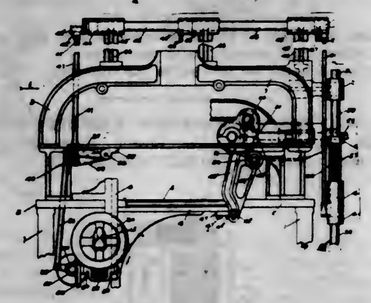
2. In a holder for safety razor blades, a handle, a base plate fixedly secured thereto, a clamp plate arranged above the base plate, and means for holding said clamp plate in position on said base plate and permitting it to rock relatively thereto, said means comprising a spring arranged under said base plate and supported between its ends which are engaged with said clamp plate.

[Claims 3 and 4 not printed in the Gazette.]

1,271,250. ENVELOP-MACHINE. EZRA P. WATERHOUSE, Worcester, Mass., assignor of one-half to Worcester Envelope Company, Worcester, Mass., a Corporation of Massachusetts. Filed Dec. 19, 1914. Serial No. 878,125. (Cl. 93—69.)

1. In an envelop machine, the combination with a single rock shaft, of a single driven cam, and connections intermediate said cam and said shaft, to cause the operation, through said shaft, of both the envelop picker mechanism, and the paper feed mechanism by said cam.

7. In an envelop machine, the combination with the envelop blank feed table, and a rack bar connected with said table, for raising and lowering the same, of means for raising and lowering said rack bar, said means comprising a pinion, a tubular shaft carrying said pinion, which pinion has an extension on its hub having a curved or cam shaped slot therein, a cam mounted to rotate with and have a sliding motion on said extension, and means for moving said cam, a rod extending within said shaft and having a longitduinal motion therein, and a pin on said rod, extending through said curved or cam shaped slot, and secured to said cam, a ratchet wheel loose on said tubular shaft, and means for rotating said ratchet wheel, a clutch member connected with said



ratchet wheel, a collar mounted on said shaft and adapted to rotate therewith and have a longitudinal motion thereon, a clutch member on said collar, adapted to engage with the clutch member on said ratchet wheel, a spring interposed between said clutch members, said members adapted to be automatically disengaged upon the longitudinal movement of said rod, to allow the rotary motion of said tubular shaft and said pinion, independent of said ratchet wheel, and the lowering of the blank feed table, and means for moving the clutch members into engagement with each other, to cause the rotary movement of said ratchet wheel, to rotate said tubular shaft and pinion.

[Claims 2 to 6 not printed in the Gazette.]

1,271,251. ART OF APPLYING TISSUE WRAPPERS TO CIGARS, &c. GEORGE M. WILLIAMS, Elizabeth, N. J., assignor to P. Lorillard Company, New York, N. Y., a Corporation of New Jersey. Filed Apr. 4, 1917. Serial No. 159,665. (Cl. 93—5.)



1. In mechanisms for inclosing articles in wrappers with twisted ends and operative with tissue wrapper inclosures for cigars, etc., means for supporting and encircling the wrapped article during end-twisting operations, said means including gripping mechanism adapted to receive and grip the wrapped article, and means for moving the wrapped article rotatively when gripped, the gripping contact with the wrapped article remaining constant during article rotation, said gripping mechanism being operative to permit introduction of the wrapped article in directions transverse to the direction of length of the axis of rotation.

7. In mechanisms for inclosing articles in wrappers with twisted ends and operative with tissue wrapper inclosures for cigars, etc., means for supporting the wrapped article during end-twisting operations, said means including a pair of spaced-apart axially-alined rotatable tubular gripping elements adapted to receive and grip the wrapped article intermediate its ends, and means for supporting said elements and controlling the paths of movement thereof.

38. In mechanism of the character described and in combination, rotatable means for receiving and embracing a wrapped article, and mechanism for gripping a wrapper end during means rotation, said gripping mechanism including a pair of fingers, an endwise movable support for the fingers, a stop in the advance path of movement of the support, cam means for closing the fingers, and means for moving the cam means axially a distance greater than the movement of the support, whereby the fingers will be advanced prior to being closed.

41. In mechanism of the character described, means for gripping an untwisted end of a wrapped article, said means including a support, a pair of pivoted fingers on said support, means for closing said fingers to gripping position, and adjustable means for positioning the fingers on their pivots and in the direction of pivotal movement whereby the gripping positions of the fingers may be varied.

[Claims 2 to 6, 8 to 37, 39, 40, and 42 not printed in the Gazette.]

1,271,252. TOOTH-BRUSH. JOSEPH T. WILSON, Clayton, N. J., assignor to Silver-Chamberlin Company, a Corporation of New Jersey. Filed Dec. 26, 1916. Serial No. 138,842. (Cl. 15—39.)



1. A tooth brush comprising a holder having an elongated portion, and provided with a recess adjacent each end of said portion, a resilient brush element extending longitudinally of said portion and having ends adapted to fit into said recesses, and a standard on said portion adapted for engagement with said element whereby the ends of said element are detachably held in said recesses.

3. In combination with a brush element, a holder for tooth brushes formed of a single piece of material, comprising a handle portion, an elongated portion provided with recessed projections adapted for the reception of the ends of the brush element, and a standard intermediate said projections and adapted for engagement with said element, substantially as described.

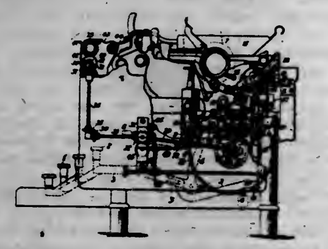
5. A tooth brush comprising a holder, a resilient brush element, said holder having a flat surface thereon, a longitudinally disposed nib extending forward and projecting over said flat portion and provided with a recess, an upstanding member having a recess therein formed on the extremity of said holder, and a standard formed on said holder intermediate said nib and said upstanding member adapted to hold said brush element, in flexed position whereby the brush element is detachably secured to said holder by its inherent resiliency.

[Claims 2 and 4 not printed in the Gazette.]

1,271,253. COMBINED TYPE-WRITING AND COMPUTING MACHINE. WALTER WRIGHT, New York, N. Y., assignor to Underwood Computing Machine Company, New York, N. Y., a Corporation of New York. Filed Apr. 9, 1910. Serial No. 554,452. (Cl. 235—62.)

1. In a combined typewriting and computing machine, the combination of a power-driven computing mechanism having an escapement wheel, a carriage, type-operating keys including a set of numeral keys, a carriage-feeding device controlled by all of said keys, said computing mechanism including a member connected to have a denomina-

tional step-by-step movement at the feeding movement of the carriage, a rack connected to said carriage, a pallet, means controlled by said numeral keys to move said pallet into engagement with said rack to be operated thereby, said pallet having means to release said escapement wheel, and mechanism extending from said numeral keys to said escapement wheel, to determine the extent of movement of the latter.



7. The combination of a step-by-step feeding carriage, a set of numeral keys having means to control said carriage, a power-driven computing mechanism including a member connected to said carriage for denominational movement and also including an escapement wheel, a dog device to control said escapement wheel, an operating lever connected to operate said dog device, a pallet upon said lever, a rack connected to said carriage, means controlled by said keys to move said pallet into engagement with said rack to be driven thereby, means to restore said pallet to normal position, and means controlled by said keys to determine the extent of movement of said escapement wheel.

20. The combination with a carriage and an escapement wheel therefor, of a slide bar normally clear of said wheel, numeral keys, a universal member operated by said keys to bring said bar into engagement with said escapement wheel, and a computing escapement operated by said slide bar.

27. In a combined typewriting and computing machine, the combination with a traveling carriage, computing wheels and numeral keys, of a source of energy for driving said computing wheels, an escapement governed by said keys for controlling the movement of any of said computing wheels, a rack moving with said carriage, and means for locking said escapement against complete operation until positively moved by said rack.

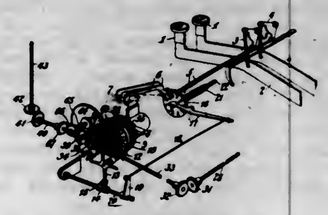
29. The combination with a register, of a valuating or indexing mechanism for said register, numeral keys for setting said valuating or indexing mechanism, restraining means for said valuating or indexing mechanism, a traveling carriage, a carriage-controlled trip for oscillating said restraining means, said trip being normally inactive, and a numeral-key-controlled shifter for forcing said trip into a position to be operated.

[Claims 2 to 6, 8 to 19, 21 to 26, 28, 30, and 31 not printed in the Gazette.]

1,271,254. COMPUTING-MACHINE. WALTER WRIGHT, New York, N. Y., assignor to Underwood Computing Machine Company, New York, N. Y., a Corporation of New York. Filed July 28, 1910. Serial No. 574,223. (Cl. 235—62.)

1. In a computing machine, the combination with a power-driven train of rotary computing mechanism, including an escapement wheel and key-operated devices to control said escapement wheel, of a member connected to said train of computing mechanism to revolve in opposition to said escapement wheel, and having a centrifugally-operating brake to engage said escapement wheel.

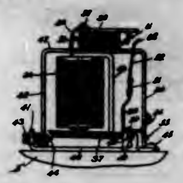
2. In a computing machine, the combination with a power-driven train of rotary computing mechanism, including an escapement wheel and key-operated devices to control said escapement wheel, of a centrifugally-operating brake to engage said escapement wheel, and movement-multiplying gearing connecting said train to said brake



to cause the latter to rotate in opposition to said escapement wheel at all movements of the latter.

[Claims 3 to 20 not printed in the Gazette.]

1,271,255. ELECTROMAGNETIC CIRCUIT-CONTROLLER. ALFRED A. ZIEGLER, Boston, Mass. Filed May 26, 1916. Serial No. 100,127. (Cl. 175—321.)



1. The automatic circuit-controller herein described comprising a substantially rectangular frame adapted for detachable connection with a block, an electro-magnet arranged within and attached to the top-portion of said frame, an armature pivotally supported by ears rising from the base-plate of the frame, a limiting-stop for said armature borne by the frame, a contact-member attached to the armature and extended upward through a hole in the frame, a conductor-plate arranged upon but insulated from the frame having a contact-portion disposed relative to the movable contact-member to be engaged by said movable member when the armature is in retracted position.

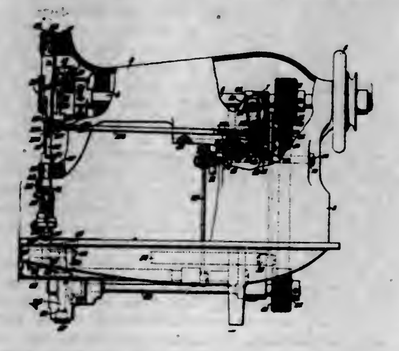
2. The automatic circuit controller herein described comprising an electro-magnet, an armature therefor, a circuit controller controlled by the armature including two contact members, and a thin conducting strip secured to one of said members presenting its edge to engagement with the other contact member.

[Claim 3 not printed in the Gazette.]

1,271,256. HEMSTITCH SEWING-MACHINE. CHARLES M. ABERCROMBIE, Bridgeport, Conn., assignor to The Singer Manufacturing Company, a Corporation of New Jersey. Filed July 24, 1915. Serial No. 41,658. (Cl. 112—4.)

1. In a sewing machine, the combination with a stitch-forming mechanism including a needle having oppositely directed stitch-forming movements, means coöperating with said needle to form stitches and means for advancing the fabric being acted on under said needle, of means operatively connected with the actuating mechanism of the sewing machine for giving to said needle stitch-forming movements in different planes including a pitman comprising a rigid portion and spiral springs operatively connected with its driving and driven elements, the resilient force of said springs in the direction of their length effecting a resistance greater than that offered by the power transmitted.

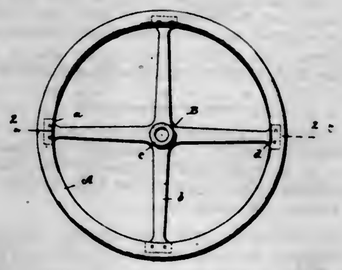
4. In a hemstitch sewing machine, a stitch-forming mechanism and fabric feeding mechanism, said stitch-forming mechanism including a main-shaft provided with a gear-member, a needle-bar, a fabric-piercer, a tubular piercer carrying bar into which said needle-bar is located, a needle having oppositely directed stitch-forming movements carried by said needle-bar and connections between the latter and said main-shaft for giving the needle stitch-forming movements in different planes, said connections



including a yoke journaled on the same axis as said needle-bar and provided with a guideway intermediate its bearings in which track a lug carried by said needle-bar and an oscillating lever for giving the said yoke its oscillatory movements.

[Claims 2 and 3 not printed in the Gazette.]

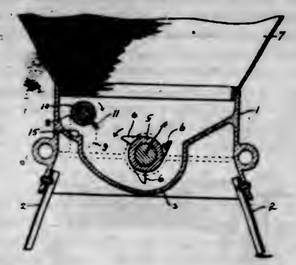
1,271,257. STEERING-WHEEL. CLETUS N. ALLERDING, Mansfield, Ohio. Filed Apr. 16, 1917. Serial No. 162,265. (Cl. 74—33.)



1. The herein described method of combining a solid non-metallic rim and a spider having substantially dished arms to form a steering wheel, consisting in forming in the solid non-metallic rim a series of recesses opening through the inner surface of the rim and otherwise of solid wall limitation, forming the terminals of the spider arms to accurately correspond in size and shape to the recesses, and at right angles to the axis of the spider, arranging the spider with the formed terminals in line with the recesses, and spreading the arms of the spider to force the terminals into the recesses to completely fill the same.

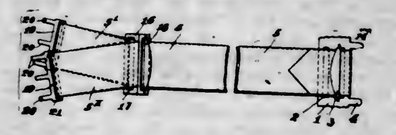
2. A steering wheel comprising a solid wooden rim and a metallic spider, said rim being formed with recesses opening only through the inner surface of the rim and being of substantial dimensions circumferentially and transversely of the rim, the spider arms having terminals fitted into the recesses, said terminals being arranged at right angles to the axis of the spider and of a size and shape to completely fill the recesses, whereby the strain of use of the wheel is distributed throughout a very considerable area of the interior of the rim.

1,271,258. FEED-GRINDER. MARTIN E. ANDERSON, De Kalb, Ill., assignor to Jacob Haish Company, De Kalb, Ill. Filed July 10, 1916, Serial No. 108,288. Renewed May 3, 1918. Serial No. 232,379. (Cl. 83—14.)



A device of the class described, comprising a suitable receptacle provided with a concave; an auger rotatably mounted in said concave; an auxiliary shaft rotatably mounted in proximity to said auger and provided with a longitudinal plate adapted to coöperate therewith; and a lip in proximity to said plate at the lowest point of its movement.

1,271,259. DETACHABLE SELF-ADJUSTING CORSET-STRAP. JULIA H. AUERBACH, Los Angeles, Cal. Filed Nov. 5, 1915. Serial No. 59,732. (Cl. 24—203.)



6. In a corset, the combination of a lacing strap, a buckle thereon, a section of the lacing strap being carried in independent loops between the buckle and the back portion of the corset and the end sections of the lacing strap being brought together in engagement with the front section of the corset, substantially as shown and described.

[Claims 1 to 5 not printed in the Gazette.]

1,271,260. PUMP-CYLINDER. DELBERT F. AXELSON, Los Angeles, Cal., assignor to Axelson Machine Co., a Copartnership comprising C. F. Axelson and G. A. Axelson. Filed Dec. 5, 1916. Serial No. 135,262. (Cl. 103—59.)

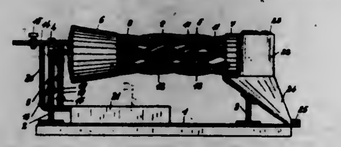


1. In an oil well pump, a shell; an upper collar into which said shell is threaded; a lower collar into which

said shell is threaded; and a series of liners, each liner fitting accurately inside said shell and having a central opening truly concentric with its outside diameter, said liners being seated at either end in said collars and being tightly clamped together between said collars.

2. A combination as in claim 1 in which the periphery of the liner consists of a series of accurately ground rings.

1,271,261. LIQUID-METER. JOHANN BAIN, Verbó, Hungary. Filed July 7, 1914, Serial No. 849,375. Renewed Dec. 3, 1917. Serial No. 205,239. (Cl. 73—37.)

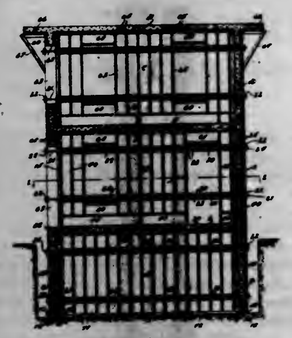


1. In a liquid meter, the combination of a rotatable shaft, a drum secured to the shaft and having longitudinal channels on its inner circumferential wall, a hollow member secured to the shaft, spirally twisted pipes communicating at one end with the channels of the drum and at the other end with said hollow member, and a counting mechanism driven by the shaft of the drum, substantially as and for the purpose described.

2. In a liquid meter, the combination of a rotatable shaft, a drum secured to the shaft and having longitudinal channels on its inner circumferential wall, a hollow member secured to the shaft, spirally twisted pipes communicating at one end with the channels of the drum and at the other end with said hollow member, said pipes having a twist of substantially 180° between their ends, and a counting mechanism driven by the shaft of the drum, substantially as and for the purpose described.

3. In a liquid meter, the combination of a revoluble drum having longitudinal channels on its inner circumferential wall, a supply pipe discharging the liquid into said channels, a closed receptacle, a testing pipe leading from the supply pipe to the closed receptacle, an adjustable cock in the testing pipe, and an overflow pipe leading from the receptacle back to the supply pipe, substantially as and for the purpose described.

1,271,262. CONCRETE-HOUSE MOLD. ROBERT A. BACHMAN, East Orange, N. J., assignor, by mesne assignments, to Industrial Poured Concrete House Co., a Corporation of New Jersey. Filed Aug. 2, 1916. Serial No. 112,726. (Cl. 25—131.)



1. In a concrete house mold, an outer mold form providing a rectangular frame of a height to form the several stories of a building, an interior mold form consisting of a plurality of box-like structures one at least for each story of the building, said structures having open bottoms and closed tops, and means for supporting the box-like structures one above the other in spaced relation.

4. In a concrete house mold, an outer mold form of a height to form the several stories of a building, said form being composed of vertically disposed plates and providing a hollow rectangular frame, an inner mold form comprising a plurality of boxlike structures having their side walls composed of vertically disposed plates, said structures having open bottoms and closed tops arranged one above the other in spaced relation, and means for supporting the upper boxes upon the lower boxes in spaced relation thereto, said means comprising pieces adapted to be lost in the concrete floor when cast.

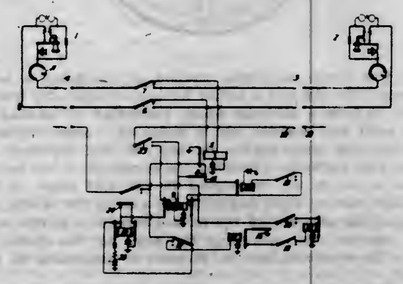
5. In a concrete house mold, an outer and an inner mold form composed of long relatively narrow vertically disposed wall plates, means passing through some of the wall plates of both forms for holding them spaced apart, and means passing transversely and longitudinally through the mold connected to said first named means for preventing the lateral displacement of the forms.

10. In a concrete house mold, an outer mold form comprising a rectangular frame of a height to form the several stories of a building, said form being composed of long relatively narrow vertically-disposed plates, horizontal bars surrounding said outer mold form, and means for clamping said bars together in the form of a rectangular supporting frame for said outer mold form.

16. In a concrete house mold form, an outer mold form of a height to form the several stories of a building comprising a rectangular frame composed of long relatively narrow vertically-disposed units, an inner mold form comprising a plurality of box-like structures having closed tops and open bottoms disposed one above the other in spaced relation, said box-like structures having their side walls composed of long relatively narrow vertically-disposed units, horizontal bars providing rectangular frames surrounding said outer mold form and disposed within said box-like structures, and rods passing transversely and longitudinally of said form connecting said bars together for preventing lateral displacement of said forms.

[Claims 2, 3, 6 to 9, and 11 to 15 not printed in the Gazette.]

1,271,263. ELECTROMAGNET. CHARLES FOWLER BALDWIN, Montclair, N. J., assignor, by mesne assignments, to Western Electric Company, Incorporated, a Corporation of New York. Filed Sept. 3, 1915. Serial No. 48,804. (Cl. 179—23.)



1. In a telephone exchange system, incoming lines, outgoing lines, a selector switch for interconnecting an incoming line with an outgoing line, a test brush, an impulse receiving means, a source of current, a plurality of operating magnets for said switch, a magnet for controlling the operation of said magnets, a winding on said controlling magnet arranged when energized to attract the armatures of said controlling magnet, another winding on said controlling magnet arranged when energized to retard the retraction of the armatures of said controlling magnet but unable to attract or maintain said armatures attracted, means controlled by said impulse receiving means for completing a circuit for said first mentioned winding, means including the test brush for completing another circuit for said first mentioned winding, and means for completing a circuit for said second mentioned winding in series with said source of current.

2. In a telephone exchange system, incoming lines, outgoing lines, a selector switch for interconnecting an incoming line with an outgoing line, a test brush, an impulse receiving means, a source of current, a plurality of operating magnets for said switch, a magnet for controlling the operation of said magnets, a high resistance winding on said controlling magnet arranged when energized to attract the armatures of said controlling magnet, a low resistance winding on said controlling magnet arranged when energized to retard the retraction of the armatures of said controlling magnet but unable to attract or maintain said armatures attracted, means controlled by said impulse receiving means for completing a circuit for said high resistance winding, means including said test brush for completing another circuit for said high resistance winding, and means for completing a circuit for said low resistance winding in series with said source of current.

1,271,264. CABLE-CLAMP. THOMAS H. BARNARD, Hamilton, Ontario, Canada. Filed Nov. 17, 1917. Serial No. 202,650. (Cl. 24—135.)



1. A cable clamp formed with a sheet metal body having a cup shaped laterally extended socket formed at its upper edge, said socket having a keyhole slot formed therein with its enlarged portion adjacent the body, in combination with a lock having its upper end adapted to close off the enlarged end of the slot, and means for detachably securing said lock in place.

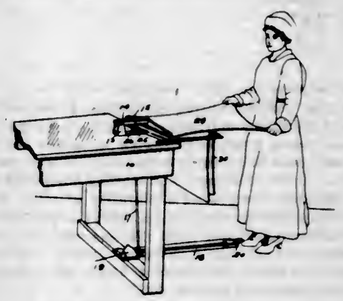
[Claims 2 to 4 not printed in the Gazette.]

1,271,265. HEADLIGHT FOR AUTOMOBILES. GEORGE W. BATCHELL, Cincinnati, Ohio, and RUBY C. SCHWENCK, Huntington, W. Va. Filed May 2, 1916. Serial No. 94,962. (Cl. 240—7.)

1. A headlight structure for vehicles, comprising a casing having a mouth portion for the emission of light, and a trifoliate group of substantially equisized reflectors within and all directed toward the mouth of the casing, the middle reflector being in the longitudinal axis of the casing and more distant from the mouth of the casing than the other reflectors, and said other reflectors being located on opposite sides of the first-named reflector, and all the reflectors having their longitudinal axes crossing or intersecting within the casing close to the mouth thereof.

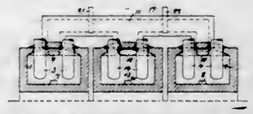
2. A headlight structure for vehicles, comprising a casing having a mouth portion for the emission of light, and a trifoliate group of substantially equisized reflectors within and all directed toward the mouth of the casing, the middle reflector being in the longitudinal axis of the casing and more distant from the mouth of the casing than the other reflectors, and said other reflectors being located on opposite sides of the first-named reflector, and all the reflectors having their longitudinal axes crossing or intersecting within the casing close to the mouth thereof, said casing being also provided with a front glass of partly spherical shape and when in place on the casing having its center of curvature substantially coincident with the point of crossing of the longitudinal axes of the reflectors.

1,271,266. DEVICE FOR SHAKING OUT LAUNDRY ARTICLES. ALBERT D. BEARMORE, Providence, R. I., assignor to The National Marking Machine Company, Cincinnati, Ohio. Filed July 30, 1917. Serial No. 183,642. (Cl. 68—11.)



In a device of the class described, a support, a clamp member thereon, a movable clamp member, operating mechanism for said movable clamp member, and a frame, including a member arranged substantially parallel with said clamp members and spaced therefrom and adapted to be below a piece of laundry gripped between said clamp members and stretched to substantially horizontal position by an operator, whereby when the operator grasps the piece of laundry and said clamp members are released, the piece of laundry will drop over said frame member.

1,271,267. ELECTROTHERMIC EXTRACTION OF ZINC. EDWARD SALOMON BERGLUND, Trollhättan, Sweden. Filed July 25, 1917. Serial No. 182,714. (Cl. 204—64.)



1. In electrothermic extraction of zinc, conducting zinc containing vapors simultaneously from several smelting furnaces to one common condenser, and shutting off the communication from one of the said smelting furnaces without disturbing the working of the remaining furnaces.

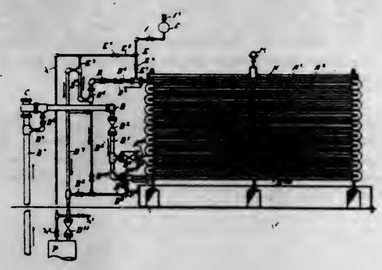
3. In electrothermic extraction of zinc, conducting zinc containing vapors simultaneously from several smelting furnaces to a vapor heating and purifying chamber, shutting off communication from one of said smelting furnaces without disturbing the working of the remaining furnaces and delivering the vapors from said chamber to a common condenser.

5. In combination several electric smelting furnaces, a vapor escape from each of said furnaces, a chamber, con-

nected with said vapor escapes, means for adjustably heating said chamber, means for shutting off each of said escapes from said furnaces, and means for connecting said chamber with a common condenser.

[Claims 2 and 4 not printed in the Gazette.]

1,271,268. CONDENSER. LOUIS BLOCK, Mamaroneck, N. Y. Filed May 20, 1915. Serial No. 29,276. (Cl. 257—38.)



1. The combination in a condenser of a coil; a main gas inlet pipe communicating therewith, a connection to a source of liquid for delivering the same into the gas in the coil to form a mixture therewith; a means for injecting gas connected to a source of gas and to said coil; and a condenser liquid discharge pipe leading from said coil.

8. A condenser comprising a plurality of coils; a main gas pipe connected to each of the coils; a pipe for each coil for delivering liquid into the gas therein; branch pipes connected to the main gas pipes and to each coil between the inlet and outlet thereof, and a final liquid discharge pipe connected to each coil.

[Claims 2 to 7 not printed in the Gazette.]

1,271,269. MANUFACTURE OF NON-ALCOHOLIC MALT BEER. LOUIS BLOCK, Mamaroneck, N. Y. Filed July 10, 1915. Serial No. 39,094. (Cl. 195—1.)



1. The process of manufacturing a malt beverage which includes the extracting of the alcohol at approximately the temperature of and directly after the main fermentation.

2. The process of manufacturing a malt beverage which includes the extracting of the alcohol under a vacuum and at approximately the temperature of and directly after the main fermentation and before the secondary or aging fermentation.

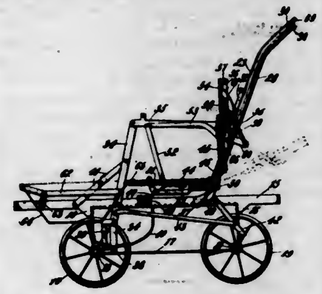
3. The process of manufacturing a malt beverage which includes the extracting of the alcohol under a vacuum and at approximately the temperature of and directly after the main fermentation, then kräusening and filtering it.

4. The process of manufacturing a malt beverage which includes the extracting of the alcohol at approximately the temperature of and directly after the main fermentation, then cooling and carbonating it.

5. The process of manufacturing a malt beverage which includes the extracting of the alcohol at approximately the temperature of, and directly after the main fermentation, then cooling the beverage and subjecting it to an aging fermentation, carbonating and filtering it.

[Claim 6 not printed in the Gazette.]

1,271,270. CONVERTIBLE FOLDING GO-CART. JOHN F. BRIGGS, Gays Mills, Wis., assignor of one-half to Samuel C. Martner, Prairie du Chien, Wis. Filed Feb. 26, 1916. Serial No. 80,578. (Cl. 21—83.)



1. A folding go-cart, comprising a main frame, handle bars pivotally mounted thereon, a seat and back pivotally connected together and mounted on the handle bars, levers fulcrumed on the main frame, links connecting the levers with the handle bars, wheel frames pivotally mounted on the sides of the main frame, wheels thereon, arc-shaped rods on the wheel frames, and cam strips carried by the levers engaging the arc-shaped rods for folding the wheel frames beneath the main frame when the levers are swung by a folding movement of the handle bars.

2. A folding go-cart, comprising a main frame, handle bars pivotally mounted thereon, levers fulcrumed on the main frame, links connecting the levers with the handle bars, wheel frames pivotally mounted on the sides of the main frame, wheels thereon, cam strips mounted on the levers and spaced therefrom, and arc-shaped rods on the wheel frames confined between the cam strips and the levers.

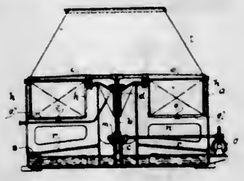
3. A folding go-cart, comprising a main frame, handle bars pivotally mounted thereon, levers fulcrumed on the main frame, links connecting the levers with the handle bars, wheel frames pivotally mounted on the sides of the main frame, wheels thereon, cam strips mounted on the levers and spaced therefrom, arc-shaped rods on the wheel frames confined between the cam strips and the levers, a blocking frame pivotally mounted on the main frame and fitting between the wheel frames, and connecting rods connecting the blocking frame with the levers.

4. A folding go-cart, comprising a main frame, handle bars pivotally mounted thereon, levers fulcrumed on the main frame, links connecting the levers with the handle bars, wheel frames pivotally mounted on the main frame, wheels thereon, folding connections between the levers and the wheel frames, a boot frame pivotally connected with the levers, links connecting the boot frame with the main frame, a folding seat and back mounted on the handle bars, and a flexible boot connected between the boot frame and the seat.

5. A folding go-cart, comprising a main frame, handle bars pivotally mounted thereon, levers fulcrumed on the main frame, links connecting the levers with the handle bars, wheel frames pivotally mounted on the main frame, wheels thereon, folding connections between the levers and the wheel frames, a boot frame pivotally connected with the levers, links connecting the boot frame with the main frame, a folding seat and adjustable back mounted on the handle bars, and a flexible boot connected between the boot frame and the seat and having detachable connections with the seat in different positions thereon.

[Claims 6 to 14 not printed in the Gazette.]

1,271,271. APPARATUS FOR COOLING, HUMIDIFYING, AND FILTERING AIR OR THE LIKE. HENRY FRANCIS BROWN, Sheffield, England. Filed Jan. 19, 1918. Serial No. 212,826. (Cl. 261—29.)

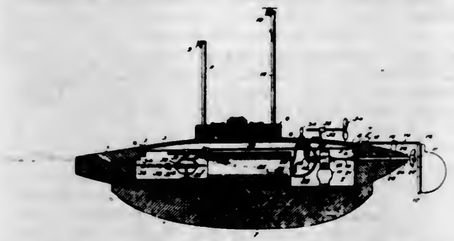


2. Apparatus for treating a gas comprising a casing having openings in its side walls through which the gas passes, a plurality of closely arranged vertical plates mounted within said casing, a rotatable sprinkler arm mounted in close proximity to the upper ends of said plates, a motor driven hollow water conducting shaft carrying said sprinkler arm, and means for supplying water to the sprinkler arm through said shaft.

4. Apparatus for treating a gas comprising a casing through which the gas passes, a water supply therefor, a plurality of plates mounted in the casing, a rotary sprinkler mounted in close proximity to the ends of the plate and having an extended surface to prevent the entraining of the particles of water with the air or gas under treatment, and means for revolving said sprinkler.

[Claims 1 and 3 not printed in the Gazette.]

1,271,272. TOY SUBMARINE. JOEL W. BUNKLEY, Washington, D. C., assignor, by direct and mesne assignments, to Rudolf Seidl, Minneapolis, Minn. Filed Jan. 18, 1917. Serial No. 143,063. (Cl. 46—37.)



1. In a toy submarine embodying a hull, a propeller with means for driving the propeller, diving rudders mounted on the hull and adapted to assume different angular positions with respect thereto, and means operable continuously by the driving means for varying the angularity of said diving rudders.

3. A toy submarine embodying a hull, a driving propeller, diving and elevating rudders, and means for periodically changing the angularity of said rudders with respect to the hull, whereby the vessel is alternately submerged and elevated, and run elevated or submerged between the periods of elevation or submergence.

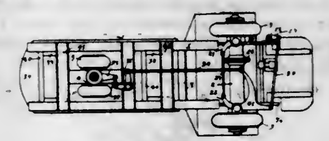
5. A toy submarine embodying a hull, a propeller, an electric motor for driving the same, and means in continuous driving relation with said electric motor for submerging the hull of the vessel.

11. The combination, in a toy vessel, of a propeller, a motor for driving the same supported by the vessel, and means operated by the flow of the water for rendering inoperative said motor.

15. The combination, in a toy submarine vessel, of a propeller, a prime mover for driving the propeller, a diving rudder carried by the vessel and adapted to assume different angular positions with respect to the longitudinal axis of the vessel, a cam driven by the prime mover for varying the angularity of said diving rudder, and an operative connection between the cam and the diving rudder.

[Claims 2, 4, 6 to 10, and 12 to 14 not printed in the Gazette.]

1,271,273. TRUCK. WILLIAM C. CARR, Buffalo, N. Y., assignor to The Automatic Transportation Company, Buffalo, N. Y. Original application filed Jan. 3, 1916, Serial No. 69,978. Divided and this application filed Jan. 25, 1917. Serial No. 144,483. (Cl. 180—43.)



1. In a power driven truck, the combination with a frame of a pair of knuckle-joint mounted wheels adjacent to one end of said frame, knuckle joints and a driving shaft for said wheels and a motor and mechanism for driving said wheels mounted over said end of said frame, a pair of axle-mounted wheels and an axle therefor pivoted underneath said frame and positioned to carry the major portion of the truck load, a steering head and lever and rod connections between said head and said steering knuckles and said axle so arranged that all four wheels are steered simultaneously.

2. In a power driven truck, the combination with a frame of a pair of knuckle joint mounted wheels adjacent to one end of said frame, knuckle-joints, a driving shaft and a motor therefor, a pair of axle-mounted wheels and an axle therefor pivoted underneath the said frame near the load-carrying center of said platform portion of said frame, and means for steering all four wheels simultaneously comprising a steering head, a bell-crank lever on the hub member of one of said knuckle joints and a lever and rod connection between it and said steering head, lever and rod connections between said knuckle joints, a bell-crank lever pivoted to said frame, a rod connecting said bell-crank lever on said knuckle joint with one arm of said bell-crank lever pivoted to said frame, a lever arm on said axle and a rod connecting it with the other arm of said bell-crank lever pivoted to said frame.

3. A power-driven truck comprising a frame, a pair of knuckle-joints secured adjacent to one end thereof, a pair of wheels on said knuckle-joints, means for transmitting power to said wheels, a second pair of wheels positioned underneath said frame and near the center of the load-carrying portion of said frame to carry the greater portion of the truck load, an axle for said last-mentioned wheels, a king-post mounted on said frame, a steering-post and lever and rod connections connecting said knuckle-joint wheels and the axle of said second pair of wheels for effecting steering of all four wheels from a single steering-post.

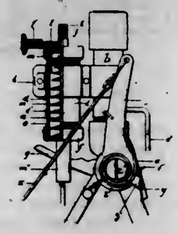
6. In a power-driven truck, the combination with a frame of a pair of knuckle-joint steering wheels and knuckle-joints therefor and power means connected with said wheels for propelling the truck, a pair of load-carrying wheels mounted on an axle and a pivot connecting said axle with said frame, steering means for said knuckle-joint wheels and lever connections between a steering element of said knuckle-joint wheels and the axle of said load carrying wheels, whereby all four wheels are steered simultaneously from a common source, and whereby the proportional steering movement of said two pairs of wheels may be determined by proportionment of said lever connections.

7. In a power-driven truck, the combination with a frame and supports for the power mechanism at one end and a load-carrying platform at the other end, a pair of knuckle-joint propelling and steering wheels adjacent the power end, a pair of axle-mounted load-carrying wheels having

a short axle pivoted to the frame adjacent the load-carrying center of said platform, steering means, a lever on a moving element of said steering means, a lever on said axle and connections between said levers, whereby all four wheels are steered simultaneously and whereby the steering movement of said axle-mounted wheels with reference to the steering movement of said knuckle-joint wheels may be proportioned by said lever connections.

[Claims 4 and 5 not printed in the Gazette.]

1,271,274. GAS LIGHTING AND EXTINGUISHING APPARATUS. DANIEL CARTER, Toronto, Ontario, Canada, assignor of one-half to James D. B. McNeice, Toronto, Ontario, Canada. Filed Dec. 22, 1916. Serial No. 138,481. (Cl. 67—17.)



1. In a gas lighting and extinguishing apparatus, including a gas burner and a stop-cock governing the flow of gas thereto, an air check controlling the movement of the stop-cock, said air check comprising a piston, a cylinder for said piston having a relief port through which the air in the cylinder between the piston and cylinder head may escape during the outstroke of the piston, and a relief port interjacent the cylinder heads to partly relieve the pressure in the cylinder between the piston and the opposite cylinder head for a partial instroke of the piston, and operating means for the stop-cock actuated by the piston.

2. In a gas lighting and extinguishing apparatus, a controlling means, for the stop-cock of a gas burner, comprising a cylinder, a piston therein, a piston rod for the piston extending beyond the cylinder to actuate the stop-cock, said cylinder having a relief port though which the air in the cylinder, between the piston and cylinder head, may escape during the outstroke of the piston, and a relief port interjacent the cylinder heads to partly relieve the pressure in the cylinders between the piston and opposite cylinder head for a partial instroke of the piston, and means for actuating the piston.

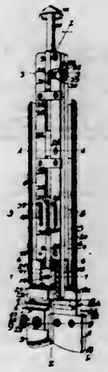
[Claims 3 to 12 not printed in the Gazette.]

1,271,275. EXPANSIVE AND CONTRACTIVE WELL-DRILL. OSCAR MARTIN CARTER, Houston, Tex. Filed Jan. 5, 1918. Serial No. 210,536. (Cl. 255—74.)

1. A drill, including a carrier casing having extensible bits, adapted to be lowered into a drill stem with slots in the end, and gravity operated means carried by and rendered latent to extend the bits, before introducing the drill into the stem, said means urging the bits against the wall of the stem during the act of lowering, and becoming active to extend the bits when the slots are reached.

6. In a drill, a drill stem with slots, a carrier casing occupying an operative position at the bottom of said drill stem, bits carried by the carrier casing and extended through the slots, means for retracting the bits through the slots, means providing an attacking member for a raising tongs and locking the bits in the extended position, and means forming a connection between the locking means and said retracting means on the initial unlocking movement of said locking means in raising the drill, said retracting means then moving the locking means on making said connection, to retract the bits.

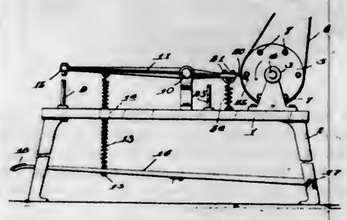
24. In a drill, a carrier casing including extensible bits, supporting means for the extensible bits, and means mutually carried by the carrier casing and said bit supporting means, for directing a stream of liquid against the bits.



40. In a drill, the combination of a drill stem having an enlarged head provided with opposed bit slots at the end, inwardly extending lugs at the end of the head, a carrier casing adapted to be lowered into place on the lugs in the enlarged head, bits carried by the carrier casing and in contact with the inner wall of the stem in lowering, and inverted V-shaped guides between the opposed slots, adapted to direct the contacting bits toward said slots.

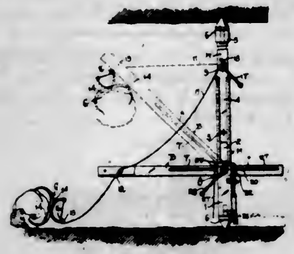
[Claims 2 to 5, 7 to 23, and 25 to 39 not printed in the Gazette.]

1,271,276. RIVETING-MACHINE. JULIUS N. CAYO, Gary, Ind., assignor to The Red-Devil-Speed Hammer Company, Gary, Ind., a Corporation of Indiana. Filed Apr. 3, 1917. Serial No. 159,575. (Cl. 78—26.)



In a riveting machine, the combination with a table mounted on legs and having bearings at its rear end, an anvil at its front end, and a fulcrum between these elements, a power driven wheel mounted in said bearings and having pins projecting from it, and a treadle pivoted to one of the rear legs and underlying the table-top; of a hammer pivoted near its rear end in said fulcrum, a head at its front extremity overlying said anvil, a spring connecting its front portion adjacent said head and the forward portion of said treadle, an upstanding stop in the table in rear of said fulcrum, a wear plate carried by the rear end of the arm and successively struck by said pins, and a relatively weak spring connecting said rear end to the table and of sufficient force to raise the front end of the hammer and its head and said treadle and its spring when the latter is not under tension, for the purpose set forth.

1,271,277. MINE APPARATUS. JOHN CHABALA, Cuddy, Pa. Filed Feb. 9, 1918. Serial No. 216,277. (Cl. 212—41.)

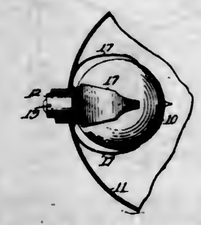


1. An apparatus of the class described comprising a supporting standard, a beam coacting with said standard and mounted for longitudinal movement independently of the standard, load carrying means coacting with an end portion of the beam, a rotary member supported by the standard and provided with operating means, a pulling member secured to the beam and engageable with the rotary member whereby the beam is moved longitudinally upon rotation of the rotary member in one direction, means for disengaging the pulling member from the rotary member, a holding member coacting with the rotary member for normally holding the same against rotation in one direction, and means operating in unison with the last named means for disengaging the holding member from the rotary member when the pulling member is disengaged from the rotary member.

5. An apparatus of the character described comprising a supporting standard, a beam coacting with said standard and mounted for swinging movement longitudinally of the standard and for longitudinal movement independently of the standard, load carrying means coacting with an end portion of the beam, a rotary member supported by the standard and provided with operating means, a pulling member secured to the beam and engageable with the rotary member whereby the beam is moved longitudinally upon rotation of the rotary member in one direction, a member engaged with the standard and mounted for rocking movement, said rocking member upon movement in one direction coacting with the pulling member for disengaging the pulling member from the rotary member, and a braking element carried by the rocking member and engaging the beam to retard the movement of the beam when the pulling member is disengaged from the rotary member, a holding member coacting with the rotary member for normally holding the same against rotation in one direction, and means carried by the rocking member for disengaging the holding member from the rotary member when the pulling member is disengaged from the rotary member.

[Claims 2 to 4 not printed in the Gazette.]

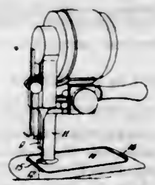
1,271,278. LIGHT-DIMMER. FRANK A. CHENETTE, Worcester, Mass., assignor of one-half to Charles J. McDonald, Worcester, Mass. Filed June 18, 1917. Serial No. 175,399. (Cl. 240—48.6.)



1. The combination with an incandescent lamp and a reflector, of a stationary opaque member between them comprising a plurality of radial spring arms having spaces between them to permit the light to pass through and extending from the face of the lamp to a point beyond the center of the lamp, spaced from the lamp throughout the length of said member, but the ends of the arms bearing with spring-pressure on the surface of the lamp at a distance beyond the center to leave substantially the entire front unobstructed so that the member is held yieldingly in position on the lamp and may be removed from the reflector with it.

[Claims 2 to 6 not printed in the Gazette.]

1,271,279. CLOTH-CUTTING MACHINE. FREDERICK J. CLARK, Buffalo, N. Y., assignor to Eastman Machine Co., Buffalo, N. Y. Filed Dec. 14, 1916. Serial No. 137,044. (Cl. 164—75.)



1. A portable cloth cutting machine having a base adapted to rest and move on a supporting surface beneath the material being cut and provided with rollers arranged to contact with the under side of the material and form rolling supports therefor to reduce the friction between said base and said material.

3. A cloth cutting machine having a base adapted to move beneath the material being cut and having rollers on its under and upper sides, the rollers on said under side being arranged to roll on a supporting surface, said rollers on said upper side being arranged to contact with the under side of the material to reduce the friction between said base and said material and said under and upper rollers acting together to permit said base to easily move between said material and the supporting surface.

5. A portable cloth cutting machine having a base adapted to rest and move on a supporting surface beneath the material being cut and comprising a main base plate and a movable edge plate, and transversely extending rollers rotatably mounted on said main base plate and arranged to contact with the under side of the material and form rolling supports therefor to reduce the friction between said base and said material.

8. A cloth cutting machine having a base adapted to move beneath the material being cut, supporting rollers for said base, spring strips on which said rollers are journaled, said base having a recessed seat for each of said spring strips provided with a lip engaging one edge of the spring strip, and a securing plate which engages the opposite edge of the spring strip and has a projection extending between the last mentioned edge of the spring strip and the adjacent side of the seat.

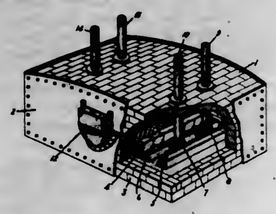
[Claims 2, 4, 6, and 7 not printed in the Gazette.]

1,271,280. ELECTRIC FURNACE. EDGAR F. COLLINS, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed May 12, 1917. Serial No. 168,270. (Cl. 204—64.)

1. An electric arc furnace comprising paired electrical conductors located adjacent each other, one or more replaceable electric conductors conforming in surface configuration with said paired conductors to make contact therewith and a movable electrode coöperating with said replaceable conductor or conductors.

3. An electric furnace comprising prismatic conductors located adjacent each other on the base of said furnace and having upwardly diverging sides, a replaceable conductive block conforming in surface configuration with

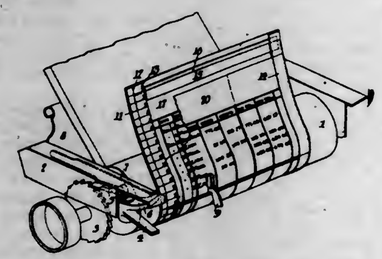
said conductors to make intimate contact therewith and an adjustable electrode coöperating with said block to support an electric arc.



4. An electric arc furnace comprising an electrical conductor providing a recess, a replaceable conductive block fitted to said recess and electrically in contact with said conductor, and an electrode projecting in arcing relation to said block.

[Claim 2 not printed in the Gazette.]

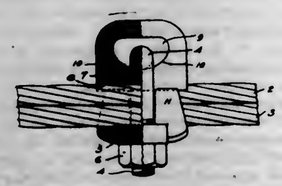
1,271,281. SHEET-COLLATING DEVICE, &c. MICHAEL F. CREAHAN, Brooklyn, N. Y., assignor to Underwood Typewriter Company, New York, N. Y., a Corporation of Delaware. Filed July 8, 1914. Serial No. 849,645. (Cl. 282—29.)



2. A collating device for work-sheets to be placed in a typewriting machine having a round platen, said device comprising a flexible backing sheet having a flap stitched thereto adjacent and parallel to the leading edge, but spaced from said edge and forming a holder for one of the work sheets, and also comprising a flap fixed to one side of the backing sheet and forming a side holder for the work sheets, said flap at the leading edge terminating short of the said side flap.

[Claim 1 not printed in the Gazette.]

1,271,282. ROPE-CLIP. OLIVER CROSBY, St. Paul, Minn., assignor to American Hoist & Derrick Co., St. Paul, Minn., a Partnership. Filed Jan. 22, 1918. Serial No. 213,145. (Cl. 24—134.)



1. A rope clip comprising a U-bolt, a block slidably mounted on the arms thereof, nuts mounted on the threaded ends of said arms, a secondary block loosely mounted on the curved portion of said U-bolt and having a cam bearing surface for said curved portion, and on which said cam bearing surface the curved portion of said bolt is free to slide when it is moved by the slipping of the rope.

[Claim 2 not printed in the Gazette.]

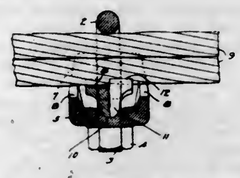
1,271,283. ROPE-CLIP. OLIVER CROSBY, St. Paul, Minn., assignor to American Hoist & Derrick Co., St. Paul, Minn., a Partnership. Filed Jan. 22, 1918. Serial No. 213,146. (Cl. 24—134.)



1. A rope clip comprising a U-shaped bolt, a block mounted to slide on the arms of said bolt and having a part to straddle the rope ends for clamping said block on the rope, a cam loosely mounted on the curved portion of the bolt and having a gripping face opposing the face of said block and said cam having means to engage said block and limit the rotary movement of said cam on said bolt.

[Claims 2 and 3 not printed in the Gazette.]

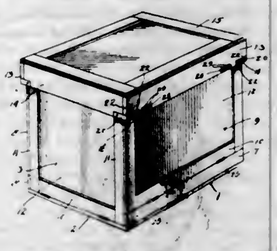
1,271,284. ROPE-CLAMP. OLIVER CROSBY, St. Paul, Minn., assignor to American Hoist & Derrick Co., St. Paul, Minn., a Partnership. Filed Mar. 20, 1918. Serial No. 223,547. (Cl. 24—134.)



4. A rope clamp comprising a U-shaped bolt, a block slidable on the ends thereof, clamping nuts mounted on said bolt for engaging said block, said block having a concave seat formed in its inner face and a member having a correspondingly shaped surface to fit said seat and rock thereon and provided with a face between which and the curved portion of said bolt the cable is clamped.

[Claims 1 to 3 not printed in the Gazette.]

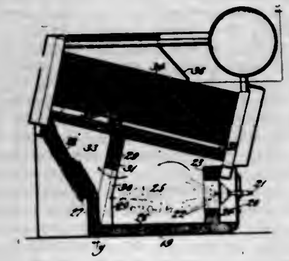
1,271,285. SHIPPING-CRATE. MICHAEL J. DACY, Richmond, Va., assignor of one-third to Claude B. Davis and one-third to John T. Palmatary, Richmond, Va. Filed Nov. 1, 1916. Serial No. 128,990. (Cl. 217—15.)



1. A folding crate comprising in combination, a base having bottom cleats around its margin ends foldable upon the base, to lie within the marginal limits of the latter, sides foldable flat on the ends, a lid having side members of sufficient depth to wholly receive the folded box, and tie rods passed through the lid and the cleats of the base so as to pass across the base below its inner surface to secure the crate in folded condition, said sides, ends and the lid being also constructed to receive the tie rods when the box is set up to lock it in extended condition.

[Claim 2 not printed in the Gazette.]

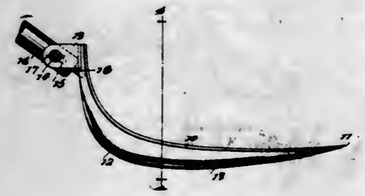
1,271,286. OIL-BURNING FURNACE. KNUT MARTIN DAHL, San Francisco, Cal. Filed Dec. 15, 1913. Serial No. 806,738. (Cl. 158—1.)



1. In a furnace of the character described, a burner chamber adapted to receive a burner having a fuel inlet, a combustion chamber, a wall between said burner chamber and combustion chamber having a passage therethrough for the admission of hydrocarbon to said combustion chamber, a depending bridge wall located at the rear of said combustion chamber and having a passage through its lower portion for the egress of the products of combustion, the upper portion of said bridge wall serving as a trap to retard a portion of the products of combustion, and a rearwardly inclined wall extending upwardly and rearwardly from the lower portion of said bridge wall thereby forming a secondary combustion chamber whose walls diverge upwardly, said rearwardly inclined wall serving to deflect the products of combustion upwardly.

[Claim 2 not printed in the Gazette.]

1,271,287. DIGGING-TOOL. EDMUND DALY, New Monterey, Cal. Filed July 17, 1917. Serial No. 181,101. (Cl. 55—14.)

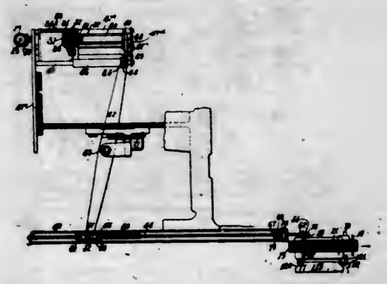


1. A digging tool, including a long narrow blade, having a straight chisel edge on its outer end and the blade curved slightly rearward, the curvature increasing toward the rear end until the inner surface of the blade adjacent said rear end is at approximately right angles to the inner surface adjacent the outer end.

3. A digging tool, including a blade having a pair of spaced ears and a series of spaced openings in the blade between the ears, a handle pivoted between the ears and having a longitudinal slot through which the pivot extends, and a pin in the end of the handle, to enter any one of the openings of the blade to hold the same rigid relative to the handle, the pin being insertible in any one of the openings to vary the angle of the blade.

[Claim 2 not printed in the Gazette.]

1,271,288. COMBINED TYPE-WRITING AND COMPUTING MACHINE. GUSTAVE O. DEGENER, New York, N. Y., assignor to Underwood Computing Machine Company, New York, N. Y., a Corporation of New York. Filed Mar. 12, 1913. Serial No. 753,660. (Cl. 235—62.)



1. In a computing machine, the combination with numeral keys, computing wheels and a traveling carriage, of tabulating stops for positioning said carriage, a master wheel for actuating said computing wheels *seriatim*, and means controlled by the tabulating stops for simultaneously connecting said keys to said computing wheels and said master wheel to said carriage.

4. In a combined typewriting and computing machine, the combination with a typewriter carriage, of a computing machine carriage, stops for connecting said carriages to intermittently travel together, means for returning said computing machine carriage to normal when not so connected, numeral keys, computing wheels, and means for connecting said keys to said wheels during only the time when said carriages are connected together.

9. The combination with a typewriter carriage and numeral keys, of a rack upon said carriage, column stops mounted on said rack, a device arranged to engage certain of said stops so as to travel with said carriage, means dependent upon the movement of the carriage for causing said device to release the stops, a master wheel, a gang of computing wheels, means connected to said device to effect a relative traveling movement between said master wheel and said computing wheels, and means controlled by said certain stops to connect said keys to said master wheel.

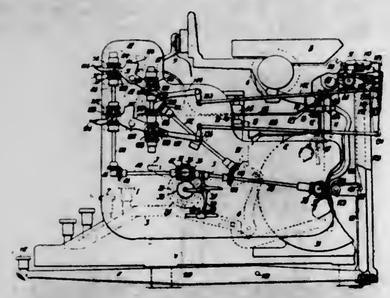
17. The combination with one or more computing units including a gang of computing wheels and a master wheel, of a carriage having a step-by-step movement, and also traveling to determine computing zones, indexing mechanism to determine the extent of rotation of the master wheel, numeral keys for controlling the action of the indexing mechanism; and a single element for concomitantly controlling the position of the carriage, the connecting of the master wheel to the carriage to cause *seriatim* engagement of the master wheel and computing wheels during the step-by-step movement of the carriage, and the connecting of the numeral keys to the indexing mechanism.

[Claims 2, 3, 5 to 8, 10 to 16, and 18 to 20 not printed in the Gazette.]

1,271,289. COMBINED TYPE-WRITING AND COMPUTING MACHINE. GUSTAVE O. DEGENER, New York, N. Y., assignor to Underwood Computing Machine Company, New York, N. Y., a Corporation of New York. Filed Mar. 17, 1913. Serial No. 754,709. (Cl. 235—62.)

2. In a combined typewriting and computing machine, the combination with numeral keys and a plurality of gangs of computing wheels, of a typewriting carriage, a tabulating mechanism comprising stops for positioning said carriage, tappets on said stops, cam bars adjacent the line of travel of said stops and arranged to be moved thereby, a connection from each cam bar to its gang of computing wheels, and clutches intermediate said wheels and keys arranged to be controlled by said cam bars.

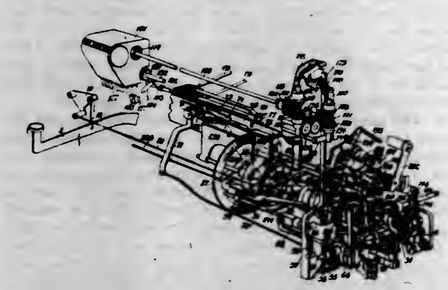
20. The combination with a carriage, of a convertible computing head, clutches for converting said computing



head, column-stops carried by said carriage and means controlled by said stops for shifting said clutches.

[Claims 1, 3 to 19, and 21 to 45 not printed in the Gazette.]

1,271,290. COMBINED TYPE-WRITING AND COMPUTING MACHINE. GUSTAVE O. DEGENER, New York, N. Y., assignor to Underwood Computing Machine Company, New York, N. Y., a Corporation of New York. Filed Nov. 15, 1913. Serial No. 801,109. (Cl. 235—62.)



1. The combination with a series of index pins, of a series of interponents for setting said pins, and a cradle for said interponents, said cradle having a beveled ring to engage in notches provided in each of said interponents, so that said interponents may be rocked about said ring as a fulcrum.

42. The combination with a computing mechanism including a valuating wheel having a series of pins settable to determine the extent of rotation thereof, of a series of numeral keys for controlling the setting of said pins, a restoring ring for said pins, a cam for actuating said restoring ring, and means for controlling the action of said cam from said numeral keys.

71. The combination with a master wheel, of a train of gearing for driving said master wheel having two breaks at different points, and a lock for said master wheel controllable in connection with both breaks so as to prevent rotation of the master wheel in case the train of gearing is interrupted at either point.

87. The combination with computing mechanism, of a master wheel for driving said computing mechanism, a lock for said master wheel, means for determining the state of said computing mechanism as to addition, subtraction or neutral, and means preventing the release of said lock when said determining means is in neutral position.

[Claims 2 to 41, 43 to 70, 72 to 86, 88, and 89 not printed in the Gazette.]

1,271,291. HEMMING ATTACHMENT FOR SEWING-MACHINES. ALBERT H. DE VOE, Westfield, N. J., assignor to The Singer Manufacturing Company, a Corporation of New Jersey. Filed Sept. 20, 1917. Serial No. 192,265. (Cl. 270—89.)

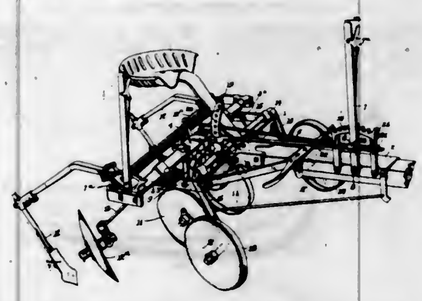


2. In a sewing machine having stitch-forming mechanism including a needle, a presser-foot provided with a needle-hole, a folding member for turning a margin of material on itself, said folding member having a directing wall merging into a deflecting curved wall immediately adjacent the needle-hole, a separating member around which the overturned margin of a hem is adapted to be bent, said separating member having a downwardly and rearwardly inclined top surface terminating in an end portion substantially abreast of the front of the needle-hole, said separating and folding members being spaced apart to define a channel in the lower surface of the presser-foot, and said inclined top surface of the separating member being spaced above the lowest surface of the presser-foot in rear thereof in the direction of feed whereby the surplus material in the overturned margin of a hem on a convexedly curved edge may be distributed.

9. In a sewing machine having stitch-forming mechanism including a needle, a presser-foot having a needle-hole, means associated therewith for turning a hem, in combination with means for making the distance between stitches in the turned margin of a hem greater than the distance between stitches in the underlying body-portion of the hem whereby the fullness of a hem on a curved edge of material may be distributed among the stitches securing it in place, without folding the margin transversely.

[Claims 1, 3 to 8, 10, and 11 not printed in the Gazette]

1,271,292. LISTER-CULTIVATOR. HARRY S. DICKINSON, Moline, Ill., assignor to Moline Plow Company, a Corporation of Illinois. Filed June 27, 1916. Serial No. 106,090. Renewed May 15, 1918. Serial No. 234,779. (Cl. 97—31.)



1. In a cultivator, the combination of a frame adapted to carry cultivating devices, carrying wheels mounted on the frame and adapted to travel at the sides of the row and movable up and down relatively to the frame, balance wheels mounted on the frame outward of the carrying wheels and movable up and down relatively to the frame, and means for moving the two sets of wheels together but different relative vertical distances.

3. In a cultivator, the combination of a frame adapted to carry cultivating devices, carrying wheels mounted on the frame and adapted to travel at the sides of the row and movable vertically relatively to the frame, balance wheels mounted on the frame outward of the carrying wheels and movable up and down relatively to the frame.

and operative connections between the two sets of wheels to cause them to move together different relative vertical distances, said connections being adjustable to vary the relation of the two sets of wheels to each other in the direction of movement.

5. In a cultivator, the combination of a frame adapted to carry cultivating devices, carrying wheels mounted on the frame and adapted to travel at the sides of the row and movable up and down relatively to the frame, balance wheels mounted on the frame outward of the carrying wheels and movable up and down relatively to the frame, and means for moving the two sets of wheels together different relative vertical distances, the balance wheels a greater distance than the carrying wheels.

8. In a cultivator, the combination of a frame adapted to carry cultivating devices, a horizontal transverse rock shaft mounted in the frame, carrying-wheel supports connected with the rock shaft, carrying wheels mounted on the supports and movable up and down in the rocking motions of the shaft, a lateral arm on the shaft, a second horizontal transverse rock shaft mounted in the frame, balance-wheel supports connected with said second rock-shaft, balance wheels mounted on the balance-wheel supports and movable up and down in the rocking motions of the shaft, a lateral arm on said second rock shaft, an operating lever mounted on the frame, a connecting device jointed at one end to the lever and at its other end to the arm on the first mentioned rock shaft, and a second connecting device jointed at one end to the lever and adjustably connected at its other end to the arm on said second rock shaft.

12. In a cultivator, the combination of a frame adapted to carry cultivating devices, a horizontal transverse rock shaft mounted in the frame, carrying-wheel supports fixed to the shaft, carrying wheels mounted on the supports and movable up and down in the rocking motions of the shaft, a second horizontal transverse rock shaft mounted in the frame, balance-wheel supports connected with said rock shaft, balance wheels mounted on said supports and movable up and down in the rocking motions of the shaft, a hand lever pivoted to the frame in advance of said shafts and movable back and forth on a horizontal transverse axis, a link pivoted to said lever on a horizontal transverse axis, a locking latch on the rear end of said link, a lateral arm on the second mentioned rock shaft provided with a series of latch engaging openings arranged in a line curved from an arc whose center is coincident with the point of pivotal connection of the link with the lever when two sets of wheels are down and the frame of the machine elevated, said latch openings adapted to be engaged by the latch on said link, a lateral arm on the first mentioned rock shaft, and a link connected at its forward end with the operating lever and at its rear end with said lateral arm.

[Claims 2, 4, 6, 7, and 9 to 11 not printed in the Gazette.]

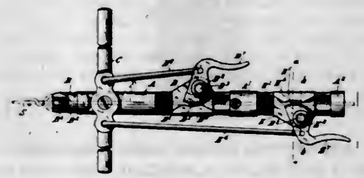
1,271,293. METHOD AND APPARATUS FOR DRYING MATERIALS IN SACKS AND THE LIKE. HANS PETER DINESEN, Herlöv, Denmark. Filed Jan. 25, 1916. Serial No. 74,224. (Cl. 98—26.)



1. In combination with the walls of an air space normally left open on one side, a frame occupying this side and provided with openings adapted to be filled by sacks of material in order that the sacks may constitute the greater part of a wall of said space, compelling air to pass through them when a difference of air pressure is established between said space and the opposite side of said sacks.

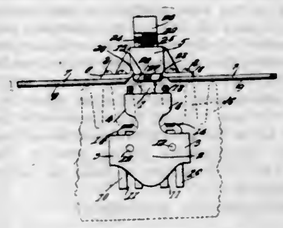
[Claims 2 to 6 not printed in the Gazette.]

1,271,294. WIRE-STRAINER. REGINALD CHARLES DUIGAN, Mia Mia, Victoria, Australia. Filed June 26, 1917. Serial No. 176,951. (Cl. 254—76.)



A wire strainer comprising a tubular base piece slotted for a portion of its length and provided at its forward end with a fixed block having parallel furcations spaced apart and extending at right angles to the base piece for securing a wire loop to the same, a handle pivotally connected to said block, sliding pieces located in said tubular base piece and each having an integral jaw provided with a shallow longitudinally curved groove, a movable jaw pivotally connected to each of the sliding pieces and having a curved surface adapted to coöperate with one of the curved grooves for gripping a second wire and moving the same through the space between the furcations, handles integral with the movable jaws, links connecting the handles with the handle, a spring located in the tubular base piece and having one end bearing against the fixed block and its other end engaging one of the sliding pieces, and another spring located in the base piece between the other sliding piece and a fixed member in the base piece.

1,271,295. MEANS FOR SHAPING THE RAKER-TEETH OF SAWS. JOSEPH M. EMERICK, Salem, Oreg. Filed Mar. 15, 1917. Serial No. 155,042. (Cl. 96—55.)



1. A device of the character described, embodying a body having a plate, clamping elements carried by said plate, slotted holding members adjustably engaging said elements and having portions to engage a saw at opposite sides of a raker tooth, and a swage movably carried by the body and engageable with the end of said tooth.

[Claims 2 and 3 not printed in the Gazette.]

1,271,296. MOLD. EDWARD E. EVERETT, Philadelphia, Pa., assignor to Philadelphia Storage Battery Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Apr. 24, 1916. Serial No. 93,192. (Cl. 22—183.)

A mold made in sections having flat contacting faces and provided with cavities in the form of grooves defining closed figures, at least one of said sections being provided with air vents opening on portions of the flat inner

face thereof circumscribed by the grooves and abutting against flat portions of another section, which portions while substantially engaging the first section, provide



with it relatively thin passages whose dimensions are insufficient to allow of flow of metal but which allow escape of air from the mold cavities.

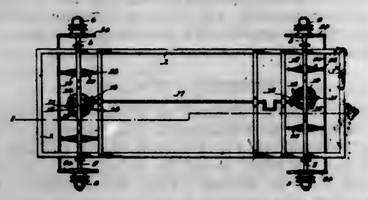
1,271,297. SAFETY-CATCH FOR PINS OR BROOCHES. FRANK E. FARNHAM, Providence, R. I., assignor to The Jewelers Supply Company, Biddeford, Me., a Corporation of Maine. Filed Mar. 8, 1916. Serial No. 82,790. (Cl. 24—157.)



1. In a safety-catch for pins and brooches, the combination with a keeper-member having a flat-sided circular hook with a post at its lower end of substantially greater thickness than the hook to provide a relatively broad base for uniting it to the back of the brooch, and with a hook portion formed with a radial slot inclined upwardly from the base of the post and terminating concentrically with the center of the hook, of a bifurcated catch-member constructed with two circular ears joined by a relatively narrow tab, said ears extending in parallel relation at right angles to the tab to adapt them to overlie and bind against the flat sides of the hook portion of the keeper-member, with circular bosses on one of the members entering recesses in the sides of the other member to provide a pivot bearing to adapt the catch-member to be rotated on the keeper-member, said catch-member formed with opposite radial slots terminating concentrically with the center of the circular ears and adapted to register with the slots in the keeper to allow for the entrance of the pin-stem therethrough, and detent-means acting between the keeper-member and the catch-member to hold the latter in open or closed position.

[Claim 2 not printed in the Gazette.]

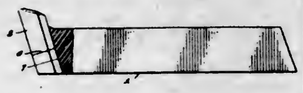
1,271,298. RUNNING-GEAR FOR MOTOR-VEHICLES. FRANK E. FARNSWORTH, Chief, Mich. Filed Nov. 6, 1913. Serial No. 799,568. (Cl. 180—75.)



1. In a vehicle, the combination of a driving shaft divided at its middle portion and subdivided at portions between said middle portion and its respective ends, transmission gearing interposed in the shaft at its middle portion so as to allow relative rotary movement of the main divisions of the shaft at said middle portion, and a pair of links between the adjacent ends of the subdivisions, said links being connected to each other and to the said ends of the shaft so as to allow relative longitudinal movement thereof and prevent relative rotary movement of said subdivisions.

2. In a vehicle, the combination of a driving shaft divided at its middle portion and subdivided at portions between said middle portion and its respective ends, transmission gearing interposed in the shaft at its middle portion so as to allow relative rotary movement of the main divisions of the shaft at said middle portion, radial arms rigidly secured to the adjacent ends of the subdivisions, and links pivotally connected to the terminals of said arms and to each other so as to allow relative longitudinal movement thereof, and prevent relative rotary movement of said subdivisions.

1,271,299. CUTTING-TOOL. HAROLD FISH, Stratford, Conn., assignor to The Ready Tool Company, Bridgeport, Conn., a Corporation of Connecticut. Filed June 12, 1917. Serial No. 174,187. (Cl. 29—95.)

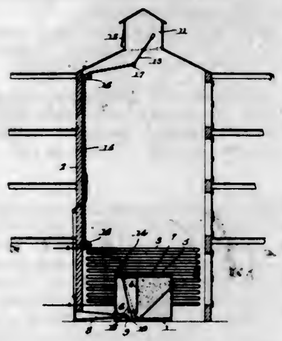


1. In a cutting tool, the combination of a shank having a recess therein to receive a cutting bit, the bit being welded to said shank in said recess, said bit being centrally divided into a half composed of a hard and relatively brittle cutting alloy and a half of a more elastic metal, the line of welding in said bit being within said recess.

6. In combination, a cutting member and holder, the cutting member being divided into a cutting portion of stellite, and a non-cutting portion of steel, the said portions being welded to each other and to the shank of the holder, the grain of the stellite being substantially parallel to the axis of the shank of said holder.

[Claims 2 to 5 not printed in the Gazette.]

1,271,300. SMOKE-HOUSE. EDWARD FLANAGAN, Philadelphia, Pa. Filed Apr. 20, 1917. Serial No. 163,452. (Cl. 34—19.)

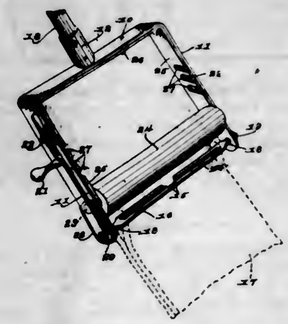


1. In a smoke house, the combination with a smoke generator having a combustion chamber formed therein, of an air supplying means extending from said chamber to the exterior of said smoke house, and a pivoted damper covering the smoke outlet of said chamber.

2. In a smoke house, the combination with a smoke generator having a combustion chamber formed therein, of an air supplying means extending from said chamber to the exterior of said smoke house, and a pivoted gravity closing damper covering the smoke outlet of said chamber.

[Claims 3 to 5 not printed in the Gazette.]

1,271,301. MOP AND WRINGER. HARRY L. FEASEL, New York, N. Y., assignor to O-So-Ezy Mop Company, a Corporation of Michigan. Filed July 13, 1915. Serial No. 39,655. (Cl. 68—43.)



1. An improved mop and wringer comprising a carrier, a mop-engaging member rotatively supported therein, a wringer-frame movably attached to said carrier, a squeezing member carried by said carrier and coöperating with said mop-engaging member and means on said wringer-frame for engaging said mop-engaging member to maintain said squeezing member in fixed relation to said mop-engaging member.

2. An improved mop and wringer comprising a carrier provided with spaced apart arms, a mop-engaging member rotatively supported by said arms, a wringer-frame attached to said arms and mounted to have pivotal and sliding movement, a squeezing member carried by said wringer-frame coöperating with said mop-engaging member and means to secure said squeezing member at various fixed distances from said mop-engaging member.

3. An improved mop and wringer comprising a carrier, a mop engaging member rotatably supported thereby, a wringer frame movably attached to said carrier and provided with a squeezing member coöperating with said mop engaging member and locking means for said mop engaging member movable with said wringer frame.

[Claims 4 to 12 not printed in the Gazette.]

1,271,302. MOP AND WRINGER. HARRY L. FEASEL, New York, N. Y., assignor to O-So-Ezy Mop Company, a Corporation of Michigan. Filed Nov. 22, 1915. Serial No. 62,712. (Cl. 15—43.)



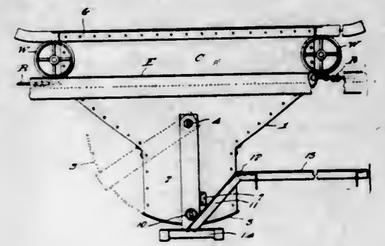
1. In a combined mop and wringer, the combination of a frame, a handle attached thereto, a mop-holding member rotatably mounted in said frame, a handle for rotating said member, a member pivoted on said frame, a roller mounted in said pivoted member and adapted to be moved into a fixed position against a mop on said mop-holding member to wring the mop and means limiting the movement of said roller to the wringing position.

2. In a combined mop and wringer, the combination of a frame, a mop holding member rotatably mounted in said frame, means for rotating said member, a member pivoted to said frame, a roller mounted in said pivoted member and adapted to be moved into a fixed position against a mop on said mop holding member and means for limiting the movement of said roller in one direction to a plane passing through the pivotal points of the pivoted member and the axis of said mop holding member.

3. In a combined mop and wringer, the combination of a frame, a mop-holding member rotatably mounted in said frame, means on one end of said member for rotating it, a member pivoted on said frame, a wringer roller carried by said pivoted member and means whereby said roller may be brought into and held at a fixed position against a mop on said mop-holding member to wring the same and automatically removed therefrom on unwinding said mop from said member.

[Claims 4 to 13 not printed in the Gazette.]

1,271,303. DUMPING-CAR. CLARENCE O. FLOWERS, Flint, Mich. Filed July 17, 1917. Serial No. 181,118. (Cl. 214—60.)



1. The combination with overhead spaced rails, a car traveling thereon and having a hopper bottom with a chute at its lowest point, a curved gate normally closing the mouth of said chute, hanger bars pivoted to the sides of said hopper at their upper ends, and feet at their lower ends carrying the gate; of laterally projecting stop elements on said hangers near their lower ends, spaced rails beneath said elevated rails at the points where dumping is to occur and constituting runners lying in a plane above the normal position of said elements, tripper bars hinged at their forward ends to said runners, and supports beneath said plane for holding the tripper bars inclined and in position to be struck by said elements, for the purpose set forth.

[Claim 2 not printed in the Gazette.]

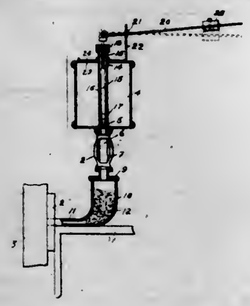
1,271,304. AUTOMATIC VAPORIZING-PLUG. WILLIAM B. FLOYD, Fort Worth, Tex., assignor of three-fourths to J. A. McDonald, Fort Worth, Tex. Filed Dec. 16, 1916. Serial No. 137,336. (Cl. 137—32.)



As a new article of manufacture, an automatic vaporizing plug comprising an elbow having the usual bend intermediate its straight end portions, one end portion of said elbow being internally threaded to a point adjacent the bend in the elbow, the other end of said elbow being exter-

nally threaded, whereby said elbow may be screwed into a set position upon the manifold of an engine, an externally threaded thimble having a longitudinally extending bore projecting partially therethrough, whereby one end of said thimble is closed, said thimble being screwed into said elbow to a point adjacent the bend in the elbow, whereby said thimble will be wedged in said elbow so as to be held against accidental displacement, said thimble being reduced adjacent its outer end, said thimble having radiating passages formed therethrough, said passages communicating at their inner ends with said bore and at their outer ends with the reduced outer end portion of said thimble an internally threaded cap having an opening formed in its outer end, a ball positioned within said cap for intermittently closing the opening formed in said cap, said cap being adjustably screwed onto the thimble, whereby when a vacuum is formed in said plug the movement of said ball may be regulated, a jam nut carried by said thimble and bearing upon said cap for holding said cap in an adjusted set position, and the reduced end portion of said thimble permitting air to pass freely into said passages from said cap.

1,271,305. AUTOMATIC LUBRICATOR. FOLKERT FOLKERS, Crichton, Ala., assignor to himself, and Leslie E. Campbell, Mobile, Ala. Filed Oct. 2, 1917. Serial No. 194,303. (Cl. 184—22.)



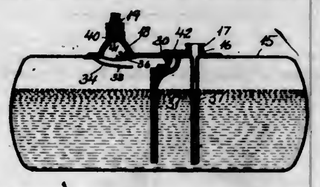
1. A lubricating device for an element movable on vertical ways, adapted to be carried on the movable element, comprising an oil reservoir, a valve controlling the flow of oil from the reservoir, a valve rod for the valve, a spring lever pivoted at one end to the valve rod, a fulcrum for the spring lever carried by the reservoir, a weight adjustable on the spring lever, and a spring for holding the valve normally closed.

3. A lubricating device for an element movable on vertical ways adapted to be carried on the movable element, comprising an oil reservoir, having a filling opening in its top, a valve controlling the flow of oil from the reservoir, a valve rod for the valve, a plate mounted to rotate on the reservoir adapted to serve as a cover for the filling opening and provided with a vertical arm, a spring arm fulcrumed in said vertical arm connected with the valve rod at one end and carrying a weight near its free end, and a spring arranged to hold the valve normally closed.

[Claim 2 not printed in the Gazette.]

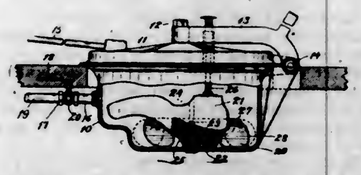
1,271,306. AIR-MOISTENING DEVICE. DAVID J. FOX, Boston, Mass. Filed Apr. 7, 1917. Serial No. 160,422. (Cl. 261—78.)

An air moistener for an internal combustion engine, comprising a water reservoir, a suction pipe having its receiving end connected with the upper portion of the reservoir and its delivering end connectible with the engine, an atomizing air conduit extending through the upper wall of the reservoir and open to the atmosphere, said conduit having a delivering portion located above the water space in the reservoir, a water conduit associated with the atomizing conduit and having its receiving end in said water space, and its delivering end above said space and in the path of air delivered by the atomizing conduit, and an auxiliary air conduit extending through the upper wall of the reservoir and open to the atmosphere, the aggre-



gate conducting capacity of the atomizing and auxiliary conduits being greater than the conducting capacity of the suction pipe, so that sufficient air is admitted to insure the presence of air at atmospheric pressure in the reservoir, and a reduction of the cross-sectional area of the atomizing conduit, to cause an efficient atomizing action, is permitted.

1,271,307. RUBBER-SHOE PRESS. JOHN R. GAMMETER, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Apr. 28, 1917. Serial No. 165,063. (Cl. 18—2.)



1. A rubber-shoe press for low-top shoes comprising a pot, means for supporting a lasted shoe therein, means for admitting compressed air thereto into direct contact with the shoe, and an instep engaging annular gasket loosely mounted in said pot, for sealing the mouth of the shoe.

5. A rubber-shoe press comprising a pot, means for supporting a lasted shoe in an inverted position therein, means for admitting compressed air thereto into direct contact with the lasted shoe, an annular gasket loosely supported on the floor of the pot, for sealing the mouth of the shoe, said gasket comprising an envelop and a liquid core, and means for venting the space inclosed by the gasket under the last.

[Claims 2 to 4 and 6 to 8 not printed in the Gazette.]

1,271,308. REEL. J BIRCHARD GREEN, Chicago, Ill., assignor to Chicago Steel and Wire Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 26, 1917. Serial No. 157,326. (Cl. 242—77.)



1. A reel for wire, comprising a tube, a fixed flange rigidly secured to one end of said tube and provided with a frusto-conical cup section inclosing said tube, and a removable flange screwed upon the other end of said tube

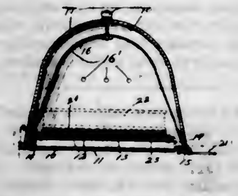
and engaged by the rim of said cup section to frictionally prevent rotation of said removable flange, said cup section forming a support for the wire, and the taper of the cup section serving to facilitate the loading of the reel, substantially as described.

2. The said reel, as set forth in claim 1, in which said cup section is tapered internally to form a solid wall which is thicker than the fixed flange and in which said tube is permanently inserted.

3. The said reel, as set forth in claim 1, in which said tube is provided with screw-threads extending into the cup section, and said removable flange has its inner side formed with a central boss which engages said screw-threads within the cup section, but said screw-threads extending beyond the end of said boss when said removable flange is against the cup section.

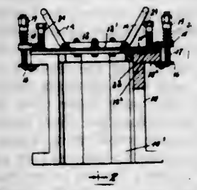
4. The said reel, as set forth in claim 1, in which said cup section is cast integral with said fixed flange, and said tube is driven into said cup section.

1,271,309. FOOD-BAKING DEVICE. CONRAD C. GROSS, Pasadena, Cal. Filed Jan. 15, 1917. Serial No. 142,450. (Cl. 53—6.)



A food baking device including a base consisting of a reticulated disk and a surrounding ring connected thereto and having a groove in the upper face thereof, a metal disk spaced above the reticulated disk, feet connected to said metal disk and to the said ring, and a double-walled dome hinged to the ring and provided with a handle, the lower edge of the inner wall of the dome being turned upwardly and seated in said groove, the lower edge of the outer wall of the dome being seated within the said upturned edge of the inner wall.

1,271,310. BABBITTING TOOL OR MOLD. CARL GUGGENBUEHLER, Newark, N. J. Filed Dec. 8, 1917. Serial No. 206,320. (Cl. 22—123.)



1. A tool for facilitating the casting of hub liners on bearing boxes, comprising a plate having on its lower face a recess closed at its top and a flange projecting centrally from said lower face and adapted to fit in the hollow of the box, the parts of the lower face of said plate outside of said recess being even and adapted to rest evenly on the surface of the hub and of the box, and the space formed between the walls of the recess, the top surface of the box and the circumference of the flange being adapted to constitute the mold.

2. A tool for facilitating the casting of hub liners on bearing boxes, comprising a plate composed of two superposed sections removably joined together, the inner section being formed with a flange projecting centrally therefrom and having a recess surrounding said flange, said flange being adapted to snugly fit in the hollow of the bearing box and in coöperation with said recess to form a mold.

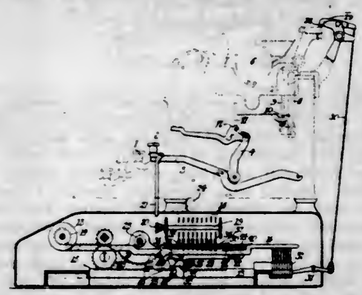
3. A tool for facilitating the casting of hub liners on bearing boxes, comprising a plate composed of two superposed sections removably joined together, the inner section having a central flange, and a recess around said flange which when the tool is applied to the bearing box is adapted, in coöperation with said flange, to form a mold, and means on said plate for clamping said tool to the bearing box.

4. A tool for facilitating the casting of hub liners on bearing boxes, comprising a plate having a flange of substantially U-shaped configuration projecting centrally therefrom, and a recess around said flange and of a shape and size to correspond with those of the liner to be cast, said flange being adapted to snugly fit into the hollow of the box and in coöperation with said recess to form a mold for said liner.

6. The combination with a bearing box for locomotives or the like, of a tool for facilitating the casting of a hub liner thereon and comprising a plate having a recess, a member on said plate adapted to engage and snugly fit in the hollow of the box and in coöperation with said recess to form a mold to form the said liner and means for removably fastening said plate to said box.

[Claims 5 and 7 not printed in the Gazette.]

1,271,311. COMBINED TYPE-WRITING AND COMPUTING MACHINE. HANS HANSON, Hartford, Conn., assignor, by mesne assignments, to Underwood Computing Machine Company, New York, N. Y., a Corporation of New York. Filed Feb. 12, 1912. Serial No. 677,053. (Cl. 235—60.)



1. In a computing machine, the combination with a series of numeral keys, computing wheels and a traveling carriage, of reciprocating bars for rotating said wheels, a series of pins mounted on each of said bars, means enabling said pins to be set by said keys, means for driving said bars to turn said wheels to an extent determined by the pins set, and means under control of said carriage for enabling a key to modify the setting of the pins on any rack bar.

3. In a computing machine, the combination with a series of numeral keys, computing wheels and a traveling carriage, of reciprocating bars for rotating said wheels, a series of pins mounted on each of said bars, means controlled by said carriage for enabling any key to set any pin, and means also controlled by said carriage for enabling any key to release any pin previously set.

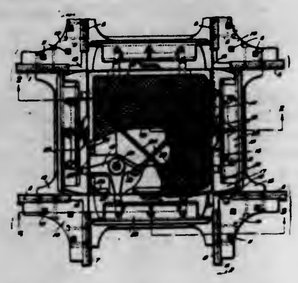
16. In a computing machine, the combination with computing wheels of reciprocating bars for turning said computing wheels, a series of digit pins spring-held in normal inactive positions on each of said bars, a latch for holding any pin in set position against the action of its spring, means coöperating with the set pin to move said bar a distance determined by the set pin to turn the computing wheel associated with said bar, and a controller pin on each bar having means thereon to coöperate with the latch on its corresponding bar to release any set pin.

21. The combination with a computing head, of actuating mechanism for running up numbers on said computing head, a series of pins settable in one direction to determine the extent of movement of said actuating mechanism, and pin means settable in the opposite direction to determine the unsetting of said pins.

29. In a computing machine, the combination with computing wheels, of rack bars for turning said wheels; a series of digit pins on each rack bar, means for setting a pin on any rack bar, means for detaining any pin in set position, means for engaging said pins and moving the rack bar to an extent determined by said pin, a device on each rack bar adapted to be alined when said bars are alined, and means coöperating with said alined devices at the completion of a computation for releasing all of said pins.

[Claims 2, 4 to 15, 17 to 20, and 22 to 28 not printed in the Gazette.]

1,271,312. NOISELESS RAILWAY-CROSSING. WILLIAM L. HARDER, Birmingham, Ala. Filed Jan. 18, 1918. Serial No. 212,441. (Cl. 104—116.)

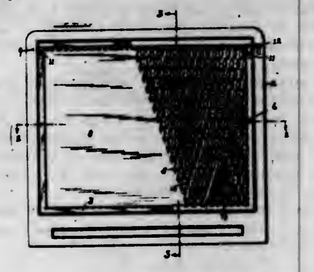


1. In an automatic continuous railway crossing comprising in combination with the intersecting track rails, a base structure to which said rails are made fast, sectional crossing rails connecting the opposite track rails, each sectional track rail comprising two sections having their near ends provided with extensions forming a lap-joint parallel with the crossing rail and having their remote ends provided with wedge heads adapted to be engaged and moved by the flanges of approaching car wheels, guides on the base to confine the sections of each crossing rail to alining travel, bell cranks pivoted on said base near each corner of the crossing, said bell cranks having their ends rounded and inserted in sockets in the two adjacent crossing rail sections, and operating rods disposed diagonally of the crossing and directly connecting diagonally opposite pairs of bell cranks to cause the latter to move together to produce reverse movements of corresponding crossing rail sections, as and for the purposes described.

2. In a continuous railway crossing, sectional crossing rails having the sections of each crossing rail with its adjacent sections lapped for parallel sliding movement, means to guide said sections in their alining movements, heads on the remote ends of the sections of each crossing rail which are disposed to be engaged and moved by the approaching wheels, sockets in the sides of crossing rail sections at each corner of the crossing, a bell crank having rounded ends inserted in the sockets of said adjacent pair of crossing rail sections, the diagonally opposite bell cranks having similarly disposed crank extensions, and diagonal connecting rods, each having an adjustable connection to said cranks on diagonally opposite bell cranks.

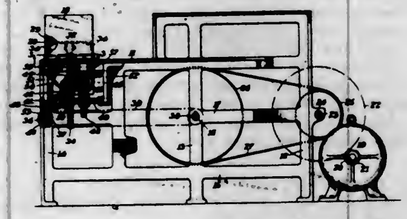
1,271,313. HOT-AIR REGISTER. ELLIS L. HAYDEN, Warren, Ohio. Filed Sept. 1, 1917. Serial No. 189,240. (Cl. 98—54.)

1. In hot-air registers, a sheet metal body having a rectangular opening and an inwardly-projecting flange about its outside, a screen and a flanged frame providing a seat therefor mounted on the outside of said body, angle pieces on the inside of the body about the opening therein and screws securing said frame and the said angle pieces to the body.



2. A hot air register, comprising a body having a pivot damper plate, and a separate screen removably affixed to the front of said body opposite the front of said plate, said damper plate having a pivot rod and said body having clamping plates affixed to the rear side thereof forming pivot bearings for said rod; and clamp screws for said plates extending through said body having screw heads covered and inclosed by said movable screens.

1,271,314. WRAPPER-HOLDER. GILBERT F. HELSON, Bayside, N. Y., assignor to E. R. Durkee & Co., Elmhurst, New York, N. Y., a Firm. Original application filed Feb. 28, 1917, Serial No. 151,397. Divided and this application filed Feb. 11, 1918. Serial No. 216,501. (Cl. 187—19.)

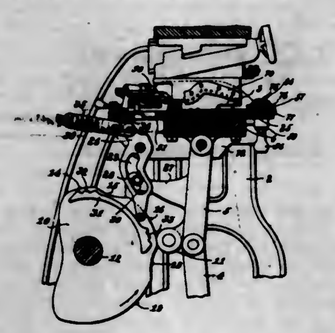


2. The combination of a wrapper holder having a vertically movable bottom, a vertical rack secured thereto, a shaft having a lever fulcrumed thereon and provided with a bevel gear on one end and a knob on its other end, a roller pivoted to one end of the lever, a pawl pivoted to the other end of said lever, a shaft having a cam fixed upon it to contact with said roller upon the lever, means for rotating said shaft, another shaft having fixed to it a worm gear and ratchet wheel with which said pawl engages, a pivoted bearing for one end of said shaft and a vertically slotted bearing for its other end whereby said shaft may be raised, another shaft provided with a gear meshing with said worm gear, another gear meshing with said rack and a bevel gear meshing with said bevel gear on the end of the lever shaft, and means for holding the worm gear shaft in a raised position.

[Claim 1 not printed in the Gazette.]

1,271,315. MACHINE FOR MOLDING LEATHER. JOHN J. HEYS, Lynn, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed May 7, 1915. Serial No. 26,551. (Cl. 12—21.)

1. A molding machine, having in combination, coöperating forms constructed and arranged to engage and mold a sheet of leather or analogous material between them, and mechanism for relatively actuating the forms to impart a series of progressively increased pressures to the work and to relieve the pressure upon the work prior to the application of each increased pressure.



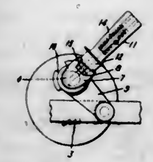
4. A molding machine, having in combination, coöperating forms constructed and arranged to engage and mold a sheet of leather or analogous material between them, means for relatively actuating the forms to impart a series of separated and progressively increased pressures to the work, and means for stopping the machine during the application of an intermediate pressure upon the work.

15. A machine for molding leather and analogous materials, having in combination, coöperating sole pressing forms, a toggle lever connected to one of the forms, an actuating lever connected to one of the forms, a cam disk, connections between the periphery of the cam disk and the toggle lever, a cam rib secured to the disk, and connections between the cam rib and actuating lever.

18. A machine for molding leather and analogous materials, comprising a form, a gage supported adjacent to the form, an indicating dial operatively connected with the gage, an indicator shaft upon which the dial is mounted, means for adjusting the indicator shaft, and adjustable connections between the dial and shaft.

[Claims 2, 3, 5 to 14, 16, 17, and 19 to 23 not printed in the Gazette.]

1,271,316. ELECTRIC SWITCH. CHARLES H. HILL, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed May 23, 1914. Serial No. 840,502. (Cl. 175—312.)

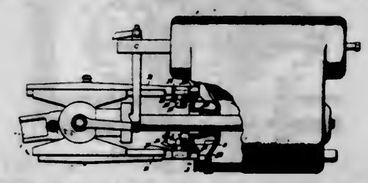


1. In combination with an operating rod, an electric switch comprising a link movable by said rod and having a slot therein, an operating arm for said switch having a slot therein adapted to register with the slot of said link, and a movably positioned handle adapted in one position to engage said registering slots whereby said switch is operated in response to said operating rod and in another position to be held out of engagement with said slots to move said switch independent of said operating rod.

5. An electric switch comprising a contact member, an operating arm provided with a slot, an operating rod, a link connected at one end to said rod and provided at the other end with a slot adapted to register with the slot of said operating arm, a handle carried by said operating arm and movably positioned thereon, and a lug carried by said handle which in one position of the handle bridges the slot of said operating arm and in another position of said handle engages the registering slots of said link and operating arm.

[Claims 2 to 4 and 6 not printed in the Gazette.]

1,271,317. SAFETY-SUPPORT FOR LOCOMOTIVE CROSS-HEAD GUIDES. HARRY A. HOKE, Altoona, Pa. Filed Mar. 13, 1918. Serial No. 222,156. (Cl. 74—84.)



1. In a steam locomotive having a cylinder head and cross-head guides, brackets on the cylinder head extending in an axial direction therefrom, each having a seat on its outer side parallel to the guides for the front ends thereof, and bolts for securing said ends to said seats, each bracket formed with a recess loosely receiving the end of the associated guide whereby the guides will be supported by the walls forming said recesses in case the other supporting means should fail.

2. In a steam locomotive having a cylinder head and cross-head guides, brackets on the cylinder head extending in an axial direction therefrom, each having a seat on its outer side parallel to the guides for the front ends thereof, bolts for securing said ends to said seats, and an abutment located radially outside the end of each guide to hold said front ends from any substantial movement in case the bolts should fail.

1,271,318. GEARING UNIT FOR TIME-TRAINS. ERNEST H. HORN, Waterbury, Conn., assignor to Waterbury Clock Co., Waterbury, Conn., a Corporation. Filed Dec. 3, 1917. Serial No. 205,142. (Cl. 64—98.)

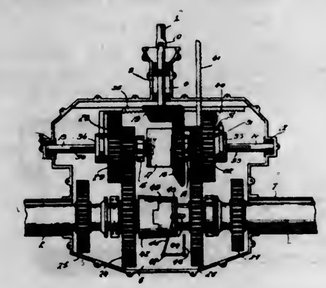


1. As a new article of manufacture, a gearing unit for time-trains, the said unit consisting of a staff mounting a pinion, a wheel frictionally driven upon the staff, and a clamping-collet driven upon the staff in position to have surface engagement with one face of the wheel which it clamps against another point of surface-engagement, whereby the wheel is held against rotation upon the staff by friction upon its opposite faces produced by the driving of the collet which effects, rather than the pinion, the final clamping of the gearing-unit structure.

2. In a gearing unit for time-trains, the combination with a staff mounting a pinion, of a wheel driven directly upon the said staff against the adjacent end of the said pinion, and a special clamping-collet driven upon the staff against the opposite surface of the wheel which is thus frictionally pinched between the pinion and the collet by the driving of the latter which effects, rather than the pinion, the final clamping of the gearing-unit structure.

3. In a gearing unit for time-trains, the combination with a staff having an integral or cut-pinion, of a wheel frictionally driven upon the staff so as to impinge upon one end of the said pinion, and a special clamping-collet frictionally driven upon the staff for pinching the wheel between it and one end of the said cut-pinion, whereby the wheel is held against rotation with respect to the staff by friction upon its opposite faces produced by the driving of the collet which effects, rather than the pinion, the final clamping of the gearing-unit structure.

1,271,319. TRANSMISSION-GEARING. ROLANDUS G. HOTSINPILLER, Bridgeport, Ill. Filed Oct. 26, 1916. Serial No. 127,875. (Cl. 74—34.)

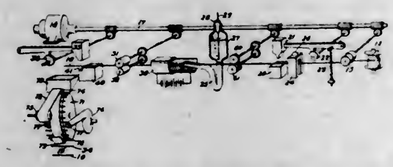


2. A transmission mechanism for motor vehicles comprising in combination with a two part drive shaft, a two part differential shaft, differential gearing connected in the differential shaft and connected with the driving power unit of the vehicle, gears rigidly connected on the two parts of the drive shaft, differential gears slidably mounted on the parts of the differential shaft, and means to simultaneously shift the gears on the differential shaft to mesh with and be released from the gears on the drive axle.

3. A transmission mechanism for motor vehicles comprising in combination with a two-part driven shaft, a divided differential shaft connected to receive turning movement from the power unit of the vehicle, gear wheels mounted rigidly on each of the parts of the driven shaft, sliding gears mounted on the divided differential shaft to be drawn into and out of mesh with the gear wheels of the driven shaft, means to simultaneously shift the gearing on the differential shaft into and out of mesh with the gearing carried by each of the parts of the driven shaft, and means arranged within the control of the operator to be shifted to lock the two parts of the driven axle to turn together.

[Claims 1 and 4 to 8 not printed in the Gazette.]

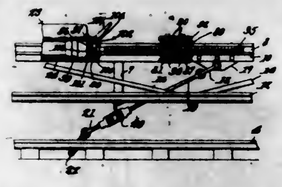
1,271,320. ELECTRIC CONDUCTOR. WILLIAM G. HOUSKEEPER, Philadelphia, Pa., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 11, 1916. Serial No. 119,470. (Cl. 176—36.)



1. A process for forming leading-in conductors which consists in flattening selected spaced portions of a conductive wire, passing the wire through a boiling flux solution, heating the wire to a sufficient temperature to remove the water from the flux solution adhering thereto and to fuse the remaining flux onto the wire, and separating said wire into lengths each of which includes one of said flattened portions.

2. A process for forming leading-in conductors which consists in flattening spaced portions of a conductive wire, trimming the edges of said flattened portions, coating said wire with a fluxing agent, fusing said fluxing agent onto the wire, separating said wire into lengths each of which includes one of said flattened portions, and removing the fused fluxing agent from the ends of each length.

1,271,321. HEADING-MACHINE. JOHN PAUL KARNS, Boulder, Colo. Filed Oct. 4, 1915. Serial No. 54,042. (Cl. 125—14.)

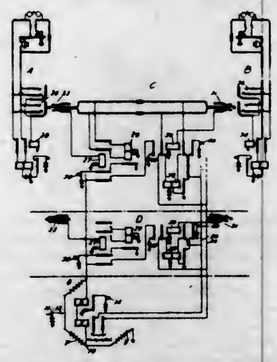


1. In a mining machine, a truck; a track carried by the truck; a carriage mounted to move along the track; a cutter assembled with the carriage; an abutment mounted on the truck for adjustment longitudinally of the truck; means connecting the abutment with the truck for holding the abutment in adjusted positions longitudinally of the truck; a nut mounted in the abutment; a feed screw threaded into the nut; means under the control of an operator for actuating the feed screw; and means for connecting the feed screw with the carriage for rotation but against movement longitudinally of the carriage.

4. In a mining machine, a truck including transverse brackets; a track carried by the lower portions of the brackets; a carriage; means on the carriage for engaging the track slidably; other tracks carried by the side portions of the brackets; means on the carriage for engaging the last specified tracks slidably; guides carried by the side portions of the brackets; an abutment slidably received by the brackets; means connecting the abutment and the guides for holding the abutment in adjusted positions on the guides longitudinally of the guides; a nut carried by the abutment; a feed screw threaded in the nut; means under the control of an operator for actuating the feed screw; a cutter mounted on the carriage; and means for connecting one end of the feed screw with the carriage for rotation but against movement longitudinally of the carriage.

[Claims 2 and 3 not printed in the Gazette.]

1,271,322. TELEPHONE-EXCHANGE SYSTEM. CHARLES W. KECKLER, Newark, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 24, 1917. Serial No. 164,172. (Cl. 179—51.)



1. In a telephone exchange system comprising telephone lines, a plurality of cord circuits, an operator's telephone set, and a normally energized relay common to the cord circuits deënergized upon the connection of one end of one of the cord circuits with one telephone line to connect therewith the operator's telephone set and energized upon the connection of the other end of the cord

circuit with another telephone line to disconnect the operator's telephone set.

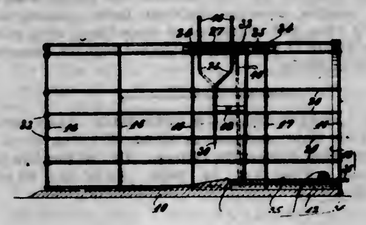
4. A telephone exchange system comprising telephone lines, a plurality of link circuits, an operator's telephone set, a Wheatstone bridge circuit having three arms common to the circuits, a resistance in each link circuit adapted to form the fourth arm of the bridge, a relay operating upon connection of one of the link circuits with one of the telephone lines to connect the associated resistance with the bridge, and a relay in the bridge responsive to the connection of the resistance with the bridge to connect the operator's telephone set with the engaged link circuit.

7. A telephone exchange system comprising telephone lines, a plurality of link circuits including talking conductors for interconnecting the lines, an operator's telephone set, circuit leads common to the link circuits and normally connected to the talking conductors thereof, means common to the link circuits for connecting the operator's telephone set to the common circuit leads, and means associated with an engaged link circuit for disconnecting the common circuit leads from the talking conductors thereof.

11. A telephone exchange system comprising telephone lines, a plurality of link circuits, an operator's telephone set, a Wheatstone bridge circuit having three arms common to the link circuits, a fourth arm for the bridge connected therewith upon connection of one of the link circuits with one of the telephone lines, and a switching device in the bridge responsive to the connection of the fourth arm to the bridge to connect the operator's telephone set with the engaged link circuit.

[Claims 2, 3, 5, 6, 8 to 10, and 12 not printed in the Gazette.]

1,271,323. TRAP. KAROL KEMPNY, Cleveland, Ohio. Filed July 6, 1917, Serial No. 179,001. Renewed May 10, 1918. Serial No. 233,786. (Cl. 43—21.)

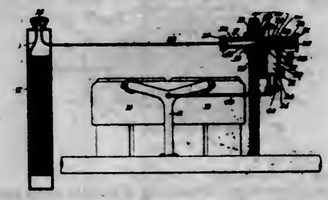


3. In a trap of the class described, the combination with a rigid base, an arcuate barred cage secured thereto, a platform pivoted in said base, said platform being adapted to carry a bait, spring arms engaged with said platform when in a raised position, a pair of oppositely disposed impaling elements mounted in said cage, means engageable with said arms whereby said impaling elements are held normally apart, means whereby said impaling elements are brought forcibly together when said arms are released, a resetting means formed with said impaling elements, and means extending from said platform whereby said trap may be reset.

[Claims 1 and 2 not printed in the Gazette.]

1,271,324. GASOLENE-ENGINE ATTACHMENT. PETER KIHSS, Brooklyn, N. Y. Filed Oct. 31, 1917. Serial No. 199,482. (Cl. 123—25.)

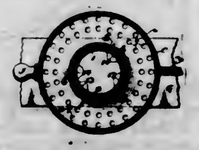
1. A gas engine attachment comprising a casing, and a revoluble valve therein having a longitudinal passage in one end thereof terminating in radially disposed passages, each adapted to register with a port in the casing, the said revoluble valve also having a transverse air passage therethrough independent of the aforesaid passages and and adapted at its ends to register with ports, the inner of which and also the port with which the radially disposed passages register are in communication with the manifold of the engine, while the longitudinal passage in the valve is adapted to be connected to a source of water vapor so that the valve may be set for admitting water vapor alone to the manifold, admitting air alone to the manifold, and admitting a mixture of water vapor and air to the manifold.



3. A gas engine attachment comprising a casing having a chamber therein, a revoluble valve mounted to turn in the casing and having a transverse air passage therethrough adapted at its ends to register with ports in the casing, one of which communicates with the atmosphere and the other with the said chamber in the casing, the said valve being also provided at its inner end with a longitudinal passage terminating in radially disposed passages at right angles to each other, and one of which is parallel with the transverse air passage, the radial passages in the valve being adapted to register with a port in the casing also communicating with the chamber therein, while the said longitudinal passage in the valve is adapted to be connected to a water vapor supply, and the chamber in the casing to the inlet manifold of the engine, and means slidable on the casing determining the extent to which the air inlet port therein is opened to control the admission of air to the chamber in the casing.

[Claim 2 not printed in the Gazette.]

1,271,325. KEROSENE-BURNER. JOHN H. KINBALY, Ferguson, Mo. Filed Sept. 30, 1916. Serial No. 123,079. (Cl. 67—70.)



1. A kerosene burner comprising a well, and a wick-portion in said well composed of a plurality of independently removable solid strips each formed of a porous refractory material.

2. A kerosene burner comprising a well, and a wick-portion in said well composed of a plurality of independently removable solid strips each formed of a porous refractory material and one of said strips having its upper end reduced to form a lighting place.

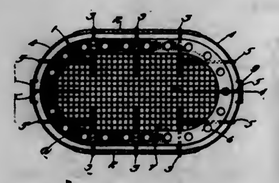
3. A kerosene burner comprising a well, and a wick-portion in said well composed of a plurality of independently removable solid strips each formed of a porous refractory material and having its upper end reduced to form a lighting place.

[Claims 4 to 8 not printed in the Gazette.]

1,271,326. EXTENSIBLE RACK. JOHN L. KIVLAN, Boston, Mass. Filed Sept. 13, 1917. Serial No. 191,185. (Cl. 53—1.)

1. An extensible rack comprising a middle body portion, two bowed substantially U-shaped wires, the middle portions of the bows forming end rim portions for the rack, the branches of each of said wires forming a partial side rim outside of said body portion, and guides adjacent the sides and slidably secured to said body portion through which the branches of the said wires are slidable to permit movement of said wires toward and away from each

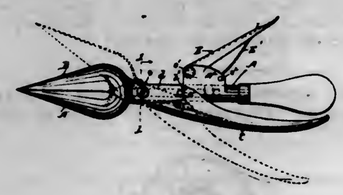
other to vary the length of the rack, the said branches being capable of lateral spreading movement away from said body portion, the spreading of the branches of said wires permitting lateral movement of the guides away from said body portion.



4. An extensible rack comprising a middle body portion, two bowed substantially U-shaped wires, the middle portions of the bows forming end rim portions for the rack, the branches of each of said wires forming a partial side rim outside of said body portion, the said wires being slidable toward and away from each other to vary the length of the rack, the said branches being capable of a lateral spreading movement away from said body portion, and guides for the said wires, said guides being movable with relation to the body of the rack to permit the longitudinal and the spreading movement of the wires.

[Claims 2 and 3 not printed in the Gazette.]

1,271,327. ICE-CREAM DIPPER. TEOFIL KLUGIEWICZ, Erie, Pa. Filed July 18, 1917. Serial No. 181,302. (Cl. 107—48.)



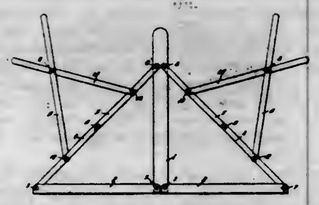
1. In a device of the class described, a hollow handle, an elongated pointed dipper bowl secured to one end thereof, a longitudinal slidable stem in said hollow handle, means to impart a partial rotation to said stem when the same is moved longitudinally, a scraper on the end of said stem within said bowl, a lever mechanism pivoted on said handle and adapted to engage and operate said scraper stem longitudinally within said handle, substantially as and for the purpose set forth.

3. In a device of the class described, a hollow handle, a pointed dipper bowl secured on one end thereof, a shaft in said hollow handle, a scraper on said shaft within said dipper bowl, another pointed bowl member inverted over the first mentioned dipper bowl and pivoted on said handle, a spring pressed handle pivoted on said handle and engaging said inverted bowl member to operate the same, and spring pressed lever mechanism to move said shaft longitudinally within said hollow handle, substantially as set forth.

5. In a device of the class described, a hollow handle having a slot through the wall thereof, ears on said handle at each side of said slot, a semi-conical dipper bowl secured on said handle, a shaft within said hollow handle, a scraper secured on said shaft within said bowl, a lever pivoted between said ears, an arm on said lever adapted to engage said shaft, a transverse pin extending through said ears below said lever, a spring secured to said lever and pressing upon said transverse pin adapted to raise said lever upward, and a hook on said spring adapted to engage said transverse pin to limit the upward movement of said lever, substantially as set forth.

[Claims 2, 4, and 6 not printed in the Gazette.]

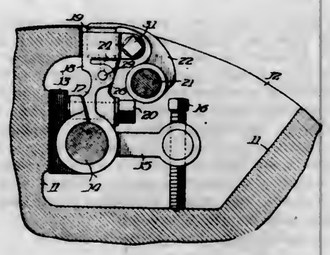
1,271,328. MUSIC-STAND. ALBERT KRAUTH, Hamilton, Ohio. Filed May 10, 1916. Serial No. 96,499. (Cl. 45—121.)



1. In a device of the class described, a center strip, a ledge-strip having one end pivotally connected to the base of the center strip to move from a position parallel with said center strip to a position at right angles thereto, a brace strip pivoted at one end to the upper portion of the center strip and at its other end to the outer end of the ledge strip, and comprising two members pivotally united, and a pair of rest strips pivotally intersectingly united toward one end, and their opposite ends pivoted each to respective members of the brace strip, said rest strips being of different lengths measured between their common and brace strip axes.

2. In a device of the class described, a center strip, a ledge-strip having one end pivotally connected to the base of the center strip to move from a position parallel with said center strip to a position at right angles thereto, a brace strip pivoted at one end to the upper portion of the center strip and its other end to the outer end of the ledge strip, and comprising two members pivotally united, and a pair of rest strips pivotally intersectingly united toward one end, and their opposite ends pivoted each to respective members of the brace strip, said rest strips being of different lengths measured between their common and brace strip axes, and connected to their brace strip members respectively at points which do not register when the brace strip is folded.

1,271,329. ADJUSTABLE GRIPPER-PAD. JOHN KYLE, Springfield, Ohio, assignor to Miehle Printing Press & Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 14, 1916. Serial No. 91,020. (Cl. 101—412.)

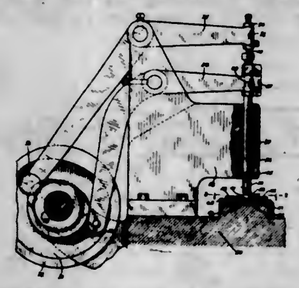


1. The combination with a printing press cylinder, and the grippers, of gripper pad supports provided with equilateral polygonal recesses and correspondingly shaped non-metallic gripper pads seated in said recesses, whereby the pads may be turned to expose any side at will for cooperation with the grippers.

5. The combination with a printing press cylinder, and the grippers, of gripper pad supports provided with rectangular recesses, cubical wooden gripper pads seated in said recesses, a coned screw transversely threaded in the support below the pad, a plunger bearing upon the pad and upon the cone, whereby the rotation of the screw will raise and lower the pad, and means to clamp the walls of the support upon the pad to maintain the latter in adjusted position.

[Claims 2 to 4 not printed in the Gazette.]

1,271,330. SPRING-ASSEMBLING MECHANISM FOR SNAP-FASTENERS. ARTHUR J. LEWIS, Stratford, Conn., assignor to The Baird Machine Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Jan. 26, 1918. Serial No. 213,997. (Cl. 79—3.)

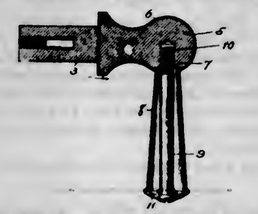


1. Mechanism of the character described, comprising spring holding means, member holding means adapted to register therewith, inner and outer plungers, means for moving the inner plunger to partly seat the spring in the member, and means for moving the outer plunger to complete the assembling operation.

10. Mechanism for assembling springs in members which comprise a cup and a central stud with slots in opposite sides thereof, consisting of spring holding means, a rotating disk having member receiving holes adapted to register with the spring holding means, means for raising members in the holes, for the purpose set forth, an inner plunger having a hole in its end to receive the stud, and a chamfer, an outer plunger, means for moving the inner plunger downward, the chamfer acting to separate the ends of the spring and press them over the stud into position to enter the slots, and means for moving the outer plunger to seat the spring in the cup.

[Claims 2 to 9 and 11 not printed in the Gazette.]

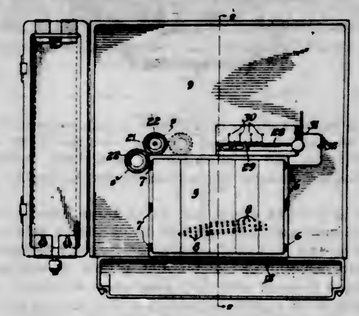
1,271,331. LEVER-HANDLE FOR SAFE-DOORS. ROLLIN C. LEWIS, Stamford, Conn., assignor to The Yale & Towne Manufacturing Company, Stamford, Conn. Filed Oct. 10, 1917. Serial No. 195,785. (Cl. 74—33.)



As a new article of manufacture, a handle for safe and other doors consisting of a metal spindle for connection with the bolt works or lock, a head integral with the spindle, a covering of non-corroding material applied to the head by rolling so that the covering conforms to the shape of the head, the head being recessed and the covering provided with an opening corresponding to said recess to receive an end of the handle, and a handle of non-corroding metal one end of which passes through the opening in the covering and rests within the recess in the head and secured therein against displacement.

1,271,332. CIGAR-MAKER'S TABLE. BERNARD LIBERMAN, Philadelphia, Pa. Filed Apr. 14, 1916. Serial No. 91,019. (Cl. 131—48.)

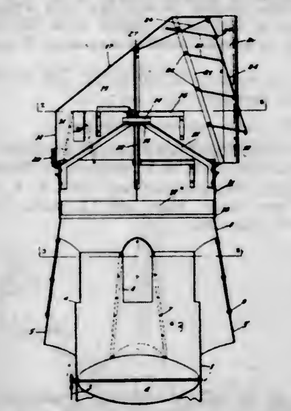
1. In combination with suitable suction means, a wooden block for wrapper cutting and rolling, provided with a perforated area, one margin of which corresponds with the free edge of the leaf to be cut, and the other margin lies within the line of severance, said block providing an unbroken surface adjacent said last margin for receiving the cutting edge of a hand operated knife as the same is passed through the leaf into the surface of said block.



2. In combination with suction creating means, a cutting block having a perforated area in communication with the suction, said perforated area conforming to the shape of the wrapper, said block adapted to be turned over the underside becoming the cutting surface and vice versa, in order to change the perforated area from a right hand to a left hand block and vice versa.

[Claims 3 to 6 not printed in the Gazette.]

1,271,333. VENTILATOR. HERMAN H. LIND, Lakewood, and DENTON K. SWARTWOUT, Mayfield Heights, Ohio. Filed Apr. 8, 1914. Serial No. 830,357. (Cl. 98—3.)



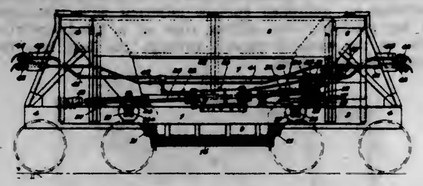
1. In a ventilator, the combination of an air shaft section having a plurality of circumferentially spaced externally located downwardly extending ducts communicating therewith, a second series of similarly located and extending ducts communicating with another vertically spaced portion of said shaft, and a rotary cowl mounted above said shaft, said cowl being provided with aspirating means also operating upon said shaft.

[Claims 2 to 5 not printed in the Gazette.]

1,271,334. DISCHARGE-DOOR-OPERATING MECHANISM. CHARLES A. LINDSTRÖM, Pittsburgh, Pa., assignor to Pressed Steel Car Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Aug. 17, 1917. Serial No. 186,680. (Cl. 105—185.)

1. In a railway dump car, discharge doors in the bottom of said car, mechanism at the ends of said doors adapted to operate them simultaneously, and a plurality of operatively connected motors for operating said mecha-

nism, one of said motors being adapted to time the action of the other of said motors.



5. In a railway dump car, hinged discharge doors in the bottom of said car having opening movements in opposite directions, and a plurality of operatively connected fluid pressure motors for automatically operating said doors.

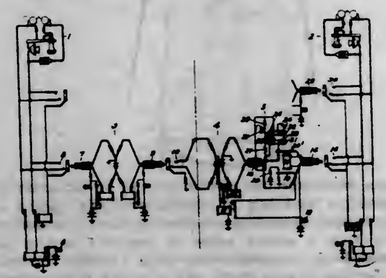
19. In a railway dump car, a discharge door, a crank connected with said door, a shaft for operating said crank, a gear wheel on said shaft, an operating motor comprising a cylinder, a piston and piston rod, a rack on said piston rod adapted to mesh with said gear wheel, a ratchet member on said rack, a pawl for engaging said ratchet member, and a motor for operating said pawl, said motors being operatively connected together.

26. In a railway dump car, a discharge door operating mechanism comprising a longitudinally movable toothed member, and a device secured to said car with which said member is adapted to engage, said device being arranged to absorb the shocks on said mechanism when the doors are being opened.

35. In a railway dump car, discharge doors, fluid pressure means for operating said doors, said means comprising a motor having a cylinder, a piston rod extending through said cylinder and beyond the ends thereof, rack members forming part of said piston rod, and a shock absorbing device secured to said car with which one of said members is adapted to engage when the doors are being opened, to arrest excessive movement of said piston rod.

[Claims 2 to 4, 6 to 18, 20 to 25, and 27 to 34 not printed in the Gazette.]

1,271,335. TELEPHONE-EXCHANGE SYSTEM. ALBEN E. LUNDELL, New York, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 11, 1916. Serial No. 71,540. (Cl. 179—51.)

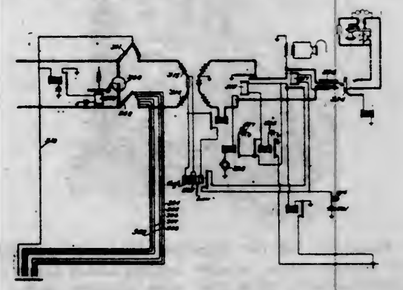


8. In a telephone exchange system, a subscriber's line, an operator's circuit including a receiver, switching means for connecting said receiver with said telephone line, a busy test circuit including a source of energy, current transforming means in said busy test circuit for inducing a current in said telephone receiver, and a second current transforming means in said busy test circuit for producing a current flow equal to that through said first transforming means but in the opposite direction, said second transforming means being connected in the circuit of said operator's receiver and the line to prevent the flow of current from said first transforming means over said line.

9. In a telephone system, a telephone line, a telephone receiver connected thereto, a busy circuit, means included in said busy test circuit to render it effective with respect to said telephone receiver but ineffective with respect to said telephone line.

[Claims 1, 2, 4, and 6 not printed in the Gazette.]

1,271,336. TELEPHONE-EXCHANGE SYSTEM. ALBEN E. LUNDELL, New York, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 14, 1916. Serial No. 131,202. (Cl. 179—27.)



1. In a telephone exchange system, an indicating arrangement comprising electro-responsive devices tuned to respond to currents of different frequency, a control circuit, manually controlled means for impressing combinations of currents of different frequencies on such control circuit to operate such electro-responsive devices in different combinations, indicating devices, a plurality of which are adapted to be simultaneously displayed in response to the operation of a particular combination of such electro-responsive devices.

2. In a telephone exchange system, a number indicating device, comprising a set of ten indicators for each digit of the maximum number it is desired to indicate, tuned electro-responsive devices less in number than said indicators, manually controlled means for energizing such electro-responsive devices in various combinations, and a circuit for each indicator controlled by a pair of such electro-responsive devices.

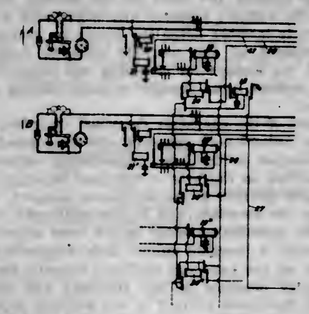
3. In a telephone exchange system, an indicating arrangement comprising a plurality of digit indicators, each including a plurality of number indicators, a set of selecting relays individual to each digit indicator, additional sets of selecting relays common to a plurality of digit indicators, means for selectively energizing such selecting relays, and means controlled by a selecting relay of a set individual to a digit indicator and by a selecting relay of a set common to a plurality of digit indicators to cause the operation of a number indicator individual to such digit indicator.

[Claims 4 and 5 not printed in the Gazette.]

1,271,337. TELEPHONE SYSTEM. ALBEN E. LUNDELL, New York, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 30, 1916. Serial No. 139,935. (Cl. 179—18.)

1. In a telephone system, telephone lines, a finder switch, a starting circuit, means for energizing said starting circuit by any line in calling to start said switch to find said line, an electromagnet for removing said starting circuit from the control of the calling line, and an energizing circuit for said magnet maintained through a brush of said switch and the terminals of non-calling lines.

2. In a telephone system, a group of telephone lines, a finder switch, a starting circuit, means for energizing said starting circuit by any line in calling to start said switch to find said line, an electromagnet for preventing a second calling line in said group from energizing said circuit, and an energizing circuit for said magnet maintained through a brush of said switch and the terminals of non-calling lines.



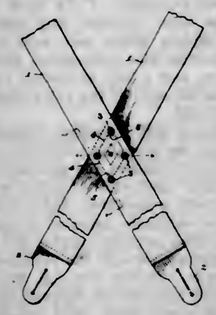
18. In combination, a group of lines, a group of switches, means for operating one of said switches, a starting circuit controlled by any one of said lines for starting the operation of said switch, and means common to the switches of said group for preselecting a plurality of said switches for successive operation.

24. The combination with a plurality of switches, of a starting circuit therefor, one of said switches being normally in operative relation with said starting circuit, means for starting said switch upon the closure of said starting circuit, means individual to each switch for controlling the movement thereof, means actuated by the movement of said switch for operating the controlling means of a second switch from an allotted position to place said second switch in operative relation with said starting circuit, and means actuated by the operation of the controlling means of the second switch for moving the controlling means of a third switch into an allotted position.

26. The combination with a starting circuit, of line controlled means for actuating the same, a waiting line finder switch in operative relation with said starting circuit, and means made operative to start said switch when said starting circuit is actuated, an allotted line finder adapted to be moved into waiting position when said waiting line finder started, and means actuated to find an idle line finder and move it into the allotted position when said allotted finder is moved into waiting position.

[Claims 3 to 17, 19 to 23, and 25 not printed in the Gazette.]

1,271,338. SUSPENDER-STRAP-FASTENING MEANS. MORGAN MCCULLOUGH, Los Angeles, Cal. Filed Dec. 27, 1917. Serial No. 208,161. (Cl. 241—19.)



The combination of a pair of intersecting suspender straps, with means for fastening said straps at their crossing point, said fastening means comprising headed metallic fasteners which penetrate the two straps at the corners where they cross each other, and lines of stitching arranged within the area defined by the metallic fasteners whereby the said metallic fasteners will protect the lines of stitching against direct outward pull.

1,271,339. COIN-HOLDER. ELWOOD T. MCGINNIS, Atlantic City, N. J. Filed Nov. 25, 1916. Serial No. 133,460. (Cl. 133—5.)



A device of the class described having a base having a row of circular openings in the top thereof of different diameters and semi-circular shaped recesses in the bottom of the base opening out through one side of the base and extending beneath said openings, said base having transversely extending slots therein interposed between said openings and recesses, plates in said slots extending beyond the sides of said base, each of said plates having a circular opening therein corresponding in diameter to the diameter of the opening below which the plate is mounted in the base, upstanding ears at one end of each plate, a down turned flange at the opposite end of each plate, lugs on the bottom of said base contiguous to the walls of said recesses, and coil expansion springs terminally connected with said lugs and flanges.

1,271,340. [WITHDRAWN.]

1,271,341. GARMENT-POCKET. JOHN MCVEIGH and SAMUEL MCCURDY, Londonderry, Ireland. Filed Oct. 6, 1914. Serial No. 865,352. (Cl. 2—134.)

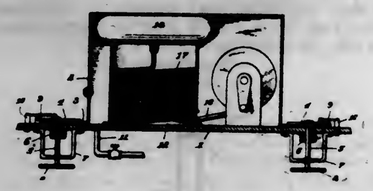


In a garment provided with a horizontal pocket opening, in combination, a facing strip or reinforce sewn at its upper edge to the lower edge of the pocket opening, a pocket having the inverted upper edge of its front wall sewn to the reinforce along a line extending downwardly from one side edge of the said front wall to the center thereof and thence upwardly to the opposite side edge of the said front wall, the upper edge of the pocket rear wall being sewn to the garment at the upper edge of the pocket opening and the sides of the pocket closed, substantially as described.

1,271,342. APPARATUS FOR RAISING SUNKEN VESSELS. JOHN W. MACDONALD, Portsmouth, Va. Filed Dec. 8, 1916. Serial No. 135,842. (Cl. 114—16.5.)

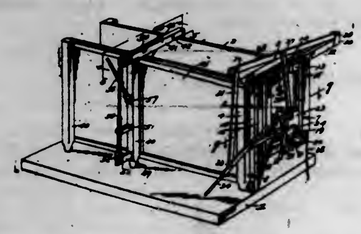
1. In apparatus for raising sunken vessels, a guide rope having one end secured to the vessel, a float connected to the other end of the guide rope, a casing inclos-

ing said float and guide rope to hold the same upon the vessel, means for introducing air under pressure for releasing said casing, guide rope and float in the event of the sinking of the vessel whereby the float may rise to the surface of the water, and means adapted to traverse said guide rope and engage the vessel whereby the latter may be raised.



2. In a device of the class described, a cable, a cable-retaining device to be carried by a vessel, a float connected with said cable, means for winding one end of the cable, the casing inclosing the float, the winding means and the cable, means for introducing air under pressure to the casing, and a device for retaining the casing in position and releasing the latter when desired, said retaining and releasing means comprising a pivotally mounted member engaging a portion of the casing, rotary means comprising a wheel and shaft for permitting the pivotally mounted means to be retained and to assume inoperative position, and a spring connected with the pivotally mounted member and with a stationary member carried by the vessel.

1,271,343. DEHORNING-CHUTE. FLAVIAN D. MANNING, Perryville, Mo. Filed May 3, 1917. Serial No. 166,232. (Cl. 119—99.)



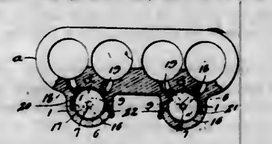
1. A device of the character described including a main support, coöperating animal neck engaging and supporting members mounted on the support one of which is movable vertically relative to the other, operating means on the support and connected to the movable member for raising and lowering the movable member, a lever movably mounted on the movable member and operably connected to and operable with the operating means for guiding the neck of an animal so as to properly position the same between the members, and means for clamping and supporting the body of an animal being dehorned in an upright position during the act of dehorning.

4. A device of the character described including a supporting base, a door jamb mounted thereon, a door swingingly connected to the jamb, a stationary animal neck receiving and supporting member carried by the frame of the door, a vertically movable animal neck engaging member mounted in the frame of the door, means for guiding a vertical sliding movement of the movable member, a plurality of levers operably connected to the frame of the door and to the movable member for actuating the movable member, another lever operably mounted on the movable member and operably connected to one of the first mentioned levers for guiding the neck of the animal which is to be dehorned during the actuation of the movable member to permit the movable member to properly engage the neck of the animal, a support carried by the outer face of the stationary neck supporting member for receiving and supporting the jaw and head of the animal being dehorned, flexible means connected to the stationary member for holding the head of the animal being dehorned on the support therefor and engageable with one of the movable member actuating levers to prevent accidental movement of the movable member, and means mounted on the support for clamping and supporting the body of an animal in an upright position during the act of dehorning.

7. A device of the character described including a supporting base, animal neck engaging and supporting means operably mounted on the base, a stationary animal body support mounted on the base, a standard mounted on the base in spaced relation to the stationary support, a beam connected to the standard and to the stationary support, pulley wheels operably mounted in the beam adjacent the respective ends, a movable animal body supporting member mounted on the base and shiftable beneath the beam, a link slidably mounted in the standard and pivotally connected to the lower portion of the movable support, a manually actuatable lever pivoted to the standard and operably connected to the sliding link for shifting the lower portion of the movable support to consequently hold the legs and hoofs of the animal against the stationary support, a cable connected to the movable support and trained about the pulley wheels and another manually actuatable lever pivoted on the standard and connected to the outer end of the cable for moving the upper part of the movable support so as to clamp the upper part of the body of an animal in a substantially upright position against the stationary support.

[Claims 2, 3, 5, and 6 not printed in the Gazette.]

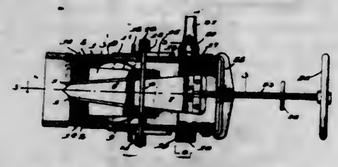
1,271,344. ROTARY VALVE MECHANISM FOR ENGINES. EVALD M. MATTSON, Inman, Kans. Filed Aug. 16, 1916. Serial No. 115,341. (Cl. 123—52.)



1. The combination with a multiple cylinder engine having intake and exhaust ports, of a cylindrical valve casing common to adjacent cylinders and provided in its bottom face with an intake port and provided in its top face with an exhaust port, a positively driven combined intake and exhaust valve rotatably mounted in said casing and provided with an inlet passage entering the bottom of the valve body and opening through the periphery thereof and an exhaust passage entering through the periphery of the valve body and opening out through the top thereof, and an expansion compression band interposed between the periphery of the valve body and the inner wall of the valve chamber, said band having projecting tubular nipples fitting into said cylinder ports, means for contracting said compression band around the body of the valve, and a bolt extending from said band through a hole in the wall of the valve casing to prevent rotation of said band.

2. The combination with a multiple cylinder engine having intake and exhaust ports, of a cylindrical valve casing common to adjacent cylinders and provided in its bottom face with an intake port and provided in its top face with an exhaust port, a positively driven combined intake and exhaust valve rotatably mounted in said casing and provided with an inlet passage entering the bottom of the valve body and opening through the periphery thereof and an exhaust passage entering through the periphery of the valve body and opening out through the top thereof, and an expansion compression band interposed between the periphery of the valve body and the inner wall of the valve chamber, said band having projecting tubular nipples fitting into said cylinder ports, means for contracting said compression band around the body of the valve, and a bolt extending from said band through a hole in the wall of the valve casing to prevent rotation of said band, and expansion packing rings surrounding said nipples.

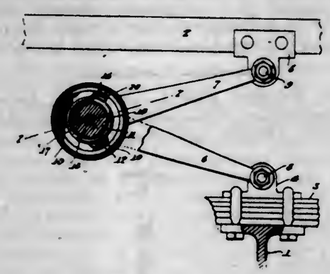
1,271,345. BOILER-FLUE CUTTER. ANTON C. MENGE and WILLIAM H. PIPES, Myrtlegrove, La. Filed Feb. 2, 1917. Serial No. 146,187. (Cl. 81—195.)



2. A boiler flue cutter comprising a tube provided with openings, arms located in the tube, springs interposed between the arms and tube, cutters carried by the arms and located in the openings of the tube, a wedge-shaped block interposed between the arms and means for moving the block, a collar adjustably mounted upon the tube, means for moving the collar, a band attached to the tube having ratchet teeth and a ring journaled on the band, and having a spring-pressed pawl which engages the teeth and adapted to be used as means for rotating the tube.

[Claim 1 not printed in the Gazette.]

1,271,346. SHOCK-ABSORBER. HUGH D. MEYERS, Grundy Center, Iowa. Filed Nov. 16, 1917. Serial No. 202,369. (Cl. 21—105.)



1. In a shock absorber, a pair of lever arms pivotally connected together and provided with a drum concentric with the pivot, and a spring having an intermediate portion coiled around the drum and having its ends connected to the lever arms.

2. In a shock absorber, a pair of lever arms pivotally connected together and provided on their opposing sides with contacting drum elements concentric with the pivot, and a spring having an intermediate portion coiled around the drum formed by the drum elements and having its ends connected to the lever arms.

3. In a shock absorber, a pair of lever arms pivotally connected together and provided on their opposing sides with contacting drum elements concentric with the pivot, and a spring coiled around the drum formed by the drum elements and having its ends connected to the lever arms, said lever arms also having cylindrical heads concentric with the drum elements.

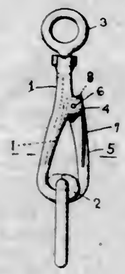
1,271,347. GRAIN-CAR DOOR. ROBERT R. MOFFITT, Lamar, Colo. Filed Apr. 20, 1917. Serial No. 163,461. (Cl. 20—30.)

The combination with a car body having a door opening and a frame extending about the same; of a socket secured in the floor of said body, an open resilient hook secured to the top beam of the frame in vertical alinement with said socket and provided at its free end with an integral inwardly extending finger, a post having its lower end seated in said socket and its upper end mounted in the hook so as to be detachably secured thereby to



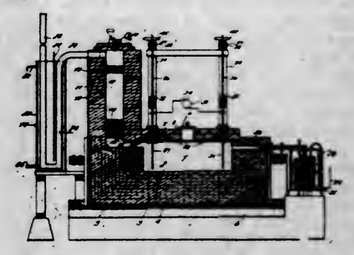
the top beam of the door frame, said post being provided in its upper end with a slot to receive said finger so as to secure the post against rotary movement, and a plurality of superposed plates secured to the post and extending across the door opening and having their ends projecting beyond the side beams of the door frame adjacent the inner face thereof.

1,271,348. HARNESS-SNAP. THOMAS E. MOFFITT, Naco, Ariz. Filed Oct. 12, 1917. Serial No. 196,287. (Cl. 24—235.)



A snap hook comprising a member having a pair of spaced hook ends, a second member pivotally connected with the first mentioned hook member and having a single hook end adapted to operate between the first mentioned hook ends and a spring bearing against the said members and serving to hold the hook ends at normal positions with relation to each other, the extremities of the hook ends being inwardly directed toward their respective shanks.

1,271,349. APPARATUS FOR RECTIFYING AND CONCENTRATING LIQUIDS. DICKSON S. MONTEITH, Charlotte, N. C., assignor to Chemical Construction Company, Charlotte, N. C., a Corporation of North Carolina. Filed Feb. 14, 1918. Serial No. 217,092. (Cl. 23—1.)

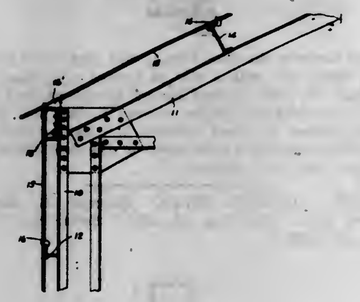


1. In apparatus for rectifying and concentrating liquids, a concentrating chamber, electrical heating means for the

chamber including electrodes extending therein, a tower having means of communication with the concentrating chamber and receiving heated gases therefrom and serving to supply the acid or the like to the concentrating chamber, a gas outlet pipe leading from the upper portion of the tower, and a concentrated liquid draw-off pipe leading from the concentrating chamber.

[Claims 2 to 6 not printed in the Gazette.]

1,271,350. SELF-LOCKING CLIP. FRANK D. MOON, Englewood, N. J. Filed Feb. 1, 1918. Serial No. 214,872. (Cl. 189—35.)



1. The combination with a flanged support and a sheet, of a clip to secure the sheet to the support comprising a member having at one end a hook embracing the free edge of the support flange, the opposite end of the member engaging over the base of the flange, and a fastener serving to connect the sheet with the hooked end of the member and tending to force said opposite end of the member firmly against the base and away from the sheet while drawing the hooked end toward the sheet.

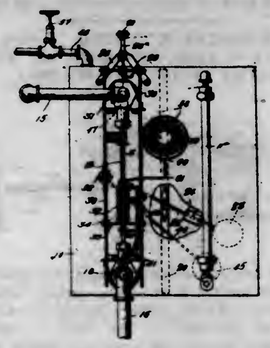
2. The combination with a flanged support and a sheet, of a clip to secure the sheet to the support comprising a member having at one end a hook embracing the free edge of the flange and having bearing contact with the inner face thereof, said member having another portion engaging over the base of the flange to prevent slippage of the hook from the free edge, and fastening means serving to connect the sheet to the clip and tending to tilt the clip around said bearing contact whereby said other portion is prevented from separating from its engaging position.

3. The combination with a flanged support and a corrugated sheet supported against the same, of a clip spanning the support flange and having three points of contact with said flange,—one within the free edge of the flange and the other two on the outside of the flange, one portion of the clip extending into one of the corrugations, and fastening means serving to connect said extending portion of the clip to the adjacent crest of the corrugation and acting to maintain the clip in contact with the flange at the three points indicated.

4. The combination with a support having a flange with a free edge and an angle at the base of the flange and a corrugated sheet lying against said flange, of a clip to fasten the sheet to the support and comprising a member projecting from the flange into a corrugation, one end of the clip projecting inward from the corrugation around the free edge of the flange, a portion of the clip remote from said end engaging on the outside of said angle, and a portion of the clip between the angle and the free edge of the flange bearing against the outside of the flange, and fastening means between the sheet and the inwardly projecting end of the clip and acting to draw the first mentioned end outward into the corrugation and against the inner face of the flange and at the same time force the other two portions of the clip firmly against the outside of the base and flange.

[Claims 5 to 9 not printed in the Gazette.]

1,271,351. LIQUID-METER. THOMAS C. MOORE, Taft, Cal. Filed Apr. 14, 1917. Serial No. 162,219. (Cl. 73—28.)



1. In combination, a tank, inlet and outlet valves for controlling the flow of fluid to and from the tank, means connecting said valves, a float-actuated lever, and resilient means connecting the lever with the connecting means to actuate the valves.

3. In combination, a tank, inlet and oulet valves connected therewith, means connecting the valves to effect a simultaneous and opposite movement thereof, a float-actuated lever arranged in the tank, and means connecting said lever with the connecting means, said last-mentioned connecting means including an extensible and contractible spring adapted to be alternately extended and compressed by the float-actuated lever to adjust the valves.

[Claims 2 to 4 and 6 to 10 not printed in the Gazette.]

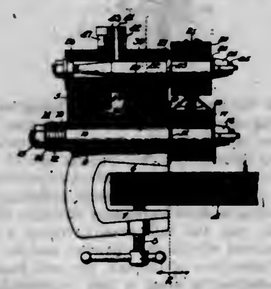
1,271,352. SAFETY-RAZOR. CORNELIUS ARIAN MULDER, Amsterdam, Netherlands. Filed July 16, 1917. Serial No. 180,917. (Cl. 30—12.)



In a safety razor, the combination of a base-plate and a closer-plate, constituting companion elements, the base-plate having a stem for which the closer-plate has an opening, a holder threaded on the stem to hold the closer-plate against the base-plate and to cause said plates to function as a clamping jaw, one of said plates having a pair of pins projecting toward the other plate and the latter having openings for said pins, and a narrow blade adapted to be clamped by said plates between the front edges thereof and with its rear edge to abut said pins, said blade being disposed wholly at one side of said stem and being freely movable from between said plates when the holder is turned to relieve the clamping pressure of said plates.

1,271,353. ANGLING-MACHINE. DANIEL J. MURNANE, Chicago Heights, Ill., assignor to Zouri Drawn Metals Company, Chicago Heights, Ill., a Corporation of Illinois. Filed May 12, 1916. Serial No. 97,044. (Cl. 153—54.)

1. In a machine for the purpose of changing the angle of molding, the combination of a body-member containing a bore and slotted to provide a split bearing, a shaft on said member, a roll on said shaft, a rotatably supported member in said bearing provided with end journals, a roll journaled in said last-named member on an axis eccentric of the axis of the latter and opposing said first-named roll, the axis about which said last-named roll rotates extending substantially parallel with said rolls, said rolls being adapted to receive between them the molding to be operated on, means engaging the split portions of said body-member for releasably holding said rotatably supported member in adjusted position, and means on said last-named member coöperating with the stationary part of the machine for indicating the position of the rotatably supported roll, with reference to the other roll of the pair.



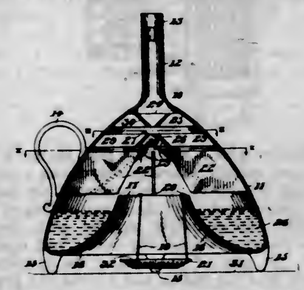
2. In a machine for the purpose of changing the angle of molding, the combination of a body-member provided with an opening adjacent its lower end, a shaft extending through said opening, a roll on said shaft, a bore in said body-member adjacent its upper end, a slot in said body-member to provide a split bearing, a rotatably-supported member in said bearing and containing an eccentrically-disposed opening, a shaft journaled in said opening and supporting a second roll, the axis of said last-named shaft extending substantially parallel with the axes of said rolls whereby upon rotatably adjusting said last-named member said last-named roll is adjusted relative to its companion roll to vary the space between said rolls, said rolls being adapted to receive between them the molding to be operated on, means engaging the split portions of said body-member for releasably holding said rotatably-supported member in adjusted position, and a plate carried by said last-named member and provided with markings coöperating with a relatively stationary part of the machine for indicating the position of the adjustably-supported roll with reference to the other roll of the pair.

1,271,354. VALVE MECHANISM FOR INTERNAL-COMBUSTION ENGINES. GLENN NUS, Arlington, Iowa. Filed Nov. 15, 1916. Serial No. 131,525. (Cl. 123—59.)



In a polycylinder internal combustion engine, the combination with the cylinders, of a removable head therefor embodying an upwardly contracting cavity forming an extension of the combustion chambers, said head being formed with transversely opposite inlet and exhaust ports terminating in valve seats cut in the upwardly converging sides of said cavity, intake and exhaust valves coöperating with said valve seats and provided with stems which diverge upwardly, rocker arms coöperating with said valve stems and having a pivotal mounting in relation to the cylinder head, a single overhead cam shaft extending centrally above the cylinders and having cams which coöperate with the inner ends of said rocker arms, a trough integral with the cylinder head and adapted to contain lubricant in which said cams dip, integral brackets on said trough supporting said rocker arms, and partitions extending transversely of said trough and dividing the same into separate oil compartments, and bearings for said cam shaft supported by said partitions at opposite sides of the cam.

1,271,355. INSECT-TRAP. KAISER OLEJNICZAK, Buffalo, N. Y. Filed Feb. 12, 1917. Serial No. 148,042. Renewed May 7, 1918. Serial No. 233,175. (Cl. 43—22.)



A trap of the type described, including a body portion of inverted general funnel shape, with an interior upwardly curved annular chamber-forming portion, a plurality of quadri-lateral radially edgewise arranged baffle-members positioned above, and spaced from said chamber forming portion also spaced edgewise and laterally from each other, and oppositely formed frames arranged in parallelism between said plurality of quadri-lateral radial members and the neck of the funnel-shaped body-portion, forming other baffle-members, said frames or members being of general cruciform arrangement, having centrally elongated passages centrally of their arms, one of said frames being of truncated pyramidal form, the sides of one frame converging upwardly while the corresponding sides of the other frame converge downwardly.

1,271,356. MULTIFOCAL OPTICAL ELEMENT. ARTHUR E. PAIGE, Philadelphia, Pa. Filed Apr. 1, 1915. Serial No. 18,435. (Cl. 88—54.)



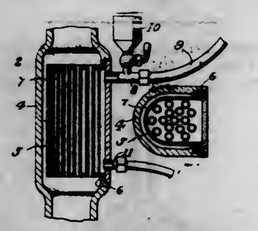
2. An opthalmic lens formed of a single piece of glass of uniform index of refraction, having one surface which is smoothly continuous throughout its area but of different dioptric curvature at different regions; regions respectively above and below the geometrical center of the lens being spherically curved and merged in an intermediate region which is otherwise curved; said surface being entirely generated from a single axis of rotation normal to said surface near one edge thereof; said axis intersecting all of the centers of spherical curvature of said surface.

9. A single piece of glass having one entire surface curved with reference to a single axis of generation near one edge thereof but with zones of different dioptric powers at different distances from said axis; said zones merging into each other.

18. An ophthalmic lens formed of a single piece of glass of uniform index of refraction, having one surface which is smoothly continuous and concave throughout its area, including three zones; the inner and outer zones being of different curvature, and the intermediate zone being a substantially parabolic zone of transition from one of said curvatures to the other without linear demarcation; all of said zones being symmetrically disposed with reference to a single axis of revolution.

[Claims 1, 8 to 8, and 10 to 17 not printed in the Gazette.]

1,271,357. HYDROCARBON-MIXTURE HEATER. WILLIAM A. PERKINS, Cortland, N. Y. Filed Apr. 7, 1917. Serial No. 160,514. (Cl. 257—241.)



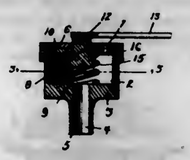
In combination with a manifold pipe having a diametrically enlarged portion, a heater comprising a casing inserted through the side of the enlargement, the surface of the casing being spaced from the inner surface of the enlargement and approximately parallel with the same, spaced pipes passing through the casing and means connected with the side of the casing for introducing a heating agent into the casing and around the pipes.

1,271,358. RESILIENT WHEEL. JAMES PICKETTS, San Diego, Cal. Filed Dec. 22, 1914. Serial No. 878,591. (Cl. 152—42.)



A wheel comprising inner and outer plates, hub portions formed on said plates and adapted to receive an axle, abutting lugs formed on the opposing faces of said plates to hold the plates in spaced relation, said outer plate having an annular recess in its inner face and in communication with the bore of the hub portions, an annular extension formed on the inner face of the inner plate and received within the recess to form a continuous hub to said plates, relatively spaced fiber disks disposed between said plates, means securing the plates against relative movement, flanges formed on said plates, pneumatic tubes carried by said flanges, a second pair of disks disposed between the first pair of disks, and having circular openings and central openings in communication with the circular openings and which receive the lugs and hub portions to limit the outward movement of said plates, and permit of relative movement thereof in relation to the first named disks, flanges formed on the second pair of disks and overlying the tubes, spokes secured to the second flanges, and a rim carried by the spokes.

1,271,359. AIR-INTAKE REGULATOR. EDMUND J. PRICE, Montague, Cal. Filed Sept. 20, 1916. Serial No. 121,271. (Cl. 137—7.)



A device of the character described comprising an air chamber having one end provided with a stem having a hollow interior communicating with the interior of the chamber, a cap mounted on the opposite end of the chamber, and provided with a central circular opening, and a plurality of circumferentially spaced openings, a valve element including a stem extending through the central opening in the cap, the said stem carrying a relatively large disk disposed within the chamber and in close contict with the inner face of the cap, the said flange having depending therefrom a stud, a coil compression spring embracing the stud and interposed between the disk and the end of the said chamber for normally maintaining the disk in close contact with the cap, the said disk having a segmental slot equal in length to the distance between the end openings in the said series of circumferentially spaced openings in the cap, and a lever attached to the stem of the said valve element.

1,271,360. SPRING-FRAME FOR VEHICLE-WHEELS. JOSEPH PRONOVOST, Detroit, Mich. Filed Oct. 19, 1917. Serial No. 197,477. (Cl. 152—47.)

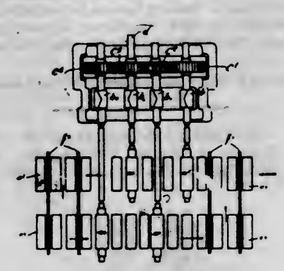


1. A spring frame for vehicle wheels, comprising two U-shaped members having sliding connection with each other and provided with oppositely disposed registering slots, the ends of the inner of said members being bent to over-lap each other in opposite directions, a block having contracted portions movable within said slots, a coiled spring bent upon itself at its longitudinal center and engaging the inner of said bent ends, the arms of the wire extending through registering slots in said members and having ends bent in opposite directions and engaging the inner face of said block.

4. A spring fame for vehicle wheels, comprising two U-shaped members having sliding connections with each other and provided with oppositely disposed registering slots, each having corresponding ends terminating in enlarged circular outlined portions, the ends of the inner member bent to over-lap each other, the outer over-lapping portion being concaved and the inner end formed into a hook, a block having contracted portions movable within registering slots in said members, the opposite faces of the block being concaved, a coiled spring bent upon itself at its longitudinal center and engaging said hooked end, the arms of the spring passing through registering slots in the members and terminating in angled ends engaging the grooved ends of said block.

[Claims 2 and 3 not printed in the Gazette.]

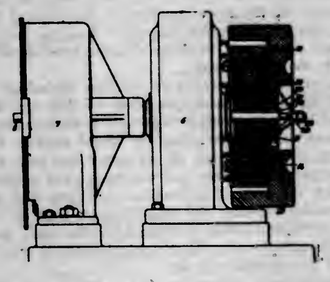
1,271,361. CONTINUOUS ROLLING-MILL. BRUNO QUAST, Cologne-Deutz, Germany. Filed Mar. 9, 1918. Serial No. 221,572. (Cl. 80—31.1.)



2. A continuous rolling mill, comprising a plurality of juxtaposed groups of rollers arranged in overlapping relation in pairs placed behind each other, each pair of rollers turning only in one direction, thereby rolling the blocks or blooms alternately to and fro, each block on changing from one pair of rollers to another entering the latter with its opposite end.

[Claim 1 not printed in the Gazette.]

1,271,362. FLUCTUATION-DAMPING MEANS FOR ROTATABLE MEMBERS. PAUL M. RAINEY, Glen Ridge, N. J., assignor, by mesne assignments, to Western Electric Company, Incorporated, a Corporation of New York. Filed Dec. 26, 1914. Serial No. 879,040. (Cl. 74—6.)

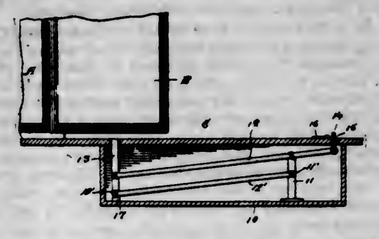


1. The combination of a rotatable member subject to speed fluctuations, with means for producing damping friction to dampen out said fluctuations, comprising two fly wheels of different characteristics and capable of relative movement with respect to said member, the relative movement being caused by speed fluctuations, the damping friction produced by one of said wheels being relatively small when such movement begins and the damping friction produced by the other of said fly wheels being relatively large when such movement begins.

6. The combination with a rotating member subject to speed fluctuations, of means for damping out said fluctuations comprising two independently operable fly wheels of different characteristics, each fly wheel producing its maximum damping effect when the damping effect of the other fly wheel is at a minimum.

[Claims 2 to 5 not printed in the Gazette.]

1,271,363. DOOR-STOP. JOHN E. RALSTON, Vincennes Ind. Filed Jan. 26, 1918. Serial No. 213,991. (C. 16—79.)

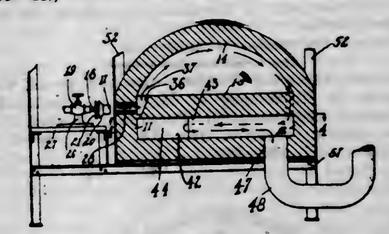


1. Means for preventing the closing of a door and comprising a pivotally mounted lever, a door obstructing element carried by one end of the lever and normally disposed in an inactive position, means for adjusting said lever to move the actuating element to an active position, a spring pressed latch element engaging the lever in one position to hold the said element in its active position, and means for effecting a release of said latch, whereby said lever automatically assumes its normal position.

2. The combination with a hinged door, of a vertically movable door obstructing element adapted to be moved into the path of the door, a pivoted operating lever having one end pivotally connected to said element, means located at the opposite end of said lever for controlling the position of the door obstructing element and a guide bar having one end pivotally secured to the door obstructing element and its opposite end pivotally secured to a stationary point to guide the door obstructing element in its movement.

3. The combination with a hinged door, of a rectangular frame mounted for vertical movement and comprising side bars and end bars pivotally connected together, one of said end bars being extended to provide an obstruction adapted to be moved into the path of said door, one of the side bars being extended to form a lever and means engageable with the lever for controlling the position of the obstruction.

1,271,364. FURNACE. WILLIAM S. RALYA, Cincinnati, Ohio, assignor to Arthur H. Bohnstengel, Cincinnati, Ohio. Filed Dec. 9, 1915. Serial No. 65,915. (Cl. 263—48.)



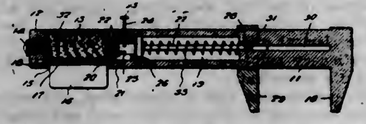
1. A furnace of the character described comprising a heating chamber having an arched top and a floor, a chamber under said floor, partitions dividing said last-named chamber into end channels and a middle channel the tops of which are formed by said floor, said partitions forming closed connections with the side wall of said last-named chamber at one of their ends, said channels extending in directions crosewise of the arch of said top, inlets for mixed fluid-fuel at one side of the arch of said top arranged to direct the products of combustion solely along the curvature of said arch, passages at the other side of said arch and at the respective end-portions of said heating chamber between said heating chamber and said end channels respectively, the other ends of said partitions terminating in said second-named chamber under said floor at points spaced from the bases of said

arch to form passages between said end channels and middle channel at that side of said furnace where said inlets for fluid-fuel are located, said middle channel having an outlet for the products of combustion at that end thereof distanced from said last-named passages.

2. In a fluid-fuel furnace of the character described, a heating chamber provided with an arched top and a floor, inlet passages for mixed fluid-fuel at one side of said arch, mixers for said fluid-fuel at the outer ends of said inlet passages, means for deflecting said mixed fluid fuel along the curvature of said arch, means for adjustably distancing said mixers from said deflecting means, a chamber under the above mentioned floor provided with partitions dividing said chamber into a plurality of channels, the tops of which are formed by said floor, said channels extending in directions crosswise of the above mentioned arch, one of the ends of a portion of said channels having communication with said heating chamber at the side of said arch opposite the said fluid-fuel inlets, said partitions having closed connections with the walls of said second-named chamber at said last-named side of said second-named chamber, and the other ends of said channels having communication with each other under said arch, the products of combustion having movement in the channels separated by said partitions in opposite directions.

[Claims 3 and 4 not printed in the Gazette.]

1,271,365. WRENCH. ALBERT WORTH REYNOLDS, JR., Princeton, W. Va. Filed Sept. 12, 1917. Serial No. 190,987. (Cl. 81—129.)



1. In a wrench of the class described, a stationary jaw having an angular shank providing, at its outer end, a handle, a chamber in said handle designed to receive an oil of a heavy specific gravity, a plunger arranged transversely in the chamber, said plunger having a reduced portion extending through a longitudinal opening in the handle and providing a hand grip, said shank having a longitudinal bore, a restricted passage between the bore and the chamber, an outwardly movable valve normally closing the passage, a plunger in the bore, a movable jaw on the shank connected with the plunger, and means operative exteriorly of the shank for holding the valve in open position.

[Claim 2 not printed in the Gazette.]

1,271,366. VEHICLE-WHEEL. GEORGE R. RIGGS, Washington, D. C., assignor of one-half to Ferdinand A. Schaefer, Raspeburg, Md. Filed Aug. 13, 1915, Serial No. 45,275. Renewed Dec. 15, 1917. Serial No. 207,856. (Cl. 152—46.)

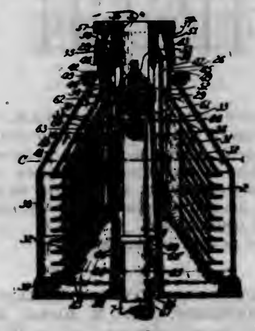


1. In a wheel, the combination of a hub member, a rim member, annularly arranged cushioning means interposed between said hub and rim, and a plurality of means each adapted to operatively connect the said hub and rim, said connecting means being adapted on a relative displacement of said hub and rim to compress said cushioning means at a plurality of spaced points.

6. In a wheel, a hub member, a rim member, a felly, a plurality of movable members adapted to operatively connect said hub and rim, said hub being provided with an annularly arranged seat, a pneumatic tire therein, the said connecting members being adapted to engage said tire, and means connected to said movable members, adapted on an inward movement of one of said members to produce a simultaneous inward movement of all of the other of said members, the said tire being adapted to yieldingly resist the said inward movement of said connecting members.

[Claims 2 to 5 and 7 not printed in the Gazette.]

1,271,367. CENTRIFUGAL SEPARATOR OR CLARIFIER. HORACE A. RIGGS, Indianapolis, Ind. Filed May 3, 1916. Serial No. 95,120. (Cl. 233—29.)



1. A centrifugal separator or clarifier including a hollow tapering bowl center with its smaller end uppermost provided with a head having a conical top face, a feed-tube embracing and secured to the head and having apertures therein at the lower portion of the conical face of the head, and a distributing tube seated on the larger portion of said center and having an upper portion arranged opposite to said apertures.

2. A centrifugal separator or clarifier including a hollow tapering bowl center provided on its top with a solid head having a conical top face, a distributing tube on the bowl center embracing the lower portion thereof and having a neck portion on its upper end that is relatively smaller in diameter and arranged at a greater elevation than the apex of the conical top face, and a feed-tube extending through the smaller neck portion in contact therewith and being connected to the head, the wall of the feed-tube having apertures therein at the lower portion of the conical top face.

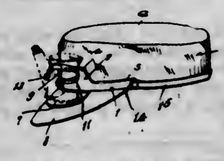
3. A centrifugal separator or clarifier comprising a hollow tapering bowl center provided on its top with a solid head having a conical top face, a distributing tube on the bowl center separably embracing the lower portion thereof and having a neck that is relatively smaller in diameter, a disk cover extending about the distributing tube and having a neck thereon in the top of which are slots, and a feed-tube extending through the smaller neck of the distributing tube in contact therewith and being connected to the head, the feed-tube having apertures therein at the lower portion of the conical top face, the feed-tube having also an imperforate flange thereon covering the upper ends of said slots and engaging the tops of the necks to deflect liquid to and through the slots.

4. A centrifugal separator comprising a hollow bowl center provided with a closure head, a distributing tube extending about the bowl center and to a plane above the apex of the conical top face, the top of the tube having a relatively small neck diametrically, a disk cover extending about the distributing tube and having a neck thereon provided in the top thereof with slots, a shell having a neck with openings therein, the neck of the shell embracing the neck of the disk cover and provided in its top with slots registering with the slots in the neck of the disk cover, and a feed-tube extending through the neck of the distributing tube and being connected to the closure head, the feed-tube having apertures therein at the top of said head and having also an imperforate flange thereon in engagement with the tops of said necks and extending continuously across the tops of said slots.

5. In a centrifugal separator or clarifier, a bowl shell having a conoidal neck portion, a divider having a conoidal neck portion, and a locking device engaging the bowl shell for uniting said portions.

[Claims 6 to 36 not printed in the Gazette.]

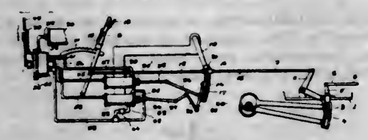
1,271,368. HOLDER FOR MINERS' LAMPS. JAMES M. ROBERTS, Fredonia, Ky. Filed Oct. 13, 1917. Serial No. 196,433. (Cl. 240—60.)



1. A lamp holder for miners' caps comprising a body plate including an outwardly bent lower portion for engaging a vizor of the cap, a central enlarged guard plate, and rearwardly extending reduced spring arms, a resilient clip secured to the central enlarged plate for detachably receiving a lamp, and adjustable straps carried by the terminals of said arms, as and for the purpose specified.

2. A lamp holder for miners' caps comprising a body plate formed of a single sheet of sheet metal having the lower portion thereof reduced and bent outwardly, an ear formed on the upper edge of the plate and bent downwardly in spaced parallel relation to the body of the plate, a resilient clip positioned between the ear and the body of the plate, means extending through the ear to hold the clip in position, and means for securing the plate to a cap.

1,271,369. REVERSING-GEAR FOR FLUID-MOTORS. MINOR L. ROBINSON, Villa Grove, Ill. Filed Aug. 10, 1917. Serial No. 185,537. (Cl. 121—98.)

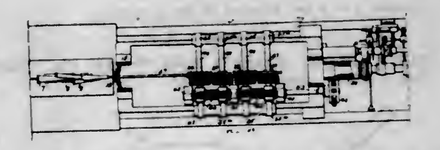


1. In a reversing gear for fluid engines, the combination with a manually operated reverse lever, of a fore reach bar having operable connection with said reverse lever, a link connected to said fore reach bar and said rear reach bar, a motor having operable connection with said link for normally maintaining said link in one position to establish an operable connection between said fore reach bar and said rear reach bar, a second motor having operable connection with said link, a controlling means for said motors adapted, when in one position to maintain said link in normal position, and adapted, when in other positions, to move said link out of normal position to establish an operable connection between said second mentioned motor and said fore reach bar and to actuate said second mentioned motor to position said fore reach bar.

6. In a reversing gear for fluid engines, the combination with a manually operated reverse lever, of a fore reach bar having operable connection with the valve gear of the engine, a rear reach bar pivotally connected to said reverse lever, a slide link having its upper end pivotally connected to said rear reach bar, said fore reach bar engaging the slide of said link, means for supporting said fore reach bar, a motor having operable connection with said slide link adapted to move said link to engage said fore reach bar with different portions of said slide, a second fluid motor having operable connection with the lower end of said slide link, said first mentioned motor being adapted to position said slide link to establish an operable connection between said fore reach bar and said rear reach bar or between said second motor and said force reach bar, and means for controlling said motors.

[Claims 2 to 5 not printed in the Gazette.]

1,271,370. MACHINE FOR MAKING PAPER TUBES. OTTO HERMAN ROESSLING, Philadelphia, Pa., assignor to Charles Beck Company, Philadelphia, Pa., a Firm comprising Charles Beck, Charles J. Beck, A. S. Beck, H. P. Beck, Leonidas Beck, and Andrew Simon. Filed Jan. 19, 1918. Serial No. 212,729. (Cl. 93—82.)



1. The combination in a tube forming machine, of means for forming the tube; a pair of grooved rolls adapted to conform to the shape of the tube; a mandrel having a reduced portion and a shoulder over which the tube passes from the forming means; means for continuously driving the pair of rolls in one direction; and a spring tending to move the mandrel in the opposite direction, so that the tube passing through the machine will be moved intermittently forward and the mandrel will be reciprocated.

3. The combination in a tube forming machine, of a series of formers; a die through which the formed tube passes; a mandrel having a rod extending through the die and through the formers; a spring on the rod arranged to retract the mandrel, said mandrel having reduced portions with inclined shoulders; a series of rolls through which the mandrel extends so that when the tube is formed and passes into the die and over the mandrel and between the rolls, it will be intermittently pressed and moved forward, while the mandrel will have a short reciprocating movement.

5. The combination in a paper tube forming machine, of a pair of rolls, one roll having a flange and a semi-circular groove, the other having a semi-circular groove in its periphery and arranged to extend between the flanges of the first mentioned roll, the flanges of one roll bearing against the hub of the other roll so as to keep the rolls spaced a given distance apart; and a mandrel having a reduced portion; means for retracting the mandrel; and means for driving the roll so that the tube will be fed forward and the mandrel will have a reciprocating motion.

[Claims 2, 4, 6, and 7 not printed in the Gazette.]

1,271,371. PREPARATION OF YEAST. LEE ROUSH, Beaver, Pa. Filed Apr. 5, 1917. Serial No. 160,048. (Cl. 195—20.)

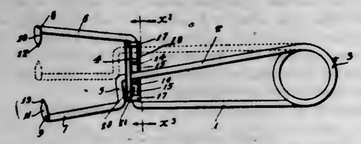
1. The herein described method of stimulating the development of yeast in a fluid culture mass which consists in causing air to ooze through a porous body into the mass while the growth of yeast is in progress therein.

5. The method herein described of reviving compressed yeast which consists in preparing a wort of malt flour, malt sprouts, and flour wherein the quantity of malt flour is not more than about fifty per cent. of the three named

ingredients, introducing compressed yeast into the wort when prepared, and causing air to ooze through a porous body into the yeast-containing wort.

[Claims 2 to 4 and 6 not printed in the Gazette.]

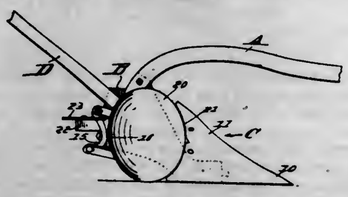
1,271,372. TRAP. CHARLES J. ROY, Santa Monica, Cal. Filed Feb. 12, 1918. Serial No. 216,683. (Cl. 43—23.)



1. A trap comprising arms, one crossing the other and having inturned ends respectively, means tending to operate one of the arms to move the inturned end thereof toward the inturned end of the other arm, teeth on one of the arms designed to engage the other arm to hold the movable arm retracted against the operating force, and means to release the last named arm from the holding means.

[Claims 2 to 4 not printed in the Gazette.]

1,271,373. PLOW. HENRY G. RUSK, Orlando, Fla. Filed July 3, 1917. Serial No. 178,517. (Cl. 97—37.)



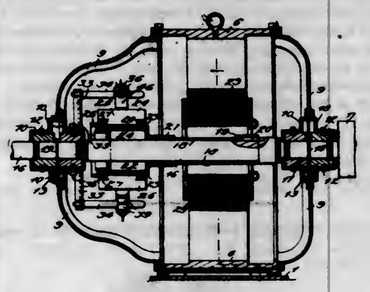
2. In a plow, a stock, a forward casting provided with a plow share mounted thereon, a substantially U-shaped frame secured to the casting and having its limbs extending rearwardly therefrom, a rear casting detachably connected to the free ends of the limbs of the frame, a clamping member connecting the forward and rear castings and securing the whole to the stock, the clamping member comprising a rod member whose one end loosely engages the front casting, the latter having an ear provided for such engagement, and a nut threadingly engaging the rod member at the other end, the rod member passing slidably through the rear casting, the stock having pivotal engagement with both castings, the stock being further provided with a rear extension, a locking device mounted upon the rear extension and adapted to engage the rear casting on either side of the stock, and a rotatable concavo-convex disk carried by the U-shaped frame so that it will stand rearwardly of the forward casting, whereby both the share and the disk may be shifted to either side of the stock to permit of right and left hand plowing.

[Claim 1 not printed in the Gazette.]

1,271,374. ELECTRODYNAMIC MACHINERY. AMATO NICOLA SAMMARONE, Akron, Ohio. Filed Jan. 25, 1916. Serial No. 74,247. (Cl. 171—252.)

1. In a dynamo electric machine, a base plate consisting of a flat piece of metal and having oblong rectangular bolt holes and being provided with flanges bordering the bolt holes, a saddle consisting of sheet metal bent in curved form, said saddle being provided with guide sockets arranged to fit over the said base plate flanges, said saddle being slidable on said base plate, means for securing the saddle in different positions with respect to the base plate, a ring arranged to rest on said saddle, and means for securing the ring to the saddle.

2. In a dynamo electric machine, a base plate consisting of a flat piece of metal and having oblong rectangular bolt holes and being provided with flanges bordering the bolt holes, a saddle consisting of sheet metal bent in curved form, said saddle being provided with guide sockets arranged to fit over the said base plate flanges, said saddle being slidable on said base plate, means for securing the saddle in different positions with respect to the base plate, a ring arranged to rest on said saddle, and bolts arranged to pass through the curved portion of the saddle into the ring for securing the ring to the saddle, said saddle having a recessed portion for permitting access to the bolts.

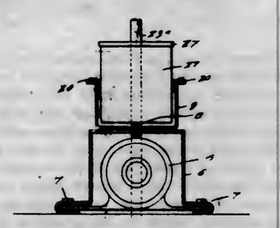


1,271,375. SADDLE-COVER. SAMUEL U. SAUNDERS, Miami, Fla. Filed Apr. 7, 1917. Serial No. 160,472. (Cl. 208—15.)



In a saddle cover, a flexible cover portion, an inclosure at the pommel end thereof, coiled springs fastened at one end to the cantle end of the saddle, a pommel stud for retaining the other end of the coiled springs, a pair of straps at the cantle end thereof adapted to pass over the cantle end of a saddle and engaging the coils of the springs of the saddle and straps at the side edges of said cover and adapted to pass under the saddle and engage respective straps at the opposite side of the cover.

1,271,376. LUBRICATOR. CHARLES G. SCHONDELMAIER, Jacksonville, Fla., assignor of one-half to J. W. Hamann, Jacksonville, Fla. Filed Feb. 7, 1917. Serial No. 147,125. (Cl. 184—22.)

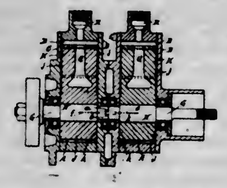


1. A lubricator including a container, a holder secured internally of the container to the front wall thereof, a forwardly directed hollow extension communicating with said holder, an absorbent lubricating element fitted in the holder and having an enlarged terminal arranged in the forward extension, a removable cover fitted upon the container and extension and confining the enlarged terminal of the lubricating element therein, said lubricating element, forwardly directed extension and cover having vertical recesses therein to receive an elevator guide, and means removably securing said cover in position.

2. In combination, an elevator shoe, a guide received within said shoe, a frame secured to the shoe, a lubricant container pivotally secured to the frame on an axis extending parallel with the guide, and a recessed lubricating element arranged in the container and engaging the guide.

[Claim 3 not printed in the Gazette.]

1,271,377. ROTARY PUMP. ALBERT EDWARD SHINER, London, England. Filed Aug. 21, 1917. Serial No. 187,404. (Cl. 103—44.)



1. A multiple rotary pump comprising a multiple number of pump casings bolted together, a driving shaft provided with an eccentric for each individual pump, said driving shafts being coupled together, each individual pump consisting of a pump chamber, a radial extension of said chamber, said extension having segmental seats formed in its opposite walls, segmental blocks resting in said seats, a pendulum rotor the stem of which slides between said segmental blocks, said stem being provided with a delivery channel extending longitudinally through it and opening at the side of the stem at a point adjacent to the bob of the rotor, an inlet port entering the pump chamber at a point between the cylindrical part of the chamber and the said segmental blocks, an outlet at the end of the radial extension of the pump chamber, one of the driving shafts having a longitudinal hole formed therein extending from the coupled end thereof and communicating with a radial hole opening out on the face of the eccentric at a point of largest radius, the adjoining coupled driving shaft having a corresponding longitudinal hole, and a communicating radial hole opening out on the face of the eccentric at a point of smallest radius, the pendulum bob actuated by this latter shaft having a radial hole extending from the outer face of the bob to the inner face thereof.

2. A multiple rotary pump comprising a multiple number of pump casings bolted together, a driving shaft provided with an eccentric for each individual pump, said driving shafts being coupled together, each individual pump consisting of a pump chamber, a radial extension of said chamber, said extension having segmental seats formed in its opposite walls, segmental blocks resting in said seats, a pendulum rotor the stem of which slides between said segmental blocks, said stem being provided with a delivery channel extending longitudinally through it and opening at the side of the stem at a point adjacent to the bob of the rotor, an inlet port entering the pump chamber at a point between the cylindrical part of the chamber and the said segmental blocks, an outlet at the end of the radial extension of the pump chamber, the pendulum rotor having in each side of the bob a circular channel communicating with another channel extending along the stem of the pendulum and being open at its end.

1,271,378. NON-INTERFERING KEY. CHARLES H. SMITH, Chicago, Ill., assignor to Kellogg Switchboard & Supply Company, Chicago, Ill., a Corporation of Illinois. Filed June 19, 1913. Serial No. 774,566. (Cl. 175—282.)

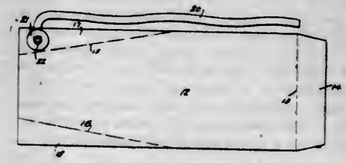
1. A switching device including a plurality of circularly disposed plungers, supporting mechanism for said plungers whereby they may be manually reciprocated, a contact spring controlled by each of said plungers, said contact springs forming means for restoring said plungers, a pivotally secured circular plate provided with orifices adapted to receive said plungers, said plate being adapted to hold an actuated one of said plungers and to



release a previously depressed plunger, and a plurality of pivoted sectors circumposed about their pivoted point and lying in a plane at right angles to the line of movement of said plungers for coöperation with said plungers to prevent a simultaneous operation of more than one of said plungers at one time.

[Claims 2 and 3 not printed in the Gazette.]

1,271,379. NECKWEAR-HOLDER. SIDNEY HOLLANDER SONN, New York, N. Y. Filed Oct. 27, 1917. Serial No. 198,861. (Cl. 211—28.)



1. A holder for neckwear and similar articles, comprising a body made of a flat piece of stiff sheet material and provided at its head end with tapering sides and back flaps forming continuations of the tapering sides, and tying means attached to one of the flaps and extending across the other flap and around the article held on the body of the holder.

2. A holder for neckwear and similar articles, comprising a piece of stiff sheet material of an approximately rectangular shape over the head end of which are doubled up a number of neckties, the end portions extending on the front of the piece and the neckbands extending on the back of the piece, the said piece having tapering sides conforming to the correspondingly tapering sides of the main end portions of the neckties, and the said piece having back flaps forming integral continuations of the said tapering sides, the back flaps engaging the outermost of the said neckbands, and a tying band and fastener secured on one of the said back flaps and extending across the other back flap and around the front and rear portions of the neckties.

3. In combination, a box having a removable cover, a necktie holder within the box and having a body made of a piece of sheet material provided with a foot resting on the bottom of the box and abutting against the foot end of the box, the other end of the body piece terminating a distance from the head end of the box, the neckties being doubled up over the head end of the body sheet and extending over the front and rear thereof, the doubled up portions fitting into the space between the head end of the body sheet and the head end of the box, the said body sheet having tapering side portions extending from the head of the body sheet to points intermediate the head and foot ends of the body sheet, the said body sheet having integral back flaps forming continuations of the said tapering side portions and engaging the rear necktie portions, a tying band and a tying disk secured to one back flap and extending across the other back flap and the necktie portions at the front and back of the body.

1,271,380. WINDOW-SASH MOUNTING. ARTHUR C. SOULE, San Francisco, Cal., assignor to Simplex Window Company, San Francisco, Cal., a Corporation of California. Filed Feb. 9, 1917. Serial No. 147,676. (Cl. 20—42.)

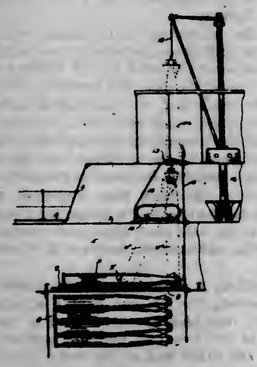


1. A window mounting comprising a casement provided with guides, slide shoes engaging said guides, a sash, pivot shoes movably connected with said sash and slidable upon said slide shoes, and arms movably connected with said slide shoes and with said sash.

5. A window mounting comprising a casement having shoe guiding means, slide shoes movably engaging said guiding means, a sash, spring pressed pivot shoes movably connected to said sash near the upper corners thereof and guided by said slide shoes, arms movably connected with said slide shoe and with said sash, and support arms pivoted to the edge of said sash near the middle thereof, and to said casement near the position assumed by the lower end of the sash when in closed position.

[Claims 2 to 4 not printed in the Gazette.]

1,271,381. HATCH STRUCTURE FOR SUBMARINES. LAWRENCE Y. SPEAR, Groton, Conn., assignor to Electric Boat Company, New York, N. Y., a Corporation of New Jersey. Filed Jan. 7, 1916. Serial No. 70,746. (Cl. 114—17.)



1. In a submarine boat, the combination of a hull having a main compartment therein for the accommodation of torpedoes, a superstructure on the hull, and a water-tight vestibule compartment extending from the hull to the top of the superstructure and communicating at its lower end with the hull and its upper end with the space above the superstructure, said compartment being of uniform width throughout and of decreasing length in the fore and aft direction from the bottom thereof to the top, whereby a torpedo lowered may be turned from a vertical position toward a horizontal position while it is being lowered through the vestibule and into the hull.

4. In a submarine boat, in combination with the hull, an elongated main compartment therein for the accommodation of torpedoes, a minor compartment located above the main compartment, an elongated hatch to provide a communication between the main and minor compartments, and a circular hatch located in the upper portion of the minor compartment and above one end of the elongated hatch, said minor compartment tapering upwardly toward said circular hatch from a point above said elongated hatch.

6. In a submarine boat, in combination with the hull, an elongated main compartment therein for the accommodation of torpedoes, a minor compartment located above the main compartment adjacent to one end thereof, the minor compartment tapering upwardly and having a substantially vertical axis so that a torpedo may be tilted from the vertical toward the horizontal while being lowered through the minor compartment, a trackway in the major compartment below the minor compartment comprising a rail arranged lengthwise with the major compartment and sloping downwardly from a point below the minor compartment, and anti-friction means movable on the track and formed to receive and support an end of a torpedo which is being lowered through the minor compartment, whereby gravity acts to move the torpedo along the rail while the torpedo is being passed through the minor compartment and tilted from the vertical toward the horizontal.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,271,382. PADLOCK. ELMER B. STONE, New Britain, Conn., assignor to The American Hardware Corporation, New Britain, Conn., a Corporation of Connecticut. Filed Dec. 27, 1917. Serial No. 209,056. (Cl. 70—108.)



2. A padlock including a case, a shackle movable longitudinally therein and having a lateral swinging movement, and means coöperating with the long arm of the shackle to return said shackle to its normal position with the short arm of the shackle opposite a keeper opening in the case after the shackle has been moved to one side.

5. A padlock including a case, a shackle movable longitudinally in the case and having a lateral swinging movement therein, the long arm of the shackle having a recess to receive a retaining pin, the bottom of said recess being provided with a flat positioning surface, a positioning plunger mounted in the case and having a "squared" end, and means for forcing the plunger against said positioning surface to return the shackle to its normal position.

6. A padlock including a case, a shackle movable longitudinally in the case and having a lateral swinging movement therein, a locking bolt to engage said shackle, a positioning plunger mounted in the case, a spring located between the plunger and bolt and exerting force on both, the long arm of said shackle having a flat positioning surface to be acted upon by said positioning plunger.

[Claims 1, 3, 4, and 7 not printed in the Gazette.]

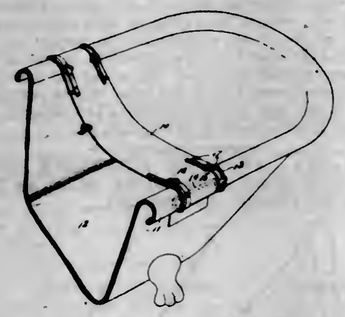
1,271,383. ADJUSTABLE SWING-ROD. ELMER O. STREET, Cave City, Ark. Filed Sept. 5, 1917. Serial No. 189,827. (Cl. 155—35.)

A device of the class described comprising a plate having a pair of openings therein unequal in size, a hook having its shank passed through the larger of said openings and terminating at one end in a right angularly extending eye, a second hook having its shank passed through said eye, and an extension at one end



of the shank of the second mentioned hook arranged in the other of said openings and curving outwardly from said shank and toward the bill of the hook.

1,271,384. BATH-TUB SEAT. RUDOLPH STROLL, Washington, D. C. Filed Feb. 21, 1918. Serial No. 218,514. (Cl. 4—2.)



A bath tub seat comprising a flexible band, and suspension means on the ends thereof; said means comprising laterally spaced shanks curved in the direction of their length to fit over the rim of the tub, hooks projecting from the inner ends of the shanks, keeper strips on the band into which the hooks are insertible, and retaining strips on the band beneath which the shanks seat and are longitudinally slidable when the hooks are disengaged from their keeper strips.

1,271,385. UNLOADING AND CONVEYING APPARATUS. FRANCIS LEE STUART, Washington, D. C., assignor to International Conveyor Corporation, New York, N. Y. Filed Dec. 5, 1917. Serial No. 205,606. (Cl. 198—8.)



1. The combination with a main conveying belt, of a truck adjustable with respect thereto, a turn table mounted on the truck, a hopper carried thereby for delivering material to the belt, and a longitudinally and angularly adjustable unloading conveyer for delivering material to said hopper.

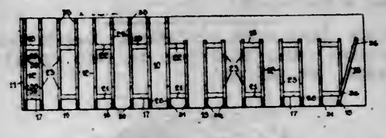
8. The combination with a main conveying belt, of a truck adjustable with respect thereto, a turntable

mounted on the truck, a hopper carried thereby for delivering material to the belt, and a longitudinally, vertically and angularly adjustable unloading conveyer for delivering material to said hopper.

12. The combination with a main conveyer, of a truck adjustable longitudinally thereof, a turn table mounted on said truck, a frame work carried by said turn table, a hopper divided to extend on opposite sides of said frame, and laterally adjustable means intermediate the parts of said hopper for delivering material thereto.

[Claims 2 to 7, 9 to 11, and 13 to 19 not printed in the Gazette.]

1,271,386. ASSEMBLY-FORM FOR AEROPLANE-WINGS. JOHN P. TARBOX, Buffalo, N. Y., assignor, by mesne assignments, to Curtiss Aeroplane and Motor Corporation, Buffalo, N. Y., a Corporation of New York. Filed Dec. 17, 1915. Serial No. 66,912. (Cl. 144—288.)



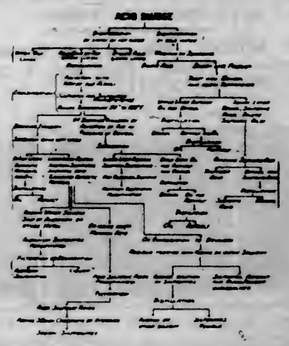
1. In an assembly form for aeroplane wings, a head block against which one end of the wing to be assembled is fitted and rib supports arranged in parallelism to said block to determine the position of said ribs in the wing.

10. In an assembly form for aeroplane wings, rib supports provided with shouldered jogs, adapted to accommodate the leading edge of the wing to be assembled and means positioned in each jog to engage the wing edge therebetween and the shoulder of the jog.

21. In an assembly form for aeroplane wings, a support, abutments mounted upon the support to engage with the marginal frame elements of the wing and alined abutments mounted in intersecting series upon said support to engage the intersecting frame elements of the wing.

[Claims 2 to 9 and 11 to 20 not printed in the Gazette.]

1,271,387. PETROLEUM PRODUCT AND PROCESS OF MAKING THE SAME. RENÉ DE M. TAVEAU, Philadelphia, Pa., assignor to The Atlantic Refining Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 6, 1914. Serial No. 849,119. (Cl. 196—28.)



1. The method of producing an emulsion of asphaltic material, which consists in disintegrating acid sludge, removing the acid, neutralizing all or a part of the sulfonic acid content of the asphaltic residue in the presence of water, and agitating the mass at a temperature below emulsion breaking temperature.

7. The method of emulsifying the asphaltic component of material resulting from the treatment of petroleum or

petroleum product with concentrated sulfuric acid, which consists in mixing the asphaltic material and the associated sulfonic acids in water, agitating the mass in the presence of material neutralizing the remaining sulfuric acid and reacting with the sulfonic acids to produce an emulsifying agent consisting of water soluble sulfonates, and subjecting the mass to said agent at a temperature below emulsion breaking temperature.

15. The petroleum product consisting of a mixture of sulfonic acids derived from acid tar.

35. The method of treating acid tar to produce asphaltic material and sulfonates, which consists in granulating the acid tar, emulsifying the same by agitating the granulated acid tar in the presence of water and alkali at a temperature suitable for emulsification, breaking the emulsion and allowing the mass to separate into layers containing, respectively, asphaltic material and sulfonates in solution.

[Claims 2 to 6, 8 to 14, 16 to 34, 36, and 37 not printed in the Gazette.]

1,271,388. TIRE SHOE OR CASING. JACK E. TAYLOR, Cleveland, Ohio. Filed Sept. 11, 1916. Serial No. 119,330. (Cl. 152—16.)

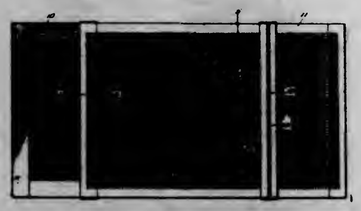


1. A tire casing or shoe comprising endless cables, a woven metallic fabric connected to said cables, and hooks passing through said fabric and over said cables, said hooks being adapted to bear on the base of the rim and to engage the rim flanges.

3. In a tire casing or outer shoe for attachment to a tire rim the combination of a fabric, a pair of cables passing through the edges of said fabric, and a plurality of angle attaching members carried by said cables and turning freely thereon, one end of each of said members being adapted to engage the base of the rim and bear endwise thereon and the other end being bent at substantially right angles thereto and adapted to engage the rim flange.

[Claim 2 not printed in the Gazette.]

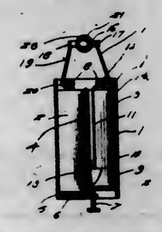
1,271,389. SCREEN. WILLIAM J. B. TAYLOR, Findlater, Saskatchewan, Canada. Filed Mar. 8, 1918. Serial No. 221,265. (Cl. 156—14.)



2. A window screen comprising two substantially rectangular frames one slidable over the other, cleats formed on the inner members of each of the frames and received in the adjacent frame and having its ends contacting with the inner edges of the longitudinal elements on the said adjacent frame, a guide secured to the end of each of the frames and surrounding the adjacent frame, said guides being each constructed of a strip of metal cut inwardly from the ends thereof and centrally bent upon itself to provide a rib and flat right angular portions arranged to the opposite sides of the rib, and the ends of the said member, outward of the rib, being bent at a right angle to the rib and to the straight faces of the guide and secured to the frames.

[Claim 1 not printed in the Gazette.]

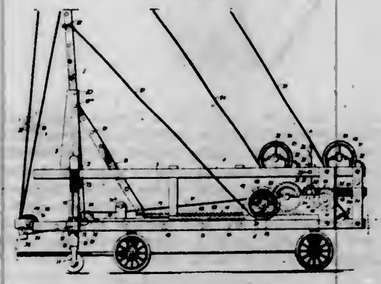
1,271,390. BUTTONHOLE ELECTRIC LIGHT. EDWIN FRANK THOMAS, Meriden, Conn. Filed July 31, 1917. Serial No. 183,754. (Cl. 240—8.5.)



1. A device of the class described comprising a supporting casing, battery cells located in said casing, an insulating means located in the casing and between the cells, wires connected to each cell and extending out through one end of the casing, a light supporting block carried by the wires, a contact strip carried by one of the cells and located in close proximity to the other cell, and means extending through the casing and engaging the strip for engagement with the other cell to complete the circuit to the light through the wires and batteries.

[Claim 2 not printed in the Gazette.]

1,271,391. PORTABLE EXTENSIBLE LADDER. JOSEPH E. TROJAN, Columbus, Tex. Filed July 7, 1917. Serial No. 179,204. (Cl. 228—28.)



1. In a portable ladder combination, a wheeled truck, a ladder mounted on said truck for movement between horizontal and upright positions, wings mounted at the sides of said truck, said wings being normally parallel to said truck and movable to positions wherein they project laterally from said truck, and means for operating said ladder and said wings in correlation whereby the wings are moved from their normal positions when the ladder is raised and are restored to their normal positions when the ladder is lowered.

2. In a portable ladder combination, a wheeled truck, a ladder mounted on said truck for movement between horizontal and upright positions, wings mounted at the sides of said truck, said wings being normally parallel to said truck and movable to positions wherein they project laterally from said truck, a frame slidable lengthwise of said truck, link connections for operating said ladder from said frame and other link connections for operating said wings from said frame whereby said wings are moved from their normal positions when the ladder is raised and are restored to their normal positions when the ladder is lowered.

3. In a portable ladder combination, a wheeled truck, a ladder mounted on said truck for movement between horizontal and upright positions, said ladder consisting of slidably related sections, gearing for moving said ladder between its horizontal and upright positions, transversely adjacent gearings having a location in the longitudinal direction of the truck distant from said first named gearing for operating the slidably movable sections, a main gear located intermediate said ladder moving gearing and section operating gearings and mounted for movement longitudinally and transversely of the truck, and means for moving said main gear to effect its selective engagement with elements of each of said gearings to operate the same.

4. In a portable ladder combination, a wheeled truck, a ladder mounted on said truck for pivotal movement between horizontal and upright positions, a sliding horizontal frame movable lengthwise of said truck, links connected to said frame for moving said ladder pivotally between its horizontal and vertical positions, gearing for operating said frame including a transverse shaft, winding drums mounted on said shaft, and cables for bracing said ladder and connected to said winding drums from which they pay out as the ladder is raised to a vertical position.

5. In a portable ladder combination, a wheeled truck, a ladder mounted at the front thereof for pivotal movement between horizontal and upright positions and consisting of a plurality of slidably related sections, means for extending the ladder comprising a lifting cable connected to the lower end of each slidably movable section and guided over the upper end of the section next below, a winding drum for each lifting cable located near the rear end of the truck, a pawl and ratchet coacting with each winding drum to prevent the descent of the ladder sections, guide sheaves for the lifting cables located at the front end of the truck and in advance of said ladder, and gearing for selectively operating said winding drums, and gearing located intermediate said winding drums and the ladder for effecting pivotal movement of the ladder in either direction.

1,271,392. PHENOL-ALDEHYDE CONDENSATION PRODUCT. ADRIAAN WILLEM COSTER VAN VOORHOUT, The Hague, Netherlands. Filed Dec. 22, 1916. Serial No. 138,377. (Cl. 106—22.)

1. The process of producing phenol-aldehyde condensation products which comprises heating a mixture of equal parts of a phenol and a 40% solution of formaldehyde and not more than 0.5% of solid caustic alkali until all the free water originally present has been driven off, as well as about one half the amount of water formed in the condensation reaction, adding to the mixture a proportion of a liquid other than water and thereafter completing the reaction by heating the mass at a comparatively low temperature during a considerable period.

12. The process of producing cresol-aldehyde condensation products which comprises heating a mixture of equal parts of a cresol and a 40% solution of formaldehyde and not more than 0.5% of solid caustic alkali until all the free water originally present has been driven off, as well as about one half the amount of water formed in the condensation reaction, stirring the mixture during this heating process, adding to the mixture a quantity of alcohol equivalent to 20 per cent. by volume of the original mass, evaporating off one half of the alcohol and completing the reaction by heating the mass in a current of air at a temperature gradually rising from 60° C to 180° C. during a period of 30 hours.

[Claims 2 to 11 not printed in the Gazette.]

1,271,393. PHENOL-ALDEHYDE CONDENSATION PRODUCT. ADRIAAN WILLEM COSTER VAN VOORHOUT, Delft, Netherlands. Original application filed Dec. 22, 1916, Serial No. 138,377. Divided and this application filed Jan. 23, 1918. Serial No. 213,389. (Cl. 106—22.)

2. The process of producing phenol-aldehyde condensation products, which comprises heating a mixture of equal parts of a phenol and a 40% solution of formaldehyde and not more than 0.5% of solid caustic alkali until all the free water originally present has been driven off, as well as about one half the amount of water formed in the condensation reaction, adding to the mixture a quantity of turpentine and glycerin equivalent respectively to 1–4% and 2–8% of the phenol used, and a small percentage of vaseline, and thereafter completing the reaction by heating the mass in a current of air at a temperature gradually rising from 60° C. to 180° C.

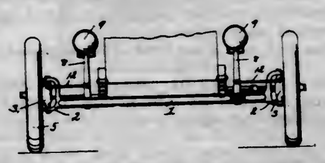
[Claim 1 not printed in the Gazette.]

1,271,394. SKIRT-MARKER. ETHEL A. WADE, Springfield, Mo. Filed Sept. 16, 1916. Serial No. 120,500. (Cl. 33—9.)



A skirt marker formed of a plurality of flexible, flat sections having their edges cut on concentric curved lines and their ends cut on diverging lines, said sections having a plurality of lines that are parallel with each other and with the curved edges of the sections, one end of one of said sections overlying the adjacent end of the other section, attaching means connecting said end, said overlying end bent at the inner edge of the overlying portion to position the main portions of the sections in alinement, and the free ends of said section adapted for overlying engagement and connection to form a substantially, frusto-conical skirt marker.

1,271,395. HEADLIGHT MECHANISM FOR AUTOMOBILES. CHARLES N. WALKER, Jamestown, Colo. Filed Aug. 25, 1917. Serial No. 188,194. (Cl. 240—62.)



The combination of the front axle of a motor vehicle, having heads at its ends, vertically-disposed knuckles journaled in said heads and having wheel-bearing spindles and means for the connection of steering gear and also having lateral arms, posts supported on and journaled in the axle to turn about their axes and having lateral arms, links connecting the arms of the knuckles and the arms on the posts, and headlights mounted on the posts.

1,271,396. COAL-MINE DRILL. JOSEPH ALFRED WALKER, Springfield, Ill. Filed Apr. 5, 1918. Serial No. 226,892. (Cl. 255—72.)

1. A core drill including an elongated tubular stock, an annular drilling head applied to one end of the stock and provided at its free end with a series of inwardly extending slots which are inclined to the axis of the stock, one side of each of the slots being formed with a longitudinal depression, and cutting bits fitted removably in the slots and depresed sides thereof, said cutting bits projecting beyond the cutting head and being inclined to the axis of the stock.

4. A core drill including an elongated tubular stock, an annular drilling head applied to one end of the stock and

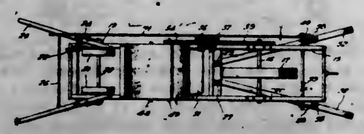
provided at the end thereof with a series of slots which extend inwardly, one side of each of the slots being provided with a transverse grooved seat, cutting bits fitted removably within the slots and provided with depressed seats adapted to register with the grooved seats of the slots when the bits are in position, and spring locking keys insertible in the grooved seats and formed with crimped portions adapted to spring into the depressed seats of the cutting bits.



6. A core drill including an elongated tubular stock, an annular drilling head applied to one end of the stock and provided upon the exterior thereof with a series of inclined ribs, the end of the head being provided with a series of slots which extend inwardly at an inclination to the axis of the stock and each have one side provided with a longitudinal depression while the other side is provided with a transverse groove, one of the slots being provided for each of the exterior ribs of the head and the slots opening through both the interior and exterior walls of the head, reversible cutting bits inserted removably in the slots and each provided at its middle portion with a depressed seat adapted to register with the before mentioned transverse groove when the bit is in position, and spring locking keys insertible in the transverse groove and formed with crimped portions adapted to spring into the depressed seats of the bits.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,271,397. **BOLL-WEEVIL DESTROYER.** WILLIAM J. WALKER, Sylvania, Ga. Filed Sept. 14, 1917. Serial No. 191,445. (Cl. 43—1.)



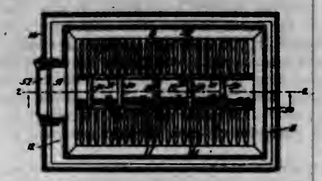
1. In a machine of the class described, a pair of forwardly divergent ground engaging brushes and front and rear standards whereby said brushes are supported, the forward standards being provided with break joints and with springs whereby the forward ends of the brushes are forced in a downward direction.

5. In a machine of the class described, a picker drum comprising a cylindrical barrel-like structure having longitudinal flexible slats or staves, prongs operating through said staves and having flat heads at their inner ends, and a cylindrical cushion within the drum and engaging the heads of the prongs to force the latter in an outward direction.

[Claims 2 to 4 not printed in the Gazette.]

1,271,398. **GRATE.** JOHN S. WASHBURN, Suffern, N. Y. Filed Dec. 22, 1917. Serial No. 208,452. (Cl. 126—174.)

1. A grate, comprising fixed and spaced grate bars, a movable grate bar between the said fixed grate bars, the said grate bars being provided on their opposing faces with projecting grinding members, and manually controlled means imparting reciprocating movement to the movable grate bar lengthwise thereof.

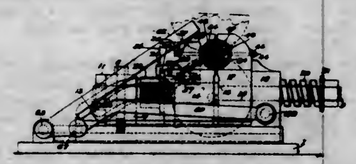


2. A grate, comprising fixed grate bars spaced apart and having perforate portions inclined toward each other and terminating at their lower ends in approximately vertical portions, a movable grate bar intermediate the said vertical portions of the fixed grate bar and approximately peak shape in cross section, and means for imparting a reciprocating motion to the movable grate bar lengthwise thereof.

3. A grate, comprising fixed grate bars spaced apart and having perforate portions inclined toward each other and terminating at their lower ends in approximately vertical portions, a movable grate bar intermediate the said vertical portions of the fixed grate bar and approximately peak-shape in cross section, fixed rods on which the said movable grate bar is mounted to slide, and means for imparting a reciprocating motion to the movable grate bar lengthwise thereof.

[Claims 4 and 5 not printed in the Gazette.]

1,271,399. **GRIPPING AND ALINING HEAD FOR HOLDING TURBINE BLADES WHILE MILLING.** JOSEPH BRIGGS WEAVER, Newport News, Va., assignor to Engineering Products Corporation, Newport News, Va., a Corporation of Virginia. Filed Aug. 13, 1914. Serial No. 856,546. (Cl. 90—60.)

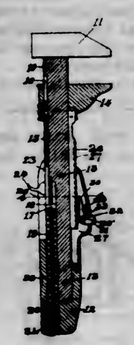


6. A device of the character set forth, comprising a base, clamping heads movably mounted therein, a post movably mounted in said base and forming an abutment for one of said heads, a shaft passing through said heads, a nut on the end of said shaft, a spring between said nut and said block, a rock arm in threaded engagement with said shaft, a clip coöperating with said rock arm and the adjacent head to permit relative rotation of such parts and to prevent relative longitudinal movement thereof, means to fix said post with respect to said base, clamping jaws carried by said head, and means to actuate said rock arm during the travel of said base to cause relative movement of said clamping jaws.

15. In a device of the character stated, a reciprocatory base, a non-rotatable shaft supported thereon, clamping heads mounted on said shaft, a tension device to maintain one of said heads normally stationary, the other of said heads being movable, means to effect relative movement of said movable head with respect to said stationary head during the reciprocation of said base, and manually controlled means independent of said first means to effect relative movement of said heads at any position of said base.

[Claims 1 to 5, 7 to 14, and 16 to 37 not printed in the Gazette.]

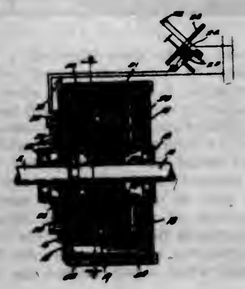
1,271,400. **WRENCH.** CHARLES H. WEST, Newton Hamilton, Pa. Filed May 19, 1917. Serial No. 169,698. (Cl. 81—134.)



1. A wrench comprising in combination a shank, a stationary jaw carried thereby, an adjustable jaw slidably mounted on said shank, a handle connected to the shank, reversely pitched rack teeth carried by the movable jaw, a dog pivoted to the handle, reversely pitched teeth also carried by said dog for engagement with the rack teeth carried by the movable jaw to hold the latter against movement in either direction and means located within the handle for urging the jaws to a closed position when the jaw holding means has been released.

2. A wrench comprising in combination a shank, a stationary jaw carried thereby, an adjustable jaw slidably mounted on said shank, a handle connected to the shank, a rack bar connected at one end to said adjustable jaw and having its opposite end disposed within said handle, said bar being provided with rows of reversely pitched teeth, a dog pivotally mounted in the handle and also provided with reversely pitched teeth having engagement with the teeth carried by the bar to hold the jaws against movement in either direction and means located within the handle for urging the jaws to a closed position when the jaw holding means has been released.

1,271,401. **MAGNETIC CLUTCH.** JARL M. WEYDELL, Indianapolis, Ind., assignor of one-half to Edward E. Stout, Indianapolis, Ind. Filed Feb. 15, 1917. Serial No. 148,787. (Cl. 172—239.)



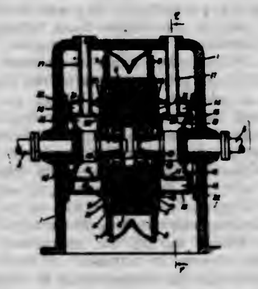
1. A magnetic clutch, comprising two rotatable magnetic members and a stationary magnetic member, and a stationary magnetizing coil, one of said rotatable magnetic members having two interconnected portions between which lie the other rotatable magnetic member and the stationary magnetic member so that together they form a substantially closed magnetic path for the magnetic flux produced by such magnetizing coil.

8. A magnetic clutch, comprising two rotatable magnetic members and a stationary magnetic member, and a stationary magnetizing coil, one of said rotatable magnetic members having two interconnected portions between which lie the other rotatable magnetic member and the stationary magnetic member so that together they form a substantially closed magnetic path for the magnetic flux produced by such magnetizing coil, the portion of said first rotatable member which lies next to one of the other members being formed of a plurality of definite poles so as to produce areas of magnetic concentration and the second rotatable magnetic member being provided with a number of short-circuited conducting members which cut the magnetic flux upon relative rotation between the two rotatable magnetic members.

5. A magnetic clutch, comprising a stationary magnetic annulus, a stationary magnetizing coil in magnetizing relation thereto, and two separately rotatable magnetic members also in magnetizing relation to such coil, one of the rotatable magnetic members comprising two parts including definite polar projections, between which two parts both said stationary magnetic annulus and the other rotatable magnetic member lie.

[Claims 2, 4, and 6 not printed in the Gazette.]

1,271,402. **ELASTIC-FLUID TURBINE.** OSKAR ANTON WIBERG, Finspong, Sweden, assignor, by mesne assignments, to Aktiebolaget Ljungströms Ångturbin, Stockholm, Sweden, a Corporation. Filed Aug. 8, 1917. Serial No. 185,036. (Cl. 253—83.)



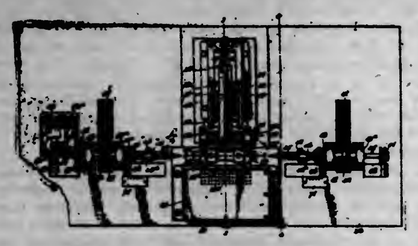
1. An elastic fluid turbine having a distributer from which elastic fluid is supplied to the turbine, said distributer comprising walls which form an annular chamber open at one end whereby the walls of said chamber may be machined and finished, and annular expansion rings connecting said distributer to stationary walls of the turbine, one such stationary wall forming a closure for the open end of the distributer.

3. An elastic-fluid turbine having a distributer from which elastic fluid is supplied to the turbine, said distributer having concentric walls forming a plurality of annular chambers, said chambers being open at one end whereby their inner surfaces may be machined and finished.

7. In an elastic-fluid turbine, the combination of a casing, two rotors therein having interleaving axially extending blade rings thereon, said rotors rotating in opposite directions, shafts for said rotors, balancing disks on opposite sides of the turbine, a labyrinth packing between said rotors and the disks, a distributer on each side of the casing for supplying elastic fluid to the blade rings, said distributers comprising concentric walls which surround the shafts and form annular chambers, said chambers being open at one end, and expansion rings connecting the distributers to said pressure disks, said disks forming closures for the open ends of the chambers and being provided with openings through which elastic fluid flows to the blade rings.

[Claims 2 and 4 to 6 not printed in the Gazette.]

1,271,403. ART OF APPLYING TISSUE WRAPPERS TO CIGARS, &c. GEORGE M. WILLIAMS, Elizabeth, N. J., assignor to P. Lorillard Company, New York, N. Y., a Corporation of New Jersey. Filed Apr. 4, 1917. Serial No. 159,664. (Cl. 93—5.)



3. In the art of applying wrappers to articles, the method of twisting tubular wrapper ends, consisting in gripping opposite faces of one of said tubular ends along a line extending longitudinally thereof leaving ungripped a portion of the wrapper end at the side of the gripped portion, causing relative rotation between the body portion of the wrapper and the gripped end, so that the wrapper is twisted upon itself between the gripped portion and the body portion, and the said ungripped portion is allowed to assume a twist formation about the gripped portion.

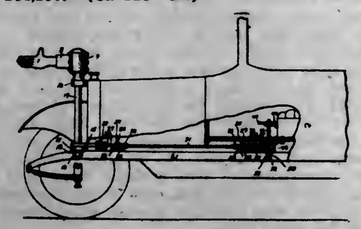
8. In wrapping mechanism, a pair of coacting twister fingers each having a relatively long and narrow gripping face, the face of one finger being adapted to be brought into substantial contiguous relation with the companion face of the other finger throughout substantially the length of the gripping faces of the fingers, and said fingers when brought together having an end configuration of such relatively small dimensions as to be substantially inclosed by an embryo twist formation.

23. In wrapping mechanism for applying inclosing wrappers to articles and adapted to apply tissue wrappers to cigars, etc., and in combination, a support for positioning the wrapped article relative to mechanisms operative in producing end-twists to the wrapper and for supporting the article during the operations of such mechanisms, and means in advance of such support whereby the object and its wrapper may be brought into wrapped relation preliminary to such positioning, said means including a wrapping table to receive the blank, suction mechanism for temporarily maintaining the blank in position on the table, and pasting mechanism for applying a stripe of adhesive to the blank while so positioned, said pasting mechanism being operative at will.

56. In wrapping mechanism, a finger for twisting mechanisms, said finger having its active gripping face decreasing in width toward its advance end.

[Claims 1, 2, 4 to 7, 9 to 22, and 24 to 55 not printed in the Gazette.]

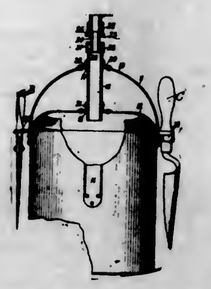
1,271,404. AUTOMOBILE TRAFFIC-SIGNAL. CHARLES W. WILSON, St. Louis, Mo. Filed Apr. 24, 1917. Serial No. 164,190. (Cl. 116—81.)



2. In an automobile traffic signal, a pivotally mounted element, a controlling shaft mounted for slight vertical movement and also for turning movement, a pair of spaced arms attached to said shaft and between which said element extends, each of said arms having a slot, a pin attached to said elements and arranged to travel in said slots, a segment, and a controlling lever on the shaft and arranged to engage the segment to lock the controlling shaft in adjusted positions.

[Claim 1 not printed in the Gazette.]

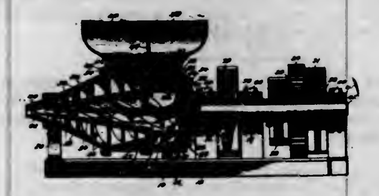
1,271,405. WATERING-POT. ALICE EMILY WILT, Philadelphia, Pa. Filed Oct. 16, 1917. Serial No. 196,924. (Cl. 137—62.)



4. A watering pot including a fixed bail on the pot at the top, said bail having a hole vertically therethrough at the approximate center, a filler pipe extending through the said hole to the pot and secured to the said bail, a nipple detachably connected with the upper end of the filler pipe above the bail, and means to swivel the said nipple on a spigot.

[Claims 1 to 3 and 5 not printed in the Gazette.]

1,271,406. MACHINE FOR MAKING TAMALES. HERBERT O. WINFREY, Austin, Tex. Filed Feb. 16, 1917. Serial No. 149,107. (Cl. 107—14.)



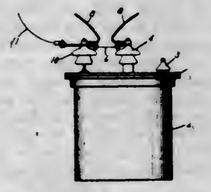
1. In a machine of the class described, a housing including a substantially cylindrical member and a substantially conical member, a primary feed screw of hollow conical form operating in the housing and having a feed flange tapering toward the base and also toward the apex of the cone from an intermediate point thereof, that portion of the feed flange that tapers toward the apex of the cone being adapted to fit within the conical housing member, and a filler of triangular cross section secured in the lower portion of the cylindrical member of the housing and tapering in the direction of the conical housing member to present a bearing surface for that portion of the feed flange which tapers toward the base of the cone.

3. In a machine of the class described, a tubular shaft supported for rotation, a primary feed screw of hollow conical form, and spaced arms connecting the feed screw with the tubular shaft, said arms being spaced apart to permit passage of material therebetween and within the hollow conical feed screw and a secondary feed screw operating within the primary feed screw.

7. In a machine of the class described, a housing comprising a substantially cylindrical member having a feed opening and a substantially conical member having a discharge opening, a primary feed screw of hollow conical form operating in the housing, the tubular shaft supported for rotation externally of the housing having a portion thereof projecting through an end wall of the cylindrical housing member, spaced arms connecting the primary feed screw with the tubular shaft, a shaft supported for rotation in the tubular shaft, a secondary feed screw carried by said shaft and extending axially within the hollow conical primary feed screw and between the spaced connecting arms to permit passage of material between said arms to the space intermediate the primary and secondary feed screws, a filler secured in the lower portion of the cylindrical housing member to provide a bearing surface for a portion of the primary feed screw, a hopper mounted on the housing adjacent to the feed opening, a partition in said hopper coinciding with the base of the conical primary feed screw, and a bottom member in the cylindrical member of the housing between the base of the primary feed screw and that end wall through which the tubular shaft extends.

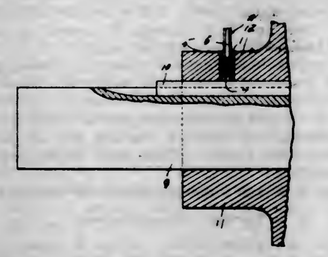
[Claims 2 and 4 to 6 not printed in the Gazette.]

1,271,407. PROTECTIVE DEVICE. GEORG WOLFF, Hermsdorf, near Berlin, Germany, assignor to General Electric Company, a Corporation of New York. Filed Jan. 11, 1915. Serial No. 1,621. (Cl. 175—273.)



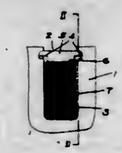
The combination of a tank for a transformer or other electrical apparatus, a cover therefor, an insulating bushing for a lead from the apparatus passing through the cover, an insulator on said cover, and a protective device comprising a fuse and an arc disrupting device of two members, one end of the fuse and one of said members being carried by said bushing and attached to the lead therethrough from the apparatus, the other end of said fuse and the other of said members being carried by said insulator, and means for connecting said last mentioned member and the adjacent fuse end to a line conductor.

1,271,408. SET-SCREW. ALBERT D. WOOD, Canton, N. C. Filed June 19, 1917. Serial No. 175,608. (Cl. 85—1.)



A set screw comprising an externally screw-threaded body adapted to be fitted into a hub and having a tapered bore provided with active engaging faces, said body having oppositely disposed slots in its inner end, and a tapered member having active engaging faces for cooperation with the faces of the body when said tapered member is inserted therein for rotating the body against a shaft carrying the hub, said tapered member adapted to be driven through the body to spread the same, and engage with the shaft to prevent rotation of the shaft with relation to the hub.

1,271,409. COIL-RETAINING DEVICE. FRANCIS E. WYNNE, Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed July 3, 1916. Serial No. 107,265. (Cl. 171—252.)



1. In a dynamo-electric machine, the combination with a magnetizable core member having a plurality of coil-containing slots having longitudinal grooves in the sides thereof, of devices for holding the coils in position each of which comprises a portion located in said grooves and a portion projecting into said slot below said grooves to engage said coil and means for moving said devices radially inwardly.

2. In a dynamo-electric machine, the combination with a magnetizable core member having a plurality of coil-containing slots having longitudinal grooves in the sides thereof, of devices for holding the coils in position each of which comprises a portion located in said grooves and radially movable therein and a portion projecting into said slot below said grooves to engage said coil, said devices having end members protruding from said magnetizable core member and means attached to said end members to hold said devices in engagement with said coils.

3. In a dynamo-electric machine, the combination with a magnetizable core member having a plurality of coil-containing slots having longitudinal grooves in the sides thereof, of devices for holding the coils in position each of which comprises a portion located in said grooves and radially movable therein and a portion projecting into said slot below said grooves to engage said coil, said devices having end members protruding from said magnetizable core member and banding material wound on said protruding end members to hold said devices in engagement with said coils.

4. In a dynamo-electric machine, the combination with a magnetizable core member having a plurality of coil-containing slots having longitudinal grooves in the sides thereof, of devices for holding the coils in position, each of which comprises a portion located in said grooves and radially movable therein and a portion projecting into said slot below said grooves to engage said coil, said devices having end members protruding from said magnetizable core member and wire wound on said protruding end members to hold said devices in engagement with said coils.

[Claims 5 and 6 not printed in the Gazette.]

1,271,410. PRESSURE-GAGE. GHOOGAS ZAHRAJIAN, Syracuse, N. Y. Filed July 18, 1917. Serial No. 181,360. (Cl. 73—109.)

1. In a pressure gage of the type described including a hollow base block and nipple, a Bourdon tube spring, a dial, and a hand; a lug rising from the rear of the base block and having a bearing, a lug detachably connected with the front of the base block and having a bearing, a rock shaft having reduced ends journaled in said bearings, means for adjustably and detachably connecting the hand with the front end of the shaft, a bent crank arm projecting from the shaft between its bearings, an ogee link, and detachable pivots between its extremities and the crank arm and the free end of said spring.

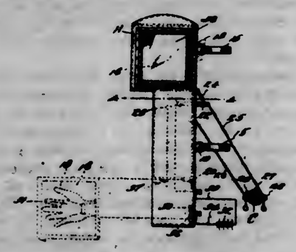
2. In a pressure gage of the type described including a hollow base block and nipple, a Bourdon tube spring, a

dial, and a hand; bearings on said base block, a rock shaft journaled in said bearings, said hand having an eye removably engaging the front end of the rock shaft,



a set screw for holding the eye adjustably thereon, a crank arm projecting from the shaft between its bearings and bent nearly into a circle having an eye at its free end, an extension at the free end of the spring provided with an eye, and a link pivotally connecting said eyes.

1,271,411. DIRECTION-SIGNAL. ROBERT H. ZIMMERMAN, Lockport, N. Y. Filed Nov. 21, 1916. Serial No. 132,650. (Cl. 116—81.)

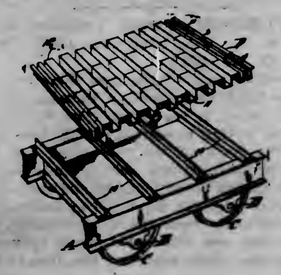


8. An auto direction signal comprising a casing open at one side, a signal arm formed as a hollow cell conforming to and disposed within said casing, a hinge connection at the line of juncture of the lower rear edge of said shell with the back wall of said casing a transverse rod within said shell, a latch member pivoted upon and extending into said casing and engaging said transverse rod, the upper portion of said shell being overbalanced whereby said shell will gravitate to a horizontal position when said latch member is released from engagement with said transverse bar, means for releasing said latch member, and a flexible member connected with said shell and extending through the back wall of said casing whereby said shell may be returned to its initial position within said casing.

[Claims 1 and 2 not printed in the Gazette.]

1,271,412. [WITHDRAWN.]

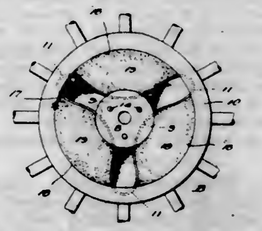
1,271,413. DECK FOR BRICK-CARS. WILLIAM H. ALLEN, Momence, Ill., assignor of one-third to Ernest A. Kramer, Grant Park, Ill. Filed May 10, 1917. Serial No. 167,779. (Cl. 34—17.)



1. The combination with a wheeled car truck, of supporting beams mounted transversely at intervals thereof and a transversely corrugated body forming a platform removably supported upon said beams.

2. The combination with a wheeled car truck, of supporting beams mounted transversely at intervals thereof and a transversely corrugated body forming a platform removably supported upon said beams, each of the corrugations being substantially U-shaped and arranged alternately in reversed positions.

1,271,414. VEHICLE-WHEEL. MARIO ARNAVAS, San Francisco, Cal. Filed Sept. 28 1917. Serial No. 193,799. (Cl. 152—44.)



In a vehicle wheel, a band having arcuate eyes therein the terminals of which open out through the inner peripheral face of the band, an axle boxing within said band having arcuate eyes therein the terminals of which open out through the outer peripheral face of the boxing, cushions interposed between the eyes in said band bearing upon the outer peripheral face of said boxing above the eyes therein, a continuous lacing threaded through the eyes in said band and boxing contacting with the ends of said cushions, and rings coextensive in diameter with said band detachably mounted on the ends of said boxing.

1,271,415. TORPEDO-PROTECTOR FOR BOATS. CHARLES FRANCIS BACON, Brookline, Mass. Filed May 10, 1917. Serial No. 167,687. (Cl. 114—240.)
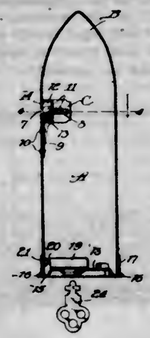


1. A torpedo protector comprising a series of floats, a protecting element, means projecting outwardly from opposite sides of the vessel, and a flexible connection extending from one float through the vessel to the other float on the opposite side of the vessel.

4. A torpedo protector for vessels, a protecting net, a series of floats for carrying the net in the water and arranged on opposite sides of the vessel, a cable connecting the floats and extending across the vessel, and means for permitting the floats to rise and fall on the lateral wave action for taking up the slack of the cable under such conditions.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,271,416. SAVINGS-BANK. AIMIE M. BAKER, Chicago, Ill. Filed Jan. 18, 1918. Serial No. 212,499. (Cl. 232—4.)

1. A coin receptacle of thin metal simulating an explosive shell, the wall of the shell having a coin slot, disposed in a plane at right angles to the longitudinal axis of the shell, means for guarding the slot comprising a plurality of freely movable balls supported behind the slot, and observable therethrough, a rod on which the balls normally rest by gravity, said rod being supported normally in a position behind the lower wall of the slot, and means for supporting the rod and balls, preventing



lateral movement of the balls and rod, but permitting limited vertical movement.

[Claim 2 not printed in the Gazette.]

1,271,417. SAVINGS-BANK. WALTER J. BAKER, Chicago, Ill. Filed Jan. 18, 1918. Serial No. 212,507. (Cl. 232—4.)



1. A coin receptacle having a base and a coin slot in its wall in a plane parallel to the base, a plurality of flexible pendants each attached to the wall above the slot and depending across the slot, and a plurality of flexible guard pendants each attached at its upper end to the wall just below the slot, and alternating with the first named pendants, the pendants being disconnected from each other and normally lying against the inner face of the wall.

3. A coin receptacle comprising a relatively thin shell having a base, and a coin slot in its wall parallel to the base, a bracket in the form of a plate attached to and fitting against the wall and having a registering slot, wider than the coin slot, the upper wall of the slot in the bracket being inwardly deflected, a series of guard chains having their uppermost links passed through perforations in the deflected portions of the bracket and normally depending across the slot therein, and guard chains alternating with the first named chains, having their uppermost links attached to the bracket just below the slot therein.

[Claim 2 not printed in the Gazette.]

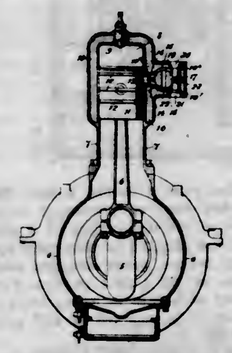
1,271,418. SKIN-STRETCHER. TOMIE F. BARNES, Hugo, Okla. Filed Nov. 22, 1917. Serial No. 203,427. (Cl. 149—21.)

4. In a device of the character described including a center bar, a pair of stretcher bars one at each side thereof, means for adjustably connecting the stretcher bars and the center bar for movement toward and away therefrom, said center bar having a pair of longitudinally extending slots, bolts passing through said slots, clamping bars having apertures to receive the bolts, and thumb screws applied to the bolts to clamp the blocks to the bar.

[Claims 1 to 3 and 5 not printed in the Gazette.]



1,271,419. INTERNAL-COMBUSTION ENGINE. LOUIS J. BERGDOLL, Philadelphia, Pa. Filed Dec. 2, 1912. Serial No. 734,530. (Cl. 123—59.)



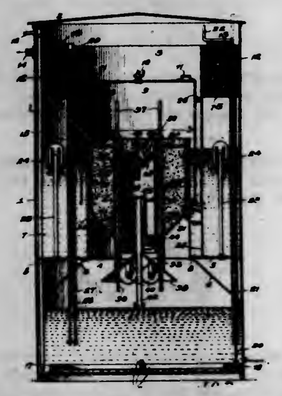
1. In an internal-combustion engine, the combination of reciprocable pistons, a series of cylinders within which said pistons operate and in the side wall of each of which is a single port for admission and exhaust of fluids, an extension disposed along the side of said series of cylinders and into which lead said engine-ports and said extension having a single elongated admission-port and a single elongated exhaust-port extending approximately from end to end thereof, and in said extension a rotary distributer-shaft having therein for each cylinder a single passage capable of simultaneous registry with the port thereof and either the admission or exhaust port.

2. In an internal-combustion engine, the combination of reciprocable pistons, a series of cylinders within which said pistons operate and in the side wall of each of which is a single port for admission and exhaust of fluids, an extension disposed along the side of said series of cylinders and into which lead said cylinder-ports, and said extension having oppositely-disposed elongated admission and exhaust ports separated by an abutment and extending approximately from end to end thereof, and in said extension a rotary distributer-shaft having therein for each cylinder a single passage capable of simultaneous registry with the port thereof and either the admission or exhaust port.

3. In an internal-combustion engine, the combination of reciprocable pistons, a series of cylinders within which

said pistons operate and in the side wall of each of which is a single port for admission and exhaust of fluids, a cooling-jacket for said series of cylinders, integral and lateral extensions of the walls of the cylinders and cooling-jacket forming a distributer-shaft casing extending longitudinally of the series of cylinders and having said cylinder-ports opening thereto, said casing having oppositely-disposed elongated admission and exhaust ports separated by an abutment and extending approximately from end to end thereof, and in said casing a rotary distributer-shaft having therein for each cylinder a single passage capable of simultaneous registry with the port thereof and either the admission or exhaust port.

1,271,420. CARBID-FEED FOR ACETYLENE-GENERATORS. JAMES O. BEWAN, Onley, Va. Filed Nov. 17, 1917. Serial No. 202,493. (Cl. 48—53.1.)



1. The combination with a carbid hopper having an inner cylinder stopping short of the hopper bottom, said hopper having a central bottom opening, of a valve working in said cylinder and adapted to close said opening, a bell working over the hopper, gears arranged beneath the hopper, a valve stem having a rack portion working between said gears, and rack bars in engagement with the gears, and in position to be engaged by and actuated by the descent of the bell.

3. In a carbid feed, a main hopper, a vertically movable valve controlling discharge of carbid therefrom, a rack valve stem, gears engaging said stem, rack bars in mesh with said gears and adapted to be engaged by a descending bell, a supplemental hopper, and a valve controlling discharge of carbid from the supplemental hopper, said valve being actuated by rise of the first mentioned valve beyond a predetermined height.

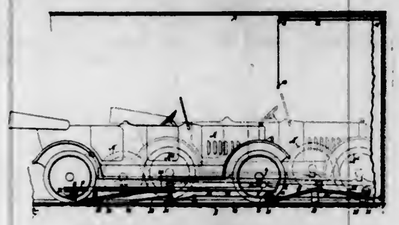
[Claims 2 and 4 not printed in the Gazette.]

1,271,421. AUTOMOBILE-REST. JOHN A. BEIERSCHMITT, Fairbank, Iowa. Filed Aug. 25, 1917. Serial No. 188,252. (Cl. 254—88.)

1. In a device of the class described, a platform front and rear tracks on which said platform is adapted to travel, the rear tracks being rockably mounted, movable means to sustain the rear tracks in raised position and operable to permit said tracks to lower, and means on the platform adapted to be engaged by an automobile to move the same forward or back on the tracks.

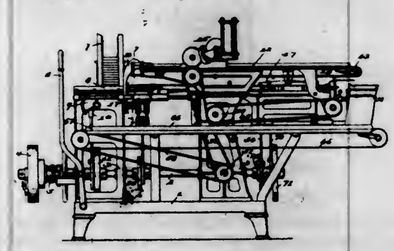
2. In a device of the class described, a platform, fixed front and rear tracks on which said platform is adapted to travel, the rear tracks being mounted for vertical rocking movement, toggle links supporting the forward ends of said tracks, manually controlled means to cause said toggle links to break joint for permitting the said rear tracks to lower, and spring means tending to return the toggle links to their normal position.

3. A device of the class described, including a platform having notches in the upper side thereof adapted to receive the front axle of an automobile, there being lugs at the front and rear of said notches, the front lugs being the higher, front and rear tracks on which the said platform may travel, and means whereby the front ends of the rear tracks may be lowered.



4. In a device of the class described, fixed front tracks presenting oppositely disposed inclines, stops at the ends of the tracks, rear tracks mounted for vertical rocking movement, stops on the rear ends of the rear tracks, means to rock the rear tracks to raise or lower the front ends thereof, and a platform mounted to travel on the said tracks and provided with means adapted to be engaged by an automobile in traveling forwardly or backwardly over the said tracks.

1,271,422. PAPER-RECEPTACLE-MAKING MACHINE. EDWARD L. BRACY, Baltimore, Md., assignor to Richard H. Wright, Durham, N. C. Filed Jan. 3, 1917. Serial No. 140,398. (Cl. 93—2.)



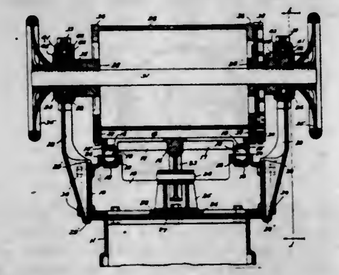
1. In a machine for making paper receptacles, folding means embodying a channel along which an object having a sheet doubled over an end thereof is movable, a pair of folding blades movable past opposite sides of the channel and operative upon a pair of the side flaps of the sheet to fold such flaps against the adjacent sides of said object, and means operative concurrently with said blades to crease the sheet at the junctions of the folded side flaps and the doubled ends of the sheet.

8. In a machine for making paper receptacles, the combination of a runway along which an object having a sheet doubled over its forward end is adapted to advance, said runway having at one side a wall to engage one side of the sheet and provided with flanges to cooperate with the longitudinal edges of said side of the sheet and thus position the sheet on the object, and the runway having at its opposite side a wall of a width corresponding substantially to that of the object and exposing the pair of side flaps at the respective side of the object, and a pair of blades movable past the latter wall of the runway and operative upon said exposed pair of side flaps to fold the same against the adjacent sides of the object.

10. In a machine for making paper receptacles, the combination of a runway along which an object having a sheet doubled over its forward end is adapted to be advanced, the sheet initially presenting two pairs of laterally projecting side flaps and a pair of laterally projecting end flaps, means for folding one pair of side flaps against the adjacent sides of the object and for concurrently creasing the sheet at the junctions of the side flaps thus folded and the unfolded end flaps, means for subsequently folding the end flaps against the previously folded side flaps, and folders at opposite sides of the runway to finally fold the remaining pair of side flaps against the previously folded side and end flaps during advance of the object along the runway.

[Claims 2 to 7 and 9 not printed in the Gazette.]

1,271,423. ROLLER-BEARING FOR PRINTING-PRESSES. ABRAHAM T. H. BROWER, Chicago, Ill. Original application filed Nov. 23, 1912. Serial No. 733,165. Divided and this application filed Jan. 22, 1917. Serial No. 143,575. (Cl. 101—282.)



1. The combination with a frame, of a reciprocating bed thereon, and sets of bearing balls interposed between said frame and bed, said parts having guide grooves forming race-ways for said sets of balls, and said grooves having cylindrical central portions of the same radius as said balls and flaring side portions tangent to said cylindrical portions and to said balls.

4. The combination with a frame, of a reciprocating bed thereon, said frame and said bed having opposed guides at their opposite side edges provided with grooves in their upper and lower faces respectively, two sets of bearing balls arranged in said grooves, spacing bars for said balls slidably mounted on said bed guides, cylinder brackets fixed to said frame and a cylinder journaled in said brackets and engaging said bed, said grooves having cylindrical central portions and flaring side walls and cooperating with said balls to center said bed and hold the same against lateral movement.

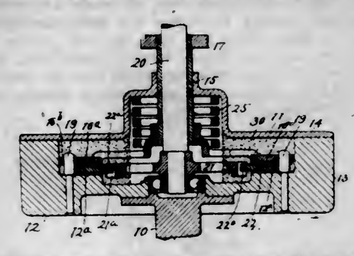
7. The combination with a frame, of a horizontally reciprocating bed thereon, said frame and said bed having opposed guides at their opposite side edges provided with grooves in their upper and lower faces respectively, two sets of bearing balls arranged in said grooves, spacing bars for said balls slidably mounted on said bed guides, cylinder brackets fixed to said frame, and a cylinder journaled in said brackets above said bed, said bed having bearing guide flanges at its side edges provided with flat horizontal working faces at their upper edges and said cylinder having cylindrical guide flanges engaging the guide flanges of said bed and coöperating with said bearing balls to center the bed and hold the same against lateral movement, substantially as described.

[Claims 2, 3, 5, and 6 not printed in the Gazette.]

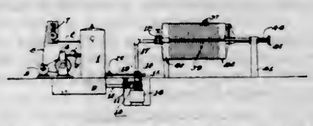
1,271,424. FRICTION-CLUTCH. ALANSON P. BRUSH, Detroit, Mich. Filed Aug. 6, 1917. Serial No. 184,578. (Cl. 192—1.)

1. The combination of a rotatable driving member, an alined rotatable driven member, friction surfaces carried respectively by said members, means to move said friction surfaces toward and from each other, a dust tight casing around said friction surfaces, and a quantity of loose powdered dry lubricating powder within said casing.

2. The combination of a driving shaft, an alined driven shaft, a casing fixed to the driving shaft and into which the driven shaft projects, friction surfaces operatively connected with said driving and driven shafts and located within said casing, means to cause the engagement and disengagement of said friction surfaces, and a quantity of loose powdered dry graphite within said casing.



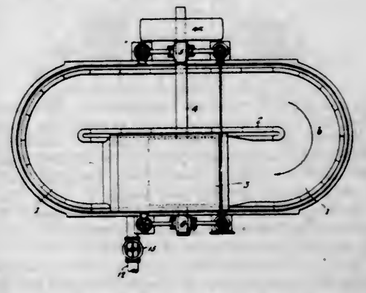
1,271,425. APPARATUS FOR PRESSING ACTIVATED SLUDGE. WILLIAM BUCKLEY, Chicago, Ill. Filed July 20, 1916. Serial No. 110,298. (Cl. 210—13.)



1. In an apparatus of the class described, a container for sludge liquid, automatically operating mechanism including means adapted to receive a charge thereof from said container and to close communication with said container thereafter, and a sludge press, said mechanism operating to force the received charge of sludge liquid into said press for the recovery of the sludge therefrom, the frequency of said operation being depenedent upon the rate of filtration of the sludge liquid through the sludge press.

[Claims 2 to 4 not printed in the Gazette.]

1,271,426. BEATING-ENGINE. BROWNELL BUEHLER, Philadelphia, Pa. Filed Jan. 22, 1918. Serial No. 213,222. (Cl. 92—23.)



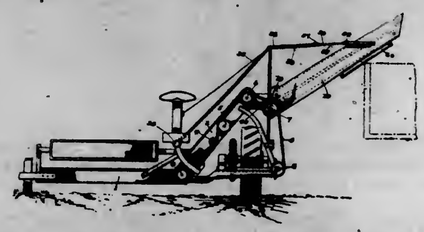
1. The combination in a beating engine of a tank; a circulating roll; a backfall mounted in the tank adjacent said roll and having perforations therein of a size to permit passage of pulp; and means for withdrawing from the tank the pulp passing through the perforations of said backfall.

[Claim 2 not printed in the Gazette.]

1,271,427. HEADER ATTACHMENT FOR BINDERS. JOHN M. BURKE, Alma, Mont. Filed Jan. 16, 1918. Serial No. 212,076. (Cl. 193—14.)

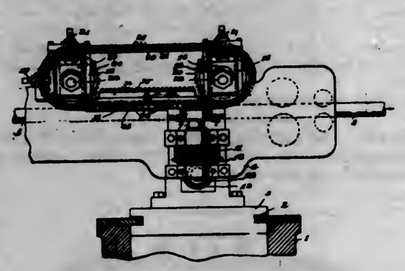
In combination with the frame of a binder having a horizontal cross piece, a yoke with angled ends fastened to said cross piece, bearing blocks upon the upright portions of the yoke, a shaft journaled in said bearings, a roller fixed to the shaft intermediate the upright portions

of the yoke, and spaced apart a slight distance from the same and said bearings, a conveyer frame having opposite side pieces, the lower ends of which are provided with notches adapted to engage the shaft intermediate the ends of said rollers and said bearings, shafts journaled in the conveyer frame near its upper end, and a shaft journaled in the conveyer frame near its lower end and above said notches, endless conveyers passing about



one of said shafts near the upper end of the frame and about said roller, and detachable means for fastening the ends of the conveyer together, and a second conveyer passing over the other rollers, one at the upper and one at the lower end of the conveyer frame, geared mechanism for driving the conveyer, and means for raising and lowering the conveyer frame.

1,271,428. PROCESS OF ELECTRICAL WELDING AND APPARATUS USED IN CONNECTION THEREWITH. JOHN BURNS, Kenosha, Wis. Filed Oct. 30, 1916. Serial No. 128,429. (Cl. 219—6.)



1. In an electric welding appliance of the character described, the combination of means to move the article to be welded, an electric terminal adapted to contact with said article adjacent to the joint to be welded, means to send an electric current through said terminal and said article or a portion thereof, and means to cause said terminal to temporarily travel with and at the speed of said article while in contact therewith to secure a sustained heating thereof, substantially as described.

10. In an electrical welding appliance of the character described, the combination of means to move the article to be welded in the direction of the length of the joint to be closed, an endless carrier, a plurality of electrical terminals mounted on said carrier, insulated from one another, and adapted to contact with said article adjacent to such joint, means to bring said terminals successively into contact with said article and successively out of contact with said article, means to cause said carrier and terminals to travel temporarily with and at the speed of said article while in contact therewith to secure a prolonged heating of the parts of the article to be welded, and means to send an electric current through each terminal and said article or portion thereof for a period ending before such contact is broken, substantially as described.

19. The process of electric welding consisting in feeding the article to be welded, simultaneously applying thereto a plurality of local electric currents, and causing said currents to travel with said article temporarily, whereby to secure a prolonged heating thereof, substantially as described.

23. The process of electric welding consisting in heating the article to be welded, simultaneously applying thereto a plurality of adjacent local heating electric currents, sustaining the heat at said several local areas during a predetermined travel of the article, and controlling the application and cessation of said heating electric currents by the travel of the article, substantially as described.

[Claims 2 to 9, 11 to 18, and 20 to 22 not printed in the Gazette.]

1,271,429. FISHING-REEL. JAMES H. BURT, Kokomo, Ind., assignor of one-half to Charles H. Leer, Kokomo, Ind. Filed Sept. 26, 1917. Serial No. 193,301. (Cl. 242—84.6.)



A fishing reel of the character described including an open casing formed with a slot, a shaft journaled in the casing, a drum on the shaft, a ratchet wheel on the shaft, a pawl pivotally mounted in the casing, a leaf spring connected to the casing to assure of the yielding retention of the pawl in engagement with any one of the teeth of the ratchet wheel, a trip positioned in the slot and near the inner end of the pawl and embodying a body reduced to form a shoulder and a knob on the reduced outer end of the body and positioned exteriorly of the casing and another leaf spring secured at its inner end to the casing and normally arranged against the inner surface of the casing and having its outer end bifurcated and pivotally secured to the body of the trip for yieldingly holding the latter partially exteriorly of the casing but adapted to be moved when the knob is depressed and manipulated to position the shoulder against the inner surface of the casing and force the body of the trip against the inner end of the pawl whereby to move and hold the pawl out of engagement with the ratchet wheel.

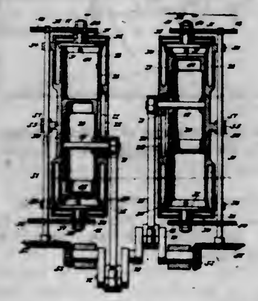
1,271,430. FOUNTAIN-PEN CAP. ALFRED W. BUSH, Coronado, Cal. Filed Mar. 8, 1918. Serial No. 221,255. (Cl. 120—42.)



1. In a fountain pen, the combination with a pen barrel, a sectional ink conveyer detachably connected therewith, and means embracing the sections at their juncture for permitting a quantity of the ink to be dispensed from the conveyer without disconnecting the latter from said barrel.

[Claims 2 to 7 not printed in the Gazette.]

1,271,431. GAS-ENGINE. PETER CALABRO, Arlington, N. J. Filed Apr. 24, 1917. Serial No. 164,229. (Cl. 123—57.)



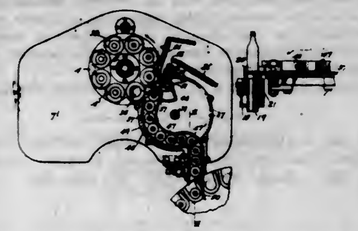
1. In an engine, a crank shaft, a plurality of cylinders outwardly flared at their ends, a plunger for each cylinder, said plungers being connected with the shaft at an angle of 180 degrees with reference to each other, said cylinders each including a pluralitly of cylinder heads provided with an inlet port and an exhaust port, a valve comprising a rotatable disk member substantially coextensive with the end of the bore of the cylinder, and having a port therein, a stem for said valve, said stem passing through the cylinder head along a line coincident with the main axis of the cylinder, a gear wheel carried by said stem, a second valve similarly mounted at the opposite end of the cylinder, a gear wheel for driving said valve, and means for driving both of the gear wheels in timed relation to the crank shaft, the edge of the rotary valve being beveled for coöperation with the flared portion of the cylinder.

2. In an engine, a crank shaft, a cylinder the walls of which include chambers forming a water jacket, a plunger therein, a pin extending transversely through the plunger, a pitman connected with said pin and with the crank shaft, a cross head carried by the pin, the walls of the cylinder being provided with channels in alinement with the aforesaid chambers of the water jacket for the accommodation of the cross heads operating in alinement with said chambers and with an elongated opening permitting the movement of the pin through said wall during the reciprocation of the plunger, the plunger closing the elongated opening.

3. In an engine, a crank shaft, a cylinder connected therewith and provided with heads, each having an inlet and an outlet port, the ends of the cylinder being flared, a rotary valve at each end of the cylinder and provided with a port adapted to register successively with the ports first named, means for firing a charge, means for rotating the valves from the crank shaft, said valves being substantially co-extensive with the ends of the bores of the cylinders, and having beveled edges coöperating with the flared ends of the cylinders.

1,271,432. PACKAGING APPARATUS. ALBERT A. CARPER, Baltimore, Md., assignor to The Crown Cork and Seal Company of Baltimore City, Baltimore, Md., a Corporation of Maryland. Filed Dec. 31, 1913. Serial No. 809,616. (Cl. 113—2.)

1. The combination, with a rotary capping mechanism having a cam surface provided with a high and a low portion for each capping head, an oscillating discharge arm arranged to be actuated from said cam surface of the capping mechanism, a conveyer arranged to transport the bottles toward the said capping mechanism, and means for holding the discharge arm out of operation, said means having a member arranged to be actuated by the contact of a bottle therewith and thereby to release the discharge arm.

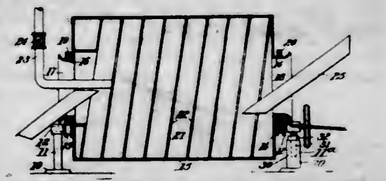


3. The combination, with a closure applying mechanism, of a carrier arranged to carry bottles to the capping mechanism, a discharge device arranged to discharge bottles from the carrier into the capping mechanism, means located in the path of the bottles and arranged to hold said discharge mechanism out of action, and means operated by the capping mechanism for actuating said discharge mechanism.

7. The combination, with a capping mechanism, of a conveyer arranged to transport bottles toward the capping mechanism, a trip lever located at the forward end of the conveyer, an oscillating discharge mechanism arranged to be actuated in timed relation with the capping mechanism, a latch device arranged to lock the discharge mechanism, and means intermediate the trip lever and the latch device whereby the discharge mechanism is unlocked upon the arrival of a bottle in contact with the trip lever.

[Claims 2 and 4 to 6 not printed in the Gazette.]

1,271,433. WASHING-MACHINE. ELMER F. CASSEL, New York, N. Y. Filed Feb. 28, 1914. Serial No. 821,695. (Cl. 259—8.)



1. An apparatus for separating material comprising a rotatably mounted helical channel, means for automatically imparting alternate opposite rotations to said channel, with periods of rotation in one direction of longer duration than the periods of rotation in the other direction.

2. An apparatus for separating material comprising a rotatably mounted helical channel, means for automatically imparting alternate opposition rotations to said channel, with periods of rotation in one direction of longer duration than the periods of rotation in the other direction, the bottom portions of said channel being in the same plane.

3. An apparatus for separating material comprising a rotatably mounted helical channel, means for automatically imparting alternate opposite rotations to said channel, with periods of rotation in one direction of longer duration than the periods of rotation in the other direction, and means whereby the relative periods of rotation may be varied.

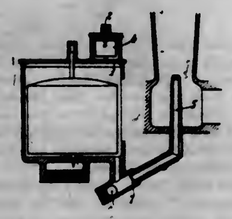
4. An apparatus for separating material comprising a rotatably mounted helical channel, means for automatically imparting alternate opposite rotations to said channel, with pediods of rotation in one direction of longer duration than the periods of rotation in the other direction,

the bottom portions of said channel being in the same plane, and means whereby the relative periods of rotation may be varied.

8. An apparatus for separating materials comprising a horizontally disposed rotatably supported cylinder open at each end and provided with an internal helical channel, and means for automatically imparting alternate opposite rotations to the said channel, with periods of rotation in one direction of longer duration than the periods of rotation in the other direction.

[Claims 5 to 7 and 9 to 12 not printed in the Gazette.]

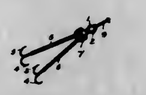
1,271,434. CARBURETER FOR LIQUID FUEL. CHARLES HENRI CLAUDEL, Levallois-Perret, France. Filed Nov. 14, 1917. Serial No. 202,020. (Cl. 158—36.)



1. In the constant level apparatus of a carbureter, the combination of: a level constant chamber, an air communication provided at the top of this chamber, means obstructing automatically this air communication when the carbureter leaves its normal position or when the constant level apparatus does not work, a feed conduit of the nozzles provided at the bottom of the level constant chamber, and means obstructing automatically this feed conduit when the carbureter leaves its normal position, substantially as described and for the purpose set forth.

[Claims 2 to 4 not printed in the Gazette.]

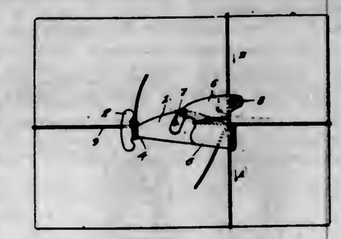
1,271,435. CLOTHES-HOOK. LOUIS PHILIPPE CLOUTIER, Montreal, Quebec, Canada. Filed July 28, 1917. Serial No. 183,329. (Cl. 57—9.)



A device of the character specified, comprising a pair of similar V-shaped spring members arranged flatwise directly against each other with the shanks of each member in contact with those of the other member, the free ends of each pair of contacting shanks being formed with oppositely-projecting hooks, a retaining member individual to each of said pairs of contacting shanks fitted over the same in relatively fixed position to constantly hold them in contacting relation, and a member slidable over both of said retaining members to control the movements of said pairs of contacting shanks toward and from each other.

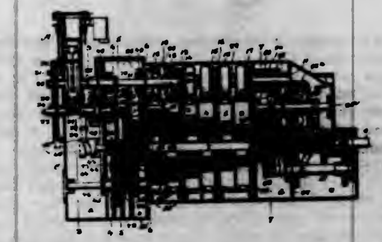
1,271,436. PACKAGE-TIE. EDWIN F. COBB, Denver, Colo., assignor of forty-five one-hundredths to Walter East, trustee, Denver, Colo. Filed July 13, 1914. Serial No. 850,729. (Cl. 24—18.)

A package tie comprising an elongated body plate having one end thereof bent back upon itself to provide a hook portion overlying the plate, the opposite end of the plate being provided with a T-shaped head, said hook engaging portion having an enlarged lateral extension extending beyond one of the longitudinal side edges of the plate, a retaining tongue formed on the forward end of said extension and extending toward the opposite longitudinal edge of the body plate and lying parallel with the hook portion, and a second retaining tongue formed on the



rear edge of the extension and extending rearwardly therefrom, as and for the purpose specified.

1,271,437. MULTIPHASE SPRING-MOTOR. BRADFORD COLBERT, Pine Bluff, Ark. Filed Sept. 24, 1915, Serial No. 52,501. Renewed Apr. 18, 1918. Serial No. 229,419. (Cl. 185—11.)



1. In a multi-phase spring motor, the combination of a main power delivering shaft, a series of convolute energy-storing springs encircling said shaft arranged to transmit their stored energy to said shaft, and all positively connected at their inner extremities to the latter, a spring winding shaft, a series of clutch members normally loose on the winding shaft and each adapted when thrown into operation to wind its respective spring, complemental clutch members keyed to said winding shaft and slidable into and out of engagement with the respective clutch members, and means for shifting said slidable clutch members in succession.

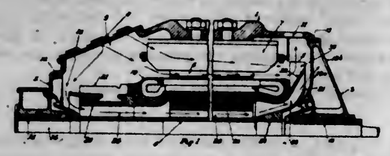
4. In a multi-phase spring motor, the combination of a main power delivering shaft, a series of convolute energy-storing springs arranged to transmit their stored energy to said shaft, spring winding drums to which the outer extremities of said springs are attached, a spring winding shaft, normally loose pinions on said winding shaft, clutches for throwing said pinions into and out of engagement with said winding shaft, a cam shaft parallel to the winding shaft, and rocker arms actuated in succession by said cam shaft to shift said clutches.

6. In a multi-phase spring motor, the combination of a main shaft, a series of energy-storing springs encircling said shaft arranged to transmit their stored energy to said shaft and all positively connected at their inner extremities to the latter, a spring winding shaft, gears connecting said winding shaft with the other extremities of the spring, and means operating automatically whereby said main shaft expends a portions of its energy on said winding shaft in winding one spring only at a time, said means operating to cause all of the springs to be wound successively.

9. In a multi-phase spring motor, the combination of a main shaft, a series of energy-storing springs arranged to transmit their stored energy to said shaft, a spring winding shaft, means operating automatically whereby said winding shaft expends a portion of its energy in winding one spring only at a time, an auxiliary spring winding motor, and means whereby said auxiliary motor is automatically thrown out of operative relation to the spring winding shaft when the energy of the spring motor has reached a predetermined maximum.

[Claims 2, 3, 5, 7, and 8 not printed in the Gazette.]

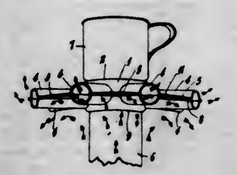
1,271,438. DYNAMO-ELECTRIC MACHINE. CHARLES S. COOK, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 25, 1914. Serial No. 873,903. (Cl. 172—286.)



1. A dynamo-electric machine comprising a stationary field-magnet frame having inlet and outlet openings, a rotatable armature having longitudinal ventilating ducts, an end member having openings therein to register with said ventilating ducts and having intermediate radially disposed fan blades projecting beyond the periphery of said armature, and an annular inclined deflecting partition for dividing said blades into concentric sets for respectively effecting a circulation of air in independent paths through said dynamo-electric machine, one of said independent paths consisting of said air ducts, openings in said end member, over one set of said fan blades and through openings in said frame, said other path consisting of the air gap, over the other set of fan blades and through another opening in said frame.

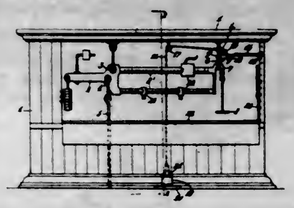
2. In a box-type inclosed railway motor, the combination with a frame having inlet and outlet openings respectively provided in the opposite ends thereof, bearing housings associated with the ends of said frame and one of said housings having outlet openings therein, and a rotatable armature supported by said housings and having longitudinal ventilating ducts, of concentrically related sets of fan blades associated with the end of the armature adjacent to said outlet openings, the inner set of blades being adapted to draw air from said inlet opening through said ducts and discharge it through the housing outlet openings, and the outer set of blades being adapted to draw air from said inlet opening through the air gap and discharge it through said frame outlet openings.

1,271,439. LAMP-HEATER. POWEL CROSLEY, Jr., Cincinnati, Ohio. Filed Aug. 26, 1916. Serial No. 117,045. (Cl. 126—256.)



As a new and improved article of manufacture, a lamp heater comprising two substantially circular plates of metal, each formed with a cupped center and channels radiating from the center, with continuous substantially plane parts between the channels and extending from the outside of the cupped center entirely out to the ends of the channels, said plates being substantially identical except that one of them has an opening in its cupped center, and said plates being inversely assembled concentric to each other, whereby the cupped centers form a distinct central receiving and distributing chamber, and with the channels of each plate meeting the channels of the other plate, and said plane parts of the respective plates being secured against each other, whereby distinct substantially tubular passages are formed, radiating from said receiving and distributing chamber.

1,271,440. PLATFORM-SCALE. ABELARDO DE AGUIAR, Habana, Cuba. Filed Jan. 15, 1918. Serial No. 211,980. (Cl. 265—71.)

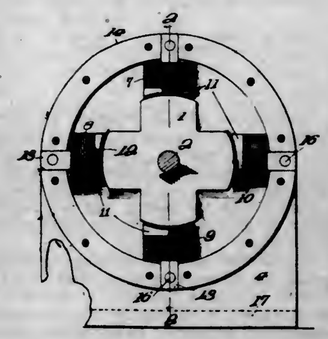


1. In a platform scale the combination of a graduated scale-beam, a pivoted stop piece therefor, a platform scale frame, a spring connecting the pivoted stop piece of the graduated scale-beam to a fixed portion of the platform scale frame, a treadle, and means connecting said stop piece to said treadle for raising said stop piece against the elastic action of the spring and vice versa.

2. In a platform scale, the combination of a counter-weight, a rotating shaft, a locking stop piece, a graduated scale-beam to which said lock piece is applied, a scale frame, the counter-weight being mounted upon the rotating shaft of the locking stop piece of the graduated scale-beam opposite the stop piece in a substantial manner, a spring connecting said counter-weight to a fixed portion of the scale frame, a treadle, and means connecting said counter-weight to said treadle for raising said stop piece against the elastic action of the spring and vice-versa.

3. In a platform scale, the combination of a steel beam provided with a locking stop-piece, a rotating shaft, a counter-weight mounted thereon opposite the stop-piece, a spring connecting said counter-weight to a fixed portion of the same scale frame, a treadle on the floor of the scale, and means connecting said treadle to said counter-weight and passing around suspending means from the top of the scale frame.

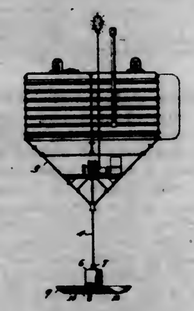
1,271,441. MAGNETO. WILLIAM WARREN DEAN, Stamford, Conn., assignor to Splitdorf Electrical Company, Newark, N. J., a Corporation of New Jersey. Filed Aug. 22, 1916. Serial No. 116,360. (Cl. 171—252.)



A magneto comprising supporting non-magnetic side plates, a shaft carried by said plates, an integral rotating

magnet mounted on said shaft and having a plurality of poles, collars on the shaft between the magnet and the side plates respectively for centering the magnet between the side plates, a plurality of current generating coils disposed outside of the path of travel of the magnet and between the side plates, a laminated core for each coil, said cores being disposed radially of the axis of the rotor and equal in number to the poles of the magnet, the inner ends of said cores being extended to form pole pieces adapted to receive flux from the poles of the magnet, the outer ends of said cores being clamped between the side plates and means for magnetically connecting said cores.

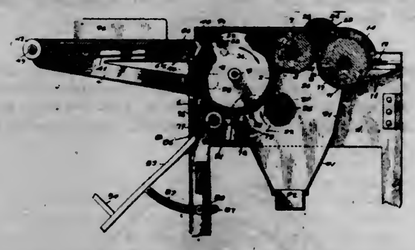
1,271,442. ANCHOR. PHILIPPO L. H. DEL FUNGO-GIERA, New York, N. Y. Filed Feb. 8, 1917, Serial No. 146,409. Renewed May 31, 1918. Serial No. 237,625. (Cl. 114—206.)



2. An anchor, comprising a central mushroom-shaped member, an annular cup-shaped member, a web member connecting said members, and means for securing a cable to said anchor.

[Claims 1 and 3 not printed in the Gazette.]

1,271,443. BRONZING-MACHINE. JOHN L. DEL NORE, San Francisco, Cal. Filed Sept. 5, 1917. Serial No. 189,892. (Cl. 91—50.)



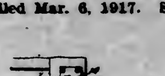
1. The combination with a bronzing machine of a platen; means for delivering a sized sheet to the platen to be bronzed; a bronze fountain; a feeding cylinder within the fountain; an impression cylinder geared with and in contact with the platen; and an adjustable distributing roller in contact with the feeding and impression cylinders to adjust the path of bronze to the width of the sized portion of the sheet.

2. The combination with a bronzing machine of a platen; means for delivering a sized sheet to the platen to be bronzed; a bronze fountain; a feeding cylinder within the fountain; an impression cylinder geared with and in contact with the platen; an adjustable distributing roller in contact with the feeding and impression cylinders to adjust the path of bronze from the feeding and impression cylinders to the width of the sized portion of the sheet; and means for removing excess bronze from the sheet.

7. The combination with a bronzing machine of a platen; means for delivering a sized sheet to the platen; a bronze fountain; a feeding cylinder within the fountain; an impression cylinder geared to the platen and adjustable radially thereto; an adjustable distributing cylinder in rolling contact with the impression and feeding cylinders to convey a path of bronze equal to the width of the sizing on the sheet; and a rotary brush to remove free bronze from the sheet; a suitable hopper to gather the removed bronze, and a drawer in the lower end of the hopper to collect the freed bronze; suitable grippers secured to the platen to secure the sized sheet to said platen when delivered thereto by the delivering means for operating the grippers gradually to secure the sheet; and means for operating the grippers to release the sheet from said platen.

[Claims 3 to 6 not printed in the Gazette.]

1,271,444. COUPLING-PIN FOR BELT-LACINGS. JAMES K. DIAMOND, Grand Rapids, Mich., assignor to Clipper Belt Lacer Company, Grand Rapids, Mich., a Corporation of Michigan. Filed May 10, 1916. Serial No. 96,657. (Cl. 91—68.)

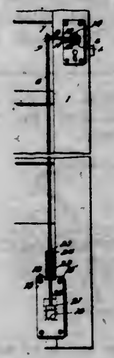


2. A coupling pin for belt lacings comprised of a plurality of fibrous strands twisted spirally of the pin and a glue-like binder carrying in suspension a lubricant permeating the entire body of the pin and filling the spaces between the strands, substantially as described.

3. A coupling pin for belt lacings comprised of a plurality of spirally twisted fibrous strands lying lengthwise of the body, a glue-like binder impregnating and stiffening said strands and located between the same and pulverized mica mixed throughout the binder and also on the surface of the pin.

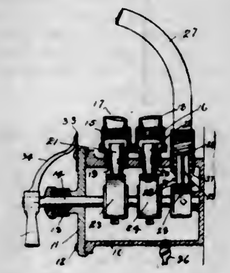
[Claim 1 not printed in the Gazette.]

1,271,445. DOOR-OPENER. WELSFORD H. DIGGS, Emporia, Kans. Filed Mar. 6, 1917. Serial No. 152,892. (Cl. 70—118.)



In a device of the kind described, in combination, a door formed at its lower end with a vertical opening, a latch carried by said door, a single plate formed at opposite ends with right angular lugs, fasteners securing said plate against said door so that its lugs may engage said door and said plate be spaced from the door opposite its opening, an outwardly-extending ear formed upon said plate upon its outer side, said ear having an opening, a vertical rod slidably projecting into said ear and being threaded at its lower end portion, said rod being operatively connected to said latch, a spring against which said rod operates as it moves down through said ear, a foot plate projecting slidably into said opening in the door, said spring surrounding said rod and resting upon said ear, the threaded end of said rod engaging said foot-plate so as to support the latter, and a guard plate secured upon the foot plate opposite the inner side of said first-named plate and slidably covering the first-named opening.

1,271,446. VALVE. TOM DOBSON, Pawtucket, R. I. Filed Dec. 11, 1916. Serial No. 136,228. (Cl. 277—18.)



1. A valve of the character described comprising a mixing chamber having tapered inlet ports and an outlet port, said inlet ports forming valve seats, elongated conical valves coöperating with said inlet ports, and having their smaller ends extending into said chamber, whereby the larger ends are exposed to the pressure of fluid flowing toward said chamber to hold the valves normally to their seats, said valves being guided solely by the tapered walls of the inlet ports, and a cam shaft within said chamber positioned to unseat said valve when the shaft is rotated in one direction.

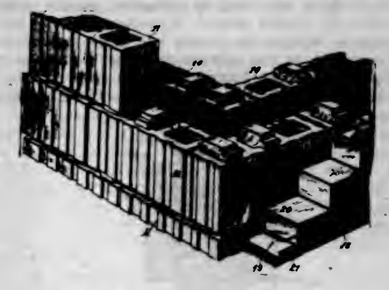
3. A valve of the character described comprising a mixing chamber provided with tapered inlet openings forming elongated conical valve seats, said chamber also having an outlet opening, elongated conical valves guided solely by said valve seats and having their smaller ends extending into said chamber, whereby said valves are normally held seated by pressure of inflowing fluid acting against their larger ends, a valve for the outlet opening, a spring acting to normally unseat said outlet valve, a cam shaft, and means carried by the cam shaft for opening or closing the outlet valve while both inlet valves are closed.

[Claim 2 not printed in the Gazette.]

1,271,447. WALL CONSTRUCTION. PETER DORAN, New Rochelle, N. Y. Filed Sept. 30, 1916. Serial No. 123,005. (Cl. 72—107.)

1. A wall comprising inner and outer wall members formed of hollow blocks laid in courses, spacing members interposed between the blocks of adjacent courses constituting said wall members, and tie members extending between said wall members and provided with end portions embracing the upper portions of the inner side walls of the blocks, the thickness of said tie members being less than the height of the projections of said spacing members, substantially as specified.

2. A wall comprising inner and outer wall members formed of hollow blocks laid in courses, spacing and alining members operatively associated with the blocks of adjacent courses constituting said wall members, each of said spacing and alining members comprising a body portion extending within the openings of the blocks of adjacent courses and laterally extending projections extending between the blocks of adjacent courses, said projections being of less height than said body portion, and tie members extending between said wall members and provided with end portions embracing the upper portions of the inner side walls of the blocks, the thickness of said tie



members being less than the height of the projections of said spacing and alining members, substantially as specified.

1,271,448. ARTIFICIAL-LIMB JOINT. DAVID W. DORRANCE, San Jose, Cal. Filed Nov. 11, 1916. Serial No. 130,739. (Cl. 3—12.)



1. A coupling of the character described comprising separable male and female members, said male member having a stud, a resilient gasket loose on the stud, means for supporting the gasket, and a locking member adjustable on the stud, said female member including a web for locking engagement with the locking-member and movable thereby into binding action therewith by the gasket.

2. A coupling of the character described comprising separable male and female members, said male member having a stud, a resilient gasket loose on the stud, means for supporting the gasket, a locking member adjustable on the stud, said female member including a web for locking engagement with the locking member and movable thereby into binding action therewith by the gasket, and means on the stud for limiting the movement of the locking member in one direction.

3. In a separable coupling, a male member, a female member, means for locking the members together and operated upon by said female member, and resilient means for binding the male and female members together when locked with each other.

8. In a separable coupling, a male member, a female member, means for locking the members together and operated upon by said female member, resilient means for binding the male and female members together when locked with each other, means for limiting the movement of the locking member when moved to releasing position, a support on the male member for the resilinet means, said locking means being in the form of a nut having wings, said female member having a web provided with notches for receiving the wings, means on the web to act upon the wings for moving the nut to locking or unlocking position and its wings into and out of registration with said notches, and means for attaching the female member to a part.

[Claims 4 to 7, 9, and 10 not printed in the Gazette.]

1,271,449. NUT-LOCK. GEORGE F. DRAKE, Oakland, Cal. Filed Oct. 18, 1916. Serial No. 126,417. (Cl. 151—19.)

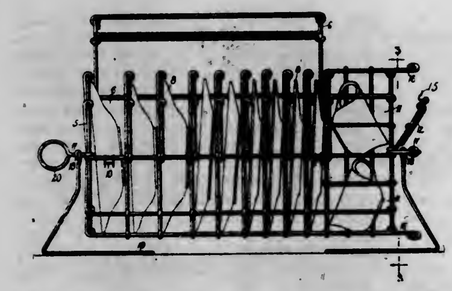
In a nut lock, a main nut having an extension, said extension having a smooth periphery with its outer end

beveled and being longitudinally slotted, the interior of said extension having threads forming extensions of the nut threads, and a wrench engaging lock nut having an annular beveled part and an elongated smooth annular guide part of slightly greater diameter than that of the extension to receive the latter, and slide thereon prior to engagement of the beveled parts of both nuts, said annular beveled part being located at substantially the longitudinal center of the lock nut so as to lie completely



within and at about the center of the body of the latter and in register with the points of greatest effectiveness of the wrench, and the outer extremity of the beveled end of the extension of the main nut being formed so as to leave clearance between same and the inner end of the annular beveled part of the lock nut and to also leave clearance between the inner face of the lock nut and the adjacent face of the main nut.

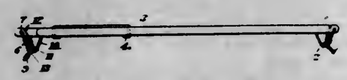
1,271,450. DISH-WASHER. MARIA DA SILVEIRA DUARTE, Brookline, Mass. Filed Sept. 11, 1917. Serial No. 190,818. (Cl. 141—9.)



2. In a dish washer, a cylindrical basket comprising a series of circular rings each braced in the plane of same, means connecting all of said rings and maintaining the same in spaced parallel relation whereby compartments of different widths are formed, said compartments being accessible from the periphery, and a cover adapted to engage the periphery of the rings for controlling access to the compartments formed by said rings.

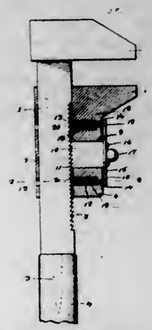
[Claim 1 not printed in the Gazette.]

1,271,451. HOLDER. JUD L. DUCKETT, Wichita Falls, Tex. Filed Nov. 16, 1917. Serial No. 202,381. (Cl. 281—42.)



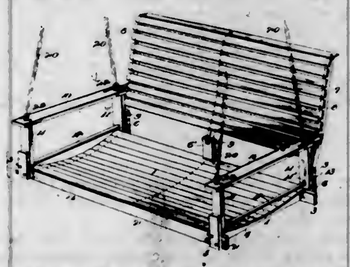
A book holder of the class described comprising a bar having a pair of members connected together for sliding movement to enable the bar to be adjusted longitudinally, pivoted clamps at the outer ends of the bar members, and springs coacting with said clamps to hold the latter in either engaged or disengaged position.

1,271,452. MONKEY-WRENCH. LEO R. DUNN, Farmer, S. D. Filed Mar. 8, 1918. Serial No. 221,258. (Cl. 81—145.)



In a wrench of the class described, in combination with a shank having ratchet teeth on one side and a fixed jaw at one end, a movable jaw having a block provided with a longitudinal opening through which the shank extends, so that said block and movable jaw are mounted for sliding movement on the shank, said block being also provided with an opening extending to one side thereof and a pair of bores spaced from said opening and each open at one end and closed at the opposite end, a dog fitted in said opening of the block and having teeth at its inner end to engage or disengage the ratchet teeth of the shank and arranged with its outer end at the outer side of said block, a bar arranged exteriorly of the block, secured to the outer end of the dog and provided with arms which extend into the bores and springs on said arms and in said bores, and each attached at one end to one of the arms, the opposite ends of the springs bearing against the closed ends of the bores and said springs exerting their tension to normally hold the dog engaged with the ratchet teeth of the shank.

1,271,453. SWING-CHAIR. EDGAR P. ELZEY, Parkersburg, W. Va., assignor to Edwin L. Davidson, Parkersburg, W. Va. Filed Oct. 2, 1917. Serial No. 194,340. (Cl. 155—35.)

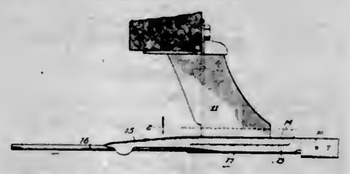


1. A swing chair comprising a seat, arms pivotally coupled thereto and provided with upwardly projecting means for the attachment of the chair supporting chains, a back pivotally coupled to said seat, and swingable latches between the back and seat, said latches being arranged adjacent to certain of said means and so arranged that the links for attaching supporting chains to said certain means will obstruct releasing swing of said latches.

2. A chair comprising a seat having pairs of front and rear upright posts, removable transverse rods fitted in said pairs of posts, respectively, foldable arms having depending members removably receiving and swingable on said rods, a back pivotally coupled to the rear posts, and latches between the back and arms.

[Claims 3 to 12 not printed in the Gazette.]

1,271,454. OVERHEAD TRACK. HOWARD J. FERRIS, Harvard, Ill., assignor to Hunt, Heim, Ferris & Company, Harvard, Ill., a Corporation of Illinois. Filed May 2, 1918. Serial No. 232,074. (Cl. 104—180.)

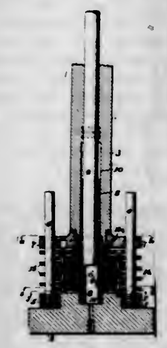


1. In combination, a flexible track and a rigid track lying in the same vertical plane, and an intermediate coupling member having a rib connecting the flexible and rigid tracks and having a recess beneath the rib, the end of the flexible track being recurved laterally beneath the rib in a horizontal plane and held in said recess.

4. In combination, a flexible track and a rigid track in the same vertical plane and a coupling member having a track-way connecting them, the free end of the flexible track being recurved to form a hook in a plane beneath said track-way, whereby a carrier running from the flexible track to the rigid track passes above the recurved hook end of the flexible track.

[Claims 2 and 3 not printed in the Gazette.]

1,271,455. MEANS FOR MAKING ELASTIC VESSELS. JAMES LOGAN FITTS, Pensauken township, Camden county, N. J., assignor to Warren Webster & Company, a Corporation of New Jersey. Filed Sept. 22, 1915. Serial No. 52,086. (Cl. 153—73.)



2. In apparatus for making expansible vessels, the combination of a bed and a platen between which a tube or shell is held and crushed axially, a plurality of annular formers spaced apart and arranged between the bed and platen and adapted to encircle the tube or shell when in position, means to positively space the formers apart and enable the said formers to move toward each other when the platen is moved toward the bed, means for supplying fluid into the tube or shell when between the bed and platen, and means for producing a relatively great expanding pressure within the tube or shell comprising a plunger or ram in the platen to put fluid within the tube or shell under pressure to expand the same.

5. In apparatus for making expansible vessels, the combination of means for holding a tube or shell and applying pressure thereto axially, means for forcing an expansible fluid against the interior walls of the tube or shell, a plurality of relatively thin annular formers arranged to surround the tube or shell and arranged between the means for applying the axial pressure to the tube, and spacing means between the annular formers for spacing them normally apart, consisting of bolts connecting adjacent plates to permit them to approach but limit their separation, and coil springs surrounding the bolts to normally force the plates apart to the limit permitted by said bolts.

7. In apparatus for making expansible vessels, the combination of means for temporarily holding a sheet metal tube or shell, a plurality of thin annular metal formers normally spaced apart to provide annular lines of external resistance about which the tube or shell is bent, means for applying an axial pressure upon the tube or shell to seal it and reduce its length, means for mechanically supporting the tube or shell on the inside against inward bending or crushing during the axial pressure upon the said tube or shell, and means for applying an internal pressure within the tube or shell to expand it between the annular formers to form a plurality of annular folds.

10. In apparatus for making expansible vessels, the combination of a bed having a socket for receiving an upright tube or shell to be treated, a lower annular frame adapted to the bed and provided with upright guides, an upper annular frame guided upon said guides, a platen for operating the upper annular frame and recessed to receive the upper end of the tube or shell, a plurality of annular formers guided upon the guides and each consisting of hinged portions capable of being separated to permit discharge of the finished vessel, a plunger working through the platen and into the space within the annular formers for providing a compression of fluid within the tube or shell to be treated, and spacing means for automatically spacing the formers apart when the platen is raised.

13. In apparatus for making expansible vessels, the combination of a bed having a recess for supporting a tube or shell to be operated on, vertical guides, an annular frame guided by the guides, a platen carried by the annular frame and having a socket for receiving the upper end of the tube or shell, a plurality of annular formers guided upon the guides and surrounding the tube or shell, means for spacing the formers at different predetermined distances above each other when the platen is raised, means for supplying a fluid into the space within the tube or shell, means independent of the platen for producing a quick pressure upon the fluid for causing a lateral pressure of the fluid upon the tube or shell intermediate of the formers, and a tubular frame extending through the space within the formers and from the platen to the bed for providing a support for the tube or shell to prevent it being crushed inwardly and constructed to permit flow of fluid from its interior to the outside of its walls under the action of the quick pressure producing means.

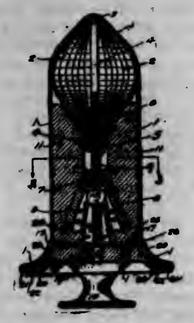
[Claims 1, 3, 4, 6, 8, 9, 11, and 12 not printed in the Gazette.]

1,271,456. RECTAL DILATOR. THEODORE J. FLACK, St. Louis, Mo. Filed Dec. 3, 1917. Serial No. 205,023. (Cl. 128—28.)

1. A rectal dilator of equal diameter and circumference in cross-section except at the point of entrance, the said body-portion being expansible and when so expanded forming a head-portion of a different diameter and circumference from the body-portion proper, said expansion of the head and body-portion proper being simultaneously effected by separately actuated means, the said means consisting of a rotatable stem having thereon relatively coarser and finer thread portions, nuts adapted to coöperate, respectively, with the said coarser and finer threads, head expansion-members, and body expansion-members.

3. In a device of the type described, the combination of a flexible sheath, sets of expansion members contained therein, one of said sets of expansion members being adapted to be distended to a larger circumference than the other, means for simultaneously dilating said expansion members, said dilating means including a threaded element, coacting members threaded thereon,

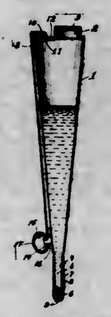
one of said sets of expansion members located between one of the said coacting members and said sheath, one of the said coacting members being a wedging member carried by said threaded element and engaging said last mentioned set of expansion members.



11. In a device of the character described, the combination of a sheath, a plurality of radial expansion-members within the sheath, each of the said expansion-members being provided with a peripheral groove and a projecting peripheral wing, and means for expanding the said expansion-members.

[Claims 2, 4 to 10, and 12 not printed in the Gazette.]

1,271,457. STYLOGRAPHIC LETTERING INSTRUMENT. ERASMUS DARWIN GAINES, Clinton, Iowa. Filed Sept. 18, 1917. Serial No. 191,254. (Cl. 120—43.)



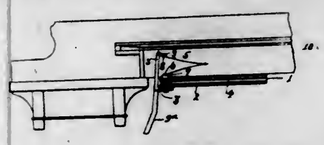
1. In a writing instrument the combination with a conical ink reservoir provided with a flexible writing tip, of an air inlet passage tube secured along the wall of the reservoir and opening at one end into the base end of said reservoir, the other end of said tube terminating at a point near the apex of said reservoir, said passage being provided near the base of the reservoir with a valve adapted to prevent ink from entering the passage.

[Claims 2 and 3 not printed in the Gazette.]

1,271,458. PUMPER-SPRING. ROBERT A. GALLY, Cincinnati, Ohio, assignor to The Baldwin Company, Cincinnati, Ohio. Filed Jan. 7, 1918. Serial No. 210,713. (Cl. 84—167.)

1. A player piano including a bellows pumper having a fixed board and a moving board, and an arm fixed to and extending from the said moving board toward and beyond said fixed board, and a spring connected from an outer part of said arm to a fixed part of the said player piano structure.

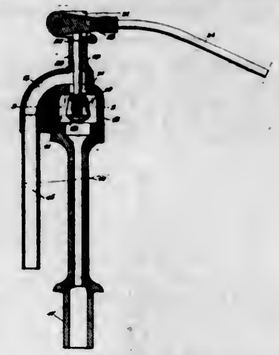
2. A bellows pumper having a fixed board and a moving board, and an arm fixed to and extending from the said moving board toward and beyond said fixed board, and a spring connected from an outer part of said arm to the said fixed board.



5. A player piano including a bellows pumper having a fixed board and a moving board, and an arm fixed to and extending from the said moving board toward and beyond said fixed board, and a spring connected from an outer part of said arm to a fixed part of the said player piano structure, and a piano case having braces, the said pumper attached to the piano structure, and the springs and the upper parts of said arm positioned on a level with said braces and inside the said case.

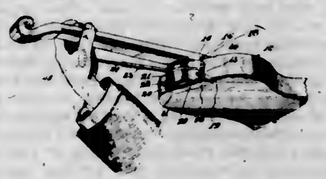
[Claims 3, 4, and 6 to 13 not printed in the Gazette.]

1,271,459. BALL-COCK. MERTON H. GREESON, Tampa, Fla. Filed Oct. 24, 1917. Serial No. 198,344. (Cl. 137—104.)



A ball cock including an automatically closing valve having a projecting pin, a casing in which the valve works, having upstanding apertured ears adjacent the free end of the said valve pin, a float controlled lever extending between the said ears and arranged to bear upon the free end of the valve pin, said lever and said ears having alined openings, and a pivot rod one end of which is extended through the said openings, said pivot rod being bent around a portion of the said ears to lock the same in position and prevent displacement of its first mentioned end.

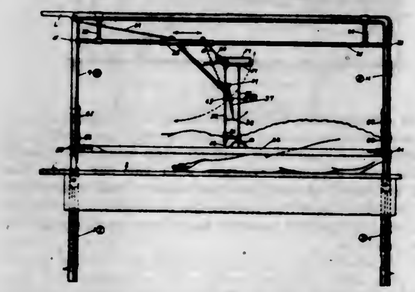
1,271,460. VIOLIN HAND-SUPPORT. RUBEN HANDEL, Columbus, Ohio. Filed Nov. 15, 1917. Serial No. 202,163. (Cl. 84—115.)



1. A hand brace for violins, comprising a clamp provided with means for attachment to the body of a violin, a yoke, means for detachably connecting the yoke to the clamp and an extensible hand brace carried by said yoke.

[Claims 2 and 3 not printed in the Gazette.]

1,271,461. VERTEGRAPH. HENRY O. HANNA, Oakland, Cal. Filed Mar. 20, 1917. Serial No. 156,202. (Cl. 33—23.)



1. An apparatus for producing graphs comprising a table, an adjustable frame supported thereby, a pivoted drawing board carried by said frame capable of being moved into two planes at right angles to each other, and a parallel motion apparatus carried by the frame for delineating upon the drawing board or paper thereon graphs corresponding to the shape in two planes of an object placed upon said table.

3. An apparatus for producing graphs comprising a table, an adjustable frame carried thereby, a pivoted drawing board capable of being moved into two planes at right angles to each other at the side of the frame, longitudinally extending rods carried by said frame and a parallel motion apparatus slidable on said rods and adapted to delineate upon the drawing board or paper thereon the shape of objects placed upon the table.

5. An apparatus for producing graphs comprising a table, a frame supported thereby, a drawing board pivotally mounted upon one side of the table and adapted to be moved into a horizontal or a vertical plane, a tracer movable in contact with the drawing board and suitable parallel motion apparatus for causing said tracer to delineate upon the drawing board or paper thereon the configuration of an object placed upon the table.

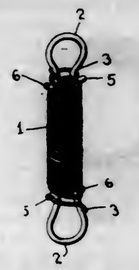
7. An apparatus for producing graphs comprising a table, a vertically adjustable frame carried thereby, a drawing board pivotally mounted on the frame to be moved to a vertical or a horizontal position, a tracing point movable along the drawing board, a laterally and longitudinally slidable parallel motion apparatus adapted to pass over objects on the table, and connections between the latter apparatus and the tracer whereby a graph of the object on the table may be produced on the drawing board.

8. An apparatus for producing graphs comprising a table, a frame adjustable with respect to the table, a drawing board movable into a horizontal or a vertical plane, a tracer movable along the drawing board, a parallel motion apparatus connected with the tracer and having a guide for causing the tracer to move parallel to the guide in one plane, and a spring to return the parallel motion apparatus to one end of the frame after having been moved to the other end thereof.

[Claims 2, 4, and 6 not printed in the Gazette.]

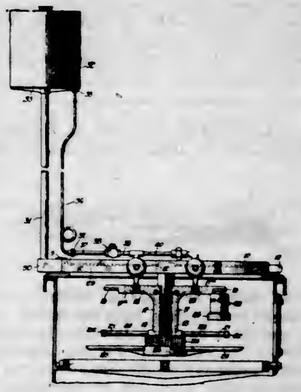
1,271,462. COMPRESSOR OR TERMINAL FOR COIL-SPRINGS. ALBERT A. HANSEN, Kenmare, N. D. Filed Apr. 6, 1917. Serial No. 160,279. (Cl. 81—15.)

A removable terminal for helical springs, which comprises a single strand of wire bent to form an open loop, the ends of which lie relatively close together, and the free ends of the strand having hooks formed thereon, and one of said free ends being extended beyond the other, said ends being adapted to engage with the convolutions



of the spring helix and being interposed therein by a rotative movement of the loop.

1,271,463. COMBUSTION DEVICE. JACQUES J. HARDIN, Oak Park, Ill., assignor to Emil F. Smrz, Chicago, Ill. Filed Sept. 17, 1917. Serial No. 191,720. (Cl. 158—8.)



1. A liquid fuel burner of the character described comprising in combination a plate-like support adapted to rest upon and cover the top of a stove about a stove lid opening thereof, and a burner device secured to said support and adapted to extend into the fire box of the stove when said support is resting on the top thereof and the stove lid is removed.

10. In an oil burner, the combination of a substantially U-shaped pipe structure having an upper and a lower leg substantially horizontally disposed and a middle leg substantially vertically disposed, the lower leg having an opening for a gas jet directed toward the upper leg, means for supplying fuel oil to the interior of said upper leg, means providing a pocket about said vertically disposed leg, asbestos or the like in said pocket, and trough means adapted to convey dripping of oil from said gas jets opening to said pocket.

15. In a device of the character described, the combination of a support for a burner, a liquid fuel burner carried by said support, a receptacle for liquid fuel hingedly mounted on said support by means which position the receptacle at an elevation above the burner, and pipe means including a flexible section between said receptacle and the burner, the arrangement being such that the receptacle may be lowered to occupy less space in the normally vertical direction.

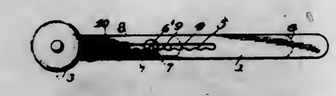
[Claims 2 to 9, 11 to 14, 16, and 17 not printed in the Gazette.]

1,271,464. FASTENER FOR ANTISKID-CHAINS. WILLIAM OLIVER HARMON, La Pryor, Tex. Filed Oct. 20, 1916. Serial No. 126,745. (Cl. 24—69.)



A device for fastening anti-skid chains upon tread surfaces of tires, comprising a plate convexed upon its under surface, and provided with two parallel flanges upon the longitudinal edges thereof, said plate having an elongated slot in the bottom thereof intermediate said flanges and one end apertured to which a chain is fastened, a lever having a widened portion near its pivotal end and which is longitudinally recessed, the walls of said recess being apertured, a pin mounted in said apertures, a link pivotally mounted upon said pin, lugs projecting in opposite directions from the opposite faces of said lever and fulcrumed in notches in the flanges, said link adapted to have a swinging movement in the recess between said lugs and to which link the other end of said chain is adapted to be fastened.

1,271,465. CAN-OPENER. CLAUDE D. HAYDEN, Curtis, Nebr. Filed June 5, 1917. Serial No. 172,998. (Cl. 30—3.)

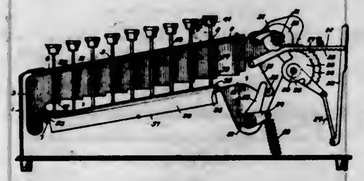


1. In a can opener, a handle bar having a prong near one end thereof to be driven into the center of the can top, and a cutter bar having a cutter at its inner end to cut the side of the can below the top, said cutter bar being arranged under the handle bar, and means including a pivot whereby the cutter bar is adjustably pivotally connected to the handle bar, the axis of the pivot being at right angles to the plane of said bar.

2. A can opener comprising a straight flat handle bar having a prong near one end thereof to be driven into the center of the can top, said handle bar also having a longitudinal slot and notches at one side of said slot, a cutter bearing against the under side of the handle bar and having a cutter at its inner end, and a pivot connecting the cutter bar to the handle bar, said pivot having flattened opposite sides which permit longitudinal movement of the pivot in the slot when the cutter bar is at right angles to the handle bar, said pivot being of such width as to enter one of the notches and prevent longitudinal movement of the cutter bar when the latter is proximately parallel with the handle bar.

1,271,466. SELECTING-BAR FOR ADDING OR LIKE MACHINES. BENJAMIN P. HAYES, Kansas City, Mo., assignor, by mesne assignments, to Automatic Bookkeeping Register Company, Kansas City, Mo., a Corporation of Delaware. Filed Apr. 15, 1915. Serial No. 21,547. (Cl. 235—60.)

1. In combination with a selecting bar having stepped stops and having a slot therein, a pivotally mounted wing having a stop member projected into the slot in said selecting bar, means for yieldingly retaining the wing in its bar stopping position, key posts adapted for engaging the wing to rock the stop member out of the bar slot, and a boss on each post arranged for projection into the path of a bar stop following the actuation of the wing.



2. In combination with a selecting bar, yielding means for functionally actuating said bar, a stop for holding the bar against the tension of said yielding means, key posts movable into stopping relation with the bar when the bar is advanced by said yielding means, and a pivotally mounted wing extending across the path of the key posts and having a locking member for retaining the posts in active position.

6. In combination with a selecting bar having a primary stop slot, yielding means for actuating the bar, means for holding the bar against the tension of said yielding means, a wing having a stop member of less width than the slot in said actuating bar and having a free edge, yielding means for retaining the wing stop in the bar slot and the free edge in locking position, key posts having stop members adapted for movement into position for engaging the bar and for engaging the wing to rock the latter, yielding means for retaining the posts in normal position, and latch hooks on said posts having beveled under faces for moving the wing to displace the stop member and locate the post hook in locking relation with the free edge of the wing.

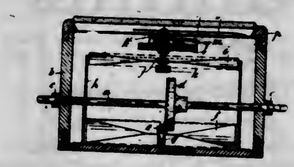
7. In combination with a supporting member, having longitudinal slots and cross slots at the end of the longitudinal slots, a selecting bar having necks adapted for sliding travel in the longitudinal slots, the said necks having heads adapted for projection through the cross slots and for keeping the necks within the longitudinal slots, yielding means for actuating the bar, a stop for holding the bar against the action of said yielding means, and selective stop members for limiting travel of the bar to relative movements.

9. In combination with a selecting bar, a plurality of key posts adapted for selective actuation to position for engagement by the selecting bar, yielding means for urging each post to initial position, a movable latching member yieldingly urged to position for engagement by the key posts, each key post having a shelf for holding engagement with the latch member, and having a protuberance at one edge inclined from an intermediate interval section toward the shelf and toward the point of initial contact with the latch member, whereby the latch member is moved from the shelf to the upper inclined edge part of a previously held key post, before said member has left its contact with the lower inclined part of an actuating post.

[Claims 3 to 5, 8, and 10 not printed in the Gazette.]

1,271,467. SPEED-INDICATOR. HAROLD WALTER HENKE and SIDNEY HERBERT HENKE, Lewisham, London, England. Filed Jan. 3, 1918. Serial No. 210,165. (Cl. 264—13.)

A speed indicator, comprising a casing adapted to be vertically arranged, a substantially vertical tubular partition arranged within said casing, a horizontal fan rotatable within the outer casing at the lower end of the tubular partition, a gear arranged above and connected with said fan, a horizontal shaft arranged near and above the fan and extending through the tubular partition and said casing with its opposite ends extending outwardly beyond the casing so that either end of the horizontal shaft may be connected with the driving means, means to prevent longitudinal movement of the horizontal shaft a vertical gear connected with the horizontal shaft and engaging the first named gear, a substantially horizontal bar arranged near the upper end of the tubular partition and connected with the casing, a vertical shaft rotatably connected with the bar, an upper horizontal fan arranged in proximity to the upper end of the tubular partition and



rigidly secured to the vertical shaft, a pointer connected with the vertical shaft, a relatively stationary arm disposed near the vertical shaft, and a coil spring surrounding the vertical shaft and having one end thereof connected with the vertical shaft and its opposite end connected with said arm.

1,271,468. CUSHION AND SUPPORT FOR THE FEET. CHARLES H. HILL, Lynn, Mass. Filed Nov. 30, 1917. Serial No. 204,488. (Cl. 36—71.)

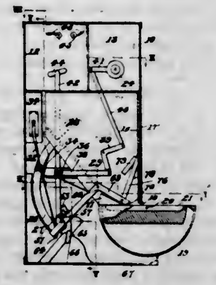


1. A foot cushion or arch support, comprising a molded homogeneous elastic cellular body having a thin heel seat and a thick intermediate portion, and a heat-proof fiber plate embedded in said thin heel seat and of sufficient stiffness to prevent said heel seat curling from normal position.

4. A foot cushion or arch support, comprising a molded homogeneous elastic cellular body having at one end a relatively thin heel seat or pad and a thick narrowed portion intermediate said heel sent and its front end, a weight carrying plate of rigid material embedded in said thick narrowed portion at its lower side and extending from said heel seat to adjacent its front end to span the shank portion of the shoe, and a fiber plate embedded in the lower side of said heel seat to prevent the same from curling.

[Claims 2 and 3 not printed in the Gazette.]

1,271,469. FIRE-ALARM BOX. SZCZEPAN HORST and WACLAW HORST, Buffalo, N. Y. Filed May 28, 1917. Serial No. 171,563. (Cl. 177A—379.)

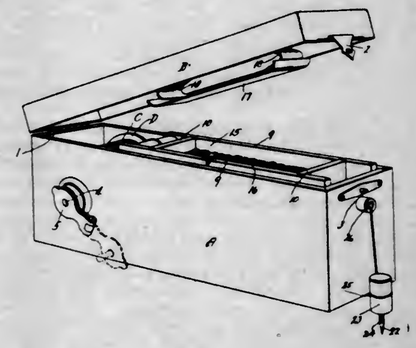


1. A fire alarm device comprising a box having an arm receiving opening in the front wall, terminal contact for the electric system within the said box, an arm engaging plate swingingly mounted inwardly and adjacent the said wall, operating means for the said plate, means adapted for restraining the operating means when the plate is lowered, circuit closing means for the said contacts carried by the said operating means, releasing means for the said restraining means, a dished elbow supporting tray positioned beneath the said opening, a hollow semicircular guard pivoted to and normally inclosing the said tray and a tilting rocker for the said guard carried by the said operating means whereby the outer end of the guard is positioned forwardly of the said opening when the operating means is in its tripped arrangement.

2. A fire alarm device comprising a box having an arm receiving opening in the front wall, terminal contacts for the electric system within the said box, an arm engaging plate swingingly mounted inwardly and adjacent the said wall, operating means for the said plate, means adapted for restraining the operating means when the plate is lowered, circuit closing means for the said contacts carried by the said operating means and releasing means for the said restraining means, a dished elbow supporting tray positioned beneath the said opening, a hollow semicircular guard pivoted to and normally inclosing the said tray, a tilting rocker for the said guard carried by the said operating means whereby the outer end of the guard is positioned forwardly of the said opening when the operating means is in its tripped arrangement, a vertically shiftable slide carried by said box wall adapted for overlying a portion of the said opening thereof when the slide is lowered, locking hooks for the said slide and releasing means for the said hooks and elevating means for the slide attached to the said rockers and being in their normal operative elevated positions when the operating means is in its normal position.

[Claims 4 to 14 not printed in the Gazette.]

1,271,470. CARPENTER'S MARKING-LINE. TANAJIRO IBARAKI, South Bethlehem, Pa. Filed Jan. 24, 1918. Serial No. 213,545. (Cl. 33—87.)



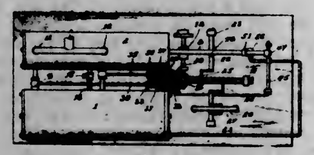
2. A marking implement of the class described comprising a casing, a reel mounted therein, a chamber in the casing, coloring means in the chamber, a line attached to the reel and extending through the chamber, guide pulleys mounted at opposite sides of the chamber for the line, and a pressure device acting on the coloring means to compress the same against the line.

4. A marking implement of the class described comprising a box-like body, a reel therein, a marking line on

the reel, a frame mounted in the body and formed with a chamber having apertures in its opposite walls, guide pulleys on the frame at opposite sides of the chamber and arranged in coöperative relation with the apertures for guiding the line into and out of the chamber, a pad in the chamber for applying coloring matter to the line, a mass of fibrous material over the pad and line, a cover for the body, and a yielding element carried by the cover for compressing the said fibrous material into engagement with the line.

[Claims 1 and 3 not printed in the Gazette.]

1,271,471. ENGINE. JONATHAN K. JABGER, Fenwood, Saskatchewan, Canada. Filed Sept. 15, 1915. Serial No. 50,847. (Cl. 123—57.)



1. In combination, a cylinder having a fluid tight head between its ends and combustion chambers at opposite sides of said head, a piston working in each chamber, a piston rod connected thereto, an exhaust valve for each chamber, means for allowing gas to enter said chambers alternately, valve rods under the control of said piston rod for alternately opening said exhaust valves at predetermined intervals, springs encircling each of said valve rods and acting in opposition to each other, means under the control of said piston rod for compressing one spring through the compression of the other spring, and means for holding said springs under compression for predetermined intervals.

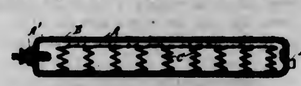
2. In combination, a cylinder having a fluid tight head between its ends and combustion chambers at opposite sides of said head, a piston working in each chamber, a piston rod connected thereto, an exhaust valve for each chamber, means for allowing gas to enter said chambers alternately, valve rods under the control of said piston rod for alternately opening said exhaust valves at predetermined intervals, springs encircling each of said valve rods and acting in opposition to each other, means under the control of said piston rod for compressing one spring through the compression of the other spring, means for holding said springs under compression for predetermined intervals, a washer arranged on each valve rod and interposed between said springs, a second rod for contracting said springs, and means under the control of said piston rod coöperating with said washer for holding said spring under pressure.

5. In combination, a cylinder having a fluid tight head between its ends and combustion chambers at opposite sides of said head, a piston working in each chamber, a piston rod connected thereto, an exhaust valve for each chamber, means for allowing gas to enter said chambers alternately, valve rods under the control of said piston rod for alternately opening said exhaust valves at predetermined intervals, a rack bar secured to the under surface of said piston rod, a mutilated gear coöperating with said rack bar, a crank shaft upon which said mutilated gear is mounted, slide rods coöperating with the crank portions of said shaft and other rods connected to said exhaust valve and having resilient connection with said slide rods, and resilient means for holding the crank portion of said shaft normally in an inclined position.

[Claims 3 and 4 not printed in the Gazette.]

1,271,472. BOMB-SHIELD FOR SHIPS, BUILDINGS, AND OTHER STRUCTURES. MAX JAKOBSON, New York, N. Y. Filed Apr. 11, 1917. Serial No. 161,119. (Cl. 114—13.)

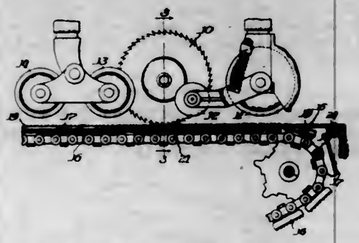
2. A bomb-shield comprising an inflatable bag, and a spring structure located within the bag and secured to one side thereof, and out of contact with the opposite side of the bag when the latter is inflated, whereby the impact of an object striking the shield will be checked



progressively by the successive cushioning action of the compressed air contained in the bag and of said spring structure.

[Claims 1 and 3 not printed in the Gazette.]

1,271,473. SAW-GUARD. GUSTAVE T. JOHNSON, Beloit, Wis., assignor to P. B. Yates Machine Company, Beloit, Wis., a Corporation of Wisconsin. Filed Nov. 30, 1917. Serial No. 204,582. (Cl. 143—49.)



1. In a sawing appliance of the character described, the combination of a longitudinally-grooved endless traveling bed, a saw above and adapted to project into the groove of said bed, and a filler-piece in said groove supported at its two ends only and adapted to prevent narrow pieces of stock from entering the groove and coming into contact with the saw-teeth, substantially as described.

3. In a sawing appliance of the character described, the combination of a recessed table, a longitudinally-grooved endless traveling-bed operating in the recess of said table, a saw above and adapted to project into the groove of said bed, and a filler-piece in said groove, supported at its two ends only on said table, adapted to prevent narrow pieces of stock from entering the groove and coming into contact with the saw teeth, and located wholly below the active surface of said bed, substantially as described.

4. In a sawing appliance of the character described, the combination of a recessed table, a longitudinally-grooved endless traveling-bed operating in said recess, a saw above and adapted to project into the groove of said bed, and a straight filler-bar, recessed for the accommodation of the saw-teeth, located in said groove, supported at its two ends only on said table, beyond said traveling bed, disposed entirely below the active surface of the bed, and adapted to prevent narrow pieces of stock from entering the bed groove and coming into contact with the saw-teeth, substantially as described.

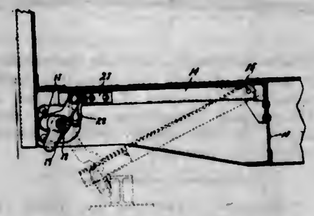
[Claim 2 not printed in the Gazette.]

1,271,474. DUMP-CAR. HERBERT R. KEITHLEY, Michigan City, Ind., assignor to Albert R. Couden, trustee, Michigan City, Ind. Filed July 24, 1917. Serial No. 182,461. (Cl. 105—14.)

1. In a car, in combination, a hinged drop door, an operating shaft adjacent the swinging end of the door journaled in slotted bearings, the slots extending transverse to the path of the door edge, a crank arm on the shaft, and a link of greater length than the crank arm and connecting such arm with the door.

3. In a car, in combination, a hinged door, a laterally shiftable operating shaft movable toward and away from the path of the door edge, a crank arm on the shaft, and a link of greater length than the arm for connecting the arm with the door.

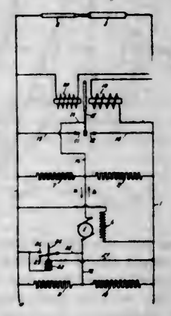
6. In a car, in combination, a hinged door, a laterally shiftable operating shaft movable toward and away from the path of the door edge, a crank arm on the shaft, a link of greater length than the arm for connecting the arm with the door, and pawl and ratchet mechanism for turning the shaft.



9. In a car, in combination, a hinged door, a laterally shiftable operating shaft movable toward and away from the path of the door edge, a crank arm on the shaft, and a link of greater length than the arm for connecting the arm with the door, the pivot connecting the link to the door being slidable in the door transverse to the plane thereof.

[Claims 2, 4, 5, 7, 8, and 10 not printed in the Gazette.]

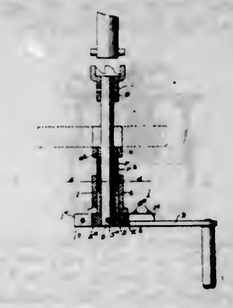
1,271,475. REGULATOR FOR MOTOR ARC-LAMPS. JOHANN KIEFER, Charlottenburg, Germany, assignor to General Electric Company, a Corporation of New York. Filed July 20, 1915. Serial No. 40,979. (Cl. 176—75.)



1. An electric arc lamp, comprising a pair of electrodes, an electric motor for separating and for approaching the electrodes, two normally open shunts, each including the motor armature, across the electrodes, a minor resistance in one of the shunts, and a major resistance in the other, a series magnet for closing and opening the shunt containing the minor resistance to control the armature current in one direction, a shunt magnet for closing and opening the shunt containing the major resistace to control the armature current in the other direction, and means for short circuiting the minor resistance when the lamp potential drops below a predetermined minimum.

2. An electric arc lamp, comprising a pair of electrodes, an electric motor arranged to be energised by current depending upon the lamp potential and a resistance in the armature circuit for separating and approaching the electrodes, means for controlling the direction of the current through the motor armature by the lamp current and by the lamp potential, respectively, and for opening the armature working circuit when the arc length is normal, means for removing the resistance from the armature working circuit when the arc potential drops below a predetermined minimum, and two branch circuits constantly closed about the armature for braking the motor when the armature working circuit is opened while the armature rotates.

1,271,476. CRANKING DEVICE FOR EXPLOSIVE-ENGINES. GEORGE J. KOEHL, San Diego, Cal., assignor to Lightening Machine Co., a Copartnership, San Diego county, Cal. Filed May 8, 1917. Serial No. 167,158. (Cl. 123—185.)



1. In a device for cranking explosive engines, a support adapted to be readily secured to the frame of a vehicle, a clutch member secured thereto, a shaft shiftable longitudinally and revolubly mounted in said clutch member, a friction member secured to one end of said shaft, a combined clutch member and clamp member a portion of which is adapted to engage said clutch member when revolving in certain directions relative to each other and a portion clamped onto said friction member, means on the inner end of said shaft for engaging the engine drive shaft, means tending to hold said shaft out of engagement therewith and a crank secured to said clamp member.

[Claims 2 to 7 not printed in the Gazette.]

1,271,477. FOUNTAIN-PEN. ULRICH KORNSTEIN, New York, N. Y. Filed Apr. 4, 1918. Serial No. 226,655. (Cl. 120—46.)



1. A fountain pen, comprising a pen holding section, a barrel rotatably mounted thereon and provided with an opening near one of its ends, a compressible ink-sack attached to said pen holding section and disposed within said barrel, a diaphanous sack-collapsing strip forming part of said sack and extending substantially throughout the length thereof, and a sleeve secured to said pen holding section and interposed between said sack and said barrel, said sleeve being provided with an opening in alinement with said collapsing strip and adapted to register with the opening in said barrel.

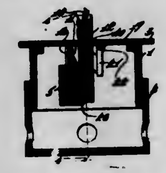
[Claims 2 and 3 not printed in the Gazette.]

1,271,478. FLOOR-BOX. HUBERT F. KRANTZ, Brooklyn, N. Y., assignor to Krantz Manufacturing Company, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Dec. 18, 1912. Serial No. 737,374. (Cl. 173—330.)

2. In combination with an electric circuit a holder provided with recesses, contacts located in said recesses, an upstanding post carried by said holder and located between said contacts, said post being provided with a curved guideway, a socket carried by said holder encompassing said contacts, the bottom of said socket being provided with an opening, a plug adapted for insertion in said socket, and contacts carried by said plug adapted to aline with the contacts on said holder when said plug is pressed home in said socket.

3. The herein described floor box consisting of a container, stationary contacts, a supporting body therefor

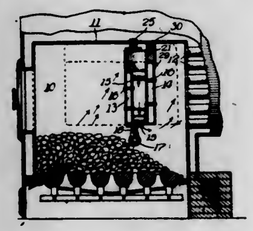
located within the container, a cover having an opening above said body, a plug having contacts adapted to be inserted through said opening, the contact plug and the contacts of the body adapted to be engaged by a sliding motion on the insertion of the plug, and means resiliently mounted within the box to urge laterally the plug contacts against the body contacts.



5. The herein described floor box consisting of a container in two parts, one a body part and one a sleeve, a cover for the sleeve, an opening therein, a body carrying contacts and secured to the sleeve with the contacts a definite distance from the cover, a plug having contacts adapted to be inserted through said opening, a closure for the opening and resilient means for normally restoring it to closed position so mounted that it will press against said plug to maintain contact when the plug is in position.

[Claims 1 and 4 not printed in the Gazette.]

1,271,479. FIRE-BOX. ALFRED F. KRUMHOLZ, Chicago, Ill., assignor of one-half to August Krumholz, Chicago, Ill. Filed Apr. 5, 1918. Serial No. 226,796. (Cl. 122—61.)



1. In a fire box, the combination with the top and side walls thereof, of a fixed transverse water conduit, and a pair of spaced vertical water cooled baffles supported between the top wall and said conduit with capacity for swinging movement on a vertical pivot, substantially as described.

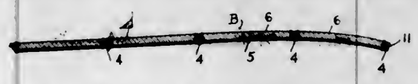
4. In a fire box, the combination of a pair of spaced vertical water-cooled baffles located transversely of the fire box in front of the entrance to the flues, said boxes being provided with alined water connections adapted to act as pivots on which the boxes may be swung to expose the flues, substantially as described.

7. A smoke consumer, comprising in combination a pair of spaced hollow baffles having communicating connections, each of said baffles being provided with recesses accommodating a socket with a water space therearound, said sockets being in vertical alinement, nipples having ball ends and packing glands for holding the nipples in the sockets, substantially as described.

[Claims 2, 3, 5, and 6 not printed in the Gazette.]

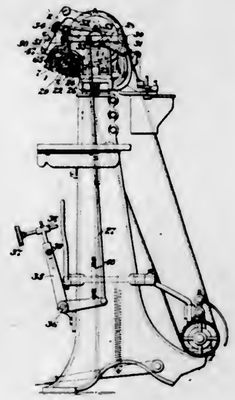
1,271,480. AIRPLANE. LEWIS KULCSAR, Punxsutawney, Pa. Filed Nov. 7, 1917. Serial No. 200,789. (Cl. 244—31.)

1. In airplane construction, a fuselage, wings, and trailing surfaces, each of said parts embodying a skeleton frame work consisting of longitudinal and transverse frame members certain of which are of T-formation in cross section and other of which are of angle iron formation in cross section, and sections of substantially transparent material filling the spaces bounded by said frame members between the points of intersection thereof.



2. In airplane construction, a frame comprising a marginal frame member of angle iron formation, longitudinal and transverse frame members of T-formation, and sections of substantially transparent material filling the spaces bounded by said frame members between the points of intersection thereof.

1,271,481. THREAD-FASTENING MACHINE. FRED N. LA CHAPELLE, Beverly, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed July 15, 1916. Serial No. 109,473. (Cl. 112—20.)



1. A machine for inserting thread fasteners through the upper and insole lip of a lasted shoe, having in combination, work positioning devices, thread fastener forming and inserting devices, and means operating to engage with and displace a toe wire to permit a thread to be laid substantially in the groove formerly occupied by the toe wire.

3. A machine for inserting thread fasteners through the upper and insole lip of a lasted shoe, having in combination, work positioning devices, thread fastener forming and inserting devices, a toe wire lifting member, and mechanism under the control of the operator for moving the member into an operative position to engage with and lift the toe wire.

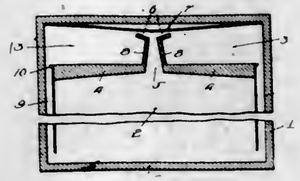
6. A machine for inserting thread fasteners through the upper and insole lip of a lasted shoe, having in combination, a channel guide, a back gage coöperating to position the shoe, thread fastener forming and inserting devices, a toe wire lifting member, mechanism for actuating the member, and connections between the actuating mechanism and channel guide for moving the channel guide away from the back gage when the toe wire lifting member is moved into an operative position.

7. A machine for inserting thread fasteners through the upper and insole lip of a lasted shoe, having in combination, work positioning devices, thread fastener forming and inserting devices, a toe wire lifting roll having an inclined peripheral face, and mechanism for moving the roll into an operative position.

11. A thread handling machine, having in combination, thread fastener forming and inserting devices, a back gage, a channel guide pivoted for movement toward and from the back gage, a toe wire lifting member, a toggle lever connected with the channel guide, connections between the toggle lever and toe wire lifting member, and means under the control of the operator for actuating the toggle lever.

[Claims 2, 4, 5, and 8 to 10 not printed in the Gazette.]

1,271,482. REFRIGERATOR. JOHN B. LACY, Chicago, Ill. Filed July 9, 1917. Serial No. 179,531. (Cl. 62—46.)



1. A chamber divided into a storage compartment and a compartment for a cooling means, a cold air flue of large cross sectional area leading from the bottom of the second compartment to a point a short distance above the bottom of the storage compartment, and there being a warm air flue of large cross sectional area at its inlet end leading from the upper portion of the storage compartment into the upper portion of the other compartment, said warm air flue having its extreme upper end so disposed that the air discharged therefrom is delivered directly into the cooling compartment in a substantially horizontal direction, and the said warm air flue decreasing gradually in cross sectional area until at its outlet end it is so restricted that the air is discharged in a broad thin sheet.

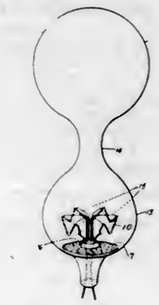
4. A chamber divided into a storage compartment and a compartment for containing a cooling means, a warm air flue connecting the upper regions of said compartments together and decreasing gradually in cross sectional area from the storage compartment end toward the other end, the top wall of said warm air flue rising from the inlet end of the flue to the outlet end and joining the upper wall of the cooling compartment, the latter wall also rising as the distance from the outlet end of the warm air flue increases, and a cold air flue extending from a point near the bottom of the storage compartment to the bottom of the other compartment.

6. A chamber divided into a storage compartment and a compartment for containing a cooling means, a warm air flue connecting the upper regions of said compartments together, the ceiling or upper wall of said chamber rising gradually from the side of the storage compartment remote from the other compartment to the opposite side of the chamber forming the top of the cooling compartment, said inclined ceiling forming the top wall of said warm air flue, the bottom wall of the warm air flue being also inclined upwardly from the inlet end of the flue to the outlet end, and a cold air flue extending from the bottom of the storage compartment to the bottom of the cooling compartment.

[Claims 2, 3, and 5 not printed in the Gazette.]

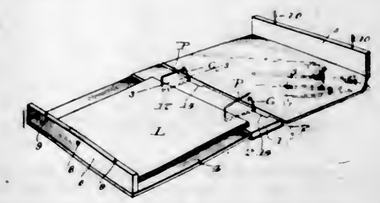
1,271,483. INCANDESCENT LAMP. IRVING LANGMUIR, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Original application filed Sept. 4, 1913, Serial No. 788,165. Patent No. 1,246,118, dated Nov. 13, 1917. Divided and this application filed Mar. 13, 1917. Serial No. 154,606. (Cl. 176—40.)

1. An incandescent lamp comprising a sealed bulb having a gaseous filling of poor heat conductivity and a closely coiled tungsten filament supported in said bulb and having an uncoiled portion located between coiled portions, the said filament being sharply bent in the region of said uncoiled portion.



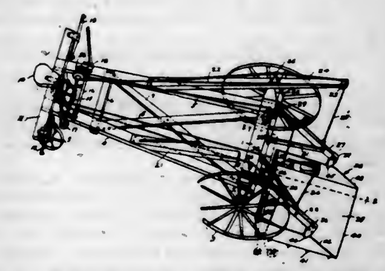
2. The combination of a sealed bulb containing a gaseous filling of poor heat conductivity, a filament support in said bulb and a closely coiled tungsten filament having an uncoiled portion located between coiled portions and in contact with said support, the said filament being sharply bent in the region of said uncoiled portion.

1,271,484. TEMPORARY BINDER. LOUIS C. LAURENT, Denver, Colo. Filed May 16, 1917. Serial No. 169,012. (Cl. 129—23.)



A temporary binder comprising a backboard formed with openings in its opposing edges, a series of holding members comprising independent pins and guards therefor, each pin and guard having a shank adapted to be inserted in one of said openings, the backboard adjacent the guards being formed with notches to permit the guards to be swung laterally from the pins, cover boards connected with the respective edges of the backboard, and means for connecting the remote ends of the cover boards.

1,271,485. DUMPING-SCRAPER. JAMESIE E. MCCLAIN, Tempe, Ariz. Filed Jan. 23, 1918. Serial No. 213,318. (Cl. 214—140.)

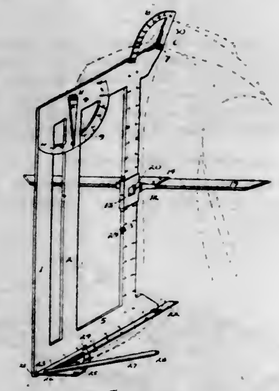


2. In a dumping scraper, a running gear having a front bolster, a derrick extending forwardly from the running gear, lifting levers pivotally connected to the front bolster and extending forwardly below the derrick, a scraper

pan having its forward part pivotally connected to the forward ends of the lifting levers, a pivoted gate at the rear side of the pan, cables connected to the forward ends of the lifting levers and extending upwardly over pulleys in the derrick and to the rear end of the running gear, an elevating shaft at the rear end of the running gear upon which the cables are attached and wound, second cables connected to the pivoted gate and extending under pulleys on the sides of the pan, over pulleys upon the running gear, and backwardly to the rear end of the running gear, and a dumping shaft at the rear end of the running gear to which the cables are attached.

[Claim 1 not printed in the Gazette.]

1,271,486. MEASURING DEVICE. OLUF L. ORVOLD, St. Paul, Minn., assignor of one-half to Frank E. Bewyer, Minneapolis, Minn. Filed July 7, 1917. Serial No. 179,283. (Cl. 33—7.)



1. In a measuring device the combination of a frame, a forward extension at the top of said frame, a clamp slidably mounted on a frame member and carrying thereon, rotatably mounted, a straight edge, and means for locking said straight edge with respect to said frame member in either of two positions.

3. A measuring device comprising a frame, a quadrant hinged to the lower end of said frame, and an indicating pointer pivoted to said quadrant for indicating degrees.

4. In a measuring device the combination of a frame, an indicating pointer pivoted thereon to indicate degrees at which said frame is inclined, a quadrant hinged to said frame and adapted to assume a position at right angles thereto, and a pointer pivoted to said quadrant for indicating degrees marked on said quadrant.

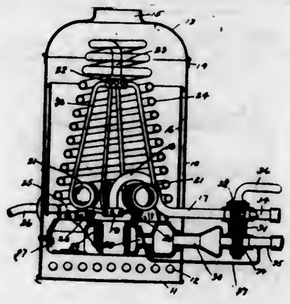
7. In a measuring device the combination of a frame, a pointer pivoted to said frame, and a slidable stright edge carried by said frame and having indicating means thereon whereby linear dimensions carried by said frame may be read.

[Claims 2, 5, and 6 not printed in the Gazette.]

1,271,487. PORTABLE WATER-HEATER. ALLAN E. REID, Providence, R. I., assignor to Eugene F. Bowen, Providence, R. I. Filed Feb. 5, 1916. Serial No. 76,257. (Cl. 122—250.)
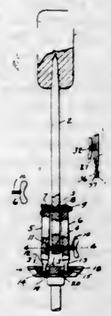
1. A portable water heater comprising a casing, a burner in said casing, a main and an auxiliary tubular coil in said casing, said auxiliary coil being divided into a plurality of separate groups of convolutions, each group having a horizontal axis lying in proximity to said burner and having one end connected to the water inlet and its opposite end to the main coil.

2. A portable heater comprising a casing, a burner in said casing, a water inlet pipe, a main and an auxiliary tubular coil in said casing, said auxiliary coil being divided into a plurality of groups of convolutions of small tubing connected to said inlet pipe, the axes of said groups standing in a horizontal plane and in proximity to said heater, a main coil of larger tubing to which all of said auxiliary coils are connected, said main coil having a vertical axis and a discharge outlet.



3. A portable water heater comprising a casing, a water inlet pipe, a main heating coil of large tubing having a hot water discharge at one end, an auxiliary coil comprising a plurality of groups of convolutions of smaller tubing, each having a horizontal axis connected at one end to said inlet and at its opposite end to said main coil, a gas heater below and in proximity to said groups having a plurality of spaced apart series of separate fire jets, said smaller coils being located over the space between said series whereby the water of condensation may drip from said convolutions through said spaces without affecting the flame.

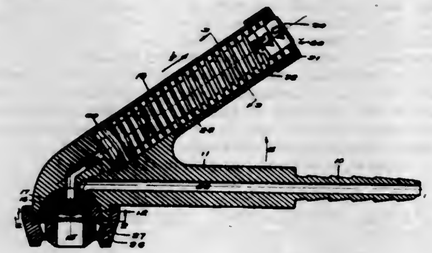
1,271,488. VALVE-GRINDING TOOL. JOSEPH J. RISCHARD, Pasadena, Cal. Filed Jan. 9, 1918. Serial No. 211,045. (Cl. 51—4.)



A valve grinding tool comprising a handle, a stem rigidly fixed to the handle, jaws flexibly connected to the stem and having teeth adapted to grip a valve head in its key sockets, and a set-screw carried by one jaw and engaging the other to force the jaws apart and cause the teeth to grip.

1,271,489. COMBINED AIR-SUPPLY VALVE AND GAGE. ARTHUR C. ROBINSON, Los Angeles, Cal. Filed May 31, 1917. Serial No. 172,057. (Cl. 284—17.)

1. A combined air faucet and gage comprising a tubular shank in communication with a source of air supply, a gage case formed integral with said shank and inclined in relation thereto, an air passage-way formed through the shank, a spherical socket with which said passage-way is in communication, a compression chamber formed within said gage case, an air passage-way establishing communication with said chamber and said socket, a spheroidal cap member positioned within the socket and adapted to fit over the opened end of a pneumatic tire stem, means whereby said body portion comprising the shank and case may be alternately brought to establish communication between the passage-ways leading through the shank and case with the tire stem, an indicating plunger positioned within said compression chamber, and means whereby communication between the passage-way from the chamber to the stem will cause the atmospheric pressure within the pneumatic tire to be indicated.



2. A combined air faucet and gage comprising a tubular shank adapted to be connected with a source of air, an air gage mounted upon said shank, a tire stem receptacle adapted to be positioned over the inflating valve of a pneumatic tire, and means whereby said shank and gage may be moved in relation to said receptacle to alternately permit air to pass from the source of supply through the receptacle to the stem or from the stem through the receptacle to the gage.

3. In a combined air faucet and gage having an air supply shank and an air gage rigidly mounted upon said shank, a tire stem receptacle consisting of a spherical cap adapted to seat over the month of the tire stem and to rotate in relation to the shank and gage, and spring means for yieldably holding said cap upon its seat to prevent leakage of air between it and the seat.

1,271,490. MEAT-CURING MACHINE. MICHAEL F. SERVATIUS, Chicago, Ill. Filed Apr. 2, 1917. Serial No. 159,093. (Cl. 99—2.)



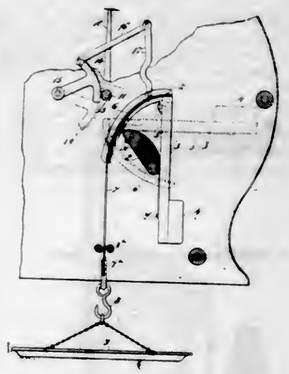
1. In a meat-curing machine, a hollow piercing member having outlet means in the end-portion thereof, a pump connected to supply the curing liquid to said member, said pump having a plunger, and a meat-rest associated with said member and rigidly connected to said plunger.

6. A structure as specified in claim 1, in which said member is provided with a shoulder forming an inlet therefor, a stationary support in which the lower portion of said member is movable up and down, and a compression-spring interposed between said shoulder and support to yieldingly resist downward movement of said member, so that said member will be moved downward when the upper end thereof strikes a bone or other obstruction in the meat.

7. In a meat-curing machine, the combination of (1) a pump having a plunger, (2) a hollow piercing member, (3) means on said plunger to form a guide for said member, (4) means whereby said plunger and said member are given relative movement to cause said member to enter the meats, and (5) means to supply liquid to said member from said pump.

[Claims 2 to 5, 8, and 9 not printed in the Gazette.]

1,271,491. MEASURING INSTRUMENT. WILHELM SIMONSSON, New York, N. Y. Filed June 21, 1906. Serial No. 322,709. Renewed Sept. 22, 1917. Serial No. 192,831. (Cl. 265—62.)



1. A measuring instrument having a frame, two convex fulcrum blocks mounted therein, two levers mounted to rock on the respective fulcrum blocks, means for effecting a positive rolling of said levers along said fulcrum blocks during rocking movement of the levers, weights on the outer ends of the respective levers, curved guide plates on the inner ends of the respective levers, index mechanism operatively connected with said levers, load receiving means, and flexible connections operatively connected with such load receiving means and having portions passed around and connected with the curved guide plates of the respective levers to communicate movement thereto.

5. A measuring instrument having a fulcrum block, a pendulating lever adapted to traverse said fulcrum block, a weight at the lower part of said lever, means for compelling rolling movement of the lever along the fulcrum block when the lever is rocked, an extension laterally directed from the upper part of said lever, and having a perimetral surface conforming to a cycloidal curve, index mechanism operatively connected with said lever, load receiving means, and a device extended from the supporting means to the said extension of the lever to communicate movement to the latter and adapted to traverse the cycloidal curved surface of said extension.

10. A measuring instrument having a pendulating lever weighted at its lower part and capable of rocking movement during the measuring operation, a flexible suspender affording support for the lever, and means, including a part whereon the lever has shifting contact during its rocking movement to vary the leverage exerted thereby, capable of operation to support the lever with varying efficiency during rocking movement thereof.

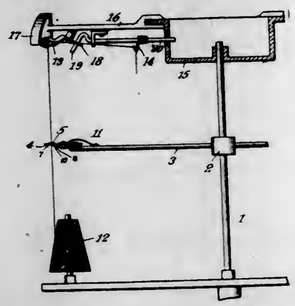
12. A measuring instrument having a pendulating lever weighted at its lower part and capable of pivotal movement away from and toward its pendent position during the measuring operation, a fulcrum member having a

surface whereon said lever is adapted for rolling contact during its pivotal movement to vary the leverage exerted thereby, said surface of the fulcrum member being irregularly inclined and operable to support the lever with an efficiency which varies during the pivotal movement of said lever, and means capable of operation to compel rolling movement of the lever along said inclined surface of the fulcrum member when the lever is moved pivotally.

18. A measuring instrument having a pendulating lever weighted at its lower part and capable of rocking movement away from and toward its pendent position during the measuring operation, a fulcrum member having a surface whereon said lever is adapted for rolling contact during its rocking movement to vary the leverage exerted thereby, and a flexible suspender affording support for the lever during its rocking movement.

[Claims 2 to 4, 6 to 9, 11, 13 to 17, and 19 to 21 not printed in the Gazette.]

1,271,492. THREAD-GUIDE. EDWARD H. STINES, New Brunswick, N. J., assignor to Perfection Manufacturing Company, New Brunswick, N. J., a Corporation of New Jersey. Filed Dec. 9, 1916. Serial No. 136,008. (Cl. 242—157.)



1. In a thread guide construction, the combination of a supporting member, a disk rotatably mounted thereon, said disk having circumferential projections to enable it to be manipulated and a plurality of graded openings arranged around its center, said disk also being provided with cut and bent portions constituting catches to engage the member and hold the disk in various positions, and a guard secured to said member and extending across the edge of the disk toward the center thereof.

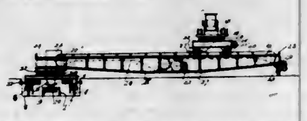
3. A thread guide construction comprising a disk and means for rotatably mounting said disk, the disk having a plurality of yieldable portions constituting catches to engage said means and hold the disk in various positions.

5. In a thread guide construction, a rotatable disk having a plurality of pairs of chordally-extending cuts adjacent its periphery, the portions of the disk between the cuts of each pair being bent away from the disk, each pair of portions constituting a catch, and means for supporting said disk, to be engaged by said catches.

[Claims 2 and 4 not printed in the Gazette.]

1,271,493. RECLAIMING AND CONVEYING APPARATUS. FRANCIS LEE STUART, Washington, D. C., assignor to International Conveyor Corporation, New York, N. Y. Original application filed Nov. 13, 1917, Serial No. 201,798. Divided and this application filed Mar. 4, 1918. Serial No. 220,301. (Cl. 193—3.)

1. An apparatus for reclaiming material from storage and conveying the same to devices to be loaded, comprising a main receiving conveyer, a conveyer adjustable longitudinally of said receiving conveyer and arranged to discharge material thereto, means for rotatably adjusting said conveyer about the point of discharge, a digger rotatably mounted on said conveyer for supplying material from storage thereto, and means for moving the same longitudinally of the conveyer.

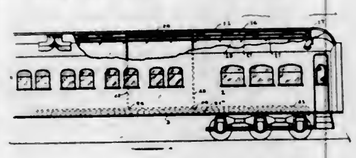


3. An apparatus for reclaiming stored material, comprising a main receiving conveyer, a boom conveyer rotatably adjustable with regard thereto about a vertical axis for supplying said main conveyer with material, and a digger carried by said boom conveyer and rotatably adjustable independently of said boom conveyer about both vertical and horizontal axes.

6. A reclaiming apparatus comprising a truck, a turntable thereon, a reclaiming conveyer supported at one end on the turntable, a trackway extending along said reclaiming conveyer, and a vertically and rotatably adjustable digger on said trackway.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,271,494. VENTILATING SYSTEM. DENTON K. SWARTWOUT, Cleveland Heights, Ohio. Filed July 30, 1915. Serial No. 42,675. (Cl. 98—23.)



1. The combination, with a car, of a pair of air-supplying ducts extending from the central portion of the car toward the opposite ends of said car respectively, said ducts being in alinement with each other and having lateral branches at their adjacent ends, means operative by the movement of the car in either direction for supplying air to said branches, an air distributing duct beneath said pair of ducts and communicating therewith at their remote ends, and means including openings in the bottom of said distributing duct for uniformly distributing the air throughout the length of the car.

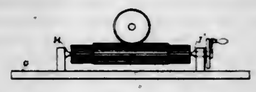
4. The combination, with a car, of a pair of air-supplying ducts extending from the central portion of the roof of said car toward the opposite ends of said car respectively, an air distributing duct beneath the first-mentioned ducts and with which the discharge ends of said ducts communicate, means operative by the movement of the car in either direction for supplying air to the first-mentioned ducts, and means for controlling the distribution of air from the distributing duct into the car.

6. The combination, with a car, of an air-collecting and supplying duct in the upper portion of the car, means operative by the movement of the car in either direction for supplying air to said duct, an air-distributing duct beneath the first-mentioned duct and communicating therewith, the last-mentioned duct being provided with longitudinally spaced air-distributing dampers, and one or more outlet flues within the car and having inlets adjacent to the floor thereof.

7. The combination, with a car, of an air conduit extending longitudinally of said car and comprising a distributing compartment extending substantially the length of the car, and two supply compartments one communicating with each end of the first compartment and terminating in an air receiving end at substantially the the longitudinal center of said first compartment, and means communicatively connected to the receiving end of each supply compartment and arranged to collect air by the movement of the car in either direction.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,271,495. METHOD OF GRINDING SPLINE-SHAFTS AND OTHER INTERRUPTED CYLINDRICAL BODIES. FREDERICK ALEXANDER WARD, Detroit, Mich., assignor to Gear Grinding Machine Company, Detroit, Mich., a Corporation of Michigan. Filed Aug. 13, 1912. Serial No. 714,810. (Cl. 51—4.)



1. The method of grinding obstructed cylindrical surfaces, comprising relatively reciprocating the work and the grinder wheel parallel to the axis of the former, said wheel being provided with a concave peripheral surface of exactly predetermined arc corresponding in radius to that of the finished cylindrical surface and of a length corresponding to that between the obstructions in the finished surface of the work, and also provided with a fashioned surface at the edge of the concave portion for grinding the face of the obstruction; rotating the work to a series of exactly predetermined positions intermediate reciprocations to present different segments to the grinding action and re-trimming the surface of said grinder to restore its exact form prior to the finishing cut.

2. The method of grinding obstructed cylindrical surfaces, comprising mounting the work and a grinder wheel in an organized work-grinding machine, adapted to relatively reciprocate the one in relation to the other and parallel to the longitudinal axis of the work; trimming said wheel while thus mounted to form a concave peripheral surface of exactly predetermined arc corresponding in radius to that of the finished cylindrical surface, and of a length corresponding to that between the obstructions in the finished surface of the work, and also having a fashioned surface at the edge of the concave surface for grinding the face of the obstruction; and rotating the work through a series of exactly predetermined positions to present different segments to the grinding action.

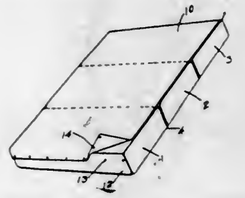
3. The method of producing a shaft which consists in forming the same of hardened steel with projecting splines and intermediate grooves between the splines, leaving stock for grinding throughout the splined portion, and grinding with a formed wheel bearing faces on the bottoms of said grooves throughout their length and width and symmetrically with reference to the axis of the shaft.

4. The method of producing a shaft which consists in forming the same of hardened steel with projecting splines and intermediate grooves between the splines, leaving stock for grinding throughout the splined portion, grinding with a formed wheel bearing faces on the bottoms of said grooves throughout their length and width and symmetrically with reference to the axis of the shaft, and by means of said formed wheel grinding the flanks of the splines parallel to the axis and straight from end to end and from their bottom to their top edges.

5. The method of producing a shaft which consists in forming the same of hardened steel with projecting splines and intermediate grooves between the splines, leaving stock for grinding throughout the length of the splined portion and grinding with a formed wheel bearing faces on the bottoms of said grooves throughout their length and symmetrically with reference to the axis of the shaft.

1,271,496. FOLDABLE MATTRESS. CLARA P. WILSON, Los Angeles, Cal. Filed Dec. 4, 1917. Serial No. 205,444. (Cl. 5—13.)

A mattress or the like constructed of three sections built upon a continuous bottom sheet, said bottom sheet forming hinges to connect the sections together; a flap connected to the outer side of one of the outer sections and extending over all the sections to the outer side of the opposite outer section; snap fasteners for securing the free edge of the flap to the outer edge of said opposite outer section, so that the flap forms a continuous top for the unfolded sections; a fastener member secured



to an intermediate section so that when the mattress has been rolled into a bundle, the flap may extend around the opposite outer section from that to which it is attached and be attached to said intermediate section so as to hold the mattress in a bundle.

1,271,497. WEIGHING-SCALE. ALBERT J. ZIMMERMAN, Dayton, Ohio, assignor, by mesne assignments, to The Richmond-Standard Manufacturing Company, Richmond, Ind., a Corporation of Indiana. Filed July 25, 1916. Serial No. 111,301. (Cl. 265—71.)



1. In a weighing scale, the combination with a main frame, a platform, and platform levers of fixed lever supports projecting beneath the levers and floating fulcrums for the platform lever carried thereby, said floating fulcrums being capable of vibratory movement in any direction in a horizontal plane.

3. In a weighing scale, the combination with a main frame, a platform, and platform levers of fixed lever supports, said supports having a plurality of depressions arranged in triangular relation in their upper faces, floating fulcrum blocks for said levers having correspondingly located depressions in their bottom faces, and bearing balls engaging simultaneously in the depressions of the supports and the fulcrum blocks, whereby said blocks will be capable of vibratory movement in a horizontal plane.

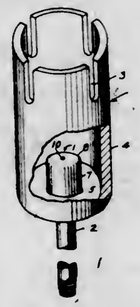
4. In a weighing scale, a stationary main frame, a vibratory platform, platform levers, and fulcrum blocks therefor capable of vibratory movement both laterally and longitudinally in a substantially horizontal plane in unison one with the other, and bearing balls upon which the fulcrum blocks are supported and vibrate.

8. In a weighing scale, a bifurcated supporting bracket, independent floating fulcrum blocks carried by each arm of said bifurcated bracket and bearing balls interposed between the supporting arms of the bracket and the fulcrum blocks, said blocks being capable of independent vibratory movement in any horizontal direction.

10. In a weighing scale, independent floating fulcrum blocks arranged in pairs, one pair for each fulcrum bearing of the scale, fixed supports for said fulcrum blocks and bearing balls interposed between the blocks and supports whereby said blocks will be capable of independent vibratory movement in any horizontal direction.

[Claims 2, 5 to 7, and 9 not printed in the Gazette.]
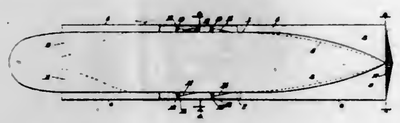
1,271,498. BLUE-FLAME GAS OR OIL BURNER. GEORGE L. BLANCHARD, Pomona, Cal. Filed Jan. 9, 1918. Serial No. 211,050. (Cl. 158—99.)



1. A burner comprising a raw casting forming an imperforate cup having a straight vertical cylindrical wall with vertical slots extending from its upper end and a flat bottom and a nozzle extending upwardly from the center of the bottom and having a vertical bore and a vertical orifice; and a vertical feed pipe tapped into the lower end of the bore.

[Claim 2 not printed in the Gazette.]

1,271,499. BOAT. HUGO BRINKHAUS, Brooklyn, N. Y. Filed July 7, 1916. Serial No. 107,914. (Cl. 115—16.)



1. A device for decreasing the head resistance of boats comprising a water-conveying conduit extending fore and aft outside of the hull of the boat from adjacent to the prow of the boat aft at least as far as the largest cross-sectional area of the boat and flaring at its forward end to provide a water-collecting funnel adjacent to the prow of the boat, and means for impelling the water sternward through such conduit.

5. A device for decreasing the head resistance of boats comprising, in combination with a boat having a forwardly tapering hull, a water-conveying conduit at each side of and at the outside of the hull of the boat extending fore and aft from adjacent the prow aft beyond the widest part of the boat at the bilge and one side of which conforms to the contour of the side of the hull from the bottom upward and the other side walls of which are longitudinally parallel to the longitudinal axis of the boat so as to provide at the prow a forwardly flaring water-collecting funnel, and means within such conduits at the bilge of the boat for impelling the water sternward through the conduits.

7. A device for decreasing the head resistance of boats comprising a water-conveying conduit at the outside of each side of the hull of the boat forming externally to the hull a hollow bilge-keel open fore and aft, and means for impelling the water sternward through such conduits.

11. A device for derreasing the head resistance of boats comprising a water-conveying conduit at each side of the hull of the boat, forming a hollow bilge-keel and extending both fore and aft from the bilge, the bottom wall of such forwardly and rearwardly extended parts being continued inward to join the hull of the boat and the top wall of such forwardly and rearwardly extended parts being continued upward and inward to join the hull of the boat for providing at the bow a forwardly and upwardly flaring water-collecting funnel and at the stern a rearwardly and upwardly flaring water-discharging funnel, the hull of the boat forming one of the walls of each such conduit and all of the other walls thereof being parallel to the longitudinal axis of the boat, and means at the bilge for impelling the water sternward through such conduits.

18. A device for decreasing the head resistance of boats comprising a water-conveying conduit at the outside of each side of the hull of the boat forming externally of the hull a hollow bilge-keel open fore and aft.

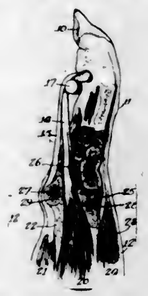
[Claims 2 to 4, 6, 8 to 10, 12 to 17, and 19 to 26 not printed in the Gazette.]

1,271,500. WORK-HANDLING DEVICE AND SUPPORT. EDWIN S. CRONK, Sauk Rapids, Minn. Filed Jan. 13, 1916. Serial No. 71,953. (Cl. 95—100.)



In a device of the character described, a body portion having a handle formed thereon, and a plurality of alternately arranged laterally extending feet formed on the lower marginal portion of the body.

1,271,501. TREATING HAMS TO PREVENT SOURING. LOUIS N. BOELIO, Chicago, Ill., assignor of one-half to Luther Johns, Oak Park, Ill. Filed Aug. 18, 1917. Serial No. 186,854. (Cl. 17—30.)



1. The method of treating hams to prevent souring which comprises supporting the hog carcass at all stages of slaughtering, dressing and cutting up of the same into various parts in such manner that the shank of the ham is maintained free from a passage-way adapted to admit putrefactive organisms or their spores from the exterior to the interior thereof, and then curing the ham in any approved way.

2. The method of treating hams to prevent souring which comprises supporting the hog carcass at all stages of slaughtering, dressing and cutting up of the same into various parts in such manner that putrefactive organisms or their spores are excluded from the interior of the body of the ham during said operations, and then curing the ham in any approved way.

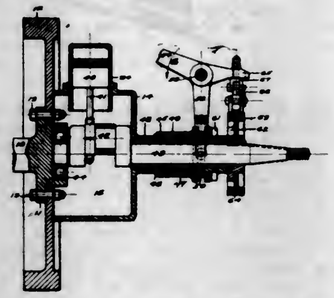
3. The method of treating hams to prevent souring which includes supporting the hog carcass at all stages of slaughtering, dressing, and cutting up of the same into various parts while maintaining the shank of the ham free from a passageway adapted to admit to the interior of the ham during said operations putrefactive organisms or their spores in a form likely to produce putrefaction, and then curing the ham in any approved way.

4. The method of treating hams to prevent souring which includes slaughtering the animal, dressing the carcass, and cutting up the same into various parts, the ham being one of such parts, while excluding putrefactive organisms and their spores from the interior of the shank of the ham during said operations.

5. The method of treating hams to prevent souring which includes slaughtering the animal, dressing the carcass, and cutting up the same into various parts, the ham being one of such parts, while excluding putrefactive organisms and their spores from the interior of the body of the ham and from the interior of a portion of the shank of the ham during said operations.

[Claims 6 to 10 not printed in the Gazette.]

1,271,502. FLUID-CLUTCH. CARLTON A. DRUMMOND, Los Angeles, Cal. Filed May 28, 1917. Serial No. 171,543. (Cl. 192—18.)

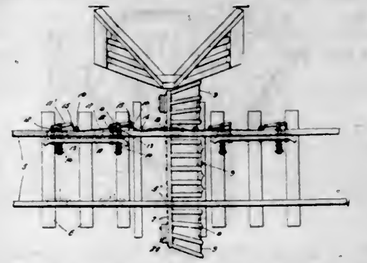


1. The combination with a driving crank shaft, of a fly wheel fixed upon one end of the crank shaft and having a solid web, a fluid clutch case fixed against the web and forming a fluid chamber, means forming a bearing in the end of the driving shaft, means forming a bearing through the case in line with the driving shaft, a driven crank shaft mounted with the crank in the case and operating in said bearings, piston cylinders extending radially from the case, pistons in the piston cylinders and connected to the crank shaft, means forming compression chambers at the outer ends of the piston cylinders, inlet valves for the compression chambers, rotary outlet valves for the compression chambers, a clutch member fixed upon the driven shaft, a second clutch member slidingly splined upon the second bearing and adapted to engage the first clutch member, a control lever pivotally mounted, a yoke member extending from the control lever and engaging the sliding clutch member, and connections between the rotary outlet valves and the sliding clutch member, so that when the rotary valves are closed the clutch members are engaged.

2. The combination with a driving crank shaft, of a fluid clutch case fixed to one end of the shaft, a driven crank shaft mounted with its crank in the clutch case, piston cylinders extending radially from the clutch case, pistons in the piston cylinders and connected to the driven crank shaft, means forming compression chambers at the outer ends of the piston cylinders, means for regulating the compression in the compression chambers, a clutch member fixed upon the driven crank shaft, a second clutch member slidingly splined relative to the clutch case and adapted to engage the first clutch member, and connections between the means for controlling the compression and the sliding clutch member, so that when the compression chamber is closed the clutch members are engaged.

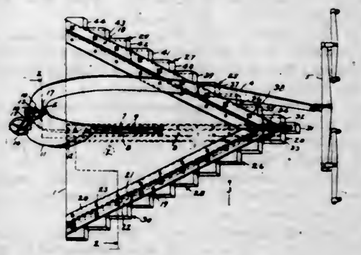
1,271,503. CATTLE-GUARD. EDWARD E. DUGGER and WILLIAM D. WOODS, Osage, Okla. Filed May 8, 1917. Serial No. 167,290. (Cl. 269—9.)

In combination with a railway track, a movable cattle guard, said guard comprising a gate, means for pivotally connecting the gate to the under side of the track, a horizontally movable bar disposed adjacent the track, levers disposed adjacent the track, rods extending through the track and bar, a coiled spring interposed between the bar and one end of the respective rods, a lever carried by each of the rods and forming the pivot therefor, rods con-



necting one of the ends of the levers to the bar, means for connecting the opposite ends of the levers to the gate, whereby movement of the bar produces a relative movement of the gate, and weights for moving the gate to its normal position after the same has been moved by the action of said bar.

1,271,504. PALMETTO-ROOT AND WEED PLOW. ELBERT H. FARMAN, McKittrick, Cal. Filed Jan. 19, 1918. Serial No. 212,715. (Cl. 55—60.)



2. In a palmetto plow, a cutter bar frame formed of heavy sheet metal, A-shaped in plan, and flat, a T-bar placed below and half way between the rear corners of the frame and extending to the point and rigidly secured in place, Z-shaped supporting plates secured to the side edges of the cutter bar frame, cutter bars secured to the supporting plates against the side edges of the cutter bar frame; the lower faces of the cutter bars being flush with the lower face of the cutter bar frame; and cutting edges upon the cutter bars; said cutting edges being in transverse lines.

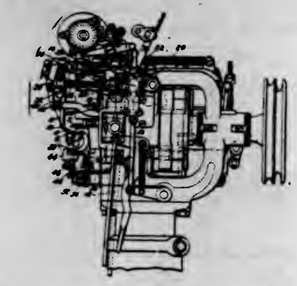
[Claims 1 and 3 not printed in the Gazette.]

1,271,505. ROUNDING AND CHANNELING MACHINE. FREDERICK JOSEPH FEIST, Rochester, N. Y., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Sept. 9, 1916. Serial No. 119,191. (Cl. 12—18.)

1. A machine for operating on shoes, having, in combination, a forepart guide, a crease guide lever, a crease guide at the forward end of the lever, and an abutment overlying and supporting the front end of the crease guide lever, and means for rendering the abutment inactive during the operation about the forepart.

4. A machine for operating on shoes, having, in combination, a forepart guide, a crease guide lever, a crease guide at its forward end, an abutment arranged to overlie the forward end of the crease guide lever, a slide bar carrying the abutment arranged to be advanced and re-

tracted in moving the forepart guide into and out of active position, and a cam plate on the crease guide lever coöperating with the abutment.



10. A sole rounding machine, having, in combination, a forepart guide, a crease guide lever, a crease guide at the forward end of the lever, an abutment overhanging and supporting the front end of the crease guide lever, and means for rendering the abutment inactive and causing the crease guide to gradually rise as the forepart guide is moved into active position.

[Claims 2, 3, 5 to 9, and 11 not printed in the Gazette.]

1,271,506. FIRE-EXTINGUISHING AND FIREPROOFING COMPOSITION. GEORGE E. FERGUSON, New York, N. Y., assignor to Pyrene Manufacturing Company, a Corporation of Delaware. Filed Nov. 18, 1913. Serial No. 801,733. (Cl. 23—5.)

1. A fire extinguishing composition composed of substances which, when exposed to the heat of the fire, give off ammonia gas and also produce a coating which holds said gas about the burning material.

2. A fire extinguishing composition composed of substances which, when subjected to the heat of the fire, give off ammonia gas and also deposit a fire-proofing coating on the burning material.

6. A fire extinguishing and fire proofing composition composed of sodium silicate, borax, microcosmic salt and monosodium phosphate.

8. A fire-extinguishing and fire-proofing composition composed of substances which when subjected to the heat of the fire give off a fire-extinguishing gas and also deposit a fire-proofing coating on the burning material, and which when brought together will not react chemically in water solution.

[Claims 3 to 5 and 7 not printed in the Gazette.]

1,271,507. ADJUSTABLE JACK. ALFRED D. GOODWIN, Ripon, Cal. Filed Feb. 13, 1917. Serial No. 148,329. (Cl. 254—119.)

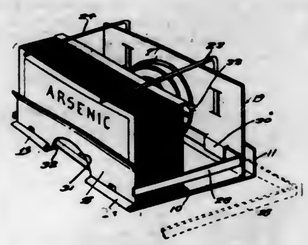


2. An adjustable jack comprising a lever adapted to lie in a substantially horizontal position when holding the lifted object, a carrier slidable along the length of the lever, a lifting bar pivotally mounted in the carrier, a link pivoted to the bar and the lever whereby when the carrier is moved it will alter the relative distance between the outer end of the lifting bar and the lever, and means for fixing the carrier stationary at any point on the lever.

4. An adjustable jack comprising a lever, a carrier slidable on the lever, a lifting bar arranged for pivotal and sliding movement in the carrier, a lug on the bar, a pivoted dog in the carrier such dog being engageable by the lug when the bar slides in the carrier whereby the dog will frictionally engage the lever and lock the carrier against movement on such lever.

[Claims 1 and 3 not printed in the Gazette.]

1,271,508. LABEL-FILE. LINCOLN HALL, Los Angeles, Cal. Filed Mar. 28, 1917. Serial No. 158,035. (Cl. 211—39.)



1. A label file, comprising a file plate formed with upturned front and back walls, the horizontal marginal edge of the front wall being curved outwardly, a follower plate adapted to slidably rest upon the file plate and secure a pack of labels against the front wall of said file plate, resilient supporting means secured to the follower plate and the back wall of the file plate in a manner to permit universal movement of said follower plate, adjustable means for accommodating labels of various heights, other adjustable means for accommodating labels of various lengths, a shelf, means whereby said file may interlock with and be supported by the shelf, and means for resiliently holding the file upon the shelf in a removable manner.

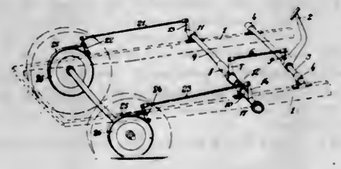
2. A label file comprising a shelf formed of sheet metal and having an up-turned rear flange and having a folded forward edge forming a groove, a flat spring extending forwardly from the rear flange, a body plate having an up-turned front ledge and an upturned back plate; said back plate fitting against the spring; and tangs extending forwardly from the body plate into the groove at the forward edge of the shelf.

3. A label file comprising a shelf having an up-turned rear flange and a folded forward edge forming a groove; there being screw holes through the rear flange; a flat spring mounted against the rear flange, screws inserted through the spring and the flange, and a body plate having an upturned forward ledge and an up-turned back plate and having tangs extending forwardly into the groove; so that by pressing the body plate backwardly the tangs will be disengaged from the groove and the body plate may be removed.

4. A label file comprising a shelf of sheet metal having an upturned rear flange and a folded forward edge; the central portion of the forward edge being cut away; a body plate having an up-turned forward ledge and an upturned back plate; the central portion of the forward ledge being cut away to match the cut away portion in the shelf; a flat spring mounted against the rear flange; the up-turned back plate pressing against the spring; tangs extending forwardly from the body plate into the groove, vertical bearings formed in the back plate, guard arms slidably mounted in said bearings and extending forwardly above the top of the back plate, a follower plate mounted to slide upon the horizontal portion of the body plate below the guard arms, and a helical spring secured to the back plate and pressing against the follower plate.

1,271,509. VEHICLE BRAKE MECHANISM. GUIDO FORNACA, Turin, Italy, assignor to F. I. A. T., a Corporation of Italy. Filed June 7, 1913. Serial No. 772,256. (Cl. 21—8.)

1. The combination in a vehicle having a plurality of wheels, of a plurality of brakes, a single operating means, and screw and nut equalizing means between said brakes and said operating means.



7. The combination with a vehicle frame having a pair of wheels, of a brake for each wheel, and a single actuating means for said brakes comprising a screw and nut equalizing mechanism maintaining equal pressures on all of said brakes.

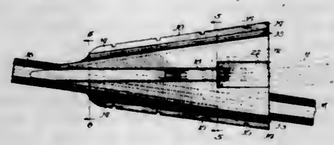
19. In combination with separate power transmitting lever arms for a plurality of load receiving devices, a common power-applying lever arm, means connecting said power transmitting arms and relatively movable horizontally with respect to the arms and operable to equalize the strain between the same and cause them to move in unison, said transmitting and power-applying arms all having a common axis and being movable in vertical planes.

20. In combination with an operating arm for each of a plurality of brakes, a rotatable common member connected with said arms, said member and arms being provided with engaging screw threads to permit movement of the arms relatively to the member longitudinally thereof, means operable to limit said movement and lock said arms and member together and means to rotate said member.

21. In combination with oscillating arms for separately operating a plurality of brakes, a common operating member connected with said arms, means to limit rotative adjustment of said arms relatively to said operating member, and means to effect such adjustment to change the throw of the arms.

[Claims 2 to 6 and 8 to 18 not printed in the Gazette.]

1,271,510. CROSSOVER. ALEXANDER M. GOW, Duluth, Minn. Filed Nov. 30, 1917. Serial No. 204,626. (Cl. 104—112.)



1. A crossover comprising a body member provided with tie-engaging supporting flanges extending throughout the major length of the body and diverging from end to end thereof, and a wheel guiding element at the top of the body and extending longitudinally thereof substantially midway of the flanges.

5. A crossover comprising a body member, tie-engaging supporting flanges depending from the body, diverging longitudinally thereof and extending throughout the major length of the body, and a rail section extending longitudinally across the top of the body substantially midway between the flanges and having its upper surface inclined downwardly toward that end of the body to which the flanges converge, and a rail receiving seat provided upon the top of the body at the high end of the rail section.

7. An integrally formed crossover comprising a tapered channel shaped member which fits over a railroad rail and is provided on its upper surface with a tapering rail section.

12. A crossover consisting of a single casting comprising a top, depending tie-engaging flanges extending throughout the major portion of the length of the casting and diverging from end to end, a rail section on the upper face of the top midway between the flanges, the upper surface of the rail section being inclined downwardly toward that end of the casting to which the flanges converge, the high end of the rail section terminating short of the adjacent end of the casting, there being a rail receiving seat in the upper face of the top at and in alinement with the high end of the rail section, and a supporting web depending from the top and disposed longitudinally beneath the rail section.

[Claims 2 to 4, 6, and 8 to 11 not printed in the Gazette.]

1,271,511. OIL-WELL-CLEANING APPARATUS. RALPH GREGORY, Mount Washington, and WILLIAM E. MINTON, Kansas City, Mo. Filed Feb. 5, 1918. Serial No. 216,124. (Cl. 166—18.)



1. The combination with the pipe line within an oil well casing, of a resilient scraper secured to the pipe line and bowed outwardly therefrom to engage the interior of the casing; said scraper having an interlocked relation to the pipe line as regards rotative movement and a longitudinal play connection therewith to accommodate automatic variation as regards the degree of bow to insure continuous contact with the interior surface of the casing.

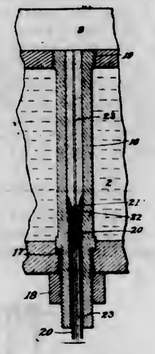
5. The combination with the pipe line within an oil well, a perforated fitting for jet action, secured upon the lower end of the pipe line, a bowed spring scraper secured to the pipe line and having an interlocked relation thereto as regards rotative movement and a longitudinal play connection therewith to permit of variation in the degree of bow.

[Claims 2 to 4, 6, and 7 not printed in the Gazette.]

1,271,512. CANDLE-MAKING MACHINE. CHARLES H. HAWKINS, Freeport, N. Y., assignor to Standard Oil Company of New York, New York, N. Y., a Corporation of New York. Filed June 30, 1917. Serial No. 178,028. (Cl. 18—27.)

2. In a candle making machine a longitudinally hollow mold the bore whereof has two diameters, the upper part being of the same diameter as the candle and the lower part of less diameter, a plunger adapted to work within said mold comprising a longitudinally hollow stem smaller than the part of the mold having the lesser diameter, an enlarged cup shaped member at the upper end of the stem and integral therewith and adapted to substantially fit the part of the mold having the larger diameter but too large to enter the part having the lesser diameter, and a lining for the cup shaped member of noncorrosive metal immovably attached thereto, so machined as to conform to the ignition end of the candle

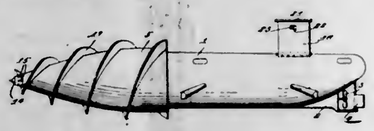
and perforated to permit the passage of the wick therethrough, the lower end of the stem of the plunger being



loosely connected with a vertically movable plate or frame.

[Claim 1 not printed in the Gazette.]

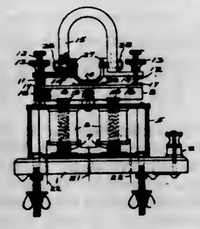
1,271,513. SUBMARINE. LEONARD ALFRED LAMAR, Portland, Oreg. Filed Apr. 2, 1917. Serial No. 159,287. (Cl. 114—16.)



1. In a submarine of the class described, the combination with the hull, of a rotatable nose-sleeve mounted upon one end thereof, the inner end of the nose-sleeve terminating short of the middle of the hull, an annular roller bearing body secured within said sleeve at its inner end, said body provided with an outer annular flange engaging the outer face of the hull, constituting a closure for the compartment formed between the hull and the sleeve, roller bearings in said body, and each bearing engaging said flange, and means for imparting rotary motion to said sleeve.

[Claims 2 and 3 not printed in the Gazette.]

1,271,514. SOUNDER. THOMAS J. MURPHY, Rochester, N. Y., assignor of one-half to James P. B. Duffy, Rochester, N. Y. Filed Oct 2, 1916. Serial No. 123,420. (Cl. 178—98.)

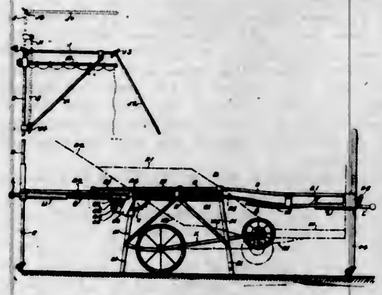


1. In a sounder, the combination of a pair of electromagnets, a balanced sounding member pivotally supported above the poles of the electromagnets, a permanent magnet supported above the sounding member, the poles of the magnets and the ends of the sounding member having abutting steel screws, a member connected to one of the steel screws for producing a sound different from that when the other of the steel screws is struck by the sounding member.

4. In a sounder the combination of a pair of electromagnets, a balanced sounding member pivotally supported above the poles of the electromagnets, a source of alternating current connected to the electromagnets for moving the sounding member, a permanent magnet, the poles of the permanent magnet and ends of the sounding member having abutting steel screws for yieldingly holding the sounding member.

[Claims 2, 3, and 6 to 8 not printed in the Gazette.]

1,271,515. PIECE OF FURNITURE CONVERTIBLE FOR USE AS A BED, COUCH, BATH-CHAIR, OR THE LIKE. JANE L. W. MURRAY, Craiglockhart, Scotland. Filed Mar. 2, 1917. Serial No. 152,030. (Cl. 155—16.)



1. A piece of furniture of the type described comprising a central structure, a main head member pivoted to one end thereof, a subsidiary head member also pivoted to said central structure, means for adjusting the position of said subsidiary member independently of the main head member, and means for securing said head members together at will to cause the main head member to follow the subsidiary head member on the operation of said adjusting means for the latter.

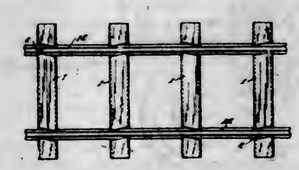
2. In combination with a construction such as that recited in claim 1, a leg member pivoted to the other end of the central structure, and an operative connection between the main head member and the leg member to effect the joint movement thereof on the operation of the adjusting mechanism for the subsidiary head member when the latter is attached to the main head member.

3. In combination with a construction such as that recited in claim 2, a foot member at the lower end of the leg member and rigid with the connecting member which extends between the main head member and the leg member.

4. A piece of furniture of the type described comprising a central structure, a main head member pivoted to one end thereof, a subsidiary head member also pivoted to said central structure, and on each side of said subsidiary member a worm wheel quadrant, a worm meshing therewith, a bevel gear for operating said worm, in combination with a transverse shaft having at each end a second bevel gear meshing with said first-mentioned bevel gear, and means for rotating said transverse shaft to raise or lower said subsidiary member, together with means for securing together at will said main and subsidiary head members whereby they may be adjusted in unison or the subsidiary member alone, substantially as described.

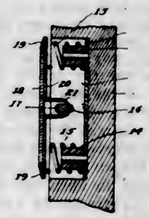
5. A piece of furniture of the type described having a central structure, a head member pivoted to one end of said central structure, an intermediate or leg member pivoted to the other end thereof, and a foot member pivoted in turn to the leg member, in combination with a wheeled under carriage, the frame of which is rigid and pivoted at its rear upon the central structure, and cam-like arms on the foot member engaging the front end of the carriage when the foot member descends, so that the front wheels of the carriage are forced into contact with the floor and the central structure raised, substantially as described.

1,271,516. RAIL-TIE. ISAAC NIEMI, Eben Junction, Mich., assignor of one-half to Andrew Salmi, Eben Junction, Mich. Filed Nov. 25, 1916, Serial No. 133,364. Renewed Dec. 29, 1917. Serial No. 209,601. (Cl. 238—5.)



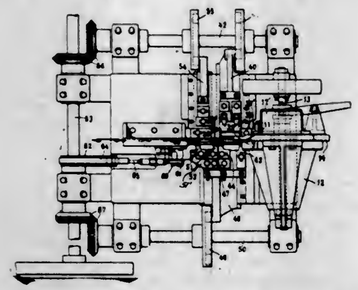
In a railway tie, a hollow tie body formed with spaced openings extending obliquely therecross, said body comprising a base, lugs formed integral with said base, tongues formed integral with the body of the tie for cooperation with said lugs to form a rail-receiving partition, and a filler for said tie body.

1,271,517. SASH-HOLDER. GEORGE JOHN O'DONNELL, Waterbury, Conn. Filed Apr. 24, 1918. Serial No. 230,463. (Cl. 16—122.)



A sash holder including a casing having inwardly extending pins in the bottom wall thereof and elongated slots in the side walls thereof, coil springs engaged on the pins, an elongated plate disposed over the open portion of the casing and having the ends thereof beveled, a strip secured to the inner face of the plate and having a central inwardly extending loop portion, and a transverse pin disposed through said slots and through said loop portion.

1,271,518. STRANDING-MACHINE. CHARLES W. PECK, Waterbury, Conn., assignor to The Mattatuck Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed Jan. 6, 1915. Serial No. 787. (Cl. 140—3.)



2. In a machine of the character described, an open-ended hopper mounted to rotate on a substantially horizontal axis and provided with plate feeding projections at the open end thereof, an abutment forming in conjunction with said projections a feeding passage for the plates, a plate guide having an entrance end adjoining said passage, and a spring for yieldingly guiding the plates in transit from said passage to the entrance of the plate guide.

3. In a machine of the character described, a vertical plate guide, means for automatically supplying plates on edge at the upper end of said guide, an overflow guide to dispose of an excess of plates at the upper end of said plate guide, and means for periodically withdrawing plates from the bottom of said plate guide.

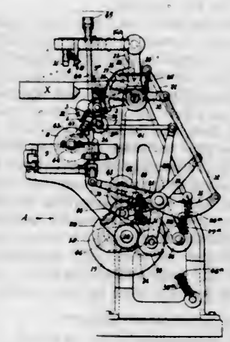
5. In a machine of the character described, a feed hopper, a horizontal strand guide beneath the feed hopper, a vertical plate guide extending in a direct line from said feed hopper to said strand guide, means for applying links to the plates at the strand guide, and means for drawing the stranded links and plates through the strand guide.

6. In a machine of the character described, a vertical plate guide, a yielding plate support at the upper end thereof, a horizontal strand guide leading from said plate guide, and means for inserting a link from the side to engage a plate held on said support.

7. In a machine of the character described, a strand guide, a yielding plate support at one end thereof, a stationary positioning nose overstanding said support, and means for inserting a link in a plate held between said support and said nose.

[Claims 1, 4, and 8 to 20 not printed in the Gazette.]

1,271,519. BAG-MAKING MACHINE. WILLIAM ROSE, Gainsborough, England. Filed July 29, 1916. Serial No. 112,167. (Cl. 93—12.)



1. In apparatus for folding and applying adhesive matter to the ends of bags, or the like, the combination of a side folder turnable on a center for folding down the first fold, and shaped to crease and splay out the outstanding portions of the bag end, a second turnable side folder for folding down the opposite side of the bag end and temporarily holding it down, end folders movable to crease the outstanding portions or ears of the bag end against the second folder while it remains temporarily in holding-down position, means independent of the folders for applying adhesive after the second side folder has moved from holding down position, and means for completing the movement of the end folders to fold down the end ears upon the side folds to complete the bag closure.

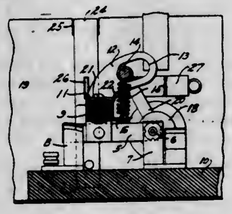
2. In apparatus of the construction specified in claim 1, the mounting of the adhesive applying device on the arm of the second side folder.

3. In apparatus of the construction specified in claims 1 and 2, the combination therewith of an adhesive supply roller, with which the applying device comes in contact on the forward stroke of the second side folder, and means for preventing such contact on the return stroke of said folder.

4. In apparatus of the construction specified in claim 1, the combination therewith of means associated with the

end flap folders for preventing the operation of the adhesive applying device unless a bag blank be upon the former.

1,271,520. QUICK-BREAK SWITCH. ALEXANDER K. SUTHERLAND, New Britain, Conn., assignor to The Trumbull Electric Manufacturing Company, Plainville, Conn., a Corporation of Connecticut. Filed Nov. 5, 1917. Serial No. 200,236. (Cl. 175—288.)

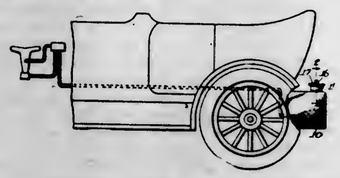


1. In a quick break switch, a switch blade pivotally supported at one end, a switch contact frictionally engaged by the opposite free end of the switch blade, a bracket mounted on the free end portion of the switch blade and insulated therefrom, said bracket having a dependent spring anchorage and an upstanding lug slotted in the general direction of the switch opening movement, a switch operating member working in said slot, and a spring connected between said operating member and the spring anchorage on the bracket.

4. In a switch of the character described, a switch box, an external operating handle having a hub portion journaled in one wall of the box and extending through said wall into the interior of the box, a rod having one end seated in said internally disposed hub portion of the handle and bent angularly to extend from the plane of said wall inward into the body of the box, a switch mounted in said box and comprising pivoted switch blades and switch contacts frictionally engaged thereby, the pivotal axis of said switch blades being substantially concentric to the pivoted hub of the operating handle, a lost motion connection between the inwardly projecting portion of the rod and the free ends of the switch blades, and a spring connection between said inwardly extended portion of the rod and said switch blades.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,271,521. FUEL-TANK-SEALING VALVE. JOHN B. TATE, Altoona, Pa. Filed Aug. 25, 1917. Serial No. 188,102. (Cl. 158—36.)

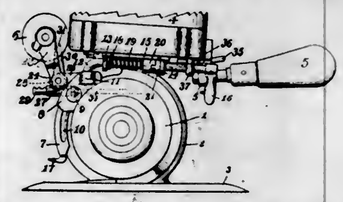


1. In a vacuum liquid-fuel feed for automobiles, the combination of a fuel tank, means for withdrawing fuel therefrom by vacuum, and means including a sealing valve responding to both internal and external pressure to vent the tank and to supply air thereto.

3. A valve comprising in combination a casing, and a valve member fitting within the casing and reciprocable therein, said casing having two internal grooves which terminate in the plane of the valve-member when the same occupies an intermediate position, the opposite ends of the grooves communicating with the opposite open ends of the casing, substantially as described.

[Claims 2 and 4 to 9 not printed in the Gazette.]

1,271,522. CLOTH-CUTTING MACHINE. EMANUEL W. BORTMAN, Norristown, Pa., assignor to Wildman Mfg. Co., Norristown, Pa., a Corporation of Pennsylvania. Filed Jan. 18, 1917. Serial No. 143,128. (Cl. 164—76.)



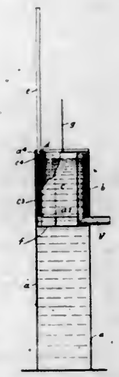
1. In combination in a cloth cutting machine, a cutting knife, means for driving the same, a sharpener normally held away from the knife, a guard for the knife manually operated means for displacing the guard to expose the knife edge and for simultaneously moving the sharpener to the said edge, and means for operating the guard independently of the sharpener, substantially as described.

4. In combination in a cloth cutting machine, a cutting knife, means for driving the same, a sharpener normally held away from the knife, a guard for the knife, a handle by which the machine is guided, means accessible to the hand of the operator which grasps the handle for operating both the guard and the sharpener substantially simultaneously, the said sharpener moving toward the knife and the guard moving away from the knife in said operation, and means adjacent the handle for operating said guard independently of the sharpener.

12. In combination in a cloth cutting machine, a cutter, a sharpener therefor, a guard for the cutter, a rock shaft carrying the guard, said rock shaft being capable of longitudinal movement, a spring clutch for locking the rock shaft to hold the guard in operative position, said rock shaft when pressed longitudinally releasing the clutch and allowing the spring to throw the guard to inoperative position, a finger lever on the rock shaft for operating the same, said finger lever being adjacent the main handle of the machine, a finger lever with a connection to the sharpener for moving the same to the knife, said finger lever operating also upon the rock shaft to move it longitudinally for the release of its locking clutch and for the movement of the guard to inoperative position.

[Claims 2, 3, and 5 to 11 not printed in the Gazette.]

1,271,523. APPARATUS FOR MEASURING THE QUANTITY OF EXPIRED AIR. HAYDN BROWN, Chislehurst, England. Filed Mar. 16, 1916. Serial No. 84,596. (Cl. 73—31.)

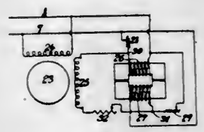


1. In apparatus of the type described, a liquid container, a bell having its margin sealed by the liquid in the container, and having inlet and outlet means for the introduction of air into the bell to cause it to rise in the liquid and thereafter gradually descend by reason of the escape of the contained air through the outlet, a normally sinking member having associated therewith means for indicating by the distance it sinks when the bell is rising and descending the volume of air introduced into the bell, and means controlled by the bell for engaging said member when the bell is at rest in its lowermost position but freeing the same during the rising and descending movement of the bell, for the purpose described.

5. In apparatus of the type described, a liquid container, a bell having its margin sealed by the liquid in the said container, means through which air can be introduced into the said bell to lift the latter, said bell being provided with an outlet through which said air may escape to permit the bell to fall again, a normally sinking gage having means for indicating by the distance it sinks while the bell is rising and descending the volume of air introduced into the bell and means associated with the said bell and container for causing the said bell to come into cramping engagement with the said gage as the said bell comes to rest.

[Claims 2 to 4 not printed in the Gazette.]

1,271,524. SELECTIVE MOTOR. JAMES BURKE, Erie, Pa., assignor to General Railway Signal Company, a Corporation of New York. Original application filed June 28, 1911, Serial No. 635,885. Divided and this application filed Jan. 6, 1914. Serial No. 810,562. (Cl. 172—278.)



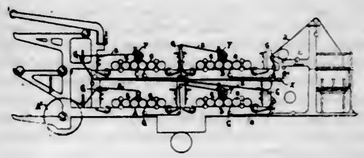
1. A single phase supply circuit, an alternating current motor having on one of its members two displaced windings, means comprising resistance and reactance each connected in two circuits in parallel with each other across said supply mains, one of said windings being connected across the line and the other winding being connected in a circuit across intermediate points of said two circuits in parallel, and means in the circuit of one of said windings tending to make the lead or lag in one winding more dependent upon the frequency than in the other winding.

2. A single phase supply circuit, an alternating current motor having on one of its members two displaced windings, one of said windings being connected directly across said supply circuit, a Wheatstone bridge also connected across said supply circuit with inductances in two opposite sides thereof and resistances in the other two opposite sides, the other of the two windings of said motor being connected across said bridge, the time constants of the two windings being different whereby the current in one winding will have its phase relation determined in greater degree by the frequency than in the other winding.

[Claim 3 not printed in the Gazette.]

1,271,525. ROTARY PRINTING-MACHINE. GEORGES CADET, Paris, and FERNAND CHARLES LEON DELATTRE, Parc de St. Maur, France. Filed Jan. 30, 1914. Serial No. 815,493. (Cl. 270—5.)

4. In a rotary printing press, a series of printing units, through which the printing web successively passes, and a regulating device engaging said web between the units, said device comprising a stationary guide roller over which the web passes directly to one of the units, a displaceable roller pivoted on the axis of the stationary roller and engaging the web in advance of the latter and means for swinging said pivoted roller on its axle to



vary the length of the path of travel of the web between the printing units, for the purpose described.

[Claims 1 to 3 not printed in the Gazette.]

1,271,526. METALLIC PACKING AND METHOD OF MAKING SAME. JOHN CRANE, Maywood, and FRANK E. PAYNE, Glencoe, Ill., assignors to Crane Packing Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 19, 1917. Serial No. 155,724. (Cl. 154—2.)



1. A packing comprising a flexible metallic body and a flexible backing therefor.

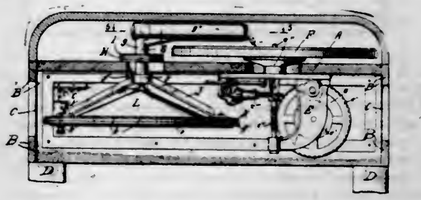
3. A packing comprising a core, a helical coil of metal about said core, lubricating means interposed between the adjacent layers of said coil, and a resilient backing for said coil.

4. The method of manufacturing packing which consists in first winding metal foil into a compact roll, pressing said roll to a rectangular cross section and then mounting it on the face of a resilient backing.

13. The improved method of manufacturing packing which consists in pressing a roll of metallic foil into rectangular cross section and then fastening said metallic foil to a resilient backing.

[Claims 2, 5 to 12, and 14 not printed in the Gazette.]

1,271,527. SOUND-REGENERATING MACHINE. MARCUS C. HOPKINS, Jersey City, N. J., assignor, by mesne assignments, to Lektophone Corporation, New York, N. Y., a Corporation of Delaware. Filed July 14, 1913, Serial No. 778,826. Renewed Mar. 22, 1918. Serial No. 224,048. (Cl. 274—16.)



1. In a mac ine for directly regenerating sound from a record of the same, a vibratile conical tympanum of large area rigidly supported at its periphery and freely exposed to unconfined air, and a mechanical transmission through which the vibrations produced by the record are transmitted to the tympanum, the tympanum being of sufficient area to impart to the surrounding free air, when the

tympanum is so vibrated, sound waves substantially corresponding in intensity to the recorded sound waves; substantially as described.

2. In a machine for directly regenerating sound from a record of the same, a vibratile conical tympanum of large area rigidly supported at its periphery and freely exposed to unconfined air, a mechanical transmission through which the vibrations produced by the record are transmitted to the tympanum, the tympanum being of sufficient area to impart to the surrounding free air, when the tympanum is so vibrated, sound waves substantially corresponding in intensity to the recorded sound waves, and an open-work cabinet inclosing the tympanum but affording substantially free access of the surrounding air thereto; substantially as described.

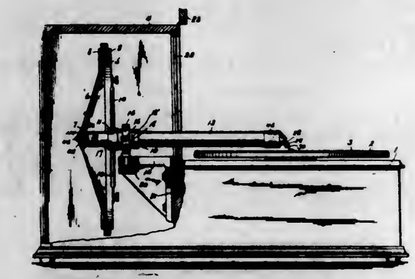
3. In a direct sound regenerating machine, the combination of a record holder, a transmission support mounted to swing over said record holder, and a tympanum carried by said support and extending under said record holder; substantially as described.

4. In a direct sound regenerating machine, the combination with a record holder, of a transmission support mounted to swing about vertical and horizontal axes, said support having an arm extended to move above and across said record holder and adapted to carry a stylus, the support having a second arm having a free end, and a tympanum carried at the free end of said second arm with its axis at an angle to said first arm; substantially as described.

5. In a sound regenerating machine, a vibration transmission comprising two ponderous members, fulcra carried by said members, an articulate parallelogram having opposite sides mounted on said fulcra and means exerting pressure upon said ponderous members to place said parallelogram under tension; substantially as described.

[Claims 6 to 31 not printed in the Gazette.]

1,271,528. SOUND-REGENERATING MACHINE. MARCUS C. HOPKINS, New York, N. Y., assignor, by mesne assignments, to Lektophone Corporation, New York, N. Y., a Corporation of Delaware. Filed Dec. 24, 1913, Serial No. 808,577. Renewed Mar. 22, 1918. Serial No. 224,049. (Cl. 274—16.)



1. In a sound regenerating machine, a sounding tympanum, a stylus-holder and a transmission member connecting the tympanum and the stylus-holder, and through which vibrations of the stylus produced by the groove of a record tablet are transmitted to the tympanum, in combination with yielding tensioning means connected to the transmission member between the tympanum and the stylus holder and vibrating therewith, and serving to impart continuous yielding lengthwise tension thereto.

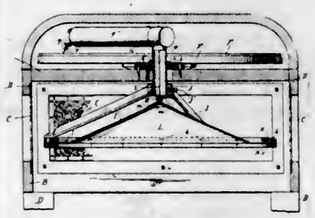
2. In a sound regenerating machine, a rigid support, two levers pivoted thereon, a transmission member carried by said levers, a style holder carried by one of said levers, a tympanum connected to said transmission member, and two springs respectively operating upon said levers to effect a tension in said transmission member.

3. In a sound regenerating machine, a rigid support carrying two knife edges, a vibration transmission member, two levers carrying said member and respectively pivoted on said knife edges, a style holder carried by one of said levers, a twmpanum connected with said transmission member, and yielding means operating upon said levers to effect a tension in said transmission member and to retain said levers seated on said knife edges.

4. In a sound regenerating machine, a rigid support, two levers pivoted thereon, a transmission member carried by said levers, a style holder carried by one of said levers, a tympanum connected to said transmission member, two springs secured respectively to said levers, and means operating upon said springs for forcing said levers to positions in which a tension will be imparted to said transmission member.

[Claims 5 to 18 not printed in the Gazette.]

1,271,529. ACOUSTIC DEVICE. MARCUS C. HOPKINS, New York, N. Y., assignor, by mesne assignments, to Lektophone Corporation, New York, N. Y., a Corporation of Delaware. Original application filed July 14, 1913, Serial No. 778,826. Renewed Mar. 22, 1918, Serial No. 224,048. Divided and this application filed Apr. 17, 1918. Serial No. 229,014. (Cl. 181—31.)



1. An acoustic device, comprising a tympanum rigidly supported at its periphery and having a free area exceeding nine inches in diameter and a conical portion, the diameter of which is not less than eight-tenths of the diameter of said area.

2. An acoustic device, comprising a tympanum rigidly supported at its periphery and having a free area exceeding nine inches in diameter and a conical portion, the diameter of which is not less than eight-tenths of the diameter of said free area, said conical portion being rigid in the direction of the axis of the tympanum.

3. An acoustic device, comprising a tympanum rigidly supported at its periphery and having a free area exceeding nine inches in diameter and a conical portion, the diameter of which is not less than eight-tenths of the diameter of said free area, the altitude of said conical portion being substantially one-quarter of the diameter of its base.

4. An acoustic device, comprising a tympanum support having a circular aperture, and a light tympanum freely exposed to unconfined air and having its outer edge rigidly mounted on said support in said aperture; said tympanum having a central conical portion, the base of which exceeds in area one-half the effective area of the said tympanum; the tympanum being of sufficient area to impart to the surrounding free air, when vibrated, sound waves substantially corresponding in intensity to the original sound waves.

[Claims 5 to 8 not printed in the Gazette.]

1,271,530. VEGETABLE-BOILER. IGNACY CERPIAL, South Bend, Ind. Filed Apr. 13, 1917. Serial No. 161,710. (Cl. 53—1.)

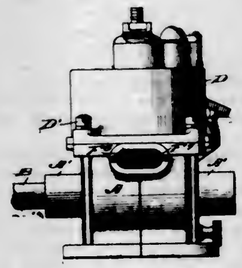
In combination, a vessel, a loop secured to the side thereof and opening vertically, a depending out-turned prong element secured to the side of the vessel above said loop, and provided with an opening, a handle formed with an upwardly-bent hook-shaped member engaging said loop and a pair of oppositely-disposed ears formed upon the upper end of the handle at right angles to said upwardly-bent member, and engaging said depending out-turned prong element, the main wall of said handle adjacent said ears being formed with an opening, a spring leaf having a flat portion secured to said handle and formed with an opening registering with the last-named opening, and also provided with an outwardly-curved



member carrying a pin, said spring holding said pin within the mentioned registering openings as well as within the prong opening, said handle being detachable by the withdrawal of said pin from the prong opening and a sliding downward movement of the handle.

REISSUES.

14,490. FLUID-PUMP. GEORGE W. KELLOGG, Rochester, N. Y., assignor to Kellogg Manufacturing Company, Rochester, N. Y., a Corporation of New York. Filed Apr. 2, 1918. Serial No. 226,333. Original No. 1,187,531, dated June 20, 1916, Serial No. 862,843, filed Sept. 21, 1914. (Cl. 230—27.)



1. In a pump, the combination with a base having an oil chamber located therein, of a cylinder arranged on the base, a piston reciprocating in the cylinder, and a baffle located at the bottom of the cylinder to prevent oil splash from the oil chamber to the cylinder walls but adapted to receive oil on its upper surface, whereby efficient lubrication is provided and excessive lubrication prevented.

2. In a pump, the combination with a base having an oil chamber located therein, of a cylinder arranged on the base, a piston reciprocating within the cylinder, and a baffle located to intercept oil splash from the oil chamber to the cylinder wall to prevent excess lubrication and adapted to receive oil on its upper surface to provide a limited but efficient lubrication between the piston and cylinder.

3. In a pump, the combination with a base having an oil chamber therein at its bottom, a cylinder located on the base and in open communication therewith, a reciprocating piston in the cylinder, and a baffle located between the base and the cylinder, said baffle extending into said open communication between the base and cylinder thereby intercepting oil splash from the oil chamber to the cylinder wall to prevent excess lubrication of the cylinder wall and piston, but adapted to hold oil on its upper surface to furnish a limited but efficient lubrication between the cylinder and piston.

4. In a pump, the combination with a base having an oil chamber in its bottom, of a cylinder located on the base and in open communication therewith, a reciprocating piston in the cylinder, and a baffle located between the cylinder and the base and effectively closing said open communication between the cylinder and base, said baffle intercepting oil splash from the oil chamber to the cylinder wall to prevent excessive lubrication, but adapted to receive and hold oil on its upper surface thereby providing a limited but efficient lubrication between the cylinder wall and the piston.

5. In a pump, the combination with a base having an oil chamber in its bottom, of a cylinder mounted on the base and in open communication with the base, a reciprocating piston in the cylinder, and a member located between the cylinder and the base and acting to intercept oil splash from the oil chamber to the cylinder wall to prevent excessive lubrication between the cylinder wall and piston and receiving and holding oil on its upper surface to provide a limited but efficient lubrication between the cylinder and the piston.

6. In a pump, the combination with a base having an oil chamber in its bottom, of a cylinder mounted thereon and in open communication therewith, a piston in the cylinder, and a yielding member located between the base and the cylinder and intercepting the communication between the base and cylinder against oil splash from the oil chamber to prevent excessive lubrication between the cylinder and piston and adapted to hold oil on its upper surface to provide a limited but efficient lubrication for the piston and cylinder wall.

7. In a pump, the combination with a base, of a cylinder mounted thereon, an oiling member extending inward from the bottom of the cylinder wall, and means for supplying a limited quantity of oil to the top of the member to be transferred outward on its top by capillary action to the cylinder wall.

8. In a pump, the combination with a base having an oil chamber located therein, of a cylinder arranged on the base, a piston reciprocating within the cylinder, a baffle located at the bottom of the cylinder, and an absorbent member disposed above the baffle.

9. In a pump, the combination with a base having an oil chamber located therein, of a cylinder detachably arranged above the base, a piston reciprocating within the cylinder, a baffle located at the bottom of the cylinder, an absorbent member disposed above the baffle in juxtaposition thereto, and deflecting means on the lower face of the piston.

10. In a tire pump, a crank case having an opening in its circumferential wall and an inwardly projecting flange defining said opening and constituting a baffle ring and cylinder seat, a cylinder mounted thereon, a piston movable in said cylinder, and an annular lubricating pad supported upon said flange adapted to be engaged by the piston upon the suction stroke of the latter, the pad being exposed to the opening, whereby it will be moistened with the lubricant by the splash from the crank case.

11. In a tire pump of the character described, a crank case, a cylinder mounted thereon, a piston operating in the cylinder, a shaft passing through the crank case, means operatively connecting the shaft to the piston to reciprocate the latter, a baffle flange formed at the junction of the crank case and the cylinder, a lubricating pad supported upon the flange and adapted to be compressed by the piston upon its suction stroke, and means whereby lubricant may be disposed in the lower portion of the crank case, there being an open space between the crank case and the adjoining portion of the cylinder and the pad being exposed to such space, as and for the purpose set forth.

12. In a pump, a crank case, a cylinder detachably mounted upon the crank case, a shaft passing through the crank case, a piston having a depending member longitudinally slotted to embrace the shaft, the slot opening at the lower end of the member, whereby said depending member may be dropped into position over the shaft when the cylinder is removed, and an actuating member mounted on the shaft and disposed at the side of said member and operatively connected with the piston.

13. In a pump, the combination with a base having an oil chamber located therein, of a cylinder arranged above

the base, a piston reciprocating within the cylinder, a baffle located at the bottom of the cylinder, an absorbent member disposed above the baffle in juxtaposition thereto, and deflecting means on the lower face of the piston.

14. In a pump, the combination with a crank case and cylinder, of a shaft passing through the crank case, a piston having a guiding member provided with an open ended slot for removably engaging said shaft and an actuating member mounted on the shaft and pivotally connected with the piston.

15. In a pump, the combination with a cylinder and reciprocating piston, of a drive shaft, a pair of eccentrics mounted on the drive shaft in spaced relation to each other and pivotally connected with said piston, and a guiding member carried by said piston, the guiding member being located between said eccentrics and having an open ended slot removably engaging the drive shaft.

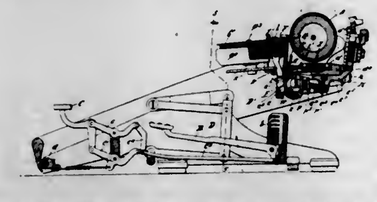
16. In a pump, the combination with a crank case of a cylinder, a piston in the cylinder, and an oil-receiving pad at the bottom of the cylinder for lubricating between the cylinder and the piston.

17. In a pump, the combination with a crank case, of a cylinder, a reciprocating piston in the cylinder, and a yielding oil receiving member at the bottom of the cylinder for lubricating between the piston and the cylinder.

18. In a pump, the combination with a crank case, of a cylinder, a reciprocating piston in the cylinder, a yielding oil receiving pad at the lower end of the cylinder, and means for supplying oil to the pad for lubricating between the piston and the cylinder.

19. In a pump, the combination with a crank case, a cylinder in communication with the case, and an oil-receiving and oil retaining pad projecting into the cylinder in the path of the lowest travel of the piston for lubricating between the piston and cylinder.

14,491. RIBBON MECHANISM. EMMIT G. LATTA, Syracuse, N. Y., assignor to Corona Typewriter Company, Inc., a Corporation of New York. Filed Jan. 26, 1916. Serial No. 74,485. Original No. 1,168,654, dated Jan. 18, 1916, Serial No. 661,516, filed Nov. 21, 1911. (Cl. 197—151.)



1. In a typewriting machine, the combination of a series of type bars, a universal bar arranged at an elevation above the pivoted ends of the type bars in position to be actuated by the type bars, a rock shaft in the upper part of the machine having arms which movably support said universal bar, a rock arm on said rock shaft, a ribbon vibrating lever, and an operative connection between said vibrating lever and said rock arm, substantially as set forth.

2. In a typewriting machine, the combination of a series of type bars, a universal bar arranged to be actuated by said type bars, a rock shaft having downwardly extending arms in rear of said universal bar, pivotal connections between said arms and said universal bar, a rearwardly extending arm on said rock shaft, a ribbon vibrating lever pivoted in rear of said universal bar, and an operative connection between said vibrating lever and said rearwardly extending arm, substantially as set forth.

3. In a typewriting machine, the combination of a series of type bars, a universal bar arranged to be actuated by said type bars, a rock shaft having supporting arms in rear of said universal bar, pivotal connections between said arms and said universal bar, a rearwardly extending arm on said rock shaft, a ribbon vibrator, a vibrating lever pivoted at its rear end in rear of said rock shaft and connected at its front end to said vibrator, and an operative connection between the central part of said vibrating lever and said rearwardly projecting arm, substantially as set forth.

4. In a typewriting machine, the combination of a series of type bars, a rock shaft having downwardly extending arms, a universal bar movably supported by said arms in position to be actuated by said type bars, a rearwardly extending arm on said rock shaft, a ribbon vibrator arranged in front of said rock shaft, a vibrating lever pivoted in rear of said rock shaft and extending forwardly under said shaft and connected to said vibrator, and a link connecting said vibrating lever to said rearwardly extending arm, substantially as set forth.

5. In a typewriting machine, the combination of a series of type bars, a universal bar, a rock shaft which movably supports said universal bar in position to be actuated by said type bars, a ribbon vibrating lever, a pair of arms loosely mounted on said rock shaft, links connecting said arms to said vibrating lever at different distances from its fulcrum, and means for operatively connecting either of said arms to said rock shaft, substantially as set forth.

6. In a typewriting machine, the combination of a series of type bars, a universal bar, a rock shaft which movably supports said universal bar in position to be actuated by said type bars, a ribbon vibrating lever, arms of different lengths loosely mounted on said rock shaft, links connecting said arms to said vibrating lever and means for operatively connecting one or the other of said arms to said rock shaft to rock therewith, substantially as set forth.

7. In a typewriting machine, the combination of a series of type bars, a universal bar, a rock shaft which movably supports said universal bar in position to be actuated by said type bars, a ribbon vibrator, a vibrating lever pivotally mounted at its rear end and connected at its front end to said vibrator, a pair of rearwardly extending arms loosely mounted on said rock shaft, links connecting said arms to the central part of said vibrating lever, and means for operatively connecting one of said arms to and disconnecting said other arm from said rock shaft, substantially as set forth.

8. In a typewriting machine, the combination of a series of type bars, a universal bar which is actuated by the type bars, a ribbon vibrating lever, means for operatively connecting said vibrating lever to said universal bar to cause the lever to move different distances, and an actuating bar for said connecting means having parts for positively limiting the movement of said vibrating lever to the exact distances intended, substantially as set forth.

9. In a typewriting machine, the combination of a series of type bars, a universal bar which is actuated by said type bars, a ribbon vibrating lever, means for operatively connecting said vibrating lever to said universal bar to cause the lever to move different distances, and an actuating bar for said connecting means which is movable transversely of said vibrating lever and provides stops for limiting the movement of the lever to the exact distances intended, substantially as set forth.

10. In a typewriting machine, the combination of a series of type bars, a universal bar actuated by said type bars, a ribbon vibrating lever, means for operatively connecting said vibrating lever to said universal bar to cause the lever to move one or another distance, and a slide for changing the movement of said vibrating lever and for positively limiting the movements of said lever to the distances intended, substantially as set forth.

11. In a typewriting machine, the combination of a transversely movable carriage, a motor which moves said carriage in one direction, a pair of ribbon spools mounted in front of said carriage, a ribbon feed bar arranged to move parallel with the direction of movement of said carriage and having rigidly connected forwardly extending arms, and means for operatively connecting said feed bar to said motor and said arms to said spools, substantially as set forth.

12. In a typewriting machine, the combination of a transversely movable carriage, a motor for moving said carriage in one direction, a pair of ribbon spools mounted in front of said carriage, a feed bar which is reciprocated by said motor in a direction parallel with the direction of movement of said carriage, rigidly connected forwardly extending arms on said feed bar, and means actuated by said arms for turning said ribbon spools, substantially as set forth.

13. In a typewriting machine, the combination of a transversely movable carriage, a motor for moving said carriage in one direction, a pair of ribbon spools mounted in front of said carriage, a feed bar arranged to slide parallel with the direction of movement of said carriage and having forwardly extending rigidly connected arms adjacent to said spools, an operative connection between said feed bar and said motor, and means for operatively connecting one of said spools to the adjacent arm of said feed bar and disconnecting the other spool from the other arm of said feed bar, substantially as set forth.

14. In a typewriting machine, the combination of a transversely movable carriage, a pair of ribbon spools mounted in front of said carriage, a feed bar arranged beneath said carriage to reciprocate in a direction parallel with the direction of movement of the carriage and having rigidly connected forwardly extending arms adjacent to said spools, means for reciprocating said feed bar, and means for operatively connecting one of said spools to the adjacent arm of said feed bar and disconnecting the other spool from the arm of said feed bar, substantially as set forth.

15. In a typewriting machine, the combination of a series of upwardly and rearwardly swinging type-bars, a transversely movable platen carriage, a pair of ribbon spools mounted in front of the plane of the type bar pivots, a bar arranged in rear of the plane of said pivots to reciprocate transversely of the machine and having forwardly extending rigidly connected arms adjacent to said spools, a motor for reciprocating said feed bar, and operative connections between the forwardly extending arms and the spools for rotating one or the other spool, substantially as set forth.

16. In a typewriting machine, the combination of a transversely movable carriage, a motor acting to move the carriage in one direction, a sliding bar connected to the motor to reciprocate padaliel with the carriage, a pair of forwardly projecting arms rigidly connected to said bar, a pair of ribbon spools, ratchet wheels connected to said spools, a pair of pawls mounted on said arms to act on the ratchet wheels, and means for holding one or the other of the pawls out of operative relation to its ratchet wheel, substantially as set forth.

17. In a typewriting machine, the combination of a transversely movable carriage, a motor acting to move the carriage in one direction, a sliding bar having a direct positive connection with the motor whereby the bar is caused to move parallel with the carriage at all times, a pair of rigid arms projecting from said sliding bar, a pair of ribbon spools, and means for operatively connecting either of said arms to one of the spools, substantially as set forth.

18. In a typewriting machine, the combination of a transversely movable carriage, a motor mounted under the carriage and acting to move the carriage in one direction, a sliding bar arranged under the carriage and connected to the motor to move therewith, a pair of forwardly projecting arms rigidly connected to the sliding bar, a pair of ribbon spools, and means whereby either of said arms may be operatively connected to one of the spools, substantially as set forth.

19. In a typewriting machine, the combination of a transversely movable carriage, a rotary motor acting to move the carriage in one direction, a sliding feed bar connected to the motor to move at all times therewith, a pair of forwardly projecting arms rigidly connected to the feed bar, a pair of rotary ribbon spools, means for connecting either of said arms to one of the spools in a way to move the spool when the carriage is moved by the motor, and to permit the spool to remain stationary when the carriage is moved in the opposite direction, substantially as set forth.

20. In a typewriting machine, the combination of a transversely movable carriage, a rotary motor acting to move the carriage in one direction, a sliding bar having a pin and cam connection with the motor whereby the bar reciprocates with the carriage, a pair of arms rigidly connected to and projecting from the sliding bar, a pair of rotary ribbon spools, and means for operatively connecting either of said arms to one of the spools, substantially as set forth.

21. In a typewriting machine, the combination of a transversely movable carriage, ribbon spools arranged in front of the carriage, a ribbon feed bar arranged at the rear portion of the machine and having rigidly connected arms extending forwardly toward said spools, means for reciprocating said feed bar transversely of the machine, and means operated automatically when the ribbon is nearly unwound from either spool for operatively connecting one of said arms to the adjacent spool and disconnecting the other arm from the other spool, substantially as set forth.

22. In a typewriting machine, the combination of ribbon spools, means for turning one or the other of said spools to wind the ribbon thereon, a pair of ribbon guide levers pivoted in rear of said spools and adapted to be moved by the ribbon when the ribbon is nearly unwound from one spool and acting when turned on their pivots to reverse the direction of feed of the ribbon, and a connecting bar located in rear of the spools and which is pivotally connected to said guide levers in front of the lever pivots, substantially as set forth.

23. In a typewriting machine, the combination of a pair of spools for a ribbon which has an obstruction near each end, mechanism for turning one or the other of the spools to wind the ribbon thereon, a pair of ribbon guide levers adapted to be actuated by said obstructions and acting when turned on their pivots to reverse the direction of feed of the ribbon, a transverse bar located in rear of the spools and pivotally connected to the guide levers to cause them to move in unison, and a spring acting to yieldingly resist the initial movement of the guide levers and to complete the movement thereof, substantially as set forth.

24. In a typewriting machine, the combination of a pair of spools for ribbon mechanism for turning one or the other of the spools to wind the ribbon thereon, a pair of levers pivotally mounted at their rear ends and having ribbon guides at their front ends, a transverse bar connecting the central parts of the levers and acting to cause the levers to move in unison, and a contractile spring connected to a fixed support in rear of one of the lever pivots and to the lever in front of its pivot whereby the spring is adapted to swing across the lever pivot and to yieldingly hold the lever at either end of its movement, substantially as set forth.

25. In a typewriting machine, the combination of a carriage, a series of upwardly and rearwardly swinging type-bars, a pair of ribbon spools mounted in front of the plane of the type bar pivots, mechanism for turning the spools, a pair of guide levers, the ribbon connecting the spools acting to swing the guide levers alternately in opposite directions, a bar located in rear of the plane of the type bar pivots and connecting said levers, and means actuated by said bar for connecting one spool to and disconnecting the other spool from the means for turning the spools, substantially as set forth.

26. In a typewriting machine, the combination of a carriage, a series of upwardly and rearwardly swinging type bars, a pair of ribbon spools mounted in front of the plane of the type bar pivots, and a pair of bars in rear of the plane of the type bar pivots movable parallel with the carriage, and means whereby one of said bars acts to turn the spools and the other to connect said spools alternately to the means for turning the spools, substantially as set forth.

27. In a typewriting machine, the combination of a transversely movable carriage, a pair of ribbon spools arranged in front of the carriage, a pair of bars arranged transversely of the machine in rear of said spools, means operated by one of said bars for turning said spools, and

means operated by said second bar for rendering the turning means for one of said spools active and the turning means for the other spool inactive, substantially as set forth.

28. In a typewriting machine, the combination of a pair of ribbon spools, a driving ratchet wheel for each spool, a driven pawl for each ratchet wheel, and connections comprising substantially rigid parts flexibly connected which are actuated directly by the ribbon and act to simultaneously lock one of said pawls out of operative position and release the other pawl from such locked position, substantially as set forth.

29. In a typewriting machine, the combination of a pair of ribbon spools, a driving ratchet wheel for each spool, a driving pawl for each ratchet wheel, a driving pawl controller for each pawl, a toggle joint for each controller acting when on dead center to positively hold the pawl out of operative position, and means acting to move one toggle joint out of dead center position and simultaneously force the other toggle joint into such position, substantially as set forth.

30. The combination in a collapsible typewriting machine having a series of type bars, and a platen carriage which is movably supported and is movable from an elevated operative position to a lower inoperative position in rear of the type bars, of ribbon spools arranged in front of the carriage to move up and down therewith, and a reciprocating feed bar which is operatively connected to said spools and is arranged transversely of the machine in position to be lowered with the carriage in rear of the type bars, substantially as set forth.

31. The combination in a collapsible typewriting machine having a series of type bars, and a platen carriage which is movably supported and is movable from an elevated operative position to a lower inoperative position in rear of the type bars, of ribbon spools arranged in front of the carriage to move up and down therewith, a reciprocating feed bar which is operatively connected to said spools and is arranged transversely of the machine in position to be lowered with the carriage in rear of the type bars, and a feed reversing device also arranged in position to be lowered with the carriage in rear of the type bars, substantially as set forth.

32. The combination in a collapsible typewriting machine having a series of type bars, a platen carriage which is movably supported and is movable from an elevated operative position to a lower inoperative position in rear of the type bars, of ribbon spools arranged in front of the carriage to move up and down therewith, a reciprocating feed bar which is operatively connected to said spools and is arranged transversely of the machine in position to be lowered with the carriage in rear of the type bars, and a feed reversing device and a ribbon vibrating mechanism also arranged in position to be lowered with the carriage in rear of the type bars, substantially as set forth.

33. In a typewriting machine, the combination of a support, ribbon spools, a power driven scroll cam, and means operated by said cam to rotate said spools.

34. In a typewriting machine, the combination of a support, a carriage, ribbon spools, a motor for driving the carriage along said support, a scroll cam operated by the motor, a bar operatively connected to the cam and to the spools and having a step-by-step movement with the carriage in its forward movement, and a movement corresponding to the movement of the carriage during its backward movement.

35. In a typewriting machine, the combination of a support, a carriage movable along said support, ribbon spools, a ratchet wheel for each spool, a driving and a holding pawl for each spool, means for moving the driving pawls, plates for controlling the engagement and disengagement of said pawls, a reversing lever for each spool adapted to be moved by the ribbon, a rod connecting the levers to move in unison, spring means for throwing the reversing levers quickly to one side when moved a certain distance by the movement of the ribbon, and means operated by the levers to position said plates and disengage one set of pawls and cause the other pawls to engage their coöperating ratchet wheel.

36. In a typewriting machine, the combination of a support, a carriage movable along said support, ribbon spools, means for rotating the spools, pivotally held reversing levers connected to move in unison and adapted to be moved by the ribbon, an arm pivotally held to each lever, toggles having a lost motion connection with said arms, springs for completing the movement of the reversing levers when swung across the pivotal axis of said levers, and means operated by said toggles for controlling the spool-rotating means and determining which spools shall be rotated.

37. In a typewriting machine, the combination of a support, a carriage movable along said support, ribbon spools, means for driving the carriage, means operated by the carriage driving means for rotating the spools, said spool rotating means being operated in the opposite direction by the carriage in its backward movement, pivotally held reversing levers adapted to be moved by a ribbon, arms pivotally connected together and to the reversing levers, said arms having lugs spaced apart, springs for completing the movement of the reversing levers when swung across the pivotal axis of said levers, toggle levers operated by said lugs, and pivotally held plates for controlling the spool driving means.

38. In a typewriting machine, the combination of a support, a carriage movable along said support, ribbon spools, ratchet and pawl mechanism for rotating the spools, pivotally held reversing levers connected to move in unison and adapted to be moved by the ribbon, arms pivotally held to the reversing levers, plates operatively connected to the arms and having an up and down movement and controlling the engagement and disengagement of the pawls and springs for completing the movement of the reversing levers when swung across the pivotal axis of said levers.

39. In a typewriting machine, the combination of a support, a carriage movable along said support, ribbon spools, ratchet-and-pawl mechanism for rotating the spools, pivotally held reversing levers, arms pivotally held to the reversing levers and to each other, plates for controlling the engagement and disengagement of the pawls, and an operative engagement between the arms and said plates.

40. In a typewriting machine, the combination of a carriage, a ribbon vibrator for moving a ribbon to cover and uncover the printing point, a rock shaft, two arms of relatively different lengths mounted on the rock shaft and operatively connected to the vibrator at different distances from said rock shaft, a universal bar operatively connected to move said rock shaft, means for moving the universal bar, and means mounted on said rock shaft to connect either arm to said shaft one at a time to move the vibrator different distances or to disconnect said arms to permit the vibrator to remain inactive.

41. In a typewriting machine, the combination of a carriage, a ribbon vibrator for moving a ribbon to cover and uncover the printing point, two pivotally held movable arms connected to the vibrator at relatively different distances from their pivots to impart different throws to the vibrator, and means for connecting and disconnecting said arms to operate the vibrator one at a time.

42. In a typewriting machine, the combination of a carriage, a ribbon vibrator for moving the ribbon to and from the printing point, a vibrator lever, a rock shaft, two arms loosely mounted on said shaft, two links connecting said arms to the lever at different distances from the rock shaft, means for rocking said shaft, means mounted on said shaft to connect to or disconnect said arms from said shaft, and manually operated means for moving the said means on the shaft.

43. In a typewriting machine, the combination of a carriage, a ribbon vibrator for moving the ribbon to and from the printing point, a vibrator lever, a rock shaft, two arms loosely mounted on said shaft, links connecting the arms to the vibrator lever at different distances from the rock shaft, means for rocking said shaft, slides mounted on said shaft having means to lock either of said arms to the shaft, and a pivotally held lever operatively connected to move the slides.

44. In a typewriting machine, the combination of a carriage, a ribbon vibrator for moving the ribbon to and from the printing point, a rock shaft, two arms having openings therein and loosely mounted on said shaft, links operatively connecting the arms to the vibrator to impart different throws thereto, slides mounted on said shaft having pins to enter said openings in the arms to lock said arms to the rock shaft, a bar for moving said slides, a rod having a loose connection with said bar to permit the disconnection of said bar from said rod, and a manually operative lever pivotally mounted to extend forwardly of the machine and connected at its inner end to operate the rod.

45. In a visible typewriting machine, the combination of type bars, a support for the type bars, a second support, a platen carriage movable with said support from an elevated position to a lower and more compact position while maintained in an upright position, keys operatively connected to the type bars, a universal bar mounted on the carriage support, a ribbon vibrator operatively connected to the universal bar also mounted on said support, ribbon spools and means for rotating said spools mounted on the carriage support, and automatic ribbon reversing mechanism also mounted on said carriage support and partaking of the compact movement.

46. In a visible typewriting machine, the combination of a main frame comprising relatively movable parts adapted when one of the parts is moved in one direction to be compact and in the opposite direction to be extended and in normal operative position, a platen carriage, ribbon vibrating mechanism, mechanism for feeding the ribbon lengthwise, automatic ribbon reversing mechanism, a universal bar operatively connected to the ribbon vibrating mechanism, all mounted upon one part of said frame, and a key action and type bars mounted upon the other part to adapt the two parts of the frame to be moved to a compact position and to place the universal bar and ribbon mechanism in an inoperative position with relation to the key action.

47. In a visible typewriting machine, the combination of a main frame comprising relatively movable parts adapted when one of the parts is moved in one direction to be compact and in the opposite direction to be extended and in normal operative position, said parts being pivotally held to each other to permit one part to move up and down with respect to another part, a platen carriage, ribbon vibrating mechanism, ribbon reversing mechanism, a universal bar operatively connected to the ribbon vibrating mechanism, carriage propelling mechanism also operated to move a part of the ribbon mechanism, all mounted upon one member of said frame, and a key action mounted on the other member to adapt the two said parts of the frame to be moved to a compact position and to place the universal bar and ribbon mechanism in an inoperative position with relation to the key action.

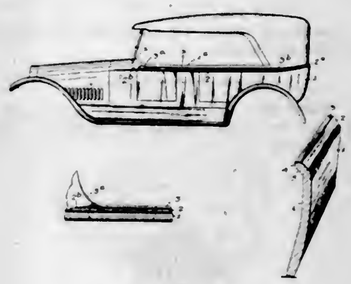
48. In a typewriting machine, the combination of a two-part main frame movably held together to permit relative movement to reduce the dimension of the frame when the members are moved relatively while in an upright position from a normal operative position to a compact position, ribbon vibrating mechanism and a universal bar operatively connected to move the ribbon to and from the printing point and means whereby the ribbon may be permitted to remain inactive for stenciling purposes, means for feeding the ribbon lengthwise including a feed bar and ratchet-and-pawl mechanism, all mounted upon one part of the frame, a platen carriage also mounted upon said part of the frame, and a key action including key-operated levers, type bars operatively connected to the levers, and means for shifting the type bars all mounted on the other part of the frame, said type bars being adapted to operate the universal bar to vibrate the ribbon and the parts mounted upon different parts of the frame being entirely separate to adapt the said part to be moved with respect to each other from a normal operative position to a compact position with the frame parts on which they are mounted.

49. In a collapsible typewriting machine, the combination of a stationary frame member, a movable frame member supported upon the stationary member and having a relative vertical movement toward and from said member, a platen carriage supported on the movable member, a type segment supported on the stationary member, type bars supported in the segment and having an upward and rearward movement, a key action for actuating the type bars, means supported on the movable member for moving the carriage in one direction step-by-step, a reciprocating feed-bar supported on the movable member transversely of the machine and partaking of the step-by-step movement and the return movement of the carriage, ribbon spools supported on the movable member at opposite sides of the type segment, and connections between the feed bar and said spools for rotating the spools, said feed bar and carriage being movable to a point in rear of the type segment when the movable member is lowered to collapse the machine.

50. In a collapsible typewriting machine, the combination of a stationary frame member, a movable frame member supported upon the stationary member and having a relative vertical movement toward and from said member, a platen carriage supported on the movable member, a type segment supported on the stationary member, type bars supported in the segment and having an upward and rearward movement, a key action for actuating the type bars, means supported on the movable member for moving the carriage in one direction step-by-step, a reciprocating feed-bar supported on the movable member transversely of the machine and partaking of the step-by-step movement and the return movement of the carriage, ribbon spools supported on the movable member at opposite sides of the type segment, means extending forwardly from the feed bar adjacent each end thereof adapted to rotate the spools when the feed bar is moved in one direction, and feed-reversing means supported on the movable member and operatively connected with the spool rotating means to simultaneously render the rotating means for one spool operative and the other spool rotating means inoperative, said feed bar and feed reversing means being movable with the platen carriage to a point in rear of the type segment when the movable member is lowered to collapse the machine.

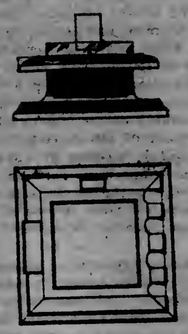
DESIGNS.

52,125. AUTOMOBILE-BODY. JOSEPH H. BOURGON, Detroit, Mich. Filed Apr. 5, 1918. Serial No. 226,962. Term of patent 14 years.



The design for an automobile body as shown and described.

52,126. COMBINED ASH-TRAY AND HOLDER FOR PIPES, TOBACCO, AND MATCHES. LOUIS U. BAUMAN, Toledo, Ohio. Filed Mar. 26, 1918. Serial No. 224,640. Term of patent 7 years.



The ornamental design for a combined ash tray and holder for pipes, tobacco, and matches, as shown.

52,127. ARTICLE OF MANUFACTURE. EMILE COSTE, New York, N. Y., assignor to Titus Blatter & Company, New York, N. Y., a Corporation of New York. Filed Aug. 14, 1917. Serial No. 186,239. Term of patent 7 years.



The ornamental design for an article of manufacture substantially as shown.

52,128. EMBLEM. ELIZABETH B. CRAIG, Concord, Mass. Filed Mar. 26, 1918. Serial No. 224,908. Term of patent 7 years.



The ornamental design for an emblem, as shown.

52,129. TOY BALLOON. FRANK J. CERQUE, Cuyahoga Falls, Ohio. Filed Dec. 18, 1916. Serial No. 137,733. Term of patent 14 years.



The ornamental design for a toy balloon, as shown and described.

52,130. BELT-HOLDER. JOHN L. FLANNERY, Jr., Chicago, Ill., assignor to The Boye Needle Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 21, 1917. Serial No. 208,322. Term of patent 7 years.



The ornamental design for a belt-holder, as shown.

52,131. CARTON. JOHN L. FLANNERY, Jr., Chicago, Ill., assignor to The Boye Needle Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 21, 1917. Serial No. 208,323. Term of patent 7 years.



The ornamental design for a carton, as shown.

52,132. JUMP-RING COUPLING. WILLIAM J. GAGNON, Bridgeport, Conn., assignor to The Bead Chain Manufacturing Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Apr. 25, 1918. Serial No. 230,813. Term of patent 14 years.



The ornamental design for a pump ring coupling, substantially as shown.

52,133. MAN'S GARTER. MYRON B. HAMMOND, Bridgeport, Conn. Filed Dec. 22, 1917. Serial No. 208,517. Term of patent 7 years.



The ornamental design for a man's garter, as shown.

52,134. MAN'S GARTER. MYRON B. HAMMOND, Bridgeport, Conn. Filed Dec. 22, 1917. Serial No. 208,519. Term of patent 7 years.



The ornamental design for a man's garter, as shown.

52,135. MAN'S GARTER. MYRON B. HAMMOND, Bridgeport, Conn. Filed Dec. 22, 1917. Serial No. 208,520. Term of patent 7 years.



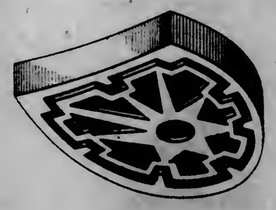
The ornamental design for a man's garter, as shown.

52,136. ADVERTISING-TABLET. MICHAEL J. HOGAN, Chicago, Ill., assignor to The Imperial Brace Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 21, 1917. Serial No. 150,278. Term of patent 3½ years.



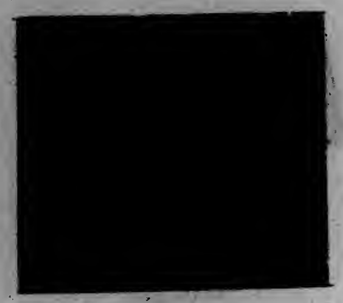
The ornamental design for an advertising tablet, as shown.

52,137. RUBBER HEEL. GUSTAV A. HUBEN, Chicago, Ill. Filed Mar. 5, 1918. Serial No. 220,662. Term of patent 7 years.



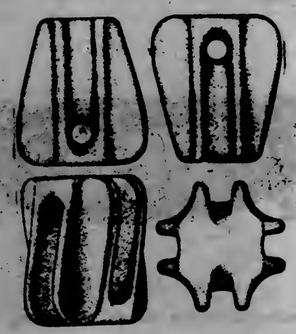
The ornamental design for a rubber heel, as shown.

52,138. LACE. ALICE PAULINE HUSSE, New York, N. Y., assignor to Felix Meyer, New York, N. Y. Filed Nov. 5, 1917. Serial No. 200,449. Term of patent 7 years.



The design for lace as herein shown and described.

52,139. STRAIN-INSULATOR. JULIAN H. KENDIG, Pittsburgh, Pa. Filed Feb. 28, 1917. Serial No. 151,588. Term of patent 14 years.



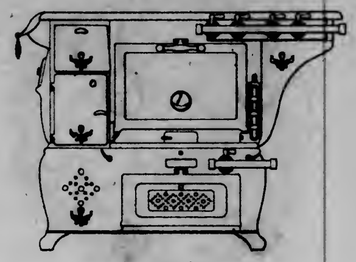
The ornamental design for a strain insulator as shown.

52,140. BADGE. JACQUES H. LEFF and ROBERT H. SPIRA, New York, N. Y. Filed Mar. 12, 1918. Serial No. 222,041. Term of patent 3½ years.



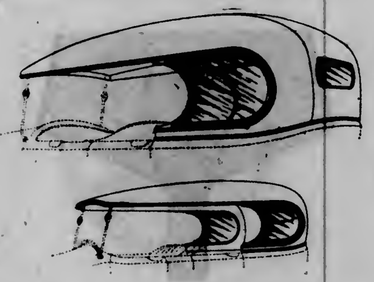
The ornamental design for a badge, as shown.

52,141. STOVE. MAX R. LEHMAN, Quincy, Ill., assignor to Steiger & Kerr Stove & Foundry Company, San Francisco, Cal., a Corporation of California. Filed Apr. 1, 1918. Serial No. 226,122. Term of patent 7 years.



The ornamental design for a stove substantially as shown.

52,142. AUTOMOBILE-TOP. CHARLES W. LINK, Los Angeles, Cal. Filed Feb. 7, 1918. Serial No. 215,918. Term of patent 3½ years.



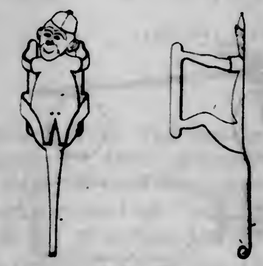
The ornamental design for an automobile top, as shown.

52,143. PHOTO-FRAME. WILLIAM B. NICHOLS, Delaware City, Del. Filed Apr. 25, 1918. Serial No. 230,809. Term of patent 7 years.



The ornamental design for a photo frame, as shown.

52,144. PENCIL-CLIP. JAMES W. NUNN, Denver, Colo. Filed Mar. 14, 1918. Serial No. 222,496. Term of patent 7 years.



The ornamental design for a pencil clip, as shown.

52,145. TOP-ROLL-SADDLE STIRRUP. OSCAR L. OWEN, Whitinsville, Mass., assignor to Whitin Machine Works, Whitinsville, Mass., a Corporation of Massachusetts. Filed Dec. 15, 1917. Serial No. 207,377. Term of patent 14 years.



The ornamental design for a top-roll saddle stirrup, as shown.

52,146. LACE. ALBERT REDFERN, Plainfield, N. J., assignor to The Stein, Doblin Lace Co., a Corporation of New York. Filed Jan. 5, 1918. Serial No. 210,570. Term of patent 3½ years.



The design for lace as herein shown and described.

52,147. NOVELTY PAPER HAT. ALEXANDER RICE, Montgomery, Ala. Filed Mar. 16, 1918. Serial No. 222,971. Term of patent 3½ years.



The ornamental design for a novelty paper hat, as shown.

52,148. NOVELTY PAPER HAT. ALEXANDER RICE, Montgomery, Ala. Filed Mar. 16, 1918. Serial No. 222,972. Term of patent 3½ years.



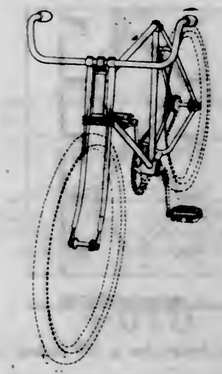
The ornamental design for a novelty paper hat, as shown.

52,149. NOVELTY PAPER HAT. ALEXANDER RICE, Montgomery, Ala. Filed Mar. 16, 1918. Serial No. 222,973. Term of patent 3½ years.



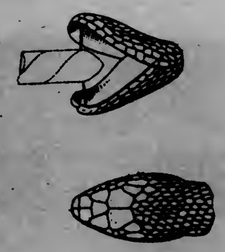
The ornamental design for a novelty paper hat, as shown.

52,150. BICYCLE-FRAME. IGNAZ SCHWINN, Chicago, Ill. Filed Feb. 23, 1918. Serial No. 218,912. Term of patent 14 years.



The ornamental design for a bicycle frame, as shown.

52,151. CIGAR-PERFORATOR. JULES H. STRAN, Worcester, Mass., assignor of one-half to Courtney Burrage, Worcester, Mass. Filed Apr. 24, 1918. Serial No. 230,593. Term of patent 7 years.



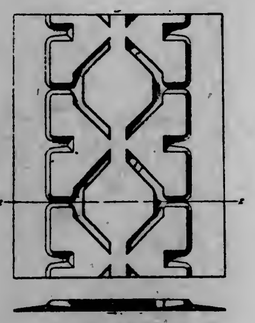
The ornamental design for a cigar perforator, as shown.

52,152. CHANDELIER FOR A LIGHTING-FIXTURE. ROBERT G. WAGNER and ERNEST J. SCHWEITZER, Los Angeles, Cal. Filed Oct. 16, 1917. Serial No. 196,971. Term of patent 3½ years.



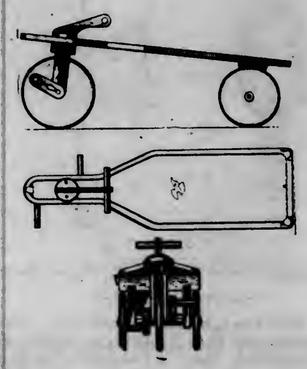
The ornamental design for a chandelier for a lighting fixture as shown.

52,153. TIRE-CASING. ORLANDO L. WEAVER, Akron, Ohio, assignor to The Star Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Apr. 25, 1918. Serial No. 230,811. Term of patent 14 years.



The ornamental design for a tire casing, as shown.

52,154. CHILD'S VEHICLE. RANDOLPH N. WILKINSON, Huntington, W. Va. Filed Aug. 9, 1917. Serial No. 185,367. Term of patent 7 years.

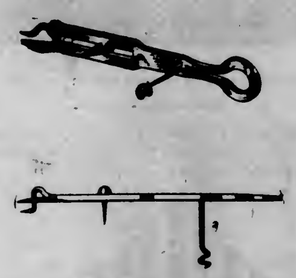


The ornamental design for a child's vehicle, as shown.

52,155. CASING FOR SOUND-BOXES. JOSEPH WOLFF, Brooklyn, N. Y., assignor to Sonora Phonograph Corporation, a Corporation of New York. Filed Mar. 10, 1917. Serial No. 154,044. Term of patent 14 years.

The ornamental design for a casing for sound-boxes, substantially as shown.

52,156. CAN-OPENER. PETER ZUNISH, Jenkins, Ky. Filed Aug. 24, 1915. Serial No. 47,150. Term of patent 3½ years.



The ornamental design for a can opener, as shown.

TRADE-MARKS

OFFICIAL GAZETTE, JULY 2, 1918.

(PUBLISHED JULY 20, 1918.)

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 14 of said act, a fee of ten dollars must accompany each notice of opposition.

Ser. No. 86,615. (CLASS 12. CONSTRUCTION MATERIALS.) MASTER ROOFERS ASSOCIATION OF CHICAGO, Chicago, Ill. Filed May 14, 1915.



Particular description of goods.—Roofing Materials—Namely, Tarred Felt and Prepared Roofing Material in Sheet or other Form.
Claims use since Apr. 22, 1915.

Ser. No. 94,744. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) NICOLAS ALFRED FERNAND GEORGE, Montrouge, near Paris, France. Filed Apr. 27, 1916.



Particular description of goods.—Paste for Polishing Metals.
Claims use since Feb. 22, 1906.

Ser. No. 96,640. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS, NOT INCLUDING ELECTRICAL APPARATUS.) THE YORKSHIRE COPPER WORKS, LIMITED, Leeds, England. Filed July 17, 1916.

'BEMAL'

Particular description of goods.—Condenser-Tubes.
Claims use since the 14th day of June, 1911.

Ser. No. 100,168. (CLASS 19. VEHICLES, NOT INCLUDING ENGINES.) HARLEY-DAVIDSON MOTOR CO., Milwaukee, Wis. Filed Dec. 26, 1916.



Particular description of goods.—Bicycles.
Claims use since Nov. 9, 1916.

Ser. No. 100,726. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) UNITED SHOE MACHINERY COMPANY, Paterson, N. J., and Boston, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Jan. 18, 1917.

K

K

The trade-mark claimed in this application consists of the letters "K K."
Particular description of goods.—Nails and Tacks.
Claims use since before Nov. 1, 1914.

Ser. No. 101,189. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) AMERICAN PHOTO PLAYER COMPANY, Berkeley, Cal. Filed Feb. 6, 1917.

Foto

Particular description of goods.—Pneumatically-Operated Organs and Orchestrions.
Claims use since Apr. 24, 1916.

Ser. No. 102,480. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) JACOB DOLL & SONS, New York, N. Y. Filed Mar. 27, 1917.

Electrola

Particular description of goods.—Pianofortes, Grand and Upright Pianos, Grand and Upright Player-Pianos, and Grand and Upright Electrically-Operated Pianos.
Claims use since 1885.

Ser. No. 102,698. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) E. & W. PUSSYFOOT CO., Alameda, Cal. Filed Apr. 3, 1917.

Pussyfoot

Particular description of goods.—Shock-Absorbers for Type-Writers and Adding-Machines.
Claims use since Oct. 1, 1916.

Ser. No. 103,116. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) INDEPENDENT TRACTOR COMPANY, Minneapolis, Minn. Filed Apr. 19, 1917.



The representation of the traction-wheel apart from the trade-mark being disclaimed.
Particular description of goods.—Tractors.
Claims use since Jan. 28, 1917.

Ser. No. 103,165. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) LEONARD B. ELLIOTT, Chicago, Ill. Filed Apr. 21, 1917.

LINI-OIL

No claim is made to the word "Oil" apart from the mark shown in the drawing.
Particular description of goods.—An Externally-Applied Remedy for Rheumatism, Sprains, Stiff Joints, Cuts, Bruises, and Insect-Bites.
Claims use since Apr. 1, 1917.

Ser. No. 103,426. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) ELECTRIC ROLLER MILLS, Gothenburg, Nebr. Filed Apr. 30, 1917. Under ten-year proviso.



Comprising the representation of a cow.
Particular description of goods.—Wheat-Flour, Wheat and Rye Graham, White and Yellow Cornmeal, and Rye-Flour.
Claims use since 1892.

Ser. No. 103,427. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) ELECTRIC ROLLER MILLS, Gothenburg, Nebr. Filed Apr. 30, 1917. Under ten-year proviso.



"QUALITY FIRST"

Comprising the representation of a cow and the words "Quality First."
Particular description of goods.—Wheat-Flour, Wheat and Rye Graham, White and Yellow Cornmeal, and Rye-Flour.
Claims use since 1892.

Ser. No. 103,861. (CLASS 38. PRINTS AND PUBLICATIONS.) THOMAS A. EDISON, INCORPORATED, West Orange, N. J. Filed May 16, 1917.

ALONG BROADWAY

Particular description of goods.—Monthly Periodicals.
Claims use since April, 1916.

Ser. No. 104,675. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) INSULAR PACKING CO., New York, N. Y. Filed June 25, 1917.

LUX-SEA

No claim being made to the word "Sea" apart from the mark as shown.
Particular description of goods.—Canned Sardines.
Claims use since June 1, 1917.

Ser. No. 104,758. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) NATIONAL JOINT-LIMB DOLL CO. INC., New York, N. Y. Filed June 29, 1917.



Particular description of goods.—Dolls, Doll Toys, and Doll Novelties.
Claims use since May 15, 1917.

Ser. No. 105,392. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) TI-TEST RING COMPANY, INC., New York, N. Y. Filed July 31, 1917.

TTT

Particular description of goods.—Piston-Rings.
Claims use since about the 20th day of July, 1917.

Ser. No. 105,870. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) HILLSDON, WATTS LTD., Mascot, near Sydney, New South Wales, Australia. Filed Aug. 25, 1917.



Particular description of goods.—Seeds, Plants, Bulbs, Flowers, and Trees for Agricultural and Horticultural Purposes.
Claims use since July 27, 1916.

Ser. No. 106,181. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) SOUTHERN ROOF PAINT COMPANY, Waxahachie, Tex. Filed Sept. 11, 1917.



Particular description of goods.—Ready-Mixed Paints.
Claims use since July 2, 1917.

Ser. No. 106,818. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) C. G. FLECKENSTEIN CO., Muskegon, Mich. Filed Sept. 19, 1917.

"FLEXOAK"

Particular description of goods.—Sole-Leather in Strips and Squares.
Claims use since Jan. 2, 1912.

Ser. No. 106,686. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) ROANOKE COFFEE AND SPICE COMPANY, Roanoke, Va. Filed Oct. 6, 1917.

PHILIRRINE

Particular description of goods.—Coffee.
Claims use since Aug. 30, 1917.

Ser. No. 106,776. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) GEORGE R. NEWELL & CO., Minneapolis, Minn. Filed Oct. 15, 1917.

Leopard

Particular description of goods.—Canned Fruits and Vegetables, Dried Fruits, Spices, Jellies, Fruit Preserves, and Coffee and Sugar, Canned Oysters and Pickles and Tapioca, Tea, Molasses, Catsup, Mince-Meat, Peanut-Butter, Mustard, Olives, Pepper, Rice.
Claims use since Aug. 20, 1897.

Ser. No. 107,105. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) THE CHANEY MANUFACTURING COMPANY, Springfield, Ohio. Filed Nov. 2, 1917.

CMC

Particular description of goods.—Thermometers, Barometers, and Rain-Gages.
Claims use since Aug. 15, 1917.

Ser. No. 107,878. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) NATIONAL ALUMINUM WORKS, Elmira, N. Y. Filed Dec. 10, 1917.



Particular description of goods.—Coffee-Pots.
Claims use since Nov. 3, 1917.

Ser. No. 107,989. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ANDREW W. O'MALLEY, Wilkes-Barre, Pa. Filed Dec. 15, 1917.



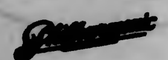
The same being the photograph and signature of applicant's father, Alexander O'Malley, M. D., deceased.
Particular description of goods.—A Preparation for the Treatment of Nose, Throat, and Lung Diseases.
Claims use since January, 1895.

Ser. No. 107,991. (CLASS 43. THREAD AND YARN.) THE ROYAL THREAD CO., New York, N. Y. Filed Dec. 15, 1917.



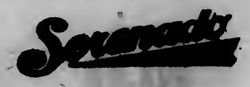
Particular description of goods.—Thread.
Claims use since 1897.

Ser. No. 108,181. (CLASS 33. GLASSWARE.) KNAACK BROTHERS, Bellingham, Wash. Filed Dec. 27, 1917.



"Philharmonic."
Particular description of goods.—Phonographs.
Claims use since Dec. 20, 1917.

Ser. No. 108,182. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) KNAACK BROTHERS, Bellingham, Wash. Filed Dec. 27, 1917.



The "Serenado."
Particular description of goods.—Phonographs.
Claims use since Dec. 20, 1917.

Ser. No. 108,262. (CLASS 17. TOBACCO PRODUCTS.) HENRY SUTLIFF, San Francisco, Cal. Filed Jan. 2, 1918.

WAR BOY

Particular description of goods.—Smoking and Chewing Tobacco, Cigars, and Cigarettes.
Claims use since Dec. 1, 1915.

Ser. No. 108,427. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) HIDE LEATHER & BELTING CO., Indianapolis, Ind. Filed Jan. 12, 1918.



Particular description of goods.—Leather Clutch-Facings, Leather Belts and Belting, Rubber Belts and Belting.
Claims use since May 1, 1917.

Ser. No. 108,500. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) THE FEDERAL BEARINGS CO. INC., Fairview, N. Y. Filed Jan. 17, 1918.

"SUPER"

Particular description of goods.—Antifriction-Bearings.
Claims use since Jan. 9, 1918.

Ser. No. 108,564. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) COMMERCIAL LABORATORIES, INC., Newark, N. Y. Filed Jan. 21, 1918.

Mazo

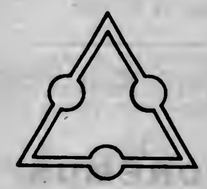
The word "Mazo" as shown in the accompanying drawing is printed in red.
Particular description of goods.—A Preparation or Product Put Up in the Form of a Powder to be Used as a Substitute for and in the Place of Eggs for All Cooking, Baking, or other Culinary Purposes Where Eggs can be and are Being Used.
Claims use since Jan. 1, 1918.

Ser. No. 108,593. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) IDA J. RAICH, Lansing, Mich. Filed Jan. 22, 1918.

Mulhercom

Particular description of goods.—Preparation for the Treatment of Kidney Diseases.
Claims use since the year 1912.

Ser. No. 108,638. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) NEWPORT CHEMICAL WORKS, INCORPORATED, Portland, Me., and Milwaukee, Wis. Filed Jan. 25, 1918.



Particular description of goods.—Alpha-Naphthylamin, Nitronaphthalene, Dinitronaphthalene, Metaxylol, Paranitrotoluol, Tolidin, Orthonitrotoluol, Orthotoluidin, Paratoluidin, Zinc Chlorid, 1.8.6-Naphthylamin Disulfo-Acid.
Claims use since Sept. 28, 1916.

Ser. No. 108,676. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) DANIEL SULLIVAN, St. Louis, Mo. Filed Jan. 28, 1918.



Particular description of goods.—Game-Boards.
Claims use since on or about the 1st day of January, 1918.

Ser. No. 108,697. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) J. LYONS & CO. LIMITED, Kensington, London, England. Filed Jan. 30, 1918.

CELESCO

Particular description of goods.—A Food Beverage Prepared from the Shells of Cocoa-Beans.
Claims use since Dec. 1, 1917.

Ser. No. 108,713. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) HEMRICH'S STAFF PRODUCTS CO., Seattle, Wash. Filed Jan. 31, 1918.

Bockstaff

Particular description of goods.—Maltless Non-Alcoholic Beverages Sold as a Soft Drink.
Claims use since the 11th day of January, 1918.

Ser. No. 108,817. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) ARMSTRONG PACKING COMPANY, Dallas, Tex. Filed Feb. 5, 1918.

NUTROLA

Particular description of goods.—A Lard Substitute—Namely, a Compound of Peanut-Oil and Oleo-Stearin.
Claims use since Dec. 22, 1917.

Ser. No. 108,820. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) THE GEO. H. BOWMAN CO., Cleveland, Ohio. Filed Feb. 5, 1918.



Particular description of goods.—Aluminum Utensils—Namely, Baking-Dishes, Berlin Kettles, Bread-Pans, Combination-Cooker, Coffee-Pots, Coffee-Percolators, Coffee-Pot Stand, Combination-Shaker, Caster Set, Carving-Forks, Colanders, Covered Casseroles, Cake-Pans, Cake-Tubes, Cake-Molds, Cake-Turners, Cream-Dippers, Custard-Molds, Crumb Tray and Scraper, Cups, Collapsible Cups, Nested Cups, Cup-Strainer, Cereal-Cooker, Dipper, Egg-Separator, Flour-Shaker, Funnel, Fruit-Jar Fillers, Fry-Pan, Grater, Griddle, Jelly-Mold, Key-Chains, Kettles, Kitchen-Bowls, Lemonade-Shaker, Ladles, Omelet-Pan, Plates, Pepper-Shaker, Pudding-Mold, Pudding-Pans, Potato-Masher, Pot-Covers, Pie-Pans, Preserving-Kettles, Roasters, Rice-Boiler, Sugar-Shaker, Salt-Shaker, Saucer, Basting-Spoon, Saucepans, Sauce-Pots, Shaving-Mug, Spout-Strainer, Soup-Strainer, Tea or Coffee Strainer, Skimmer, Strainer-Ladle, Soup-Ladle, Skillets, Sifter, Strainers, Stew-Pans, Strainer-Saucepans, Toothpick-Holder, Tooth-Brush Holder, Tea-Stand, Tea-Ball, Tea-Kettle Tea-Kettle Inset, Teapots, Vegetable-Boiler.
Claims use since Aug. 28, 1917.

Ser. No. 108,876. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) JOHN J. TURNEY, Philadelphia, Pa. Filed Feb. 7, 1918.



The star being colored blue and having the words "Blue Star" in white arranged across its upper half.

Particular description of goods.—Wheat-Flour.

Claims use since Dec. 17, 1917.

Ser. No. 108,885. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) THE FRANCE MANUFACTURING CO., Cleveland, Ohio. Filed Feb. 8, 1918.

F-F

Particular description of goods.—Magnetic Rectifiers.

Claims use since Nov. 1, 1916.

Ser. No. 109,007. (CLASS 12. CONSTRUCTION MATERIALS.) THE BARRETT COMPANY, New York, N. Y. Filed Feb. 15, 1918.

Cotex

Particular description of goods.—Fabric Saturated or Coated or Saturated and Coated with Bituminous Material for Use in Building Constructions.

Claims use since about Jan. 25, 1918.

Ser. No. 109,140. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) SOCIÉTÉ CHIMIQUE DES USINES DU RHONE (ANCIENNEMENT GILLIARD, P. MONNET ET CARTIER), Paris, France. Filed Feb. 20, 1918.

RHODOÏD

Particular description of goods.—Celluloid.

Claims use since December, 1917.

Ser. No. 109,352. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) CHINA & JAPAN TRADING COMPANY, LIMITED, New York, N. Y. Filed Mar. 4, 1918.



Particular description of goods.—Woolen and Cotton Piece Goods.

Claims use since Oct. 18, 1887.

Ser. No. 109,393. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) KLEMENS S. RAMASHAUSKI, Chicago, Ill. Filed Mar. 5, 1918.

"OREMUS"

Particular description of goods.—Medicinal Compounds for Use in the Treatment of Rheumatism, Hemicrania, Neuralgia, Headache, Lumbago, Paralysis, Stomach Trouble, Kidney and Bladder Trouble, Melancholia, Epilepsy, Fright, Diarrhea, Dysentery, Gonorrhea; also for Liniment for Burns and Scalds and also for Hair-Tonic.

Claims use since Sept. 15, 1917.

Ser. No. 109,413. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) THE CELLULOID COMPANY, Newark, N. J., and New York, N. Y. Filed Mar. 7, 1918.

IVALEUR

Particular description of goods.—Dressing-Combs, Pocket-Combs, Infant-Combs, Fine Combs, Gents' Combs, Pincushions, Glove-Stretchers, Crochet-Hooks, Knitting-Needles for Hand Use, Shoe-Horns, Shoe-Hooks, Thimbles, Glove-Darners for Hand Use, Stocking-Darners for Hand Use, Napkin-Rings, Miniature Clothes-Pins for Toilet Use, Hair-Pins, Beads, Hat-Eyelets, and Collar-Buttons. The Said Articles are Made of Compounds of Pyroxylin.

Claims use since Oct. 27, 1917, on dressing-combs; since Nov. 21, 1917, on pincushions; since Nov. 22, 1917, on pocket-combs, infant-combs, fine combs, and gents' combs; since Dec. 3, 1917, on glove-stretchers, shoe-horns, and shoe-hooks; since Dec. 11, 1917, on crochet-hooks, knitting-needles for hand use, and miniature clothes-pins for toilet use; since Dec. 20, 1917, on thimbles; since Jan. 4, 1918, on glove-darners for hand use, napkin-rings, hair-pins, beads, and hat-eyelets; since Jan. 5, 1918, on stocking-darners for hand use, and since Jan. 12, 1918, on collar-buttons.

Ser. No. 109,422. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) THE CELLULOID COMPANY, Newark, N. J., and New York, N. Y. Filed Mar. 7, 1918.

IVALEUR

Particular description of goods.—Razor-Handles, Thin Plates Forming the Ornamental Sides of Pocket-Knife Handles, Type-Writer Key-Caps, Type-Writer Key-Buttons, and Knobs as Parts of Machines. The Said Articles are Made of Compounds of Pyroxylin.

Claims use since Dec. 11, 1917.

Ser. No. 109,467. (CLASS 39. CLOTHING.) THE IDEAL SHIRT CO., Cleveland, Ohio. Filed Mar. 9, 1918.

Sincere

Particular description of goods.—Dress-Shirts.

Claims use since Jan. 10, 1918.

Ser. No. 109,520. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) GABA A. G., Basel, Switzerland. Filed Mar 12, 1918.

EMODELLA

Particular description of goods.—Purgatives.

Claims use since about October, 1909.

Ser. No. 109,628. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) THE JOHNS-PRATT COMPANY, Hartford, Conn. Filed Mar. 18, 1918.



The trade-mark which indicates the letters "N" and "R" in white on a green background and the letter "C" in green on a white background. No claim, however, is made to trade-mark rights in a green label *per se*.

Particular description of goods.—Inclosed Electric Fuses of the Cartridge Type.

Claims use since Jan. 17, 1918.

Ser. No. 109,668. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) CHENEY BROTHERS, South Manchester, Conn. Filed Mar. 20, 1918. Under ten-year proviso.

CHENEY

Particular description of goods.—Flags and Banners.

Claims use since about 1875.

Ser. No. 109,673. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) C. G. CONN, LTD., Elkhart, Ind. Filed Mar. 20, 1918.

VICTOR
NEW WONDER

Particular description of goods.—Wind Musical Instruments—Namely, Cornets

Claims use since Dec. 27, 1917.

Ser. No. 109,792. (CLASS 39. CLOTHING.) BLASKOPF & CO., New York, N. Y. Filed Mar. 26, 1918.

Sub Deb

Particular description of goods.—Lingerie—Namely, Chemises, Drawers, and Ladies' Underwear, Made of Woven Material.

Claims use since the 1st day of January, 1918.

Ser. No. 109,815. (CLASS 15. OILS AND GREASES.) STANDARD OIL COMPANY, Bayonne, N. J. Filed Mar. 26, 1918.

PLANOLINE

Particular description of goods.—Lubricating-Oil.

Claims use since Feb. 27, 1918.

Ser. No. 109,832. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) JACOB NATHAN, Dorchester, Mass. Filed Mar. 27, 1918.

Ryto

Particular description of goods.—A Safety-Pocket and Heart or Body Protector.

Claims use since Jan. 18, 1918.

Ser. No. 109,859. (CLASS 39. CLOTHING.) JOHN WANAMAKER, NEW YORK, New York, N. Y. Filed Mar. 28, 1918.

"Molly Pitcher"

Comprising the words "Molly Pitcher."
Particular description of goods.—A Farm Outfit, Consisting of Breeches, Smock, Belt Made of the Same Material, and a Hat to Match.
Claims use since Jan. 26, 1918.

Ser. No. 109,864. (CLASS 39. CLOTHING.) RICHARD J. HICKSON, New York, N. Y. Filed Mar. 29, 1918.

WAR TIME

Particular description of goods.—Outer Garments for Ladies and Misses, Comprising Suits, Dresses, Coats, and Waists.
Claims use since Feb. 25, 1918.

Ser. No. 109,911. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) BISCEGLIA BROS., San Jose, Cal. Filed Apr. 2, 1918.

PARADISE VALLEY

Particular description of goods.—Canned Peaches, Canned Cherries, Canned Apricots, Canned Pears, Canned Tomatoes, and Canned Peas.
Claims use since July 1, 1903.

Ser. No. 109,974. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) FORT WAYNE DRUG COMPANY, Fort Wayne, Ind. Filed Apr. 4, 1918.

Old Stratford

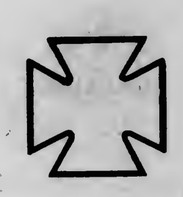
Particular description of goods.—Coffee.
Claims use since Feb. 11, 1918.

Ser. No. 110,023. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) HIGGINBOTHAM, BAILEY, LOGAN CO., Dallas, Tex. Filed Apr. 6, 1918.

OVER THE TOP

Comprising the words "Over the Top."
Particular description of goods.—Cotton Piece Goods.
Claims use since Jan. 1, 1918.

Ser. No. 110,027. (CLASS 28. JEWELRY AND PRECIOUS-METAL WARE.) INTERNATIONAL SILVER COMPANY, Meriden and Bridgeport, Conn. Filed Apr. 6, 1918.



Particular description of goods.—Silver-Plated Knives, Forks, Spoons, and Ladles.
Claims use since on or about the 1st day of January, 1886.

Ser. No. 110,073. (CLASS 39. CLOTHING.) POSNER-MARINACE, INC., New York, N. Y. Filed Apr. 9, 1918.

Pam

Particular description of goods.—Ladies' Outer Cloth, Cotton, and Silk Coats and Dresses.
Claims use since Jan. 1, 1918.

Ser. No. 110,141. (CLASS 3. BAGGAGE, HORSE EQUIPMENTS, PORTFOLIOS, AND POCKET-BOOKS.) J. MICHAEL EILERS, Cincinnati, Ohio. Filed Apr. 12, 1918.



Particular description of goods.—Hand-Bags.
Claims use since Apr. 3, 1918.

Ser. No. 110,183. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) SAN JOAQUIN FRUIT CO., Tustin, Cal. Filed Apr. 13, 1918.

Mark Twain



The picture being that of Mark Twain.
Particular description of goods.—Fresh Citrus Fruits Consisting of Oranges, Lemons, and Grape-Fruit.
Claims use since Mar. 11, 1918.

Ser. No. 110,191. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) THE ABSORENE MANUFACTURING COMPANY, St. Louis, Mo. Filed Apr. 15, 1918.

H. R. Henderson

Consisting of the facsimile of signature of H. R. Henderson.
Particular description of goods.—Paint-Cleaner.
Claims use since Jan. 8, 1903.

Ser. No. 110,197. (CLASS 14. METALS AND METAL CASTINGS AND FORGINGS.) H. BOKER & CO. INC., New York, N. Y. Filed Apr. 15, 1918.

H. Boker & Co.

The name "H. Boker & Co. Inc.," shown on the drawing being in the facsimile handwriting of Mr. H. R. Boker, president of the applicant company.
Particular description of goods.—Iron, Steel, Steel Alloys, Nickel, Nickel Alloys, High-Speed Steel, High-Speed Steel Alloys, Tool-Steel, Alloys of Tool-Steel and the Various Alloy-Steels Adapted for Use in Hot Die-Work, Balls and Ball-Bearings, Cold Punching or Blanking, Dies, Chisels, Reamers, Taps, Drills, Files, Milling-Cutters, Lathe and Planer Tools, Knives, Hydraulic Tools, Magnets, Wire-Drawing Dies and Plates, Worties, Saws, Springs, and Similar Purposes, All Being in the Form of Bars, Rods, Blanks, Sheets, Strips, Plates, Wire, Tubes, Balls, and Castings, the Word "Blanks" Being a Technical Trade Expression and Meaning a Short Piece of Metal Cut Off from a Rod or Bar and Also a Short Piece of Metal Which is Sometimes Forged to Approximate the Shape of a Short Piece or Slice Cut Off from a Bar.
Claims use since about Sept. 15, 1917.

Ser. No. 110,232. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) W. W. BEITENMAN, Englewood, Colo. Filed Apr. 16, 1918.

CALLADERM.

Particular description of goods.—A Preparation for the Treatment of Tan, Sunburn, Freckles, Chapped Hands, and Roughness of the Skin.
Claims use since 1890.

Ser. No. 110,237. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) CHEM-O-VITA COMPANY, INC., Fort Wayne, Ind. Filed Apr. 16, 1918.

CHEM-O-VITA

Particular description of goods.—Preparation for the Treatment of Dyspepsia, Rheumatism, Diabetes, Anemia, Impure Blood, Chronic Ulcers, Skin Diseases, Neurasthenia, Asthma, Chronic Catarrh, Bronchitis, Chronic Sick Headache, Goiter, and Affections of the Stomach, Bowels, Liver, and Kidneys.
Claims use since Mar. 1, 1918.

Ser. No. 110,255. (CLASS 38. PRINTS AND PUBLICATIONS.) THE PROTECTIVE SIGNAL MANUFACTURING COMPANY, Denver, Colo. Filed Apr 17, 1918.



Particular description of goods.—A Periodical Publication Published Monthly.
Claims use since Nov. 8, 1917.

Ser. No. 110,339. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) THE WEST HAVEN MFG. CO., West Haven, Conn. Filed Apr. 19, 1918.

PAR

Particular description of goods.—Hacksaws.
Claims use since Mar. 23, 1918.

Ser. No. 110,344. (CLASS 25. LOCKS AND SAFES.) ESCO MANUFACTURING CO. INC., Detroit, Mich. Filed Apr. 20, 1918.



The background being red.
Particular description of goods.—Automobile Gasolene and Ignition Locks Combined and Tire-Locks.
Claims use since about Sept. 8, 1912.

Ser. No. 110,345. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) JOSEPH GREENSPON'S SONS IRON & STEEL CO., St. Louis, Mo. Filed Apr. 20, 1918.



Particular description of goods.—Line Casing or Piping.
Claims use since Mar. 15, 1918.

Ser. No. 110,353. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ROYAL EXTERMINATING PRODUCTS INCORPORATED, New York, N. Y. Filed Apr. 20, 1918.

ROYAL

Particular description of goods.—A Roach-Powder.
Claims use since Apr. 1, 1918.

Ser. No. 110,373. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) JOHN FERNSLER, Philadelphia, Pa. Filed Apr. 22, 1918.



Particular description of goods.—Hair-Tonics.
Claims use since March, 1910.

Ser. No. 110,378. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) JAMES MAURICE METTLER, Kalispell, Mont. Filed Apr. 22, 1918.

SUPER



Particular description of goods.—Automobile and Furniture Polish.
Claims use since the 1st day of February, 1918.

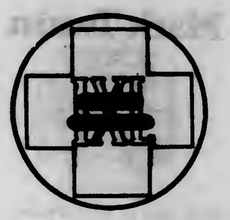
Ser. No. 110,388. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) COLUMBIA NOVELTY MFG. CO., St. Louis, Mo. Filed Apr. 23, 1918.

Bull Dog



Particular description of goods.—A Steel Belt-Lacing or Belt-Hook.
Claims use since about 1912.

Ser. No. 110,420. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) WHITE CROSS LABORATORIES, Chicago, Ill. Filed Apr. 24, 1918.



Particular description of goods.—Egg Substitute.
Claims use since Jan. 1, 1918.

Ser. No. 110,424. (CLASS 15. OILS AND GREASES.) BLIVEN & CARRINGTON, INC., New York, N. Y. Filed Apr. 25, 1918. Under ten-year proviso.



Particular description of goods.—Lubricating-Oils.
Claims use since July 1, 1887.

Ser. No. 110,463. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) AMERICAN LA FRANCE FIRE ENGINE CO., INC., Elmira, N. Y. Filed Apr. 27, 1918.

ALFCO

Particular description of goods.—Respirating Devices
Claims use since July 1, 1915.

Ser. No. 110,535. (CLASS 27. HOROLOGICAL INSTRUMENTS.) THE E. INGRAHAM CO., Bristol, Conn. Filed Apr. 29, 1918.

VICTORY

Particular description of goods.—Clocks.
Claims use since Mar. 1, 1918.

Ser. No. 110,564. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) EMPIRE WEAVING & BELTING CORPORATION, East Rochester, N. Y. Filed Apr. 30, 1918.

TUFTEX

Particular description of goods.—Woven Cotton Machinery-Belting and Woven Cotton Automobile Transmission-Lining.
Claims use since Nov. 12, 1914.

Ser. No. 110,580. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) WILLIAM T. BAKER INC., Jersey City, N. J. Filed May 1, 1918.

FEDERAL

Particular description of goods.—Sash-Putties.
Claims use since the year 1914.

Ser. No. 110,582. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) WILLIAM T. BAKER INC., Jersey City, N. J. Filed May 1, 1918.

NATIONAL

Particular description of goods.—Sash-Putties.
Claims use since the year 1914.

Ser. No. 110,605. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) LIVINGSTON BAKING COMPANY, Chicago, Ill. Filed May 2, 1918. Under ten-year proviso.

LIVINGSTON'S

Particular description of goods.—Bread.
Claims use since Jan. 1, 1868.

Ser. No. 110,613. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) HARRIS-WOODSON CO. INC., Lynchburg, Va. Filed May 2, 1918.

VIRGINIA REEL

Particular description of goods.—Candy.
Claims use since Mar. 15, 1918.

Ser. No. 110,614. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) WATTS, STEBBINS & CO., New York, N. Y. Filed May 2, 1918.

ARENA

Comprising the word "Arena."
Particular description of goods.—Cotton Piece Goods.
Claims use since Feb. 20, 1918.

Ser. No. 110,615. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) WATTS, STEBBINS & CO., New York, N. Y. Filed May 2, 1918.

LIVE WIRE

Comprising the words "Live Wire."
Particular description of goods.—Cotton Piece Goods.
Claims use since Mar. 22, 1918.

Ser. No. 110,616. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) WATTS, STEBBINS & CO., New York, N. Y. Filed May 2, 1918.

FULL SPEED

Comprising the words "Full Speed."
Particular description of goods.—Cotton Piece Goods.
Claims use since Mar. 19, 1918.

Ser. No. 110,617. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) WATTS, STEBBINS & Co., New York, N. Y. Filed May 2, 1918.

BUZZ-SAW

Comprising the words "Buzz-Saw."
Particular description of goods.—Cotton Piece Goods.
Claims use since Apr. 15, 1918.

Ser. No. 110,644. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) HUDSON BELTING COMPANY, Worcester, Mass. Filed May 4, 1918.

CLIMAX

Particular description of goods.—Flat, Twisted, and Round Leather Belting.
Claims use since July 24, 1906.

Ser. No. 110,645. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) HUDSON BELTING COMPANY, Worcester, Mass. Filed May 4, 1918.

MERMAID

Particular description of goods.—Flat, Twisted, and Round Leather Belting.
Claims use since July 24, 1906.

Ser. No. 110,646. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) HUDSON BELTING COMPANY, Worcester, Mass. Filed May 4, 1918.

RIVAL

Particular description of goods.—Flat, Twisted, and Round Leather Belting.
Claims use since July 24, 1906.

Ser. No. 110,725. (CLASS 14. METALS AND METAL CASTINGS AND FORGINGS.) WHEELING CEILING & ROOFING CO., Wheeling, W. Va. Filed May 6, 1918.

Gardner

Particular description of goods.—Tin Plates, Terne Plates, Black Sheets, and Galvanized Sheets.
Claims use since August, 1914.

Ser. No. 110,795. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) WILLIAM T. BAKER INC., Jersey City, N. J. Filed May 10, 1918.

CONTINENTAL

Particular description of goods.—Sash-Putties.
Claims use since Apr. 20, 1918.

Ser. No. 110,796. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) WILLIAM T. BAKER INC., Jersey City, N. J. Filed May 10, 1918.

EBONOID

Particular description of goods.—Sash-Putties.
Claims use since Apr. 20, 1918.

Ser. No. 110,869. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) NELSON BAKER & COMPANY, Detroit, Mich. Filed May 13, 1918.

NEBA

Particular description of goods.—Face-Powders, Talcum Powders.
Claims use since May 13, 1914.

Ser. No. 110,916. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE AMERICAN METAL COMPANY, LIMITED, New York, N. Y. Filed May 15, 1918.

POLAR

Particular description of goods.—Zinc Oxid Used as a Filler for Rubber Goods.
Claims use since November, 1917.

Ser. No. 110,934. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) WORLD'S DISPENSARY MEDICAL ASSOCIATION, Buffalo, N. Y. Filed May 16, 1918.

IRONTIC

Particular description of goods.—Tonic for the Blood.
Claims use since Mar. 16, 1918.

Ser. No. 110,959. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) LYSTER CHEMICAL COMPANY, Augusta, Me., and New York, N. Y. Filed May 17, 1918.

AKESOL

Particular description of goods.—Liquid Disinfectant and Antiseptic for External Use.
Claims use since July 23, 1912.

Ser. No. 111,031. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) ALASKA FISH CO., Seattle, Wash. Filed May 18, 1918.

OVER THERE

Particular description of goods.—Canned Salmon.
Claims use since Apr. 29, 1918.

Ser. No. 111,071. (CLASS 48. MALT BEVERAGES, EXTRACTS, AND LIQUORS.) SCHOENHOFEN COMPANY, Chicago, Ill. Filed May 20, 1918.

SPLASH

Particular description of goods.—Malt Beverages.
Claims use since May 1, 1918.

Ser. No. 111,115. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) JAMES A. MCATEER & SONS, INC., Pittsburgh, Pa. Filed May 22, 1918.

PRINCESS ROYAL

Particular description of goods.—Rolled Oats and Corn Flakes.
Claims use since Sept. 10, 1913, on rolled oats and June 28, 1917, on corn flakes.

Ser. No. 111,244. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) REBECCA WHITE, Birmingham, Ala. Filed May 28, 1918.



The picture is a portrait of the proprietor, Rebecca White.
Particular description of goods.—A Preparation for Treatment of the Hair.
Claims use since the early part of February, 1918.

Ser. No. 111,249. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ISRAEL S. TURK, New York, N. Y. Filed May 29, 1918.

HINDALORIN

Particular description of goods.—A Salve for Rheumatism, Neuralgia, Sciatica, Arthritis, Stiffness, and Gout.
Claims use since Apr. 1, 1918.

Ser. No. 111,331. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) CHICAGO PNEUMATIC TOOL COMPANY, Chicago, Ill. Filed June 3, 1918.

60

Particular description of goods.—Pneumatic Riveting-Hammers.
Claims use since about July, 1901.

Ser. No. 111,382. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) SUNBEAM CHEMICAL COMPANY, Chicago, Ill. Filed June 5, 1918.



The picture shown in the drawing and constituting the trade-mark is fanciful.
Particular description of goods.—Dyes Combined with Soap.
Claims use since on or about July 1, 1917.

TRADE-MARK REGISTRATIONS GRANTED

JULY 2, 1918.

122,121. REMEDY FOR GALLS, SORES, AND CUTS IN ANIMALS. LLOYD ADAMS, South Brownsville, Pa.
Filed February 21, 1918. Serial No. 109,145. PUBLISHED APRIL 16, 1918.

122,122. MALTED MILK. THE ALFA-CELO CORPORATION, Los Angeles, Cal.
Filed October 8, 1917. Serial No. 106,653. PUBLISHED APRIL 16, 1918.

122,123. ALUMINUM COOKING UTENSILS AND HOUSEHOLD GOODS. ALUMINUM GOODS MFG. COMPANY, Manitowoc, Wis.
Filed August 29, 1917. Serial No. 105,974. PUBLISHED MARCH 26, 1918.

122,124. CERTAIN NAMED LEATHER-WORKING MACHINERY. ASSOCIATED TANNERS MACHINERY CO., Salem, Mass.
Filed March 24, 1917. Serial No. 102,400. PUBLISHED APRIL 16, 1918.

122,125. CERTAIN NAMED TOILET PREPARATIONS AND BITTERS FOR MIXING PURPOSES. THE BEAU-SITE COMPANY, New York, N. Y.
Filed December 3, 1917. Serial No. 107,717. PUBLISHED APRIL 9, 1918.

122,126. HAIR-GROWER. MADAM NANNIE BOND, Bessemer, Ala.
Filed January 28, 1918. Serial No. 108,662. PUBLISHED APRIL 16, 1918.

122,127. OINTMENT FOR PILES, CUTS, BURNS, AND ECZEMA. BOTACHA OINTMENT CO., Jacksonville, Fla.
Filed March 13, 1918. Serial No. 109,529. PUBLISHED APRIL 16, 1918.

122,128. CANNED SALMON. JOSEPH R. BURKE, Portland, Oreg.
Filed December 13, 1917. Serial No. 107,933. PUBLISHED APRIL 9, 1918.

122,129. PAPER-BALER. HENRY HOUSTON BURNS, Battle Creek, Mich.
Filed September 5, 1917. Serial No. 106,063. PUBLISHED APRIL 16, 1918.

122,130. DYESTUFFS—VIZ., DYEWOOD EXTRACTS IN CRYSTAL, PASTE, AND POWDER FORM. BUSH, BEACH & GENT INC., New York, N. Y.
Filed February 1, 1918. Serial No. 108,741. PUBLISHED APRIL 16, 1918.

122,131. INTERNAL-COMBUSTION ENGINES AND MOISTURIZERS THEREFOR. CARPENTER & COMPANY, Los Angeles, Cal.
Filed May 4, 1917. Serial No. 103,665. PUBLISHED APRIL 16, 1918.

122,132. SPARK-PLUG PORCELAINS. CHAMPION SPARK PLUG COMPANY, Toledo, Ohio.
Filed April 16, 1917. Serial No. 103,018. PUBLISHED APRIL 2, 1918.

122,133. ICE-CREAM. CHAPIN-SACKS MANUFACTURING COMPANY, Washington, D. C.
Filed March 4, 1918. Serial No. 109,355. PUBLISHED APRIL 16, 1918.

122,134. CHEESE. D. DE BERNARDI & CO., INC., San Francisco, Cal.
Filed March 13, 1918. Serial No. 109,532. PUBLISHED APRIL 16, 1918.

122,135. CLEANING COMPOUND IN THE NATURE OF A PASTE FOR CERTAIN NAMED SURFACES. EATON'S UZON COMPANY, INC., Roanoke, Va.
Filed August 2, 1917. Serial No. 105,420. PUBLISHED APRIL 2, 1918.

122,136. CERTAIN NAMED CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF. THE FAFNIR BEARING COMPANY, New Britain, Conn.
Filed January 31, 1918. Serial No. 108,710. PUBLISHED APRIL 9, 1918.

122,137. LIGHTNING-RODS. THE E. A. FOY COMPANY, Cincinnati, Ohio.
Filed February 16, 1918. Serial No. 109,026. PUBLISHED APRIL 9, 1918.

122,138. LITHIUM, MAGNESIUM, STRONTIUM, AND THORIUM NITRATE. FOOTE MINERAL CO., Philadelphia, Pa.
Filed January 26, 1918. Serial No. 108,647. PUBLISHED APRIL 9, 1918.

122,139. FACE-POWDER. LEON GAWURIN, New York, N. Y.
Filed February 23, 1918. Serial No. 109,178. PUBLISHED APRIL 16, 1918.

122,140. BREAD. EDWIN S. GEMPP, St. Louis, Mo.
Filed May 21, 1917. Serial No. 103,983. PUBLISHED APRIL 16, 1918.

122,141. MEN'S OUTER COATS AND COAT-DUSTERS. GLOBE SHIRT & OVERALL CO., Abingdon, Ill.
Filed February 20, 1918. Serial No. 109,130. PUBLISHED APRIL 16, 1918.

122,142. HAY-LIFTING MACHINES. ALFRED M. HANSON, Inkster, N. D.
Filed September 18, 1916. Serial No. 98,048. PUBLISHED FEBRUARY 12, 1918.

122,143. PERFUMES. THOMAS G. HITT, Seattle, Wash.
Filed August 27, 1917. Serial No. 105,896. PUBLISHED APRIL 16, 1918.

122,144. TOILET-PAPER. THE JOHN HOBERG CO., Green Bay, Wis.
Filed March 1, 1918. Serial No. 109,291. PUBLISHED APRIL 2, 1918.

122,145. TOILET-PAPER. THE JOHN HOBERG CO., Green Bay, Wis.
Filed March 1, 1918. Serial No. 109,292. PUBLISHED APRIL 2, 1918.

122,146. FOOD PRODUCT INTENDED AS A SUBSTITUTE FOR EGGS. THE HOLLEY COMPANY, Rochester, N. Y.
Filed February 8, 1918. Serial No. 108,887. PUBLISHED APRIL 16, 1918.

122,147. CREAM-CHOCOLATE BARS. CURTIS IRELAND, St. Louis, Mo.
Filed February 26, 1918. Serial No. 109,224. PUBLISHED APRIL 16, 1918.

122,148. CHEMICAL COMPOUND MIXED WITH POULTRY FOOD AS A TONIC AND TO INCREASE EGG PRODUCTION. W. H. JOHNSON, Pine Bluff, Ark.
Filed January 21, 1918. Serial No. 108,572. PUBLISHED APRIL 16, 1918.

122,149. FOOD KNOWN AS TOASTED CORN FLAKES. JOHN L. KELLOGG, Battle Creek, Mich.
Filed March 16, 1918. Serial No. 109,595. PUBLISHED APRIL 16, 1918.

122,150. HINGES, DOOR-GUARDS, AND LAVATORY-TRIMMINGS. LAWSON MFG. CO., Chicago, Ill.
Filed November 19, 1917. Serial No. 107,470. PUBLISHED MARCH 19, 1918.

122,151. FRESH APPLES IN BOXES. MANUEL BROTHERS COMPANY, Minneapolis, Minn., and Grand View, Sunnyside, and Zillah, Wash.
Filed March 9, 1918. Serial No. 109,475. PUBLISHED APRIL 16, 1918.

122,152. SALVE DESIGNED TO BE USED FOR THE TREATMENT OF BURNS. DOMENICO L. MICCA, West Hoboken, N. J.
Filed June 23, 1917. Serial No. 104,648. PUBLISHED APRIL 9, 1918.

122,153. MONTHLY PUBLICATION. THE NORTHWESTERN CHEMICAL COMPANY, Marietta, Ohio.
Filed February 1, 1918. Serial No. 108,750. PUBLISHED MARCH 26, 1918.

122,154. CANNED PEAS AND CANNED BEANS. PACIFIC PEA PACKING COMPANY, Eau Claire, Wis., and Oakdale, Cal.
Filed March 2, 1918. Serial No. 109,340. PUBLISHED APRIL 16, 1918.

122,155. ROLL-PAPER CUTTERS AND HOLDERS. PARSONS TRADING COMPANY, New York, N. Y.
Filed January 12, 1918. Serial No. 108,436. PUBLISHED MARCH 19, 1918.

122,156. ELECTRICALLY-OPERATED SIGNAL-HORNS. ALEXANDER N. PIERMAN, Newark, N. J.
Filed February 7, 1918. Serial No. 108,878. PUBLISHED APRIL 9, 1918.

122,157. HAIR-TONIC. PURI-TIS CHEMICAL CO., Detroit, Mich.
Filed September 7, 1917. Serial No. 106,121. PUBLISHED APRIL 16, 1918.

122,158. ALIMENTARY PASTES, COVERING ALL KINDS OF MACARONI. GUANO & RAGGIO, INC., Philadelphia, Pa.
Filed March 5, 1918. Serial No. 109,386. PUBLISHED APRIL 16, 1918.

122,159. LIQUID SOAP, OLIVE-OIL SOAP, TOILET SOAP, AND VIOLET SOAP, AND SHAVING-CREAM. THE REMILLER CO., New York, N. Y.
Filed July 10, 1917. Serial No. 104,967. PUBLISHED JANUARY 22, 1918.

122,160. POCKET-KNIVES. THE ROBESON CUTLERY COMPANY, Rochester, N. Y.
Filed February 1, 1918. Serial No. 108,754. PUBLISHED MARCH 5, 1918.

122,161. METAL-WORKING DRILL-PRESSES. THE SILVER MANUFACTURING COMPANY, Salem, Ohio.
Filed October 31, 1917. Serial No. 107,071. PUBLISHED FEBRUARY 19, 1918.

122,162. BANK-STATIONERY—VIZ., PASS-BOOKS, LEDGER-CARDS, AND SIGNATURE-CARDS. SIDNEY SLADDEN, New York, N. Y.
Filed September 18, 1915. Serial No. 89,304. PUBLISHED APRIL 2, 1918.

122,163. BOOT AND SHOE BLACKING. SOCIÉTÉ GÉNÉRALE DES CIRAGES FRANÇAIS, Paris, France.
Filed January 6, 1917. Serial No. 100,404. PUBLISHED MARCH 26, 1918.

122,164. PRINTING-ROLLER WASH AND PRESERVATIVE. STAR CHEMICAL COMPANY, Philadelphia, Pa.
Filed October 6, 1917. Serial No. 106,637. PUBLISHED APRIL 16, 1918.

122,165. REMEDY FOR NERVOUS CONDITIONS DUE TO MONTHLY PERIODS OR CHANGE OF LIFE. BERNARD E. STUDER, Los Angeles, Cal.
Filed February 21, 1918. Serial No. 109,160. PUBLISHED APRIL 16, 1918.

122,166. MOTOR-CAPS AND BABY-CAPS. EDWIN T. THOMAS, Chicago, Ill.
Filed January 17, 1918. Serial No. 108,508. PUBLISHED FEBRUARY 26, 1918.

122,167. CATTLE AND STOCK MEDICINE AND TONIC. TROY CHEMICAL CO., Binghamton, N. Y.
Filed February 27, 1918. Serial No. 109,250. PUBLISHED APRIL 16, 1918.

122,168. MEDICINAL SALVE FOR USE BY EXTERNAL TREATMENT AND INTERNAL VAPORS. THE VICK CHEMICAL CO., near Greensboro, N. C.
Filed December 19, 1917. Serial No. 108,067. PUBLISHED APRIL 9, 1918.

122,169. ALL KINDS OF STEAM-FITTINGS. WALWORTH MANUFACTURING COMPANY, Boston, Mass.
Filed September 27, 1917. Serial No. 106,468. PUBLISHED MARCH 19, 1918.

122,170. TEA. MARK T. WENDELL, Boston, Mass.
Filed March 4, 1918. Serial No. 109,379. PUBLISHED APRIL 16, 1918.

122,171. TEA. MARK T. WENDELL, Boston, Mass.
Filed March 4, 1918. Serial No. 109,378. PUBLISHED APRIL 16, 1918.

122,172. RAZOR-BLADE STROPPERS. WOODWARD-WILLIAMS CO. INC., Rochester, N. Y.
Filed February 25, 1918. Serial No. 109,214. PUBLISHED APRIL 9, 1918.

122,173. CANNED FOODS—NAMELY, CHICKEN-TAMALES, ENCHILADAS, DEVILED CHILLI-MEAT, SANDWICH-PASTE, CHILLI-CON-CARNE. WORKMAN PACKING CO., San Francisco, Cal.
Filed February 7, 1918. Serial No. 108,877. PUBLISHED APRIL 16, 1918.

LABELS

REGISTERED JULY 2, 1918.

20,708.—*Title:* "BECKMAN BED BLANKETS." (For Bed-Blankets.) THE BECKMAN COMPANY, Cleveland, Ohio. Filed May 11, 1918.

20,709.—*Title:* "WORLD'S WONDER POLISH." (For a Polish.) BRISTOW & MCDONALD, Butte, Mont. Filed January 2, 1918.

20,710.—*Title:* "NO-FLY." (For a Fly-Spray.) W. D. CARPENTER CO., Syracuse, N. Y. Filed May 7, 1918.

20,711.—*Title:* "TRENCH TUBES." (For Trench-Tubes.) DAVIS & GECK, INC., Brooklyn, N. Y. Filed May 25, 1918.

20,712.—*Title:* "NO BROW 'ATHERTON' QUALITY VEIL." (For Veils.) JAMES ATHERTON DUNHAM, Brooklyn, N. Y. Filed March 11, 1918.

20,713.—*Title:* "BERLINER TEA MATZOTHS." (For Matzoths.) A. GOODMAN & SONS, INC., New York, N. Y. Filed May 10, 1918.

20,714.—*Title:* "SWEETHEART KISSES." (For Kisses.) THE HARTER CANDY CO., Toledo, Ohio. Filed May 10, 1918.

20,715.—*Title:* "PACIFIC." (For Lemons.) JOHNSTON FRUIT CO., Santa Barbara, Cal. Filed August 1, 1917.

20,716.—*Title:* "KRANK'S LEMON CLEANSING CREAM." (For Cold-Cream and Cleansing-Cream.) ALFRED J. KRANK, St. Paul, Minn. Filed March 5, 1918.

20,717.—*Title:* "KRANK'S SHOE CREAM." (For Preparation for Polishing and Preserving All Kinds of Leather.) ALFRED J. KRANK, St. Paul, Minn. Filed April 19, 1918.

20,718.—*Title:* "AUTHENTIC DESIGNS." (For Silk and Cotton Samplers.) ORIENTAL SILK PRINTING COMPANY, New York, N. Y. Filed January 31, 1918.

20,719.—*Title:* "AUTHENTIC DESIGNS." (For Silk and Cotton Knitting-Bags.) ORIENTAL SILK PRINTING COMPANY, New York, N. Y. Filed January 31, 1918.

20,720.—*Title:* "OZENE." (For a Hair-Tonic and Dandruff Remedy.) OZENE COMPANY, Oklahoma, Okla. Filed March 4, 1918.

20,721.—*Title:* "CELTO." (For Non-Intoxicating Beverages.) THE PEOPLES BREWING CO., Terre Haute, Ind. Filed April 29, 1918.

20,722.—*Title:* "REMUE." (For a Proprietary Preparation.) REMUE REMEDIES COMPANY, Denver, Colo. Filed February 16, 1918.

20,723.—*Title:* "OVER THE TOP." (For Chocolates.) JOSEPH ROSENFELD, New York, N. Y. Filed May 1, 1918.

20,724.—*Title:* "SAUER'S." (For Flavoring Extracts.) THE C. F. SAUER CO., Richmond, Va. Filed October 1, 1917.

20,725.—*Title:* "OVER THE TOP INTO BERLIN." (For Games.) SAMUEL M. SWAYER, New York, N. Y. Filed May 15, 1918.

20,726.—*Title:* "IDYLL." (For Cigars.) THE TRI-STATE CIGAR M'FG. CO., New Brunswick, N. J. Filed March 28, 1918.

20,727.—*Title:* "A PERFECT BLEND WILKINS COFFEE." (For Coffee.) JOHN H. WILKINS COMPANY, Washington, D. C. Filed March 26, 1918.

20,728.—*Title:* "PAULINE GARCIA." (For Cigars.) DAVID ZLATTNER, New York, (Brooklyn,) N. Y. Filed April 19, 1918.

PRINTS

REGISTERED JULY 2, 1918.

4,911.—*Title:* "THE 'CASCO' SYSTEM FOR REPLACING MOTOR BOAT TOPS." (For Motor-Boat Tops.) ALBERT W. CONNOR, Cincinnati, Ohio. Filed February 16, 1918.

4,912.—*Title:* "CAN'T START TOO YOUNG." (For a Toilet Cream.) JAMES C. CRANE, New York, N. Y. Filed March 18, 1918.

4,913.—*Title:* "BEWARE." (For Detmer Woolens.) DETMER WOOLEN CO., New York, N. Y. Filed May 6, 1918.

4,914.—*Title:* "PLUMBERS' AUTO REPAIR KIT." (For Kits Containing Plumbers' Supplies.) ROSS MANUFACTURING COMPANY, Kansas City, Mo. Filed April 25, 1918.

DECISIONS

OF THE

COMMISSIONER OF PATENTS,

AND OF

UNITED STATES COURTS IN PATENT CASES.

DECISIONS OF THE U. S. COURTS.

Court of Appeals of the District of Columbia.

IN RE ESTATE OF P. D. BECKWITH, INC.

Decided May 27, 1913.

1. TRADE-MARKS—REGISTRABILITY—DESCRIPTIVE.
Where a trade-mark contains as its dominant features words aptly descriptive of the goods to which it is applied, *Held* that registration should be refused.

2. SAME—SAME—SAME—MOIST-AIR HEATING SYSTEM.
The words "Moistair Heating System" as applied to hot-air and combined hot-air and hot-water heaters and furnaces *Held* descriptive, and therefore unregistrable.

3. SAME—SAME—CONFUSION IN TRADE.
In order to protect the public against confusion in trade, *Held* that the Commissioner of Patents may anticipate inevitable confusion and refuse to grant a monopoly in a mark which is not only descriptive, but contains the common trade-name of similar commodities in a general class of merchandise.

4. SAME—SAME—ELIMINATION OF DESCRIPTIVE MATTER.
Held that the objection to descriptive matter in a trade-mark cannot be overcome merely by a disclaimer, but must be eliminated from the mark.

Mr. H. C. Howard for the appellant.

Mr. T. A. Hostetler for the Commissioner of Patents.

VAN ORSDEL, *J.*:

This appeal is from the decision of the Commissioner of Patents denying the application of appellant for the registration of the following trade-mark for "hot air and combined hot air and hot water heaters and furnaces":



The Commissioner tendered registration of the figure with the words "Moistair Heating System" eliminated, which appellant refused—hence this appeal. The reason assigned by the Commissioner is that—

> applicant has an exclusive right to all these features except the phrase "Moistair Heating System," and it has in common with the public generally also the right to use, but not to register, these descriptive words.

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The Trade-Mark Act of February 20, 1905, (33 Stats. L., 724,) in section 5, among other things, provides—

> that trade-marks which are identical with a registered or known trade-mark owned and in use by another, and appropriated to merchandise of the same descriptive properties, or which so nearly resemble a registered or known trade-mark owned and in use by another, and appropriated to merchandise of the same descriptive properties, as to be likely to cause confusion or mistake in the mind of the public, or to deceive purchasers, shall not be registered: *Provided*, That no mark which consists merely in the name of an individual, firm, corporation, or association, not written, printed, impressed, or woven in some particular or distinctive manner or in association with a portrait of the individual, or merely in words or devices which are descriptive of the goods with which they are used, or of the character or quality of such goods, or merely a geographical name or term, shall be registered under the terms of this act.

It must be conceded that the words "Moistair Heating System" are descriptive of the merchandise on which the mark is used and for which registration is sought. These words, standing alone, are clearly unregistrable, and are open to public use, limited only by the principles involved in unfair competition. If these words constitute an essential feature of the trade-mark, it is sufficient to defeat registration. A mark, certain features of which are merely suggestive of character or quality, is one thing; but a mark like the present, which contains as its dominant feature words aptly descriptive of the character or quality of the goods to which it is applied, is quite another thing. In such cases, where the descriptive words are the dominant feature of the mark, registration should be denied. (*Johnson* v. *Brandau*, 32 App. D. C., 348; 139 O. G., 732; *in re Schweinfurter*, 38 App. D. C., 279; *in re Excelsior Shoe Co.*, 40 App. D. C., 480; 196 O. G., 805; *in re Mots Tire & Rubber Co.*, 40 App. D. C., 487; 198 O. G., 513.

The statute not only prohibits the registration of marks which are descriptive, but of marks which would be likely to cause confusion in trade. "Moist air heating system" is the trade-name of a large class of merchandise. There are numerous styles of "hot air and combined hot air and hot water heaters and furnaces" manufactured and on the market, on which the owners are entitled to use the common designation here sought to be monopolized. The statute does not contemplate that the Commissioner shall register a mark with descriptive words in it, and wait until another applies for registration of the same or a similar mark before he can apply the restriction as to confusion. It is sufficient if the mark is known to be in use, or its equivalent, a trade-name common to a large class

of merchandise, upon one branch of which it is sought by the applicant, through the agency of registration, to monopolize the use of the mark. In the matter of the registration of trade-marks, the Commissioner represents the public. The section of the statute here in question relates primarily to the protection of the public, and the controlling provision is that which forbids the registration of any mark which may lead to confusion in trade. That being true, the uniform holding of this court that registration of marks will be refused in which descriptive words constitute the dominating feature, will be adhered to.

The attempt to register a trade-name which would damage others engaged in handling the same class of merchandise to which the mark is applied and for which registration is sought, has generally been held to constitute a ground for opposition proceedings. In *Johnson* v. *Brandau*, *supra*, sustaining the opposition on the ground that the opposer had used the mark merely as a trade-name, the court said:

> If registration be allowed, it becomes *prima facie* evidence of the appellant's ownership of it as a valid trade-mark * * * in any action which he may institute against the opposer or others who may use the word as a general trade-name for similar articles of goods. Having used the word as such a tradename, although not entitled to ownership of it as a trademark, we think it is permissible for the opposer to make opposition to the registration by the applicant.

In *Natural Food Co.* v. *Williams*, (30 App. D. C., 348; 133 O. G., 282,) involving the right to register the mark "Shredded Whole Wheat," when it appeared that the opposer had never used the words as a trade-mark, the court said:

> That he (the opposer) did not use the words as a trade-mark, but merely in a descriptive sense, is of no moment. He, in common with all other manufacturers of shredded whole wheat, had the same right to properly designate their product as did the Natural Food Company.

The term or trade-name "moist air heating system" is generic, and is descriptive of specific articles of manufacture belonging to one general class of merchandise. The name is common to all, and may be aptly used as descriptive of each. Such a name may not be monopolized as a trade-mark.

In *Standard Paint Co.* v. *Trinidad Asphalt Co.* (220 U. S., 446, 453; 165 O. G., 971) the Court, considering the validity of the word "Rubberoid" as a trade-mark for paint said:

> The Asphalt Company also makes a roofing, not, however, of the same material as that of the Paint Company, but of the same thickness as the latter, and cut in the similar widths and lengths, and sells it under the name of "Rubbero" roofing. Two contentions are made by the Paint Company: (1) that its trade-mark is a valid one and has been infringed by the Asphalt Company. (2) That the latter has been guilty of unfair competition. The court of appeals decided adversely to both contentions. (163 Fed. Rep., 977.) Of the first contention the court said it was clear that the Paint Company "sought to appropriate the exclusive use of the term rubberoid," and that its rights were to be adjudged accordingly, and that as the latter, being a common descriptive word, could not be appropriated as a trade-mark, the one selected by the Paint Company could not be appropriated. The court said: "A public right in rubberoid and a private monopoly of rubberoid cannot coexist." The court expressed the determined and settled rule to be "that no one can appropriate as a trade-mark a generic term or one descriptive of an article of trade, its qualities, ingredients or characteristics, or any sign, word or symbol which from the nature of the fact it is used to signify others may employ with equal truth.

By indisputable analogy, it follows that to give the statute the force intended by Congress, primarily to protect the public against confusion in trade, the Commissioner may anticipate inevitable confusion and refuse to grant a monopoly in a mark which is not only descriptive in its dominant features, but contains the common trade-name of similar commodities in a general class of merchandise. If an applicant can register descriptive words or trade-names camouflaged in immaterial and deceptive trimmings, the whole purpose of the statute would be nullified. To uphold such procedure amounts to countenancing the perpetration of a fraud in the face of the clear intent of Congress. The conclusion, when measured in the light of the evident purpose of the statute, seems to be irresistible. It is so just and so manifestly in accord with the spirit of the law that a different interpretation should not be indulged through any technical, fine-spun, literal construction of the statute.

Opportunity was given appellant in the Patent Office to eliminate from his mark the words "Moistair Heating System," and accept registration of the fanciful portions of the design. Clearly this is all to which he is entitled. It, however, can be accomplished only by elimination from the registered mark, and not merely by filing a disclaimer in the Patent Office. (*Johnson* v. *Brandau*, *supra*; *Electro Steel Co.* v. *Lindenberg Steel Co.*, 43 App. D. C., 270; 215 O. G., 977; *Fishbeck Soap Co.* v. *Kleeno Mfg. Co.*, 44 App. D. C., 6; 216 O. G., 633.)

The decision of the Commissioner of Patents is affirmed, and the clerk is directed to certify these proceedings as by law required.

Affirmed.

Mr. Chief Justice SMYTH concurring specially:

I concur in the opinion and judgment of Mr. Justice Van Orsdel on the ground of *stare decisis*. It seems to me that if the rule so often announced by this court either directly or inferentially is to be changed, it should be done by Congress and not by the court. If, however, the question was one of first impression, I would join in the conclusion announced by Mr. Chief Justice McCoy.

Mr. Chief Justice McCOY dissenting:

The statute concerning the registration of trade-marks provides among other things as follows:

> That the owner of a trademark used in commerce * * * may obtain registration for such trademark by complying with the following requirements. (Here follow provisions in relation to the application for registration.)
>
> SEC. 2. That the application * * * must be accompanied by a written declaration * * * to the effect that the applicant believes himself * * * to be the owner of the trademark sought to be registered; * * * that such trademark is used in commerce * * *.
>
> That no mark by which the goods of the owner of the mark may be distinguished from other goods of the same class shall be refused registration as a trademark on account of the nature of such mark unless such mark consists of or comprises immoral or scandalous matter. (Sec. 5 a.)
>
> Consists of or comprises the flag, coat of arms, or other insignia of the United States * * *.
>
> *Provided*, That no mark which consists * * * merely in words or devices which are descriptive of the goods with which they are used or the character or quality of such goods * * * shall be registered under the terms of this act. (Sec. 5 b.)

It has been decided by this court that a trade-mark which comprises words merely descriptive cannot be registered, but that is not what the statute says. I cannot see that the proviso in regard to the use of descriptive words needs to be construed, for the language is perfectly plain, but if I am wrong in this then the proper construction of it is made certain by other parts of the section; namely, those where the statute reads "*consists* of or *comprises*." (Italics mine.)

The trade-mark law is nothing but a registration act. (*Elgin Watch Co.* v. *Illinois Watch Co.*, 179 U. S., 665–672; 94 O. G., 755.) In refusing registration to marks consisting merely in words or devices which are descriptive the act codified the law found in the decisions because a mark of that kind was not given protection in equity. (*Brown Chemical Co.* v. *Myer*, 139 U. S., 540–542; 55 O. G., 287.) Nothing else was decided in *Standard Paint Co.* v. *Trinidad Asphalt Co.*, (220 U. S., 446; 165 O. G., 971,) cited in the present opinion of Mr. Justice Van Orsdel.

A so-called common-law trade-mark containing descriptive words is protected in equity. (*Singer Mfg. Co.* v. *June Mfg. Co.*, 163 U. S., 169; *McLean* v. *Fleming*, 96 U. S., 251, p. 256 and *passim*; *Williams* v. *Mitchell*, 106 Fed. Rep., 168–171; 96 O. G., 2411; *Leather Cloth Co.* v. *American Leather Cloth Co.*, Ho. Lords Cas., 1864–1866, vol. 11,523; *Siemo* v. *Provesende*, 1865, 1 L. Rep., 191; *Redway* v. *Banham*, 1896, App. Cas., 199; *Montgomery* v. *Thompson*, 1891, App. Cas. L. Rep., 217; *Raggett* v. *Findlater*, 1873, 17 Eq. Cas., 29; *Russia Cement Co.* v. *Lepage*, 147 Mass., 206, 211.)

In the brief for the Commissioner of Patents it is stated as follows:

> The recent decisions of the courts, such as *Nairn Linoleum Co.* v. *Ringwalt Linoleum Works*; *O. W. Thum Company* v. *Dickinson*, and others that have interpreted the statutes, have to some extent changed the practice in the Patent Office, which Office is governed by the decisions of the courts.

This is a respectful way of saying that the decisions of this court have revolutionized the practice in the Patent Office so far as concerns the matter here in question.

The decisions of this court in cases where registration has been refused to trade-marks comprising descriptive words seem to be based upon some intention of Congress said to be expressed in the proviso which reads as follows:

> That trademarks which are identical with a registered or known trademark owned and in use by another and appropriated to merchandise of the same descriptive properties or which so nearly resemble a registered or known trademark owned and in use by another and appropriated to merchandise of the same descriptive properties as is likely to cause confusion or mistake in the mind of the public or to deceive purchasers shall not be registered,

and in the present opinion of Mr. Justice Van Orsdel he says:

> The statute not only prohibits the registration of marks which are descriptive, but of marks which would be likely to cause confusion in trade.

So it does, provided that the confusion likely to arise would come from the registration of a mark identical with a registered or known trade-mark or so nearly resembling a registered or known trade-mark as to be likely to cause confusion. Counsel for the Commissioner of Patents does not contend that the mark here in question is identical with or resembles any registered or known trade-mark, and the Commissioner of Patents did not refuse registration on either of these grounds.

It is said that in the matter of registration of trade-marks that the Commissioner represents the public. So does any other public official; but he misrepresents the public if he acts in contravention of the statute. If Congress intended to make him a chancellor it was also very careful to limit the scope of his powers.

I do not find any warrant in the statute for permitting an applicant to secure registration of a trade-mark after eliminating any part thereof. The statute is clearly against such practice for it says as already quoted that it is "the owner of a trade-mark used in commerce" who is entitled to have it registered. He can register only what he has used. (*Elgin Watch Co.* v. *Illinois Watch Co.*, *supra*, where the court said:)

> Trademarks are not defined by the act, which assumes their existence and ownership, and provides for a verified declaration by applicants for registration that they have the exclusive right to the particular trademark sought to be registered.

I dissent, though I would not do so had the previous decisions of this court established a rule of property.

Court of Appeals of the District of Columbia.

REES *v.* WHITE.

Decided May 27, 1918.

INTERFERENCE—PRIORITY.

Concurrent decisions of the Patent Office tribunals affirmed and *Held* that priority was properly awarded to W., as the early experiments of R. constituted merely an "abandoned experiment," and, besides, any rights he may have had thereby were lost by concealment and suppression.

Mr. Geo. D. Beattys for the appellant.

Mr. Robert C. Mitchell for the appellee.

VAN ORSDEL, *J.*:

This appeal is in an interference proceeding, the subject-matter of which is described by the Commissioner of Patents as follows:

> The invention relates to an apparatus for producing perforated note sheets which are so perforated that when used in connection with a suitable reproducing instrument the composition will be produced as to tempo changes and dynamics as originally rendered by the player.

The issue is in four counts, of which the following is illustrative:

> 1. In an apparatus for producing perforated note sheets for music playing instruments, a cutter apparatus including cutters for forming in a sheet note perforations, and a separate cutter for forming in said sheet expression controlling perforations, a manually controllable player apparatus, said cutter apparatus and said player apparatus being so arranged as to operate simultaneously and coöperatively, the speed of one being variable relatively to the speed of the other, the speed of the latter being substantially uniform, means between said player apparatus and said cutter apparatus for controlling the moment and duration of operation of the cutters for forming note perforations in the sheet being perforated, and means between the player apparatus and the cutter apparatus for controlling the moment of and duration of operation of the cutter for forming the expression controlling perforations in the sheet being perforated.

The tribunals below concur in holding that White is entitled to priority. Where this occurs, and the case, as in this instance, turns wholly upon questions of fact, the finding below will not be disturbed, except where manifest error has been committed. White took no testimony, relying upon his filing date. The tribunals below held that, while Rees showed that some experiments along the line of the invention had been made as early as 1909, it was unnecessary to determine whether they amounted to a conception of the invention; since, if they did, he has lost his right by concealment and suppression, and what he did at that time amounted only to an abandoned experiment.

Upon careful consideration of the whole case, we concur in the unanimous holding of the tribunals below.

The decision of the Commissioner of Patents is affirmed, and the clerk is directed to certify these proceedings as by law required.

Affirmed.

[Vol. 252. No. 1.]

THE

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OF THE

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Prints	1—No.	4,915.	
Reissues	1—No.	14,492.	
Total	420		

Notice—Photostat Copies.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., June 19, 1918.

Owing to difficulties encountered in obtaining the services of competent typists notice is hereby given that in order to avoid delays the Patent Office reserves the right to furnish photostat copies in lieu of type-written copies, in filling orders for copies of its records, on and after August 1, 1918, unless otherwise specifically directed.

J. T. NEWTON,
Commissioner.

Interference Notices.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., July 6, 1918.

Davis Chemical Co., its assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of the Fig-O-Lax Manufacturing Company, 521 Margin street, Grenada, Miss., for registration of a trade-mark and trade-mark registered April 26, 1892, No. 21,055, to the Davis Chemical Co., Ypsilanti, Mich., and a notice of such declaration sent by registered mail to the said Davis Chemical Co. at the said address having been returned by the post-office undeliverable, notice is hereby given that unless said Davis Chemical Co., its assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

R. F. WHITEHEAD,
First Assistant Commissioner.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., July 2, 1918.

Five Points Chemical Co., their assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of Harriet W. Belden, of 322 West Twenty-fifth street, Minneapolis, Minn., for registration of a trade-mark and trade-mark registered January 24, 1882, No. 22,572, to Five Points Chemical Co., of Rolla, Mo., and a notice of such declaration sent by registered mail to said Five Points Chemical Co. at the said address having been returned by the post-office undeliverable, notice is hereby given that unless said Five Points Chemical Co., their assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

R. F. WHITEHEAD,
First Assistant Commissioner.

Disclaimer.

1,232,128.—*Theodore L. Valerius*, Fort Atkinson, Wis. PASTEURIZER AND RIPENER. Patent dated July 3, 1918. Disclaimer filed July 5, 1918, by the assignee, *The Creamery Package Manufacturing Company.*

Enters this disclaimer—

"To claims 6 and 7 of said Patent No. 1,232,128."

Adverse Decisions in Interference.

PATENT NO. 1,202,555.

On June 12, 1918, a decision was rendered that Talbot G. Martin was not the first inventor of the subject-matter covered by claims 1, 2, 17, 18, 35, 37, 38, 39, and 40 of his Patent No. 1,202,555, subject, "Code ringing telephone system," and no appeal having been taken within the time allowed such decision has become final.

PATENT NO. 1,205,067.

On June 29, 1918, a decision was rendered that Jacob London was not the inventor of the subject-matter covered by claims 9, 11, 12, and 13 of his Patent No. 1,205,067, subject, "Mining machine and truck," and no appeal having been taken within the time allowed such decision has become final.

APPLICATIONS UNDER EXAMINATION.

Condition at Close of Business July 5, 1918.

Exam No.	Divisions and subjects of invention.	Oldest new application and oldest action by applicant awaiting office action. New.	Amended.	No. of applications awaiting action.
314	1. Closure Openers; Fences; Gates; Harrows and Diggers; Plows; Railway Gates; Planting; Scattering Unloaders; Trees, Plants, and Flowers.	May 23	June 8	146
128	2. Bee Culture; Corsets; Shades, and Screens; Dairy; Label Pasting and Paper Hanging; Paper Files and Binders; Medicine; Pneumatics; Presses; Tents, Canopies, Umbrellas, and Canes; Tobacco.	Mar. 19	Apr. 5	398
175	3. Annealing and Tempering; Electric Heating and Rheostats; Electrochemistry; Heating; Metal-Founding; Metallurgical Apparatus; Metallurgy; Plastic Metal Working.	Apr. 22	May 8	230
284	4. Conveyors; Elevators; Excavating; Hoisting; Material or Article Handling; Pneumatic Despatch; Pushing and Pulling Implements; Railway Mail Delivery; Store-Service; Traversing Hoists.	May 27	June 19	156
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218	6. Bleaching and Dyeing; Chemicals; Explosives; Fertilizers; Liquid Coating Compositions; Plastic Compositions; Preserving; Substances Preparation.	Mar. 7	May 3	388
312	7. Educational Appliances; Games and Toys; Optics; Velocipedes	Mar. 1	May 18	318
131	8. Beds; Chairs; Flexible-Sheet Securing Devices; Furniture; Kitchen and Table Articles; Store Furniture; Supports.	May 16	June 10	240
221	9. Air and Gas Pumps; Hydraulic Motors; Motors, Fluid; Motors, Fluid-Current; Pumps; Marine Propulsion.	Feb. 9	June 12	430
295	10. Carriages and Wagons; Motor Vehicles	Mar. 16	June 5	261
154	11. Boot and Shoe Making; Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Spring Devices; Whips and Whip Apparatus.	Apr. 24	May 23	188
222	12. Journal-Boxes, Pulleys, and Shafting; Machine Elements	Mar. 15	May 4	711
220	13. Ammunition and Explosive Charge Making; Bolt, Nail, Nut, Rivet, and Screw Making; Button Making; Chain, Staple, and Horseshoe Making; Driven, Headed, and Screw-Threaded Fastenings; Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Tools and Implements, Making; Metal Working; Needle and Pin Making; Nut and Bolt Locks; Turning.	Mar. 5	Apr. 26	864
223	14. Compound Tools; Cutting and Punching Sheets and Bars; Farriery; Metal-Bending; Sheet-Metal Ware, Making; Tools; Wire Fabrics and Structure; Wire-Working.	Apr. 10	May 9	164
208	15. Bread, Pastry, and Confection Making; Coating; Fuel; Glass; Laminated Fabrics and Analogous Manufactures; Paper-Making and Fiber Liberation; Plastic Block and Earthenware Apparatus; Plastics.	May 29	June 7	237
112	16. Electric Signaling-A; Radiant Energy; Telegraphy; Telephony	Mar. 4	Apr. 11	502
307	17. Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet Material Associating or Folding; Sheet Feeding or Delivering; Type Setting.	May 6	May 3	104
229	18. Fluid-Pressure Regulators; Injectors and Ejectors; Liquid Heaters and Vaporizers; Miscellaneous Heat-Engine Plants; Speed Responsive Devices; Steam and Vacuum Pumps; Steam-Engines; Steam-Engine Valves.	Mar. 25	Apr. 1	385
236	19. Dampers, Automatic; Furnaces; Heating Systems; Stoves and Furnaces; Domestic Cooking Vessels	Apr. 15	Apr. 1	231
179	20. Artificial Body Members; Builders' Hardware; Cutlery; Dentistry; Locks and Latches; Safes; Undertaking.	May 21	June 15	148
213	21. Brakes and Gins; Carding; Cloth-Finishing; Continuous-Strip Feeding; Cordage; Felt and Fur; Knitting and Netting; Silk; Spinning; Weaving; Winding and Reeling.	Mar. 13	May 3	235
240	22. Aeronautics; Firearms; Ordnance	Apr. 22	May 25	285
217	23. Acoustics; Coin-Handling; Horology; Recorders; Registers; Sound Recording and Reproducing; Time-Controlling Mechanism.	Apr. 13	May 24	229
144	24. Apparel; Apparel Apparatus; Sewing-Machines; Garment Supporters	May 6	May 7	200
315	25. Agitating; Butchering; Centrifugal Bowl Separators; Mills; Threshing; Vegetable Cutters and Crushers; Gas Separation.	May 21	May 16	148
105	26. Electricity, Generation; Motive Power	Dec. 8	Apr. 1	498
214	27. Brushing and Scrubbing; Grinding and Polishing; Laundry; Washing Apparatus	May 6	May 31	250
226	28. Internal-Combustion Engines	Mar. 20	May 3	422
147	29. Boring and Drilling; Coopering; Fire-Escapes; Ladders; Wheelwright-Machines; Wooden Buildings; Wood-Sawing; Wood-Turning; Woodworking; Woodworking Tools	Feb. 23	Mar. 1	478
152	30. Illuminating-Burners; Illumination; Liquid and Gaseous Fuel Burners; Type-Writing Machines	Apr. 3	June 15	364
172	31. Alcohol, Ammonia, Water, and Wood Distillation; Charcoal and Coke; Gas, Heating and Illuminating, Hides, Skins, and Leather; Hydraulic Cement and Lime; Mineral Oils; Oils, Fats, and Glue; Sugar and Salt.	Apr. 3	May 11	368
278	32. Gas and Liquid Contact Apparatus; Heat Exchange; Packaging Liquids; Refrigeration	Jan. 15	May 4	630
70	33. Bridges; Hydraulic Engineering; Masonry and Concrete Structures; Metallic Building Structures; Paving; Roads.	Apr. 22	May 23	215
304	34. Railways; Railway Rails and Joints; Railway Rolling Stock; Railway Ties and Fasteners	June 7	June 11	77
57	35. Baskets, Buttons, Clasps, Etc.; Card, Picture, and Sign Exhibiting; Signals; Toilet	Feb. 15	Jan. 26	494
264	36. Dryers; Geometrical Instruments; Measuring Instruments; Photography; Force Measuring	May 16	June 5	452
107	37. Electric Lamps; Electricity, Circuit Makers and Breakers; Electricity, Conduits; Electricity, General Applications.	Mar. 1	Mar. 5	678
278	38. Animal Husbandry; Earth Boring; Fishing and Trapping; Stationary; Stone-Working; Wells	June 13	May 24	124
220	39. Water Distribution; Multiple Valves	Mar. 2	Mar. 11	238
272	40. Bearings; Bottles and Jars; Check-Controlled Apparatus; Cloth, Leather, and Rubber Receptacles; Duplex and Collection Receptacles; Metallic Shipping and Storing Vessels; Package and Article Carriers; Paper Receptacles; Special Receptacles and Packages; Wooden Receptacles.	Apr. 5	Apr. 11	800
126	41. Railway Draft Appliances; Resilient Tires and Wheels	Mar. 26	May 7	284
114	42. Electricity, Conductors; Railway Signaling; Electricity-Transmission to Vehicles; Electric Signaling	Jan. 16	Jan. 25	631
282	43. Baths and Closets; Dispensing; Dispensing Beverages; Electricity, Medical and Surgical; Fire-Extinguishers; Surgery; Water Purification.	Apr. 2	Apr. 16	196
288	44. Air-Guns, Catapults, and Targets; Ammunition and Explosive Devices; Boats and Buoys; Ships	May 4	May 31	153
270	45. Clutches; Letter-Boxes; Meters; Railway Brakes	Mar. 11	Apr. 5	327

Oldest new case, Dec. 8; oldest amended, Jan. 25.
Total number of applications awaiting action..... 14,811

162	Trade-Marks, Designs, Labels and Prints:			
	Trade-Marks	May 31	June 5	721
	Designs	Mar. 30	May 28	476
	Labels and Prints	May 31	June 21	160

PATENTS

GRANTED JULY 9, 1918.

1,271,531. SLIP CONNECTION FOR DENTAL BRIDGE-WORK. Elliott Allingham, Toronto, Ontario, Canada. Filed Mar. 30, 1918. Serial No. 225,740. (Cl. 32—12.)



1. In a slip connection for dental bridge work, the combination with a crown having a vertical guide-way held thereon, and adjacent guide-ways on each side of the main guide-way, of a bridge having a vertical end tongue and laterally extending tongues one on each side designed to slip into and snugly fit the guide-ways in the crown.

2. The combination with a crown having a guide-way formed in the center of the side and laterally projecting wings forming supplemental adjacent guide-ways, of a bridge having a stem provided with a vertical end portion and a bar on the inside of such end portion provided with bent ends forming a loop, the ends of which form lateral extending tongues, the said tongues being adapted to fit into the guide-ways on the crown.

1,271,532. RAIL-JOINT. John E. Arthur, Lanes, Ill. Filed Mar. 10, 1917. Serial No. 153,811. (Cl. 239—9.)



1. A rail joint including in combination, rails having slots through the webs thereof, fish plate members positioned one on each side of the rails, each fish plate member having a plurality of apertures therethrough and a locking lug adjacent each aperture and extending inwardly, said locking lugs being adapted to pass through the apertures in the webs of the rails and through the apertures in the other fish plate member.

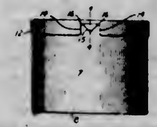
4. A rail joint including in combination, rails having slots through the webs thereof, fish plate members positioned one on each side of the rails, each fish plate member having a plurality of apertures therethrough and a locking lug adjacent each aperture and extending inwardly, said locking lugs being adapted to pass through the apertures in the webs of the rails and through the apertures in the other fish plate member, and means for pressing the fish plate members in opposite directions to hold the parts in locked relation.

7. A rail joint including in combination, rails having slots through the webs thereof, fish plate members positioned one on each side of the rails, each fish plate member having a plurality of apertures therethrough and a locking lug adjacent each aperture and extending inwardly, said locking lugs being adapted to pass through the apertures in the webs of the rails and through the apertures in the other fish plate member, said locking lugs having headed portions adapted to engage the outside of the other fish plate member, when the fish plate members are moved in opposite directions to each other, said heads having inclined under faces so that they have a wedging action against the other fish plate member, and means for forcing said fish plate members in opposite directions.

8. A rail joint including in combination, rails having slots through the webs thereof, fish plate members positioned one on each side of the rails, each fish plate member having a plurality of apertures therethrough and a locking lug adjacent each aperture and extending inwardly, said locking lugs being adapted to pass through the apertures in the webs of the rails and through the apertures in the other fish plate member, said locking lugs having headed portions adapted to engage the outside of the other fish plate member when the fish plate members are moved in opposite directions to each other, said heads having inclined under surfaces so that they have a wedging action against the other fish plate member, abutments on the other sides of said lugs and S-shaped resilient members passing through the apertures in said fish plate members and said webs, the ends of which engage said abutments when in their extreme flattened condition.

[Claims 2, 3, 5, and 6 not printed in the Gazette.]

1,271,533. OPENER AND CLOSURE FOR CANS. George W. Berry, Lorna Doone, New South Wales, Australia. Filed Aug. 11, 1917. Serial No. 185,637. (Cl. 220—67.)



1. In combination with a can, of a closure therefor having a depending flange, said flange having a downwardly pointed cutter nib cut and set inwardly therefrom to provide a shoulder whereby, when the closure is applied to the can with the cutter nib sprung outwardly to engage the outer face of the can, said shoulder will frictionally engage the can and serve as a lock for the closure.

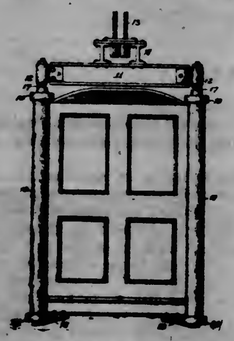
2. A can closure having a flange to extend in a direction longitudinally of the can body with portions cut therefrom and through the edge of the flange to form a depending V-shaped cutter nib integral with the closure flange, and said nib being bent inward to form a shoulder at the juncture of said nib with the closure flange and adapt the nib to normally extend yieldingly inward from the flange, said nib being adapted to lie contiguous to the outer face of the can body in the normal inoperative position of the closure on the can, or adapted to pierce a taggers tin end of the can and lie contiguous to the inner face of the can body with the shoulder at the juncture of the nib and closure flange engaging with the edge of the can body and operate to press the severed edge smoothly against the can body as the end of the can is severed, substantially as and for the purpose specified.

[Claim 3 not printed in the Gazette.]

1,271,534. ELEVATOR. Charles A. Bickford, Chicago, Ill. Filed Oct. 18, 1916. Serial No. 126,228. (Cl. 187—1.)

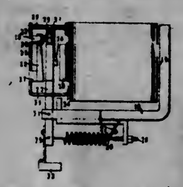
An elevator comprising a plurality of air cylinders provided with inlet and outlet valves, a piston and piston

rod within each cylinder, a spring extending around and parallel with the piston rod in each cylinder operating independently of the piston, a plurality of cross-bars and



means for attaching same to the upper ends of the piston rods, a cable and means for securing same to the cross-bars, substantially as shown and described.

1,271,535. ELECTRIC-CIRCUIT-CHANGING APPARATUS. JOSEPH BIJUR, New York, N. Y., assignor to Bijur Motor Lighting Company, Hoboken, N. J., a Corporation of New York. Filed Aug. 26, 1911. Serial No. 646,189. (Cl. 175—349.)



3. In combination, an electric circuit comprising a pair of co-acting contacts, electro-magnetic means adapted to vibrate said contacts into and out of engagement in a direction substantially transverse to their active surfaces, and means mounting one of said contacts upon a point eccentric to its center of gravity to permit it to move irregularly about said point transversely with respect to said first movement.

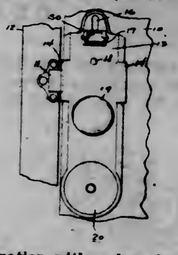
5. In combination, an electric circuit comprising a pair of coacting contacts, means adapted to move one of said contacts into and out of engagement with the other thereof, and means mounting said contacts to permit relative movement thereof in two directions transversely with respect to the line of said first movement.

17. In combination, an electric circuit comprising a pair of coacting contacts, means adapted to move one of said contacts into and out of engagement with the other thereof, and a flat spring mounting one of said contacts in position and out edgewise with respect to the direction of said movement, said contact members having their effective surfaces rounded.

22. A circuit interrupting device comprising in combination, a coil, a magnetic circuit energized by said coil, and comprising a spring-retracted vibratory armature, a contact carried by said armature and provided with a rounded surface, a second contact into engagement with which said armature intermittently moves the rounded surface of said first contact, the engaging surfaces of said contacts being non-fitting with respect one to another, and means loosely mounting said second contact for freedom of movement in a direction other than that of said first contact.

[Claims 1, 2, 4, 6 to 16, and 18 to 21 not printed in the Gazette.]

1,271,536. REVERSIBLE LOCK-CASING AND KEEPER FOR COIN-CONTROLLED LOCKS. GEORGE G. F. BOSWELL, Indianapolis, Ind., assignor to Universal Coin Lock Company, Indianapolis, Ind., a Corporation of Indiana. Original application filed Mar. 18, 1916, Serial No. 83,820. Divided and this application filed July 13, 1916. Serial No. 109,126. (Cl. 70—16.)

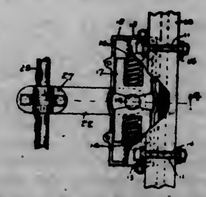


1. The combination with a door frame, and a door, of a keeper on the door frame, a lock on the door having a bolt adapted to enter said keeper, a case with a bolt opening on the opposite sides thereof, and a flange surrounding each of said bolt openings so as to overlap the keeper on its top and bottom faces and its outer face, substantially as set forth.

2. The combination with a door, of a lock casing, consisting of a single member open at the back and secured to the door, said door acting as a back plate for the casing, said casing having a bolt opening on opposite sides thereof, a flange extending around three sides of said opening, and means coöperating with said flanges to close either bolt opening.

3. The combination with a door frame and a door, of a lock casing having a bolt opening on opposite sides thereof, a flange extending around three sides of said opening, each flange having dovetailed grooves and a plate having beveled ends for coöperation with said dovetailed grooves adapted to cover either of said bolt openings.

1,271,537. STEERING-GEAR ATTACHMENT. MARTIN C. BRIGHT, Indianapolis, Ind., assignor of one-half to Thomas Bemis, Sr., Indianapolis, Ind. Filed Aug. 7, 1916. Serial No. 113,523. (Cl. 21—200.)



1. A steering device for automobiles including a housing adapted to be secured to the front axle, a compression spring mounted in said housing with one end arrested by the housing, a follower slidable in the housing and in position to arrest the other end of said spring, said follower having one face tapering outwardly toward the center, an arm pivoted in the housing in position for its outer end to engage said follower and means attached to said arm and to the tie rod of the automobile for actuating said arm and moving the follower to compress said spring when the tie rod is moved and arranged so that said spring whill return said follower, arm and tie rod actuated means to normal position.

2. A steering device for automobiles including a housing adapted to be secured to the front axle, a compression spring mounted therein with one end arrested by the housing, a connecting bar pivoted at one end to the tie rod of the automobile and at the other end to said housing, an arm in said housing rigidly connected to said connecting bar and a follower slidable in said housing and in engagement with the other end of said spring, said follower having a face tapering outwardly toward its center for engagement with the end of said arm.

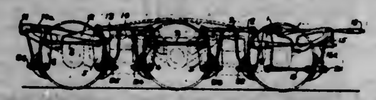
3. A steering device for automobiles including a housing adapted to be secured to the front axle, compression springs with one end arrested by the housing and the other end extending inwardly, spring pressed followers adapted to engage the inner ends of said springs having ends tapering outward toward the center thereof, oppositely extending arms pivoted in said housing between said followers having faces extending inwardly toward the center against which said followers are forced to seat by the normal tension of said springs, and a connecting bar secured to said arms and slidingly pivoted to the tie rod of the automobile, whereby said tie rod will be returned to its normal position after being operated.

4. A steering device for automobiles including a housing adapted to be secured to the front axle, a removable cover on said housing, spiral compression springs each with one end arrested by the housing and the other end extending inwardly, spring pressed followers having their ends tapering and adapted to engage the inner ends of said springs, oppositely extending arms pivoted to said housing between said followers and tapering toward each other so as to bring the outer ends of the arms into immediate action against said followers, whereby the movement of said arms will force said followers against said springs, a pivotal connecting bar secured to said arms, and a sliding member pivoted to the tie rod of the automobile and adapted to slide in a slot in said bar whereby, said tie rod will be returned to its normal position after being operated.

5. A steering device for automobiles including a housing adapted to be secured to the front axle, a pair of oppositely disposed slidable followers in said housing with their adjacent ends provided each with an inclined surface and said surfaces on the two followers being inclined reversely to each other, compression springs acting against the followers tending to force them toward each other, a bar pivotally connected at one end with the tie rod of the automobile and at the other end to an arm in said housing located between the two followers and having its sides inclined so as to bring the outer ends of the arms into immediate action against the inclined surfaces of the two followers when the automobile is in straight-ahead or any other position.

[Claim 6 not printed in the Gazette.]

1,271,538. BRAKE-RIGGING FOR ARTICULATED TRUCKS. THOMAS L. BURTON and HENRY A. WAHLERT, St. Louis, Mo., assignors to The American Brake Company, St. Louis, Mo., a Corporation of Missouri. Filed Nov. 15, 1916. Serial No. 131,359. (Cl. 188—24.)



1. In a brake rigging for railway trucks, the combination of a dead truck lever having a fulcrum, a bracket for supporting the same and a strut pivotally connected to said bracket and extending to a transverse truck member for transmitting the reaction from said fulcrum to the truck frame.

4. In a brake rigging for railway trucks, the combination of a dead truck lever located at the inside of the wheels, a bracket attached to the truck frame outside of the truck wheels and extending to the plane of the truck lever for supporting the same, and a fulcrum bar pivotally attached to said bracket and to a transverse truck member at the opposite side of the axle, the dead lever being fulcrumed on said bar.

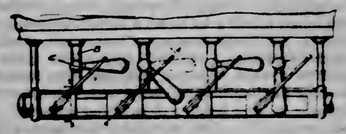
5. In a brake rigging for railway trucks, the combination of two sets of truck levers, one at each side and inside of the truck wheels, pull rods connecting the upper ends of adjacent truck levers, and brackets attached to the truck frame outside of the wheels for supporting and guiding said pull rods.

6. In a brake rigging for railway trucks, the combination of brake beams applied to both sides of each pair of wheels, a truck lever for each beam, the two truck levers for the first pair of wheels being located at the inner side of the axle, a coupling rod pivotally connected to the said two truck levers, and having an extension at the other side of the axle, and a bracket attached to the truck frame for supporting and guiding said extension.

8. In a brake arrangement for car trucks, a pair of brake levers, a pair of brake beams one of which is attached to the corresponding extremities of each of said levers, a lever-connecting member extending between the two levers and attached thereto between their extremities, a lever-actuating member attached to the other extremity of one of said levers, the corresponding extremity of the second lever being pivoted at a dead point, a truck bolster, a strut extending from said bolster to the dead point of the said lever and forming the dead pivot point therefor, said strut passing adjacent the first of said levers but out of the path thereof and said strut being adapted to receive the brake reaction load and transmit the same to the said bolster.

[Claims 2, 3, 7, and 9 not printed in the Gazette.]

1,271,539. SAFETY ATTACHMENT FOR GAS-STOVES. JOHN E. CADIGAN, New York, N. Y. Filed Sept. 5, 1917. Serial No. 189,840. (Cl. 126—42.)

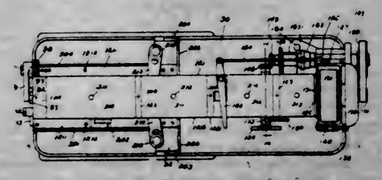


1. A valve guard for gas stoves comprising a plate adapted to be secured to the feed pipe of the valve, a member slidable on said plate, an arm movably supported from said member and provided with a series of notches for interchangeably receiving the handle of the valve when said handle is in respectively different positions and serving to hold the handle against movement, and means for holding said arm in a relatively fixed position.

2. An attachment for gas stoves comprising a slidably mounted member adapted to be positioned adjacent to the valve, a swinging arm on said member, said member having a longitudinal series of notches for interchangeably receiving the handle of the valve, and means on said member for holding the arm in a relatively fixed position.

3. An attachment for gas stoves comprising a member adapted to be positioned adjacent to the valve, and a swinging arm on said member, said arm having a longitudinal series of notches arranged therein and opening onto one edge of the arm and adapted to interchangeably receive the handle of the valve to hold the same against movement.

1,271,540. AUTOMATIC SCREW-MACHINE. FRANK L. CONN, Windsor, Vt. Filed Aug. 15, 1917. Serial No. 186,311. (Cl. 29—37.)



2. A screw machine comprising a lower bed, an upper bed thereabove, frames spacing and rigidly connecting

said beds, a tool slide mounted to reciprocate on the lower bed, a feed shaft mounted on the upper bed, a cam drum on said feed shaft, an upright rock shaft having one arm actuated by cams on said cam drum and having another arm connected to said tool slide.

38. An automatic screw machine comprising a lower bed, an upper bed vertically spaced therefrom, a plurality of frames interposed between said beds and rigidly securing them together, a spindle-carrying turret journaled in certain of said frames, a spindle drive shaft located between said beds in axial alinement with the turret, a main drive shaft journaled in said upper bed, power-transmitting connections between said main drive shaft and said spindle-driving shaft, a tool slide supported by the lower bed, a feed shaft journaled in the upper bed, operative mechanism actuated by the feed shaft for reciprocating said tool slide, and clutch-controlled power-transmitting mechanisms for transmitting power to the feed shaft in alternation from the spindle-driving shaft and the main drive shaft.

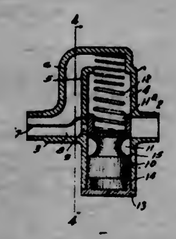
34. An automatic screw machine comprising a lower bed, an upper bed, frames rigidly connecting said beds, a main tool slide mounted to reciprocate on the lower bed, a spindle-carrying turret journaled in certain of said frames, a feed shaft journaled on the upper bed, a vertical rock shaft pivoted to the upper and the lower beds and having lateral arms, a cam drum on the feed shaft for rocking one of said arms and thereby said rock shaft, and a link connecting the other arm to said main tool slide.

47. A multi-spindle metal-working machine comprising a bed, a plurality of spaced upright frames thereon arranged in longitudinal alinement, a spindle-carrying turret journaled in the front frames, a turret extension journaled in the rear frame and including a disk, mechanism associated with said disk for indexing the turret, and turret-locking mechanism associated with the front end of the turret for locking it after it has been indexed.

64. An automatic screw machine comprising a bed, a main tool slide arranged to reciprocate longitudinally thereof, a rotary turret having four spindles which, when the turret is locked, are arranged two in rear and two in front of the vertical plane of the turret axis, vertical cross slides arranged in front and in rear of said plane, guides on said bed for guiding the upper and lower edges of the slides, provisions for securing tools on each slide to operate on the work held by the two adjacent spindles, and a cam shaft disposed above the turret in axial parallelism therewith, cams thereon, and cam-operated rock shafts for actuating said cross slides.

[Claims 1, 3 to 27, 29 to 33, 35 to 46, 48 to 63, and 65 to 81 not printed in the Gazette.]

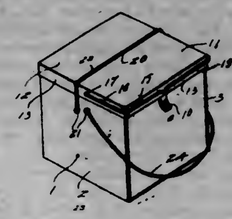
1,271,541. FUEL-MIXER. WAYNE W. CORE and ALPHONSE P. WEHNER, Pittsburgh, Pa. Filed Sept. 25, 1916. Serial No. 122,021. (Cl. 137—82.)



1. The combination with an explosive engine, of an air supply device comprising a casing having a sliding valve therein, means to move the valve by exhaust of pressure in the engine fuel supply manifold to allow air to pass through the casing, and connections through the casing to the engine crank case and to the fuel supply manifold.

[Claims 2 to 5 not printed in the Gazette.]

1,271,542. HAT-BOX. WILLIAM B. CRENSHAW, Watson, W. Va. Filed Oct. 9, 1917. Serial No. 195,690. (Cl. 229—46.)

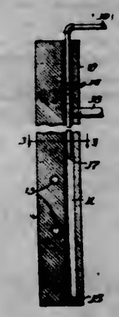


1. A hat box comprising a substantially rectangular casing having an opened front and top, a removable closure for the top, a pivoted closure for the front, and an endless flexible member slidably associated with the casing for engaging either the front or top closure to prevent the acidental opening of one closure, while the other is being opened.

4. A hat box comprising a bottom, rear and side walls, a front wall pivotally secured to the bottom wall at the front edge thereof, a removable cover for the top of the box, said cover having downwardly extending flanges formed on the side edges thereof for engaging the upper edge of the rear, side and front walls, the front flange of said removable cover being pivotally secured thereto, and a U-shaped bail member pivotally secured at its free ends to the side flanges of the cover, the bight portion of said U-shaped bail being arranged to engage the pivoted front flange, as and for the purpose specified.

[Claims 2 and 3 not printed in the Gazette.]

1,271,543. WATER-COOLED BUCK-STAY. GEORGE L. DANFORTH, Jr., Chicago, Ill. Filed Jan. 15, 1916. Serial No. 72,217. (Cl. 122—6.)



1. A buckstay formed of a rolled metal slab having a drilled aperture therethrough and water connections to said aperture, substantially as described.

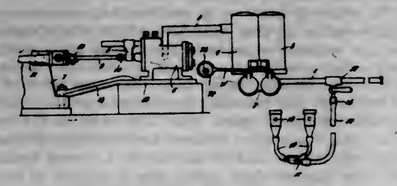
2. A buckstay formed of a rolled metal slab having a bored aperture therethrough, water connections to said aperture comprising a pipe extending downwardly within said aperture and terminating short of the bottom thereof, substantially as described.

3. A buckstay formed of a wrought metal slab, having a drilled aperture extending substantially the length thereof, water connections to said aperture comprising a feed pipe directed downwardly in said aperture, and an outlet connection near the top of said buckstay, substantially as described.

4. A buckstay formed of a wrought metal slab having an aperture formed after said slab is formed, water connections to said aperture comprising a feed pipe extending substantially through said aperture, said pipe being enlarged at its discharge end and adapted to abut the sides of said aperture, and an outlet connected to said aperture near the upper end thereof, substantially as described.

5. A device of the class described formed of wrought metal, and provided with a longitudinally-extending aperture, water connections to said aperture, said connections comprising a feed pipe led into said aperture from the top and smaller in diameter than said aperture, and an outlet connected to said aperture above the discharge end of said feed pipe, substantially as described.

1,271,544. VACUUM MILKING-MACHINE. CLAUDE HUDSON DAVIS, Wanganui, New Zealand. Filed Nov. 11, 1915. Serial No. 60,893. (Cl. 31—99.)



1. In a milking machine, a milk pipe to which various milking units are adapted to be connected, an ejecting apparatus for releasing milk from said pipe into the atmosphere, and two vacuum tanks having unequal vacuum pressure obtaining therein, said ejecting apparatus alternately and intermittently admitting the vacuum from said tanks to said milk pipe, such alternate and intermittent action pulsating the teat-cups and drawing the milk therefrom into the milk pipe and to the ejecting apparatus.

2. In a milking machine, a milk pipe and a releasing apparatus comprising means for alternately admitting two different vacuum pressures to the said milk pipe, and releasing milk from the said milk pipe into the atmosphere substantially as set forth.

5. In a milking machine, an ejecting apparatus adapted to admit alternately two different pressures of vacuum to the milk pipe and to release milk from said pipe upon the admission of each vacuum pressure to said pipe.

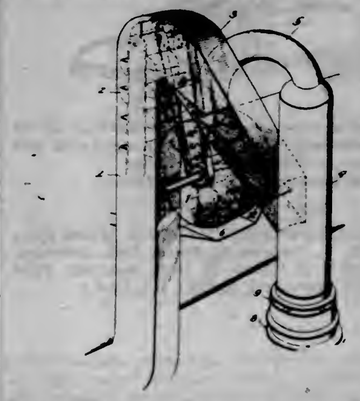
8. In a milking machine, an ejecting apparatus having a milk passage therein, a main milk pipe connected with said passage, a valve face, ports from said milk passage to said valve face, ports in said valve face communicating with a source of vacuum, a slide valve operating against said valve face and having ports controlling said ports in said valve face, pocket valves swinging upon the exterior of said slide valves, and means for operating said slide valve for bringing the interior of said pocket valves alternately into communication with the milk and the vacuum ports in said valve face and with the atmosphere, substantially as set forth.

12. In a milking machine, a vacuum pump, two vacuum tanks of unequal air conditions, the tank of high vacuum being connected directly to the vacuum pump, and ejecting apparatus having two ports connected with said tanks respectively for admission of two different vacuum pressures, a relief valve located between the two tanks, to draw air from the tank of low vacuum pressure, into the tank of high vacuum pressure, and a relief valve located between the tank of low vacuum pressure and the atmosphere, substantially as set forth.

[Claims 3, 4, 6, 7, 9 to 11, and 13 not printed in the Gazette.]

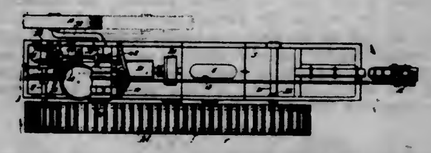
1,271,545. GRAIN-CLEANER. MONROE DAVIS, Enid, Okla. Filed Dec. 1, 1917. Serial No. 204,809. (Cl. 130—17.)

1. In a grain cleaner, the combination of a threshed grain elevator, an inclined pipe into whose upper end said elevator discharges, a final vertically disposed grain cleaning pipe into whose side said inclined pipe discharges at its lower end, and a suction conduit connected to said grain cleaning pipe above said inclined pipe; together with means for directing inclined sheets of air through the bottom of said inclined pipe toward the delivery end of the latter and for constraining the grain to pass through said sheets of air.



2. In a grain cleaner, the combination of a grain pipe inclined downwardly to its delivery end and open at both ends, said pipe having in its bottom a plurality of longitudinally spaced air inlet openings extending substantially throughout its width, a plurality of inclined plates in said pipe and secured at their upper ends to said bottom at points spaced toward its upper end from said openings, said plates diverging downwardly with said bottom and the lower ends of said plates overlapping the upper ends of adjacent plates in spaced relation thereto, and means for producing inward currents of air through said air inlet openings.

1,271,546. TRACTOR. WILLIAM E. DAVISON, Hammer, Wash. Filed June 1, 1917. Serial No. 172,817. (Cl. 180—9.)



1. A tractor comprising a frame, an endless traction belt and supporting wheels for the belt on one side of the frame, means for driving the belt, a leveling wheel on the other side of the frame, and a swinging support for the leveling wheel adjustable to elevate and lower said wheel relative to the frame and also to position the wheel in advance of and to the rear of the pivotal axis of the support, to vary the position of said wheel in the direction of the length of the frame.

2. A tractor comprising a frame, an endless traction belt and supporting wheels for the belt on one side of the frame, means for driving the belt, a wheel on the other side of the frame, and a swinging support for the wheel adjustable to position the wheel in advance of and to the rear of the pivotal axis of the support, to shift said wheel forward and rearward of the frame.

1,271,547. SHOE-TREE. FRANK X. DELANEY, Philadelphia, Pa. Filed Aug. 3, 1917. Serial No. 184,198. (Cl. 12—129.)

1. A shoe tree including a head block, and a flexible bag having a portion secured to an outer surface of said

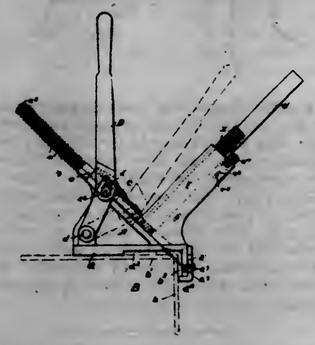
block, said surface of the block being extended beyond the portion of said bag which is secured thereto to permit a portion of said bag when inflated to roll on the ex-



tended portion of said surface, and said block at its top having a smooth curved end surface blending with said extended surface, substantially as described.

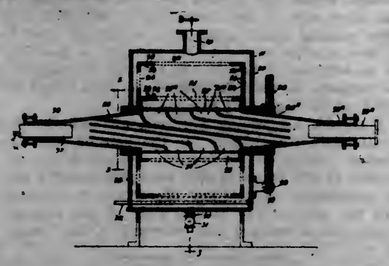
[Claim 2 not printed in the Gazette.]

1,271,548. STAPLE-DRIVING MACHINE. JAMES DOIG, Brooklyn, N. Y., assignor to Emma Doig, Brooklyn, N. Y., executrix of William S. Doig, deceased. Filed May 18, 1916. Serial No. 98,278. (Cl. 1—3.)



In a machine for driving fasteners, in combination, a body; a plunger in said body; a spring for holding the plunger in its upper or driving position; an operating member for moving the plunger to drive a fastener; a lever pivoted on the body and having a latching end and a disengaging end; a pawl pivoted on the lever and arranged to be engaged by said member to move the latching end of the lever into latching position; and means for supplying fasteners.

1,271,549. DYEING-MACHINE. HOWARD M. DUDLEY, Philadelphia, Pa. Filed May 16, 1917. Serial No. 168,921. (Cl. 8—19.)



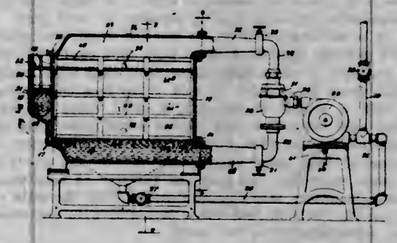
1. In a dyeing machine, in combination, a receptacle, a revoluble series of fiber chambers within the receptacle, each fiber chamber comprising foraminous walls with inwardly extended members, openings between said members, a foraminous member spaced from the inner walls of the fiber chamber and integral therewith, a series of tubes abutting upon the inner face of the foraminous member and extending outwardly, means for forcing liquids and air through the tubes during the revolution of the fiber chambers and means for revolving the chambers.

2. In a dyeing machine, in combination, a receptacle, a revoluble series of adjacent fiber chambers within the receptacle, each fiber chamber comprising foraminous walls with inwardly extended members, openings between said members, a foraminous member spaced from the inner walls of the fiber chambers and revoluble therewith, two series of oppositely divergent tubes covering the inner face of the foraminous member, each series being connected with a pump for continuously passing a liquid through the device, means for passing air through the device and means for revolving the fiber chambers within the receptacle.

4. In a dyeing machine, in combination, a receptacle, a revoluble series of fiber chambers within the receptacle, each fiber chamber comprising foraminous walls with inwardly extended members, openings between said members, a foraminous member spaced from the inner walls of the fiber chambers and revoluble therewith, a series of tubes, each tube of which opens upon a portion of the inner face of the foraminous member and extends outwardly through the hollow core of the device, a second series of tubes, each tube of which opens upon a portion of the inner face of the foraminous member and extends outwardly through the hollow core of the device in a direction opposite to those of the first series, means for maintaining the fiber chambers beneath a liquid within the receptacle, means for removing the liquid from the receptacle, means for removing the liquid from the receptacle after it has passed through the fiber chambers, means for continuously passing a liquid through the tubes and the fiber chambers, means for heating the liquid, means for passing air through the tubes and the fiber chambers and means for revolving the fiber chambers, the foraminous member and the tubes.

[Claim 3 not printed in the Gazette.]

1,271,550. DYEING-MACHINE. HOWARD M. DUDLEY, Philadelphia, Pa. Filed June 30, 1917. Serial No. 177,954. (Cl. 8—19.)



1. In a fiber treating device, in combination, a dyeing chamber, a series of removable fiber chambers within the dyeing chamber, each fiber chamber comprising a foraminous bottom having upwardly extending members and imperforate sides, a foraminous top plate having downwardly extended members to each series of fiber chambers, and means whereby a liquid may be passed in opposite directions through the fiber chambers.

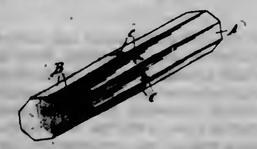
5. In a fiber treating device, in combination, a dyeing chamber, a series of removable fiber chambers within the dyeing chamber, each fiber chamber comprising a foraminous bottom having upwardly extending members and imperforate sides, a foraminous top plate having downwardly extended members to each series of fiber chambers, a reserve tank, means connecting the upper portion of the dyeing chamber with the upper portion of the reserve tank, means connecting the lower portion of the dyeing chamber with the upper portion of the reserve tank, a pump, means connecting the lower portion of the reserve tank with the pump, a second dyeing chamber containing a fiber chamber adjacent to the first dyeing chamber, means connecting the upper and lower portions of the second dyeing chamber respectively with the upper and lower portions of the first dyeing chamber to allow of the passage of a liquid therethrough, and means whereby a liquid may be passed in opposite directions through the fiber chambers.

6. In a fiber treating device, in combination, a dyeing chamber, a series of removable fiber chambers within the dyeing chamber, each fiber chamber comprising imperforate sides and a foraminous bottom formed by a series of upwardly and downwardly divergent members with openings therethrough for the passage of a liquid, a foraminous top to the upper fiber chamber, and means whereby a liquid may be passed in opposite directions through the fiber chambers.

9. In a fiber treating device, in combination, a dyeing chamber, a series of removable fiber chambers within the dyeing chamber, each fiber chamber comprising a foraminous bottom and imperforate sides, a foraminous top to one of the fiber chambers, the top and bottom of the dyeing chamber having respectively downwardly and upwardly converging foraminous plates for the passage of a liquid, and means whereby a liquid may be passed in opposite directions through the fiber chambers.

[Claims 2 to 4, 7, and 8 not printed in the Gazette.]

1,271,551. GAME APPARATUS. JOHN G. EBNER and HARRY L. GINSMAN, Chicago, Ill. Filed Mar. 9, 1917. Serial No. 153,726. (Cl. 46—56.)



1. A game device comprising an elongated rollable member having a plurality of elongated sides extending parallel with the axis of said member adapted to contact with the surface upon which the device is rolled; and indicative characters provided on said sides, substantially as described.

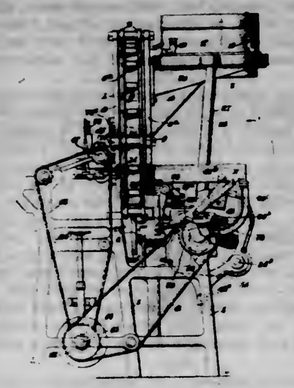
[Claim 2 not printed in the Gazette.]

1,271,552. MACHINE FOR MOLDING PLASTIC MATERIAL INTO BLOCKS OR BODIES. BRUCE V. EDWARDS, Newark, N. J., assignor to Edwards Engineering and Manufacturing Company, a Corporation of New Jersey. Filed Jan. 4, 1915, Serial No. 373. Renewed Apr. 9, 1918. Serial No. 227,599. (Cl. 31—65.)

1. In a machine of the type described, the combination of an outer forming member, and an inner forming member rotatable within the outer member, said members having their adjacent faces constructed to conjointly form mold cells in their rotation, means for rotating one of said members, and means whereby the driven member imparts its motion to the other member.

2. In a machine of the type described, the combination of an outer rotary member provided on its inner face with formative cavities, an inner rotary member mounted eccentrically within the outer member and provided in its outer face with formative cavities, said cavities adapted in the rotation of said members to conjointly form mold cells, the portions of said members between the cavities being adapted to engage each other to effect a driving connection between the members, and means for rotating one of said members.

3. In a machine of the type described, the combination of an outer rotary member provided on its inner face with formative cavities, an inner rotary member mounted eccentrically within the outer member and provided in its outer face with formative cavities, said cavities adapted in the rotation of said members to conjointly form mold cells, the portions of said members between the cavities being adapted to engage each other to effect a driving connection between the members, and means for rotating said outer member.

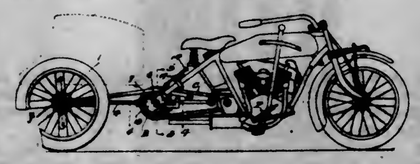


4. In a machine of the type described, the combination of an outer rotary forming member provided with inwardly extending blocks constituting cavities in the inner face of said member, an inner rotary forming member mounted within the outer member and provided with outwardly extending blocks constituting cavities in the outer face of said member, the adjacent ends of said blocks on the respective members adapted to engage each other with a driving action to drive one member from the other, and means for rotating one of said members.

5. In a machine of the type described, the combination of an outer rotary forming member provided with inwardly extending blocks constituting cavities in the face of said member, an inner rotary forming member mounted within the outer member and provided with outwardly extending blocks constituting cavities in the outer face of said member, the adjacent ends of said blocks on the respective members adapted to engage each other with a driving action, and means for rotating said outer member.

[Claims 6 to 42 not printed in the Gazette.]

1,271,553. TRAILER ATTACHMENT FOR MOTOR-CYCLES. FLOYD E. ELLIOTT, Lincoln, Nebr. Filed Sept. 6, 1917. Serial No. 190,011. (Cl. 180—16.)



1. A trailer attachment for motor-cycles comprising a pair of wheels, a pair of axle sections connected to said wheels and having a differential drive, a propeller shaft extending forwardly from the differential, means for driving said propeller shaft, said means being receivable in the rear motor-cycle fork after removal of the rear wheel, a transverse axle for holding said driving means in said fork, said axle taking the place of the usual rear axle of the motor cycle, and a driving wheel for said driving means coacting with the usual rear wheel driving means of the motor-cycle.

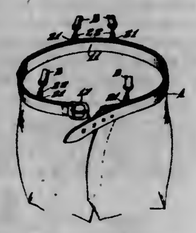
2. A trailer attachment for motor-cycles comprising a pair of wheels, a pair of axle sections connected to said wheels and having a differential drive, a propeller shaft extending forwardly from the differential, a beveled gear on the front end of said propeller shaft, a transverse axle taking the place of the usual rear axle of the motor-cycle

after removal of the rear wheel, a hub rotatably mounted on said axle and taking the place of the rear wheel hub, a sleeve slidable endwise on but rotatable bodily with said hub, a pair of beveled gears on said sleeve for mesh with the opposite sides of said first named gear, means for shifting said sleeve to bring either of said pair of gears into play, and driving means on said hub for coaction with the usual driving means of the motor-cycle rear wheel.

3. A trailer attachment for motor-cycles comprising a pair of wheels, a pair of axle sections connected to said wheels and having a differential drive, a propeller shaft extending forwardly from the differential, a beveled gear on the front end of said propeller shaft, a transverse axle taking the place of the usual rear axle of the motor-cycle after removal of the rear wheel, a hub rotatably mounted on said axle and taking the place of the rear wheel hub, a sleeve slidable endwise on but rotatable bodily with said hub, a pair of beveled gears on said sleeve for mesh with the opposite sides of said first named gear, means for shifting said sleeve to bring either of said pair of gears into play, driving means on one end of said hub for coaction with the usual rear wheel driving means of the motor-cycle, and braking means on the other end of said hub.

4. A trailer attachment for motor-cycles comprising a pair of axle sections having wheels at their outer ends and having a differential drive, a propeller shaft extending forwardly from the differential, a gear box receivable in the rear fork of the motor-cycle when the rear wheel is removed and having an axle for securing it in said fork, said axle taking the place of the usual rear axle of the motor cycle, forward and reverse gearing in said gear box for driving said propeller shaft, and a driving wheel for said shaft adapted for coaction with the usual rear wheel driving means of the motor cycle.

1,271,554. COMBINATION BELT AND SUSPENDERS. FRANK CARSON FANE, Elmsford, N. Y. Filed Apr. 8, 1918. Serial No. 227,820. (Cl. 241—9.)



1. A belt of the character described comprising an inner and outer section folded one upon the other, means for clamping the sections together, upon the edge of the article to be supported.

2. A belt comprising an inner and outer section, a pocket on the outer section, clamping means between the two sections comprising plates, and a spring hinge connecting the plates, a plurality of lugs extending at intervals on the upper edge of the belt.

3. A belt comprising an inner and outer section, a pocket on the outer section, clamping means between the two sections comprising plates, and a spring hinge connecting the plates, a plurality of lugs extending at intervals on the upper edge of the belt, and suspenders having hooks to engage the eyes.

1,271,555. SWITCH MECHANISM. ELIS F. G. H. FAUBS, Erie, Pa., assignor to Burke Electric Company, a Corporation of Pennsylvania. Filed Mar. 17, 1914. Serial No. 825,377. (Cl. 175—284.)

4. The combination with a tubular housing, of a switch member longitudinally reciprocating therein, a latching bar attached to said switch member, latching means interlocking with said bar, an external controlling device carried by said housing and movable to release said bar from said latching means, and a spring connected to said bar and said controlling device for holding said bar in en-



gagement with said latching means and storing power during movement of said controlling device to actuate said switch member when said bar is released from said latching means.

[Claims 1 to 3 and 5 to 15 not printed in the Gazette.]

1,271,556. FROG. JOSEPH P. FLECKENSTEIN, Bethlehem, Pa., assignor, by mesne assignments, to Bethlehem Steel Company, a Corporation of Pennsylvania. Filed Aug. 22, 1916. Serial No. 116,246. (Cl. 104—5.)

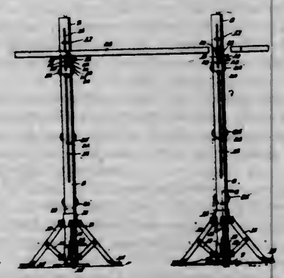


1. A frog recessed at its under side and at its top formed with a frog point, ribs depending from the top wall of the recess and arranged in line with each other and extending longitudinally of the frog point, and oppositely curved laterally extending flanges connecting one end of each longitudinal rib with the side walls of the recess, the unflanged end of the longitudinal rib extending between the curved lateral flanges of the next adjacent rib.

2. A cast metal railroad frog comprising a floor portion, spaced longitudinally-extending lateral web portions supporting the floor portion, tread portions rising from the floor portion, and converging web portions extending beneath the floor portion and connected at their outer ends to said lateral web portions and connected together at their inner ends.

[Claims 3 to 6 not printed in the Gazette.]

1,271,557. SCAFFOLD. BENJAMIN F. FORSYTH, Chicago, Ill., assignor of seven and one-half one-hundredths to Claude M. Griffith, seven and one-half one-hundredths to Leona Montgomery Griffith, and forty-two one-hundredths to Frederick Ziethen, Chicago, Ill. Filed Dec. 8, 1917. Serial No. 205,105. (Cl. 20—81.5.)

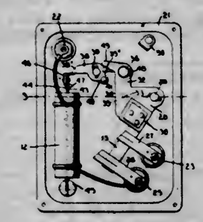


1. A scaffold support comprising a tubular post slotted at one side; a bracket slidable in said slot; a clamping head on the inner end of said bracket within said post; a clamping head slidable on said bracket and engaging the outer side of said post; a scaffold board support pivoted to said bracket; and means operable by said board support, arranged to force said outer clamping head against said post, substantially as described.

2. A scaffold support comprising a tubular post slotted at one side; a bracket slidable in said slot a clamping head on the inner end of said bracket within said post; a clamping head slidable on said bracket and engaging the outer side of said post; a scaffold board support pivoted to said bracket; and an eccentric cam on said board support arranged to force said outer clamping head against said post, substantially as described.

[Claims 3 and 4 not printed in the Gazette.]

1,271,558. THERMOSTATIC TIME CUT-OUT. JOHN C. FRANCIS, Boston, Mass., assignor to Samson Electric Company, Canton, Mass., a Corporation of Massachusetts. Filed June 16, 1916. Serial No. 104,101. (Cl. 175—275.)



1. A thermostatic cut-out for an electric circuit comprising switch members, power actuating means for giving relative movement to said members, a thermostatic means operable upon a sustained abnormal or an abnormally sustained heavy normal current in said circuit, means for locking said switch members in conducting position, a releasing device normally out of contact with and uninfluenced by said power actuating means and adapted to be released by a predetermined movement of said thermostatic means and independent means for actuating said releasing device to release the power actuating means thereby to effect relative movement of the switch members.

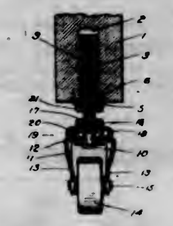
3. A thermostatic cut-out for an electric circuit comprising switch members, power actuating means for giving relative movement to said members, means for holding said switch members in conducting position, a thermostatic means operable upon a sustained abnormal or an abnormally sustained heavy normal current in said circuit, an independent spring-actuated releasing device adapted to be held in operative position by said thermostatic means and normally uninfluenced by said power actuating means adapted to be released by a predetermined movement of said thermostatic means to effect the release of the said power actuated means thereby to effect relative opening movement of said switch members.

4. A thermostatic time cut-out for an electric circuit comprising switch members, power actuated means for giving relative movement to said members, means for locking said power-actuated means to retain the switch members in contacting position, a movable releasing device actuated by an independent mechanism of lesser power and operating when actuated to release the power actuated means, and thermostatic means controlling said releasing device and acting upon a predetermined degree of movement to free said releasing device to actuation by its power.

10. A thermostatic time cut-out for electric circuits comprising a stationary member and a pivotally mounted coöperating member, a spring tending normally to separate said members, a spring actuated detent pivotally mounted on a stationary pivot adapted to engage said movable member, a spring actuated tripping member in coöperative relation to said detent, a thermostatic member adapted normally to engage said tripping member and hold the same against the action of its spring away from said detent but adapted under the influence of a predetermined amount of heat to release said tripping member and thereby cause the same under the influence of its spring to impinge against said detent and thereby disengage the same from said movable member and to cause the actuation of said member to break the circuit.

[Claims 2, 5 to 9, and 11 to 13 not printed in the Gazette.]

1,271,559. CASTER. CHARLES P. FERBUACH, Kansas City, Mo., and JULIUS O. ROBERTS, Salina, Kans. Filed May 28, 1917. Serial No. 171,417. (Cl. 16—73.)



A caster comprising an internally threaded sleeve having ribs extending longitudinally along its outer surface and having an annular base flange provided with upwardly projecting points, a shank threaded onto said sleeve and extending from the lower end thereof, a yoke pivotally mounted on said shank, a roller mounted in said yoke, a nut fixed on the shank adjacent the yoke, antifriction members seated between the yoke and nut, and a lock nut threaded onto the shank adapted to engage the end of said sleeve for the purpose set forth.

1,271,560. APPARATUS AND METHOD FOR CONDENSING ZINC-VAPOR. CHARLES H. FULTON, St. Louis, Mo., assignor, by mesne assignments, to Metallurgical Laboratories, Incorporated, Chicago, Ill., a Corporation of Illinois. Filed Jan. 8, 1917. Serial No. 141,177. (Cl. 266—19.)



1. A zinc condenser provided with tubular-shaped members arranged one within the other and spaced apart so as to form a passageway through which a gas stream from a zinc distilling apparatus travels.

2. A zinc condenser provided with a passageway through which a gas stream from a zinc distilling apparatus travels, condensing surfaces in said passageway of such form and arrangement that the gas stream will travel through said passageway at a definite velocity and impinge upon or sweep over said condensing surfaces, and means whereby said passageway may be either heated or cooled so as to control the temperature of said condensing surfaces.

11. A zinc condenser provided with an annular condensing chamber whose outer wall is exposed to the at-

mosphere, and means for enabling the inner wall of said chamber to be heated or cooled.

22. A zinc condenser, comprising a base, a chamber in said base that is adapted to serve as a combustion chamber or as a cool air supply chamber, a structure on said base provided with a gas passageway that comprises a central tubular-shaped portion that communicates with an annular portion which surrounds same, baffles in said passageway that serve as condensing surfaces, an annular flue arranged between the two portions of said passageway, and a connection between said flue and the chamber in said base.

[Claims 3 to 10 and 12 to 21 not printed in the Gazette.]

1,271,561. ADJUSTABLE CHAIR. ROY N. GAGE, Sturgis, Mich., assignor to Jerreld F. Walton, Sturgis, Mich. Filed Nov. 26, 1915. Serial No. 63,514. (Cl. 155—27.)



2. In a chair, the combination of a frame comprising front and rear rails, an adjustable back, a channel-shaped casing member extending between and secured at its ends to said front and rear rails facing downwardly, a slide member operatively connected to said back and slidably supported within said casing member, a clutch mechanism comprising a clutch ball adapted to coact with said slide member, a retaining member for said ball mounted below said slide member and constituting a support therefor, and a ball actuating member projecting into said ball retaining member to lift said ball in engagement with said slide.

[Claims 1 and 3 to 5 not printed in the Gazette.]

1,271,562. AIR-PUMPER CHECK. ROBERT A. GALLY, Cincinnati, Ohio, assignor to The Baldwin Company, Cincinnati, Ohio. Filed Sept. 10, 1917. Serial No. 190,672. (Cl. 277—60.)

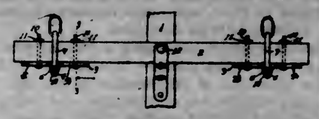


1. An air service pipe; and an air check main part therein extending across the entire cross section and interior of the said pipe including two seat faces of converging lines and having a windway through each said face; and two flap valves each attached over one of said seat faces of the said main part at a distance from each other at their places of attachment and when in seated positions approaching each other at their ends distant from their places of attachment, the said two valves disposed across the said windways at one end of the said main part.

[Claims 2 and 3 not printed in the Gazette.]

1,271,563. DRAFT APPLIANCE. WILLIAM H. GEMER, St. Paul, Minn. Filed Feb. 6, 1918. Serial No. 215,704. (Cl. 21—76.)

1. A double-tree pivoted at its middle, two longitudinally adjustable clevis plates one near each end of the rear side of the double-tree, two clevises straddling the doubletree and pivoted one to each clevis plate.



2. A clevis arrangement for each end of a doubletree, the same consisting of a plate having longitudinal slots, securing bolts extended through said slots and through holes in the doubletree, said plate having perforated rearward projections, a clevis straddling the doubletree and a pin in said clevis engaging said perforated projections.

3. The structure specified in claim 2 and means for holding the clevis pin in place; said means consisting of a pin slidable up and down in the perforated extensions of the plate and having a lateral arm adapted to bear upon the head of the clevis pin, a spring acting on the slidable pin to hold it downward, and means for preventing rotation of the slidable pin when it is in locking engagement with the head of the clevis pin.

1,271,564. WIRE-STRETCHER. HARRY L. GORDON, Chicago, Ill. Filed Dec. 8, 1914. Serial No. 876,091. (Cl. 254—77.)



1. A wire stretcher comprising wire gripping means and a sliding cam like bearing surface coöperating therewith to cause stretching of a wire gripped by said gripping means when said surface is slid from one position to another, substantially as described.

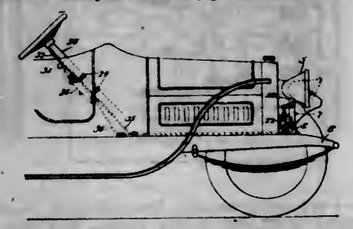
4. A wire stretcher comprising an operating handle and a smooth curved bearing member extending laterally therefrom, there being a central slot formed in said bearing member and a wire engaging opening in the neighborhood of its juncture with said handle; and a lug projecting from each side of said bearing member in the neighborhood of its juncture with said handle, there being a notch in each of said lugs, substantially as described.

7. A wire stretcher comprising an operating handle and a bearing member therefor adapted to operate against the side of an object; and a slotted lug on each side of said handle adjacent said bearing member, the parts being so arranged and combined as to permit of the swinging of said handle through substantially an angle of 180 degrees and to cause the line of tension on said lugs to cross the operative center of said bearing member during operation of said handle to effect locking of said handle in stretching position, substantially as described.

[Claims 2, 3, 5, and 6 not printed in the Gazette.]

1,271,565. HEADLIGHT CONTROL. SAMUEL S. GOSSARD and JAY E. CRANDALL, Belvidere, Ill. Filed Oct. 30, 1918. Serial No. 128,594. (Cl. 240—61.)

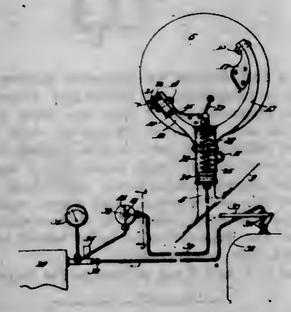
1. A headlight control for motor vehicles, comprising a pair of headlight standards, a headlight pivotally mounted on each standard, a cylinder also mounted on each standard and provided with a piston, a connection between each piston and headlight for oscillating the latter by movement of the piston, a third cylinder of substantially twice the capacity of the pair of cylinders, a piston for the third cylinder reciprocable at the will of an operator, and pipe connections between the ends of the cylinders arranged so that upon moving the piston of the third cylinder back and forth the pistons of both headlight cylinders will be oscillated back and forth substantially in unison through the agency of a liquid contained in the cylinders and pipe connections.



8. In a headlight control for vehicles, the combination with a pair of pivotally mounted headlights, of means for limiting the pivotal movement of each headlight in opposite directions so that each will be capable of oscillating through a predetermined arc, operating means under the control of an operator for moving the headlights from one extreme position to the other, and means allowing the first named means to be adjusted independently of the operating means for changing the vertical range of oscillation of the headlights without substantially changing the extent of their oscillation, whereby the headlights may be moved by said operating means through a given arc in any of various ranges of movement according to the adjustment of said first named means.

[Claims 2 to 7 not printed in the Gazette.]

1,271,566. HEADLIGHT CONTROL. SAMUEL S. GOSSARD and JAY E. CRANDALL, Belvidere, Ill. Filed Apr. 9, 1917. Serial No. 160,732. (Cl. 240—61.)



1. Headlight illuminating means for vehicles comprising in combination, a pair of headlights adapted to be supported one at each side of the vehicle facing forwardly, supporting means carrying the headlights and constructed so that each headlight may be moved back and forth to different operative positions in one of which the intense rays of the headlight are directed substantially straight ahead and in the other downwardly and outwardly to the road bed in proximity to the vehicle, and operating means connected with both headlights and operable at will by an operator to simultaneously move both headlights back and forth to and from their downwardly and outwardly directed positions.

4. Headlight illuminating means for vehicles, comprising a headlight mounted to oscillate about a downwardly and laterally inclined axis, spring actuating means connected to the headlight through the agency of a universal joint to swing the headlight in one direction, and power means rendered operative at will to swing the headlight in the opposite direction against the spring pressure of said actuating means.

11. A headlight illuminating means for motor vehicles comprising a headlight mounted so as to be capable of moving downwardly and sidewise from a substantially straight ahead position, a cylinder and a piston therefor, a connection between the piston and headlight, and means for reciprocating the piston to thereby move the headlight to and from its said straight-ahead position.

[Claims 2, 3, and 5 to 10 not printed in the Gazette.]

1,271,567. SUCTION APPARATUS FOR CONVEYER-CONDUITS. LORNE A. GRIFFIN and LOUIS C. VANDERLIP, Elkhart, Ind., assignors, by direct and mesne assignments, to American Steam Conveyor Corporation, Chicago, Ill., a Corporation of New York. Filed Jan. 7, 1915, Serial No. 924. Renewed Feb. 16, 1917. Serial No. 149,148. (Cl. 137—69.)



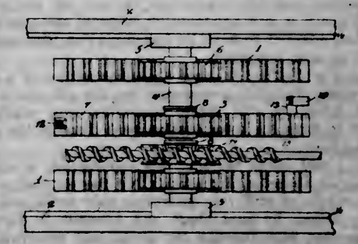
1. A device of the class described comprising a body member provided with a plurality of inlet openings and a discharge opening; a wear lining arranged within the body member and provided with openings in registration with said inlet and discharge openings; a wear lining insertion opening in the body member; and a cover plate detachably secured over said insertion opening.

2. A device of the class described comprising a body member provided with a plurality of inlet openings and a discharge opening; a removable wear lining comprising a plurality of sections arranged within the body member and provided with openings in registration with said inlet and discharge openings; a wear lining insertion opening in said body member; and an apertured cover plate detachably secured over said insertion opening.

3. A device of the class described comprising a body member provided with a plurality of inlet openings and a discharge opening, and provided also with a hand hole; a wear lining arranged within the body member and provided with openings in registration with said inlet and discharge openings and said hand hole; a wear lining insertion openings in the body member; a cover plate detachably secured over said insertion opening; and a hand hole cover detachably secured over said hand hole.

[Claims 4 to 10 not printed in the Gazette.]

1,271,568. FULCRUM-CHANGING MACHINE. ROYAL L. HALL, Buffalo township, Marquette county, Wis. Filed Jan. 29, 1917. Serial No. 145,212. (Cl. 74—5.)

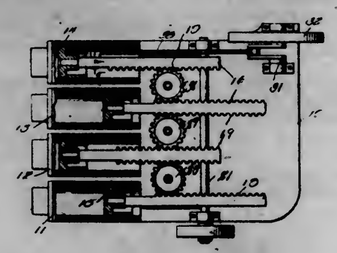


1. In a device of the class described, supporting members, a shiftable fulcrum member slidingly supported

thereby, a lever on said fulcrum member, and means for shifting said fulcrum member, comprising a pair of stationary racks, cogwheels on said fulcrum member cooperating with said racks, and worm screw gearing.

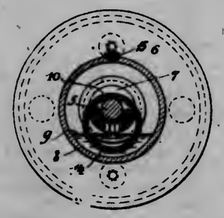
[Claim 2 not printed in the Gazette.]

1,271,569. INTERNAL-COMBUSTION ENGINE. ALBERT V. HANCOCK, Denver, Colo. Filed Aug. 31, 1914. Serial No. 859,514. (Cl. 74—27.)



In an engine, a shaft, a plurality of rotatable hollow gears loosely journaled on said shaft and having internal ratchet teeth, ratchet members carried by the shaft and located within the gears to engage the internal ratchet teeth, a plurality of cylinders having pistons slidable therein, rack bars fixed to the pistons in spaced parallel relation to each other and movable at right angles to the shaft, rack teeth on the under side of the rack bars and meshing with the gears, rack teeth on the inner sides of the outermost rack bars and also on opposite sides of the innermost racks bars, and pinions journaled between the rack bars and meshing with the rack teeth on the sides thereof, whereby the movement of one rack bar will produce an opposite movement of the adjacent rack bar.

1,271,570. SELF-OILING BEARING. HJALMAR JOHAN HANSEN, Erie, Pa., assignor to Burke Electric Company, a Corporation of Pennsylvania. Filed Jan. 23, 1917. Serial No. 143,933. (Cl. 64—31.)



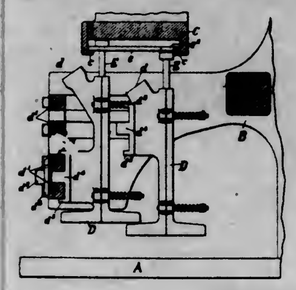
1. In a self oiling bearing, the combination of a shaft and bearing therefor, a reservoir for the oil, and a ring formed solely of stiff non-metallic material encircling said shaft and adapted to have its lower portion pass through the oil in said reservoir.

3. In a self oiling bearing, the combination of a shaft and bearing therefor, a reservoir for the oil, and a ring formed solely of stiff fabric encircling said shaft and adapted to have its lower portion pass through the oil in said reservoir.

6. In a self oiling bearing, the combination of a shaft and bearing therefor, a reservoir for the oil, and a ring formed solely of stiff felt encircling said shaft and frictionally driven by said shaft and adapted to have its lower portion pass through the oil in said reservoir.

[Claims 2, 4, and 5 not printed in the Gazette.]

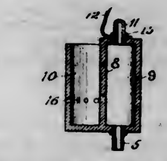
1,271,571. BOX-NAILING MACHINE. WILLIAM F. HARNETT, Brooklyn, N. Y., assignor to EMMA DOIG, Brooklyn, N. Y., as sole executrix of William S. Doig, deceased. Filed July 31, 1917. Serial No. 183,649. (Cl. 1—10.)



3. In a box-nailing machine, in combination, a carriage; a plurality of chucks carried thereby and each independently removable therefrom without disturbing the other chucks, a reciprocating cross-head; a plurality of drivers, one for each chuck, reciprocated by the cross-head; and plates carried by the cross-head, one for each chuck, and each plate provided with a slot terminating at one end in an opening through which the head of its driver may pass, whereby the driver may be detached from the cross-head without disturbing the other driver.

[Claims 1 and 2 not printed in the Gazette.]

1,271,572. FUEL-HEATER. GEORGE H. HAYES, Hazelton, Kans. Filed Dec. 24, 1917. Serial No. 208,650. (Cl. 123—180.



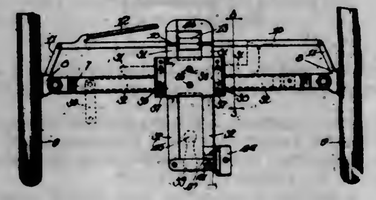
3. In a fuel heater for explosive engines, an intake manifold, a receptacle for liquid fuel having two compartments disposed side by side, one being closed to the atmosphere and the other having an open top located below and adjacent to the manifold, means for supplying the closed compartment with liquid fuel, a conductor into which the closed compartment discharges and which discharges into said manifold, and a heat conducting supporting member held clamped to said receptacle by said conductor, and disposed so as to be heated by fuel burning in said open compartment.

[Claims 1, 2, and 4 not printed in the Gazette.]

1,271,573. LOCKING AND ANTISTEERING DEVICE FOR AUTOMOBILES. PETER L. HEDBERG, Chicago, Ill. Filed Jan. 18, 1918. Serial No. 212,388. (Cl. 70—126.)

1. In a device of the character described, the combination with the connecting rod of the steering mechanism of an automobile, of an upright standard thereon, a holder operatively mounted on the automobile, locking arms pivotally mounted on the holder and adapted to embrace said standard when they are moved into substantial parallelism with one another, means for engaging the pivoted ends of said arms to move them into and out of applied positions, and means to lock said moving means when said arms are in their applied positions.

2. In a device of the character described, the combination with the starting crank and connecting rod of the steering mechanism of an automobile, of an upright standard on said rod, a holder operatively mounted upon the automobile, locking arms pivotally mounted on the holder and adapted to embrace said crank and standard when they are moved into substantial parallelism with one another, and means to lock said arms in their applied positions.

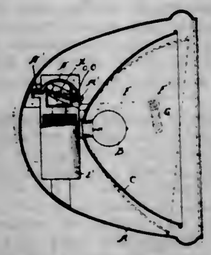


3. In a device of the character described, the combination with the front axle and the connecting rod of the steering mechanism of an automobile, of an upright standard on said rod, a holder operatively mounted on the axle, locking arms pivotally mounted on the holder and adapted to embrace said standard when moved into substantial parallelism with one another, means engaging the pivoted ends of said arms to move them into and out of applied positions, and means to lock said moving means when said arms are in their applied positions.

7. In a device of the character described, the combination with the connecting rod of the steering mechanism of an automobile, of an upright standard thereon, a holder operatively mounted upon the automobile, locking arms pivotally mounted on the holder and adapted to embrace said standard when moved into substantial parallelism with one another, means engaging the pivoted ends of said arms to move them into and out of applied positions, means to lock said moving means when said arms are in their applied positions, and means to hold said arms in their normal positions.

[Claims 4 to 6 not printed in the Gazette.]

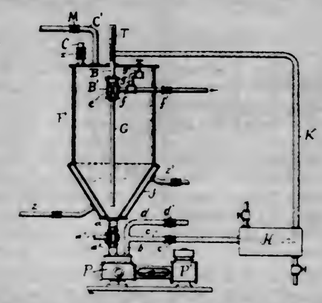
1,271,574. LAMP. FRED E. HOLMES, Detroit, Mich. Filed Mar. 26, 1917. Serial No. 157,419. (Cl. 240—41.)



1. The combination with a casing, of a reflector pivotally mounted in the casing, a rock arm for rocking said reflector about its pivot, electrical-controlled means for positively actuating said rock arm in either direction, and a spring for holding the mechanism in either of its positions of adjustment.

2. The combination with a casing, of a reflector movably mounted in the casing, a single magnet for the movable member also mounted in said casing, connecting mechanism between the reflector and the movable member of the magnet arranged to positively and automatically move the reflector in one direction upon closing of the circuit to the magnet and to positively and automatically move the reflector in the opposite direction upon the next closing of the circuit to the magnet, and a spring for holding the mechanism in either of its positions of adjustment.

1,271,575. HYDROGENATING OILY MATERIAL CONTAINING UNSATURATED BODIES. MARTIN HILL ITTNER, Jersey City, N. J. Filed May 6, 1914. Serial No. 836,624. (Cl. 87—12.)



1. The process of hydrogenizing oily material containing unsaturated bodies, which comprises forcing the material, mixed with a catalyzer, through an orifice or opening, which orifice or opening communicates with a supply of hydrogen gas, and causing the mixture of oily material and catalyzer to entrain or draw in hydrogen and thereby effecting an intimate mixture of the oily material and the hydrogen gas; substantially as described.

2. The process of hydrogenizing oily material containing unsaturated bodies, which comprises forcing the material, mixed with a catalyzer, through an orifice or opening, which orifice or opening communicates with a supply of hydrogen gas, whereby hydrogen gas is drawn into the mixture of oily material and catalyzer and whereby an intimate mixture of the oily material and the hydrogen gas is brought about, and discharging said mixture into an inclosed space containing an atmosphere of hydrogen gas; substantially as described.

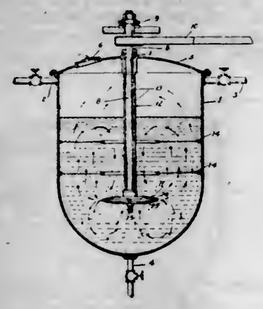
3. The process of hydrogenizing oily material containing unsaturated bodies, which comprises forcing the material, mixed with a catalyzer, through an orifice or opening, which orifice or opening communicates with a supply of hydrogen gas, whereby hydrogen gas is drawn into the mixture of oily material and catalyzer and whereby an intimate mixture of the oily material and the hydrogen gas is brought about, and discharging said mixture into an inclosed space containing an atmosphere of hydrogen gas, and also containing a body of the oily material mixed with the catalyzer; substantially as described.

7. The process of treating oily material and the like containing unsaturated bodies which comprises confining a body of said material, admixed with a catalyzer, in juxtaposition to a hydrogen-containing gaseous medium, in withdrawing from said body portions thereof, in passing such portions through some portion of said gaseous medium; whereby entrainment of some portion of the latter occurs, and in causing the withdrawn oil and entrained gas to enter said body of oil beneath the surface thereof; whereby saturation of at least a portion of said unsaturated bodies is effected.

8. The process of treating oily material and the like containing unsaturated bodies which comprises confining a body of said material, admixed with a catalyzer, in juxtaposition to a hydrogen-containing gaseous medium under pressure, in continuously withdrawing from said body portions thereof, in passing said portions through some portion of said gaseous medium; whereby entrainment of some portion of the latter occurs, and in causing the withdrawn oil and entrained gas to enter said body of oil at a point well beneath the surface thereof; whereby saturation of at least a portion of said unsaturated bodies is effected.

[Claims 4 to 6 not printed in the Gazette.]

1,271,576. HYDROGENATION OF UNSATURATED BODIES. MARTIN HILL ITTNER, Jersey City, N. J. Filed Sept. 27, 1915. Serial No. 52,819. (Cl. 87—12.)



1. The process of hydrogenizing oily material containing unsaturated bodies, which comprises forcing the material, mixed with a catalyzer, through an orifice or opening below the surface of the material, which orifice or opening communicates below the surface of the oily material with a supply of hydrogen gas, and causing the mixture of oily material and catalyzer to entrain or draw in hydrogen, and thereby effecting an intimate mixture of the oily material and the hydrogen gas; substantially as described.

3. The process of hydrogenising oily material containing unsaturated bodies, which comprises forcing the material, mixed with a catalyzer, through a rotary orifice or opening below the surface of the material, which orifice or opening communicates below the surface of the oily material with a supply of hydrogen gas, whereby hydrogen gas is drawn in to the mixture of oily material and catalyzer and whereby an intimate mixture of the oily material and the hydrogen gas is brought about, and interposing barriers in the path of the resulting currents of the mixture; substantially as described.

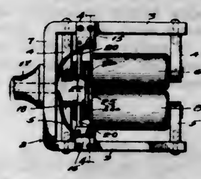
4. The process of hydrogenizing oily material containing unsaturated bodies, which comprises subjecting the material, mixed with a catalyzer and with hydrogen gas, to sudden variations in pressure below the surface of the material, whereby the hydrogenizing reaction is promoted; substantially as described.

7. The process of hydrogenising oily material containing unsaturated bodies, which comprises forcing the material, mixed with a catalyzer, centrifugally outward through an orifice or opening in a rotary distributer below the surface of the material, which orifice or opening communicates with a supply of hydrogen gas, and thereby entraining and intimately mixing hydrogen with such material, continuing the circulation of the material mixed with the hydrogen through said distributer and thereby entraining further amounts of the hydrogen, until the desired hydrogenizing has been effected, and interposing wire screens or other baffles to break up the currents of the mixture and prevent the formation of a vortex; substantially as described.

[Claims 2, 5, and 6 not printed in the Gazette.]

1,271,577. ELECTRIC CLOTHES-PRESSER. JOSEPH JEANNETAUD, Dubuque, Iowa. Filed Aug. 6, 1915. Serial No. 44,063. (Cl. 219—25.)

In apparatus of the character described, a rigid U-shaped frame having spaced sides; a pair of rollers arranged within the frame and connected with the spaced sides thereof to move toward and away from each other; yielding means to move the rollers toward each other; electrical heating elements arranged within the rollers; a spring element having electrical connection with corresponding ends of the heating elements and also serving to move the rollers toward each other; contacts carried by the sides of the frame and having permanent electrical



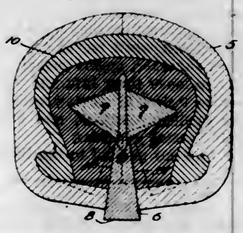
connection with the opposite ends of the electrical heating elements; and lead wires connected with the contacts.

1,271,578. METHOD OF SEPARATING NITRO COMPOUNDS FROM LIQUIDS. FREDERICK M. G. JOHNSON, Montreal, Quebec, Canada. Filed Sept. 18, 1917. Serial No. 191,996. (Cl. 52—3.)

5. A method of separating trinitrotoluol from spent acid, which consists in confining the acid at pressures below atmospheric until such time as the trinitrotoluol particles are floated to the surface thereof by accumulation of gas on the particles, drawing off the cleared acid from beneath the floating mass, and finally subjecting the mass to heat sufficient to melt the trinitrotoluol and cause complete separation thereof from the remaining acid.

[Claims 1 to 4 and 6 not printed in the Gazette.]

1,271,579. PROCESS OF AND APPARATUS FOR MAKING VEHICLE-TIRES. GEORGE LENNON KAVANAGH, Montreal, Quebec, Canada. Filed July 25, 1914. Serial No. 853,145. (Cl. 18—45.)



1. A process of making tires, which consists in inserting a casing within a mold, positioning a multi-part core concentrically within said casing, filling the space between the casing and core with suitable material, and vulcanizing until the filling is rigidly attached to the casing and is of softer and more elastic consistency than the casing.

5. An apparatus for making tires, comprising the combination with a mold of a central sectional circular core member approximately triangular in cross section, a pair of similar sectional circular core members carried by said central member forming a part of the core and of such cross sectional shape that when the article molded around the core is contracted bringing the surfaces molded by the central core member into engagement, the surfaces molded by the second core members will form walls of a symmetrical annular channel.

[Claims 2 to 4 and 6 not printed in the Gazette.]

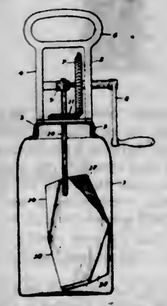
1,271,580. LETTERING-PEN. EDWARD S. KEENE, Agricultural College, N. D. Filed Sept. 15, 1917. Serial No. 191,568. (Cl. 120—43.)



1. In a lettering-pen, a point comprising members one of which has an upwardly bent or angularly arranged portion, the other member having its end contacting with the first member rearwardly of the end of the upwardly bent or angular portion.

[Claims 2 and 3 not printed in the Gazette.]

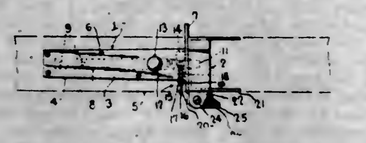
1,271,581. CHURN. JOHN E. KEITH, Canton, Ohio, assignor, by direct and mesne assignments, to The Novelty Cutlery Company, Canton, Ohio, a Corporation of Ohio. Filed Jan. 31, 1918. Serial No. 214,577. (Cl. 259—135.)



1. A churn having a centrally rotating shaft therein, a dasher mounted upon the said shaft, means upon one side of the said dasher for forcing the mass inwardly and upwardly from the lower corner of the body of the said churn, superposed means upon the same side of said dasher for forcing the mass inwardly and downwardly, the opposite side of said dasher being arranged to describe a circle of less diameter than said first named side of said dasher and means upon said second named side of said dasher for forcing the mass within the churn inwardly and downwardly.

2. A churn having a centrally located shaft therein, means upon the said churn for rotating the said shaft, a dasher eccentrically secured to said shaft and adapted to be rotated therewith, a vane upon the longer radius of said eccentric dasher designed to force the mass within the churn inwardly and upwardly, a superposed vane upon the longer radius of said eccentric dasher designed to force the mass within the churn inwardly and downwardly, a vane upon the shorter radius of said eccentric dasher designed to force the mass inwardly and downwardly, and a flange upon the bottom of said dasher designed to force the mass within the said churn downwardly.

1,271,582. LATCH DEVICE FOR FOLDING DOORS. JACOB S. KERN, Fleetwood, Pa., assignor to Fleetwood Metal Body Company, Fleetwood, Pa. Filed Oct. 11, 1917. Serial No. 195,953. (Cl. 70—49.)

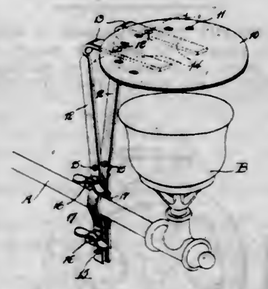


1. In a latch device for folding doors, said latch device comprising stationary and hinged sections, a latch bar secured to the stationary section and coöperating with the hinged section to lock the door when closed, manually operated means for throwing the latch bar into releasing or inoperative position, a locking device for holding said latch bar in releasing position and means for disengaging said locking device with said latch bar at a predetermined period, in the operation of opening said door.

2. In a latch device for folding doors, said latch device comprising stationary and hinged sections, a latch bar secured to the stationary section and coöperating with the hinged section to lock the door when closed, manually operated means for throwing the latch bar into releasing or inoperative position, a spring controlled locking device for holding said latch bar in releasing position and means for disengaging said locking device with said latch bar at a predetermined period in the operation of opening said door.

3. In a latch device for folding doors, said latch device comprising stationary and hinged sections, a latch bar secured to the stationary section and coöperating with the hinged section to lock the door when closed, manually operated means for throwing the latch bar into releasing or inoperative position, a spring controlled locking device for holding said latch bar in releasing position, said locking device comprising a recessed head adapted to engage the latch bar and a rod or stem slidable on the hinged section and means on the hinged section adapted to engage said rod or stem and disengage the locking device with the latch bar at a predetermined period in the operation of opening the door.

1,271,583. COOKING AND HEATING ATTACHMENT FOR GAS-JETS. WILLIAM H. KETLER, Camden, N. J. Filed Mar. 6, 1917. Serial No. 152,860. (Cl. 126—252.)



1. In a heater and cooker for attachment to gas jets, the combination of a plate, a pair of independent bracket arms, means for detachably clamping the bracket arms in spaced relation to the opposite sides of the gas jet, and adjustable fastening means for securing the bracket arms in various spaced apart positions upon the plate.

3. In a heater and cooker for attachment to a gas jet, the combination of a plate, a pair of bracket arms provided with laterally extending fingers at one end for engagement beneath the plate, means for adjustably securing the said fingers to the plate, and attaching means carried upon the opposite ends of said arms for binding the same in adjusted position upon the gas jet.

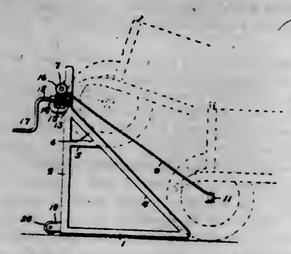
5. In a heater and cooker, the combination of a plate provided with spaced-apart openings therein, a pair of independent bracket arms, one end of each arm being bent laterally to provide a supporting finger, securing bolts detachably and adjustably engaging through said fingers and through the openings in said plate one at a time to adjustably connect the fingers to the plate, the opposite ends of said clamping arms having registering outwardly and oppositely bowed socket portions adapted to receive a support therebetween, and clamping bolts arranged through said opposite ends of the arms at the opposite sides of the socket portions to bind the latter upon said support.

[Claims 2 and 4 not printed in the Gazette.]

1,271,584. AUTOMOBILE-LIFTER. AL C. KLEMME, Lewistown, Mont. Filed Sept. 29, 1916. Serial No. 122,891. (Cl. 254—88.)

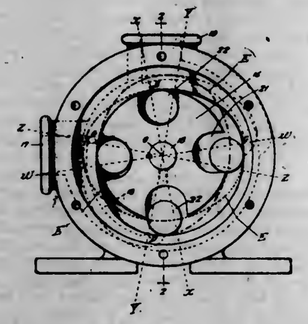
In vehicle lifting means, a base having horizontal base bars, standards extending from one end of said bars, in-

clined tracks secured at their lower ends to the other end of said base bars and having their upper portions disposed in substantially horizontal planes to form wheel supports, said tracks being further provided with inclined bracing bars at their upper ends formed continuous therewith and secured to the standards, the tracks and bracing bars



serving as bracing members for the base bars and standards, and the bracing bars further serving to prevent lateral movement of a vehicle wheel resting upon said wheel support, and means carried by the standards for moving a vehicle upon and up the said tracks.

1,271,585. ROTARY PUMP. ALBERT B. KLISE, Petoskey, Mich., assignor to Blackmer Rotary Pump Co., Petoskey, Mich., a Corporation of Michigan. Filed Dec. 5, 1917. Serial No. 205,488. (Cl. 103—44.)



1. In a rotary pump of the class described, the combination of a cylinder, a piston body rotatable within the cylinder, piston members carried with said piston body to engage with the cylinder wall, an inlet and an outlet for the cylinder, a section of the cylinder wall having the curvature of a circular arc whose center is at the center of the piston body and whose radius is equal to that of the piston body, a section of said cylinder diametrically opposite said first mentioned section having the curvature of a circular arc whose center is that of the piston body but whose radius is longer than that of the piston body, the remaining sections of said cylinder wall having the curvature of ellipses whose center is that of the piston body, and whose major and minor axes are respectively twice the lengths of the radii of the larger and smaller circular arc sections.

3. In a rotary pump, the combination of a cylinder having an inlet and an outlet, a piston body rotatable within the cylinder, and piston members shiftable on said piston body to engage with the cylinder wall, the cylinder wall surface engaged by said piston members being in part of cylindrical curvature and in part of elliptical curvature, the sections of cylindrical and elliptical curvature being connected together tangentially.

[Claim 2 not printed in the Gazette.]

1,271,586. FOUNTAIN-MOP. HOWARD H. KNAPP, Cleveland, Ohio, assignor to The American Textile Manufacturing Company, Cleveland, Ohio, a Corporation. Filed June 13, 1917. Serial No. 174,454. (Cl. 15—51.)



1. A fountain mop, comprising separate layers of twisted strands and an envelop of woven fabric folded and secured together flatwise and having a water intake opening on the fold line thereof, the strands extending in flounce formation beyond the edge of the fabric.

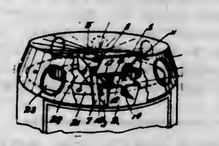
2. A fountain mop, comprising a padded casing made of twisted strands and an enveloping band of woven fabric, and an inner lining for said casing composed of plaits of strands united to and extending downward from said casing.

4. A fountain mop, comprising two layers of twisted strands of graduated length having a band of woven fabric enveloping the same at their middle and folded together, and a lining of fabric having separate plaits of twisted strands secured to its edges and folded within said band and its layers of strands.

8. A fountain mop having a pad comprising folded fabric having a central opening and a lining of twisted strands having their ends projecting beyond the edges of said pad, the pad being sewed shut at its ends and flexible tie members at its edges intermediate said ends binding the middle portions of said pad together in combination with inner padded material extending beneath said twisted strands.

[Claims 3, 5 to 7, 9, and 10 not printed in the Gazette.]

1,271,587. HUMIDIFIER FOR HEATING PLANTS. HENRY KRAKER, Holland, Mich. Filed Oct. 27, 1917. Serial No. 198,788. (Cl. 126—113.)



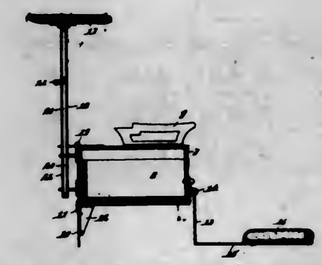
1. In a humidifier, the combination of a receptacle having a bottom, sides and ends, a top covering the major portion of the receptacle but leaving the front portion thereof open at its upper side, said top having an opening therein back of the front opening, a door hingedly mounted and adapted to close the front uncovered part of the receptacle, a shutter pivotally mounted on the cover adjacent said rear opening therein, means connecting the door and shutter for automatically opening and closing the shutter as the door is closed and opened, and means to enter water into the receptacle and hold it at a predetermined level, substantially as described.

2. In a humidifier, the construction claimed in claim 1, in which the means for operating the shutter by the door comprises an arm depending from the door, and a link pivotally connected at one end to the arm and at its other end to the shutter, substantially as described.

3. In combination, a furnace radiator and fire pot dome, a furnace casing surrounding and spaced from the same, a receptacle extending through a side of the casing and passing above said radiator and dome, said receptacle comprising a tank having sides, bottom, inner end and top partly within the casing, said cover having

an opening therein, a door hinged to the tank outside of the casing, means to wholly or partially close the opening in said cover, and means interposed between the door and said closing means for operating the same by movements of the door.

1,271,588. BOOT-BLACK STAND. HARRY H. KRONE, Chicago, Ill. Filed July 2, 1917. Serial No. 178,164. (Cl. 15—58.)



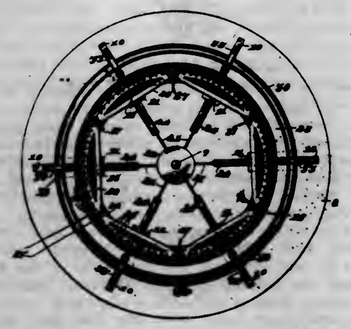
2. A boot black stand comprising a body; a foot rest on the top of said body having a channel extending therethrough; a foldable seat post on the rear of said body adapted to fold into said channel; a slidable bolt in said seat post; and a hollow member at the rear of said body adapted to receive said bolt, substantially as described.

4. A boot black stand comprising a body; a foot rest on the top of said body; supporting legs for the rear of said body; and a combined supporting frame and operator support foldably connected at the front of said body, said frame being substantially in U form and angularly bent to form a horizontal portion adapted to rest upon the ground and a vertical portion adapted to constitute supporting legs for said body, said vertical portion being pivoted to the front of said body and said frame being adapted to fit over said foot rest, substantially as described.

6. A boot black stand comprising a body; a foldable support for said body, said support being angular in form to constitute a horizontal portion adapted to rest upon the ground and a vertical portion pivoted to said body to constitute supporting legs therefor; and an operator support on said horizontal portion, subetantially as described.

[Claim 1, 3, and 5 not printed in the Gazette.]

1,271,589. TIRE-VULCANIZER. WALTER D. LAUER, Chicago, Ill. Filed July 23, 1917. Serial No. 182,220. (Cl. 18—17.)

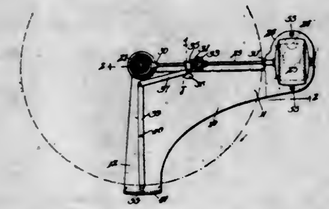


2. The method of vulcanising rubber comprising the interposition of an elongated looped heating element between the rubber parts to be vulcanized together, then passing an electric current through said heating element, then severing said loops, and then withdrawing the same after the rubber parts have been sufficiently heated, substantially as described.

6. A tire vulcaniser comprising a support for the tire to be vulcanized; means for securing the tire to said support; an electric heating element arranged above and supported by said support and adapted for insertion between the tire and tread member to be vulcanized together; and means for pressing the tread member into close engagement with the tire, said means comprising a plurality of annular members adapted for adjustment toward and from the tire, substantially as described.

[Claims 1, 3 to 5, and 7 to 10 not printed in the Gazette.]

1,271,590. DRIVING ATTACHMENT FOR TALKING-MACHINES. EDEN G. LEFEVER, Boyertown, Pa. Filed Aug. 1, 1917. Serial No. 183,909. (Cl. 74—26.)



3. A self-contained driving attachment for talking machines comprising a plate formed with an opening adapted to take over the center pin of a talking machine, said plate also having a bearing for the turn-table, a motor, connections between the motor and turn-table for driving the latter, said connections including a shaft extending radially from said bearing and carrying a friction roller.

5. A self-contained driving attachment for talking machines comprising a plate formed with an opening adapted to take over the center pin of a talking machine, said plate also having a bearing for the turn-table, a motor, connections between the motor and turn-table for driving the latter, said connections including a shaft extending radially from said bearing and carrying a friction roller splined thereto for rotation therewith and sliding movement thereon, and means for sliding the roller along the shaft.

[Claims 1, 2, 4, 6, and 7 not printed in the Gazette.]

1,271,591. PROCESS OF RETTING, UNGUMMING, AND DRYING FIBER PLANTS AND WOODY MATERIAL. BURDETT LOOMIS, Hartford, Conn. Original application filed July 23, 1912, Serial No. 711,048. Divided and this application filed Aug. 2, 1915. Serial No. 43,210. (Cl. 92—2.)

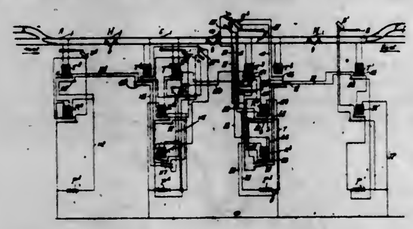
1. The process of retting and ungumming fiber plant material, which consists in placing the material in layers on grids in a closed tank, circulating around and between such layers hot water and fatty acid solvents including acetic acid, till the gummy and resinous matter has been released, floating off the gummy and resinous matter and causing it to be separated from the water, repeatedly reheating the solvent liquor and circulating it through or in contact with the fiber material till retting and ungumming are effected.

[Claims 2 to 5 not printed in the Gazette.]

1,271,592. RAILWAY SIGNALING. RONALD A. MCCANN, New Brunswick, N. J., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Aug. 19, 1914. Serial No. 857,432. (Cl. 246—30.)

1. In combination, a stretch of railway track, track circuits for the stretch including track relays, two end

signals for governing traffic into said stretch from opposite directions, two intermediate signals located respectively in advance of said end signals, a signal relay for each signal, a circuit for the signal relay for each end signal which circuit is controlled by the signal relay for the adjacent intermediate signal and by the track relays for the stretch between said two signals, a circuit for each intermediate signal relay controlled by the track relays for that portion of the stretch in advance of the intermediate signal, an auxiliary relay for each intermediate signal relay for rendering said relay ineffective to control the end signal relay in the rear; a pick-up circuit for each auxiliary relay including a contact operated by the adjacent intermediate signal and closed when the signal indicates clear, and a back contact of a track relay in the rear of said signal; and a holding circuit for each auxiliary relay including a back contact of a track relay in advance of said intermediate signal, and a front contact of the auxiliary relay.



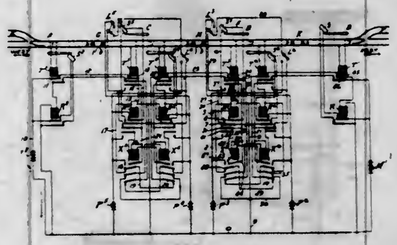
2. In combination, two successive sections of a railway track, two signals located respectively adjacent the entrance ends of said sections, track circuits for each section including track relays, a signal relay for each signal, means for controlling the signal relay for the rear signal by the track relays for both sections and for controlling the signal relay for the signal in advance by the track relays for the section in advance, an auxiliary relay for removing the signal relay for the section in the rear from control by the track relays of the section in advance, a pick-up circuit for said auxiliary relay controlled by the signal relay for the section in advance and by a back contact of the track relay for the forward track circuit of the section in the rear, and a holding circuit for said auxiliary relay controlled by the auxiliary relay itself and by the signal relay for the section in advance.

3. In combination, two successive sections of a railway track, two signals located respectively adjacent the entrance ends of said sections, track circuits for the sections including track relays, a signal relay for each signal, means for controlling the signal relay for the rear signal by the track relays for both sections and for controlling the signal relay for the signal in advance by the track relays for the section in advance, an auxiliary relay for rendering the track relays of the section in advance ineffective to control the signal relay for the section in the rear, a pick-up circuit for said auxiliary relay controlled by the signal relay for the section in advance and including a back contact of a track relay for the section in the rear, and a holding circuit for said auxiliary relay controlled by the signal relay for the section in advance.

[Claims 4 and 5 not printed in the Gazette.]

1,271,593. RAILWAY SIGNALING. RONALD A. MCCANN, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Original application filed Aug. 19, 1914, Serial No. 857,432. Divided and this application filed Jan. 27, 1917. Serial No. 144,879. (Cl. 246—30.)

1. In combination, a stretch of railway track divided into track-circuited sections, signals located at intervals for governing traffic through the stretch, means for controlling each signal by each track circuit in advance of the signal, an auxiliary relay corresponding to each signal for rendering the track circuits in advance thereof ineffective to control the signal next in the rear, a pick-up circuit for each auxiliary relay controlled by one or more track circuits in advance of the corresponding signal and by a contact operated by an adjacent signal government traffic in the opposite direction which contact is closed only when the signal indicates "stop", and a holding circuit for each auxiliary relay controlled by one or more track circuits in advance of the corresponding signal.



2. In combination, a stretch of railway track, signals located at intervals for governing traffic through the stretch, a signal relay for each signal, means for controlling each signal relay by the signal relay for the signal next in advance governing traffic, in the same direction, track circuits for the stretch including track relays for controlling said signal relays, an auxiliary relay corresponding to each signal for rendering the signal relay for such signal ineffective to control the signal relay for the signal in the rear, a pick-up circuit for each auxiliary relay controlled by one or more track circuits in advance of the corresponding signal and by a contact operated by an adjacent signal governing traffic in the opposite direction which contact is closed only when the signal indicates "stop", and a holding circuit for each auxiliary relay controlled by one or more track circuits in advance of the corresponding signal.

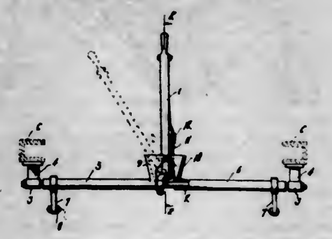
[Claims 3 and 4 not printed in the Gazette.]

1,271,594. MOVING IMPLEMENT. HARRY W. MCKEE, Cincinnati, Ohio. Filed Aug. 23, 1915. Serial No. 46,932. (Cl. 254—115.)



A moving implement comprising a housing having a front wall and rearwardly extending side-walls terminating in rearwardly and inwardly slanting wings projecting toward each other for forming a slide-guide space extending longitudinally in the housing, a slide provided with a rear wall and forwardly projecting flanges and having a web between said flanges spanning the space between said wings, said slide having rear rearwardly and inwardly projecting faces projecting toward each other and coacting with said wings, said forwardly projecting flanges on said slide and said side walls of said housing arranged for forming a space extending longitudinally between said housing and slide, a tooth-rack on said slide in said space and spaced from said front wall, the front wall of said housing provided with a slot, a segment-gear pivoted to said housing and extending through said slot and into said longitudinally extending space into engagement with the teeth of said rack, a pawl pivoted to said housing and extending into said space into engagement with the teeth of said rack, and a movable bar for moving said slide extending from said segment-gear.

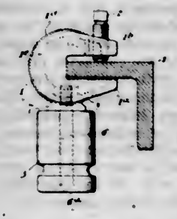
1,271,595. LEVER MECHANISM FOR VEHICLE-BRAKES. FREDERICK W. MATZ, Valley City, N. D. Filed Feb. 12, 1918. Serial No. 216,769. (Cl. 74—39.)



1. The combination with a pair of brake actuating rods, a lever for controlling said rods mounted to swing in planes at right angles to each other, rotatably mounted longitudinally alined members connected with said rods and having upstanding elements positioned in the path of movement of said lever whereby the lever may be engaged with one or the other of said elements, to actuate one of the brakes independently of the other or with both of them to actuate the brakes simultaneously.

[Claims 2 to 4 not printed in the Gazette.]

1,271,596. INSULATOR-SUPPORT. WALTER S. MAYER, Philadelphia, Pa., assignor to Electric Service Supplies Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Apr. 21, 1917. Serial No. 163,557. (Cl. 173—321.)



An insulator and a support therefor comprising a body provided with jaws for fixing it to carrying means, bearings separated by a slot and guide ways within said bearings, in combination with a nut movable within and controlled by said ways, a shoe supporting said insulator and engaging said bearings, and a bolt passing through said insulator, shoe and slot into engagement with said nut.

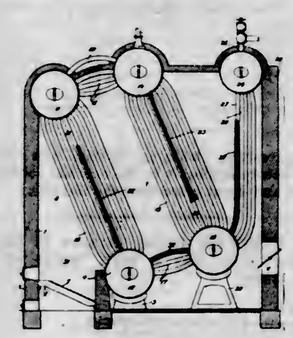
1,271,597. JOINT FOR FIXING ELASTIC TUBES UPON METAL PIPES. MAURICE ALEXANDRE MAZADE, Paris, France. Filed Oct. 28, 1916. Serial No. 128,163. (Cl. 285—37.)



1. In a joint for tubing, the combination with a rigid tube, of a flexible tube telescoping therewith, a threaded nut engaging said flexible tube and adapted to tightly clamp the same to the rigid tube, and deformable material interposed between the rigid tube and the flexible tube and between the latter and the nut.

2. In a joint for tubing, the combination with a rigid tube, of a flexible tube telescoping therewith, a cap of flexible metal over the end of the flexible tube which telescopes with the rigid tube, a portion of the metal of said cap being interposed between the rigid tube and the flexible tube and a threaded nut for clamping said flexible tube to said rigid tube.

1,271,598. BOILER CONSTRUCTION. EDWARD C. MEIER, Phoenixville, Pa. Filed Apr. 10, 1917. Serial No. 161,090. (Cl. 122—444.)



1. The combination in a boiler of a casing; a boiler unit within said casing; an independent feed water drum within the top of said casing; means for conducting feed water to the drum, said boiler unit having an upper and a lower drum connected by tubes, said lower drum being mounted below said independent feed water drum; a plurality of tubes connecting the lower drum of the boiler unit with said feed water drum; a baffle leading downwardly from the upper drum of the boiler unit and supported by the tubes thereof, said baffle stopping short of the lower drum to provide a passage for the products of combustion; and a second baffle extending from said lower drum toward said feed water drum and located to the rear of said first baffle and passage and in front of the tubes connecting with the feed water drum, said second mentioned baffle stopping short of the feed water drum to provide a passage for the products of combustion between said latter tubes and between said second mentioned baffle and the rear of the casing, said casing having an outlet passage for the products of combustion below and to the rear of said second mentioned passage, substantially as described.

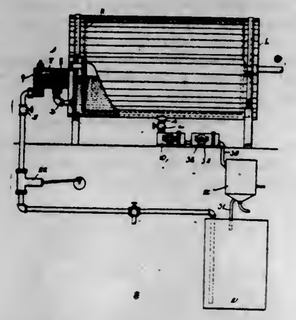
[Claim 2 not printed in the Gazette.]

1,271,599. METHOD OF CLEANING GARMENTS. MAURICE E. MESSM, Cleveland Heights, Ohio. Filed Feb. 2, 1915. Serial No. 5,669. (Cl. 8—8.)

1. In a method of dry cleaning clothes in a single chamber, the steps which consist in immersing the clothes in a cleaning solution in the chamber, forcing the solution through the clothes by movement of the latter in the former, continuously replacing the solution with solution by drawing off solution from one point of the chamber and simultaneously supplying clean solution to the chamber at another point, then completely drawing off the solution and repeating the operation with clean solution.

3. In a method of dry cleaning fabrics, the steps which consist in immersing the same in a cleaning solution, agitating the solution, continuously drawing off a part of the solution, filtering the same and then returning it to the original solution.

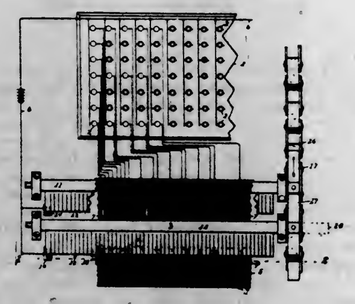
5. In a method of dry cleaning fabrics, the steps which consist in immersing the same in a cleaning solution, agitating the solution, continuously drawing off a part of the



solution, successively straining, filtering and cleaning the same, and then returning it to the original solution.

[Claims 2 and 4 not printed in the Gazette.]

1,271,600. ELECTRIC SIGN. ALBERT C. MEYER, San Diego, Cal. Filed May 3, 1917. Serial No. 166,245. (Cl. 177—350.)



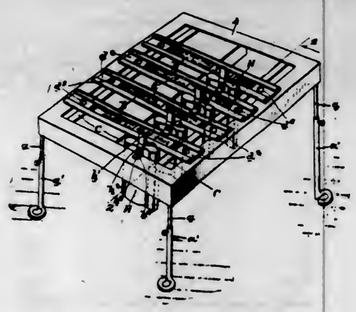
2. In an electric sign, the combination with a sign board studded with electric lamps, of a flasher comprising a series of stationary conductors connected to said lamps, removable letter bars having conducting tenons or fingers in contact at their inner ends with said stationary conductors and exposed at their outer ends, a switch supported in operative relation to said exposed ends, and means for moving the switch into contact therewith.

3. In an electric sign, the combination with a sign board studded with electric lamps, of a flasher comprising a base provided with a series of parallel conductor bars or plates connected to the lamps and each having a portion of one side exposed, a letter bar having conducting tenons or fingers engaging with their inner portions the exposed portions of said conductor bars and exposed at their outer ends, and a switch supported in operative relation to the said exposed ends of said tenons or fingers, and means for moving the switch into contact therewith.

[Claims 1 and 4 to 8 not printed in the Gazette.]

1,271,601. HAND-STAMP RACK. ALBERT C. MEYER, San Diego, Cal. Filed Sept. 4, 1917. Serial No. 189,607. (Cl. 211—43.)

2. A hand stamp rack comprising, an elevated frame having openings for the endwise insertion and removal of the stamps, and hand stamp supports each formed of a strip folded upon itself to form a handle and a stamp-receiving fork; the ends of the strip being bent in oppo-



site directions to rest on the upper side of the frame beyond the sides of the openings.

[Claims 1 and 3 to 5 not printed in the Gazette.]

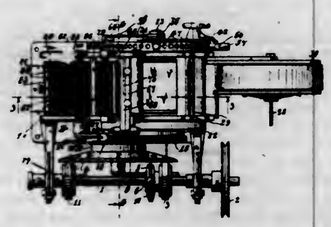
1,271,602. RECEPTACLE. LOUIS SUMNER MINOR, Portsmouth, Ohio. Filed May 12, 1917. Serial No. 168,175. (Cl. 129—15.)



1. A receptacle of the character described comprising a container, one wall of the container having angle plates fixed thereto, each plate being provided with an inwardly projecting flange having a slot, a plurality of partitions, means projecting from the edges of the partitions and received in the said slots to pivotally mount the partitions.

2. A receptacle of the character described comprising a container provided with a slot in its front wall, one wall of the container having angle plates fixed thereto, each plate comprising an inwardly projecting flange having a slot, a plurality of partitions, means projecting from the edges of the partitions and received in the said slots to pivotally mount the partitions, a stem carried by the forward edge of each of the partitions and extended through the said slot in the container.

1,271,603. DEVICE FOR AUTOMATICALLY MOISTENING AND SERVING STRIPS OF TAPE. CHARLES G. MORTIMER, East Orange, N. J., assignor to National Binding Machine Company, New York, N. Y., a Corporation of New York. Filed May 13, 1914. Serial No. 838,197. (Cl. 91—14.5.)



1. In a device for automatically moistening and serving strips of adhesive tape, the combination of a holder

for a supply of tape, feeding means for feeding strips of predetermined length, severing means adapted to cut the tape while the feeding means are arrested, moistening means for rendering the strips adhesive, a main shaft having connections for positively operating the feeding, severing and moistening means, means for varying the speed of said feeding, severing and moistening means including a driving shaft, a friction disk operatively connected with the main shaft, and a friction gear mounted on the driving shaft to engage the face of said disk and movable along the said driving shaft radially with respect to said disk to vary the speed thereof.

2. In a device for automatically moistening and serving strips of adhesive tape, the combination of a holder for a supply of tape, feeding means for feeding strips of predetermined length, severing means adapted to cut the tape while the feeding means are arrested, moistening means for rendering the strips adhesive, a main shaft having connections for positively operating the feeding, severing and moistening means, a variable speed friction drive including a driving shaft and a friction disk having a plurality of recesses, a disk clutch operatively connected with the main shaft and adjacent to the said friction disk and said recesses, a pin mounted on the disk clutch and normally held in spring pressed engagement with one of the recesses in the friction disk, and means for withdrawing the said pin from engagement with the friction disk.

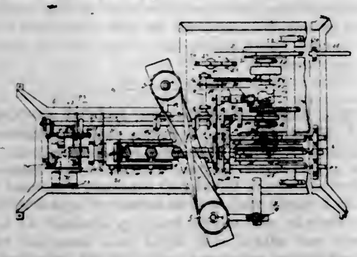
3. In a device for automatically moistening and serving strips of adhesive tape, the combination of a holder for a supply of tape, a shaft operative continuously, a collar loosely mounted on said shaft and carrying a gear and a ratchet wheel, an arm fastened to said shaft and rotatable therewith, the said arm being provided with a pawl to engage the ratchet wheel, means disposed in the path of the arm to alternately trip and set the pawl, feed rollers operatively connected with the aforesaid gear and adapted to be rotated thereby when the pawl is in engagement with the ratchet and to be arrested after the pawl has been disengaged therefrom, means for severing the strip when the feed rollers are arrested, and means for rendering the strips adhesive.

9. In a strip serving device, the combination of a holder for a supply of tape, means adapted to positively feed tape strips of predeterminable length, and means for varying the length of strips fed, during operation of the feeding means.

15. In a device for serving strips of adhesive tape, the combination of a holder for a supply of tape, and moistening means comprising a roller mounted to rotate in a container of moistening liquid, and a second roller lying between said first roller and a wall of the container and adapted to press excess moisture from the exposed portion thereof.

[Claims 4 to 8, 10 to 14, and 16 to 18 not printed in the Gazette.]

1,271,604. PAPER-BOX MACHINE. WOOLRIDGE B. MORTON, New York, N. Y. Filed Feb. 28, 1911, Serial No. 611,542. Renewed Nov. 28, 1917. Serial No. 204,453. (Cl. 93—36.)



1. In a machine for forming receptacles, the combination of means for forming a tube from the free end of a web of indefinite length, means for applying to said tube transverse end-forming pieces and means for cutting sections from said tube.

2. In a machine for forming receptacles, the combination of means for forming a tube from a continuous length of material and advancing said tube, means for applying transverse end-forming pieces to said tube as the same reaches a definite point in its advance and means for cutting sections from said tube.

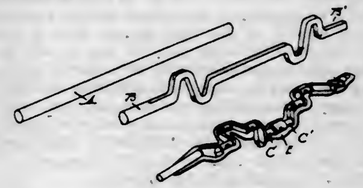
3. In a machine for forming receptacles, the combination of means for forming a tube, means for inserting end forming divisions in said tube and means for cutting said tube into sections.

4. In a machine of the character described, the combination of means for forming and advancing a continuous tube having partitions at intervals therein, and means for cutting said tube into sections.

13. In a machine for making receptacles, the combination of means for forming and advancing a tube, means for inserting end forming closures at intervals in said tube, means for cutting said tube into sections, a member arranged in the path of movement of said tube and means operated by the engagement of said tube with said member for causing the operation of said tube cutting means and said closure inserting means.

[Claims 5 to 12 not printed in the Gazette.]

1,271,605. METHOD OF FORMING CRANK-SHAFTS. ALEXANDER A. MOTHERWELL, Flint, Mich., assignor to General Motors Company, Jersey City, N. J., a Corporation of New Jersey. Filed July 23, 1917. Serial No. 182,170. (Cl. 29—6.)



1. The process of forging crank-shafts, comprising simultaneously die-forging non-adjacent throws in the same plane, re-fashioning said throws to bend the same into different planes, and simultaneously stretching and fashioning the metal intermediate the re-fashioned throws to form one or more additional throws in a different plane.

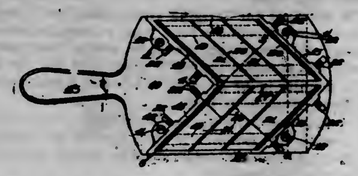
5. The process of forging crank-shafts comprising die-forging the blank to form therein a pair of non-adjacent double throws, all of the throws being in the same plane and with a portion at one end of the blank of greater length than at the other, subjecting the blank to a second die-forging operation for bending the throws into different radial planes and while engaged with the dies stretching the intermediate metal to form additional throws in a still different plane, removing the blank from the dies and trimming the same to remove the fin of surplus metal, returning the blank to the dies for the last forming operation to restore the true shape thereto, and upsetting the end of greater length to form a flange coupling thereon.

[Claims 2 to 4 and 6 not printed in the Gazette.]

1,271,606. BLOCK-DRESSING IMPLEMENT. JOHN O'LOUGHLIN, Rochester, N. Y. Filed Sept. 10, 1917. Serial No. 190,480. (Cl. 145—47.)

2. In a block dressing implement, a support comprising a body portion having spaced convergently arranged walls projecting therefrom and connected by a centrally disposed web, a plurality of saw blades mounted upon each side of the web substantially parallel to the walls, spac-

ing members removably mounted between the blades and extending substantially the full length thereof and means



for holding the blades in contact with the spacing members.

[Claims 1 and 3 not printed in the Gazette.]

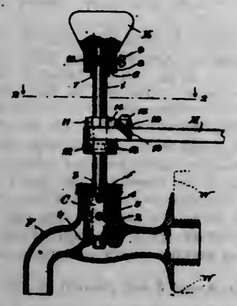
1,271,607. PAPER-FASTENER. LEO OPPENHEIM, New York, N. Y., assignor to Ideal Specialties Manufacturing Corporation, a Corporation of New York. Filed Aug. 12, 1916. Serial No. 114,552. (Cl. 24—153.)



1. A paper fastener comprising a plurality of holding portions at an angle to each other and connected by a neck of short curvature so as to be substantially in the form of a V, a prong on one of said holding portions and a mating housing on the other of said holding portions, and an inturned stiffening edge on one of said holding portions cupping said portion so as to deepen said prong housing and bring the edges of said holding portions close to the paper in set position and extending from said bend to the point of application of the setting pressure so as to confine the bending to the neck and to bring the prong and its housing into accurate register when set.

[Claim 2 not printed in the Gazette.]

1,271,608. HOUSEHOLD-TOOL FOR REPAIRING THE VALVE-SEATS OF FAUCETS AND THE LIKE. AUGUST PANN, Brooklyn, N. Y. Filed Feb. 21, 1918. Serial No. 218,384. (Cl. 90—12.5.)

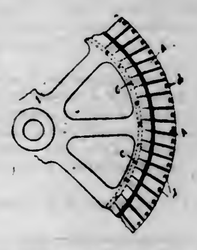


1. A tool for repairing the valve-seats of faucets and the like, comprising a rotatable stem, a sleeve-member mounted on said stem at the lower end thereof, cutting teeth on said stem at the lower end of said sleeve-member for engaging the valve-seat and smoothing the same when the stem is rotated, said sleeve-member extending substantially into contact with the inside wall of the faucet to constitute thereby a centralising bearing or guide during the operation of the tool, a ratchet fixed upon said stem above said sleeve-member, a handle-bar rotatably mounted at one end on said stem and having a spring-pressed pawl for engaging the teeth of said ratchet, whereby the forward operation of said handle-bar rotates said stem and cutting teeth, while the reverse or return movement of said handle-bar causes said pawl to ride idly over the teeth of said ratchet, and a head or knob rotatably mounted on the upper end of said stem for holding the tool by hand and exerting the necessary downward pressure on the cutting teeth when the same are moved over the valve-seat.

6. A tool for repairing the valve-seats of faucets and the like, comprising a rotatable stem, a cutter mounted upon the lower portion of said stem, said cutter consisting of a sleeve-member provided at its lower end with cutting teeth for smoothing the valve-seat when the tool is operated, said sleeve-member having a slot or recess at its upper end, a fixed pin or lug on said stem adapted to engage in said slot or recess when the cutter is inserted in place on the stem, said pin-and-slot engagement preventing rotary as well as upward movement of said cutter on said stem, an adjustable screw carried by said sleeve-member for securing the cutter to the stem against downward or separating movement, said adjustable screw permitting ready removal of the cutter from the stem, a ratchet fixed upon said stem above said cutter, a handle-bar rotatably mounted at one end on said stem and having a spring-pressed pawl for engaging the teeth of said ratchet, whereby the forward operation of said handle-bar rotates said stem and cutter, while the reverse or return movement of said handle-bar causes said pawl to ride idly over the teeth of said ratchet, and a head or knob rotatably mounted on the upper end of said stem for holding the tool by hand and exerting downward pressure on the cutting teeth when the same are moved over the valve-seat.

[Claims 2 to 5 not printed in the Gazette.]

1,271,609. FLEXIBLE METALLIC TIRE FOR MOTOR AND OTHER VEHICLES. PAUL G. PAVLIDÈS and LOUIS F. FERALDI, Paris, France. Filed Sept. 27, 1916. Serial No. 122,325. (Cl. 152—8.)

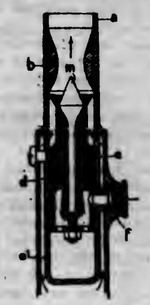


In combination with a wheel rim, an elastic metal tire comprising a continuous helical spring formed of a steel band placed in the wheel rim, the single convolutions of said spring partly telescoping into each other, alternate convolutions being each provided with a stud loosely entering a transverse groove in the wheel rim, and a metal band provided with interlocking ends for securing the spring to the wheel rim.

1,271,610. CARBURETER FOR INTERNAL-COMBUSTION ENGINES. HANS PETER, Liestal, Switzerland. Filed July 13, 1916. Serial No. 109,017. (Cl. 261—99.)

1. In a carbureter for internal combustion engines, an air induction tube, a liquid fuel container combined therewith and a liquid fuel feeding bundle of separate, elastic, flexible threads, said bundle being so arranged as to have its lower end within said liquid fuel container and its upper end freely projecting into said air induction tube, so that the inducted air current may cause the free upper ends of the threads to vibrate and to thus pulverize the fuel by a whip-like action to fine mist delivered to the air, substantially as hereinbefore described.

2. In a carbureter for internal combustion engines, an air induction tube, a liquid fuel container combined therewith and a liquid fuel feeding bundle of separate elastic, flexible threads, said bundle being so arranged as to have its lower end within said liquid fuel container and its upper end freely projecting into said air induction tube,



in combination with a sprayer arranged to expand or spray out said upper bundle end to a freely outstanding position, so that the induced air current may cause the free upper ends of the threads to vibrate and to thus pulverize the fuel by a whip-like action to fine mist delivered to the air, substantially as hereinbefore described.

1,271,611. METHOD OF PRODUCING HYDROGEN PEROXID. PAUL PICKL, Chicago, Ill., assignor to Emma Pickl, Chicago, Ill. Filed Nov. 16, 1917. Serial No. 202,410. (Cl. 23—13.)

11. As a new product, a hydrogen peroxid developer comprising acid sodium sulfate, sodium peroxid and sodium chlorid.

[Claims 1 to 10 and 12 not printed in the Gazette.]

1,271,612. PULLEY-GUARD. OSCAR H. PIEPER and ALPHONSE F. PIEPER, Rochester, N. Y. Original application filed May 27, 1912, Serial No. 699,938. Divided and this application filed Nov. 12, 1917. Serial No. 201,544. (Cl. 74—51.)



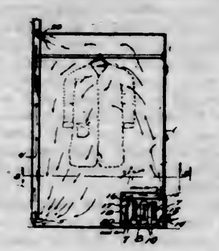
1. The combination with a rotatable spindle having a plurality of stepped pulleys thereon, of a bearing for the spindle, a collar fixed on the bearing, and a stepped guard coöperating with said pulleys and slidable on the collar transversely of the spindle axis.

5. The combination with a rotatable spindle having a plurality of stepped pulleys thereon, of a bearing for the spindle, a collar fixed on the bearing and having guide openings extending through opposite portions thereof, a guard embodying a central outer portion carrying oppositely arranged pins which are slidable in the openings, stepped guard portions coöperating with said pulleys, the aforesaid pins having recesses extending partially along one side, and limiting stops in the openings which engage said recesses and limit the outward movement of the guard.

[Claims 2 to 4 not printed in the Gazette.]

1,271,613. ELECTRICALLY-HEATED DRIER FOR CLOTHING. OLLYSTIS M. POTTER, Larned, Kans. Filed Mar. 31, 1916. Serial No. 88,056. (Cl. 34—19.)

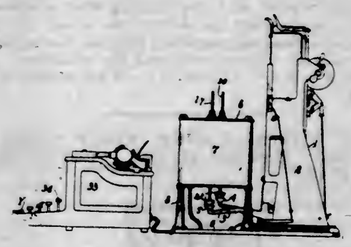
1. A cabinet or closet for drying and deodorizing clothing, comprising an inclosed chamber or cabinet provided with a sealed heating device adjacent the bottom, an air-heating channel adjacent and passing over said heating device and having an inlet from the exterior and opening into the interior of the cabinet at one side thereof, and an exhaust channel having an outlet port or opening adjacent the bottom of the cabinet upon the side opposite the heating device, and a smaller opening or port connecting the exhaust channel with the upper part of the cabinet.



2. A cabinet or closet for drying and deodorizing clothing, comprising an inclosed chamber or cabinet, an electric heating device therein, an inclosing wall surrounding said heating device and sealing it from the drying chamber, a heating conduit adapted to convey air currents from the outside and lead them into the cabinet at one side thereof and located adjacent said heating device, and an exhaust channel leading from the side opposite the heating device.

[Claims 3 and 4 not printed in the Gazette.]

1,271,614. COMBINED TYPE-WRITER AND PERFORATING MACHINE. JAMES POWERS, New York, N. Y., assignor to Powers Accounting Machine Company, New York, N. Y., a Corporation of Delaware. Filed Oct. 31, 1914. Serial No. 869,539. (Cl. 164—113.)



1. In a device of the class described, the combination of a machine for printing letters and numerals; and means for automatically causing the punching of a card when a numeral is printed and automatically causing the omission of punching when a letter is printed.

7. In a device of the class described, the combination of a keyboard operated typewriting machine comprising letter-producing elements and numerical-producing elements; a mechanism for producing record conformations on record members for reproducing records a number of times; operative connections between said machine and mechanism for automatically causing the production of a record conformation when a numeral-producing element is actuated and for automatically causing the omission of the production of a record conformation when a letter producing element is actuated; and keyboard operated means for instantaneously rendering said connections operative or inoperative.

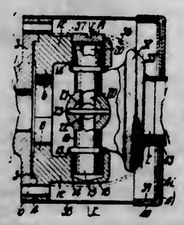
13. In a device of the class described, the combination with a typewriter-mechanism having numeral key-bars, of a perforating-mechanism having like key-bars; mechanism for connecting said numeral key-bars with the key-bars of

the perforating-mechanism when said numeral typewriter key-bars are operated; said connecting means comprising a housing; means for supporting said housing above the key bars of said perforating-mechanism, plungers operatively mounted in said housing and projecting from the bottom thereof and adjacent to the key-bars of said perforating-mechanism, one plunger for each of said latter key-bars; solenoids in said housing, cores in said solenoids, each connected to one of said plungers, a series of pairs of electrical contacts normally out of contact, each pair disposed directly below a numeral key-bar of the typewriter-mechanism, an extension on the lower end of said key-bar adapted to contact with a pair of electrical contacts to move them into contact with one another when such key-bar is depressed, and electric conductors connecting said contacts with said solenoids, which are energized whenever the typewriter numeral key-bars are depressed, said solenoids when energized, operating to actuate said plungers to operate the key-bars of said perforating mechanism.

24. In a device of the class described, a punching machine having keys adapted to be depressed by reciprocating members; an operator therefor comprising a housing, reciprocating plungers mounted in said housing, solenoids in said housing, cores in said solenoids, said cores and reciprocating plungers connected whereby a movement of said cores will cause a movement of said plungers, means for making and breaking the circuit of the said solenoids, said means comprising a series of pairs of electrical contacts separate and apart from the machine operator and normally out of contact, electric conductor circuits connecting the contacts with said solenoids which are energized whenever the contacts are brought together, means for forcing the contacts together, means for disconnecting the solenoids from the said forcing means in such a manner that the said forcing means may be operated without energizing the solenoids, said disconnecting means comprising contact pieces interposed in said electric conducting circuits normally in contact with one another, a disconnecting electric contact lever adjacent said forcing means and a projection on the lever end of said disconnecting lever adapted to engage one of said latter contacts when said disconnecting lever is depressed to remove one contact piece from the other, and thus break the electric circuit at which time the forcing means may be operated without energizing the solenoids.

[Claims 2 to 6, 8 to 12, and 14 to 23 not printed in the Gazette.]

1,271,615. UNIVERSAL JOINT. KARL F. RANGER, Detroit, Mich. Filed May 10, 1916. Serial No. 96,475. (Cl. 74—19.)



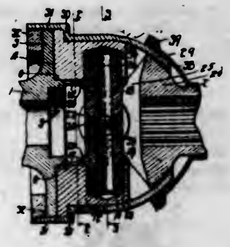
1. A universal joint comprising two main members and a connecting member through which stress is transmitted, a section interposed between one of the main members and the connecting member, said section having alined bearing elements the common axis of which is at right angles to the length of said main member, said section being formed of male and female members whose dividing line extends in general at an angle to said axis, the last mentioned main member having rigid therewith means whereby the male and female members are prevented from separating from one another by relative movement at an angle to the dividing line.

3. A universal joint comprising two main members and a connecting member through which stress is transmitted, a section interposed between one of the main members and the connecting member, said section having alined bearing elements the common axis of which is at right angles to the length of said main member, said section being formed of a plurality of members, the last mentioned main member being socketed to receive the ends of the plurality of members, and conforming to said ends whereby said members are prevented from spreading in a plane at an angle to the axis of said last mentioned main member, the connecting member and the interposed section being of such relative cross-section as to prevent the former from being wholly removed from the latter while said interposed section is received in the socket in the main member.

21. In a universal joint, a hollow cross member having integral journal bearings on one of the cross-arms thereof, a hollow journal pin insertible through the other cross-arm, a bifurcated shaft member having a recess in one of its furcations for receiving said hollow journal pin and an aperture in the opposite furcation through which said pin is inserted, a cap for closing said aperture after the insertion of said pin, a complementary bifurcated shaft member, provided with detachable furcations separately engageable with the integral journals of said cross member and closed at their outer ends, and means for positioning and securing said detachable furcations to their shaft member.

[Claims 2, 4 to 20, and 22 to 28 not printed in the Gazette.]

1,271,616. UNIVERSAL JOINT. KARL F. RANGER, Detroit, Mich. Filed Nov. 14, 1917. Serial No. 201,896. (Cl. 74—19.)



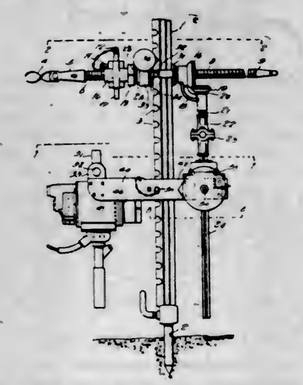
1. In a universal joint, a main member having integral therewith a projection having parallel sides, a cross, a divided element fitting over the ends of two arms of the cross to form a bearing therefor, each part of the divided element having parallel inner surfaces conforming to the parallel sides of the projection, means for preventing the parts of the divided element from spreading, and a second main member pivoted to the cross.

2. A universal joint comprising a first main member and a second main member, a cross pivotally connected to the first main member, a divided element interposed between said cross and the second main member and pivotally connected to the cross, said second main member having a projection thereon of non-circular cross-section over which the divided element fits, and a ring-like retaining member extending around the divided element to keep the parts thereof from spreading.

9. A universal joint comprising a first main member having a cylindrical flange and also having a projection of non-circular cross-section, a cross, a second main member pivoted to the cross surface, a divided element conforming to the periphery of the projection and forming bearing for one pair of arms of the cross, the parts of the cross being spaced from each other, a casing including an annular portion passing around the periphery of the flange and closing the ends of the spaces between the sections, said casing having a spherical end embracing the end of the second main member, said casing also including a second member having a spherical portion in sealing engagement with said spherical end.

[Claims 3 to 8 not printed in the Gazette.]

1,271,617. COAL-MINING MACHINE. AGOSTINO REA, Helper, Utah. Filed Feb. 14, 1918. Serial No. 217,134. (Cl. 255—47.)



1. An attachment for mining machines comprising a brake drum having on one end a plug for reception in the socket of the usual feed nut of the machine, a brake coacting with said drum, and means for supporting said brake from the frame of the machine.

4. An attachment for mining machines comprising a brake drum and means for attaching it to the feed nut of a mining machine, a brake coacting with said drum, a supporting member for said brake and drum, means for supporting said supporting member from the usual frame of the machine, and a socket on said supporting member to receive the plug on the bearing of the usual drill shaft driving gear.

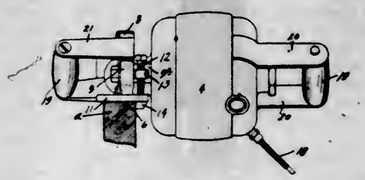
6. An attachment for mining machines comprising a brake drum and means for attaching one end of said drum to the usual feed nut of the machine, the other end of said drum having a central socket, a supporting member for said drum in the form of a split sleeve, one end of said sleeve extending into said socket and forming a journal for said drum, a sectional socket formed on the other end of said sleeve for passage around the plug of the usual bearing of the drill shaft driving gear, and a brake coacting with said drum.

9. A mining machine comprising a supporting frame including a pair of vertical side bars, a horizontal frame including a pair of horizontal side bars extending across said vertical bars, means for connecting the two frames, a drill, a motor for driving said drill, said motor being positioned between the side bars of said horizontal frame at one end of the latter, a lug on said motor having an opening, and a transverse pin passing through said opening for supporting said motor from said horizontal bars in a detachable manner, and means for applying hand power for driving the drill when said motor is removed.

[Claims 2, 3, 5, 7, and 8 not printed in the Gazette.]

1,271,618. PORTABLE GROOVING-TOOL. FRANK REESE, Minneapolis, Minn. Filed July 17, 1916. Serial No. 109,691. (Cl. 144—136.)

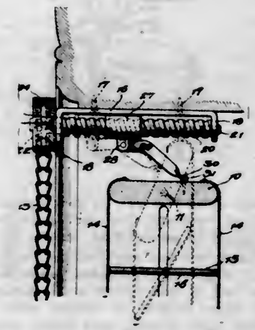
1. A grooving tool comprising a motor, having a casing and a rotor inclosed within the same, said rotor having a shaft projecting at one end and provided with a groove cutter, a housing for said groove cutter adjustably connected to the motor casing and provided at its bottom with a runner that is vertically adjustable therewith, in respect to said motor casing and groove cutter, to vary the projection of said groove cutter, means for securing said housing and motor casing in different relative adjustments, and two handles, the one secured to said motor casing and projecting from one side thereof, and the other



secured to said housing and projected therefrom in opposite directions from the first noted handle, the said two handles being approximately alined with the axis of said rotor shaft.

[Claim 2 not printed in the Gazette.]

1,271,619. SLAT-ADJUSTING DEVICE FOR LOUVER-BLINDS. CHARLES H. SAPPER, South Norfolk, Va. Filed May 1, 1918. Serial No. 231,980. (Cl. 156—17.)



1. The combination with a louver blind having a pivoted top slat, of means for tilting the slats thereof including a threaded member rotatively mounted at the top of the blind, a nut on said member, and a link having one end pivoted to the nut and the other end pivotally connected to the said top slat at a point eccentric to the axis thereof.

4. The combination with a louver blind having a pivoted top slat, of means for tilting the slats thereof including, a threaded rod extending transversely of the blind at the top thereof, a wheel secured to the end of said rod, a chain passing over said wheel and depending in front of the blind, a nut fitted on said rod, and a link connecting said nut and top slat.

5. The combination with a louver blind having a pivoted top slat, of means for tilting the slats of the blind including a member movable transversely of the blind, rotative means operable from the front of the blind for moving said member, and a link connecting the member and said top slat, whereby movement of said member tilts the slats.

[Claims 2 and 3 not printed in the Gazette.]

1,271,620. SPARK-PLUG. ALBERT SCHMIDT, Flint, Mich., assignor to Champion Ignition Company, Flint, Mich., a Corporation of Michigan. Filed Apr. 27, 1917. Serial No. 164,842. (Cl. 123—169.)

1. In a spark-plug, the combination with an insulator, of an electrode extending therethrough, a metallic sleeve

surrounding said electrode and having a different coefficient of expansion, said sleeve having a threaded engage-



ment with the insulator, and clamping means for said electrode engaging the outer end of said sleeve.

[Claim 2 not printed in the Gazette.]

1,271,621. MOP-WRINGER. JAKOB SCHMOLINER, Detroit, Mich. Filed Mar. 9, 1917. Serial No. 153,709. (Cl. 15—12.)

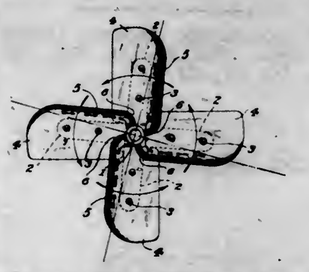


1. In a mop wringer, a pair of coöperating rollers relatively movable toward and from each other between which a mop is adapted to be received; means for holding the mop in position between said rollers, said means comprising a pair of pivotally mounted guide plates arranged adjacent the ends of said rollers and positioned to adapt the adjacent edges thereof to contact with a mop positioned between said rollers, said guide plates being so mounted that, upon swinging thereof, the adjacent free edges of said guides will move toward or from each other; a manually operatable element for effecting relative movement of said rollers; and means operatable by said element engaging under said guide plates for automatically swinging the same to cause said edges to move toward each other when said rollers are moved relatively toward each other, substantially as described.

2. In a mop wringer, a pair of coöperating rollers relatively movable toward and from each other between which a mop is adapted to be received; means for holding the mop in position between said rollers, said means comprising a pair of pivotally mounted guide plates arranged adjacent the ends of said rollers and positioned to adapt the adjacent edges thereof to contact with a mop positioned between said rollers, said guide plates being so mounted that, upon swinging thereof, the adjacent free edges of said guides will move toward or from each other; a swingingly mounted element for effecting relative movement of said rollers; and inwardly projecting swinging studs on said element engaging under said guide plates for swinging the same to cause said edges to move toward each other when said rollers are moved relatively toward each other, substantially as described.

1,271,622. ROTARY FAN. HERBERT N. SEARLES, New York, N. Y. Filed Nov. 24, 1917. Serial No. 203,660. (Cl. 170—159.)

1. A fan the blades whereof are of substantially equal width throughout, each having a sharp, unobstructed forward edge, the forward part of each blade being substantially flat and the rear edge of each blade having a laterally projecting flange of substantially equal width throughout and which extends to the hub of the fan.



4. A fan each blade whereof is of substantially equal width throughout and flat in its forward part terminating in a thin and unobstructed forward edge and having on its rear edge a longitudinally extending and laterally projecting flange of substantially equal depth throughout, the inner or hub end of each flange being turned inwardly and formed into a semi-bowl-like part resting against the hub.

[Claims 2 and 3 not printed in the Gazette.]

1,271,623. COMPENSATING FEED FOR MOVING-PICTURE MACHINES. MICHAEL SEGEL, New York, N. Y., assignor to Elizabeth Mehlfelder Uebelmesser, Bayside, N. Y. Filed Feb. 18, 1914. Serial No. 819,392. (Cl. 88—18.)



1. In a moving picture machine or the like, an upper continuously driven feed roller provided with a normal and abnormal speed driving mechanism therefor, a lower continuous feed sprocket controlling at least one of the speeds of said upper feed roller.

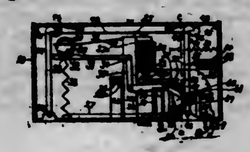
7. In a moving picture machine or the like, an upper feed sprocket driven normally by a lower feed sprocket, an additional higher speed driving means for said upper feed sprocket to engage said sprocket and advance the speed thereof when the film on said sprocket exerts a forward pull on said sprocket.

9. In a motion picture machine an upper feed sprocket and a lower feed sprocket, means for maintaining a predetermined slack in the film comprising a selective gear drive mechanism, means for controlling said gear drive mechanism by the film.

10. In a motion picture machine an intermittently driven sprocket and a continuously driven sprocket, means for accommodating a loop of film between said sprockets, a continuously driving member for said sprocket and a brake for said driving member.

[Claims 2 to 6, 8, and 11 not printed in the Gazette.]

1,271,624. AUTOMOBILE THIEF-ALARM. JOSEPH I. SILBAR, St. Paul, Minn. Filed Apr. 7, 1917. Serial No. 160,537. (Cl. 177—314.)

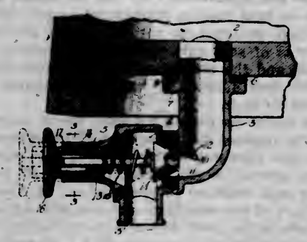


2. In an alarm device mounted on an automobile or other vehicle, a mechanism box, a concealed and protected electric bell and battery and wiring of same, some of said wiring extending into the mechanism box, said box having a lock, a slidable bolt or slide in the lock and a key for sliding the bolt, and mounted within said box a self-closing switch for the ringing of the bell, a pivoted catch arranged to hold the bell switch normally open; an armature on the catch, an electromagnet arranged to act on the armature and permit the bell switch to close, a switch arranged in the wiring to cause an electric current to energize the electro-magnet, said switch comprising a stationary ring-shaped switch member, and a vibratile switch member having a portion of it spaced within the ring, said vibratile member consisting of a vertically disposed resilient wire with a weight on it to induce vibration, and means operated by the slide for locking the vibratile member against vibration when the vehicle is in ordinary use.

5. In an alarm device for automobiles, a mechanism box mounted on the car, a concealed and protected electric bell and battery and wiring of same, some of said wiring extending into the mechanism box; said box having a cover and lock and key, a slide in the lock moved by the key; and mounted within the box a self closing switch for the ringing of the bell, a catch for holding said bell switch open, an armature on the catch, an electromagnet arranged to act on the armature and permit the bell switch to close, a switch arranged in the wiring to cause electric current to energize the electromagnet, said switch having one stationary member and one vibratile member designed to close contact with the stationary member when vibrated by stirring of the car, a switch for turning electric current from said battery to the engine of the car, and means actuated by the slide for operating the switch leading to the engine, and for controlling the vibratile switch member, and for arresting the bell switch in open position, and for setting it in open position, and for releasing it so it may close, and for holding the cover of the box locked.

[Claims 1, 3, and 4 not printed in the Gazette.]

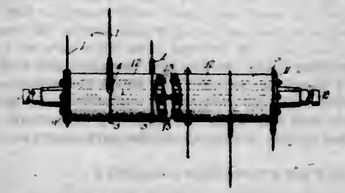
1,271,625. DRAINING DEVICE. HOWARD F. SNYDER, Newton, Iowa, assignor to The Maytag Company, Newton, Iowa, a Corporation of Iowa. Filed Nov. 14, 1914. Serial No. 872,083. (Cl. 4—35.)



1. In a draining device of the class described, a casing having an inlet passageway, an outlet passageway laterally offset therefrom and a third passageway connecting said inlet and outlet passageways and extending at right angles to each thereof, a valve seat in said third passageway with its axis parallel thereto, a closure in the side of said outlet passageway and terminating at its outer end in an interrupted cylindrical member, a valve stem passing through said closure and having means to engage the interrupted portion of said cylindrical member whereby said stem may be quickly placed and held in open position with substantially all sides of the valve plug exposed in the outlet passageway or released therefrom, a conical valve plug on said stem movable in a path parallel to the direction of flow of liquid past said valve seat, the inclination of the sides of said valve plug being such as to be washed clear of foreign matter by the outflowing liquid.

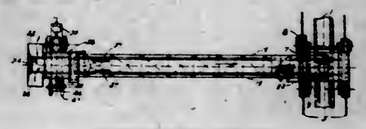
2. In a draining device of the class described a casing having an inlet passageway and an outlet passageway laterally offset from each other, an opening connecting said inlet and outlet passageways and extending at right angles to each thereof, a valve seat in said opening, a valve stem, a valve plug on said stem for engagement against said seat, means for normally resiliently holding said valve plug against said seat, means for moving said valve plug away from said seat in a direction parallel to the general direction of flow of liquid through said opening, said valve plug when in open position having substantially all sides exposed within the outlet passageway whereby the outflowing liquid will wash past said plug and keep it clear of foreign matter.

1,271,626. BAND-CUTTER FOR THRESHING-MACHINE FEEDERS. HOWARD F. SNYDER, Newton, Iowa, assignor to The Maytag Company, Newton, Iowa, a Corporation of Iowa. Original application filed Sept. 6, 1912, Serial No. 718,865. Patent No. 1,200,253, dated Oct. 3, 1916. Divided and this application filed Dec. 7, 1914. Serial No. 875,954. (Cl. 130—1.)



In a band cutter, a central shaft, a pair of end plates, a plurality of knives each having a plain hub portion provided with a plurality of openings spaced thereabout, a plurality of longitudinal bolts passing through said apertures and secured at their ends in said end plates and a plurality of plain cylindrical shells adapted to space apart said hub portions, the inner circumference of which shells entirely surrounds said bolts whereby said cylindrical shells are supported by said bolts.

1,271,627. SCRAPER-PLOW RECLAIMING APPARATUS. FRANCIS LEE STUART, Washington, D. C., assignor to International Conveyor Corporation, New York, N. Y. Filed Dec. 24, 1917. Serial No. 208,598. (Cl. 193—3.)



1. A reclaiming apparatus, comprising a main conveyer belt for receiving and carrying away material to be reclaimed, a truck mounted to move parallel with said belt, a reclaiming arm pivotally connected with said truck and projecting from the side thereof, a scraper plow carried

by the outer end of said arm and having its entrance end arranged transversely to the line of movement of the truck, a tractor interposed between the plow and the arm for swinging the arm relatively to the truck, and a conveyer for carrying material from the plow to the main conveyer.

3. A reclaiming apparatus, comprising a main conveyer for receiving and carrying away collected or reclaimed material, a truck mounted to move in a direction parallel with the conveyer, a reclaiming arm extending sidewise from the truck and pivotally connected therewith, a scraper plow mounted on the outer end of the reclaiming arm, a conveyer extending across the rear portion of the plow and supported on the outer end of the reclaiming arm and another conveyer mounted in the reclaiming arm receiving material from said last mentioned conveyer and carrying it to the outer end of the reclaiming arm.

4. A reclaiming apparatus, comprising a conveyer belt, a truck mounted to move in a direction parallel with the belt, a reclaiming arm pivotally connected with the truck and projecting sidewise therefrom, a tractor on the outer end of the reclaiming arm, a scraper plow on the outer end of the arm and outside the tractor which has a front entrance edge, an inclined body portion and a curved mold board, a hopper carried by the truck which delivers to the conveyer and a conveyer extending from the body portion of the plow in rear of its entrance edge to said plow, the organization being such that the reclaimer may be moved along the edge of a pile of material and then swung to the desired extent to collect material by destroying the slope of the pile.

5. A reclaiming apparatus, comprising a truck, a hopper thereon, a conveyer to which the hopper delivers, a reclaimer frame projecting sidewise from the truck, a conveyer belt supported in said frame and delivering to said hopper, a tractor on the outer end of the reclaimer frame, and a scraper plow projecting from and arranged wholly beyond the outer side of the tractor and which is supported on its inner side only, said conveyer belt being arranged to extend at its outer end across the rear portion of the plow but having both its receiving and return portions below the level of the plow and said plow having a flange on its outer side which protects the outer end of the belt and over which material being gathered falls onto said belt while the gathering of material is unobstructed by any devices above the path traversed by the plow.

[Claim 2 not printed in the Gazette.]

1,271,628. LOADING APPARATUS. FRANCIS LEE STUART, Washington, D. C., assignor to International Conveyor Corporation, New York, N. Y. Filed Jan. 21, 1918. Serial No. 212,973. (Cl. 37—25.)



A portable loading apparatus, comprising a movable supporting wheeled carriage, a scraper plow projecting from and arranged wholly beyond the side of the carriage and its wheels and which is supported on its inner side only, a conveyer belt extending at its outer end across the rear portion of the plow, but having both its receiving and return portions below the level of the bottom of the plow, a roller carried by the plow around which the lower end of the belt extends, said conveyer belt having its upper end extending beyond the opposite side of the carriage, and means for driving the conveyer.

1,271,629. FLOOR-WASHING MACHINE. STEVEN B. TATULIS, Chicago, Ill. Filed Sept. 27, 1917. Serial No. 193,423. (Cl. 15—14.)

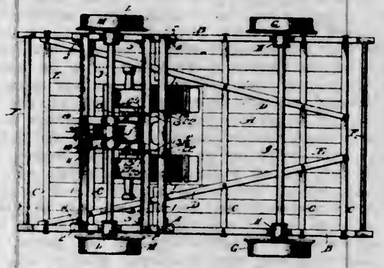
3. A floor washing machine comprising a wheeled carriage; a cleansing liquid reservoir supported by said carriage; a scrubbing element adapted for engagement with the floor; a cleansing liquid supply adapted to discharge cleansing liquid onto said scrubbing element; means for mopping up the floor to remove the cleansing liquid therefrom; a vertically movable squeegee carried by said carriage at each end thereof adapted to engage with the floor to collect the liquid thereon for absorption by said mopping means; means, adapted upon movement of the device in one direction, to automatically raise the squeegee at one end of the carriage to inoperative position, and to



lower the other squeegee to operative position, and, upon movement of the device in the opposite direction to automatically reverse the movement of said squeegees, said last mentioned means comprising a rockingly mounted holder for each squeegee; and a gear coöperating with said holder whereby upon forward and rearward movement of the device said holder will be rocked first in one direction and then in the other, substantially as described.

[Claims 1 and 2 not printed in the Gazette.]

1,271,630. POWER-PLANT CONSTRUCTION FOR RAILWAY MOTOR-CARS. JEAN K. VANATTA, Chicago, Ill., assignor to Mudge & Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 2, 1918. Serial No. 215,033. (Cl. 105—17.)



1. In a motor car having a frame provided with longitudinally arranged sills and traction wheels, the axles of which are mounted in bearings secured to said sills on the under side of the car, the combination of a metal subframe, having longitudinally extending members and cross bar members, means for securing the sub-frame to the under side of the car frame with its longitudinal members arranged transversely of the car frame sills, an engine base member secured to said sub-frame lengthwise of the car frame and transversely of the sub-frame, an engine mounted on said base, a driving axle supported in journal bearings mounted on the sub-frame, driving wheels on the ends of said axle, operative connections between the engine and the driving axle, and journal bearings on the engine base adapted to support the driving axle intermediate its ends.

2. In a motor car having a wooden frame embracing longitudinally disposed side sills, a sub-frame of metal having end and side bars, means for securing said sub-frame to the under side of the car frame from side sill to side sill, a driving axle mounted in journal bearings located upon the end bars of the sub-frame and carrying driving wheels on the ends of the axle, and means intermediate the ends of the axle adapted to connect said axle and the longitudinal bars of the sub-frame together and brace the same against undue strains.

3. As a unitary structure for motor cars, a sub-frame comprising front and rear longitudinally disposed side bars 1, 1, an intermediate longitudinal bar 3 and end bars 2, 2, connecting said bars 1, 3, 1 together.

4. As a unitary structure for motor cars, a sub-frame comprising front and rear longitudinally disposed side bars 1, 1, an intermediate longitudinal bar 3 positioned near the front bar 1, and end bars 2, 2, connecting said bars 1, 3, 1 together.

5. As a unitary structure for motor cars, a sub-frame comprising front and rear longitudinally disposed side bars 1, 1, an intermediate longitudinal bar 3 positioned near the front bar 1, and end bars 2, 2, connecting said bars 1, 3, 1 together, said frame being provided with means for securing it to a motor car frame.

[Clams 6 to 25 not printed in the Gazette.]

1,271,631. DRIVEWAY FOR AUTOMOBILES. ANGEL VELO and PRÓSPERO LASAGA, Habana, Cuba. Filed July 5, 1917. Serial No. 178,801. (Cl. 57—18.)



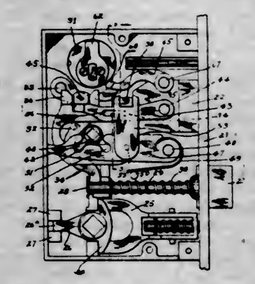
1. In permanent connection with a sidewalk, the combination of a recessed frame permanently inserted into the body of the sidewalk and having one edge flush with the curb edge of the sidewalk, and a skid pivotally mounted in said frame and normally located in the recess thereof to present a surface on a level with the surface of the walk, said skid being adapted to be turned about its pivot into a position sloping downwardly with respect to said frame and walk.

2. In permanent connection with a sidewalk, the combination of a frame having circumferential flanges on two lateral edges and on a rear edge the front edge of the frame being flush with the curb edge of the sidewalk, a plate pivotally mounted on said frame and confined, when in inoperative position, by the said edges, the front edge of the pivotal plate, when in inoperative position, being flush with the curb edge of the sidewalk, the pivot of said plate being adjacent to said front edge.

5. In permanent connection with a sidewalk, a frame plate having a recessed bottom and circumferential flanges on three sides projecting from said bottom, one of said flanges being joined to said bottom by a concave fillet, a pivotal skid normally mounted in the recess of said frame, one edge of said skid being rounded to correspond to the curvature of the fillet with which it is in engagement when said plate is in normal position, the bottom being provided with grooves and the skid being provided with ribs on the lower surface adapted for registration with said grooves when the skid is in normal position.

[Claims 3 and 4 not printed in the Gazette.]

1,271,632. LOCK. HENRY G. VOIGHT, New Britain, Conn., assignor to Sargent & Company, New Haven, Conn., a Corporation of Connecticut. Filed Apr. 14, 1917. Serial No. 162,000. (Cl. 70—29.)



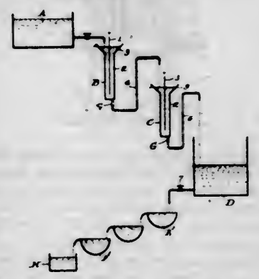
1. In a lock, a case, a dead bolt therein, a tumbler for said bolt carried thereby, a tumbler mounted on the case, operating means coöperating with the first tumbler, and another operating means coöperating with the second tumbler.

2. In a lock, a case, a dead bolt therein, a tumbler carried by the bolt, another tumbler pivoted to the case, operating means coöperating with the first tumbler, another operating means coöperating with the second tumbler, and means for operating said tumblers concurrently.

15. In a lock, a bolt, a tumbler carried thereby, a case inclosing said bolt and tumbler, a second tumbler for the bolt pivoted on the case, and a thumb turn hub cooperating with said second tumbler to deadlock the bolt and adapted to protract and retract said bolt.

[Claims 3 to 14 and 16 to 20 not printed in the Gazette.]

1,271,633. METHOD OF ELECTROLYTIC PRODUCTION OF PERCHLORIC ACID. EDWARD C. WALKER, 3d, Brookline, Mass. Filed Apr. 23, 1917. Serial No. 163,766. (Cl. 204—9.)



1. The process of producing perchloric acid, which consists in subjecting to electrolytic action a hydrochloric acid solution, strength one normal, or less, with current-density at five-tenths ampere, or less, per square centimeter.

2. The process of producing perchloric acid, which consists in subjecting to electrolytic action a hydrochloric acid solution, strength one normal, or less, with current-density at five-tenths ampere, or less, per square centimeter, at a temperature not materially exceeding 50° centigrade.

3. The process of producing perchloric acid, which consists in subjecting to electrolytic action a hydrochloric acid solution, strength one normal, or less, with current-density at five-tenths ampere, or less, per square centimeter, at a temperature not materially exceeding 50° centigrade at the initial stages of the process, and reducing the temperature as the process progresses.

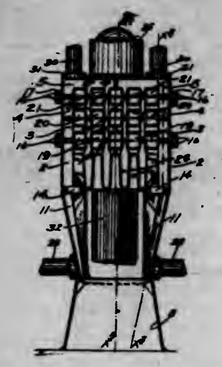
4. The process of producing perchloric acid, which consists in subjecting to successive stages of electrolytic action a hydrochloric acid solution, strength one normal or less, with current-density at five-tenths ampere or less per square centimeter, at a temperature not materially exceeding 50° centigrade, in the initial stage, and at materially reduced temperature in a subsequent stage, maintaining flow of electrolyte through the initial stage, to and through the subsequent stage.

5. The process of producing perchloric acid, which consists in subjecting to successive stages of electrolytic action a hydrochloric acid solution, strength one normal or less, with current-density at five-tenths ampere or less per square centimeter, at a temperature not materially exceeding 50° centigrade, in the initial stage, and at materially reduced temperature in a subsequent stage, maintaining a flow of electrolyte through the initial stage, to and through the subsequent stage, drawing off and concentrating the perchloric acid solution thus produced.

1,271,634. HOT-WATER BOILER. FREDERICK J. WALLING, Minneapolis, Minn. Filed Oct. 17, 1914. Serial No. 867,126. (Cl. 122—218.)

1. A boiler made up of hollow cast sections formed with coöperating corrugations with intervening flame passages

affording return flues and intervening water conduits, each of said sections being made up of two connected subsections, said sections and subsections having connecting conduits for the circulation of water therethrough, cold water returns leading to the two lowest subsections, and hot water feed pipes leading from the two upper subsections.



4. A boiler made up of hollow cast sections formed with coöperating corrugations with intervening flame passages affording return flues and intervening water conduits, the lowermost of said sections constituting a fire pot and having hollow inwardly projecting vertical hollow ribs with intervening air passages, the bottom plate of the second section from bottom being formed with longitudinal corrugations exposed to the direct flames from the fire pot, and increasing the surface in contact with the water contained therein.

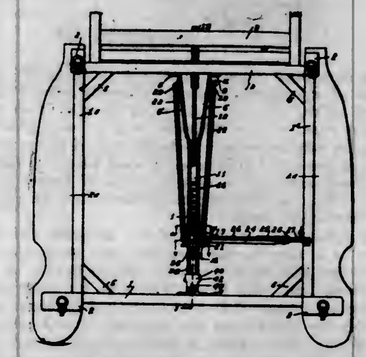
5. A boiler made up of hollow cast sections, the lower of which constitutes a water jacketed fire pot, and the intermediate of which sections have longitudinal upper and lower corrugations coöperating to afford return flues, the said intermediate flues having vertical flame passages extended through the rear portions thereof, and all but the lower section having a flame passage near its front extremity, and the said upper section having a smoke outlet passage opening through its upper portion, the water chambers of the said sections being connected at alternate ends so that the water follows a zigzag course upward through the several sections.

7. A boiler made up of hollow cast sections, the lower of which constitutes a water jacketed fire pot, the intermediate of which sections have longitudinal upper and lower corrugations coöperating to afford return flues, the said intermediate flues having vertical flame passages extended through the rear portions thereof, and all but the lower section having a flame passage near its front extremity, the said upper section having a smoke outlet passage opening through its upper portion, the water chambers of the said sections being connected at alternate ends so that the water follows a zigzag course upward through the several sections, each of said sections comprising two subsections, cold water return pipes leading to the lower subsections, hot water feed pipes leading from the upper subsections, and the said lower section constituting a fire pot and the side walls thereof having hollow inwardly projecting corrugations.

[Claims 2, 3, and 6 not printed in the Gazette.]

1,271,635. ADJUSTABLE CHAIR. JERROLD F. WALTON, Sturgis, Mich. Filed Jan. 26, 1915. Serial No. 4,437. (Cl. 155—27.)

1. In a chair, the combination of a frame having front, side and rear rails and an adjustable back; a channel-shaped sheet metal casing secured at its front end to said front rail, the rear of said casing being split to form arms extending rearwardly and secured to said rear rail; a ball retaining block carried by said casing and provided with a notch forming with the side walls of said casing a ball retaining chamber and a groove extending transversely of said block and opening into the bottom of said ball retaining chamber; a slide bar, connected to said adjustable back, disposed in said casing and having its lower surface provided with a plurality of openings forming ball retaining seats; tongues struck out from the forward end of said slide bar; a block secured to said channel shaped slide bar by said tongues, the top of said block extending slightly above the side walls of said slide bar and engaging the top of said channel shaped casing; laterally directed fingers struck out from the forward end of said slide bar, said fingers extending through slots provided in the side walls of said casing; lugs struck out from said rearwardly extending arms on said casing; springs connecting said fingers with said lugs; a clutch ball disposed within said ball retaining chamber; a ball actuating bar having a beveled inner end disposed in said ball retaining block below said clutch ball; and means for actuating said bar to release the clutch, all coacting substantially as described and for the purpose specified.



7. In a chair, the combination of a frame, having front and rear rails and an adjustable back; a channel shaped sheet metal casing secured at its ends to said front and rear rails respectively; a ball retaining block provided with a ball retaining chamber carried by said casing; a channel shaped slide bar, connected to said adjustable back, disposed in said casing above said block and having its lower surface provided with a plurality of ball seats; tongues struck out from the forward end of said slide bar; a block secured to said channel shaped slide bar by said tongues, the top of said block extending slightly above the side walls of said slide bar and engaging the top of said channel shaped casing; a clutch ball disposed within said ball retaining chamber; and means for actuating said clutch ball to lift the same into engagement with one of said ball seats, all coacting substantially as described and for the purpose specified.

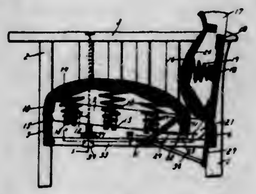
10. In a chair, the combination of a frame having front and rear rails and an adjustable back; a channel shaped sheet metal casing provided at its front end with laterally directed flanges secured to said front rail, the rear of said casing being secured to said rear rail, said casing being provided at its forward end with slots formed in the side walls and extending into said flanges; a slide bar disposed within said casing and connected to said adjustable back; laterally directed fingers struck out from said slide bar and extending through said slots; and spring means connected with said fingers and drawing said slide bar rearwardly in said casing, all coacting substantially as described and for the purpose specified.

11. In a chair, the combination of a frame, having front and rear rails and an adjustable back; a channel shaped sheet metal casing secured at its ends to said front and rear rails respectively; a slide bar disposed in said casing and connected to said adjustable back; a block carried by said casing; clutch mechanism carried by said block for holding said slide bar against movement; a brake shoe disposed within said casing and having a pair of depending legs at each end thereof; a shoulder on the rear of said brake shoe; a shoulder on said clutch block adapted to engage said brake shoe shoulder to limit the downward movement thereof; a pin extending transversely between the side walls of said casing; a leaf spring carried by said pin and engaging the under surface of said brake shoe to force the same upwardly in said casing; a bracket carried by said casing; and a screw carried by said bracket and engaging the free end of said leaf spring to vary the tension of said leaf spring on said shoe, said brake shoe yieldingly engaging the under surface of said slide bar when the same is moved forwardly in said casing, all coacting substantially as described and for the purpose specified.

14. In a chair, the combination of a frame, having front and rear rails and an adjustable back; a channel shaped sheet metal casing secured at its ends to said front and rear rails respectively; a slide bar disposed in said casing and connected to said adjustable back; a block carried by said casing; clutch mechanism carried by said block for holding said slide bar against movement; a brake shoe disposed within said casing; and a leaf spring engaging the under surface of said brake shoe to force the same upwardly in said casing, said brake shoe yieldingly engaging the under surface of said slide bar when the same is moved forwardly in said casing, all coacting substantially as described and for the purpose specified.

[Claims 2 to 6, 8, 9, 12, 13, and 15 to 17 not printed in the Gazette.]

1,271,636. ADJUSTABLE CHAIR. JERROLD F. WALTON, Sturgis, Mich. Filed July 12, 1915. Serial No. 39,365. (Cl. 155—28.)



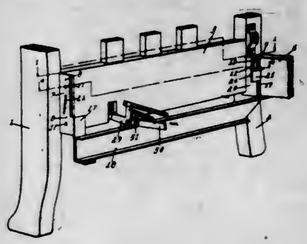
1. In a chair, the combination with a chair frame, of an adjustable back pivotally mounted on said chair frame, a seat mounted at its front end on said frame for tilting adjustment thereon, downwardly and forwardly projecting arms at the lower end of said back, rollers on the lower ends of said arms, said seat being provided with ways resting on said rollers whereby the rear end of the seat is raised and lowered with the adjustment of the back, a spring connected to said frame and to said seat urging the rear end of the seat downwardly, a downwardly projecting supporting arm on said back, a channeled slide way disposed below said seat, a rack having forwardly facing teeth arranged in said slide way, a link connecting said rack to said supporting arm on said back, a pawl arranged through one side of said channeled slide way to coact with said rack teeth, a spring for holding said pawl yieldingly in engagement with said teeth, and means for retracting said pawl.

7. In a chair, the combination with a chair frame, of an adjustable back pivotally mounted on said chair frame, a seat loosely mounted at its front end on said frame for tilting adjustment thereon, an arm on said back supporting the rear end of said seat, a spring connected to said frame and to said seat urging the rear end of the seat downwardly and forwardly, and a ratchet means for supporting said back.

[Claims 2 to 6 and 8 not printed in the Gazette.]

1,271,637. FURNITURE. JERROLD F. WALTON, Sturgis, Mich. Filed Sept. 20, 1915. Serial No. 51,678. (Cl. 155—3.)

1. A structure of the class described, comprising a corner member, a pair of side members disposed at an angle to each other with their ends abutting said corner member, a plate-like male coupling member provided with a stud and having a rearwardly projecting flange-like lug, said coupling member being secured to one of said side members with its said lug seated in a vertical kerf-like recess therein, and a coacting plate-like female coupling member having an inclined stud engaging slot therein, clamped between said corner member and the end of the other side member and having a flange-like lug disposed in a vertical kerf-like recess in said corner member.



8. In a chair, the combination of front and rear legs, side rails connecting the front and rear legs in pairs, front and rear rails abutting said legs, plate-like male coupling members having outwardly projecting headed studs and inwardly projecting flange-like lugs, secured to the inner sides of said front and rear rails with their said lugs seated in vertical kerf-like recesses therein, said coupling members being provided with projecting brackets, the brackets of the coupling members mounted on the front rail being angle-shaped and depending below the front rail and constituting foot rest supports, the brackets of the coupling members mounted on the rear rail constituting seat supports, plate-like female coupling members having inclined stud engaging slots therein, said female coupling members being clamped between said legs and the ends of the side rails and having flange-like lugs disposed in vertical kerf-like recesses in said legs, a foot rest comprising ways mounted on said rear rail and on said depending brackets of said coupling members mounted on said front rail, and a seat disposed with its rear end on said brackets on said coupling members mounted on said rear rail.

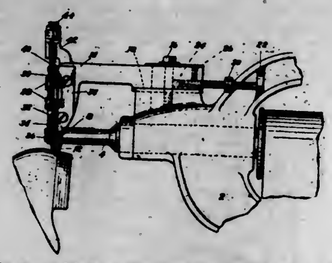
11. In a chair, the combination of front and rear legs, side rails connecting the front and rear legs in pairs, front and rear rails abutting said legs, male coupling members having outwardly projecting headed studs and inwardly projecting retaining lugs, secured to the inner sides of said front and rear rails with their said lugs seated in vertical kerf-like recesses therein, the coupling members mounted on the front rail being provided with brackets constituting foot rest supports, female coupling members having inclined stud engaging slots therein, said female coupling members being clamped between said legs and the ends of the side rails and having retaining lugs disposed in vertical kerf-like recesses in said legs, and a foot rest comprising ways mounted on said brackets.

17. In a chair, the combination of side members comprising legs and connecting rails secured together as a unit, cross rails, coupling members having retaining lugs secured to said cross rails with their said lugs seated in recesses therein, and coupling members clamped between said legs and the ends of the said rails connected thereto and having retaining lugs disposed in recesses in said legs, said coupling members having co-engaging studs and slots.

19. In a chair, the combination of side members comprising legs and connecting rails secured together as a unit, cross rails, coupling members clamped between said legs and the ends of their said connecting rails to project therefrom and having retaining lugs disposed in recesses in said legs, and coacting coupling members connected to said cross rails.

[Claims 2 to 7, 9, 10, 12 to 16, 18, and 20 to 22 not printed in the Gazette.]

1,271,638. TRIMMING-MACHINE. FRANK H. WARREN, Swampscott, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Nov. 6, 1915. Serial No. 60,116. (Cl. 12—88.)



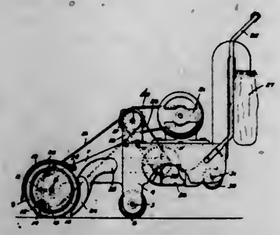
1. In a machine of the class described, the combination with a randing cutter, of a shield positioned at the end of the cutter for engagement in the crease between the upper and the sole of a shoe, and means arranged with reference to said shield to protect the surface of the upper from injury through contact with the shield, said means comprising a wheel arranged to be rotated by contact with the upper.

3. In a machine of the class described, the combination with a randing cutter, of a shield positioned at the end of the cutter and having a curved edge for engagement in the crease between the upper and the sole of a shoe, and a wheel arranged to engage and roll on the upper to guide the shoe, said wheel having its periphery curved in substantial conformity to the curve of said edge and positioned adjacent to said edge to protect the surface of the upper from injury through contact with the shield.

5. In a machine of the class described, the combination with a randing cutter, of a stationary shield positioned with reference to said cutter to engage the shoe in the rand crease, and a guide arranged to engage the upper of the shoe to limit the extent of projection of said shield into the rand crease, said guide being arranged to yield under the pressure of the shoe to permit the depth of the cut to be varied.

[Claims 2, 4, and 6 to 9 not printed in the Gazette.]

1,271,639. SANDING-MACHINE. GEORGE M. WATTERS, Minneapolis, Minn. Filed Oct. 23, 1916. Serial No. 127,042. (Cl. 51—13.)



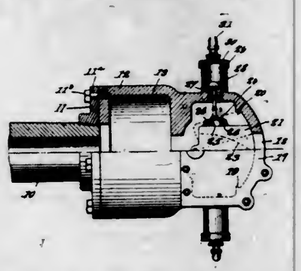
1. A finishing machine comprising a frame having a motor thereon, a finishing drum forwardly offset from said motor, a fulcrum roller between said finishing drum and motor, the preponderance of weight of the machine being at the rear of said fulcrum roller, whereby the said finishing roller will be gravity tilted from operative position and not positively held to its work, and a gage mounted on said frame forward of said fulcrum roller for limiting the depth of cut of the said finishing roller, and a handle on the rear of said frame.

2. A finishing machine comprising a frame having a motor thereon, a finishing drum forwardly offset from said motor, a fulcrum roller between said finishing drum and motor, the preponderance of weight of the machine being at the rear of said fulcrum roller, whereby the said finishing roller will be gravity tilted from operative position and not positively held to its work, a gage mounted on said frame forward of said fulcrum roller for limiting the depth of cut of the said finishing roller, said finishing roller being mounted in bearings that are vertically movable on said frame, adjustable stops limiting the downward movement of said bearings in respect to said frame, and yielding devices normally pressing said bearings against said adjustable stops.

3. A finishing machine comprising a frame having a motor thereon, a finishing drum forwardly offset from said motor, a fulcrum roller between said finishing drum and motor, the preponderance of weight of the machine being at the rear of said fulcrum roller, whereby the said finishing roller will be gravity tilted from operative position and not positively held to its work, a gage mounted on said frame forward of said fulcrum roller for limiting the depth of cut of the said finishing roller, and means for independently vertically adjusting or moving said finishing drum and gage roller in respect to said frame.

4. A finishing machine comprising a frame having a motor thereon, a finishing drum forwardly offset from said motor, a fulcrum roller between said finishing drum and motor, the preponderance of weight of the machine being at the rear of said fulcrum roller, whereby the said finishing roller will be gravity tilted from operative position and not positively held to its work, a gage mounted on said frame forward of said fulcrum roller for limiting the depth of cut of the said finishing roller, and a roller mounted at the rear of said frame and positioned to engage the supporting surface when, by gravity, said frame is rocked to raise said finishing drum from the supporting frame.

1,271,640. DEVICE RELATING TO ORDNANCE. WILLIAM H. WENTLING, Harrisburg, Pa. Filed Dec. 28, 1917. Serial No. 209,327. (Cl. 89—5.)



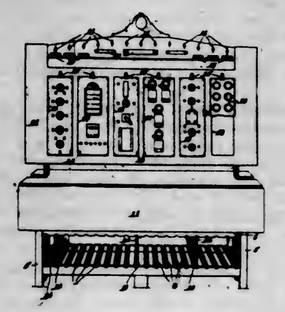
1. In a device relating to ordnance, an expansion chamber attached to a gun muzzle, a valve casing constituting a continuation of the expansion chamber, said valve casing having an opening therein for the discharge of projectiles, valve members hingedly mounted in the valve casing to guard the last mentioned opening, said valve members having camming surfaces to be engaged by a projectile for forcing them from their normal positions, and means for returning the valve members to their normal positions.

[Claim 2 not printed in the Gazette.]

1,271,641. CABINET. OSCAR WERWATH, Milwaukee, Wis., assignor to Kewaunee Mfg. Co., Kewaunee, Wis., a Corporation of Wisconsin. Filed Jan. 22, 1918. Serial No. 213,238. (Cl. 35—12.)

1. A cabinet body having a compartment therein extending transversely therethrough; a standard on top of said body, having releasable mountings on each side, and interchangeable mounting bases insertible in said compartment or in said mountings, substantially as described.

2. A cabinet body having a compartment therein extending transversely therethrough, said compartment being open at and accessible from both sides of the cabinet; transverse guides extending entirely through said compartment and arranged to permit of the removal or insertion of articles from both sides; a standard on top of said body having releasable mountings on each side; and interchangeable mounting bases insertible in the guides in said compartments or in said mountings, substantially as described.



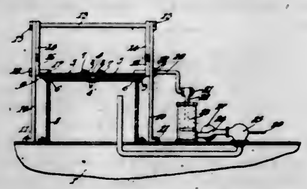
3. A cabinet body having a compartment therein extending transversely therethrough, said compartment being open at and accesible from both sides of the cabinet; a standard on top of said body having releasable mountings on each side; electric terminals of various characters on each side of said standard; and interchangeable mounting bases insertible in said compartments or in said mountings, substantially as described.

7. A cabinet comprising a body having a compartment therein extending transversely therethrough, said compartment being open at and accessible from both sides of the cabinet; a standard on top of said body, said standard having openings extending transversely therethrough; interchangeable mounting bases insertible in said compartments or in the openings in said standard, said bases having flanges around their edges contacting with the outer faces of said standard; electric terminals of various characters on each side of said standard; and buttons on said standard arranged to engage over the flanges at the upper edges of said bases, substantially as described.

10. A cabinet comprising a body portion; a standard on top of said body portion, said standard being provided with one or more cabinet compartments extending entirely therethrough; doors at each side of the compartments of said standard; supporting flanges extending laterally above and below said doors; and buttons coöperating with said uppr flanges, substantially as described.

[Claims 4 to 6, 8, 9, 11, and 12 not printed in the Gazette.]

1,271,642. SAFETY APPLIANCE FOR LOCOMOTIVES. AUGUST WM. WIEGAND, Sedalia, Mo. Filed Sept. 15, 1917. Serial No. 191,635. (Cl. 137—139.)



1. In a safety attachment for locomotives, the combination with a steam dome, of lids hinged to the dome, means for retaining the lids in normally closed position, and automatically controlled means for releasing the retaining means to permit the lids to open.

3. In a safety attachment for locomotives, the combination with a steam dome, of lids hinged on the dome and forming a cap therefor, opposed standards secured adjacent the dome and rising thereabove, means journaled in the standards for normally retaining the lids in closed position, and fluid operated means for actuating the retaining means to release the lids.

5. In a safety attachment for locomotives, the combination with a steam dome, of lids hinged to the dome, means for normally retaining the lids in closed position, fluid actuated means for operating the retaining means to release the lids, a source of fluid supply, and a gravity actuated valve for controlling the supply of fluid.

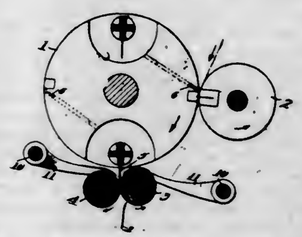
[Claims 2 and 4 not printed in the Gazette.]

1,271,643. LOCK-NUT. JAMES A. WINTON and GEORGE C. REED, Seaside, Oreg. Filed Oct. 31, 1917. Serial No. 199,541. (Cl. 151—11.)



A nut lock including a bolt having a plurality of recesses in the groove of the threaded portion thereof, a nut engaged on the bolt and having a circumferentially arranged groove, each face of the nut having an opening in the bottom of the groove and extending into the central bore of the nut, each face of the nut having a pair of outwardly diverging grooves the meeting ends of which are disposed at the said last-named opening in the side of the nut, and a spring yoke having a central coil portion and arms provided respectively with a shorter inwardly directed end for engagement in one of the side openings of the nut and a longer end for engagement in an opposite opening and into one of the recesses in the bolt, the arms of the yoke being adapted to lie at times in the divergent grooves.

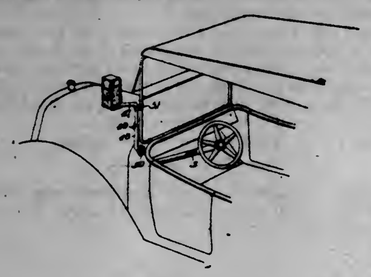
1,271,644. PAPER-GUARD FOR FOLDING MECHANISM. HENRY A. WISE WOOD, New York, N. Y., assignor, by mesne assignments, to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed June 16, 1918. Serial No. 773,915. (Cl. 270—77.)



1. In a folding mechanism the combination of a folding cylinder and an adjacent folding roll, sheet forwarding pins on said cylinder adapted to lead the sheet by its forward edge over said adjacent folding roll, the surface of which roll moves in a direction opposite to that of the sheet, a guard interposed between the said cylinder and said roll to prevent the leading edge of the sheet from contacting with said roll, said guard being located out of the pathway of the said pins.

[Claims 2 to 8 not printed in the Gazette.]

1,271,645. AUTOMOBILE-SIGNAL. HENRY C. WRIGHT and FRANK W. ROSS, Elmira, N. Y. Filed Apr. 28, 1917. Serial No. 163,906. (Cl. 40—132.)



1. An automobile signal comprising a casing having parts provided with means for indicating the operating intentions of the driver of the automobile, a lamp in the casing to illuminate means for indicating an intention to turn to the right, a second lamp in the casing to illuminate means for indicating an intention to turn to the left, a third lamp in the casing to illuminate means for indicating an intention to drive straight ahead, the means illuminated by said third lamp being visible only from the front and sides of the casing, and a fourth lamp in the casing to illuminate means for indicating an intention to stop, the means illuminated by said fourth lamp being visible only from the rear of the casing.

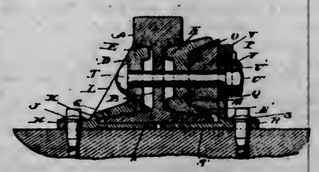
2. An automobile signal comprising a casing having a plurality of separate compartments and parts in said compartments for indicating the operating intentions of the driver of the automobile, a lamp in one of said compartments to illuminate means therein for indicating an intention to turn to the right, a second lamp in a second compartment to illuminate means in said second compartment for indicating an intention to turn to the left, a third lamp in a third compartment to illuminate means for indicating an intention to drive straight ahead, the means illuminated by said third lamp being visible only from the front and sides of the casing, and a fourth lamp in a fourth compartment to illuminate means for indicating an intention to stop, the means illuminated by said third lamp being visible only from the rear of the casing, the compartments containing said third and fourth lamps having a common opaque partition wall extending longitudinally of the casing between the front and rear walls thereof.

3. An automobile signal comprising a casing having parts provided with characters to indicate the operating intentions of the driver of the automobile, said parts forming the front, rear and side walls of the casing, a transparent plate in front of each of said parts, the transparent plate at the rear being differently colored from those at the sides and front, a lamp in the casing to illuminate a character or characters indicating an intention to turn to the right, a second lamp in the casing to illuminate a character or characters indicating an intention to turn to the left, a third lamp in the casing to illuminate a character or characters indicating an intention to drive straight ahead, and a fourth lamp in the casing to illuminate a character or characters indicating an intention to stop, the character or characters illuminated by said fourth lamp being visible only from the rear of said casing.

4. An automobile signal comprising a casing consisting of a plate of metal bent so as to form the sides, top and bottom of the casing and having characters stamped therein for indicating the operating intentions of the driver of the automobile, partitions at different distances above the bottom and connecting said side portions to form compartments in the casing, a vertical partition between the bottom of the casing and the next horizontal partition above it and dividing the space below the bottom partition into two compartments, front and rear metal plates having characters stamped therein similar to those in the sides for indicating the operating intentions of the driver of the automobile, transparent members facing the sides, front and rear of the casing and through which the aforesaid characters are visible, means for holding the metal plates at the front and rear and the transparent members facing them in position comprising a member detachably connected to the bottom of the casing, lamps in the compartments within the casing for illuminating the characters in the walls of the casing, and means whereby any one of said lamps may be lighted without first lighting and disconnecting another of said lamps.

5. An automobile signal comprising a casing having two partition walls extending between the front and rear walls of the casing and a third partition wall extending longitudinally of the front and rear walls, said partition walls dividing the interior of said casing into four compartments, two of said compartments being provided with indicating means on all sides thereof, the indicating means of one of said two compartments being provided for indicating an intention of the driver of the automobile to turn to the right and the indicating means of the other of said two compartments being provided for indicating an intention of the driver to turn to the left, another of said four compartments being provided with means visible only from the front and sides of the casing for indicating an intention to drive straight ahead, and the fourth compartment being provided with means visible from the rear of the casing for indicating the intention of the driver to stop the automobile.

1,271,646. RAIL-JOINT. HENRY F. WUSSOW, Jr., Bonduel, Wis. Filed Apr. 29, 1918. Serial No. 231,325. (Cl. 239—6.)



In combination with the ends of the rails, the plate disposed on one side having a vertical wall engaging the foot and head of the rails, a foot receiving portion and integral braces, a plate on the opposite side of the rails engaging the head and foot thereof and formed with a channel, a cushion strip fitting said channel, a plate having a foot supporting portion and a vertical portion resting against the face of said cushion strip, bolts for securing the rails and plates in proper relation, and nuts on said bolts.

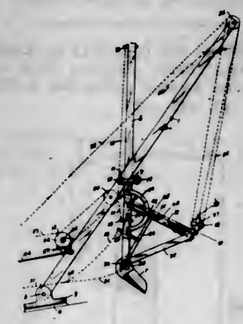
1,271,647. SWIVEL AND RING. PETER M. YOUNG, Chicago, Ill. Filed Mar. 13, 1917, Serial No. 154,589. Renewed May 20, 1918. Serial No. 235,726. (Cl. 24—242.)



An article of the class described comprising a supporting base provided with a slot, an open ring having a reduced end provided with an opening mounted on said base, a segmental closure pivotally mounted on said base opposite the reduced end, a pin mounted thereon, a flattened

arm integral with said closure and extending downward therefrom and so positioned that a pull on said arm forces it within the slot and forces the pin on the opposite end within the opening in the ring forming a continuous ring.

1,271,648. MOTOR-ACTUATED SHOVEL. MICHAEL J. ZABAWA, Grand Rapids, Wis. Filed Apr. 9, 1917. Serial No. 160,603. (Cl. 214—137.)



1. In a shovel mechanism, the combination with a boom, of a scoop supporting lever having fulcrum bearing support upon the boom, and adapted to slide in such support, flexible connections for adjusting said lever in said support, a scoop pivotally supported at the lower end of said lever, in a position to dump by gravity, an operating arm connected with the scoop, a rigid forwardly projecting frame carried by the scoop supporting end of the lever, a latch to hold the scoop operating arm with the scoop in filling position, flexible connections for actuating the operating arm to latching position and the latch to releasing position, a pulley mounted on the outer end of the boom, and an operating cable extended over said pulley, and connected with the front end of the forwardly projecting frame.

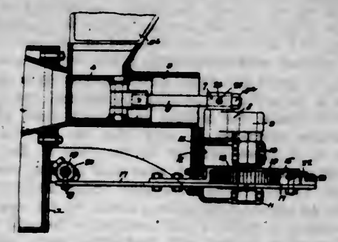
5. In a shovel mechanism, the combination with a scoop supporting and operating lever, a scoop pivotally secured to the lower end thereof, a scoop setting lever rigidly secured to the scoop, a latch for locking the scoop setting lever with the scoop in filling position, a flexible connection adapted to operate the latch, and another flexible connection for operating the scoop setting lever, said flexible connections being connected in common with an operating cable, and the latch connection being supported from the scoop operating lever at a point below and in front of the attachment of the other flexible connection to the scoop setting lever, whereby when the scoop operating lever is swung forwardly the latch operating connection will become relatively taut, and adapted to transmit motion to the latch in advance of the action of the other connection upon the scoop setting lever.

[Claims 2 to 4 not printed in the Gazette.]

1,271,649. STOKER DRIVING MECHANISM. MAXWELL ALPERN, Philadelphia, Pa., assignor to American Engineering Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 2, 1914. Serial No. 864,620. (Cl. 74—54.)

1. The combination in a stoker feeding, mechanism of a reciprocating element; and means for operating said element, consisting of an overhung crank connected thereto, a reciprocating shaft; a ratchet wheel in connection with the crank; with a pawl oscillated by said shaft and operative on said ratchet wheel.

8. The combination in a stoker feeding mechanism of a reciprocating element; a rotary shaft mounted in a line at right angles to the line of movement of said element; a crank driven from said shaft and having a crank-pin; a headed connecting rod attached to the element and slidable through said crank-pin; a structurally weak pin operatively connecting the crank-pin and the connecting rod; with bushings respectively mounted in the crank-pin and in the connecting rod, in which said structurally weak pin is mounted.



10. A stoker feeding mechanism comprising a series of reciprocating pushers operative in substantially horizontal lines, a series of independent vertical shafts, means for operating said shafts in the same direction, over-hung cranks on the upper ends of the shafts, and means connecting said cranks with said pushers.

[Claims 2 to 7 and 9 not printed in the Gazette.]

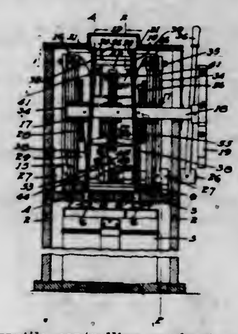
1,271,650. FASTENER. LOUIS ARKIN, Boston, Mass. Filed Dec. 6, 1917. Serial No. 205,735. (Cl. 24—211.)



1. A fastener comprising complemental stud and socket members, the stud having a recess in the forward end thereof, and coacting means on the socket member and in said recess respectively for separating said members, the coacting means including elastic means arranged to be compressed when the stud is inserted into the socket.

[Claims 2 to 5 not printed in the Gazette.]

1,271,651. COIN-CONTROLLED MECHANISM FOR TURNSTILES. JOSEPH WILLIAM BATES, Minneapolis, Minn. Filed Aug. 31, 1914. Serial No. 859,272. (Cl. 194—55.)



1. In a turnstile controlling mechanism, the combination, with means for locking said mechanism, of a coin way arranged to permit a coin to be moved edgewise therein, a coin push plate arranged in said way, a lever arranged to be operated independently of the turnstile for actuating said push plate, and a controlling plate connected with said locking means, and arranged to be moved to release said locking means by a suitable coin inserted in said coin way and moved edgewise against said controlling plate by the movement of said push plate.

3. In a turnstile controlling mechanism, the combination, with means for locking said mechanism, of a coin way, means arranged in said way for moving a coin edgewise therein in a plane parallel to the face of the coin, a controlling plate connected with said locking means and arranged to be moved manually, independently of the turnstile to release said locking means by engagement of the edge of a suitable coin inserted in the coin way and moved against said controlling plate, and means for returning the parts to normal position after each operation.

4. In a turnstile controlling mechanism, the combination, with means for locking said mechanism, of a coin way, means arranged in said way for moving a coin therein in a plane parallel to the face of the coin, a controlling plate connected with said locking means and arranged to be moved manually, independently of the turnstile to release said locking means by the engagement of the edge of a suitable coin inserted in the coin way and moved edgewise against said controlling plate, and means for registering or counting the movement of said controlling plate.

6. In a turnstile controlling mechanism, the combination with means for locking said mechanism, of a coin way, an adjustable guard controlling the passage of coins to said way, means arranged in said way to be moved manually, independently of the turnstile for moving a coin edgewise therein, and a controlling plate connected with said locking means and arranged to be moved to release said locking means by a suitable coin inserted in the coin way and moved edgewise against said controlling plate.

8. In a turnstile controlling mechanism, the combination, with means for locking said mechanism, of a coin-way adapted to have a coin moved edgewise therein, a push-plate arranged in said way for moving said coin, a lever for operating said push-plate, a controlling plate connected with said locking means and arranged to release said locking means by engagement therewith of the edge of a suitable coin inserted in the coinway and moved edgewise against said controlling plate, means for locking the lever, when moved to operate the push-plate without the insertion of a coin in the coin-way, and means for manually releasing said lever and returning the parts to normal position.

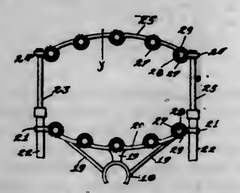
[Claims 2, 5, and 7 not printed in the Gazette.]

1,271,652. METHOD OF MAKING COLORED GLASS. HARRY T. BELLAMY, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 5, 1917. Serial No. 146,705. (Cl. 106—36.1.)

3. The hereinbefore described process of making ruby colored glass, which consists in making a batch of sand, red lead, nitrate of soda, oxid of antimony, borax, oxid of tin, potash, lime and gold in proportions substantially as hereinbefore described, heating said batch to substantially 2,400 degrees Fahrenheit, then cooling said batch, and finally reheating it to plasticity.

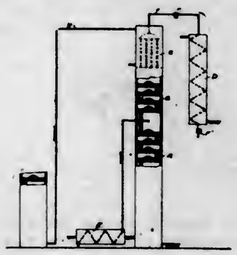
[Claims 1 and 2 not printed in the Gazette.]

1,271,653. BAG-HOLDER. CARL G. G. BERGSTROM, St. Paul, Minn. Filed Aug. 31, 1916. Serial No. 117,822. (Cl. 83—26.)



A bag holder, comprising, in combination, a standard, a plurality of bag holding elements supported by said standard, one of said elements being movable away from the other, and both of said elements being flat upstanding bands of segmental contour extending in opposite directions, and a series of closely placed freely rotatable bag engaging elements journaled on the lower edge of each and projecting inwardly and outwardly from the concave and convex sides of said bands to tensionally engage and retain in curved open position the mouth of a bag and to evenly distribute the tension about the bag mouth, said bands being formed with guides over the instanding portion of each rotatable bag engaging element.

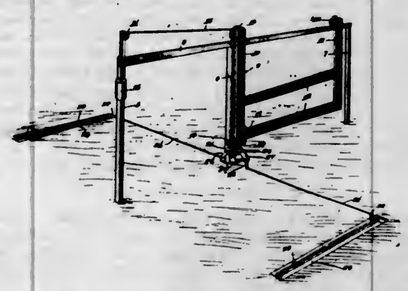
1,271,654. METHOD OF DISTILLING LIQUID MIXTURES OR SOLUTIONS. HILDING OLOF VIDAR BERGSTRÖM, Stockholm, Sweden. Filed Jan. 8, 1917. Serial No. 141,204. (Cl. 195—13.)



1. A method of distilling a relatively small amount of alcohol from a larger amount of an aqueous liquid, which comprises boiling the mixture in a column still, while treating the incoming mixture with the vapors produced in said boiling operation, and with a heating agent, treating the vapors given off in such boiling operation with condensate produced from like vapors and dephlegmating the vapors; bringing the co-treated vapors into heat-exchanging relation with a condensing cooling fluid, while said cooling fluid is maintained at a pressure sufficiently below the pressure of the vapors, to produce boiling of said cooling fluid, thereby producing steam in commercially useful quantities.

[Claim 2 not printed in the Gazette.]

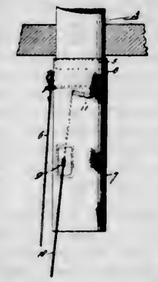
1,271,655. GATE-LATCH. CARL J. BETTGER, Gravelbourg, Saskatchewan, Canada. Filed Sept. 24, 1914. Serial No. 863,341. (Cl. 70—28.)



1. A latch release comprising a supporting plate, a spring pressed detent slidable in said supporting plate and normally projecting through and beyond the same, bell cranks pivoted to said supporting plate facing in opposite directions and swinging in the same plane for retracting said detent, one arm of each bell crank bearing directly on the detent, plunger chambers adapted to be sunk in the ground at a distance from said supporting plate and detent and on opposite sides thereof, plungers carried in said chambers, and means for transmitting the motion of said plungers to said bell cranks to release said detent.

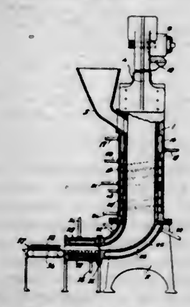
2. A latch release comprising a latch member having an angular end, a supporting member for said latch member, bell cranks pivotally mounted upon said supporting member to swing in the same plane, one arm of each bell crank bearing upon the angular end of said latch member, resilient means for normally retaining said latch member in operative position, plungers at a distance from and on opposite sides of said latch member, a supporting member for each of said plungers adapted to be placed across a roadway below the surface of the same, a bell crank connected by one arm to each plunger, and connections between the bell cranks on said plungers and said first named bell cranks to operate the latter when a plunger is depressed and force said latch member into inoperative position.

1,271,656. FLUE-CLEANER. THOMAS ELSWORTH BLAUVELT and JOHN JACKSON FOOSHEE, Hurley, N. Mex. Filed Mar. 22, 1917. Serial No. 156,713. (Cl. 15—41.)



A flue cleaner of the character described, including a receiving sack, the body of which is formed with an eyelet, the upper portion of the body of the sack being folded inwardly upon itself, and secured to the main portion of the body to form a casement, a supporting thimble mounted within the casement and snugly engaged thereby and serving to reinforce the sack and hold the upper portion thereof extended, an elongated handle having the upper end rigidly connected to the thimble while the main portion depends therefrom and is arranged in close relation to the thimble and the sack for facilitating the telescoping of the thimble on the flue, the thimble serving to hold the inner portion of the casement in close relation to the flue, a scraping element disposed within the sack and a stem on the scraping element projected through the eyelet.

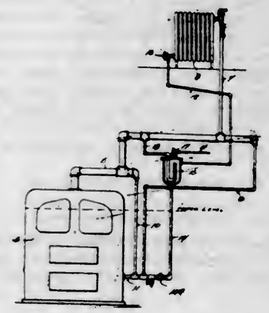
1,271,657. SOAP COOLER AND COMPRESSOR. JOSEPH BOCK, Sr., Cincinnati, Ohio. Filed Dec. 17, 1915. Serial No. 67,352. (Cl. 25—8.)



1. In a device of the character described, a cylinder for soap, a series of separate and independent water jackets around said cylinder adapted to receive cooling media of progressively lower temperatures ranging from the receiving end to the delivery end, a nozzle at the delivery end and a die plate in the nozzle, said die plate being provided with an aperture of a cross sectional area to form the soap into bars of the shape and size desired, a piston in the cylinder, and means for operating the piston slowly to force the soap through the cylinder without agitation, whereby disintegration of the soap is avoided.

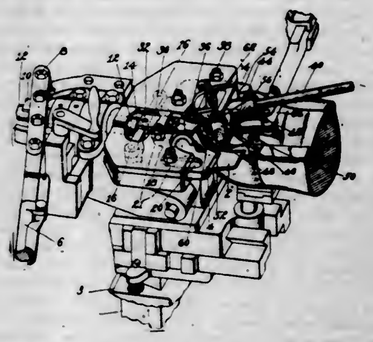
[Claims 2 and 3 not printed in the Gazette.]

1,271,658. VAPOR-HEATING SYSTEM. JOHN S. BRENNAN, Milwaukee, Wis. Filed Feb. 19, 1917. Serial No. 149,507. (Cl. 237—68.)



In a pressure controlling mechanism for a vapor heating system including a boiler, a vapor supply pipe, and a return pipe each connected therewith, the combination with a trap chamber interrupting the return pipe, of a thermostatically controlled atmospheric vent for the trap chamber, a vapor condensation drain pipe in communication with the trap chamber and said vapor supply pipe, the vapor condensation drain pipe having an upturned discharge leg within the trap chamber, the outlet of said leg being above its bottom end whereby to normally maintain a column of water in said leg, said column of water being displaced by abnormal pressure in the vapor supply pipe resulting in an equalization of pressure in the vapor supply and return pipes of the system, substantially as described.

1,271,659. LASTING APPARATUS. MATTHIAS BROCK, Boston, Mass., assignor, by mesne assignment, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Dec. 18, 1914. Serial No. 877,985. (Cl. 12—14.)



3. Toe lasting apparatus having, in combination, toe lasting wipers constructed and arranged to be advanced and closed over the edge of the shoe bottom, a carrier constructed and arranged to be forced toward the wipers, and a series of three or more members movably mounted upon the carrier for holding the upper frictionally against the

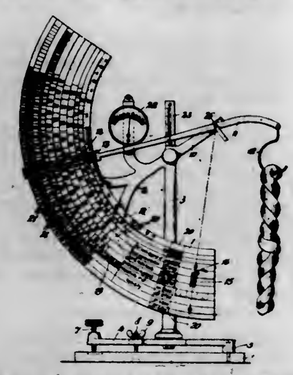
wipers, each of said series being adapted to move upon the carrier when the tension upon the upper adjacent to a given movable member becomes excessive, whereby the strain upon that portion of the upper is diminished and the strain upon the upper as a whole is equalized and distributed.

5. Toe lasting apparatus having, in combination, toe embracing wipers adapted to close over the end of a toe; and an upper holding device comprising an operating member and a member constructed and arranged to overlie the upper upon the top face of the wipers and provided with a plurality of upper engaging rolls mounted to turn in directions normal to the lines of strain on the upper.

11. Toe lasting apparatus having, in combination, toe lasting wipers and means for holding down the upper of a shoe toe upon the wipers to facilitate the application of lasting tension to the shoe upper at the toe during upward movement of the wipers, comprising a loop, and a series of separate movable bead-like members threaded upon the loop and adapted to contact with the upper and permit the upper to slip under them when excessive tension is applied to a portion of the upper adjacent to any given member.

[Claims 1, 2, 4, 6 to 10, and 12 to 19 not printed in the Gazette.]

1,271,660. BALANCE FOR DETERMINING THE TITER OF SILK. ALBERT BRUNNER, Männedorf, Switzerland. Filed Aug. 23, 1916. Serial No. 116,569. (Cl. 265—36.)



1. A balance for determining the standard of silk, comprising a standard, a segment thereon having a plurality of concentric rows of scale divisions thereon, each scale row corresponding to a definite length of silk, a pivoted beam operating simultaneously as a pointer for said scale and a carrier for the silk, one end of said beam movable over said rows of scale divisions and means for adjusting the beam and segment relatively one to the other to compensate for atmospheric humidity, and means for tilting the standard and its attached segments to adjust the pointer to zero-reading.

2. A balance for determining the titer of silk, comprising a standard, a balance arm pivotally mounted on said standard and acting simultaneously as a pointer, means on said arm for attaching the skeins to be examined, an annular segment concentric to the pivot of said arm and having a plurality of concentric scales each corresponding to a definite length of a skein and the division of these scales being such that the titer may be read off the scale corresponding to the length of the skein, said segment also provided near the zero position of the balance beam with a humidity adjusting scale, and means adapted to adjust the balance arm relatively to the annular segment with respect to said humidity scale in accordance with the degree of humidity of the air, substantially as described.

3. A balance for determining the titer of silk, comprising a standard, a balance arm pivotally mounted on said standard and acting simultaneously as a pointer, means on said arm for attaching the skeins to be examined, an annular segment concentric to the pivote of said arm and having a plurality of concentric scales thereon, each of said scales corresponding to a definite length of silk and the divisions of these scales being such that the titer may be read off the scale corresponding to a length of silk that is to be examined, by means of said pointer, said segment also provided near the zero position of the balance beam with a humidity adjusting scale, a hygrometer carried by said standard and means adapted to adjust the balance arm relatively to the annular segment in accordance with the degree of humidity of the air, substantially as described.

4. A balance for determining the titer of silk, comprising a standard, a pivot movable in said standard, a balance arm fixed to said pivot and acting simultaneously as a pointer, a hook connected to this arm, a rod fixed to said pivot, an adjustable weight on this rod, an annular segment concentric to said pivot and having a plurality of concentric scales thereon, each scale corresponding to a definite length of silk and the division of these scales being such that the titer may be read off the scale corresponding to the length of silk being examined by means of said pointer, said segement also provided near the zero-position of the balance beam with a humidity scale, and a hygrometer carried by said standard, said adjustable weight permitting to adjust the balance arm relatively to the annular segment by means of said humidity scale in accordance with the degree of humidity of the air, substantially as described.

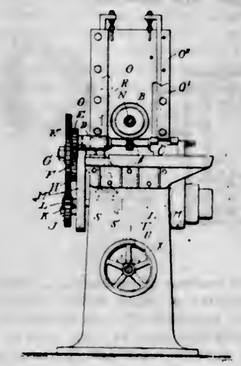
1,271,661. TRACTOR ATTACHMENT FOR FARM IMPLEMENTS. JOSEPH BUECHE, Gray, Saskatchewan, Canada. Filed Nov. 17, 1917. Serial No. 202,448. (Cl. 180—16.)

1. The combination with a binder and an automobile for propelling the same over the ground, said automobile having a steering wheel, of a crank connected to said steering wheel, a shaft connected to said crank, an auxiliary steering wheel connected to said shaft, said auxiliary steering wheel being arranged upon said binder, and means whereby upon the rotation of said auxiliary steering wheel the automobile and binder will be guided over the ground substantially as and for the purpose specified.

2. The combination with an automobile having a clutch pedal, steering wheel and motor controlling levers, of a machine detachably connected to said automobile, a cable connected to said clutch pedal and extending to said machine, a cable connected to said controlling levers and extending to said machine, a crank connected to said steering wheel, an auxiliary steering wheel mounted upon said machine, and means for slidably and flexibly connecting said auxiliary steering wheel to said crank substantially as and for the purpose specified.

1,271,662. MACHINE AND PROCESS FOR CUTTING HOBS, WORMS, AND THE LIKE. WILLIAM CANNELL, Springfield, Mass., assignor to Baush Machine Tool Company, a Corporation of Massachusetts. Filed Dec. 5, 1914. Serial No. 875,654. (Cl. 90—4.)

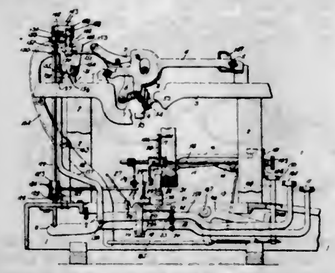
6. A machine for cutting hobs, worms or the like adapted to revolve the cutter and the work on axes at an angle to each other so as to cause the cutter to make a spiral cut in the work, said machine comprising in combination shafts arranged on the said axes, a carriage in which one of said shafts is carried, supporting means for said carriage, an equalizing lever carried by said supporting means and engaging said carriage at one end and a cam mounted on the shaft within said carriage and adapted to engage the other end of said lever.



9. A machine for cutting hobs, worms or the like adapted to revolve the cutter and the work on axes at an angle to each other so as to cause the cutter to make a spiral cut in the work, said machine comprising in combination shafts arranged on the said axes, a carriage in which one of said shafts is carried, supporting means for said carriage, an equalizing lever *c* carried by the supporting means and engaging said carriage at its rear end, a cam *g* carried near the forward end of the shaft in said carriage and adapted to engage the forward end of said lever, whereby as the shaft in said carriage rotates the carriage is lifted and lowered relatively to its supporting means by an amount less than the throw of the cam.

[Claims 1 to 5, 7, 8, and 10 to 18 not printed in the Gazette.]

1,271,663. TYPE-WRITING MACHINE. HERBERT A. CARHART, Syracuse, N. Y., assignor to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Filed Oct. 18, 1917. Serial No. 197,214. (Cl. 197—157.)

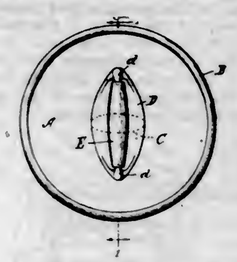


1. In a typewriting machine, the combination of a carriage; shifting means for bringing one or another of two different color fields of a ribbon into use; and means operating automatically at a plurality of predetermined points in the travel of the carriage in one direction to actuate said shifting means, said automatically operating means comprising a controlling member shiftable in opposite directions and free to remain indefinitely at the limit of its movement in either direction, and means for moving said controlling member first in one direction and then in the opposite direction during the travel of the carriage in one direction.

15. A bifurcated sheet metal tappet, one leg of which is provided with a lateral extension having two integral cams arranged at substantially right angles to each other and joined to form an apex at their juncture.

[Claims 2 to 14 not printed in the Gazette.]

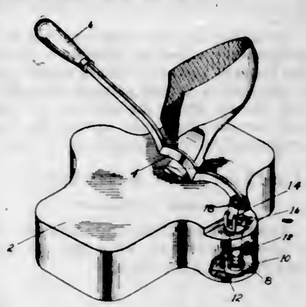
1,271,664. COLLAR-BUTTON. FRANK B. CARLAND, Nutley, N. J., and RALPH L. MORGAN, Worcester, Mass. Filed Sept. 20, 1917. Serial No. 192,289. (Cl. 24—101.)



1. A collar button having a head carrying a roller arranged to rotate about a fixed axis which is transverse to the shank.

[Claims 2 to 4 not printed in the Gazette.]

1,271,665. APPARATUS FOR USE IN THE MANUFACTURE OF BOOTS AND SHOES. JOHN V. CARON, Haverhill, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Nov. 18, 1915. Serial No. 62,234. (Cl. 12—47.)



1. In an apparatus for trimming the breast edge of the top lift of a shoe heel flush with the breast, the combination of a cutting block against which the tread face of the top lift of the heel is held, a knife supported for free tipping movement about an axis extending longitudinally of the knife edge to allow the side face of the knife to be held in contact with the surface of the heel breast, and means for effecting movement of the knife to trim the top lift.

7. In an apparatus for trimming the breast edge of the top lift of a shoe heel, a cutting block, a knife pivoted at one side of the block for movement toward and from the surface of the block, and a second pivot allowing the knife to be swung in a horizontal plane for use of the knife on different portions of the block.

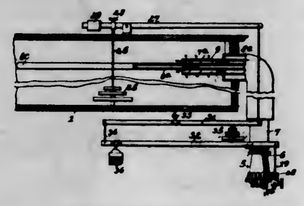
10. An apparatus for trimming the breast portion of the top lift of a heel attached to a shoe flush with the remainder of the heel breast, comprising a support for the tread face of the heel, and a trimming knife constructed and arranged to effect the trimming operation by a movement directed from the shank of the shoe toward the tread face of the top lift.

[Claims 2 to 6, 8, 9, 11, and 12 not printed in the Gazette.]

1,271,666. INCUBATOR. ERNEST D. CHARTERS, Turlock, Cal. Filed Aug. 24, 1916. Serial No. 116,755. (Cl. 236—6.)

1. In an incubator, the combination with the casing, of a thermostat within the same, a lever mounted on the

casing with which the thermostat is in operative co-operation to swing the lever, a pair of levers arranged below the casing, the uppermost lever being pivoted intermediate its ends to the casing, a link pivotally connecting the inner ends of the levers, a thermostat arranged between the levers near their outer ends, a link connecting the outer end of the uppermost lever with the first named lever, a burner and a connection between the outer end of the lowermost lever of the pair and the burner for controlling the said burner.

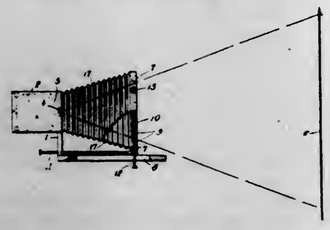


2. In an incubator, the combination with the casing, of a thermostat within the same, a lever operated thereby, a pair of superposed parallel levers suspended from the casing, the uppermost lever being connected to the first named lever at one end, a burner, a connection between the adjacent end of the lowermost lever and the burner for controlling said burner, and a thermostat between the parallel levers.

4. In an incubator, a main burner having at one end thereof a pilot burner, a pair of shutters movable toward and from the flame of the main burner and having a partition plate adapted to extend between the pilot burner and the main burner when the shutters are closed, an operating arm for simultaneously moving the shutters in opposite directions, and a thermostat for controlling the said arm.

[Claims 3 and 5 not printed in the Gazette.]

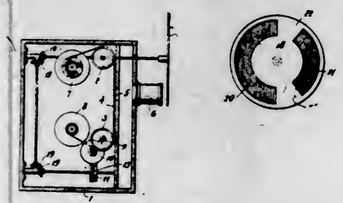
1,271,667. MOVING-PICTURE APPARATUS. CLYDE J. COLEMAN, New York, N. Y. Filed Mar. 23, 1912. Serial No. 685,688. (Cl. 88—16.4.)



1. Colored moving picture apparatus having in combination a lens, means for moving a moving picture film by the lens, a color screen covered with minute vertical ruling of the primary colors, said screen being at a fixed distance from the lens greater than the distance of the film from the lens, and means for adjusting the screen longitudinally whereby registration of the rulings of the screen with the rays of corresponding colored light may be obtained by adjustment in one direction only.

2. Colored moving picture apparatus having in combination a lens, means for moving a moving picture film by the lens, a color screen covered with minute horizontal ruling of the primary colors, said screen being at a fixed distance from the lens greater than the distance of the film from the lens, and means for adjusting the screen vertically whereby registration of the rulings of the screen with the rays of corresponding colored light may be obtained by adjustment in one direction only.

1,271,668. COLORED MOVING PICTURE. CLYDE J. COLEMAN, New York, N. Y. Filed Mar. 23, 1912. Serial No. 685,689. (Cl. 88—16.4.)



1. The improved method of producing a moving picture film for colored moving pictures, which consists in alternately and rapidly exposing different sections of a photographically sensitive film strip to light rays of red colors and light rays of another color, allowing the rays of red colors to act on the film for a longer period of time than rays of another color by holding the film motionless for a longer period while exposed to the red rays than while exposed to rays of the other color.

2. The improved method of producing a moving picture film for colored moving pictures, which consists in rapidly exposing separate sections of the film to light rays of red colors and light rays of another color, allowing the film to be exposed to the light rays of red colors for a longer period of time than to rays of the other colors by holding the film motionless for a longer period while exposed to the red rays than while exposed to rays of the other color.

3. The improved method of producing colored moving pictures by means of a rapidly moving film strip, which consists in alternately screening out red rays of light and then rays of another color, allowing the red rays to act for a longer period of time than rays of the other color by holding the film motionless for a longer period while exposed to the red rays than while exposed to rays of the other color.

1,271,669. MEANS FOR ATTACHING THE SIDE ARMS TO SPECTACLE-FRAMES. HARRY HARRIS COLLINGS, West End, Cowbridge, Wales. Filed Mar. 25, 1916. Serial No. 86,606. (Cl. 88—53.)

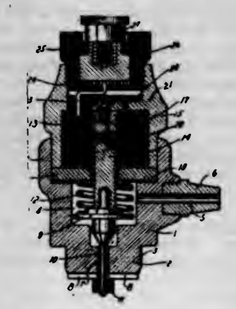


The combination with a spectacle frame having eyes formed at the ends thereof, of side-arms each having one end bent over to form a hook adapted to be engaged with one of said eyes, a light leaf spring secured on each side-arm near the bent-over end thereof and engaging by its end the end of said hook substantially as set forth.

1,271,670. PRIMING DEVICE FOR INTERNAL-COMBUSTION ENGINES. FRANK CONRAD, Swissvale, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 5, 1913. Serial No. 799,256. (Cl. 137—4.)

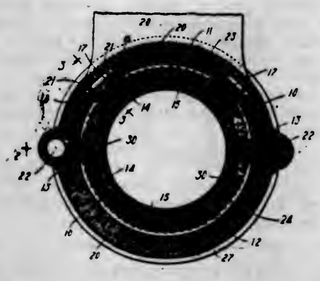
1. In a priming device, the combination with a valve and a core member connected thereto, of a coil for actuating said core member, a casing for said coil, a spring between said valve and said casing, a second casing member having a passage therethrough controlled by said valve and a member for inclosing said core member and for forming a gasket for connecting said casing members.

2. In a priming device, the combination with a casing member having a chamber and an outlet for said chamber, and a valve for controlling said outlet, of a coil above said chamber, a member of non-magnetic material between said coil and said chamber and having a portion projecting within said coil, a second casing member for inclosing said coil separated from the other casing member by the member of non-magnetic material to constitute a gasket therebetween, and a movable core member within said projecting portion and attached to said valve.



3. In a priming device, the combination with a plurality of concentric casing members, one of said members being provided with a chamber and an opening for said chamber, of a coil above said chamber and inclosed by one of said casing members, a lining of non-magnetic material between said coil and said chamber and having a tubular portion, within said coil, said lining extending between said casing members to form a gasket therefor, a movable core member within said chamber and said tubular portion, and a valve connected to said core member for controlling said opening.

1,271,671. PIPE-TONGS. DANIEL W. COOPER, Los Angeles, Cal. Filed Aug. 18, 1917. Serial No. 186,941. (Cl. 81—60.)

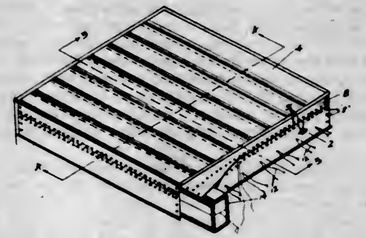


1. A pipe wrench, embodying an inner pipe engaging ring formed of a plurality of separable segments and means to hold the segments together around a pipe, and an outer operating ring carrying the inner ring revoluble therein, said outer ring formed of a similar number of separable segments and means to hold the segments together, and the segments of one ring being held in the segments of the other to be removable therefrom only by endwise movement of one segment in the other.

[Claims 2 to 4 not printed in the Gazette.]

1,271,672. MATTRESS. JAMES J. CROWLEY and URAIA ISAAC ROSENTHAL, Montreal, Quebec, Canada. Filed Aug. 18, 1917. Serial No. 186,871. (Cl. 5—13.)

1. In combination in a mattress, upper and lower mattress coverings and a flap, means for detachably connecting one of said coverings to said flap to permit complete removal of said covering, a plurality of partition flaps carried by each covering, means for connecting the partition flaps of one covering to those of the other to form compartments, and a filling.



4. In combination in a mattress, a plurality of mattress sections flexibly connected together and comprising a continuous upper covering with separate lower coverings and flaps, means for removably connecting the flaps to the upper coverings, partition flaps carried by said coverings, and means for drawing the partition flaps of one covering toward or from those of the other or others.

6. In combination in a mattress, a plurality of mattress sections flexibly connected and each having an upper and a lower covering and a flap, and adjustable partitions connecting said coverings.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,271,673. FILM FOR KINETOSCOPES OR MOVING-PICTURE MACHINES. SAMUEL DAVIS, New York, N. Y. Filed Sept. 25, 1916. Serial No. 122,159. (Cl. 88—19.5.)

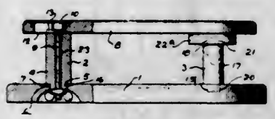


1. A moving picture film, a strip of transparent material overlying its sensitized surface, and lines of stitching along the edges of the film and through said material.

3. The herein described motion film having lines of stitching along it parallel with and near both edges and with their leads projecting beyond its surface, for the purpose set forth.

[Claims 2 and 4 not printed in the Gazette.]

1,271,674. IRONING-BOARD. MICHELE DEL CIOPPO, New York, N. Y. Filed Feb. 28, 1918. Serial No. 219,559. (Cl. 68—10.)



1. An ironing board comprising a base, a supporting member positioned on said base, a garment-supporting device, rotatably positioned on said supporting member, an auxiliary supporting member for one end of said garment-supporting device, and means independent of said first mentioned supporting member for supporting said auxiliary supporting member, said auxiliary supporting

member comprising an auxiliary garment-supporting device.

2. An ironing board comprising a base provided with an opening therein, a supporting member in the form of a sleeve having a reduced portion adjacent one end thereof fitting within said opening and providing a shoulder portion engaging said base, a garment-supporting device supported by said member, a retaining member passing through said sleeve for holding said base, supporting member and device in spaced relation, and auxiliary supporting means for said device comprising an auxiliary supporting member and an auxiliary garment-supporting device detachably positioned by said auxiliary supporting member.

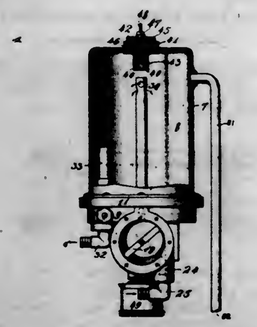
4. An ironing board comprising a base provided with an opening therein, a supporting member in the form of a sleeve positioned within said opening, a garment-supporting device detachably supported by said member, and a retaining member passing through said sleeve for holding said base, supporting member and device in spaced relation, said device being provided with a slot for engagement with one end of said retaining member, and said base being provided with a cut-away portion providing an abutment for engagement with the other end of said retaining member.

5. An ironing board comprising a base provided with an opening therein, a supporting member in the form of a sleeve having a reduced portion adjacent one end thereof fitting within said opening and providing a shoulder portion engaging said base, a garment-supporting device detachably supported by said member, a retaining member passing through said sleeve for holding said base, supporting member, and device in spaced relation, said device being provided with a slot for engagement with one end of said retaining member, and said base being provided with a cut-away portion providing an abutment for engagement with the other end of the said retaining member, and auxiliary supporting means for said device comprising an auxiliary supporting member and an auxiliary garment-supporting device positioned by said auxiliary supporting member.

7. An ironing board comprising, in combination, a base, a garment supporting device, means interposed between said base and said garment-supporting device for rotatably securing said garment-supporting device to said base, an auxiliary supporting member for one end of said garment-supporting device, and means independent of said first mentioned means for rotatably supporting said auxiliary supporting member, said auxiliary member comprising an auxiliary garment-supporting device.

[Claims 2 and 6 not printed in the Gazette.]

1,271,675. FUEL-TANK. JULIAN F. DENISON, New Haven, Conn., assignor to Gottfried Piel, New York, N. Y. Filed Sept. 21, 1916. Serial No. 121,526. (Cl. 158—36.)



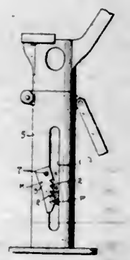
1. A device designed to constitute an insert in a liquid feed line, comprising means for elevating the liquid, a reservoir for receiving the elevated liquid, and an outlet from the reservoir for permitting the liquid to flow therefrom by gravity, said elevating means including a rotary pump having a capacity sufficient to supply the reservoir at a rate in excess of the rate of flow therefrom.

7. In a device of the class described, a tank provided with a bottom, an outlet therefrom positioned above the bottom so as to form a well in the tank, means carried by the bottom and opening into the tank above the level of the outlet for supplying liquid to the tank, a by-pass in the bottom opening from the well below the level of the outlet whereby the liquid remaining in the well may be drawn off, a pump priming conduit contained within the outlines of the bottom and opening from said by-pass, and means for controlling said by-pass.

24. In a device of the class described, a tank, a pump for supplying liquid to said tank, an outlet leading downward from said tank, and an inverted U pipe constituting the inlet supply pipe leading to the intake of said pump.

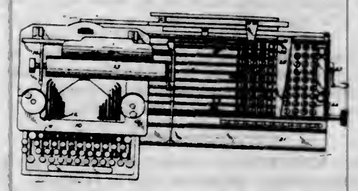
[Claims 2 to 6 and 8 to 23 not printed in the Gazette.]

1,271,676. LOCKING DEVICE. ELMER L. DENMAN, Charleston, Ill. Filed Sept. 10, 1917, Serial No. 190,597. Renewed May 25, 1918. Serial No. 236,650. (Cl. 74—81.)



In combination with a support provided with a vertically directed slot, a member disposed through said slot and movable longitudinally thereof, a locking member pivotally engaged at its upper end portion with the support and having one edge toothed for locking engagement with the movable member for holding the member against movement in one direction, the pivotal connection between the locking member and the support being positioned to cause the toothed edge of the member to normally overlie the longitudinal portion of the slot, the pivoted end portion of the member at the side of the pivotal connection remote from the slot being of increased width to facilitate the maintenance of the locking member in its normal position.

1,271,677. COMBINED TYPE-WRITING AND COMPUTING MACHINE. ADOLPHUS S. DENNIS, Lakewood, Ohio. Filed July 22, 1912, Serial No. 710,853. Renewed Nov. 8, 1916. Serial No. 130,276. (Cl. 235—62.)



1. The combination of a computing machine, a series of shafts corresponding to the different digits for actuating the computing machine, a typewriting machine, and a series of clutches adapted to connect said shafts with the numeral keys of the typewriting machine.

4. The combination of computing mechanism having a series of operating members corresponding to the different digits, and a series of shafts, mechanism connecting the same with said operating members, whereby a rotation of the shaft operates the operating member, a series of clutches, one for each shaft, a driving mechanism, a typewriter, and means under the control of the numeral keys thereof for connecting said driving mechanism with said shafts.

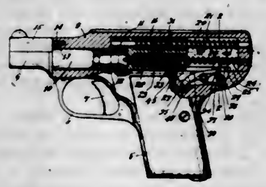
7. The combination, with a typewriter having a series of operating members, means for actuating them, a carriage for moving said means from one series to another, a series of operating shafts for said means respectively, an escapement for the computor carriage connected with each operating shaft, and means actuated by the numeral keys of the typewriter for connecting the corresponding shafts with a driving device.

11. The combination of a typewriting machine, a computing machine, connecting mechanism for actuating the computing machine and extending beneath the typewriting machine, power mechanism, a series of clutches for connecting the power mechanism with the connecting mechanism, a carriage having a series of plungers adapted to throw the respective clutches, said plungers being adapted to be actuated by the depression of the numeral keys of the typewriting machine, and means for moving said plunger carriage to idle position.

15. In a computing machine, the combination of a series of depressible keys, mechanism including a series of rotatable shafts for depressing said keys individually, a series of constantly driven shafts alined with said rotatable shafts, normally idle clutches between each of the first mentioned shafts and the second named shafts, and means for operating said clutches.

[Claims 2, 3, 5, 6, 8 to 10, 12 to 14, 16, and 17 not printed in the Gazette.]

1,271,678. FIREARM. LUCIUS N. DIEHM, West Hartford, Conn. Filed Oct. 6, 1916. Serial No. 124,072. (Cl. 42—3.)



1. A firearm including a receiver with a breech-bolt opening therein, a breech-bolt slidably mounted in said opening, said firearm having guide grooves, a firing pin slidably mounted in the breech-bolt, and laterally projecting guides from the firing pin extending into said grooves.

3. A firearm including a receiver with a breech-bolt opening therein, a breech-bolt slidably mounted in said opening and having recesses forming portions of guide grooves, said bolt being positioned so that the bottom wall of the opening in the receiver forms walls of said grooves, a firing pin slidably mounted in the breech-bolt, and laterally projecting guides from the firing pin extending into said grooves.

8. A firearm including a receiver with a breech-bolt opening therein, a breech-bolt slidably mounted in said opening and having recesses in its lower edge forming portions of guide grooves and a housing opening out of said grooves, said bolt being positioned so that the bottom wall of the opening in the receiver forms walls of said grooves, a firing pin slidably mounted in said breech-bolt and having a rib extending across it of a width to be completely received in said housing, and projecting guides constituting extensions from said rib, said guides extending into said guide grooves.

[Claims 2, 4 to 7, and 9 to 12 not printed in the Gazette.]

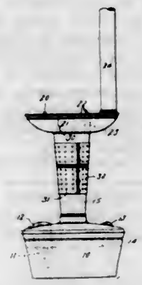
1,271,679. COMBINED FORK AND SPOON. RALPH E. DUCKETT, San Francisco, Cal. Filed Jan. 17, 1918. Serial No. 212,192. (Cl. 30—22.)



1. A combined fork and spoon comprising a spoon having passageways through the bowl thereof and having a handle, a fork having a handle carrying tines adapted to pass through the passageways of the spoon bowl, and means whereby the fork and spoon handles may be frictionally connected together at their ends in either one of two positions.

2. A combined fork and spoon comprising a spoon having longitudinally extending passageways through the bowl thereof and a fork having tines adapted to pass through said passageways in the spoon bowl, the handle of said fork having a wide slot therein through which the end of the spoon handle moves, and being adapted to be secured to the spoon handle in either one of the two positions.

1,271,680. HEATER. EMANUEL W. DUNN, Los Angeles, Cal. Filed Jan. 15, 1918. Serial No. 211,956. (Cl. 126—85.)

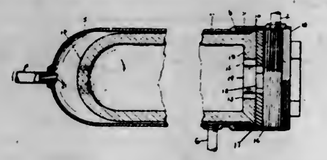


A device of the class described comprising a liquid fuel receptacle providing a primary combustion chamber, a tubular stack for the receptacle having air inlet perforations therethrough within the zone of combustion and adapted for producing secondary combustion within the stack, a radiating drum communicating with the stack and adapted for receiving the heated gases of primary and secondary combustion from the stack and an outlet flue for the said drum.

1,271,681. FILTER. WILLIAM HENRY DURYEA, Tiffin, Ohio. Filed Aug. 17, 1916. Serial No. 115,890. (Cl. 210—11.)

A filter comprising a housing providing a main chamber, a permeable wall auxiliary chamber mounted in the main

chamber and having a hemispherical end, and a multiple stream providing swirl inlet axially beyond the auxiliary chamber and terminally directed upon the hemispherical



end of the auxiliary chamber to wash the chamber, and an outlet from the main chamber remote from the inlet to permit removal of waste from the main chamber as washed by the inlet.

1,271,682. ELECTRIC LOCOMOTIVE. GEORGE M. EATON, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 4, 1916. Serial No. 70,245. (Cl. 105—259.)



1. In a locomotive, the combination with a cab, of three articulated driving trucks, friction bearings between each of said trucks and the cab, and means for pivotally connecting the two end trucks to said cab, one of said pivotal connections being provided with means for permitting the truck carrying it to move longitudinally of, and relatively to, the cab.

2. In a locomotive, the combination with a cab, of three articulated trucks, one of said trucks being a floating truck and two of said trucks being joined to said cab, and means comprising friction bearings for supporting a portion of the cab weight on each of said trucks.

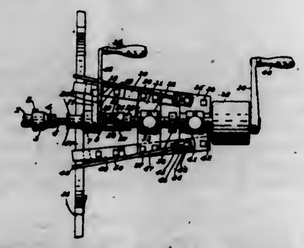
3. In a locomotive, the combination with a cab, a four-wheel floating inner truck, two four-wheel outer trucks, and two-wheel guiding trucks joined to said outer trucks.

4. In a locomotive, the combination with a cab, of a floating inner truck, two outer trucks pivotally joined to said cab, and friction bearings for supporting said cab upon the inner and the two outer trucks.

5. In a locomotive, the combination with a cab, of a floating inner truck, two outer trucks pivotally joined to said cab, friction bearings for supporting said cab upon the inner and two outer trucks, and two two-wheel guiding trucks joined to said outer trucks.

[Claims 6 to 13 not printed in the Gazette.]

1,271,683. POWER-TRANSMISSION ATTACHMENT. ERNEST F. ELMBERG, Parkersburg, Iowa. Filed Dec. 15, 1917. Serial No. 207,225. (Cl. 180—53.)



1. In combination, a driving-shaft, a driven shaft element mounted on said driving-shaft, engaging-means on said driven shaft element, a crank mounted loosely and longitudinally slidably on said driven shaft element, and a yieldable resiliently-controlled pawl engaging said engaging-means detachaby and mounted on said crank, to rotate the shafts when the crank is rotated in one direction only.

4. In combination, a driving-shaft, a driven shaft element mounted thereon, another driven shaft element, a universal coupling detachably connected between said driven shaft elements, a frame on which said second-mentioned driven shaft element is rotatably mounted, a frame on which said driving shaft is rotatably mounted, adjustable supporting connections between said frames, the first-mentioned driven shaft element having engaging-means adapted to detachably secure it to said universal-coupling, a crank loosely slidably mounted on the first-mentioned driven shaft element and having a yieldable resiliently-controlled pawl mounted thereon and adapted to engage the said engaging-means when the universal-coupling is removed, and the crank moved forward longitudinally on the shaft, to rotate the connected shaft elements in one direction.

5. In combination, a driving shaft, a driven shaft element mounted thereon, another driven shaft element, a universal coupling detachably connected between said driven shaft elements, a frame on which one of said driven shaft elements is rotatably mounted, a frame on which said driving shaft is rotatably mounted, adjustable supporting connections between said frames, the first-mentioned driven shaft element having a cylindrical detent thereon, a crank loosely slidably mounted on the first mentioned driven shaft element, a resiliently-controlled pawl mounted movably on said crank to engage said detent when the crank is rotated in one direction, after the universal-coupling has been uncoupled from said element, to rotate said element in one direction, said pawl yieldably riding over said detent when the said shaft element is rotated in a reverse direction.

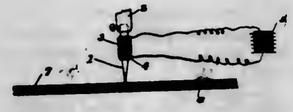
6. In combination, a driving-shaft, a frame on which said driving-shaft is rotatably mounted, an axle supporting said frame, a driven shaft element mounted on said driving-shaft, another driven shaft element, a universal-coupling detachably connecting said driven shaft elements, a frame on which said second-mentioned driven-shaft element is rotatably mounted, adjustable clips mounted movably on the last-mentioned frame and having engaging-means adapted to releasably engage the first-mentioned frame, the rear end of the last-mentioned frame being supported on the first-mentioned frame, and an adjustable clip movably mounted on the last-mentioned frame and having engaging-means adapted to releasably engage said axle, the rear part of the last-mentioned frame being bent downwardly and engaging said axle.

7. In combination, a driving-shaft, a frame on which said driving-shaft is rotatably mounted, an axle supporting said frame, a driven shaft element mounted on said driving-shaft, another driven shaft element, a universal-coupling detachably connecting said driven shaft elements, a frame on which said second-mentioned driven shaft element is rotatably mounted, adjustable clips mounted movably on the last-mentioned frame and having engaging-means adapted to releasably engage the first-mentioned frame, the rear end of the last-mentioned frame being supported on the first-mentioned frame, an adjustable clip movably mounted on the last-mentioned frame and having engaging-means adapted to releasably engage said axle, the said clip being formed of two parts, a turn-buckle adjustably connecting said parts, said last-mentioned frame having engaging-means, and a cam mounted on the last-mentioned frame to rock thereon in moving engagement with said engaging-means, said cam having a pivotal connection to one of the parts of the last-mentioned clip.

[Claims 2 and 3 not printed in the Gazette.]

1,271,684. METHOD OF PRODUCING SOUND-RECORDS. VICTOR HUGO EMERSON, New York, N. Y., assignor to Emerson Phonograph Co., Inc., a Corporation of New York. Filed June 19, 1915. Serial No. 34,990. (Cl. 41—24.)

1. The herein described method of producing a sound record in a solid volatile material by volatilizing portions thereof to form an undulatory groove therein, wherein the material removed in forming the groove is entirely removed by volatilization.



2. The herein described method of producing a sound record in a solid material composed of volatile and pyrographic elements by volatilizing and sublimating a portion thereof to form an undulatory groove therein, wherein the material removed in forming the groove is entirely removed by volatilization.

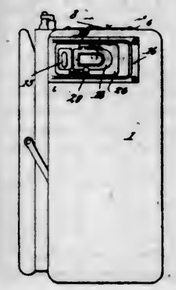
3. The herein described method of producing a sound record which consists of preparing a blank of volatile material, and burning therein a record groove by means of a suitable thermal stylus, wherein the material removed in forming the groove is entirely removed by volatilization.

4. The herein described method of producing a sound record which consists of preparing a blank of volatile material and burning therein a record groove by means of a thermo-electric stylus, wherein the material removed in forming the groove is entirely removed by volatilization.

8. The herein described method of producing a sound record, which consists of inscribing an undulatory groove in a solid volatile material by means of a diaphragm operated thermal stylus, having sufficient heat applied to said stylus to displace entirely partially by volatilization and partially by sublimation the contents of the grooves made thereby.

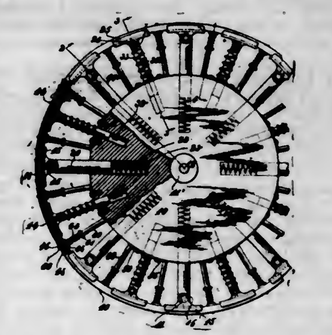
[Claims 5 to 7 not printed in the Gazette.]

1,271,685. CAMERA. JAMES E. ENDER, LIONEL W. CROMPTON, and WILLARD C. BURGERT, Tampa, Fla. Filed Mar. 1, 1916. Serial No. 81,490. (Cl. 95—1.1.)



In a device of the class described, a camera having a transverse compartment which is open at one end, and having an opening communicating with the compartment; means for holding a sensitized element in position for exposure in the camera; a plate bridging the opening and carried by the camera, the plate having a slot; a button mounted to reciprocate on the outer surface of the plate and having a projecting neck movable in the slot and extended into the compartment; a bowed spring attached to the neck and bearing against the inside of the plate; a tube secured to the neck and movable in the compartment, the tube having guides; an inscription slide mounted in the guides and coacting with the sensitized element in the camera; a closure for said open end of the compartment and carried by the camera; a plate slidable on the closure and connected with the tube, the plate having an opening through which the slide may be inserted; and a movable shutter carried by the last specified plate and constituting means for admitting light into the tube.

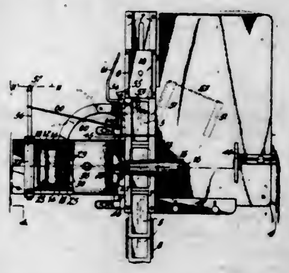
1,271,686. SPRING-WHEEL. JOHN ERDÉLYI, Rayland, Ohio. Filed Apr. 26, 1917. Serial No. 164,705. (Cl. 152—31.)



1. In a wheel, in combination, a disk, a series of tread-supporting elements yieldably carried by said disk, an endless rubber tread mounted upon said tread-supporting elements, and a plurality of members each consisting of an arcuate portion secured upon the periphery of said disk, a pair of rods formed integrally upon said arcuate portion, flanges formed upon said rods short of their free ends, said rubber tread being formed circumferentially with a series of openings, bushings fitting in said openings, elongated plates adapted to pass through the bushings in said tread and having sharp edges, said plates having stubs, and coiled springs surrounding the free ends of said rods and the stubs and pressing said plates against said tread.

2. In a resilient wheel, in combination, a disk, having a plurality of radial sockets, an annular rubber tread, rods telescoping in said sockets, heads formed upon said rods, a series of shoes pivotally mounted upon said heads and carrying said annular rubber tread, springs against which said rods move within said sockets, rods projecting from the periphery of said disk and having spring seats, said tread formed with a plurality of radial openings, elongated plates formed with radial extensions having sharp edges projecting through said openings, said elongated plates being formed with stubs, and springs connecting the seats of said last-named rods and the stubs and urging said plates against the inner periphery of said tread, said shoes slidably disposed relatively to said rubber tread and adapted to be restrained in slidable movement by said plates.

1,271,687. ADDRESSING-MACHINE. GUY J. EVANS, Buffalo, N. Y. Filed Sept. 24, 1915. Serial No. 52,842. (Cl. 101—51.)



1. An addressing machine comprising means for supporting the article to be addressed in the printing position, means for supporting an address stencil over said article at the printing position, an impression device movable horizontally forwardly toward and backwardly from the printing position and vertically toward and from

the upper side of said stencil for producing an impression of said stencil on said article, and a lifting plate movable horizontally toward and from said printing position underneath said stencil and having an inclined front edge which is adapted to engage the underside of said article with a wedge action and lift the same toward said stencil.

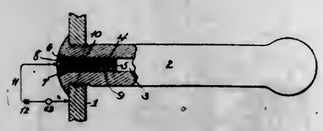
6. An addressing machine comprising means for supporting the article to be addressed in the printing position, means for supporting an address stencil over said article at the printing position, an ink plate arranged in rear of said stencil support, an impression roller movable horizontally over said ink plate and vertically toward and from said stencil, a carriage on which said impression roller is mounted, an ink distributing roller mounted on said carriage and engaging with said impression roller, an ink supply roller engaging with said distributing roller, and an ink supply plate which is mounted on said carriage and from which ink is supplied to said supply roller.

10. An addressing machine comprising means for supporting the article to be addressed in the printing position, means for supporting an address stencil over said article at the printing position, an ink plate arranged in rear of said stencil support, an impression roller movable horizontally over said ink plate and vertically toward and from said stencil, a carriage on which said impression roller is mounted, two ink distributing rollers mounted on said carriage and engaging with the upper side of said impression roller on opposite sides of a line drawn vertically through the axis of said impression roller, and an ink supply plate arranged on said carriage and inclining toward said distributing rollers.

12. An addressing machine comprising means for supporting the article to be addressed at the printing position, means for supporting an address stencil over said article at the printing position, an impression device for producing an impression of said stencil on said article comprising an impression roller adapted to engage said stencil and a carriage supporting said roller and movable forwardly and backwardly, and means for discharging the article from the printing position operated by motion derived from said carriage comprising an ejector finger movable forward and from said printing position, an ejector arm carrying said finger, a rock shaft carrying said ejector arm, a trip arm connected with said shaft, and a trip dog movable with said carriage and adapted to trip over said trip arm during the forward movement of said carriage but to engage said trip arm and turn the latter together with said ejector finger and associated parts during the backward movement of said carriage.

[Claims 2 to 5, 7 to 9, 11, and 13 to 15 not printed in the Gazette.]

1,271,688. STAY-BOLT STRUCTURE. JOHN ROGERS FLANNERY, BENJAMIN E. D. STAFFORD, and ETHAN I. DODDS, Pittsburgh, Pa., assignors to Flannery Bolt Company, Pittsburgh, Pa. Filed Oct. 25, 1917. Serial No. 198,477. (Cl. 85—1.5.)

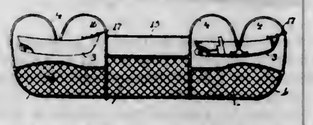


1. The combination with a stay bolt having a bore, of a container within said bore, a pin entering said container, a spring located within the container, a block of non-conducting soluble material between the spring and pin, and an electric circuit including said pin and spring and a signal device.

2. The combination with a stay bolt having a bore, of a container located within said bore and having openings at both ends, a plug closing the bore, a pin passing through said plug, a coiled spring located within the container, a block of non-conducting soluble material disposed between said coiled spring and pin, and an electric circuit including the coiled spring and pin and a visual signal.

[Claim 2 not printed in the Gazette.]

1,271,689. TORPEDO-NETTING. NEWELL T. FOGG, Sanford, Me. Filed May 7, 1917. Serial No. 166,950. (Cl. 114—240.)

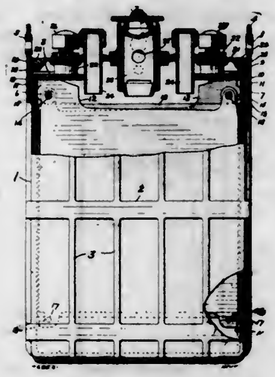


1. A protection against torpedoes and the like, comprising a comparatively inflexible frame, intercepting means carried by said frame, and a boat pivotally connected to each end of said frame, the pivotal connection to each boat being at substantially its longitudinal and transverse center and adapted to permit the boat to be turned to any point in the compass independently of the frame.

4. A protection against torpedoes and the like, comprising a comparatively inflexible frame, intercepting means carried by said frame, and a boat pivotally connected to each end of said frame, the pivotal connections being adapted to permit the boats to be turned to any points in the compass independently of said frame.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,271,690. SECONDARY OR STORAGE BATTERY. BRUCE FORD, Philadelphia, Pa. Filed Jan. 29, 1915. Serial No. 5,002. (Cl. 204—29.)

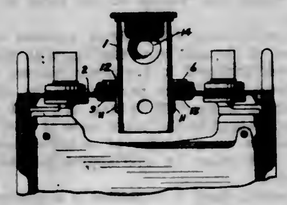


3. A storage battery for boats and the like comprising the combination of a jar provided with upstanding ears and with oppositely disposed inclined seats, bus bars having feet resting upon said seats, plates of like polarity suspended at one side from each bus bar, rods supported by the plates and from which the other sides of the plates are suspended, projections at the lower parts of the plates, flanged reinforcements in the material of the jar walls arranged for coöperation with the ears and seats, and cushions between the seats and bus bar feet, substantially as described.

[Claims 1, 2, and 4 to 8 not printed in the Gazette.]

1,271,691. SECONDARY OR STORAGE BATTERY. BRUCE FORD, Philadelphia, Pa. Filed Dec. 3, 1917. Serial No. 205,024. (Cl. 204—29.)

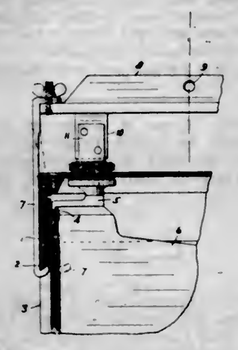
2. In a storage battery having cover and stand-pipe members, the combination of a right-hand thread on one member and a left-hand thread on the other member, a locking ring having a right-hand thread on one circumference and a left-hand thread on the other circumference to engage the threads of both members, and a feather for



preventing relative rotation and permitting relative endwise movement of said members.

[Claims 1, 3, and 4 not printed in the Gazette.]

1,271,692. ELECTRIC STORAGE BATTERY. BRUCE FORD, Philadelphia, Pa. Filed Mar. 29, 1918. Serial No. 225,456. (Cl. 204—29.)



2. The combination of a storage battery jar provided internally with a plate-supporting ledge and provided at its top with a reinforcement having an undercut seat arranged on the outside of the jar and below the ledge, and a yoke having hooks for detachably engaging said seat.

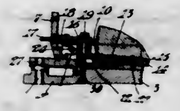
[Claims 1, 3, and 4 not printed in the Gazette.]

1,271,693. WRENCH. CLARENCE M. FOSTER, Toledo, Ohio. Filed Apr. 3, 1918. Serial No. 226,460. (Cl. 81—169.)



In a wrench, a tubular handle; a nut at one end of the handle; means for holding the nut on the handle for rotation but against longitudinal movement; a plunger threaded at one end into the nut and provided with a movable jaw disposed at the other end of the handle, the jaw having an opening; a fixed jaw in the opening; and means for securing the fixed jaw to the handle.

1,271,694. MACHINE FOR LEVELING SPRING-HEEL SHOES. DANIEL M. FREY, Jr., Philadelphia, Pa., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Sept. 29, 1915. Serial No. 53,180. (Cl. 12—38.)



2. In a machine for leveling spring heel shoes after the sole and heel wedge have been secured thereto, the combination of opposed leveling pressure members, one of said members adapted to engage the tread surface of the outersole, and the other of said pressure members having substantially flat engaging portions for supporting the top surface of the wedge from the bottom of the crease to the edge of the wedge about the exterior of the heel to flatten the lines of the crease as the parts between said members are subjected to a leveling pressure.

3. In a machine of the class described, the combination of a pressure member for engaging the interior of the heel portion of a spring heel shoe, a leveling member having a substantially flat leveling surface for engaging and supporting the top portion of the wedge uniformly from the bottom of the crease to the edge of the wedge about the heel of the shoe, and a leveling plate for engaging the tread surface of the outersole about the heel of the shoe opposite to said flat surface, said leveling members and plate being relatively movable to subject the spring heel between them to a leveling pressure to flatten the edge of the wedge about the heel of the shoe, and straighten the lines of the crease after the spring heel has been nailed to the shoe.

11. In a machine for nailing and leveling the heel portions of spring heel shoes, the combination of a nail block and opposed pressure member, a spring heel leveling plate mounted for movement to and from operative position over the nail block and having an inclined portion opposed to the break of the heel when in operative position, and an edge supporting member in opposed relation to the nail block and having a substantially flat surface opposite pressure exerting portions of the leveling plate when in operative position and extending about the heel to a point beyond the incline of the wedge to directly support the edge of the wedge throughout its contour and a portion of the edge of the outersole beyond the incline of the wedge when the leveling pressure is applied.

[Claims 1, 4 to 10, and 12 not printed in the Gazette.]

1,271,695. VALVE-CAP. HERMAN FUCHS, St. Louis, Mo. Filed Nov. 15, 1916. Serial No. 131,509. (Cl. 152—12.)

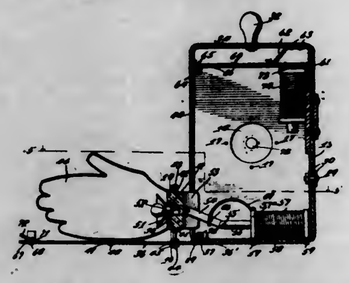


1. In combination with a valve stem, a cap comprising an externally threaded cup portion slidably engageable

upon the valve stem, a gasket within said cup portion engageable upon the end of the stem, a metallic sleeve threaded upon the valve stem and having an internally threaded flange engaged upon the exterior of the cap, and a gasket between said sleeve and the end of said cup portion.

2. In combination with a valve stem, a cap comprising a cup portion disposable externally upon the valve stem, a concentric externally threaded plug portion engageable within the valve stem and provided with a bore terminating in a recess receiving the valve plunger, and a tubular gasket within said bore and extending beyond the end of said plug for engagement with the valve seat within the stem.

1,271,696. AUTOMOBILE-SIGNAL. MANIOUS GARL, Akron, Ohio. Filed Mar. 27, 1917. Serial No. 157,730. (Cl. 177—329.)

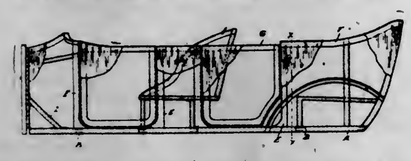


1. In a signal of the class described the combination of a casing, a door pivotally mounted upon said casing, an indicating element carried by said door, a clip provided with a pair of jaws carried by said door, a door pivotally mounted upon said casing, a solenoid carried by said casing, a core carried by said solenoid and engaging said door, means for energizing said solenoid whereby said core will move said door to a closed position, and means adapted to be positioned between the jaws of said clip for retaining said door in a closed position.

5. In a signal of the class described the combination of a casing, a door pivotally mounted upon said casing, an indicating element carried by said door, a vertically-movable lock-arm pivotally mounted upon said casing, a spring carried by said casing and bearing upon said arm for normally urging said arm in one direction, a solenoid carried in said casing and having a core, a spring clip carried by said door and engaging said arm whereby said door will be retained in a closed position, said solenoid being adapted to be energized so as to urge said arm against the tension of said spring for causing said arm to disengage said clip whereby said door will be free to move, and means for moving said door to a closed position.

[Claims 2 to 4 and 6 not printed in the Gazette.]

1,271,697. METALLIC VEHICLE-BODY. WILLIAM D. GEROW and FRANKLIN O. PRUSIA, Detroit, Mich. Filed Dec. 2, 1916. Serial No. 134,569. (Cl. 21—7.)



1. In a metallic body for vehicles, a frame comprising fashioned metallic bars of channel cross section arranged with the sides of the channel conforming to the curvature of the metallic sheets to be secured thereto.

3. In a metallic body for vehicles, a frame formed of curved metallic bars of channel cross section, said bars intersecting and overlapping each other, the overlapping portions being spot-welded, and sheet-metal panels overlying said frame and welded to the sides of the bars thereof.

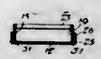
5. In a metallic body for vehicles, a frame comprising a sill formed of channel cross section, with the parallel flanges thereof arranged in horizontal planes, brace-bars extending between different portions of the sill, curved posts extending upward from the sill, and a curved border frame secured to the upper ends of said posts, all of said members being formed of metallic channel bars secured to each other by overlapping portions of the flanges thereof.

7. In a metallic body for vehicles, a supporting frame, comprising a sill formed of a metallic channel bar, the parallel flanges of which lie in horizontal planes, the web portion of said bar being inclined to conform to the contour of the body and the lower flange projecting beyond the edge of the upper flange and a floor board resting upon said lower flange and abutting against said upper flange.

9. In a metallic body for vehicles, the combination with a fashioned frame, of inner and outer curved sheets to be secured thereto, said frame comprising fashioned metallic bars of channel cross section arrangement intermediate said sheets with the sides of the channels conforming to the curvature of the sheets.

[Claims 2, 4, 6, and 8 not printed in the Gazette.]

1,271,698. BOX. DAVID M. GOODRICH, Mount Kisco, N. Y., assignor to United Paper Box Company of America, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Oct. 20, 1916. Serial No. 126,644. (Cl. 229—6.)



1. A box-element having a bottom, a neck projecting at right-angles from and integral with said bottom, a rim of less height than and surrounding said neck with its lower edge in substantial register with said bottom, a cover-strip for said neck having a marginal portion folded over the upper edge of the neck and downwardly against its inner surface to which it is adhered, a binder-strip for said rim having a marginal portion folded over the upper edge of the rim and downwardly against its inner surface to which it is adhered and another marginal portion bent over and secured to the lower face of said bottom, substantially as described.

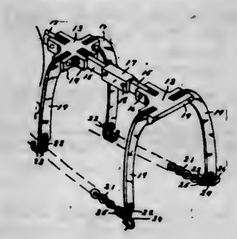
3. A box-element having a bottom and a neck projecting therefrom at right-angles, a rim of less height than and surrounding said neck with its lower edge in substantial register with said bottom, and a cover-strip for said rim having a marginal portion folded over the upper edge of the rim and downwardly against its inner surface to which it is adhered, substantially as described.

[Claim 2 not printed in the Gazette.]

1,271,699. ANTISKID TIRE-GRIP. HAROLD D. GREENE, Britt, Iowa. Filed July 16, 1917. Serial No. 180,728. (Cl. 152—16.)

1. Spaced side chains formed in sections, devices adapted to connect respective sections of each chain detachably, one of said devices being formed of a single length of metal having terminal open hooks lying in planes at right angles to each other and adapted loosely to engage spaced chain links, all of said connecting devices being formed with bearings between their ends, U-shaped links engaging said bearings at their ends, and anti-skid members connecting laterally-opposed U-shaped links and adapted to extend across the tread of a tire.

3. An anti-skid tire grip, comprising circumferentially spaced tread blocks, curved and laterally extended grip bars pivoted to said tread blocks, triple-member tread bars alternating with and pivoted at extreme ends to said tread blocks and in line with central portions of the blocks, and flexible means connecting the free ends of the grip bars.



5. An anti-skid tire grip, comprising circumferentially spaced tread blocks formed with laterally and longitudinally projecting bifurcated lugs, multi-section tread bars connecting said tread blocks through pivotal connections to the longitudinally extending lugs, said tread bars including channeled intermediate sections embracing the end sections, curved, laterally extending grip bars pivoted to the laterally extended lugs of said tread blocks, and flexible connections between free ends of said grip bars.

[Claims 2, 4, 6, and 7 not printed in the Gazette.]

1,271,700. APPARATUS FOR USE IN CONNECTION WITH MOLDING, SHAPING, OR OTHERWISE WORKING DOUGH. EDGAR GREENWOOD, Bradford, and ALFRED SHARP, Manchester, England. Filed Aug. 18, 1917. Serial No. 186,993. (Cl. 107—9.)



1. A machine for working dough comprising a pair of spindles, and mechanism for actuating said spindles to simultaneously twist and stretch the dough.

4. In apparatus for molding, shaping or otherwise working a clot of dough in combination, a pair of rotating spindles placed tandem with their shaped ends at a slight distance apart; means for driving the said spindles in the same direction but at different speeds; means for causing the rotating spindles to recede from one another during contact with the dough and after the engagement of the clot of dough with their shaped ends and return to their initial positions after the molded clot has been removed; a table clearer with means for partially rotating the same to strip the stretched and twisted dough from the ends of the spindles; a pivoted adjustable depressible table above which the dough is delivered; a catch member acted on by a projection; and springs to return the parts to their nomal positions substantially as and for the purposes herein set forth.

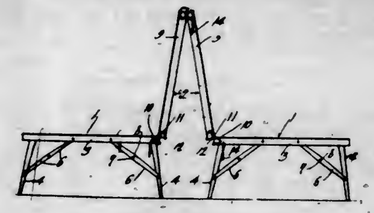
7. A machine for working dough comprising a pair of spindles, means for rotating said spindles at different speeds and means for moving said spindles toward and away from each other during rotation thereof.

10. A machine for working dough comprising a pair of spindles, mechanism for rotating said spindles at different speeds in the same direction, and for moving said spindles toward and away from each other during the rotation thereof, a movable supporting member biased to one position, and means actuated by the depression of said member for setting into operation that portion of said mechanism which moves said spindles toward and away from each other.

14. A machine for working dough comprising a pair of rotatable spindles arranged end to end, means for rotating said spindles at different speeds, means for causing said spindles to recede one from the other after said spindles have rotated a predetermined number of times, and movable means for removing the dough from said spindles.

[Claims 2, 3, 5, 6, 8, 9, 11 to 13, 15, and 16 not printed in the Gazette.]

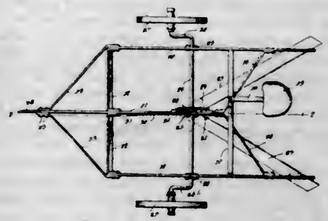
1,271,701. CHAIR-COT. JAMES EMMETT GRIFFITH, Austin, Tex. Filed Mar. 25, 1918. Serial No. 224,591. (Cl. 5—5.)



1. A chair-cot, including end frames, legs pivotally attached to the end frames and foldable therewithin, hingedly attached central frames to be elevated to draw the end frames together and form seats hinged to the end frames, and a covering secured on the frames.

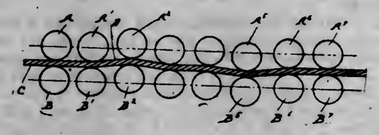
[Claims 2 and 3 not printed in the Gazette.]

1,271,702. AGRICULTURAL IMPLEMENT. ADOLF GRUENSICK, American Falls, Idaho. Filed Mar. 9, 1917. Serial No. 153,643. (Cl. 97—34.)



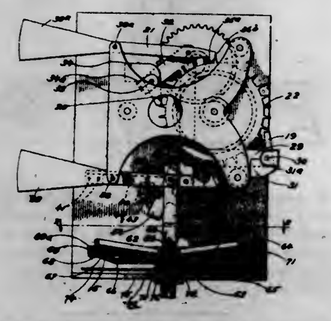
An agricultural implement comprising a carriage having longitudinally extending side beams, a longitudinally extending central beam, the central beam terminating short of the rear ends of the side beams and extending beyond the forward ends of the side beams, cross bars connecting the forward ends of the side beams with the central beam at a point intermediate the length of the central beam, diagonally extending bracing bars connecting the forward ends of the side beams with the forward end of the central beam, diagonally extending bracing bars connecting the rear end portion of the central beam with the rear end portions of the side beams, a V-shaped ground engaging blade having its diverging side arms connected at their forward ends and engaged by the central beam, the rear end portions of the side arms of the ground engaging blade being engaged by the side beams, an axle connected with the beams and provided with wheel spindles and supporting wheels mounted upon the wheel spindles.

1,271,703. METHOD OF FORMING SHEET-METAL PRODUCTS. F WALTER GUIBERT, Detroit, Mich. Filed Oct. 28, 1916. Serial No. 128,191. (Cl. 29—180.)



The process of forming sheet-metal articles, free from strain marks, comprising the transverse bending or working of cold-rolled sheet-metal and the subsequent drawing or stretching of the same to fashion the article.

1,271,704. SECONDARY-CLOCK MOVEMENT. AUGUSTUS L. HAHL, Chicago, Ill. Filed Oct. 29, 1912. Serial No. 728,339. (Cl. 58—42.)



1. In a secondary clock movement, an escapement wheel, pawls disposed in substantially diametrically opposite operative relation to said wheel, a single pawl carrier having relatively immovable fulcrums thereon for said pawls arranged to impart equal motions to said pawls upon movement of said pawl carrier, said pawls being arranged to act alternately in driving said wheel.

12. In a secondary clock movement, an escapement wheel, pawls disposed in operative relation to said wheel, a single inflexible pawl carrier for both said pawls, a pivoted mounted lever pivoted to said pawl carrier to guide the same, and a movable member associated with said lever for imparting movement thereto.

14. In a secondary time movement, a single sheet diaphragm, means actuated by said diaphragm, a casing for said diaphragm, resilient means for holding the peripheral portion of said diaphragm in air tight engagement with said casing, and means for transmitting motion from said diaphragm to said first named means.

19. In a secondary clock movement, an escapement wheel, pawls disposed in operative relation to said wheel, a single pawl carrier for both of said pawls, and means for imparting a parallelogram movement to said carrier, whereby equal movements are imparted to said pawls.

[Claims 2 to 11, 13, 15 to 18, 20, and 21 not printed in the Gazette.]

1,271,705. BEAN-HARVESTER. HERMAN F. HARDY, Jason, N. C. Filed Nov. 3, 1917. Serial No. 200,153. (Cl. 56—1.)



A harvester comprising a body provided at its sides with slots, journaled boxes adjustably mounted in the slots, means for securing the boxes in adjusted position, wheels having axles journaled in the boxes and plates mounted on the sides of the body and bringing the slots beyond the inner surfaces of the boxes.

1,271,706. STEERING MECHANISM. HENRY T. HAZARD, Los Angeles, Cal. Filed Aug. 30, 1916. Serial No. 117,750. (Cl. 21—199.)



1. A steering mechanism comprising a pair of steering knuckles, wheel spindles thereon, steering arms on the steering knuckles at right angles to the wheel spindles, tie rod supporting arms on the steering knuckles arranged at an angle to the steering arms, a tie rod connecting the tie-rod supporting arms, a rock shaft disposed in a vertical plane, a pair of divergent steering cranks on said rock-shaft arranged at an angle on opposite sides of the center of the rock-shaft corresponding to the angle between the tie rod supporting arms and the steering arms, a pair of drag links connected to steering arms and extending toward each other substantially parallel with the tie rod with their inner ends overlapping and projecting past the rock-shaft into engagement with the steering crank on the opposite side of the rock shaft, and a worm gear on the rock shaft interposed between the steering cranks, a steering column, and a worm on said steering column meshing with the worm gear.

2. A steering mechanism comprising a pair of vertically pivoted steering knuckles mounted at the opposite ends of a vehicle axle, spindles extending outwardly from said knuckles, steering arms secured to said knuckles and disposed substantially at right angles to the spindles, tie rod supporting arms secured to said knuckles and disposed at equal angles to the steering arms and inclined toward each other; said arms being shorter than the steering arms and of equal length; a rigid tie rod pivotally connecting the tie rod supporting arms, a rock-shaft disposed in a vertical plane at a point in the rear of the tie rod and between the ends thereof, a pair of steering cranks secured to said rock shaft; said cranks extending toward the tie rod and being equal in length to the steering arms; said cranks also being disposed at equal angles to a center line parallel to the center lines of the steering arms and the same as the angle between the steering arms and the tie rod supporting arms; a drag link pivotally connected to the end of one steering arm and passing to the end of the farthermost steering crank, to which it is pivotally connected, a drag link pivotally connected to the end of the opposite steering arm and pivotally connected to the other steering crank, and means whereby the rock-shaft with its steering cranks may be actuated.

3. A steering mechanism comprising a pair of vertically pivoted steering knuckles mounted at the opposite ends of a vehicle axle, spindles extending outwardly from said knuckles, steering arms secured to said knuckles and disposed substantially at right angles to the spindles, tie rod supporting arms secured to said knuckles and disposed at equal angles to the steering arms and inclined toward each other; said arms being shorter than the steering arms and of equal length; a rigid tie rod pivotally connecting the tie rod supporting arms, a rock-shaft disposed in a vertical plane at a point in the rear of the tie rod and between the ends thereof, a pair of steering cranks secured to said rock-shaft; said cranks extending toward the tie rod and being equal in length to the steering arms; said cranks also being disposed at equal angles to a center line parallel to the center lines of the steering arms and the same as the angle between the steering arms and the tie rod supporting arms; a drag link pivotally connected to the end of one steering arm and passing to the end of the farthermost steering crank to which it is pivotally connected, a drag link pivotally connected to the end of the opposite steering arm and pivotally connected to the other steering crank, a worm wheel secured upon the rock-shaft and positioned between the steering cranks, a worm gear in mesh with said wheel, and a steering column upon which the worm gear is mounted and by which it is rotated.

1,271,707. COMBINATION RUBBER AND LEATHER FOOTWEAR. EDWARD HEISER and PETER BINKLE, Berlin, Ontario, Canada, assignors to The Goodyear's Metallic Rubber Shoe Company, a Corporation of Connecticut. Filed June 30, 1916. Serial No. 106,875. (Cl. 36—4.)



1. An article of footwear comprising an upper, a top underlying and secured to the uppermost edge of said upper, a sole, said top having a portion terminating adjacent said edge, and an extension projecting therefrom to a position adjacent said sole providing a smooth continuous surface lying against the inner surface of said upper.

3. An article of footwear comprising a rubber upper, a leather top formed of two quarters joined together by a seam at the back and having their lower edges underlying and forming a lap-joint with the uppermost edge of said upper, an extension formed by complementary pieces of leather extending respectively from the lower back portion of said quarters and joined together along a seam alined with the seam of said quarters, and a sole, said extension projecting to a position adjacent said sole and providing a surface flush with the inner surface of said quarters and lying freely against the inner back surface of said upper.

5. A boot or shoe comprising an upper member and a top member, said members being secured together along their upper and lower margins respectively to form a lapped joint, the inner lap forming an exposed offset edge at approximately the height of the said upper member for a portion of the distance about the boot or shoe terminating at the heel portion, the inner lap at said heel portion being extended for a substantial distance beyond said edge.

[Claims 2 and 4 not printed in the Gazette.]

1,271,708. BURIAL-VAULT. HERMAN DICK HORSTMAN, Syracuse, Nebr. Filed July 9, 1917. Serial No. 179,386. (Cl. 72—7.)



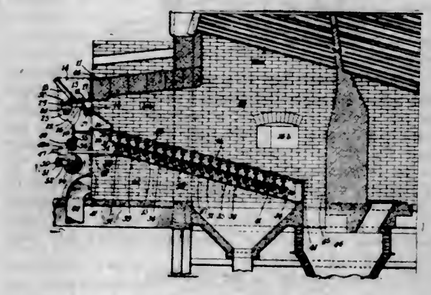
A vault of plastic material capable of hardening, having sectional sides, said sections having rods embedded in the material thereof, and means at the ends of the abutting sections for engaging the rods to tie the sections together, the connection between the rods of the side sections consisting of crosses embedded in one section and opening at the inner and outer faces of the section, the rod of the section being received in one end of the cross and the rod of the other section being adapted for engaging the other end of the cross, the means for securing the last named rod to the cross being engageable with the rod upon either face of the section.

1,271,709. SLED. SOPHUS K. HOLTH, Edinburg, N. D. Filed Apr. 21, 1917. Serial No. 163,608. (Cl. 21—48.)



A device of the character described comprising a standard having a U-bolt fixed thereto, a yoke including laterally spaced arms each provided with a plurality of transversely alined apertures, a loop formed intermediate the ends of the said yoke and engageable with the said U-bolt whereby the said spaced apart arms are normally maintained in superposed relation, a beam of a width equal to the distance between the said arms of the yoke whereby the said arms may embrace the beam, the embraced portion of the beam having a longitudinally spaced opening adapted to be alined with the opening in the said yoke, and a removable fastening element adapted for reception in the opening in the arm of the yoke and in the said beam.

1,271,710. AUTOMATIC FURNACE-GRATE. CHARLES A. HORN, New York, N. Y., assignor of one-fourth to W. Everett Rundle, East Orange, N. J., and one-fourth to Harold E. Lombard, Bloomfield, N. J. Filed June 2, 1917. Serial No. 172,416. (Cl. 110—39.)



1. In an automatic furnace-grate, in combination, a plurality of transverse grate-sections or units, and mechanism for giving the same in succession from front to rear of the furnace a combined vertical and horizontal movement of reciprocation, whereby the fuel-bearing surface of the grate is given a wave-like motion traveling from front to rear.

5. In an automatic furnace-grate, a grate-section or unit comprising a transverse shaft, a plurality of brackets pivotally mounted on the shaft and extending forwardly therefrom, roller bearings for the brackets, a grate-top carrier-bar mounted on the brackets, and a plurality of grate-tops mounted on the carrier-bar.

7. In an automatic furnace-grate, a grate-section or unit comprising a transverse supporting shaft, a plurality of brackets mounted on the shaft and extending forwardly therefrom, a grate-top carrier-bar arranged in front of the shaft and fixed on the brackets, a plurality of grate-tops mounted on the carrier-bar, and mechanism for swinging the carrier-bar about the axis of the shaft.

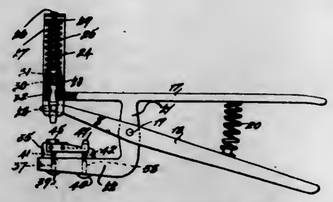
11. In an automatic furnace-grate, in combination, a plurality of transverse grate-sections or units each capable of combined vertically and horizontally reciprocatory movement, a plurality of forwardly extending reciprocatory links connected at their rear ends with the respective grate sections to actuate the same, a crosshead fixed on the forward end of each link, the crossheads being in transverse alinement when the links are in their rearmost positions, a series of cams to advance the crossheads and links having their primary edges in transverse alinement whereby to normally advance all the crossheads and links simultaneously, and a series of adjustable stroke-limiting stops adapted to restrict the rear-

ward movement of the crossheads and links and hold the former successively farther from the primary edges of the cams whereby the links will be advanced and the grate-sections actuated in succession when the cams are operated.

14. In an automatic furnace-grate, in combination, a plurality of movable transverse grate-sections or units, a plurality of forwardly extending actuating links connected at their rear ends to the grate-sections, a plurality of crossheads fixed on the front ends of the links, means cooperating with the crossheads to cause the same and the links to move forwardly and rearwardly, and a plurality of guide-rollers under the crossheads of support the same.

[Claims 2 to 4, 6, 8 to 10, 12, 13, and 15 not printed in the Gazette.]

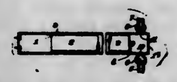
1,271,711. COMBINATION BUTTON-FASTENER AND EYELETING TOOL. CHARLES HORVÁTH, New Brunswick, N. J. Filed Feb. 21, 1918. Serial No. 218,421. (Cl. 218—20.)



1. A holder consisting of a plurality of pivotally connected arms, a supporting element carried by one of said arms for anvils or the like, a movable pin also carried by said arm located over said support, said pin being arranged for the attachment of a plurality of different tools to coöperate with the different anvils carried by said support, a spring surrounding said pin arranged to restore same to normal position after the operation thereof, a yoke pivotally connected at one end to the other of said arms, and means to detachably connect said yoke to the upper end of said pin.

[Claim 2 not printed in the Gazette.]

1,271,712. UTILIZING AN EXPANSIVE FORCE. HERBERT ALFRED HUMPHREY, London, and WILLIAM JOSEPH RUSSELL, Dudley, England, assignors to Humphrey Gas Pump Company, a Corporation of New York. Filed May 16, 1912. Serial No. 697,792. (Cl. 230—27.)

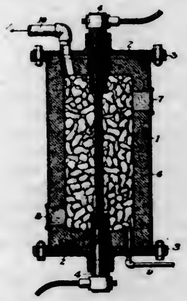


1. An elastic fluid pump operating without a fly wheel, which comprises a power chamber having inlet and discharge valves, a play pipe in operative relationship therewith containing space for a reciprocating piston, means forming a space in advance of the piston for an elastic fluid with inlet and discharge valves, a piston adapted to be actuated in one direction, by the energy of a primary actuating medium to compress and deliver elastic fluid, and in the opposite direction, the return stroke, by elastic fluid pressure, and means comprising piston, cylinder, and discharge port suitably located with respect to the compression space beyond, whereby the total energy stored in the elastic fluid utilized for causing the return stroke is maintained approximately constant.

2. An elastic fluid pump operating without a fly wheel which comprises a power chamber having inlet and discharge valves, a play pipe in operative relationship therewith containing space for a reciprocating piston, means forming a space in advance of the piston for an elastic fluid with inlet and discharge valves, a piston adapted to be actuated in one direction, by the energy of a primary actuating medium to compress and deliver elastic fluid, and in the opposite direction, the return stroke, by elastic fluid pressure, and means forming and utilizing an elastic cushion in a region other than that in which the primary actuating medium is delivered, for limiting the return stroke.

3. An elastic fluid pump operating without a fly wheel, which comprises a power chamber having inlet and discharge valves, a play pipe in communication therewith containing a space for a reciprocating mass and for an elastic fluid cushion, a mass having sufficient weight to enable it to absorb energy at the beginning of its movement and to give out energy toward the end thereof adapted to be actuated by a primary actuating medium acting directly thereon in said power chamber, and to act in coöperation with the elastic fluid cushion, to reciprocate, inlet and discharge valves for elastic fluid operating to admit and discharge the elastic fluid into and from the space in advance of said reciprocating mass, and means comprising piston, cylinder, and discharge port suitably located with respect to the compression space beyond whereby the total energy stored in the elastic fluid utilized for causing the return stroke is maintained approximately constant.

1,271,713. METHOD FOR THE PRODUCTION OF SILICON TETRACHLORID. OTIS HUTCHINS, Niagara Falls, N. Y., assignor to The Carborundum Company, Niagara Falls, N. Y., a Corporation of Pennsylvania. Filed Oct. 30, 1917. Serial No. 199,283. (Cl. 204—31.)



1. The process of producing silicon tetrachlorid which consists in passing chlorin over silicon carbid heated to a temperature sufficient to cause the chlorin to decompose the silicon carbid and combine with the silicon.

2. The process of producing silicon tetrachlorid by passing chlorin over silicon carbid heated to a temperature of at least 1000° C.

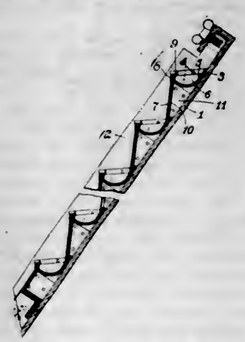
3. The process of producing silicon tetrachlorid by passing chlorin through a mass of silicon carbid which has been heated to 1000° C. by means of electrically developed heat.

4. The process of producing silicon tetrachlorid which comprises heating silicon carbid to a temperature of at least 1000° C., and passing dry chlorin over the heated silicon carbid.

1,271,714. GOLD-SAVING APPARATUS. ADOLPH J. JARMUTH, Seattle, Wash., assignor to Erastus S. Bennett, New York, N. Y. Filed Dec. 17, 1915. Serial No. 67,433. (Cl. 83—67.)

1. In combination, in a gold saving apparatus, a tank side, a support, a mercury holding receptacle composed of thin sheet metal held by said support and a reinforcing piece removably mounted on and overlapping the edge of said mercury holding member, over which reinforcing piece the material must pass, thereby protecting the said edge, substantially as described.

2. In combination, in a gold saving apparatus, a tank side, a mercury holding pocket having an apron depending from its edge and a reinforcing member removably held at and overlapping the point of junction between the mercury pocket and apron and protecting said junction point from wear of the passing material, substantially as described.



3. In combination in a gold saving apparatus, a tank side, a mercury holding pocket composed of thin sheet metal, a support for said pocket and a reinforcing piece of inverted U-shape in cross section removably mounted on the edge of said pocket over which the material must pass, whereby the said edge is protected from the wear resulting from the passage of the material, substantially as described.

1,271,715. RAZOR-BLADE-SHARPENING MACHINE. SAMUEL KANNER, Bronx, N. Y., assignor to The Royal Stropper Co., Inc., New York, N. Y., a Corporation of New York. Filed Aug. 16, 1917. Serial No. 186,454. (Cl. 51—16.)



1. A razor-blade sharpener of the character described comprising an open-top box, a pair of cylindrical sharpening rolls therein exposed at the open top of said box and geared together to have reverse rotary motion, a frame pivotally mounted on said box and near one side thereof and comprising side arms and a connecting hand piece whereby the free end of the frame may be manually pressed toward said rolls, a bladeholder rotatably mounted in said frame nnd movable therewith and adapted to detachably hold a blade to be pressed against said rolls and sharpened thereby, a spring acting to move said frame to its upper position above and from said rolls, and blade reversing means engaging the blade holder for, on the movement of said frame, automatically reversing said blade-holder and blade so that the opposite side of the edge of the blade may be presented for sharpening, ing, said sharpener as a whole being adapted to be held in one hand between the fingers and thumb thereof and having means by which with the other hand the said rolls may be rotated.

2. A razor-blade sharpener of the character described comprising an open-top box, a pair of cylindrical sharpening rolls therein exposed at the open top of said box and geared together to have reverse rotary motion, a frame connected with and extending above said box and movable toward and from said rolls, a blade-holder rotatably mounted in said frame and movable therewith and adapted to detachably hold a blade to be sharpened, a spring acting to move said frame to its upper position above and from said rolls, and blade reversing means engaging the blade holder for automatically, on the movement of said frame, reversing said blade-holder and blade so that the opposite side of the edge of the blade may be presented for sharpening, said sharpener as a whole being adapted to be held in one hand between the fingers and thumb thereof and having means by which with the other hand the said rolls may be rotated.

3. A razor-blade sharpener of the character described comprising an open-top box, a pair of cylindrical sharpening rolls therein exposed at the open top of said box and geared together to have reverse rotary motion, a frame pivotally connected with and extending above said box and movable toward and from said rolls, a blade-holder rotatably mounted in said frame and movable therewith and adapted to detachably hold a blade to be sharpened, a spring acting to move said frame to its upper position above and from said rolls, and blade reversing means engaging the blade holder on the downward movement of said frame, for automatically reversing said blade-holder and blade so that the opposite side of the edge of the blade may be presented for sharpening, said sharpener as a whole being adapted to be held in one hand between the fingers and thumb thereof and having means by which with the other hand the said rolls may be rotated.

4. A razor-blade sharpener of the character described comprising an open-top box, a pair of cylindrical sharpening rolls therein exposed at the open top of said box and geared together to have reverse rotary motion, a frame pivotally mounted on said box and near one side thereof and comprising side arms and a connecting hand-piece whereby the free end of the frame may be manually pressed toward said rolls, a blade-holder rotatably mounted in said frame and movable therewith and adapted to detachably hold a blade to be pressed against said rolls and sharpened thereby, a spring acting to move said frame to its upper position above and from said rolls, and blade reversing means engaging the blade holder on the downward movement of said frame for automatically reversing said blade-holder and blade so that the opposite side of the edge of the blade may be presented for sharpening, said sharpener as a whole being adapted to be held in one hand between the fingers and thumb thereof and having means by which with the other hand the said rolls may be rotated, and said means for rotating said rolls being a crank disposed at one side of the box and connected with one of said rolls, and said means for reversing the blade-holder and blade being disposed at the other side of said box.

5. A razor-blade sharpener of the character described comprising an open-top box, a pair of cylindrical sharpening rolls therein exposed at the open top of said box and geared together to have reverse rotary motion, a frame connected with and extending above said box and movable toward and from said rolls, a blade-holder rotatably mounted in said frame and movable therewith and adapted to detachably hold a blade to be sharpened, a spring acting to move said frame to its upper position above and from said rolls, and blade reversing means engaging the blade holder for automatically reversing said blade-holder and blade so that the opposite side of the edge of the blade may be presented for sharpening, said means comprising an actuating traveler on the end of the blade holder and a plate connected with said box and engaging the traveler and adapted on the movement of said frame to reverse the traveler and thereby the blade holder and blade.

[Claims 6 to 10 not printed in the Gazette.]

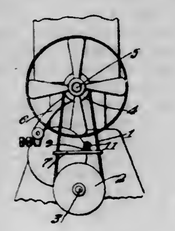
1,271,716. DETACHABLE HANDLE. JOHN D. KARLE, Roselle Park, N. J. Filed June 22, 1916. Serial No. 105,173. (Cl. 65—32.)



A detachable handle comprising pivotally connected levers, one of said levers terminating in spaced, down-

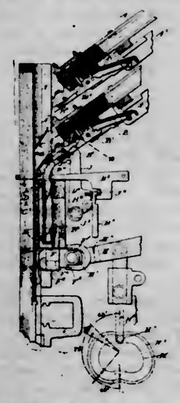
wardly extending jaws, and the other of said levers terminating in a single jaw opposed to said spaced jaws and including a pivotal gripping plate curved in transverse directions to form a plurality of contact points.

1,271,717. BELT-GUARD. CARL H. KAUFMANN, Santa Ana, Cal. Filed Dec. 26, 1916. Serial No. 138,869. (Cl. 74—51.)



In a device of the class described, an engine embodying a crank shaft; a crank case extended above the shaft and provided upon its end and adjacent its periphery with an outstanding securing device; a fan shaft journaled above the crank case; a fan on the fan shaft; a belt connecting the shafts; and an open horizontal frame through which both runs of the belt pass, the frame having a rearwardly extended lug provided with an upstanding ear bearing against the forward end of the crank case, the ear having an opening receiving the securing device, whereby the latter will hold the frame rigidly on the crank case.

1,271,718. TYPOGRAPHICAL MACHINE. DAVID S. KENNEDY, Brooklyn, N. Y., assignor to Mergenthaler Linotype Company, a Corporation of New York. Filed Sept. 28, 1915. Serial No. 53,000. (Cl. 199—19.)



1. In a typographical machine, the combination of a plurality of magazines each having a series of escapements, a series of actuating members therefor, a supporting frame for the actuating members, mechanism for moving the supporting frame to locate the actuating members in operative relation to one or another of the magazines, including a longitudinally movable device through which the frame is moved, and means controlled by said device to shift the actuating members out of operative relation to the escapements before the movement of the frame.

5. In a typographical machine, the combination of a plurality of magazines each having a series of escapements, a series of actuating members for the escapements, a supporting frame movably arranged so as to locate the actuating members in operative relation to the escapements of one or another of the magazines, mechanism for effecting such movement of the supporting frame, and locking devices, adapted to be released by the initial operation of said mechanism, for holding the supporting frame against movement.

13. In a typographical machine, the combination of the movable frame D, the relatively shiftable frame E supported therein and having the projecting studs E^2, and mechanism for moving the frame D, the said mechanism including the vertical slides F having the inclined surfaces F^1 coöperating with the studs E^2.

19. In a typographical machine, the combination of a plurality of magazines each pivotally mounted in the machine, and means for rocking the magazines simultaneously about their pivots, said means including cams to coöperate with the respective magazines, and the said cams being of different form to vary the extent of rocking of the magazines, for the purpose described.

23. In a typographical machine, the combination of a plurality of magazines, assembling devices shiftable from one magazine to another, a pivoted supporting frame carrying the assembling devices and arranged to swing outward away from the magazines, and mechanism for effecting the shifting of the assembling devices, said mechanism being mounted in part in the machine frame and in part in the pivoted frame and including connections which are automatically made and broken as the pivoted frame is swung to and from its operative position.

[Claims 2 to 4, 6 to 12, 14 to 18, and 20 to 22 not printed in the Gazette.]

1,271,719. MEANS FOR VARYING THE AREAL DELIVERY OF ROSE-HEADS. GEORGE COLVIN KENNEDY, Waterloo, Iowa. Filed Apr. 12, 1917. Serial No. 161,655. (Cl. 137—83.)



1. In combination, a rose-head in communication with a source of fluid supply, and a removable branching division contrivance therein.

6. In combination, a rose-head, and an imperforate branched division contrivance therein adapted to be positioned to cut off varying areas of the delivery surface of the rose-head from the source of fluid supply thereto.

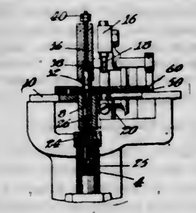
12. In combination, a rose-head, a removable base therefor provided with an inlet-port, and a division contrivance seated removably and fittingly between the rose-head and said base, said contrivance consisting of a diametral partition for the rose-head having a lateral part extending at a right angle from its middle at one side, said contrivance being reversible in the rose-head to cut off a one-half or a one-quarter segment of the delivery surface thereof from said inlet-port.

[Claims 2 to 5, 7 to 11, 13, and 14 not printed in the Gazette.]

1,271,720. EYELETING-MACHINE. HERBERT W. KENWAY, Newton, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Sept. 1, 1914. Serial No. 859,632. (Cl. 218—15.)

4. In an eyeleting machine, an expansible upsetting die comprising a plurality of resilient sections, constructed and arranged so that their resiliency tends to maintain the operative portions in contracted position.

6. In an eyeleting machine, an eyelet inserting set mounted for reciprocation, and an expansible upsetting die carried thereby.



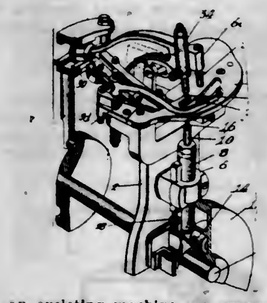
9. In an eyeleting machine, an expansible upsetting die, and a combined work feeding and die expanding member.

10. In an eyeleting machine, a punch, a feed member arranged to enter the punched hole, and an expansible upsetting die arranged to be expanded by the feeding member.

30. In an eyeleting machine, an expansible upsetting die, said die being normally contracted so as to be passed through a hole in one layer of the work which is smaller than the ultimate size of the upsetting surface of the expanded die, and means for passing an eyelet through one layer of the work and forcibly presenting the same against the upsetting surface of said die to thereby upset it upon a part of the layers of the work.

[Claims 1 to 3, 5, 7, 8, 11 to 29, and 31 not printed in the Gazette.]

1,271,721. EYELETING-MACHINE. WALTER SHAW, Dedham, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Mar. 8, 1915. Serial No. 12,877. (Cl. 218—15.)



1. In an eyeleting machine, an expansible setting die comprising relatively movable sections, each section having means for splitting an eyelet barrel at points located between the open spaces of the expanded die.

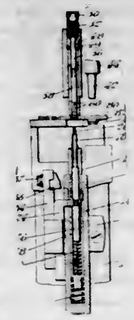
7. In an eyeleting machine, an expansible setting die, yielding means for expanding the die, and positively acting means for limiting the pressure between the die and the die-expanding means.

15. In an eyeleting machine, an expansible die and a die-expanding device arranged for relative movement, and means independent of the die-expanding device for limiting such relative movement.

26. In a machine for setting fastening devices, a work support, a tubular punch located below the plane of the work support, a coöperating solid abutment of similar cross sectional dimensions located opposite to the punch and above the work support, said punch and abutment being constructed and arranged for lateral adjusting movement in response to an adjustment of the length of the feeding movement to be imparted to the work, and means for inserting a fastening device in the hole formed by the punch.

[Claims 2 to 6, 8 to 14, 16 to 25, and 27 to 29 not printed in the Gazette.]

1,271,722. EYELETING-MACHINE. THOMAS J. HALLAM, Lynn, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Nov. 22, 1915. Serial No. 62,788. (Cl. 218—14.)



1. An upsetting tool having a shoulder and a concave upsetting surface on the side of the shoulder toward the end of the tool, said shoulder and upsetting surface being formed in a plurality of integrally connected and expansible sections.

2. An upsetting tool having a shoulder with one of its lateral surfaces forming an upsetting surface at one side of the shoulder and with its other lateral surface merging in a contracted portion at the other side, said shoulder and upsetting surface being formed in a plurality of expansible but normally contracted sections.

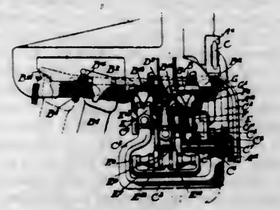
3. An upsetting tool having an expansible end portion comprising a plurality of sections having a shouldered upsetting surface formed therein, and sharp ribs each disposed midway between the edges of a section.

4. In an eyeleting machine an expansible upsetting die, and a tool for expanding the upsetting die and guiding an eyelet to it.

5. In an eyeleting machine an expansible upsetting die, a raceway, and a tool for taking an eyelet from the raceway and guiding it to the upsetting die when the upsetting die is in expanded condition.

[Claims 6 to 20 not printed in the Gazette.]

1,271,723. TYPOGRAPHICAL MACHINE. GEORGE P. KINGSBURY, Brooklyn, N. Y., assignor to Mergenthaler Linotype Company, a Corporation of New York. Filed Mar. 26, 1917. Serial No. 157,421. (Cl. 199—41.)



1. In a typographical machine, the combination of a plurality of distributers, a matrix transporter movable into operative relation to the distributer successively, and means whereby the appropriate matrices may be withdrawn from the transporter in its different operative positions and delivered to the respective distributers.

10. In a typographical machine, the combination of a plurality of distributers each having a distributer box from which the matrices are fed thereto, a matrix transporter movable into operative relation to the distributer boxes successively and adapted in its first position to release the matrices belonging to the corresponding dis-

tributer, and a supporting member movable out of and into the first distributer box so as to receive the released matrices and carry them thereinto.

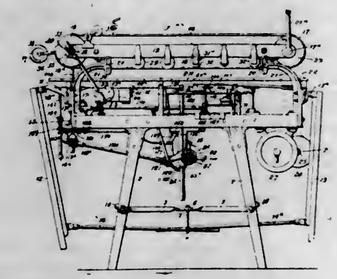
16. In a typographical machine, the combination of a distributer box, a matrix transporter movable into operative relation thereto, means for effecting the release of matrices from the transporter, and a matrix supporting member contained within the distributer box and movable into and out of the same and provided at its inner end with a pair of automatic pawls, for the purpose described.

21. In a typographical machine, the combination of a plurality of distributers, a matrix transporter adapted at each cycle of operation to be presented in operative relation to the distributers successively, and actuating means acting automatically to effect such operation of the transporter.

25. In a typographical machine, the combination of two distributers, separate matrix feeding devices therefor, and common operating means for both of said feeding devices.

[Claims 2 to 9, 11 to 15, 17 to 20, 22 to 24, 26, and 27 not printed in the Gazette.]

1,271,724. LABELING-MACHINE. FREDERICK H. KNAPP, Roland Park, and HAYWOOD G. DEWEY, Westminster, Md., assignors to Fred H. Knapp Company, Westminster, Md., a Corporation of Maryland. Filed Feb. 5, 1915. Serial No. 6,314. (Cl. 216—48.)



1. In a labeling machine, longitudinally extending supporting bars, labeling mechanism, a paste receptacle, a pasting device within the receptacle, said receptacle having a bracket at opposite sides thereof adapted to loosely engage over said bars, whereby the receptacle may be adjusted longitudinally, and means for retaining said receptacle in adjusted positions.

8. In a labeling machine, a runway for cans or the like, means for applying paste to the periphery of the cans, labeling mechanism, a feed belt arranged above the runway, driving means for the latter, and guiding rollers interposed between opposite stretches of the belt to engage the lower stretch thereof so as to contact the latter with the edges only of the pasted can, said rollers having a conical periphery, yieldably supported transversely extending shafts for the rollers, and a disk-shaped projection on the shafts spaced from the inner end of the rollers and of greater diameter than the rollers at said inner end.

48. In a labeling machine, the combination of a runway for cans or the like, pasting mechanism, a label support, said mechanism and support being arranged intermediate the ends of the runway and in the path of the cans, and label retaining means including a knife blade to engage the uppermost label adjacent the edge thereof, and a rocking support for the knife blade, a driving shaft, and lever mechanism interposed between said shaft and rocking support.

65. In a labeling machine, the combination of a can runway, a label support, said mechanism and support being arranged intermediate the ends of the runway, label retaining means including a positively driven rocking knife blade to engage the upper surface of the uppermost label at its edge adjacent one end, and a yieldably supported knife blade to engage the edge of the upper surface of said label at the opposite end thereof.

89. In a labeling machine, the combination of a runway for cans and the like, a movable label bed or follower, actuating means for elevating the same, driving mechanism for the latter, and can presser means for operatively connecting said means and mechanism, only after a plurality of labels have been taken up by the moving cans.

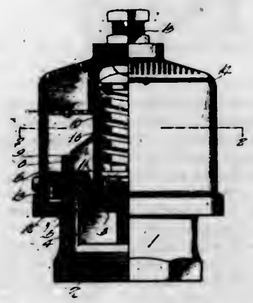
[Claims 2 to 7, 9 to 47, 49 to 64, 66 to 88, and 90 to 107 not printed in the Gazette.]

1,271,725. SOFA-BED. JULIUS KRAMER, JOSEPH UMHOFER, FRANK J. ERAL, and HENRY WILDBERGER, Chicago, Ill., assignors to Pullman Couch Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 11, 1915. Serial No. 1,603. (Cl. 5—50.)



In a sofa bed, a frame having ends spaced apart and a swinging hollow back carried pivotally by and between said ends, in combination with mounting means at each end of said back comprising a pair of plates, one fixed to the adjacent end of the frame and the other fixed to the adjacent end of said back adjacent to its bottom, the movable plate having a pair of pivot-like studs spaced apart and facing outward, and the stationary plate having a pair of slots therein extending forward one over the other and each open ended at its front end, the lower slot turning downward and terminating, and the upper slot turning down and thence lying in an arc concentric with the inner end of the lower slot and spaced therefrom according to the spacing of said studs, said studs coacting with said slots respectively.

1,271,726. SAFETY-VALVE. CHARLES F. KRAUT, Baltimore, Md., assignor to The Kraut Safety Valve Company, Baltimore, Md., a Corporation of Maryland. Filed Aug. 29, 1917. Serial No. 188,860. (Cl. 137—137.)



1. In a safety valve, a casing having a steam passage and a guide at the delivery end thereof partly obstructing said end to form an annular steam discharge space, a valve-ring seated over and closing said space, a valve-seating member engaged with said guide and passing through said ring but in spaced disconnected relation therewith, a spring for actuating said valve-seating member, and coacting means on said member and ring for pressing said ring to its seat and centering the ring.

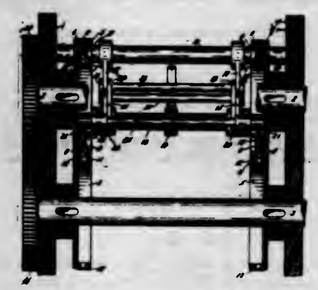
2. In a safety valve, a casing having a steam passage and a guide at the delivery end thereof partly obstructing said end to form an annular steam discharge space, a valve-ring seated over and closing said space, a tubular valve-seating member engaged with said guide and passing through said ring but in spaced disconnected relation therewith, a spring within said member for actuating the same, and co-acting means on said member and ring for pressing said ring to its seat and centering the ring.

3. In a safety valve, a casing having a steam passage and a guide at the delivery end thereof partly obstructing said end to form an annular steam discharge space, a valve-ring seated over and closing said space, said ring having an annular stiffening flange on its upper side, a tubular valve-seating member engaged with said guide and passing through said ring but in spaced disconnected relation therewith, a spring for actuating said valve-seating member, and outstanding webs on said member engaging said flange, to center the valve ring, and adapted to press said valve ring to its seat.

4. In a safety valve, a casing having a steam passage and a guide at the delivery end thereof partly obstructing said end to form an annular steam discharge space, a valve ring seated over and closing said space, said ring having an annular stiffening flange on its upper side, a cylindrical valve-seating member engaged with said guide and passing through said ring but in spaced disconnected relation therewith, a spring for actuating said valve-seating member, and outstanding webs on said member bearing against said valve ring to seat the same and abutting said flange to center said ring.

5. A structure as specified in claim 4, the inner edge of said valve ring being flared in the direction of travel of the steam.

1,271,727. PAPER-PERFORATOR. ALBERT KRAUTH, Hamilton, Ohio. Filed Sept. 10, 1915. Serial No. 49,958. (Cl. 164—99.)



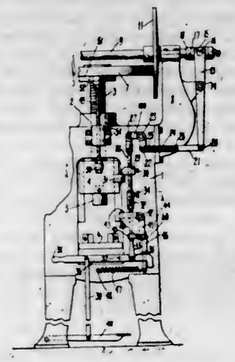
1. A machine of the class described, a pair of rotative perforator carriers for respectively coöperatively supporting punch and die members, a punch member radially movable and supported in one of said carriers, a cam functioning roller adapted to be stationed at a point in the orbital path of said punch member to actuate the same, and lever devices for supporting and moving said roller toward and away from a punch coöperating station, said lever devices including toggle links for rigidly sustaining said roller supporting parts.

3. An article of manufacture comprising a punch provided with a threaded end and a shank having a squared end portion with an axially threaded bore for extensibly uniting with the punch, and adjustable means for limiting the degrees of joining interengagement between said punch and shank and provide a seat for definite punch reach setting.

5. As an article of manufacture, a die having a set-screw threaded therethrough parallel with the die axis and adapted to project beyond the base surface of the die to provide adjustable limits for die insertion with a supporting seat.

[Claims 2 and 4 not printed in the Gazette.]

1,271,728. POWER-DRIVEN SCREW-PRESS. JOHN A. KRAITLER, Newark, N. J. Filed Mar. 13, 1915. Serial No. 14,094. (Cl. 74—46.)



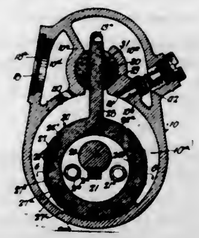
1. In combination in a machine tool, a double disk friction drive, a reciprocating member actuated by the said friction drive, a stationary braking surface, and a brake shoe normally in engagement therewith and moving with the reciprocating member for keeping the reciprocating member in neutral or stationary position out of contact with either of said disks at the top of the stroke.

6. In a machine tool, a power driven member and a control device therefor, including a rod for actuating said member when moved longitudinally in one direction, means for moving said rod in its operating direction, said rod being capable of motion in its operating direction without movement of said means, and automatic means for operating said member independently of the manually operating means.

13. In combination in a machine tool, a frame, a vertical spindle in threaded engagement therewith, a friction wheel on said spindle, a pair of friction disks adapted for selective engagement with said friction wheel, a pair of members in frictional engagement, one of said members moving with said spindle and the other mounted upon a part fixed with reference to the frame for preventing the descent of the spindle by gravity and means for adjusting one of said members vertically.

[Claims 2 to 5 and 7 to 12 not printed in the Gazette.]

1,271,729. COMPRESSOR. LADISLAV F. KRISTUFEK, Chicago, Ill. Filed Dec. 19, 1913. Serial No. 807,600. (Cl. 230—30.)



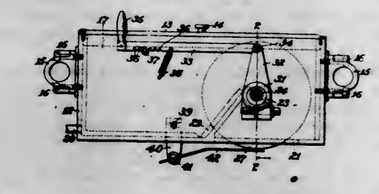
1. A compressor comprising a casing providing a cylindrical compression-chamber having an inlet and a discharge, a piston member in said compression-chamber adapted to have orbital movement, means for orbitally moving said piston member, and means providing packing intermediate said piston member and the peripheral wall of said compression-chamber comprising a plurality of oscillatory members.

2. A compressor comprising a casing providing a cylindrical compression-chamber having an inlet and a discharge, a piston member in said compression chamber adapted to have orbital movement, means for orbitally moving said piston member, and means providing packing intermediate said piston member and the peripheral wall of said compression-chamber comprising a plurality of oscillatory members carried by said piston member.

6. A compressor comprising a casing providing a cylindrical compression-chamber having an inlet and a discharge, a piston member in said compression-chamber adapted to have orbital movement, means for orbitally moving said piston member, and packing between said piston member and the peripheral wall of said compression-chamber comprising members mounted on said piston member to have movement relative thereto, with spaces between the piston member and the forward ends of said last-named members open to the interior of said chamber, whereby the fluid, while undergoing compression, operates against said last-named members and holds them in contact with the peripheral wall of said chamber.

[Claims 3 to 5 not printed in the Gazette.]

1,271,730. TOP GLUING MECHANISM. ELIE W. LABOMBARDE, Nashua, N. H. Filed Dec. 22, 1916. Serial No. 138,517. (Cl. 93—68.)



1. In mechanism of the character described, a glue receptacle having a slot, a wheel mounted in the receptacle and having a portion projecting through said slot, all other portions of the receptacle being closed, and means for subjecting the wheel to the action of vapor to prevent drying when the wheel is stationary.

8. In mechanism of the character described, a closed receptacle having a glue chamber and a water chamber, said glue chamber having a slotted wall, a wheel having a portion of its periphery extending through said slot, an under portion of the wheel being exposed to apply glue to passing blanks, and means for permitting vapor from the water chamber to have constant access to all portions of the wheel not immersed in glue.

[Claims 2 to 7 not printed in the Gazette.]

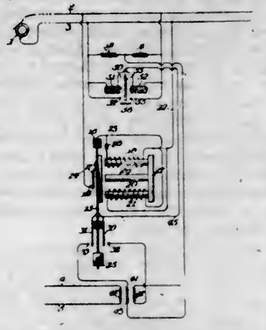
1,271,731. BOW-HOLDER. JOSEPH H. LANCOR, Providence, R. I. Filed Mar. 1, 1918. Serial No. 219,778. (Cl. 24—81.)



3. In a device of the character described, the combination of an oblong plate, lateral extensions upon an intermediate portion of the plate provided with parallel longitudinally disposed slots, a resilient arm integral with one end of the plate, means upon the free end of the arm for detachably engaging the other end of the plate, a curved resilient strap pivotally engaging one extension through its slot, and a finger upon the other end of the strap adapted to engage the second extension through its slot.

[Claims 1 and 2 not printed in the Gazette.]

1,271,732. CURRENT-MODIFIER. OSCAR M. LEICH, Genoa, Ill., assignor to Leich Electric Company, Genoa, Ill. Filed Mar. 24, 1915. Serial No. 16,564. (Cl. 172—281.)

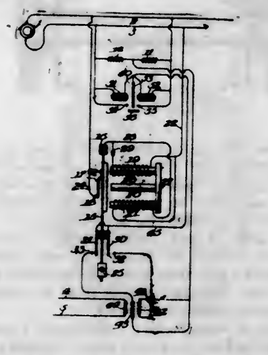


1. In a frequency changer the combination with a source of alternating current, a rectifier to rectify current from said source, a consumption circuit, means to change said rectified current into an alternating current for said consumption circuit, and means controlled by the current in said consumption circuit to control said rectifier.

4. In a frequency changer the combination with a source of alternating current, a rectifier to rectify current from said source, a consumption circuit, means operated from said source to change said rectified current into an alternating current for said consumption circuit, and means controlled by the current in said consumption circuit to control said rectifier, said means including a relay having a high resistance and a low resistance winding.

[Claims 2 and 3 not printed in the Gazette.]

1,271,733. CURRENT-MODIFIER. OSCAR M. LEICH, Genoa, Ill., assignor to Leich Electric Company, Genoa, Ill. Original application filed Mar. 24, 1915, Serial No. 16,564. Divided and this application filed May 18, 1916. Serial No. 98,266. (Cl. 172—281.)

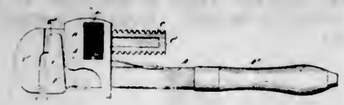


1. In a selective frequency signaling system the combination of an alternate current source of supply, a signaling circuit, a vibratory rectifier for changing the alternating current to a pulsatory uni-directional current, and a vibratory electromagnetically operated means connected to feed said rectified current to said signaling circuit at a fundamental rate of pulsation different from the rate of pulsation of said rectified current.

4. In a selective frequency signaling system the combination of an alternate current source of supply, a signaling circuit, a vibratory rectifier for changing the alternating current to a pulsatory uni-directional current, a vibratory electromagnetically operated means excited from the alternating current source of supply connected to feed said rectified current to said signaling circuit at a fundamental rate of pulsation different from the rate of pulsation of said rectified current, and a transformer interposed between said vibratory means and said signaling circuit.

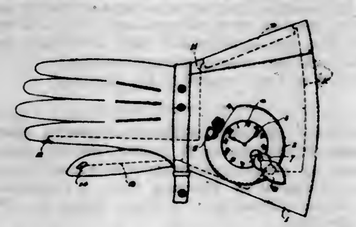
[Claims 2 and 3 not printed in the Gazette.]

1,271,734. WRENCH. THEODORE W. LITTLE, Brookline, Mass., assignor to Walworth Manufacturing Company, Boston, Mass., a Corporation of Massachusetts. Filed Jan. 9, 1915. Serial No. 1,450. (Cl. 81—103.)



In a wrench, the combination with a main shank carrying a jaw, a threaded movable shank carrying a jaw, a housing embracing said shanks and pivoted to the main shank and an adjusting nut engaging the movable shank and mounted in the housing, of a pair of rigid arms on the jaw of the main shank extending well over the movable shank and directly abutting the housing in front of the nut whereby to limit the rocking movement of the housing on its pivot and take up directly the pressure of the nut in operation and prevent lateral rocking or twisting of the housing with respect to the main shank.

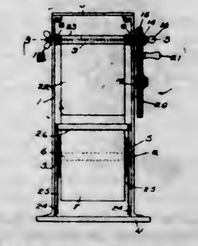
1,271,735. ILLUMINATED WATCH-HOLDER. BENJAMIN F. LOCKWOOD, Oakland, Cal. Filed Sept. 5, 1916. Serial No. 118,465. (Cl. 240—8.4.)



1. The combination with a glove having a pocket therein for receiving a time piece, of a lamp disposed adjacent the pocket and arranged to cast its rays across the time piece, and means contained and operable within the glove for lighting the lamp at will.

[Claim 2 not printed in the Gazette.]

1,271,736. PAPER-ROLL WINDER. MAURICE LOEWENSTINE, Cincinnati, Ohio. Filed Dec. 12, 1914. Serial No. 876,922. (Cl. 242—55.)



In a paper roll winding device of the character described, a frame work, a bulk roll of paper supported therein, a shaft formed of two parts supported in said frame work, said shaft at one end being screw threaded, a winged nut, said winged nut capable of engaging and disengaging the screw threaded end of said shaft, said shaft at its opposite end carrying a pinion and handle, a large gear supported on said frame work, a handle thereon, said large gear when turned meshing with the pinion on the shaft and revolving said shaft to form a paper roll thereon, and means for holding the paper on the bulk roll at a tension; the large roll, large gear and the pinion all being in the same vertical plane.

1,271,737. BEARING-LUBRICATOR. CHARLES E. LOZIER, Elyria, Ohio. Filed May 16, 1917. Serial No. 168,942. (Cl. 64—27.)



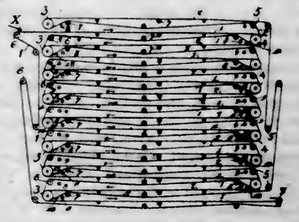
1. In bearing lubricating apparatus, the combination of bearing members, one of which is provided with a slot whose bottom surface is curved on an arc of a circle and a lubricant feeding bore tangent to the bottom of the slot and entering the same adjacent but to one side of the center of the bottom of the slot and intermediate the ends thereof, the bottom of the slot curving in both directions away from the entrance orifice of the bore, and means to cause lubricating material to flow through the bore into the slot.

2. In bearing lubricating apparatus, the combination of bearing members, one of which is provided with a slot having an opening contiguous the other bearing member and a continuously curved bottom, a lubricant conducting bore extending from one end of the slotted bearing member to the slot, said bore being tangent to the bottom of the slot and entering the same adjacent the central portion thereof but nearest the end of the slotted bearing member containing the entrance to said bore, the walls of the slot being curved in either direction from the orifice of the bore and means to cause lubricating material to flow through the bore and into the slot.

3. In bearing lubricating apparatus, the combination of two bearing members, one of which is provided with a straight lubricant conducting bore parallel to the axis of the bearing members and having an entrance at one end of said member and a slot with which said bore communicates adjacent the lowest point in the slot, the bottom of the slot being continuously curved in each direction from the orifice to the mouth of the slot and means to cause lubricating material to flow through the bore into the slot.

[Claims 4 to 6 not printed in the Gazette.]

1,271,738. APPARATUS FOR DRYING PAPER, PASTEBOARD, WOOD-PULP, AND OTHER MATERIALS. LEO ARNEMANN LYCHE, Sandviken, near Christiania, Norway. Filed Oct. 12, 1917. Serial No. 196,324. (Cl. 34—48.)

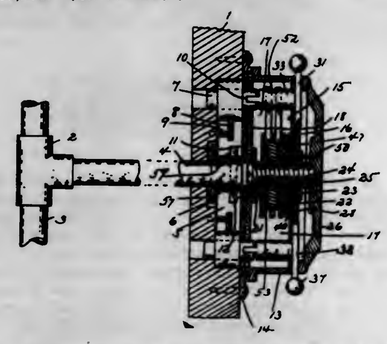


1. An apparatus for drying material by means of hot air in which a layer of the material is passed along a

zigzag path, comprising endless conveying belts, means to guide the belts so as to produce between different sections thereof separate chambers one above the other, means to hold the conveying belt sections against one another at the ends of each of the chambers, means to supply hot air to one end of each of the separate chambers, and means to withdraw the vapors produced from the other end of each of the chambers.

[Claims 2 to 4 not printed in the Gazette.]

1,271,739. COMBINATION-LOCK. ROBERT H. MCDONOUGH, Detroit, Mich. Filed Sept. 1, 1917. Serial No. 189,276. (Cl. 70—18.)



1. The combination with a pivotal member, of an abutment, a plurality of pawls engageable with said abutment in a certain position of the pivotal member for locking said member in said position, a plurality of cams respectively associated with said pawls, each being adapted to lift its corresponding pawl out of engagement with said abutment, lost-motion connections between said cams, and means for adjusting said cams rotatively according to a predetermined combination to disengage all of the pawls from said abutment.

2. The combination with a pivotal member, of an abutment, a plurality of pawls engageable with said abutment in a certain position of the pivotal member for locking each member in said position, a plurality of cams respectively associated with said pawls, each being adapted to lift its corresponding pawl out of engagement with said abutment, lost-motion connections between said cams, means for adjusting said cams rotatively according to a predetermined combination to disengage all of the pawls from said abutment, and a stop engageable by said pawls when the latter are disengaged from said abutment, limiting motion of the pawls toward the corresponding cams.

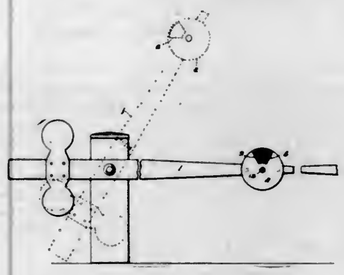
3. The combination with a locking member and means for actuating the same, of an abutment and a series of pawls respectively engageable with said abutment to prevent retraction of the locking member, a series of concealed cams for respectively actuating said pawls to release the locking member, lost-motion connecting means between said cams by which they may be successively actuated according to a predetermined combination to disengage all of said pawls from the abutment, and a stop engageable by said pawls when the latter are disengaged from said abutment, limiting motion of the pawls toward the corresponding cams.

4. The combination with a pivotal member, of an abutment, a plurality of pawls engageable with said abutment in a certain position of the pivotal member for locking said member in said position, a plurality of cams respectively associated with said pawls, each being adapted to lift its corresponding pawl out of engagement with said abutment, lost-motion connections between said cams, means for adjusting said cams rotatively according to a predetermined combination to disengage all of the pawls from said abutment, and means for automatically throwing the combination upon displacement of said pivotal member from its locking position.

5. The combination with a locking member, of an actuating member therefor and an intermediately pivoted lever transmitting control from the actuating member to the locking member, an abutment and a plurality of pawls engageable with said abutment in the position of the lever corresponding to the locking position of the locking member to restrain said lever and locking member from displacement, a plurality of cams connected by a lost-motion engagement and respectively associated with said pawls to individually disengage the same from said abutment, and means for adjusting said cams rotatively according to a predetermined combination to disengage all of the pawls from said abutment.

[Claims 6 to 15 not printed in the Gazette.]

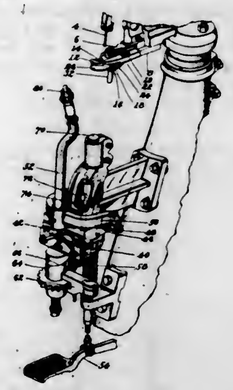
1,271,740. SIGNAL. JAMES L. MCKINNEY, St. Louis, Mo. Filed Dec. 26, 1917. Serial No. 208,760. (Cl. 40—70.)



1. In combination with a railway crossing gate-arm, a signal comprising a housing having a sight opening fixed to said gate-arm, a self balanced indicator arranged inside of said housing adapted to be exposed to view through said sight opening when the gate-arm is in a horizontal position and out of alinement with said sight opening when the gate-arm is in an upright position.

[Claims 2 to 4 not printed in the Gazette.]

1,271,741. SHOE-MACHINE. ALBERT A. MACLEOD, Swampscott, and LOUIS M. BROWN, Beverly, Mass., assignors, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Dec. 12, 1914. Serial No. 876,949. (Cl. 12—67.)



1. A machine of the class described having, in combination, welt attaching mechanism for securing a welt progressively to a shoe bottom, a rest to which the work it held to bring it into operative relation to the attaching mechanism, and a plate arranged adjacent to the rest and constructed to facilitate movement of the shoe relatively to the rest as the attaching operation proceeds.

5. A machine of the class described having, in combination, welt attaching mechanism, a rest having a recess in its lower face adapted to hold a welt to guide it into position to be secured progressively to a shoe bottom and a work engaging plate movably mounted upon the under side of the rest to permit introduction of the welt into the recess of the rest by a lateral movement of the welt, and constructed and arranged to be held by pressure of the work across the said recess to close the recess and form a welt inclosing guide.

[Claims 2 to 4 and 6 to 8 not printed in the Gazette.]

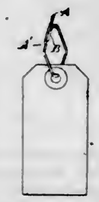
1,271,742. AUTOMOBILE REAR AXLE. JEREMIAH ST. L. MAHER, St. Louis, Mo. Filed June 16, 1917. Serial No. 175,093. (Cl. 21—5.)



1. In an automobile rear axle, in combination, a tubular housing; a driving-gear-box at the center of said housing; two convex disks mounted at ends of said housing; an axle mounted in the housing; a roller-bearing housing concentrically mounted on the outer side of each of said disks; and a truss-rod having an eye at each end to encircle one of said roller-bearing housings.

2. In an automobile rear axle, in combination, a tubular housing; a driving-gear-box at the center of said housing; two convex disks mounted at the ends of said housing; an axle mounted in the housing; a roller-bearing housing concentrically mounted on the outer side of each of said disks; a truss-rod having an eye at each end to encircle one of said roller-bearing housings; and means for adjusting the length of said truss-rod.

1,271,743. TAG-FASTENER. ANDREW D. MORSE, Framingham, Mass., assignor to Dennison Manufacturing Company, Boston, Mass., a Corporation of Massachusetts. Filed June 30, 1917. Serial No. 177,940. (Cl. 40—24.)



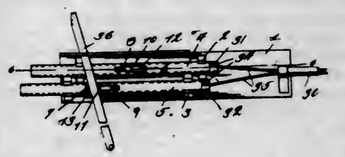
1. A wire fastener shaped in the form of a loop narrower at the ends than at the middle, one end of said wire being reversed to form a hook and the other end extending beyond the loop to form a piercing arm, said reversed end portion overlying the said piercing arm, and said piercing arm shaped to hold the material in the path of said reversed end portion while said fastener is being applied to the material.

4. A wire fastener shaped in the form of a loop narrower at the ends than at the middle, one end of said wire being reversed to form a hook and the other end extending beyond the loop to form a piercing arm having an offset, said reversed end portion overlying said piercing arm and the ends of said reversed end being blunt.

6. A fastener made of wire bent to form an elongate loop, one end of said wire being reversed to form a hook and the other end extending along the reversed end and thence beyond the loop to form a piercing arm, the latter end being offset at the tip of the former end so as to form a shoulder adapted to position material pierced by said arm in line with said tip.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,271,744. MUSIC-TURNER. WALTER H. MOSHER, Lowville, N. Y. Filed Feb. 27, 1917. Serial No. 151,314. (Cl. 84—17.)



1. A music leaf turner comprising a casing, a pair of bars slidably supported on the casing, inwardly bent tongues cut from said casing and reversely disposed with respect to each other, resilient fingers carried by the bars and having heads engageable with the tongues for the automatic shifting of said fingers outwardly and inwardly on the movement of the bars, stops on the bars adjacent the fingers, a lever engageable successively with the stops and automatically locked with the bars by the fingers on progressive movement of said lever, and music leaf turning arms pivotally supported and having connection with the bars for the swinging of said arms on movement of the bars.

2. A music leaf turner comprising a casing, a pair of bars slidably supported on the casing, inwardly bent tongues cut from said casing and reversely disposed with respect to each other, resilient fingers carried by the bars and having heads engageable with the tongues for the automatic shifting of said fingers outwardly and inwardly on the movement of the bars, stops on the bars adjacent the fingers, a lever engageable successively with the stops and automatically locked with the bars by the fingers on progressive movement of said lever, music leaf turning arms supported relative to the casing and pivoted for swinging movement, and wires connected with the bars and with the arms respectively for swinging the latter on movement of said bars.

1,271,745. AUTOMOBILE-BODY. FRIEDERICH MÜLLER, Hartford, Conn. Filed June 9, 1917. Serial No. 173,701. (Cl. 21—62.)



An automobile body comprising in combination, side, back and front walls including windows and doors, a top of rigid construction permanently mounted in place and having at the front an opening which extends from side to side, a door adapted to close the opening and bodily movable to a position above the top at the rear of the opening, a locking mechanism carried by the door on its underside, means carried by the top and adapted to be engaged by the locking mechanism for holding the door in its open position at the rear of the opening, other means adapted to be engaged by the locking mechanism for holding the door in its closed position in the opening, and means whereby the locking mechanism may be operated.

1,271,746. ABDOMINAL SUPPORT. CHARLES MUNTER, New York, N. Y. Filed Dec. 5, 1917. Serial No. 205,626. (Cl. 2—188.)



3. An abdominal support embodying a body portion adapted to be wrapped about the figure, said body portion being provided with openings extending upwardly from its lower edge to points below its upper edge, and with openings extending downwardly from the upper edge to points above the lower edge, a pair of belt sections adapted to be secured together about the wearer, and lacings secured to the ends of said belt sections and coöperating with the openings, each lace being secured at one end to one belt section, having slidable connection with at least one edge of one of the openings and secured at its other end to at least one edge of the same opening, whereby, when the belt sections are placed under tension, all of the lacings are automatically and simultaneously drawn tight to adjust the openings and shape the garment to the figure.

[Claims 1 and 2 not printed in the Gazette.]

1,271,747. MOTORMAN'S SEAT. JÓZSEF NAGY, Dayton, Ohio. Filed Oct. 13, 1917. Serial No. 196,401. (Cl. 155—25.)

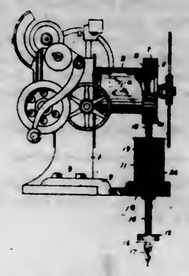


2. In combination with an upright post-shaped base having a threaded bore, a shaft axially arranged within said bore fixedly secured to the base at the inner end of the bore and having a head at its upper end, a cup-shaped support threaded for vertical adjustment within said bore with a perforation through the bottom of said member through which the shaft freely extends, a helical spring surrounding the shaft seated within the cup-shaped member upon the bottom thereof, a collar slidably arranged upon the shaft and positioned upon the upper end of the spring, a seat supported by said collar and arranged above the head of the shaft, and an adjusting nut threaded upon the shaft and bearing against the upper side of said collar and a hand engaging ring carried by said nut.

[Claim 1 not printed in the Gazette.]

1,271,748. FOCUSING DEVICE FOR MOVING-PICTURE MACHINES. EMIL A. NELSON, Duluth, Minn. Filed Jan. 8, 1918. Serial No. 210,899. (Cl. 88—16.)

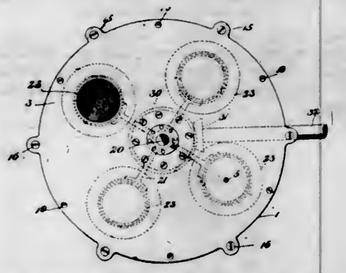
1. An operating device for focusing lenses, comprising a reciprocable lens having a ring gear thereabout, a substantially vertically disposed solenoid adjacent the gear, a core within the solenoid having an extension upon the upper end thereof engageable with the teeth of the gear whereby when the solenoid is energized, the end of the extension will strike one tooth of the gear, and correspondingly rotate same, an electric circuit for supplying energy to the solenoid and means in the circuit for intermittently making and breaking same.



2. An operating device for reciprocable focusing lenses, comprising a ring gear fixed about the lens, a pair of solenoids, one on each side of the gear and below same, a fabricated reciprocal core in each solenoid alined with the extreme outer tooth of the gear directly above it whereby when each solenoid is energized the extension upon its respective core will forcibly strike said tooth and correspondingly revolve the gear and means for alternately intermittently energizing the solenoids.

3. In a device of the character described, the combination with a reciprocable focusing lens having a ring-gear rigidly fixed thereto, of reciprocal electrically controlled means adjacent the gear and coöperatively engageable therewith and an electric circuit connected therewith having means therein for intermittently energizing the controlling means.

1,271,749. COMBINED MEASURING AND FILLING APPARATUS. AAGE W. NIELSEN, Chicago, Ill. Filed June 1, 1916. Serial No. 101,035. (Cl. 221—109.)



1. In an apparatus of the class described, the combination with upper and lower stationary disks, the former having a feed-opening and the latter a discharge-opening out of alinement with said feed-opening, spacing-rings secured to the inner faces of both disks and surrounding the feed and discharge-openings, retaining-rings secured to each of the spacing-rings and of less internal diameter than the same and also surrounding said feed and discharge-openings, and means for adjusting the two disks with relation to each other, of a series of collapsible measuring vessels open at their opposite ends and provided with opposite outwardly disposed end-flanges engaged by the retaining-rings, a central rotatable support, and arms radiating from the same to said vessels.

4. In an apparatus of the class described, the combination with upper and lower disks, the former having a feed-opening and the latter a discharge-opening out of alinement with the feed-opening, spacing-ring surrounding the openings and positioned at the inner faces of the disks, retaining-rings positioned against the spacing-rings and smaller than the same, and threaded adjusting-rods and sleeves passed through the upper and lower disks, their spacing and retaining-rings, whereby to adjustably connect said disks, of a series of telescopic open ended measuring-vessels located between the disks and having opposite outwardly disposed end-flanges contacting with the disks and engaged by the retaining-rings, a central rotatable support, and supporting-arms radiating therefrom and connected to the measuring-vessels.

[Claims 2 and 3 not printed in the Gazette.]

1,271,750. EARTH-BORING TOOL. THOMAS E. NOBLE, Yale, Okla. Filed Feb. 21, 1918. Serial No. 218,650. (Cl. 255—77.)



1. A tool of the class described comprising a bit having its working end portion split, a face of said bit being provided with a groove, the open end portion of the groove being flared, and an arm mounted for movement longitudinally within the groove and provided with a cam coacting with the flared end portion of the groove for expanding the split portion of the bit.

7. A tool of the class described comprising a bit having its working end portion split, said split portions being provided with a slot arranged longitudinally thereof, arms coacting with the opposite faces of the bit and expanding the slit portion thereof upon movement of the arms in one direction, said arms being provided with inwardly directed blocks extending within the slot, and means for connecting the portions of the arms provided with the blocks.

[Claims 2 to 6 not printed in the Gazette.]

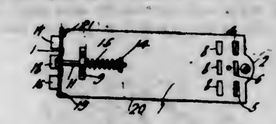
1,271,751. FENCE-POST. FRANK NOYESS, Ypsilanti, Mich. Filed Aug. 22, 1917. Serial No. 187,705. (Cl. 189—31.1.)



1. A structure of the character described including a base having a socket, a post inserted in the socket, a collar detachably mounted on the post and adjustable therealong, a block mounted on the base and adjustable toward or from the post, a brace extending from the block to said collar, a plate through which the post passes, and resting upon said collar and having interlocking engagement therewith to prevent a rotation of the collar, and downwardly divergent rods connected at their lower ends to the base and passing through the ends of the plate and provided with nuts whereby said plate may be drawn down upon the collar.

[Claims 2 and 3 not printed in the Gazette.]

1,271,752. ADJUSTABLE MOLD-JACKET. JOHN L. NUTT, Kennett Square, Pa. Filed Oct. 4, 1917. Serial No. 194,810. (Cl. 22—112.)



1. A device of the class described comprising angular walls, one of which is provided with spaced slots and with an intermediate slot between the spaced slots, the other of which is provided with spaced tongues loosely received in the spaced slots, and with an intermediate tongue loosely received in the intermediate slot, the spaced slots tapering toward each other, and the intermediate slot tapering from its ends toward its central portion.

2. A device of the class described comprising angular walls, one of which is provided with a slot and with an opening located outwardly of the slot, the other of which is provided with a tongue received in the slot, and with an exterior lug; a rod slidably mounted in the lug and in the opening and having a head engaging the first specified wall; an adjusting device on the inner end of the rod; and a spring on the rod and interposed between the adjusting device and the lug.

3. As an article of manufacture, adapted to be used in the formation of a mold jacket, a plate provided at one end with a slot and having an opening located outwardly of the slot, the plate being provided at its other end with a tongue corresponding in size to the slot, and being provided with an outstanding lug located adjacent the tongue; a rod slidable in the lug and corresponding in diameter to the opening, the rod having a head at its outer end; an adjusting device on the inner end of the rod; and a spring interposed between the lug and the adjusting device.

1,271,753. MACHINE-OILER. NAPOLEON PAQUETTE, Grand Rapids, Mich. Filed Dec. 11, 1917. Serial No. 206,705. (Cl. 64—27.)



1. In combination with a hollow bolt having a slot through one side, a screw cap upon said bolt, a compression extension member in said cap, and a rod having one end passed through the slot in the bolt, the other end actuated by the metal extension member in the cap to force the rod longitudinally in the hollow of the shaft.

4. In combination with a bolt having a hole drilled inwardly from the screw end thereof and extending nearly the length of the bolt, said bolt being provided with a slot from the inner end of the hole to the surface of the bolt, a wire arranged to pass into the hole with the inner end passing through the slot, and means connected with the screw end of the bolt for moving the wire longitudinally of the bolt and the slot, and for forcing grease through the slot.

[Claims 2 and 3 not printed in the Gazette.]

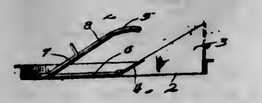
1,271,754. [WITHDRAWN.]

1,271,755. [WITHDRAWN.]

1,271,756. PAIL-COVER ATTACHMENT. ROBERT POULSON, Hutchinson, Minn. Filed Apr. 18, 1917. Serial No. 162,986. (Cl. 221—21.)

1. The combination with a can top having a spout opening, of marginal walls surrounding three sides of the

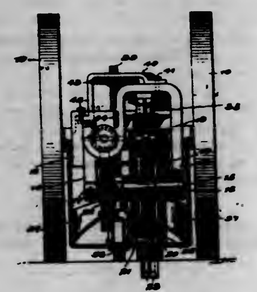
opening and having their edges inclined toward the fourth side, guide ways formed along the opposing walls, a guide element slidable in said guide ways and a closure element fitted to said walls and carried by said guide element to be seated by the latter when it is entered into the guide ways.



3. The combination with a can top having a spout opening, of a marginal element vertically disposed around the opening, the ends of the marginal element extending freely into parallel relation and inclining toward the surface of the top, slideways formed along the parallel ends, and a closure having legs extending into said slideways, said closure being shaped to fit on the edge of said marginal element.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,271,757. PAVEMENT-CUTTING MACHINE. ALBERT H. PEDRICK, Springfield, Ohio. Filed Jan. 18, 1916. Serial No. 72,764. (Cl. 37—50.)



1. In a machine for cutting channels in pavement, the combination with supporting wheels, of a frame pivotally supported on a transverse axis, a shaft mounted in the forward end of the frame, two cutter wheels arranged close together and operating in parallel planes at right angles to the shaft, means for turning the cutter wheels in opposite directions simultaneously, and means for feeding the machine to cut a groove in the pavement, said feeding means comprising a toothed wheel arranged to travel in the channel formed by the cutters and means for turning said wheel.

3. In a machine for cutting channels in pavement, the combination with suitable supporting wheels, of a cutter frame, a fixed shaft mounted in the cutter frame, a spider fixed on said shaft, pinions mounted on radial bearings on the spider, cutter wheels on opposite sides of said spider provided with gear teeth engaging said pinions, the peripheries of said cutter wheels lying close together and being provided with cutters adapted to form a narrow channel in the pavement, a worm and worm wheel for imparting a slow rotary movement to one of said cutter wheels, the other cutter wheel being driven in the opposite direction through the intermediate pinions, and means for imparting a slow forward movement to said machine.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,271,758. MUFFLER FOR INTERNAL-COMBUSTION ENGINES. ANDREA PETTITO, Trenton, N. J. Filed June 27, 1917. Serial No. 177,326. (Cl. 121—116.)

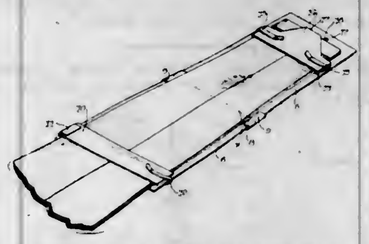
1. In a muffler, a pipe adapted to be connected to the exhaust pipe of an engine, a spider detachably mounted within the said pipe and having a concavo convex web formed with a central valve seat, a valve coacting with said seat and having a stem extending through the spider, a lever extending through the wall of the pipe and bearing at its inner end against the valve, and a spring bearing against the outer end of the lever and holding the valve closed.



2. In a muffler, a pipe adapted to be connected to the exhaust pipe of the engine and formed on its interior with a valve seat, a base member mounted upon the pipe and having a longitudinally extending slot and upwardly extending brackets and an upwardly extending post rearward of the brackets, a lever extending through said slot and pivotally mounted upon the brackets, a valve carried on one end of the lever and engaging the seat, and a spring extending from the post to the upper end of the lever and urging the valve to its closed position, the base being formed with a concaved recess and the lever having a convex head engaging in the recess, said convex head at all times preventing the passage of products of combustion through said slot.

3. A muffler comprising a main pipe leading from the exhaust of an engine, a relatively large casing mounted upon the end of the main pipe, a muffler pipe disposed within the casing larger than the main pipe and into which said main pipe discharges, said muffler pipe for a portion of its length having laterally disposed notched strips, and a plurality of baffle disks mounted on said strips and having staggered perforations, the casing being formed at its outer end with a discharge opening.

1,271,759. TROUSERS-STRETCHER. ALBERT J. PETTERMAN, Chicago, Ill. Filed June 28, 1917. Serial No. 177,434. (Cl. 223—19.)



1. In combination, a hinged body adapted to receive a garment, a clamping member adapted to secure one end of the garment to said body, clamping means adapted to engage the opposite end of the garment and adjustable flexible means connecting said clamping means to said body to vary the tension of the garment.

2. In combination a body formed in two hinged sections and adapted to receive a garment, means to prevent buckling of the sections, a stationary clamp at one end of one of the sections, a movable clamp on the other section, and adjustable flexible means connecting said movable clamp to said last mentioned section to stretch the garment.

[Claims 3 and 4 not printed in the Gazette.]

1,271,760. ELECTRIC FURNACE. CARL A. PFANSTIEHL, Highland Park, Ill., assignor to Pfanstiehl Company, Inc., North Chicago, Ill., a Corporation of New York. Filed Oct. 30, 1916. Serial No. 128,399. (Cl. 219—36.)

1. In a furnace for reducing tungsten trioxid to metallic tungsten the combination with a tube of refractory material, of a heating element surrounding the tube, a nickel protecting lining covering the inner wall of the tube within and insulated from said heating element, and means for supporting the tungsten trioxid to be reduced within said metal lining.



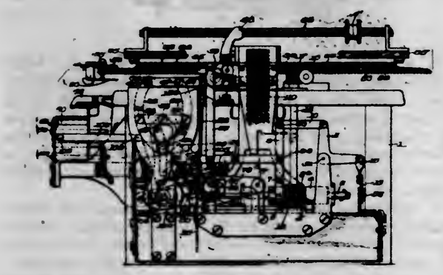
4. A furnace for the reduction of tungsten trioxid to metallic tungsten having a heating element, and a nickel lining insulated from the heating element for protecting the walls of the furnace from the sub-oxids of tungsten.

[Claims 2 and 3 not printed in the Gazette.]

1,271,761. COFFEE PRODUCT AND PROCESS OF MAKING THE SAME. WILLIAM GRAY PHILLIPS, Jr., and WILLIAM FRANCIS MCKENNA, Brooklyn, N. Y. Filed May 20, 1915. Serial No. 29,362. (Cl. 99—11.)

The method of producing coffee tablets consisting in making a strong infusion by boiling a quantity of ground coffee beans in water, then heating said infusion on a flat bottomed container until all liquid has evaporated therefrom, but no longer, in order to prevent scorching of the powdered residue, removing such residue from the container and mixing it with pure coffee oil to form a damp powder and to restore any characteristics destroyed by the foregoing steps, and then molding such powder into desired shapes.

1,271,762. CALCULATING-MACHINE. ARTHUR F. POOLE, Chicago, Ill., assignor to The Wahl Company, Wilmington, Del., a Corporation of Delaware. Filed Aug. 24, 1912. Serial No. 716,939. (Cl. 235—59.)



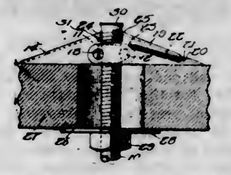
1. In a calculating machine the combination of: a locating linkage; a set of tabulator stops; a source of power normally disconnected from said locating linkage; and a clutch adapted to connect said source of power with said locating linkage upon the actuation of one of said set of tabulator stops.

4. In a calculating machine the combination of a totalizer, an actuating mechanism therefor: a decimal carriage tabulatable in either direction to effect the appropriate decimal relation of said totalizer and actuating mechanism; a source of power normally disconnected from said carriage; and a clutch to connect said source of power with said carriage to thereby bring said carriage to a predetermined decimal place.

17. In a calculating machine the combination of a totalizer, an actuating mechanism therefor; a decimal carriage tabulatable in either direction to effect the appropriate decimal relation of said totalizer and actuating mechanism; a set of tabulator stops; a source of power normally disconnected from said carriage; and a clutch adapted to connect said source of power with said carriage to bring it to a decimal place determined by the actuation of any one of said stops.

[Claims 2, 3, and 5 to 16 not printed in the Gazette.]

1,271,763. TOGGLE-BOLT. ARTHUR F. POOLE, Chicago, Ill. Filed Oct. 27, 1915. Serial No. 58,251. (Cl. 85—3.)

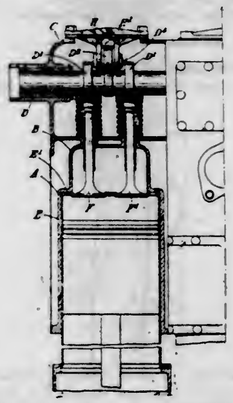


1. In a toggle bolt, the combination of a bolt, a nut, trunnions on said nut, a wing pivoted on said trunnions, a portion of said wing being adapted to engage the wall, the arrangement being such that said trunnions are on the opposite side of said bolt from the portion of said wing which is adapted to engage the wall.

2. In a toggle bolt, the combination of a bolt, a nut, a wing pivoted on said nut, and a second wing pivoted to said first wing.

[Claims 3 to 5 not printed in the Gazette.]

1,271,764. VALVE MECHANISM AND ASSOCIATED PARTS OF INTERNAL-COMBUSTION ENGINES. THOMAS CHARLES WILLIS PULLINGER, The Brae, near Dumfries, Scotland, assignor, by direct and mesne assignments, to American B. H. P. Aero Engine Corporation, New York, N. Y., a Corporation of New York. Filed Sept. 5, 1916. Serial No. 118,331. (Cl. 123—90.)



In an internal combustion engine, the combination of an engine cylinder having at one end a wall providing a circular area wherein seatings for the controlling valves are situated, two exhaust valves of the mush-room type mounted in two seatings provided in the said area, an inlet valve of the mushrobm type mounted in a third seating within the said area to one side of and equidistant from each of the exhaust valves, the said inlet valve being larger than each of the exhaust valves and all three valves being of such dimensions that the greatest portage room available is obtained within the said given circular area whereby free passage of the exhaust is provided for as well as adequate portage for the incoming charge, a single cam shaft placed across the two exhaust valves, to operate them directly by cams on the shaft, an outer detachable cover plate situated above the valves and its shaft, and a rocking lever carried by a depending bracket on the cover plate and so situated that one end bears on a third cam on the cam shaft and the other end on the inlet valve which arrangement allows the rocking lever to be readily removed with the cover plate and the free exposure of the other parts for inspection, substantially as set forth.

1,271,765. PREPARED HEALTH FOOD AND PROCESS OF MAKING SAME. JAMES P. PURSELL, Quincy, Ill., assignor to The Fruited Cereal Company, Quincy, Ill., a Corporation of Delaware. Filed Dec. 4, 1917. Serial No. 205,332. (Cl. 99—5.)

1. The improved process of preparing health food, which consists in cooking a whole grain cereal, mixing fruit therewith, and continuing the cooking, drying said mixture, and then toasting said mixture.

2. The improved process of preparing health food, which consists in cooking a whole grain cereal by direct application thereto of steam under pressure, mixing therewith a quantity of fruit comprising dates, figs, and raisins, continuing the cooking of the mixture, toasting said mixture, and then grinding the same.

3. The improved process of preparing health food, which consists in cooking a whole grain cereal by direct application thereto of steam under pressure, mixing therewith a quantity of fruit in the proportions of one-tenth to one-sixth of the quantity of cereal, said fruit comprising dates, figs, and raisins, continuing the cooking of the mixture, toasting said mixture, and then grinding the same.

4. The improved process of preparing a health food which consists in cooking a quantity of cereal, drying a quantity of fruit and grinding it, combining the ground particles with the cereal and cooking the mixture together, then drying the mixture and grinding it.

5. The improved process of preparing health food, which consists in cooking a whole grain cereal by direct application thereto of steam under pressure, mixing therewith a quantity of fruit comprising dates, figs, and raisins, continuing the cooking of the mixture, toasting said mixture, and then rolling the same.

[Claims 6 to 8 not printed in the Gazette.]

1,271,766. TOWEL-HOLDER. EDWARD H. RAAB, Fort Wayne, Ind. Filed July 10, 1916. Serial No. 108,400. (Cl. 45—32.)



1. A device composed of a single length of wire and formed with a semi-circular element, a pair of clamping elements disposed at an angle to the plane of the semi-circular element, a pair of guide elements connecting the semi-circular element with the clamping elements, a vertically disposed supporting element formed with loops at its upper and lower ends respectively and extending through said semi-circular element, and an arm extending horizontally from said vertically disposed supporting element and united with the lower end portion of said pair of clamping elements.

2. A towel holder, the combination with a back, of a carrying portion secured to said back, a supporting arm extending outwardly from said carrying portion, opposed retaining jaws mounted on said supporting arm, the upper ends of said retaining jaws flaring outwardly to form guide portions, and a portion connecting said retaining jaws and extending between said carrying portion and back, substantially as described.

4. A towel holder consisting of a single strand of wire, in combination with a back having spaced apart securing members positioned thereon, comprising a portion connecting said retaining members, a supporting arm extending from said portion, opposed retaining jaws projecting upwardly from said supporting arm, the upper ends of said retaining jaws being flared outwardly with respect to each other to provide guiding portions, and an arcuate portion connecting the upper end of said flared portions to yieldingly resist spreading movement thereof, and extending between said back and said first mentioned portion, substantially as described.

[Claims 3 and 5 not printed in the Gazette.]

1,271,767. PACKAGE-TYING DEVICE. ROBERT L. RADFORD, Asheville, N. C., assignor of one-fourth to Philip R. Moale, Asheville, N. C. Filed Aug. 17, 1917. Serial No. 186,799. (Cl. 24—18.)



In a package tie, a hook having oppositely extending and inclined bills at opposite ends of its shank, V-shaped cord clamps interposed between said shank and bills, collars on said clamps through which said shank and bills are passed, and shoulders on said shanks adjacent the free ends of said bills.

1,271,768. OIL-BOLT. ALBERT D. RAY, Cleveland, Ohio. Filed Dec. 18, 1916. Serial No. 137,617. (Cl. 64—27.)



2. An oil bolt, comprising a bolt body having a longitudinal slot in one side forming a cavity having a mouth open at one side of the body, and a cover for said cavity formed of pervious material and arranged to slowly deliver oil therefrom, said body being provided with an oil filling channel communicating with said cavity and a portion of which is cylindrical, the axis of said cylindrical portion passing through said mouth.

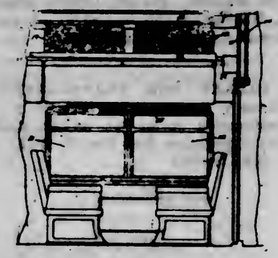
3. An oil bolt body having a head and shank, said shank having a cavity forming an oil reservoir having a mouth opening out through the side of said shank, and a cover for said opening formed of a thin sheet of pervious material, said bolt also having a filling channel for said cavity extending through the bolt head and having a cylindrical portion whose axis passes through said mouth.

8. An oil bolt, comprising a bolt body having a side slot forming an oil reservoir, means whereby oil may be supplied to said reservoir, and a hollow inverted rimmed diaphragm covering said slot, said diaphragm having a plurality of small oil ports therethrough and being formed of fibrous material.

[Claims 1 and 4 to 7 not printed in the Gazette.]

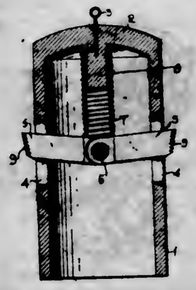
1,271,769. HUMIDIFIER. WILLIAM M. RAYMOND, Long Beach, Cal. Filed Mar. 14, 1917. Serial No. 154,836. (Cl. 137—154.)

1. A humidifier comprising a fabric curtain, a roller upon which said curtain is mounted, a case inclosing the roller and into which the curtain may be drawn; said case having a slotted opening along its upper forward edge bounded above and below by outwardly extending curtain supporting flanges whereby the case may be substantially closed to prevent the spilling of water disposed within the case; a lower case in spaced vertical alinement with the upper case and provided with a slot in its upper wall through which the lower edge of the curtain may pass, and a hook positioned within the lower case whereby the curtain may be engaged and held.



2. A humidifier for railway coaches, comprising a longitudinally extending case positioned above window openings of the coach and extending substantially the length of said coach, vertical partition walls formed across said case at intervals corresponding to the length of the window openings and through which a continuous curtain roller may be mounted, fabric curtains secured to the portions of the roller between the partition walls, a crank at the end of the case by which the curtains may be wound upon the roller; said partition walls being formed with openings along their lower edges whereby water may circulate throughout the length of the case and be entrapped in the various compartments therealong; said case being formed with a slotted opening along its upper forward edge having upper and lower lips between which the curtains pass; a drain case disposed in vertical alinement with the first-named case and having slotted openings in its upper face through which the curtains may extend, and hook members within the drain case whereby the curtains may be engaged and held in position over the openings.

1,271,770. HEAVING-PLUG. CARLOS J. REEVES, Maricopa, Cal. Filed Apr. 15, 1918. Serial No. 228,648. (Cl. 166—13.)



1. A heaving plug comprising a tubular body having one end closed and provided at substantially diametrically opposed points with openings, dogs extending through said openings and pivotally engaged within the body, and means within the body for constantly urging the dogs in one direction.

[Claims 2 and 3 not printed in the Gazette.]

1,271,771. ARTIFICIAL LIMB. MILO E. RICE, Kansas City, Mo. Filed Sept. 6, 1917. Serial No. 190,276. (Cl. 3—11.)

1. The combination with an artificial limb comprising an upper member and a lower member, of a knee joint pivotally connecting said members and provided with forwardly projecting arms, and arms extending down from the forwardly projecting arms and secured to the lower member, and suspenders connected at their lower ends to said forwardly projecting arms to be tensioned by the latter when the leg is bent and to utilize said forwardly projecting arms as levers in straightening the leg.



2. The combination of an artificial limb comprising an upper member and a lower member, a knee joint pivotally connecting said members and provided with forwardly projecting arms and arms extending downwardly from the front ends of the forwardly projecting arms and secured to the lower member, the upper member of the limb having exterior downwardly-facing shoulders to constitute abutments for said forwardly projecting arms when the limb as a whole is straightened.

1,271,772. WINDOW-SASH LOCK. TREMONT W. RICKEL, McAllen, Tex. Filed Oct. 15, 1917. Serial No. 196,711. (Cl. 16—58.)



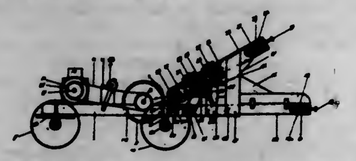
6. An automatic window sash lock comprising in combination with the upper and lower sash of a window, a swinging member pivoted at its lower end to the face of the lower sash and having a laterally projecting portion extending over the top of the lower sash and beyond the inner face thereof, said member having a handle, a plate secured to the upper sash and having inwardly inclined curved marginal flanges, a central vertical partition projecting from the plate, forming a right and a left way, and having its upper end laterally inclined, a transverse partition at the upper end of the right way, the marginal flanges of the plate tending to swing said member toward a vertical position as the lower sash is raised, a spring fastened at its upper end to said plate and extending below the central partition, and inclined guide members projecting from the plate and extending over the free end of the spring and serving to further swing said member to a vertical position as the lower sash closes.

[Claims 1 to 5 not printed in the Gazette.]

1,271,773. DEVICE FOR FEEDING BRUSHWOOD TO CUTTERS. JOHN W. RICHMAN, Gilroy, Cal. Filed June 14, 1917. Serial No. 174,751. (Cl. 146—20.)

1. A device for feeding material having a main frame with a tilting frame mounted thereon intermediate of the

ends thereof, means for feeding material on said frame, and coacting cutters mounted on the sides of said main and tilting frames respectively, said cutters being substantially parallel with the direction of the advance of material by said feeding means.



2. A device for feeding material having a main frame, an upper tilting frame with a carrier above said main frame and coacting cutters mounted on the sides of said main and tilting frame respectively, said coacting cutters being substantially parallel with the direction of movement of said carrier.

3. A device for feeding material comprising a main frame with a carrier thereon, a tilting carrier frame with a carrier thereon mounted on said main frame and operating therewith, and coacting cutters mounted respectively on the sides of said main and tilting frames, said coacting cutters being substantially parallel with the direction of movement of said carriers.

1,271,774. CRANK-HANDLE-RETAINING DEVICE. JOHN L. RIGGAN, Spring Grove, Va. Filed Nov. 13, 1916. Serial No. 131,092. (Cl. 74—33.)



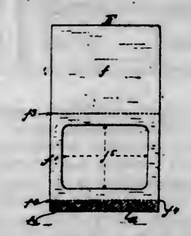
1. An automobile crank handle retaining device, which comprises a pair of brackets formed of flat material, each bracket having a body portion adapted to be secured to the automobile, with flanges extending therefrom, one of said flanges extending vertically with a hole therein, and having one end of the flange bent to lie in the same plane as the body portion, said end being provided with an angularly cut outer corner, and a spring having its ends bent to form shafts so that the spring is adapted to be rotatably secured in the holes in vertical flanges, and to coöperate with the bent ends of said flanges, said spring being positioned therebetween to expand against the vertical flanges and adapted to engage with the crank handle.

2. A device of the character described, which comprises a pair of rigidly mounted spaced brackets having flanges thereon, an inherently resilient crank retaining arm pivotally mounted in the brackets and coöperating with the flanges so as to be held in an operative or an inoperative position, and the outer corners of the opposed flanges being beveled to facilitate movement of the retaining arm into its operative and inoperative positions, and when in an operative position, the resilient arm engages with the underside of each of the brackets.

3. A device of the character described, which comprises a pair of brackets each one of which is formed of a single piece of material and consists of a body portion, an upright arm, and an angularly projecting flange projecting from said arm, said flange having a beveled outer corner, and a resilient crank retaining arm pivotally mounted in the upright portions of the bracket.

4. An auto crank handle retaining device which comprises a pair of rigidly mounted brackets having securing portions, upright arms and inwardly projecting flanges, the upper corners of said flanges being beveled, a retaining arm formed from a single piece of metal bent to have an approximately W-shape, the legs of which are pivotally mounted in the arms of the brackets, the intermediate portion of the retaining arm being adapted to engage with the crank, the legs of the retaining arm coöperating with the flanges so as to be maintained in the inoperative and operative positions, and the beveled outer corner of the flanges facilitating the movement of the retaining arm to either of its adjusted positions.

1,271,775. PACKET FOR TRANSPARENT BULLETINS. CLAIR V. RUCKER, New York, N. Y. Continuation of application Serial No. 93,182, filed Apr. 24, 1916. This application filed Feb. 9, 1917. Serial No. 147,542. (Cl. 11—23.)



A wrapper for a packet for transparent bulletins in which the bulletin is imposed on a transparent film from a transfer sheet folded about the film and inserted in a folded wrapper, which consists of a flexible opaque wrapper folded midway of its length and having a weakened line at the fold, one of the leaves of the wrapper being provided with an exposure opening whereby the bulletin may be produced by direct action on the transfer material and whereby the leaf having the exposure opening may be detached at the line of fold and used as a mat for the film when it is used as a lantern slide.

1,271,776. FASTENER-SETTING MACHINE. FRED A. RUMNEY, Boston, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Aug. 20, 1914. Serial No. 857,760. (Cl. 218—14.)



1. A duplex fastener setting machine, having in combination, oppositely disposed pairs of setting dies, and work guiding means constructed and arranged to press two pieces of material into engagement with each other and guide them toward setting position.

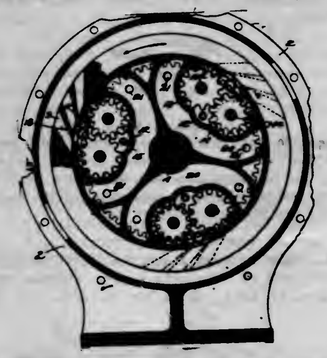
3. A duplex fastener setting machine, having in combination, work feeding means arranged to act upon separate pieces of sheet material, and guiding means for holding the two pieces in contact with each other at one point while the feeding means act at another point.

5. A duplex fastener setting machine, having in combination, a stationary support for superposed layers of sheet material, oppositely disposed yielding devices arranged at one end of the support for pressing the two layers into engagement with each other, and work feeding means arranged to act on the work on the side of the pressing means opposite to the support while the layers of the work are so pressed.

11. A duplex eyeleting machine, having in combination, means for directing and feeding two pieces of work to setting position, including yielding presser members for holding the two pieces in contact, means for punching both pieces while in contact, and means movable in a direction at right angles to the line of feed for separating the two pieces where they have been punched.

[Claims 2, 4, and 6 to 10 not printed in the Gazette.]

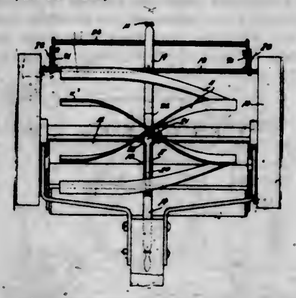
1,271,777. ROTARY INTERNAL-COMBUSTION ENGINE. SAMUEL L. SAUNDERS, Boston, Mass. Filed Oct. 9, 1916. Serial No. 124,632. (Cl. 123—9.)



1. A rotary internal combustion engine embracing in combination a hollow casing, a rotor mounted inside said casing and having a peripheral bucket ring whose buckets are disposed to receive the impact of the explosion by which the rotor is driven, suitable combustion chambers arranged inside the casing in coöperative relationship with said bucket ring, and continuously rotating gas feeding members acting by their rotation to compress and feed the combustible mixture into said combustion chambers, said rotary feed members having operative connection with said rotor by which they are continuously rotated, substantially as described.

[Claims 2 to 9 not printed in the Gazette.]

1,271,778. LAWN-MOWER SHARPENER. CHARLES S. SAYRE, Albion, Wis. Filed Mar. 10, 1916. Serial No. 83,862. (Cl. 76—82.)



1. In a sharpening device constructed for use in connection with a lawn mower comprising a bed knife and a blade movable into coöperation with said bed knife; the combination of a bar provided with handles and with a guide between said handles, an abrasive element, and means coöperative with said guide for guiding said blade with respect to said bed knife when said guide is moved along the said bed knife, while in contact therewith, by means of said handles.

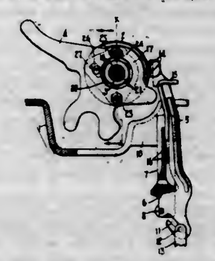
[Claims 2 to 5 not printed in the Gazette.]

1,271,779. MANIFOLD. ALBERT F. SCHROEDER and RALPH R. ROOT, Cleveland, Ohio, assignors to The Globe Machine & Stamping Company, Cleveland, Ohio. Filed Apr. 12, 1917. Serial No. 161,438. (Cl. 137—75.)



A manifold adapted for use in internal combustion aircraft engines comprising a hollow structure shaped to form a main passageway and a plurality of branches extending therefrom to form corners, said manifold being manufactured of complementary light sheet metal portions having continuous integral flat flanges around each of said corners as well as therebetween to constitute abutting edge portions, the latter being laminated, folded and welded together whereby to form lock seams capable of maintaining a near vacuum within the manifold and sustaining both the high temperatures and the high pressures.

1,271,780. TYPE-WRITING MACHINE. GEORGE A. SEIB, Ilion, N. Y., assignor to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Filed Oct. 7, 1916. Serial No. 124,250. (Cl. 197—149.)



1. In a typewriting machine, the combination with a platen and a platen frame having an end plate, of a bearing piece for the platen axle comprising a plate and a sleeve secured to said plate, and means for adjustably and rigidly securing the last mentioned plate against a face of said end plate of the platen frame.

3. In a typewriting machine, the combination with a platen, of a platen frame having an end plate, a bearing piece for the platen axle comprising a plate and a sleeve secured to said plate, and screws adjustably and rigidly securing the last mentioned plate against a face of said end plate of the platen frame.

5. In a typewriting machine, the combination with a platen and a platen frame having an end piece, of a bearing piece for the platen axle comprising a plate, a bearing sleeve screwed through said plate and a nut screwed on said sleeve against said plate, and means for adjustably and rigidly securing the last mentioned plate against a face of said end plate of the platen frame.

[Claims 2, 4, and 6 to 14 not printed in the Gazette.]

1,271,781. GRIP-NUT. WILLIAM E. SHARP, Chicago, Ill., assignor to Grip Nut Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 29, 1915. Serial No. 17,682. (Cl. 151—21.)



1. A bolt nut comprising a nut having one substantially flat face adapted to contact with the proximate structure in the usual manner and provided with a centrally dis-

posed bead on the other face thereof intersected by the bolt hole, both the nut proper and the proximate bead being threaded and the bead being depressed in a line parallel to the axis of the bolt hole to slightly deflect the threads thereof.

2. A bolt nut comprising a nut having one substantially flat face adapted to contact with the proximate structure in the usual manner, and provided with a centrally disposed bead on the other face thereof intersected by the bolt hole, both the nut proper and the proximate bead being threaded and the bead being depressed in a line parallel to the axis of the bolt hole to slightly deflect the threads of the bead, and of the proximate part of the body of the nut from their normal position.

1,271,782. LOCK-NUT AND PROCESS OF MAKING THE SAME. WILLIAM E. SHARP, Chicago, Ill., assignor to Grip Nut Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 8, 1916. Serial No. 119,123. (Cl. 151—21.)

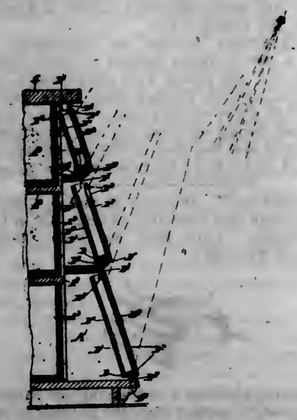


1. The herein described process of producing a lock nut consisting in forming a blank of substantially equal thickness throughout and solid except for the bolt hole with a centrally disposed rectangular shaped ridge of less width than the diameter of the bolt hole extending across one face thereof intersected by the bolt hole, and forming a thread in said nut, and thereafter placing the same upon a flat surface and applying pressure to the face of the ridge, whereby part of the threads in line with the ridge on each side of the bolt hole are modified, the compressed part of the topmost thread in each case being of a length substantially of the width of the ridge, and the compressed part of each succeeding modified thread being slightly less in length as they approach toward the other face of the nut.

6. A lock-nut comprising a threaded bolt nut provided with a centrally disposed flat faced ridge across one face thereof severed by the bolt hole, the width of the ridge being less than the diameter of the bolt hole, the threads formed in the ridge being slightly compressed toward the other face of the nut, each succeeding thread of the nut beneath the ridge being likewise compressed, but successively shortened in length and disappearing within the body of the nut.

[Claims 2 to 5 not printed in the Gazette.]

1,271,783. DISPLAY-COUNTER. WILLIAM G. SHEARER, Chicago, Ill. Filed Nov. 3, 1916. Serial No. 129,250. (Cl. 211—9.)



1. A display counter having a series of display pockets mounted on the front thereof one above the other and inclined to the vertical, all of said pockets being parallel, each pocket being higher than and having its upper edge slightly behind the lower edge of the one above it.

3. A display counter having a series of display pockets on the front sides thereof, all of said pockets being inclined to the vertical and being parallel one with another, the height of the pockets being such that the angle subtended by each pocket at the eye of a customer standing at the counter, is substantially the same.

[Claims 2 and 4 to 7 not printed in the Gazette.]

1,271,784. GOLF-BAG. EDWIN I. SIMPSON, Philadelphia, Pa. Filed Sept. 18, 1915. Serial No. 51,349. (Cl. 224—45.)



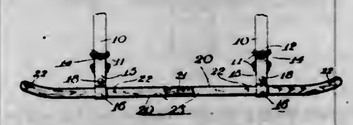
A detachable partitioning device for a golf bag, comprising a pair of oppositely located spring clips adapted to engage the top edge of a golf bag and a partition extending transversely between said clips for the purpose of segregating the iron and wooden clubs.

1,271,785. PROCESS OF MANUFACTURING ENDLESS DRIVING-BELTS. THOMAS SLOPER, Devizes, England. Filed Mar. 11, 1918. Serial No. 221,806. (Cl. 28—5.)



The method of manufacturing endless driving belts, comprising the steps of providing a mandrel in the form of a split ring with a spiral gage thereon, then winding a single strand of cord in an open spiral around the mandrel and against the spiral gage to determine the length of the cord of the first winding and the position of each turn of the winding with relation to the other turns, and continuing this winding at least twice around the mandrel, the second or subsequent windings lying preferably close against the next preceding winding, then joining the ends of the cord after the number of windings have been completed, then removing the mandrel from the interior of the windings, and then stretching the belt to draw the first and last of the windings against each other, substantially as described.

1,271,786. AUTOMOBILE-BUMPER. ALBERT E. SMITH, Milwaukee, Wis., assignor of one-half to Benjamin D. Zimmerman, Milwaukee, Wis. Filed Jan. 11, 1918. Serial No. 211,364. (Cl. 293—55.)



1. In an automobile bumper, a bumper bar consisting of a flexible resilient wooden member.

4. An automobile bumper, comprising a yieldable wooden bumper bar with spring steel reinforcement.

6. An automobile bumper, comprising a bumper bar formed of spring steel around a wooden reinforcement with a metal covering for the wooden reinforcement.

8. An automobile bumper, comprising yielding brackets each consisting of a bracket member adapted to be secured to the end of an automobile frame, a second bracket member pivotally connected therewith, and a third bracket member clamped to the second bracket member, the first bracket member and the third bracket member having their ends adjustably connected together, and a bumper bar clamped between the second bracket member and the third bracket member of each bracket.

11. An automobile bumper, comprising: supporting brackets, each consisting of; a fixed member fitting on the front end of the side bar of the automobile frame, a hook formed at one end of the fixed bracket member, an arc-shaped slotted portion bent up from the other end of the fixed bracket member, U-bolts fitting in the hook portion and the bent portion of the fixed bracket member for clamping it to the frame, a swinging bracket member having its end forked and engaging one of the U-bolts on opposite sides of the hook to form a hinge connection and having an arc-shaped end slidably fitting against the slotted portion of the fixed bracket member, and a clamping bolt for adjustably clamping said parts together; and a bumper bar carried by the brackets.

[Claims 2, 3, 5, 7, 9, 10, and 12 to 15 not printed in the Gazette.]

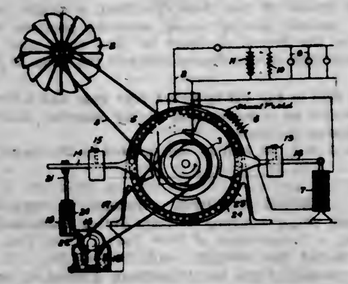
1,271,787. MANUFACTURE OF PERFORATED METAL FOR DRAINAGE-CASINGS, SCREENS, &c. ANDREW SMITH, San Mateo, Cal. Filed July 23, 1914, Serial No. 852,654. Renewed Dec. 5, 1917. Serial No. 205,685. (Cl. 29—148.)



3. The process of making perforated metal sheets, or plates for strainers, drainage casings, etc., comprising forming a series of corrugations in the metal plate, to raise portions of the metal above the plane of the intervening portions, said raised portions being flattened substantially throughout their extent, and cutting a series of parallel slots through the raised portions transversely of the corrugations.

[Claims 1 and 2 not printed in the Gazette.]

1,271,788. VARIABLE-POWER REGULATION. JOHN A. SNAB, Jr., West Elizabeth, Pa. Filed Feb. 16, 1915. Serial No. 8,506. (Cl. 171—312.)

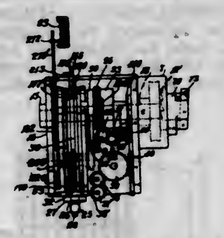


1. The method of speed control of a fluid motor operating under varying fluid velocities, which consists in producing one force which is a function of the speed of such motor, another force which is a function of the torque thereof, and in balancing said forces against each other and regulating the load on the fluid motor in accordance with the point of balance, so that the motor is maintained at a predetermined speed for each fluid velocity.

3. The method of speed control of a fluid motor adapted to operate with varying fluid velocities, which consists in producing a centrifugal force which is proportional to the square of the motor velocity and a force which is proportional to the torque of the motor, and balancing said forces against each other so that when the balance is reached for any particular fluid velocity, the motor runs at a predetermined speed, and in utilizing any preponderance of said first force over said second force to increase the motor load and vice versa.

[Claim 2 not printed in the Gazette.]

1,271,789. BUTTON-SETTING MACHINE. SAMUEL L. SHELMERDINE, Boston, Mass., assignor to Independent Button Fastener Machine Company, a Corporation of Massachusetts. Filed Oct. 8, 1913. Serial No. 794,154. (Cl. 218—8.)



1. In a button setting machine a frame, a shaft rotatable therein, an operating mechanism for said shaft, a button presenting and setting mechanism actuated from said shaft, a wire feed having a gear train and coöperating with said setting mechanism, and an actuating mechanism for said wire feed including a cam on said rotatable shaft, a lever coöperating with said cam, a slide disposed for reciprocation by said lever and a pawl on said slide directly engaging a gear wheel of the gear train of the wire feed and effective during one phase of its reciprocation and ineffective during another phase of its reciprocation.

2. In a button setting machine a frame, a shaft rotatable therein, an operating mechanism within the control of the operative for actuating said shaft, a button presenting and setting mechanism actuated from said shaft, a wire feed having a gear train, a counting mechanism cooperating with said setting mechanism and without the control of the operative and an actuating mechanism for both the wire feed and the counting mechanism including a cam on said rotatable shaft, a lever coöperating with said cam, a slide disposed for reciprocation by said lever, means on said slide for actuating the counting mechanism and a pawl on said slide for directly engaging a gear wheel of the gear train of the wire feed.

3. In a button setting machine, a frame, a shaft rotatable therein, an operating mechanism for said shaft, a button presenting and setting mechanism actuated from said shaft, a button pusher coöperating with said mechanism, and an actuating mechanism for said pusher including a cam on the rotatable shaft, a lever coöperating with said cam and formed with a hooked end a second lever engaging said hooked end and said pusher, a coöperating cam on said shaft fixed to said first-named cam and a lever coöperating with said last-named cam and engaging said pusher.

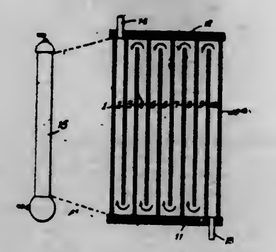
4. In a button setting machine, a shaft, a mechanism for successively presenting and setting a plurality of buttons to any suitable material, an actuating mechanism for said setting mechanism operable from said shaft, a counting mechanism coöperating with said presenting and setting mechanism to register the number of buttons set thereby, an actuating mechanism for said counting mechanism also operable from said shaft, and a locking and releasing mechanism for said register actuating mechanism including a tooth on said shaft, and a dog normally disposed without the path of said tooth and arranged to be

projected into the path of said tooth at a predetermined time by said counting mechanism to lock said shaft.

5. In a button setting machine a shaft, a mechanism for successively presenting and setting a plurality of buttons, means operable from said shaft to actuate said setting mechanism, a counting mechanism coöperating with said setting mechanism to register the number of buttons set, means also operable from said shaft to actuate said counting mechanism, a locking and releasing mechanism for said shaft, a button pusher device coöperating with said setting mechanism, and an actuating mechanism for said pusher including a cam on said shaft, a lever cooperating with said cam, a second lever engaging said first named lever and said pusher, a second cam on said shaft fixed to said first cam, and a lever coöperating with said last named cam and engaging said pusher.

[Claims 6 to 12 not printed in the Gazette.]

1,271,790. PHOTOCHEMICAL APPARATUS. WALTER O. SNELLING, Pittsburgh, Pa. Continuation in part of application Serial No. 776,834, filed July 1, 1913. This application filed July 1, 1914, Serial No. 848,355. Renewed Jan. 3, 1918. Serial No. 210,231. (Cl. 23—24.)



1. Photochemical apparatus consisting of a series of parallel plates pervious to light arranged in a box-like chamber, impervious to light except through said plates, said plates being so arranged as to afford a continuous passageway for gases around the same in order, said chamber having an inlet at one end and an outlet at the other end.

2. Photochemical apparatus consisting of a series of transparent conduits arranged to afford a continuous passageway, one in front of the other, and means for preventing light from entering said conduits except by passing through the front one and thence through the others in order.

6. In photochemical apparatus, a compartment having a transparent wall, means for introducing chlorin and materials to be chlorinated thereto, a source of actinic light, a transparent walled vessel between said source and said compartment, and means for introducing gas comprising chlorin into said vessel.

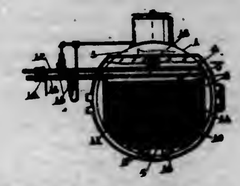
7. In photochemical apparatus, the combination of means affording a passageway for gases from an inlet to an outlet, so arranged that light directed thereon will act with greatest actinic effect on the gases near the outlet and with less actinic effect on the gases nearer the inlet, and means for regulating the temperature of gases passing through said passageway.

13. In photochemical apparatus, a reaction chamber having opaque walls and a transparent wall, said chamber having an inlet and an outlet, and being so arranged as to cause a current of gases passed through the same to progress from said inlet to said outlet in a path crossing and recrossing a line normal to aid transparent wall.

[Claims 3 to 5 and 8 to 12 not printed in the Gazette.]

1,271,791. FUEL-BURNER. JOSEPH F. SPIEGEL, Toronto, Ontario, Canada. Filed Apr. 2, 1917. Serial No. 159,187. (Cl. 158—100.)

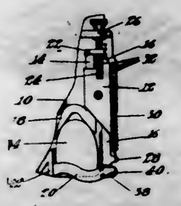
1. A fluid burner comprising a plurality of rows of jets each provided with a mixing chamber; a plurality of separate alternated air and gas conduits; pipes connecting each mixing chamber with an air conduit; pipes connecting each mixing chamber with a gas conduit; a common air supply pipe communicating with all the air conduits and a common fuel supply pipe communicating with all the fuel conduits.



3. In a fluid burner, the combination of a mixing chamber; a gas supply pipe communicating with said chamber, and air supply pipe communicating with said chamber; a detachable jet provided with an inner end of reduced diameter screwed into an opening in said chamber; and a conical spreader located within the jet with its point extending within the part of reduced diameter.

[Claim 2 not printed in the Gazette.]

1,271,792. BLANK-HOLDER. JOHN F. STANDISH, Winthrop, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Nov. 16, 1914. Serial No. 872,461. (Cl. 1—32.)



1. A heel or top lift holder having a gage for engaging one edge of a heel or top lift, a relatively invertible gage for engaging the other edge of the heel or top lift, and means for effecting relative approaching movement of said gages, to seize a blank between them.

2. A heel or top lift holder having a breast gage invertible relatively to the remainder of the holder, said breast gage being constructed and arranged to conform to the breast edges of blanks having breast edges of different contours by engagement with said edges.

8. In a device of the class described, a single blank engaging member having blank engaging portions conforming to the breast contours of both right and left heels or top lifts having breast edges in the form of ogee curves.

9. In a heel or top lift holder, a rear gage and a breast gage reversible by inversion and having opposite, parallel, work engaging portions.

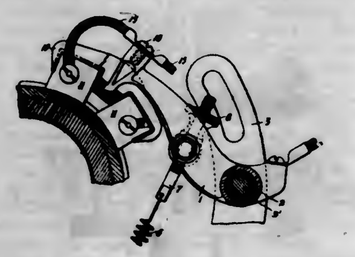
[Claims 3 to 7, 10, and 11 not printed in the Gazette.]

1,271,793. BRUSH-HOLDER. ROBERT W. STANLEY, Cleveland, Ohio, assignor to Entz Motor Patents Corporation, a Corporation of New York. Filed Dec. 11, 1916. Serial No. 136,201. (Cl. 200—24.)

1. In a device of the kind described, a lever, a brush holder arm mounted thereon to permit motion of the brush holder arm in any direction relative to the lever, and positive means for guiding the brush holder arm.

3. In a device of the kind described, a lever, a brush holder arm mounted thereon to permit motion of the brush holder arm in any direction relative to the lever, a brush mounted upon the brush holder arm, and means, independent of the lever and including the brush, for guiding the brush holder arm.

5. In a device of the kind described, a pivoted, freely rotatable lever, a spherical member carried thereby, and a brush holder arm having a spherical depression adapted to coöperate with the spherical member.



7. In a device of the kind described, a lever, a brush holder arm carried thereby and mounted thereon to permit motion of the brush holder arm in any direction relative to the lever, positive means for guiding the brush holder arm, and means for limiting its angular motion with respect to the lever.

9. In a device of the kind described, a lever, a projection carried thereon, a spherical member carried by said projection, a brush holder having a slotted portion, and a spherical depression formed at the base of the slot, the spherical member being adapted to coöperate with the spherical depression of the brush holder arm to permit motion of the brush holder arm in any direction relative to the lever, the projection being adapted to coöperate with the sides of the slot to limit the angular motion of the brush-holder arm.

[Claims 2, 4, 6, and 8 not printed in the Gazette.]

1,271,794. PROTECTIVE DEVICE. GEORGE H. STEVENSON, Mount Vernon, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 20, 1916. Serial No. 132,446. (Cl. 175—30.)



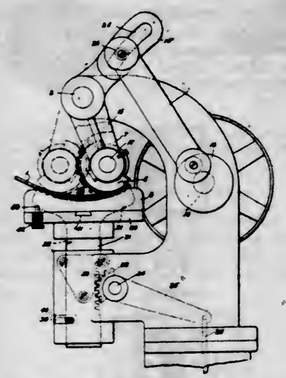
1. In a protective device, a container, and electrodes therein providing a plurality of spark gaps of different lengths, said electrodes being surrounded by gas at substantially the critical pressure of one of the longer gaps.

2. In a protective device, a container, and electrodes therein providing a plurality of spark gaps of lengths varying from 0.05 mm. to 1.5 mm., said electrodes being surrounded by gas at substantially the critical pressure of one of the longer gaps.

6. In a protective device comprising a partially evacuated container, in which is arranged a spark gap having a minimum sparking potential at substantially the pressure in said container, means providing an auxiliary spark gap in parallel with said principal gap and having its minimum sparking potential at a higher gas pressure than said principal gap, said minimum sparking potential of the auxiliary gap being less than the sparking potential of said principal gap at the same pressure.

[Claims 3 to 5 not printed in the Gazette.]

1,271,795. MACHINE FOR OPERATING ON SOLES. WILLIAM C. STEWART, Swampscott, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Apr. 12, 1916. Serial No. 90,572. (Cl. 12—21.)

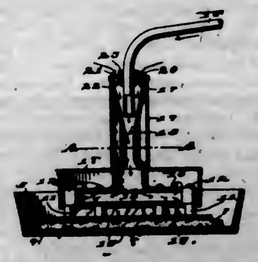


1. A sole molding machine having, in combination, cooperating sole molding forms, a pivoted arm supporting one of the forms, mechanism for oscillating the arm about the fulcrum to traverse the form in a curved path relative to the coöperating form, and mechanism for simultaneously rotating the form to cause each portion of the form to register with the corresponding portion of the coöperating form.

5. A sole molding machine, having, in combination, a sole supporting form, an oscillatory arm, a sole molding form pivoted upon the free end of the arm, mechanism for oscillating the arm to move the form in a curved path, and means for moving the sole supporting form toward and from the path of movement of the sole molding form.

[Claims 2 to 4 not printed in the Gazette.]

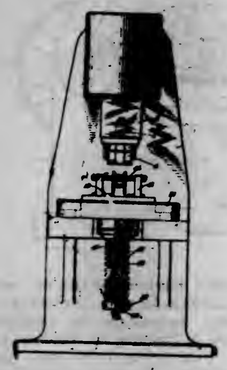
1,271,796. FRYING APPARATUS. JAKE M. STIVERS and ANDREW C. ENOCHS, Oklahoma, Okla., assignor to The Right Way Cooker Company, Oklahoma, Okla., a Corporation of Oklahoma. Filed Dec. 26, 1917. Serial No. 208,771. (Cl. 126—41.)



1. In apparatus of the class described, a plate, a burner mounted on the plate, a tubular fuel mixer extending upward from the burner, means for supplying fuel to the mixer, a cover for the burner, said cover having a dome portion revolubly embracing the tubular mixer, said mixer and dome having openings adapted to be brought into register.

2. In apparatus of the class described, a plate, a burner mounted on the plate, a tubular fuel mixer extending upward from the burner, a cover for the burner, said cover having a dome portion revolubly embracing the tubular mixer, a bush extending down through the top wall of the dome portion and screwthreaded into the top wall of the mixer, a flexible fuel-supply tube inserted through the bush, the top walls of the dome and mixer having inlet openings adapted to be brought into register by revolving the dome.

1,271,797. SLIDE-FORMER MACHINE. FLOYD D. STOWE, Wilmington, Del., assignor to E. I. du Pont de Nemours Powder Company, Wilmington, Del., a Corporation of New Jersey. Filed Apr. 24, 1914. Serial No. 834,082. (Cl. 113—38.)



1. In a metal forming machine, devices for turning over the edge of a blank comprising a reciprocating grooved member, a rocker arm adapted to force the edge of the blank into the groove, the rocker arm having a projection guiding the rocker arm into the groove, and a plate following the blank on the opposite side thereof to the grooved member.

3. In a metal forming machine, devices for turning over the edge of a blank comprising a reciprocating grooved member, a rocker arm adapted to force the edge of the blank into the groove, and an adjustable actuating device for the rocker arm secured to the grooved member.

4. In a metal forming machine, devices for turning over the edge of a blank comprising a reciprocating grooved spring-supported sleeve, a rocker arm adapted to force the edge of the blank into the groove, and an impression die located in the sleeve.

16. In a metal forming machine, devices for turning over the edge of a blank comprising a reciprocating grooved spring-supported sleeve, a rocker arm adapted to force the edge of the blank into the groove, an impression die located in the sleeve, and another impression die cooperating with the first-mentioned impression die.

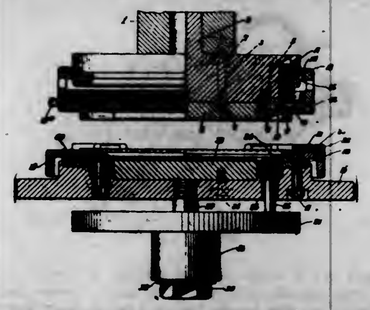
20. In a metal forming machine, devices for turning over the edge of a blank beyond a position perpendicular to the blank, and a kicker for removing the formed blank therefrom, comprising a pivoted arm.

[Claims 2, 5 to 15, 17 to 19, and 21 to 24 not printed in the Gazette.]

1,271,798. HEAD-FORMING MACHINE. FLOYD D. STOWE, Wilmington, Del., assignor to E. I. du Pont de Nemours Powder Company, Wilmington, Del., a Corporation of New Jersey. Filed Apr. 24, 1914. Serial No. 834,083. (Cl. 113—38.)

1. A head forming machine comprising a convex forming device, a concave forming device, said forming devices being located in an inclined position, and male and female lettering dies located in the forming devices.

5. A head forming machine comprising a convex forming device, a concave forming device, said forming devices being located in an inclined position, and bung-hole and neck forming devices in the said forming devices.

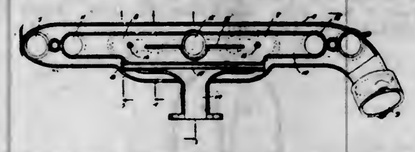


9. A head forming machine comprising a convex forming device, a concave forming device, said forming devices being located in an inclined position, bung-hole and neck forming devices in the said forming devices, and a stripper ring associated with the neck forming devices.

15. A forming machine comprising upper and lower keg head forming devices, upper and lower pressure rings, one of said pressure rings being spring-supported, and means for displacing the spring-supported pressure ring in opposition to the force of the spring.

[Claims 2 to 4, 6 to 8, and 10 to 14 not printed in the Gazette.]

1,271,799. INTERNAL-COMBUSTION ENGINE. FREDERICK R. SUNDERMAN, Detroit, Mich., assignor to Sunderman Corporation, Newburgh, N. Y., a Corporation of New York. Filed Sept. 12, 1917. Serial No. 190,922. (Cl. 257—241.)



1. In an internal combustion engine, the combination with the cylinders having intake and exhaust passages, of an exhaust manifold extending across the cylinders in juxtaposition thereto and having a plurality of lateral inlet openings registering with said exhaust passages to receive the exhaust gas therefrom and having an outlet opening, an intake manifold extending longitudinally of and within said exhaust manifold so as to have its walls heated by the exhaust gases, and having an intake opening for fuel mixture, and lateral outlet openings registering with the intake passages of the cylinders, and one or more exhaust flues entering the intake manifold at points near the exhaust passages of the cylinders and extending through said intake manifold so as to cause the hot gases direct from the cylinders to rapidly pass through the flues, whereby the intake manifold is heated externally and internally in such manner as to thoroughly heat the fuel mixture just before it enters the cylinders.

4. In a manifold construction for internal combustion engines, the combination of an outer manifold casing having a discharge opening at one end and a plurality of lateral exhaust intake openings along the length thereof adapted to register with the exhaust passages of the engine, an inner manifold casing cast integrally with and lying within said outer casing with a space between said casings for the flow of exhaust gases surrounding said inner casing on all sides so as to bring all of the walls thereof directly in contact with the hot exhaust gases and reduce heat conduction from said walls, said inner casing extending longitudinally of the outer casing and having a plurality of lateral openings along its length adapted to register with the engine fuel intake openings and having a lateral intake passage extending through the wall of the outer casing for receiving fuel mixture from a carbureter, a plurality of short transverse flues entering the inner manifold casing at points substantially in line with the lateral intake openings of the outer casing and extending through said inner casing so as to convey hot exhaust gases through the inner casing directly as they are discharged from the cylinders, and an exhaust flue extending longitudinally through said inner casing above the intake opening thereof, whereby the wall of the inner casing is substantially uniformly heated by the flow of the hot exhaust gases through the outer casing and the inner portions of the intake mixture flowing through the inner casing are heated by the exhaust flues extending through the inner casing, to insure the proper heating of the intake mixture just before it enters the cylinders.

[Claims 2, 3, and 5 to 7 not printed in the Gazette.]

1,271,800. ILLUMINANT. WOODRUFF SUTTON, New York, N. Y., assignor to J. G. Wilson Corporation, Norfolk, Va., a Corporation of Virginia. Filed Nov. 26, 1917. Serial No. 204,077. (Cl. 88—58.)

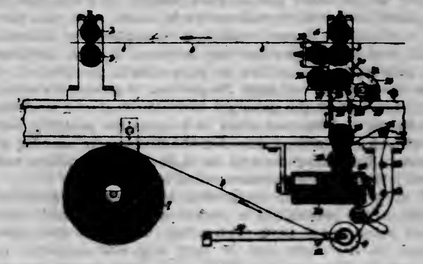


1. An illuminating device comprising a plurality of parallel spaced slats or plates adapted to be arranged between a source of light and the area to be lighted, the faces of said slats or plates toward the said source of light having an enameled or mirror-like surface adapted to specularly reflect the light upon the opposing faces of adjacent slats or plates and said opposing faces being knurled whereby they are adpted to diffuse the light, substantially as set forth, into the area to be lighted.

[Claims 2 and 3 not printed in the Gazette.]

1,271,801. MACHINE FOR MAKING WINDOW-ENVELOPS. GEORGE W. SWIFT, Jr., Bordentown, N. J. Filed Oct. 16, 1916. Serial No. 125,708. (Cl. 93—61.)

In an envelop machine, the combination of means for imparting continuous movement to an envelop web having window apertures cut therein; means for imparting intermittent movement to a patch web at a speed equal to that of the envelop web, comprising means whereby the advancing edge of the patch web is advanced until it is within the control of the mechanism which advances the envelop web; means for thereupon severing the advanced portion of the patch web from the rest of the web with formation of a patch, which, from the moment of its formation, is under control of the envelop web advancing mechanism, and is by it pressed into adhesive contact with a window aperture of the envelop web; and said means for imparting intermittent movement to the patch web also comprising means whereby the dwell in the intermittent movement of the patch web is caused to commence from the completion of the severance of a patch



and to continue until the approach of another window aperture after which the gummed patch web is motionless for an interval.

1,271,802. PRESSURE-GAGE. WILLIAM W. TALBOT, Baltimore, Md., assignor of one-half to Akron Tire and Rubber Company, Inc., Baltimore, Md., a Corporation of Maryland. Filed July 19, 1917. Serial No. 181,520. (Cl. 73—111.)



A tire gage comprising a slotted tubular body, a pressure actuated plunger in the body and having its outer end cup-shaped, a plug having a sliding fit in the body and provided with a reduced inner end seating loosely in the cup-shaped outer end of the plunger, and an indicator ring carried by the plug and encircling the body externally, the latter having graduations for the ring.

1,271,803. HARVESTER. JAMES W. THOMPSON, Spokane, Wash. Filed Sept. 16, 1916. Serial No. 120,462. Renewed Dec. 20, 1917. Serial No. 208,146. (Cl. 56—22.)



1. A harvester reel comprising a fixed shaft, series of radial arms journaled to rotate about the shaft, a pair of reel slats hinged to the outer end of each arm and mounted to swing into alinement with the arm or outwardly

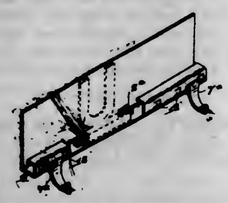
away from each other in a position perpendicular to the arm, a bracket mounted to slide on each arm and connected to the reel slats to swing the same, a roller connected to the inner end of each bracket, a fixed cam on the shaft adjacent to each series of arms, each cam having a marginal flange consisting of portions of unequal radii, and having passageways between the said portions for permitting the rollers to pass within the portion of less diameter and out upon the portion of greater diameter, gates for closing the passages to retain the rollers within the flange and the reel slats in inoperative position, and a common operating means for simultaneously opening or closing all of the gates and for deflecting the rollers outwardly through the passages when open.

2. A harvester reel comprising a fixed shaft, series of radial arms journaled to rotate about the shaft, the series being apart from each other, a pair of reel slats hinged to the outer end of each arm and mounted to swing into alinement therewith or at right angles thereto in opposite directions, a roller connected with the slats of each arm and movable longitudinally of the arm, a fixed cam adjacent to each series, each cam having a marginal flange within which the rollers normally move to hold the slats extended at right angles to the arm, said flange having inlet and outlet passages for the rollers for permitting them to pass to the periphery of the flange to move the slats into alinement with the arm at certain points in their travel, and means for preventing escape of the rollers from within the flange and for constraining the rollers to move outside the flange.

3. A harvester reel comprising a fixed shaft, series of radial arms journaled to rotate about the shaft, the series being spaced apart from each other, a pair of reel slats hinged to the outer end of each arm and mounted to swing into alinement therewith or at right angles thereto in opposite directions, a roller connected with the slats of each arm and movable longitudinally of the arm, a fixed cam adjacent to each series, each cam having a marginal flange within which the rollers normally move to hold the slats extended at right angles to the arm, said flange having inlet and outlet passages for the rollers for permitting them to pass to the periphery of the flange to move the slats into alinement with the arm at certain points in their travel.

[Claims 4 to 7 not printed in the Gazette.]

1,271,804. SIGN-RACK FOR LETTERS AND NUMERALS. FRED THUNELL, Salt Lake City, Utah. Filed Sept. 22, 1917. Serial No. 192,683. (Cl. 40—142.)



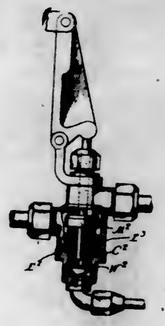
1. In a letter holder of the character described, a base member, a back member, a member overlapping the base member so as to leave a letter space between the back and the overlapping members, and flexible lips in the back and base members for holding the letters in relative position.

2. In a letter holder for signs, a one piece rack forming a letter raceway and having open ends permitting letters to be inserted and removed through the ends, and a plurality of flexible lips struck out of the rack and bendable across the raceway for holding the letters at various positions in the raceway.

3. A letter holder for signs comprising a base member, an extended back member, a side member, an overlapping member, said members forming a letter raceway having open ends and a letter space between the back and overlapping members, and a plurality of lips bendable from certain of said members into the raceway.

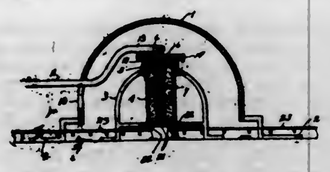
4. A letter holder for signs comprising a base member, an extended back member, a side member, a member extending from the side member and projecting over the base member and spaced apart from the back member so as to form a raceway, a plurality of lips bendable into the raceway, a plurality of lips bendable outwardly from the base member, and supports fitting the base member and having slots for the base member lips.

1,271,805. VALVE MECHANISM. EDWARD J. THURBER, New Orleans, La., and JOHN W. RACKLIFFT, Detroit, Mich., assignors, by mesne assignments, to Northern Engineering Works, Detroit, Mich., a Corporation of Michigan. Filed Dec. 17, 1914. Serial No. 877,831. (Cl. 277—21.)



A valve mechanism comprising a casing having opposed ports, valves respectively controlling said ports, a spring interposed between said valves tending to normally maintain the same closed, another spring abutting at one end against one of said valves and abutting at its other end against the casing, and means for manually controlling the valve against which both springs abut.

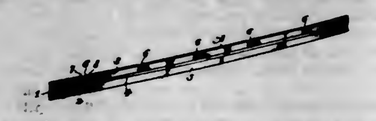
1,271,806. FIRE-ALARM. EDITH L. TIBBS, Greenville, S. C. Filed June 12, 1916. Serial No. 103,221. (Cl. 200—33.)



In a fire alarm signaling system, a pair of contacts, a lever connected with one of the contacts for procuring engagement thereof, a cartridge casing arranged in opposition to said lever, an explosive charge in said casing, an expansible spring in said casing, a cap for the end of the cartridge adjacent the lever and including a frangible portion engageable by the spring and adapted upon explosion of the charge to release the spring for engagement with the lever and a fuse extending from the casing.

1,271,807. PRINTER'S QUOIN. WILLIAM J. TINSLEY, Woodhaven, N. Y. Filed Apr. 12, 1918. Serial No. 228,097. (Cl. 254—42.)

8. A printer's quoin or locking member comprising a strip-like section having a straight, flat face at one side, the opposite side of said member having a rib extending longitudinally thereof and forming a thickened section on the member, said rib having a straight, flat portion extending parallel to the first mentioned straight, flat face and having a longitudinally extending beveled portion merging into the face upon which the rib is located.

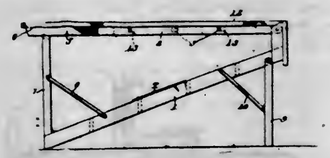


6. A device for use as a printer's quoin or locking member comprising a strip-like section having opposing parallel, vertical side portions and having a beveled rib extending longitudinally of one of said side portions thereof, said strip being provided with tool-engaging means.

9. A strip for making printer's quoins or locking member comprising a relatively long strip-like member having a thickened beveled portion extending longitudinally at one face thereof and having a series of notches placed along one edge thereof and forming tool-engaging shoulders, said strip being adapted to be subdivided into sections of selected sizes, to provide locking or quoin members.

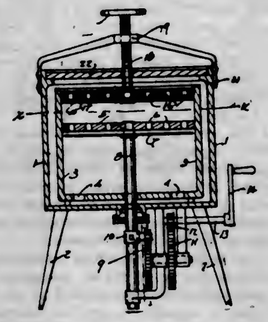
[Claims 1, 2, 4, 5, 7, and 8 not printed in the Gazette.]

1,271,808. COMBINED STEP-LADDER AND IRONING-BOARD SUPPORT. ALEXANDER TOBIAS, New York, N. Y. Filed Aug. 31, 1917. Serial No. 189,184. (Cl. 228—32.)



In combination with a ladder a prop member hingedly connected thereto and provided with hinged extension members, braces pivotally connected with each other and pivotally connected with the said extension members, the prop member having cross rods, frames pivotally connected with the ladder at the upper and lower ends thereof, braces pivotally connected with the frames and the ladder, and a board having hooks adapted to engage under the rods of the props.

1,271,809. WASHING-MACHINE. HARVEY S. TOTTEN, Port Angeles, Wash. Filed May 1, 1917. Serial No. 165,773. (Cl. 68—37.)



In a washing machine which embodies a cylindrical outer tub and a similar inner tub the combination of a piston rod slidably passing through the bottom of both tubs, a thin and perforated one piece piston slidably mounted within the inner tub and secured to the upper end of said piston, a normally open loose valve plate slidably mounted on said piston rod directly beneath the said piston and adapted to close the perforations therein under an upward thrust, a similarly perforated cover adjustably and slidably mounted in water tight relation within the said inner tub and adjacent the top thereof, a threaded shaft secured to said cover, a valve plate slidably mounted on said shaft directly beneath the said cover and adapted to close the perforations therein under the influence of an upward thrust, whereby when clothes to be washed are placed intermediate the piston and the cover the upward movement of the piston will cause the clothes to force the valve beneath the cover into closed position and on the downward stroke of the piston the resistance of the water beneath the piston will force the valve of the piston to a closed position.

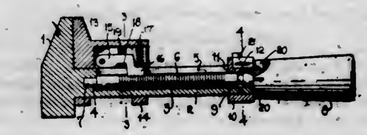
1,271,810. VULCANIZATION OF RUBBER AND SIMILAR MATERIALS. DOUGLAS FRANK TWISS, Sutton Coldfield, England, assignor to The Dunlop Rubber Company, Limited, Westminster, London, England. Filed Jan. 4, 1918. Serial No. 210,302. (Cl. 18—53.)

1. A method of accelerating a vulcanizing process which consists in adding to the rubber mixing an accelerator comprising caustic alkali dissolved in a hydroxy-organic compound forming a solvent which is not decomposed by the alkali.

3. A method of accelerating a vulcanizing process which consists in adding to the rubber mixing an accelerator comprising caustic alkali dissolved in glycerol or glycol.

[Claim 2 not printed in the Gazette.]

1,271,811. WRENCH. CHARLEY VINCENT and ALFRED FONTAINE, New Haven, Conn. Filed Aug. 15, 1917. Serial No. 186,427. (Cl. 81—156.)



1. A wrench of the character described, comprising a relatively fixed jaw, a shank connected thereto, said shank being formed with a longitudinal bore and in one edge with a longitudinal slot communicating with the bore, a threaded rod rotatably mounted in said bore, a handle connected to one end of said rod, a collar fitting over one end of the shank and formed with an inwardly projecting tongue engaging in said slot and formed with a lug, the rod being formed with an annular groove in which said lug is engaged, a movable jaw slidingly mounted on the shank and provided with a pivoted dog engageable with the threads of the rod, the handle being formed in one end with a plurality of recesses, and a catch carried by the collar and engageable in any one of said recesses, for the purpose specified.

2. A wrench of the character described, comprising a relatively fixed jaw, a shank connected thereto, said shank being formed with a longitudinal bore and in one edge with a longitudinal slot communicating with the bore, a threaded rod rotatably mounted in said bore, a handle connected to one end of said rod, a collar fitting over one end of the shank and formed with an inwardly projecting tongue engaging in said slot and formed with a lug, the rod being formed with an annular groove in which said lug is engaged, a movable jaw slidingly mounted on the shank and provided with a pivoted dog engageable with the threads of the rod, and coacting means carried by the collar and handle for holding the rod against rotation.

1,271,812. RAILROAD-CAR. FREDERICK ULRICK WAGNER, Rahway, N. J. Filed Jan. 4, 1917. Serial No. 140,559. (Cl. 105—15.)



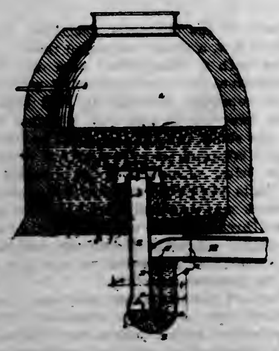
1. A railroad car having a floor, a turntable having a platform at the level of the floor, intermediate the length thereof and forming in one position a continuation of said floor, and means for rotatably supporting said turntable offset longitudinally from the center of the turntable.

3. A railroad car having a floor, a turn table having a platform at the level of the floor, intermediate the length thereof and forming in one position a continuation of said floor, means for rotatably supporting said turntable, longitudinally disposed spaced channels affixed to said car floor, and similarly disposed channels affixed to the turntable platform.

7. A railroad car having a floor, a turntable having a platform at the level of the floor, intermediate the length thereof and forming in one position a continuation of said floor, means for rotatably supporting said turntable, longitudinally disposed spaced channels affixed to said car floor, similarly disposed channels affixed to the turntable platform, said channels being provided with a plurality of screw-threaded holes, end chocks, each provided with a transverse row of vertical holes, side chocks each provided with a longitudinal row of vertical holes, and bolts adapted to pass through the holes in said chocks and to screw into the holes in said channels, combined with inclined planks having adjustable supports adapted to support an end of the turntable when out of alinement with the car floor.

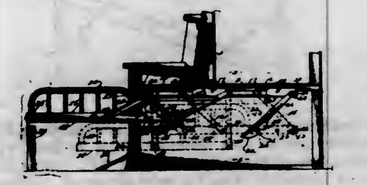
[Claims 2 and 4 to 6 not printed in the Gazette.]

1,271,813. AUTOMATIC FLUSH-TANK. FRANK WALKER, Los Angeles, Cal., assignor to William Llewellyn, Los Angeles, Cal. Filed Aug. 4, 1914. Serial No. 855,065. (Cl. 137—106.)



In an automatic flush tank, a siphon provided with a vertically descending limb having integrally joined thereto at the lower part of one of its walls a vertically ascending limb, said wall thus being common to both limbs; an outlet in communication with the upper part of the ascending limb; a curved part connecting the lower ends of said limbs and together with the ascending limb forming the seal of the siphon; a partition beginning within the descending limb at a level slightly above the level of the lower end of the common wall and extending from side to side of the siphon; said partition also being provided with a curve and having a terminal ascending vertically within the ascending limb to the level of the outlet; said partition thus dividing the lower end of the descending limb and also dividing the seal into two channels, each channel having a vertically ascending passage therein; said passages terminating at the same outlet level; and one of the channels having a curve within and above the curve of the other channel so that the depth of the first-named channel is less than the depth of the last-named channel; a terminal bend in said common wall extending upwardly into the vertically ascending passage of the first-named channel and reaching from side to side of the siphon; said bend being comparatively short and constituting the upper part of the curve in the first-named channel so that capillary attraction and the formation of air bubbles are thereby minimized, and also producing a throat or reduced passageway at the lower end of the vertically ascending passage in the first-named channel; and the passage in the first-named channel assuming its full width immediately above the terminal of said bend so that the air entrapped in the descending limb of the siphon may suddenly expand above said bend at a predetermined moment and blow out the liquid seal in the first-named channel, while the weight of the column of liquid in the last-named channel is normally sufficient to resist the pressure of the entrapped air, and the main body of the liquid seal is thus retained in the last-named channel.

1,271,814. DISAPPEARING BED. CHIPMAN J. WELLS, Long Beach, Cal. Filed Aug. 26, 1916. Serial No. 117,110. (Cl. 5—18.)



1. A bed comprising a horizontally disposed frame pivotally and slidably supported for movement, guide means for regulating the direction of movement thereof, and locking means suspended from said guide means for sustaining said frame in position at opposite extremes of movement.

3. A bed of the character described comprising fixed supports, a frame having members substantially in vertical alinement therewith, connection slidably and pivotally attached to said supports and pivotally attached to said frame at opposite points intermediate of the sides of said bed, additional connections from said supports attached to said frame at opposite points exterior of said bed, and means depending from points above the frame for engagement therewith for supporting the same at opposite extremes of action.

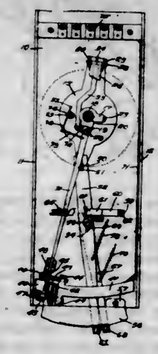
5. A bed of the character described comprising fixed parallel supports, means depending therefrom for supporting the bed, a bed frame pivotally attached to said depending supports at opposite points intermediate of the sides and exterior of one side of said bed and latch means on said fixed supports and engaging said frame for locking said bed at different extremes of movement.

7. A bed of the character described comprising a pair of fixed parallel supports, a frame normally disposed therebeneath, members pivotally attached to said supports and to said frame at opposite points for suspending the frame in operating position, means for slidably attaching said members to said supports to permit the extension of said frame from beneath said supports, and means for locking said frame at desired points within its range of action.

9. A bed of the character described comprising fixed supports having slidably and pivotally depending members, a frame attached to and suspended on said depending members, said frame being normally closed and suspended beneath said supports and capable of extension outwardly therefrom into a horizontal plane for use, and gravity actuated means for locking said frame at both extremes of action.

[Claims 2, 4, 6, 8, and 10 not printed in the Gazette.]

1,271,815. HEAT-REGULATOR. EVERETT H. WHITE, St. Paul, Minn. Filed Jan. 10, 1916. Serial No. 71,350. (Cl. 200—31.)



6. A thermostat comprising a fixed member, a supporting member rotatably mounted thereon, a thermostatic member fixed on said supporting member, a pair of lugs attached to said supporting member extending beyond said thermostatic member, a bell-crank pivoted to said lugs having one arm thereof engaging the thermostatic member and the other arm extending toward said supporting member, a pointer pivoted to said supporting member, a link connecting said last mentioned arm and said pointer, contact members on said fixed member engaged by said pointer, a lever slidably pivoted to said fixed member, a pivotal connection between one end of said lever and said supporting member, a notched segment secured to said fixed member, a head on the other end of said lever for engaging said segment, a spring for causing said head to engage the notches of said segment and for turning said lever in one direction, a U-shaped lever pivoted to said fixed member having one leg thereof engaging a projection on the slidable lever for sliding the same, means associated with the other leg of said U-shaped lever for automatically operating the same to release said slidable lever, and an adjustably positioned stop for limiting the movement of said slidable lever.

[Claims 1 to 5 not printed in the Gazette.]

1,271,816. SCREW-DRIVER. FREDERICK H. WHITE, New York, N. Y. Filed Jan. 27, 1917. Serial No. 144,822. (Cl. 145—50.)



1. A screw driver having a point entering the screw slot, a rotatable member also entering said slot, and a spring for urging said rotatable member to rotate relatively to the screw driver point whereby the spring furnishes the force which creates the gripping action on the screw.

3. A screw driver having a casing, a point attached in said casing and having a longitudinal bore, a gripping rod journaled in said bore and having a helix at the inner portion, a non-rotating nut traveling in said casing along said helix to cause the rod to rotate, and means for moving said nut along said helix.

5. A screw driver having a casing, a point attached to said casing and having a longitudinal bore, a rotatable gripping rod passing inward through said bore, said rod having a projection bearing against the inner end of said point to prevent it from moving outward, a helix on said rod, a non-rotary nut traveling in said casing and coöperating with said helix to cause the rod to rotate, and a spring operative upon said nut and upon said projection for urging said nut to travel in a direction which rotates the rod to grip in the slot.

10. A screw driver having a tubular casing, a point extending outward therefrom and having a central bore, a gripping rod passing through said bore and provided with a helix within the casing, a non-rotatable nut traveling within the casing and coöperating with the helix, a spring for urging said nut in one direction, a sleeve sliding on the outside of the casing, said casing having a longitudinal slot adjacent to the sleeve, and a pin fastened to the nut and to the sleeve and passing through said slot whereby the sleeve and the nut move in unison, and the nut is prevented from rotating.

[Claims 2, 4, 6 to 9, and 11 to 13 not printed in the Gazette.]

1,271,817. DISPLAY APPARATUS. GEORGE M. WILEY, Los Angeles, Cal. Filed Nov. 19, 1917. Serial No. 202,865. (Cl. 40—133.)



1. A display apparatus comprising an inclosure, a screen within said inclosure, having cut-out portions, and dividing said inclosure into a front and rear compartment, a mass of flaked material in said front compartment, means to supply air currents to said front compartment to agitate said mass of flaked material and cause an accumulation of said material at points on said screen where the cut-out portions occur, means dividing said screen into a plurality of zones, and means to control the circulation of the air currents to cause successively an accumulation of the flaked material on alternate zones of said screen.

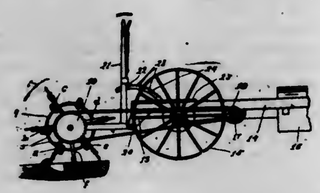
5. A display apparatus comprising an inclosure, a plurality of strips therein, a screen fastened on the front of said strips, and having cut-out portions divided by said strips, a cover on the back of said strips and provided with a plurality of rows of alternately arranged openings, said screen and cover dividing said inclosure into a front and a rear compartment, a mass of flaked material in said front compartment, means to produce air currents within the front compartment, means in said rear compartment forming separate air circulating divisions corresponding in number to the rows of openings in said cover, and means to control the circulation of air alternately through the cut-out portions in said screen and said divisions to cause an accumulation of said material at points only on said screen where the air may pass through.

6. A display device comprising an inclosure, a plurality of strips in said inclosure, a screen fastened on the front of said strips and having cut-out portions, said strips dividing said screen into a plurality of zones, a cover fastened on the back of said strips, said screen and cover dividing said inclosure into a front and a rear compartment, the rear compartment divided into a plurality of chambers, having outlets, said cover having a plurality of rows of alternate openings providing communication between the front compartment and the chambers in the rear compartment, a mass of flaked material in said front compartment, means to produce air currents within said front compartment, and means to control alternately the circu-

lation of air from the front compartment to the chambers in said rear compartment, whereby to cause an accumulation of the material on alternate zones of said screen successively.

[Claims 2 to 4 not printed in the Gazette.]

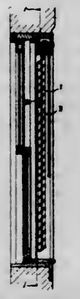
1,271,818. ROTARY SPADER. TOM WILLIAMS, Marysville, Kans. Filed Jan. 20, 1916. Serial No. 73,145. (Cl. 97—63.)



1. In a spading mechanism, a rotatably mounted wheel shaped frame, rods secured to said frame near the periphery thereof, the ends of said rods extending laterally beyond the edges of said frame and forming stops, pairs of arms pivoted to said frame near its axis and on opposite sides of said frame, said arms extending radially between the ends of said rods and swinging freely between them, and transversely positioned blade shaped elements secured to and carried by each pair of said arms.

[Claim 2 not printed in the Gazette.]

1,271,819. ILLUMINANT. PERCY HUNT WILSON, Norfolk, Va., and WOODRUFF SUTTON and BASSETT JONES, New York, N. Y., assignors to James G. Wilson Corporation, Norfolk, Va. Filed Mar. 15, 1917. Serial No. 155,136. (Cl. 88—58.)



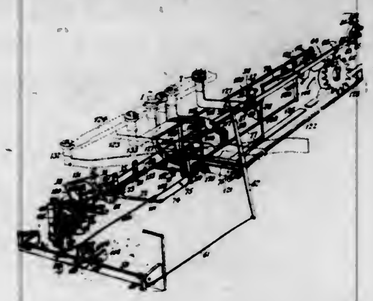
1. An illuminating device comprising a plurality of adjustable reflectors; one of said reflectors being adapted to intercept and reflect obliquely and specularly light from a given source; another being adapted to intercept and diffuse said rays from said first reflector.

3. An illuminating device comprising a plurality of tiltable slats associated after the fashion of a Venetian blind, adapted to be tilted to intercept all direct rays of the sun, moon, or other source of light; the outer surfaces of said slats being adapted to give specular reflection of light; the inner surfaces being adapted to give diffused reflection of light.

6. An illuminating device comprising a plurality of parallel spaced slats adapted to be arranged between a source of light and an area to be lighted, the faces of said slats toward the said source having a surface adapted to specularly reflect the light upon the opposing faces of the adjacent slats and the said opposing surfaces being adapted to reflect and diffuse the light, substantially as set forth, into the area to be lighted, said slats being connected and rotatable whereby the amount and direction of the light transmitted by them may be varied.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,271,820. COMBINED TYPE-WRITING AND COMPUTING MACHINE. WALTER WRIGHT, New York, N. Y., assignor to Underwood Computing Machine Company, New York, N. Y., a Corporation of New York. Filed Apr. 23, 1910. Serial No. 557,273. (Cl. 235—62.)



1. The combination of a power-driven computing mechanism having an escapement wheel, a carriage, said computing mechanism including a member connected to have a denominational step-by-step movement at the feeding movement of the carriage; a set of numeral keys; means to lock the keys against operation; a carriage-feeding device controlled by said keys, a dog device restraining said escapement wheel; means controlled by the carriage at its letter-feeding movement to operate at its letter-feeding movement to operate said dog device to release said escapement wheel; and mechanism extending from said keys to said escapement wheel, to determine the extent of movement of the latter; said dog device being movable by the pressure of said escapement wheel; and having means effective at such movement to release said keys.

30. In a combined typewriting and computing machine, the combination with a key for operating type, of a traveling carriage, a tabulator key for arresting said carriage, a computing mechanism, an escapement therefor controlled by said carriage through said type key, and means for preventing the operation of said tabulator key until the operation of said escapement has been completed.

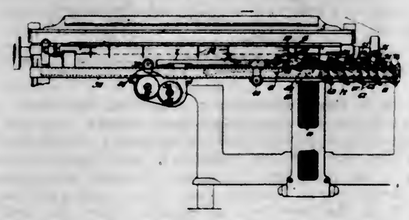
32. In a combined typewriting and computing machine, the combination with a traveling carriage, an escapement therefor, type-operating keys, and a space key controlling step-by-step movements of said carriage through said escapement, of computing mechanism, an escapement therefor controlled by said carriage through said type-operating keys, and means for preventing operation of said space key to control said carriage escapement until the escapement of said computing mechanism has completed its movement.

46. The combination with registering mechanism, of a carriage traveling to determine denominational selections of said registering mechanism, computing mechanism for determining the computations run up in said registering mechanism, key mechanism solely for the purpose of effecting traveling movements of said carriage, and locking mechanism for said key mechanism controlled from said computing mechanism and maintained in action during a running of said computing mechanism.

[Claims 2 to 29, 31, 33 to 45, and 47 to 53 not printed in the Gazette.]

1,271,821. COMBINED TYPE-WRITING AND COMPUTING MACHINE. WALTER WRIGHT, New York, N. Y., assignor to Underwood Computing Machine Company, New York, N. Y., a Corporation of New York. Filed Sept. 28, 1911. Serial No. 651,795. (Cl. 235—59.)

1. The combination with typewriting mechanism including a carriage, of computing mechanism including a traveling element, a connector for connecting said traveling element with said carriage so as to obtain a concomitant movement of said carriage and said traveling element, and a series of disconnectors for rendering said connector inoperative, for the purpose of connecting the carriage and the traveling element, at predetermined points in the movement of said carriage.



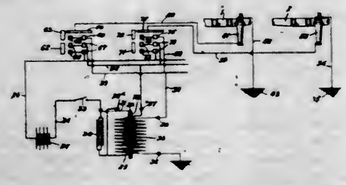
5. The combination with a typewriting mechanism including a letter feeding carriage, of a computing mechanism including a traveling element, a bar connected to said traveling element, a bar intermittently connectible to said carriage during a continuous movement thereof, and gearing for driving said first-mentioned bar from said second-mentioned bar.

45. In a combined typewriting and computing machine, the combination with computing wheels forming a totalizer long enough to be utilized as groups forming a plurality of small totalizers, of a traveling typewriter carriage, means settable to utilize one group of said wheels to print in one column of said typewriter, means settable to use adjacent groups of said wheels to compute matter printed in a non-adjacent column of said typewriter, and means for merging two groups to make a greater group, all of said means acting by determining different periods of travel of a part of the totalizer with the carriage.

49. In a computing machine, the combination with a traveling carriage and a stop thereon, of a hook adapted to be caught by said stop, means settable to disconnect said hook from said stop, and a fixed stop adapted to make said disconnector permanently effective.

[Claims 2 to 4, 6 to 44, 46 to 48, and 50 to 56 not printed in the Gazette.]

1,271,822. GAS-RANGE-LIGHTING APPLIANCE. NICHOLAS ZAM, Cleveland, Ohio. Filed July 31, 1917. Serial No. 183,803. (Cl. 175—116.)

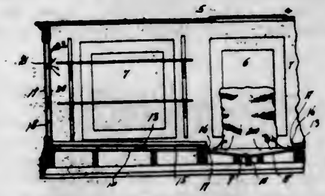


1. A gas-range lighting appliance comprising a burner, a valve having a limited range of movement for controlling the supply of fuel thereto, and an electrical device positively controlled by the movement of said valve in one direction for successively delivering sparks in ignitible proximity to said burner and at predetermined points with reference to the limits of movement of said valve.

5. A gas-range lighting appliance comprising a burner, a valve having stationary and movable parts for controlling the supply of fuel thereto, means for limiting the movement of said valve in both directions, and an electrical system including; a source of current, an induction coil primary and secondary contacts upon each of said valve parts, a plurality of sets on one of said parts being definitely arranged with reference to the limits of movement of said valve, another set of contacts on the other of said parts being adapted to successively engage said plurality of sets of contacts respectively, and a spark plug located at said burner and connected to a secondary contact of each of said definitely arranged sets whereby to furnish a spark at predetermined intervals during the movement of said valve.

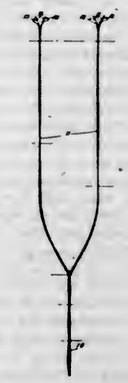
[Claims 2 to 4 not printed in the Gazette.]

1,271,823. REFRIGERATOR DISPLAY-CASE. SAMUEL W. AKINS, Denver, Colo. Filed Apr. 6, 1916. Serial No. 89,383. (Cl. 62—37.)



A refrigerator display case having a substantially, horizontally arranged bottom, a central ice compartment and an article-containing compartment arranged on each side thereof, the bottom of the ice compartment being inclined toward a central drain opening, the bottom of each article-containing compartment being provided with a drip pan which is downwardly inclined from its outer extremity toward the ice compartment, the bottom of the latter being slightly lower than the upper surface of the drip pan, each drip pan being spaced from the bottom proper of the case, thus forming a bottom air space which is in communication at its inner extremity with the lower part of the ice compartment, each article-containing compartment having at its outer extremity a vertical partition spaced from the end wall of the case to form a vertically disposed air space which is in communication at its lower extremity with the outer extremity of the said bottom air space, the upper portion of the vertical air space being in communication with the upper portion of the adjacent article-containing compartment.

1,271,824. TELEPHONE AND TELEGRAPH CABLE. GUSTAVUS A. ANDEREGG, Oak Park, and WILBUR E. MOUGEY, Chicago, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed June 30, 1916. Serial No. 106,808. (Cl. 178—81.)



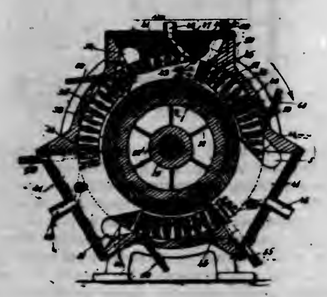
1. A quad having quad twists shorter than one of the pair twists.

4. In a cable, a plurality of insulated conductors formed into quads, each quad consisting of two pairs, one of said pairs having lengths of twist longer than the quad twists.

5. A multi-conductor cable containing one or more quads, each quad consisting of two pairs having relatively long lengths of twist twisted helically about each other with a uniform length of lay less than that of one of the twisted pairs.

[Claims 2 and 3 not printed in the Gazette.]

1,271,825. TURBINE OR IMPACT-ENGINE. EMIL ANDERSON, New York, N. Y., assignor to The Universal Turbine Company, Jersey City, N. J., a Corporation of New Jersey. Filed Oct. 30, 1911, Serial No. 657,451. Renewed Dec. 5, 1917. Serial No. 205,671. (Cl. 253—41.)



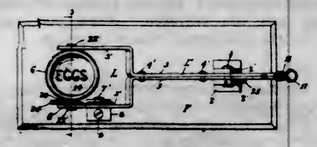
1. A rotary impact engine having a casing, a rotor within the casing arranged therewith to provide a substantially annular working passage for the motive fluid, stationary means for dividing said passage into a plurality of circumferential passages, means for introducing steam into said passages at a given point on the periphery, and other means in advance thereof for commingling a jet of water with the steam flowing through said passages.

3. A rotary impact engine having a casing, a rotor within the casing arranged therewith to provide a substantially annular working passage for the motive fluid, stationary means for dividing said working passage into a plurality of circumferential passages, said rotor being provided with radially disposed depressions offset from one another to thereby make the side walls of said passage tortuous, said casing being constructed to form a plurality of peripheral pockets of successively increasing size, said pockets having curved faces adapted to direct back into said circumferential passage such of the motive fluids as are thrown outward therefrom by centrifugal force, and inlet and exhaust passages for the motive fluid.

7. In a rotary impact engine, a casing having a cylindrical bore, a rotor comprising three rings recessed to form annular channels between them, the adjacent faces of said rings being provided with depressions forming radially disposed buckets, a pair of stationary plates each projecting into and inclosing a part of one of said channels, said plates having transverse oblique openings therethrough and having their sides converging to a reduced front edge, the edge of each plate being cut to form a slit, and means for passing a fluid heavier than the motive fluid into the channels through said slits, means for admitting motive fluid through the casing into the channels back of said slits, the openings through the plates being arranged to constitute a passage through which the motive fluid will pass from the buckets in one of the rings to the buckets in the other rings and beyond said plate through the channels, the back of said plate being arranged at an angle to the buckets to deflect the motive fluid outward, the casing being constructed to form an exhaust passage, and a water inlet pipe near said exhaust passage.

[Claims 2 and 4 to 6 not printed in the Gazette.]

1,271,826. STAMPING DEVICE. FRANK EDWIN ANDERSON, Brooklyn, N. Y. Filed Jan. 20, 1917. Serial No. 143,495. (Cl. 101—35.)



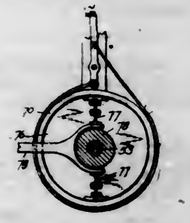
1. In a stamping-device, a supporting base-piece; a spring-retracted pivoted throw-lever having a yoke; a stamp-block of cylindrical form carrying a printing-face, on either end revolubly mounted in and carried by the yoke of the throw-lever; a spring normally maintaining the throw-lever in a raised position; an inking-pad supported by the base-piece immediately below the yoke; and means for automatically reversing the stamp-block, so as to bring the newly inked bottom-printing surface upward; and the just used top-printing surface downward, upon the throwing of the throw-lever to its upward limit.

8. A stamp-block having concavities at either end connected by an air-passage; an elastic printing-disk secured upon each of such concavities and sealing the same air-tight; whereby when one printing surface is brought into contact with the ink-pad, and an object to be printed is pressed upon the top elastic printing-disk, the air consequently compressed will force the like elastic printing-disk at the bottom on the ink-pad, and the same will be brought into contact therewith at all points, so as to thoroughly ink the printing-disk.

12. A stamp block having recesses connected by an air passage, concave elastic printing members covering said recesses and sealing them air-tight, whereby the depression of one printing member will cause the distention of another printing member.

[Claims 2 to 7, 9 to 11, and 13 not printed in the Gazette.]

1,271,827. ROTARY TRANSMISSION. JOHN G. ANDERSON, Wheat Ridge, Colo. Filed May 14, 1917. Serial No. 168,527. (Cl. 24—34.)



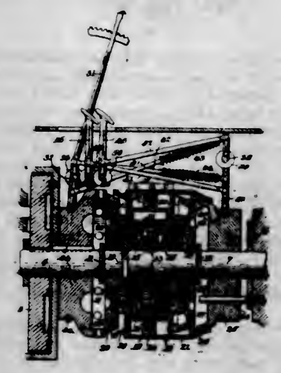
2. The combination with a driving element and a driven element, of a mechanism for transmitting a movement of one element to the other, comprising two rotary members, an appliance to effect the rotative continuity thereof through the medium of a body of air under pressure, including an air-chamber, a conduit in communication with said chamber, and a valve at an arbitrary point of said conduit, for regulating the density of a body of air in the chamber, whereby to regulate the relative angular velocities of said members.

3. The combination with a driving element and a driven shaft, of a mechanism for transmitting a movement of said element to said shaft, comprising two rotary members and an appliance adapted to effect the rotative continuity thereof through the medium of a body of air under pressure, one of said members including an internal gear-wheel, a drum mounted for rotation about the driven shaft, a gear-wheel on the driven shaft, a gear-wheel on the drum intermediate of the other gear wheels, and an adjustable, tapering bushing interposed between the driven shaft and the drum for the purpose specified.

8. The combination with a driving-element and a driven element, of a transmission-medium connected with one of them, and including a pressure-chamber, and an air-compressor for the supply of air under pressure to said chamber, comprising a reciprocating piston, a peripherally grooved cam in connection with the other element, and a projection extending loosely in the cam-groove, in connection with the piston.

[Claims 1, 4 to 7, and 9 to 11 not printed in the Gazette.]

1,271,828. SPEED-TRANSFORMER. SANTIAGO ARCE, Buenos Aires, Argentina. Filed June 27, 1917. Serial No. 177,291. (Cl. 74—34.)



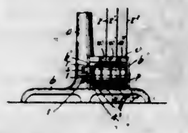
2. In a variable speed transmission, the combination, with a drive shaft and a driven shaft arranged in endwise alinement; of a gear fixed to the driven shaft; a planet gear in mesh therewith; a crank disk carrying said planet gear and loosely mounted on said driven shaft; a ring gear encircling said gears and meshing with the planet gear; a rotatable case to which said ring gear is internally affixed, said case and said crank disk each having a clutch member connected thereto; and a member keyed to said drive shaft and having a clutch portion intermediate said clutch members to selectively engage either of them, to transmit the movement of said drive shaft either to said crank disk or to said ring gear.

4. In a variable speed transmission, the combination, with a drive shaft and a driven shaft arranged in endwise alinement; of a gear fixed to the driven shaft; a planet gear in mesh therewith; a crank disk carrying said planet gear and loosely mounted on said driven shaft; a ring gear encircling said gears and meshing with the planet gear; a rotatable case to which said ring gear is internally affixed, said case and said crank disk each having a clutch member connected thereto; a clutch keyed to the drive shaft to selectively engage either of said clutch members; a brake operative selectively upon said ring gear and said crank disk; and means for simultaneously operating said clutch and applying said brake, to positively drive either said crank disk or said ring gear and lock the other in relatively-fixed position.

8. In a variable speed transmission, the combination, with a drive shaft and a driven shaft arranged in endwise alinement; of a gear fixed to the driven shaft; a planet gear in mesh therewith; a carrier for the planet gear loose on said driven shaft; a ring gear encircling said gears and meshing with the planet gear; means for coupling said drive shaft to either said carrier or said ring gear to positively rotate the same; a brake for holding the uncoupled one of said elements in relatively-fixed position; and means connected with said brake to variably release it from said uncoupled gear so as to cause variable slippage between the latter and the brake.

[Claims 1, 3, 5 to 7, and 9 to 22 not printed in the Gazette.]

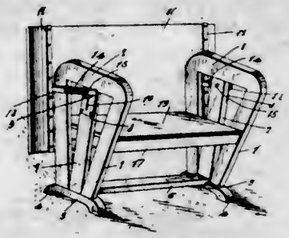
1,271,829. MUSIC-LEAF TURNER. THOMAS P. ARSNEAU, Portland, Oreg. Filed July 8, 1915. Serial No. 38,787. (Cl. 84—17.)



3. In a music leaf turner, the combination of a pivot post, leaf turning arms pivotally supported thereby, pivotally mounted bell crank levers connected to the leaf turning arms, longitudinally movable rods pivoted to the bell crank levers, a cylinder having a plurality of continuous cam elements having portions disposed one in advance of the other and offset, and other cam portions on said continuous cam elements arranged in transverse alinement, bell crank levers between the cam portions and the lower ends of the longitudinal rods, and pedal operated means for intermittently rotating the cylinder to cause the cam portions in advance of the other and offset to successively turn the leaf turning arms in one direction, and the transverse alined cam portion to subsequently reverse the movement of the leaf turning arms and return same to normal position.

[Claims 1 and 2 not printed in the Gazette.]

1,271,830. COMBINATION SEAT AND TABLE. HARRY S. AUSTIN, Rome, N. Y. Filed May 4, 1917, Serial No. 166,424. Renewed June 6, 1918. Serial No. 238,622. (Cl. 155—6.)

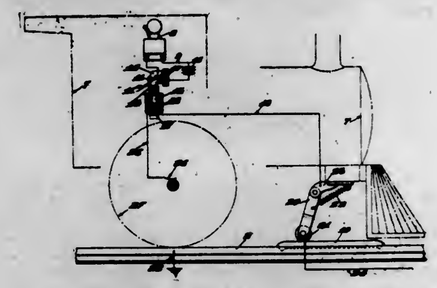


A combined seat and table comprising substantially U-shaped end supporting members having web portions disposed uppermost to form arm rests, a seat secured to the ends of the arm portions of said substantially U-shaped members, a seat connecting said members, plates carried by the end members and having circular grooves and downwardly depending grooves in communication with the circular grooves, arms slidably and pivotally connected to the end members, a board secured to the arms, and lugs formed upon said arms and adapted to travel in the circular grooves and the downwardly depending grooves to lock the board in a substantially horizontal position to form a table.

1,271,831. RAILWAY SAFETY-SIGNAL. WILHELM SWOBODA, Alton, and BOLESLAW SWOBODA, East St. Louis, Ill. Filed July 7, 1916. Serial No. 107,921. (Cl. 175—281.)

1. In an apparatus of the class described, the combination of a solenoid coil, a core within said coil mounted in a substantially vertical position so as to be raised by said coil when energized by the current, a movable con-

tact member for closing a circuit, unattached to said core and lying above and in the path of movement of said core so as to be actuated to close the circuit by the upward movement of said core, and a second contact member coöperating with said movable contact member and operating by engaging therewith to hold the same up and thereby maintain the circuit closed.



4. In apparatus of the class described, the combination of a solenoid coil, a core within said coil mounted in a substantially vertical position so as to be raised by said coil when energized by the current, a movable contact member for closing a circuit, unattached to said core and lying in the path of movement of said core so as to be actuated to close the circuit by the upward movement of said core, said core being freely movable so as to be returned by gravity after being raised by said coil, and having a head at its upper end to engage said coil and support the core in its depressed position, said core also having a lower head for engaging the lower end of said coil to limit the upward movement of said core.

[Claims 2 and 3 not printed in the Gazette.]

1,271,832. NAIL-PULLER. HENRY BARTELS, Coleman, Wis. Filed Apr. 19, 1918. Serial No. 229,610. (Cl. 254—24.)

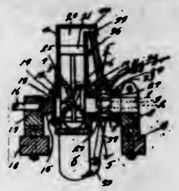


3. In an extracting tool of the class described, the combination with a shank and a movable jaw connected thereto, of means movable intermediate and transversely of the shank and the jaw, and a fulcrum piece to which said means is connected for actuating the movable means upon relative movement of the tool with respect to the fulcrum piece.

10. A tool of the class described comprising a shank, a pair of jaw members pivotally connected to the shank at diametrically opposite points, a foot piece arranged at one side of the jaw members and pivotally connected to the shank, a substantially U-shaped wedge member engaging about the shank of the tool so as to lie between the jaw members and shank and having fixed connection with the foot piece, said jaw members being operable incident to pivotal movement of the foot piece when the tool is rocked upon said foot piece as a fulcrum.

[Claims 1, 2, and 4 to 9 not printed in the Gazette.]

1,271,833. INTERNAL-COMBUSTION ENGINE. LINTON T. BASSETT, Carthage, Mo. Filed July 10, 1916. Serial No. 108,337. (Cl. 123—44.)



1. In a multiple cylinder internal combustion engine, an engine shaft having longitudinally extending intake and exhaust passages provided with intake and exhaust ports at their inner ends, a crank case revoluble on said shaft and provided with radial cylinders, pistons operable in said cylinders and having pitman rods eccentrically connected to said shaft, said crank case having an extension sleeve provided with ports having tubes of communication with the outer ends of the cylinders, a valve sleeve fitting the shaft and extending into said extension sleeve and provided with ports, and adapted to be rotated at one-half of a revolution to two-thirds of a revolution of the crank case, whereby the ports of the sleeve valve may coöperate with the ports of the extension sleeve and said shaft.

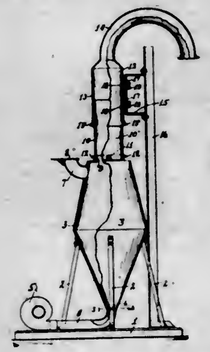
2. In an internal combustion engine, a stationary shaft having longitudinally extending intake and exhaust passages having their inner ends terminating in intake and exhaust ports, a crank case revoluble concentrically on said shaft and having multiple cylinders extending radially and provided with an extension sleeve having three ports to alternately register with said intake and exhaust ports of said shaft, passages of communication between the ports of said extension sleeve and the outer ends of the cylinders, whereby charges may enter the cylinders behind the pistons therein, to be compressed, fired and discharged, pistons operable in said cylinders and having eccentric connections with said shaft, and means operable between the shaft and said extension sleeve for controlling the charges through said passages.

3. In an internal combustion engine of the kind set forth, a stationary cylindrical member, a revoluble engine case mounted thereon and having multiple radial cylinders, pistons operable in said cylinders and provided with eccentric connections with said member, said member having an intake and an exhaust passage, means revoluble on the member, and adapted to make one-half of a revolution to two-thirds of a revolution of the engine case, whereby each cylinder will admit a charge on the completion of every two complete revolutions, and means carried by the cylinders coöperating with the last named means to permit the cylinders to admit and exhaust said charges.

1,271,834. NESTED-PAPER-CUP SEPARATOR. BENJAMIN J. BAUM and CLARENCE W. ODERMATT, San Francisco, Cal. Filed Sept. 5, 1917. Serial No. 189,898. (Cl. 83—92.)

1. A machine for the described purpose comprising a receptacle with a controllable feed opening; means at one end of the receptacle for introducing a current of air; an outlet pipe from the other end of the receptacle; and means for adjustably supporting the outlet pipe for varying the effective length thereof.

2. A machine for the described purpose comprising a receptacle with a controllable feed opening; means at one end of the receptacle for introducing a current of air; an outlet pipe from the other end of the receptacle; and means for adjustably supporting the outlet pipe for varying the effective length thereof, said pipe having its terminal discharge portion of reduced diameter.



3. A machine for the described purpose comprising a receptacle with a controllable feed opening; means at one end of the receptacle for introducing a current of air; a pipe section telescopically fitted to the other end of said receptacle; and an outlet pipe fitted to said pipe section.

4. A machine for the described purpose comprising a receptacle with a controllable feed opening; means at one end of the receptacle for introducing a current of air; a pipe section fitted to the other end of said receptacle; an outlet pipe telescopically fitted to said pipe section; and means for adjustably supporting the outlet pipe for varying the effective length thereof.

5. A machine for the described purpose comprising a receptacle with a controllable feed opening; means at one end of the receptacle for introducing a current of air; a pipe section fitted to the other end of said receptacle; an outlet pipe telescopically fitted to said pipe section; and means for adjustably supporting the outlet pipe for varying the effective length thereof, said outlet pipe having its terminal discharge portion of reduced diameter.

[Claim 6 not printed in the Gazette.]

1,271,835. LAMP-SOCKET. REUBEN B. BENJAMIN, Chicago, Ill., assignor to Benjamin Electric Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed July 8, 1915. Serial No. 38,822. (Cl. 173—362.)



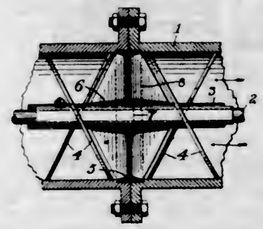
1. A switch receptacle comprising an internally-threaded bushing, a cup-shaped housing non-rotatably secured with respect to said bushing, an insulating base in said housing, a contact and a switch-operating member supported by said base, said housing extending down over said contact, said switch-operating member being offset with respect to the axis of said receptacle, and means for securing said base in said casing in different positions of rotatable adjustment.

3. A switch receptacle comprising an internally-threaded bushing, a cup-shaped housing non-rotatably secured with respect to said bushing, an insulating base in said housing, a contact and a switch-operating member supported by said base, said housing extending down over said contact, said switch-operating member being offset with respect to the axis of said receptacle, and means for securing said base in said casing in different positions of rotatable adjustment, said securing means comprising a spring tongue secured to said insulating base, said casing having a plurality of recesses in any one of which said tongue may enter.

5. A switch receptacle comprising an internally-threaded bushing, a cup-shaped housing non-rotatably secured with respect to said bushing, an insulating base in said housing, a shell contact and a switch-operating member supported by said base, said housing extending down over said contact, said switch-operating member being offset with respect to the axis of said receptacle, and means for securing said base in said casing in different positions of rotatable adjustment, said operating member comprising a pull member extending between said shell contact and said housing, out through the open end of the housing.

[Claims 2, 4, and 6 not printed in the Gazette.]

1,271,836. SCREW-PUMP. ERASTUS S. BENNETT, New York, N. Y. Filed Apr. 28, 1917. Serial No. 165,205. (Cl. 253—182.)



2. A screw pump comprising a casing, a diaphragm within the casing having openings for the passage of water therethrough and a blade rotating in close proximity to the diaphragm, said blade being in one plane from end to end and inclined in relation to the axis of the pump, the said diaphragm having its side adjacent the blade inclined at an angle corresponding to that of the blade, substantially as described.

[Claims 1 and 3 not printed in the Gazette.]

1,271,837. MACHINE FOR GRINDING THE INTERIORS OF HOLLOW BODIES. LÉON BILLÉ, Nogent-sur-Marne, France. Filed Mar. 31, 1917. Serial No. 158,912. (Cl. 51—4.)



1. In a machine of the class described, the combination with a vertically and horizontally movable support, of a grinding tool shaft extending therefrom, a tool on the end of the shaft, a handle extending from the support and having an indicator mounted thereon which is alined with the tool.

2. In a machine of the class described, the combination with a vertically and horizontally movable support, of a grinding tool shaft extending therefrom, a tool on the end of said shaft, and a handle extending from the support by means of which the latter may be moved either in a vertical or horizontal direction.

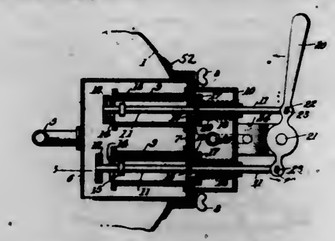
3. In a machine of the class described, the combination with a vertically and horizontally movable support, of a grinding tool shaft extending therefrom, a grinding tool on the end of said shaft, and a handle secured to and extending from the support substantially parallel to the tool shaft.

4. In a machine of the class described, the combination with a movable support, of a tool shaft extending therefrom, a tool mounted on the end of said shaft, a handle extending from the support and having a grip portion adjacent to the end of the tool shaft.

5. In a machine of the class described, the combination with a vertically and horizontally movable carriage, of a tool shaft extending therefrom, a tool mounted on the end of said shaft and a work support comprising supporting elements, and means for varying the angle of said support.

[Claim 6 not printed in the Gazette.]

1,271,838. MEASURING-FAUCET. WILLIAM R. BILLINGS, Brooklyn, N. Y. Filed Oct. 11, 1916, Serial No. 124,942. Renewed Apr. 10, 1918. Serial No. 227,826. (Cl. 221—112.)



1. In a measuring faucet, the combination of a main chamber for the liquid or substance being dispensed, a water chamber, a supplemental receiving chamber communicating with the main chamber, a submerged measure in the latter chamber, means for emptying said measure, and a removable discharge chamber for receiving the contents of the measure.

9. In a measuring device for liquids and fluids, the combination of a main beverage chamber, a hot water chamber, an auxiliary receiving chamber communicating with the main chamber, a cover therefor, means for securing it detachably in place, measuring chambers in said receiving chamber and attached to the cover, a common discharge chamber on said cover receiving the contents of the measuring chambers, inlet and outlet valves for the measuring chambers, means for jointly operating them including a lever handle, a discharge faucet, and means for connecting it loosely with an outlet nozzle in the discharge chamber.

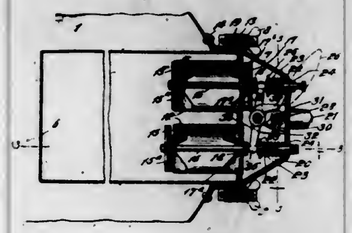
15. The combination with a chamber for containing a quantity to be measured, of a measure, removable means on the chamber for carrying said measure, inlet and outlet means for the measure, a discharge chamber for receiving the contents of the measure, means for delivering said contents from the discharge chamber, means for controlling the inlet and outlet means for the measure, the same being located partially within the discharge chamber and having an external operating handle.

[Claims 2 to 8, 10 to 14, 16, and 17 not printed in the Gazette.]

1,271,839. MEASURING-FAUCET. WILLIAM R. BILLINGS, Brooklyn, N. Y. Filed Apr. 18, 1917. Serial No. 162,838. (Cl. 221—112.)

1. In a measuring faucet, the combination of a main liquid chamber, a supplemental receiving chamber at a distance therefrom and communicating therewith, a submerged measure in the latter chamber, a faucet, and means whereby communication may be established between the main chamber and the supplemental chamber, or between the main chamber and the faucet.

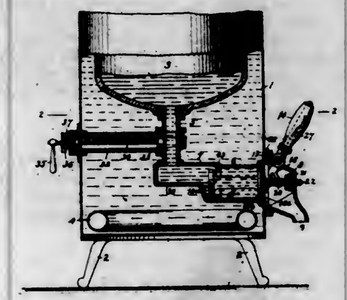
5. In a measuring device, the combination of a liquid container, a receiving chamber communicating therewith, an open-ended measure, a plate supporting the latter and covering one end of the receiving chamber, a pair of valves at the ends of the measure distanced from each other so that when one is open the other is closed, means for operating said valves jointly consisting essentially of a bell crank lever, and an independent handle bearing against one arm of said lever, and a discharge chamber into which the contents of the measure are discharged, said discharge chamber having an outlet.



7. The combination of a chamber, a cover for the end thereof, measures carried by said cover and consisting of open-ended compartments, an inlet and outlet valve for each measure, means for connecting said valves together and guiding them in their movements, a discharge chamber, bell crank levers pivotally supported in said discharge chamber and acting upon the valves of the measures, and a single lever handle carrying a cam which acts against the shorter arms of the bell crank levers for the purpose of individually opening the measures, together with means for restoring the discharge valves to their closed position.

[Claims 2 to 4, 6, 8, and 9 not printed in the Gazette.]

1,271,840. MEASURING-FAUCET. WILLIAM R. BILLINGS, Brooklyn, N. Y. Filed Dec. 22, 1917. Serial No. 208,418. (Cl. 221—114.)



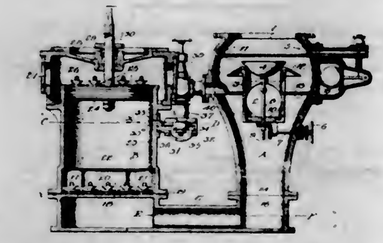
1. In a measuring faucet, the combination of a measure, a receiver axially-disposed with relation thereto, the receiver having a flat bottom of higher level than the bottom of the measure and having its upper part concentric with and of larger diameter than the measure, and inlet and outlet valves for the measure.

4. In a measuring faucet, the combination of a measuring chamber, a receiver disposed endwise thereof and axially-eccentric thereto, so that the wall of the receiver may be out of line with the wall of the measure so as to provide a channel for the passage of liquid into the measuring chamber when the inlet valve is open, said channel being of a curved form, and inlet and outlet valves for the said measure, together with a discharge chamber.

6. In a measuring faucet, the combination of a measure, of a receiver axially-disposed with relation thereto, and having a flat bottom of higher level than the bottom of the measure, inlet and outlet valves for the measure, the inlet valve being the smaller, and the outlet valve having a flange, said outlet valve fitting into the bore of the measure and said flange engaging the outer end of the measure, together with means for moving the said valves jointly.

[Claims 2, 3, 5, 7, and 8 not printed in the Gazette.]

1,271,841. CONDENSER-PUMP. WILLIAM H. BLAKE, Boston, Mass. Filed Apr. 19, 1916. Serial No. 92,274. (Cl. 230—27.)



1. In combination with a condenser, a vertical bucket pump having both a water-drawing connection and an air-drawing connection with the condenser; said air-drawing connection communicating with the pump at a point between the upper and lower limits of the suction stroke of the pump-bucket; said air-drawing connection having a check valve preventing back flow from the pump, and positive means for unseating said check valve at a predetermined point after commencement of the suction stroke of the pump.

2. In combination, an exhaust steam condenser, a pump cylinder with a reciprocating bucket, a conduit between the lower ends of said condenser and said cylinder, a normally closed air connection between the condenser and the vacuum cylinder above the water level of the condenser, and a valve in said air connection, said valve having mechanical means opening it to pass air from the condenser to the vacuum cylinder during a portion of the latter half of the bucket's upstroke.

7. In combination, an exhaust steam condenser, a pump cylinder with a reciprocating suction member, a conduit between the lower ends of said condenser and said cylinder; a normally closed connection between the condenser and the cylinder above the water level of the condenser, a valve in said connection, and mechanical means for opening said valve to pass air from the condenser to the vacuum cylinder during a portion of the latter half of the bucket's upstroke; said valve comprising a seat, a head and a spindle for the head; said mechanical means comprising a lip on said spindle, a tripping toe adapted to engage said lip during a part of its stroke, an oscillating housing for said tripping toe, and a link driven by a prime mover synchronously with said pump; there being an adjusting member for said tripping toe to regulate its amount of protrusion, thereby timing its length of engagement with said lip.

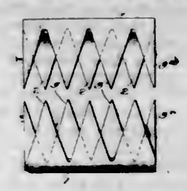
11. In combination, a condenser, an exhaust pump connected to the condenser and having a water inlet port in connection with the condenser, an air inlet port communicating with the pump cylinder and the condenser, a single acting piston whose amplitude of movement is such as to permit the piston to pass beyond the air inlet during its suction stroke to draw air into the cylinder.

[Claims 3 to 6, 8 to 10, and 12 not printed in the Gazette.]

1,271,842. CABLE-SPLICE. NEWTON K. BOWMAN, Canton, Ohio. Filed Oct. 4, 1915, Serial No. 54,015. Renewed Dec. 5, 1917. Serial No. 205,670. (Cl. 173—263.)

1. A splice comprising a plurality of compressible sections for encircling the part to be coupled, each of the sections having spurs along opposite edges, the spurs at the edge of one section intermeshing with the spurs at the adjacent edge of the next section.

3. A splice comprising two like halves of compressible or bending material adapted to encircle the parts to be joined, each half having relatively long tapering spurs along opposite edges separated by like tapering indentations, the terminal spurs at one edge being substantially half the width of the remaining spurs and the spurs being disposed to interdigitate when the halves of the splice are assembled.



[Claim 2 not printed in the Gazette.]

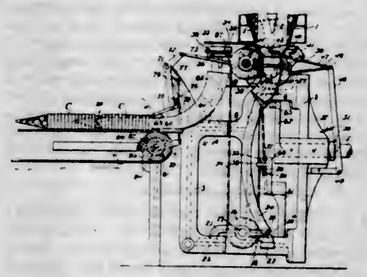
1,271,843. METHOD OF MANUFACTURING RUBBER FOOTWEAR. CHARLES E. BRADLEY, Mishawaka, Ind., assignor to Mishawaka Woolen Manufacturing Company, a Corporation of Indiana. Filed Aug. 3, 1917. Serial No. 184,220. (Cl. 18—53.)

1. The method of vulcanizing articles containing rubber which consists in heating the article by the application of a heating medium applied to one side thereof while maintaining the opposite side free from contact with a condensable heating medium and when the article has been sufficiently heated to prevent condensation thereon, then subjecting the opposite side to a condensable heating medium at a vulcanizing temperature.

7. The method of vulcanizing articles containing rubber which consists in heating the article by the application of a heating medium applied to one side thereof while maintaining the opposite side free from contact with a condensable heating medium when the article has been sufficiently heated to prevent condensation thereon when subjecting the opposite side to a condensable heating medium at a vulcanizing temperature and simultaneously therewith or subsequent thereto subjecting the article to a differential of pressure.

[Claims 2 to 6 not printed in the Gazette.]

1,271,844. TRIMMING AND DELIVERING MECHANISM FOR PASTRY-MAKING MACHINES. FREDERICK A. BRUCKMAN, Portland, Oreg. Filed Apr. 16, 1917. Serial No. 162,428. (Cl. 107—4.)



1. In a machine of the class described, a trimming mechanism which comprises a tubular receiving chute for the cones as they leave the molds, an oscillating trimmer tube, and a fixed pusher against which said tube is pressed.

5. In a mechanism of the class described, a sectional tubular receiving chute having a restricted outlet, a trimmer mechanism into which a cone is deposited by said chute and devices for operating the chute sections to open and close the same.

9. In a machine of the character described, a sectional receiving chute located at the extraction station, an oscillatably supported trimmer tube into which said chute delivers the cone, a fixed pusher, mechanism for first sepa-

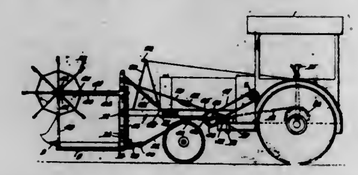
rating the said chute sections and then swinging the trimmer into position to engage the pusher, a detent device for holding a cone that drops through the trimmer tube at the extraction station until said trimmer tube reaches the pusher engaging position, and means at the pusher engaging station for receiving the cones which are released from the trimmer tube for delivering from the machine.

11. A mechanism as defined in claim 9 combined with a device to engage the cones which are received from the trimmer tube and stack the same in "sticks" of predetermined length.

13. In a machine of the character described, a sectional receiving chute located at the extraction station, an oscillatably supported trimmer tube into which said chute delivers the cone, a fixed pusher, mechanism for first separating the said chute sections and then swinging the trimmer tube into position to engage the pusher, means at the pusher engaging station for receiving the cone released from the trimmer tube, a device for engaging the cones received from the trimmer tube to stack the same in sticks of predetermined length, said devices comprising a cone moving element, means coöperative with the trimming mechanism for actuating said element, a traveling conveyer and means coöperative with said cone moving device for advancing said conveyer in harmony with the movement of the same through predetermined intervals.

[Claims 2 to 4, 6 to 8, 10, 12, and 14 to 19 not printed in the Gazette.]

1,271,845. HEADER ATTACHMENT FOR TRACTORS. BERTAIN Y. BRYANT, Haviland, Kans. Filed June 26, 1916. Serial No. 105,958. (Cl. 56—100.)



The combination with a tractor, of supporting bars projecting forward from the front end thereof, a transverse shaft carried by said bars, pivoted arms carried by the shaft, a harvesting mechanism carried by the lower ends of the arms, said mechanism comprising a platform, and a sickle bar, a reel and a conveyer carried by the platform, a shaft carried by the platform, a driven shaft on the tractor operatively connected to the platform shaft, a shaft operatively connected to the reel and comprising flexibly connected sections, a driving connection between the last-mentioned shaft and the platform shaft, a second shaft carried by the platform and operatively connected to the first-mentioned platform shaft and to the conveyer, and a driving connection between the sickle bar and the second-mentioned platform shaft.

1,271,846. PROCESS OF PRODUCING MERCURY PREPARATIONS FOR THERAPEUTIC PURPOSES. HANS BUCHTALA, Gratz, Austria, assignor to Dr. Bayer es Tarsa, a Firm comprising Dezso Bayer and Rudolph Braun de Belatin, Budapest, Hungary. Original application filed June 5, 1913, Serial No. 771,796. Divided and this application filed Aug. 18, 1915. Serial No. 46,203. (Cl. 167—7.)

1. The method of producing a therapeutic mercurial preparation, comprising producing a reaction between tyrosin and mercuric oxid.

2. The method of producing a therapeutic mercurial preparation, which consists in heating tyrosin in an aqueous solution with mercuric oxid.

3. The method of producing a therapeutic mercurial preparation, comprising producing a reaction between tyrosin and mercuric oxid, and then dissolving the product obtained thereby in an alkaline solution.

4. The method of producing a therapeutic mercurial preparation, which consists in heating tyrosin in an aqueous solution with mercuric oxid, and then dissolving the product obtained thereby in an alkaline solution.

1,271,847. METHOD OF CANNING FRUIT. WILLIAM C. BUHLES, San Francisco, Cal., assignor to Bremer & Bruckmann, Braunschweig, Germany, a Copartnership. Filed Aug. 10, 1910. Serial No. 576,606. (Cl. 99—8.)



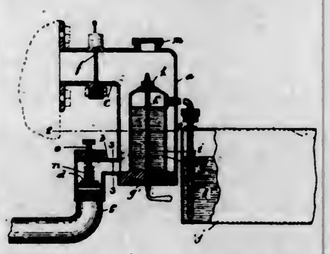
1. The process of preserving food products in cans which consists in rigidly securing the permanent cover to the filled can, so as to retain it against displacement resulting from internal pressures and at the same time provide a vent, subjecting the filled can to heat, and then permanently sealing the cover to the can.

2. In the sanitary method of preserving food products in double seamed cans, the process which consists of applying a cover to a filled can, then performing the first step in the operation of double seaming the cover to the can, so as to retain the cover in position against displacement resulting from internal pressures while providing a vent, then subjecting the filled can to heat to cook and sterilize the contents, and then performing the remaining steps of the double seaming operation.

5. The herein described process of canning consisting in filling a flanged can, placing a flanged closing plate or head on the open end of said can, thereafter bending the flange on the closing plate under the flange on the can in such manner as to retain said plate against displacement resulting from internal pressures while providing a vent, then treating or cooking the contents of the can, and finally completing the crimping of the plate to the can to hermetically seal the same.

[Claims 3 and 4 not printed in the Gazette.]

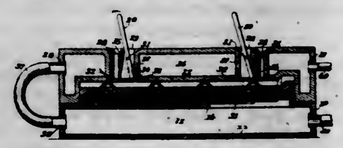
1,271,848. VACUUM-FEED CARBURETER. THOMAS WILLIAM BURR, Stoneham, Mass. Filed June 30, 1916. Serial No. 106,935. (Cl. 158—36.)



1. In combination with a carbureter having a low-pressure chamber, a low-level, main, liquid-fuel reservoir, a closed auxiliary reservoir, adapted to permit a partial vacuum to be maintained therein, a liquid supply pipe leading from a low level in said main reservoir and opening into said auxiliary reservoir at a higher level than its bottom, and liquid discharging means, providing the sole means of communication between said auxiliary reservoir and said low pressure chamber, and having its inlet opening to said auxiliary reservoir at a lower level than that at which said supply pipe opens thereto and having its outlet opening into said chamber at a higher level than that of its inlet.

[Claims 2 to 5 not printed in the Gazette.]

1,271,849. MOLD. CALLIE S. CAMPBELL, New London, Ohio. Filed May 2, 1916. Serial No. 94,933. (Cl. 22—153.)



A mold, comprising hollow mold members, which are in communication and through which a cooling medium is adapted to be circulated, one of the mold members having connecting portions extending across the space thereof and forming ties for the inner and outer walls, and having a pair of openings in each connecting portion, and a recess in the mold face in communication with the pair of openings, a sliding cut off in each recess, and a lever in one opening of each pair of openings, and having the cut off connected thereto.

1,271,850. TOOTH-REGULATOR. JOHN E. CANNING, Denver, Colo. Filed Jan. 8, 1917. Serial No. 141,083. (Cl. 32—19.)



1. A tooth regulating device including tubular members an integral part of which is interiorly threaded, and an arch band composed of a flexible member having exterior threads which engage and coöperate with the interiorly threaded portions of the tubular members as the arch band is rotated and anchor bands mounted on said tubular members.

2. A tooth regulating device including interiorly threaded tubular members and an arch band composed of a spiral spring whose exterior is screw threaded to coöperate with the interior threads of the tubular members, one part of the arch band having a right hand thread and the other part, a left hand thread.

3. A tooth regulating device including an arch band composed of two connected spiral spring members one of which is wound to form a right hand screw thread while the other is wound to form a left hand screw thread.

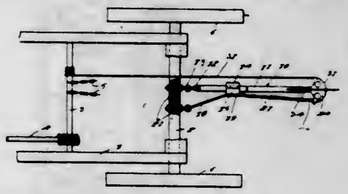
4. A tooth regulating device including an arch band composed of a spiral spring having right and left hand threaded parts, and tubular members having interior screw threads which coöperate respectively with the oppositely threaded parts of the arch, the latter having a part fast thereon between its extremities and fashioned to facilitate the rotation of the arch.

5. A tooth regulator of the class described, including anchor bands each of which has a threaded and an unthreaded sleeve, tubular members exteriorly threaded to coöperate with the threads of the sleeves of said bands and shouldered to engage the unthreaded sleeves, and an arch band composed of a spiral spring whose exterior is screw threaded to coöperate with interior threads with which the tubular members are provided, one part of the arch band having a right hand thread and the other part a left hand thread.

[Claims 6 and 7 not printed in the Gazette.]

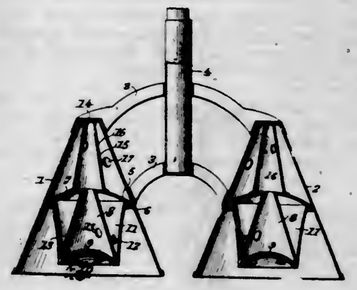
1,271,851. DIRECTION-INDICATOR FOR TRACTION-ENGINES. JOHN M. CARLSON, Sheyenne, N. D. Filed May 5, 1916. Serial No. 95,619. (Cl. 116—31.)

1. In a direction indicator for traction engines a supporting tube, a block structure slidably carried by said tube, a bar connected to said block structure, means carried by said tube and said bar for connection with a tractor structure, a substantially vertical rod rotatably carried by the outer end of said tube structure, a sector mounted upon said rod for movement therewith, the lower end of said rod being bent for forming a supporting axle, a supporting wheel mounted upon said axle at the end of said rod, a contractile spring connected to said bar and to said sector, means connected to the tractor steering structure for normally holding said wheel in a position parallel with the line of travel of the tractor and against the contracting action of said spring, and an indicating arm carried by the upper end of said rod for movement therewith.



[Claims 2 to 4 not printed in the Gazette.]

1,271,852. WASHING IMPLEMENT. WILLIAM F. CAULEY, Wade, Miss. Filed Mar. 7, 1916. Serial No. 82,677. (Cl. 68—5.)



1. In a washing implement, a pair of main cup members, connections between said members, a handle mounted in said connections, a curved partition positioned transversely in each cup member, a frusto-conical member depending from each partition and having an open upper end forming a central opening for said partition, a frusto-conical member positioned between each partition and the bore of the main cup member, said frusto-conical members having openings in their sides, said main cup members having openings in their sides above said partitions, and auxiliary cup members positioned in the lower portions of said cup members and provided with openings in their lower portions and their side portions, the lower portions of said auxiliary cup members serving to close the lower ends of the first-mentioned frusto-conical members.

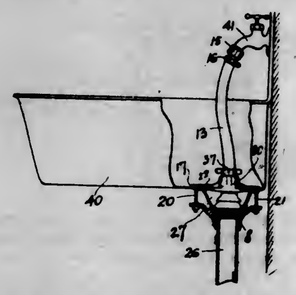
[Claim 2 not printed in the Gazette.]

1,271,853. SINK-PIPE-CLEANING DEVICE. WILLIAM WELLS CAVERLEY, Vancouver, British Columbia, Canada. Filed Oct. 2, 1917. Serial No. 194,394. (Cl. 4—1.)

1. A sink pipe cleaning device comprising, a tubular connection having one end adapted for coupling to a water service and having its opposite end formed as a nozzle adapted to fit the said pipe so that its peripheral surface will form a joint therewith, a strut having an interiorly threaded bore mounted on said tubular connection adapted to be secured across the mouth of the sink-pipe, and a nut coöperating with the bore of said strut whereby the said nozzle may be jammed in place.

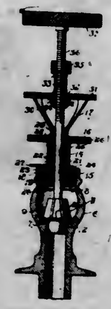
2. For use with a sink and sink-pipe, a plate ring surrounding the sink outlet of less diameter than the same and provided with diametrically opposite slots, a tubular connection having one end adapted for coupling to a

water service and having its opposite end formed as a nozzle adapted to fit the said pipe so that its peripheral surface will form a joint therewith, a strut mounted on said tubular connection the ends of which are adapted to



pass through the slots of the said plate ring to engage the underside of the same, and vertically adjustable means extending between said strut and the said nozzle and bearing directly on the nozzle.

1,271,854. TOOL FOR RECUTTING VALVE-SEATS. HOWARD H. CHRISTENSEN, Chicago, Ill., assignor to Charles A. Dreier, Chicago, Ill. Filed Feb. 10, 1917. Serial No. 147,925. (Cl. 90—12.5.)

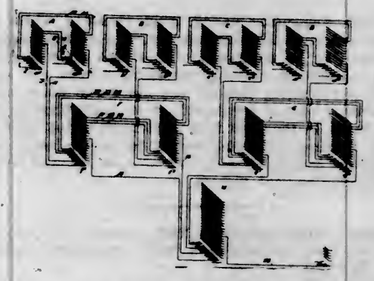


1. In a tool for recutting valve seats, the combination of a cutting member, a rod attached to said member, a holder for the rod in which it has a free rotative movement, a plug of expansible and yieldable material arranged to be inserted upon the inside of the open upper end of the valve casing, means forming a part of said holder for expanding said plug to bring it into engagement with the inner wall of said upper end of the valve casing to lock the holder in place, and means forming a part of said holder and adapted by adjustment to mechanically exert a downward pressure on the rod to feed the cutting member into cutting position, substantially as described.

2. In a tool for recutting valve seats, the combination of a cutting member, a rod attached to said member, a holder for the rod in which it has a free rotative movement, an expansible and yieldable member forming a part of said holder and adapted to be inserted in the inside of the open upper end of the valve casing, a movable sleeve forming a part of said holder and extending through said expansible member and underlying one side thereof, means for moving said sleeve to draw it into tight engagement with said expansible member, means for preventing movement of the expansible member out of position whereby it is expanded by the pressure of said sleeve and brought into engagement with the inner wall of said upper end of the valve casing to lock the holder in place, and means associated with said holder and adapted by adjustment to mechanically exert a downward pressure on the rod to feed the cutting member into cutting position, substantially as described.

[Claims 3 to 6 not printed in the Gazette.]

1,271,855. TRUNKING SYSTEM. HENRY P. CLAUSEN, Mount Vernon, N. Y., assignor, by mesne assignments, to Western Electric Company, Incorporated, a Corporation of New York. Filed Mar. 6, 1915. Serial No. 12,486. (Cl. 179—18.)



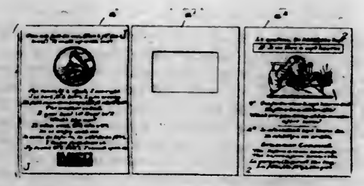
1. In a trunking system, a plurality of main groups of primary switches arranged in subgroups, a main group of secondary switches arranged in subgroups, each subgroup of secondary switches being normally individual to a different one of said main groups of primary switches, first choice trunks for the switches of each of the subgroups of each main group of primary switches leading to the switches of the subgroup of secondary switches normally individual to such main group, second choice trunks for the switches of each subgroup of each main group of primary switches leading to switches of another subgroup of the same main group of primary switches, first choice trunks for the switches of each subgroup of said main group of secondary switches outgoing from said main group, and second choice trunks for the switches of each subgroup of the main group of secondary switches leading to the switches of another subgroup of said main group of secondary switches.

2. In a trunking system, a plurality of main groups of primary switches arranged in subgroups, a main group of secondary switches arranged in subgroups, each subgroup of secondary switches being normally individual to a different one of said main groups of primary switches, first choice trunks for all the switches of each subgroup of each main group of primary switches leading to switches of the subgroupe of secondary switches normally individual to such main group, second choice trunks for all the switches of each subgroup of each main group of primary switches leading to a portion of the switches of another subgroup of the same main group of primary switches, first choice trunks for all the switches of each subgroup of said main group of secondary switches outgoing from said main group, and second choice trunks for all the switches of each subgroup of the main group of secondary switches leading to a portion of the switches of another subgroup of said main group of secondary switches.

3. In a trunking system, a plurality of main groups of primary switches arranged in subgroups, a main group of secondary switches arranged in subgroups, each of said secondary subgroups being normally individual to a different main group of primary switches, first choice trunks for all the switches of each subgroup of each main group of primary switches leading to switches of the subgroup of secondary switches normally individual to such primary main group, second choice trunks for all the switches of each subgroup of each main group of primary switches leading to switches of another subgroup of the same main group of primary switches, subscribers' lines terminating directly in the remaining switches of each primary subgroup, first choice trunks for all the switches of each subgroup of said main group of secondary switches outgoing therefrom, and second choice trunks for all switches of each subgroup of secondary switches overflowing to switches of another subgroup of said secondary main group.

4. In a trunking system, main groups of primary switches arranged in subgroups, main groups of secondary switches arranged in subgroups, each of said secondary subgroups being normally individual to a different main group of primary switches, a group of tertiary switches, first choice trunks for all switches of each subgroup of each main group of primary switches leading to switches of the subgroup of secondary switches normally individual to such primary main group, second choice trunks for all switches of each subgroup of primary switches leading to switches of another subgroup of the same main primary group, first choice trunks for all switches of each subgroup of each main group of secondary switches leading to said tertiary group, and second choice trunks for all switches of each subgroup of each main group of secondary switches leading to switches of another subgroup of the same main group of secondary switches.

1,271,856. CARD-GAME MEANS. WILLARD E. COOK, Philadelphia, Pa. Filed Oct. 4, 1917. Serial No. 194,676. (Cl. 46—25.)



A card-game means, comprising a "joker"-card having a display cartoon and containing different idioms; a "window"-card and a "lingo" or "figure"-card containing a cartoon, a block configuration together with questions and answers, in different foreign languages and grammar comments; the latter comprising a series of such cards and furnishing in conjunction with the window-card and joker-card the means for playing said game and scorings to be recorded, substantially as described.

1,271,857. PROCESS OF TREATING FIDUCIARY PAPERS FOR THE PURPOSE OF PREVENTING FRAUD. CHARLES ANDRÉ COPPIER, Paris, France. Filed Jan. 20, 1915. Serial No. 3,299. (Cl. 101—32.)

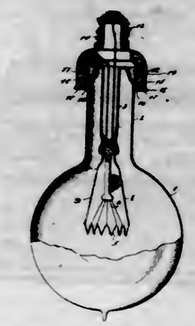


1. The process of treating fiduciary papers which comprises compressing the papers while dry with the interposition of a matrix having elevations of varying height to produce varying-translucent portions over the impressed area.

7. The process of treating fiduciary papers which comprises giving the papers an initial watermark, printing on one or both sides thereof with colored ink, and compressing the papers with the interposition of a matrix or matrices having elevations of different height to produce over the impressed area varying-translucent portions modified by the initial watermark and the color effects of said ink.

[Claims 2 to 6 not printed in the Gazette.]

1,271,858. ELECTRIC INCANDESCENT LAMP. JOHN H. DALE, New York, N. Y., assignor to Dale Lighting Fixture Co., Inc., a Corporation of New York. Filed Mar. 4, 1915. Serial No. 11,988. (Cl. 176—16.)



1. An electric incandescent lamp comprising a lamp bulb and a lamp base, a member secured directly to the lamp bulb, supports extending from said member and connected to said lamp base rigidly supporting said base spaced from said lamp bulb, and heat insulating material interposed in the space between said base and bulb.

2. The combination with an incandescent lamp bulb and its base of a connecting insulator introduced between the bulb and base and comprising a double-walled cup-shaped body, insulating material contained between the walls thereof, the neck of the bulb being sealed into the cavity of said cup, and the base being attached axially to the outside of said cup, substantially as described.

1,271,859. OPHTHALMIC MOUNTING. GEORGE H. DAY, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Feb. 5, 1917. Serial No. 146,701. (Cl. 88—53.)



1. The combination with an end piece having a beveled outer face and a temple receiving slot, of a temple having a portion pivotally secured within the slot and a box exterior to the slot overlying and interlocking with the beveled faces of the end piece, substantially as illustrated.

5. The combination with an end piece having a beveled outer face and a temple receiving slot, of a temple having a portion pivotally secured within the slot and a box exterior to the slot provided with inner beveled faces adapted to interlock with the beveled faces of the end piece as and for the purpose set forth.

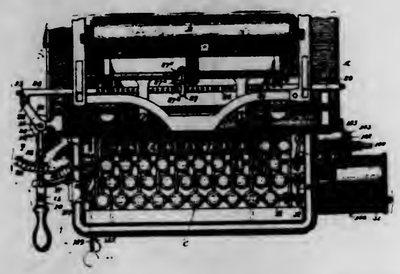
[Claims 2 to 4 and 6 to 10 not printed in the Gazette.]

1,271,860. COMPUTING ATTACHMENT FOR TYPEWRITERS. BENJAMIN M. DES JARDINS, West Hartford, Conn., assignor to John T. Underwood, Brooklyn, N. Y. Filed Oct. 11, 1900. Serial No. 32,746. (Cl. 235—62.)

59. In a combined typewriting and computing machine, the combination with numeral keys and a gang of computing wheels, of means for simultaneously positioning said carriage and coupling said keys to said wheels in any one of several columns, and means for automatically uncoupling said wheels and keys when a number has been completely recorded in any of said columns.

61. In a computing machine, the combination with numeral keys and computing wheels, of a master wheel for

operating said wheels *seriatim* to an extent determined by said numeral keys, carry-over devices connected with said computing wheels for turning each wheel from the one lower in denomination, a source of power for turning said master wheel, and a separate source of power controlled by said carry-over mechanism for causing said computing wheels to be turned thereby.



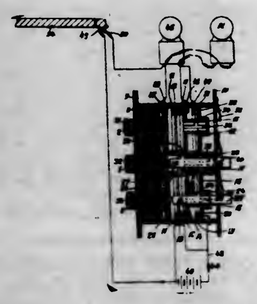
96. In a combined typewriting and computing machine, the combination of a typewriter carriage, a denomination selector, a tabulating device, and means, including a part of said tabulating device, for setting said selector so that it will move step by step with said carriage.

142. In a combined typewriting and computing machine, the combination of a carriage in the typewriter, a denominational tabulator for said carriage, denomination selecting mechanism in the computer and including a device that moves step by step independently of said typewriter carriage, and means controlled by the typewriter tabulator for setting said step by step moving device, said device being settable independently of the typewriter carriage to any desired denominational position.

159. The combination with key-operated printing mechanism arranged to print several parallel columns of numbers, of a totalizer, and key-operated actuating means arranged to actuate the totalizer as the numbers are printed in the different columns.

[Claims 1 to 58, 60, 62 to 95, 97 to 141, 143 to 158, and 160 to 163 not printed in the Gazette.]

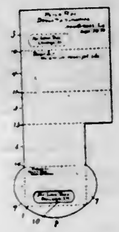
1,271,861. ELECTRIC PROTECTIVE DEVICE. WILLIAM DEUTSCHER, New York, N. Y. Filed Dec. 20, 1912. Serial No. 737,809. (Cl. 175—282.)



3. In an electric protective device, a switch element comprising a casing of non-conducting material provided with a plurality of openings through the face thereof, a spring controlled plate adjacent the inner face of said casing, push buttons mounted in said openings and bearing against said plate, pins carried by said push buttons and projecting through said plate, a conducting piece carried by said plate, a second conducting piece in the path of said first conducting piece, a plurality of movable supports of non-conducting material arranged one behind the other, a pin carried by each said support and bearing against said support, each pin in the path of a push button and its pin, a conducting piece carried by each said support and a conducting piece in the path of each of said movable conducting pieces but insulated from said second conducting piece, said conducting pieces respectively being provided with means for connecting them with signal circuit terminals.

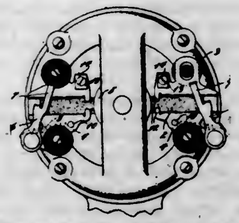
[Claims 1, 2, and 4 not printed in the Gazette.]

1,271,862. COMBINED WRITING-SHEET AND ENVELOP. WILHELM C. DE WENDT, New Orleans, La. Filed Nov. 1, 1916. Serial No. 128,908. (Cl. 229—92.7.)



A combined letter sheet and envelop comprising a substantially rectangular writing sheet provided at one end with a relatively narrow intermediate connecting portion laterally reduced at one side and extending from and arranged in flush relation with the longitudinal edge at the other side of the letter sheet and terminating short of one of the longitudinal edges of the said writing sheet to form a relatively narrow laterally projecting portion of a width materially less than the intermediate connecting portion, said letter sheet being folded on transverse lines spaced apart substantially the width of the intermediate connecting portion so as to permit the folded letter sheet to overlie the said intermediate portion, the relatively narrow laterally extending portion of the writing sheet being folded longitudinally of the latter into the area of the intermediate connecting portion and over the same, said intermediate connecting portion constituting the back of the envelop and the envelop portion being located at the outer end of the intermediate connecting portion and provided with end and bottom flaps foldable around the writing sheet and the said intermediate connecting portion when the same are folded against the inner face of the envelop portion, the front face of the writing sheet and the front face of the envelop portion being located at the same face of the paper and the said envelop portion having an opening adapted to expose an address on the terminal portion of the writing sheet.

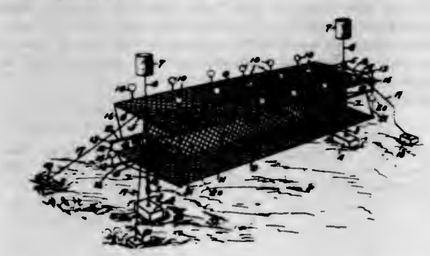
1,271,863. BRUSH-HOLDER FOR DYNAMO-ELECTRIC MACHINES. CHARLES H. J. DILG, New York, N. Y. Original application filed Jan. 7, 1913, Serial No. 740,641. Divided and this application filed Oct. 9, 1917. Serial No. 195,498. (Cl. 200—24.)



1. In a dynamo-electric machine, a brush holder comprising a guide tube open along one side, a movable pressure member adapted to bear against the rear end of the brush in the guide tube and including a portion extending in front of the longitudinal opening and arranged to prevent the brush from escaping into the opening, and resilient means engaging the pressure member and holding it resiliently against the rear end of the brush.

[Claims 2 to 4 not printed in the Gazette.]

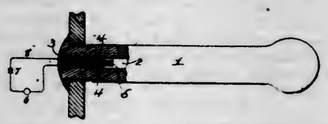
1,271,864. SUBMARINE BARRIER. THOMAS J. DIONNEY, Bridgeport, Conn. Filed Aug. 13, 1917. Serial No. 185,979. (Cl. 102—3.)



3. A submarine barrier, comprising masts having booms extending therefrom adjacent to their upper and lower ends, a net connected to said masts, nets connected to said booms and to said first-mentioned net whereby to form a trap, floats connected to said barrier for maintaining the same in a substantially vertical position, and contact mines carried by said barrier, substantially as and for the purpose specified.

[Claims 1, 2, and 4 to 12 not printed in the Gazette.]

1,271,865. STAY-BOLT STRUCTURE. ETHAN I. DODDS, Pittsburgh, Pa., assignor to Flannery Bolt Company, Pittsburgh, Pa. Filed Oct. 25, 1917. Serial No. 198,476. (Cl. 85—1.5.)



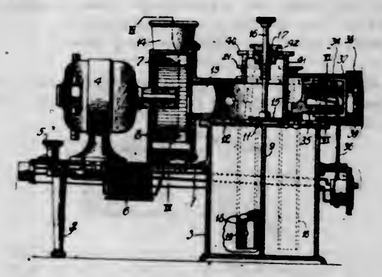
1. The combination with a staybolt having a tell-tale bore, of a circuit closer disposed in said bore, an electric circuit including said circuit closer and a signal, and a body of non-conducting soluble material normally holding said circuit closer open.

3. The combination with a staybolt having a tell-tale bore and a plug of non-magnetic material closing said bore, of contact springs carried by said plug and projecting into the bore to form a circuit closer therein, a body of non-conducting soluble material normally separating said contact springs, and an electric circuit including said contact springs and a signal device.

[Claim 2 not printed in the Gazette.]

1,271,866. VOLATILIZER. FRANK C. DOBMENT, Detroit, Mich., assignor to The Rogers Electric Laboratories Company, Cleveland, Ohio, a Corporation. Filed May 3, 1917. Serial No. 166,095. (Cl. 261—122.)

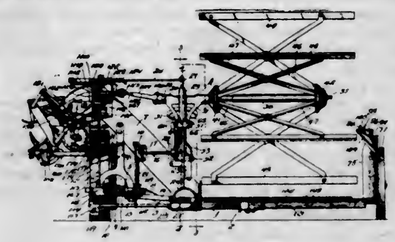
1. A volatilizer comprising a receptacle having a plurality of compartments, a cover therefor having an outlet duct in communication with the several compartments, means for exhausting air through the outlet ducts, a closure regulating the discharge from the several compartments into the outlet duct, air inlet tubes extended toward the bottom of each compartment, means for regulating the admission of air to each inlet tube, means for introducing medicament to air drawn into the air inlet tubes, and means for heating the air drawn into the several compartments.



9. A volatilizer comprising a main receptacle having a plurality of compartments, a cover for the receptacle having an outlet passage in communication with the several compartments, a main frame partially supported by the main receptacle, an electric motor on the main frame, a fan operated by the motor and adapted to exhaust air through the outlet passage of the cover, a plurality of inlet bosses on the cover with openings therethrough in communication with an inlet passage, a plurality of auxiliary medicament holders having their outlet nozzles adapted to be inserted in the boss inlet openings, provided with inlet passages that direct indrawn air through the contents of the holder, and manually operable means controlling communication between the compartments and the inlet passages.

[Claims 2 to 8 not printed in the Gazette.]

1,271,867. HARVESTING-MACHINE. THOMAS C. DUNCAN, St. Joseph, Mo. Filed Nov. 4, 1915. Serial No. 59,649. (Cl. 56—33.)



1. In a machine of the class described, a frame comprising front and rear bars and a side bar consisting of an angle bar connecting said front and rear bars at the grain side of the frame, said angle bar having apertures in the horizontal flange thereof, a shaft supported by the front and rear bars intermediate the side bar and the stubble side of the frame; and a grain platform swingingly mounted on said shaft and having a keeper on the underside thereof; in combination with a supporting member having at its upper end a hook adapted for engagement with the keeper and at its lower end a flange provided with curved hooks adapted for engagement with the apertures in the horizontal flange of the side bar; and a grain wheel carried by said supporting member.

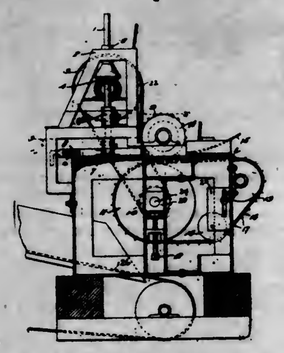
3. In a machine of the class described, a frame including a side bar, a grain platform hingedly connected with the frame and adpted to be supported upon the side bar, a locking bar, links connected pivotally with the platform and supporting the locking bar, and a lever arm associated with one of the links to actuate the locking bar.

4. In a machine of the class described, a frame including a side bar, a platform hingedly connected with the frame and adapted to be supported upon the side bar, links pivotally connected with the platform, a locking bar

supported pivotally by the links and having an arcuate hookshaped portion adapted to engage the side bar of the frame, and means for actuating the links to move the locking bar into and out of engaging position.

[Claims 2 and 5 not printed in the Gazette.]

1,271,868. PINEAPPLE-FLESHING MACHINE. JOHN DUNN, Honolulu, Hawaii. Filed Feb. 12, 1918. Serial No. 216,763. (Cl. 146—11.)



1. In a pineapple fleshing machine, the combination of revolving spaced cutting disks arranged to cut the fleshy portion of pineapple peelings into strips, and a revolving cutting blade at right angles to the aforementioned disks to sever the strips from the skin.

2. In a pine apple fleshing machine, a horizontal revolving circular blade for severing the meat or flesh of pineapples from the skin, means for conveying the pineapple peelings to said blade, said means including spaced cutting disks arranged to cut the fleshy portion of the pine apple peelings into strips, and offset guide members positioned over the horizontal revolving blade to guide the recovered pineapple meat to a conveyer, substantially as set forth.

3. In a pineapple fleshing machine, the combination of conveying means, an upwardly curved guide, disposed above the conveyer belt, spaced vertical blades, the center blades being of smaller diameter than the outer blades; a horizontal revolving disk blade for severing the strips of pine apple from the peelings and means for conducting the flesh or meat of the pineapple into a receptacle separate from the skin.

1,271,869. COLLAPSIBLE BLOCK. ROBERT DUNSEATH, New York, N. Y. Filed Apr. 6, 1918. Serial No. 227,015. (Cl. 254—192.)

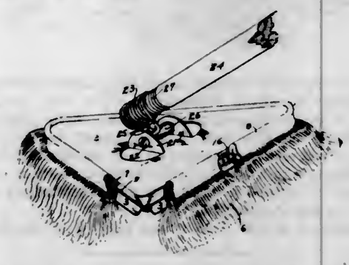


1. A block of the character described, comprising spaced plates each having a hole in register with the holes of the other plates, bolts removably disposed in the registered holes of the plates and the bolts being composed of a number of detachably connected sections, sheaves rotatable on the bolt between each pair of the plates, and means on all the bolts releasably fastening the plates and the bolts together.

6. In a block of the character described, a bolt composed of a key section having a cylindrical axle portion, including two threaded lugs of less diameters than the axle portion projecting in opposite directions from the ends of the cylindrical portion, and a plurality of separate corresponding sections, each having a cylindrical axle portion, including a threaded recess in one end of each axle portion as well as having a threaded ing of less diameter than the axle portion protruding from its second end and said recesses and lugs being of relative sizes whereby the recessed axle portion of each of the recessed sections may be removably screwed on the lug of one of the other sections so that all the axle portions will be spaced apart.

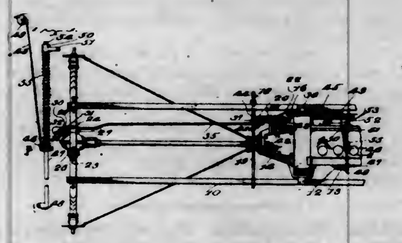
[Claims 2 to 5 not printed in the Gazette.]

1,271,870. DUPLEX MOP. ANDREW EINSFELD, San Francisco, Cal. Filed June 29, 1916. Serial No. 106,604. (Cl. 15—56.)



An article of manufacture, comprising a mop, a mop head having tabs cut from the material thereof, and turned upwardly to form lugs thereon, a helical coil of wire having the ends formed into eyes adapted to lie contiguous with said lugs, a block disposed between said eyes, a bolt passing through said lugs, eyes and block to pivotally secure the coil upon the lugs, means for securing the mop to the mop head and a handle provided with threads adapted to engage in said coil.

1,271,871. ATTACHMENT FOR FORD AUTOMOBILES. HENRY EINUNG, Jasper, Minn. Filed Sept. 15, 1917. Serial No. 191,509. (Cl. 74—39.)



1. The combination with a self propelled vehicle having an element controlling transmission of power, of means operable from the rear of the vehicle for actuating such element.

2. The combination with a motor vehicle including an element adapted in one position to cause transmission of power and in another position to cause stopping of such transmission of power, and means movable to a position to normally hold the element in the latter position, of means operable from the rear of the vehicle for moving the element to the former position.

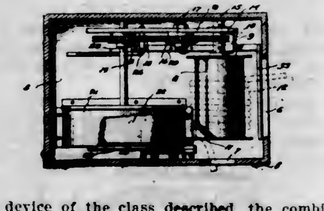
3. The combination with a motor vehicle including a clutch pedal and hand brake lever movable to hold the clutch pedal in neutral position, of means operable from the rear of the vehicle for moving the clutch pedal to low speed position.

4. The combination with a motor vehicle including a clutch pedal and hand brake lever movable to hold the clutch pedal in neutral position, of means operable from the rear of the vehicle for moving the clutch pedal to low speed position, said means including a manually operable lever swingingly mounted at the rear of the vehicle, and link connection between the lever and clutch pedal.

5. The combination with a motor vehicle having a carbureter, a clutch pedal, and a brake lever adapted in one position to hold the clutch pedal in neutral position, of means operable from the rear of the car for successively opening up the throttle valve of the carbureter and moving the clutch pedal to low speed position.

[Claims 6 to 11 not printed in the Gazette.]

1,271,872. TELEPHONE-CORD TAKE-UP. LEEVI W. ELSYET, Lakeview, Ohio. Filed Oct. 31, 1917. Serial No. 199,529. (Cl. 242—108.)



1. In a device of the class described, the combination of a housing having an opening through which a flexible element extends, a drum within said housing operable to wind and unwind said element, a spring also in said housing, a train of gearing connecting said spring and drum whereby to rotate the latter, a pivoted element normally engaging said train of gearing to prevent rotation thereof to wind the flexible element on said drum, and a rocking element connected to said pivoted element and having a portion thereof disposed adjacent the opening in the housing and adapted to be engaged by the flexible element extending through said opening whereby to adjust said pivoted element out of engagement with said gearing to permit the same to wind said flexible element on the drum.

2. In a device of the class described, the combination of a drum operable to wind and unwind a flexible element, a spring operatively connected to said drum for rotating the same in one direction to wind the flexible element thereon, said spring being adapted to be placed under tension by the unwinding of said flexible element from the drum, means normally preventing operation of said spring to wind said flexible element on the drum but permitting of the unwinding of said flexible element therefrom, and means actuated by said flexible element for releasing the last named means to permit said element to be wound upon the drum after the same has been unwound therefrom.

1,271,873. MAGNET-OPERATED SWITCH. RUDOLPH C. EMMERLING, JOHN H. WHEELOCK, and CURT J. ROHLAND, Worcester, Mass., assignors to American Model and Instrument Company, Worcester, Mass., a Corporation of Massachusetts. Filed Apr. 12, 1916. Serial No. 90,763. (Cl. 175—281.)

1. In an electromagnetic switch, the combination with two contact members, and an electromagnet having a pivoted armature, of a movable independent arm, supporting one of said contact members, said armature having a fixed projection thereon constituting the sole means for operating said movable arm in a direction to close the contact.



3. In an electromagnetic switch, the combination with two contact members, of an electromagnet having a pivoted armature, and a movable arm supporting one of said contact members, said armature having means for engaging and operating said arm located substantially in alinement with the main body of the armature and the pivot being located beyond the plane of the armature.

10. In an electromagnetic switch, the combination with two contact members, one of them movable into contact with the other, and an electromagnet having a pivoted armature, of a movable arm supporting one of said movable contact members, said armature having means for engaging and operating said arm located substantially in alinement with the main body of the armature and the pivot being located on the side of the armature opposite the electromagnet.

[Claims 2 and 4 to 9 not printed in the Gazette.]

1,271,874. CONCRETE-MOLD. ARTHUR I. ENGLISH, Newton Center, Mass., assignor of two-thirds to Benjamin A. Howes, New York, N. Y. Filed Jan. 2, 1908, Serial No. 408,928. Renewed May 14, 1918. Serial No. 234,534. (Cl. 25—131.)



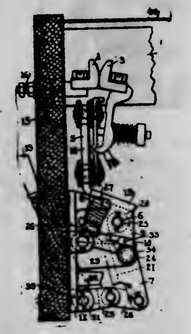
9. In a mold for plastic material, the combination with a retaining wall comprising plates, of a second retaining wall comprising plates, rods extending through the space for the plastic material between the walls and engaging with said walls, each of said rods having its end bent at an angle upon the same side of the axis of the rod and in the same plane, said bent ends forming driven fastenings, each of said rods extending between two adjacent plates of one wall and having one of its bent ends driven into the edge of one of said plates, its other end entering between adjacent sections of the other retaining wall and its other bent end being driven into the edge of one of the sections thereof.

[Claims 1 to 8 not printed in the Gazette.]

1,271,875. OVERLOAD CIRCUIT-BREAKER. CLARENCE T. EVANS, Milwaukee, Wis., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed June 28, 1917. Serial No. 177,454. (Cl. 175—267.)

1. In a circuit breaker, the combination with relatively movable contacts, of a pivoted lever, a switch arm carrying certain of said contacts, said arm being pivotally mounted upon said lever for movement therewith and being biased to move relatively thereto for disengagement of said contacts, electromagnetically controlled means

for restraining said switch arm against such movement subject to release under abnormal electrical conditions and means for actuating said lever, said means being operable for moving said arm to position of restraint following movement thereof in response to its bias and thereafter operable for moving said arm to closed circuit position during restraint of said arm by said restraining means.



8. In a circuit breaker, in combination, a fixed support, a lever pivoted medially thereon, a switch arm pivotally mounted upon said lever and biased to move relatively thereto to open circuit position, a roller carried by said arm and adapted to engage a stop carried by said support for limiting such movement, a latch member pivoted upon said support for normally restraining said arm against such movement, operating means for moving said arm and said lever jointly to circuit closing or circuit opening position during restraint of said arm by said latch, said operating means including a toggle connection adapted to coöperate with a portion of said support for normally retaining said lever in closed circuit position, and electro-responsive means effective upon overload to trip said latch member for movement of said switch arm to open circuit position in response to its bias.

[Claims 2 to 7 not printed in the Gazette.]

1,271,876. PIPE-CLAMP. IVAN B. FAIRBANKS, Emmett, Kans. Filed Dec. 3, 1917. Serial No. 205,130. (Cl. 24—249.)



A pipe clamp, comprising a yoke member including a pair of legs and a V-shaped head joining the legs at one end, the opposing faces of the V-shaped head having a series of clamping teeth formed thereon, a clamping head pivoted between the legs and having a jaw to coöperate with the V-shaped head, an elongated handle extending rearwardly from the head, and an adjustable stop member entered into the head, said adjustable stop member also acting as a release device.

1,271,877. CROSSING-GATE. DAN V. FARMAN, Battle Creek, Mich. Filed Mar. 10, 1917. Serial No. 153,924. (Cl. 39—92.)

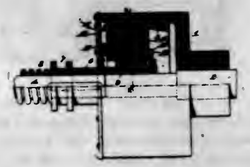
1. In a crossing gate, a standard, a gate comprising an inner member pivoted on a horizontal pivot on said standard, and an outer member pivoted to the inner member on a pivot at right angles to the horizontal pivot, an extension on the outer member, the inner member provided with a socket to receive said extension, and a spring catch on the inner member normally engaging and securing the extension in the socket when the gate is in open position, and a lug on the standard engaging said catch



to release the extension when the gate is in a closed position.

[Claim 2 not printed in the Gazette.]

1,271,878. FRICTION DEVICE. WILLIAM H. FAUBER, Brooklyn, N. Y., assignor of one-half to John Robert Taylor, Brooklyn, N. Y. Filed Mar. 4, 1915. Serial No. 11,980. (Cl. 192—8.)



1. In a device of the character described, a friction member comprising a hub, a peripheral channel on the hub, a plurality of series of radiating elements resting in the channel, and a separating body between the different series of elements.

11. In a device of the character described, a friction member comprising a hub, a ribbon disposed around the periphery of the hub in such a manner as to form a spiral groove between its convolutions, and a series of radiating elements seated in the groove.

16. In a device of the character described, a friction member comprising a hub, a ribbon disposed around the periphery of the hub in such a manner as to form a spiral groove between its convolutions, and a series of radiating elements seated in the groove, crimps in the ribbon between the elements to retain them in position.

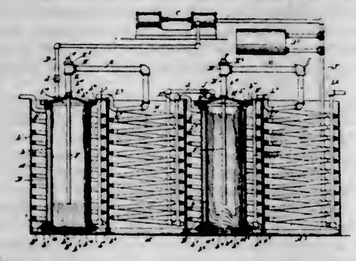
23. In a device of the character described, a friction member comprising a hub, a ribbon disposed around the periphery of the hub in such a manner as to form a spiral groove between its convolutions, and a series of elongated, radiating elements of equal length seated in the groove.

29. In a device of the character described, a friction member comprising a hub, a series of spaced bodies on the hub, a series of filamentous elements substantially radially arranged between the bodies, and means for securing the bodies and elements to the hub.

[Claims 2 to 10, 12 to 15, 17 to 22, and 24 to 28 not printed in the Gazette.]

1,271,879. PROCESS OF FREEZING WATER. WILLARD O. FELT, Bradford, Pa. Filed June 7, 1912. Serial No. 702,231. Renewed Sept. 8, 1917. Serial No. 190,380. (Cl. 62—172.)

1. The herein described process of forming ice which consists in freezing a shell of ice around a body of water, then lowering the temperature of the inclosed water below the freezing point before it is permitted to freeze.

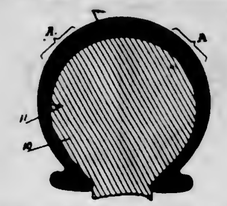


3. The herein described process of forming ice which consists in freezing a shell of ice around a body of water then withdrawing the water lowering its temperature below the freezing point and again introducing it into the shell of ice and permitting it to freeze.

12. The herein described process of forming ice, which consists in freezing a shell of ice around a body of water, causing the water to circulate from and back into the interior of said shell, lowering the temperature of the water below the freezing point while circulating, and then stopping the circulation and permitting the water to freeze.

[Claims 2 and 4 to 11 not printed in the Gazette.]

1,271,880. TIRE AND METHOD OF MAKING SAME. GEORGE F. FISHER, Roselle, N. J., assignor to The Hartford Rubber Works Co., a Corporation of Connecticut. Filed Jan. 6, 1916. Serial No. 70,596. (Cl. 154—14.)



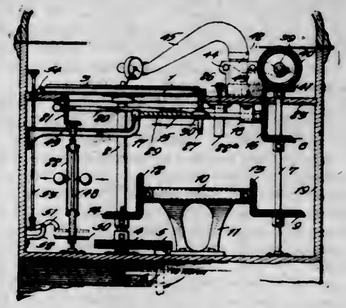
1. A tire comprising a plurality of convolutions of fabric having circumferentially extending warp threads and radially extending weft threads, the warp threads having less crimp than the weft threads at the tread portion of the tire, having approximately the same crimp as the weft threads at the zones of greatest flexing in the tire, and having greater crimp than the weft threads between said zones and the edges of the tire.

2. The process of producing tires of rubber treated fabric normally having greater crimp in the warp threads than in the weft threads, consisting of forming a plurality of convolutions of a continuous strip of the fabric under such tension that a less crimp is produced in the warp threads than exists in the weft threads at the tread of the convolutions and the same crimp is produced in the warp threads as exists in the weft threads throughout zones of greatest flexing in the convolutions, pressing the weft threads toward each other near the edge portions of the convolutions to produce greater crimp in the warp threads than in the weft threads, and vulcanizing the product.

[Claims 3 and 4 not printed in the Gazette.]

1,271,881. SPEED-REGULATING MEANS. THEODORE FLETCHER, San Antonio, Tex. Filed May 16, 1917. Serial No. 168,972. (Cl. 74—45.)

1. In speed regulating means for sound recording and reproducing machines, a rotary disk receiving table, a speed controlling wheel in frictional contact with the table, a shaft supporting the speed controlling wheel and having spiral engagement therewith, a governor mechanism adapted to be operated by the said shaft, and means for moving the speed controlling wheel across the table.



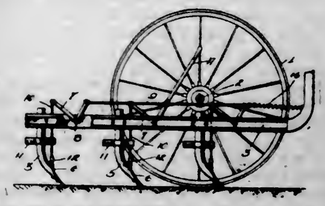
3. In speed regulating means for sound recording and reproducing machines, a rotary disk supporting table, a speed controlling wheel in frictional contact with the table, a movable shaft supporting the speed controlling wheel, a governor mechanism adapted to be actuated by means of said shaft, a screw shaft, a carrier engaging the speed controlling wheel and the screw thread shaft, and means for moving the carrier to disconnect it from the screw thread shaft and to clear the speed controlling wheel from the table to admit of resetting the speed regulating means.

6. In a machine for recording or reproducing sound, a rotary disk supporting table and an arm for receiving the recorder or reproducer, a speed controlling wheel in frictional engagement with the table, a governor-controlled support for the speed controlling wheel, a screw shaft for moving the speed controlling wheel across the table, a second screw shaft for moving the arm to carry the stylus across the disk, and means for operating the two screw shafts at like speeds whereby the speed controlling wheel and the stylus occupy a like distance from the axis of rotation of the table to cause that part of the disk in contact with the stylus to travel at a uniform speed.

8. In a machine for recording or reproducing sound, a disk supporting table and an arm for receiving the recorder or reproducer, a speed controlling wheel in frictional contact with the table, a supporting shaft therefor, a governor mechanism adapted to be actuated by means of the said shaft, a screw shaft for moving the speed controlling wheel across the table, a resetting mechanism for the speed controlling wheel embodying indicating means, a screw shaft for moving the said arm to carry the stylus across the disk, indicating means having connection with the said arm to admit of properly positioning the stylus, and connecting means between the table and the screw shafts for moving the same in unison.

[Claims 2, 4, 5, and 7 not printed in the Gazette.]

1,271,882. ATTACHMENT FOR CULTIVATORS. JOHN H. FORD, Webster City, Iowa. Filed Mar. 16, 1916. Serial No. 84,679. (Cl. 97—3.)

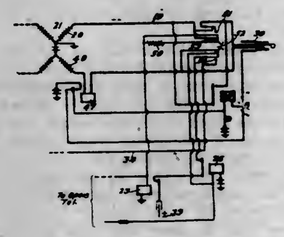


1. A cultivator comprising a frame, a shovel shank supported upon said frame, a shovel blade carried by said shank, a guiding bracket clamped upon said shank and

provided with a closed forward end, a roller mounted within the closed forward end of said bracket, a scraper provided with a scraper blade working upon said shovel blade, a rod secured to said scraper blade and bearing upon said roller, said roller constituting a fulcrum for said rod and causing the same to swing and permit said scraper blade to follow the contour of said shovel blade, and a bell crank lever supported upon said frame and engaging said rod for reciprocating said rod.

2. A cultivator of the class described comprising a frame, a shovel carried by said frame, a shovel blade carried by said shank, a guiding bracket carried by said shank, said guiding bracket being placed upon said shank intermeditae the ends thereof, a scraper rod extending through said bracket, said bracket constituting a fulcrum for said scraper rod, a bell crank lever supported upon said frame and connected to the upper end of said scraper rod, a scraper blade carried by the lower end of said rod and adapted to work upon the forward face of said shovel blade, and said shovel blade having the forward face thereof formed on the contour of an arc of a circle described by the outer end of said bell crank lever when the same is operated.

1,271,883. TELEPHONE SYSTEM. CLARENCE B. FOWLER, New York, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 25, 1917. Serial No. 193,102. (Cl. 179—35.)



1. In a telephone system, in combination, a telephone line terminating in a plurality of jacks, a cord circuit having a combined talking and testing conductor for engaging the test terminal of a jack to determine the idle or busy condition of the line, a busy test relay, a resistance coil, and a listening key actuated to connect the resistance coil in the combined talking and testing conductor and to connect the test relay with the testing conductor in parallel relation to the resistance coil.

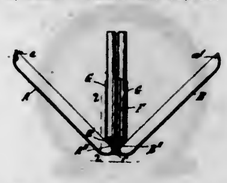
2. In a telephone system, in combination, a telephone line terminating in a plurality of jacks, a plurality of cord circuits each having a combined talking and testing conductor for engaging the test terminal of a jack to determine the idle or busy condition of the line, a busy test relay, a resistance coil common to a plurality of cord circuits, and a listening key actuated to connect the resistance coil in the combined talking and testing conductor, and to connect the busy test relay with the testing conductor in parallel relation to the resistance coil.

4. In a telephone system, in combination, a plurality of poly-station telephone lines, each terminating in a plurality of jacks, a plurality of cord circuits, one of the cord circuits having its answering end connected with a jack of one of the lines, a testing conductor for the calling end of each of the cord circuits, an operator's telephone set, a listening key for the engaged cord circuit for connecting the operator's telephone set therewith, a resistance coil common to the cord circuits connected in series with the testing conductor of the engaged cord circuit by the actuation of the key, a source of tone supply, a test relay connected with the testing conductor of the engaged cord circuit in parallel with the resistance coil by the actuation of the key and responsive to the engagement of the testing conductor thereof with the test terminal of another jack of the engaged line to connect the source of tone supply in circuit with the receiver of the operator's telephone set, a relay energized when the calling end of the engaged cord circuit is connected with the jack of another line, and a circuit established upon the energization of the last mentioned relay for preventing the connection of the resistance coil in the testing conductor.

6. In a telephone system, in combination, a poly-station telephone line terminating in a plurality of jacks, a cord circuit having its answering end connected with one of the jacks, a testing conductor for the calling end of the cord circuit, a repeating coil for the cord circuit having a winding connected in the testing conductor, an operator's telephone set, a listening key for connecting the operator's telephone set with the cord circuit, a resistance coil connected in series with the repeating coil winding by the actuation of the key, a source of tone supply, a test relay connected with the testing conductor and in parallel with the resistance coil and the repeating coil winding upon the actuation of the key and responsive to the engagement of the testing conductor with the test terminal of another jack to connect the source of tone supply in circuit with the receiver of the operator's telephone set, a relay in the calling end of the cord circuit energized while the cord circuit is connected with a telephone line, and a disabling circuit established upon the energization of the last mentioned relay to prevent the connection of the resistance coil in the testing conductor when the key is actuated.

[Claims 3 and 5 not printed in the Gazette.]

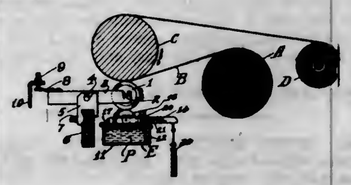
1,271,884. CIGARETTE-CASE. ETHELBERT R. FREDERICK, East Orange, N. J., assignor to Havone Corporation, New York, N. Y., a Corporation of New York. Filed June 1, 1915. Serial No. 31,385. (Cl. 206—41.)



1. A case of the character described, comprising a pair of hinged lids provided, near the ends of their hinged portions, with hooks facing in opposite directions, and a holder located between the lids and connected with the hinge thereof, said holder being provided, near one end, with a hook extending in one direction to engage the hook on one of the lids, and also provided, near the other end, with a hook extending in the opposite direction to engage the hook on the other lid, said holder hooks being secured to the holder rigidly.

[Claims 2 to 4 not printed in the Gazette.]

1,271,885. PASTE-APPLYING MECHANISM FOR FABRIC-SLITTING MACHINES. AARON FREYDBERG, New York, N. Y. Filed Sept. 13, 1917. Serial No. 191,199. (Cl. 91—50.)



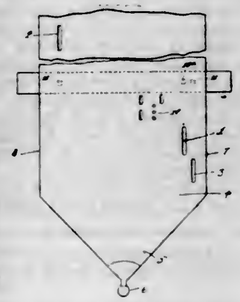
1. The combination with a support over which a sheet is adapted to travel and a cutter for slitting the sheet, of a removable, rotating paste-applying disk in contact with the cutter for applying paste to the latter whereby the paste will be transferred by the cutter to the edges formed in slitting the sheet.

4. The combination with means for slitting a sheet, including a rotary cutting disk, of means for applying paste to the disk, said means comprising a supply tank for the paste, a positioning shoe mounted on the tank, a carrier bar also mounted on the tank and held against lateral movement by the shoe, and a paste-applying member carried by the carrier bar and extending into the tank and adapted to contact with the cutting disk to apply paste to the latter.

7. The combination with means for slitting a sheet into strips, including a gang of spaced cutting disks, of a paste holding tank mounted adjacent the cutting disks, and a gang of independently adjustable paste applying disks movably mounted on the tank and adapted to project thereinto to receive paste, and means for holding each of said paste applying disks in contact with the periphery of a companion cutting disk to apply paste to the latter whereby said paste will be transferred to the edges of the strips formed in the cutting or slitting of the sheet.

[Claims 2, 3, 5, and 6 not printed in the Gazette.]

1,271,886. MUSIC-SHEET-TRAVEL-CONTROL PERFORATIONS. ROBERT A. GALLY, Cincinnati, Ohio, assignor to The Baldwin Company, Cincinnati, Ohio. Filed Dec. 17, 1917. Serial No. 207,640. (Cl. 84—162.)



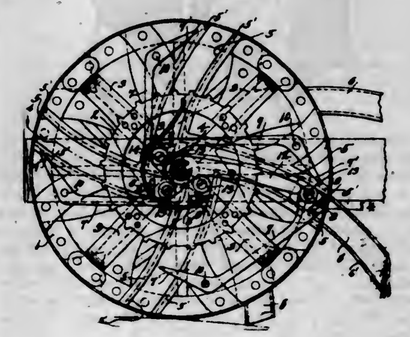
1. A music sheet having perforations for notes alined therein in several rows longitudinally of the sheet, a perforation in another alinement to effect the shifting to the rewind travel of the sheet, and another perforation, in another alinement than any of the aforesaid perforations to effect the shifting to the repeat travel of the sheet for replaying, the said perforation for repeat travel being nearer to an edge of the sheet than is the perforation for rewind travel.

2. A music sheet having perforations for notes alined therein in several rows longitudinally of the sheet, a perforation in another alinement to effect the shifting to the rewind travel of the sheet, and another perforation, in another alinement than any of the aforesaid perforations, to effect the shifting to the repeat travel of the sheet for replaying, the said repeat perforation being nearer to one edge of the sheet than the said rewind perforation is to the other edge of the sheet.

3. A music sheet having perforations for notes alined therein in several rows longitudinally of the sheet, a perforation in another alinement to effect the shifting to the rewind travel of the sheet, and another perforation, in another alinement than any of the aforesaid perforations to effect the shipping to the repeat travel of the sheet for replaying, the said perforation for repeat travel being nearer to an edge of the sheet than is the perforation for rewind travel, and the forward end of the said sheet being slanted away from its edges at that end.

4. A music sheet having perforations for notes alined therein in several rows longitudinally of the sheet, a perforation in another alinement to effect the shifting to the rewind travel of the sheet, and another perforation, in another alinement than any of the aforesaid perforations, to effect the shifting to the repeat travel of the sheet for replaying, the said repeat perforation being nearer to one edge of the sheet than the said rewind perforation is to the other edge of the sheet, and the forward end of the said sheet being slanted away from its edges at that end.

1,271,887. TRACTION-WHEEL. LOUIS J. GOSSELL and HENRY W. GOSSELL, near Verndale, Minn. Filed May 2, 1917. Serial No. 165,973. (Cl. 21—210.)



1. A traction wheel of the class described comprising a surface engaging member movably mounted thereon, operating means pivotally connected with the engaging member for movement therewith as the latter moves into operative position, and means for causing the engaging member to move into such operative position, the operating means being operable to shift the engaging member into inoperative position after the performance of its tractive function.

3. A traction wheel of the class described comprising a plurality of surface engaging members movably mounted on the wheel, means for actuating said members in turn to move the same into operative position, and means operable with each surface engaging member under the control of the actuating means so arranged as to engage the corresponding means of another surface engaging member to effect movement of the second mentioned surface engaging member into inoperative position.

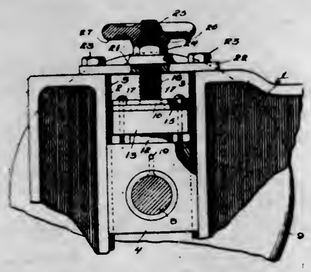
5. A traction wheel of the class described, comprising a series of surface engaging members movably mounted on the wheel, an arm connected to each of said members at one end and having pivoted connection with the wheel at the other end, and a relatively stationary member arranged in the path of movement of said arms and successively engageable thereby, for projecting said engaging members from the periphery of the wheel, each of said arms constituting a retracting means for a contiguous engaging member.

7. A traction wheel of the class described comprising movably mounted surface engaging members, means for actuating said members to move them into operative position, separate means for actuating the members to move them into inoperative position subsequent to the performance of their tractive function, and retaining means for holding the surface engaging members in inoperative position during a portion of the revolution of the wheel.

9. A traction wheel of the class described comprising a series of surface engaging members, projecting means therefor, and means carried by each of the engaging members engageable with the projecting means for causing movement of said members into extended operative position, each of said means being engaged by a preceding one to retract the engaging member into inoperative position.

[Claims 2, 4, 6, and 8 not printed in the Gazette.]

1,271,888. ADJUSTABLE BEARING-BLOCK. JOSEPH A. GOSSETT and JOHN C. HEWITT, Canton, Ohio, assignors to The Canton Foundry and Machine Company, Canton, Ohio, a Corporation of Ohio. Filed Mar. 1, 1917. Serial No. 151,665. (Cl. 64—52.)



In combination with a frame having a slot therein, inwardly disposed ribs upon the walls of said slot, a bearing block having rib engaging grooves located within said slot, a cap spaced from one end of said bearing block, sockets formed in adjacent faces of said cap and bearing block, a cushion contained in said sockets, a pair of plates mounted on said cap and a pair of cushion adjusting screws located through said plates, and cap and threaded into said bearing block, a plate secured across the extremity of said slot and a bearing adjusting screw located through said plate and loosely connected between said pair of plates.

1,271,889. DRESS-FORM. FRANK B. GRANGER, New York, N. Y., assignor to Hall-Borchert Dress Form Company, New York, N. Y., a Corporation of New Jersey. Filed Feb. 13, 1915. Serial No. 8,082. (Cl. 223—18.)

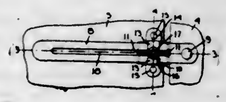


1. In a device of the class described, the combination of two telescoping members, a dress form body comprising a body portion and a skirt portion including hoop members and lengthwise extensible and contractible suspender members connected thereto and having their upper ends secured to said body portion, means for supporting the body portion by the upper of said two telescoping members at elevated or lowered positions, a connection between the lower ends of said suspender members and the lower of said two telescoping members, whereby the skirt portion of the form will be automatically elongated or shortened as said body portion is raised or lowered.

5. In a device of the class described, the combination with a dress form, of a supporting standard therefor comprising two telescoping sections, the outer one of which has a slot and the inner one of which has a groove therein, a laterally-moving locking member carried by the outer telescoping section and adapted to engage the groove of the inner section through said slot and positively prevent telescopic action.

[Claims 2 to 4, 6, and 7 not printed in the Gazette.]

1,271,890. ADJUSTABLE DRESS-FORM. FRANK B. GRANGER, Columbus, Ohio, assignor to Hall-Borchert Dress Form Company, New York, N. Y., a Corporation of New Jersey. Filed Oct. 28, 1916. Serial No. 128,336. (Cl. 223—18.)



1. A dress form divided to present a plurality of sections which are adjustable relative to each other, a strap secured to one section and a friction clamping member secured to an adjacent section and through which the strap slides, said clamping member being formed of a single piece of sheet metal bent to present two ribs extending transversely of one face of the strap at separated points, and two clamping fingers which engage the opposite face of the strap between said ribs and hold the strap yieldingly against the ribs.

4. A dress form divided to present a plurality of sections which are adjustable relative to each other, a strap secured to one section, a friction clamping member secured to an adjacent section and through which the strap slides, said clamping member including a sheet metal body portion presenting two ribs extending transversely of the strap and engaging one face thereof at separated points, and two clamping fingers integral with said body which engage the opposite face of the strap and hold the latter yieldingly against the ribs, a clamping screw secured to said body portion, and a clamping nut on the screw adapted to engage said arms and by which the clamping pressure thereof against the strap can be varied.

[Claims 2 and 3 not printed in the Gazette.]

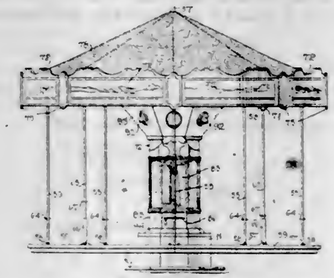
1,271,891. ROLLER-SKATE. CLYDE V. GUSTIN, Monett, Mo. Filed Feb. 14, 1918. Serial No. 217,110. (Cl. 46—51.)



In a roller skate, the combination with a block-like runner conforming on its upper face with the shape of the shoe-sole, having an offset at the inner forward side thereof, the offset provided with an upright recess parallel with the longitudinal axis of the runner and opening at its lower face, said lower face being flat and provided with sockets surrounded by ball races; of balls in said races, spheres mounted in said sockets and projecting below the lower face of said blocks, and a roller mounted in said recess and projecting also below said lower face a less distance than the spheres, two of the latter being provided at opposite sides of the longitudinal axis of the block and in rear of said roller, and a single sphere under the heel.

1,271,892. KNOCKDOWN MERRY-GO-ROUND. ANTHONY O. HABESHAN, Bogota, N. J. Filed Apr. 30, 1917. Serial No. 165,419. (Cl. 46—27.)

1. A merry-go-round comprising a central shaft, radiating arms extending horizontally from the central shaft, radiating downwardly extending braces extending from the central shaft, a series of vertically disposed members with which said braces and arms detachably engage, a series of circumferentially extending braces detachably engaging said members and spacing them and the arms and braces from each other, and panels disposed between said members and extending over and concealing the circumferential braces, said members having end sockets in which the ends of the panels are disposed.



3. A merry-go-round including a central shaft, a series of radiating arms extending from the shaft, a series of downwardly extending radiating braces extending from the shaft, a series of vertically disposed members, one for each arm and corresponding braces, each arm extending through its corresponding member and having detachable engagement therewith, and each brace having detachable engagement with the upper end of the corresponding member, said members being formed with vertically disposed lateral grooves, the lower end walls of each groove being formed with downwardly extending perforations, a series of circumferential braces having terminal ends engaged in the perforations of said members and spacing the members apart, and panels disposed between each pair of members and having reduced extremities extending into said grooves in the members, the panels extending down below the circumferential braces and concealing them, and covering cleats detachably engaged with the adjacent portions of each panel and extending over the outer faces of the members and concealing them.

5. A toy merry-go-round including a central shaft, a plurality of radiating arms connected to the central shaft, a plurality of radiating braces extending downward and outward from the central shaft and disposed above the arms, vertically disposed members having eyes at their upper ends with which the downwardly and outwardly extending braces are engaged, the radiating arms extending from said members and being detachably engaged therewith, a series of circumferential braces having hook-shaped ends detachably engaging said members, panels disposed between the members and having detachable engagement therewith and extending over and concealing said braces, and cleats detachably supported over the outer faces of said members and concealing the joint between the panels and the members.

7. A toy merry-go-round including a central shaft, radiating arms detachably connected to the shaft, downwardly and outwardly extending radiating braces detachably connected to the shaft, a plurality of members one for each brace and arm to which the braces and arms are detachably connected, said members extending vertically and being formed with laterally opening sockets, a series of circumferential braces detachably connecting said members, and a series of panels having their extremities slidably disposed in said laterally opening sockets of the members and bracing the members from each other.

10. A toy merry-go-round including a central shaft, a plurality of radiating arms detachably connected to the shaft, a plurality of radiating braces detachably connected to the central shaft, a plurality of members one for each brace and arm, said members extending vertically and the corresponding arm passing through the corresponding member, each of said members being formed with an upwardly extending lug having an eye with which said braces detachably engage, a plurality of circumferentially extending braces detachably engaging the lower ends of the members and holding them in spaced relation to each other, an awning having a central opening through which the central shaft extends, said awning being supported by the braces and having eyes on its margin, the upwardly extending lugs of said members being formed with hooks engageable with said eyes.

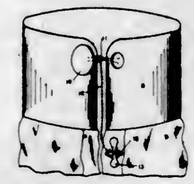
[Claims 2, 4, 6, 8, 9, 11, and 12 not printed in the Gazette.]

1,271,893. ART OF TREATING WORSTED YARN. JOHN H. HALFORD, Bridgeport, Pa., assignor to James Lees and Sons Company, a Corporation of Pennsylvania. Filed Feb. 9, 1917. Serial No. 147,556. (Cl. 28—7.)

1. The herein-described method of treating finished worsted yarn, consisting in winding the same into balls, and then steaming said balls.

[Claim 2 not printed in the Gazette.]

1,271,894. JEWELRY. HOBART HALSTEAD, Montclair, N. J. Filed Jan. 26, 1916. Serial No. 74,335. (Cl. 24—90.5.)



1. An article of the class described comprising a link button for a cuff, a member adapted to engage the button hole of the sleeve adjacent said cuff and a chain connecting said last stated member and said link.

[Claim 2 not printed in the Gazette.]

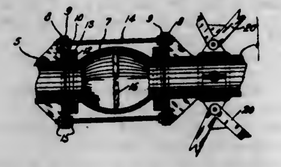
1,271,895. BUNDLE OR PACKAGE TIE. FRANK T. HENRY, Michigan City, Ind. Filed Oct. 12, 1917. Serial No. 196,139. (Cl. 24—18.)



2. In a bundle or package tying device, a fastener comprising a body having an opening in one end in which, one end of a cord is adapted to be fastened, said body substantially midway its ends having a transversely disposed kerf extending from one face of the body angularly through the thickness thereof and toward the other end of the body, said other end of the body having a transversely disposed kerf parallel with the opposite faces of the body and parallel with the transverse position of the first kerf, said body adjacent the crotches of both kerfs having a narrow neck adjoining the crotches, whereby the opposite end portion of the cord may wrap once thereabout, said other end of the body adjacent the second kerf having a pair of opposing jaws, one of which being provided with a plurality of yieldable tongues, whereby a portion of the cord of different thicknesses at different points may be clamped between said jaws securely.

[Claim 1 not printed in the Gazette.]

1,271,896. AIRCRAFT. ROBERT A. HIGGINS, Henderson, Colo. Filed Nov. 26, 1917. Serial No. 203,940. (Cl. 244—10.)

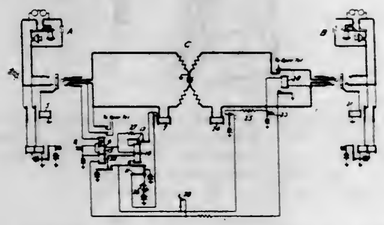


8. An aircraft equipped with an open ended tube having a rotatable section within which section is located a propeller having an open center, the propeller comprising inwardly extending radial fan blades arranged to force the air rearwardly through the tube, the interior of said tube being free of air-resisting obstructions other than said radial blades.

10. In an aircraft, a longitudinally extending cylinder having a rotatable driven section, a propeller located within the section for creating a partial vacuum forward of said propeller and compressing the air in the rear thereof, and means on the outer walls of said section for engagement with driving means.

[Claims 1 to 7, 9, 11, and 12 not printed in the Gazette.]

1,271,897. TELEPHONE-EXCHANGE SYSTEM. EDWARD E. HINRICHSEN, New York, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 20, 1917. Serial No. 149,745. (Cl. 179—51.)



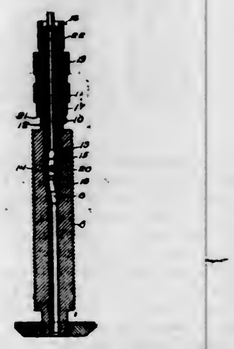
1. A telephone exchange system comprising telephone lines, a link circuit for interconnecting the lines, a supervisory relay and a second relay operating upon the connection of the link circuit with a calling line, a third relay actuated upon the operation of the second relay, a locking circuit for the third relay including a winding of the second relay established upon the operation of the second relay and the supervisory relay, a signaling device, and a source of intermittent current brought into circuit with the signaling device upon the subsequent deenergization of the third relay and the energization of the supervisory relay.

4. A telephone exchange system comprising telephone lines, a link circuit for interconnecting the lines, a supervisory relay and a listening relay operated upon the connection of the link circuit with a calling line, an operator's telephone set connected with the link circuit upon the operation of the listening relay, a third relay actuated upon the operation of the listening relay, a locking circuit for the third relay established upon the operation thereof for rendering this relay independent of the listening relay, a signaling device, and a source of intermittent current brought into circuit with the signaling device by the subsequent deënergization of the third relay followed by energization of the supervisory relay.

7. A telephone exchange system comprising telephone lines, a link circuit for interconnecting the lines, a listening relay having an operating, a compensating and a neutralizing winding, a signaling device, a circuit including the operating winding of the listening relay and the signaling device established upon connection of one end of the link circuit with a line, an operator's telephone set controlled by the listening relay, a supervisory relay, a shunt circuit comprising the compensating winding of the listening relay connected about the signaling device upon the energization of the supervisory relay, and a circuit including the neutralizing winding of the listening relay completed upon the connection of the other end of the link circuit with another line.

[Claims 2, 3, 5, and 6 not printed in the Gazette.]

1,271,898. PNEUMATIC VALVE. EDWARD E. HOLT, Chicago, Ill., assignor to Holt Auto Devices Company, Chicago, Ill., a Corporation of Illinois. Filed June 5, 1917. Serial No. 173,028. (Cl. 152—12.)



2. In a pneumatic valve, the combination of a conical valve seat and a conical valve plug therefor, both of circular cross section, the taper of the cone of the plug being less than the taper of the cone of the valve seat, whereby contact is first established between the extreme edge of the plug and the surface of the valve seat, and there being a recess or socket in the contacting end of the valve plug to thereby provide a thin circular wall in the valve plug, said wall increasing in thickness from the extreme contacting edge toward the body of the plug to thereby insure a maximum flexibility in the extreme contacting portion of the wall for the purpose specified.

[Claim 1 not printed in the Gazette.]

1,271,899. METHOD OF RECOVERING SULFUR DIOXID FROM FURNACE-GASES. HENRY HOWARD, Brookline, and FRANK G. STANTIAL, Melrose, Mass. Filed May 12, 1917. Serial No. 168,276. (Cl. 23—13.)

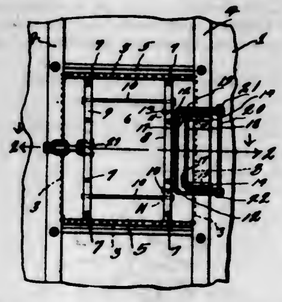
1. A cyclical method of recovering sulfur dioxid from furnace gases, comprising scrubbing the gases with a dilute solution of alkali, thereby producing an alkali sulfite, cauticizing said sulfite by lime to produce calcium sulfite and regenerate an alkali solution, and re-using the regenerated alkali solution in the operating cycle.

2. A cyclical method of recovering sulfur dioxid from furnace gases containing also sulfur trioxid, comprising precipitating non-gaseous substances, including sulfur trioxid, from the gas-stream, scrubbing the residual gas-mixture with a dilute solution of alkali, thereby producing an alkali sulfite, causticizing said sulfite by lime to produce calcium sulfite and regenerate an alkali solution, and re-using the regenerated alkali solution in the operating cycle.

[Claim 3 not printed in the Gazette.]

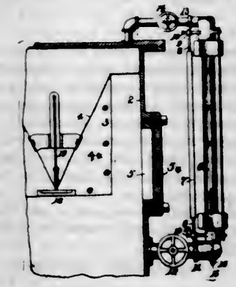
1,271,900. HINGE FOR SILO-DOORS. JACOB H. HUMBURG, Mount Angel, Oreg. Filed Sept. 22, 1917. Serial No. 192,659. (Cl. 16—106.)

1. In a silo door hinge, a pair of straps spaced at a considerable interval one above the other and secured to the frame of the door opening, a U-shaped link having its arch rockably mounted in eyes of said straps, eyes spaced at a considerable interval one above the other and carried by the outer face of the door, a second U-shaped link having its vertical arch rockably mounted in said eyes, means pivotally uniting the arms of both links, said straps having eyes in which the first link is mounted and being so constructed and disposed that the pivot of the first link in the eyes of said strap will protrude outwardly out of alinement with the pivot between both links and the pivot of the second link to the door, to hold the door in close contact with a shoulder of the door opening.



2. In a silo door hinge, a pair of straps spaced at a considerable interval one above the other and secured to the frame of the door opening, a U-shaped link having its arch rockably mounted in the eyes of said straps, eyes spaced at a considerable interval one above the other and carried by the outer face of the door, a second U-shaped link having its vertical arch rockably mounted in said eyes, a rod pivotally uniting the arms of both links, said straps having eyes in which the first link is mounted and being so constructed and disposed that the pivot of the first link in the eyes of said straps will protrude outwardly out of alinement with the pivots between both links and the pivots of the second link to the door, to hold the door in close contact with a shoulder of the door opening.

1,271,901. METHOD OF SETTING METERS AND MEANS THEREFOR. EDWARD G. JAY, Jr., Philadelphia, Pa., assignor to Warren Webster & Company, a Corporation of New Jersey. Filed Aug. 4, 1917. Serial No. 184,507. (Cl. 73—167.)

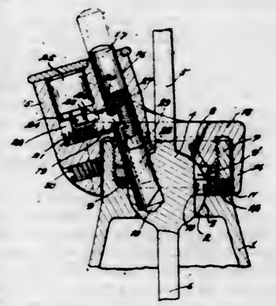


1. In means for "setting" a meter of the character stated, the combination with a tank having therein a V-notch weir, and a leveling strip adjacent the bottom of the notch and also having a man-hole in its side in horizontal alinement with the leveling surface of the strip, of a glass water gage at the outside of the tank in alinement with the man-hole and leveling strip and having top and bottom fittings respectively in communication with the tank above and below the V-notch weir therein, a pointer rod adjustably secured in the bottom fitting and extending upward within the glass gage and with its upper end in horizontal alinement with the bottom of the weir notch and leveling strip, and a mirror scale adjustably secured to the gage fittings, said mirror scale being arranged vertically with the reflecting surface facing the glass gage and with the clear surface thereof provided with a scale which is reflected in the mirror to give the pointer a three-point sight.

9. The herein described method of "setting" a weir weter, which consists in opening the side of the meter tank between the bottom of the weir and water gage on the outside of the tank, removing the glass tube of the gage, adjusting the pointer of the gage to an exact level with the bottom of the weir by use of leveling devices extending through the opening in the meter tank, removing the leveling devices and sealing the tank opening, inserting the glass tube of the gage to inclose the pointer, adjusting a mirror scale adjacent to the glass tube and pointer rod to give a three-point sight corresponding to the top of the pointer rod, causing water to flow through the meter to give to it normal conditions as to temperature, shutting off the supply of water to the meter and drawing off the water until the level of water in the tube of the gage is exactly on a level with the top of the pointer rod to determine the absolute zero of the notch or weir of the meter, and then adjusting the usual registering and recording devices to zero with respect to the zero water level of the water in the meter.

[Claims 2 to 8 not printed in the Gazette.]

1,271,902. LEVER-LOCKING UNIT. GEORGE C. JENSEN, Oakland, Cal. Filed Feb. 13, 1918. Serial No. 216,963. (Cl. 70—128.)



1. In combination with a lever, a tubular member through which said lever extends, said member providing a support for the lever and within which the same is mounted for universal swinging movement but relatively to which the lever is precluded from axial rotation, retaining means coöperating with the lever and detachably secured to the tubular member for retaining the lever positioned therein, a lever controlling member carried by said retaining means at an angle to the lever and capable of manual operation to engage said lever to lock the same from operative movement or removal from its fulcrum.

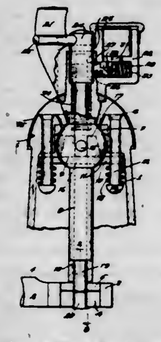
2. A lock for a lever mounted for universal swinging movement on a ball and socket fulcrum, comprising a collar for surrounding the lever and for threaded attachment to the lever support, a boss carried thereby and arranged at an angle thereto, a longitudinally movable locking bolt within said boss and adapted for manual depression to engage the lever, lock controlled means cooperating with said bolt and carried by said boss for retaining the bolt in its locking position, and means for restoring the bolt to normal unlocked position on the release of said lever controlled means.

3. In combination with a lever member provided with a spherical portion and a recess in the region of said spherical portion, a tubular member through which said lever extends with the spherical portion thereof seated therein, said member providing a universal fulcrum for

said lever, a ring member surrounding said lever, and engaging said tubular portion for retaining the lever therein, and a longitudinally movable lock controlled locking bolt carried by one of said members and capable of positioning to engage said recess whereby said ring is locked from detachment from said tubular member and said lever is locked from operative movement within its socket.

[Claims 4 to 6 not printed in the Gazette.]

1,271,903. LEVER STRUCTURE AND LOCK FOR SAME. GEORGE C. JENSEN, Oakland, Cal. Filed Feb. 13, 1918. Serial No. 216,965. (Cl. 70—128.)



1. In combination with a lever mounted for universal swinging movement, longitudinally movable parallel spaced shifter devices coöperating therewith and adapted for independent operation on the movement of said lever, and lock controlled means depending from the lever and capable of positioning to engage both of said shifter devices, one at a point below the upper surface thereof to prevent the independent operation of the same and thus lock said lever from movement and to prevent the disengagement of the lever therefrom by an upward movement thereof.

2. In combination with a lever mounted for universal swinging movement, a pair of longitudinally movable parallel spaced shifter devices lying beneath the same and provided on adjacent faces with coöperating depressions, lock controlled means carried by said lever and extending into said depressions, said means capable of positioning to be received within one of said depressions to admit of the independent operation of said shifter devices on the movement of said lever, and of movement to extend into both of said depressions to prevent the independent operation of said devices thus locking said lever from operative movement.

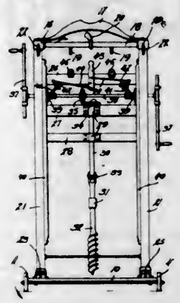
3. In combination with a lever mounted for universal swinging movement, a pair of longitudinally movable parallel spaced shifter devices lying beneath the same and provided on adjacent faces with coöperating depressions, lock controlled means carried by said lever and extending into said depressions, said means capable of positioning to be received within one of said depressions to admit of the independent operation of said shifter devices on the movement of said lever, and of movement to extend beneath the said devices and into both of said depressions to prevent the independent operation of said devices and lock said lever from operative movement or detachment therefrom by longitudinal upward movement.

4. In combination with a lever mounted for universal swinging movement, a pair of parallel spaced shifter devices lying beneath the same and provided on adjacent faces with coöperating depressions, means carried by said lever and extending between said devices to a point within said depression, said means capable of positioning for reception within one of said depressions to admit of the independent operation of said shifter devices on the movement of said lever, and of axial rotation to extend into both of said depressions to prevent the independent operation of said devices and a lock for locking said means in its latter position.

5. In combination with a lever mounted for universal swinging movement, a pair of parallel spaced shifter devices lying beneath the same and provided on adjacent faces with coöperating depressions, means carried by said lever and extending between said devices to a point within said depression, said means capable of positioning for reception within one of said depressions to admit of the independent operation of said shifter devices on the movement of said lever, and of manual axial rotation to extend into both of said depressions to prevent the independent operation of said devices, a lock for locking said means in its latter position, and means for automatically restoring said means to its former position on the release of said lock.

[Claims 6 to 10 not printed in the Gazette.]

1,271,904. POST-HOLE-DIGGING MACHINE. BUTLER M. JONES, Detroit, Mich. Filed June 20, 1917. Serial No. 175,955. (Cl. 255—22.)



1. A post hole digging machine comprising a frame including side standards provided with longitudinally extending grooves, a carriage having tubular side bars split longitudinally and slidably mounted upon the side standards and provided with teeth fitting into the grooves thereof, racks carried by the standards with the tubular side bars moving upon opposite sides of the racks, a driving shaft rotatably connected with the carriage, an auger shaft rotatably connected with the carriage and driven from the driving shaft, pinions slidably mounted upon the driving shaft, and means for adjusting the pinions longitudinally of the driving shaft and moving the pinions into and out of engagement with the racks.

4. A post hole digging machine including a platform, a frame comprising a pair of spaced standards having their lower ends removably secured to said platform, removable bearings secured to said standards, a removable cross bar connected to the upper end of said standards above said bearings, a shaft mounted in said bearings, hooks carried by said shaft, an auger carriage mounted for vertical movement upon said standards and adapted at times to be suspended from said hooks, a pair of inclined braces having their lower ends connected with said platform and their upper ends connected with the bearings on said standards.

[Claims 2 and 3 not printed in the Gazette.]

1,271,905. UNIVERSAL COUPLING. LLOYD JONES, Pittsburgh, Pa., assignor to United Engineering and Foundry Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Dec. 20, 1917. Serial No. 208,159. (Cl. 64—91.)

1. A universal coupling comprising two members to be coupled, one of said members having jaws and the other member having a tongue extending between the jaws, and bearing shoes interposed between the tongue and jaws having ball and socket mounting in one member and a sliding fit with the other member; substantially as described.



2. A universal coupling comprising two members to be coupled, one of said members having jaws and the other member having a tongue extending between the jaws, and bearing shoes interposed between the tongue and jaws eccentric to the longitudinal axis of the coupling, said bearing shoes having spherical bearing surfaces engaging one member and flat bearing surfaces engaging the other member substantially as described.

9. A universal coupling comprising two members to be coupled, one of said members having jaws and the other member having a tongue extending between the jaws, bearing shoes interposed between the tongue and jaws having ball and socket mounting in one member and a sliding fit with the other member, the socket mountings being formed in wear plates adjustably seated on said jaws; substantially as described.

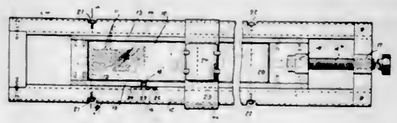
[Claims 3 to 8 not printed in the Gazette.]

1,271,906. VARIABLE-SPEED CONVEYER. CHARLES A. JUENGST, Croton Falls, N. Y., assignor to American Assembling Machine Company, a Corporation of Delaware. Filed Oct. 18, 1916. Serial No. 126,294. (Cl. 193—24.)

A book covering machine delivery mechanism comprising: a horizontally extending book conveyer carrying books in an upright position, means causing said book conveyer to release books, regardless of thickness, at regular intervals at a delivery point, a delivery conveyer, below the book conveyer, extending horizontally away from said delivery point, means affording a variable number of variably spaced upstanding spacing members on said delivery conveyer for the reception of books, from the book conveyer, of variable thicknesses and in an upright position, and means for varying the speed of the delivery conveyer to present an upright spacing member at the delivery point at intervals corresponding to the release of books by the book conveyer.

1,271,907. INDICATOR. ALFRED E. JURY, New York, N. Y., assignor to Rubber Regenerating Company, a Corporation of Indiana. Filed Dec. 2, 1916. Serial No. 134,635. (Cl. 33—1.)

1. An indicator comprising a slidable scale having divisions arranged thereon according to divisions of the standard article, and a secondary scale having divisions arranged in register with a marker on the slidable scale to indicate any variation between said standard divisions of the scale and the actual divisions of the article to be investigated, whereby when the divisions of the slidable scale are made to progressively coincide with the corresponding divisions on the article to be investigated, the divisions on the secondary scale will indicate the algebraic sum of all the differences between the divisions on the slidable scale and those of the article being investigated.



4. A device for indicating the number of threads per unit length of fabric comprising a transparent slidable scale having divisions corresponding to the number of threads per unit length of a standard fabric, and a frame for the transparent scale having a secondary scale provided with divisions arranged to indicate the variation between the divisions of the transparent scale and the number of threads of the fabric under investigation, whereby when the divisions of the transparent scale are made to progressively coincide with the corresponding threads of the fabric under investigation, the divisions on the secondary scale will indicate the algebraic sum of all the differences between the divisions on the transparent scale and the number of threads of the fabric.

[Claims 2 and 3 not printed in the Gazette.]

1,271,908. TESTING-MACHINE. ALFRED E. JURY, New York, N. Y., assignor to Rubber Regenerating Company, a Corporation of Indiana. Filed Dec. 13, 1916. Serial No. 136,598. (Cl. 73—51.)

1. In a fabric testing machine, a frame, a series of jaws mounted in the said frame, a carriage in the frame and a series of jaws mounted therein, the two series of jaws being adapted to hold fabric under tension between them, and means for imparting combined endwise and lateral jogging movements to the said carriage.

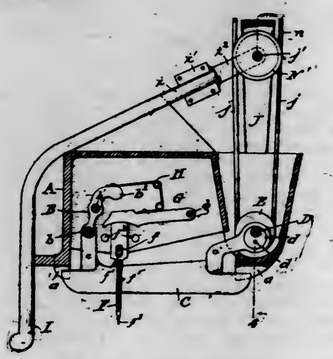
2. In a fabric testing machine, a frame, a series of jaws mounted in the said frame, a carriage in the frame and a series of jaws mounted therein, means for imparting combined endwise and lateral jogging movements to the said carriage, and means for indicating the number of movements of the carriage so arranged as to become inactive upon the breaking of fabric held by said jaws.

3. In a fabric testing machine, a frame, a jaw mounted in said frame, a carriage and a jaw therein, the two jaws being adapted to hold fabric under tension between them, parallel shafts in the frame, eccentrics on said shafts and in operative relationship with each end of said carriage, a power device and connections between the same and said shaft, whereby the carriage may be given a combined endwise and lateral jogging movement.

4. In a fabric testing machine, a frame and a jaw mounted therein, a carriage and a jaw movable therewith, means for imparting combined endwise and lateral jogging movements to said carriage, and means for indi-

cating the number of movements of the carriage, including a recording device having a drive shaft, an actuating member for said shaft on the carriage, and a spring operative to withdraw the said actuating member out of register with the shaft upon the breaking of a fabric held between said jaws.

1,271,909. CARCASS-SPLITTING MACHINE. AUGUST KARHAN and CHARLES F. KARHAN, New York, N. Y., assignors of one-third to Michael Pilnacek, New York, N. Y. Filed July 17, 1915. Serial No. 40,350. (Cl. 17—30.)



1. A carcass splitting machine embodying means for cutting, and means for simultaneously cracking the spine and guiding the machine during the cutting and cracking operations.

5. In a carcass splitting machine, the combination of a cutter blade, means for imparting eccentric movement thereto, a guiding member coöperating with the cutter blade and adapted to enter the spinal-cord cavity of a carcass for the purpose of guiding the operations of the cutter blade, and means operated by the cutter blade for maintaining the guiding member within said cavity.

11. In a carcass splitting machine, the combination of a cutting blade, a guiding member mounted for longitudinal movement relative to the cutting blade and adapted to enter the spinal-cord cavity of the carcass for the purpose of guiding the cutting operations of the cutter blade, means for moving the cutting blade transversely of the guiding member, and means for forcing said guiding member into said cavity as the cutting operation advances.

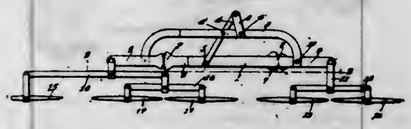
25. A carcass splitting machine embodying a cutting mechanism, in combination with a guiding member embodying a wedge-shaped portion adapted to enter the spinal-cord cavity of a carcass, said guiding member having a sliding connection with the machine, and being longitudinally movable relative to the cutting mechanism.

43. A carcass splitting machine embodying cutter mechanism, in combination with a guiding member embodying a wedge-shaped portion adapted to enter the spinal-cord cavity of a carcass and provided with a longitudinal slot in which the cutting element of the cutter mechanism operates, and pulsating means for driving the guiding member into the spinal-cord cavity of the carcass in advance of the cutting element.

[Claims 2 to 4, 6 to 10, 12 to 24, and 26 to 42 not printed in the Gazette.]

1,271,910. FIVE-HORSE EVENER. HERMAN KATZBERG, Prosser, Nebr. Filed Nov. 10, 1917. Serial No. 201,290. (Cl. 21—76.)

1. A draft equalizer including a whiffle tree formed of spaced upper and lower members, a lever fulcrumed between the upper and lower members of the whiffle tree and having a segmental gear at each end, levers fulcrumed in the end portions of the whiffle tree and having segmental gears meshing with the respective segmental gears of the first named lever, and trees connected to the outer ends of the last named levers.



2. A draft equalizer including a whiffle tree made up of upper and lower spaced members, a beam secured to said members, a central lever fulcrumed between the members of the whiffle tree and having a segmental gear at each end, a brace connected to the beam and whiffle tree, a fastening element extending through the brace and whiffle tree and constituting the fulcrum of the lever, fastening means extending through the ends of the beam and the whiffle tree, end levers fulcrumed on said fastening means and having segmental gears constantly in mesh with the gears at the ends of the central lever, and trees connected to the outer ends of the end levers.

1,271,911. PLIERS. WILLIAM J. KEARNEY, Des Moines, Iowa. Filed Aug. 13, 1917. Serial No. 185,932. (Cl. 81—47.)



4. A pair of pliers comprising a pair of jaws, an angular shaft mounted in one of said jaws having a cylindrical portion mounted in the other of said jaws and having on one end a ratchet, a handle on the jaw which receives the angular shaft, a handle pivoted to the other jaw at a point on the opposite side of its pivotal point from its gripping member, a pawl slidably mounted in the last described jaw adapted to coact with said ratchet, and with said pivoted handle, and a spring adapted to hold said pawl away from said ratchet, the parts being so arranged that when the pivoted handle is moved toward the other handle it will engage said pawl and force it into engagement with said ratchet for thereby locking said jaws against relative movement.

[Claims 1 to 3 not printed in the Gazette.]

1,271,912. CLAMP. CHARLES W. KEMPER and JOHN T. KEMPER, Oakland, Cal. Filed June 7, 1917. Serial No. 173,267. (Cl. 24—126.)



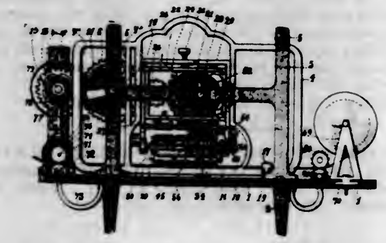
1. A rope clamp comprising a pair of interlocking clamping sections slidable longitudinally with relation to each other and adapted to receive and inclose a pair of contacting rope ends, and a gripping roller in each clamp section adapted to automatically engage and grip the rope ends when a longitudinal pull is exerted on the rope ends.

7. A rope clamp comprising a pair of interlocking clamping sections slidable longitudinally with relation to each other and adapted to receive and inclose a pair of overlying rope ends, a gripping roller in each clamp section adapted to automatically engage and grip the rope ends when a longitudinal pull is exerted on the rope ends, and means for limiting the longitudinal movement of one clamp section with relation to the other.

9. A rope clamp comprising a pair of clamping sections slidable longitudinally with relation to each other and adapted to receive an inclosing pair of overlying contacting rope ends, said clamping sections being approximately channel-shaped in cross section and each clamp having a bottom section, a portion of which is straight and a portion of which is inclined, corrugations formed in the faces of the straight portions of the bottom sections, a clamping roller interposed between each rope end and the inclined bottom sections adapted to engage and grip the rope ends and force the ropes against the corrugated straight bottom sections, a channel-shaped flange formed on each side of one clamping section, said channel extending from end to end thereof, a flange formed on each side of the opposite clamping section adapted to enter the channels formed in the first named clamping section, said flanges also extending from end to end, and means for retaining the clamping rollers against accidental removal.

[Claims 2 to 6 and 8 not printed in the Gazette.]

1,271,913. PRINTING-MACHINE. CHARLES KESSES, New York, N. Y. Filed July 3, 1917. Serial No. 178,418. (Cl. 101—199.)



1. In a printing machine for printing constantly running paper, the combination of a type-bed, of a mechanism to reciprocate said type-bed parallel with and at right angles to a given plane, an ink table in the rear of said bed, inking rollers, having means to traverse said form and said table transversely in relation to the constantly running paper, a fountain, an ink curtain adjacent said fountain and a ductor roller for supplying ink from said curtain to said table.

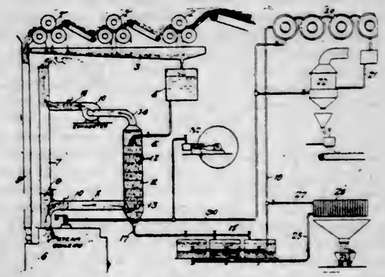
3. In a printing machine, the combination of a type-bed, of a mechanism to reciprocate said type-bed parallel with and at right angles to a given plane, an ink table in the rear of said bed, inking rollers, endless sprocket chains carrying said rollers, sprocket wheels, gear-wheels for rotating said sprocket wheels, a spiral gear engaging a pin wheel for driving said gear-wheels, whereby the ink-rollers are caused to run over the inktable, and the type bed, in ink-curtain adjacent said fountain and a ductor roller for supplying the ink from said curtain to said table.

[Claims 2 and 4 not printed in the Gazette.]

1,271,914. METHOD OF TREATING RAW SUGAR-JUICES. ALFRED KRAFFT, Honolulu, Hawaii. Filed Mar. 7, 1917, Serial No. 153,018. Renewed Dec. 1, 1917. Serial No. 205,002. (Cl. 127—7.)

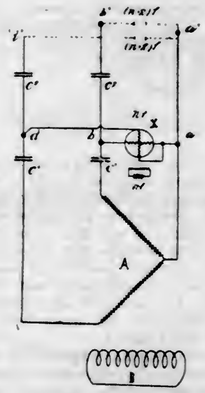
1. The method of treating sugar juices which comprises subjecting the same to direct contact with products of combustion from a boiler furnace or similar heat source.

2. The method of treating sugar juices which comprises subjecting the same in shower-like form to direct contact with products of combustion from a boiler furnace or similar heat source.



3. The method of treating sugar juices which comprises showering said juices through a rising current of flue gases from a steam boiler furnace or the like.

1,271,915. MACHINE FOR TRANSFORMING THE FREQUENCY OF CURRENTS. MARIUS C. A. LATOUR and JOSEPH BETHENOD, Paris, France. Filed Feb. 20, 1914. Serial No. 820,088. (Cl. 172—281.)



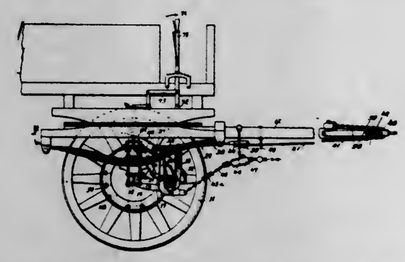
A machine for transforming currents of lower frequency and currents of higher frequency for wireless telegraphy and telephony, comprising in combination a stator with a polyphase winding, a rotor with a single phase winding, condensers connected to the stator and adapted to insure resonance of the circuit for the receiving current of the machine, and additional condensers connected to the stator and in series to said first named condensers and adapted to insure resonance of the circuit for the current generated by the machine, substantially as described.

1,271,916. VEHICLE SAFETY BRAKE MECHANISM. EDWARD V. LAWRENCE, New York, N. Y. Continuation of application Serial No. 8,504, filed Feb. 20, 1915. This application filed July 13, 1916. Serial No 109,003. (Cl. 21—9.)

2. A wagon brake mechanism comprising a band brake having a drum secured to the wagon wheel, an actuating lever for applying the brake having a movable fulcrum, and a lever having a stationary fulcrum operatively connected to the brake actuating lever and dependent for its action upon the tractive force.

18. A wagon attachment comprising a pair of band brakes having drums adapted to be secured to a pair of

wagon wheels, a transverse supporting bar adjacent to the drums, guide brackets secured to said bar, an extendible shaft comprising a sleeve, a pair of pivot shafts extending into said sleeve and mounted on said supporting bar in said guide brackets, brake actuating levers affixed to said shafts, connected to the brake bands at one end and having cam slots at the other end, a pair of bell crank levers pivotally mounted on said supporting bar adjacent to the brake actuating levers and having pins extending laterally into the cam slots thereof, an equalizing bar connected to said bell crank levers at their upper ends, and means connected to the equalizing bar for exerting a pull on the bar and on the bell crank levers when the team is holding back the wagon, draft mechanism comprising a double tree, a pair of chains connected to the double tree at its middle point and extending obliquely to the opposite ends of the bell crank levers whereby a forward pull of the team releases the levers, said pivotal shafts being adapted to move circumferentially in said guide brackets when the wagon wheels and brake drums are moving backwardly, to prevent the setting of the brakes when the team is backing the wagon.



20. A wagon attachment comprising a band brake having a drum adapted to be secured to a wagon wheel, a transverse support, a guide bracket thereon, a pivot shaft mounted on the support in the guide bracket, a brake actuating lever affixed to said shaft connected to the brake band at one end and having a cam slot at the other end, a bell crank lever pivotally mounted on said support adjacent to the brake actuating lever and having a pin extending laterally into the cam slot thereof, and means for exerting a pull on the bell crank lever when the team is holding back the wagon.

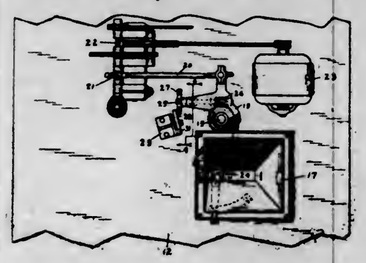
34. A wagon attachment comprising a band brake having a drum adapted to be removably secured to the wagon wheel, an actuating lever for applying the brake, having a movable fulcrum, means dependent upon the team for automatically setting the brake when the wagon is moving forward and the team is holding back, said movable fulcrum being adapted to be displaced when the wagon is moving backwardly to prevent the setting of the brake when the team is backing the wagon.

36. Wagon brake mechanism comprising a brake drum rigidly secured to a wagon wheel, a brake member adapted to coöperate therewith, means for setting the brake, and a lever adapted to be tilted in one direction or the other, dependent upon the tractive force, and operatively connected to the brake setting means, said means being adapted to be rendered inoperative by a backward movement of the wagon.

[Claims 1, 3 to 17, 19, 21 to 33, and 35 not printed in the Gazette.]

1,271,917. MECHANICAL MOVEMENT. ORANGE E. McMEANS and CHARLES A. TRIPP, Indianapolis, Ind., assignors to Holcomb & Hoke Mfg. Co., Indianapolis, Ind., a Corporation of Indiana. Original application filed Dec. 9, 1916, Serial No. 135,921. Divided and this application filed July 20, 1917. Serial No. 181,898. (Cl. 74—14.)

1. In combination, a rotatable shaft, a worm wheel fixed on said shaft, an oscillating member loose on said shaft, a worm carried by said oscillating member and meshing with said worm wheel, and means operated by the oscillation of said oscillating member independently of said worm wheel for turning said worm.



3. In combination, a rotatable shaft, a worm wheel fixed on said shaft, an oscillating member loose on said shaft, a worm carried by said oscillating member and meshing with said worm wheel, and means operated independently of said worm wheel for producing turning of said worm in the direction to reduce the movement of the rotatable shaft upon the movements of said oscillating member in one direction only.

6. In combination, a rotatable shaft, a worm wheel fixed on said shaft, an operating member loose on said shaft, a worm carried by said oscillating member and meshing with said worm wheel, and means for producing such turning of said worm upon the movements of said oscillating member that said shaft is oscillated with said oscillating member but with a greater movement in one direction than in the other.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,271,918. DUST AND CINDER CONVEYER FOR RAILWAY PASSENGER-COACHES. JOEL W. MALPHURS, Gainesville, Fla. Filed Sept. 6, 1917. Serial No. 189,988. (Cl. 105—200.)

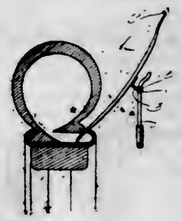


In a dust and cinders conveyer for railway passenger coaches, a pipe line mounted horizontally at the side of the coach below the windows thereof and having imperforate bottom and side walls and upper vertical tubular neck extensions, a series of vertical mouth-pieces located above said pipe line between said windows and opening at the rear vertical margins of the latter, said mouth-pieces having lower vertical neck extensions engaging the upper extensions of the pipe line, a flaring mouth-piece for the forward end of said pipe line and a depending tubular cinder discharge extension for the other end of the pipe line.

1,271,919. TIRE-TOOL. THADDEUS B. MATHIAS, Denver, Colo. Filed Oct. 22, 1917. Serial No. 197,904. (Cl. 157—6.)

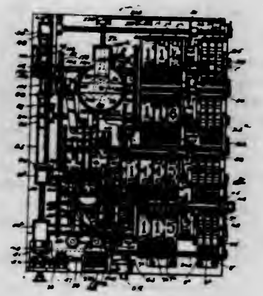
A tire-tool comprising a relatively wide and thin bar whose thickness is greater at the middle than at the ends, said ends being curved from edge to edge and being turned laterally in opposite directions; a bifurcated apertured lug extending laterally from the middle of one of the major sides of said bar; a second bar, said second bar being formed with a hook at one end and having its other end portion extending laterally in a direction at an angle to the plane of the hook, said second bar having a portion

adjacent to said laterally extended end portion and disposed between the furcations of said lug, a pivot extend-



ing through the apertures of said lug and through said bar and having its axis parallel with the plane of said hook; and cushioning means on said hook.

1,271,920. TAXIMETER. GEORGE S. MAXWELL, Newark, N. J., assignor, by direct and mesne assignments, to The Taximeter Register Company, Washington, D. C., a Corporation of Delaware. Filed June 16, 1917. Serial No. 633,457. (Cl. 235—30.)



1. The combination, with a trip-distance indicator, and means actuated by the movement of the vehicle for driving said trip-distance indicator, of a fare indicator, and means actuated by the trip-distance indicator and arranged to couple the fare indicator to said driving means.

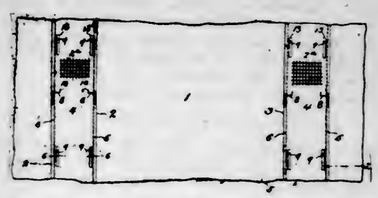
2. The combination, with a trip-distance indicator, and means actuated by the movement of the vehicle for driving said trip-distance indicator, of a fare indicator, a setting device arranged to set up a basic fare on the fare indicator, and means actuated by the trip-distance indicator and arranged to couple the fare indicator to the means for driving said trip-distance indicator.

10. The combination, with a fare indicator, a clock mechanism, and operating means actuated by the movement of the vehicle for driving the fare indicator, of means for coupling the fare indicator to the clock mechanism, a spring tending to force said coupling means into its operating position, a reciprocatory member arranged to be moved in one direction by the operating means which drives the fare indicator, and to be driven in the opposite direction by the said coupling means, and a delay action device for delaying the last-mentioned movement.

12. The combination, with an indicator and an oscillatory device for actuating said indicator, of a rotary shaft, means operated by said shaft for actuating the oscillatory device, and a recording mechanism having a recording arm, and means operated by the rotary shaft for oscillating said recording arm.

[Claims 3 to 9, 11, 13, and 14 not printed in the Gazette.]

1,271,921. ROADWAY. CHARLES MEHLHORN, Philadelphia, Pa. Filed Mar. 12, 1918. Serial No. 222,005. (Cl. 104—178.)

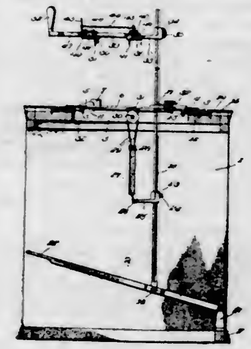


1. A roadway including a concrete bed; rails spaced apart and embedded within said bed, said rails having top portions flush with the top surface of the bed; and members spaced apart within the length of said rails, said members depending from said portions and being embedded within said concrete bed, substantially as described.

4. A roadway including a concrete bed; and rails spaced apart and embedded within said bed, said rails having top surfaces flush with the top surface of the bed, said rails having hooked tongues spaced apart within their lengths and embedded within said bed, substantially as described.

[Claims 2 and 3 not printed in the Gazette.]

1,271,922. CAN-OPENING DEVICE. ALBERT MENDENHALL, Oskaloosa, Iowa. Filed Nov. 7, 1917. Serial No. 200,836. (Cl. 30—3.)



1. In a device of the class described, a support, a manually operable member, clamping members, cutter mechanism, automatically variable connection between the manually operable member and each of the clamping members and between said member and the cutter mechanism whereby upon actuation of the manually operable member, the clamping members will be simultaneously moved toward each other in equidistant spaced relation to the cutter mechanism and the cutter mechanism will be moved in the direction of the support, and manually operable means for actuating the said cutter mechanism.

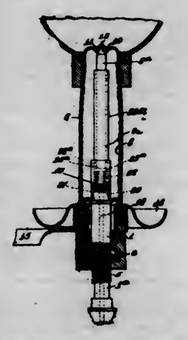
2. In a device of the class described, a support, a member movable with relation to the support, cutter mechanism carried thereby and located above the support, a manually operable actuating means connected with the said member, clamping members movable upon the support toward and away from each other, and yieldable connection between the clamping members and the first-mentioned member for moving the clamping members toward each other when the said first-mentioned member is actuated to move the cutter mechanism toward the support.

6. In a device of the class described, a support, a member movable with relation to the support, cutter mecha-

nism carried thereby, a manually operable actuating means connected with the said member, clamping members movable toward and away from each other, and automatically variable connection between the clamping members and the first-mentioned member operable to move the clamping members toward each other when the first-mentioned member is actuated to move the cutter mechanism toward the support.

[Claims 3 to 5 not printed in the Gazette.]

1,271,923. LIQUID-FUEL BURNER. JOSEPH MERLE, Bensonhurst, N. Y. Filed May 25, 1917. Serial No. 170,804. (Cl. 158—67.)

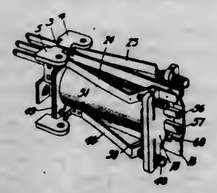


1. A liquid fuel burner comprising, in combination, a vaporizing chamber provided with an orifice, a member relative to which said chamber is movable for conducting fuel to said chamber, said member being provided with means for increasing the evaporation surface in the vaporizing chamber and with means operative by said relative movement to close said orifice.

5. A liquid fuel burner comprising, in combination, a vaporizing chamber having an inlet for liquid fuel and outlet for vaporized fuel, a member adapted to close both inlet and outlet, and means for preventing the closing of the inlet until the outlet has been closed.

[Claims 2 to 4 and 6 to 9 not printed in the Gazette.]

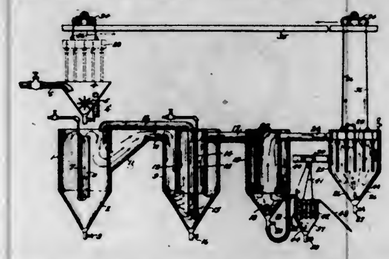
1,271,924. ELECTROMAGNETIC SWITCHING DEVICE. DANIEL D. MILLER, New York, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 27, 1916. Serial No. 133,600. (Cl. 175—338.)



3. An alternating current electromagnetic switching device comprising a core having a bifurcated pole piece, an extension on the rear end thereof, an energizing winding for the core, a U-shaped armature flexibly mounted on the core extension and extending substantially parallel with the core with the free end thereof in juxtaposition to the pole piece, contact springs mounted on the core extension extending substantially parallel to the core and controlled by the armature, a conducting plate mounted on and completely surrounding one leg of the bifurcated pole piece and forming a phase displacement winding, and adjustment screws carried by the plate for adjusting the position of the contact springs.

[Claims 1 and 2 not printed in the Gazette.]

1,271,925. WATER-PURIFIER. GEORGE MOORE, Joplin, Mo., assignor to The Chemical Process Company, New York, N. Y., a Corporation of New York. Filed Oct. 31, 1914. Serial No. 869,547. (Cl. 210—1.)



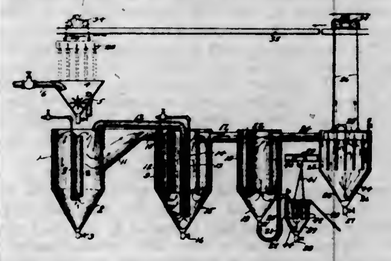
1. In combination, a container, means for agitating sewage therein, a thickening container communicating with the first mentioned container for receiving sewage therefrom, means for returning the thickened portions of sewage from the second container to the first, and means for removing solids from effluent discharged from the second container.

2. In combination, a container, means for agitating sewage therein, a container communicating with the first container and adapted to allow settling of solids entering from the first container, and means for discharging thickened materials from the lower portion of the second container directly back into the first container.

3. In combination, a container, means for agitating sewage therein, a container communicating with the first container and adapted to allow settling of solids entering from the first container, means for discharging thickened materials from the lower portion of the second container directly back into the first container, a third container communicating with the upper portion of the second container and adapted to receive fluid and solids in suspension therefrom, and means for separately treating products discharged from the upper and lower portions of the third container.

[Claims 4 to 10 not printed in the Gazette.]

1,271,926. SEWAGE TREATMENT. GEORGE MOORE, Joplin, Mo., assignor to The Chemical Process Company, New York, N. Y., a Corporation of New York. Filed Oct. 31, 1914. Serial No. 869,548. (Cl. 210—1.)



1. In a process of the class described, agitating sewage in the presence of previously coagulated sewage solids, drawing off a portion from the agitated mass, returning coagulated solids of the drawn off portion to the mass, and agitating newly supplied sewage in the mass in the presence of the returned coagulated solids.

2. In a process of the class described, agitating sewage in the presence of previously coagulated sewage and foreign solids, drawing off a portion from the agitated mass, returning coagulated sewage and foreign solids from the drawn off portion to the mass, and agitating freshly supplied sewage in the mass in the presence of such returned sewage and foreign solids.

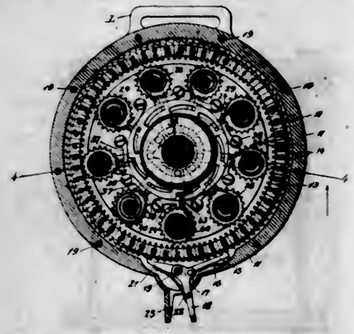
3. In a process of the class described, agitating sewage in the presence of previously coagulated sewage and fuel solids, drawing off a portion from the agitated mass, returning coagulated sewage and fuel solids from the drawn off portion to the mass, and agitating freshly supplied sewage in the mass in the presence of such returned sewage and fuel solids.

4. In a process of the class described, agitating sewage in the presence of previously coagulated sewage and fuel solids, drawing off a portion from the agitated mass, returning coagulated sewage and fuel solids from the drawn off portion to the mass, agitating freshly supplied sewage in the mass in the presence of such returned sewage and fuel solids, and treating unreturned portions for forming fuel of the solids therein contained.

5. In a process of the class described, as a continuous operation, maintaining agitation of a mass of sewage, previously coagulated sewage solids and foreign solids, continuously supplying thereto original sewage, drawing off therefrom fluid portions of the mass, returning to the mass solids from the drawn off portions, and filtering the remaining drawn off portions.

[Claims 6 to 14 not printed in the Gazette.]

1,271,927. GAME-COUNTER. DAVID L. MURCHEY, Detroit, Mich. Filed Feb. 9, 1914. Serial No. 817,483. (Cl. 235—111.)



1. In a device of the character described, a series of individually operable register wheels, a total register, means common to all register wheels and adapted to set each register wheel successively into operative relation with the total register, and means for operating the total register to advance the set register wheel one indication at a time.

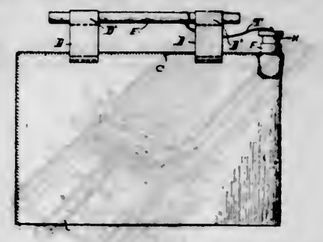
4. In a device of the character described, a series of individually rotatable register wheels, a rotatable total register, a slide on which the register wheels are mounted, a gear for each register wheel, the total register being provided with internal gear teeth with which the gear of each register wheel is adapted to engage, means for moving the slides consecutively to bring the gear wheels of the register sets into engagement with the internal gear of the total register whereby advancement of the total register rotates the set register wheel.

6. In a device of the character described, a casing, a series of independently operable register wheels arranged in a circle therein, each bearing numbers arranged in consecutive order from zero, the casing having an aperture for each register wheel through which a number may be displayed, a total register surrounding the register wheels, and means common to all the register wheels for moving the same in succession into and out of operative relation with the total register.

[Claims 2, 3, 5, and 7 not printed in the Gazette.]

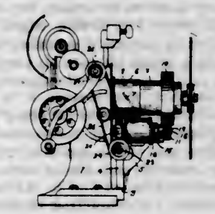
1,271,928. CANTEEN. RUDOLF NELLES, Baltimore, Md. Filed Dec. 7, 1917. Serial No. 206,022. (Cl. 150—1.)

A receptacle of general rectangular shape, the sides and bottom made of a single piece of fabric impervious to water, the upper edges of the fabric being inwardly folded, a strip interposed between the inwardly folded edges, the upper folded portions of the edges and said strip being



flush, and stitching through the sides and folded parts and strip and over the upper edge of the latter, and ends stitched to the ends of sides, handle straps fastened to the opposite sides of the strip.

1,271,929. FOCUSING DEVICE FOR MOVING-PICTURE MACHINES. EMIL A. NELSON, Duluth, Minn. Filed Jan. 8, 1918. Serial No. 210,900. (Cl. 88—16.)



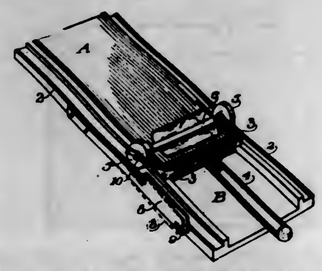
1. A device of the character described comprising in combination a motion picture machine having a reciprocable rotative projection lens extending therefrom, rotary power transmitting means journaled below the lens and in constant operative engagement with the barrel carrying the lens, means for furnishing power to the transmitting means, whereby the lens barrel may be rotated in either direction.

3. The combination with a motion picture machine having a rotatable projection lens carrying barrel with a ring gear attached thereto for rotating same, of rotative mechanical means upon either side of the ring gear and below the center of same, means for imparting constant rotating motion to said mechanical means and electric means for alternately and intermittently engaging the ring gear with the rotating means, whereby the projection lens may be adjusted in either direction for focusing purposes.

4. The combination with a motion picture machine having a rotatable projection lens carrying barrel with a ring gear attached thereto, of two small short shafts in parallel axial alinement with the ring gear, small spur gears on the outer ends of said short shafts and in constant engagement with the ring gear, disks fixed to the inner ends of said shafts, two other longer shafts in axial alinement with the shorter shafts, disks close to the first mentioned disks and fixed to the ends of the longer shafts, magnetic spools of wire about the longer shafts and in which the latter are rotatable, large intermeshing spur gears fixed to the opposite ends of the longer shafts and by which the latter are rotated in opposite directions, means for imparting motion to the large gears, an electric circuit for energizing each magnetic coil separately for electromagnetising the longer shafts thereby causing the one so energised to adhere tightly to the adjacent short shaft and cause it to rotate in unison therewith and means within the electric circuits for alternately and intermittently controlling said circuits substantially as and for the purpose described.

[Claims 2 and 5 not printed in the Gazette.]

1,271,930. BLADE-SHARPENER. ALPHONSE NEWHOUSE, San Francisco, Cal. Filed June 17, 1916. Serial No. 104,292. (Cl. 51—16.)



1. In a blade sharpener, spaced tracks, an interposed abrading element beyond which the tracks extend at one end, a blade holder, a support rotatably carrying the latter and movable over the tracks, and means arranged beyond the abrading element permitting free rotation of the holder when the latter is moved from the abrading element and engaging with the support on movement of the latter toward the abrading element for retaining the holder in proper position to engage the abrading element.

2. In a sharpener for double edged blades, a fixed abrading element, a pivotally mounted blade holder constructed to hold a blade between its cutting edges, means for traversing said blade holder in opposite directions over the abrading element, and rocking it to bring a side of on edge of the blade against the abrading element on movement in one direction and on reverse movement to bring the corresponding side of the opposite cutting edge against said abrading element, and means arranged beyond one end of the abrading element and in the path of movement of the blade holder for contacting therewith and turning it over to present to the abrading element the opposite sides of the cutting edges of the blade.

3. In a blade sharpening device, a supporting body having a trackway, a blade holder formed to hold a blade between its edges, means supporting the holder for reciprocatory movement along the trackway, and means permitting rotation of the holder on movement of the supporting means in one direction and arresting the holder against back movement on reverse movement of the supporting means.

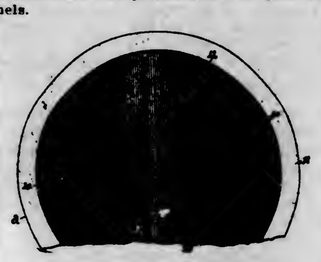
4. In a blade sharpener, spaced tracks, an interposed abrading element beyond which the tracks extend at one end, a blade holder having shaft extensions, wheels frictionally mounted on the latter for movement over the tracks, to effect rotation of the holder on movement from the abrading element, and means for arresting the holder against rotation on movement thereof toward the abrading element.

5. The combination in a blade sharpener, of a fixed abrading element, a holder in which the blade is supported above the abrading element, tracks upon each side of said element, rollers frictionally journaled on said holder and adapted to travel on said tracks and to tilt the holder and blade to bring opposite edges of the blade in contact with the abrading element alternately at each reciprocation, a spring guide secured at the side of a track, and cam arms fixed on the outer end of said holder adapted to coact with said guide to reverse the holder and blade and to guide the reversed side of the blade to the abrading element.

[Claims 6 to 9 not printed in the Gazette.]

1,271,931. GLASS OR LENS FOR HEADLIGHTS. JOSEPH P. OGDEN, Lynn, Mass., assignor of one-third to Lawrence J. Killian, Lynn, Mass. Filed Nov. 5, 1917. Serial No. 200,224. (Cl. 240—48.4.)

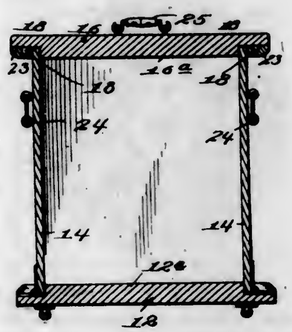
1. A glass or lens provided on one surface with substantially vertically arranged prisms, and on its opposite surface with substantially vertically arranged panels of greater width than said prisms and with grooves between said panels.



5. A glass or lens provided on one surface with substantially parallel ribs of different widths with the ribs of greatest width located on opposite sides of the center of the glass or lens and with the ribs of less width tapering from the sides toward said center.

[Claims 2 to 4 not printed in the Gazette.]

1,271,932. LEAF-TOBACCO PACKING-CASE. HENRY GUSTON OLIVE, Morenci, Ariz. Filed Feb. 25, 1918. Serial No. 219,029. (Cl. 217—12.)

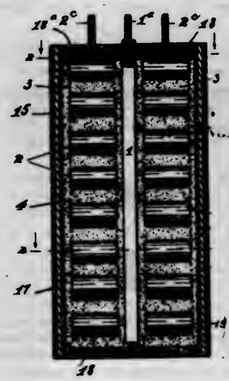


1. A rectangular packing case, for leaf tobacco or the like, consisting of a bottom or base having a central rectangular raised part and grooves at two opposite sides of said raised part, two sides hinged to said bottom or base and abutting, when in closed positions, against said central raised part, two other opposite sides, disposed at right angles to said hinged sides and fitting at their lower ends in said grooves, a cover provided at its under side with grooves receiving the upper ends of said last-named sides and having a central depending part against which the upper ends of said hinged sides abut, and detachable fastening devices for securing all of said sides and said cover in place to form a closed case.

[Claims 2 to 4 not printed in the Gazette.]

1,271,933. DRY-CELL BATTERY AND METHOD OF MAKING SAME. HERBERT R. PALMER, Cleveland Heights, Ohio. Filed Oct. 16, 1917. Serial No. 196,829. (Cl. 204—38.)

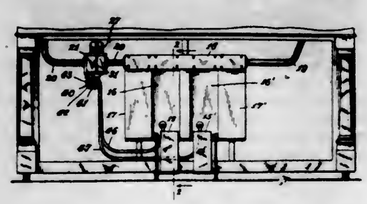
6. The method of making a battery that includes twin anodes of sinuous formation and an interposed cathode embedded in a concrete mass of battery mix confined in a container, said method consisting of, first providing a channel mold, the longitudinal dimension of which is greater than the length of the battery, next forming in said mold twin concrete masses of depolarizing mixture with the sinuous anodes compressed therein and having their terminals protected from the mixture, next inserting the twin masses with an interposed cathode packed in battery mix, into a flexible jacket, next placing reinforcing members on the sides of the jacket, then compressing



and binding the structure with suitable binding material, and finally hermetically sealing the cell.

[Claims 1 to 5 not printed in the Gazette.]

1,271,934. PEDAL-CONTROLLED PHRASING DEVICE FOR PLAYER-PIANOS. GEORGE H. PARSONS, Stamford, Conn., assignor to Kroeger Piano Company, Stamford, Conn., a Corporation of New York. Filed Aug. 21, 1917. Serial No. 187,438. (Cl. 84—168.)



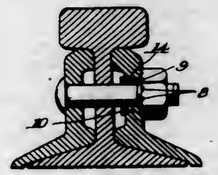
1. In a musical instrument of the character described, the combination, with exhausting means, means for intermittently actuating the same, equalizing means, and an air passage from said equalizing means to the sound-producing instrumentalities of the instrument, of means including a valve for retarding and accelerating the flow of air through said passage, a bellows the interior of which has direct communication with said exhausting means, and connecting means between a movable member of said bellows and said valve to open the latter upon collapse of said bellows.

2. In a musical instrument of the character described, the combination, with exhausting means, means for intermittently actuating the same, equalizing means, and an air passage from said equalizing means to the sound-producing instrumentalities of the instrument, of means including a valve for retarding and accelerating the flow of air through said passage, a bellows the interior of which is in constantly open communication with said exhausting means, and connecting means between a movable member of said bellows and said valve to open the latter upon collapse of said bellows.

3. In a musical instrument of the character described, the combination, with air exhausting means, means for intermittently actuating the same, equalizing means, and an air passage from said equalizing means to the sound-producing instrumentalities of the instrument, of means including valves for variably retarding and accelerating the flow of air through said passage, a bellows the interior of which has direct communication with said exhausting means, and connecting means between a movable member of said bellows and said valves to open the latter successively upon collapse of said bellows.

[Claims 4 to 20 not printed in the Gazette.]

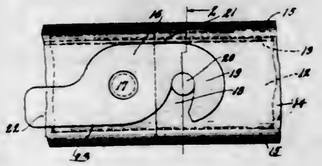
1,271,935. NUT-LOCK. LEON R. PAUL, Hereford, Tex. Filed July 23, 1917. Serial No. 182,148. (Cl. 151—39.)



1. A nut lock, in combination with a fish plate, comprising a resilient bar disposed against the inner surface of the plate and having pins extending therethrough toward the outer surface, fastening bolts extending through the fish plate, nuts on said bolts having grooves in their inner surfaces, each groove having radial side lines and an inclined wall extending from one of the lines to the other line, said pins having inclined walls, and said bar being disposed at an angle whereby said inclined walls of the pins will spring flat against the inclined walls in the grooves.

2. A nut lock, in combination with a fish plate, comprising a resilient bar disposed against the inner surface of the plate and having pins extending therethrough toward the outer surface, fastening bolts extending through the fish plates, one of the fish plates having openings spaced from the bolt openings and through which the pins pass, said pins having blunt ends and inclined walls extending therefrom in substantially the same lateral direction so that they may be ground simultaneously by one passage of the bar with the pins thereon through a grinding machine, nuts on said bolts having grooves in their inner surfaces, each groove having radial side lines and an inclined wall extending from one of the lines to the other line, and said bar being disposed at an angle whereby said inclined walls thereof will spring flat against tbe inclined walls in the grooves.

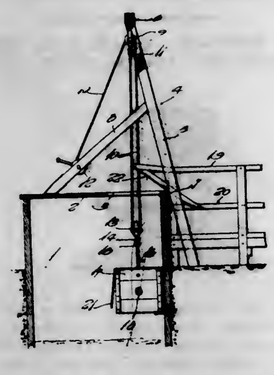
1,271,936. WHEEL. LOUIS H. PERLMAN, New York, N. Y. Filed Feb. 23, 1917. Serial No. 150,489. (Cl. 152—21.)



3. The combination with a wheel body, and a cross-cut demountable rim therefor, of a hook pivoted to one end of the rim and having a throat opening through one edge thereof, and a stud projecting from the opposite end of the rim adapted to be engaged by said throat of the hook, said hook having an abutting edge at its closed side and having a tail piece at its inner end with an abutting edge facing the edge through which the throat opens, said abutting edges being adapted for interchangeable engagement with the wheel body to hold the hook from swinging out of engagement with the stud when the rim is applied on the wheel body with either edge of the rim presented first.

[Claims 1, 2, and 4 not printed in the Gazette.]

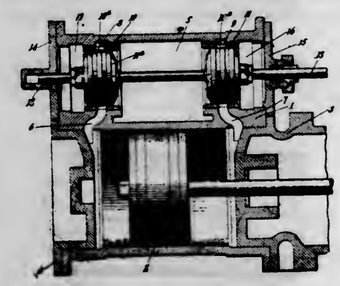
1,271,937. STOCK-FEEDER. CHRISTIAN REBMAN, Republican City, Nebr. Filed Jan. 10, 1916. Serial No. 211,205. (Cl. 214—17.)



1. The combination of a vertical shaft, a hoisting bucket movable vertically therein, a cable for raising said bucket, a pair of main parallel tracks leading laterally from the upper end of said shaft, a lateral roller on each of two opposite sides of said bucket adapted to roll along said tracks, and a pair of auxiliary tracks inclining downwardly and outwardly from the inner ends of said main tracks, said auxiliary tracks being located in the upward path of said rollers when the bucket is being raised, whereby to swing said bucket laterally, whereupon disengagement of the rollers from said auxiliary tracks will cause said bucket to swing in the other direction onto said main tracks.

2. A structure as specified in claim 1, the inner ends of said main tracks being inclined to cause initial travel of the bucket rollers onto the same by gravity.

1,271,988. STEAM-VALVE. CLIFTON REEVES, Trenton, N. J. Filed Mar. 13, 1915. Serial No. 14,051. (Cl. 136—5.)



1. In combination a piston valve comprising two side rings, laterally projecting shoulders on the adjacent sides of said rings and a central valve seat engaging ring supported upon said shoulders to permit free outward movement of said central ring, and a valve seat comprising a cylindrical sleeve having a peripheral port opening therein, said central ring engaging a full portion of said sleeve when either of the side rings covers the port opening.

4. In combination, a piston valve having two side rings recessed on their adjacent sides, a central valve seat engaging ring supported in said recesses in such a manner as to permit independent outward movement of one of the side rings relative to the other, and a valve seat comprising a cylindrical sleeve having a peripheral port opening therein, said central ring engaging a full portion of said sleeve when either of the side rings covers the port opening, the central ring being provided with a port to equalize the pressure on the upper and lower surface thereof.

[Claims 2 and 3 not printed in the Gazette.]

1,271,939. SPRINKLER-NOZZLE. HERBERT J. REEVES, New York, N. Y. Filed Mar. 18, 1915. Serial No. 15,184. (Cl. 137—81.)



A sprayer nozzle comprising a base, a cap mounted thereon, a spreader adjustable toward and away from the cap and having a downwardly tapering configuration, and a shield for closing a portion of the opening between the cap and the spreader, the shield being provided with forwardly projecting, deflecting wings adapted to merge into the downward taper of the spreader.

1,271,940. HYDRAULIC-CARTRIDGE APPARATUS. WILLIAM J. REILLY and DAVY VANCE SICKMAN, Denver, Colo. Filed Apr. 27, 1914. Serial No. 834,703. (Cl. 138—10.)

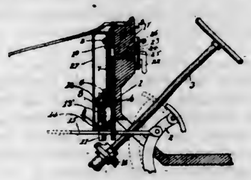


1. A piston for hydraulic cartridges, having its operating face curved longitudinally.

5. A hydraulic cartridge provided with a piston ellipsoidal in shape and having its operating face concavely curved.

[Claims 2 to 4, 6, and 7 not printed in the Gazette.]

1,271,941. LOCKING DEVICE FOR MOTOR-VEHICLES. SIGMUND REISER, Cincinnati, Ohio. Filed Apr. 8, 1918. Serial No. 227,250. (Cl. 70—126.)

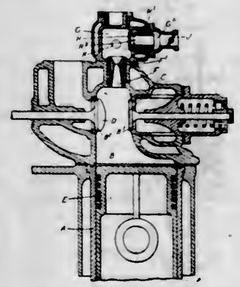


1. In combination with a motor vehicle having pedals to control the operation of said vehicle, a plunger plate movably mounted on said vehicle, plungers movably mounted in said plate, bars connected with said pedals and operable therewith, said bars having openings arranged to be engaged by said plungers when the pedals and plunger plate are in prearranged locking positions, means on said plungers to place the same under tension against said bars when said plate is in locking position and said pedals are not in locking positions, whereby said plungers are caused automatically to enter the openings in said bars upon the operation of said pedals into locking positions, and means for the operation of said plunger plate.

2. In combination with a motor vehicle having pedals to control the operation of said vehicle, a plunger plate movably mounted on said vehicle, plungers movably mounted in said plate, bars connected with said pedals and operable therewith, said bars having openings arranged to be engaged by said plungers when the pedals and plunger plate are in prearranged locking positions, means on said plungers to place the same under tension against said bars when said plate is in locking position and said pedals are not in locking positions, whereby said plungers are caused automatically to enter the openings in said bars upon the operation of said pedals into locking positions, means for the operation of said plunger plate, and means to lock said plunger plate in locking position.

3. In combination with a motor vehicle having pedals and a steering column to control the operation of said vehicle, a plunger plate movably mounted on said vehicle, plungers movably mounted in said plunger plate, bars connected with said pedals and operable therewith, said bars having openings arranged to be engaged by certain of said plungers when the pedals and plunger plate are in prearranged locking positions, a collar rigidly secured to said steering column, said collar having a recess arranged to be engaged by one of said plungers when the plunger plate and steering column are in locking positions, means on said plungers to place the same under tension against said bars and said collar respectively when said plate is in locking position and said pedals and steering column are not in locking positions, whereby said plungers are caused automatically to enter the openings in said bars and the recess in said collar respectively upon the operation of said pedals and steering column into locking positions, means for the operation of said plunger plate, and means to lock said plunger plate in locking position.

1,271,942. INTERNAL-COMBUSTION ENGINE. HARRY RALPH RICARDO, London, England. Filed Feb. 1, 1916. Serial No. 75,578. (Cl. 123—191.)



1. In an internal combustion engine, the combination of a cylinder provided at its head with a pocket that communicates with the combustion chamber of the cylinder through a constricted passage, a piston within the cylinder, an ignition device within the pocket, and means whereby during each suction stroke of the piston the pocket and combustion chamber are successively filled with fuel and air respectively, for the purpose described.

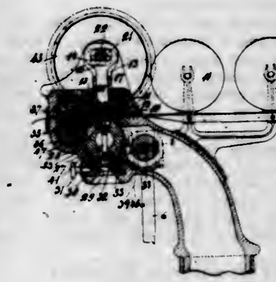
2. In an internal combustion engine the combination of a cylinder, a cylinder cover, a pocket mounted on the cylinder cover, a short passage in which is a constriction, the passage constituting a means of communication between the pocket and the interior of the cylinder, means for cooling the pocket, an ignition device disposed in the pocket, a spring controlled valve controlling an opening through which fuel is admitted into the pocket, a valve controlling an opening in the cylinder cover through which air is admitted to the cylinder, means for operating this valve, a valve controlling an opening in the cylinder cover for the passage of the exhaust products, and means for operating this valve as set forth.

3. In an internal combustion engine, the combination of a cylinder having a socket communicating with the combustion chamber therein through a relatively narrow passage, a piston within the cylinder, means for admitting fuel to the pocket, means for admitting air to the combustion chamber of the cylinder, means for withdrawing exhaust gases directly from the combustion chamber, and an ignition device within the pocket, the several parts being so related that at each suction stroke of the piston a rich charge of fuel is first drawn into the pocket after which the fuel inlet is closed and air inlet opened so that on the completion of said outward stroke of the piston the combustion chamber is filled with air for the purpose described.

[Claims 4 to 8 not printed in the Gazette.]

1,271,943. [WITHDRAWN.]

1,271,944. MACHINE FOR THE CAPSULING OF BOTTLES. ANDERS ANDERSSON ROSENGREN, Malmö, Sweden. Filed Dec. 15, 1913. Serial No. 806,873. (Cl. 113—3.)



1. In a machine for forming and applying capsules, the combination of a movable member having female die portions therein, mechanism for feeding a strip across said die portions, a punch for cutting capsule blanks from said strip, and means adapted to simultaneously form a capsule in one of said die portions and to coöperate in expelling a formed capsule from another of said die portions.

4. In a machine for forming and applying capsules, the combination of a rotatably mounted cylinder having peripheral depressions constituting female die portions, of a punching tool alined with the depressions in said cylinder, means for feeding a strip between said punching tool and said cylinder across the depressions therein, and a plunger operable within said punching tool to simultaneously form a capsule in one of said depressions and to coöperate in expelling a formed capsule from another of said depressions.

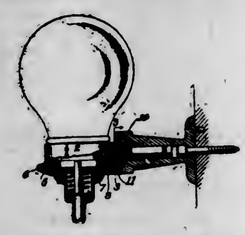
11. In a machine for forming and applying capsules, the combination of a cylinder having female die portions therein, means for feeding a strip across said die portions, means for punching capsule blanks from said strip over said die portions, means for forming capsules in said die portions, elastic means for applying said capsules to a receptacle, and projections on the periphery of said cylinder coöperating with a portion of said elastic means to compress said elastic means.

12. In a machine for forming and applying capsules, the combination of an intermittently rotating cylinder having peripheral female die portions therein, means for feeding a strip across said die portions, means for punch-

ing capsule blanks from said strip over said die portions, means for forming capsules in said die portions, an elastic ring alined with the die portions in said cylinder, a compressor interposed between said cylinder and said ring, and projections on said cylinder adapted to engage said compressor and to compress said elastic ring.

[Claims 2, 3, and 5 to 10 not printed in the Gazette.]

1,271,945. DISPENSING DEVICE FOR LIQUID SOAP, &c. LUCIE CLAIRE ROSENSTOCK, Nutley, N. J. Filed Apr. 16, 1917. Serial No. 162,323. (Cl. 221—74.)



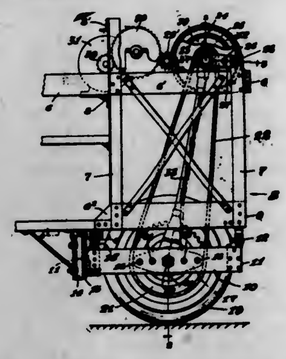
1. In a dispensing device for liquid soap &c., a container-assembly, a measure-assembly, means for hinging said measure-assembly to said container-assembly and means for holding said measure-assembly in closed position on said container-assembly.

2. In a dispensing device for liquid soap &c., a container-assembly and a measure-assembly, a hinge swingably connecting said measure-assembly to said container assembly, sealing means between said container-assembly and said measure-assembly and means for holding aid measure-assembly in closed position on said container assembly.

3. In a dispensing device for liquid soap &c., a container-assembly and a measure-assembly hingeably connected together, means for holding the said measure assembly against lateral movement on said container-assembly when in closed position and means for holding said measure-assembly in closed position on said container assembly.

[Claims 4 to 7 not printed in the Gazette.]

1,271,946. MOTOR-VEHICLE. HARRY B. ROSS, Benton Harbor, Mich. Filed Dec. 4, 1916. Serial No. 134,801. (Cl. 180—71.)



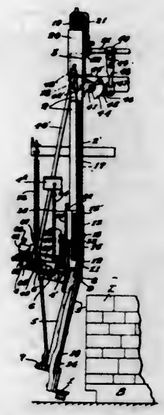
1. In a motor vehicle having a body of an inverted U-shape in transverse section, a frame provided under each leg of said body and hingedly connected at one of its ends to the respective leg, a spring interposed between the other end of the frame and the adjacent leg, a traction wheel carried in each frame, transversely arranged vertically movable power-driven shafts provided on the body, a radius rod connecting said shafts with the subjacent frames, and power-transmission devices operatively connecting the shafts with the respective wheels.

2. In a motor vehicle having a body of an inverted U-shape in transverse section, traction wheels connected to the side members of the body for vertical movements independently of each other and relatively of said body, power-driven means provided on the upper portion of said body, and power transmission devices extending from said driven means down through the aforesaid side members to drive the wheels.

3. In a motor vehicle having a body of an inverted U-shape in transverse section, traction wheels connected to the side members of the body for independent vertical movements, power-driven means provided on the upper portion of said body, power transmission devices extending from said driven means down through the respective side members to drive the wheels, and means actuated by the relative vertical movements of the wheels with respect to said body to effect movements to said power-driven means corresponding to the respective wheels.

4. In a motor vehicle, the combination with the vehicle body, traction wheels, frames carrying said wheels and connected with the body for relative vertical movements, and means provided on said frames for yieldingly supporting the body, of power-driven shafts, arms pivotally connected with the body adjacent to the sides of the latter and provided at their free ends with journal bearings for the shafts, driving connections between said shafts and the wheels, and a radius rod connecting each of said frames with the respective arms whereby the latter are influenced by the relative movements of the frames to maintain the shafts at definite distances from the axes of the respective wheels.

1,271,947. PORTABLE ELEVATOR. HARRY B. ROSS, Benton Harbor, Mich. Filed Dec. 4, 1916. Serial No. 134,802. (Cl. 214—75.)



1. In apparatus of the class described, the combination with the vehicle frame, of guide bars hingedly connected to said frame, means connected with said bars for swinging the same laterally of the frame, load-engageable devices slidably connected to said guide bars, and means for effecting the vertical movements of said devices.

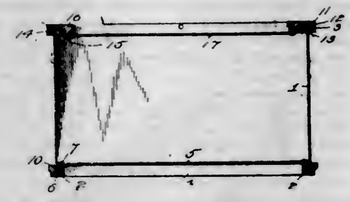
4. In apparatus of the class described, the combination with a supporting frame, jointed guides secured thereto, grappling devices and means for raising and lowering the same subject to the action of said guides, of means rendered effective by the lowering of said devices whereby said guides are influenced to effect the relative opening movements of said devices, and manually operated means for closing the devices to engage the load.

10. In apparatus of the class described, the combination with a frame, and guides thereon, of load-engaging devices slidable vertically in the respective guides, pulley blocks from which said devices respectively depend, power-driven drums, guide sheaves, hoisting ropes for the respective grappling devices, each of said ropes having one end connected to one of said bolts, thence passing under the pulley of the respective block and then over a guide sheave to have its other end connected to a drum.

11. In apparatus of the class described, the combination with a frame, grappling devices arranged for vertical and lateral movements with respect to the frame, and power-operated means to raise and lower all of the grappling devices in unison, of manually actuated means including differential mechanisms whereby the grappling devices may be moved collectively or individually to engage a load.

[Claims 2, 3, 5 to 9, and 12 to 14 not printed in the Gazette.]

1,271,948. BOX. HENRY B. RUGGLES, Pasadena, Cal., assignor to American Products Company, St. Louis, Mo. Filed July 8, 1915. Serial No. 38,752. (Cl. 217—5.)

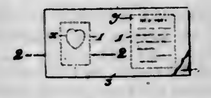


1. A box body having an edge folded back upon itself, whereby to form a downwardly depending lip, and a rigid top member having a locking channel formed therein, adapted to have said folded edge inserted bodily thereinto, with means therein for automatically interlocking with said downwardly depending lip when it is attempted to remove said top member.

4. A box comprising a body, a bottom locked upon one edge of said body, the remaining edge of said body being broken and bent, and a top having a locking channel provided with an overhanging flange closing a portion of its open side, the said remaining edge of the body being secured in said locking channel.

[Claims 2, 3, 5, and 6 not printed in the Gazette.]

1,271,949. METHOD OF PRINTING. CHARLES W. SAALBURG, Richmond Hill, N. Y., assignor to Multicolor Intaglio Press Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 29, 1916, Serial No. 94,332. Renewed Sept. 28, 1917. Serial No. 193,839. (Cl. 95—5.8.)



1. The process of making etched printing rolls or plates for multicolor printing consisting in making, without use of color separation screens, a carbon print having a gelatin or like content, of a picture to be reproduced; in assembling such initial print flatwise with a transparent screen and exposing such assemblage to light; in transferring such screen print to an etchable roll or plate and etching the same to form a key roll or key plate; in printing from such key roll or key plate a series of impressions on transparent sheets, one impression for every additional color roll or color plate required, and thereby making a series of transparent key sheets; in fixedly and flatwise assembling each such key sheet with a transparent reproduction sheet; in art-working in opaque patches of varying areas and equal density on each reproduction sheet the part or parts of the underlying key sheet that are correspondent to the particular color required in a corresponding part or parts of the reproduction to be printed in superimposed colors; in assembling each such art-worked transparent reproduction sheet with a sheet of sensitized carbon paper having a gelatin or like content and exposing such assemblage to light; in transferring each carbon print last-named to an etchable roll or plate; and in subjecting each such roll or plate and the transferred carbon print on it to a suitable acid and thereby producing in the printing surface of the roll or plate, ink-holding recesses of varying areas and of substantially uniform depth.

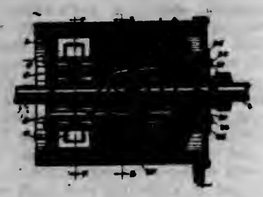
5. As an improvement in the art of printing from a series of etched rolls or plates each having a plurality of etchings that are required to be registered accurately one with another in the press printing operation, a process consisting in placing a plurality of photographic carbon tissue positives on a mount which is detachable from the positives; in transferring such positives from the detachable mount to a press printing surface to be etched; in etching such surface and thereby forming a key press printing surface having a plurality of etched portions; in making a press printed impression on a transparent sheet from the key press printing surface in an ink which will not print photographically, in order to form a key sheet; in assembling such key sheet with a transparent reproduction sheet; in reproducing on the reproduction sheet such part or parts of the representations on the underlying key sheets as may be desired; in assembling the so-worked reproduction sheet with a sheet of sensitized carbon tissue; in exposing such assemblage in a photographic printing frame and making a photographic carbon tissue print; in transferring such last carbon tissue print to another press printing surface to be etched; and in etching such second surface; whereby two etched press printing surfaces each having a plurality of etched portions are produced, the corresponding etched portions of the two press printing surfaces being in exact relatively registering positions one to another.

7. The process of making a series of etched rolls the etched printing surfaces whereof are exactly registrable one with another, consisting in transferring a carbon tissue print comprising one or more representations to be finally printed to an etchable press-printing body, and in etching such body by use of a suitable acid; in taking an impression from such etched body on a transparent sheet; in assembling such impressioned sheet with a sheet of sensitized carbon tissue; in making from such assemblage a photographic carbon tissue print; and in transferring such carbon tissue print to another etchable press-printing body and etching the same by use of a suitable acid.

8. The process of making a series of etched press-printing bodies for use in multicolor printing, consisting in etching a master or key press-printing body with a complete representation of what is to be afterward press-printed in colors; in taking an impression from such key body on a transparent sheet in an ink or medium that will not print photographically, to form a key sheet; in flatwise assembling such key sheet with a transparent reproduction sheet and working thereon in a medium that will print photographically such portion of the key-sheet representation as is to be finally printed in a color other than that to be printed by the key press-printing body; in assembling the worked reproduction sheet with a sheet of sensitized carbon tissue and making a carbon tissue print by exposure to light; in transferring such exposed carbon tissue print to a press-printing body to be etched; and in etching it.

[Claims 2 to 4 and 6 not printed in the Gazette.]

1,271,950. ROTARY ENGINE. ROY SAUNDERS, St. Louis, Mo., assignor to Saunders Motor Power Company, East St. Louis, Ill., a Corporation of Illinois. Filed Mar. 12, 1917. Serial No. 154,271. (Cl. 123—8.)

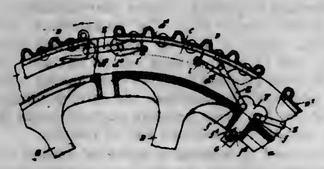


1. In a rotary engine, a rotor, a series of rock shafts carried by the rotor, pistons attached to said shafts respectively, an axially movable member on each of said shafts, means for reciprocating said members axially as the rotor rotates, and means for rocking said shafts by the movement of said members.

9. In a rotary engine, the combination with a rotor, pistons in the rotor, rock shafts for actuating the pistons and provided with spiral grooves, of a sleeve mounted for axial reciprocation upon each rock shaft, a key movable by each sleeve in the spiral groove formed in the corresponding shaft, a cam, a projection on each sleeve, a roller on said projection operating against the cam effectively to reciprocate the sleeve on said shaft as the rotor rotates, and an oil chamber adapted to contain a lubricant in which said parts operate.

[Claims 2 to 8 not printed in the Gazette.]

1,271,951. TRACTION DEVICE. EUGÈNE SCHNEIDER, Le Creuzot, France. Filed Dec. 28, 1915. Serial No. 69,101. (Cl. 152—2.)



2. In a traction device, a plurality of shoes, single links connecting the shoes in pairs, linked connections between the respective pairs of shoes, and means between the ends of each of said last-named connections for attaching the traction device to a wheel-rim.

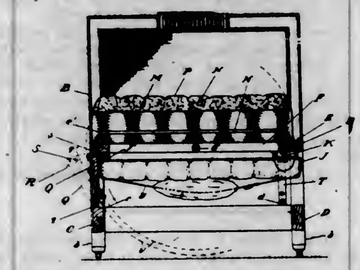
4. In combination with a vehicle wheel provided with twin tires, a traction device comprising a plurality of shoes bridging the space between said tires, means between the tires for connecting the respective shoes, a plurality of said connecting means each including between the ends thereof a unitary, double-hooked member engaging adjacent sections of the connecting means, and means for attaching said members to the wheel-rim between said tires.

6. In combination with a vehicle wheel provided with twin tires, a traction device comprising a plurality of shoes bridging the space between said tires, single links between the tires for connecting said shoes in pairs, and linked connections between the tires for connecting the respective pairs of shoes, a member of each of said last-named connections being provided with means for attaching the traction device to the wheel rim between said tires.

8. In a traction device, a plurality of shoes, means connecting the respective shoes, means in the length of certain of said connecting means for attaching said traction device to a wheel-rim, said means comprising a member having a double-hooked outer end for engaging adjacent sections of said connecting means, and a device for securing said member to the wheel-rim, said device comprising a wedge key passing through an opening in said member and engaging the wheel-rim and means for holding said key in place.

[Claims 1, 3, 5, and 7 not printed in the Gazette.]

1,271,952. COUCH-BED. ARTHUR SCHRENKEISEN, New York, N. Y. Filed June 19, 1917. Serial No. 175,566. (Cl. 5—50.)



1. In a piece of convertible furniture the combination with a pair of end sections, of a displaceable supporting board extending between the end sections on the front side of said piece, a rotatable frame adapted to carry a bed on one side and an upholstered section on the other pivoted on its longitudinal axis to the end sections, one side of the upholstered section being flush with the edge of the frame and the frame extending beyond the edge of the upholstered section on the other side to form a ledge adapted to be engaged by the supporting board when the bed side of the frame is uppermost, and a pair of spring shelves, one mounted on the rear portion of each end section and extending inwardly to support the frame when in horizontal position and to permit the frame to be revolved in one direction.

[Claim 2 not printed in the Gazette.]

1,271,953. BLADE-SHARPENING DEVICE. BERT A. SEBRING, Pueblo, Colo. Filed July 1, 1916. Serial No. 107,172. (Cl. 76—88.)

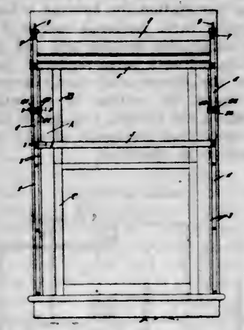


3. In a device of the character described, a carrying frame comprising a bottom member and two side members at right angles thereto, the one of said side members being plain and relatively high, a sharpening device resting on said bottom and held between said side members, means for removably retaining said sharpening device in position, and a bevel clip removably held on said plain side member.

[Claims 1 and 2 not printed in the Gazette.]

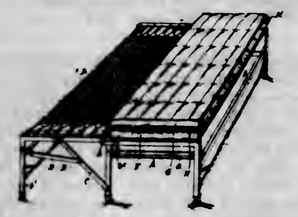
1,271,954. ADJUSTABLE WINDOW-SHADE SUPPORT. OSCAR C. SIMMONS, Hamlin, Tex. Filed Jan. 29, 1918. Serial No. 214,359. (Cl. 156—27.)

The combination with flat, parallel guide strips lying in the same plane and each having its longitudinal edges inturned to form a channel, of flat slides mounted in the respective channels, cross strips secured at their ends to the slides and coöperating therewith to form a frame, said slides being extended upwardly beyond the cross strips, shade supporting brackets extending from the upper end portions of the slides and movable longitudinally within the channels, the cross strips being offset between their ends to permit the supported shade to hang between the guides and back of the cross strips, bolts carried by the slides, clamping plates on the bolts and engaging the inturned portions of the guides, and means on



the bolts for clamping said plates on the guides to hold the slides against movement.

1,271,955. EXTENSION-COUCH. GEORGE F. SISBOWER, East Orange, N. J., and LOUIS E. PITTONI, New York, N. Y., assignors to New York Couch Bed Company, New York, N. Y., a Corporation of New York. Filed Aug. 21, 1914. Serial No. 857,901. (Cl. 5—46.)

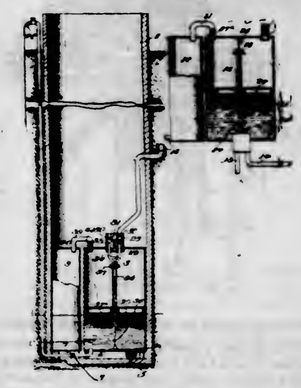


A two-part extension couch comprising stationary and movable frame members, the end bars of the stationary member having lugs projecting from their inner extremities, a folding mattress consisting of a stationary part and a movable part, and an operating device for the mattress movable independently of the relative movement of said frame members, said operating device consisting of a frame bar lying along one side and two ends of the movable part of the members and secured to one side thereof, the end portions of said operating device having offset members pivotally connected with said lugs.

1,271,956. AUTOMATIC LIQUID-ELEVATOR. WILLIAM HURLEY SMITH, Deming, N. Mex. Filed Dec. 19, 1916. Serial No. 137,816. (Cl. 103—8.)

1. An apparatus for elevating liquids, including a water reservoir having a water inlet, a discharge pipe and an air outlet, a compressed air storage tank connected to the reservoir, means for intermittently compressing air in said tank, means for alternately establishing connection between the compressed air tank and the water reservoir and simultaneously closing the air outlet and disestablishing said connection and simultaneously opening the air outlet, an air chamber connected at its lower end to the discharge pipe and connected at its upper end to the upper end of the water reservoir, a check valve in said connection, and means located in the discharge pipe beyond the air chamber for controlling the passage of liquid through the discharge pipe.

8. An apparatus for elevating liquids including a water reservoir having a water inlet, a discharge pipe and an air outlet, means for alternately admitting compressed air into said reservoir and forcing the air out therefrom through said discharge pipe and for discharging the air and allowing water to enter said reservoir, an air chamber connected to the discharge pipe and also connected at a point remote from its outlet with the reservoir to receive the pressure of air admitted to the reservoir, the discharge pipe providing communication between the outlet of the air chamber and the reservoir, a check valve controlling back flow from the air chamber to the reservoir through the discharge pipe, and means located beyond the air chamber for controlling the flow of water through the discharge pipe.



[Claims 2 to 7 not printed in the Gazette.]

1,271,957. TREAD-BAND FOR PNEUMATIC TIRES. WILLIAM F. SPRENGNETHER, St. Louis, Mo. Filed Apr. 22, 1918. Serial No. 230,039. (Cl. 152—33.)



In combination with a tire, a protecting transversely split tread band encompassing the tire and having its side edges beaded, the beads being removed for a suitable distance from the parted ends of the band thereby forming reduced terminals for the band, alining perforated lugs formed on the sides of said terminals, bolts for drawing said lugs together, and a wearing plate having its side edges beaded in continuation of the beads of the band and interposed between the tire and reduced terminals of the band.

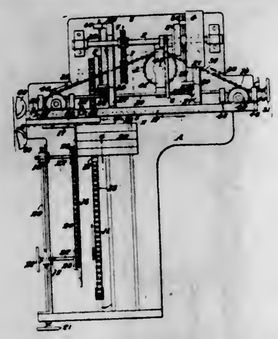
1,271,958. CUFF-BUTTON. MARCUS C. STEARNS, Buffalo, N. Y. Filed Mar. 18, 1918. Serial No. 223,068. (Cl. 24—102.)



1. A cuff-button or fastener for a soft or French cuff, comprising a U-shaped connector adapted to engage between its two parts the edges of the standing part of the cuff and having a button head on the outer side of each part near the end thereof, to pass outwardly through the button-hole in the turned-over part of the cuff.

[Claim 2 not printed in the Gazette.]

1,271,959. FEEDING-TABLE. CHARLES STICHEL, San Francisco, Cal., assignor to Pacific Box Factory, Inc., San Francisco, Cal., a Corporation of California. Filed July 18, 1917. Serial No. 181,244. (Cl. 144—242.)



1. In a feeding table, an adjustable guide plate having a chain receiving and guiding groove formed in its front face, an endless feed chain movable in the guiding groove, a fixed drive for the chain, and means for simultaneously adjusting the plates and maintaining the chain operatively taut during such adjustment of the plate.

4. In a feeding table, a main guide plate, a feeding chain passing longitudinally over the plate, a second plate arranged at an angle in front of the main guide plate and having its inner end deflected to lie parallel with said main plate for defining a path therebetween, a second feed chain operating across the defined path for feeding material along the second guide plate against the main guide plate, screw threaded members carried by the second guide plate, fixed nuts through which the threaded members operate for adjusting the second guide plate toward and from the second feed chain, and transmission means connecting the threaded members whereby rotation of one will effect rotation of the other for evenly adjusting the second guide plate.

6. In a feeding table, a main guide plate, a feeding chain passing longitudinally over the plate, a second guide plate arranged at an angle in front of the main guide plate and having its inner end deflected to lie parallel with said main plate for defining a path therebetween, and a top guide carried by one of the guide plates over the defined path between the main guide plate and the deflected end of the second guide plate.

[Claims 2, 3, and 5 not printed in the Gazette.]

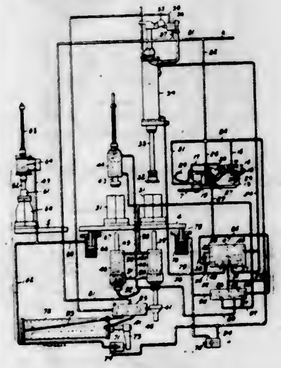
1,271,960. PROCESS FOR PREPARING GELATIN. TAMETARO TADA, Tokushima Ken, Japan. Filed June 1, 1918. Serial No. 237,823. (Cl. 99—5.)

1. A process of preparing gelatin characterized by concentrating in a vacuum pan, or any other suitable evaporator, the gelatin fluid, extracted from any suitable gelatin producing material, bleached and clarified, to from 30 to 60% strength; and in drying in a temperature not lower than 40° C. after solidifying the same into thin sheets by casting it in a mold, substantially as and for the purposes hereinbefore set forth.

[Claim 2 not printed in the Gazette.]

1,271,961. GLASS-FORMING MACHINE. WILLIAM S. TEEPLE, Wellsburg, W. Va. Filed June 29, 1916, Serial No. 106,591. Renewed Feb. 27, 1918. Serial No. 219,541. (Cl. 49—5.)

1. In a glass forming machine, the combination of a rotatable table provided with preliminary blowing molds, a fluid pressure actuated table mover for advancing the table from station to station, glass cutting shears, fluid pressure means for operating said shears, a reciprocatory fluid pressure actuated rod at one station and above a mold for blowing glass to the bottom of the mold, a reciprocatory fluid pressure actuated neck former at said station and below the table, a fluid pressure actuated glass blower at another station for blowing a blank, means including a timing valve rendered operative by the movement of the shears for moving said rod to and from a mold, means including a valve rendered operative by the movement of the shears and simultaneously with said last-named means for setting in operation said neck former and said glass blower, and means rendered operative by the concluding movement of said rod for setting said table mover in operation.



2. In a glass forming machine, the combination of a rotatable table provided with preliminary blowing molds, a fluid pressure actuated table mover, including a reciprocatory piston rod, glass cutting shears, fluid pressure means for operating said shears, a reciprocatory fluid pressure actuated rod at one station and above a mold for blowing glass to the bottom of the mold, a reciprocatory fluid pressure actuated neck former at said station and below the table, a fluid pressure actuated glass blower at another station for blowing a blank, means including a timing valve rendered operative by the movement of the shears for moving said last named rod to and from a mold, means including a valve rendered operative by the movement of the shears and simultaneously with said last named means for setting in operation said neck-formed and said glass blower, means rendered operative by the concluding movement of said rod for causing said table moving piston rod to move in one direction, and means rendered operative at the conclusion of said movement of the piston rod for causing return movements of said neck-former and glass blower.

3. In a glass forming machine, the combination of a rotatable table provided with preliminary blowing molds, a reciprocatory fluid pressure actuated table-moving rod, glass cutting shears, a fluid pressure actuated rod above the table for blowing glass to the bottom of a mold, a fluid pressure actuated reciprocatory neck former below the table, means including a timing valve operative upon the concluding movement of the shears for causing said rod to descend and rise, independent means operative simultaneously with said last named means for causing said neck former to move upwardly, means operative upon the upward movement of the blowing rod for causing said table moving piston rod to move in one direction, and means operative at the end of said movement of the piston rod for causing said neck former to move downwardly, and means set in operation by the downward movement of said neck former for causing said piston rod to move in the opposite direction from its first named movement.

4. In a glass forming machine, the combination of a rotatable table provided with preliminary blowing molds, a fluid pressure actuated table mover for advancing the table from station to station, glass cutting shears, fluid pressure means for successively closing and opening said shears, fluid pressure actuated means including a reciprocating rod for forming at one station a neck in the glass, a valve for timing the movement of said rod, fluid pressure actuated means at another station for blowing a blank, means rendered operative by the opening movement of the shears for simultaneously setting in operation said neck forming and said blowing means, and means rendered operative by the concluding movement of said rod for setting said table mover in operation.

5. In a glass forming machine, the combination of a rotatable table provided with preliminary blowing molds, a fluid pressure actuated table mover for advancing the table from station to station, glass cutting shears, fluid pressure means for successively closing and opening said shears, a reciprocatory fluid pressure actuated rod at one station and above the mold for blowing glass to the bottom of the mold, a reciprocatory fluid pressure actuated neck former at said station and below the table, fluid pressure actuated means at another station for blowing a blank, means rendered operative by the opening movement of the shears for simultaneously setting in operation said rod, said neck former and said blowing means, a valve for timing the movement of said rod, and means rendered operative by the concluding movement of said rod for setting said table mover in operation.

[Claim 6 not printed in the Gazette.]

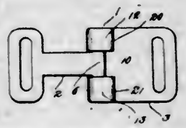
1,271,962. PROCESS OF CURING MEAT. CHARLES B. TRESCOTT, Chicago, Ill. Filed Nov. 5, 1917. Serial No. 200,295. (Cl. 99—1.)

1. Curing meat by first pickling it in brine to impregnate it with salt throughout a portion only of its thickness, transferring the meat thus pickled into a curing box, subjecting the contents of said box to pressure, providing a liquid seal of brine over the meat, and continuing the curing action of the salt throughout the remainder of the thickness of the meat.

5. Curing bacon, corned beef and like meat by first pickling pieces thereof in brine to impregnate each piece with salt throughout a portion only of its thickness, piling the pieces thus pickled in layers in a rectangular curing-box, tamping down the layers to spread them, subjecting the pile to compacting pressure, removing the pressure and forming a liquid seal of brine from the meat over the pile thereof, and continuing the curing action of the salt throughout the remainder of the thickness of the pieces in said pile.

[Claims 2 to 4 not printed in the Gazette.]

1,271,963. CLASP. ANNA LOUISE VILANDRER, St. Paul, Minn. Filed Mar. 14, 1917. Serial No. 154,793. (Cl. 24—230.)



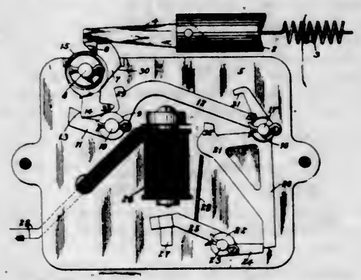
2. The described device consisting of an inflexible clasp member having a T-head and a clasping member having spring arms for engaging the opposing ends of said head, said arms having returned ends normally engaging the surface of the clasping member and means whereby the said ends may be moved to permit the T-head to pass thereunder.

21. A clasp having spaced apart hooks, another member engageable by said hooks, and integral means on the first member for holding said members in locked relation.

[Claims 1 and 3 to 20 not printed in the Gazette.]

1,271,964. STOP-MOTION APPARATUS. ALEXIS F. WALDOW, Whitinsville, Mass., assignor to The Whitin Machine Works, Whitinsville, Mass., a Corporation of Massachusetts. Filed Sept 16, 1914. Serial No. 862,035. (Cl. 74—93.)

1. In a power-controlling device, the combination with suitable knock-off means, of successive locking devices, the first of said devices being capable of holding said knock-off means and the second device normally locking the first against releasing movement, and a single electro-magnet operative to retract both of said devices.

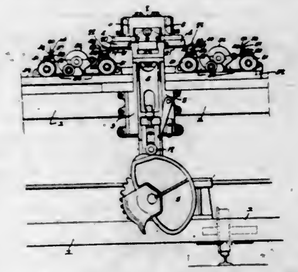


5. In a power-controlling device, the combination with suitable power-changing means, of a trigger capable of holding said means, a detent normally blocking movement of the trigger, and an electro-magnet arranged to retract said detent, said detent having a portion normally spaced from and adapted to contact with and trip the trigger.

6. In a power-controlling device, the combination with a spring-urged knock-off member, of a lever normally connected therewith, a pivoted trigger engaged by said lever and having a depending arm, a lever fulcrumed intermediate its ends with one of its arms normally in blocking relation to said depending arm, and an electro-magnet arranged over the other arm of this lever and adapted to pull the same upward.

[Claims 2 to 4 and 7 to 10 not printed in the Gazette.]

1,271,965. PRINTING-MACHINE. WILLIAM H. WALDRON, New Brunswick, N. J. Filed May 22, 1917. Serial No. 170,185. (Cl. 101—163.)

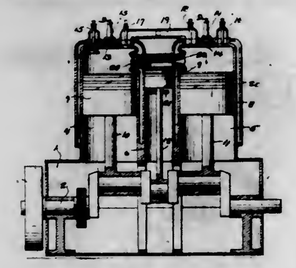


1. The combination in a printing machine of a reciprocable printing block; means for applying coloring material thereto including a fountain reciprocable under the block; a doctor for removing surplus coloring material from the block, said doctor being formed to cause the material removed to be delivered into the fountain when it moves over the block in one direction and including means for separately collecting the removed material when it moves over the block in an opposite direction.

6. The combination in a printing machine of a reciprocable printing block; a color applying device recoprocable under said block; an oscillatory doctor mounted to act upon the printing face of the block in either of two positions; means for automatically reversing the position of the doctor after each of its engagements with the block; with a trough for separately collecting coloring material removed by the doctor when the latter occupies one of its two positions in engagement with the block.

[Claims 2 to 5, 7, and 8 not printed in the Gazette.]

1,271,966. DUPLEX ENGINE. WILLIAM WEEKS, Chicago, Ill. Filed Feb. 15, 1916. Serial No. 78,455. (Cl. 123—58.)



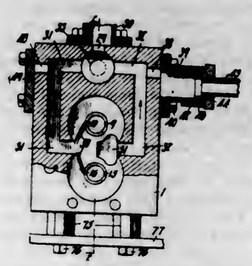
In an internal combustion engine, the combination of a pair of main cylinders, pistons operating therein, an intake valve for each cylinder, an exhaust manifold connecting said cylinders, an exhaust valve for each cylinder controlling communication to said manifold, a crank shaft having a major offset portion, rods connecting said pistons to said offset, a minor offset portion in said major offset portion, directed oppositely so as to produce a swing of less radius than the major offset, an auxiliary cylinder having a normally open exhaust port, a piston operating therein, a rod connecting said piston with the minor offset, whereby all of the pistons are moved in unison in the same direction, an oscillatory valve in each main cylinder controlling the communication between said cylinders and the auxiliary cylinder, an operating means for said oscillatory valves whereby the main pistons may operate alternately on an explosion stroke and on the four cycle principle and the auxiliary cylinder receive a portion of the charge alternately from each main cylinder at each working stroke of said auxiliary piston and exhaust the spent gases therefrom at each return of said auxiliary piston.

1,271,967. COMB-CLEANER. ROBERT C. WERKHEISER, Lansdale, Pa. Filed Feb. 14, 1917. Serial No. 148,539. (Cl. 132—17.)



A comb cleaner comprising a pair of spaced disconnected body members, each provided with a series of openings at its marginal edge, a coil member received in each series of openings, the said coil members being adapted for intermeshing relationship when body members are disposed in close proximity to each other, rings attached to one of the members for holding it against movement when the other member is pulled, a thread engaged with the said intermeshed coils, and a handle carried by the other member for moving the said coils out of mesh to draw the said threads for forming a plurality of intermediate lengths in the thread between the approximate edges of the said members.

1,271,968. GEAR-PUMP. GARFIELD A. WOOD, Detroit, Mich. Filed Mar. 15, 1915. Serial No. 14,479. (Cl. 103—44.)



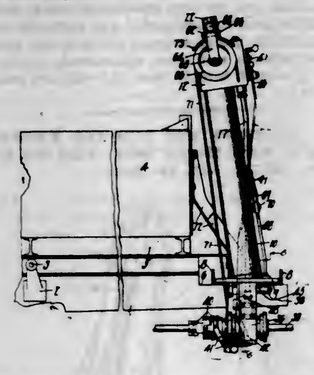
1. A device for handling liquid comprising a closed system including a casing, the capacity of the casing being but a small fraction of that of the closed system as a whole, a pair of meshing pump gears chambered therein, said casing having a continuous passage, other than the gear chamber extending from the delivery side of the pump gears to the suction side thereof, said casing also having two openings leading to the passage, and valve means whereby liquid may be either admitted through one of these openings in such direction as to pass to the suction side of the gears and be discharged through the discharge passage and the other opening or may be admitted through the last mentioned opening and discharged through the first mentioned opening without passing through the pump gears, or may be circulated continuously through the passage, as desired, said valve means and the associated passages being so arranged that the valve means is incapable of entirely preventing the escape of liquid from the discharge side of the pump gears.

13. In combination, a fixed cylinder and a piston and piston rod slidable therein, a casing, passage forming means for conducting liquid from the casing to the cylinder at one side of the piston, other passage forming means for conducting liquid from a point in the cylinder near the opposite end thereof to the casing, the capacity of the casing being but a small fraction of that of the cylinder, a pair of meshing pump gears chambered in the casing, a single passage leading from the delivery side of the pump gears to the suction side thereof, said passage having two openings, one in communication with the first mentioned passage forming means, the other opening being in a communication with the last mentioned passage forming means, means for driving the pump gears continuously, and valve means whereby liquid may be either admitted through one of the openings in such direction as to pass to the suction side of the gears and be discharged through the passage and the other opening, or may be admitted through the last mentioned opening and discharged through the first mentioned opening without inducing stress on the rotating pump gears.

15. A gear pump comprising a thin block casing, a pair of meshing pump gears chambered therein, a passage other than the gear chamber entirely inclosed within the block casing and extending from the suction side of the pump gears to the delivery side thereof in the plane of said gears whereby the use of projecting connections is avoided and a compact device is secured, a suction passage in said casing, a delivery passage also in said casing, and a single valve located at the point of connection of one of the two last named passages and the first named passage the valve projecting from one side only of the casing and being rotatable about an axis parallel to the axes of the pump gears, whereby liquid may be admitted through the suction passage to the first named passage and discharged through the delivery passage after passing through the pump gears or may be admitted through the delivery passage and discharged through the suction passage without passing through the gears.

[Claims 2 to 12 and 14 not printed in the Gazette.]

1,271,969. HOISTING AND DUMPING MECHANISM. GARFIELD A. WOOD, Detroit, Mich. Original application filed Mar. 15, 1915, Serial No. 14,480. Divided and this application filed Aug. 21, 1916. Serial No. 115,957. (Cl. 21—20.)



1. Hoisting mechanism comprising a cylinder, a piston slidable therein, a hollow piston rod connected to the piston, said cylinder having an end through which the piston rod passes and to which it closely conforms, whereby the piston rod is guided for movement parallel to the axis of the cylinder, a cross piece carried by the end of the rod remote from the piston, said cross piece projecting laterally in opposite directions from said end, said rod forming a broad support for the cross piece, cables coöperating with the projecting portions of the cross piece for lifting a load, and means for equalizing the stresses in the cables.

8. Hoisting mechanism comprising a cylinder, a piston and piston rod therein, one end of the latter projecting from the cylinder, a cross-piece attached to the projecting end of the piston rod and extending laterally therefrom, a shackle seated on and arranged to swing vertically in respect to the cross-piece, a pin passing through the shackle, a second shackle mounted on the pin to swing in a vertical plane at right angles to the swinging movement of the first mentioned shackle, said second shackle having depending ends, a horizontal pin passing through the ends of the second shackle, a pulley rotatable in respect to the pin, a cable passing over said pulley, the ends of the first mentioned shackle being curved downwardly around the periphery of the pulley, whereby the cable is retained in position thereon.

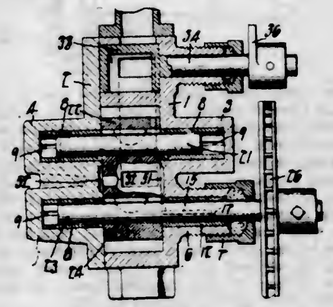
19. A truck comprising a frame, a body tiltable about an axis near the rear end of said frame for dumping purposes, a longitudinally extending propeller shaft for the truck, a pair of body arms secured to the forward portion of the body and depending therefrom on opposite sides of the propeller shaft, an upright hoisting cylinder carried by the frame, a piston rod slidable in said cylinder, sheaves carried by said piston rod on opposite sides thereof, cables attached to the lower ends of the corresponding body arms and passing over said sheaves, and means for equalizing the stress in said cables, whereby the front end of the body is elevated at a more rapid rate than the piston rod and whereby the body is largely relieved of twisting stresses.

28. In combination with the frame of a motor vehicle and with a driven shaft thereof, a supplemental frame supported on the first-mentioned frame, a hoisting cylinder carried by the supplemental frame, lifting means associated with the hoisting cylinder, a gear pump also supported on the supplemental frame in operative relation to the hoisting cylinder and lifting means, means for driving the gear pump from the driven shaft, whereby relative deflection of the gear pump and hoisting cylinder is reduced and leakage is avoided, means for controlling the pump, and means for controlling the transmission of power from the driven shaft to the gear pump, said controlling means being both located on the cylinder.

33. In combination with the side bars and the centrally arranged longitudinally extending propeller shaft of a motor truck, a body tiltable about a horizontal axis near the rear end of the side bars, a cross frame supported on the side bars forwardly of the front end of the body, a hoisting cylinder rising from the central portion of said cross frame, a piston rod reciprocable in said cylinder and projecting from its upper end, there being two open spaces inclosed by the side bars and the cross frame, one on each side of the base of the hoisting cylinder, a pair of body arms secured to the front end portion of the body and each depending into the corresponding open space when the body is lowered, and cable means attached to the lower ends of the body arms and coöperating with the piston rod to transmit lifting stress from the latter to the body.

[Claims 2 to 7, 9 to 18, 20 to 27, and 29 to 32 not printed in the Gazette.]

1,271,970. GEAR-PUMP. GARFIELD A. WOOD, Detroit, Mich. Original application filed Mar. 15, 1915. Serial No. 14,479. Divided and this application filed Aug. 28, 1916. Serial No. 117,235. (Cl. 103—44.)



1. A gear pump comprising in combination, a pump casing, a pair of meshing pump gears within the casing, said casing having formed therein suction and delivery passages for liquid pumped by the gears, a pair of shafts for the gears mounted in bearing relation to the casing, and means entirely within the casing for forming communication between a portion of the suction passage and a point in one of the bearings removed from the corresponding gear, said means including a groove formed in the end face of the gear whereby liquid passing from the delivery passage into the bearing may be withdrawn to insure proper circulation.

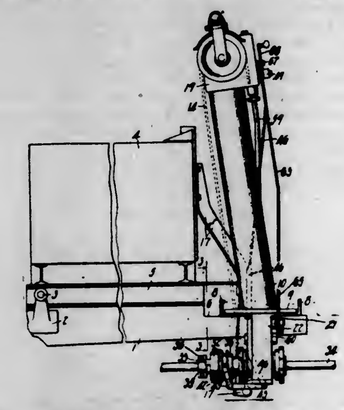
4. A gear pump comprising a casing, a pair of meshing pump gears within the casing, said casing having formed therein suction and delivery passages for liquid pumped by the gears, a pair of shafts for the gears, a bushing interposed between one end of one of the shafts and the casing, said bushing having two longitudinal grooves in its inner surface and also having a circumferential groove in its inner surface in communication with the longitudinal grooves, one of the longitudinal grooves communicating with the suction passage and the other with the delivery passage.

5. A gear pump comprising a casing, a pair of meshing pump gears within the casing, said casing having formed therein suction and delivery passages for liquid pumped by the gears, a pair of shafts for the gears, a bushing interposed between one end of one of the shafts and the casing, said bushing having two longitudinal grooves in its inner surface, one of the longitudinal grooves communicating with the suction passage and the other with the delivery passage, and means whereby liquid is inter-

mittently fed to one of the grooves from the delivery passage and is drawn back through the other groove to the suction passage.

[Claims 2 and 3 not printed in the Gazette.]

1,271,971. HOISTING MECHANISM FOR MOTOR-VEHICLES. GARFIELD A. WOOD, Detroit, Mich. Filed Aug. 28, 1916. Serial No. 117,236. (Cl. 21—20.)



1. In combination with the frame and a rotatable shaft of a motor vehicle, a hoisting device supported by the frame, and clutch mechanism for actuating the hoisting device from the shaft, part of said clutch mechanism being carried by the shaft and another part being supported independently thereof, one of the parts being capable of bodily movement transversely of the shaft, whereby considerable deflection of the frame in respect to the shaft may take place without inducing bending stresses in the shaft, and a manually operated lever for shifting an element of one of said clutch mechanism parts to or from driving engagement with an element of the other clutch mechanism part at will.

3. In combination with the frame and a rotatable shaft of a motor vehicle, a driven mechanism supported by the frame, a clutch member rotatable with the shaft, a rotatable member supported by the frame and extending around said shaft and spaced therefrom, a pin slidable through the rotatable member into and from the path of the clutch member.

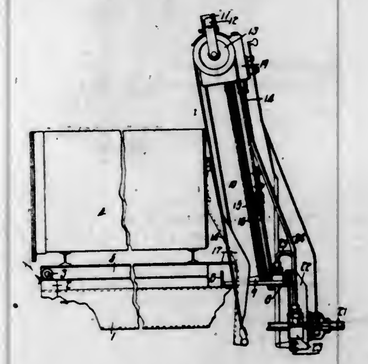
7. In combination with the frame and a rotatable shaft of a motor vehicle, a hoisting device supported by the frame, and mechanism for actuating the hoisting device from the shaft, said mechanism including a sleeve supported by the frame and through which the shaft passes, said shaft being spaced from the sleeve, a clutch member secured to the shaft, a second clutch member carried by the sleeve, said second clutch member also being spaced from the shaft, whereby deflection of the sleeve in respect to the shaft may take place without inducing bending stresses in the shaft.

17. In combination with the side bars and a driven shaft of a motor vehicle, a supplemental support extending across between the side bars, a body tiltable on said truck, an upright hoisting cylinder supported on the supplemental support forward of the front end of the body for tilting the body, means including a rotatable member supported on the supplemental support and spaced from and encircling said shaft, whereby liquid may be pumped to said cylinder at will and whereby relative deflection of said support and shaft is allowed.

21. In combination with a frame and a driven shaft of a motor vehicle, said frame and driven shaft constituting two elements, a clutch ring, means for supporting said ring on one of the elements to swing about an axis at right angles to and substantially intersecting the axis of said shaft, said ring having clutch faces located in a plane at a large angle to that determined by the axis of the shaft and the axis about which the ring swings, complementary clutch means carried by the other element, means for causing driving engagement between the clutch ring and the last mentioned clutch means at will, the parts being so constructed and arranged that the clutch ring and the complementary clutch means may have deflection relative to each other transversely of the shaft.

[Claims 2, 4 to 6, 8 to 16, and 18 to 20 not printed in the Gazette.]

1,271,972. HOISTING AND DUMPING MECHANISM. GARFIELD A. WOOD, Detroit, Mich. Filed Dec. 8, 1916. Serial No. 135,797. (Cl. 21—20.)



1. In combination with the side bars and a longitudinally extending shaft of a motor vehicle, a cross bar construction extending across between the side bars, said cross bar construction comprising a depending element including a thin plate arranged in a longitudinal plane of the vehicle, a pump mounted on said plate on the side thereof most remote from the shaft, and means for driving the pump from the shaft.

3. In combination with the side bars and the longitudinally extending propeller shaft of a motor vehicle, a supplemental support extending across between the side bars and depending to a point at substantially the level of the corresponding portion of the propeller shaft, a hoisting cylinder on the supplemental support, a driving member secured to the shaft, a pump and a pump driving gear supported on the depending portion of the supplemental support, said pump including a casing separate from the depending portion of the support, said shaft passing through the gear, means for directing liquid from the pump to the cylinder and from the cylinder to the pump, and clutch means for connecting the pump driving gear to the driving member at will, said means allowing deflection of the supplemental frame without inducing bending stresses in the shaft.

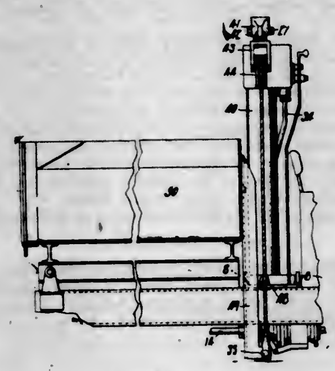
5. In combination with the side bars and a longitudinally extending shaft of a motor vehicle, a pump support carried by the side bars and including a substantially vertically arranged angle iron having one flange in a longitudinal plane of the vehicle, the lower portion of the other flange being removed to form a notch, a pump mounted in the notch, and means for driving the pump from the shaft.

7. In combination with the side bars and the longitudinally extending propeller shaft of a motor vehicle, a cross bar extending across between the side bars, supporting means rigid with the cross bar and depending therefrom on opposite sides of the propeller shaft, a pump and a pump driving member carried by said supporting means, and clutch means, including a yoke pivoted to swing about a horizontal axis and mounted in the depending supporting means on opposite sides of the propeller shaft, for driving said pump driving member from the shaft at will.

9. In combination with the side bars and the longitudinally extending propeller shaft of a motor vehicle, a cross-bar construction extending across between the side bars and depending therefrom, a clutch construction encircling the shaft and comprising a member carried by the shaft and another member carried by the cross bar construction considerably below the upper edges of the side bars, a pump supported by the cross bar construction and spaced considerably below the upper edges of the side bars, and means for driving the pump from the last mentioned clutch member.

[Claims 2, 4, 6, and 8 not printed in the Gazette.]

1,271,973. DUMPING-TRUCK. GARFIELD A. WOOD, Detroit, Mich. Filed Dec. 26, 1916. Serial No. 138,762. (Cl. 21—20.)



1. In combination with the frame of a vehicle, said frame including side bars, a body pivoted adjacent the rear end to tip and having members secured to the forward portion thereof, said members depending below the upper faces of the corresponding side bars on the outer sides thereof, hoisting means for the front end of the body, said hoisting means comprising an upwardly projecting guide located substantially in the central vertical longitudinal plane of the vehicle, a member reciprocable therein, said member projecting transversely of the vehicle at the top, sheaves carried by the projecting portions of said member, and cable means connecting the sheaves to the lower ends of the corresponding depending members in runs which rise substantially vertically from the end of the corresponding depending member, the distance between the ends of the projecting portions of the reciprocable member being considerably less than the distance between the above mentioned runs of the cable means, said cable means being so constructed and arranged that the lifting stress applied to the depending members is maintained substantially equal and the front end of the body is caused to rise substantially twice as fast as the reciprocable member.

2. In combination with the frame of a vehicle, a body pivoted adjacent the rear end thereof to tip and having body arms depending from the front end thereof outside of the sides of the frame, an upstanding guide forwardly of the body, a reciprocable member in the guide, the reciprocable member including at its upper end an arm extending transversely of the vehicle, sheaves supported at the ends of the arm and having their axes extending longitudinally of the vehicle, and flexible means passing over the sheaves and attached to the lower ends of the depending members, whereby the length of the arm is reduced.

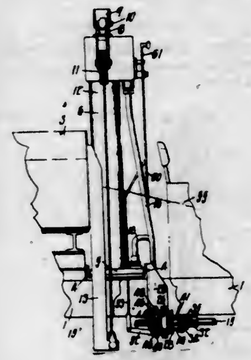
5. In combination with the frame of a vehicle, a body pivoted thereon to tilt, an upwardly projecting hoisting cylinder, a hollow piston rod reciprocable in said cylinder, a transversely extending arm, a bolt passing through the piston rod and across the opening therein from side to side a short distance below the upper end of the rod, said bolt also passing through the arm, whereby the arm may tilt on the rod, and means for connecting the ends of the arm to the body.

14. In combination with the frame of a vehicle, a body pivoted thereon to tilt, an upwardly projecting hoisting cylinder, a hollow piston rod reciprocable in said cylinder, a cross head fitting over the top of said piston rod to exclude dirt therefrom, said cross head being pivotally mounted on the piston rod, and flexible means coöperative with said cross head for tilting the body as the piston rod is projected from the cylinder.

20. In combination with a vehicle body arranged to tip, an upright guide, a thrust member reciprocable in respect thereto, a tiltable cross arm of substantially channel shape in cross-section movable with the thrust bar, and means whereby the cross arm is utilized to tilt the body.

[Claims 3, 4, 6 to 13, and 15 to 19 not printed in the Gazette.]

1,271,974. TRUCK-BODY-DUMPING MECHANISM. GARFIELD A. WOOD, Detroit, Mich. Filed Jan. 15, 1917. Serial No. 142,404. (Cl. 21—20.)



1. In combination with the side bars and the longitudinally extending propeller shaft of a motor vehicle, a supplemental support extending across between the side bars and depending on one side only of said shaft, a hoisting cylinder on the supplemental support, a pump for the hoisting cylinder and a pump driving gear supported on the depending portion of the supplemental support, said gear being hollow and of appreciably greater internal diameter than the external diameter of the shaft, said shaft passing through the gear, whereby the supplemental frame may be deflected without inducing bending stresses in the shaft, and means for driving said gear from the shaft at will.

5. In combination, a driven shaft, a clutch member supported thereon a second clutch member spaced from and surrounding said shaft and supported independently thereof, one of said members being slidable along the shaft, an element carried by one of the members and tiltable about an axis substantially intersecting that of the shaft and substantially at right angles thereto, said element engaging the member other than that by which it is carried when the slidable member is in one position and being out of the path thereof when the slidable member is in another position, the engaging surfaces of the element and the member other than that by which the element is carried being shaped to prevent disengagement from one another by a movement parallel to the axis of the shaft.

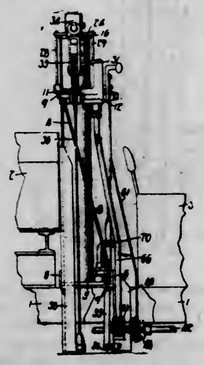
11. In a motor vehicle, a shaft, a clutch element carried thereby, a second clutch element surrounding the shaft and spaced therefrom and including means movable along the shaft into and from engagement with the first mentioned clutch element, a member cooperating with the second clutch element to permit rotation thereof and to shift the movable means in either direction at will, and supporting means for said member constructed and arranged to permit universal swinging movement thereof.

20. In combination with the frame and a driven shaft of a motor vehicle, a pump arranged substantially in the same horizontal plane as the shaft, the pump having a socket, a pump support carried by the frame, means for driving the pump from the shaft, said means including a clutch, a swingable clutch shifting member having an end received in the socket, and a lever for swinging the clutch shifting member.

26. In a motor vehicle, a driven shaft, a clutch member carried thereby, a rotatable gear, clutch pins supported by and slidable through the gear to and from engagement with the clutch member, the ends of the pins on the side of the gear most remote from the clutch member having reduced ends forming shoulders, said ends being threaded, a spool-like member through which said ends pass, and nuts for drawing the pins up against the spool-like member to cause the shoulders to bear thereon.

[Claims 2 to 4, 6 to 10, 12 to 19, and 21 to 25 not printed in the Gazette.]

1,271,975. TRUCK-BODY-DUMPING MECHANISM. GARFIELD A. WOOD, Detroit, Mich. Filed Jan. 15, 1917. Serial No. 142,406. (Cl. 21—20.)



1. A motor vehicle comprising a frame, a body pivoted to tilt thereon, an upright hoisting cylinder forward of the front end of the body, a piston and piston rod reciprocable therein for tilting said body, clamping means split transversely of the cylinder and encircling the latter somewhat below the top, a pump for delivering liquid into the space below the piston to elevate the latter, and a controlling lever for said pump mounted on said clamping means.

2. A motor vehicle comprising a frame, a body pivoted to tilt thereon, an upright hoisting cylinder forward of the front end of the body for tilting said body, said cylinder having a base, a cross-frame constituting supporting means for the base of the cylinder, said cylinder having a circumferential groove at a point considerably above the base and below the top, a split clamping element in said groove, and braces extending from the clamping element downwardly, forwardly and laterally to the outer ends of the cross-bar.

4. A motor vehicle comprising a frame, a body pivoted to tilt thereon, an upright hoisting cylinder forward of the body, a piston and piston rod reciprocable in said cylinder, means associated with the upper end of said piston rod for tilting the body, a clamping element associated with the upper portion of the cylinder, means for forcing the clamping element transversely of the cylinder into clamping relation therewith, a pump for delivering liquid to the space below the piston, a driven shaft, means for driving the pump from said shaft at will, a valve for controlling the flow of liquid to the cylinder, and valve actuating means including a hand lever mounted on the clamping element.

8. A vehicle including a frame, a body pivoted to tilt thereon, an upright cylinder supported on said frame forwardly of the body, a piston and piston rod reciprocable in said cylinder, means associated with said piston rod for tilting the body, a split clamping member encircling the upper portion of said cylinder and mounted in a groove formed in the latter, means leading downwardly, forwardly and laterally from said clamping member for bracing the cylinder, a head for said upper end of the cylinder, and bolts associated with said split clamping member whereby said head is retained in position.

10. A vehicle comprising a frame, a body pivoted to tilt thereon, an upright hoisting cylinder forward of the body, a piston and piston rod for the cylinder, a pair of sheaves supported by the piston rod, the axes about which said sheaves rotate extending longitudinally of the vehicle, cable means passing over said sheaves and attached to the front portion of the body, means encircling the upper portion of the cylinder, said cable means engaging the encircling means on opposite sides of the central longitudinal vertical plane of the vehicle.

[Claims 3, 5 to 7, and 9 not printed in the Gazette.]

1,271,976. HYDRAULIC HOISTING DEVICE. GARFIELD A. WOOD, Detroit, Mich. Original application filed Jan. 15, 1917, Serial No. 142,406. Divided and this application filed June 6, 1917. Serial No. 173,091. (Cl. 138—9.)



1. An upright hoisting cylinder, clamping means encircling the upper portion of said cylinder in a groove, a piston and piston rod slidable in said cylinder, an annular head for said cylinder, and bolts associated with the clamping means whereby said head is retained in position.

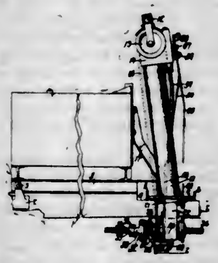
3. An upright hoisting cylinder, a piston and piston rod slidable therein, a head for the cylinder, a port in the cylinder some distance below the head, the lower end of the piston rod being in communication with the space between the piston rod and the cylinder, a passage externally of the cylinder extending from said port to a higher level, said piston rod being perforated at a point considerably above the piston whereby when liquid is introduced through the passage, the air above the port and between the piston rod and the cylinder may escape through the piston rod.

6. An upright hoisting cylinder having a groove therein near its upper end and being perforated at the groove, a piston and piston rod reciprocable in the cylinder, a divided clamping element extending around the cylinder and having a portion thereof received in the groove and around the perforation therein, whereby when the parts of the element are drawn together by a movement transversely of the cylinder a close joint is secured between the element and the adjacent surface of the groove, the clamping element having a passage in registration with the perforation in the groove, the space between the cylinder and piston rod serving as a reservoir for liquid, and means for withdrawing the liquid through the passage and expelling it below the piston to cause the latter to rise.

13. In combination, an upright cylinder, a lower end for the cylinder, a piston and piston rod slidable in the cylinder, a pump for forcing liquid between the piston and said lower end, the space between the cylinder and the rod above the piston constituting a storage chamber for liquid, means for limiting the upward movement of the piston, said means including a port in the wall of the cylinder near the upper end, a suction pipe leading to the pump, and a divided clamp including a hollow portion conforming to the cylinder and surrounding the port and in communication with the upper end of the suction pipe, said clamp including another portion on the opposite side of the cylinder, and means for drawing the two portions toward each other transversely of the cylinder.

[Claims 2, 4, 5, 7 to 12, 14, and 15 not printed in the Gazette.]

1,271,977. HOISTING MECHANISM FOR MOTOR-VEHICLES. GARFIELD A. WOOD, Detroit, Mich. Original application filed Aug. 28, 1916, Serial No. 117,236. Divided and this application filed June 7, 1917, Serial No. 173,377. Renewed Apr. 26, 1918. Serial No. 231,024. (Cl. 21—20.)



1. In combination with the frame and a rotatable shaft of a motor vehicle, a hoisting device supported by the frame, and mechanism for actuating the hoisting device from the shaft, said mechanism including a gear pump comprising a housing, a driven gear and a driving gear therein, a hollow rotatable sleeve to which said driving gear is secured, anti-friction bearings in the housing for said sleeve, means for sealing the joints between said sleeve and the housing, said shaft passing through the sleeve and being spaced therefrom, a clutch member secured to the shaft, a second clutch member carried by the sleeve and rotatable therewith, and means for moving said second clutch member longitudinally of the shaft to connect it to or disengage it from the first mentioned clutch member at will, the second clutch member also being spaced from the shaft, whereby deflection of the frame and gear pump, due to loads on the hoisting device, may take place without inducing bending stresses in the shaft.

5. In combination with the frame and a rotatable shaft of a motor vehicle, a hoisting device supported by the frame, said mechanism including a hollow fluid impelling member, said shaft passing through said hollow member and being spaced therefrom whereby relative movement of the hollow member and the shaft transversely of the axis of the latter is allowed, and means for driving the hollow member from the shaft at will.

6. In combination with the frame and a rotatable shaft of a motor vehicle, a hoisting device supported by the frame, said device including a liquid impelling member surrounding said shaft and spaced therefrom, and mechanism for actuating the hoisting device from the shaft, part of said mechanism being carried by the shaft and another part being supported independently thereof, one of the parts being capable of movement transversely of the shaft, whereby deflection of the frame in respect to the shaft may take place without inducing bending stresses in the shaft.

7. In combination with the frame and a rotatable shaft of a motor vehicle, a hoisting device supported by the frame, said device including a liquid impelling member substantially concentric with and spaced from the shaft, and clutch mechanism for actuating the liquid impelling member from the shaft, part of said clutch mechanism being carried by the shaft and another part being supported independently thereof, one of the parts being capable of movement transversely of the shaft.

12. In combination with the frame and a rotatable shaft of a motor vehicle, a liquid impelling member concentric with said shaft, a sleeve interposed between said member and shaft and rigid with said member, said sleeve being spaced from the shaft and projecting along said shaft in one direction beyond the corresponding end of the member, a bearing for the projecting portion of the sleeve, and clutch means for driving the sleeve from the shaft.

[Claims 2 to 4, 8 to 11, 13, and 14 not printed in the Gazette.]

1,271,978. HYDRAULIC HOISTING DEVICE. GARFIELD A. WOOD, Detroit, Mich. Filed Mar. 15, 1915, Serial No. 14,480. Renewed Aug. 1, 1917. Serial No. 183,979. (Cl. 138—9.)



1. Hoisting mechanism comprising a cylinder having an upper and a lower end, a piston slidable in the cylinder, a hollow piston rod connected to the piston and having its upper end passing out through the upper end of the cylinder, said piston rod being in communication near its lower end with the interior of the cylinder above the piston to form storage space for liquid, a closure extending across and fixed to the piston rod at a point near its upper end, the interior of the piston rod being in communication with the atmosphere at a level somewhat below the closure, and means for transferring the liquid from the storage space to the space between the lower end of the cylinder and the piston whereby the piston and piston rod are caused to rise.

5. Hoisting mechanism comprising a cylinder having one end arranged above the other, the lower end being closed and the upper end being reduced to form a shoul-

der, a storage tank for liquid carried by and surrounding the cylinder, means for clamping the tank rigidly against the shoulder to prevent leakage, a piston and piston rod slidable in the cylinder, and means for transferring liquid from the storage tank to the space between the lower end of the cylinder and the piston for causing the latter and the piston rod to be elevated.

7. A cylinder, a member reciprocable therein, said member including a piston and a hollow piston rod connected to the piston and spaced from the cylinder, a closure for one end of the cylinder, said piston rod passing through the closure, means for closing the end of the piston rod remote from the piston, said hollow piston rod forming a storage reservoir for liquid, said reciprocable member including a passage through which the stored liquid may escape as the reciprocable member moves in one direction, means for venting the closed end of the piston rod, said means comprising an air conduit, one end of which is located within the piston rod and in proximity to the closure therefor, the other end opening laterally through the wall of the piston rod at a point more removed from the closure whereby air is admitted to the piston rod as the latter moves through the cylinder in the direction stated, and whereby liquid is prevented from escaping from the piston rod as it approaches the end of its movement in the opposite direction.

15. Hoisting mechanism comprising a cylinder having an upper end and a lower end, a closure for the upper end of the cylinder, a piston and piston rod slidable in the cylinder, said piston rod passing through the closure, means for forming an air chamber at the upper end of the cylinder of size sufficient to allow expansion of an amount of liquid sufficient to fill a large proportion of the space inclosed by the cylinder, said air-chamber forming means being supported by the cylinder, a closure for the lower end of the cylinder, and pump means for drawing off the liquid from above the piston through the air chamber and delivering it to the space in the cylinder below the piston whereby the piston rod is projected from the upper end of the cylinder.

25. Hydraulic hoisting mechanism forming a circulatory system including a loop arranged with one end higher than the other, one branch of the loop including an upright cylinder, a piston reciprocable in the cylinder, a piston rod projecting upwardly from the piston, the other branch of the loop including a suction pipe through which liquid may freely pass either from or to the space above the piston, the loop also including a pump for drawing the liquid through the suction pipe and forcing it under pressure into the cylinder below the piston to elevate the latter, automatic means for limiting the upward movement of the piston rod, the system further including an expansion space located for the most part above the upper limit of movement of the piston and exterior of the cylinder through which the liquid is drawn off to the suction pipe, said space being large enough to allow for the expansion of an amount of liquid sufficient to fill a large proportion of the entire system and to separate the froth from said liquid under rapid and continuous circulation at high pressure.

[Claims 2 to 4, 6, 8 to 14, 16 to 24, and 26 to 29 not printed in the Gazette.]

1,271,979. FOOT-TREAD. THOMAS B. WREN, Mahanoy City, Pa. Filed June 22, 1917. Serial No. 176,344. (Cl. 21—55.)



A foot tread for an automobile running board comprising a casting consisting of a rectangular frame in plan view, the side of the frame being angular in cross section and being embedded in an opening and a rabbet adjacent the opening of the running board, said frame having a transverse integral bar substantially near its central portion and provided with a plurality of alined longitudinally extending bars integrally connecting the transverse bar and the end portions of the frame, said bars having their upper portions provided with removable V-shaped strips having their upper edges above the surface of the frame and thereby constituting means for renewing the foot tread.

1,271,980. ELECTRIC-LIGHTING APPARATUS. GILBERT WRIGHT, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Mar. 11, 1914. Serial No. 823,954. (Cl. 173—328.)



1. In a mounting device for an electric lamp, the combination of parts associated, respectively, with the lamp and with the structure carrying it and fitting one within the other, one of said parts having notches at different positions lengthwise thereof and the other having means adapted to engage in said notches, said parts being capable of relative movement to bring such means into and out of engagement in the various notches and alter the position of the lamp with reference to the aforesaid structure, and spring means tending to shift said parts lengthwise with reference to one another and thereby bring about engagement of said means in said notches.

4. In a mounting device for an electric lamp, the combination of parts associated, respectively, with the lamp and with the structure carrying it and fitting one within the other, one of said parts having notches at different positions lengthwise thereof and the other having means adapted to engage in said notches, said parts being capable of relative rotary and longitudinal movement to bring such means into and out of engagement in the various notches and alter the position of the lamp with reference to the aforesaid structure, and spring means tending to shift the parts lengthwise with reference to one another in the direction to cause engagement of said means in said notches.

6. The combination of a casing comprising separate parts, one of which has a socket for a lamp base, said parts being longitudinally adjustable with reference to one another so as to extend or contract the space in the casing behind a lamp base in the socket, contact means in the casing for engaging the lamp base, and spring means in the casing which acts to separate the lamp base and the contact means when the space is extended and permits them to come together when it is contracted.

10. A hollow contact member having cylindrical portions of different diameters and a slot extending lengthwise through the larger portion and into the smaller portion, so that the parts into which said member is divided may be made to approach one another by flexure in the smaller portion, and screws in the larger portion at opposite sides of its bore for clamping the parts together upon a conductor in said bore.

[Claims 2, 3, 5, and 7 to 9 not printed in the Gazette.]

1,271,981. SOCKET AND PLUG DEVICE. GILBERT WRIGHT, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Mar. 11, 1914. Serial No. 823,955. (Cl. 173—328.)

1. A connective plug device for a bayonet socket comprising a hollow body adapted to center therein having bayonet engagement means adapted to coact with that of the socket and an external shoulder; yielding contact means in said body each comprising a shell with a partition therein consisting of a metal disk held at its edges in a groove in the wall of the shell, a movable contact member in one end of said shell, and a spring in said shell between said member and said partition; and an elastic

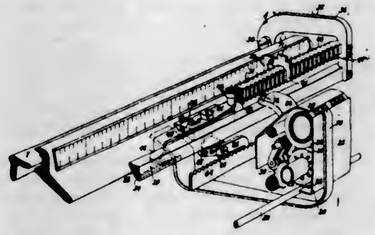
ring on said body adapted to be compressed water-tight between said flange and abutment means associated with the socket.



3. A double ended hollow body part for a yielding contact element comprising a tubular shell with a partition therein consisting of a metal disk of larger size than the interior of said shell held at its edge in a groove or bead-like local expansion of the shell.

[Claim 2 not printed in the Gazette.]

1,271,982. COMBINED TYPE-WRITING AND COMPUTING MACHINE. WALTER WRIGHT, New York, N. Y., assignor to Underwood Computing Machine Company, New York, N. Y., a Corporation of New York. Filed Dec. 1, 1911. Serial No. 663,217. (Cl. 235—59.)

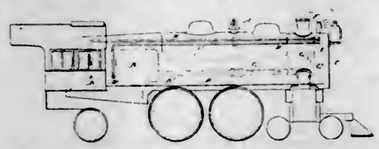


1. The combination with a typewriter carriage, of a computing head having a traveling element, a pick-up means having parts engageable to cause said traveling element to move with said carriage, a shifter controlling the connection of said parts of said pick-up means, and a series of actuators for successively moving said shifter in opposite directions.

4. The combination with a typewriter carriage, of a computing head having a traveling element, a pick-up means having parts engageable to cause said traveling element to move with said carriage, a shifter controlling the connection of said parts of said pick-up means, and a series of lugs to actuate said shifter, some of said lugs being effective to move said shifter in one direction, and others of said lugs being effective to move said shifter in the opposite direction.

[Claims 2, 3, and 5 to 57 not printed in the Gazette.]

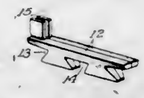
1,271,983. COMBUSTION-ACCELERATOR FOR BOILER-FURNACES. GEORGE W. WYMAN, Delmar, Del. Filed June 26, 1917. Serial No. 177,073. (Cl. 110—57.)



1. In a boiler having a furnace, flues and smoke-box, enlarged tubes for the products of combustion in the lower portion of the boiler, a heater installed in said tubes and disposed in the path of the hot products of combustion, a header located in the upper portion of the smoke-box, means dividing said header into separate chambers, means for conducting air into one of said chambers, means leading from said chamber to the heater, pipes for leading the heated air from said heater into the other chamber of said header and means leading from the last-named chamber to the furnace.

[Claims 2 and 3 not printed in the Gazette.]

1,271,984. COMMUTATOR AND COMMUTATOR-BAR. HENRY L. ZABRISKIE, Westfield, and GUSTAVE C. MARX, Elizabeth, N. J., assignors to Diehl Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Apr. 3, 1916. Serial No. 88,712. (Cl. 200—12.)

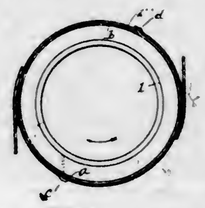


7. A commutator bar having a commutating surface, and comprising two complementary elements assembled side by side, each of said elements having a projection extending beyond the commutating surface and at a substantial distance within the planes of the sides of the element, said projections being in registry whereby a space is provided between said projections for a conductor.

8. The method of making a commutator bar which consists in forming two complementary elements, which, when assembled will produce a commutator bar, and providing said elements with integral projections extending beyond the commutating surface of the bar, bending said projections and assembling said elements so that the projections will be adjacent to each other and will form between them a space in which a conductor may be positioned.

[Claims 1 to 6 not printed in the Gazette.]

1,271,985. TIRE. ADRIAN O. ABBOTT, Jr., Detroit, Mich., assignor of one-half to William B. Norton, Detroit, Mich. Filed Apr. 20, 1917. Serial No. 163,349. (Cl. 152—13.)



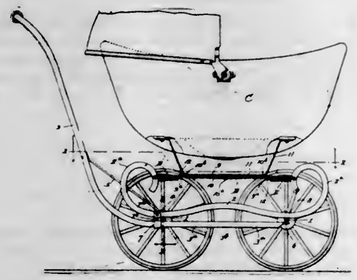
1. In a tire, a carcass construction involving a spliced joint in which is a strip of fabric wound into an annulus of only slightly greater length than the long circumference of the core and before the annulus is completed over a second strip and lapping its beginning end with the second strip intervening between the two lapped ends.

[Claims 2 to 4 not printed in the Gazette.]

1,271,986. PERAMBULATOR OR BABY-CARRIAGE. ARTHUR J. ADAMS, Bay City, Mich., assignor, by mesne assignments, to Ferris-Stevenson Corporation, Buffalo, N. Y., a Corporation of New York. Filed May 22, 1917. Serial No. 170,165. (Cl. 21—12.)

1. In a vehicle of the character set forth, the combination with a pair of axles, of a pair of reach-members mounted on and connecting said axles and provided with upward extensions, a handle in rigid relation to the rear axle, a body, a body-supporting frame beneath said body, and connections between said frame and said upward extensions, including a pair of coil-springs disposed wholly below the body.

2. In a vehicle of the character set forth, the combination with a pair of axles, of a pair of reach-members mounted on and connecting said axles, a handle having members provided with extensions disposed below said axles, affording supplemental reach-members between said axles, suspension members extending above the axles and rigid therewith, a body-supporting frame, and connections between said frame and said suspension members, including a pair of suspension coil-springs.



3. In a structure of the character set forth, the combination with a pair of axles, of a pair of reach-members mounted on and connecting said axles and equipped with goose-neck extremities disposed above said axles, a handle having members provided with horizontal extensions, affording supplemental reach-members disposed beneath the axles, means rigidly uniting said reach-members to the axles and supplemental reach-members, coil-springs having extremities connected to said goose-necks, and a body equipped with supporting means suspended between said coil-springs.

4. In a structure of the character set forth, the combination of a pair of axles, reach-members rigidly connected with said axles, suspension members extending above said axles and rigidly connected therewith, a body-supporting frame comprising a pair of longitudinal bars and braces uniting the same, said frame having upwardly extending body-supports, tension-springs interposed between said frame and said suspension members, and a body mounted on said supports above the plane of said frame.

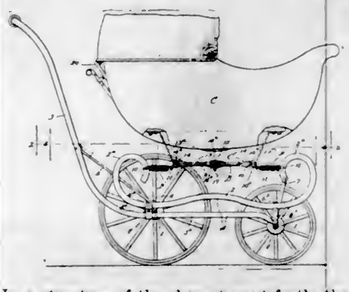
5. In a structure of the character set forth, the combination of a pair of axles, reach members rigidly connecting said axles and provided with upward extensions, a horizontal body-supporting frame equipped at its front and rear portions with upwardly-extending members, a body mounted on said upwardly-extending members, and tension-springs interposed between said frame and the upward extensions of said reach-members and disposed wholly below the body.

[Claim 6 not printed in the Gazette.]

1,271,987. BABY-CARRIAGE OR PERAMBULATOR. ARTHUR J. ADAMS, Bay City, Mich., assignor, by mesne assignments, to Ferris-Stevenson Corporation, Buffalo, N. Y., a Corporation of New York. Filed May 22, 1917. Serial No. 170,166. (Cl. 21—12.)

1. In a structure of the character set forth, the combination of a running gear-frame equipped at its ends with upwardly projecting suspension members, a suspension frame interposed between said suspension members and adapted to serve as a turn-table, spring suspension means including substantially horizontal tension springs between said suspension frame and said suspension members, and a body reversibly mounted on said suspension frame.

2. In a structure of the character set forth, the combination of a running gear-frame provided at its front and rear portions with rigid suspension members, a horizontal suspension frame adapted to serve as a turntable, horizontal coil-springs connecting said suspension frame to said suspension members, a body equipped with a frame adapted to serve as a turn-table, said body disposed wholly above the plane of said coil-springs, and a central swivel connection between said last-mentioned frames.



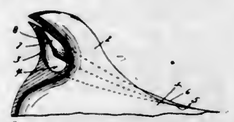
3. In a structure of the character set forth, the combination of a running gear-frame provided at its front and rear portions with rigid suspension members, a horizontal suspension frame adapted to serve as a turntable, horizontal coil-springs connecting said suspension frame to said suspension members, a body disposed above the plane of said suspension frame and equipped with a frame adapted to serve as a turn-table, a central swivel connection between said last-mentioned frames, and a latch-device adapted to secure said last-mentioned frames together.

4. In a structure of the character set forth, the combination of a running gear-frame, a suspension frame comprising longitudinal bars and diagonal brace-bars secured thereto, coil-springs connecting said suspension frame to the running gear-frame, a rotatable frame swiveled on said suspension frame and comprising longitudinal bars and diagonal brace-bars superposed on the corresponding bars of said suspension frame, and a body mounted on said rotatable frame.

5. In a structure of the character set forth, the combination of a running gear-frame, a suspension frame comprising longitudinal bars and diagonal brace-bars secured thereto, coil-springs connecting said suspension frame to the running gear-frame, a rotatable frame swiveled on said suspension frame and comprising longitudinal bars and diagonal brace-bars superposed on the corresponding bars of said suspension frame, and means for locking the rotatable frame to the suspension frame.

[Claims 6 to 8 not printed in the Gazette.]

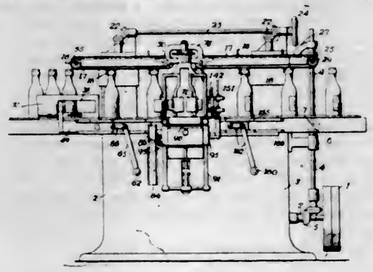
1,271,988. LIQUID-CONTAINER. ARNOLD S. ANDERSON, Batavia, Ill. Filed Feb. 28, 1917. Serial No. 151,537. (Cl. 65—31.)



1. A pitcher comprising a main container having a spout projecting therefrom, the marginal edge of the spout merging into the marginal edge of the container at each side of the latter, a flange integrally formed with the spout and curved upwardly and forwardly and terminating in close proximity to the extended terminal of the spout and having its marginal edge curved beneath and around the said spout to form a relatively large channel having a restricted entrance beneath the said spout, the bottom of the said channel sloping rearwardly and terminating at the top edge of the spout at the point where the latter merges into the side walls of the container, the said flange being merged with the container at a point slightly rearwardly of the point at which the channel merges into the said container and a curved baffle plate projecting from the marginal edge of the flange and into the center of the said channel.

[Claims 2 and 3 not printed in the Gazette.]

1,271,989. LABELING-MACHINE. GEORGE ARVID ANDERSON, Worcester, Mass., assignor of one-fourth to David P. Thomas, Worcester, Mass., and one-fourth to Eskil B. Renblom, Springfield, Mass. Filed Feb. 21, 1917. Serial No. 150,048. (Cl. 216—54.)



1. In a machine of the class described, the combination with label affixing mechanism, of a conveying mechanism for the articles to be labeled, comprising upper and lower series of spaced traveling conveying devices to engage, respectively, the upper and lower ends of successive articles to be presented to said label affixing mechanism, and means for bodily adjusting the upper conveying devices to vary the distance between said upper and lower series, whereby to accommodate said conveying mechanism to articles of different heights.

3. In a machine of the class described, the combination with label affixing mechanism, of a conveying mechanism for the articles to be labeled, comprising a series of spaced traveling engaging devices adapted for contact with the lower ends of the articles, and two series of spaced traveling conveying devices, one series on each side of said label affixing mechanism, adapted for contact with the upper ends of said articles, and means for moving both upper series simultaneously toward and from said lower series, to accommodate said conveying mechanism to articles of different heights.

11. In a labeling machine, the combination with label affixing mechanism, of a conveying mechanism for advancing the articles to be labeled in spaced relation to said affixing mechanism, means frictionally engaging the articles to feed them toward said conveying mechanism, retarding means interposed in the path of articles on said feeding means and normally locked to prevent the advancement of articles thereby, and means for unlocking said retarding means at predetermined intervals to permit the feeding of a single article by said feeding means to said conveying means.

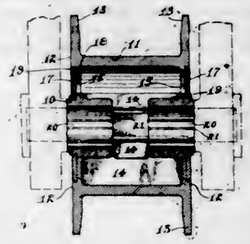
15. In a machine of the class described, the combination with article conveying mechanism, for moving the articles to be labeled in a longitudinal path through the machine, of a rotating label carrying means adapted for rotation in the longitudinal path of articles on said conveying mechanism, and means, responsive to the movement of an article on said conveying mechanism, for feeding a label to said label carrying means.

20. In a machine of the class described, a rotating label carrying device presenting a pair of spaced surfaces adapted to support adhesively a label extending across the space therebetween, said space being adjustable to permit the passage therethrough of articles of various sizes and shapes, and means for moving an article between said spaced surfaces and through the axis of rotation of said label carrying devices.

[Claims 2, 4 to 10, 12 to 14, 16 to 19, and 21 to 35 not printed in the Gazette.]

1,271,990. DREDGE-TUMBLER. MARSHALL F. APGAR and CHARLES B. ANDREWS, High Bridge, N. J., assignors to Taylor-Wharton Iron & Steel Co., High Bridge, N. J., a Corporation of New Jersey. Filed Oct. 5, 1917. Serial No. 194,921. (Cl. 64—17.)

1. A tumbler having a hub portion, a peripheral wall and spaced connecting members all cast integral, a closure plate at opposite ends substantially filling the space between adjacent connecting means but leaving a crevice along the edge, and a member welded in place in said crevice for permanently retaining said closure plates.



3. A device of the class described, including a hub, a peripheral wall presenting outwardly extending, substantially parallel terminal flanges and spokes connecting said peripheral wall and said hub, each of said openings having an outwardly facing seat or shoulder therein, and an undercut portion between said shoulder and the outer surface, a closure disposed within each opening and in engagement with the seat or shoulder thereof, and having its peripheral surface outwardly beveled and spaced from said undercut portion, and a retaining ring welded in place within the space between the beveled periphery of the closure and the undercut surface.

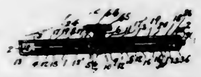
[Claims 2 and 4 not printed in the Gazette.]

1,271,991. PROCESS OF STABILIZING TEMPERANCE CEREAL BEVERAGES. CHARLES S. ASH, San Francisco, Cal., assignor to Gould & Ash, San Francisco, Cal., a Copartnership consisting of Chas. S. Ash and Ralph A. Gould. Filed Nov. 15, 1917. Serial No. 202,117. (Cl. 99—11.)

1. The process of stabilizing cereal beverages containing less than 0.5% by volume of alcohol, which consists in treating the beverage at any stage of the brewing process with tannin in the presence of sulfurous acid or its salts to precipitate those substances held in solution in the beverage which are susceptible to precipitation by cooling the finished beverage to temperatures below normal atmospheric temperatures and to prevent the breaking down under subsequent heat treatment of the slightly stable compounds in the beverage which cause it to acquire a cooked taste and to become discolored, and removing the precipitate.

[Claims 2 to 4 not printed in the Gazette.]

1,271,992. MECHANICAL TALLY. EUGENE D. BALDWIN, East Orange, N. J. Filed May 4, 1917. Serial No. 166,300. (Cl. 235—78.)

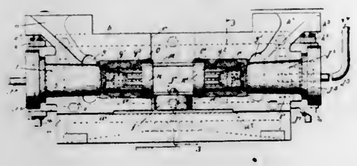


1. A mechanical tally comprising a casing, a unit counting wheel, a total counting wheel, said unit counting wheel and total counting wheel being mounted back to back within said casing so that the unit count is disclosed through one side of said casing and the total count through the other side of said casing for independent reading thereof, and an actuating device for mutually operating said counting wheels projecting from the periphery of said casing.

2. A mechanical tally comprising a casing, a unit counting wheel for indicating successive unit counts, a total counting wheel for indicating a multiplication of completed series of unit counts, said casing having separate apertures through which the numeral indications of said respective wheels may be respectively and independently

read, the outer surface of said casing adjacent to said total wheel aperture having fixed numeral indications which are successively combined with the disclosed numeral of said total counting wheel upon the step by step movement of the latter for the purpose of registering totals including the transferred units tallied by one complete revolution of the unit counting wheel, and means for mutually actuating said counting wheels.

1,271,993. CASTING APPARATUS. JOSEPH H. BAMBERG, Toledo, Ohio, and HERMAN H. DOEHLER, Brooklyn, N. Y., assignors to Doehler Die-Casting Company, Brooklyn, N. Y., a Corporation of New York. Filed Mar. 26, 1917. Serial No. 157,387. (Cl. 22—126.)



1. A casting apparatus embodying therein a plurality of metal mold parts capable of relative movement to open and close the apparatus, each of said parts having a portion of a mold cavity and of an ingate formed therein, a support for said mold parts, means carried thereby, whereby an inside core may be supported within said mold cavity, and an inside core comprising a non-frangible body, a core base carried thereby and projecting therefrom into said mold cavity, and a facing upon said core base formed of porous, refractory material.

3. A casting apparatus embodying therein a plurality of metal mold parts capable of relative movement to open and close the apparatus, each of said parts having a portion of a mold cavity and of an ingate formed therein, a support for said mold parts, means carried thereby, whereby an inside core may be supported within said mold cavity, and an inside core comprising a non-frangible body, a core base carried thereby and projecting therefrom into said mold cavity, said core base being of gradually reduced dimensions from said core body toward the end of the base, and a facing upon said core base formed of porous, refractory material.

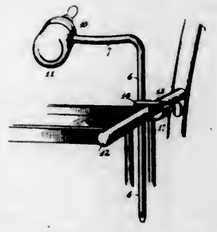
4. A casting apparatus embodying therein a plurality of metal mold parts capable of relative movement to open and close the apparatus, each of said parts having a portion of a mold cavity and of an ingate formed therein, a support for said mold parts, means carried thereby, whereby an inside core may be supported within said mold cavity, and an inside core comprising a non-frangible body, a hollow core base carried thereby and projecting therefrom into said cavity, said core base having vent openings therethrough, said core base being of gradually reduced dimensions from said core body toward the end of the base, and a facing upon said core formed of porous, refractory material.

6. A casting apparatus embodying therein a plurality of metal mold parts capable of relative movement to open and close the apparatus, each of said parts having a portion of a mold cavity and of an ingate formed therein, a base upon which said mold parts are slidably mounted, a pedestal carried by said base at one side of the mold cavity in said parts, said parts having recesses therein forming a well, the wall of which is adapted to engage said pedestal when the mold parts are closed, and an inside core comprising a core body adapted to seat upon said pedestal, a core base carried thereby and projecting therefrom into said mold cavity, and a facing upon said core base formed of porous refractory material.

7. A casting apparatus embodying therein a plurality of metal mold parts capable of relative movement to open and close the apparatus, each of said parts having formed therein portions of a plurality of mold cavities, ingates, and a well intermediate said mold cavities, a base upon which said mold parts are slidably mounted, a pedestal upon said base, adapted to occupy said well when the mold parts are closed, an inside core comprising a core body adapted to seat upon said pedestal, a plurality of hollow core bases having openings therethrough projecting from said core body into said mold cavities respectively, and a facing upon each of said core bases formed of porous, refractory material, a dowel and socket connection having lost motion therein, between said pedestal and said core body, a coöperating guide pin and socket upon said pedestal and said core body, whereby said core bases will always coöperate with the same mold cavity, and means for automatically adjusting said inside core with relation to said mold cavity comprising a cylindrical extension upon said core body and a coöperating beveled portion upon said mold parts extending about the end of the mold cavities therein.

[Claims 2 and 5 not printed in the Gazette.]

1,271,994. SUPPORTING DEVICE FOR NURSING-BOTTLES. ARTHUR BARLOW, Brooklyn, N. Y., assignor of one-half to Walter McDougall, Brooklyn, N. Y. Filed Nov. 25, 1913. Serial No. 802,957. (Cl. 248—3.)



1. A bottle supporting device of the character described comprising a bent main arm, and a telescopic auxiliary bottle clamping arm fitting in one end thereof, and a clamp, said clamp comprising a yoke, through the free ends of which passes said main arm, a clamping plate located and movable between the arms of said yoke, and a clamping screw passing through said yoke whereby to hold the several parts in their proper relative positions.

2. A bottle supporting device of the character described and consisting of a main arm having fitted in one end thereof an adjustable auxiliary bottle clamping arm, and a clamping device, the latter comprising a yoke the free ends of which are provided with openings through which said main arm passes, a curved clamping plate located between the arms of said yoke and impinging against said main arm and having the bent edges thereof serrated for the purpose of securely holding the same in position on a chair or other support, and a clamping screw passing through said yoke and adapted to bear at its free end against the said chair or other support, substantially as described.

3. A bottle supporting device of the character described comprising a main arm, an auxiliary bottle clamp rotatably carried at one end thereof, and a clamp, said clamp comprising a yoke, through the free ends of which passes said main arm, a clamping plate located and movable between the arms of said yoke, and a clamping screw passing through said yoke whereby to hold the several parts in their proper relative positions.

4. A bottle supporting device of the character described, consisting of a main arm, an auxiliary bottle clamping arm rotatably carried at one end thereof, and a clamping device, said clamping device including a yoke, the free ends of which are provided with openings through which said main arm passes, a curved clamping plate located between the arms of said yoke and impinging against said main arm and having the bent edges thereof serrated for the purpose of securely holding the same in position on a chair or other support, and a clamping screw passing through said yoke and adapted to bear at its free end against the said chair or other support.

5. A clamp for a bottle supporting device comprising a yoke, the free ends of which are provided with openings for the passage of a rod therethrough, a curved clamping plate located between the arms of said yoke and adapted to impinge against said rod and having the bent edges thereof serrated for the purpose of securely holding the same in position on a chair or other support, and a clamping screw passing through said yoke and adapted to bear at its free end against the said chair or other support.

[Claim 6 not printed in the Gazette.]

1,271,995. DEEP-WELL PUMP. DANIEL BEEDY, Colby, Kans. Filed July 2, 1917. Serial No. 178,228. (Cl. 103—54.)



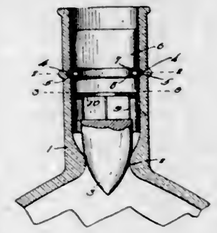
1. In a lift pump, the combination with an air reservoir adapted to have direct communication with a pump cylinder, said air reservoir having a closed top, of a water supply pipe extending into and through the air reservoir through the closed top and of such smaller diameter than the air reservoir as to leave a material air receiving space therebetween and a plurality of lateral openings formed through the lower end of the water supply pipe.

3. A device of the character described, comprising a water conducting pipe, a hollow pump rod passing through the water conducting pipe, a plunger carried by the pump rod, a cylinder in which the plunger moves, a receptacle constituting an air reservoir disposed above the lower end of the water conducting pipe of materially greater diameter than the water conducting pipe and surrounding the same and having communication with the cylinder, an air pump connected to the hollow pump rod for movement in unison therewith and a connection between the air pump and the hollow pump rod, said hollow pump rod having a lateral discharge nozzle which projects outwardly beyond the line of the water conducting pipe.

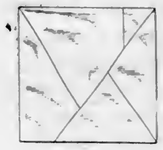
[Claims 2 and 4 not printed in the Gazette.]

1,271,996. BOTTLE-NECK. JAMES W. BENTLEY, Wise, Va. Filed July 12, 1917. Serial No. 180,199. (Cl. 215—65.)

A bottle neck having an annular groove on its inner face, a lining to fit snugly in said neck and having an instruck annular portion forming an outside groove in the inside shoulder, the grooves in said lining being designed to register with the groove in the neck when the parts are in operative position, a split ring for insertion in both of said grooves to lock the casing against withdrawal, and a stopper to be positioned inside said shoulder and carrying a plate for engagement with the shoulder to limit the outward movement of the stopper.



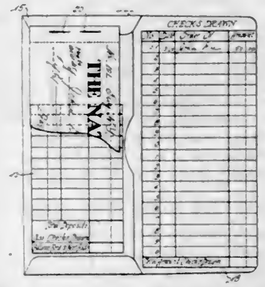
1,271,997. PUZZLE. WILLIAM L. BENEDICT, New York, N. Y. Filed Mar. 1, 1918. Serial No. 219,834. (Cl. 46—41.)



2. A puzzle comprising a set of separate elements in the form of irregular polygons adapted to form in association either a square or an equilateral triangle.

[Claims 1 and 3 not printed in the Gazette.]

1,271,998. COMBINED BLANK-CHECK AND PAID-VOUCHER HOLDER. EDWIN P. BENSON, New York, N. Y. Filed Mar. 2, 1918. Serial No. 219,944. (Cl. 283—57.)



1. A device of the kind described including an envelop provided with a flap, a plurality of checks loosely contained within the envelop, indicia upon the front face of the envelop for the keeping of a record to identify the owner of the envelop, and indicia upon the back of the envelop and the inner face of the flap for the making of records of bank deposits and of checks issued, the indicia for the records of checks issued corresponding with the number of checks contained in the envelop.

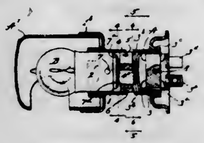
2. A device of the kind described including an envelop provided with a flap, a plurality of checks loosely contained within the envelop, indicia upon the front face of the envelop for the keeping of a record to identify the

owner of the envelop, and indicia upon the back of the envelop and the inner face of the flap for the making of records of bank deposits and checks issued, the indicia for the records of checks issued corresponding with the number of checks contained in the envelop, and means independent of the envelop flap for keeping the checks within the envelop.

3. A device of the kind described including an envelop provided with a flap, a plurality of checks loosely contained within the envelop, indicia upon the front face of the envelop for the keeping of a record to identify the owner of the envelop, and indicia upon the back of the envelop and the inner face of the flap for the making of records of bank deposits and checks issued, the indicia for the records of checks issued corresponding with the number of checks contained in the envelop, the envelop and the contained checks bearing an identical symbol.

4. A device of the kind described including an envelop provided with a flap, the back face of the envelop having secured thereto a plurality of blank checks and provided underneath said checks with indicia for making a record pertaining to bank deposits made, the inner face of the flap provided with indicia for making a record of checks issued corresponding in number with the number of checks initially carried by the envelop, and the outside of the envelop carrying indicia for making a record to identify the owner of the envelop, the checks when paid adapted to be inserted within the envelop for permanent safekeeping.

1,271,999. ELECTRIC CONNECTOR. JOHN BERG, Chicago, Ill., assignor to Metal Specialties Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed July 20, 1917. Serial No. 181,893. (Cl. 173—349.)



2. A device of the character set forth comprising a shell provided with median lateral segmental slots having recesses at one side of their end-portions, a lamp having a shank secured in one end of said shell and equipped at the inner end with contacts, a plug secured in the other end of said shell and equipped with spring-contacts, and an interposed rotatable switch-disk of insulating material adapted to oscillate with relation to both said lamp-shank and plug and provided with a lateral actuating stud which is normally out of engagement with the walls of said slots and provided also with metal contact-posts extending through said disk and having extremities at one end adapted to engage said spring-contacts and extremities at the other end adapted to be thrown into and out of registration with said lamp-contacts by oscillation of said switch-disk.

[Claims 1 and 3 not printed in the Gazette.]

1,272,000. METALLIC JOINT. BERNARD J. D. BLACKMORE, Oconomowoc, Wis., assignor of one-third to Percy S. Brukaker, Chicago, Ill. Filed Nov. 3, 1913. Serial No. 798,946. (Cl. 78—54.)

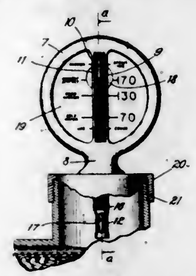


A joint comprising lapped metallic plates, having a longitudinal row of alined rivet openings, the adjacent faces of said plates also having a pair of longitudinally extending grooves, disposed one on each side of the row of rivet openings, a fusible bond strip disposed between the plates and consisting of a thin, soft metallic ribbon having openings to aline with those in the plates, said ribbon being of a width equal to the distance between said longitudinal grooves, and beads formed on the longitudinal edges of the ribbon and disposed in said grooves in the plates, and securing rivets extending through their openings, said bond strip being so disposed with respect to the rivets in assembled position as to be fused by the heat incidental to applying said rivets.

1,272,001. PREPARATION OF NEW FERTILIZER. GUIDO BORGHESANI and GIUSEPPE STAMPA, Rome, Italy. Filed Apr. 7, 1917. Serial No. 160,559. (Cl. 71—7.)

In the preparation of fertilizer, a process which consists in mixing phosphoric mineral, potassic mineral and sodium bisulfate, subjecting the mixture to a temperature sufficient to fuse the mass, cooling the fused material, and reducing the same to the form of powder containing phosphoric acid and potash soluble in 2% citric acid.

1,272,002. INDICATING DEVICE FOR AUTOMOBILES. HARRISON HURLBERT BOYCE, Forest Hills, N. Y. Filed Aug. 26, 1913. Serial No. 786,660. (Cl. 73—52.)



1. In combination with the radiator cap of an automobile, an annular supporting frame, a plate mounted therein and provided with an indicating scale, a temperature responsive indicating means positioned contiguous to said plate, and coöperating therewith, and a pair of protecting members extending transversely of said supporting frame and disposed in close proximity to said temperature indicating means to prevent injury thereto.

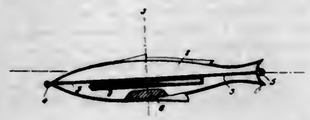
7. The combination with a radiator filler cap of an automobile, said cap having an opening, of a frame having a base adapted to rest upon said filler cap, said base having an opening therethrough and an internally screw-threaded socket formed in its lower surface around said opening, a thermometer mounted within said frame and having a portion extending through the opening in the base thereof and adapted to depend through the opening in the filler cap into the radiator and a sleeve adapted to protect the depending portion of said thermometer tube and also to form means for attaching said instrument to said filler cap, said sleeve having a continuous thread cut on a portion of its outer surface, the upper threaded end of said sleeve screwing into the threaded socket in the base of said frame, the threaded portion of the sleeve projecting through the opening in said filler cap and a nut screwing on the threaded portion of said sleeve below said filler cap for clamping said instrument and filler cap together.

[Claims 2 to 6 not printed in the Gazette.]

1,272,003. ARTIFICIAL FISH-BAIT. LOWRIE W. CAMERON, Vancouver, British Columbia, Canada. Filed Sept. 25, 1917. Serial No. 193,107. (Cl. 43—30.)

1. An artificial bait which comprises an elongated body, a rod passing through the body in substantially the central axis thereof, a closed tube carried by the rod, and a freely shiftable weight sealed within the tube.

6. An artificial fish bait, comprising the combination with a hermetically sealed hollow body shaped to resemble a fish, the tail of which is laterally bent to one side, a rod with an eye at each end passing lengthwise through and secured to the body, the eye at the head end being laterally



bent opposite the tail, ballast to maintain the body on an even keel and to normally maintain the longitudinal axis substantially horizontal, and a tube lengthwise disposed along the axial stem, said tube having a small quantity of mercury sealed within it.

[Claims 2 to 5 and 7 to 9 not printed in the Gazette.]

1,272,004. GUM-WRAPPER. JOHN S. CAMPBELL, Owatonna, Minn. Filed June 11, 1917. Serial No. 174,048. (Cl. 229—87.)



1. A gum wrapper having a gummed surface on both sides at one end, one of said gummed surfaces adhering to the tinfoil covering of the gum and the other gum surface adhering to the other end surface to hold the wrapper on the gum, said wrapper having a tab which, when pulled, will remove a section of said wrapper and a corresponding section of the tinfoil adhering thereto.

2. A gum wrapper having gummed inner and outer surface at one end, said gummed inner surface adhering to the tinfoil in which the gum is inclosed, the other gummed surface adhering to the other end of the wrapper holding it on the gum, the ends of said wrapper having tabs arranged to register with each other and said ends being perforated transversely adjacent said tabs, whereby a pull on said tabs removes a section of the wrapper along said perforations and that portion of the tinfoil adhering thereto.

1,272,005. [WITHDRAWN.]

1,272,006. ARTIFICIAL HAND AND ARM. LOUIS G. CARON, Toronto, Ontario, Canada. Filed Dec. 15, 1917. Serial No. 207,335. (Cl. 3—12.)



1. In an artificial hand, the combination with a finger and a thumb, one being pivoted so that it may be swung toward the other, of a hook extending in substantially the same direction as the finger and thumb and pivoted at the opposite side of the palm from the thumb to swing in opposition to the finger.

2. In an artificial hand, the combination with a grasping member comprising a plurality of curved fingers in fixed relationship to one another, and a grasping member formed as a thumb, one member being pivoted so that it may be swung toward the other, of a hook extending in substantially the same direction as the finger and thumb and pivoted at the opposite side of the palm from the thumb to swing in opposition to the fingers.

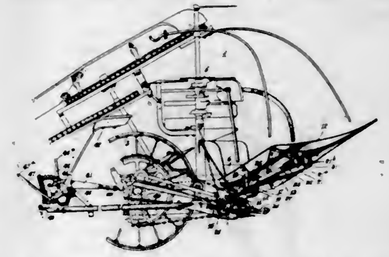
6. The combination of a wrist member having a cupped socket formed at its outer end; a hand member having a hollow ball formed thereon adapted to engage the socket, said ball having intersecting slots formed therein; a headed bolt screwed into the wrist member having its head adapted to engage the inner surface of the hollow ball while its stem passes through a slot; and a pin connected to the stem of the bolt and extending laterally, the wrist member being slotted for its passage.

9. The combination of a forearm member; a wrist member journaled thereon on an axis longitudinal of the forearm member; a T-lever fulcrumed on the forearm member having its stem engaged with the wrist member to turn the same; an upper arm member hinged to the forearm member; cable operating means connected to the upper arm member adjacent the hinge pin; a cable secured to said cable operating means and having its ends connected to the arms of the T-lever.

15. In an artificial hand, the combination of a finger; a thumb pivoted to swing in opposition to the finger and jointed to permit of the tip swinging in a direction transversely of the hand; a spring tending to move the thumb away from the fingers; pawl and ratchet rack mechanism for holding the thumb; and a spring tending to move the tip of the thumb toward the hand.

[Claims 3 to 5, 7, 8, and 10 to 14 not printed in the Gazette.]

1,272,007. BUNDLE-CARRIER FOR GRAIN-BINDERS. HENRY J. CASE, Poughkeepsie, N. Y., assignor to Moline Plow Company, a Corporation of Illinois. Filed May 11, 1916. Serial No. 96,772. (Cl. 56—37.)



1. In combination with a machine frame, a support mounted thereon and swingable about an axis, a bundle carrier pivoted to the support so as to move bodily therewith from receiving to discharging position, and so as to move also relatively to the support up and down at its outer edge to discharge the bundles, a fixed supporting track beneath the carrier, a member on the under side of the carrier at that side of its pivotal axis which moves downwardly in the discharge of the bundles, said member traveling on the track and acting to support the carrier in its bodily movement with the support, and said track being formed with a depressed portion in which said member of the carrier will enter as the carrier reaches its discharging position and will thereby permit the carrier to tip on its axis and discharge the bundles.

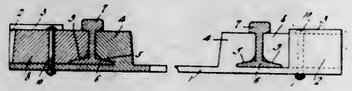
2. In combination with a machine frame, a supporting arm mounted thereon to swing about an axis, a bundle carrier extending substantially longitudinally of the arm and pivoted near one edge thereon to rock about an axis disposed longitudinally of the arm, whereby the opposite

edge of the carrier may swing up and down, said carrier being movable bodily with the arm from receiving to discharging position, means for controlling the movement of the carrier relatively to the arm, and a spring acting respectively on the arm and carrier and tending to swing the carrier upwardly relatively to the arm.

3. In combination with a machine frame, a substantially horizontal supporting arm mounted thereon to swing about an inclined axis, a bundle carrier extending longitudinally above said arm and pivotally supported thereon to swing down relatively thereto and discharge the bundles sidewise therefrom, and a fixed inclined track beneath the carrier, which is operatively engaged by the carrier and thereby supporta the same in its bodily movement with the arm, said track being so formed that when the carrier reaches its discharging position, it will be permitted to rock relatively to the supporting arm and thereby discharge the bundles.

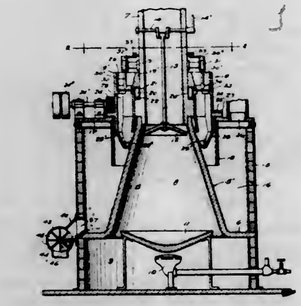
[Claims 4 to 18 not printed in the Gazette.]

1,272,008. RAILROAD-TIE. CHARLES WALTER CASON, Sr., Camden, N. J. Filed Nov. 2, 1917. Serial No. 199,936. (Cl. 238—5.)



A tie comprising a base plate, blocks rising from the base plate toward the ends thereof and adapted to engage the inner faces of parallel rails, a housing on each end of the base plate and spaced from the block, a rail contacting member slidable in the housing, said member formed with a rack thereon, a pinion journaled in the base plate and engaging the rack, and means for locking the pinion against rotation.

1,272,009. OXIDIZING APPARATUS. MANLEY J. CHAPLIN, Seattle, Wash., assignor to Robert A. Brown, New York, N. Y. Filed Mar. 15, 1917. Serial No. 154,987. (Cl. 263—22.)



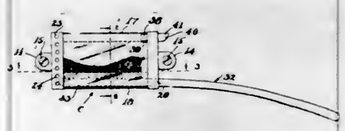
1. An annular retort of the class described, having a conoidal inner wall affording a furnace within the same, a chimney extending from the latter, a rotary receptacle surrounding said chimney and having spouts extending into the retort, a foraminated partition provided in said receptacle, means to revolve said receptacle, and adjustable means extending into the receptacle and rendered operable by the rotation of the latter to effect the feeding of said material through the partition into the respective spouts.

2. In combination with a retort of the class described, an annular receptacle rotatable about the axis of said furnace and having delivery spouts extending into the furnace, said receptacle being provided intermediate its height with a foraminated partition, a plurality of blades extending into said receptacle, means to rotate the receptacle, and means to coincidently adjust all of the blades to regulate the discharge of material through the various spouts during the rotation of the receptacle.

5. A retort having an outer peripheral wall provided with a slag-discharge opening, an inner furnace wall of a conoidal shape, a stationary floor connecting the lower end of said furnace wall with said peripheral wall, means to feed material to be treated upon the furnace wall, and revoluble means to remove the slag from said furnace wall and the floor and direct the slag into said discharge opening.

[Claims 3 and 4 not printed in the Gazette.]

1,272,010. CASING FOR TOILET ARTICLES. ERNEST F. CIGLIA, New York, N. Y., assignor to Sanit-Air Company, Inc., New York, N. Y., a Corporation of New York. Filed June 5, 1915. Serial No. 32,272. (Cl. 248—63.)



1. A casing for holding a tooth brush and protecting the same from foreign material such as dust or the like, anchoring means in said casing for properly securing said tooth brush in place, said anchoring means comprising clamping arms between which the tooth brush is secured, and tongues struck out from such clamping arms for engaging the bristles of the tooth brush while the main portions of said clamping arms engage the frame of said tooth brush.

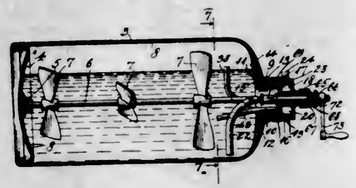
2. A casing for holding toilet brushes comprising a casing having a rear end wall provided with ventilating perforations, a front end wall provided with a perforation for the entrance of the brush also providing ventilation, and a second perforation; an envelop containing a brush treating substance adapted to be removably secured in the casing by being passed in through the second perforation in the end wall; a resilient spring means for securing the envelop, and like means for securing the brush, in the casing against accidental displacement.

1,272,011. VIOLIN, MANDOLIN, AND OTHER STRINGED MUSICAL INSTRUMENT. WILLIAM C. CLOPTON, St. Louis, Mo. Filed Dec. 12, 1916. Serial No. 136,441. (Cl. 84—44.)



A violin as heretofore made and adjusted comprising a body with the usual interior end blocks fitted with a bar set longitudinally in the air chamber thereof and extending from the one block to the other, the block at the neck end being provided with a vertical socket of greater length than width, and having closed ends; the other or butt end block being provided with a vertical slot of greater length than the depth of the end of the bar set therein, together with means for closing the slot above the bar to hold the end securely in position; the bar consisting of a strip of resilient material of uniform thickness and enlarged or wider ends closely fitting the slots without rigidly adhering thereto, and having a straight upper edge and a lower edge slightly inclined longitudinally—the bar being set in said blocks so that its upper edge is at a substantial distance from the belly.

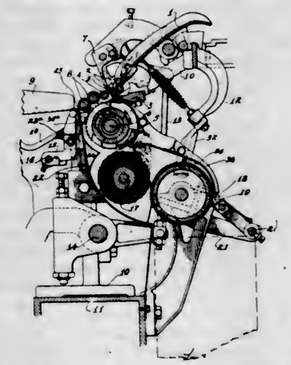
1,272,012. FIRE-EXTINGUISHING APPARATUS. MAURICE N. CONNOR, Buffalo, N. Y., assignor to Frank W. Carter, Buffalo, N. Y. Filed Jan. 29, 1913. Serial No. 744,870. (Cl. 169—72.)



1. In fire extinguishing apparatus, a tank horizontally disposed, a head at one end comprising a water inlet and discharge chamber, an overflow and gas outlet chamber, and a gas inlet chamber, a discharge connection leading from the water inlet and discharge chamber, a pipe leading from said chamber into the tank near the bottom thereof, a connection leading from the overflow and gas discharge chamber, a pipe leading from this chamber to a point near the top of the tank, a connection leading from the gas inlet chamber to the outside of the head, a pipe from the same chamber for discharging its gas downward into the tank, and means for supplying gas to the gas connection.

[Claims 2 to 5 not printed in the Gazette.]

1,272,013. COMBER-CASING. FRANK L. CROCKETT, North Uxbridge, Mass., assignor to The Whitin Machine Works, Whitinsville, Mass., a Corporation of Massachusetts. Filed Dec. 10, 1915. Serial No. 66,049. (Cl. 19—6.)



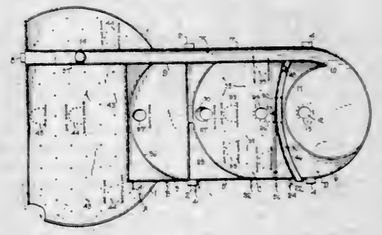
2. In a cotton comber, the combination with the comb cylinder, rotary brush and doffer cylinder, of a casing comprising a fixed front wall having end wall sections permanently affixed thereto and shaped to accommodate the comb and brush shafts, and supplementary end wall sections engaging said first mentioned end walls from the opposite sides of said shafts.

5. In a comber, the combination with the comb cylinder, doffer brush and doffing cylinder, of a casing therefor comprising front and rear walls and end walls, the latter embracing the comb and brush shafts, and closing in the ends of the comb cylinder and brush, and a packing applied to said end walls around one of said shafts.

8. In a cotton comber, the combination with the piecing rolls, comb cylinder, rotary brush and doffer cylinder, of a casing inclosing the ends and sides of the comb cylinder and brush and comprising a front wall extending from the piecing rolls to a point adjacent the lower end of the doffer cylinder, end walls provided with shelf bearings and rear walls removably seated on said bearings.

[Claims 1, 3, 4, 6, 7, and 9 to 11 not printed in the Gazette.]

1,272,014. GAME APPARATUS. JESSE W. DARBY, Laporte, Ind., assignor of one-half to John Lloyd Witter, Laporte, Ind. Filed Sept. 1, 1917. Serial No. 189,312. (Cl. 46—61.)



1. A game apparatus comprising a plurality of playing fields in superimposed relation and over which a projectile is adapted to travel, each of the upper fields being provided with an opening arranged above the fields immediately therebeneath, and a swinging valve underlying each of said openings and having its free end disposed rearwardly.

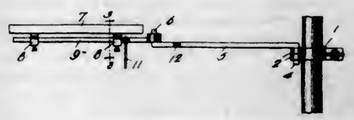
5. A game apparatus comprising a plurality of playing fields in superimposed relation and over which a projectile is adapted to travel, the upper fields being provided with openings arranged above the fields immediately therebeneath, and upstanding pins carried by each of the playing fields.

11. A game apparatus comprising a playing field over which a projectile is adapted to traverse, an inclined trackway, a member arranged beneath the trackway and provided with pins extending loosely through the trackway, means for normally maintaining the member substantially in contact with the trackway, and means for moving the member away from the trackway.

13. A game apparatus comprising a playing field over which a projectile is adapted to traverse, an inclined track way, a member normally obstructing the track way, and means for moving said member in a position to free the track way.

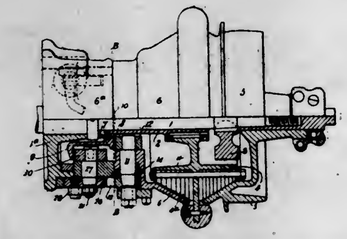
[Claims 2 to 4, 6 to 10, 12, and 14 not printed in the Gazette.]

1,272,015. TRAY-SUPPORT. WILLIS M. DAVIS, Concord, Mass. Filed June 21, 1916. Serial No. 104,982. (Cl. 45—82.)



A device of the class described comprising a clamp having jaws provided with sockets, an arm having oppositely directed and vertically disposed pintles carried by its ends, one of said pintles being pivotally engaged in said sockets whereby to connect said jaws, a rod having a socket at one end for receiving the other pintle, whereby said rod will swing in a horizontal plane, a tray having clamps carried thereby for engaging said rod to permit of an adjustment of the tray about the same as a pivot, and means for connecting the arm and rod to hold the same in angular relation.

1,272,016. DRIVING AND STOPPING MECHANISM. MARK THOMAS DENNE, Rushden, England. Filed Sept. 22, 1914. Serial No. 863,023. (Cl. 74—46.)

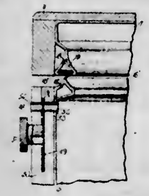


1. In a driving and stopping mechanism for use in connection with high speed machines, the combination with a shaft, of a driving element, a treadle-operated connection, means to cause the shaft to be clutched to the driving element upon movement of said connection in one direction, means to unclutch said shaft from said driving element and bring said shaft to rest upon movement of said connection in an opposite direction, and means to reverse the direction of rotation of the shaft and bring it to rest in a predetermined position on a second movement of said connection in the first-named direction.

3. In a driving and stopping mechanism, the combination with a shaft, of a driving pulley loose thereon, a treadle-operated connection, means operated by a partial movement of said connection in one direction to clutch said shaft to said pulley whereby the shaft will rotate at full speed and upon a further movement of said connection in the same direction to bring about a reduction in the speed of rotation of the shaft.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,272,017. HUMIDOR. MOSES S. DIAMOND, New York, N. Y. Filed Aug. 27, 1917. Serial No. 188,427. (Cl. 217—56.)

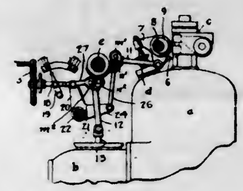


1. The combination with a receptacle and cover therefor, one having a bead at its edge and the other having a groove to be entered by said bead when the cover is closed, of an elastic gasket strip having its edges secured to the margins of the groove and normally held taut across the entrance thereof with a cavity in the groove behind it, whereby said gasket will be stretched by the bead entering the groove when the cover is closed.

[Claim 2 not printed in the Gazette.]

1,272,018. VALVE-GEARING FOR INTERNAL-COMBUSTION ENGINES. CARL DIETZE, Winterthur, Switzerland, assignor to Busch-Sulzer Bros.-Diesel Engine Company, St. Louis, Mo., a Corporation of Missouri. Filed Nov. 18, 1914. Serial No. 872,703. (Cl. 123—41.)

1. In an internal combustion engine, the combination with fuel and starting valves, of a common cam shaft carrying sets of cams for both valves, each set comprising cams placed for forward and backward running, respectively, rockers for operating said valves, valve-operating links pivotally connected at one end with said rockers and having their opposite ends positioned to be shifted about such pivotal connection transversely of said common cam shaft, sets of cam rolls carried by said ends of the links in arrangement to coöperate with the forward and backward operation cams on the cam shaft, a reversing control device and connections for shifting the valve links, and a further control device operative upon the valve rockers to place the valves selectively into and out of operation.



2. In an internal combustion engine, the combination with fuel and starting valves, of a common cam shaft carrying sets of cams for both valves, each set comprising cams placed for forward and backward running, respectively, operating connections interposed between the cam shaft and the valves, said connections including shiftable members carrying sets of cam rolls arranged for coöperation with the corresponding forward and backward operation cams on the common cam shaft, a reversing control operative upon said roll-carrying members, and a further control device operative upon the valve rockers to place the valves selectively into and out of operation.

3. In an internal combustion engine, the combination with a cylinder having a plurality of valves, of a cam shaft having for each of said valves separate cams set for forward and backward running, respectively, operating connections for the different valves shiftable into operative relation to the corresponding forward and backward cams alternately, a common reversing device connected with the operating connections of all the valves, and an independent timing device connected with a part only of said connections.

4. In an internal combustion engine, a cylinder having a plurality of valves, including a fuel injection valve, in combination with groups of cams for operating the different valves, each group comprising separate cams set for forward and backward running respectively, operating connections for the different valves having each separate cam rolls adapted to be brought into and out of operative relation to their respective forward and backward cams in alternation, a reversing device connected by linkage with all said connections to shift the same simultaneously, and means connected with said linkage for shifting the connection of the fuel injection valve independently of the connections of part or all of the other valves to vary the time and duration of fuel admission.

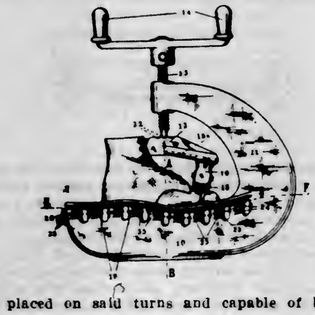
5. In an internal combustion engine, a cylinder having a plurality of valves including a fuel valve, in combination with groups of cams for operating the respective valves, each group comprising cams set for forward and backward running respectively, connections for operating the valves from the cams, and a control mechanism operable upon all said connections for reversing and upon the operating connections of a part of the valves only for regulation of admission.

[Claims 6 to 8 not printed in the Gazette.]

1,272,019. SHOE-PRESS. EUGEN GOTTFRIED DIHLMANN, Leipzig-Reudnitz, Germany. Filed Feb. 24, 1917. Serial No. 150,853. (Cl. 12—33.)

2. In a shoe press, a sole support composed of a number of interconnected tension elements arranged side by side and normally loose, being adapted to assume a uniform tension and to accommodate themselves to the surface of a shoe pressed thereupon.

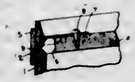
10. In a shoe press, a support for the shoe to be worked, having a rigid frame, a cord interlaced in turns to and fro about the said frame, means adapted to support the turns singly at different heights, and a yielding



liner placed on said turns and capable of bearing the shoe.

[Claims 1, 3 to 9, 11, and 12 not printed in the Gazette.]

1,272,020. BARREL-HEAD FASTENER. PATRICK J. DINN, Roxbury, Mass. Filed July 17, 1916. Serial No. 109,618. (Cl. 217—89.)

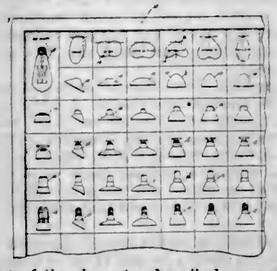


1. The combination of a barrel having an interior annular groove adjacent the head end; head-members having portions formed to engage the groove; a key-member having one end formed to engage said groove; a plate demountably secured to the key-member at its other end; a lip formed on the central major portion of the edge of the plate and engaging the said barrel groove, the remainder of the edge of the plate being formed to rest against the barrel adjacent the groove whereby the plate may be secured to key-members of greater width than the lip and a locked closure is provided for the barrel.

2. The combination of a barrel having an interior annular groove adjacent the head end, head-members having portions formed to engage the groove, a key-member having one end formed to engage the groove, a plate on the other end portion of the key-member, a terminal lip on said plate angularly projecting therefrom and adapted to engage the barrel groove and thereby lock the head and key-member in barrel closing position.

[Claim 3 not printed in the Gazette.]

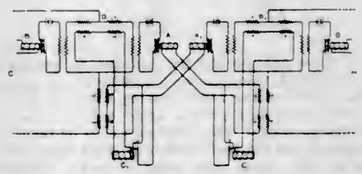
1,272,021. LIGHT-DISTRIBUTION CHART. HENRY D'OLIER, Jr., Bridgeport, Conn., assignor to Harvey Hubbell, Incorporated, Bridgeport, Conn., a Corporation of Connecticut. Filed Aug. 14, 1916. Serial No. 114,673. (Cl. 35—12.)



1. A chart of the character described, comprising a set of indications of different degrees of light concentration obtainable from a source of light of given intensity, coupled with a set of indications of devices capable of producing the said different degrees of light concentration, and a set of different fixture indications so disposed with respect to the set of indications of light concentration that the required combination of fixtures to produce the desired light concentration will be located at the intersection of an imaginary line extending from any one indication of light concentration, with one extending from any one indication of a fixture and at right angles with respect to the first line.

[Claim 2 not printed in the Gazette.]

1,272,022. TWO-WAY-REPEATER CIRCUITS. MIHRAN M. DOLMAGE, Washington, D. C. Continuation in part of applications Serial Nos. 30,664, 30,665, 30,666, and 30,667, filed May 26, 1915. This application filed Nov. 8, 1916. Serial No. 130,303. (Cl. 179—170.)



1. In a telephone system between two terminating stations, the combination with two telephone repeaters at each repeating station, each arranged for one-way repeating, but in opposite direction respectively to the said telephone system, both normally in full repeating relation to the said system, of voice actuated circuit making and breaking devices and circuit changing means controlled by the same for rendering inoperative that telephone repeater which is arranged for repeating in a direction opposite to the direction of transmission from the talking to the listening station.

3. In a telephone system between two terminating stations, the combination with two repeaters at each repeating station, each arranged for one-way repeating but in opposite directions respectively to the said telephone system, both normally in full repeating relation to the said system, of electromagnetic relays responsive to voice currents, circuit changing means controlled by the same for rendering inoperative that telephone repeater which is arranged for repeating in a direction opposite to the direction of transmission from the talking to the listening station.

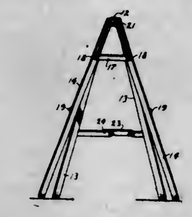
8. Two circuits and two-way repeating apparatus comprising amplifying means normally conditioned for transmission in either direction between said circuits, and means responsive to initial transmission in either direction to discontinue such condition for transmission in the opposite direction; whereby transmission is effected in either direction without initial hiatus or reflexion.

[Claims 2, 4 to 7, and 9 to 14 not printed in the Gazette.]

1,272,023. COLLAPSIBLE FRAME. GEORGE W. DUNN, Newport, Ky. Filed Oct. 26, 1915, Serial No. 58,034. Renewed Oct. 4, 1917. Serial No. 194,805. (Cl. 20—83.)

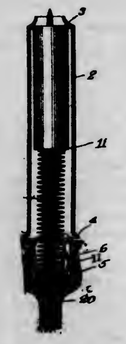
A collapsible frame consisting of an outer pair of props, an inner pair of props within the outer pair, the props of one pair being permanently pivoted to the props of the other pair approximately midway between the ends of the props, a supporting bar permanently pivoted near one of its ends between the upper ends of the props of the inner pair and provided with a notch in its under side near its other end where it is adapted to occupy a position between the spaced upper ends of the props of the outer pair, a stop bar extending across this space adapted to be received by the notch mentioned and bent to extend downwardly on the outer props to which props below

their upper ends it is non-rigidly connected at its ends by pivot bolts, a transverse brace also pivotally connected to said same props at each of its ends by these same bolts, and a sectional brace non-rigidly connected to the props of one of the pairs below the brace first mentioned, whereby, when said sectional brace is adjusted to its bracing position, the outer props are caused to spread below their pivotal connections to the other brace which connections become fulcrums on which the props swing so as to cause the upper ends of said props above said



brace to move against the sides of the supporting bar, thereby clamping the same and holding it by means of the engagement of the notch therein with the stop bar, the pivotal connection of this upper brace to the outer props being so spaced from the upper ends of these props as to produce the aforesaid clamping effect upon the supporting bar, the upper brace being of such a length that when the frame is collapsed, it permits the four props with the supporting bar between them to be compactly closed up against each other.

1,272,024. CANDLE-HOLDER. ROBERT W. L. DUNN, Trenton, N. J. Filed Dec. 30, 1916. Serial No. 139,895. (Cl. 67—27.)



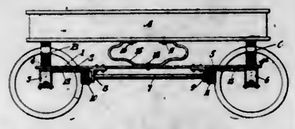
1. A candle holder comprising a barrel-formed member having an integral flange at its lower end, a prong-formed member, some of the prongs being longer than others, the longer prongs having clips adapted to receive the flange, and means for holding the clips thereon.

2. A candle holder comprising a barrel-formed member having a flange at its lower end, a spring-prong-formed member, the prongs thereof having clips for the reception of said flange, and a ring encircling said prongs for clamping the clips on the flange, said member having some of its prongs shaped to prevent the removal of the ring.

3. A candle holder comprising a barrel-formed member having a flange at its lower end, a spring-prong-formed member, the prongs thereof having clips for the reception of said flange, and a ring encircling said prongs for clamping the clips on the flange, said member having means for preventing the removal of the ring and recesses for holding it in place when the clips are secured on the flange.

[Claims 4 to 12 not printed in the Gazette.]

1,272,025. BRACE FOR VEHICLE RUNNING-GEAR. JOHN M. EADIE, New York, N. Y. Filed Oct. 16, 1915. Serial No. 56,205. (Cl. 21—143.)



1. In apparatus of the character described, the combination with a vehicle having means for turning the axles simultaneously, and oppositely, of a vehicle body, a reach, means for supporting the body and a longitudinal brace attaching the reach to the body of the vehicle.

2. In apparatus of the character described, the combination with a vehicle having means for turning the axles simultaneously, and oppositely, of a vehicle body, a reach, means for supporting the body and a longitudinal brace between the body of the vehicle and the reach located substantially midway between the axles.
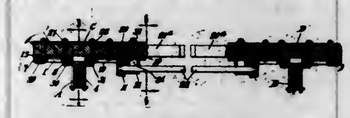
3. In apparatus of the character described, the combination with a vehicle having means for turning the axles simultaneously, and oppositely, of a vehicle body, bolsters between the axles and the body of the vehicle, and a reach secured to the bolsters and braced against moving longitudinally with respect to the body.

4. In apparatus of the character described, the combination with a vehicle having means for turning the axles simultaneously, and oppositely, of a vehicle body, a reach connecting the two axles, means mounted on the axles to support the body of the vehicle, and a brace between the body and the reach adapted to relieve the said supporting means from end thrust.

5. In apparatus of the character described, the combination with a vehicle having means for turning the axles simultaneously, and oppositely, of a vehicle body, a reach connecting the two axles, means mounted on the axles to support the body of the vehicle, and a brace between the body and the reach which yields to vertical pressure but opposes relative longitudnal motion of the body and the reach.

[Claims 6 to 11 not printed in the Gazette.]

1,272,026. STEERING AND TURNING DEVICE FOR VEHICLES. JOHN M. EADIE, New York, N. Y. Filed Oct. 16, 1915. Serial No. 56,207. (Cl. 21—143.)



1. In apparatus of the character described, the combination with the front and rear axles, of a fifth wheel on the front axle, a sixth wheel on the rear axle, racks on said wheels, a shaft having pinions to engage said racks, bearing plates for said fifth and sixth wheels secured to the body of the vehicle, a reach supported on arms integral with the plates, and hangers engaging the shaft adjacent said pinions and fitted into and supported by the said arms.

2. In apparatus of the charcter described, the combination with the front and rear axles, of a fifth wheel on the front axle, a sixth wheel on the rear axle, racks on said wheels, a shaft having pinions to engage said racks, bearing plates for said fifth and sixth wheels secured to the body of the vehicle, a resilient reach supported on arms integral with the plates and hangers engaging the shaft adjacent said pinions and fitted into and supported by the said arms.

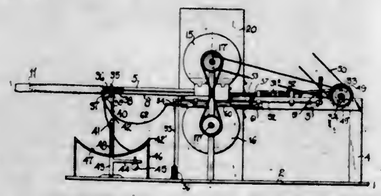
3. In apparatus of the character described, the combination with the front and rear axles, of a fifth wheel on the front axle, a sixth wheel on the rear axle, racks on said wheels, a shaft having pinions to engage said racks, bearing plates for said fifth and sixth wheels secured to the body of the vehicle, a reach comprising a wooden bar reinforced with spring steel, hangers engaging the shaft close to the pinions, the said reach and hangers being rigidly clamped to the said plates.

4. In apparatus of the character described, the combination with the front and rear axles, of a fifth wheel on the front axle, a sixth wheel on the rear axle, racks on said wheels, a shaft having pinions to engage said racks, bearing plates for said fifth and sixth wheels secured to the body of the vehicle, a reach supported on arms integral with the plates, hangers engaging the shaft adjacent said pinions and fitted into and supported by the said arms, the said arms being flanged to fit the reach and hangers, and means for clamping the reach and hangers adjustably to the said arms.

5. In apparatus of the character described, the combination with the front and rear axles, of a fifth wheel on the front axle, a sixth wheel on the rear axle, racks on said wheels, a shaft having pinions to engage said racks, bearing plates for said fifth and sixth wheels secured to the body of the vehicle, a reach supported on arms integral with the plates, hangers engaging the shaft close to the pinions, the said arms being of I-beam section adapted to take the reach in the upper channels and the hangers in the lower channels, and means for clamping the reach and hangers rigidly to the said arms.

[Claims 6 to 13 not printed in the Gazette.]

1,272,027. PAD-STUFFING MACHINE. ELLIS G. EDMONSON, Greenfield, Ohio, assignor to The American Pad & Textile Company, Greenfield, Ohio, a Corporation of Ohio. Filed Aug. 18, 1917. Serial No. 186,950. (Cl. 69—4.)



1. In an apparatus of the character described, a casing, means for moving padding material through said casing, means arranged to engage the article to be stuffed and to hold it upon said casing, means for yieldingly restraining the movement of said article relative to the casing as it is being stuffed, means for disengaging said engaging means from the article after the article has been stuffed, and means for supporting said casing and movable with the article to be stuffed.

3. In a stuffing mechanism of the character described, a casing insertible in the article to be stuffed, said casing being rectangular in cross section and having inwardly and forwardly extending prongs upon opposite walls, and a plunger reciprocating through the casing and including a relatively flat plate having a width approximately the width of the casing and having outwardly and forwardly extending resilient prongs mounted upon opposite faces and confronting the prongs on the casing but being disposed in staggered relation thereto.

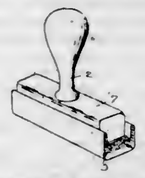
5. In a stuffing mechanism, a casing insertible into the article to be stuffed and having oppositely disposed openings at its rear end, a flat packing plunger reciprocable through said casing and extending transversely across the same, the plunger being provided upon its opposite faces with forwardly projecting prongs and the confronting walls of the casing being also provided with forwardly projecting prongs, means for reciprocating the plunger, and means for feeding packing material into the openings on each side of the plunger.

7. In a stuffing machine, a casing insertible into the article to be stuffed and having oppositely disposed openings at its rear end, a flat packing plunger reciprocable through said casing, and having means upon its opposite faces for engaging the stuffing material, the walls of the casing also having means for retaining stuffing material from rearward movement, means for reciprocating the plunger, oppositely disposed drums communicating with the openings in the casing, and means for feeding packing material into said drums.

10. In a stuffing machine, a casing insertible into the article to be stuffed, said casing being rectangular in cross section and provided upon its opposite faces with forwardly directed prongs, a packing plunger reciprocable within the casing and having a width equal to that of the casing and being formed upon its opposite faces with forwardly projecting prongs, the walls of said casing at its forward end being outwardly yieldable to pressure from within the casing and the side walls of the casing at its forward end being longitudinally slotted, and packing members hingedly mounted upon the forward end of the plunger and resiliently urged outward through said slots as the plunger moves forward.

[Claims 2, 4, 6, 8, 9, and 11 to 26 not printed in the Gazette.]

1,272,028. HAND-STAMP. BEVERLY P. EVANS and ALEXANDER M. FISHER, Washington, D. C. Filed Dec. 14, 1916. Serial No. 137,003. (Cl. 101—125.)



1. In a hand stamp, a channeled member carrying a printing pad, a pattern sheet located beneath said pad and having its free ends extending upwardly and reversely within the channel of said member, and a handle engaging the side walls of said channeled member to secure said sheet in position.

5. The combination with a hand stamp, comprising a handle member and a clasp member, one of the members bearing a pad, of a pattern sheet underlying the pad and opposite edge portions thereof fitting between the members, the latter slidably engaged one with the other and with said edge portions of the sheet to secure the sheet in proper relative position and stretch the same across the pad.

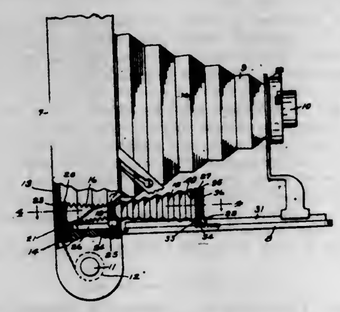
[Claims 2 to 4 not printed in the Gazette.]

1,272,029. AUTOGRAPHIC DEVICE FOR CAMERAS. CHARLES C. FINN, Seattle, Wash. Filed Apr. 27, 1916. Serial No. 93,848. (Cl. 95—1.1.)

1. The combination with a folding camera having a main substantially pyramidal bellows and adapted for the reception of a film, of an auxiliary smaller bellows adjacent the base of said pyramidal bellows, means for making light-proof contact between said film and the inner end of said auxiliary bellows, a translucent autograph plate associated with the outer end of said auxiliary bellows, and a shutter interposed in said auxiliary bellows between said autograph plate and said film.

8. The combination with a camera having a bellows adapted for the reception of a film, of a transverse shaft, a rectangular frame secured on said shaft, means for turning said shaft to vary the angle of inclination of said frame, padding of soft material for said frame and said shaft, a smaller bellows adapted to telescope within said camera bellows and secured at its inner end to said frame, a lens and shutter mechanism provided on the forward end of said smaller bellows, another smaller bellows connected with said lens and shutter mechanism and extending outward in diverging relation thereto in substantial alinement with said first-named smaller bellows, a transparent plate in the forward end of said last-named smaller bellows, an autograph plate removably associated with

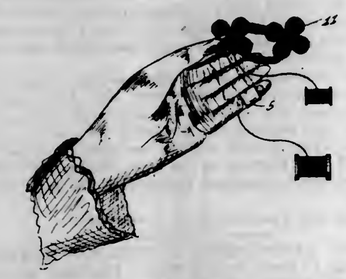
the forward end of said last-named smaller bellows, means for opening the shutter in said shutter mechanism, and means for preventing the opening of said shutter when said frame is in an inclined position.



9. The combination with a folding camera having a substantially pyramidal bellows through which a picture may be projected onto a sensitized film, of a second smaller and shorter bellows adjacent the base of said pyramidal bellows and through which an inscription may be projected on said film, said bellows being connected and arranged with respect to each other so that the inscription will be projected on the film within the field of the first named bellows.

[Claims 2 to 7 not printed in the Gazette.]

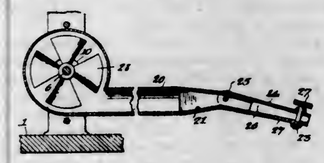
1,272,030. THREAD-HOLDER. EMMA M. FORT, Glidden, Iowa. Filed Apr. 2, 1914. Serial No. 829,124. (Cl. 66—17.)



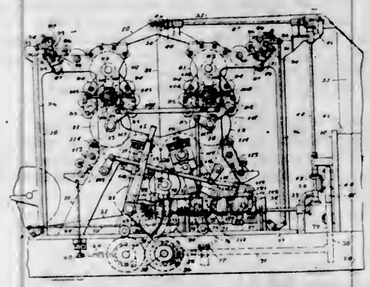
As a new article of manufacture, a thread holder consisting of a relatively wide ring having an ear projecting axially from each side edge thereof, said ears being alined and curved in the direction of the curvature of the ring and located wholly within the plane of that portion of the ring from which they project, each ear being provided with openings of different sizes, and said ears being adapted to extend longitudinally of the finger to which the article is applied.

1,272,031. DISCHARGE-NOZZLE. OTTO ADOLPH GOHMERT, Yorktown, Tex. Filed June 19, 1916. Serial No. 104,583. (Cl. 43—14.)

In an insecticide distributer, a discharge spout, a nozzle therefor including a plate having opposite edges outwardly diverging and the smaller end of the plate integrally secured to the discharge pipe, side walls formed upon the diverging edges of said plate, a cover plate for said nozzle having opposite edges outwardly diverging, and having its diverging edges bent at right angles to embrace the walls of the bottom plate, a pin entering said walls and edges of the top and bottom plates, said bottom plate having a threaded aperture adjacent its outer edge and the top plate a smooth opening for registration therewith, and an adjusting screw penetrating the openings whereby to space the plates, toward or away from each other.



1,272,032. PLANOGRAPHIC-PRINTING MACHINE. SAMUEL G. GOSS, Glencoe, Ill., assignor to The Goss Printing Press Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 19, 1916. Serial No. 137,762. (Cl. 101—143.)



1. In a printing machine, the combination of a form-cylinder, a folder, variable speed mechanism for driving said form-cylinder and said folder at normal high speed in operative relation to each other, and means serving to throw said folder out of operation when the driving mechanism is shifted from its high speed to its low speed.

2. In a printing machine, the combination of a form-cylinder, a folder, driving mechanism comprising a high speed shaft and a low speed shaft, means operatively connecting said high speed shaft with said form-cylinder and said folder for driving them at normal speed in operative relation to each other, and means operatively connecting said low speed shaft with said form-cylinder adapted to permit said folder to remain silent upon the low speed driving.

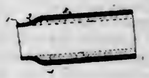
9. In a planographic printing machine, the combination of a form-cylinder, a transfer cylinder movably mounted adjacent to said form-cylinder and adapted to coöperate therewith, variable speed mechanism for driving said form-cylinder at either high speed or low speed, and means for throwing said high speed driving mechanism out of operation and for simultaneously moving said transfer cylinder out of operative contact with said form-cylinder.

14. In a planographic printing machine, the combination of a form-cylinder, a transfer cylinder movably mounted adjacent to said form-cylinder and adapted to coöperate therewith, inking mechanism for applying ink to said form-cylinder, water mechanism for applying water to said form-cylinder in advance of the application of ink thereto, variable speed mechanism for driving said form-cylinder at either high speed or low speed, a movable member by a partial operative stroke of which the high speed driving mechanism is thrown out of operation, means actuated by the next following portion of the stroke of said movable member for cutting off the supply of fresh ink from said inking mechanism, means actuated by the succeeding portion of the stroke of said movable member for throwing said inking mechanism out of operative position relative to said form-cylinder, and means actuated by the succeeding portion of the stroke of said movable member for throwing said water mechanism out of operation.

19. In a planographic printing machine, the combination of a form-cylinder, a transfer cylinder movably mounted adjacent to said form-cylinder and adapted to coöperate therewith, inking mechanism for applying ink to said form-cylinder, water mechanism for applying water to said form-cylinder in advance of the application of ink thereto, variable speed mechanism for driving said form-cylinder at either high speed or low speed, cam means adapted upon a partial rotation to throw said high speed mechanism out of operation, means actuated by the next-succeeding portion of the rotation of said cam means for cutting off the supply of fresh ink from said form-cylinder, means actuated by the next-succeeding portion of the rotation of said cam means for throwing said inking mechanism out of operative position relative to said form-cylinder, and means operated by the next-succeeding portion of the rotation of said cam means for throwing said water mechanism out of operative position relative to said form-cylinder.

[Claims 3 to 8, 10 to 13, and 15 to 18 not printed in the Gazette.]

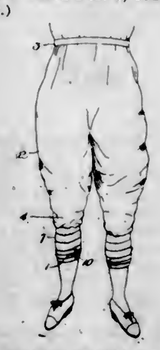
1,272,033. STEERING REACH-ROD. CLIFFORD GREENE, Cincinnati, Ohio, assignor to The Cincinnati Ball Crank Company, Oakley, Cincinnati, Ohio, a Corporation of Ohio. Filed Jan. 25, 1917. Serial No. 144,327. (Cl. 74—17.)



1. A steering rod connection consisting of an integral piece of tubing having a swaged end enlarging its diameter for providing a socket, and forming an annular shoulder portion as a juncture for the two different diameter portions of the tubing for providing a seat at the inner end of the socket, said enlarged end having its metal thickness increased to the normal metal thickness of the tubing.

2. A steering rod connection consisting of an integral piece of tubing having a swaged end enlarging its diameter for providing a socket, and forming an annular shoulder portion as a juncture for the two different diameter portions of the tubing for providing a seat at the inner end of the socket, said enlarged end having a thickness of metal equal to or greater than the normal metal thickness of the tubing.

1,272,034. NETHERGARMENT. MARJORIE T. GREGG, Boston, Mass. Filed Feb. 5, 1918. Serial No. 215,432. (Cl. 2—122.)



1. A nether garment having a closure and protection for the leg comprising fastening means, a strap adapted to be fastened to said fastening means and to be wound several times around the leg of the wearer thereby to cover and confine the lower end of the garment, and means adapted to encircle the leg of the wearer to hold the free end of the strap from unwinding.

[Claims 2 and 3 not printed in the Gazette.]

1,272,035. MILK-FOOD PRODUCT AND METHOD OF MAKING THE SAME. WILLIAM P. M. GRELCK, Lincoln, Nebr. Filed Dec. 26, 1916. Serial No. 138,724. (Cl. 99—11.)

1. The method of preparing a food product from soured milk which consists in subjecting the milk to the action of a steam jet, whereby the casein is precipitated and fixed in the form of minute mutually non-adherent particles.

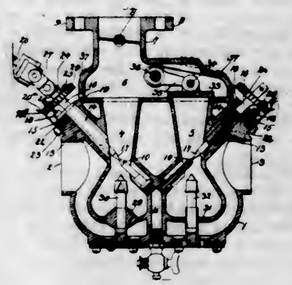
4. The method of preparing a food product from soured milk which consists in precipitating the casein, agitating the precipitated particles so that they become mutually non-adherent, and intermingling extract of malt with the said particles and removing the excess fluid therefrom.

6. As a new article of manufacture; a food product comprising malt extract and the solids of soured milk in which the casein is present in the form of fixed discontinuous particles.

11. A pasteurized acid milk food product having the casein thereof in minute precipitated fixed discontinuous non-adherent particles intermingled with extract of malt.

[Claims 2, 3, 5, and 7 to 10 not printed in the Gazette.]

1,272,036. CARBURETER. CHARLES R. GREUTER, Saugus, Mass. Filed Aug. 25, 1915. Serial No. 47,285. (Cl. 137—80.)

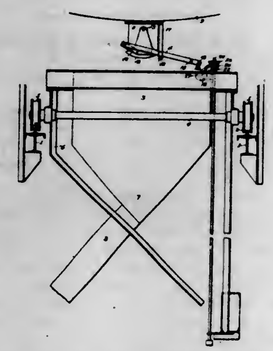


1. A carbureter comprising, in combination, a casing; a fuel nozzle mounted therein; a removable housing seated in a socket in said casing in axial alinement with said nozzle; a needle valve longitudinally adjustable in said housing and in axial relation thereto; a retaining device for said housing capable of application only when the housing is in its precise predetermined position; and a stop carried by the housing and co-acting with said needle valve to limit the movement of the latter toward said nozzle.

2. In a carbureter, the combination of a casing provided with a socket to receive a housing; a housing removably mounted in said socket; a needle valve longitudinally adjustable in said housing; a fuel nozzle mounted in the casing in axial alinement with the needle valve; a stop carried by the housing; and a co-acting stop carried by the needle valve, said stops serving by their co-action to limit the movements of the needle valve both toward and from the fuel nozzle, and said housing being made to closely fit within its socket and being held therein by a pin insertible only when the housing is perfectly seated in its predetermined position.

[Claim 8 not printed in the Gazette.]

1,272,037. MEANS FOR OPERATING OVERHEAD VALVES OF COALING APPARATUS. WILLIAM E. HALM, Philadelphia, Pa., assignor to R. H. Beaumont Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 5, 1917. Serial No. 205,520. (Cl. 214—41.)



1. The combination of a bunker having a discharge opening; a pivoted gate arranged to open and close said opening; two bars, one at each side of the gate and connected thereto; a cross rod connecting the ends of the two bars; a traveling lorry; a shaft; a hook on the shaft arranged to engage the rod and to move the gate to the open position; a vertical operating shaft having its bearings on the lorry structure; gearing between the vertical shaft and the hook shaft; and means for manually operating the vertical shaft so that on turning the shaft the hook will engage the rod and will open the gate.

3. The combination of a bunker having a discharge opening; a gate arranged to close said opening; two bars connected to the gate; means for supporting the bars; two rods connecting the outer ends of the bars; a lorry; a shaft on the lorry; and means for turning the shaft, said shaft having a hook arranged to enter the space between the two rods on the bars and operate the gate through said bars.

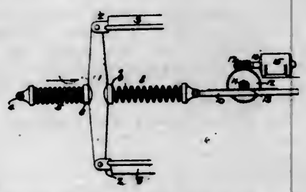
4. The combination of a bunker having a discharge opening; a pivoted gate arranged to close said discharge opening; a bar pivoted to the gate; a fixed support for the bar, said bar having a rod at its outer end; a traveling lorry arranged to move horizontally under the bunker; a shaft on the lorry structure; an arm on said shaft having a hook; a heel back of the hook and arranged to engage the rod on the end of the gate bar; a beveled gear wheel on said shaft; a vertical shaft on the lorry structure having a beveled gear wheel meshing with the bevel gear wheel on the hook shaft, said vertical shaft extending to the lower portion of the lorry structure and having a handle by which it can be turned.

[Claim 2 not printed in the Gazette.]

1,272,038. BRAKE. JAMES T. HALSEY, Philadelphia, Pa.; Sue Mason Maury Halsey administratrix of said James T. Halsey, deceased. Filed July 9, 1914, Serial No. 849,981. Renewed Dec. 4, 1917. Serial No. 205,436. (Cl. 188—16.)

1. In a vehicle, in combination with a braking element, a coiled spring having one end fixed to said vehicle and its opposite end acting upon said braking element, a second coiled spring, a motor for compressing said second spring to cause it to react upon the first spring to release the brake, and means operatively connecting said motor with said second spring.

4. The combination with a vehicle having a wheel, of a brake shoe in engagement with said wheel, a carrier for said brake shoe, a coiled spring anchored to the vehicle and having its free end in engagement with said carrier to apply its force to said brake shoe, elastic means for relieving the force exerted by said spring, a motor for actuating said elastic means, and means for operatively connecting said motor with the elastic means.

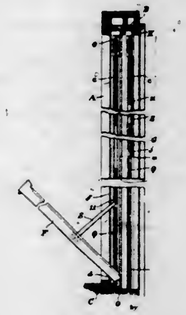


6. The combination, in braking mechanism, of a car, wheels supporting said car, brake shoes in engagement with said wheels, a brake beam carrying said shoes, a spring having one end anchored to the car and arranged to apply pressure from its opposite end to said brake beam, a second spring connected to the brake beam, a motor for applying pressure to said second spring to cause it to react upon the first spring and relieve the pressure exerted thereby upon the brake shoes.

8. The combination, in braking mechanism, of a car, wheels supporting said car, brake shoes in engagement with said wheels, a brake beam carrying said shoes, a spring having one end anchored to the car and arranged to apply pressure from its opposite end to said brake beam, a second spring arranged in line with the first spring, means for applying pressure to said second spring to relieve the pressure exerted by the first spring, said means including a rack and pinion, a worm wheel operating said rack and a motor for driving said worm wheel, and mechanism operatively connecting said motor and worm wheel and controllable from the front platform of the car.

[Claims 2, 3, 5, and 7 not printed in the Gazette.]

1,272,039. WINDOW. BERNARD HAUSMANN, New York, N. Y. Filed July 25, 1914. Serial No. 853,000. (Cl. 20—49.)



1. A window of the double hung counterweighted or counterbalanced type, having a sash which slides vertically in the usual manner and may be swung inwardly and retained in such position at any desired horizontal angle, grooves in the jamb of the window frame, movable slides retained in said grooves, said slides connecting with the sash chains, arms pivoted at one end to said slides, said arms being pivoted at the other ends to the sash, and holding devices for the pivotal connections of the arms and the sash, whereby the sash may be locked at any desired angle.

3. A window of the double hung counterweighted or counterbalanced type, having a sash which slides vertically in the usual manner and may be swung inwardly and retained in such position at any desired horizontal angle, grooves in the jamb of the window frame, movable slides retained in said grooves, said slides connecting with the sash chains, arms pivoted at one end to said slides, said arms being pivoted at the other ends to the sash, and holding devices for the pivotal connections of the arms and the sash, whereby the sash may be held at any desired angle, and locking devices for the pivotal connections of the arms and the slides, whereby the sash may be locked at any desired height in open position.

[Claims 2 and 4 not printed in the Gazette.]

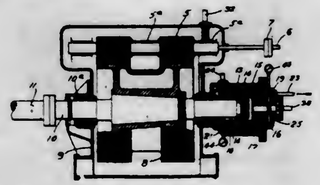
1,272,040. METHOD OF VULCANIZING AND MOLDING ARTICLES MADE OF RUBBER AND THE LIKE. LEON J. D. HEALY and ARTHUR A. FRANK, Milwaukee, Wis., assignors to The Federal Rubber Company, Cudahy, Wis., a Corporation of Massachusetts. Filed Sept. 17, 1917. Serial No. 191,742. (Cl. 18—53.)

2. The method of making articles molded from rubber or the like, which consists in partially vulcanizing the surface of the article to be molded by subjecting the article to be molded by subjecting the article to the action of an external chemical substance, and then molding and further vulcanizing the article.

8. The improvement in the method of making vehicle tires which consists in partially vulcanizing the surface of the tire by the action of sulfur chlorid, and then molding and further vulcanizing the tire.

[Claims 1, 3 to 7, and 9 to 11 not printed in the Gazette.]

1,272,041. COMBINATION GEARING AND THRUST-BEARING. HERBERT T. HEAD, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 26, 1915. Serial No. 41,928. (Cl. 64—25.)



1. In combination with a transmission gearing, a thrust block movably mounted on the casing of the gearing and operatively connected to the main gear of the transmission gearing, and means for restricting the movement of the thrust block.

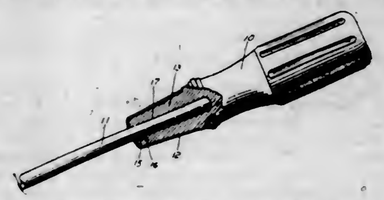
5. In geared marine turbine installations, a driving agent, a driven agent, a transmission gearing between said agents comprising a driving gear, and a driven gear operatively connected to the driven agent, and shiftable axially in its bearings in response to variations in longitudinal thrust imparted by said driven agent, a thrust bearing operatively connected to the driven gear and responsive in operation to the variations in the axial position of the driven gear, and a coupling between the driving gear and the driving agent, permitting said driving gear to shift axially without imparting thrust to the driving agent.

11. In a thrust bearing, a thrust imparting member, means coöperating therewith and subjected to fluid pressure for opposing the thrust in either direction imparted by said member, and means responsive to the thrust imparted by said member for varying the fluid pressure to which the first mentioned means is subjecttd.

15. In combination, a driving agent, a driven agent, a reduction gearing between said agents and comprising a driving gear, a driven gear shiftable longitudinally in response to axial thrust imparted thereto by the driven agent, and a thrust bearing mounted on the casing of the gearing and comprising a thrust imparting member operatively connected to the shaft of the driven gear, means for opposing longitudinal motion of the member by fluid pressure, and a valve responsive in operation to the movement of said member for varying the degree of fluid pressure opposing motion of said member.

[Claims 2 to 4, 6 to 10, and 12 to 14 not printed in the Gazette.]

1,272,042. SELF-FASTENING FERRULE FOR TOOL-HANDLES. WILLIS F. HOBBS, Bridgeport, Conn. Filed Jan. 28, 1918. Serial No. 214,089. (Cl. 279—102.)

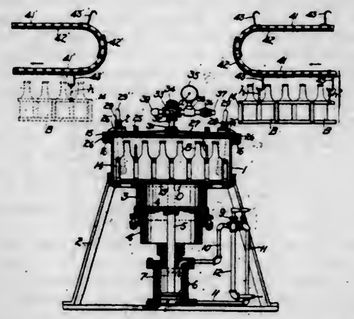


1. A self retaining ferrule for wooden tool handles, having a hole in its head and a pronged tongue adapted to be turned inward by the driving home of a tool shank, which also drives the prong from the inner side into the wood of the handle.

3. In combination, a wooden tool handle having a hole in one end, a ferrule having a hole in alinement with the hole in the handle, and a pronged tongue extending from one side of the hole in the ferrule, and a tool shank driven through the hole in the ferrule and into the hole in the handle, whereby the tongue is turned inward parallel with the wall of the hole in the handle and the prong is driven into the wood.

[Claims 2 and 4 not printed in the Gazette.]

1,272,043. METHOD OF TESTING AERATED-BEVERAGE CONTAINERS. JOHN A. HOFF, St. Louis, Mo. Filed Dec. 26, 1917. Serial No. 209,009. (Cl. 73—51.)



1. The method of testing containers of aerated liquids which consists in submerging the container in a body of liquid confined in a suitable tank or holder, and withdrawing a portion of the liquid body from its original confines to create a vacuum in the space originally occupied by the volume of the liquid thus withdrawn, whereby the container is subjected to a test under the absolute pressure of the contained gases.

2. The method of testing containers of aerated beverages which consists in submerging the container in a body of liquid confined in a suitable holder, withdrawing a portion of the liquid body from its original confines to create a vacuum in the space originally occupied by the volume of liquid thus withdrawn, whereby the interior of the container is subjected to the resulting difference between the inside and outside pressure, exposing the con-

tainer to view while said pressure is being maintained whereby leaky containers may be detected.

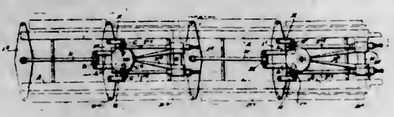
4. The method of testing containers of aerated liquids which consists in exposing the containers to an extraneous pressure reduced below normal atmospheric pressure, in the presence of a body of liquid in which the container is partly or wholly submerged.

5. The method of testing containers of aerated liquids which consists in inclosing the container in a body of liquid confined by the walls of a suitable holder, then moving outwardly a wall or section of a wall of such holder a sufficient distance to overcome the atmospheric pressure on the outer face of such wall or section, whereby a vacuous condition is established in the holder around the container, and the latter subjected to a test under absolute pressure.

6. The method of testing containers of aerated liquids which consists in surrounding them with a body of liquid confined in a vessel without access of atmospheric air, and imparting a slight outward movement to a wall of the vessel or portion thereof in contact with the liquid, whereby a vacuous condition is produced in the vessel and the container subjected to a test under absolute pressure.

[Claim 3 not printed in the Gazette.]

1,272,044. LOCOMOTIVE-BRAKE. HARRY A. HOKE, Altoona, Pa. Filed Mar. 14, 1918. Serial No. 222,284. (Cl. 188—44.)



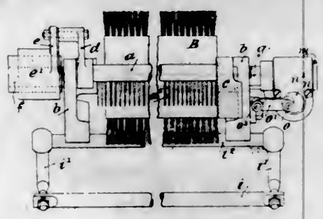
1. In a locomotive the combination with the frame and a plurality of pairs of drivers, of a brake mechanism for applying a braking force to two of said pairs of drivers, comprising a vertically disposed brake cylinder, a brake level shaft having its ends mounted in the side frames, a pair of bell crank levers mounted on said shaft, and having their hub portions adjacent the side frames, and each having an arm bent or offset to bring its free end into proximity to the axis of the brake cylinder piston and connected to the latter, a pair of brake beams, one for each of said two pairs of drivers and equalizing connections between said brake beams and rock levers.

2. In a locomotive, the combination with the locomotive's side frames and a plurality of pairs of driver elements, of a separate brake mechanism for each pair of driver elements comprising a centrally disposed vertical brake cylinder, a transverse brake lever shaft having its ends mounted in the side frames, a pair of bell crank levers mounted on said shaft, and having their hub portion adjacent the side frames, and each having an arm bent or offset to bring its free end into proximity to the axis of the brake cylinder piston and connected to the latter, a pair of brake beams, one for each driver element, and equalizing connections between each of said brake beams and the other arms of said levers.

3. In a locomotive, the combination with the locomotive side frames and a pair of driver elements, of a brake mechanism for applying a braking force to said pair of driving elements comprising a centrally disposed vertical brake cylinder, a brake lever shaft having its ends mounted in the side frames, a pair of bell crank levers mounted on said shaft, and having their hub portions adjacent the side frames, and having arms bent or offset to bring their free ends in proximity to the axis of the brake cylinder piston and connected to the latter, pull rods connected to the second arms of the bell crank levers, a pair of equalizing bars pivotally connected between their ends one to each of said pull rods, a brake beam for one of said driver elements to which one end of each of said equalising bars is link connected, links connecting the opposite ends of the equalizing bar to a third equalising bar, and a brake beam for the second driver element pivotally connected to the last mentioned equalizing bar.

4. In a locomotive, the combination with the locomotive side frames and a pair of driver elements, of a brake mechanism for applying a braking force to said pairs of driver elements, comprising a centrally disposed vertical brake cylinder, a brake lever shaft having its ends mounted in said side frames, a pair of bell crank levers mounted on said shaft, and having their hub portions adjacent the side frames, and each having a long arm bent or offset to bring its free end into proximity to the axis of the brake cylinder piston and connected to the latter, a pull rod connected to the other arm of each bell crank lever, a pair of equalizing bars pivotally connected between their ends one to each of said pull rods, a brake beam for one of said driver elements to which one end of each of said equalizing bars is link connected, links connecting the opposite ends of the equalizing bar to a third equalising bar, and a brake beam for the second driver element pivotally connected at its center to the center of the last mentioned equalizing bar, the latter being formed of two parts, one located above and one located below the brake beam to which it is pivotally connected, and being connected to the latter by a stud or pivot pin passing through the beam and the two parts of the equalizing bar, said beam being transversely slotted adjacent the ends of the equalizing bar parts, and posts connecting the ends of the two equalizing bar parts passing through said slots.

1,272,045. FLAT BRUSHING OR CLEANING ARRANGEMENT FOR CARDING-ENGINES AND SUCH LIKE. SAMUEL HURST, Werneth, Oldham, England. Filed Dec. 5, 1917. Serial No. 205,480. (Cl. 19—15.)



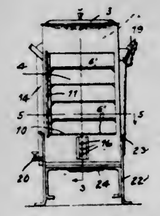
1. A revolving flat cleaning arrangement for carding engines comprising a vibrating comb, stationary supports for said comb, means for moving the teeth of the comb through an arc of a circle relatively to the bristles in the brush, a flat cleaning traversable brush carried in stationary bearings and means for traversing the brush endon in the stationary bearings, the vibrating comb and the traversable brush being used in combination as set forth.

5. A revolving flat cleaning combination for carding engines, comprising a comb shaft, stationary supports therefor, teeth on said comb shaft, shaft adjusting means, mechanical means in connection with the brush shaft to vibrate the comb shaft, a rotary flat cleaning brush, a shaft carrying same, fixed bearings supporting the shaft, and a traverse motion carried by the shaft for moving said shaft end-on, as described herein.

[Claims 2 to 4 not printed in the Gazette.]

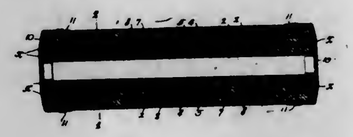
1,272,046. STEAM-COOKER. ANGELO MICHAEL IAMONACO, Rochester, N. Y. Filed July 13, 1914. Serial No. 850,841. (Cl. 126—20.)

In a cooker, a rectangular casing having at its lower end a food boiling compartment closed on its sides and bottom by said casing and open only at the top, said casing having at its upper end an oven compartment open only at the top and closed on its sides by said casing, a cover for closing the top of said compartment, said casing also having a steaming compartment arranged between said boiling and oven compartments and opening through one side of said casing, a door hinged to said casing for closing said steaming compartment, vertically spaced lugs in said casing, a plurality of cross bars arranged in pairs and in superposed relation on said lugs within said steaming compartment, certain of said cross bars having shelves mounted thereon, the lowermost shelf being mounted on the lowermost lugs for forming the top



and closure for said boiling compartment and having steam openings therein, the uppermost shelf forming a support for said oven compartment and a pipe extending exteriorly of said casing and being closed at its upper end and having communication with the upper end of said steaming compartment and open at its lower end into the atmosphere.

1,272,047. WRAPPING FOR FLOOR-COVERINGS. RALPH G. JACKSON, Chester, Pa., assignor to The Congoleum Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 3, 1917. Serial No. 200,081. (Cl. 206—46.)



2. A roll of floor covering and like material, consisting of two or more rolls of material, the first roll being rolled in its cover, the cover being fastened and forming the core for the second roll of material, which is rolled upon the first roll with its cover, the latter cover being fastened, this package forming the core for the third roll of material, which is rolled upon the second roll with its cover, the cover of the third roll forming the outside roll of the package.

4. A roll of floor covering and like material, consisting of two or more rolls of material, the first roll being rolled in its cover, the cover being fastened and forming the core for the second roll of material, which is rolled upon the first roll with its cover, the wrapper of the two rolls being of a greater width than the material and turned in at the ends and secured, forming cushions for the ends of the roll; and a covering inclosing the turned-in ends and secured to the outer covering by bands, or equivalent fastenings.

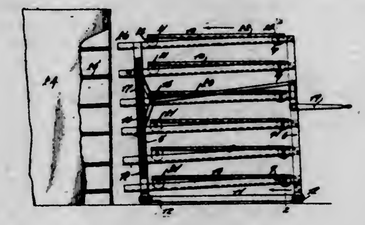
[Claims 1 and 3 not printed in the Gazette.]

1,272,048. PORTABLE TRUCK FOR FEEDING TRAYS TO OVENS. HENRY JANDER, Brooklyn, N. Y. Filed Sept. 21, 1917. Serial No. 192,628. (Cl. 107—56.)

1. A truck consisting of a base-member, wheels carried thereby, a tray-frame secured at one end thereof to one end of said base-member, posts carried by the base-member, and means to slidably connect said posts and the adjacent end of the tray-frame.

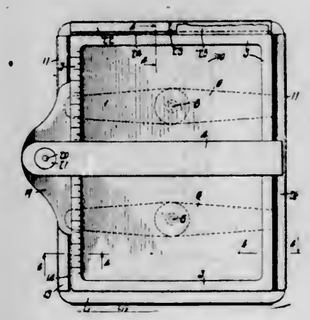
2. A truck consisting of a base-member, wheels carried thereby, a frame secured at one end thereof to said base-member, toggles connecting said base-member, and the opposite end of the frame, independent posts supporting said toggles; means to operate the toggles to raise or lower the frame, and wheeled trays carried by the frame.

3. A portable truck consisting of a movable frame, wheeled trays carried thereby, and rails for said trays, said rails being provided with slots to receive the wheels of said trays to lock the trays against premature movement.



4. A truck consisting of a base-member, vertical posts carried thereby, a frame-work, blocks connected with said framework and slidably engaging the posts, toggles connecting said blocks and the posts, and a link and lever connection to operate the toggles, whereby one end of the framework can be raised or lowered.

1,272,049. DRAWING-BOARD. CHESTER F. JOHNSON, Detroit, Mich. Filed Sept. 28, 1916. Serial No. 121,701. (Cl. 83—76.)



1. In combination, a sheet metal frame for a drawing board, said frame having a web which forms a guide for a T-square and also having an outwardly extending flange along the lower edge of the web, a strip of sheet metal associated with the flange and having an element extending parallel to the web and in close proximity thereto, and a T-square having a portion extending between the strip and the web, the strip serving to hold the T-square in close slidable relation to the latter.

2. In combination, a sheet metal frame for a drawing board, said frame having a web which forms a guide for a T-square and also having an outwardly extending flange along the lower edge of the web, the margin of said flange being up-turned, a strip of sheet metal seated on the upper side of the flange and against the margin, said strip having an element extending parallel to the web and in close proximity thereto, and a T-square having a portion extending between the strip and the web, the strip serving to hold the T-square in close slidable relation to the latter.

3. In combination, a frame for a drawing board, said frame having a guiding edge for a T-square, a T-square having a head including a flange arranged to engage and be guided by said edge, said frame including a resilient strip parallel to said edge, said strip being arranged to press against said flange to force the latter into close engagement with said edge.

5. In combination, a frame for a drawing board, said frame having a guiding edge for a T-square, a T-square having a head including a flange arranged to engage and be guided by said edge, said frame including a resilient strip parallel to said edge, said strip being arranged to press against said flange to force the latter into close engagement with said edge, the upper edge of said strip flaring outwardly from the edge of the board to allow the flange of the T-square to be forced directly downwardly between said strip and board.

6. In combination, a frame for a drawing board, said frame having a guiding edge for a T-square, a T-square having a head including a flange arranged to engage and be guided by said edge, said frame including a resilient strip parallel to said edge, and substantially co-extensive therewith, said flange extending on both sides of the blade of said T-square, said strip being arranged to force said flange into snug engagement with the edge of the frame, whereby the blade is held in proper relation to said frame at any point of adjustment substantially throughout the length of said frame.

[Claim 4 not printed in the Gazette.]

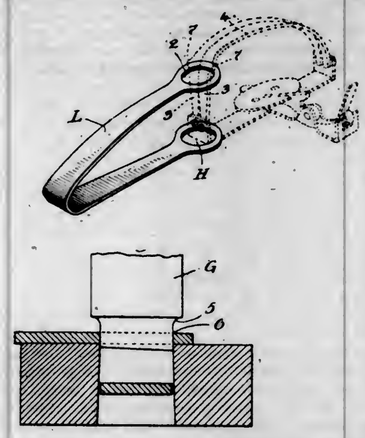
1,272,050. HOG-CATCHING TOOL. HENRY G. KELLER, Owasco, Ind. Filed Apr. 22, 1916. Serial No. 92,913. (Cl. 119—154.)



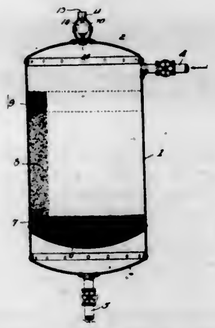
A hog catching tool comprising an elongated supporting plate, a pair of side members having one of their ends secured to the opposite sides of the plate and extending outwardly beyond one end thereof and their free ends being twisted, an actuating rod slidably mounted on one face of said plate, a pair of arcuate jaws each having one end pivotally secured to one end of the rod, said twisted ends of the side members being pivotally secured to each jaw adjacent the pivotal connections of the jaws with the rod, and a loop formed integral with the free end of the rod to facilitate the opening and closing movement of the jaws, as and for the purpose specified.

1,272,051. PROCESS OF PRODUCING BEARING-APERTURES IN TRAP-SPRINGS. DONALD W. KELLEY, Oneida, N. Y. Filed June 24, 1914. Serial No. 846,973. (Cl. 29—148.)

The herein described process of producing a bearing aperture in a spring for animal traps, which consists in first forming an aperture at one end of the spring, the walls of said aperture being substantially at right angles to the upper surface of said spring, and then pressing the upper annular corner portion of the walls of said aperture to make said corner portion round and smooth and to condense and harden said portion.



1,272,052. WATER-SOFTENING APPARATUS. CASS L. KENNICOTT, Chicago Heights, Ill., assignor of one-half to The Permutit Company, New York, N. Y., a Corporation of Delaware. Filed Mar. 20, 1916. Serial No. 85,383. (Cl. 210—1.)

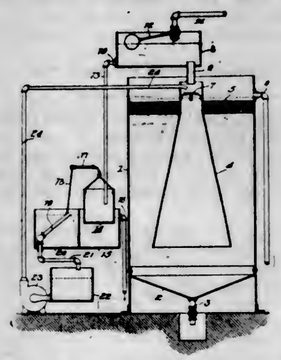


A water-softening apparatus comprising a vertical drum, a raw water inlet in the upper portion of the drum, a softened water outlet in the lower portion of the drum, a permeable bed of base-exchanging substance arranged to afford a uniform cross-sectional area throughout its depth and mounted in the intermediate portion of the drum and below the said inlet, a float lying above the said bed and an air outlet valve actuated by the float, whereby a solid column of water may move downward at a uniform velocity through the entire cross-sectional area of the bed.

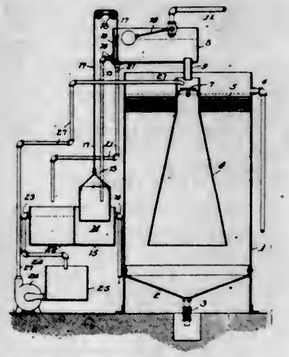
1,272,053. MEANS FOR REGULATING WATER-SOFTENING APPARATUS. CASS L. KENNICOTT, Chicago Heights, Ill., assignor of one-half to The Permutit Company, New York, N. Y., a Corporation of Delaware. Filed Mar. 20, 1916. Serial No. 85,385. (Cl. 210—1.)

1. In a water-softening apparatus, means for supplying raw water, means for dividing the water supplied into a main stream and a regulating stream, a bucket tank, a bucket floating therein, means for discharging the regulating stream into the said bucket, a chemical tank, a vertically movable outlet member for said tank, connections between said bucket and said outlet member for actuating the latter from the former, and means for discharging the chemicals passing through the said outlet member into said main stream of raw water.

[Claim 2 not printed in the Gazette.]



1,272,054. MEANS FOR REGULATING THE FEED OF CHEMICALS IN WATER-SOFTENING APPARATUS. CASS L. KENNICOTT, Chicago Heights, Ill., assignor of one-half to The Permutit Company, New York, N. Y., a Corporation of Delaware. Filed Mar. 20, 1916. Serial No. 85,386. (Cl. 210—1.)

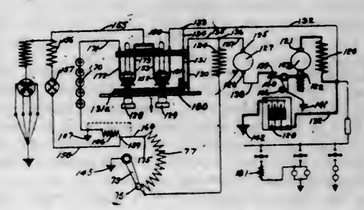


1. In a water-softening apparatus, means for supplying raw water, means for dividing the water supplied into a main stream and a regulating stream, a bucket tank, a bucket floating therein, means for discharging the regulating stream into the said bucket, a chemical containing tank, an overflow for the said chemical containing tank, means for supplying displacing fluid to the said chemical containing tank, means for regulating the supply of said displacing fluid in accordance with the position of the said bucket, said means operating to supply a progressively greater amount of displacing fluid as the bucket progressively lowers, and means for receiving the overflow from the said chemical containing tank and for mixing it with the main stream of raw water.

[Claim 2 not printed in the Gazette.]

1,272,055. ELECTRICAL SYSTEM FOR ENGINES. CHARLES F. KETTERING and WILLIAM A. CHRIST, Dayton, Ohio, assignors to The Dayton Engineering Laboratories Company, a Corporation of Ohio. Filed July 16, 1914, Serial No. 851,259. Renewed Dec. 5, 1917. Serial No. 205,668. (Cl. 123—148.)

1. In a system of electrical distribution and control, the combination with a generator and circuit connections, and an ignition system having a sparking circuit; of automatic means for varying the time of occurrence of the sparking therein; and means operable by said automatic means for controlling the output of said generator.

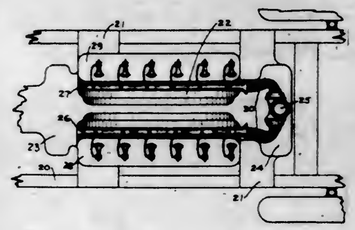


26. In a system of electrical distribution and control, the combination with a generator; of an ignition circuit electrically connected with said generator; and automatic means for regulating the output of said generator and the resistance of said ignition circuit.

40. In a system of electrical distribution and control, the combination with an engine, of an engine-actuated shaft, an ignition system including a timing member on said shaft, a sleeve, a centrifugal governor mounted on said sleeve, means between said governor and said sleeve to transmit movement from the governor to said timer member, a regulating means, means including a loose connection actuated by said governor for operating said regulating means, and manually operated means for rotating said sleeve.

[Claims 2 to 25, 27 to 39, and 41 to 45 not printed in the Gazette.]

1,272,056. IGNITION SYSTEM. CHARLES F. KETTERING, Dayton, Ohio, assignor to The Dayton Engineering Laboratories Company, a Corporation of Ohio. Filed Aug. 30, 1915, Serial No. 47,962. Renewed Dec. 5, 1917. Serial No. 205,666. (Cl. 123—168.)



1. In an ignition system, the combination with a plurality of primary and secondary electric circuits including terminals and spark plugs; of means for breaking and making the primary circuit; and a plurality of distributing devices for selecting said secondary circuits in a predetermined and recurrent sequence.

2. In an ignition system, the combination with a primary electric circuit having a current interrupter and an operating member for actuating said interrupter; of secondary electric circuit including terminals and spark plugs; and a plurality of distributing devices actuated to select the different secondary circuits.

3. In an ignition system the combination with a primary electric circuit; of means for making and breaking said circuit; a plurality of secondary circuits including terminals and spark plugs; a plurality of distributing devices for said secondary circuits, operable alternately and in a recurrent sequence to select the different secondary circuits in a recurrent sequence.

[Claims 4 to 30 not printed in the Gazette.]

1,272,057. PRICE-TAG. FREDERICK KOHNLE, Dayton, Ohio, assignor to The Monarch Tag Company, Dayton, Ohio, a Corporation of Ohio. Filed Nov. 12, 1917. Serial No. 201,485. (Cl. 40—25.)



1. A tag fastener composed of a single length of wire bent into plural ply and formed to comprise a yoke head portion having crimped ends, adapted to engage through a tag and be clenched upon opposite side of the tag, and a pair of prongs diverting from the crimped ends of the head in a direction perpendicular to the plane of the head, each prong having a rounded pin end.

2. A tag fastener composed of a single length of wire bent into plural ply and formed to comprise a yoke head portion crimped at each end to provide hooks arranged to engage through and upon the opposite face of a tag, the ends of the wire respectively forming a ply of the hooks and engaging the rear side of the tag, and a pair of prongs diverting from the ends of the hooks at right angles to the plane of the head having rounded pin ends.

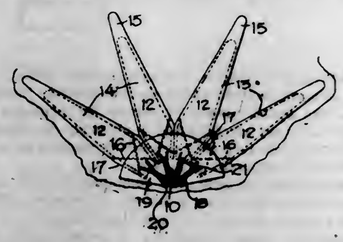
7. A pin ticket comprising a card and penetrating and attaching member constituted of a single piece of wire passed through and clamped by bends therein to the card, and presenting a pair of pins projecting from one side of the card, the wire in the pin portions being continuous and doubled to present smooth rounded penetrating points, and spread apart shank strands for looping one pin through the other.

8. A pin ticket comprising a card and penetrating and attaching members comprising a pair of pins fixed to and projecting from one side of the card and parallel to each other, each pin constituting a doubled piece of wire to present a smooth, rounded, penetrating point and spread apart shank strands for looping one pin through the other.

9. A pin ticket comprising a card and penetrating and attaching members, said members comprising a pair of pins fixed to and projecting from one side of the card and disposed to be interlooped one with another, each pin constituting a doubled piece of wire to present a smooth, rounded penetrating point and one thereof having its shank strands spread apart for engaging the other therethrough.

[Claims 3 to 6 not printed in the Gazette.]

1,272,058. SUSPENSION-PATCH FOR BALLOONS. HERMAN T. KNOTT, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Sept. 11, 1916. Serial No. 119,512. (Cl. 244—31.)

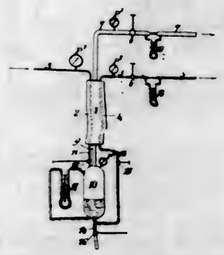


1. A suspension patch for balloons, including flexible elements, tongues adapted to anchor the extremities of the flexible elements to the balloon and patch pieces arranged to correlate the separate tongues into a unitary patch.

5. In a suspension patch for balloons, a pair of flexible elements having bight loops arranged in substantial coincidence, composite finger pieces arranged to anchor each extremity of the pair of flexible elements, said fingers being grouped to radiate over the surrounding area of the balloon body from the coinciding loops as a center, an under patch securing all of said tongues in a unitary group, and a cover patch supplementing the effect of said under patch, the loops of said suspension elements projecting through both the under patch and the cover patch.

[Claims 2 to 4 not printed in the Gazette.]

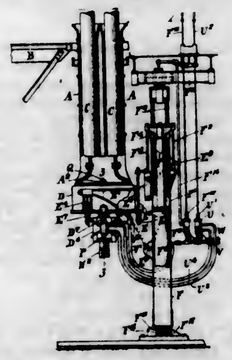
1,272,059. SEPARATION OF THE CONSTITUENTS OF GASEOUS MIXTURES. BURRITT S. LACY, Sewaren, N. J., assignor to The Roessler & Hasslacher Chemical Co., New York, N. Y., a Corporation of New York. Filed Sept. 20, 1916. Serial No. 121,155. (Cl. 183—115.)



2. The process of separating methane from natural gas, consisting in conducting compressed natural gas through one channel of a temperature exchanger, expanding it, separating the liquefied hydrocarbons, passing the non-liquefied gas through a second channel of the exchanger in counter current to the incoming compressed gas, evaporating the liquefied hydrocarbons at a progressively rising temperature by passing them through the lower part of a third channel of the exchanger in counter current to the incoming compressed gas, and leading the gas produced by the evaporation through the upper part of the third channel of the exchanger in counter current to the incoming compressed gas.

[Claim 1 not printed in the Gazette.]

1,272,060. SOCKET-PATTERN MECHANISM. JAMES B. LADD, Philadelphia, Pa., assignor to United States Cast Iron Pipe and Foundry Company, Burlington, N. J., a Corporation of New Jersey. Filed Mar. 6, 1917. Serial No. 152,577. (Cl. 22—28.)



1. In a pipe molding machine, the combination with a flask and its supporting means, of socket pattern mechanism comprising a supporting frame, a pattern ramming press mounted in said frame and comprising two cooperating press elements each movable relative to the other and to said frame, a socket pattern mounted on one of said elements and means for connecting the other element to the flask.

3. In pipe molding apparatus, the combination with a flask and its supporting means, of a socket pattern mechanism comprising a supporting frame, said flask and frame being relatively movable to bring them into and out of operative relation, a pattern ramming press mounted in said frame and comprising two coöperating press elements movable relative to each other and to said frame, a socket pattern mounted on one of said elements, means for connecting the other of said elements to the flask in the socket pattern ramming operation, and to said supporting frame to permit the socket pattern to be advanced when said frame is out of operative relation with said flask.

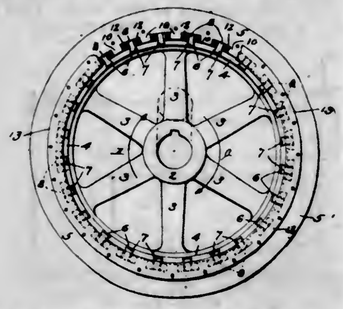
9. Pattern ramming mechanism for operating at the under side of a flask open at its under side comprising in combination a vertically adjustable support and an upwardly acting pattern ramming press suspended from said support by flexible longitudinally adjustable connections.

18. In a pipe molding machine the combination of a supporting frame, a vertical pattern carrier and a vertically movable pattern stripper mounted in said frame, a vertically movable hydraulic actuating device also mounted in said frame, a lever pivotally connected to said device and comprising a pair of arms extending at opposite sides of the point of connection thereto, separate link connections between one arm of said lever and said stripper and carrier at greater and lesser distances, respectively, from the path of movement of said point of connection, means limiting the upward movement of said carrier relative to said stripper, an adjustable stop carried by said frame and engaged by the other arm of the lever after an initial downward movement of said device, and a hydraulic plunger for exerting a constant upward force on said pattern carrier during the pattern stripping operation.

25. Molding apparatus comprising in combination a mold support, a pattern carrier, a pattern stripper, and means for moving the said carrier and stripper simultaneously toward the mold and for withdrawing them successively, comprising a movable actuating device for advancing and withdrawing the carrier and stripper and an operating connection between said device, carrier and stripper, through which said device on its initial withdrawal movement exerts a force on the carrier tending to withdraw it and a force on the stripper tending to maintain the latter in place, and means brought into operation by a further withdrawal movement of said device for causing said connection to exert a force on the stripper tending to withdraw the latter.

[Claims 2, 4 to 8, 10 to 17, and 19 to 24 not printed in the Gazette.]

1,272,061. FLY-WHEEL. SIMON LAKE, Milford, Conn. Filed June 14, 1917. Serial No. 174,687. (Cl. 74—6.)

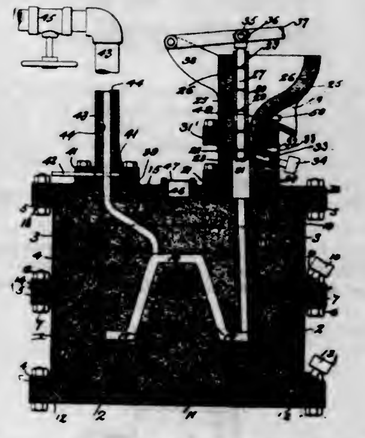


2. A fly wheel, having its rim constructed of an inner section and an outer section of heavy weight, each section having a plurality of transversely arranged ribs, the ribs of the inner section having convex sides and the ribs of the outer section having concave sides, leaf springs arranged in the spaces formed by and between said ribs, and means carried by one of said rim sections for holding said sections and said spring members in position.

6. In combination with the power shaft of an engine, a fly wheel mounted upon said shaft having a fixed rim section and a movable rim section mounted upon said first mentioned rim section, said fixed rim section having a plurality of transversely arranged ribs dovetailed therein and having convex sides, said outer section provided with a plurality of inwardly extending transversely arranged ribs formed with concave sides, leaf springs arranged within the spaces formed by and between the said ribs, and means carried by one of said rim sections to prevent the displacement of said rim sections and said springs.

[Claims 1 and 3 to 5 not printed in the Gazette.]

1,272,062. APPARATUS FOR MAKING METAL CASTINGS. SIMON LAKE, Milford, Conn. Filed Aug. 9, 1917. Serial No. 185,277. (Cl. 22—67.)



1. In combination, a flask and its base adapted to form the drag, and a flask and its top plate adapted to form the cope, the meeting edges of the flasks being hermetically sealed, a mold arranged in the flasks and having a feeding passage or channel leading thereto at or near one end and an exhaust passage leading therefrom at or near the opposite end, and means to control the introduction of molten metal to the feeding passage and apply pressure thereto after it enters the mold.

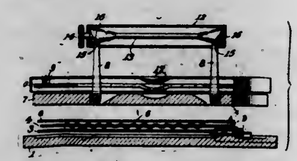
2. In combination, a flask and its base adapted to form the drag, and a flask and its top plate adapted to form the cope, the meeting edges of the flasks being hermetically sealed, a mold arranged in the flasks and having a feeding passage or channel leading to its bottom and an exhaust passage leading therefrom at or near its top, a hopper erected on the plate of the cope and terminating in a cylindrical portion opening into the feeding passage, and a plunger arranged in said hopper and adapted to control the flow of metal from the hopper through the cylindrical portion to the feeding passage and then to be moved toward the feeding passage to apply pressure to the metal fed from the hopper into the feeding passage.

3. In combination, a flask and its base adapted to form the drag, and a flask and its top plate adapted to form the cope, the meeting edges of the flasks being hermetically sealed, a mold arranged in the flasks and having a feeding pasage or channel leading thereto at or near one end and an exhaust passage leading therefrom at or near the opposite end, and means to control the introduction of molten metal to the feeding passage and apply pressure

thereto after it enters the mold, the exhaust passage being intercepted transversely by a sliding valve.

4. In combination, a flask and its base adapted to form the drag, and a flask and its top plate adapted to form the cope, the meeting edges of the flasks being hermetically sealed, a mold arranged in the flasks and having a feeding passage or channel leading thereto at or near one end and an exhaust passage leading therefrom at or near the opposite end, and means to control the introduction of molten metal to the feeding passage and apply pressure thereto after it enters the mold, the exhaust passage being intercepted transversely by a sliding valve, and a frangible relief valve located in the cope plate.

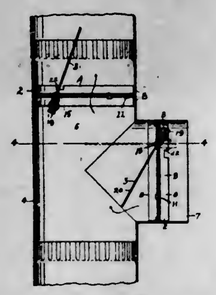
1,272,063. ELECTRIC IRON. MOSES LEVINSON, New York, N. Y. Filed Nov. 2, 1917. Serial No. 199,866. (Cl. 219—25.)



4. An electric iron containing suitable electric heating-means, a handle for said iron, two links pivoted to said iron and slidably connected to said handle, a shaft carried by said handle and having grooves for engaging the upper ends of said links for securing said links upright to maintain said handle in raised position.

[Claims 1 to 3 and 5 to 8 not printed in the Gazette.]

1,272,064. AUTOMATIC DAMPER FOR STOVES AND FURNACES. MAX LEZIUS, Cleveland, Ohio. Filed Nov. 30, 1914. Serial No. 874,694. (Cl. 236—2.)



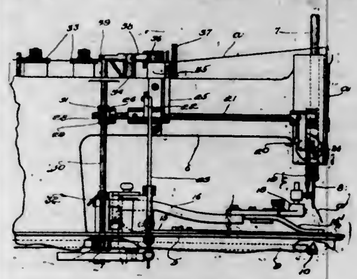
1. A stove or furnace pipe having a side draft extension, in combination with separate damper plates pivotally mounted at one side of their diametrical centers within said pipe and said extension respectively on slidable supports, each plate being sensitively balanced for self-action and adapted to open and close more or less completely across the passage-way through the part in which the same is mounted under the influence of up and down drafts through said pipe.

3. A stove or furnace pipe having a main passage and a side opening thereto, a swinging damper having a supporting ring therefor slidably mounted within said side opening to set said damper in various adjusted relations to the said main passage.

7. A damper device comprising a pair of rings having inturned flanges mechanically united in facial engagement and a damper plate having a journal-pin rotatably confined by channeled bearing portions between said rings.

[Claims 2, 4 to 6, and 8 to 12 not printed in the Gazette.]

1,272,065. SEWING-MACHINE. ROBERT L. LYONS, Waltham, Mass., assignor to Frederick Osann Company, New York, N. Y., a Corporation of New York. Filed Nov. 16, 1911. Serial No. 660,593. (Cl. 112—33.)



1. A sewing machine comprising stitch forming means, work holder movably mounted, means for moving said work holder, a thread clamping means, mechanism for operating said work holder and thread clamping means approximately simultaneously to break the thread, a thread puller in operative connection with said operating mechanism, and releasing means for said thread clamping means.

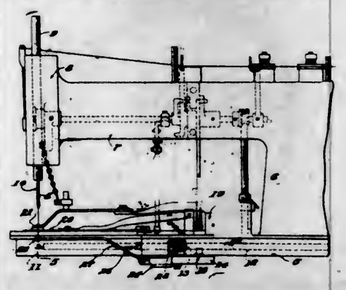
2. A sewing machine comprising stitch forming means, a thread clamp, manually operated means for closing said clamp, a work holder movably mounted, means actuated by the movement of the work holder for releasing said clamp, and a connection between the work holder and the clamp closing means, whereby said work holder and said clamp may be operated to break the thread.

4. A sewing machine comprising means for forming a group of stitches, means for breaking the thread, means for holding the thread at a considerable distance from the stitch forming devices against movement after breaking, and means acting to draw on the thread after the next downward movement of the needle, subsequent to such breaking, to draw down the needle end of said thread.

6. A sewing machine comprising a head, stitch forming means including a needle bar operatively mounted in said head, a needle thread tension mounted on said head at a distance from said needle bar, a thread puller operating on the thread between said tension and said needle bar, a thread clamp located between said tension and said thread puller, and means for straining the thread when held by said clamp.

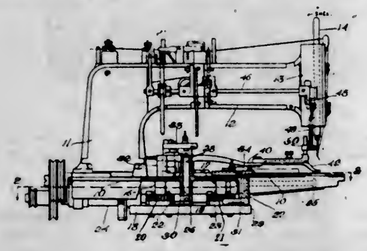
[Claims 3, 5, 7, and 8 not printed in the Gazette.]

1,272,066. SEWING-MACHINE HAVING THREAD-CUTTING DEVICE. ROBERT L. LYONS, Waltham, Mass., assignor to The Frederick Osann Company, New York, N. Y., a Corporation of New York. Filed May 18, 1914. Serial No. 839,189. (Cl. 112—33.)



A single thread sewing machine comprising in combination, a needle and a looper, operating means therefor, a work holder, means for effecting relative movement between said work holder and said needle, a cutter member slidably mounted and having a loop engaging member and a blade having its edge positioned to act in the retractive movement of said cutter member, means to project said cutter member to introduce its loop engaging member into a loop of thread sustained by said looper, and spring means to retract said cutter member to cut said loop.

1,272,067. SEWING-MACHINE. ROBERT L. LYONS, Waltham, Mass., assignor to The Frederick Osann Company, New York, N. Y., a Corporation of New York. Filed July 24, 1914. Serial No. 852,782. (Cl. 112—32.)



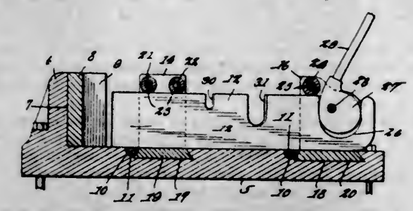
1. A sewing machine comprising stitch forming means, a work holder movably mounted, and means for effecting relative lateral periodic positioning movement in two directions between said work holder and said stitch forming devices, for arresting said movement at times and for effecting relative stitch forming vibrations at the times at which said positioning movements are arrested.

5. A sewing machine comprising a work holder for a snap fastener member and material, said work holder having complemental means for engaging said member and material, stitch forming means, and mechanism to effect relative lateral positioning movements between said work holder and said stitch forming means to position the work in registry with said stitch forming means successively at several points related to the periphery of said member and for changing said positioning movement at each of said points of registry to a vibratory movement to form stitches extending from points within the margin of said fastener member to points outside said margin.

7. A sewing machine comprising stitch forming means, a work holder furnished with a work sustaining plate having a needle passage and a tongue extending to the axis of said passage, and a work centering means co-operating solely with the end of said tongue.

[Claims 2 to 4, 6, and 8 not printed in the Gazette.]

1,272,068. COMBINED BENDING AND CUTTING MACHINE. RODERICK MCCLURE and CLAUDE OWENS, Fort Laramie, Wyo.; said Owens assignor to said McClure. Filed Sept. 25, 1917. Serial No. 193,130. (Cl. 153—48.)



1. In a combined bending machine and cutter, a base having an abutment near one end, a die bearing against the said abutment, said base having recesses therein, anti-friction members in the said recesses, a plunger movable on the antifriction members, said plunger having recesses in its upper edge, the walls of the said recesses being diagonally disposed, means for guiding the plunger with relation to the die, said plunger having a recess near one end, a cam pivotally mounted to operate in the last mentioned recess and adapted to coact with the walls of the recess for moving the plunger, and a stationary member having recesses corresponding with the recesses of the plunger and adapted to receive material to be cut by the operation of the plunger.

2. In a combined bending machine and cutter, a base having an abutment near one end, a die bearing against the said abutment, said base having recesses therein, anti-friction members in the said recesses, a plunger movable on the anti-friction members, said plunger having recesses in its upper edge, the walls of said recesses being diagonally disposed so as to form cutting edges, means for guiding the plunger with relation to the die, said plunger having a recess near one end, and a cam pivotally mounted to operate in the last mentioned recess and adapted to coact with the walls of the recess for moving the plunger.

3. In a combined bending machine and cutter, a base having an abutment near one end, a die bearing against the said abutment, said base having recesses therein, anti-friction members in the said recesses, a plunger movable on the anti-friction members, said plunger having recesses in its upper edge, the walls of said recesses being diagonally disposed so as to form cutting edges, means for guiding the plunger with relation to the die, said plunger having a recess near one end, a cam pivotally mounted to operate in the last mentioned recess and adapted to coact with the walls of the recess for moving the plunger, and pairs of standards rising from the base comprising guides for the plunger, anti-friction members between the said standards bearing on the upper edge of the plunger, means extending between the pairs of standards for supporting the anti-friction members, and means for rotating the cam.

1,272,069. ADJUSTABLE SURVEYING-TARGET. JOHN GILMORE MCMILLAN, San Jose, Cal. Filed Oct. 1, 1917. Serial No. 194,190. (Cl. 33—74.)



In an adjustable surveying target of the class described, comprising a hollow metal body portion of a length of a standard unit of linear measure; a target integral with said body portion and positioned at one end thereof; a longitudinal open slot in said body portion; said body portion being provided with a scale containing numbered subdivisions of the unit on one side of the slot reading downward; and with a second scale on the opposite side of the slot, containing numbered subdivisions of the unit reading upward, whereby the units of measure marked on a suitable rod may be read in conjunction

with said numbered subdivisions of the unit on the body portion, thus indicating the exact distance, in units and fractions thereof, the target is set from either end of the rod; means for clamping the hollow body portion in any desired position on any suitable rod, substantially as set forth.

1,272,070. LIQUID-SPRINKLER. ARNOLD NESBITT MACNICOL, Melbourne, Victoria, Australia. Filed Dec. 28, 1917. Serial No. 209,270. (Cl. 137—66.)



1. In a rotary sprinkler, the combination with a fixed standard and a sprinkler tube mounted thereon for rotation about said standard, of a nozzle on said tube having a spray opening, a valve adapted to vary the width of said opening, and automatically operating means carried by said standard and tube for positively controlling the movements of said valve, thereby determining the reach of the spray, at each point of its rotation about said standard.

2. In a rotary sprinkler, the combination with a fixed standard and a sprinkler tube mounted thereon for rotation about said standard, of a nozzle on said tube, a valve for controlling the flow of water from said nozzle, said valve comprising an inner fixed cylindrical body having a lateral opening extending over about one quarter of its circumference and an outer rotating sleeve having a portion cut away to allow the full opening of said valve body to be uncovered, and automatically operating means carried by said standard and tube for positively controlling the movements of said sleeve, thereby determining the reach of the spray at each point of the rotation of said valve about said standard.

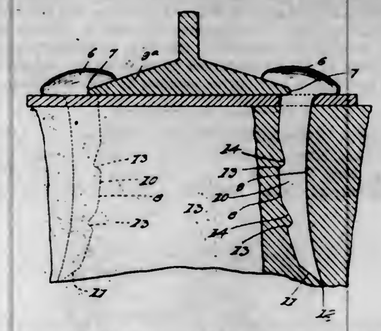
3. In a rotary sprinkler, the combination with a fixed standard and a sprinkler tube mounted thereon for rotation about the standard, of nozzles on said tube, one of said nozzles being at one outer end of said tube and another of said nozzles on an intermediate portion thereof, a valve for controlling the flow of water from each nozzle, each valve comprising an inner fixed cylindrical body having a lateral opening extending over about one quarter of its circumference and an outer rotating sleeve having a portion cut away to allow the full opening of the said valve body to be uncovered, the portion cut away from the sleeve pertaining to the intermediate nozzle being larger than the portion cut away from the sleeve pertaining to the end nozzle to cause the former nozzle to open before and close after the latter nozzle, and automatically operating means carried by said standard and tube for positively and permanently controlling the movements of said sleeve.

5. In a rotary sprinkler, the combination with a fixed standard and a sprinkler tube mounted thereon for rotation about the standard, of nozzles on said tube, a valve for controlling the flow of water from each nozzle, a cam fitted to said standard having a contour corresponding to the shape of the area to be watered, and means carried by said tube permanently engaging said cam and valves, said means being actuated by said cam to control simultaneously the movement of all of said valves, said valves being so proportioned that they will open and close in a predetermined sequence.

[Claims 4 and 6 not printed in the Gazette.]

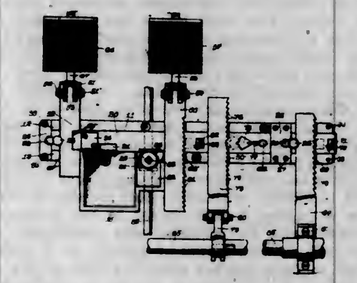
1,272,071. RAILROAD-SPIKE. RALPH P. MADSLEY, Sacramento, Cal. Filed Mar. 12, 1915. Serial No. 13,912. (Cl. 85—21.)

A spike including a shank, a forwardly projecting head carried by one terminal of the shank, the opposite end of the shank being beveled to provide a cutting edge, said shank being curved from end to end and having the entire portion of the front face lying between the head and the beveled end of convex form, said convex front face having



recesses providing anchoring shoulders lying inwardly of the convex face and facing the headed terminal of the spike shank.

1,272,072. AUTOMOBILE-LOCK. FREDERICK GARFIELD MADSEN, Chicago, Ill., assignor of one-third to Abram E. Mabie, Evanston, Ill., and one-third to Joseph O. Thomas, Chicago, Ill. Filed Jan. 19, 1917. Serial No. 143,297. (Cl. 70—126.)



1. In combination, a plurality of levers, a base frame, a latch bar slidable therein, members operatively associated with the levers, and arranged transversely in said latch bar, a lock for the bar, a removable cover plate for the base, and means on the latch bar engageable with the cover plate when the latch bar is in locked position to prevent unauthorized removal of said cover plate.

2. In combination, a base frame, a sliding latch bar mounted in said frame, means to lock said latch bar, a plurality of members operable transversely of the latch bar, and a plurality of pawl members on said latch bar to engage said transversely operable member to restrain movement of the same.

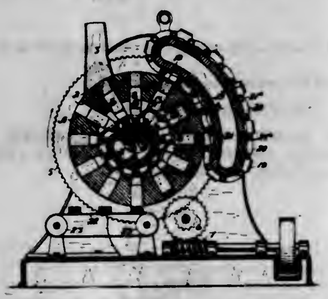
3. In combination, a plurality of levers or the like to be locked, a base frame, a sliding latch bar mounted in said frame, a plurality of members disposed transversely of the frame and connected with said levers, a removable cover plate, means on the latch bar to restrain the members, means to lock the latch bar, and means on said latch bar to engage and retain the cover plate when the latch bar is in locked position.

4. In combination, a plurality of levers or the like to be locked, a base frame, a sliding latch bar therein, a cover plate on said frame having a plurality of socket plates, a plurality of transverse members on said frame connected to said levers, means to shift said latch bar, and a plurality of pins on said latch bar to engage the socket plate when the latch bar is moved to locked position to prevent unauthorized removal of the cover plate.

5. In combination, a plurality of levers or the like to be locked, a base frame, a sliding latch bar therein, a plurality of transverse members on said frame connected to said levers, said transverse members having ratchet teeth and pawl members on said latch bar adapted to engage said toothed transverse members to restrain the same against movement in a single direction.

[Claims 6 to 11 not printed in the Gazette.]

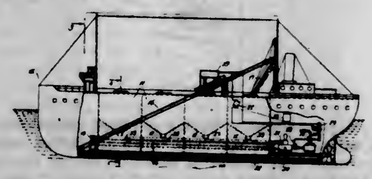
1,272,073. ROTARY COMPRESSION-MACHINE. WLADYSLAW MAJEWSKI, San Francisco, Cal. Filed Feb. 8, 1917. Serial No. 147,344. (Cl. 25—78.)



1. In combination with a drum having radial compression chambers and reciprocating plungers therein, an inner cam, an outer cam spaced from the inner cam, said cams having a radial cut-out, a rigidly formed member slidable in the cut-out and having a face corresponding to the inner cam and spaced side flanges overlying said face and corresponding to the outer cam, said plungers having their inner ends formed to be received in the space between the flanges of said member and to directly engage said inner cam and said face of said member, pins on the plungers engaging the flanges of said members and the outer cam, shoulders on the plungers, said outer cam having a bulged part to engage said shoulders to effect the compressing movements of the plungers, said member having a notch in a side thereof, a shaft journaled in the inner cam, and a projection on the shaft engaged in said notch to effect sliding of said member.

2. In combination with a drum having radial compression chambers and reciprocating plungers therein, an inner cam, an outer cam spaced from the inner cam, said cams having a radial cut-out, a member slidable in the cut-out and having a face corresponding to the inner cam and side flanges overlying said face and corresponding to the outer cam, said plungers having their inner ends formed to directly engage said inner cam and said face of said member, pins on the plungers engaging the flanges of said member and the outer cam, shoulders on the plungers, said outer cam having a bulged part to engage said shoulders to effect the compressing movements of the plungers, and means carried by the inner cam and engaging said member to effect adjustment thereof in said cut-outs.

1,272,074. SHIP-TRIMMING APPARATUS. EDWIN H. MESSITER, Brooklyn, N. Y., assignor to Electric Weighing Company, a Corporation of New York. Filed Apr. 6, 1918. Serial No. 227,084. (Cl. 214—2.)



1. In a vessel, a bin, adapted to hold movable material, a water ballast compartment, a conveyer arranged to move said material, a weigher in the conveyer, a pump connected with the compartment, and means controlled by the weigher for actuating the pump to move a quantity of water proportional in weight to the weight of material passing over the conveyer.

5. In a vessel, a plurality of bins adapted to hold a movable material, a discharge gate for each bin, a plurality of water ballast compartments each in proximity to one of said bins, a conveyer arranged to move the material discharged from each bin through its respective gate, a weigher in said conveyer, a pump, pipes leading from the pump to said compartments, a valve for each compartment, a mechanical connection between each gate and the valve for its proximate compartment, and means controlled by the weigher for actuating the pump to move water into the compartment in proximity to the bin from which material is discharged.

6. In combination with a conveyer, a weigher therein, a pump, and means controlled by the weigher for actuating the pump.

9. In combination with a conveyer, a weigher therein arranged to close an electric circuit when a desired weight of material passes the weigher, a pump, means for actuating the pump, electro-magnetic means in said electric circuit for controlling the pump actuating means to start the pump, and other means actuated by the pump for stopping the pump actuating means after the pump has moved a desired amount of fluid.

[Claims 2 to 4, 7, and 8 not printed in the Gazette.]

1,272,075. MECHANISM FOR ADJUSTING PAPER UPON FEED-BOARDS. ROBERT MIEHLE, Chicago, Ill. Filed Nov. 27, 1916. Serial No. 133,763. (Cl. 271—8.)



1. The combination with a feed board from which paper is to be manually fed; of rollers rotatable in the line of feeding and projecting through the feed board to engage the paper thereupon; and mechanism for effecting the rotation of the rollers.

5. The combination with a board from which paper is to be manually fed; of paper supporting rollers located to the rear of the board and having tractive engagement with paper upon the same, said rollers being rotatable in the line of feeding; and manually operated mechanism for effecting the rotation of the rollers.

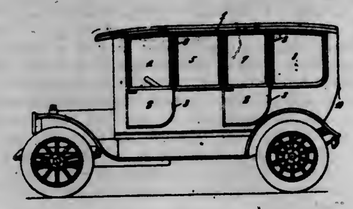
10. The combination with a feed board for supporting paper thereupon that is to be fed therefrom, said feed board having openings therethrough; of rollers formed in spaced apart sections that project through said openings to have tractive engagement with the paper upon the feed board; and mechanism for effecting the rotation of the rollers, the feed board being extended into the spaces between the roller sections.

[Claims 2 to 4, 6 to 9, and 11 to 14 not printed in the Gazette.]

1,272,076. VEHICLE-BODY. MARLIN D. MONTGOMERY, Chicago, Ill. Filed Oct. 28, 1916. Serial No. 128,309. (Cl. 21—14.)

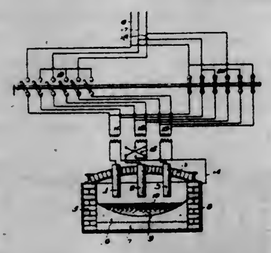
1. An inclosed vehicle body having the outward appearance of a limousine, and formed with window openings and windows, collapsible and removable seats therefor, means for supporting the seats out of the way upon the under side of the roof, when the car is to be used in a commercial capacity, and means for displaying advertising placards behind the windows.

2. An inclosed vehicle body having the outward appearance of a limousine, and having glass panels, recesses provided beneath certain of the panels, placards movable in said recesses and adapted to be raised to expose the same



behind the panels, collapsible and removable seats, and means for supporting the seats out of the way upon the under side of the roof when the car is to be used in a commercial capacity.

1,272,077. ELECTRIC FURNACE. WILLIAM E. MOORE, Pittsburgh, Pa. Original application filed Sept. 7, 1916, Serial No. 118,890. Divided and this application filed Sept. 11, 1917. Serial No. 190,744. (Cl. 204—64.)



1. An electric furnace having three arcing electrodes, and a refractory bottom rendered electrically conducting, an electrically conducting shell, transformers for supplying electric power to said electrodes and having secondaries connected to said electrodes in Y formation, an electrical connection from a neutral point in said secondary connection to the conducting shell of said furnace, and switching means for connecting the primaries of said transformer in delta formation or in Y formation at will.

5. An electric furnace having arcing electrodes, and provided with a bottom composed of a mixture of refractory material increasing in electrical conductivity toward the lower face thereof, transformers for supplying power to said electrodes and having a neutral point connected to said furnace bottom, and switching means in the primary circuit of said transformers for varying the voltage of the electrode arcs at will.

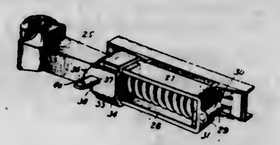
10. In the treatment of steel and other metals in an electric furnace having electrodes supplied with power from a multi-phase circuit, the method which consists in producing a circulation of the molten bath by a rectified current from the current of separate phases.

[Claims 2 to 4 and 6 to 9 not printed in the Gazette.]

1,272,078. DRAW-BAR AND YOKE. GEORGE C. MURRAY, Chicago, Ill., assignor to Keyoke Railway Equipment Company, a Corporation of Delaware. Filed Feb. 12, 1912. Serial No. 677,119. (Cl. 213—42.)

1. In combination with a tapered draw-bar, a yoke, means for connecting them, and a displaceable box surrounding both the draw-bar and the yoke to hold them in connection, said box having its vertical side walls spaced from said draw bar.

2. In combination with a draw-bar provided with oppositely disposed outwardly projecting shoulders, a yoke comprising two members, each of said members having an inwardly projecting shoulder at one end, a displaceable box for securing said members together at their shouldered



ends, and a hinge connecting the other ends of said members.

[Claim 3 not printed in the Gazette.]

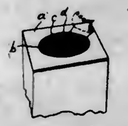
1,272,079. GARTER OR GARMENT FASTENER. GUSTAV NORMAN, Aberdeen, Wash. Filed Nov. 15, 1916. Serial No. 131,545. (Cl. 24—250.)



1. In a device as set forth, a base clamping jaw having a shield on one face to prevent the contact of the metal with the leg of the wearer, one end of said jaw having an outwardly turned flange, an auxiliary lever pivotally mounted near the other end of said jaw and provided with a rectangular opening adjacent its pivoted end, one edge of said opening having a laterally extending T-shaped lug, said lever having at its pivoted end a transversely disposed yieldable flange, a holding and releasing clamping jaw having at one end an angle flange adapted to be jammed under the outwardly turned flange of the first jaw, and provided at its other end with a T-shaped slot in which said T-shaped lug engages for loosely connecting said holding and releasing jaw to said lever, whereby as the lever is closed the angle end flange of said holding and releasing jaw is forced in engagement with and under the outwardly extending flange of the first jaw, said holding and releasing jaw having a yieldable tongue adjacent said T-shaped opening, said tongue being bent U-shaped in cross section and extending through the opening of said lever and provided with a terminal flange adapted to engage the edge of the flange of the lever whereby the lever is held against said holding and releasing jaw when closed.

[Claim 2 not printed in the Gazette.]

1,272,080. PAPER MILK-RECEPTACLE. WILLIAM B. NORTON, Detroit, Mich. Filed Sept. 20, 1916. Serial No. 121,129. (Cl. 229—17.)

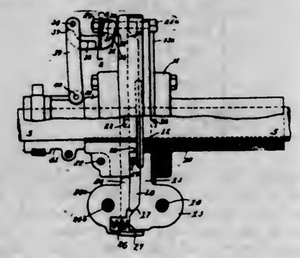


1. A paper receptacle, having end flaps comprising two whole flaps and two half flaps which are folded together and provided with a central aperture, one of the whole flaps having an inside set of corner weakened lines and the other an outside set of corner weakened lines, the one half flap being provided also with weakened lines, such

sets of weakened lines being adapted to register when the flaps are folded together to form a weakened portion on one corner which may be removed.

[Claims 2 to 4 not printed in the Gazette.]

1,272,081. CLUTCH. HARVEY R. NUTTING, Salisbury, and ALFRED B. NUTTING, Boston, Mass. Filed July 23, 1917. Serial No. 182,144. (Cl. 192—7.)



1. Clutch mechanism, comprising coöperative disks, means for pressing them into operative engagement consisting in draw bolts, and a one-piece cam head coöperative with each of said bolts to react thereagainst having front and back humps substantially out of parallelism with said bolt in clutch opening position, said cam heads having a tilting mounting on the respective bolts with a conical hole through which the bolt is passed and formed to cause the same to fulcrum on said back hump and swing said front hump inward to a clutch closing position.

6. Clutch mechanism, comprising coöperative clutch disks, a draw bolt for pressing said disks into operative engagement having an adjustable nut at an end thereof, and a cam head operatively engaging the inner face of said nut and tiltingly mounted on said bolt, said cam head having an extension first radially inward of the clutch, and then outward endwise thereof, said extension bearing a spring clip yieldingly engaging the periphery of said nut to hold the same in adjustment.

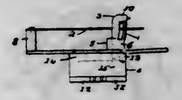
10. Clutch mechanism, comprising a main clutch disk having a presser ring associated therewith, an inner clutch disk for coöperation with said main clutch disk, means for drawing said disks into operative engagement, and means for connecting said disks to a driving member and a driven member respectively, the outer faces of said disks having means associated therewith interchangeable one with the other whereby either clutch member may be engaged with the driving or the driven member.

12. Clutch mechanism, comprising coöperative clutch disks equipped with means for pressing them into operative engagement, each of said disks having means for engaging the same with a driving or a driven element consisting in a hub removably and interchangeably fitted thereto whereby hubs with diverse sized shaft receiving bores may be employed.

14. Clutch mechanism, comprising a main clutch disk rigidly secured to a shaft element, a clutch ring coöperative therewith, an intermediate clutch disk, and means for pressing them into operative engagement consisting in draw bolts rigidly and permanently held by the main clutch disk having operating devices associated therewith, said draw bolts having a sliding loose fit through said clutch ring and the portion of said main clutch disk holding said draw bolts extending inward into relatively close proximity to said clutch ring whereby said bolts are rigidly supported and adapted to serve as steady pins to hold said clutch ring guided and alined with respect to said main clutch disk without the use of separate steady pins or other alining means, said draw bolts equipped with means adjustable thereon with respect to their operating devices at the ends thereof which project through said clutch ring.

[Claims 2 to 5, 7 to 9, 11, 13, 15, and 16 not printed in the Gazette.]

1,272,082. EMERGENCY LOCKING MECHANISM. WILLIAM CHARLES PARKER, Chicago, Ill. Filed Apr. 22, 1918. Serial No. 229,889. (Cl. 70—51.)



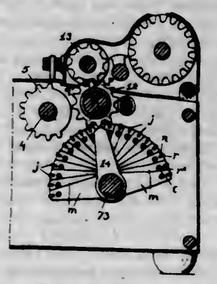
1. An emergency locking means for revolving doors, comprising a fixed member adapted for attachment to a door housing and having a support and guide for a latch bolt, a latch bolt associated with said support and guide, a revoluble member adapted for attachment to a revolving door and formed with a circular series of bolt holes adapted for engagement with the latch bolt aforesaid, and means adapted for operation from a remote point for releasing the latch bolt for a locking engagement, substantially as set forth.

2. An emergency locking means for revolving doors, comprising a fixed member adapted for attachment to a door housing and having a support and guide for a latch bolt, a latch bolt associated with said support and guide, a revoluble member adapted for attachment to a revolving door and formed with a circular series of bolt holes adapted for engagement with the latch bolt aforesaid, and a pivoted operating bar adapted for operation from a remote point and having operative connection with the latch bolt to release the same for a locking engagement, substantially as set forth.

3. An emergency locking means for revolving doors, comprising a fixed member adapted for attachment to a door housing and having a support and guide for a latch bolt, a latch bolt having vertical movement in said fixed member and formed with an angular upper portion engaging the support aforesaid, a revoluble member adapted for attachment to a revolving door and formed with a circular series of bolt holes adapted for engagement with the latch bolt aforesaid, and means adapted for operation from a remote point for releasing the latch bolt for a locking engagement, substantially as set forth.

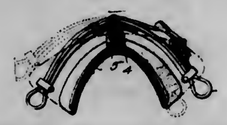
[Claims 4 and 5 not printed in the Gazette.]

1,272,083. CARRYING MECHANISM FOR CALCULATING-MACHINES. EDGAR E. PHINNEY, New York, N. Y., assignor to Monroe Calculating Machine Company, New York, N. Y., a Corporation of New York. Filed Aug. 27, 1915. Serial No. 47,644. (Cl. 235—130.)



In a calculating machine, carrying mechanism including independently movable gears, a reciprocatory plunger for each gear, a rotary shaft, members upon said shaft having guideways provided with straight portions parallel to said shaft, reciprocatory teeth having straight portions parallel to said shaft and slidable in straight paths in said guideways against the straight portions thereof, and means for depressing the plungers individually once during each rotation of the corresponding gears, each of said teeth being engaged by the corresponding plunger in the rotation of said shaft and thrown in the shortest path into engagement with the succeeding gear.

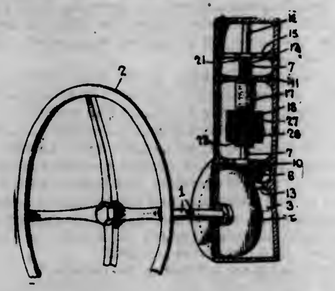
1,272,084. NECK-PAD. BRADLEY ELI PICKETT, Yankton, S. D. Filed Aug. 30, 1917. Serial No. 188,985. (Cl. 54—67.)



1. In a device of the character specified, the combination with the neck pad, of a yoke shaped member comprising a body secured to the pad and upstanding arms, a shaft carried by the arms, a bar having a bearing sleeve engaging the shaft, and a leather connection for the hame supported by the bar, said bearing sleeve being movable longitudinally of the shaft, and the bar being pivoted to the sleeve to permit lateral movement of the bar with respect to the sleeve.

[Claims 2 to 4 not printed in the Gazette.]

1,272,085. AUTOMOBILE STEERING-GEAR. SWAN P. PIERSON, Milford, Mass. Filed Aug. 10, 1917. Serial No. 186,588. (Cl. 74—79.)



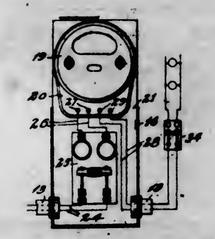
1. Irreversible steering gear comprising in connection with an initial actuating member and a final actuated member in the form of a runner, a rotary and longitudinally movable feed screw, a fixed member with which said screw has a threaded connection, a rotatable and longitudinally movable secondary feed screw, means for imparting rotary motion from one feed screw to the other, and a primary runner having a threaded connection with both feed screws actuated by one screw and actuating the other screw, said secondary runner having a threaded engagement with the secondary feed screw.

3. In steering gear, the combination of an initial rotary actuating member, a final reciprocatory actuated member consisting of a final runner, a rotary and longitudinally movable primary feed screw geared to said initial actuating member, a stationary member with which said primary feed screw has a right hand threaded engagement, a rotary and longitudinally movable final feed screw, means for transmitting rotary motion from one of said feed screws to the other, a primary runner having a left hand threaded engagement with the primary feed screw and a left hand threaded engagement with the final feed screw, said final actuated element or secondary runner having a right hand threaded engagement with said final feed screw, and a steering knuckle arm actuating rod with which said secondary runner has a tongue and socket connection.

[Claim 2 not printed in the Gazette.]

1,272,086. PROTECTIVE BOX FOR METER CONNECTIONS. CLARENCE D. PLATT, Bridgeport, Conn. Filed Nov. 21, 1917. Serial No. 203,125. (Cl. 247—17.)

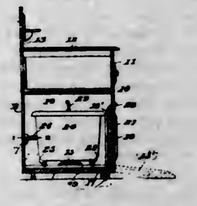
1. A protective box for meter connections comprising a box body open at one end to admit the terminal chamber of a meter, a cover secured to said box body having a cut-away portion to receive the terminal chamber, and an adapter secured over said cut-away portion and closely fitting said terminal chamber.



4. A switch box comprising a box body open at the front and at one end, and a cover secured to said box body, said cover having an end wall partially closing the open end of the box body and recessed to admit meter connections directly into said switch box, said box body having an extension at the open end thereof forming a support for a meter, and a meter mounted on said support having the electrical connections therewith disposed within the switch box.

[Claims 2 and 3 not printed in the Gazette.]

1,272,087. BATH-TUB CABINET. JOHN POCHOPIEN, Flint, Mich. Filed Dec. 28, 1917. Serial No. 209,249. (Cl. 45—38.)

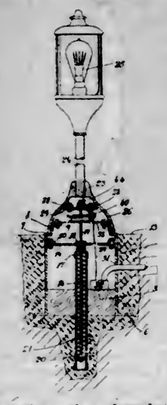


1. A device of the class described comprising a cabinet having a compartment adjacent the bottom thereof, rails upon the bottom of the compartment having forward extensions adjacent the open front of the cabinet, an approach hinged to the bottom of the cabinet arranged with slots adapted for the reception of the said rail extensions when the device is closed, closing doors for the cabinet positioned outwardly of the approach when closed, a tub slidably mounted upon the track within the compartment and automatic projecting means for the tub arranged within the cabinet.

2. A device of the class described comprising a cabinet having a compartment provided with a bottom and having a front opening, track rails transversely arranged upon the bottom of the cabinet having forwardly projecting ends, an approach hinged to the bottom of the cabinet arranged with slots adapted for the reception of the said track ends when the device is closed, rails upon said approach adjacent the said slots arranged in substantial alinement with the rails of the cabinet bottom when the approach is in its open slightly inclined position, a concealed tub movably mounted upon the rails within the cabinet when the latter is closed, expelling springs carried by the back of the cabinet in contact with the tub when the device is closed and a retaining catch for the cabinet doors.

1,272,088. TILTABLE POST. CHARLES A. POOLE, Jersey City, N. J. Filed Oct. 20, 1915. Serial No. 56,831. (Cl. 240—84.)

1. The combination of a foundation member, a post member supported thereon and adapted to tilt with respect thereto, means for maintaining said post in upright position, an electric lamp on said post, means for supplying current to said lamp and a switch in the lamp circuit for opening the latter when the said post member is tilted beyond a predetermined angle.

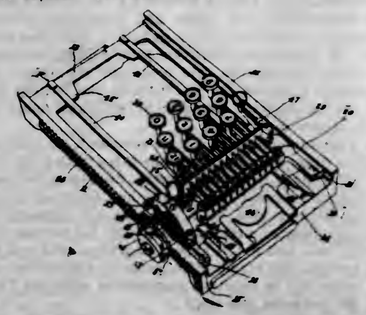


2. The combination of a foundation member, a post member supported on the latter and adapted to tilt with respect thereto, means tending to maintain said post member in upright position, an electric lamp on said post, means for supplying current to said lamp including annular switch blades secured to said foundation member, other annular switch blades secured to said post member, the said switch blades being adapted to engage each other to form an annular switch for maintaining the supply of current to the said lamp while the said post member is tilted.

3. A device of the class described, comprising a post member and a foundation member, and means constantly urging the post member toward the foundation member, the foundation member having an upstanding portion defining an annular supporting portion at its base, and the post portion having a hood-like member at its lower end having annular depending wall parts telescoped over the upstanding portion of the foundation member resting upon said supporting portion adapted to permit the post to tilt in all directions and to maintain the post centered upon the foundation member.

[Claims 4 to 7 not printed in the Gazette.]

1,272,089. TWELVE-KEY HAND-PUNCH. JAMES POWERS, New York, N. Y., assignor to Powers Accounting Machine Company, New York, N. Y., a Corporation of Delaware. Filed Dec. 30, 1915. Serial No. 69,459. (Cl. 164—112.)



1. In a perforator, the combination of a base; a carriage slidable on said base; punches carried on said carriage a die plate secured to the carriage and provided with perforations coöperating with the punches; and means carried on the base for holding said cards against endwise movement relative to the base.

7. In a perforator, the combination of a stationary base; a carriage slidable on said base; manually operable punches carried on said carriage; a die plate secured to the carriage and provided with perforations corresponding in number to said punches; stationary side guides secured to said base and disposed between said die plate and carriage; and end pieces for holding said cards stationary relative to said guides, base and end pieces.

15. In a perforator having a frame, a carriage mounted to travel along said frame, a plurality of punches mounted in said frame, actuating mechanism for moving said carriage along said frame, a plurality of key levers, cams interposed between said key levers and said punches, the actuation of said key levers engaging said cams to actuate said punches, a universal plate rockably mounted in engagement with said key levers and connected to said actuating mechanism, the actuation of said key levers also actuating said universal plate to actuate said actuating mechanism, and a space lever for actuating said actuating mechanism independently of said punches.

[Claims 2 to 6 and 8 to 14 not printed in the Gazette.]

1,272,090. CIRCUIT-PROTECTIVE DEVICE. WILLIAM D. PYLE, Indianapolis, Ind. Filed July 10, 1917. Serial No. 179,740. (Cl. 175—273.)



1. A safety device for an electric circuit comprising a tube, a body mounted on one end of the tube, said body formed with a pocket in connection with the bore of the tube and further formed with a reservoir adapted for containing a quantity of liquid, means for displacing liquid in the reservoir to cause the liquid to enter the pocket and fill the tube, and means for establishing electric connection with liquid in the tube.

4. In an electric protective device, a cylindrical body closed at one end with a bottom and provided on the bottom with an upstanding annular rim, and formed in the bottom with a pair of openings terminating in the space within the rim; an insulating tube attached to the body exteriorly of the bottom and formed with a pair of bores establishing connection with the openings in the body, and a cap on the tube inclosing a cavity connecting the ends of the bores; a cap on the body, a headed shank slidably inserted in an opening in the cap, and a plunger in the body attached to the shank and adapted for entering the space between the wall of the body and the rim.

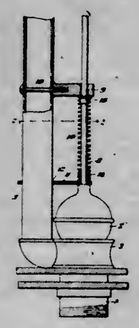
[Claims 2 and 3 not printed in the Gazette.]

1,272,091. VALVE FOR FLUSHING-TANKS. THOMAS H. QUINN, New Haven, Conn. Filed Nov. 16, 1917. Serial No. 202,366. (Cl. 4—5.)

1. In combination with the valve seat and over-flow pipe of a flushing tank, a valve to close downwardly on the valve seat and having an upwardly extending rod, a leader arm bearing on the valve and connected to the over-flow pipe for vertical movement thereon, and a spring bearing downwardly on the leader arm and hence exerting its tension to normally close the valve and to tightly hold the latter in closed position on the valve seat.

2. In combination with the valve seat and over-flow pipe of a flushing tank, a valve to close downwardly on the valve seat and having an upwardly extending rod, a

leader arm bearing on the valve and connected to the over-flow pipe for vertical movement thereon, a spring bearing downwardly on the leader arm and hence exerting its tension to normally close the valve and to tightly



hold the latter in closed position on the valve seat, and a guide arm for the valve rod and attached to the over-flow pipe, the spring being arranged on the valve rod and between the guide arm and the leader arm.

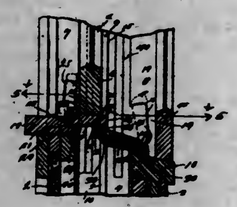
1,272,092. COMPOSITION FOR PREVENTING SMUT OF PRINTING-INK. CHARLES HERMAN RACKLE, New York, N. Y., assignor to Printing Ink Compound Co., New York, N. Y., a Corporation of New York. Filed July 31, 1917. Serial No. 183,721. (Cl. 134—1.)

1. A composition for preventing smut of printing ink, consisting of tallow, varnish, starch, paraffin oil, and oil of citronella, in proportions substantially as specified.

4. A composition for preventing smut of printing ink, consisting of mutton tallow, varnish, cornstarch, paraffin oil, and oil of citronella, in proportions substantially as specified.

[Claims 2 and 3 not printed in the Gazette.]

1,272,093. WINDOW-FRAME AND SLIP-SILL FOR DROP-SASHES. JOHN H. RAMBERG and OTTO A. MERMAN, Minneapolis, Minn. Filed July 11, 1917. Serial No. 179,898. (Cl. 20—52.1.)

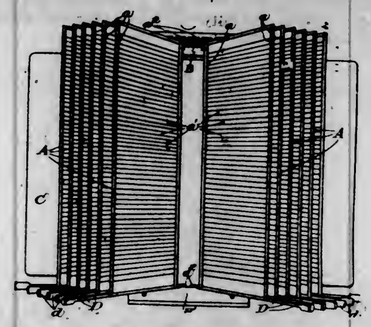


1. In combination, a window frame provided with a sill, and a pocket below the sill, said sill comprising inner and outer stationary sill sections and intermediate movable overlapping sill sections, each being hinged to the inner edge portion of an adjacent stationary sill section.

6. In combination, a window frame provided with a sill, and a pocket below the sill, said sill comprising inner and outer stationary sill sections and intermediate movable overlapping sill sections, each being hinged to the inner edge portion of an adjacent stationary sill section, the inner faces of the sides of the window frame at their lower portions having angular recesses adjacent the movable sill section hinged to the outer stationary sill section, and spring sheet metal devices on the ends of one of the movable sill sections to engage said angular recesses.

[Claims 2 to 5 not printed in the Gazette.]

1,272,094. INDEX. JAMES H. RAND, Newton, Mass. Filed Jan. 8, 1917. Serial No. 141,108. (Cl. 40—102.)

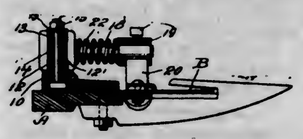


1. An index comprising a support, a series of stiff leaves hinged to said support, the hinges of the leaves being spaced apart, and means comprising a series of arms projecting outwardly from the several leaves beyond the outer edges of the leaves, said means and spaced hinges coöperating with one another to prevent the faces of the leaves from contacting with one another in any position of the leaves.

5. An index comprising a support, a series of stiff leaves hinged to said support, the hinges of the leaves being spaced apart, and a series of arms projecting outwardly from the several leaves beyond the outer edges of the leaves, each consisting of a headed wire or rod in substantial alinement with the bottom edge of the leaf, the several headed wires or rods being all disposed in the same plane perpendicular to the axes of the leaves, said arms and spaced hinges coöperating with one another to prevent the faces of the leaves from contacting with one another in any position of the leaves.

[Claims 2 to 4 not printed in the Gazette.]

1,272,095. SICKLE ATTACHMENT. JEFF RANKIN, Glendale, Ariz. Filed Dec. 8, 1917. Serial No. 206,252. (Cl. 56—44.)

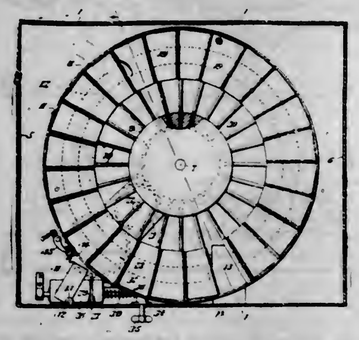


1. In a machine of the character described, the combination with a finger bar and a reciprocating cutter bar, of a base secured to said finger bar, posts rising from said base, spaced parallel guiding elements fitted on said posts, sleeves surrounding said posts and interposed between said elements to hold the latter spaced, a channeled block arranged to reciprocate between said guiding elements, and a connection between said block and the cutter bar, and including a spring for maintaining the cutting edge of said bar in constant engagement with the finger bar for the purposes described.

2. In a machine of the character described, the combination with a finger bar, and a reciprocating cutter bar, of a reciprocating block, a support therefor fixed upon the finger bar, a standard secured to the cutter bar, a rod providing a connection between said block and standard whereby the block is reciprocated simultaneously with the movement of said cutter bar, and a coil spring encircling said rod and bearing against said standard to maintain the cutting edge of said cutter bar in constant engagement with the finger bar for the purposes described.

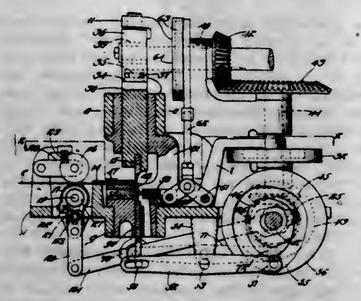
3. In a machine of the character described, the combination with a finger bar, and a reciprocating cutter bar, of a support secured to said cutter bar, a block arranged to slide upon said support, a standard rising from said cutter bar, and having a transverse bore, a rod providing a connection between said block and standard and having one extremity received within said bore, a spring encircling said rod and bearing against said standard to maintain the cutting edge of said bar in constant engagement with the finger bar, said standard being capable of sliding adjustment on said rod to vary the tension of said spring, and a set screw carried by said standard to engage said rod to hold the standard fixed relatively thereto in a given position.

1,272,096. VENDING-MACHINE. JOSEPH JOHN RATHGEB, Jr., New York, N. Y. Filed May 22, 1917. Serial No. 170,296. (Cl. 194—75.)



In a vending machine, a block mounted for movement and having a slot adapted to partially receive a check, means for moving the block, a closure movably mounted adjacent the block, and means including an arm adapted to be operated step by step by the check when the block is moved to advance the arm toward the closure and finally bring the arm in engagement with the closure and move the same over the slot in the block.

1,272,097. TACK-MAKING MACHINE. JAMES H. REED, Swampscott, Mass. Filed Oct. 18, 1917. Serial No. 197,367. (Cl. 10—30.)



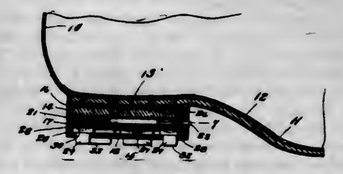
1. In a machine of the character described, a frame, a punch and block oscillatable relatively to said frame, means for oscillating the punch and block, means carried by the frame to reciprocate the punch there being a loose connection between the punch and its reciprocating means to permit the said oscillation.

4. In a machine of the character described, strip feeding mechanism, a reciprocating punch and tack forming dies movable relatively to each other, and so located as to permit the punch to deposit a slug in the said dies.

11. In a machine of the character described strip feeding mechanism, a reciprocating punch, a pair of tack forming dies having a matrix for the formation of a tack, said tack forming dies being located in line with the reciprocating punch, a finger reciprocating in line with the punch to assist the punch to deposit the slug in the said dies, and a spring finger in the face of one of said dies to hold a slug cut by the punch in proper position relatively to the other die.

[Claims 2, 3, and 5 to 10 not printed in the Gazette.]

1,272,098. BOOT OR SHOE HEEL. JOHN P. REILY, St. Louis, Mo. Filed Aug. 27, 1917. Serial No. 188,332. (Cl. 36—59.)

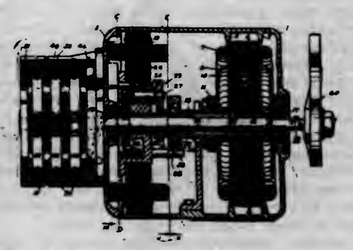


1. A shoe heel comprising a housing, the lower portion of which is removable, a filler block in the upper portion of said housing, an elastic body within the housing below said filler block, and a plurality of independently movable studs positioned within the housing beneath the elastic member, portions of which studs project through the bottom of the housing.

7. A shoe heel comprising a housing having a removable part, means for locking said removable part of the housing to the other part, a filler block located in the upper part of the housing, an elastic member located below the filler block, and a series of independently movable studs bearing against the under side of the elastic member and projecting through the bottom of the removable portion of the housing.

[Claims 2 to 6 not printed in the Gazette.]

1,272,099. SEMAPHORE-SIGNAL MECHANISM. GERRET REKERS, Rochester, N. Y., assignor to General Railway Signal Company, Gates, N. Y., a Corporation of New York. Filed Apr. 21, 1913. Serial No. 762,570. (Cl. 246—29.)



1. In an electric signal mechanism, in combination: an oscillatable member having a biased and a set position; a motor for causing the member to assume the set position; a shaft connected to the motor; a shaft connected to the member; a train of gear wheels having one end wheel connected to the shaft of the motor; a clutch for connecting the other end wheel and the shaft of the member when said member is assuming set position; a rotatable device of magnetic material mounted for turning in the direction of rotation of said member when assuming the biased position; a clutch for connecting the shaft of the member and the device when the member is assuming the biased position; the intermediate gear wheels in said train being operably mounted on the said device and movable therewith, and means for magnetically holding the rotatable device from turning.

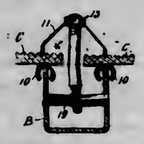
4. In a signal operating mechanism, in combination: an oscillatable arm having an operated position and a

biased position; an electric motor for operating said arm; an operating connection between said motor and said arm including a reduction gearing; means interposed in said connection and automatically operated by the movement of said arm to its biased position for interrupting said connection; means operated automatically by the movement of said arm to its biased position for operatively connecting said motor and said arm; an operating circuit for said motor; and circuit controlling means included in said motor operating circuit and governed by the movement of said arm, said circuit controlling means temporarily closing said motor operating circuit near the biased position of said arm when said arm moves toward its biased position.

12. In a semaphore signal operating mechanism, in combination: a semaphore having an operated position and a biased position; a motor for operating said semaphore; means including reduction gearing and rendered effective only when the semaphore is moved toward its operated position for operatively connecting the semaphore and the motor; means rendered effective only when the semaphore moves toward its biased position for directly connecting the motor and the semaphore; a circuit controller governed by the semaphore and closed only when the semaphore moves toward its biased position; an operating circuit for the motor including said circuit controller; and means for closing said operating circuit for part of the movement of the semaphore near its biased position.

[Claims 2, 3, and 5 to 11 not printed in the Gazette.]

1,272,100. SKYLIGHT. ARTHUR EDGECUMBE RENDLE, Philadelphia, Pa., assignor to Keystone Type Foundry, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Apr. 10, 1917. Serial No. 161,051. (Cl. 108—13.)



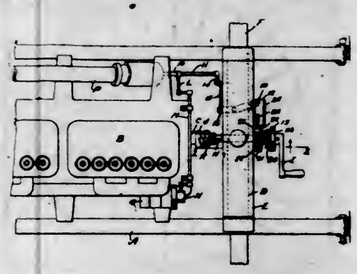
1. A skylight structure comprising a frame having supporting edges, glass plates with longitudinal grooves, cap-bars which span and cover the joints between said glass plates and have lower edges seated in longitudinal grooves in alinement with the supporting edges of said frame, the width of said grooves and the thickness of said lower edges being substantially the same, and securing devices, substantially as set forth.

2. A skylight structure comprising a metal frame having supporting edges, glass plates supported on said edges, rocking bearings comprising split tubes mounted on the supporting edges of the frame and between the plates and said supporting edges, and means for holding the parts in place, substantially as set forth.

3. A skylight comprising sections connected together, each section comprising channel-irons, sections of corrugated glass supported on the upper edges of said channel-irons, cap bars covering the space between the adjacent edges of said glass sections and with one lower edge resting in a corrugation of said respective glass plates, and immediately over and in alinement with the supporting edges of said channel-iron, tubular lead rocking bearings having longitudinal openings interposed between the supporting edges of said channel-iron and the glass plates, said longitudinal openings allowing of limited rocking movement of the bearing tubes, clamping means for holding said parts in position, a support extending from beneath the upper end of one channel-iron to beneath the lower end of the adjacent channel-iron across the end of said lower channel-iron, and means for securing said support, substantially as set forth.

4. A skylight structure comprising channel-irons having upturned supporting edges, glass sections supported on the upturned edges of said channel-irons, bearings consisting of tubular members having longitudinal openings, lead parts mounted to rock on the upper edges of said channel-irons and forming rests for said glass sections, said glass sections being formed with longitudinal grooves or corrugations in their upper surfaces, a cap bar having down-turned edges adapted to straddle the space between the edges of said glass sections and having its lower edges fitted in said corrugations or grooves immediately over and in alinement with the supporting edges of said channel-irons, and means for securing said parts together, substantially as set forth.

1,272,101. AUTOMATIC SAFETY ATTACHMENT FOR CRANKING DEVICES. GEORGE HENRY RICE, Castner, Hawaii. Filed Dec. 11, 1917. Serial No. 206,602. (Cl. 123—185.)



1. An automatic safety attachment for the cranking device of an internal combustion engine, including coacting elements, the one adapted to be applied to the cranking device and the other adapted to be mounted adjacent to the cranking device; together with means operative with an abnormal movement of the spark advancing means of the engine to relatively position said elements for interlocking engagement to prevent turning of the cranking device when the spark has been advanced to an extent to produce back-fire.

2. The combination with the spark advancing means and cranking device of an internal combustion engine, of means operative by an abnormal movement of the spark advancing means to prevent turning of the cranking device.

3. An automatic safety attachment for the cranking device of an internal combustion engine, including an element adapted to be secured to the cranking device to partake of its turning and sliding movements, an element adapted to be mounted adjacent to the first element for relative movement, and means to throw the second element into position for locking with the first element, the said last mentioned means being adapted to connect the second element with the actuating means of the timing device of the engine to partake of the movements of said actuating means and engage the first mentioned locking element by an abnormal movement of said actuating means.

4. The herein described safety attachment for controlling the cranking device of an internal combustion engine, comprising a disk adapted to be secured to the cranking device to partake of the movement thereof, a transversely slidable element, said disk having locking members on that face adjacent to the path of movement of the slidable element, guide means for said sliding element, and means to shift the sliding element transversely to lie in the plane of rotation of the members on the disk when the cranking device is advanced to clutching position.

5. The combination with the spark advancing means, the actuating means thereof, and the cranking device of an internal combustion engine; of a disk on the cranking device to partake of the longitudinal and turning movements thereof, an annular series of studs on a face of the disk, a transversely movable locking member having an edge portion adapted to be moved with the sliding of said device into a position to interlock with the studs on the disk, and a connection between said locking device and the said actuating means to bring said locking device and the said studs into locking engagement upon an abnormal movement of the said actuating means.

1,272,102. FEED-BAG SUPPORTER. MURRY E. RICE, Delphos, Kans. Filed Apr. 19, 1917. Serial No. 163,207. (Cl. 119—67.)



In a feed bag supporter, the combination with a substantially rectangular frame composed of rods, and a plurality of cross rods within the frame; of a pair of supporting rods whereof each has means at its upper end for attachment to a harness-collar and is formed at its lower end into a loop slidably mounted on the rear frame bar, and continued beyond said loop in a short arm standing oblique to the main portion of the rod and having an outturned hook at its front end for removable engagement with the side bar of the frame, for the purpose set forth.

1,272,103. AUTOMOBILE STEERING-GEAR. JAMES H. RICHARDS, Moscow, Idaho. Filed June 4, 1917. Serial No. 172,647. (Cl. 74—79.



1. A motor-vehicle steering mechanism including a housing having a lateral supporting arm on one side and a similar supporting wing on the opposite side thereof, the wing being relatively shorter than the arm and having a relatively right angled suporting ear thereon, a rock-shaft mounted in the housing, a steering arm secured to the rock-shaft, a steering shaft rotatively guided in the housing, and means in the housing having operative connection with the steering shaft and the rock-shaft to enable the former to control the latter.

7. In a motor-vehicle steering mechanism, the combination of a housing having a guide bore therein and a counterbore extending from the guide bore to one end portion of the housing, said end portion being provided with a head having a cylindrical extension that also has a head therein, the head of the housing and the extension being bored, the guide bore having longitudinal guide grooves therein, an annular rock-lever in the counterbore and having trunnions supported in the wall of the housing, one of the trunnions extending through the wall and having a steering arm thereon, a cam sleeve in the housing extending through the rock-lever and into the bore of the extension of the housing head and having right and left pitcher grooves in its periphery, a ball-race seated in said housing head, bearing balls on the ball-race, a bearing cone secured to said sleeve at a short distance from one end thereof and seated on said balls, two push-blocks guided in said guide bore and contacting respectively with opposite portions of said rock-lever, the push-blocks having guide-pins thereon extending into said guide grooves respectively, the inner faces of the push-blocks having right and left screw-threads thereon extending into the right and left pitched grooves respectively, bearing-balls arranged on the opposite end of the cam sleeve, a bearing-box screwed into the opposite end of the housing and having a notched flange on its outer end, a bearing plate secured to the inner end of the bearing box and contacting with said last-mentioned bearing balls, a latch mounted on the housing and contacting with said notched flange, a steering shaft extending rotatively through said bearing box and the cam sleeve and secured to the sleeve, a dust-collar secured to the steering shaft adjacent to the outer end of the bearing box, and a swab secured to said collar and contacting with said end of the bearing box.

[Claims 2 to 6 not printed in the Gazette.]

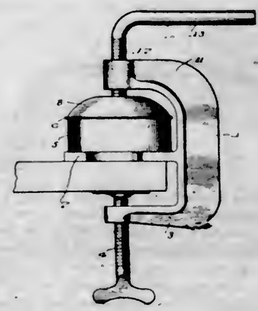
1,272,104. HYPODERMIC NEEDLE. RICHARD H. RIETHMUELLER, Philadelphia, Pa. Filed Nov. 25, 1914. Serial No. 873,881. (Cl. 128—25.)



1. A hypodermic needle having a weakened region, and means on said needle intermediate of said weakened region and the point of the needle for arresting its movement.

2. A hypodermic needle having a weakened region, a guard adjustable along said needle, and means arranged to secure said guard to said needle between said weakened region and its point.

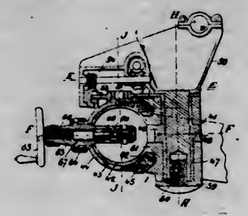
1,272,105. DEVICE FOR RE-FORMING FRUIT-JAR COVERS. HOWARD V. RILEY and ALBERT G. RILEY, Flint, Mich. Filed Apr. 17, 1917. Serial No. 162,643. (Cl. 81—15.)



A device for reshaping jar covers comprising a frame having a fixed base portion provided with a smooth upper surface and means coöperating with the base portion to hold the frame in position upon a support, a screw threaded in the frame above the base portion and located approximately centrally thereof and having a rounded lower end, a ring resting loosely on the upper smooth surface of the base portion, a dome shaped disk having in the vicinity of its edge and at its lower side an annular flange the outer surface of which is beveled, the diameter of the ring being greater than that of the flange whereby the ring may receive the flange, the disk being provided at its upper side with a concaved depression which is centrally located with relation to the said flange and adapted to receive the rounded lower end of the screw and a clamp screw passing through the frame at the op-

posite side of the base portion from the first mentioned screw, said screws having their active end portions in alinement with each other.

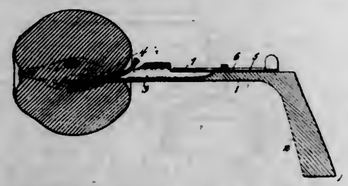
1,272,106. WHEELED GUN-CARRIAGE WITH WIDE SCOPE OF FIRE. EMILE RIMAILHO, Paris, France, assignor to Compagnie Des Forges Et Acieries De La Marine Et D'Homecourt, Paris, France. Filed June 17, 1914. Serial No. 845,578. (Cl. 89—40.)



3. A wheeled gun carriage comprising an axle wheel frame and a trail frame coupled thereto by a ball and socket joint, said joint consisting of a ball and neck thereon held in a recess formed therein, a pair of threaded half collars, the neck resting on the axle and extending through a two part socket, the internal section of which is cylindrical and the external section being polygonal whereby a constant surface of support is obtained irrespective of the direction of the trails relating to the axle.

[Claims 1, 2, 4, and 5 not printed in the Gazette.]

1,272,107. APPLE-CORER. ROBERT WHITING RIORDAN, Brooklyn, N. Y. Filed Mar. 27, 1918. Serial No. 224,947. (Cl. 146—6.)

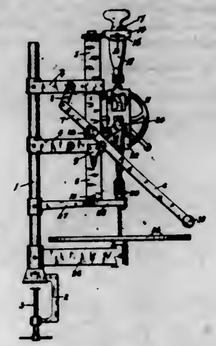


1. An apple corer comprising a shank having a tubular cutter, a lever fulcrumed on the shank at a point inwardly from the cutter, a secondary cutter on the end of the lever adjacent the tubular cutter, a handle connected with the shank, and means on the lever at a point adjacent the handle, whereby the lever can be operated to throw the secondary cutter into and out of operative position.

2. An apple corer comprising a shank having a tubular portion beveled at its extremity and open at its inner end, a lever fulcrumed on the shank and having a second cutter disposed adjacent the open end of the tubular cutter, a handle connected with the shank, and a thumbpiece on the end of the lever opposite from the secondary cutter and located adjacent the handle.

1,272,108. HAND-DRILL. JOHN ROBB and EDGAR SAMUEL LYONS, Toronto, Ontario, Canada. Filed Oct. 6, 1917. Serial No. 195,182. (Cl. 77—7.)

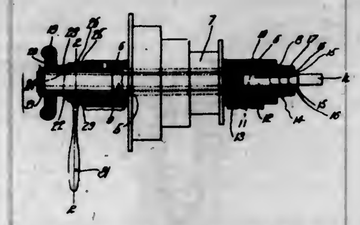
1. A drill frame comprising a vertical cylindrical post attachable to a separate stationary base, stationary twin-arms horizontally and vertically adjustable upon the post, a carrying bar vertically slidable upon the twin-arms, a feed-lever pivoted upon the carrying bar and loosely linked to one of the stationary twin-arms, and means for removably attaching the drill to the carrying bar.



4. A drill frame comprising a revoluble vertical cylindrical post attachable to a stationary base, separate stationary twin-arms horizontally and independently vertically adjustable upon the post, a carrying bar vertically slidable upon the twin-arms, a feed lever pivoted upon the carrying bar, and loosely linked interchangeably to either of the stationary twin-arms, and means for removably attaching the drill to the carrying bar.

[Claims 2 and 3 not printed in the Gazette.]

1,272,109. CHUCK-CLOSER. ALBERT F. ROBBINS, Waltham, Mass. Filed June 25, 1917. Serial No. 176,694. (Cl. 29—113.)

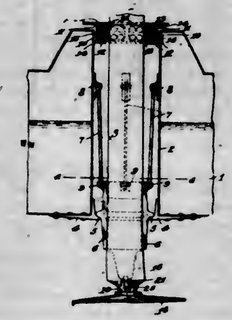


1. A chuck closer having, in combination, a hollow shaft, a chuck member extending through said shaft, gripping fingers on said chuck member at one end of said hollow shaft, adapted to engage said hollow shaft and be forced toward each other when said chuck member is moved longitudinally thereof in one direction, a cam fast to said chuck member, another cam rotatably mounted on said chuck member between said first-named cam and said shaft and bearing against the end of said shaft opposite that end thereof adjacent to said gripping fingers, means rotatably mounted on said last-named cam and a manually operable device to lock said last-named means and cam together whereby said chuck member may be moved longitudinally within said shaft and said fingers moved toward each other.

5. A chuck closer having, in combination, a hollow shaft, a chuck member extending through said shaft, gripping fingers on said chuck member at one end thereof adapted to engage said hollow shaft and be forced toward each other when moved longitudinally thereof in one direction, a hand wheel fast to said chuck member, and adjustable longitudinally thereof, a hub on said hand wheel having one end thereof inclined to form a cam, a collar rotatably mounted upon said chuck member between said hand wheel and said shaft, one end thereof being inclined to form a cam and bearing against the inclined end of said hand wheel hub, the other end of said cam collar arranged to bear against the end of said shaft opposite that end at which said gripping fingers are located, said cam collar having a plurality of holes extending radially therethrough, a collar rotatably mounted upon said cam collar, and a pin slidably mounted on said last-named collar and adapted to project into any one of the holes in said cam collar, whereby, when said last-named collar is rotated, said cam collar will be rotated and said chuck member moved longitudinally thereof in said hollow shaft and said fingers forced toward each other.

[Claims 2 to 4 not printed in the Gazette.]

1,272,110. DREDGE. ARTHUR W. ROBINSON, Montreal, Quebec, Canada. Filed Dec. 12, 1917. Serial No. 206,816. (Cl. 37—18.)



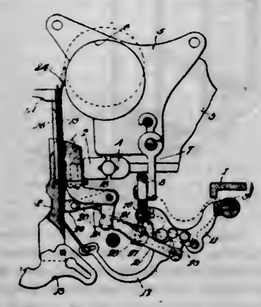
1. A dredge having a spud casing and guiding and cushioning devices for the spud at or near the top of the casing.

4. A spud having a conically recessed ball casting on its lower end, a base plate having a corresponding ball socket in its upper surface, a headed bolt engaging with the base plate and passing through the conical recess in the ball casting, and a key which passes through the bolt whereby the base plate is held to the casting.

5. A spud having a conically recessed ball casting at its lower end, a foot plate comprising a central casting having a ball socket in its upper surface and a recess in its lower surface, two substantially equal wings or plates pivoted to the central casting in such manner as to expand when pressed against the bottom and to collapse when lifted from the bottom, the socket casting being pivotally connected to the ball casting by a vertically arranged headed bolt which passes through the conical recess in the ball casting.

[Claims 2 and 3 not printed in the Gazette.]

1,272,111. MOVABLE LINE-FINDER. ALVAH C. ROEBUCK, Woodstock, Ill., assignor to Woodstock Typewriter Company, Woodstock, Ill., a Corporation of Illinois. Filed May 27, 1915. Serial No. 30,715. (Cl. 197—190.)

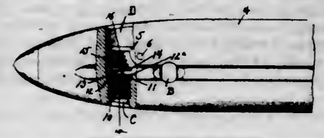


1. In a typewriter, the combination of a shiftable platen, and a line finder separately pivoted in the typewriter frame having a connection which shifts the finder when the platen is shifted.

15. In a typewriter, a shiftable platen, means for shifting the platen, a bell crank, a line finder pivoted to one arm of the bell crank and movable vertically thereby, and means connecting the other arm of the bell crank and the means for shifting the platen so that the line finder will be moved in accordance with the movement of the platen.

[Claims 2 to 14 not printed in the Gazette.]

1,272,112. TENSION DEVICE FOR LOOM-SHUTTLES. FRANK M. ROGERS, Baltimore, Md. Filed May 31, 1917. Serial No. 171,953. (Cl. 139—46.)



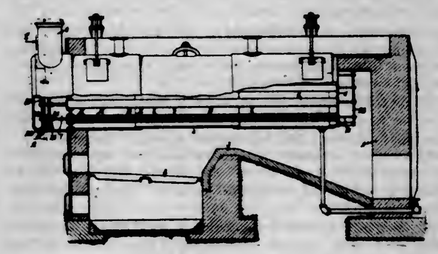
1. A tension device for loom shuttles, comprising a member adapted to engage the yarn, a tensioning spring engaging said member, an apertured socket piece fitted in the shuttle, and a screw adjustable in said socket piece and engaging said spring, said screw being provided with a projecting part to prevent its passage through the socket piece, substantially as set forth.

3. A tension device for loom shuttles, comprising a member adapted to engage the yarn, a tensioning spring engaging said member, an apertured socket piece fitted in the shuttle, and a screw adjustable in the socket piece and having a head engaging said spring and preventing the passage of the screw through the socket piece, said screw having a notched end for adjusting the screw through the socket piece, substantially as set forth.

7. A tension device for loom shuttles comprising a member adapted to engage the yarn, means for adjusting the tension of said member, a socket in the shuttle and means for securing the adjustment of the tension consisting of a screw adjustably mounted in said socket and operably connected with said member and having a head located between said member and the socket to prevent its passage through said socket, substantially as set forth.

[Claims 2 and 4 to 6 not printed in the Gazette.]

1,272,113. BOILER. PETER O. ROTH, New York, N. Y. Filed May 26, 1917. Serial No. 171,257. (Cl. 110—97.)

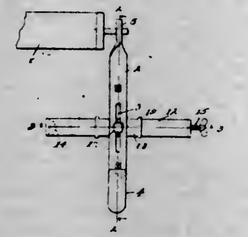


1. In a device of the character described, the combination with a boiler having flues of means for retarding the passage of the flame and products of combustion through said flues, said means comprising a rod extending longitudinally through each of said flues, a plurality of propeller-like structures rotatably arranged on said rod, means on each of said propeller-like structures overlapping the next adjacent propeller-like structure for transmitting motion from each structure to the next adjacent structure, and means for rotating one of the end propeller-like structures for causing a rotation for varying the relative position of said propeller-like structures.

5. In a device of the character described, the combination with a boiler having flues, of means for retarding the passage of the flame and products of combustion through said flues, said means comprising a spiral member arranged in each flue formed with comparatively long spiral sections, and comparatively short adjustable sections, said adjustable sections being divided into small parts, each part presenting a propeller-like structure, a pair of members arranged on each of said parts acting to transmit motion from one part to the next adjacent parts, one of said members on each of said parts causing said parts to assume a spiral when moved in one direction and the other of said members on each of said parts causing said parts to assume an interrupted spiral when moved in the opposite direction, the parts next to said long sections overlapping said long sections for transmitting motion thereto when rotated, means connected with one of said propeller-like structures arranged in each of said flues for rotating the same to adjust the remaining propeller-like structures whereby a greater or less amount of retarding effect may be produced.

[Claims 2 to 4 not printed in the Gazette.]

1,272,114. SHADE-ROLLER HOLDER. CECIL A. ROUSH, Upper Sandusky, Ohio. Filed Nov. 1, 1917. Serial No. 199,692. (Cl. 156—24.)



1. A shade roller holder comprising a stationary horizontal member, said member being provided with vertical corrugations thereon, adjustable vertical members having vertical corrugations thereon and means carried by the vertical member for clamping the corrugations upon each member into engagement.

2. A shade holder comprising a stationary horizontal strip, said strip carrying vertical corrugations, an adjustable vertical member carrying an elongated opening, a plate mounted upon the horizontal strip, vertical corrugations carried by the movable member, and means slidably mounted in the opening of the movable member and engaging the horizontal strip for forcing the corrugations thereon into engagement with the corrugations formed upon the movable member.

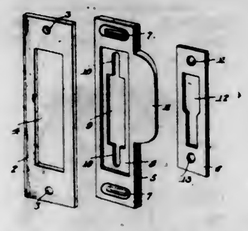
3. A shade holder comprising a stationary horizontal member having corrugations thereon, a plate horizontally movable thereon, and having an opening therein, a vertical movable member, a slide thereon having a threaded opening, and a thumb screw operable in said slide for engagement with the horizontal member through the opening in said plate.

6. A shade holder comprising a stationary horizontal member having vertical corrugations upon its inner face, the longitudinal edges of said inner face being cut away, a vertical movable member having corrugations thereon to coact with the corrugations on the horizontal member, a plate slidably mounted upon the outer face of said horizontal member, said plate having a plurality of fingers bent over the longitudinal edges of said horizontal member to engage the cut away portion thereof, and means carried by the vertical member for adjustably clamping the same upon the horizontal member.

7. A shade holder comprising a vertical movable member consisting of a pair of spaced parallel vertical arms one of which is provided with vertical corrugations, a stationary horizontal arm interposed between said vertical arms and provided with vertical corrugations to coact with those upon the vertical arm, and means carried by the vertical arm for adjustably clamping the vertical member to the horizontal arm.

[Claims 4 and 5 not printed in the Gazette.]

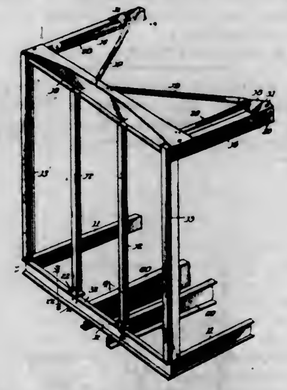
1,272,115. LOCK-STRIKE. LEO RUSSELL, Mineral Wells, Tex. Filed Mar. 23, 1918. Serial No. 224,120. (Cl. 70—15.)



1. A device of the class described comprising a flat plate having a transverse slot at each end thereof for receiving the securing means and a centrally located recess, a second plate seated in said recess and means for adjusting the second plate vertically in said recess.

2. A device of the class described comprising a plate having a hole in each end thereof, a second plate having a horizontal slot at each end thereof, registering with the said holes, a recess formed in each face of said second plate, and an opening in said recess having its ends reduced, a top plate having a central opening and a hole at each end, said top plate fitting in the recess in the top face of the second plate, a pair of plates engaging the recess in the bottom face of the second plate, screws passing through the openings in the top plate, and the reduced ends of the opening in the second plate, and engaging openings in the pair of plates, and screws passing through the slots in the second plate and the holes in the first place.

1,272,116. CAR END CONSTRUCTION. THOMAS NATHAN RUSSELL, Chicago, Ill., assignor to Chicago-Cleveland Car Roofing Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 16, 1914, Serial No. 877,463. Renewed Dec. 10, 1917. Serial No. 206,564. (Cl. 105—192.)



1. In a car frame, an upper structure comprising longitudinal side plates, a transverse beam, gusset plates attached to the horizontal faces of said side plates intermediate their ends, portions depending from said gusset plates attached to the vertical faces of said side plates, and diagonal members attached at one end to the gusset plate and at the other end to said transverse beam.

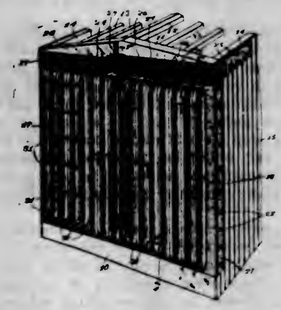
3. In a car frame a roof structure comprising longitudinal side plates, transverse beams, gusset plates attached to one of the said side plates intermediate its ends, a diagonal member attached at one end to the gusset plate and at the other end to a transverse beam, and a member substantially parallel to the side plate beam connected at one end to the said gusset plate and at the other to the transverse beam.

7. A car frame comprising, in combination, a substantially vertical beam of Z-shaped cross-section and a substantially horizontal beam, a shoe arranged on said horizontal beam, and a projection on said shoe of Z-shaped cross-section projecting perpendicularly with respect to said horizontal beam, and means for clamping said projection to the end of said vertical beam.

9. A car frame comprising, in combination, a substantially vertical beam, a substantially horizontal beam, a shoe on said horizontal beam adapted to receive the end of the vertical beam, said shoe having portions adapted to contact with the horizontal and inner vertical faces of the horizontal beam and two longitudinal faces of the vertical beam and not the faces diametrically opposite thereto, and means for clamping said faces of said beams against said portions.

[Claims 2, 4 to 6, and 8 not printed in the Gazette.]

1,272,117. RAILWAY-CAR. THOMAS N. RUSSELL, Chicago, Ill., assignor to Chicago-Cleveland Car Roofing Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 17, 1916. Serial No. 72,495. (Cl. 105—192.)



1. In a railway car, the combination of an end plate, and end-closure plate extending downward from said end plate and having a plurality of strengthening ribs therein extending in vertical position from substantially the lower edge of the end plate, and means for bracing said end-closure plate relative to said end plate comprising a strengthening rib extending in horizontal position along said end plate and secured thereto, whereby said horizontally-extending strengthening rib and said vertically-extending strengthening ribs mutually reinforce each other.

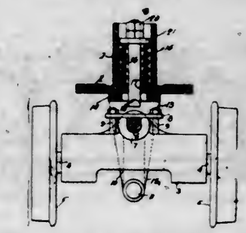
3. In a railway car, the combination of a plurality of end-closure plates arranged side by side transversely of the car, each of said plates having a plurality of strengthening ribs therein extending in vertical position substantially from the upper edge of the plate to substantially the lower edge near the floor of the car, and means for bracing said end-closure plates against bowing outward between their side edges longitudinally of the car, comprising a strengthening rib extending transversely of the car from the outer side edge of one of said end-closure plates to the outer side edge of the other of said end-closure plates near the upper edge of said end-closure plates.

8. In a railway car, the combination of two end-closure plates arranged side by side across the end of a car, each of said plates having a plurality of strengthening ribs therein extending in vertical position from substantially the upper edge of the plate, and means for bracing said end-closure plates against bowing outward between its side edges longitudinally of the car, comprising a strengthening rib of varying depth extending in horizontal position near the upper edge of said end-closure plates being of greatest depth at about the middle of the car, and means for reinforcing said strengthening rib near its middle point, said reinforced horizontally-extending strengthening rib and said vertically-extending strengthening ribs being adapted to mutually reinforce each other.

11. In a railway car, the combination of an end plate, a plurality of end-closure plates arranged side by side and bearing at their upper ends on the outer face of the end plate, each of said end-closure plates being provided with a plurality of strengthening ribs therein extending in vertical position from substantially the lower edge of the end plate, a reinforcing strip extending across the outer faces of said end-closure plates at their upper ends and provided with a strengthening rib pressed therein longitudinally thereof, and means for securing both said end-closure plates and said strip to said end plate, said horizontally-extending rib and said vertically-extending ribs being adapted to mutually reinforce each other for strengthening the end structure against strains longitudinally of the car.

[Claims 2, 4 to 7, 9, and 10 not printed in the Gazette.]

1,272,118. SWING-TRUCK FOR LOCOMOTIVES. KENNETH RUSHTON, Philadelphia, Pa., assignor to The Baldwin Locomotive Works, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 6, 1918. Serial No. 220,696. (Cl. 105—226.)



1. The combination in a swing truck, of a center bearing carried by the locomotive or car body; a truck; a rocker frame pivoted to the truck and arranged to rock against the center bearing; and a spring carried by the center bearing and tending to hold the frame against the bearing and to return the frame to its normal position.

2. The combination of a center bearing adapted to be secured to a locomotive, or car body; a truck frame; a rocker frame; links connecting the rocker frame with the truck frame, said rocker frame resting against the under side of the center bearing; and a spring tending to draw the rocker frame against the center bearing and to return the rocker frame to its central position.

3. The combination in a swing truck, of a center pin; a truck frame having bearings for an axle; a rocker frame resting against the under side of the center pin; links connecting the rocker frame with the truck frame; a spring located in the center pin; and a bolt supported by said spring tending to normally retain the rocker frame in the central position.

[Claims 4 to 7 not printed in the Gazette.]

1,272,119. VEHICLE-WHEEL HUB. LOUIS A. RYAN, Everett, Mass. Filed Nov. 18, 1916. Serial No. 132,147. (Cl. 21—31.)

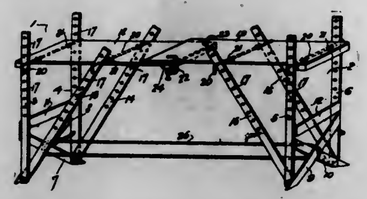
A device of the class described comprising an inner section consisting of a box having a screw threaded extension and a flanged collar having sockets therein, a second flanged collar having an axially threaded opening therein engaging with the screw threaded extension and a flange coöperating with the before mentioned flange to engage the spokes, an outer section or sleeve having an

interior collar intermediate its ends provided with a screw threaded opening engaging with the screw threaded



extension, the end of said sleeve being screw threaded and a nut adapted to engage said screw threads.

1,272,120. SCAFFOLD. WILLIAM KELSON SAINT, Vancouver, British Columbia, Canada. Filed Oct. 12, 1917. Serial No. 196,257. (Cl. 20—81.)

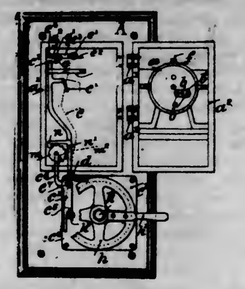


1. In a scaffold, a platform, vertical supporting frames therefor, braces pivoted to said frames and engaging the platform between the frames, and a flexible connection between said frames adapted to be drawn taut to pull the bottoms of said frames toward each other whereby an arching strain is exerted on the platform.

2. In a scaffold, a pair of vertical supporting frames, a platform board for each frame supported thereby at its outer end and detachably secured thereto at its outer end, the inner ends of said boards being overlapped and detachably clamped together, means for bracing said boards intermediate their length, and a flexible connection between said frames adapted to be drawn taut so as to pull said frames toward each other and to force the said supporting means upwardly against the underside of the platform boards to stiffen the platform formed thereby.

3. In a scaffold, a pair of vertical supporting frames the opposite legs of which are suitably braced together and provided with a plurality of vertically spaced openings and a rod passing through a pair of said openings, a platform board for each frame each of which is supported on the said rods at its outer end, the inner ends of said boards being clamped together, a pair of bracing frames hingedly connected at their lower ends to the respective vertical frames and having their opposite legs perforated with a plurality of spaced openings and provided with a rod passed through a pair of said openings, said hinged frames being disposed so that the rods of the same support the said platform boards approximately intermediate their length, staples on the underside of said boards and through which the said rods pass, and an adjustable connection between the lower ends of said vertical frames whereby tension can be exerted upon the platform to arch it.

1,272,121. AUTOMATIC CONTROLLING MEANS FOR HEATING AND LIGHTING INSTALLATIONS AND SUCH LIKE. SAMUEL SAUNDERS, Manchester, England. Filed Oct. 10, 1917. Serial No. 195,669. (Cl. 161—8.)



1. An automatic control mechanism comprising a movable alarm clock, a stop alarm press fitting thereon, a rotary mounting on the back of said clock, a compound release lever device, a fulcrum for such lever device, a ratchet in connection with one part of the lever, a connecting device with another part of the compound lever whereby the lever elements are inter-connected, a rotatable pulley worked by a load on release of the compound lever and trip lever mechanism comprising a pivoted lever and hinged part operated on the backward movement of the compound lever said pivoted lever working the stop alarm press fitting.

2. An automatic control mechanism comprising a movable alarm clock, a stop alarm fitting on said clock, a rotary alarm wind mounting on said clock, a release lever device formed in two parts, a toothed device on the one part and a connection to said toothed device on the other part, a release pulley, a load to work such pulley on release, and a stop on said pulley, and a trip lever with pivoted part and pins, the trip lever mechanism being operated on the backward movement of part of the release lever and serving to actuate the stop alarm fitting on the clock.

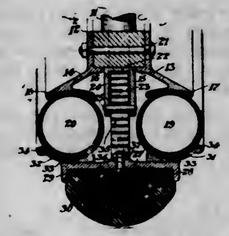
3. An automatic control mechanism consisting of a movable alarm clock, a stop alarm fitting on the clock, a rotary alarm wind mounting on the alarm wind spindle, a compound release lever consisting of an upper and a lower part, a fulcrum for the compound release lever, a quadrant fitting on the one part, a pivoted inter-connecting device on the other part, means to hold the compound lever, a movable connection operating device capable of being set, a stop thereon, and a trip lever mechanism mounted above the clock and a hinged plate on said lever whereby the trip lever works the stop alarm fitting on the clock on the return movement of the upper part of the compound release lever.

5. An automatic control mechanism comprising a support, a movable alarm clock, a hinged carrier for said clock, a stop alarm fitting and an alarm spindle mounting on said clock, a compound release lever consisting of an upper and lower part, a ratchet disk on the lower part, a link connection to said disk on the upper part, a rotary operating pulley and connections and a stop for the lower part of the release lever, and inclosed trip lever mechanism consisting of a pivoted lever, hinged parts and stop-pins operated by the upper part of the release lever to act on the stop alarm fitting on the clock all in combination and as set forth.

[Claim 4 not printed in the Gazette.]

1,272,122. VEHICLE-WHEEL. GUSTAV SCHADEE, New York, N. Y., assignor, by mesne assignments, of two-thirds to Emma G. Gallagher and one-third to Alice Schadee, New York, N. Y. Filed Sept. 24, 1917. Serial No. 192,884. (Cl. 152—32.)

1. In a vehicle wheel and in combination with the felly thereof, an inner rim comprising separable members secured to the inner sides of the felly, an outer rim, pneumatic tubes between the members of the inner rim and the outer rim, a plurality of brackets secured to the face of the felly between the separable members of the inner rim, a corresponding number of volute springs, devices for connecting the inner end of each volute spring in one of the said brackets, and means for connecting the outer end of each volute spring in the said outer rim.



3. In a vehicle wheel and in combination with the felly thereof, an inner rim comprising separable members secured to the sides of the felly, an outer rim with the inner face thereof screw threaded, tube rings adapted to be turned in the screw threaded inner face of the outer rim, there being a tube ring corresponding to each of the separable members of the inner rim, a pneumatic tube between each member of the inner rim and the corresponding tube ring, a plurality of brackets each secured to the face of the felly between the separable parts of the inner rim and having flanges extending therefrom, a pin secured in the flanges of each bracket, a corresponding number of volute springs the inner end of each of which is connected to a pin in one of the said brackets, and bolts by which the outer ends of the said springs are secured in the said outer rim.

[Claim 2 not printed in the Gazette.]

1,272,123. SHEAR-GUARD. HARVEY K. SCHELL, Polo, Ill. Filed Mar. 9, 1918. Serial No. 221,564. (Cl. 30—13.)



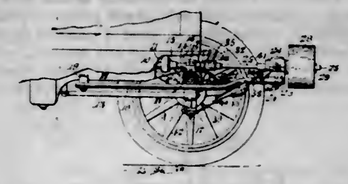
1. As a new article of manufacture, a shear guard comprising a body having an elongated aperture at its middle, said body provided with parallel apertured ears contiguous to said aperture, and said ears projecting inwardly, whereby a shears can be projected through said aperture and attached to said ears, substantially as shown and described.

4. A device of the class described, comprising a body provided with an aperture formed therein between its ends, and said body provided with angularly-disposed shear supporting means intermediate its ends and contiguous to said aperture.

[Claims 2 and 3 not printed in the Gazette.]

1,272,124. BELT ATTACHMENT FOR MOTOR-VEHICLES. WILLIAM SCHLUTER, Parkersburg, Iowa, assignor to Parkersburg Manufacturing Company, Parkersburg, Iowa, a Corporation of Iowa. Filed Aug. 7, 1917. Serial No. 184,917. (Cl. 180—53.)

1. In a belt attachment for motor vehicles, the combination of a motor having a crank shaft, a stub shaft mounted on the vehicle and engaged with the crank shaft, a driving shaft detachably supported upon the vehicle, coupling heads on the stub and driving shafts and having diametrically opposed notches for the interlocking engagement of said heads, one of the shafts being adapted to extend through the coupling head thereon and within the other coupling head.



3. The combination with a pair of shafts, of sleeve like coupling heads mounted on the adjacent ends of said shafts and having diametrically opposed notches for the interlocking engagement of the heads, one of the shafts being extended within the head thereon, and a crank handle having an arm provided with a hollow boss for telescopic engagement on the extended end of the shaft and to be received in the head thereon and also having a beveled tooth for ratchet action upon the head when the other head is detached.

5. A belt attachment for motor vehicles comprising a pair of spaced bars adapted to extend beneath the front transverse spring of the vehicle, means secured to the intermediate portions of the bars for engagement with the front transverse bar of the vehicle frame to suspend said bars, a bearing mounted on the outer ends of the bars, a drive shaft journaled in the bearing, a stub shaft permanently journaled upon the front transverse bar of the vehicle frame and connected with the crank shaft of the motor of said vehicle, sleeve like coupling heads on the stub and drive shafts and adapted for interlocking engagement with each other, the stub shaft being projected into the head thereon for detachable engagement in the other head, and a cranking arm having a hollow boss and a tooth, whereby on disengaging the drive shaft from the stub shaft the hollow boss will fit on the stub shaft within the head for the locking engagement of the tooth of the crank arm with said head to permit cranking of the motor shaft.

6. The combination with the stub and driving shafts, of sleeve like coupling heads mounted on the adjacent ends of said shafts, and having diametrically opposed notches for the interlocking engagement of the heads to cause said shafts to move together, the stub shaft being extended through its coupling head and into the other head whereby when the shafts are separated, the head of the stub shaft provides means for connecting a crank handle thereto.

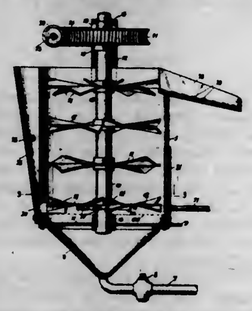
7. In combination with a motor vehicle having a crank shaft, with the usual crank handle socket thereon, a stub shaft permanently journaled upon the frame of the vehicle in line with the crank shaft, engaging at one end in said socket and having its outer end projecting beyond the vehicle frame, a supporting frame arranged in a plane beneath the stub shaft and extending forwardly from the vehicle, a bearing on said frame, a drive shaft journaled in the bearing, sleeve like heads on the stub and drive shafts respectively and having diametrically opposed notches for interlocking engagement with each other, the head on the stub shaft being constructed for the projection of the end of said shaft into the other head, and means for detachably mounting said supporting frame on the frame of the vehicle, whereby upon the removal of the frame with the drive shaft carried thereby, the crank shaft of the engine may be operated by applying a crank to the head on said stub shaft.

[Claims 2 and 4 not printed in the Gazette.]

1,272,125. ORE-SEPARATOR. FRANK GOTTFRIED SCHMIDT, San Jose, Cal. Filed Mar. 26, 1917. Serial No. 157,477. (Cl. 83—67.)

2. In an ore separator, the combination of a cylinder having a depending bottom portion provided with a dis

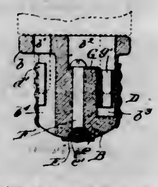
charge opening; a rotary vertical shaft mounted in said cylinder; upper and lower sets of agitating paddles secured to said shaft; and means for introducing the ore-bearing material in a comparatively thin, horizontal layer into said cylinder at a point substantially in line with the lower group of paddles; the said lower group of paddles being inclined in a direction to exert a positive rubbing action directly upon the surface of the material under treatment so as to separate the metal particles from the waste and force said particles downward toward the bot-



tom of the cylinder, while at the same time lifting the waste into the sphere of action of the upper group, and the upper group of paddles being inclined in a direction to exert an upward pressure against the waste so delivered thereto so as to cause the waste to ascend through said cylinder; said metal particles settling down in said bottom portion to be withdrawn therefrom through said discharge opening.

[Claims 1 and 3 not printed in the Gazette.]

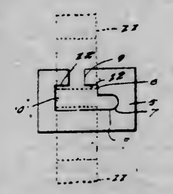
1,272,126. PIN-PLUG CONNECTOR. RALPH A. SCHOENBERG, (now by judicial change of name Ralph A. Belmont,) New York, N. Y. Filed June 18, 1917. Serial No. 175,249. (Cl. 173—343.)



2. In combination with a separable pin plug member an insulating body portion carrying a threaded embossed metal contact member on its periphery for contact with a current carrying terminal of an electric light or other current supply fixture, said contact member also serving as a contact terminal for one of the pins of the pin plug.

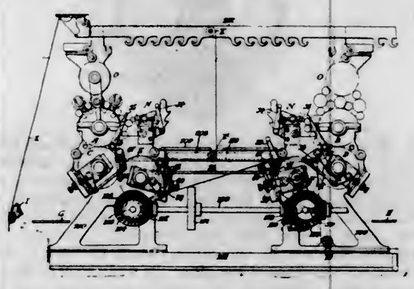
[Claims 1 and 3 not printed in the Gazette.]

1,272,127. BALE-TIE BUCKLE. FRANK SCHUTZ, Cameron, Tex. Filed Nov. 28, 1916. Serial No. 133,861. (Cl. 24—23.)



A bale buckle comprising a flat body plate having an elongated opening therein one end of which is rounded and the other end straight, said opening enlarged laterally at one end to provide a shoulder which is parallel to the straight end of the opening, said body plate having an entrance throat formed therein and communicating with the enlargement of said opening equi-distant of the ends of the enlargement, the sides of said throat being parallel with said shoulder and at right angles to the sides of said opening.

1,272,128. OFFSET PERFECTING-PRESS. DAVID J. SCOTT, Plainfield, N. J., assignor to Isabella Scott and David J. Scott, executors of Walter Scott, deceased, Plainfield, N. J. Filed Apr. 2, 1915. Serial No. 18,639. (Cl. 101—143.)



1. A rotary offset perfecting machine comprising: a plurality of units printing from positive forms on opposite sides of impression receiving material, each unit consisting of a form-carrying, a transfer and an impression cylinder all of substantially the same diameter, the form-carrying and transfer cylinders being arranged in an upright column, and the impression cylinder being arranged out of line with the other cylinders to afford an exposed operating side for the unit, said units being grouped with their operating sides outermost.

4. A rotary offset perfecting machine comprising: a plurality of units printing from positive forms on opposite sides of impression receiving material, each unit consisting of a form-carrying, a transfer and an impression cylinder all of substantially the same diameter, the form-carrying and transfer cylinders being arranged in an upright column, and the impression cylinder being arranged out of line with the other cylinders to afford an exposed operating side for the unit, said units being grouped with their operating sides outermost, and means for moving the impression cylinder of each unit inwardly with respect to the operating side of said unit and away from the other cylinders of said unit.

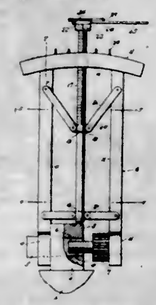
10. A rotary offset perfecting machine comprising: a plurality of side by side units printing from positive forms on opposite sides of impression receiving material, each unit consisting of a form-carrying, a transfer and an impression cylinder all of substantially the same diameter, the form-carrying and transfer cylinders being arranged in an upright column and the impression cylinder being arranged out of line with the others and lowermost of said column to afford an exposed operating side for the unit, said units being grouped with their operating sides outermost and with their impression cylinders innermost, means for guiding a web above one unit, thence between the two units, thence to the impression cylinder of one unit, thence across from one unit to the impression cylinder of the second unit, and thence out underneath said second unit, and an anti-smutting device engaging with the impression cylinder of said second unit and located adjacent the lower part thereof.

11. A rotary offset web perfecting machine comprising: two side by side units adapted to print from positive forms on opposite sides of the web, each unit consisting of a form carrying, a transfer and an impression cylinder, the form carrying and transfer cylinders of each unit being located one above the other and outermost, with the form

carrying cylinder uppermost, and the impression cylinders being arranged below the transfer cylinders and innermost of the machine, a web supply located adjacent to the outermost side of one of the units, a delivery located adjacent to the outermost side of the other unit, means for guiding the web from the source of supply above one unit, thence in between the two units, thence to the impression cylinder of one unit, thence across from one unit to the other to the impression cylinder of said other unit, thence underneath the said other unit to the delivery, uprights for supporting the elements of each unit, a bridge connecting the two units, and platforms on said bridge between the units.

[Claims 2, 3, 5 to 9, and 12 not printed in the Gazette.]

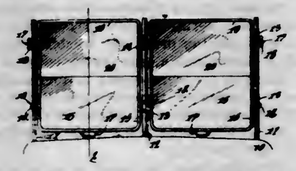
1,272,129. BATTERY-TERMINAL REMOVER. HIRAM W. SEFFENS, Aberdeen, S. D. Filed Feb. 29, 1916. Serial No. 81,268. (Cl. 29—85.)



1. A device for removing screw retained terminal wedges from binding posts including a grooved bar, a shaft adjustably connected with said bar intermediate said grooves, legs slidably mounted in the grooves of said bar, means for adjustably connecting the legs with said shaft, and means terminally provided on said legs for exerting pressure upon the screw, and means for operating said shaft.

[Claims 2 and 3 not printed in the Gazette.]

1,272,130. INDIVIDUAL WIND-SHIELD. BYRON L. SHUBERT, Vilets, Kans. Filed June 15, 1917. Serial No. 174,996. (Cl. 21—148.)



A wind shield for automobiles, comprising a middle and side standards provided with upper and lower bearings in coincident relation, a pair of lower U-shaped frames having lateral studs mounted in the lower bearings of the standards, and having depending handles on their lower elements, a pair of upper inverted U-shaped frames having lateral studs journaled in the upper bearings of the standards, the outer studs being threaded, nuts mounted on the threaded studs to secure the upper frames in an adapted position, and transparent shield elements mounted in the several frames, with their contiguous edges normally abutting.

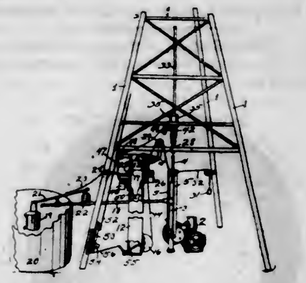
1,272,131. SPLICE FOR JOINERS. CARL THEODOR SILBERG, Bellingham, Wash. Filed June 12, 1917. Serial No. 174,870. (Cl. 20—92.)

1. In a means for splicing the ends of ties or the like, the combination with two timbers, each having its end cut away longitudinally and transversely to provide a tongue, and a shoulder, interengaging means between the ends of the tongues and said shoulders when the tongues are arranged in lapping position, said tongues having their confronting faces provided with a wedge-shaped depression, and a removable wedge key in said depression.



2. In a means for removably connecting the ends of two timbers or the like, each being cut longitudinally from the end thereof and transversely to provide a tongue and a shoulder, and the inner straight faces of the tongues designed to lap one another, the shoulder having a central depression and having a pocket at the inner portion thereof in a line with the inner straight face of the shoulder, the ends of the tongues having pockets at the corners thereof and a lug between said pockets, said pockets designed to be received in the sockets of the respective shoulders, the lugs designed to be received in the depressions of the said shoulders, and means comprising a removable element arranged between the confronting faces of the shoulders for locking the tongues.

1,272,132. AUTOMATIC PUMP AND WINDMILL CONNECTION. THOMAS W. SLACK, Fort Worth, Tex. Filed Aug. 11, 1917. Serial No. 185,739. (Cl. 103—100.)



1. In a pump provided with a driving means consisting of a motor, means for connecting the sucker rod of the pump to said motor, actuating means consisting of a vertical cylinder and a weight movable in said cylinder, a tripping means mounted on said cylinder and operatively connected with said motor connecting means adapted to be actuated by said weight for automatically disconnecting the motor connecting means from said sucker rod, and a gravity actuating means for automatically releasing said tripping means.

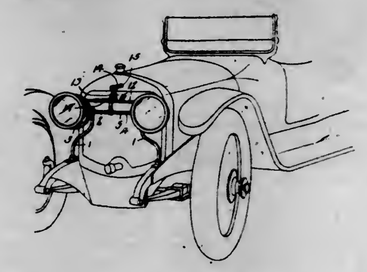
3. In a pump provided with alternative driving means consisting of a motor and a windmill, means connecting the motor to the pump for operation of the pump, actuating means for disconnecting said motor from said pump and for connecting the windmill to the pump, and gravity actuated devices for automatically starting said actuating means in case the water stops flowing from the pump.

5. In a pump provided with alternative driving means consisting of a motor and a windmill, means connecting the motor to the sucker rod of the pump, actuating means consisting of a vertical cylinder and a weight movable in said cylinder, means operatively connected to the motor connecting means and adapted to be actuated by said weight for automatically disconnecting the motor from the pump, connecting means carried by the windmill connection and adapted to be actuated by said weight for automatically connecting the windmill to the sucker rod of the pump subsequent to the disconnection of the

motor from the pump, and gravity actuated means for starting said actuating means in case the water stops flowing from the pump.

[Claims 2, 4, and 6 not printed in the Gazette.]

1,272,133. HEADLIGHT CONTROL. JAY D. SLIPHER, Frankfort, Ind. Filed Apr. 3, 1917. Serial No. 159,518. (Cl. 240—61.)



A head light control comprising a pair of lamp posts, a horizontal shaft journaled therein and having yokes at its ends, a pair of lamps, a pair of plates hinged to each lamp, means for pivoting each pair of plates to the ends of each yoke, a rod connecting one plate of each pair together, a bar having longitudinal and rotary movement, a link connecting the end of said bar with the horizontal shaft to rotate the same, and a pair of links connecting said bar with the rod connected to the plates for moving the same horizontally on the rotation of said bar.

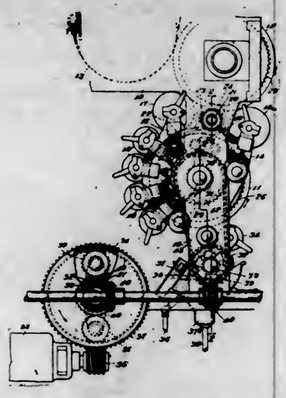
1,272,134. TIRE-ARMOR. CHARLES K. SMITH, Niagara Falls, N. Y. Filed May 5, 1915. Serial No. 26,049. (Cl. 152—18.)



In combination with a tire, a shield comprising a plurality of superposed sections, each section being formed of two layers of fabric vulcanized together at their side portions and secured together at their central portions to provide circumferential pockets, a sheet of wire fabric in the outermost of said layers and having certain of its transverse strands depressed to enter into and lie along the inner faces of said pockets, and resilient strips disposed within said pockets and engaging said depressed strands and the outer faces of said pockets.

1,272,135. INKING MECHANISM. ERNEST JAMES SMITH, Chicago, Ill., assignor to The Goss Printing Press Company, Chicago, Ill., a Corporation of Illinois. Filed June 19, 1916. Serial No. 104,464. (Cl. 101—351.)

1. The combination of an inking cylinder, a form cylinder parallel with said inking cylinder and out of contact therewith, two arms swingingly mounted relative to said inking cylinder at its ends, a form roller revolubly mounted on said arms at one side of the line of centers of said cylinders, two other arms swingingly mounted relative to said inking cylinder at its ends, a second form roller revolubly mounted on said second-named arms on the opposite side of the line of centers of said cylinders, a rock-shaft extending along said inking cylinder, and links pivotally connected with said arms and having eccentric connection with said rock-shaft whereby upon the turning of said rock-shaft said form rollers are moved simultaneously either into or out of contact with said cylinders.



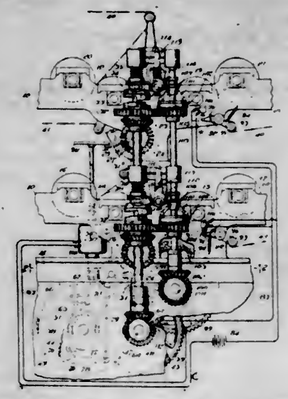
2. In an inking mechanism, the combination of an inking roller, means for delivering ink to said roller, and inking cylinder, means for applying ink from said roller to said cylinder, means for driving said cylinder in one direction comprising a pawl and ratchet mechanism adapted to permit the cylinder to be driven independently in the same direction, means for positively driving said inking roller, and a chain connected positively with said cylinder and connected by a one-way clutch mechanism with said inking roller adapted upon the rotation of the roller to drive said cylinder but adapted to permit said cylinder to be driven at an increased speed in the same direction.

1,272,136. PRINTING-PRESS. ERNEST JAMES SMITH, Chicago, Ill., assignor to The Goss Printing Press Company, Chicago, Ill., a Corporation of Illinois. Filed June 19, 1916. Serial No. 104,467. (Cl. 101—220.)

1. In a web printing press, the combination of a printing couple, a motor, clutch-connections between said motor and said printing press, a second motor, means operable by said second motor for throwing said clutch connections out of operative engagement, and means effective upon the breaking of the web being printed for throwing said second motor into operation.

6. In a printing press, the combination of a plurality of printing couples, a motor, clutching connections between said motor and said printing couples, means for throwing said clutching connections out of operation, a second motor, means for operatively connecting said second motor with said clutch operating means, a controller system for said second motor comprising an electric circuit provided with a plurality of switches by the operation of any one of which said second motor is set into operation, and means effective upon the breaking of the web being printed by any one of said printing couples for operating one of said switches to throw said second motor out of operation.

12. In a web printing press, the combination of a printing couple, a motor, variable speed mechanism connecting said motor with said printing couple, comprising a high speed clutch and a low speed clutch, means automatically effective when the printing couple is being driven at its high speed to throw both of said clutches out of operation upon the breaking of the web being printed, and means serving upon the throwing of the high speed clutch out of operation to render said automatically-acting clutch throwing means ineffective whereby a break of the web at low speed shall not stop the printing couple.

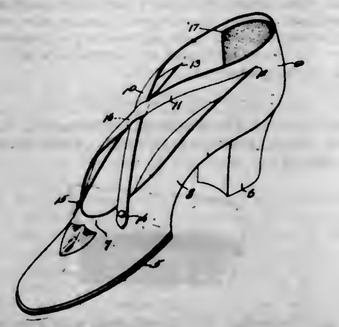


21. In a web printing press, the combination of a printing couple, means for driving said printing couple for printing a web thereby, a roller adapted normally to be supported by said web but adapted to descend upon the breaking of the web, yielding means adapted to support said roller above its lowermost position when the roller is moved downward easily into engagement but adapted to permit the roller to move to its lowermost position when the roller is moved downward into engagement with a sudden sharp movement, an electric switch adapted to be closed by a downward movement of the roller beyond the position at which it is supported by said yielding means, and means set into operation by the closing of said switch upon the breaking of the web for disconnecting said printing couple from its driving means.

27. In a printing press, the combination of a printing couple, a driving shaft, variable speed mechanism for connecting said shaft with said printing couple, comprising a low speed clutch and a high speed clutch, a second shaft, means for rotating said second shaft as desired, means actuated by the rotation of said second shaft in one direction to throw said clutches successively into operation and actuated by the rotation of the shaft in the opposite direction to throw said clutches out of operation in the reverse order, and means automatically effective upon the breaking of the web being printed to set said second shaft into operation for throwing said clutches out of operation.

[Claims 2 to 5, 7 to 11, 13 to 20, 22 to 26, and 28 to 38 not printed in the Gazette.]

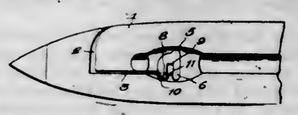
1,272,137. SHOE-FASTENER. MARY L. SMITH, Marlboro, N. H. Filed Oct. 18, 1917. Serial No. 197,307. (Cl. 36—585.)



1. The combination with a shoe having a heel and sole, of a counter and a vamp joined by quarters, a plurality of straps formed by slitting the quarters from a point adjacent the counter forward to the vamp, means for detachably securing the free ends of the straps to the vamp, said straps being adapted to be crossed, and friction material carried by one of the straps at the point of crossing to prevent undue movement of the strap and to prevent wear of the hose of the wearer.

[Claim 2 not printed in the Gazette.]

1,272,138. SHUTTLE. LEWIS P. SPENCER and WILLIAM H. WILSON, New Bedford, Mass. Filed Dec. 28, 1917. Serial No. 209,227. (Cl. 139—46.)

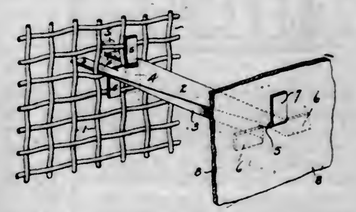


1. In a shuttle, a shuttle body having a vertical cavity, a lateral delivery eye passage, and vertical and horizontal connecting threading slits, a guide eye having a flat side extending to form a rib and forming therewith a means for securing the eye in the passage, said guide eye formed with a thread slot communicating with the horizontal slit of the shuttle, one wall of the thread slot being cut away at its inner end above the horizontal slit to form an abrupt shoulder intermediate the length of the wall with the outer end depending across the same, a passage beneath the depending wall portion connecting the horizontal slit to the thread slot, and a ridge extending up into the latter.

2. In a shuttle having a horizontal threading slit leading to a delivery eye passage, a substantially U-shaped delivery eye arranged in inverted position within the delivery eye passage, the shuttle body being cut away beneath the wall adjacent the threading slit and extending upwardly between the walls of said delivery eye.

[Claim 3 not printed in the Gazette.]

1,272,139. FORM FOR WALL CONSTRUCTION. EDGAR A. STANLEY, Youngstown, Ohio. Filed June 24, 1915. Serial No. 36,122. (Cl. 72—48.)



1. A wall forming construction comprising spaced concrete retaining elements forming permanent parts of the completed wall, temporary core units arranged between said permanent elements, and ties having a releasable connection with the core units and a permanent locked connection with said permanent elements to also form parts of the completed wall.

2. A wall forming construction including spaced metal fabric forms, constituting permanent parts of the completed wall, temporary collapsible core units arranged between said forms, and anchoring ties having a releasable connection with the cores to permit the removal of the latter and having a permanent locked connection with the fabric forms to also constitute permanent parts of the completed wall.

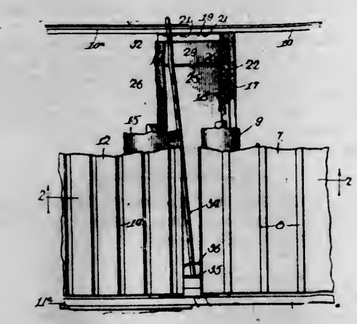
3. A plastic wall-forming construction comprising oppositely disposed open mesh concrete retaining elements constituting permanent parts of the completed wall, a supporting unit arranged between the retaining elements, and ties connecting the said unit and said retaining ele-

ments, each tie comprising a body portion having means at one end for permanently engaging the retaining elements, and means at the other end for releasably engaging the supporting unit, said ties also constituting permanent parts of the completed wall.

4. A plastic wall-forming construction comprising oppositely disposed open mesh concrete retaining elements, a supporting unit arranged between the retaining elements, and ties connecting said unit and said retaining elements, each tie comprising a body portion having means at one end for permanently engaging the retaining elements, and means at the other end for releasably engaging said supporting unit, said latter means comprising oppositely disposed outturned bracing feet and an intermediate holding tongue.

5. A plastic wall-forming construction comprising oppositely disposed open mesh concrete retaining elements, a supporting unit arranged between the retaining elements, and ties connecting said unit and said retaining elements, each tie comprising a body portion having means at one end for releasably engaging said supporting unit and means at the other end for permanently engaging the retaining elements, said latter means consisting of a plurality of fingers adapted to be bent to respectively engage both sides of the retaining elements.

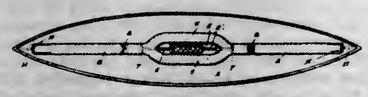
1,272,140. GRAIN-SAVING ATTACHMENT FOR BINDERS. WILLIAM S. STEELE, Strongfield, Saskatchewan, Canada. Filed Nov. 8, 1917. Serial No. 200,859. (Cl. 56—126.)



1. A grain saving attachment for binders consisting of a receptacle horizontally mounted beneath the space between the grain receiving canvas or conveyer and the grain elevating canvases or conveyers of the binder, and having an opening in its floor at one end thereof, a movable member or door located transversely between the sides of the receptacle at the inner edge of said opening, and a chute pivotally secured to the sides of the receptacle to close said opening.

[Claims 2 and 3 not printed in the Gazette.]

1,272,141. MARINE PROPULSION. BENJAMIN STRAUCH, Baltimore, Md. Filed May 5, 1917. Serial No. 166,626. (Cl. 115—16.)



2. In combination with a vessel hull which is of the same design at its opposite ends, a propelling means comprising a tunnel which traverses the length of the hull and which is divided at a point between its ends into branches, propellers located in the tunnel at the opposite ends of the branches and having shafts which enter between the branches, rudders at the ends of the tunnel and means for independently locking the rudders against turning movement.

[Claim 1 not printed in the Gazette.]

1,272,142. WASHBOARD. JACOB A. SUDDERTH, Buford, Ga. Filed Sept. 20, 1917. Serial No. 192,356. (Cl. 68—29.)



1. A device of the character described including a frame embodying side rails, upper and lower cross bars, the adjacent faces of the rails being provided with vertical grooves while the adjacent faces of the cross bars are provided with longitudinal grooves, one edge of each of the longitudinal grooves being straight and the other being serrated, a transversely corrugated rubbing plate having its side edges arranged in the vertical grooves and its upper and lower portions flattened and arranged against the straight edges of the longitudinal grooves, and brush means embodying a plurality of bars arcuate in cross section and a plurality of bristles projecting from the arcuate surface of the bars, the flattened surfaces of the bars being arranged against the flattened portion of the corrugated plate when the arcuate surfaces are engaged against the serrated edges of the longitudinal grooves so that the bars serve to clamp the plate in position, and brace the plate while the plate in addition serves to brace the bars.

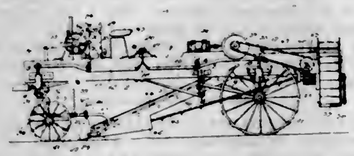
2. A wash board including a frame consisting of a head piece, side rails connected thereto, a soap supporting board arranged between the side rails and the head piece, an upper cross bar connected between the side rails for retaining the soap board and coöperating therewith to form soap receptacles, the under surface of the upper cross bar being provided with a groove one edge of which is serrated, the side rails being also provided with opposed vertical grooves, a transversely corrugated rubbing plate arranged in the vertical grooves and in the groove in the upper cross bar, brushing means embodying a plurality of bars, bristles extending from the bars, the upper ends of the bars being inserted in the grooves so as to engage the serrated edge thereof and clamp the upper portion of the rubbing plate within the groove, and another cross bar rigidly arranged between the side rails and provided with a groove for accommodating the brush bars and a lower portion of the plate.

1,272,143. HEEL-PROTECTOR. THOMAS H. SULLIVAN, Sidney, Ohio. Filed Nov. 11, 1916. Serial No. 130,780. (Cl. 36—75.)



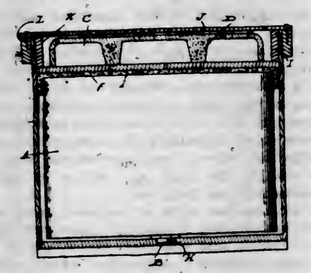
In a heel protector, the combination, with a rubber heel, of a continuous wear plate, a continuous retaining plate, posts connecting the same into a rigid structure embedded in said heel with the wear plate standing flush with the tread thereof, said plates being extended beyond the posts and provided with coinciding openings corresponding with openings in the heel, and fastening devices, said fastening devices being passed entirely through the openings of the wear plate and also being extended through the openings of the retaining plate but caused to engage the under side of said retaining plate.

1,272,144. DITCHING-MACHINE. ROBERT B. SUMMERS, Okmulgee, Okla. Filed Oct. 12, 1917. Serial No. 196,244. (Cl. 97—12.)



A ditching machine comprising a frame, a conveyer frame pivoted at its upper end to said frame, a pair of plow beams of J-shape connected to the lower end of said conveyer frame, a vertically extending rack bar having its lower end pivotally connected to the plow beams intermediate their ends, means on the frame for raising and lowering said rack bar, means connected with the front end of said beams for tilting the same on the rack bar and a plow share pivotally connected to the lower ends of the plow beams, upwardly extending side wings on said share, and means for adjustably connecting the upper ends of said side wings to the plow beams.

1,272,145. PACKAGE. JAMES M. TEAHEN, Detroit, Mich. Filed Nov. 6, 1916. Serial No. 129,842. (Cl. 206—65.)



1. A package, comprising an outer container, a fragile tank and its cover within said container, a separating partition between the tank and cover acting as a clamping means for the former, and means for attaching the cover to said partition to hold the same from contact with the walls of the container.

8. In a package, a container having separate compartments for a tank and its cover, a partition for separating said compartments constituting a clamping means for said tank, and means for securing said cover to said partition comprising securing devices passing through the partition, and lugs on the interior of the cover for engaging said securing devices.

10. A package, comprising a fragile, externally-finished tank and a cover therefor, a container for receiving the same having means for engaging the bottom of the tank to hold the same from lateral movement, the walls of said container being spaced from the finished walls of the tank, a partition within said container for dividing the same into separate compartments for the tank and the cover and bearing upon the former to hold the same from displacement, and means for securing said cover to a wall of the corresponding compartment, said means being engageable with the unfinished interior of the cover and holding the externally-finished surface thereof out of contact with the other walls of said compartment.

[Claims 2 to 7, 9, and 11 to 16 not printed in the Gazette.]

1,272,146. ELECTRIC-LAMP SOCKET. GEORGE B. THOMAS, Bridgeport, Conn., assignor to The Bryant Electric Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Feb. 8, 1913. Serial No. 747,098. (Cl. 173—354.)



1. An electric lamp socket having line and lamp terminals and a switch mechanism interposed between the same, together with an indicator for disclosing the position of the switch and means for securing an intermittent engagement between the switch mechanism and indicator for actuating the latter.

3. An electric lamp socket having line and lamp terminals, an inclosing casing, a switch mechanism within the latter and operating means therefor extending through the casing, an indicator mounted independent of the switch mechanism and an operative connection between the switch operating means and the indicator for actuating the indicator to show the position of the switch.

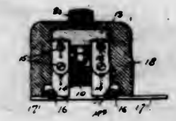
7. An electric lamp socket comprising a socket body, an inclosing cap and apertured shell casing therefor, an indicator within said casing but visible through the apertured shell, a switch on the socket body and means operatively connected therewith for actuating said indicator.

9. An electric switch comprising a switch piece, an operating device therefor having a pawl and ratchet actuating connection between said parts, an indicator serving to show the on or off position of the switch and an independent pawl and ratchet mechanism for operating said indicator on the actuation of the switch piece.

12. In a rotary switch, the combination of an insulating base, switch mechanism mounted thereon and including a relatively rotatable switch member, an oscillating switch operating lever, pawl and ratchet connection between said lever and the rotatable switch member whereby the switch member will be rotated with a step by step movement as the switch lever is oscillated, a rotatably supported switch indicator, and pawl and ratchet connection between the switch lever and said indicator whereby as the lever is oscillated the indicator will be rotated with a step by step movement corresponding to the movement of the rotatable switch member.

[Claims 2, 4 to 6, 8, 10, and 11 not printed in the Gazette.]

1,272,147. ELECTRIC SWITCH. GEORGE B. THOMAS, Bridgeport, Conn., assignor to The Perkins Electric Switch Manufacturing Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Feb. 16, 1916. Serial No. 78,679. (Cl. 175—298.)

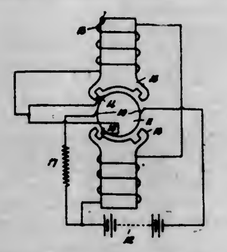


1. A panel board switch comprising a "removable-mechanism" flush switch insulating base with the usual switch mechanism and combined switch terminals and brush contacts mounted thereon, in combination with in-

dependent standards secured to the brush portions of said contacts, means for securing said standards directly to the bus bars of a panel board to electrically connect the latter to said switch terminals, an insulating hood inclosing said base and electrical connections and switch-operating means projecting through said hood.

2. A panel board switch comprising a "removable-mechanism" flush switch insulating base with the usual switch mechanism and combined switch terminals and brush contacts mounted thereon, in combination with independent standards secured to the brush portions of said contacts, screw means for detachably securing said standards directly to the bus bars of a panel board to electrically connect the latter to said switch terminals, an insulating hood inclosing said base and electrical connections and switch-operating means projecting through said hood.

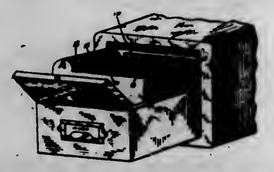
1,272,148. CHARGING OF ACCUMULATORS FROM A VARIABLE-SPEED DYNAMO-ELECTRIC MACHINE. JOHN GODFREY PARRY THOMAS, Chiswick, London, England, assignor to Thomas Foreign Patents Limited, Kensington, London, England, a Corporation of Great Britain. Filed Mar. 23, 1914. Serial No. 826,740. (Cl. 171—229.)



1. A generating system, comprising a dynamo electric generator, having an armature winding and low resistance field windings and a commutator with brushes thereon, a battery connected across the main brushes of said generator, auxiliary brushes upon said commutator adjacent to and symmetrically disposed about one of said main brushes, and conductors joining said field winding between the auxiliary brushes and the neighboring main brush.

2. A constant voltage generating system, comprising a field structure, a low resistance winding thereon, an armature, windings on said armature, a commutator with main brushes thereon, a battery connected across said main brushes, an auxiliary brush adjacent one of said main brushes, connections joining the whole of said field winding between said auxiliary brush and the neighboring main brush, and a regulating or steadying resistance connected to the main brush in circuit with the battery and with the field winding.

1,272,149. CARD AND INDICATOR FOR CARD-INDEX SYSTEMS. JOHN H. THOMPSON, New Haven, Conn., assignor to Rufus G. Cleveland, Bridgeport, Conn. Filed Feb. 19, 1918. Serial No. 218,018. (Cl. 129—16.7.)

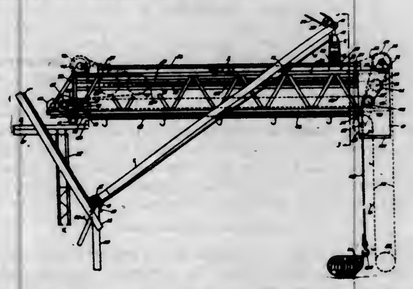


1. In combination, an indicating card having indicia on the face thereof and contiguous thereto a longitudinal slot, and an indicator, adapted to lie on the face of the card, and provided with a window, and offset wings adapted to lie on the back of the card, leaving a rib between the wings which is adapted to engage the slot, whereby the indicator is securely but detachably secured to the card and is free to be moved longitudinally thereon.

2. In combination, an indicating card provided with a longitudinal slot, and an indicator adapted to lie on the face of the card, and provided with offset wings struck out from the plate and adapted to lie on the back of the card, leaving a rib between the wings which is adapted to engage the slot.

3. In combination, an indicating card provided with a slot and a line of indicia extending beyond the slot at one end, and an indicator comprising a plate lying on the face of the card and provided with a rib engaging the slot and wings on the rib lying on the back of the card, and a window and pointer wholly at one side of the rib and wings adapted to register with the farthest of the indicia.

1,272,150. UNLOADING APPARATUS. WILLIAM F. THORNTON, Birmingham, Ala. Filed June 10, 1915. Serial No. 33,331. (Cl. 214—14.)

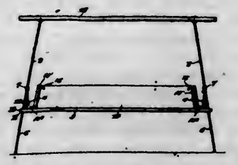


1. In an apparatus of the character described, the combination of a vertically adjustable truss and its supporting structure, of a pair of swinging platforms suspended from the outboard end of the truss, handling lines which drop from the outboard end of the truss, power mechanism on the truss, drums for said lines, clutch controlled means to drive said drums from said power mechanism, means on each platform to independently control a handling line by means of said mechanism, and a conveying apparatus on the truss also driven by said mechanism, substantially as described.

3. The combination with an endless conveyer and its supporting and driving mechanism, of adjustable take-up idlers over which said conveyer passes, guides for said take-up idlers, auxiliary supporting idlers which coöperate with the take-up idlers, means to connect said auxiliary idlers and take-up idlers for joint movement when the latter are in initial position, and means to automatically disengage the auxiliary idlers from the take-up idlers when the latter reach an intermediate point in their adjusting travel, substantially as described.

[Claims 2 and 4 not printed in the Gazette.]

1,272,151. WORKING-BENCH. JOHN A. TOBP, Aberdeen, Wash. Filed Apr. 2, 1918. Serial No. 226,225. (Cl. 20—83.)



1. A device of the class described comprising a shelf, leg members hinged to the upper surface thereof, extensible members pivotally connected to said members above the shelf, and means for removably holding said extensible members to the ends of the shelf.

[Claim 2 not printed in the Gazette.]

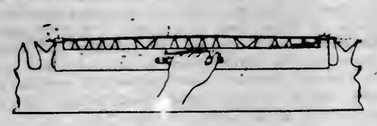
1,272,152. COMBINED HARROW AND HOE. HARRY E. TRAGER, Arcanum, Ohio. Filed July 5, 1917. Serial No. 178,719. (Cl. 55—39.)



1. A cultivating implement comprising a head having tapered ends, a hoe formed integral with one of said ends and extending above the upper face of the head, and a plurality of teeth arranged in staggered relation carried on the lower face of said head.

2. A cultivating implement comprising a head having tapered extremities, an extension formed on one of said extremities and bent upwardly to constitute a hoe, a socket arranged on the upper face of said head, and a plurality of teeth arranged in staggered relation on the bottom face of the head.

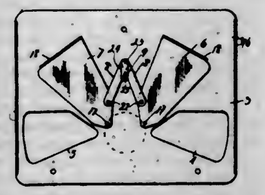
1,272,153. SAW-TOOL. GEORGE EDMOND TURNER, Olympia, Wash. Filed Oct. 9, 1917. Serial No. 195,598. (Cl. 33—202.)



1. A saw tool comprising a flat bar, arms extending parallel and in the same direction from the ends of said bar and in the same plane therewith, loops carried by said arms, and a flat resilient steel bar slidably disposed through said loops.

2. A saw tool comprising a flat bar, flat integral arms extending from the ends of said bar in the same plane therewith, loops integral with said arms and disposed transversely of said bar, a handle for said flat bar, and a flat resilient steel bar slidably disposed through said loops.

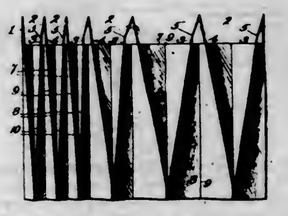
1,272,154. AUTOMOBILE-SIGNAL. IRA B. TURNER, Philadelphia, Pa. Filed Aug. 28, 1917. Serial No. 188,546. (Cl. 116—31.)



9. A signal comprising a housing having signal openings therein, a signal arm pivoted adjacent each signal opening and adapted to move across its respective opening, a link connected to each signal arm and a crank common to both of the signal arms and to which both of the links are connected whereby movement of the crank to one position will move one of the signal arms across its respective signal opening, a movement of the crank to a second position will move the other signal arm across its respective signal opening, a movement of the crank to a third position will move both the signal arms across their respective signal openings and a movement of the crank to a fourth position will move both signal arms away from the signal openings.

[Claims 1 to 8 not printed in the Gazette.]

1,272,155. POCKET INDEX-FILE. WALTER W. WARING, Sterling, Kans. Filed Feb. 25, 1918. Serial No. 220,087. (Cl. 129—15.)



1. A file comprising a series of pockets, the front and back walls whereof diverge upwardly, each back wall having near its upper edge a longitudinal crease to facilitate bending, and sides connected to the ends of said walls and formed with alternately disposed V-shaped and inverted V-shaped folds, the V-shaped folds projecting into and forming the ends of the pockets and the inverted V-shaped folds projecting inward between and forming the sides of the spaces between adjacent pockets.

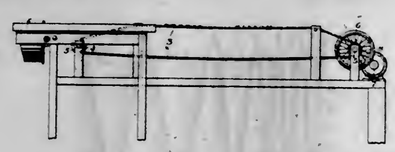
2. A file comprising a series of pockets, the front and back walls whereof diverge upwardly, each back wall having near its upper edge a longitudinal crease to facilitate bending, and sides connected to the ends of said walls and formed with alternately disposed V-shaped and inverted V-shaped folds, the V-shaped folds projecting into and forming the ends of the pockets and the inverted V-shaped folds projecting inward between and forming the sides of the spaces between adjacent pockets; the walls of the pockets projecting to a plane higher than the sides by an amount at least equal to the distance between the horizontal planes of the top of said walls and said creases of the back walls of said pockets.

3. A file comprising a series of pockets, the front and back walls whereof diverge upwardly, each back wall having near its upper edge a horisontal crease to facilitate bending, and sides connected to the ends of said walls and formed with alternately disposed V-shaped and inverted V-shaped folds, the V-shaped folds projecting into and forming the ends of the pockets and the inverted V-shaped folds projecting inward between and forming the sides of the spaces between adjacent pockets; the inverted V-shaped folds being truncated at their upper ends, and the walls of the pockets projecting to a plane higher than the sides by an amount at least equal to the distance between the horizontal planes of the top of said walls and said creases of the back walls of said pockets.

4. A file comprising a series of pockets, the front and back walls whereof diverge upwardly, each back wall having near its upper edge a horizontal crease to facilitate bending, and sides connected to the ends of said walls and formed with alternately disposed V-shaped and inverted V-shaped folds, the V-shaped folds projecting into and forming the ends of the pockets and the inverted V-shaped folds projecting inward between and forming the sides of the spaces between adjacent pockets; the inverted V-shaped folds being truncated at their upper ends, and the walls of the pockets projecting to a plane higher than the sides by an amount at least equal to the distance between the horizontal planes of the top of said walls and said creases of the back walls of said pockets, the central lines of the V-shaped folds sloping downward and out-

ward and the central lines of the inverted V-shaped folds sloping downward and inward when the pockets are partially or wholly closed and extending substantially vertical when the pockets are fully opened.

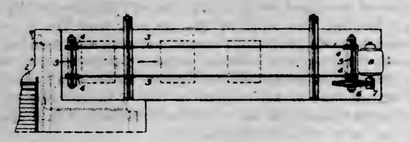
1,272,156. METHOD OF SORTING GLASS PLATES AND PIECES. JOHN WATERLOO, Monongahela, Pa., assignor to Window Glass Machine Company, Pittsburgh, Pa., a Corporation of New Jersey. Original application filed May 8, 1916, Serial No. 96,061. Divided and this application filed July 20, 1917. Serial No. 181,827. (Cl. 88—14.)



1. In the method of sorting transparent glass plates, the steps comprising moving successive plates from one point to another past an examining station while allowing light to pass directly through the major portions of their areas without obstruction, and examining the lighted plates while thus moving past said stations, substantially as described.

[Claim 2 not printed in the Gazette.]

1,272,157. APPARATUS FOR SORTING GLASS PLATES AND PIECES. JOHN WATERLOO, Monongahela, Pa., assignor to Window Glass Machine Company, Pittsburgh, Pa., a Corporation of New Jersey. Original application filed May 8, 1916, Serial No. 96,062. Divided and this application filed May 8, 1916, Serial No. 96,061. Renewed Dec. 3, 1917. Serial No. 205,233. (Cl. 88—14.)



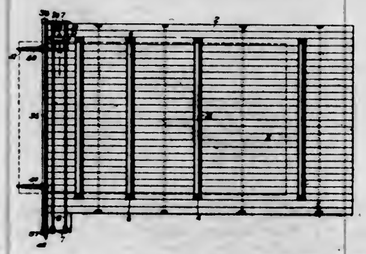
1. Apparatus of the character described, comprising two separated movable supports having their inner edges separated by a distance less than one dimension of the glass plates or sheets which are to be supported, being thereby adapted to support said plates or sheets by their edge portions only, substantially as described.

2. Apparatus of the character described, comprising two separated movable supports having their inner edges separated by a distance less than one dimension of the glass plates or sheets which are to be supported, being thereby adapted to support said plates or sheets by their edge portions only, said supports having a free open space between them, substantially as described.

3. Apparatus of the character described, comprising two separated movable supports having their inner edges separated by a distance less than one dimension of the glass plates or sheets which are to be supported, being thereby adapted to support said plates or sheets by their edge portions only, said supports having a free open space between and below them, and said space being laterally open for the admission of light, substantially as described.

4. The combination with a glass cutting table, of glass inspecting and assorting means, comprising two horizontally separated relatively narrow movable conveyers having their receiving portions adjacent to the delivery portion of said table, the distance between said conveyers being less than the dimension of the glass plates or sheets to be inspected, and being thereby adapted to support said plates or sheets by their edge portions only, there being a free space between said conveyers, substantially as described.

1,272,158. GLASS-CUTTING APPARATUS. JOHN WATERLOO, Monongahela, and GEORGE W. KLAGES, Pittsburgh, Pa., assignors to Window Glass Machine Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed June 2, 1914. Serial No. 842,437. (Cl. 33—32.)



1. Glass cutting apparatus, comprising a pivoted cutter carrier, a tool post mounted on said carrier, the carrier having a projecting arm, a barrel or holder mounted in said arm, a vertical wiper mounted in the barrel or holder, and a spring seated in the barrel or holder and pressing against the wiper, substantially as described.

4. Glass-cutting apparatus, comprising a cutting table, a guide member extending transversely of the table, a carriage mounted to slide freely on said guide member, an oscillating shaft trunnioned on said carriage, a cutter-carrier fixed to said shaft, and an elevating cam on said carriage in front of the tool, substantially as described.

6. Glass cutting apparatus, comprising a movable cutter carriage, a cutter carrier mounted for pivotal movement about a horizontal axis on said carriage, a cutting tool mounted on said carrier to move therewith and arranged to be adjusted thereon, a sleeve adjustably mounted on said cutter, and a spring-pressed wiper within said sleeve; substantially as described.

[Claims 2, 3, and 5 not printed in the Gazette.]

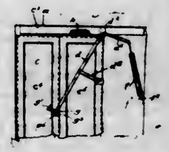
1,272,159. FOLDING BACK. HOWARD W. WEED, Stamford, Conn. Original application filed Jan. 4, 1917, Serial No. 140,592. Divided and this application filed Sept. 6, 1917. Serial No. 189,995. (Cl. 208—138.)



1. A folding back for the saddle of a motor cycle, bicycle and like machine, comprising a support secured to and projecting from the rear of the saddle, said support having a lug, a back mounted to swing on the said support from upright to horizontal position and vice versa, a combined catch and releasing lever mounted on the said back and having a handle and adapted to engage the stop, and a spring secured to the back and in engagement with the said catch, the handle of the catch also serving to swing the back into upright and horizontal positions.

2. A folding back for the saddle of a motor cycle, a bicycle and like machine, comprising a support secured to and projecting from the rear of the saddle, said support being provided with a lug and rearwardly projecting stops, a back pivoted to the support adjacent the stops to swing on the said support from upright to horizontal position and vice versa, said back engaging the stops when in horizontal position, a lever pivoted on the said back intermediate of its ends, said lever having at one end a catch for engaging the lug of the support and at its other end a handle for disengaging the catch from the lug of the support and swinging the back into upright and horizontal positions, and a coil spring having one end secured to the lever and its other end to the back.

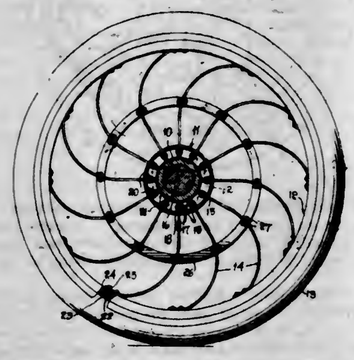
1,272,160. DEVICE FOR OPERATING SLIDING DOORS. LOUIS T. WEISS, Brooklyn, N. Y., assignor to Reliance Ball Bearing Door Hanger Company, New York, N. Y., a Corporation of New York. Filed Oct. 19, 1917. Serial No. 197,383. (Cl. 268—8.)



1. An operating device for sliding doors, comprising a lever pivoted upon a fixed point, one arm of said lever having a longitudinal slot in engagement with a pin on the door to permit the movement of the door with the lever and a handle pivoted on the lever and having a notch for coöperation with the pin on the door.

2. An operating device for sliding doors comprising a lever pivoted upon a fixed point, one arm of said lever having a longitudinal slot in engagement with a pin on the door to permit movement of the door with the lever, a handle pivoted on the lever and having a notch for cooperation with the pin on the door and a weighted plunger connected to the other arm of said lever.

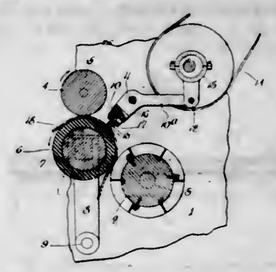
1,272,161. CUSHIONED WHEEL. PIERCE L. WHITE, McCormick, S. C. Filed Apr. 17, 1918. Serial No. 229,121. (Cl. 152—51.)



A cushioned wheel comprising a hub including oppositely disposed hub flanges, a rim, and resilient spokes connecting the rim and hub, said spokes all curving in the same direction, the inner end of each spoke extending radially from the hub and being bent to provide an approximately rectangular base extending in the direction of rotation of the wheel, the opposite sides of said base being disposed in slightly convergent relation, and being formed with semi-circular recesses, the recesses of adjacent bases confronting each other, and bolts passing transversely through the hub flanges and through the bolt seats formed by said recesses.

1,272,162. HIDE AND LEATHER WORKING MACHINE. ROBERT F. WHITNEY, Winchester, Mass., assignor to Whitney Machine Company, Winchester, Mass., a Corporation. Filed Sept. 20, 1917. Serial No. 192,311. (Cl. 149—16.)

1. In a machine of the character described, in combination, a bed roll; a feed roll; a work roll; and a reciprocating bladed bar; the work roll and the reciprocating bladed bar being adjacently disposed at one side of the other rolls; and the bed roll being movable to and away from the work roll, the reciprocating bar and the feed roll; with means for reciprocating the bar; and means for accomplishing the movements of the bed roll.



2. In a machine of the character described, in combination, stock supporting means; stock feeding means; a work roll; and a reciprocating bladed bar; the work roll and the reciprocating bladed bar being adjacently disposed at one side of the stock feeding means and the stock supporting means; and the bed roll being movable to and away from the stock supporting means, the stock feeding means and the reciprocating bar; with means for reciprocating the bar and means for accomplishing the movements of the bed roll.

5. A vibratory bar for working upon a hide, skin, or other stock, comprising in combination a channeled bar proper having a narrowed opening with interior shoulders adjacent the opening; a series of overlapping flanged blades yieldingly disposed within the bar with their flanges resting on said shoulders and their blades extending through the opening; a rubber strip disposed adjacent the flanges; a strip of spring steel disposed adjacent the rubber strip; and a series of external adjusting screws extending into said bar and engaging said spring steel strip.

8. A vibratory bar for working upon a hide, skin, or other stock, comprising in combination a channeled bar proper having a narrowed opening with interior shoulders adjacent the opening; a series of overlapping flanged blades yieldingly disposed within the bar with their flanges resting on said shoulders and their blades extending through the opening; and cushioning means disposed within the bar adjacent the flanges.

[Claims 3, 4, 6, and 7 not printed in the Gazette.]

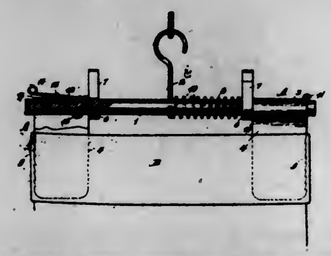
1,272,163. LAMP-SOCKET. JOHN W. WIEDEY, Baltimore, Md. Filed June 3, 1916. Serial No. 101,551. (Cl. 173—346.)



A lamp socket comprising a conductive shell socket threaded internally for a portion of its length adjacent the lamp receiving end, an insulating plug provided with an opening in the side thereof mounted in the end of the shell socket and formed with a lateral circumferential flange engaging the end of the socket, a casing provided with an opening in the ends thereof to register with the opening in the side of the plug, said casing encircling the socket and having threaded engagement therewith, a pin mounted in the casing to insure proper registrations between the respective openings, said casing holding the plug in engagement with the socket, a pair of leads em-

bedded in said plug, one of the leads having an extremity positioned to engage the central electrode of the lamp, and a headed screw mounted for movement through the casing, socket and plug toward and away from the other lead.

1,272,164. GARMENT-HANGER. JOHN F. WILLIAMS, New York, N. Y. Filed June 29, 1917. Serial No. 177,677. (Cl. 211—13.)



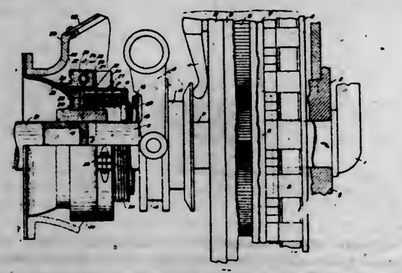
1. A garment hanger comprising a supporting bar, a suspension member attached to the bar and extending upwardly therefrom, a pair of garment-engaging devices on the bar, one of the devices being freely movable longitudinally of the bar, a member attached to the movable device and extending upwardly, whereby the suspension member and last-mentioned member can be gripped by one hand to move the movable device inwardly, and a spring carried by the supporting bar and acting on the movable device to urge the same outwardly.

3. A garment hanger comprising a supporting bar, a plurality of garment-gripping devices each comprising a tubular portion embracing the bar and members extending upwardly and downwardly from the tubular portion, a spring on the bar acting on one of the devices to urge the same outwardly, and means for adjustably fastening the other device to the said bar.

4. In a garment hanger, a garment-gripping device comprising a tubular body portion and depending members, and additional members connected with one end of the tubular body portion and bent upwardly around the outside thereof and continuing upwardly above the body portion to form a gripping element.

[Claim 2 not printed in the Gazette.]

1,272,165. END-THRUST-BEARING ATTACHMENT FOR THE TRANSMISSION-SHAFTS OF FORD AUTOMOBILES. HARVEY D. WOLCOTT, Birmingham, Ala. Filed Jan. 17, 1918. Serial No. 212,177. (Cl. 180—54.)



1. In a thrust bearing for the shafting of automobiles having a planetary gear transmission, the combination with a clutch spring support and the front universal ball cap, of an end thrust bearing attachment having co-acting elements mounted respectively on said cap and spring support, substantially as described.

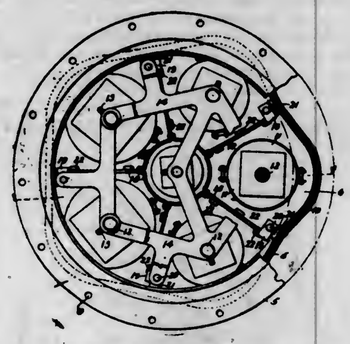
3. In an end thrust bearing attachment for the shafting of automobiles having a planetary gear transmission, the combination with the clutch spring support and the transmission cover, of a bearing element mounted on the spring support free of contact with the clutch spring, a co-acting element, and a support for said latter element rigid with the transmission cover.

5. The combination of a clutch spring, a clutch spring support, a transmission element of a planetary transmission to which said support is keyed, a driving shaft, a tapering front universal ball cap, an annular bearing element having a taper face disposed to bear on said tapering cap to center it, an annular sleeve having a flanged portion fitted into the rear open end of the spring support, and a bearing element adjustably mounted on said sleeve and co-acting with said element on said cap, substantially as described.

6. An atachment for automobiles having a planetary gear transmission, comprising an annular externally threaded sleeve having at its rear end an internal supporting member adapted to fit into the clutch spring support, an antifriction bearing comprising an element mounted on said sleeve, and means to adjust said element on said sleeve, the other bearing element having a tapered bearing end adapted to seat against the adjacent tapered face of the front universal ball cap.

[Claims 2, 4, and 7 not printed in the Gazette.]

1,272,166. LOADING-COIL CASE. CHARLES R. YOUNG, Bloomfield, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed May 26, 1916. Serial No. 100,057. (Cl. 175—360.)



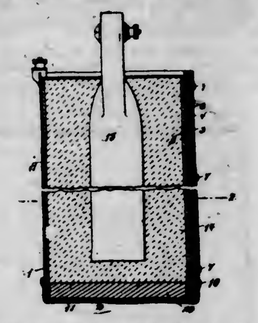
1. In combination, a case of magnetic material provided with an opening and inclosing a storage space a portion of which is out of alinement with said opening, and a removable partition of magnetic material in said space.

2. In combination, a loading coil case of magnetic material having a receiving space for groups of coils and an opening for the introduction of the coils into said receiving space, a portion of said space being out of alinement with said opening, and partitions for arrangement in said space to extend in directions transverse to said opening.

3. In combination, a loading coil case formed of magnetic material and provided with an opening for the introduction of the loading coils, a flange surrounding said opening and having a portion projecting over the coil receiving space, and partitions of magnetic material adapted for placement in the coil receiving space after the introduction of the coils to coöperate with the walls of said case to form magnetically shielded compartments for the respective groups of coils.

1,272,167. RECHARGEABLE DRY CELL. MATTHEW G. YOUNG, Geneva, Ohio. Filed Sept. 11, 1917. Serial No. 190,755. (Cl. 204—38.)

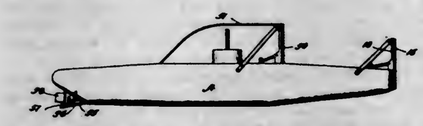
2. A dry cell including a charge of chemicals and a shell adapted to be turned inside out when the said charge is consumed, said shell being made of a sheet of zinc, one end of the sheet being formed with a groove throughout its length to receive the other end when the shell is initially formed and also when the shell is turned



inside out, means for breakably sealing the joint between the ends of the sheet, and a detachable metal cap fitted over the bottom of the shell.

[Claim 1 not printed in the Gazette.]

1,272,168. NET AND CABLE CUTTING ATTACHMENT FOR SUBMARINE BOATS. OSCAR A. YOUNGREN, New York, N. Y. Filed Jan. 25, 1917. Serial No. 144,488. (Cl. 114—221.)



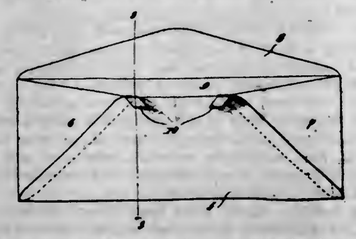
1. The combination with a motor driven machine, such as a submarine boat, of a cutting apparatus mounted on the front thereof consisting of vertically reciprocating knives extending from a point approximately even with its bottom to a point above the top and a second cutting apparatus mounted in line with and in advance of the turret of the boat and extending from the deck to a point above the top of the first mentioned cutting apparatus, means for guiding wires and nets between the knives, and means for reciprocating said knives to cut said wires or nets, substantially as set forth.

6. A submarine boat provided with wire cutting knives on the front and top thereof, said knives being formed with tapered points having notched edges, substantially as set forth.

8. In a submarine boat provided with a vertically arranged cutting apparatus on its bow extending from the keel to a point above the deck, and with a second cutting apparatus adjacent to the superstructure extending above the deck midway thereof, and means for operating said cutting apparatus, substantially as set forth.

[Claims 2 to 5, 7, and 9 not printed in the Gazette.]

1,272,169. ENVELOP. GEORGE ZERBE, Tiosa, Ind. Filed Oct. 20, 1917. Serial No. 197,704. (Cl. 229—68.)



An envelop of the usual form having the free corners of its triangular end flaps provided with extensions having one of their edges parallel with one edge of the end flap, and said extensions extending at substantially a right angle to the upper edge of said flap, being adapted to be folded obliquely over the corners of the back flap for reinforcing the seams between the end flaps and back flap.

1,272,170. EYE INSTRUMENT. WILLIAM ZIEGLER, Chicago, Ill. Filed Apr. 1, 1916. Serial No. 88,326. (Cl. 128—11.)



1. An instrument of the character described comprising a tapered stem, having an enlarged end portion adapted to be positioned beneath the eye lid and offset with respect to the stem, said end portion having one side substantially flat and the other side rounded.

[Claims 2 and 3 not printed in the Gazette.]

1,272,171. FLUID SEAL FOR STUFFING-BOXES. CARL LUTHER ZINSSMEISTER, Newark, N. J. Filed Apr. 25, 1917. Serial No. 164,586. (Cl. 286—10.)



1. In combination with an autoclave having packing means, a revoluble member projecting through the packing into the autoclave, a cup surrounding the revoluble member below the packing and adapted to receive a medium of high viscosity, and means carried by the revoluble member and entering the cup for preventing a direct flow from the interior of the autoclave to the packing without passing through the medium in the cup.

2. In combination with a vessel having packing means, a revoluble member passing through the packing means into the vessel, an annular cup interposed between the vessel and the packing and coaxial with the revoluble member, said cup adapted to receive a medium of high viscosity, and a bell secured to the revoluble member adapted to engage the medium in the cup whereby the flow from the interior of the vessel to the packing means is intercepted by the medium in the cup.

3. In combination with a vessel having packing means, a revoluble member passing through the packing means into the vessel, an annular cup concentric with the revoluble member and forming an additional guide for said revoluble member, said cup being interposed between the stuffing box and the vessel, a bell in the annular cup secured to the revoluble member, and packing means for the bell and the revoluble member, said stuffing box and top of bell forming a clearance adapted to offer a high resistance to flow therethrough, substantially as and for the purpose set forth.

1,272,172. BOOT, SHOE, OR THE LIKE. JOSEPH ABRAMOWITZ, North Venice, Ill. Filed Feb. 7, 1918. Serial No. 215,820. (Cl. 36—11.)



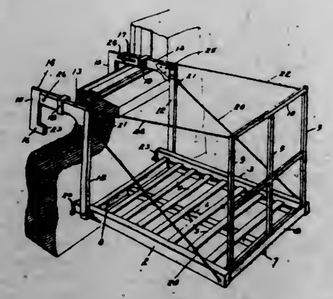
1. In a shoe, a unit integrally comprising an insole and an upper, the upper including side quarters and ball and toe extensions, and a longitudinally kerfed vamp-unit having instep adapting means disposed between said extensions and overlying the ball of the insole, the vamp-unit conforming throughout its side and front margins with the margins of said extensions and being thread-stitched throughout its side and front margins to the margins of said extensions.

3. A shoe comprising an outsole, an insole overlying and secured to the outsole, an upper the insole and upper being formed of a single piece of material and the upper including side quarters and ball and toe extensions, and a longitudinally kerfed vamp having instep adapting means disposed between said extensions and overlying the ball of the insole, the vamp conforming throughout its side and front margins with the margins of said extensions and being thread-stitched throughout its front and side margins to the margins of said extensions, the rear margins of the vamp on each side of said kerf conforming to and providing continuations of the upper margins of the side quarters.

4. In a shoe, an outsole, an insole overlying and secured to the outsole, an upper, the insole and upper being formed of a single piece of material and the upper being split and stitched vertically over the center of the heel of the outsole, and a heel-counter fixed exteriorly upon the upper and concealing said stitch, the counter having an end extension disposed and secured between the outsole and insole.

[Claim 2 not printed in the Gazette.]

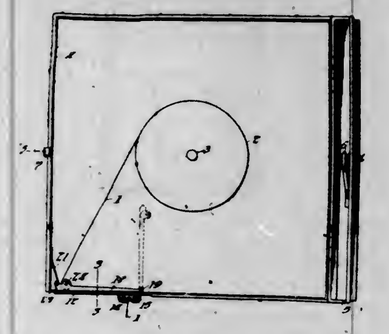
1,272,173. WINDOW-JACK. AMANDO P. ACUIN, Oakland, Cal. Filed Apr. 25, 1916. Serial No. 93,382. (Cl. 20—87.)



1. A foldable window cleaning jack comprising a base frame, posts pivotally attached to the sides of said frame near the inner end thereof, arms attached to the tops of said posts and shaped to extend over a window sill, a guard frame pivoted to said base frame at the outer end thereof, diagonal brace members extending from the tops of said posts to the outer ends of said base frame, and means for yieldably holding the guard frame in either open or closed position.

[Claim 2 not printed in the Gazette.]

1,272,174. MOTION-PICTURE-PROJECTING APPARATUS. EDWARD L. AIKEN, Orange, N. J., assignor, by mesne assignments, to New Jersey Patent Company, West Orange, N. J., a Corporation of New Jersey. Original application filed Nov. 8, 1905, Serial No. 286,424. Divided and this application filed July 25, 1912, Serial No. 711,399. Renewed Dec. 13, 1916. Serial No. 136,812. (Cl. 88—17.)



1. In a moving picture apparatus, a film holder comprising a box having an opening for the passage of the film, a plate hinged to the box and forming with the wall thereof a long narrow passage leading from the opening to the interior of the box, and means for locking said plate in its closed position, substantially as set forth.

9. In a moving picture apparatus, a film holder comprising a container having an opening for the passage of the film and provided with means coacting with the wall of the container to form a long narrow passage leading from said opening, substantially as described.

11. A film holder for moving picture apparatus, comprising a casing or housing, a long narrow guideway or passage having closed sides through which the film must pass into said casing or housing, said guideway having one end communicating directly with the interior of said casing or housing, and guiding means external to the casing or housing closely associated with the other end of said guideway or passage and preventing rubbing contact of the film with said guideway or passage, substantially as described.

13. In a film receptacle, a casing for inclosing a coil of film, having an opening in its wall for the passage of film to or from said coil, and means carried by said casing for inclosing the film in a portion at least of its passage between said opening and said coil.

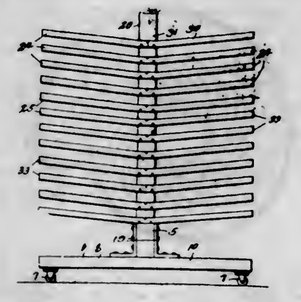
14. In a film receptacle, a casing having an opening in its wall for the passage of a strip of film, and means within said casing and leading from said opening for inclosing said film.

[Claims 2 to 8, 10, 12, and 15 to 19 not printed in the Gazette.]

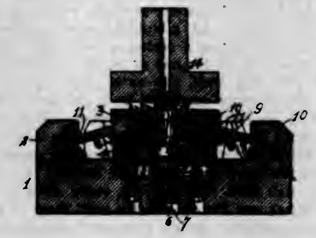
1,272,175. PAN-RACK. EDWARD ALBRIGHT, Menominee, Mich. Filed Aug. 2, 1916. Serial No. 112,825. (Cl. 21—65.)

1. In a device of the class described, a wheeled base comprising a pair of adjustable telescopically mounted sections, means for locking said sections against movement, a pair of spaced uprights connected with and medially of said base, a telescopic cross bar adjustably connecting the upper ends of the uprights to permit the adjustment thereof upon the adjustment of the base, and a series of pan supporting members connected with the exterior side faces of said uprights and capable of supporting pans of various lengths.

2. In a device of the class described, a wheeled base having an adjustable connection at the end and intermediate portions thereof, a pair of spaced uprights connected with said base at opposite sides of its intermediate connection, a telescopic cross bar for spreading apart or drawing together the upper ends of the uprights, and a series of pan supporting members of L-shaped configuration in cross section having their vertical and horizontal portions engaging with said uprights for connecting the supporting members therewith and disposing the latter in a longitudinal plane with respect to said base.



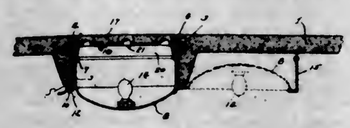
1,272,176. COMMUTATOR-ASSEMBLING DEVICE. LOUIS A. ALEXANDER, Toledo, Ohio, assignor to The Toledo Commutator Co., Toledo, Ohio, a Corporation of Ohio. Filed Mar. 3, 1917. Serial No. 152,290. (Cl. 29—84.)



1. In a commutator assembling device, a series of circularly arranged segmental jaws, the inner faces of said jaws being recessed to collectively conform to the outer circumference of a commutator, means for applying axial pressure upon such commutator, and means disposed between the points of application of such axial pressure for radially projecting into closed relation and for retracting into open relation said jaws.

[Claims 2 to 6 not printed in the Gazette.]

1,272,177. ILLUMINATING SIDEWALK-SIGN. JOHN ALMQUIST and FRED BURTON, Petaluma, Cal. Filed June 30, 1915. Serial No. 37,193. (Cl. 40—132.)



1. An improved sign comprising a body shaped to be inserted in a side walk and having an inwardly extended flange, a sign consisting of a body formed of opaque and transparent portions and resting on said flange, a reflecting bowl normally closing the bottom of said body, lamps carried by said bowl, and hinge means connecting the bowl and body whereby the bowl may be swung to one side out of the lines of projection of extraneous rays of light passing inwardly through said sign.

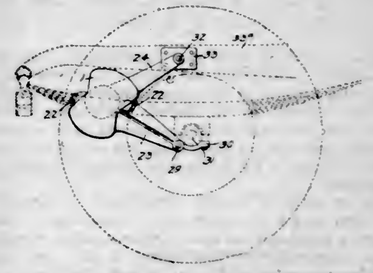
2. An improved sign comprising a body shaped to be inserted in a side walk, a sign consisting of a body formed of opaque and transparent portions supported by said body, a reflecting bowl normally closing the bottom of said body, lamps carried by said bowl, and hinge means connecting the bowl and the body, whereby the bowl may be swung to one side out of the lines of projection of extraneous rays of light passing inwardly through the sign.

3. An improved sign comprising a body shaped to be inserted in a side walk, a sign consisting of a body formed of opaque and transparent portions supported by said body, a reflecting bowl normally closing the bottom of said body, lamps carried by said bowl, hinge means connecting the bowl and the body, whereby the bowl may be swung to one side out of the lines of projection of extraneous rays of light passing inwardly through the sign, and locking devices attached to the body and positioned to engage said bowl.

4. An improved sign comprising a supporting body of substantial depth shaped to be inserted in a side walk and having an inwardly extended flange located between its top and bottom edges, a sign body resting on said flange and having transparent portions, said illuminating means suspended from the said bottom edges and positioned within the supporting body below said sign.

5. An improved sign comprising a supporting body of substantial depth shaped to be inserted in a sidewalk and having an inwardly extended flange located between its top and bottom edges, a sign body resting on said flange and having transparent portions, a reflector hinged to said supporting body, and illuminating means carried by said reflector.

1,272,178. SHOCK-ABSORBER. GUSTAF A. ANDERSON, Waynesboro, Pa. Filed June 15, 1916. Serial No. 103,756. (Cl. 21—105.)



1. In an energy absorber, the combination of a casing providing a liquid chamber, a blade mounted to oscillate in said chamber and constructed with by-passes therethrough, valves mounted in said by-passes, one of said valves operating to by-pass fluid in one direction and the other in the opposite direction, and a spring mounted in said chamber to bear at one end against a wall of said chamber and at the other end against one of said valves, substantially as set forth.

2. In an energy absorber the combination of a casing providing a chamber, a blade mounted to oscillate therein and constructed with a by-pass, a valve mounted in said by-pass, and means interposed between said blade and casing operable by the oscillation of said blade for increasing or diminishing the lead on said valve, substantially as set forth.

3. In an energy absorber the combination of a casing providing a fluid chamber, a member operable within said chamber and formed with a by-pass therethrough, a valve at said by-pass, and means interposed between said valve and the casing for controlling said by-pass in proportion to the relative relation of said member and chamber, substantially as set forth.

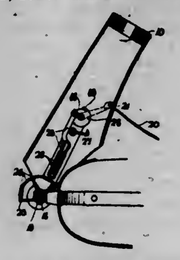
4. In an energy absorber the combination of a casing providing a liquid chamber, a member operable within said chamber and formed with a by-pass, a valve at said

by-pass, and a spring interposed between said casing and said valve for controlling said by-pass, substantially as set forth.

5. In an energy absorber the combination of a casing providing a liquid chamber, a piston mounted to have a relative movement in said chamber, and provided with by-passes, valves for controlling said by-passes, and means abutting the casing associated with part of said valves and operable by the movement of said piston in relation to said casing for controlling said part of said valves, substantially as set forth.

[Claims 6 to 16 not printed in the Gazette.]

1,272,179. ARTIFICIAL ARM. WILLIAM PURVES ANDERSON and NORMAN CARYLL CLARKE, Birmingham, and JOHN FALCONER WHITELAW, Erdington, England. Filed May 31, 1917. Serial No. 172,041. (Cl. 3—12.)



1. In an artificial arm, the combination of an upper arm socket, a forearm pivoted thereto, a sliding bolt for locking said forearm in its adjusted position relatively to the socket, a crank on the forearm controlling said sliding bolt and having a limited movement only, and a controlling cable connected to said crank for the purpose specified.

2. In an artificial arm, the combination of an upper arm socket, a forearm pivoted thereto, a sliding bolt for locking said forearm in its adjusted position relatively to the socket, a crank on the forearm controlling said sliding bolt and having a limited movement only, a controlling cable connected to said crank, and means for locking said bolt at will in its inoperative position, substantially as described.

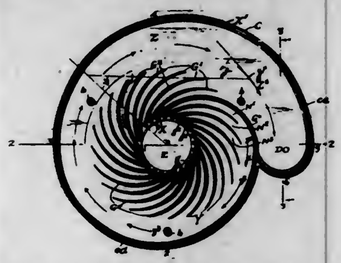
3. In an artificial arm in combination, a forearm, an upper arm socket, an elbow joint comprising a tubular member, a projection on said tubular member whereby it may be connected with said socket, a pivot bar within said tubular member, and a nut on said pivot bar.

7. In an artificial arm, the combination of an upper arm socket, a forearm pivoted thereto, a sliding bolt for locking said forearm in its adjusted position relatively to the socket, a controlling cable connected to said locking bolt, means for limiting the extent to which said sliding bolt may be retracted, and a spring for advancing said sliding bolt into its locking position, said spring offering a less resistance to the cable than is offered by the weight of the forearm whereby the initial tensioning of the cable will first withdraw the bolt, while a further tensioning will raise the forearm.

[Claims 4 to 6 not printed in the Gazette.]

1,272,180. MUFFLER. HALVOR ANDRESEN, New York, N. Y., assignor to The Vacuum Muffler Corporation. Filed June 26, 1917. Serial No. 177,067. (Cl. 121—116.)

1. A muffler of the class described comprising a casing having spaced heads and a spiral side wall, which casing is provided with inlet and discharge openings, said muffler also comprising a series of uniformly-spaced deflecting plates one of which plates merges into and becomes a continuation of the spiral side wall, the inner ends of said deflecting plates providing the peripheral portion of a centrally located initial receiving space into which the gases from the inlet opening flow, the outer end portions of said deflecting plates and the wall portion of the casing on the one hand and the spaced heads on the other providing a conduction chamber that gradually increases in cross-sectional area along the line of flow.



3. A muffler of the class described comprising in combination spaced heads, a spiral wall formation, deflecting plates which define a centrally located initial receiving space from which incoming gases pass through slots, between the inner ends of said deflecting plates, into the spaces between said deflecting plates, there being between the outer ends of said deflecting plates and the wall formation a conduction chamber leading to the discharge opening of the muffler which conduction chamber gradually increases in cross-sectional area in passing toward the discharge opening, the ends of said deflecting plates being constructed and arranged so that each makes an acute angle with the direction of flow of the gases passing by it.

6. A muffler having a casing which is provided with the necessary inlet and discharge openings, which casing comprises spaced heads and a spiral-shaped inclosing side wall, said muffler having a series of uniformly spaced deflecting members or plates one of which is in effect a continuation of the side wall, the outer ends of said spaced deflecting plates being arranged in a circular path about the center of an initial receiving space, which receiving space is defined by the inner ends of said deflecting plates, and into which initial receiving space the gases are received from the inlet opening of the muffler, the construction being such that between the outer ends of the deflecting member and the spiral side wall there is provided a conduction chamber which gradually increases in volume in passing toward the discharge opening of the muffler.

8. A muffler of the class described comprising in combination spaced heads, a casing side wall, a series of uniformly-spaced curved deflecting plates one of which extends to or merges into the side wall and the others of which are arranged so that the outer ends thereof are spaced from the casing side wall whereby there is provided a conduction chamber leading to the muffler discharge.

11. A muffler having a casing provided with inlet and discharge openings, which casing comprises spaced heads and an inclosing side wall, said muffler having a series of spaced deflecting members or plates one of which extends to the side wall, the outer ends of the other of said spaced deflecting plates being spaced from said inclosing side wall, said muffler having an initial receiving space into which the gases are received from the muffler inlet opening, the peripheral portion of which inlet or receiving space is defined by a slotted wall, the muffler construction being such that between the outer ends of the deflecting members and the side wall there is a conduction chamber for the gases flowing toward the discharge opening.

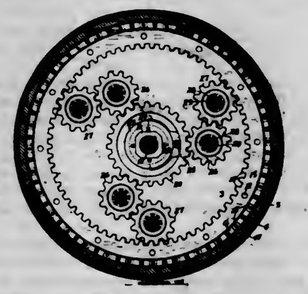
[Claims 2, 4, 5, 7, 9, and 10 not printed in the Gazette.]

1,272,181. PRODUCTION OF NITROGEN FROM THE AIR. CARLO ANDREUCCI, Rome, Italy. Filed Nov. 6, 1917. Serial No. 200,593. (Cl. 23—10.)

1. A process for continuously obtaining atmospheric nitrogen, consisting in separately supplying successive charges each of air and hydrogen, in substantially the proportions of 1,000 liters of air to 418 liters of hydrogen, into a chamber, igniting and exploding each charge while within the chamber, and removing the product of each explosion upon occurrence thereof, and collecting the nitrogen released from the successive explosion-products.

2. A process for obtaining atmospheric nitrogen in an internal combustion engine, the combustion chamber of which is provided with inlet openings for air and hydrogen, which comprises regulating the proportions of air and hydrogen by means of said inlet openings, igniting and exploding the successive charges of the air and hydrogen while within the chamber, and collecting the nitrogen released from the successive explosion products.

1,272,182. TRANSMISSION-HUB. ORVILLE APPLEBY, San Francisco, Cal. Filed Nov. 11, 1916. Serial No. 130,895. (Cl. 74—58.)



2. In a transmission hub, the combination of an axle, a housing therefor, a drum axially secured to said housing, a vehicle wheel rotatable around the axle, an internal gear wheel rotatable with the vehicle wheel, a slidable gear wheel around the axle and rotatable therewith, an idle gear wheel carried by the housing for transmitting motion from the gear wheel in its inner position to the internal gear wheel but at a slower speed of rotation, devices secured to the gear wheel and wheel respectively to transmit motion direct to the wheel from the gear wheel in its outer position, and means for shifting said means.

4. In combination, a driving axle, a vehicle wheel driven thereby, a housing for the axle, a drum secured to said housing, a drum secured to the wheel, a ring secured to said drum and having internal gear teeth, anti-friction rollers between the ring and the drum to which it is not secured, a sliding gear shaft around said axle, a transmission device slidable on, but rotatable with, said sliding gear shaft, comprising a gear wheel and a clutch member, a clutch member carried by said second-named drum with which said first clutch member is adapted to be moved into engagement, means carried by said housing, and with which said gear wheel is adapted to be moved into engagement, for transmitting motion from said gear wheel to said internal toothed ring, and means for shifting said transmission device.

6. The combination of a driving axle, a driven wheel, a stationary housing for the axle, means slidable longitudinally relatively to the axle for transmitting motion in one of its positions direct from the axle to the wheel, and means carried by the housing forming a medium through which said slidable means can transmit motion in another of its positions indirectly from the axle to the wheel.

[Claims 1, 3, 5, 7, and 8 not printed in the Gazette.]

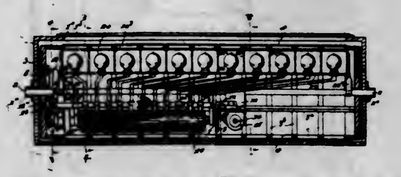
1,272,183. ARTIFICIAL FISH-BAIT. SIGEL ARNOLD, Kansas City, Mo. Filed Sept. 27, 1917. Serial No. 193,544. (Cl. 43—30.)



1. An artificial fish bait comprising a flat strip of flexible material, and a short strip of material folded upon one end of the first said strip and forming a loop that extends from one longitudinal edge to the other longitudinal edge of the strip and adapted to have a fish hook extended therethrough.

[Claim 2 not printed in the Gazette.]

1,272,184. ADVERTISING DEVICE. WADE H. BABCOCK, Cleveland, Ohio, assignor of one-half to Harry E. Whittle, Cleveland, Ohio. Filed May 5, 1917. Serial No. 166,609. (Cl. 40—53.)

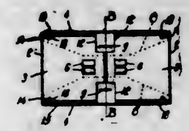


1. In an advertising device, a casing provided with a sight-opening, light projecting compartments at the rear of said sight-opening, a rotary drum carrying letters, means for intermittently driving said drum and stopping the same with said letters between said sight-opening and light projecting compartments, and means for illuminating said compartments and letters in sequential order when the latter and said drum are in their stopped or stationary position.

5. In an advertising device, a casing provided with sight-opening, light projecting compartments therein at the rear of said sight-opening, a rotary drum carrying letters, a commutator provided with a spring connected pinion for driving said drum when released, pawl mechanism operated by said commutator for intermittently releasing said drum and stopping the same when released, with said letters in front of said light projecting compartments, and means controlled by said commutator for illuminating said compartments and letters in sequential order when the latter and said drum are in their stopped position.

[Claims 2 to 4 and 6 to 8 not printed in the Gazette.]

1,272,185. BOX. FREDRICK W. BADEN, Sr., Newark, N. J. Filed Oct. 9, 1915, Serial No. 54,996. Renewed Nov. 21, 1917. Serial No. 203,275. (Cl. 229—44.)



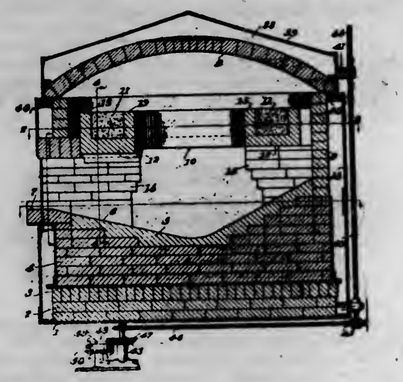
3. In a box of the character described, the combination with the sides thereof, of flanges bent inward from the free edges of said sides, and means for holding said flanges substantially in planes bisecting the angles formed by the sides when the box is closed, the adjacent ends of flanges upon edges which meet at an angle being beveled or cut off slantwise so as to clear each other.

[Claims 1 and 2 not printed in the Gazette.]

1,272,186. MELTING-FURNACE. THADDEUS F. BAILY and FRANK T. COPE, Alliance, Ohio, assignors to The Electric Furnace Company, Alliance, Ohio, a Corporation of Ohio. Filed Sept. 4, 1917. Serial No. 189,466. (Cl. 204—64.)

1. In an electric furnace of the resistance type the combination of a heating chamber, a hearth located in the bottom of said heating chamber, a resistance trough located above said hearth and extending around the walls of the heating chamber and a roof so arranged above said resistance trough that heat rays radiating upwardly from

said trough will be reflected upon said hearth while heat rays radiated downwardly from said resistance trough will strike directly upon said hearth.

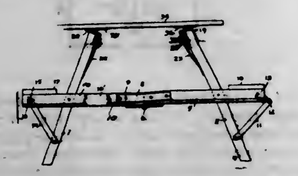


3. In an electric furnace of the resistance type, the combination of a heating chamber, a hearth located in the bottom of said heating chamber, a circular resistance element located above said hearth and a roof so arranged above said resistance element that heat rays radiating upwardly from said resistance element will be reflected upon said hearth while heat rays radiating downwardly from said resistance element will strike directly upon said hearth.

7. In an electric furnace of the resistance type, the combination of a heating chamber, a hearth located in the bottom of said heating chamber, spaced walls provided within said heating chamber around the inner walls thereof and extended above said hearth, a resistance element supported upon said spaced walls and spaced from the inner walls of the heating chamber and a roof so arranged above said resistance element that heat rays radiating upwardly from said resistance element will be reflected upon said hearth, while heat rays radiating downwardly from said element will strike directly upon said hearth.

[Claims 2 and 4 to 6 not printed in the Gazette.]

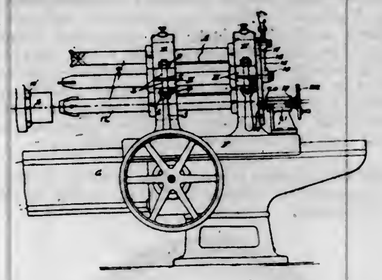
1,272,187. FOLDING CAMP-TABLE. HAROLD R. BASFORD, San Francisco, Cal. Filed Sept. 4, 1917. Serial No. 189,497. (Cl. 45—116.)



1. A clamp table comprising four transversely extending members hinged together in pairs and adapted to provide a support for two seats, four legs pivotally connected with said transversely extending members, four longitudinally extending members adapted to be detachably connected together in pairs at their ends to support a table top, and suitable braces for holding the entire frame rigid.

2. A camp table comprising two pairs of legs, two members pivoted to each pair of legs and to each other, two other members pivoted to the cross pairs of legs, means to detachably connect the latter members whereby a rigid table frame is produced, projections on certain of the members pivoted to the legs for a seat support, braces from the seat support to the legs, and a spring catch for locking the seat support in a horizontal position.

1,272,188. TURRET. FRED MCRAE BAWDEN, Toronto, Ontario, Canada. Filed Jan. 26, 1918. Serial No. 214,019. (Cl. 29—48.)

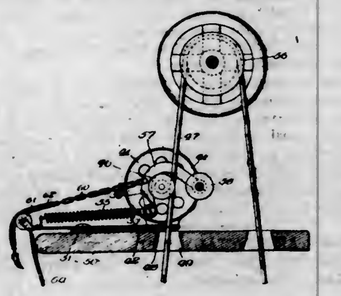


2. A turret comprising a rotary member provided with a plurality of horizontal holes therethrough to receive cutter-bars; a pair of split standards, spaced apart, in which the said rotary member is mounted to rotate on a horizontal axis; an indexing-device whereby the cutter carried by said member to be put to work is readily accurately located, and means whereby said rotary member is locked in said standards subsequent to the use of said indexing means.

4. A turret comprising a rotary member provided with a plurality of horizontal holes therethrough to receive cutter-bars; a pair of split standards spaced apart in which the said rotary member is mounted to rotate on a horizontal axis; an indexing-device comprising a ratchet-plate secured to one end of said rotary member adjacent the outer side of one of said standards, and provided with a plurality of holes suitably located corresponding to the number of cutter-bars carried by said rotary member; a locating pin; a bracket in which said locating pin is mounted to operate; the said locating-pin co-acting with the holes in said indexing-plate for the purpose specified; a lever pivoted to said ratchet-plate; a pawl pivoted to said lever and co-acting with said ratchet-plate to turn said rotary member, and means carried by each of the said split standards whereby said rotary member is locked therein.

[Claims 1, 3, and 5 not printed in the Gazette.]

1,272,189. SUPPORTING-CLAMP FOR SEWING-MACHINE MOTORS. CHESTER H. BEACH, Racine, Wis., assignor to Wisconsin Electric Company, Racine, Wis., a Corporation of Wisconsin. Filed June 21, 1915. Serial No. 35,350. (Cl. 74—21.)



3. The combination with a sewing machine having a head and a table, of an electric motor adapted to drive said head, and an L-shaped base, said motor being mounted on one arm of said base, the other arm of said base having projecting members which coöperate with said table to aline the motor with the head of the sewing machine.

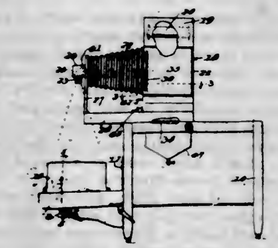
16. The combination with a sewing machine having a head, and a horizontal table provided with belt holes, of a base member supported on said table with rubber interposed between the two to prevent marring said table, a horizontally arranged pivotal member supported by said base, a motor above said pivotal member and mounted thereon whereby it may rock about said pivot to effect a driving connection with said head, and means on said base for positively engaging a substantially vertical wall of said table to prevent slipping of said motor on said table.

19. A portable sewing machine motor comprising a base having rubber pads and having clamps thereon, one of which is arranged to fit within one of the belt holes, the other of which is arranged to engage another vertical wall of the sewing machine table, a horizontal rod supported above said base and a motor having a pair of downwardly projecting arms through which said rod passes, whereby said motor is pivotally supported above said base.

34. The combination with a sewing machine having a head, and a table provided with belt holes, of an electric motor adapted to drive said head, and a base for said motor, said base having a forward extension comprising relatively slidable members, each having a downward hook adapted to enter one belt hole, and means for moving said hooks toward each other to clamp the table between said belt holes, whereby said motor and its base are supported on said table to the rear of said belt holes.

[Claims 1, 2, 4 to 15, 17, 18, 20 to 33, and 35 to 38 not printed in the Gazette.]

1,272,190. PHOTOGRAPHING APPARATUS. GEORGE C. BEIDLER, Rochester, N. Y. Filed Dec. 2, 1912. Serial No. 734,552. (Cl. 88—24.)



1. A casing, means associated therewith for exposing opposite sides of a double coated film photographically including reflectors, means for movably holding the reflectors in the casing thereby permitting the removal of a reflector for observing the projected image reflected by the opposite reflector, said casing having openings through which the focusing can be observed, and means for holding a screen substantially in the plane occupied by the film against which the projected image is reflected.

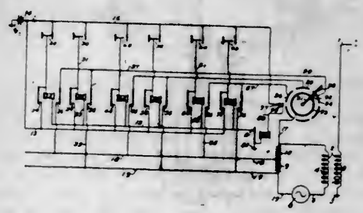
4. In a photographing apparatus, a copy holder comprising a base, frames slidable horizontally for clamping the copy between them and displaying copy from each side of the frame, means for reflecting the said copy, and a photographing apparatus containing material sensitized on two sides, said photographing apparatus having means for projecting said copy to the two sensitized sides of the film.

8. In a photographing and developing apparatus, a light tight chamber, means for supporting a sensitized film therein so that picture areas on opposite sides of the film are free, means for holding a sheet to expose opposite sides thereof, means for focusing light rays, from one side of the sheet on to one side of the film, and means for focusing light rays from the opposite side of the sheet on to the opposite side of the film.

9. In an apparatus relating to photography, means for holding a book in an open position, means associated therewith for holding a leaf of the book at an angle with relation to the position of the book when open, means for reflecting both sides of the said page, means for projecting the reflected matter, and a sensitised element on to which the reflected matter is projected.

[Claims 2, 2, 5 to 7, and 10 to 17 not printed in the Gazette.]

1,272,191. TELEGRAPH SYSTEM. JOHN HUME BELL, East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed July 12, 1917. Serial No. 180,169. (Cl. 178—67.)

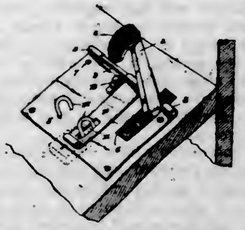


1. In a telegraph system of the class wherein means under the control of relays are employed for varying the strength of half-waves from a source of alternating current to effect signaling, the combination of contacts for selectively preparing in advance of service operative combinations of said relays, and distributer means for establishing operated ones of said relays effective with said means for varying the strength of half-waves of currents from said alternating current source.

2. In a telegraph system, a source of alternating currents, a plurality of relays, a distributer, resistances jointly controlled by said relays and said distributer for affecting the strength of successive alternations from said source of current, and a relay for disabling said first mentioned relays.

[Claim 3 not printed in the Gazette.]

1,272,192. LOCK FOR MOTOR-VEHICLES. WILLIAM M. BELL, Charlotte, N. C. Filed Mar. 31, 1916. Serial No. 88,156. (Cl. 70—128.)

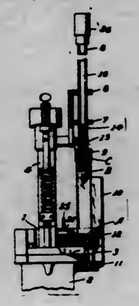


In a lock of the class set forth, a floor plate formed with an open ended slot to receive and admit of the fore and aft movement of a vehicle control lever, knuckles extending upwardly from said floor plate at opposite sides of said slot, a locking bolt slidable at a right angle to and across said slot through said knuckles to obstruct the movement of said lever, an arm on said bolt movable toward and away from the floor plate, and lock receiving means coöperating with said arm, to prevent movement of said bolt at both limits of the sliding movement of the latter.

1,272,193. AUTOMATIC METAL-FEED FOR TYPE-CASTING MACHINES. MORRIS FULLER BENTON, Plainfield, N. J., assignor to American Type Founders Company, Jersey City, N. J., a Corporation of New Jersey. Filed June 6, 1916. Serial No. 102,057. (Cl. 22—80.)

1. The combination with a melting pot for holding a supply of molten metal, and means for feeding a pig of

metal thereto, of a shield adapted to inclose the pig and extend to below the metal holding pot and provide a flue to conduct the products of combustion up around said metal holding pot and pig, and heating means located beneath said pot, substantially as set forth.



4. The combination with a melting pot having a combustion chamber provided with an outlet opening and means for feeding a pig of metal to the molten mass, of a shield comprising a sheet metal plate constructed to form a flue, said flue communicating at one end to receive the products of combustion from the outlet opening and through which the pig is passed, and means for mounting said shield whereby the same may be moved into and out of position, substantially as set forth.

6. The combination with a melting pot having guides mounted thereon, of a gravity actuated bar mounted in said guides and adapted to carry a pig of metal, a flexible member connected with and supporting said bar, and automatically actuated means for controlling the movement of said flexible member to feed said bar, substantially as set forth.

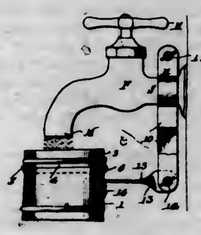
9. The combination with a melting pot having guides mounted thereon, of a gravity actuated bar mounted in said guides and adapted to carry a pig of metal, a flexible member connected with and supporting said bar, a sheave on which said flexible member is wound, a gearing connected to be driven by said sheave, an escapement associated with the gearing, a float adapted to be supported by the molten mass, and means connecting said float with the escapement for automatically controlling the movement of the flexible member to feed said bar, substantially as set forth.

12. The combination with a melting pot having a frame mounted thereon provided with guides, of a gravity actuated bar mounted in said guides and adapted to carry a pig of metal, a sheave mounted on said frame, a chain passing over said sheave and connected to said bar at the lower end thereof, a casing, a sheave journaled in said casing and having said chain wound thereon, a detent mechanism associated with said casing sheave, a float adapted to be supported by the molten mass, a lever connecting said float with the detent mechanism for automatically controlling the movement of the chain to feed said bar, and means for rewinding the chain on said casing sheave to raise the pig supporting bar, substantially as set forth.

[Claims 2, 3, 5, 7, 8, 10, and 11 not printed in the Gazette.]

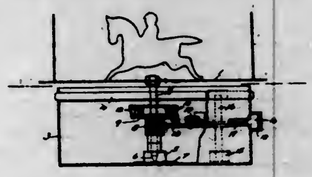
1,272,194. SOAPSUDS-MIXER. SPENCER BICKERTON, Honolulu, Hawaii. Filed Sept. 5, 1917. Serial No. 189,808. (Cl. 45—28.)

A soap holder comprising a support, a cylindrical open ended body secured thereto, a cylindrical open ended cover hinged upon said body and abutting the edge thereof, outwardly stamped beads in the periphery of said body and said cover, and screens disposed within the body and cover and engaged in the respective beads, and means se-



cured to said body and adapted for attachment to a faucet.

1,272,195. TOY. CHARLES F. BLACK, Dayton, Ohio, assignor to David P. Clark, Dayton, Ohio. Filed Feb. 2, 1918. Serial No. 215,172. (Cl. 46—40.)



1. In a toy a vertically arranged shaft, a part to be operated connected with said shaft, a pinion loosely mounted on said shaft, a toothed wheel rigidly secured to said pinion, a member mounted on said shaft for vertical movement relatively thereto, said member being held against rotation relatively to said shaft and having a part coöperating with said toothed wheel to establish a connection between said pinion and said shaft, said part and the teeth of said wheel being so arranged that when said pinion rotates in one direction said part will operatively engage one of said teeth, and when said pinion rotates in the other direction said member will be moved lengthwise of said shaft to permit said part to ride over said teeth, and a toothed rack to actuate said pinion.

8. In a toy, a casing, a shaft mounted in said casing, a part to be operated arranged beyond said casing and connected with said shaft, a pinion loosely mounted on said shaft, an overrunning clutch connection between said pinion and said shaft, a toothed segment pivotally mounted in said casing and arranged to mesh with said pinion, means to move said segment in a direction to actuate said operable part of said toy and return the same to its normal position, said segment being so arranged with relation to said pinion that when the segment is in its normal position its teeth will be out of engagement with said pinion.

[Claims 2 to 7, 9, and 10 not printed in the Gazette.]

1,272,196. PORTABLE HAND-PLANER. JAMES HENERY BLOODGOOD, South Jacksonville, Fla., assignor of one-half to Edward C. Broward, Jacksonville, Fla. Filed Jan. 2, 1918. Serial No. 209,878. (Cl. 144—117.)

1. A rotary wood-working tool comprising a body member formed at one side with a shoulder offset from the body member, the bottom of which shoulder constitutes a continuation of the bottom of the body member, a tool-carrying shaft mounted in the body member below the level of the shoulder, a worm gear on the shaft, an upright spindle at one side of the shaft and mounted in the shoulder, and extending in a direction at right angles to the length of the shaft, a worm gear mounted on the spindle and meshing with the first-named worm gear, a

swivel member on the shoulder and for which the spindle constitutes a pivot, and intermeshing gearing, one of which is fast to the worm gear and the other of which is journaled in the swivel member for the application of power to the tool-carrying shaft, said swivel member inclosing the intermeshing gearing.



5. A rotary wood-working tool comprising a body member having an extended working face with a throat for the reception of the tool, a tool-carrying shaft journaled in the body member and extending to one side thereof, an upright spindle mounted at one side of the shaft, gearing between the spindle and the tool-carrying shaft, a drive shaft, gearing between the drive shaft and the first-mentioned gearing, and a swivel joint inclosing all the gearing, the lower member of the joint maintaining a relatively fixed position with respect to the body member, and the other member of the joint moving about the spindle.

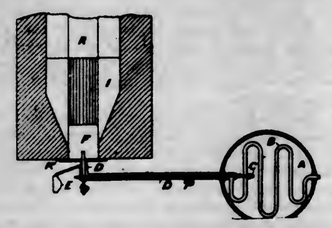
[Claims 2 to 4 and 6 not printed in the Gazette.]

1,272,197. DECOLORIZER. PERCY ALBERT BOECK, New York, N. Y., assignor to Celite Products Company, Los Angeles, Cal., a Corporation of California. Filed June 14, 1917. Serial No. 174,725. (Cl. 252.)

2. A decoloriser formed of infusorial and fullers' earths in equal proportions by weight.

[Claims 1 and 3 to 7 not printed in the Gazette.]

1,272,198. APPARATUS FOR BURNING PITCH. GEORG HENNING HILMAR BÖLLING, Christiania, Norway. Filed Mar. 26, 1917. Serial No. 157,476. (Cl. 158—36.)

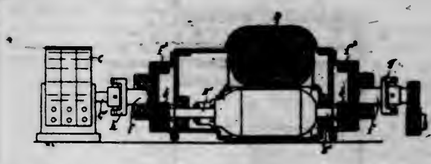


1. Apparatus for effecting a continuous combustion of pitch, consisting of a vessel for containing pitch, heating means for said vessel for maintaining a body of pitch therein in a fluid condition, a burner, a jacketed pipe for conveying fluid pitch from said vessel, the jacket of said pipe extending the whole distance between said vessel and burner, means for supplying heating fluid to the jacket of said pipe, a fireplace, a burner tube of said burner connected with said pipe and entering said fireplace, a jacket inclosing said burner tube, and a fluid jet nozzle arranged in proximity to said burner tube and adapted for atomizing the stream of fluid pitch issuing from such tube, substantially as set forth.

[Claim 2 not printed in the Gazette.]

1,272,199. EXPLOSION-ENGINE WITH DYNAMOMAGNETIC IGNITION. PIERRE BOSSU, Paris, France. Filed Aug. 31, 1915. Serial No. 48,271. (Cl. 171—315.)

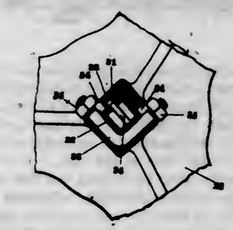
1. The combination, with an explosion engine; of a dynamo having its armature shaft connected with the engine shaft to be driven therefrom at a speed higher than that of the engine; a magneto arranged in tandem with said dynamo armature shaft; and a driving connection, including a speed-reducing device, between said dynamo shaft and the magneto shaft for driving the latter from the former.



3. The combination, with an explosion engine; of a dynamo provided at each end of its case with a trunnion, said trunnions being disposed in alinement with each other and parallel with the armature shaft of the dynamo, one of said trunnions being connected with the engine shaft to be driven therefrom; a magneto having its shaft connected with the outer trunnion; a speed-accelerating device between one end of the dynamo armature shaft and the trunnion connected with the engine shaft; and a speed-reducing device between the other end of said dynamo armature shaft and the trunnion connected with the magneto shaft.

[Claim 2 not printed in the Gazette.]

1,272,200. KEYING DEVICE. ROBERT R. BOWERS, Ottumwa, Iowa, assignor to The Dain Manufacturing Company of Iowa, Ottumwa, Iowa, a Corporation of Iowa. Filed Nov. 6, 1916. Serial No. 129,856. (Cl. 74—8.)



1. The combination with a shaft and a member having a hub adapted to fit thereon, said shaft having a rivet extending therethrough and secured therein and having a head projecting from the face of the shaft, the inner face of the hub being recessed to receive said rivet-head, whereby the hub can only be placed on the shaft in a predetermined position.

3. The combination with a shaft, a member having a hub adapted to fit thereon, and means on the shaft and hub for interlocking such parts together, of a bolt passing through the hub and partially surrounding the shaft, and means for tightening the bolt to force the shaft and hub into close frictional contact.

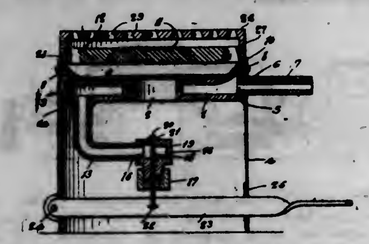
5. The combination with a shaft having a plurality of faces and a member having a hub adapted to fit thereon and having a recess in one of its faces, of a rivet passed through two faces of the shaft and having an end projecting beyond one of such faces and entering the said recess in the hub, a bent bolt passing through the hub and in contact with two faces of the shaft, and means for tightening the bolt to force said shaft into close frictional engagement, the hub having its bolt-hole enlarged to permit of the insertion and withdrawal of the bolt.

[Claims 2 and 4 not printed in the Gazette.]

1,272,201. HYDROCARBON-BURNER. LEVI M. BOWMAN, Tulsa, Okla., assignor of one-half to William A. Smith, Tulsa, Okla. Filed May 16, 1917. Serial No. 168,993. (Cl. 158—69.)

1. A hydrocarbon burner including an outer casing, a gas-generating member removably secured to same, said

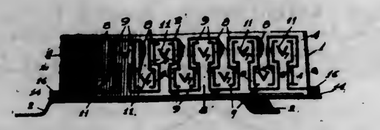
gas generating member having a central opening therethrough and an interior chamber surrounding the same, said gas generating member having a concave recess in its upper surface, said chamber being provided with inlet



and outlet openings, a deflecting plate supported by and above the gas generating member, said deflecting plate having a peripheral recess in its upper surface, and a cap supported in spaced relation to the deflecting plate.

[Claim 2 not printed in the Gazette.]

1,272,202. VENTILATOR. ARTHUR J. BRADLEY, San Francisco, Cal. Filed Dec. 15, 1917. Serial No. 207,635. (Cl. 114—177.)



1. A ventilator for port holes and the like comprising a plurality of intercalary U-shaped members arranged to provide a series of tortuous channels for the passage of air and to prevent the passage of light and retard the passage of water; and means for securing the intervolved members within a port hole or the like.

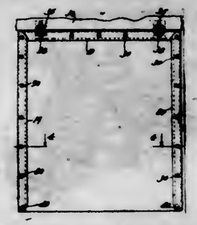
6. A ventilator for port holes and the like comprising a plurality of opposed and vertically disposed intercalary U-shaped members having flanges provided with inwardly offset portions, to form a series of vertically disposed tortuous channels, said offset portions forming enlarged chambers within the tortuous channels, to permit the passage of air and prevent the passage of light and to retard the passage of water; vertically disposed V-shaped members arranged within the enlarged chambers and diverging toward the outer side of the ventilator to further obstruct the passage of water; outwardly extending flanges on the ends of the offset portions to further obstruct the passage of water; means for draining the lower portions of the channels toward the outer side of the ventilator; a drum frame surrounding the U-shaped members; and means for securing the frame within a port hole or the like.

[Claims 2 to 5 not printed in the Gazette.]

1,272,203. WASHTUB-COVER. ANGELO BRIENZA, New York, N. Y., assignor of one-half to Charles N. Gregg, New York, N. Y. Filed Jan. 24, 1918. Serial No. 213,503. (Cl. 220—9.)

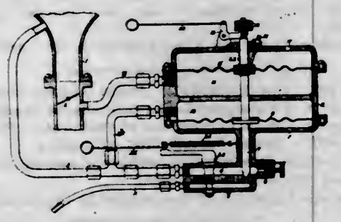
1. A wash tub cover, comprising a body formed of a single piece of sheet metal bent over to provide a top, front, back, sides and bottom, the top and bottom being spaced apart and the back and sides being provided with flanges bent onto the under side of the said bottom, and a metal reinforcing frame extending between the said top and bottom and along the sides and back and screws extending through the said flanges and the said bottom and screwing into the said frame.

2. A wash tub cover, comprising a body formed of a single piece of sheet metal bent over to provide a top, front, back, sides and bottom, the top and bottom being spaced apart and the back and sides being provided with flanges having doubled up edges and bent onto the under side of the said bottom, and a metal reinforcing frame ap-



proximately U-shape, the frame extending between the said top and bottom and fitting against the said sides and back and screws extending through the said flanges and the said bottom and screwing into the said frame.

1,272,204. PRIMING DEVICE. HOWARD BROOKS, El Paso, Tex. Filed Feb. 24, 1917. Serial No. 150,737. (Cl. 261—69.)



5. In combination with the intake manifold of an internal-combustion engine having a throttle valve, a priming device comprising a fuel feed, a valve controlling the feed, a discharge conduit from the valve to the manifold above the throttle, pneumatically-operable means controlling said valve, and means for subjecting said pneumatically-operable means to the pressure of the manifold above the throttle valve when priming the engine, and to the pressure above and below the throttle when running on the regular mixture.

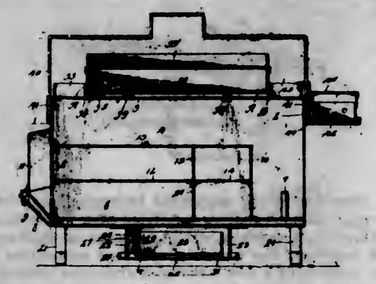
6. In combination with the intake manifold of an internal-combustion engine having a throttle valve, a fuel feed, a valve controlling the feed, a discharge conduit from the valve to the manifold above the throttle, a diaphragm mechanism associated with said valve, and means for subjecting the diaphragm mechanism to the pressure of the manifold above the throttle when priming the engine, and to that above and below when running on the regular mixture.

7. In combination with the intake manifold of an internal combustion engine having a throttle valve, a feed controlling valve, a discharge conduit from the said valve to the manifold above the throttle, a spring for maintaining said valve closed, a diaphragm mechanism associated with the feed valve, and means for subjecting the diaphragm mechanism to the pressure of the manifold above the throttle to move the valve against the resistance of the spring or to the pressure above and below the throttle of the manifold to subject the valve to the action of the spring whereby the flow of priming fuel is inversely proportional to the flow of regular fuel mixture.

[Claims 1 to 4 not printed in the Gazette.]

1,272,205. FOOD-WARMER. FIRMIN C. BROWN, Chicago, Ill. Filed May 9, 1917. Serial No. 167,569. (Cl. 126—261.)

A food warmer of the class described having a fire box connected to and suspended from the bottom thereof, said fire box being open at one side, and a drawer in the fire box removable therefrom through said open side thereof and arranged to contain a suitable heater, the said drawer being provided with means to support the bottom thereof



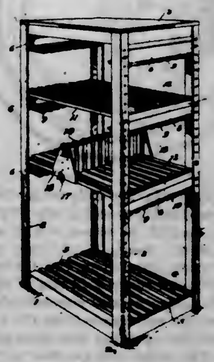
in spaced relation to the bottom of the fire box, and the walls of the fire box and drawer being provided with air openings, the bottom of the fire box being provided with extensions at the sides and ends thereof to receive soot or the like which may be dropped from the fire box.

1,272,206. BELT-BUCKLE. SAMUEL BUCHBAUM, Chicago, Ill. Filed July 28, 1916. Serial No. 111,776. (Cl. 24—170.)



A belt and belt buckle device of the character described comprising a front plate having two side walls projecting rearwardly thereof, a clamping element arranged between said side walls, means whereby said clamping element is pivotally mounted within said side walls, said clamping element having a pair of separated bridge like serrated engaging surfaces, and a link of substantial length pivotally carried by said clamping element, said clamping element being adapted to clamp the belt tongue between it and the front plate, the axis of the pivotal mounting of said link and the axis of said pivotally mounted clamping element being normally in a plane substantially parallel to the plane of said front plate, one belt extremity being pivotally associated with the free extremity of said link.

1,272,207. CHASE-RACK FOR PRINTERS' USE. HENRY L. BULLEN, Newark, N. J., assignor to American Type Founders Company, Jersey City, N. J., a Corporation of New Jersey. Filed Aug. 5, 1915. Serial No. 43,840. (Cl. 211—14.)



1. In a chase rack for printers' use, the combination, of a frame structure having a base and corner posts, a channeled platform mounted on the base, guide members adjustably mounted on said corner posts having channels registering with the channels of the platform, a second channeled platform mounted on said guide members, and guide members adjustably mounted on said corner posts having channels registering with the channels of the second platform, substantially as set forth.

2. In a chase rack for printers' use, the combination, of a frame structure, a channeled platform vertically adjustable on the frame structure, a channeled back guide horizontally adjustable on said platform, and guide members adjustably mounted on the frame structure having channels registering with the channels of said platform and the back guide respectively, substantially as set forth.

3. In a chase rack for printers' use, the combination, of a frame having opposite entrances, a platform mounted on the frame and provided with channel-ways, and a pair of top guides independently and adjustably mounted on the frame at each entrance thereof, said top guides having each a plurality of channel-ways registering with the channel-ways of the platform, substantially as set forth.

[Claim 4 not printed in the Gazette.]

1,272,208. COMBINATION STRAIN-PLATE AND REMOVABLE TROLLEY-FROG. JOSEPH E. BURGESS, St. Louis, Mo., assignor to More-Jones Brass & Metal Company, St. Louis, Mo., a Corporation of Missouri. Filed Aug. 1, 1914. Serial No. 854,458. (Cl. 191—38.)



1. In a trolley switch, a strain plate for the support of a trolley frog having like portions formed on the top and bottom side thereof so that said plate can be reversed relative to the adaptation of right or left hand frogs.

4. A strain plate for trolley switch frogs having like portions formed on the top and bottom thereof that are adapted to receive a trolley wire so that said plate can have either its top or bottom portion engaged against a trolley wire.

6. In a trolley switch, a strain plate, said strain plate adapted to have a trolley wire secured thereto, a removably mounted trolley frog secured to said strain plate, and a trolley wire approach adapted to be secured to said strain plate and said frog.

8. In a trolley switch, a strain plate, said plate being adapted to be secured to a main line trolley wire, a lead trolley wire portion formed on said plate for the reception of a lead trolley wire, said plate having like portions formed on the top and bottom side thereof whereby either side of said plate can be placed uppermost so that said lead portion can be placed in either a right or left hand position relative to the mounting of either a right or left hand trolley frog thereto.

[Claims 2, 3, 5, and 7 not printed in the Gazette.]

1,272,209. LOCKING HAIR-PIN. JAMES P. BURKE, Struthers, Ohio. Filed Oct. 20, 1917. Serial No. 197,639. (Cl. 132—22.)



1. The herein described locking hairpin comprising a head and two prongs extending therefrom, the prongs being each substantially straight from one end to the other except for a short distance between the ends where it is formed into a spiral forming a shoulder adapted to interlock directly with the similar shoulder of the other prong, whereby when the pin is introduced into the hair with

the prongs spaced from each other and the ends of the prongs are then held firmly and the head end of the pin is given a turn or twist around the longitudinal axis of the pin the two shoulder portions automatically interlock.

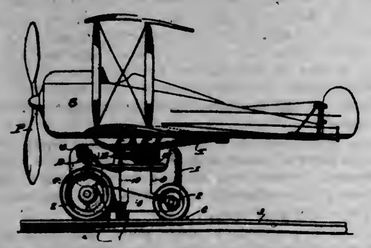
2. In a locking hairpin, the combination of a head and two prongs projecting therefrom resiliently, each prong intermediate of its ends being provided with a compound-curved portion while the straight portions on opposite sides of the curved portion lie approximately in the same direction, said curved portions of the two prongs being adapted to interlock when the head of the pin is given a rotation around a longitudinal axis of the pin with respect to the points of the prongs.

1,272,210. TATTING-SHUTTLE. DAVID H. BUTLER, Providence, R. I., assignor to The Inlaid Company, Inc., Providence, R. I., a Corporation of Rhode Island. Filed May 11, 1917. Serial No. 168,027. (Cl. 66—10.)



As a new article of manufacture, a tatting shuttle composed of two substantially similar celluloid members each of substantially ovaloid form having a central struck-out part forming a closed bottom, said bottoms being relatively long and wide and being cemented to each other in abutting relation, each member having a flat rim-like part extending throughout the periphery thereof, the flat rim-like parts at the ends of the members contacting with each other.

1,272,211. LAUNCHING MECHANISM FOR AIRCRAFT. GODFREY LOWELL CABOT, Boston, Mass. Filed Aug. 13, 1917. Serial No. 186,012. (Cl. 244—2.)



1. A launching mechanism for aircraft comprising a car, and an electro-magnet on said car for holding the craft thereon until the required speed has been attained, said craft having an armature attracted by said magnet.

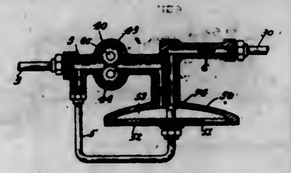
5. A launching mechanism for aircraft comprising a track, a carriage thereon, means for connecting an aircraft to said carriage, means for propelling said carriage, and means for automatically throwing said propelling means into action when the aircraft propeller has started the ship and the carriage forward.

11. A launching mechanism for torpedo carrying air craft comprising a car, and an electro-magnet carried by the upper part of said car for holding a torpedo of the craft, the upper end of said magnet having a channel shaped depression extending in the direction of movement of the car and forming a seat to receive said torpedo.

[Claims 2 to 4 and 6 to 10 not printed in the Gazette.]

1,272,212. FLOW-CONTROLLING APPARATUS. JOHN GURNEY CALLAN, Madison, Wis., assignor, by mesne assignments, to Constantine Hutchins, Daniel R. Sortwell, and Eliot Farley, trustees, Boston, Mass. Filed May 19, 1917. Serial No. 169,692. (Cl. 137—78.)

1. In an apparatus for regulating the flow of fluids, the combination with a fluid measuring device adapted to receive fluid, from a supply under pressure and to deliver said fluid, with a pressure regulating device adapted to equalize the inlet and outlet pressures of said measuring device.

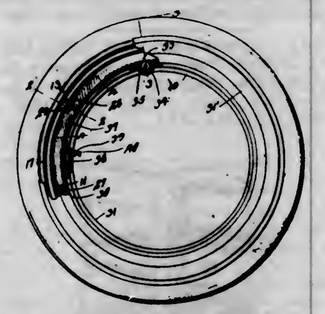


4. A flow controlling apparatus interposed between a supply pipe for fluid under a relatively high pressure and a discharge duct through which the fluid is discharged under a relatively low pressure, said flow controlling apparatus comprising a flow measuring device for advancing the fluid from its inlet to its outlet at a definite quantity rate; and a pressure regulating device comprising a chamber and movable abutment therein, said chamber being in communication with the inlet and outlet ducts of the measuring device at opposite sides of said movable abutment respectively; and a valve operated by said movable abutment and controlling the communication from the main supply to the main discharge pipe of the apparatus, pressure from the discharge side of the measuring device tending to open said valve, whereby the pressures at the inlet and discharge sides of said measuring device are maintained substantially equal, and said valve permits a flow from the main supply to the main discharge duct at the rate determined by the measuring device, substantially as described.

5. An apparatus for regulating the flow of fluids comprising a measuring device adapted to be power driven at a determinate speed, to transfer fluid from its inlet to its outlet; and a pressure regulating device adapted to maintain substantially equal pressures at the inlet and outlet sides of said measuring device.

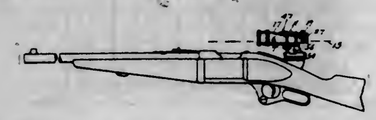
[Claims 2 and 3 not printed in the Gazette.]

1,272,213. DEMOUNTABLE RIM. ELMER P. CALVIN, Sardinia, Ohio. Filed July 25, 1916. Serial No. 111,236. (Cl. 152—21.)



The combination with the felly of a vehicle wheel, of a fixed rim fastened thereon and projecting over the sides of the said felly, one of the edges of the said rim having an inturned annular flange, said edge being provided with spaced notches, ears upon the inner walls of the notches contacting and secured to one of the sides of the felly, the opposite edge of the rim having an outturned flange and having its outer face from the said flange beveled, a detachable tire-carrying rim surrounding the fixed rim, lugs upon the underface of the said tire carrying rim having oppositely wedge-shaped faces which are arranged one within each of the notches of the fixed rim, a turnable member having spaced wedge-shaped faces co-acting with the lugs, a housing for the said turnable member secured to the side of the felly, means carried by said housing and co-acting with the turnable member for moving the same, means carried by the said housing for locking the turnable member, and an inturned flange upon the tire-carrying rim having its inner face provided with a compressible element which contacts with the outer face of the housing.

1,272,214. FIELD-GLASS FOR FIREARMS. EUGENE P. CAMUS, Brooklyn, N. Y. Filed Apr. 20, 1917. Serial No. 163,441. (Cl. 88—2.2.)



1. The combination with a firearm, of field glasses, a mounting for supporting said field glasses over the frame of said firearm, said field glasses having two major segment telescopes, set side by side and containing major segment lenses therein, each of said telescopes having an extension, both of said extensions overlapping one over the other on a lateral plane, said two extensions being pivoted together by a bolt at the rear end and slidable in hinge action at the front end; means to coact the optical center lines of said telescopes in direction and convergence with unmagnified sights and eye sight lines through the open space under the chordal walls of said telescopes and within the circumferential lines of said lenses, by the said hinge movement of said base plate extensions being adapted to alter the directions of the optical center lines of said telescopes.

8. In field glasses, the combination with two relatively adjustable major segment telescopes, set side by side and each composed of a pair of sections, one of said sections being an arcuate funnel shaped shell and base plate drawn together by threaded screws, said shell having at the front end a milled out seat therein; fiber casings with grooves holding the objective lenses in said grooves; said shell with the said seat adapted to hold the said fiber casings with said objective lenses therein by the clamping grip around the edges of the said lenses, by means of said shell and said base plate in conjunction with said threaded screws.

[Claims 2 to 7 not printed in the Gazette.]

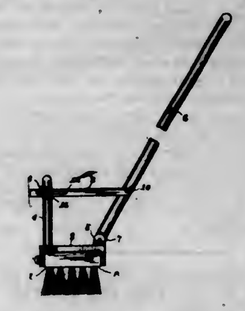
1,272,215. SPRING-TIRE. CHARLES A. CHALONE, Aberdeen, Md. Filed Apr. 12, 1918. Serial No. 228,196. (Cl. 152—8.)



1. A spring tire comprising inner and outer rims, members securing said rims in spaced relation, means securing the inner rim to the felly of a wheel, said outer rim having rectangular openings, rectangular stems slidable in said openings, tread supporting members formed upon said stems, tread sections secured to said supporting members, lugs formed upon the inner rim, springs having their outer ends threaded into the stems and their inner ends secured to the lugs, and protectors surrounding said springs and interposed between the rims.

2. A spring tire comprising inner and outer rims, means securing said rims together, means securing the inner rim to the felly of a wheel, stems slidable in the outer rim, tread supporting members formed on said stems and spaced from the outer rim, tread sections secured to said supporting members, springs secured to said stems and to the inner rim, and telescopic protectors surrounding said springs and interposed between the inner and outer rims.

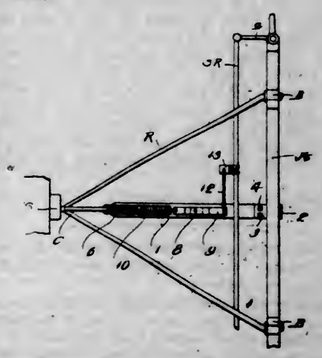
1,272,216. SCRUBBING-BRUSH. JOSEPH CHECK, Wilkes-Barre, Pa. Filed Oct. 22, 1917. Serial No. 197,912. (Cl. 15—13.)



1. The combination with a scrubbing brush, of a clamping head applied to the back of the brush, a short rigid standard projecting upwardly from one side of the head, a long handle extending upwardly from the opposite side of the head and pivotally connected thereto at its lower end, a substantially horizontally disposed foot rest and brace pivotally connected to the handle and slidably engaging the standard, and means for clamping the foot rest and brace to the standard to hold the handle in an adjusted position.

2. The combination with a scrubbing brush, of a clamping head applied to the back of the brush, a short standard projecting from one side of the head, a long handle extending upwardly from the opposite side of the head and pivotally connected thereto, a substantially horizontally disposed foot rest and brace connecting the standard to the handle, said foot rest and brace having a channel shaped cross section and one end thereof being bifurcated and pivotally connected to the handle while the opposite end thereof is provided with an elongated opening receiving the standard, the side flanges having slots corresponding to the said elongated opening, and a clamping bolt extending through the standard and slots of the foot rest and brace for securing the latter in an adjusted position.

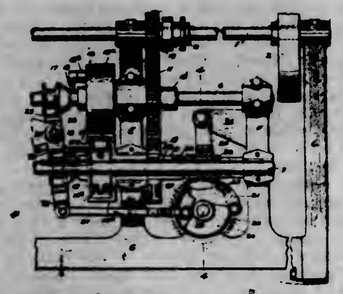
1,272,217. RADIUS-ROD BRACE AND SELF-STEERING DEVICE. CHRISTIAN CHRISTIANSEN, Sioux Falls, S. D. Filed July 27, 1916. Serial No. 111,742. (Cl. 21—200.)



A combined radius rod brace and self steering device for automobiles comprising a substantially straight ap-

proximately horisontal bar having near one end a quarter twist and inclining upwardly to a slight extent from this twist to said end, said inclined portion having its sides disposed vertically and said end having a notch to receive the crotch of the radius rod, the remainder of the length of said bar having its sides disposed in substantially horizontal planes and the end of the bar opposite said notch being bent upwardly and inwardly to form a hook to receive the lower bead at the front side of the automobile axle, a clamping plate at the upper side of said bar for passage over the lower bead at the rear side of the axle, a bolt for drawing said plate toward said bar, a lever positioned longitudinally on the front portion of said bar and fulcrumed between its ends thereto, the front and rear ends of said lever being off-set upwardly, a coiled spring connected to the rear end of said lever at its front end and hooked at its rear end into an opening in said inclined portion of said bar, a rod extending laterally from and pivoted to the front end of said lever, and a clamp for connecting said rod pivotally to the transverse steering rod of the machine.

1,272,218. TRANSMISSION-GEARING. PRENTICE E. CLARK, Elkins, W. Va. Filed Aug. 20, 1917. Serial No. 187,167. (Cl. 74—50.)

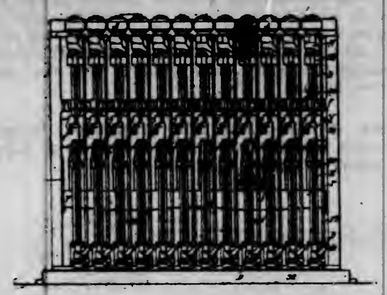


1. In transmission gearing of the type set forth, in combination, a pair of parallel shafts, a pair of intermeshing pinions mounted on the respective shafts, one of said pinions being continuously driven in one direction and continuously driving the other in an opposite direction, a pair of machine driving pinions also mounted on the respective shafts, the pinions of one of said pairs being loose on the shafts and the pinions of the other pair being fast thereon, clutches associated with the loose pinions and operative to effect their rotation with the respective shafts, sleeves connecting said loose pinions and the respective companion elements of said clutches, supporting bearings for said sleeves, said loose pinions being arranged at one side and said clutches at the opposite side of said bearings, a worm mounted on one of said shafts and rotatable with and by the pinion thereon continuously driven in one direction, a shaft disposed transversely of said parallel shafts, a worm wheel on the transversely disposed shaft in mesh with and operated by said worm, a cam on the transversely disposed shaft and means for holding the respective clutches simultaneously operative and inoperative, said cam operating said means to reverse the clutches periodically in their operative and inoperative relation.

[Claim 2 not printed in the Gazette.]

1,272,219. DRILLING-MACHINE. WALTER L. CLARK, Springfield, Mass. Filed June 28, 1916. Serial No. 106,867. (Cl. 77—22.)

1. A machine of the class described including in combination a plurality of drilling units arranged alongside of one another, independent motors, one for each of said units, and an overload mechanism for cutting off the power from each motor alone when the resistance to its operation increases beyond a determined normal and simultaneously putting a brake on the further movement of the parts of said unit.



3. A machine of the class described including in combination a plurality of drilling units carried adjacent to one another, each comprising a rotatable chuck adapted to engage one end of a long narrow piece of work in an upright position, a tail stock adapted to engage and hold the other end of said work and a drill carriage which is vertically movable to feed a drill through said tail stock and said work, a feed screw, means for rotating the same during a drilling operation and stopping it at the end of such operation, a nut on the carriage adapted to be brought into engagement with the feed screw to effect a feeding operation, or to be withdrawn from such engagement, and a hand operated gear carried by said carriage and engaging the feed screw for retracting the carriage when the feed screw is stationary.

5. A machine of the class described including in combination a number of upright guides, a number of motors and chucks rotated thereby at one end of said guides, a corresponding number of adjustable tail stocks on said guides for holding work-pieces in engagement with the chucks and drill carriages on said guides which are given a feeding movement by said motors.

[Claims 2, 4, and 6 to 9 not printed in the Gazette.]

1,272,220. PROCESS OF MAKING LEAVENED BREAD FROM WHEAT-FLOUR AND CORNMEAL. JOSEPH MORRIS CLARKE, Shreveport, La. Filed Sept. 22, 1917. Serial No. 192,715. (Cl. 99—10.)

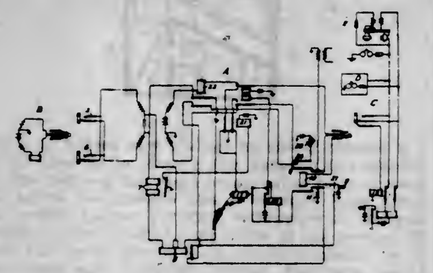
1. The process of making leavened bread from a mixture containing wheat flour and corn meal, which consists in adding water to the corn meal, cooking the product so formed into a mush, then adding to this mush cream of tartar, then adding to this mixture wheat flour containing yeast and other ingredients necessary to the growth of the yeast, thoroughly mixing the same, allowing the same to ferment, and finally baking the same, substantially as described.

[Claims 2 to 5 not printed in the Gazette.]

1,272,221. TELEPHONE-EXCHANGE SYSTEM. HENRY P. CLAUSEN, Mount Vernon, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 13, 1916. Serial No. 136,625. (Cl. 179—46.)

1. A telephone exchange system comprising a trunk circuit extending from a first to a second central office, a telephone line terminating at the second central office and connected with the trunk circuit, a source of signaling current at the second central office, switching means controlled by the operator at the first central office for determining the side of the line over which current from said source is to be projected, and means for connecting the source of signaling current to the line.

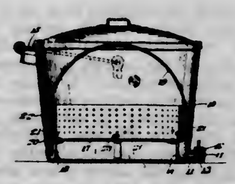
5. A telephone exchange system comprising a trunk circuit extending from a first to a second switchboard, a telephone line terminating at the second switchboard, a relay in the trunk circuit energised upon the connection thereof with the telephone line, a source of ringing current, a ringing relay responsive to the energization of the first relay to connect the source of ringing current with the telephone line, a link circuit at the first switchboard, a polarized relay in the trunk circuit controlled by the connection of the link circuit therewith for determining the side of the line over which ringing current is to be projected, a third relay in the trunk circuit controlled over the connected telephone line, a signaling device in the trunk circuit, interrupter mechanism, and an operating circuit for the signaling device and the interrupter mechanism established upon the subsequent disconnection of the link circuit from the trunk circuit and including contacts of the energized first and third relays.



14. A telephone exchange system comprising a trunk circuit extending from a first to a second switchboard, a link circuit at the first switchboard, a relay in the trunk circuit energized upon the connection of the link circuit therewith, a signaling device in the trunk circuit operated upon the energization of the relay, a telephone line terminating at the second switchboard, a relay in the trunk circuit responsive to the connection thereof with the telephone line for stopping the operation of the signaling device, a third relay in the trunk circuit controlled over the telephone line, interrupter mechanism, and an operating circuit for the signaling device and the interrupter mechanism including engaged contacts of the three relays established upon the subsequent deenergization of the first relay while the second and third are energized.

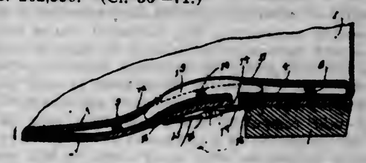
[Claims 2 to 4 and 6 to 13 not printed in the Gazette.]

1,272,222. COOKING VESSEL. CHARLOTTE E. CLAYTON, Foreston, Minn. Filed Feb. 17, 1917. Serial No. 149,257. (Cl. 53—1.)



The combination with a cooking vessel, of a tray removably disposed therein and including a perforated bottom, legs secured to said bottom and supporting the tray in spaced relation to the bottom of the vessel, a vertical peripheral flange on said bottom, a bail, pins pivoting said bail externally upon said flange and projecting inwardly of the flange, and an auxiliary perforated wall disposed upon said bottom inwardly of said flange and provided at its lower edge with bayonet slots engaging said pins whereby said wall is removably secured to said flange.

1,272,223. ARCH-SUPPORTING SHOE. THOMAS CORFEY, West Tulsa, Okla. Filed Nov. 20, 1917. Serial No. 202,990. (Cl. 36—71.)

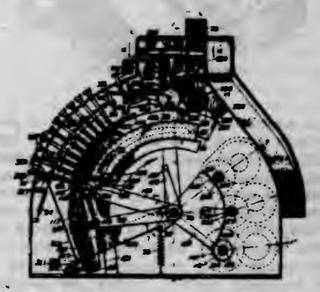


1. An arch supporting shoe including with an inner sole structure against which the foot bears, inflatable means to give elevation and to vary the elevation of the inner sole structure at the instep arch, and means to bodily raise and support the inflatable means.

8. An arch supporting shoe comprising an inner sole, a middle sole, cushioning means interposed between said middle sole and inner sole, supporting plates engaging the under face of said cushioning means, and means for buckling said supporting plates for raising said cushioning means and consequently raising the arch of said shoe.

[Claims 2 to 7 not printed in the Gazette.]

1,272,224. CHANGE-MAKING MACHINE. JAMES B. COMBS, New York, N. Y. Filed May 4, 1916. Serial No. 95,440. (Cl. 133—2.)



1. In a calculating machine, an operating element, and a plurality of computing units, one for each digit of a number and each movable in one direction throughout its computing operation, the units being actuated singly or plurally in any combination by a single motion of the said element for subtracting the amount of purchase from the amount tendered.

7. In a calculating machine, an operating element operative by a continuous motion in one direction, a plurality of banks of keys arranged in pairs for different digits, and means including computing units normally disengaged from the keys and movable in one direction throughout their computing operation, each unit being adapted to contact with an operated key in one associated bank during the first part of the movement of the said element and with an operated key in a complemental bank for subtracting a smaller amount from a larger during the further movement of the said element.

21. In a calculating machine, a plurality of change stacks, a control for each stack, a change selecting mechanism, an operating element, an ejector, means operated by the said element for actuating the ejector, and means for preventing the return of the operating element to normal position upon the depleted condition of any stack.

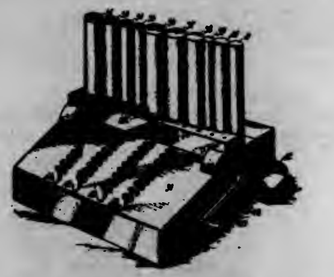
64. In a calculating machine, an operating element having a continuous movement always in one direction for any calculation, a plurality of manually operable keys, and a computing mechanism including means movable less than ten spaces for subtracting a smaller from a larger digit, movable ten spaces for subtracting digits

of equal values, and movable more than ten spaces for subtracting a larger from a smaller digit.

70. In a calculating machine, an operating element, a plurality of manually operative keys arranged in banks, a computing mechanism, key controlled means for controlling said mechanism by locking the same to and unlocking the same from said element, a transfer mechanism for locking said computing mechanism to said element to borrow by one digit from another, and means for unlocking said computing mechanism from said element upon the completion of a movement of one space by said computing mechanism after being locked to said element by said transfer mechanism.

[Claims 2 to 6, 8 to 20, 22 to 63, 65 to 69, 71, and 72 not printed in the Gazette.]

1,272,225. SALARY-COMPUTER. JAMES R. COMBS, New York, N. Y. Filed June 1, 1916. Serial No. 101,044. (Cl. 133—4.)



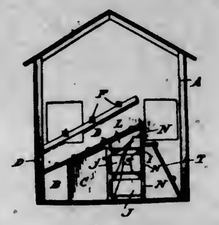
1. In a machine of the class described, a plurality of selective keys from zero to nine arranged in digit banks, a plurality of coin stacks for different monetary denominations, means for ejecting the largest denominational units to make up a desired amount under the control of the selective keys from 1 to 9, means operable by the depression of said zero keys for rendering said ejecting means inoperative, an oscillatory element disposed over and arranged for normally maintaining the zero keys in depressed position, means for locking a normally raised key in depressed position, means for returning zero keys out of raised position to depressed position, and means for returning said depressed normally raised keys to raised position upon the return of said zero keys to normal positions.

15. In a machine of the class described, including a plurality of coin stacks, coin delivery means, and a plurality of selective keys from zero to nine controlling said means, a low change warning for each of said stacks, and means for locking said machine against movement upon the operation of said low change warning comprising an element on the operating member of said machine, a normally inoperative detent adapted to bear thereon, and an element locking said detent against movement upon the operation of said low change warning.

21. In a machine of the class described, a plurality of selective keys from zero to nine arranged in digit banks, levers for the keys from 1 to 9 normally held in raised positions, a lever for each zero key normally held in lowered position, an operating element, a pawl for each digit slidable by said operating element and consisting of two oppositely directed arms extending the width of a bank of levers and an arm provided with a downwardly directed hook, coin selecting means for each digit adapted to be engaged by the respective hooked arm to move with the pawl, differential cam surfaces on the levers from 1 to 9 of each bank adapted to differentially rock the respective pawls into and out of engagement with the respective coin selecting means to move the latter corresponding distances, and cam means on said zero levers for normally holding said pawls out of engagement with said coin selecting means irrespective of the sliding movement of said pawls by said operating element.

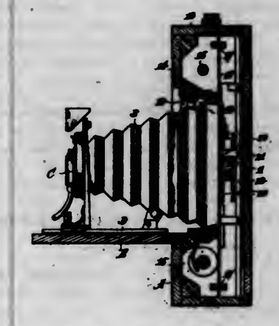
[Claims 2 to 14 and 16 to 20 not printed in the Gazette.]

1,272,226. CHICKEN-HOUSE AND BROODER. JOHN GEORGE CONNOR, Byers, Kans. Filed Sept. 5, 1917. Serial No. 189,841. (Cl. 119—21.)



A brooder having an inclined roof portion to a nest chamber and provided with a series of horizontally disposed recessed strips spaced apart and provided with recessed pipes mounted in said recesses and having perforations in registration with the opening leading into the recesses and in which pipes a disinfectant is adapted to be contained, rollers opposite said strips, and nests having mesh-work bottoms supported upon said strips and rollers.

1,272,227. CAMERA. WILLIAM JOHN CROTHERS, Toronto, Ontario, Canada. Filed Nov. 15, 1915. Serial No. 61,644. (Cl. 95—11.)



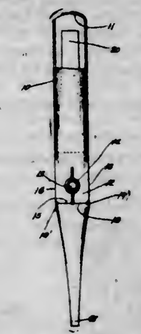
2. In a camera, an elongated body having an extensible bellows foldable therein, a lens carriage supporting the front end of the bellows, shutters arranged within the body rearwardly of the bellows and adapted to vary the light space when an exposure is made through a lens, means for adjusting the shutters simultaneously with each other, means for limiting the movement of the shutters toward each other, an indicator supported by the body exteriorly thereof and coöperating with the first named means for adjusting the shutters, and means for guiding a film strip contiguous to the shutters rearwardly thereof.

3. In a camera, an elongated body having an extensible bellows foldable therein, a lens carriage supporting the front end of the bellows, shutters arranged within the body rearwardly of the bellows and adapted to vary the light space when an exposure is made through a lens, means for adjusting the shutters simultaneously with each other, means for limiting the movement of the shutters toward each other, an indicator supported by the body exteriorly thereof and coöperating with the first-named means for adjusting the shutters, means for guiding a film strip contiguous to the shutters rearwardly thereof, and a back slide fitted in the body and removable therefrom.

4. In a camera, an elongated body having an extensible bellows foldable therein, a lens carriage supporting the front end of the bellows, shutters arranged within the body rearwardly of the bellows and adapted to vary the light space when an exposure is made through a lens, means for adjusting the shutters simultaneously with each other, means for limiting the movement of the shutters toward each other, an indicator supported by the body exteriorly thereof and coöperating with the first-named means for adjusting the shutters, means for guiding a film strip contiguous to the shutters rearwardly thereof, a back slide fitted in the body and removable therefrom, and a hinged top on said body.

[Claims 1, 5, and 6 not printed in the Gazette.]

1,272,228. COMBINATION-TOOL. JOHN L. DAHL, Teaneck, N. J. Filed Feb. 27, 1918. Serial No. 219,495. (Cl. 7—16.)

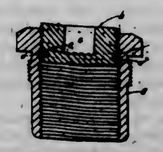


3. The herein-described combination tool comprising a handle, a tool device coöperating with the handle and having reversible tool ends for interchangeable use, and a gripping member passing through the handle and said tool device to lock the tool device in fixed position with respect to the handle, said handle and tool device both being provided with interlocking shoulder means adjacent to the gripping member to prevent accidental rotation of either part with respect to the other while the gripping means is tight.

4. In a combination tool, the combination of a handle having straight edges at an angle to each other adjacent to one end thereof, a tool blade having a transverse opening therethrough and provided with a square shoulder adjacent to said opening, and a clamping pivot member passing through the end of the handle aforesaid and through said opening and serving to lock the handle and tool member from relative rotation with said shoulder in coöperation with either of said straight edges of the handle end.

[Claims 1 and 2 not printed in the Gazette.]

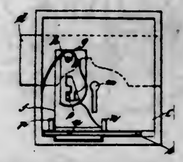
1,272,229. GREASE-CUP-PLUG LOCK. MARK DALY, Moncton, New Brunswick, Canada. Filed June 14, 1917. Serial No. 174,784. (Cl. 184—48.)



1. In combination a grease cup of the class described, a plug having threaded connection with the interior of said cup, a groove surrounding the exterior of said plug, adapted to the reception of a wire spring, a wire spring partially occupying said groove and held by its advance end during the forward motion of said plug, and adapted to a buckling and wedging movement between the threads in contact on its backward or return movement; substantially as described.

2. In combination, a grease cup of the class described, a plug having threaded connection with the interior of said cup, a groove surrounding the exterior of said plug near its entrance to said cup, a wire spring partially occupying said groove and held by its advance end during the forward motion of said plug, and in the reverse motion of said plug adapted to a buckling and wedging motion between the said threads in contact, with an external central recess adapted to the reception of an operating wrench; substantially as described, and for the purpose specified.

1,272,230. LOCK. ERUCHSHAW BYRAMJI DABOOWALLA, Bombay, India. Filed Feb. 25, 1916. Serial No. 80,431. (Cl. 70—74.)



1. In a lock mechanism, a key, two bits thereon, a lock casing, a single main lock bolt arranged in the casing and adapted to be projected at one end exteriorly of the same, a lever lock adapted to lock the bolt in projected position, one of the said bits being adapted to operate the said lever lock to unlock the bolt and to effect the sliding movements of the latter, a second bolt adapted to engage with and lock the first bolt in projected position, a second lever lock distinct from the first and adapted to lock the said second bolt when the latter is in locking engagement with the first bolt, said second lever lock being adapted to be operated by the other bit of the key to cause the said second bolt to unlock the first bolt, both of the said lever locks being operatable by the bits at different periods of revolution of the key.

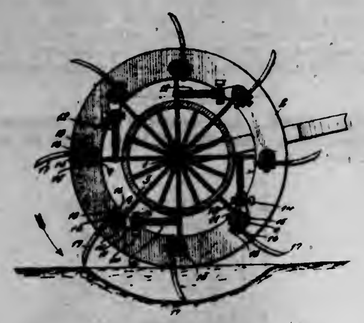
2. In a lock mechanism, a key, two bits thereon, a lock casing, a single main lock bolt arranged in the casing and adapted to be projected at one end exteriorly of the same, a partition within the casing and dividing the interior of the latter into two compartments, a lever lock arranged in one compartment and adapted to lock the bolt in projected position, one of the said bits being adapted to operate the said lever lock to unlock the bolt and to effect the sliding movements of the latter, a second bolt arranged within the other compartment and adapted to engage with and lock the first bolt in projected position, a second lever lock arranged in the same compartment with the said second bolt and adapted to lock the latter when it is in locking engagement with the main bolt, said second lever lock being adapted to be operated by the other bit of the key to cause the second bolt to unlock the main bolt, both of the said lever locks being operatable by the bits at different periods of revolution of the key.

3. In a lock mechanism, a key, two bits thereon, a lock casing, a single main lock bolt arranged in the casing and adapted to be projected at one end exteriorly of the same, a second bolt in the casing and slidable at right angles to the main bolt and engageable therewith to lock the latter in projected position, a lever lock adapted to engage with and lock the main bolt in projected position, a second lever lock adapted to engage with and lock the said second bolt when the latter is in locking engagement with the main bolt, one of the bits of the key being adapted at one period of revolution of the key to operate one of the lever locks to free the second bolt and to slide the latter out of engagement with the main bolt, and the other bit being adapted during a further period of revolution of the key

to operate the other lever lock to cause it to unlock the main bolt and to effect the sliding movement of the latter as and for the purpose specified.

[Claims 4 to 7 not printed in the Gazette.]

1,272,231. SPADING AND DIGGING PLOW. LEMUEL R. DAVIS, Hopkinsville, and DANIEL F. GATHS, Fruithill, Ky. Filed May 19, 1917. Serial No. 169,687. (Cl. 99—38.)



1. A plow of the class described comprising an outer drum, an inner drum, a supporting shaft, said inner drum keyed to said supporting shaft, an operating lever secured to said supporting shaft, blades carried by said outer drum, means for yieldably connecting said blades to said inner drum, and means carried by said lever for engaging said outer drum for rotating and locking said inner drum in an adjusted position with respect to said outer drum and changing the position of said digging blades.

8. A plow of the class described comprising an outer drum, an inner drum, a shaft keyed to said inner drum, said outer drum being loosely mounted upon said shaft, a plurality of plow blades supporting shafts carried by said outer drum, a sleeve rotatably mounted upon each shaft, a plow blade adjustably mounted upon each sleeve, yieldable means coöperating with said sleeve for normally holding said plow blades extended at right angles with the periphery of said outer drums, and means carried by said outer drum for holding said plow blades against swinging movement in one direction beyond a predetermined degree.

[Claims 2 and 4 not printed in the Gazette.]

1,272,232. TEMPERATURE-CHANGING APPARATUS. WILLIAM J. DAVIS, Chicago, Ill. Filed July 28, 1917. Serial No. 182,116. (Cl. 257—234.)



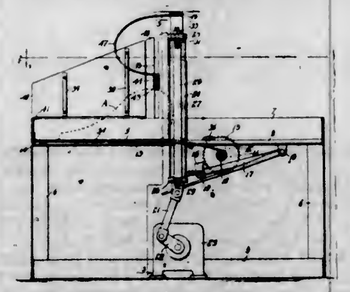
1. In a device of the class described, the combination with a pair of heads, of a plurality of large tubes connecting said heads, connected to each other at alternate ends through said heads, a series of smaller tubes inclosed within the larger ones and passing through said heads, doors secured to the outer faces of the heads containing connecting passages for said smaller tubes at alternate ends, and a quadrant-shaped guide containing curved passages coöperating with the lower set of small tubes opening into the connecting passages in the doors.

2. In a device of the class described, the combination with a pair of heads, of a plurality of large tubes connecting said heads, connected to each other at alternate ends, a series of smaller tubes inclosed within the larger ones and passing through said heads, doors secured to the outer faces of the heads containing connecting passages for said smaller tubes at alternate ends, an elbow coöperating with the outer face of the head and the smaller tubes, a yoke having the elbow pivoted in the center thereof hinged to one side of the head, and means at the other end of the yoke for forcing it toward the head to clamp the elbow to the head.

4. In a device of the class described, the combination with a pair of heads, of the large heating-fluid pipes connecting said heads, smaller pipes therein for heating the fluid to be treated, doors coöperating with said heads and having two sets of passages therethrough to connect the adjacent ends of the two sets of pipes at alternate ends to form two sets of tortuous passages for the heating fluid and the fluid to be treated, packing channels and packing therein in the opposed faces of the heads and doors surrounding the openings therein for the two sets of passages, and transverse channels between the channels for the two sets of passages to disclose leaks, substantially as described.

[Claim 3 not printed in the Gazette.]

1,272,233. MEAT-CUTTING MACHINE. ANDREAS DE KLERIS, Visalia, Cal. Filed Mar. 11, 1918. Serial No. 221,709. (Cl. 17—24.)



1. In an apparatus of the character described the combination of a supporting structure, a carriage having a plurality of slots mounted to reciprocate in said structure, a pair of vertically disposed guide-ways mounted on the structure, a frame reciprocable in said guide-ways, a plurality of cutter blades carried by said frame and passing through the slots in the supporting structure, a motor, a driving connection between the motor and the cutter carrying frame, and a driving connection between said cutter carrying frame and the reciprocable carriage, substantially as set forth.

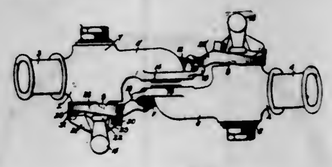
2. In an apparatus of the character described the combination of a supporting structure, a carriage having a plurality of slots mounted to reciprocate in said structure, a pair of vertically disposed guide-ways mounted on the structure, a frame reciprocable in said guide-ways, a plurality of cutter blades carried by said frame and passing through the slots in the supporting structure, a motor, a driving connection between the motor and the cutter carrying frame, a reel, a rope on the reel connected to the reciprocable carriage, and a pawl and ratchet driving connection between said cutter carrying frame and the reel, substantially as set forth.

3. In an apparatus of the character described the combination of a supporting structure, tracks mounted on said structure, a carriage having a plurality of slots mounted to travel on said tracks, vertically disposed channel pieces, forming guide-ways at the sides of the supporting structure, a frame reciprocable in said guide-ways, a plurality of cutter blades carried by said frame and passing through the slots in the supporting structure, a motor, a crank and connecting rod drive between said motor and the cutter carrying frame, and a pawl and ratchet driving connection between the cutter carrying frame and the reciprocable carriage, substantially as set forth.

4. In an apparatus of the character described the combination of a supporting structure, tracks mounted on said structure, a carriage having a plurality of slots mounted to travel on said tracks, vertically disposed channel pieces, forming guide-ways at the sides of the supporting structure, a frame reciprocable in said guide-ways, a plurality of strip saws independently mounted in said frame and passing through the slots in the supporting structure, a motor mounted on said structure directly beneath the saw carrying frame, a crank and connecting rod drive between said motor and the cutter carrying frame, and a pawl and ratchet driving connection between the said cutter carrying frame and the reciprocable carriage, substantially as set forth.

5. In an apparatus of the character described the combination of a supporting structure, a reciprocable carriage mounted in said structure, a plurality of cutting knives, means for operating said knives, operative connections between the carriage and the knife operating means, fixed and movable rollers for guiding the piece to be cut, and a spring tensioned detent roller for steadying the moving piece, substantially as set forth.

1,272,234. COMBINATION HOSE-COUPLING AND AIR-VALVE PLUG. EDWARD WILSON DE WILTON, New York, N. Y. Filed Apr. 5, 1917. Serial No. 159,997. (Cl. 284—9.)



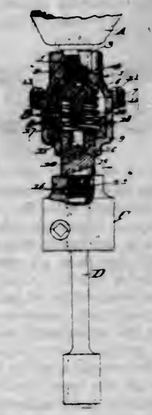
1. A coupling for the air brake system of trains, comprising a pair of coupling members, each of said members having a projecting member formed with a bead, a tiltable ring arranged on each of said members formed with a bead coacting with the first mentioned bead, said beads overlapping when the members of the coupler are ready to be coupled, and means acting on the rings for tilting the same so as to interlock said beads and press said members toward each other.

2. A coupling, comprising a pair of identically constructed members, each of said members being formed with a valve casing and a valve arranged in said casing, an operating handle, and tiltable rings operated by said handle for clamping said members together in a locked position when the valve is opened.

3. A coupler of the character described, comprising a pair of identically constructed members, each of said members being formed with a valve casing, a valve member arranged in said casing, a handle for operating said valve member, a tiltable ring for clamping said coupler members together, said ring being provided with a pair of oppositely facing cams, and arms on said handle engaging said cams whereby when the handle is turned in one direction one cam will be moved for causing said coupler members to interlock and when moving in the opposite direction for causing one of the arms to engage a second cam and move said ring to an unlocked position.

4. A coupler for air brake systems of trains comprising a pair of coupling members, each of said coupling members having a projection, a tiltable ring arranged on each of said members formed with an extension coacting with said projection, said extension and said projection overlapping when the members of the coupler are ready to be coupled, and means acting on the rings for tilting the same so as to interlock said extensions and said projections and press said members toward each other.

1,272,235. RESILIENT CLUTCH. GEORGE J. DOSTIE, Detroit, Mich. Filed July 3, 1917. Serial No. 178,385. (Cl. 77—55.)



1. The combination with the rotatable shank of a drilling machine, a chuck, and a tool mounted in the chuck, of a stationary clutch member carried by the rotatable shank, a movable clutch member carried by the chuck and slidable with respect to the stationary clutch member, coöperative means on the clutch members for removably holding the parts in substantial rigid relation when the movable clutch member is slid toward the stationary clutch member, and expansible resilient means mounted between the clutch members and normally holding them in spaced relation with each other.

2. In a device of the character described, a stationary clutch member adapted to be rigidly connected, a pin projecting from the outer end thereof, a casing carried by the stationary member and surrounding the pin, a movable clutch member slidably mounted in the casing and provided with a recess for removable engagement with the pin so that both of the members will be rotated together, and resilient means interposed between the two clutch members for normally holding them spaced from each other.

3. A device of the character described, a stationary clutch member adapted for rigid engagement with the rotating shank of a drilling machine, the outer end of the member being provided with an annular groove, a pin rectangular in cross section projecting centrally from the outer end of the clutch member, a tubular casing rigidly connected to the clutch member and inclosing the pin, a movable clutch member slidably mounted in the casing and adapted to be connected at its outer end to a drill chuck, the opposite end of the movable member being provided with a circular recess and further provided in the bottom thereof with a rectangular process for removable engagement with the pin, and a coil spring the respective ends of which bear against the annular recess in the stationary member and the circular recess in the movable member for normally holding the clutch members in spaced relation.

1,272,236. SELF-ADJUSTING TRACK-BRACE. WILLIAM DUNN, Elk, Wyo. Filed Feb. 28, 1918. Serial No. 219,614. (Cl. 238—5.)

1. In a device of the type specified, the combination with a pair of rails in track alinement, of a pair of

forked clamping braces for each rail, the upper prongs of each pair of braces adapted to engage the web of the rail from opposite sides, while the lower prongs of said braces are pivotally connected together, an elongated member laterally movable through holes in said clamping braces below their forked ends, a head on one end of said elongated member, a nut adapted to be applied to its other end, and slidable means on said member adapted to be moved upon the braces when the nut is tightened, to draw the elongated member tightly against the feet of the rails and to press the upper prongs of the braces firmly against the web portions of said rails.



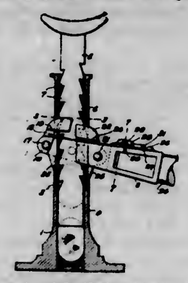
2. In a device of the type specified, the combination with a pair of rails in track alinement, of a pair of forked clamping braces for each rail, the upper prongs of each pair of braces adapted to engage the web of the rail from opposite sides, while the lower prongs of said braces are pivotally connected together, an elongated bolt laterally movable through holes in said clamping braces below their forked ends, a nut adapted to be applied to the threaded end of said bolt, a slidable member on said bolt adapted to be moved upon the upper portion of a brace when the nut is tightened, and a sleeve on said bolt, interposed between the two innermost slidable members.

3. In a device of the type specified, the combination with a pair of rails in track alinement, of a pair of inclined clamping braces for each rail, the upper end of each brace being forked, the lower prong of each pair of braces being pivotally connected together, while their upper prongs are adapted to engage the web portion of the rail from opposite sides, an elongated bolt laterally movable through holes provided in the inclined portion of the said braces below their forked ends, a nut adapted to be applied to the threaded end of said bolt, a sleeve on the middle portion of said bolt, and a slidable washer on said bolt, on each side of said sleeve, and at each end of the bolt, each washer having an inclined inner end adapted to be moved upon the upper prong of an adjacent brace when said nut is tightened.

4. In a device of the type specified, the combination with a pair of rails in track alinement, of a pair of inclined clamping braces for each rail, the upper ends of each brace being forked, the lower prongs of the forked portions of each pair of braces being pivotally connected together, while their upper prongs are adapted to engage the web portion of the rail from opposite sides, an elongated bolt laterally movable through holes provided in the inclined portions of said braces below their forked ends, a nut adapted to be applied to the threaded end of said bolt, a slidable washer on said bolt adapted to be moved upon the upper portion of an adjacent brace when the nut is tightened, a slot in the upper portion of each brace, and a projection on a washer adapted to enter its respective slot to guide it during its up and down movement on the brace.

1,272,237. LIFTING-JACK. DAVID ELBY, Funk, Ohio. Filed Feb. 6, 1918. Serial No. 216,582. (Cl. 254—110.)

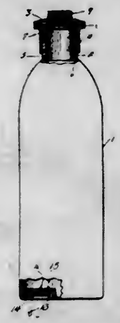
2. In a lifting jack, a standard, a lifting bar adapted to slide vertically within said standard, a lever fulcrumed upon said standard, a pawl mounted upon said lever at either side of said fulcrum and equi-distant therefrom, a series of ratchet teeth upon one side of said lifting bar adapted to be engaged by one of the said pawls and a series of ratchet teeth upon the opposite side of said lifting bar and arranged in staggered relation with said first series of said ratchet teeth and adapted to be engaged by the other of said pawls, the said pawls and their respective series of ratchet teeth upon the said lifting bar being adapted to co-act to force the said lifting bar upwardly when the lever is oscillated vertically upon its fulcrum, a spring carried by the said lever, the said spring being normally adapted to lie out of engagement with the said pawls and means carried by the said lever for forcing the said spring into engagement with the pawls to cause the



said pawls to co-act with their relative series of ratchet teeth to lower the lifting bar when the lever is oscillated vertically upon its fulcrum.

[Claim 1 not printed in the Gazette.]

1,272,238. SHEET-METAL HOT-WATER AND SHEET-METAL IRRIGATING BOTTLE. WILLIAM H. ELLIS, Two Rivers, Wis. Filed Jan. 18, 1918. Serial No. 212,503. (Cl. 220—58.)

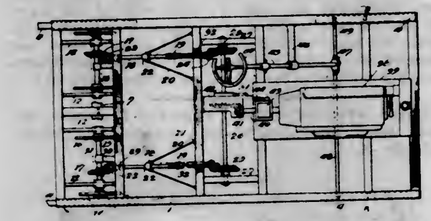


1. A device of the class described comprising a container adapted to normally stand on its bottom, said bottom having a depression, a vent in said depression, a fulcrum block secured in said depression, and an eye pivoted to said block, said eye being normally disposed in said depression when the container is seated on its bottom, and movable outwardly at right angles to provide a hanger for supporting the container when held in an inverted position.

2. A combination water and irrigating bottle adapted to normally seat on its bottom and having an outlet from its top, a closure cap for the opening, said cap being constructed to permit the attachment of a hose connection having communication with the interior of the bottle, the bottom of the bottle having a depression, a hanger element normally disposed within said depression and movable outwardly therefrom to provide a support for the bottle when in an inverted position, and a vent in said depression.

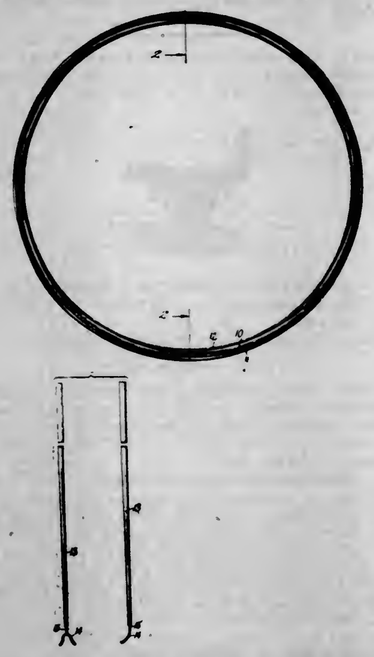
1,272,239. SELF-PROPELLED SLED. ALBERT ENGELSON, Bellingham, Minn. Filed Mar. 2, 1917. Serial No. 152,054. (Cl. 180—6.)

1. In a self-propelled sled, a plurality of shafts movably supported adjacent the rear runners thereof, driving means mounted on said shafts, power transmission on the sled, pivotally connected sectional driving shafts intergeared with said transmission and said movable shafts, means for preventing lateral movement of certain of the drive shaft sections, arcuate springs pivotally connected at certain of their ends to the sled and having the remaining ends bearing on certain of the drive shaft sections, and levers mounted adjacent the springs and engageable therewith for varying the tension of the same.



2. In a self-propelled sled, a plurality of hangers having slotted bearing portions formed therein secured to the sled adjacent the rear runners thereof, spurred driving wheels mounted on shafts journaled in said slotted bearings, power transmission on the sled, pivotally connected sectional driving shafts intergeared with said transmission and said movable shafts, means for preventing lateral movement of certain of the drive shaft sections, arcuate springs pivotally connected at certain of their ends to the sled and having at the remaining ends certain of the drive shaft sections, and levers mounted adjacent the springs and having portions bearing upon the same for varying the tension thereof.

1,272,240. TOY HOOP. TATSUTARO ENOMOTO, Watsonville, Cal. Filed Jan. 17, 1918. Serial No. 212,293. (Cl. 46—38.)



A toy hoop composed of a single strip of the outer portion or skin of bamboo, wrapped spirally about itself throughout the hoop into a plurality of layers, the ends of the strip being clamped between the respective layers.

1,272,241. SPINNING-BOX. CHARLES A. ERNST, Marcus Hook, Pa., assignor to The Viscose Company, Marcus Hook, Pa., a Corporation of Pennsylvania. Filed June 8, 1916. Serial No. 102,516. (Cl. 18—8.)



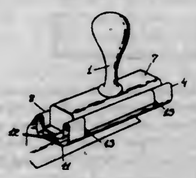
1. A spinning box of the type described, comprising a hard rubber body with metallic reinforcing rings embedded in its upper and lower edges and an intermediate metallic hoop embedded in the side wall of the box to prevent breakage or deformation of the box under operating conditions.

3. A spinning box of the type described comprising a hard rubber body perforated at different levels to permit the escape of liquids from the interior, together with metallic reinforce embedded in the walls of the box in the interspaces between the perforations.

6. A spinning box of the type described comprising a hard rubber body having a hollow shank or hub to receive the spinning spindle, a metallic bushing within said shank, and a centering button set into the bottom of the box above said bushing to facilitate the location of the box on the spinning spindle.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,272,242. STENCIL-SHEET FOR HAND-STAMPS. BEVERLY P. EVANS and ALEXANDER M. FISHER, Washington, D. C. Filed Apr. 16, 1917. Serial No. 162,415. (Cl. 101—125.)



1. A folded flexible paper stencil sheet for hand stamps, having an upper member and a lower guard and tympan member, said upper member having a central suitably prepared stencil portion equi-distant from all opposite marginal edges thereof.

4. A folded flexible paper stencil sheet for hand stamps, having an upper member and a lower guard and tympan member, said upper member having a central suitably prepared stencil portion, and marginal parallel transverse guide lines intersecting said central portion.

6. The combination with a hand stamp comprising a handle member and a base member bearing a pad, of a pattern sheet folded upon itself, underlying said pad and fitting between said members, the latter slidably engaged one with the other and with the pattern sheet to secure the sheet in proper relative position, said sheet having a loose extension underlying and guarding the pad.

[Claims 2, 3, 5, and 7 to 9 not printed in the Gazette.]

1,272,243. PRICE-SLIP FOR PIECEWORK. RICHARD ALBERT FEISS, Cleveland, Ohio. Filed Oct. 4, 1916. Serial No. 123,756. (Cl. 235—89.)

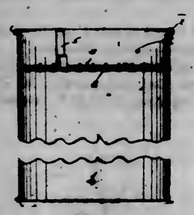
A price slip for piece work employees covering a definite period of time, comprising a paper sheet divided by lines

into a consecutive series of inclosed spaces or boxes, and headed by a number representing a basic price per piece for work, and designated spaces in which to fill out the time covered by the slip, each box containing two superposed numbers, one number representing the serial number of the box and designating the number of pieces in each batch or lot of work which may be given to the employee during said period of time, which boxes are numbered consecutively throughout the sheet, the other number repre-



senting the product of the basic rate displayed on the sheet head multiplied by the serial number of the box and designating the amount earned at the basic rate for the number of pieces completed, whereby the pieces of work and the amounts earned therefor may be designated by lines drawn about individual boxes, the last box marked on the sheet indicating the amount earned by the employee and the number of pieces of work completed for the period covered by the slip.

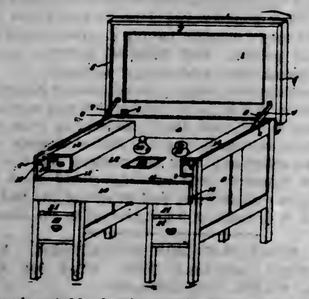
1,272,244. CLOTHES-HOLDER. INES EMERI FITS GERALD. Oakland, Cal. Filed Nov. 1, 1915. Serial No. 59,027. (Cl. 68—30.)



2. A clothes holder of the character described comprising a ring having wire mesh attached thereto, and clips having resilient portions shaped to engage the edge of a receptacle, said clips being also provided with lower loop portions receiving the ring and shaped to permit of a limited vertical movement of said ring.

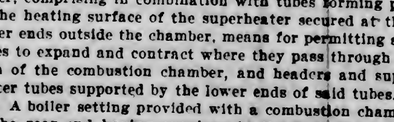
[Claim 1 not printed in the Gazette.]

1,272,245. COMBINATION LIBRARY AND DRESSING TABLE. MARIE E. FITZGERALD, St. Louis, Mo. Filed Mar. 22, 1917. Serial No. 156,559. (Cl. 45—31.)



A dressing table having a fixed top, a fixed wall extending about the fixed top at the rear and at the ends thereof, a wall hinged to the front edge of the top and adapted to swing downwardly below said top or upwardly and position or rest upon the upper surface of said fixed top to complete an inclosing wall about said top, article-receiving boxes supported upon the top and extending from the rear to a point adjacent the front thereof, said boxes terminating short of the front edge of the top a sufficient distance to permit the hinged front wall to lie between the side walls when the front wall is raised, and a hinged cover having a flange extending therearound which fits down over the several walls when lowered.

1,272,246. SERVING-FORK. HARRISON D. FLEGEL, Racine, Wis. Filed Jan. 9, 1918. Serial No. 210,961. (Cl. 30—5.)



In a table fork having a handle provided with a longitudinally disposed slot; the combination of a stripper slidably mounted upon the handle, the same comprising a flat metallic blank provided with an upturned transversely disposed key-shaped nib which is adapted to be inserted through the slot of the handle in assemblage when the stripper is positioned at approximately a right angle to said handle, a pair of spaced arms extending from the opposite end of the stripper, the same terminating with transversely arranged guide webs, which webs are adapted to be bent upwardly for sliding engagement with one face of certain of the fork tangs, when the scraper is swung to its alined position with the fork handle, in which position the webbed arms have play in the fork interstices.

1,272,247. JAR FOR SUBMARINE AND LIKE BATTERIES. BRUCE FORD, Philadelphia, Pa. Filed Apr. 2, 1917. Serial No. 159,130. (Cl. 204—29.)



5. A jar for submarine and like batteries having the base of its wedging ribs extending beyond the ribs to provide wedge-stops.

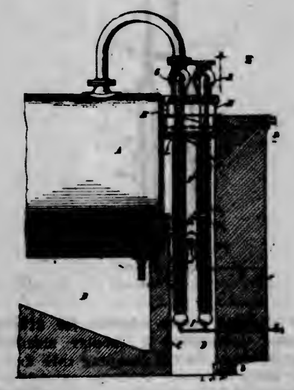
[Claims 1 to 4 and 6 not printed in the Gazette.]

1,272,248. SUPERHEATER FOR STEAM-BOILERS. ERNEST H. FOSTER, Dongan Hills, N. Y., assignor to Power Specialty Company, New York, N. Y., a Corporation of New York. Filed Feb. 17, 1916. Serial No. 78,800. (Cl. 122—470.)

1. A superheater for horizontal return tubular boilers, located in the combustion chamber at the rear of the boiler, comprising in combination with tubes forming part of the heating surface of the superheater secured at their upper ends outside the chamber, means for permitting said tubes to expand and contract where they pass through the arch of the combustion chamber, and headers and superheater tubes supported by the lower ends of said tubes.

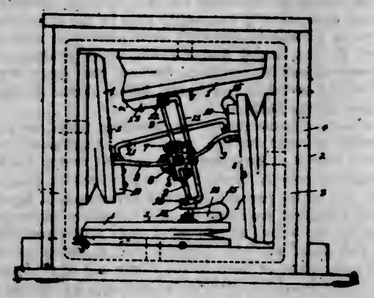
2. A boiler setting provided with a combustion chamber in the rear end having openings in the arch thereof, in combination with a superheater proper located in said chamber in the direct path of a portion of the furnace gases, and means for suspending said superheater proper in said chamber comprising inlet and outlet tubes for the superheater projecting through said arch openings and

supported outside said heating chamber, and closures between the walls of the openings and the supporting tubes free to move in and out as the tube expands and contracts under the influence of the heat.



3. A superheater for horizontal return tubular boilers located in the combustion chamber at the rear of the boiler, comprising inlet and outlet headers located within said chamber, superheating elements spanning said headers and located in the direct path of the furnace gases, inlet and outlet tubes connected to said headers for freely supporting the same and for conveying the saturated steam to and superheated steam from said headers, said inlet and outlet tubes passing through openings in the top of the boiler setting, and covers for said openings through which said tubes pass into said chamber, said covers adapted to move upwardly and downwardly in said openings with said tubes as the latter contract and expand.

1,272,249. PITMAN AND SPREADER. ROBERT A. GALLY, Cincinnati, Ohio, assignor to The Baldwin Company, Cincinnati, Ohio. Original application filed July 30, 1917, Serial No. 183,576. Divided and this application filed Jan. 9, 1918. Serial No. 211,660. (Cl. 230—36.)



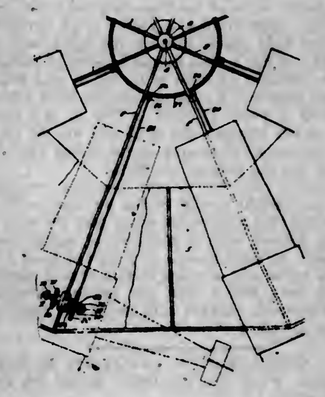
1. Two opposed hinged pumpers; a revoluble crank therebetween; pitmen from said crank to each said pumper; and a spreader rod between the said two pumpers and attached to both said pumpers at the ends of said rod, each said end of said rod having its extreme part at a right angle to the main part of said rod, and the axis of each said right angle end part parallel to the hinge lines of the two pumpers.

2. Two opposed hinged pumpers; a revoluble crank therebetween; pitmen from said crank to each said pumper; and a spreader between the two said pumpers and attached to both said pumpers, the said attachment to one of said pumpers comprising a spring directly mounted on said pumper and supporting its end of the said spreader.

7. A revoluble shaft having a crank therewith; four pumpers disposed in rectangular arrangement around said shaft and crank; a floating crank block journaled on said crank; a flexible pitman from each said pumper to the said floating crank block; the said four pumpers disposed in two pairs, each pair at opposed sides of the said rectangle, and two expansion spreaders, each one of said spreaders attached to its pair of opposed pumpers.

[Claims 3 to 6 and 8 not printed in the Gazette.]

1,272,250. AMUSEMENT DEVICE. FREDERICK J. GIBSON, Oakland, Cal. Filed Apr. 3, 1917. Serial No. 159,594. (Cl. 46—27.)



1. An amusement device comprising a movable frame, carriers mounted on said frame, a fixed gear, a shaft journaled on said frame, a pinion on said shaft meshing with said fixed gear, a worm on said shaft, a second shaft journaled on said frame, a worm gear on said second shaft meshing with said worm, and means actuated by said second shaft for reciprocating said carriers up and down and for oscillating said carriers sidewise.

3. An amusement device comprising a rotatable frame, a fixed gear at the center of said frame, a shaft journaled on said frame, a pinion on said shaft meshing with said fixed gear, a worm on said shaft, a second shaft journaled on said frame, a worm gear on said second shaft meshing with said worm, a carrier mounted on said frame, and means actuated by said second shaft for reciprocating said carrier up and down and for oscillating said carrier sidewise.

4. An amusement device comprising a rotatable frame, a fixed gear at the center of said frame, a shaft journaled on said frame, a pinion on said shaft meshing with said fixed gear, a worm on said shaft, a second shaft journaled on said frame, a worm gear on said second shaft meshing with said worm, a carrier mounted on said frame, a rock shaft journaled on said frame, rock frames on said rock shaft, a carrier reciprocatively mounted in said rock frames to move up and down, cranks on said second shaft, pitmen connecting said cranks and carrier for reciprocating said carrier up and down in said rock frames, and an eccentric on said second shaft for rocking said rock shaft, rock frames and carrier.

[Claim 2 not printed in the Gazette.]

1,272,251. RELIEF-VALVE. WILLIAM J. GLENN, Steelton, Ontario, Canada. Filed May 2, 1917. Serial No. 165,984. (Cl. 126—35.)

1. In a relief valve of the type described, the combination with an upright casing having an inlet at its lower end and a head at its upper end pierced with a plurality of radial openings; of a curved band disposed within said head and covering certain of said openings at their inner

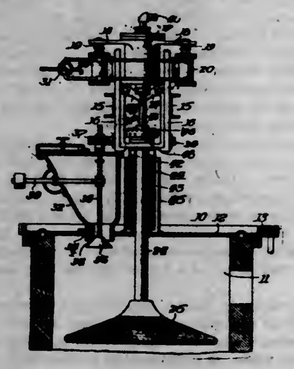
ends, and a fastening device passing through said band and selectively engaged with one of said openings, for the purpose set forth.



2. In a relief valve of the class described, the combination with the water front of a stove; of an upright valve casing whose body passes through the upper wall of said water front and has a head having a series of radial openings and a threaded aperture in its top, a plug removably closing said aperture, a band within the head adapted to be selectively disposed to cover certain of said openings, fastening means through the band and one of the openings, and an upwardly-opening spring closed valve within said casing, for the purpose set forth.

3. In a relief valve of the type described, the combination with an upright casing having an inlet at its lower end and a recessed head at its upper end, the wall of the head being pierced with a plurality of radial openings, and a closure for said recess; of a curved band disposed within said recess and covering certain of said openings at their inner ends, and a split pin passing through said band and selectively engaged with one of said openings, for the purpose set forth.

1,272,252. GAS-PRODUCER. ALEXANDER M. GOW, Duluth, Minn. Filed Dec. 20, 1917. Serial No. 208,079. (Cl. 48—85.2.)



1. In combination, a gas producing chamber, means for distributing fuel in said chamber, and reciprocatory and rotary means whereby the fuel in the coking zone is maintained in a uniformly porous condition, the reciprocatory and rotary actions taking place at different times.

6. In combination, a gas producing chamber, a hollow vertical shaft, a hollow transverse chopper, means for supplying a cooling medium thereto, means whereby the vertical shaft and chopper may be raised and lowered, and means whereby they may be given a partial revolution only when the chopper is above the fuel bed.

9. In combination, a gas producing chamber, a vertical shaft carrying a transverse chopper, fluid actuated means for raising the vertical shaft and chopper, and fluid actuated means for adjusting the operative position of said first mentioned means.

[Claims 2 to 5, 7, 8, 10, and 11 not printed in the Gazette.]

1,272,253. WELL-CLEANING DEVICE. HENRY M. GREEN, Kansas City, Mo. Filed Nov. 1, 1917. Serial No. 199,693. (Cl. 166—20.)



1. A well cleaning device adapted for attachment to pumping tubes, comprising a tubular member having means for attachment to the pumping tube and provided with lateral water discharge openings extending outward at an angle adapted to impart an approximately tangential flow to the water passing through said openings, a barrel rotatably mounted on said tubular member, and vanes carried by said barrel and forming vane projections on the inner and outer surfaces thereof, the space between said tubular member and barrel being closed at the top and open at the bottom.

3. A well cleaning device for pumping tubes comprising a tubular member having means for attaching the same to the pumping tube and provided with lateral water discharge openings adapted to impart an approximately tangential flow to the water passing outward through said openings, a barrel rotatably mounted on said tubular member, vanes carried by said barrel and forming vane projections on the inner and outer surfaces thereof, and a foot piece of inverted cone shape secured to the lower end of said tubular member.

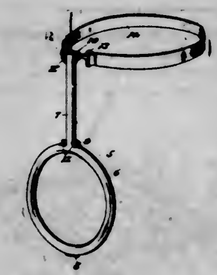
5. A well cleaning device for pumping tubes comprising a tubular member having means for attachment to the pumping tube and provided with lateral water discharge pasages adapted to impart an approximately tangential flow to the water passing outward through said passages, a barrel rotatably mounted on said tubular member and provided with spirally extending slits in the sides thereof, and vanes extending through said slits and detachably secured to the barrel and forming vane projections on the inner and outer surfaces thereof, the space between said tubular member and barrel being closed at the top and open at the bottom.

7. A well cleaning device for pumping tubes comprising a tubular member having means of attachment to the pumping tube and provided with lateral water discharge openings adapted to impart an approximately tangential flow to the water passing outward through said openings, a barrel rotatably mounted on said tubular member, vanes carried by the barrel and forming vane projections on the inner and outer surfaces thereof, and a foot-piece of inverted cone shape secured to the lower end of said tubular member and provided with water passages extending from the upper part of said foot-piece and in the direction of the apex thereof.

[Claims 2, 4, and 6 not printed in the Gazette.]

1,272,254. FIRE-ESCAPE. WILLIAM ROY GREEN, Chicago, Ill. Filed July 31, 1917. Serial No. 183,742. (Cl. 227—22.)

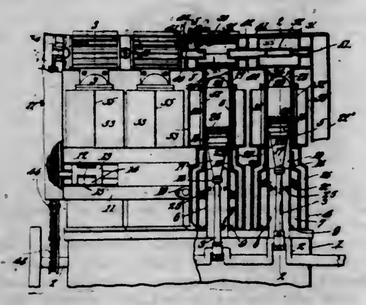
1. In a device for the purpose set forth, a ring, a cable wound around the ring and having one of its ends secured thereto and its opposite end designed to be attached to a support, a split compressible casing loosely and wholly received in the ring, a guide tube for the cable upon the casing, said casing designed, when compressed, to frictionally contact with the ring to regulate the turning of the ring in the casing, when the cable is being unwound from the ring.



4. In a device for the purpose set forth, a tubular ring having a continuous opening on the outer periphery thereof, a cable wound in the ring and having one of its ends secured to the ring and its opposite end passing through the slot therein, an annular casing loosely receiving the drum, a tubular guide on the casing, said casing and guide comprising two members hingedly connected, and a grooved roller in the guide for the cable, said casing having its confronting edges gradually spaced from each other from the hinged connection of the said section to a point diametrically opposite said hinge. and the sections of the casing being designed to be compressed to frictionally contact with the ring to regulate the turning of the ring in the casing when the cable is unwound from the ring.

[Claims 2 and 3 not printed in the Gazette.]

1,272,255. EXPLOSION-ENGINE. LEON CONSTANTINE HANNA, Tampa, Fla., assignor of one-half to John F. Baldoser, Bushnell, Ill. Filed Dec. 30, 1914. Serial No. 879,741. (Cl. 123—69.)



1. An explosive engine, including a power cylinder having a combined intake and exhaust port in the top thereof and with an annular air admitting port intermediate of its ends, a power piston mounted in the cylinder and controlling the intermediate port, a concentric chamber formed in the lower end of the cylinder, a pump plunger carried by the power piston and operating in the concentric chamber, said concentric chamber at one end being in communication with the intermediate port of the power cylinder, an air supplying means in communication with said concentric chamber, whereby upon one stroke the chamber is filled with air, and means mounted at the upper end of the cylinder for controlling the admission of the explosive charge to the cylinder and for directing the burnt gases and scavenging air therefrom.

3. An explosion engine, including a power cylinder having a port through the upper end thereof for the admission of the explosive charge and the exhaust of the burnt gases therefrom, a valve casing in communication with said port, a rotatory valve mounted therein, said valve casing being provided with diametrically disposed exhaust ports at each end thereof, said valve being provided with exhaust by-passes for directing the exhaust gases in opposite directions through the exhaust ports, said valve being hollow and forming an explosive charge receiving chamber having two diametrically disposed ports for registration one at a time with the port of the power cylinder, means for supplying an explosive charge to the chamber of the valve, a power piston mounted in the power cylinder, a crank shaft operably connected thereto, the power cylinder being provided with an annular port adjacent its lower end, a concentric chamber disposed coaxially with and below the power cylinder, a pump plunger mounted in said chamber and operably connected to the power piston, the chamber of the rotatory valve being in communication with the upper end of said chamber, means for supplying a charge of carbureted air to the chamber, means for supplying a charge of air to the chamber below the plunger, and a by-pass connecting the said chamber below said plunger with the air admitting port of the power piston.

6. An explosion engine, including a base, a crank shaft, a power piston, a power cylinder having a port at its head and a port intermediate of its ends, the latter port being controlled by the power piston, inner and outer sleeves disposed coaxial with and below the power cylinder and forming inner and outer annular chambers, the outer sleeve having a fuel-admission port, the inner sleeve having an air-admission port, and the outer sleeve having an air-outlet port, a pump piston fitting in the annular chamber and connected to the power piston, the pump piston controlling the air-admission port, an intake manifold communicating with the fuel admission port, the air outlet port communicating with the intermediate port of the power cylinder, a rotatory valve for controlling the direction of the fuel charge through the intake manifold to the outer chamber and for directing the fuel charge away from the outer chamber, a second valve chamber disposed above the power cylinder and in communication with the head port thereof, said latter valve chamber being in communication with the first valve chamber to receive the compressed fuel charge therefrom, the latter valve chamber being provided with an exhaust port, and a rotatory valve mounted in the latter chamber for directing the explosive charge to and through the upper end of the power cylinder and for directing the exhaust gases thereaway from, the power piston controlling the intermediate port of the power cylinder to direct the scavenging charge of air therein while the exhaust port is still open.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,272,256. BUMPER. HENRY T. HAZARD, Los Angeles, Cal. Filed Sept. 26, 1916. Serial No. 122,207. (Cl. 267—21.)



1. The combination with a spring suspended at its ends on swinging links, of a yieldable body disposed at the ends of the springs and rearwardly of the links to oppose and restrict their swinging movement.

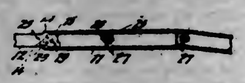
6. A bumper adapted to be disposed between the axle, bracket, links, and spring terminal of a vehicle, comprising a resilient body, seated on the axle and having a transverse arcuate channel to receive the spring terminal, and a spring clamp adapted to extend over the bracket into engagement with the resilient body.

[Claims 2 to 5 and 7 not printed in the Gazette.]

1,272,257. JEWELRY NOVELTY. FREDERICK HELLER, Newark, N. J. Filed Mar. 16, 1916. Serial No. 84,577. (Cl. 59—80.)

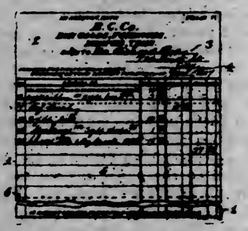
A device of the character described, comprising a plurality of chain units, hingedly connected together, and

provided respectively at one end, and at their under sides with recessed portions, a plurality of sleeve units inclosing respectively each of said chain units, adjacent portions of said sleeve units adapted to remain in contact during movement of the units with respect to each other, and to



cover the hinge connections between the chain units, the lower side of said sleeve units being provided at one end with a straight wall adapted to cooperate with said recessed portions of said chain units to permit greater hinged movement in one direction than the other.

1,272,258. BILL-FORM. DAVID MAX HENNING, Memphis, Tenn. Filed Apr. 7, 1917. Serial No. 160,437. (Cl. 283—58.)



A combined bill and negotiable instrument to be used in submitting statements of account, comprising a sheet of paper having a bill head occupying the entire face of one side of the sheet, to be filled out by the merchant before mailing the same to a customer, the other face containing a blank check or draft, with spaces to be filled out by the customer for the payment of the amount of the bill rendered by the merchant.

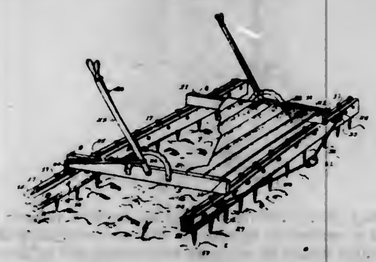
1,272,259. CLAMP. ANTHONY J. HEROLD, Omaha, Nebr. Filed Feb. 9, 1918. Serial No. 216,263. (Cl. 144—299.)



1. A device of the character described including a pair of sections one of which is slidably receivable within the other, each of the sections being provided with a plurality of openings adapted for alinement with each other, a slide adjustably mounted on the outer section, retaining means operably mounted on the slide and engagable with certain alined openings in the sections for removably holding the sections in relatively adjusted position, a stationary jaw formed on one end of one section, and a movable jaw adjustably mounted on the other section for cooperating with the stationary jaw.

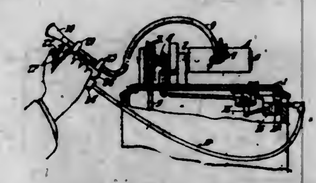
[Claims 2 to 5 not printed in the Gazette.]

1,272,260. HARROW. JAMES B. HILL, Puente, Cal. Filed Dec. 2, 1916. Serial No. 134,503. (Cl. 55—103.)



In a harrow, the combination of a framed platform, bars connected to the transversely disposed edges of said platform and below the same, said bars comprised of two parallel members secured together, teeth clamped between said members, eyes clamped between said members, eyes on said frame linked with the first mentioned eyes, a quadrant and lever secured to each longitudinally extending side of said platform, a link pivotally secured to each of said levers and to each of said bars, whereby said bars may be moved independently of each other.

1,272,261. CONTROLLING DEVICE. NEWMAN H. HOLLAND, West Orange, N. J., assignor to New Jersey Patent Company, West Orange, N. J., a Corporation of New Jersey. Filed Oct. 23, 1914. Serial No. 868,153. (Cl. 230—27.)



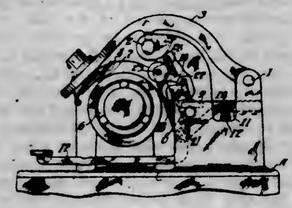
1. In a device of the character described, means adapted to control operating mechanism comprising a tubular member containing an element operable to effect the operation of said mechanism, said element being normally biased to inoperative position, and a resilient device carried by said element and adapted to coact directly with said member to lock said element in operative position, substantially as described.

2. In a device of the character described, means adapted to control operating mechanism comprising a hollow member containing a spring pressed element operable to effect the operation of said mechanism but normally tending to assume inoperative position, and a resilient rod carried by said element and coacting directly with said hollow member to automatically lock the spring pressed element in operative position, substantially as described.

5. In a device of the character described, means adapted to control operating mechanism comprising a member adapted to be held in the hand, an element operable by the thumb, when said member is held in the hand, to effect the operation of said operating mechanism, said element being biased to inoperative position, and a device applied to said element for locking the latter in operative position, said device being normally held in inoperative position by said member and being operable by the thumb to release said element, substantially as described.

[Claims 3, 4, and 6 not printed in the Gazette.]

1,272,262. PHONOGRAPH. NEWMAN H. HOLLAND, West Orange, N. J., assignor to New Jersey Patent Company, West Orange, N. J., a Corporation of New Jersey. Filed Nov. 27, 1916. Serial No. 133,671. (Cl. 274—17.)



1. The combination of a rotatable support for a record tablet, a stylus in operative relation thereto, said support and stylus being movable with respect to each other, and means for marking the surface of a tablet carried by said support without damaging the same, said marking means being mounted to automatically occupy different positions with respect to the tablet for different positions of said stylus with respect to the tablet, substantially as described.

2. The combination of a rotatable support for a record tablet, a stylus in operative relation thereto, said support and stylus being movable with respect to each other, and yielding means for marking the surface of a tablet carried by said support, said marking means being mounted to automatically occupy different positions with respect to the tablet for different positions of said stylus with respect to the tablet, substantially as described.

3. The combination with a rotatable support for a record tablet, of rotatable means mounted in proximity thereto for marking the surface of a tablet carried by said support, substantially as described.

4. The combination of a rotatable support for a record tablet, a stylus in operative relation thereto, said support and stylus being movable with respect to each other, and rotatable means for marking the surface of a tablet carried by said support, said marking means automatically occupying different positions with respect to the tablet for different positions of said stylus with respect to said support, substantially as described.

[Claims 5 to 18 not printed in the Gazette.]

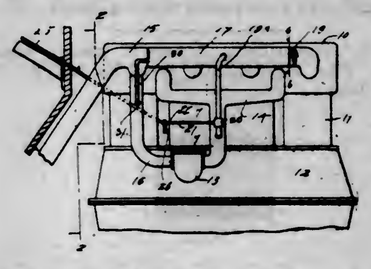
1,272,263. ATMOSPHERIC GAS-BURNER. WILLIAM HOOKER, Aldershot, England. Filed Aug. 8, 1917. Serial No. 185,179. (Cl. 67—121.)



1. In a gas burner of the class specified, a nipple having a plurality of longitudinally alined outlet holes therethrough decreasing in diameter from the first to the last hole of the series, and a rotary longitudinally slidable valve of enlarged smooth form seated to closely move against and control the base portions of all the holes of the series to successively close or open said holes, the slidable valve being provided with a reduced threaded feed means.

[Claims 2 and 3 not printed in the Gazette.]

1,272,264. CHARGE-FORMING DEVICE FOR EXPLOSIVE-ENGINES. FRANKLIN P. HOOPER, Rapid City, S. D. Filed Sept. 14, 1917. Serial No. 191,394. (Cl. 123—122.)



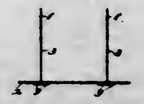
1. In an explosive engine, an exhaust manifold, a hollow boss formed integral with the manifold providing a hot air chamber provided with air inlet ports adjacent one end, said exhaust pipe having a port therein communicating with the chamber adjacent its opposite end, and hot air pipes connected with said chamber and the intake of the engine.

2. In an explosive engine, an exhaust manifold, a hollow boss formed integral with the manifold providing a hot air chamber having air inlet ports adjacent one end, said exhaust manifold having a relatively small port communicating with the chamber adjacent its opposite end, a horizontally disposed partition arranged in the chamber beneath the port in the manifold, a hot air pipe communicating with the chamber below the partition, and a second hot air pipe communicating with the chamber intermediate its ends.

3. In an explosive engine, a cylinder, a carbureter connected therewith, an air chamber in communication with the exhaust of the engine and means establishing communication between the chamber and cylinder on opposite sides of the carbureter.

4. In an explosive engine, a cylinder, a carbureter, a manifold connecting the carbureter with the cylinder, an air heating chamber in communication with the exhaust of the engine and communicating with the inlet port of the carbureter, and means establishing communication between the chamber and the inlet manifold at a point between the carbureter and the engine.

1,272,265. BROOM-RACK. JACOB S. HORN, Muenster, Tex. Filed Oct. 2, 1917. Serial No. 194,354. (Cl. 248—49.)



A broom rack comprising a plate having means for attachment to a wall and having slots formed therein adjacent its side edges, and a pair of arms divided so as to provide sections capable of entering the slots, said sections being united at their forward ends where projections rise above the upper edges of the upper section, the ends of the sections entering the slots being further divided, so that said divisions of each section may be bent down in opposite directions against the back of the plate, whereby when the plate is screwed to a wall the arms may be held rigidly attached therewith.

1,272,266. METHOD OF PREPARING CARROT FLAKES. MARY C. HORN, Muenster, Tex. Filed Jan. 12, 1918. Serial No. 211,615. (Cl. 99—5.)

1. The herein described method of preparing carrot flakes consisting of peeling, washing and slicing the carrots, then boiling the sliced carrots in a quantity of water

until the water has entirely evaporated, then partially drying the sliced carrots and subsequently rolling them into a flattened flake-like form and finally drying the sliced carrots.

[Claims 2 and 3 not printed in the Gazette.]

1,272,267. PIPE-JOINT. ROBERT E. HORTON, Albany, N. Y. Filed Aug. 11, 1917. Serial No. 185,768. (Cl. 285—165.)



1. In a pipe joint, the combination of two pipe members having telescoping ends fitting one within the other and an annular member adapted to indent one telescopic end and to penetrate the other telescopic end to force the latter into engagement with the former.

2. As a new article of manufacture, an annular member having dissimilar wedging portions cross sectionally thereof to form distorting wedges for use between the joined ends of pipes to seal the joint between the same.

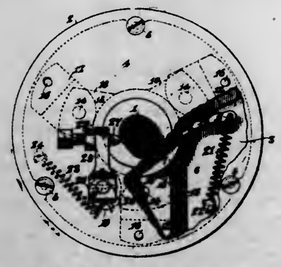
3. As a new article of manufacture, an annular member having dissimilar wedging portions cross sectionally thereof to form a distorting wedge and pipe indenting portion for use between the joined ends of pipes to seal the joint between the same.

4. In a pipe joint, the combination of two pipe members having overlapping ends and whereof one is made upon its end with an annular wedge receiving recess adjacent to the outer periphery of the overlapping end, and a wedge ring having its sharp end forced into said recess by the other member to deflect an annular portion of said recessed member against said other member to close the joint between the two members.

5. In a pipe joint, the combination of two pipe members having overlapping ends and with a wedge ring having its sharp end forced into one member by the other member to deflect an annular portion of the penetrated member against said other member to close the joint between the two members.

[Claims 6 to 8 not printed in the Gazette.]

1,272,268. CLUTCH. JOE HRINAR, Waukegan, and HUTTON GIBSON, North Chicago, Ill. Filed Jan. 22, 1917. Serial No. 143,801. (Cl. 192—21.)



1. In combination with a shaft, of spaced collars fast thereon, a pulley loose on the shaft, cam devices on the pulley in operative relation to the collars, and operating means for the cam devices in part on the shaft and in part on the pulley, with the part on the shaft in toggle connection with the cam devices.

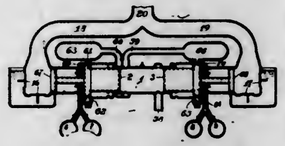
3. The combination with a shaft and a pulley loosely mounted on the shaft, of means for clutching the pulley and shaft together, comprising a clutch structure fast on the shaft and another clutch structure in part loosely mounted on the shaft and in part carried by the pulley for engagement with the clutch structure fast on the shaft, the clutch structure carried by the pulley having means imparting to it a normal tendency to move to the clutching position and the shaft and pulley having coacting means for moving the clutch structure on the pulley in opposition to its normal tendency.

5. The combination with a shaft and a pulley loosely mounted thereon, of clutching means between the shaft and pulley, comprising collars fast on the shaft, a disk loosely mounted on the shaft and having arms projecting therefrom, clutch blocks pivoted to the disk and to the pulley and having cam portions in operative relation to the collars fast to the shaft, means imparting to the disk a normal tendency to move in a direction to cause the cam portions of the blocks to engage the collars on the shaft, and means carried by the shaft and pulley and associated with the disk to move the latter in opposition to its normal tendency to move the cam surfaces away from the collars, said last-named means comprising a rockable cam block, a spring tending to move it in one direction, an arm for moving the cam block in the opposite direction and provided with an adjustable set screw, and a sleeve slidable on the shaft and having a taper end movable into and out of the path of the set screw.

7. A clutch comprising two concentrically disposed members rotatable one with relation to the other, clutch elements fast to the inner member, other clutch members on and movable with relation to the outer clutch member and to the clutch elements on the inner clutch member, means on and movable with relation to the inner clutch member and connected to the clutch elements on the outer clutch member and having a normal tendency to move the outer clutch elements into engagement with the inner clutch elements, and means carried by the clutch members for moving the outer clutch elements in opposition to their normal tendency to effect the unclutching of the clutch.

[Claims 2, 4, and 6 not printed in the Gazette.]

1,272,269. UTILIZING AN EXPANSIVE FORCE IN THE MOVEMENT OF LIQUID. HERBERT ALFRED HUMPHREY, London, England, assignor to Humphrey Gas Pump Company, a Corporation of New York. Filed Apr. 30, 1912, Serial No. 694,287. Renewed Dec. 8, 1917. Serial No. 206,326. (Cl. 103—67.)



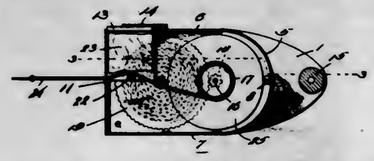
1. The combination of an expansion chamber, play pipes for the reciprocation of liquid connected therewith and a plurality of pistons having their ends operating in the expansion chamber with their other ends acting directly upon the liquid.

2. The combination of an expansion chamber, pipes for the reciprocation of liquid connected therewith, a plurality of pistons each having an end operating in the expansion chamber, the other ends acting directly upon the liquid, and means for forming elastic cushions adapted to store energy on the power stroke and to give up energy in connection with the return stroke of the pistons.

3. An expansion chamber, a plurality of pistons operating therein, a play pipe for the reciprocation of liquid, means whereby the pistons are actuated by a primary medium to operate directly against the liquid and means whereby the momentum of the liquid column may be utilized to introduce fresh liquid.

[Claims 4 to 16 not printed in the Gazette.]

1,272,270. AUTOMATIC CHALK-LINE HOLDER. WILLIAM JÄRVIÖ, West Quincy, Mass. Filed Sept. 15, 1917. Serial No. 191,567. (Cl. 33—87.)



1. A chalk line holder including a casing having an opening arranged in the top thereof, a chalk chamber positioned below said opening, a roller arranged below said chamber, and a line carrying reel arranged in said casing.

2. A chalk line holder comprising a casing, a chalk chamber positioned therein, a line carrying reel mounted in said casing, guards mounted on said reel, a brake for said reel comprising a rotatable member having one end slotted to receive the peripheral edge of one of said guards, and an operating handle formed on the opposite end of said rotatable member.

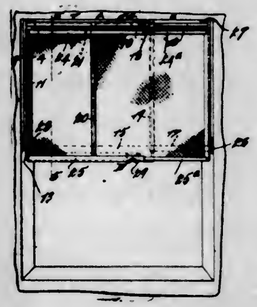
4. A chalk line holder comprising a casing, a chalk line mounted therein, guards mounted on said reel, and a rotatable brake member mounted in said casing and provided with a slotted end to receive the peripheral edge of one of said guard members.

7. A chalk line holder, including a casing, comprising a top wall having an opening formed therein, a front wall having a slot formed therein, a chalk chamber positioned above said slot and below said opening, a roller journaled in said chamber, a reel positioned in said casing, and a line wound upon said reel and having its free end trained over said roller and extended out through said slot.

8. A chalk-line holder, comprising a casing, including top, bottom, side and end walls, said side walls having their rear ends extended beyond the end wall of the casing and reduced, a handle secured between said reduced portions, and a chalk line carrying reel positioned in said casing.

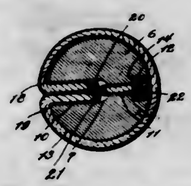
[Claims 3, 5, and 6 not printed in the Gazette.]

1,272,271. ADJUSTABLE WINDOW-SCREEN. JACOB KALMANOWITZ, Brooklyn, N. Y. Filed Jan. 7, 1918. Serial No. 210,750. (Cl. 156—38.)



A screen comprising an upper section and a lower section, each section being made up of two subsections, slidably connected for extension, a vertical channel-member connecting the left-hand subsection of the upper screen section at its inner end, and a vertical strip carried at the inner end of the left-hand subsection of the lower screen section and slidably engaging the vertical channel member at the inner end of the said left-hand subsection of the upper screen section, whereby said screen sections will be interlocked.

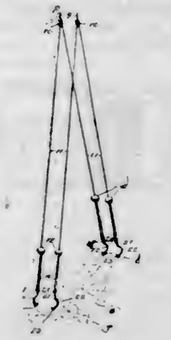
1,272,272. CORD-ADJUSTER. LESTER L. KELL, St. Louis, Mo. Original application filed May 23, 1916. Serial No. 99,310. Divided and this application filed Mar. 18, 1918. Serial No. 223,059. (Cl. 24—129.5.)



6. In combination with a spherical body provided with bores open at the exterior of the body and intercommunicating within the body, certain of which bores having within their lengths diametrical reductions and a groove belting the exterior surface of the body and intersecting at least one of said bores, a cord having a knotted end seated in one of the bores and held against movement by reason of one of the diametrically reduced portions of the bore, said cord being doubled in one of the bores and extended around the body in said groove, said cord being doubled in a second bore and provided with a bight outside said second bore and said cord extended through a third bore to project from the body.

[Claims 1 to 5 not printed in the Gazette.]

1,272,273. SWING. LESTER L. KELL, St. Louis, Mo. Filed May 23, 1916. Serial No. 99,310. (Cl. 155—35.)



1. A suspension means for swings comprising a cord, and an element comprising an eye, for connection with the cord, a wedge-shape hook, for connection with the swing body, and a curvilinear body between the eye and hook, substantially as shown and for the purposes stated.

2. The combination with a body, having supporting wheels, of a suspension means therefor, comprising an overhead bearing consisting of readily separable elements, cords for connection with certain of the separable elements, means for connecting said cords with the wheels of said body comprising a bowed body portion and a wedge-shaped hook, and means for adjusting the cords, as to lengths.

1,272,274. SPRAY-HEAD. JOHN H. KINEALY, Ferguson, Mo. Filed Sept. 3, 1915. Serial No. 48,867. (Cl. 137—57.)

1. In a spray head, the combination of a body portion having an externally threaded part and a bore terminating in an outwardly flaring outlet, a yoke having the part intermediate its ends flattened and made to taper to a sharpened front edge and to a sharpened rear edge, one end of said yoke having an internally threaded opening

adapted to receive said threaded part of said body portion, and a spray plate carried by said yoke in front of said outlet.

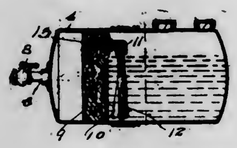


2. In a spray head, the combination of a body portion having a bore terminating in an outwardly flaring outlet and an externally threaded part concentric with said bore, a yoke having the part intermediate its ends flattened and tapered to a sharpened front edge and to a sharpened rear edge, one end of said yoke having an internally threaded opening adapted to receive said threaded part of said body portion, and a spray plate carried by said yoke in front of said outlet.

3. In a spray head, the combination of a body portion having a bore terminating in an outwardly flaring outlet and an externally threaded part concentric with said bore, a yoke having its ends provided with openings which have a common axis and having the part intermediate its ends flattened and made to taper to a sharpened front edge and to a sharpened rear edge, the opening in one end of said yoke being internally threaded to receive said threaded part of said body portion and the opening in the other end of said yoke being adapted to receive a spray-plate-holding means, a spray plate, and a spray-plate-holding means.

[Claims 4 to 7 not printed in the Gazette.]

1,272,275. MOISTENING DEVICE. CARL J. KLEIN, Mount Vernon, Ill. Filed Oct. 13, 1917. Serial No. 196,474. (Cl. 261—99.)



In a moistening device for the purpose described, the combination of a tank, a partition dividing the tank into a water chamber and a water vapor chamber, said partition having apertures near its top, pipe elbows in the water chamber secured around said apertures, absorbent filtering material secured on the opposite side of the partition, capillary wicks extending from near the bottom of the water chamber through said elbows and apertures to said filtering material, water and air inlets to said water chamber and an outlet pipe from said water vapor chamber.

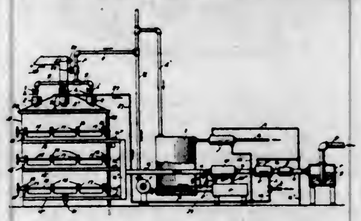
1,272,276. PROCESS OF VINEGAR-MAKING. ERWIN KLEIN, Peekskill, N. Y. Filed Jan. 12, 1916. Serial No. 71,692. (Cl. 23—27.)

1. A step in the Schutzenbach process of vinegar-making, comprising automatically controlling the draft of spent air by the inflowing fluid mixture capable of undergoing acetic fermentation.

2. A step in the Schutzenbach process of vinegar-making, comprising condensing in a generator by means of the artificially pre-cooled inflowing fluid mixture capable of undergoing acetic fermentation the vapors carried by the spent air.

3. A subprocess in the herein described Schutzenbach process of vinegar-making, consisting in condensing in a generator by means of the artificially precooled inflowing fluid mixture capable of undergoing acetic fermentation the vapors carried by the spent air; and finally subjecting the mixture to the action of fresh air.

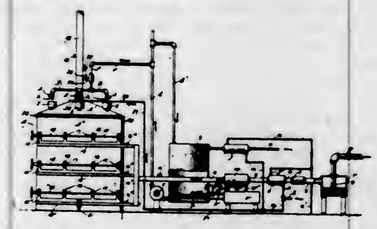
8. A subprocess in the Schutzenbach process of vinegar-making, comprising artificially-cooling the generator by flowing portions thereof with cold fluid; introducing near the top of the generator the fluid mixture capable of undergoing acetic fermentation; and condensing the vapors carried by the spent air by bringing the same into contact with the cooled mixture and the artificially-cooled portions of the generator.



10. A subprocess in the Schutzenbach process of vinegar-making, comprising precooling the fluid mixture capable of undergoing acetic fermentation; regulating the temperature to which the latter is precooled; and condensing the vapors carried by the spent air, by introducing the precooled mixture near the top of the generator.

[Claims 4 to 7 and 9 not printed in the Gazette.]

1,272,277. APPARATUS FOR VINEGAR-MAKING. ERWIN KLEIN, Peekskill, N. Y. Filed Jan. 12, 1916. Serial No. 71,693. (Cl. 23—27.)



1. A vinegar-making apparatus of the Schutzenbach type including a vinegar generator; means for introducing the mix thereinto, an air-conduit; mechanism for cooling the air flowing therethrough; automatically-operating means for throwing said mechanism into and out of operation to maintain the temperature of the air below a predetermined maximum and means for leading the air from said mechanism to said generator.

5. A vinegar-making apparatus including a vinegar-generator; false bottoms within said generator and dividing the same into a vertical series of intercommunicating compartments; said false bottoms being formed of spaced strips having reduced lower faces; and means for causing an ascending current of fresh air to flow through the spaces between the strips of which said false bottoms are formed.

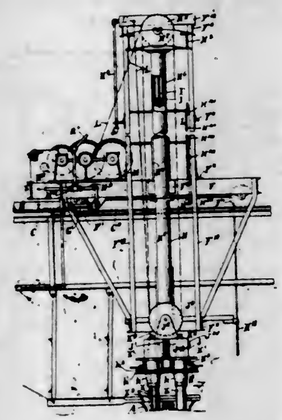
9. A vinegar-making apparatus of the Schutzenbach type including a vinegar generator; a conduit for the fluid mixture capable of acetic fermentation; means for precooling said mixture flowing through said conduit; and means for automatically controlling the temperature of said mixture.

[Claims 2 to 4 and 6 to 8 not printed in the Gazette.]

1,272,278. PATTERN-RAMMING MACHINE FOR PIPE-MOLDING. JAMES B. LADD, Philadelphia, Pa., assignor to United States Cast Iron Pipe and Foundry Company, Burlington, N. J., a Corporation of New Jersey. Filed Mar. 6, 1917. Serial No. 152,578. (Cl. 22—25.)

1. A pattern hoist for pulling a ramming pattern up out of a vertical pipe mold comprising in combination a support, vertically movable pattern and mold engaging

elements carried by said support, and a block and tackle connection between said elements for simultaneously applying an upwardly acting force to said pattern element and a downwardly acting force to said mold engaging element.



3. A pattern hoist for pulling a ramming pattern up out of a vertical pipe mold comprising in combination a support, a vertically movable mold engaging element mounted in said support and comprising vertical members, a pattern secured to the lower ends of said members, a pattern element comprising a vertically movable crosshead in guided relation with said members, a main ramming pattern in guided relation with the first mentioned pattern, and a block and tackle connection between said crosshead and the upper ends of said members for simultaneously applying an upwardly acting force to said pattern element and a downwardly acting force to said mold engaging element.

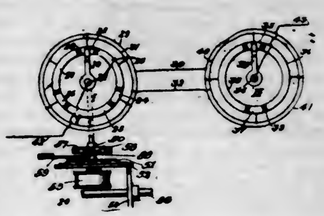
14. In pipe molding apparatus the combination with a vertical flask and its supporting means, of a support extending over the flask, a carriage mounted on and horizontally movable with respect to said support, vertically movable mold engaging and pattern elements in guided relation with one another and said carriage, a rotatable motor mounted on said carriage and power transmitting connections between said motor and said elements for simultaneously applying oppositely acting forces to said elements.

18. In a pipe molding plant the combination with a turn table and a series of vertical flasks carried thereby, of an idle pattern support located adjacent said turn table, a crane arm mounted above the flasks to turn about the turn table axis and a pattern hoist mounted on said crane arm with freedom for adjustment from one position in which it extends over the path of the flasks into another position in which it extends over said pattern support, and a pair of optionally usable socket pattern mechanisms into coöperative relation with each of which said hoist may be brought.

22. Molding apparatus comprising in combination a support, a mold forming device comprising two coöperative vertically movable elements, means for impressing an upwardly acting force on one of said elements and a reactive downwardly acting force on the other of said elements and a connection between the last mentioned element and said support, normally exerting a yielding supporting force on said element and means for varying said force, and a piston and cylinder supporting connection between said support and said last mentioned element and means for maintaining and for varying an elastic fluid pressure therein.

[Claims 2 to 8, 10 to 13, 15 to 17, 19 to 21, and 23 not printed in the Gazette.]

1,272,279. CIRCUIT-INTERRUPTING DEVICE. ALBEN E. LUNDELL, New York, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 16, 1916. Serial No. 115,211. (Cl. 175—347.)

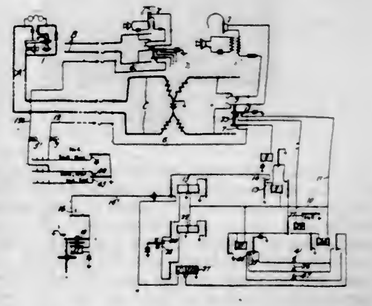


1. In an electrical system, a plurality of interrupting devices, a circuit including said interrupting devices, and means for establishing an interconnection between said interrupting devices such that said circuit will continue to be interrupted while any or all of said interrupting devices are in operation.

4. In an electrical system, a plurality of interrupting devices, a circuit including said interrupting devices, each of said interrupting devices comprising a brush arranged to swing over a plurality of conducting segments, said conducting segments being of various lengths and separated by insulating segments, the conducting segments in the several interrupting devices being arranged to cause circuit closures varying in number and duration, said brushes being arranged to make contact across adjacent conducting segments while passing an insulating segment, mechanical means for preventing said brush from stopping in engagement with two conducting segments, and means for establishing an interconnection between said interrupting devices, such that said circuit will continue to be interrupted while any or all of said interrupting devices are in operation.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,272,280. TELEPHONE SYSTEM. ALBEN E. LUNDELL, New York, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 6, 1916. Serial No. 124,066. (Cl. 179—27.)



1. In a telephone exchange system, a plurality of lines, characteristic signaling means for each line, a normally resting switching device common to the signaling means of said lines, and means controlled by said switching device for simultaneously controlling the actuation of a plurality of of said signaling means in a manner characteristic for a plurality of calling lines.

2. In a telephone exchange system, a plurality of lines, a plurality of trunks, characteristic signaling means for each line at each trunk, a normally resting switching device common to said trunks, means for extending any one

of said lines when calling to any one of said trunks, and means operative thereupon and controlled by said switching device for simultaneously actuating at each trunk to which a calling line has been extended the signaling means characteristic for the extended calling lines.

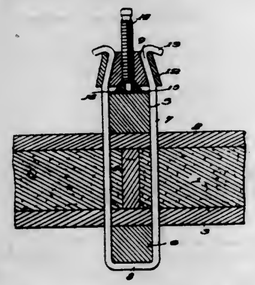
3. In a telephone exchange system, a plurality of lines of different classes, a plurality of trunks, a plurality of operators' telephone sets, means operative upon the initiation of a call on any one of said lines for extending it to any one of said trunks, a listening key for each operator's telephone set, an electrical circuit closed upon the actuation of any one of said listening keys, a switch normally at rest for controlling said circuit, means responsive to the actuation of any one of said listening keys for starting the operation of said switch, and means depending on the class of the line calling for causing said switch to change the electrical condition of said circuit in a predetermined manner.

4. In a telephone exchange system, a plurality of lines, a plurality of operators' positions, means for extending any one of said lines to any one of said positions, a plurality of signals one for each of said lines at each of said operators' positions, and means normally at rest and common to said operators' positions for simultaneously controlling the actuation of said signals.

5. In a telephone exchange system, a plurality of lines, a plurality of operators' positions, means for extending any one of said lines to any one of said operators' positions, a plurality of signals one for each line at said operators' positions, means normally at rest and common to said operators' positions, and means responsive to the extension of calling lines to operators' positions to operate said second mentioned means to simultaneously control the actuation of the signals individual to the calling lines.

[Claims 6 to 16 not printed in the Gazette.]

1,272,281. CEMENT-FORM TIE-CLAMP. OTTO D. McCORD, Rock Island, Ill. Filed Feb. 20, 1918. Serial No. 218,255. (Cl. 24—16.)

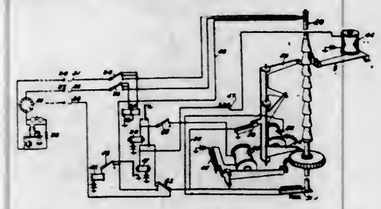


3. A device of the class described including a single piece of wire bent loop shape and adapted to pass through the walls of a concrete form, a sleeve, a wedging member engageable with the free ends of said wire, an externally threaded brace rod passing through said member and having its inner end engageable with the adjacent wall of the form, and the wedge member being internally threaded for coöperative engagement with the said rod whereby upon rotation of the rod, the member is movable outwardly to securely hold the wire in position.

[Claims 1 and 2 not printed in the Gazette.]

1,272,282. TELEPHONE-EXCHANGE SYSTEM. JAMES L. McQUARRIE, Montclair, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 20, 1917. Serial No. 202,934. (Cl. 179—27.5.)

1. In an automatic switching device, a multiple terminal bank comprising a plurality of sections arranged in superimposed tiers, each tier being provided with an upper and lower contact bearing surface, each of said surfaces comprising a separate group of multiple terminal strips, switching mechanisms in operative relation to said terminal bank, and means to operate a switching mechanism to select a desired group of contacts and to select a desired contact in a selected group.



2. In an automatic switching device, a multiple terminal bank comprising a plurality of sections arranged in superimposed tiers, each tier being provided with an upper and lower contact bearing surface, each of said surfaces comprising a separate group of multiple terminal strips, a plurality of movable brush carriages, a brush set carried by each of said brush carriages, means to advance a brush carriage to select a desired group, and means to advance said brush carriage transversely of a selected group to position its associated brush set on a desired terminal set in the selected group.

3. In an automatic switching device, a plurality of switching mechanisms, movable contacts controlled thereby, a multiple terminal bank comprising a plurality of sections arranged in superimposed tiers, each tier being provided with an upper and a lower contact bearing surface, each of said surfaces comprising a plurality of terminal strips suitably insulated from one another, contact portions on said strips projecting at desired intervals and in proper relation to one another, said contact portions being suitably offset for engagement with movable contacts of said switching mechanism, means to operate one of said switching mechanisms to advance its movable contacts carried thereby into operative relation with one of said contact bearing surfaces to accomplish group selection, and means to advance said movable contacts transversely of said selected surface to select a desired terminal set in the selected group.

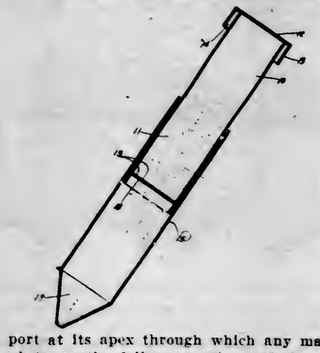
4. In an automatic switching device, a multiple terminal bank comprising a plurality of sections arranged in superimposed tiers, each tier being provided with an upper and lower contact bearing surface, each of said surfaces comprising a separate group of multiple terminal strips, switching mechanisms in operative relation with said terminal bank, means to cause vertical motion of a switching mechanism to select a desired group of contacts, and means to cause rotary movement of a switching mechanism to select a desired contact in a selected group.

5. In an automatic switching device, a multiple contact bank comprising a plurality of unit layers placed in superimposed relation, a plurality of movable brush carriages, brushes carried thereby, means to advance a brush carriage into position to select a desired group, and means to advance said brush carriage transversely of a selected group to enable the associated brushes to engage contacts in said selected group, and means to advance said brushes over contacts on the lower surface of a selected layer or over contacts on the upper surface of a selected layer in accordance with whether the number of group steps taken by said carriage is odd or even.

[Claim 6 not printed in the Gazette.]

1,272,283. INSECT-DESTROYER. JEREMIAH M. MADDEN, New York, N. Y. Filed Feb. 7, 1918. Serial No. 215,874. (Cl. 43—14.)

2. In a dispensing device for powder, the combination of a container of uniform cross section and adapted to hold a quantity of material to be dispensed, said container being provided at its base end with a hand hold, and an outer shell fitted and slidable upon the outer surface of the container from one end to the other with a substantially air tight fit, said shell being provided at its outer end with a tapered nozzle member having a small



delivery port at its apex through which any material in the space between the delivery portion and the container will be discharged in a fine stream by the compressed air trapped in such space when the shell is reciprocated toward the base of the container.

[Claim 1 not printed in the Gazette.]

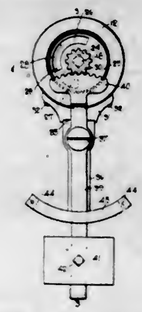
1,272,284. TAG-HOLDER. STEPHEN M. MAGSBY, Lula, Miss. Filed Mar. 24, 1917, Serial No. 157,131. Renewed Dec. 8, 1917. Serial No. 206,325. (Cl. 40—23.)



A tag holding and attaching device comprising a spring hook having a pair of arms, coils connecting said arms together at one end and adapted to be passed through an opening in a tag, and reversely turned bills at the free ends of said arms, in combination with a keeper connecting the arms together and arranged for longitudinal slidable movement thereon to permit the bills of the hook to move apart when the keeper is moved toward the coils and to cause the bills of the hook to move toward each other when the keeper is moved toward the bills, and a tag element provided with an opening through which the coils extend, the diameter of the coils exceeding that of the opening, so that the tag element is held between two of the coils.

1,272,285. GRADE-CONTROLLED AUXILIARY AIR-VALVE FOR INTERNAL-COMBUSTION ENGINES. FRANK MANLEY, Silverton, Colo. Filed Apr. 23, 1917. Serial No. 164,036. (Cl. 137—7.)

1. In a motor vehicle, a casing having a pipe communicating with the intake manifold of a vehicle, said casing having upon one wall thereof, an arcuate slot, the slot for a portion of its length having a predetermined width and for another portion of its length having a different width, the walls of both portions of the slot being parallel, a rotatable valve plate having an arcuate opening coacting with the arcuate opening in the wall of the casing, a pendulum mounted for oscillation in a vertical plane parallel to the line of movement of the vehicle, and means operatively connecting the pendulum to the valve plate to rotate the latter in correspondence with the relative movements of the pendulum.

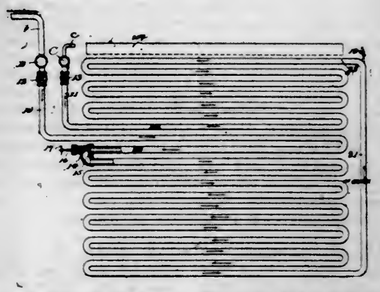


6. In a device of the character described, a casing having a pipe leading therefrom adapted to be connected to the intake manifold of an internal combustion engine, a face plate detachably mounted on the casing and having a central hub, a pinion having a stem rotatably mounted in said hub, a valve plate mounted upon said stem and rotatable therewith against the face plate and having an arcuate slot coacting with the slot in the face plate, a pendulum operatively supported in connection with the casing and having a sector gear engaging with the pinion, said pendulum being disposed in a vertical plane, a coil spring surrounding the hub, a ball carrier loosely surrounding the stem and against which said spring bears, a washer mounted on the stem and confronting the ball carrier, and means on the stem bearing against said washer and placing the spring under compression.

8. In a device of the character described, a casing, a plate forming one wall thereof and having an opening, the plate at its margins being provided with inwardly projecting lugs, the wall having recesses into which said lugs may project, a ring having a screw-threaded engagement with the wall of the casing to thereby lock the plate and casing in conjoined relation, a stem rotatably mounted in the plate, a valve mounted to rotate with the stem and controlling passage through the opening in the plate, and a pendulum operatively connected to said valve.

[Claims 2 to 5, 7, and 9 to 11 not printed in the Gazette.]

1,272,286. AMMONIA-CONDENSER FOR ICE-MACHINES. WILLIAM H. MANNS, Waynesboro, Pa., assignor to Frick Company, Waynesboro, Pa., a Corporation. Filed July 31, 1914. Serial No. 854,333. (Cl. 257—28.)

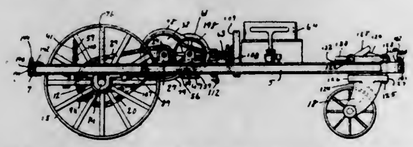


1. An ammonia condenser comprising a series of coils connected at inlet end with an ammonia gas header, at

the outlet end with a liquid ammonia header, said gas header and said liquid header being arranged on the same level and on a level with the top of the coil, and a valve interposed in said coil near the gas inlet end adapted to regulate the orifice to a size which will take care of the flow of liquid ammonia absorbed by the liquid lying in the inlet pipe outside of said valve, substantially as set forth.

[Claims 2 to 4 not printed in the Gazette.]

1,272,287. TRACTOR. ANDREW K. MARTELL and EMIL MONHOF, Los Angeles, Cal. Filed June 19, 1917. Serial No. 175,563. (Cl. 180—17.)



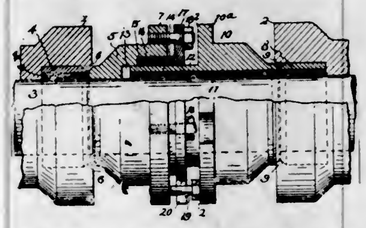
1. A tractor comprising a substantially rectangular frame narrowed at its front end; a pair of tractor wheels independently mounted at the rear end of said frame, one at each side thereof; a pair of caster wheels mounted at the front end of said frame, each of said wheels being mounted independently of the other wheel and being capable of movement horizontally; an explosion engine mounted in said frame longitudinally thereof and having a crank shaft; a power shaft; a clutch connecting said crank and power shafts; a bevel pinion on the end of said power shaft; a drive shaft extending from side to side of said frame at a right angle to said power shaft; a pair of bevel gears loosely mounted on said drive shaft in mesh with said bevel pinion on opposite sides thereof; a clutch slidably but non-revolubly mounted on said drive shaft between said bevel gears adapted to lock either of said gears to said shaft; means to operate said clutch; a transmission member slidably but non-revolubly mounted on said drive shaft near one end thereof; a gear mounted on each end of said transmission member, one of said gears being of a larger diameter than the other; a transmission shaft mounted in said frame parallel with and adjacent to said drive shaft; a pair of gears rigidly mounted on said transmission shaft in a plane passing between the gears on the transmission member, said gears being of different diameters in reverse order to the gears of the transmission member whereby the smaller gear on one shaft will mesh with the larger gear on the other shaft; means to cause either pair of said gears to mesh; sprocket wheels secured to the inner sides of said driving wheels; sprocket wheels on said transmission shaft mounted loosely thereon in alinement with said driving wheel sprockets; a sprocket chain connecting said pairs of sprocket wheels; clutch members on said transmission shaft at the side of the sprocket wheels adapted to lock said sprocket wheels to said shaft; means to operate said last clutch members; means to lock said caster wheels against movement horizontally; means to release said locking means; a brake drum on the outer periphery of said clutch members; brake shoes for said drum adapted to frictionally engage the same at predetermined times; and means to simultaneously operate said brake shoes and engine clutch.

6. In a vehicle a pair of independently driven driving wheels; means to impart power thereto; a pair of independently mounted caster wheels mounted to turn around a vertical axis; means to lock said caster wheels against movement around said axis; and means to release either one of said driving wheels and to unlock said caster locking means in unison.

[Claims 2 to 5 not printed in the Gazette.]

1,272,288. PACKING DEVICE. LOUIS H. MARTELL, Elyria, Ohio. Filed Jan. 30, 1914, Serial No. 815,383. Renewed May 3, 1918. Serial No. 232,384. (Cl. 286—13.)

1. The combination with opposed cylinder heads and a plunger operating between them, a packing device surrounding the plunger and extending between the said heads, said device comprising opposed sets of sleeves, packing between the sleeves of each set, the sleeve of each set which is adjacent the cylinder heads being surrounded by a portion of the cylinder and with which the packing between the sleeves in each set may engage, and rigid means for moving the adjacent sleeves of said sets of sleeves in opposite directions.



2. The combination with opposed cylinder heads which are recessed, and a plunger operating between said heads, of a packing device surrounding the plunger and extending between the cylinder heads, said packing device comprising sleeve elements adapted to be seated within the recesses in the cylinder heads, opposed sleeve members upon said plunger, packing associated with the sleeve elements within the recesses of the cylinder heads, means for moving the opposed sleeve elements upon the plunger to compress the packing associated with the sleeves in the cylinder heads, and packing between the opposed sleeves.

3. The combination with opposed cylinder heads, and a plunger operating between them, of a packing device surrounding the plunger and extending between the said heads, said packing comprising opposed sets of sleeves, one set of sleeves being provided with an extended cylindrical portion, the other of said sleeves surrounding said cylindrical extending portion, means for moving adjacent sleeves of said sets in opposite directions, and a packing means between the extending cylindrical portion of one sleeve and the sleeve which surrounds said cylindrical portion.

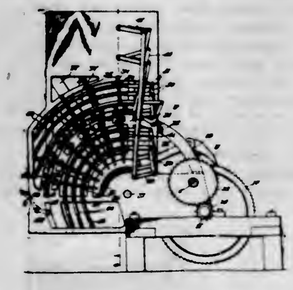
6. The combination with the heads of opposed cylinders, and a plunger extending between the said cylinders, the said cylinder head being formed with recesses which surround the plunger, sleeves within the said recesses, packing associated with each of said sleeves, means adapted to coöperate with the sleeves within the recessed portions of the cylinder head for effecting compression of the said packing, said means comprising a recessed sleeve provided with a head, a compressor member, packing within a portion of said recessed sleeve, and engaged by the compressor member, means for adjusting the compressor member, a second sleeve provided with an extending portion, which extends within the first mentioned recessed sleeve, and expanding members associated with both of the last mentioned sleeves to adjust them longitudinally of the plunger.

[Claims 4, 5, 7, and 8 not printed in the Gazette.]

1,272,289. SAWMILL SET-WORKS. EMMETT MASSEY, Proctor, Ark. Filed July 10, 1917. Serial No. 179,742. (Cl. 143—114.)

1. In a device of the class described, a set lever, a quadrant having stop shoulders to limit the extreme throw of the lever in two directions, a stop container adjacent to and spaced from the quadrant, stop members slidable in said container toward and from the quadrant, and means for actuating the stop members.

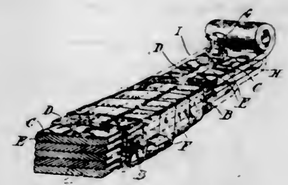
3. In a device of the class described, a set lever, a quadrant having stop members limiting the extreme throw of the lever, a stop member consisting of a slide movable transversely in the direction of the quadrant to lie in the path of the set lever intermediate the stop shoulder, and means for actuating said slide including a rock shaft, pinions carried thereby, teeth on the stop member meshing with one of the pinions, an arcuate spring retracted slide, and a rack carried by said slide in mesh with the other pinion on the rock shaft.



5. In a device of the class described, a set lever, a stop container, stops slidable in said container and adapted to be projected in the path of the set lever, means for projecting the stop members, spring actuated means for retracting the stop members, means for temporarily locking and securing the stop members in projected position, and means for releasing the locking means.

[Claims 2, 4, and 6 to 9 not printed in the Gazette.]

1,272,290. LUBRICATION OF LAMINATED SPRINGS. REGINALD WALTER MAUDSLAY, Coventry, England. Filed June 18, 1917. Serial No. 175,516. (Cl. 184—1.)



1. In spring lubricating apparatus, the combination with a laminated plate vehicle spring, of a flexible lubricating duct having discharging openings extending along said spring, and absorbent material extending from the openings to the parts of the spring to be lubricated.

3. In spring lubricating apparatus, the combination with a laminated plate vehicle spring, of a wrapping of absorbent material on said spring, and a flexible lubricating duct in said wrapping, said duct having oil discharging openings.

5. In spring lubricating apparatus, the combination with a laminated plate vehicle spring, of a pad of absorbent material, an oil distributing plate located between the spring and the pad and formed with a lengthwise channel and transverse oil discharging slits, a wrapping to bind the plate and pad to the spring, and means operatively connected to the plate to feed oil thereto, for the purpose set forth.

[Claims 2 and 4 not printed in the Gazette.]

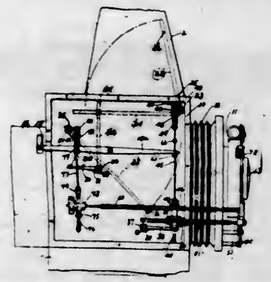
1,272,291. MUD-HOOK. HARRY E. MAY, Sedalia, Mo., assignor of one-third to Holmes Hall, Sedalia, Mo., and one-third to Hugh K. Wagner, St. Louis, Mo. Filed Sept. 19, 1917. Serial No. 192,047. (Cl. 152—14.)

In a mud hook, a body portion adapted to embrace a wheel tire, a link pivotally connected to one side of said body portion, a shackle constructed to embrace the felly of a wheel, a laterally extending lug at one end of the shackle to which the said link is secured, the other end of the shackle being slotted, and a fork integral with the slotted end of said shackle, a lever having an enlarged end pivoted in said fork centered for cam action, whereby the enlarged end of the lever acts as a cam when the lever is moved, a draw bolt connected at one end to one



side of said body and having its other end mounted on the pivot of the cam head of said lever.

1,272,292. CAMERA. WALTER K. MENNS, Chelsea, Mass. Filed June 4, 1917. Serial No. 172,742. (Cl. 95—42.)



1. A camera, comprising a box equipped with a magazine for presenting successive plates for exposure, a lens equipped with a shutter, means for focusing through said lens including a movable mirror, and means having connection with the lens shutter and focusing means whereby the shutter is locked closed during the shifting of said movable mirror from operative to inoperative position.

3. A camera, comprising a box equipped with a magazine for presenting successive plates for exposure, a lens equipped with a shutter, means for focusing through said lens, and means including a swinging mirror and a swinging safety shutter having connections with said lens shutter and focusing means whereby the lens shutter is locked closed while said mirror is swinging from inoperative position to an inoperative position and while said safety shutter is swinging from inoperative position to operative position.

4. A camera, comprising a box equipped with a magazine to hold a series of plates for exposure, a lens equipped with a shutter, means for focusing through said lens including a swinging mirror, operating mechanism for controlling said lens and said shutter having connections holding said shutter locked closed while said mirror is swinging from operative to inoperative position, and means associated with and controlled by said operating mechanism for governing the movement of plates from said magazine.

5. A camera, comprising a box equipped with means for holding a plate in position for exposure, a lens equipped with a shutter, means for focusing through said lens including a swinging mirror having provision for holding the same diagonally with respect to said lens for focusing, operating mechanism for said shutter having connections for also controlling said mirror and with provision for holding the lens shutter locked closed while the mirror is swinging from operative position to inoperative position, and a lever connected with said operating mechanism and adapted to control the shifting of plates in said box.

7. A camera, comprising a box equipped with means for holding plates in position for exposure, a lens equipped with a shutter and mounted for movement to and from said box with an expanding hood, a focusing

mirror mounted to swing from a focusing position diagonally with respect to said lens to an inoperative position and equipped with means for normally holding it in inoperative position, a trip catch for holding said mirror in its diagonal focusing position, means for closing said shutter having connection for operating said trip catch after the shutter is closed, a safety shutter also controlled by the last named means for movement to operative position, said shutter having an instantaneous exposure device, means for operating said instantaneous exposure device having a connection for restoring said mirror to its diagonal focusing position, and having also a connection for releasing said safety shutter for permitting its return to an inoperative position.

[Claims 2 and 6 not printed in the Gazette.]

1,272,293. GUN. CHARLES MIRMILLO, Oakland, Cal. Filed Oct. 24, 1916. Serial No. 127,361. (Cl. 89—21.)

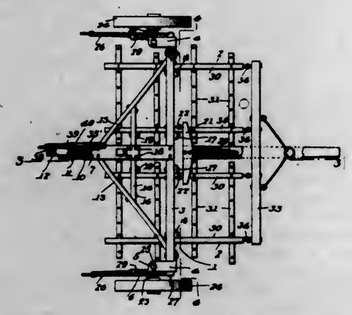


1. A gun comprising a barrel having a firing chamber, a loading chamber back of said firing chamber and having a slot extending through the side of said barrel to permit a cartridge to be placed in said loading chamber, a breech block having a forward portion adapted to push said cartridge into said firing chamber, a block slidably mounted adjacent said slot and an arm extending from said block into said loading chamber, the end of said arm being adapted to contact with said cartridge and withdraw it from the firing chamber.

2. A gun comprising a barrel having a firing chamber, a loading chamber back of said firing chamber and having a slot extending through the side of said barrel to permit a cartridge to be placed in said loading chamber, a breech block having a forward portion adapted to push said cartridge into said firing chamber, a block slidably mounted adjacent said slot, an arm extending from said block into said loading chamber, the end of said arm being adapted to contact with said cartridge and withdraw it from the firing chamber, and an ejecting lever pivotally mounted on the outside of said barrel, and having a part adapted to be extended into said loading chamber for ejecting the cartridge therefrom.

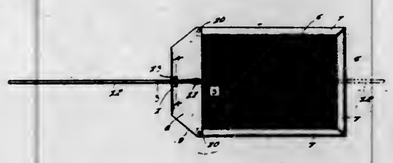
[Claim 3 not printed in the Gazette.]

1,272,294. WHEELED SECTIONAL HARROW. WILLIAM H. MIZE, Celina, Tex. Filed Jan. 12, 1918. Serial No. 211,598. (Cl. 55—89.)



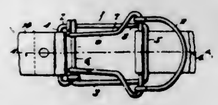
In a harrow of the class described, a truck frame comprising an axle bar, upper and lower longitudinally arranged bars secured to and extending rearwardly from the center of the axle bar, rearwardly converging bars having their rear ends secured between said upper and lower bars and having their front ends secured to the axle bar, a cross-bar connecting said rearwardly converging bars, standards extending downwardly from the cross-bar, inner and outer standards extending downwardly from the axle bar, and harrow sections arranged with their inner sides bearing against the inner standards and the standards of the cross-bar and with their outer sides pivotally connected to the outer standards.

1,272,295. FLY-SWATTER. FRANKLIN O. MOORE, Glendale, Cal. Filed Feb. 9, 1916. Serial No. 77,259. (Cl. 43—1.)



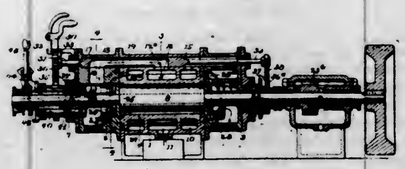
A fly swatter including a strip doubled along a longitudinal line to provide spaced and compressible side members, a swatter element clamped between the extreme free edges of the strip and terminating in spaced relation to the bight portion of the latter, a U-shaped handle pivotally secured to said strip, and pairs of bosses struck out from the compressible portions of the spaced side members of the strip adapted to receive the parallel members of the U-shaped handle for retaining the latter in extended or operated position.

1,272,296. BUCKLE. WILLIAM E. MORELAND, Union City, Ga. Filed Apr. 21, 1917. Serial No. 163,648. (Cl. 24—193.)



A buckle comprising a main frame, a pivot bar extending transversely across and secured to said main frame, a U-shaped clamping member having the ends of its arms pivotally secured to the pivot bar between the side bars of the main frame, the base of the U-shaped clamping member extending transversely across and beyond the side bars of the main frame adjacent the opposite end of said frame to define a clamping bar, inwardly extending portions connecting the extremity of the clamping bar with the arms of the clamping member to provide additional bearing against the main frame and a bail secured to the clamping bar at a point beyond the side bars of the main frame.

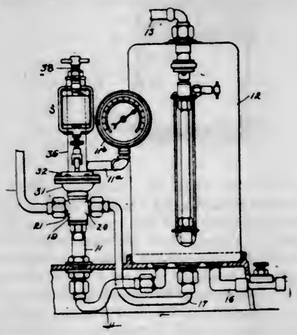
1,272,297. ROTARY ENGINE. NEWELL H. MOTSINGER, Fredonia, Pa. Filed Aug. 11, 1915. Serial No. 44,857. (Cl. 121—51.)



1. In a rotary engine the combination of a casing providing a central and side cylinders, a steam jacket surrounding said cylinders, a steam chamber, piston rotors mounted to operate in the side cylinders, a rotor coöperable with said piston rotors mounted in the central cylinder, a rotary valve controlling the passage of steam from said jacket to the steam chamber, a rotary valve controlling the passage of steam from said chamber to the piston rotors, and a common manually controlled means for actuating said valves, substantially as set forth.

[Claims 2 to 12 not printed in the Gazette.]

1,272,298. CARBONATING APPARATUS. EDWARD E. MURPHY, Winchester, Mass. Filed May 5, 1917. Serial No. 166,732. (Cl. 261—27.)



1. In carbonating apparatus, in combination, a carbonating tank, a motor-driven pump connected with the tank to supply liquid thereto, means for delivering gas under pressure to the tank, and controlling means actuated by variations of gas pressure in the tank to stop the pump when the gas pressure rises, and start the pump when the gas pressure is lowered, said controlling means including a member movable in one direction by an increase of gas pressure in the tank to stop the pump, and a yielding pressure device, independent of the tank, for moving the said member in the opposite direction to start the pump.

2. In carbonating apparatus, in combination, a carbonating tank, a motor-driven pump connected with the tank to supply liquid thereto, a gas conduit connected with the tank to deliver gas under pressure thereto, a gas valve in said conduit, and controlling mechanism actuated by variations of gas pressure in the tank and adapted to simultaneously stop the pump and close said valve when the gas pressure rises, and to simultaneously start the pump and open said valve when the gas pressure is lowered, said controlling means including a member connected with the gas valve and movable in one direction by an increase of gas pressure in the tank to stop the pump and close the gas valve, and a yielding pressure device, independent of the tank, for moving said member in the opposite direction to start the pump and open the gas valve.

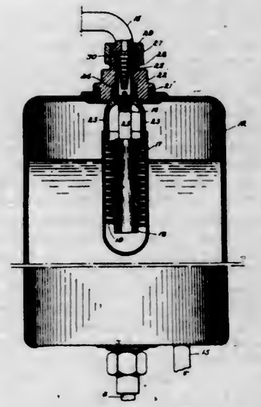
3. In carbonating apparatus, in combination, a carbonating tank, means for delivering gas under pressure thereto, a pump connected with the tank to supply liquid thereto, an electric motor for said pump, and controlling means actuated by variations of gas pressure in the tank and including a switch in circuit with the motor, a member connected with the switch and movable in one direction by a rise of gas pressure to break the circuit and stop the pump, and a yielding pressure device, independent of the tank, for moving said member in the opposite direction to close the circuit and start the pump when the gas pressure is lowered.

4. In carbonating apparatus, in combination, a carbonating tank, means for delivering gas under pressure thereto, a pump connected with the tank to supply liquid thereto, an electric motor for said pump, and controlling means actuated by variations of gas pressure in the tank and including a switch in circuit with the motor, a member connected with the switch and movable in one direction by a rise of gas pressure in the tank to break the circuit and stop the pump, and a spring adapted to move said member in the opposite direction and thereby close the circuit and start the pump when the gas pressure is lowered.

5. In carbonating apparatus, in combination, a carbonating tank, means for delivering gas under pressure thereto, a pump connected with the tank to supply liquid thereto, an electric motor for said pump, and controlling means actuated by variations of gas pressure in the tank and including a switch in circuit with the motor, a member connected with the switch and movable in one direction by a rise of gas pressure in the tank to break the circuit and stop the pump, a spring adapted to move said member in the opposite direction and thereby close the circuit and start the pump when the gas pressure is lowered, and means for regulating the force of said spring to vary the degree of gas pressure required to start the pump.

[Claims 6 to 8 not printed in the Gazette.]

1,272,299. MIXING MEANS FOR CARBONATING APPARATUS. EDWARD E. MURPHY, Winchester, Mass. Filed May 5, 1917. Serial No. 166,733. (Cl. 261—75.)



1. A carbonating apparatus comprising a tank having a contracted water inlet arranged to direct a jet of water downwardly from the top of the tank, a fixed jet-receiving cup closed at its lower end and having an open upper end communicating with a gas space above an accumulation of water in the tank, a central flow conduit in the cup arranged in the path of said jet, to receive the jet and gas moving therewith, and separated from the wall of the cup by an annular space forming a return conduit, and means in said return conduit for deflecting and elongating a current of water and gas flowing upwardly therethrough.

2. A carbonating apparatus comprising a tank having a contracted water inlet arranged to direct a jet of water downwardly from the top of the tank, a fixed jet-receiving cup closed at its lower end and having an open upper end communicating with a gas space above an accumulation of water in the tank, a central flow conduit in the cup arranged in the path of said jet, to receive the jet and gas moving therewith, and separated from the wall of the cup by an annular space forming a return conduit, and a helical current-deflecting and elongating flange in said return conduit adapted to guide upwardly flowing water and gas in a helical path.

3. A carbonating apparatus comprising a tank having an opening in its top, an annular bushing detachably secured in said opening having means at its upper end for connection with a conduit member, a contracted nozzle supported by said bushing and adapted to direct a jet of water downwardly into the tank, a hanger attached to

and depending from said bushing and a fixed jet-receiving mixing-cup supported by said hanger, and having an open upper end communicating with a gas space above an accumulation of water in the tank, the cup being adapted to cause an entrainment of gas by the water entering the cup, the hanger and cup being of smaller diameter than said opening and bushing, and insertible and removable with the bushing.

4. A carbonating apparatus comprising a tank having an opening in its top, an annular bushing detachably secured in said opening, and having means at its upper end for connection with a conduit member, a thimble occupying the bore of said bushing and forming another conduit member extending through the bushing, said thimble having a contracted nozzle at its lower end, adapted to direct a jet of water downwardly into the tank, a hanger attached to and depending from said bushing, and a fixed jet-receiving mixing-cup supported by said hanger, and having an open upper end communicating with a gas space above an accumulation of water in the tank, the cup being adapted to cause an entrainment of gas by the water entering the cup, the hanger and cup being of smaller diameter than said opening and bushing, and insertible and removable with the bushing.

1,272,300. RESILIENT WHEEL. MELVIN A. MYERS, Kane, Pa., assignor of three two-hundredths to H. W. Short, one two-hundredth to Chas. W. Nelson, two two-hundredths to F. W. Spencer, five two-hundredths to Archie Short, three two-hundredths to Meade Robinson, three two-hundredths to C. G. Dahlen, three two-hundredths to Lyle F. Robinson, two two-hundredths to W. P. Zink, three two-hundredths to Harold Spencer, two two-hundredths to William H. Spence, three two-hundredths to F. J. Robinson, two two-hundredths to Norman Patrick, two two-hundredths to E. R. Collinge, three two-hundredths to Carl Johnson, three two-hundredths to William Faul, six two-hundredths to John H. Scott, one two-hundredth to G. G. Fitzgerald, two two-hundredths to L. Dunn, one two-hundredth to Laurence Ohlson, two two-hundredths to G. D. Leake, five two-hundredths to C. R. Carnahan, one two-hundredth to Byron Foulkrod, one two-hundredth to Ernest Emmons, one two-hundredth to Porter Smith, two two-hundredths to C. K. Dunn, one two-hundredth to A. Baker, two two-hundredths to Robert Hennell, one two-hundredth to Axel E. Anderson, one two-hundredth to W. W. Paup, one two-hundredth to T. M. McElree, three two-hundredths to Leon Torpy, two two-hundredths to Mrs. Dora Robinson, two two-hundredths to Miss Ruth Robinson, one two-hundredth to Mrs. Stella Kelsey, one two-hundredth to Adelbert Sykes, one two-hundredth to H. Danks, one two-hundredth to Lloyd Sanford, one two-hundredth to John A. Johnson, two two-hundredths to Tom Faul, one two-hundredth to William Burton, one two-hundredth to William Noel, one two-hundredth to F. H. Micheau, two two-hundredths to William Simpkins, two two-hundredths to Norman Simpkins, one two-hundredth to Henry Bearkle, one two-hundredth to Joe Micheau, two two-hundredths to George Hart, one two-hundredth to John Block, one two-hundredth to C. A. Dunn, two two-hundredths to J. J. Kuhns, one two-hundredth to E. Eckborg, and one two-hundredth to Bessie L. Short. Filed Nov. 1, 1916. Serial No. 128,995. (Cl. 152—8.)

6. A spring wheel including inner and outer rims, a plurality of springs arranged on the inner rim having curved ends extending beyond the outer rim, chairs on the outer rim having curved ends for receiving the curved ends of the springs said chairs having recesses and passages, threaded studs secured to the ends of the springs, turnbuckles for the threaded studs adapted to be seated in the recesses of the chairs, said passage permitting free access to said turnbuckles, a resilient tire arranged on the outer rim, a supporting member for the tire arranged on the outer rim, said tire having side portions, and securing rings for the tire side portions.

7. A spring wheel including inner and outer rims, a plurality of springs including free ends and base portions the base portions being secured to the inner rim, chairs on the outer rim having curved portions for receiving the free ends of the springs, threaded studs on the ends of the springs, turnbuckles for engagaing the threaded studs, a tire for the outer rim having side portions extending inwardly beyond the inner rim to form a covering, a support arranged on the outer rim for supporting the tire, and annular bands secured to the inner rim for clamping the inwardly extending portions of the tire.

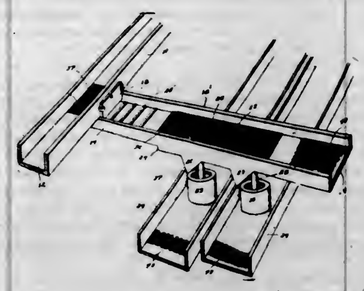


10. A spring wheel including inner and outer rims, a plurality of springs arranged on the inner rim having curved ends extending beyond the outer rim, chairs on the outer rim having curved ends for receiving the curved ends of the springs, said chairs having recesses and side passages, threaded studs secured to the ends of the said springs, turnbuckles for the threaded studs adapted to be seated in the recesses of the chairs, said passages permitting free access to said turnbuckles, a resilient tire positioned on the outer rim, a supporting member for the tire positioned on the outer rim, said tire having side portions, and securing rings for the tire side portions.

11. A spring wheel including inner and outer rims, a plurality of springs mounted upon the inner rim and having free ends fitting upon said outer rim, chairs positioned upon said outer rim, said chairs comprising bodies having flange portions extending therefrom for retaining the chairs upon said outer rim, said chairs having recesses formed in their bodies and side passages communicating with said recesses, turnbuckles engaged with the free ends of said springs, whereby the tension of said springs may be increased or decreased upon the adjustment of the turnbuckles, said springs bearing upon the bodies of said chairs and said turnbuckles positioned within said recesses, said side passages permitting free access to said turnbuckles.

[Claims 1 to 5, 8, and 9 not printed in the Gazette.]

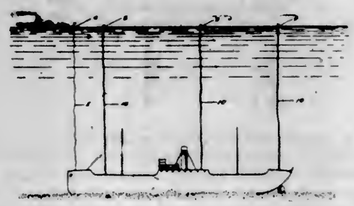
1,272,301. ORE-SEPARATOR. ROBERT E. NELSON, Keystone, S. D. Filed Aug. 30, 1917. Serial No. 189,008. (Cl. 83—59.)



2. In a device of the class described, a sluiceway, a catch basin connected therewith and having an outlet portion, a pipe connected with the outlet portion, a receptacle into which the pipe discharges, and removable deflecting devices within the receptacles each comprising an annular member having a central opening and having inwardly and downwardly turned flanges adjacent to the openings, said flanges being concentric with reference to the discharge pipe and of greater diameter than the latter, and fibrous material located within the bottom of the receptacle.

[Claims 1 and 3 not printed in the Gazette.]

1,272,302. SALVAGING APPARATUS. ALFRED H. NYLEN, Piedmont, Cal. Filed Jan. 31, 1917. Serial No. 145,749. (Cl. 114—51.)



1. In an apparatus for raising sunken vessels, a marker buoy mounted on the vessel so as to float to the surface of the water upon sinking of the vessel, a line connecting said buoy to the vessel, a line float mounted on the vessel, means carried by said marked buoy for releasing said float to allow the float to float to the surface of the water, and means carried by said float for attaching a hawser to the vessel to raise the vessel.

2. In an apparatus for raising sunken vessels, a marker buoy mounted on the vessel so as to float to the surface of the water upon sinking of the vessel, a line connecting said buoy to the vessel, a line float mounted on the vessel, means carried by said marker buoy for releasing said float to allow the float to float to the surface of the water, a U-shaped tube mounted on the vessel with its side members extending upwardly, and a light line extending through said tube and connected to said float.

4. In an apparatus for raising sunken vessels, a receptacle mounted on the vessel, a marker buoy freely mounted in said receptacle so as to float to the surface of the water when the vessel sinks, a line connecting said buoy to the vessel, floats mounted on the vessel and normally locked to the vessel, means connected to said marker buoy for releasing said floats, and means associated with said floats for attaching a hawser to the sunken vessel to raise the same.

5. In an apparatus for raising sunken vessels, a marker buoy mounted on the vessel to float on the surface of the water when the vessel is sunk, a line connecting said buoy to the vessel, receptacles mounted on the vessel, floats mounted in said receptacles and normally locked therein, means connected to said marked buoy for releasing said floats so that they may float to the surface of the water, and means associated with said floats for attaching a hawser to the sunken vessel.

6. In an apparatus for raising sunken vessels, a receptacle mounted on the vessel, a buoy resting in said receptacle, a rope connected to said buoy and the vessel normally packed within said receptacle, said buoy being adapted to float to the surface of the water when the vessel is sunk and said line being adapted to unpack to permit said buoy to leave the receptacle and float to the surface of the water, a second receptacle mounted on the vessel, means for normally locking said float in the receptacle, a rope connected at its respective ends to said float and to the vessel and normally packed in said receptacle, a line connected to the rope of said buoy and to said locking means for releasing said float so that said float may float to the surface of the water with its connecting rope, and means associated with the float rope for attaching a hawser to the sunken ship.

[Claim 3 not printed in the Gazette.]

1,272,303. KEYLESS LOCK. ANTHONY OSTROSKE, Detroit, Mich. Filed Dec. 1, 1917. Serial No. 204,951. (Cl. 70—18.)



1. The combination of a lock having a locking bolt mounted for reciprocation, of a rotatable member capable of movement transversely of said lock, means including an arm pivotally secured to the bolt and engageable with the rotatable member when the latter is moved transversely of the lock, means for holding the said arm in position for such engagement, means for holding said rotatable member in disengaged position, and means located upon the outside of the lock, whereby the engaging position of the rotatable member and arm may be determined.

2. The combination with a lock having a locking bolt mounted for reciprocation, of a rotatable member capable of movement transversely of said lock, an arm having one end pivotally secured to said bolt, the free end of said arm having an aperture therein, a pin carried by the rotatable member for engagement with the aperture in the arm when the said rotatable member is moved transversely of the lock, means for holding said arm in position for such engagement, means for holding said rotatable member and arm in disengaged position and means located upon the outside of the lock whereby the engaging position of the rotatable member and arm may be determined.

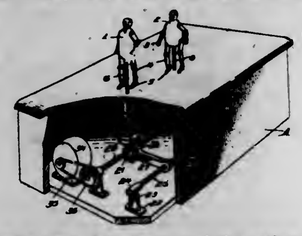
3. The combination with a lock having a locking bolt mounted for reciprocation within a casing, of a rotatable member capable of movement transversely of said casing, a pivoted arm carried by the locking bolt and provided with an aperture, a pin carried by the rotatable member for engagement with said aperture upon transverse movement of the rotatable member, fixed means carried by the casing for holding the arm in position for engagement by the pin when the bolt is retracted, means for holding the arm in position for engagement by the pin when the bolt is in a locking position, means for holding said pin normally disengaged from the arm and means located upon the outside of the casing for predetermining the pin and arm engaging position.

4. The combination with a lock having a locking bolt mounted for reciprocation within the casing, of a rotatable member capable of movement transversely of said casing, a pivoted arm carried by said locking bolt and provided with an aperture, a pin carried by the rotatable member for engagement with the aperture upon transverse movement of the rotatable member, means for holding the arm in position for engagement by the pin when the bolt is retracted, a stop carried by the locking bolt and located in the path of the arm for holding the latter in position for engagement by the pin when the bolt is in a locking position, means for holding said pin normally disengaged from the arm and means upon the outside of the casing for predetermining the pin and arm engaging position.

1,272,304. FIGURE TOY. ELBERT C. OWENS, Ottawa, Kans. Filed Mar. 9, 1917. Serial No. 153,635. (Cl. 46—40.)

1. A device of the character described including a casing, a plurality of jointed figures, rods connected to the figures and slidably mounted in the top of the casing, a plunger head on the lower end of each rod, a rotatably mounted shaft, cams carried by the shaft, rockably mounted yokes in operable relation with the cams and arranged beneath the plunger heads for supporting the

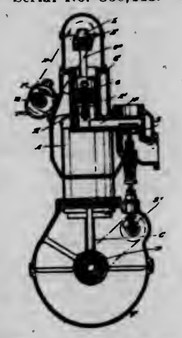
plunger heads, means adjustably connected to the yokes for varying the position of the rods during sliding movement to consequently vary the relation of the jointed



figures with respect to the top of the casing, and means for rotating the shaft to assure of the actuation of the figure supporting rods.

[Claims 2 and 3 not printed in the Gazette.]

1,272,305. INTERNAL-COMBUSTION ENGINE. STEWART CHARLES PAGET, Wallingford, England. Filed Sept. 5, 1914. Serial No. 860,443. (Cl. 123—37.)



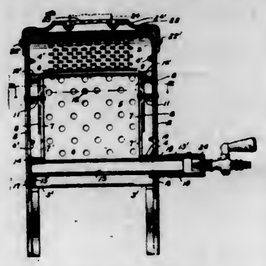
6. In an internal combustion engine, the combination with a plurality of cylinders having pistons therein, of a secondary cylinder overlying each cylinder in communication therewith, and a fuel feed for each secondary cylinder, a sliding piston valve controlling the communication between the secondary cylinder and power cylinder, an auxiliary motor, and means connecting said auxiliary motor with said sliding valve whereby a series of charges may be delivered to the secondary cylinder and exploded therein during a single downward stroke of the piston in the power cylinder to accord with the demand upon the engine, and a scavenging piston arranged in each secondary cylinder and actuated by the auxiliary motor for forcing the gases undergoing combustion contained within the firing cylinder into the power cylinder.

8. In an internal combustion engine, the combination with a power cylinder and a piston, a secondary cylinder and piston driven and controlled by an independent motor, said secondary cylinder being adapted to receive the fuel mixture and explode the same within the cylinder, the charges of gases undergoing combustion being transferred to the power cylinder as frequently as may be required in accordance with the demand upon the engine, and means for controlling the transfer of gases while undergoing combustion from the secondary cylinder to the working cylinder.

[Claims 1 to 5 and 7 not printed in the Gazette.]

1,272,306. GAS-STOVE. ROBERT T. PARISEN, Pittsburgh, Pa., assignor to Lawson Manufacturing Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Mar. 6, 1917. Serial No. 152,572. (Cl. 126—85.)

1. A gas stove comprising opposite wall-forming plates, a combustion chamber between and secured to said plates with the combustion chamber adapted to expand and contract, a gas burner for the combustion chamber with the burner comprising a tie for uniting said plates, and resilient means for uniting the burner and plates.



2. A gas stove comprising opposite wall-forming plates with one of said plates formed with a burner passage, a combustion chamber between and secured to said plates, a burner of greater length than the distance between said wall-forming plates with the burner entered in said plate passage and secured to the opposite wall, and resilient means securing the burner to said passage-formed plate.

3. A gas stove comprising opposite wall-forming plates, a combustion chamber between and secured to the plates, one of the plates having a burner receiving passage, a burner of greater length than the distance between said wall-forming plates with the burner entered through said passage and secured to the opposite wall-forming plate, the burner having an abutment at the exterior of said passage-formed plate, and a coiled spring embracing the burner intermediate said abutment and the passage-formed plate.

4. A gas stove comprising opposite wall-forming plates with one of said plates formed with a burner passage, a combustion chamber between and secured to the plates, a burner of greater length than the distance between said plates and adapted to be entered through said passage and be secured to the opposite plate, the burner having a boss at its outer end, and an abutment-forming collar adapted to fit the extremity of the burner and formed with a bayonet slot adapted to embrace the burner lug, and a coiled spring encircling the burner intermediate said collar and said passage-formed plate.

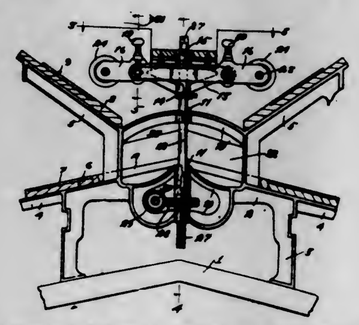
5. A gas stove comprising opposite upright wall-forming end plates, an intermediate perforated body-forming portion secured to the plates, a laterally closed top member secured to the end plates and providing a cap for the perforated body portion, the top member having a grill-forming perforated top surface shaped to receive a flue pipe, and a gas burner within the stove.

1,272,307. FRUIT-SIZER. GEORGE D. PARKER, Riverside, Cal. Filed Dec. 27, 1917. Serial No. 209,014. (Cl. 130—32.)

1. A fruit sizer having a plurality of parallel fruit runways each composed of parallel spaced wall members, one wall member of each runway formed of a plurality of independent interconnected rolls arranged end to end and providing a series of graduated discharge outlets for the escape of the sized fruit therethrough, and means for simultaneously adjusting the roll wall members of said parallel runways to simultaneously vary all of said discharge outlets.

5. A sizer having a plurality of parallel fruit runways each composed of parallel spaced wall members, said members providing a series of graduated discharge outlets for the escape of the sized fruit therethrough, certain corresponding wall members of each runway being downwardly inclined toward each other with their adjacent edges in spaced relation to provide a common escape between the same for sized fruit from corresponding outlets.

9. A fruit sizer having a plurality of parallel fruit runways each composed of parallel spaced wall members providing a series of graduated discharge outlets for the escape of the sized fruit therethrough, corresponding wall members of said runways comprising units adapted for adjustment relatively to the other corresponding wall members of said runways to vary said discharge outlets, a plurality of frames mounting said adjustable units of the respective runways, and an adjustable supporting standard associated with each frame.

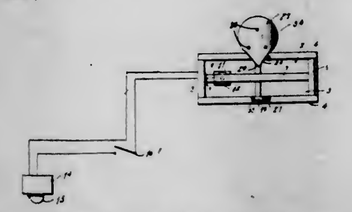


13. A fruit sizer having a plurality of parallel fruit runways each composed of parallel spaced wall members providing a series of graduated discharge outlets for the escape of the sized fruit therethrough, corresponding wall members of said runways comprising units adapted for adjustment relatively to the other corresponding wall members of said runways to vary said discharge outlets, a plurality of frames mounting said adjustable units of the respective runways, and a standard supporting each of said frames, said standards capable of axial rotation to permit of the independent adjustment of said frames.

17. A fruit sizer provided with a central longitudinally disposed opening forming a common discharge outlet for the sized fruit, a plurality of associated parallel fruit runways situated above the centrally disposed outlet and each composed of a pair of parallel spaced wall members providing a series of graduated discharge outlets for the escape of the fruit as sized, corresponding wall members of said runways comprising units adapted for adjustment relatively to the other corresponding wall members of said runways to vary said discharge outlets, a plurality of vertically disposed adjustable standards extending upwardly in alinement with said longitudinally disposed opening, and a frame carried by each standard and extending transversely of said longitudinally disposed opening for supporting the adjustable units of adjacent runways, said standards capable of independent and simultaneous adjustment.

[Claims 2 to 4, 6 to 8, 10 to 12, 14 to 16, 18, and 19 not printed in the Gazette.]

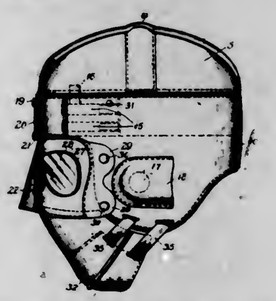
1,272,308. RAIN-SIGNAL. VICTOR PARKER, Maberry, N. C. Filed Mar. 21, 1917. Serial No. 156,436. (Cl. 200—27.)



1. A device of the class described comprising a casing, an arm hingedly arranged in the casing, a weight carried by the arm, a breakable strip supported across the casing supporting the arm in raised position, a spout arranged on the casing, located directly over the strip, a block, a circuit closer carried by the block, said circuit closer located in the path of the arm, whereby when the arm is dropped, the circuit will be completed, as and for the purpose specified.

[Claims 2 to 4 not printed in the Gazette.]

1,272,309. AVIATION-HELMET. JOSEPH PAUPA, Chicago, Ill., assignor to Thos. E. Wilson & Co., Chicago, Ill., a Corporation of Maine. Filed Aug. 23, 1917. Serial No. 188,246. (Cl. 2—117.)



2. A helmet comprising a crown piece and a head band loosely connected thereto and consisting of a main section to embrace the sides and back of the head and a front section to engage the forehead, said front section being resiliently connected to said main section, an eye shield supported on said helmet and movable to and from operative position, and a chin pad resiliently connected to said head band.

3. A helmet comprising a head covering, an eye and nose shield, a link pivotally connected to said shield and covering whereby the former may be moved upwardly to inoperative position and separate means independently connected to said head covering to protect the chin and mouth of the wearer.

6. A helmet comprising a head covering, an eye shield, a link pivotally connected to said head covering, and a hook on said shield normally gripping said link and disengageable therefrom by a downward pulling force applied to said shield.

7. A helmet comprising a head covering, an eye shield, a link, a hook on said head covering normally gripping one end of said link, said shield being pivotally connected to the other end of said link to permit movement of said shield to inoperative position.

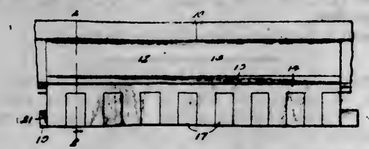
9. A helmet comprising a crown piece, an expansible head band, an eye and nose shield, a link connecting said shield to said head band, and a chin pad separate from said eye and nose shield resiliently connected to said head band and carrying a mouth covering, the several parts being so formed as to completely inclose the head and face of the wearer when adjusted to operative position.

[Claims 1, 4, 5, and 8 not printed in the Gazette.]

1,272,310. SPLICE-BAR. CALHOUN PETTY, Frierson, La., assignor of one-half to W. A. Shamberger, Frierson, La. Filed June 26, 1917. Serial No. 177,096. (Cl. 239—6.)

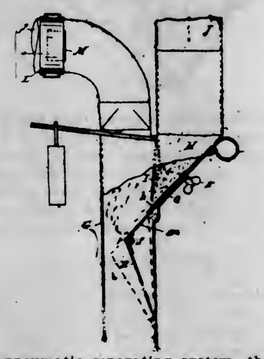
A rail joint comprising side plates each having a base portion composed of a number of spaced sections, the sections of one base portion fitting snugly in the spaces between the sections of the other base portion, the lower surfaces of all of the sections lying in the same plane which is parallel with the upper edges of the sections, the lower edges of all of the sections extending completely across the base portions whereby the ends of all of the sections at the same side of the rail joint lie in the same

plane, all of the base sections having at their lower edges notches which are in alinement with each other longitudinally of the joint, said notches having inclined side walls and the side walls of the notches converging toward each other longitudinally of the joint thereby forming a



wedge shape slot which is open at its ends and at the lower surfaces of the base portions of the plates, and a wedge shaped member fitting snugly in the slot and having its lower side lying in the same plane as that in which the lower surfaces of the base portions of the plate lie.

1,272,311. PNEUMATIC SEPARATING SYSTEM. HAROLD M. PLAISTED, Granite City, Ill., assignor to The Williams Patent Crusher & Pulverizer Co., St. Louis, Mo., a Corporation of Missouri. Filed Feb. 23, 1918. Serial No. 218,845. (Cl. 130—17.)

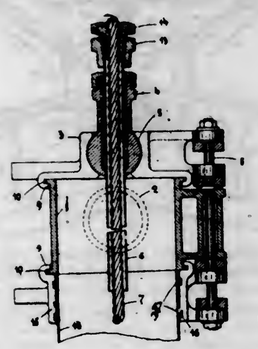


1. In a pneumatic separating system, the combination with a vertically positioned pipe, subject to an upward air suction having a regulatable feed inlet at one side, and a downwardly inclined hopper bottom communicating with said feed inlet, of a slide valve located below and parallel to said bottom, to deliver the gravitating feed and foreign matter off its bottom edge, and extendible into said pipe to vary the air velocity past said edge, and an apron pivotally supported by the bottom edge of the slide, inclined downward and backward to a sliding engagement with the side wall of said pipe, substantially as described.

2. In a pneumatic separating system the combination with a vertically positioned pipe subject to an upward air suction, having a regulatable feed inlet at one side, and a downwardly inclined hopper bottom, communicating with said feed inlet, and an air inlet valve above the feed inlet to lessen the air suction and mix air with the passing feed, of an inclined slide valve mounted below said bottom to form a continuation thereof, a depending backwardly inclined apron pivoted to the bottom edge of the slide valve, with its lower edge in slidable contact with one side of said pipe, whereby is provided an air inlet valve above the feed inlet to vary the quantity of air sucked in, and an air cut off valve below the feed inlet to vary the velocity, whatever the quantity of air in said system.

1,272,312. WELL-CASING HEAD. IWAN PODOBIEDOFF, Petrograd, Russia. Filed Feb. 2, 1916. Serial No. 75,751. (Cl. 166—14.)

1. In a rope-boring, well-sinking apparatus, the combination, with the inner or working pipe; of a hood adapted to removably rest on the upper end of said pipe and provided with an inlet for washing-fluid, said hood having its top and bottom edges turned laterally outward and also having an exteriorly-located vertical pivot securely attached to its body and projecting at opposite ends above and below said edges; a two-part ring having its members pivoted at one end to the lower end of said pivot and arranged to encircle said pipe when closed together, said ring members being formed at their upper edges with interiorly-recessed flanges adapted to fit over the out-turned lower edge of the hood so as to clamp the latter in place on the pipe end; means for fastening the free ends of the ring members together in closed position; a two-part cover adapted to rest upon the



upper end of said hood and having its members pivoted to the upper end of said pivot, the lower edges of said cover members being formed with interiorly-recessed flanges adapted to fit over the out-turned edge of said hood so as to clamp said cover in place on said hood; and means for fastening the free ends of the cover members together in closed position; said cover members being provided with mating openings through which the boring rope passes, and both said cover members and said ring members being adapted to be opened or spread apart to disengage their flanged ends from the out-turned edges of the hood and to permit the hood, ring and cover to be removed bodily as a unit from the pipe.

[Claim 2 not printed in the Gazette.]

1,272,313. ARC-LAMP. EDWIN STANTON PORTER, New York, N. Y. Filed Feb. 3, 1917. Serial No. 146,355. (Cl. 176—103.)



1. In an electric arc lamp, a carbon holder and feed, comprising a frame, a pair of peripherally grooved rollers on one side of the carbon, a peripherally grooved roller on the opposite side of the carbon, means for varying the width of one of said rollers, and means for actuating one of said rollers to feed said carbon.

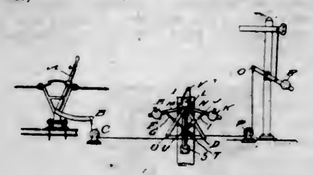
6. In an electric arc lamp, a carbon holder and feed, comprising a frame, a pair of peripherally grooved rollers on one side of a carbon, a peripherally grooved roller on the opposite side of the carbon, means for actuating one of said rollers to feed said carbon, means for adjusting the width of one of said pair of rollers to swing one end of the carbon laterally, and means on said roller disposed on the opposite side of the carbon for maintaining pressure on said carbon in the lateral movement thereof.

11. In an electric arc lamp, a carbon holder and feed, comprising a frame, a pair of peripherally grooved rollers on one side of the carbon, a sleeve movably mounted in each side of said frame having beveled cheeks jointly forming a peripherally grooved roller on the opposite side of the carbon, a spindle longitudinally movable in said sleeves, means for preventing rotation of said spindle in said sleeves, a spring bearing on one of said sleeves and on said spindle tending to hold said cheeks together yieldingly, and means for actuating one of said rollers to feed the carbon.

15. In a carbon holder and feeder for an electric arc lamp, a grooved roller having moving cheeks whereby the width of the groove may be varied, and means for moving said cheeks.

[Claims 2 to 5, 7 to 10, 12 to 14, and 16 to 19 not printed in the Gazette.]

1,272,314. RAILWAY-SIGNAL MIDWAY WIRE-COMPENSATOR. REGINALD LIONEL POWELL, Cawnpore, India. Filed Mar. 10, 1917. Serial No. 153,873. (Cl. 246—5.)



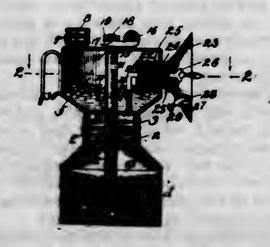
1. A railway signal wire compensator, comprising weighted cranks to which are attached respectively the wires leading to the signal and signal lever, a member having limited swinging movement, and a connection between each crank and one end of the swinging member, whereby all the said parts will swing together.

2. A railway signal wire compensator, comprising weighted cranks mounted on a common pivot and to which are attached respectively the wires leading to the signal and signal lever, a swinging member mounted upon the pivot of the cranks, and a connection between the cranks and swinging member.

6. A railway signal wire compensator, comprising two weighted cranks to which are attached respectively the wires leading from the signal and signal lever, a pivoted and spring pressed floating lever provided with a longitudinal slot and teeth, a stop for said lever, links pivoted at one end to the cranks and having their other ends provided with slots, one of the links being provided with a pin for engaging the teeth of the floating lever, and a pin passing through the slots of the links and floating lever.

[Claims 3 to 5 not printed in the Gazette.]

1,272,315. LAMP. JAMES H. POWERS, Evansville, Ind. Filed Apr. 27, 1917. Serial No. 164,924. (Cl. 48—4.)



1. An acetylene lamp including a sectional body embodying a carbid receiving and a gas generating cup and a superimposed water chamber, a water feeding tube disposed centrally through the bottom of the chamber and projecting into the cup and having the upper end connected to the top of the chamber and further provided with an opening near the bottom of the chamber for establishing communication between the chamber and the cup, another tube telescopically received in the water feeding tube, the upper end of the last mentioned tube being adjustably mounted near its upper end in the water feeding tube and projecting above the top of the chamber, the lower end of the last mentioned tube being bifurcated so as to coöperate with the opening in the water feeding tube in controlling the flow of water to the cup, agitating arms formed on the free ends of portions of the tubes formed by the bifurcations, and an operating element connected to the upper projecting end of the last mentioned tube for partially rotating and oscillating the last mentioned tube to allow water to flow through the opening and between the bifurcation into the cup and for actuating the agitating arms.

[Claim 2 not printed in the Gazette.]

1,272,316. KNITTING-NEEDLE. FRANK K. RICH, Hyannis, Mass., assignor to The Standard Comb Company, Leominster, Mass., a Firm consisting of William H. Lane and J. Philip Legere, Leominster, Mass. Filed Feb. 21, 1918. Serial No. 218,383. (Cl. 66—17.)



2. As an article of manufacture, a knitting needle having a circumferential groove located in the point thereof a short distance from the extreme end, the general shape of the point of the needle on both sides of the groove being substantially the same and the surfaces all being smooth and without abrupt changes in direction.

[Claim 1 not printed in the Gazette.]

1,272,317. CIRCUIT-CONTROLLER. WALTER C. REED, Dalton, Mass., assignor to The Telelectric Company, Pittsfield, Mass., a Corporation of Massachusetts. Filed Oct. 25, 1916. Serial No. 127,571. (Cl. 175—321.)



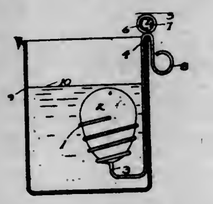
1. A circuit controller comprising an electro-magnet provided with an armature arranged to open and close the circuit to be controlled and with another armature subject to a greater attractive force than the first-mentioned armature and having means for engaging the latter and forcing it away from the magnet in opposition to the attraction exerted thereby.

[Claims 2 and 3 not printed in the Gazette.]

1,272,318. EGG-BOILER. PETER A. RODGERS, Proctor, Minn. Filed May 31, 1917. Serial No. 172,094. (Cl. 53—1.)

As an article of manufacture an egg boiler formed of a single piece of wire, one portion of which is shaped into an egg receptacle, an upstanding projection from said

egg receptacle formed into a hook adapted to engage the edge of a cooking vessel or tumbler to support the egg boiler therein, a finger grip in the extreme end of



the outer side of said hook and a dial carrying ring formed in the wire above said hook.

1,272,319. [WITHDRAWN.]

1,272,320. [WITHDRAWN.]

1,272,321. GAS-ABSORPTION APPARATUS. HENRY BYRON SLATER, Los Angeles, Cal. Filed Feb. 19, 1916. Serial No. 79,341. (Cl. 261—116.)

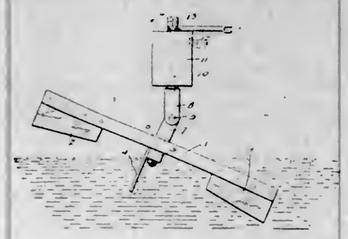


1. An apparatus for effecting absorption of gas in a liquid comprising a casing provided with an inlet at its top and an outlet at its bottom for the liquid, a trough within the casing adapted to receive the liquid from said inlet and having overflow means adapted to distribute said liquid in a descending sheet, deflector means for deflecting said descending sheet of liquid and adapted to discharge the liquid in a second descending sheet, inlet means for the gas, said outlet for the liquid being provided with aspirating means, and pipe means connecting said aspirating means to said casing on the other side of the sheets of descending liquid from the entering gas, so that the liquid passing through said aspirating means will draw the gas through said sheets of descending liquid.

[Claim 2 not printed in the Gazette.]

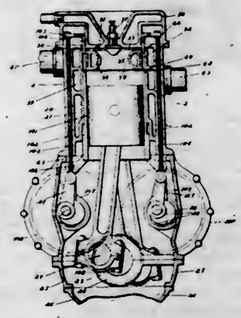
1,272,322. CURRENT-MOTOR. ORA SONNERS, Cody, Wyo. Filed Oct. 23, 1916, Serial No. 127,195. Renewed June 13, 1918. Serial No. 239,894. (Cl. 170—99.)

1. In a current motor, the combination of spaced vanes, an arm to which the vanes are fastened, a rocker vane positioned substantially midway between the aforesaid vanes and at substantially right angles thereto, a connecting rod for operatively connecting the current motor with a device to be actuated thereby, and means operatively connecting the vanes and arm to the connecting rod.



[Claims 2 to 4 not printed in the Gazette.]

1,272,323. ENGINE. MILTON TIBBETTS, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Original application filed Mar. 18, 1909, Serial No. 484,231. Divided and this application filed May 4, 1914. Serial No. 836,284. (Cl. 123—75.)



1. The combination with a casing having a head extending into one end thereof and a working piston in the casing, of a single sleeve valve between the extended part of the head and the surrounding casing, and another sleeve valve between the piston and the casing, and means for operating said valves.

2. The combination with a casing having a head extending into one end thereof and a working piston in the casing, of a single sleeve valve between the extended part of the head and the surrounding casing, and another sleeve valve between the piston and the casing, and positive means for operating said valves.

3. The combination with a casing having a working piston therein and formed with inlet and outlet ports arranged axially beyond one end of the path of travel of the piston and an annular unobstructed valve chamber coaxial with the piston, of a plurality of open ended sleeve valves relatively movable and arranged end to end in said chamber for controlling said ports, and means for actuating the said valves.

4. The combination with a cylinder having a working piston therein and formed with inlet and exhaust ports at one end thereof, of a pair of sleeve valves concentric with the cylinder axis, one sleeve controlling the inlet and the other the exhaust port, and means for actuating said sleeves including a connection to one sleeve at the head end of the cylinder and a connection to the other sleeve at the opposite end of the cylinder.

5. The combination with a cylinder having a fixed cylinder head and a working piston therein, said cylinder formed with inlet and outlet ports at one end thereof, of a pair of sleeve valves concentric with the cylinder axis for controlling said ports, and means for actuating said sleeve including a connection to one sleeve at the head end of the cylinder and a connection to the other sleeve at the opposite end of the cylinder.

[Claims 6 to 18 not printed in the Gazette.]

1,272,324. BASKET. GAINES M. WALKER, St. Louis, Mo. Filed Sept. 8, 1914. Serial No. 860,584. (Cl. 217—122.)

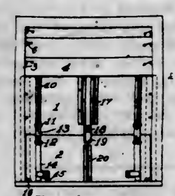


1. A basket constructed of a blank made from a single piece of wood veneer, covered with paper so that the same may be bent into basket form without disturbing the wood fiber and forming cracks, and comprising a bottom portion, integral sides and end portions, said end portions being formed by slitting the blank, the slits of each end converging toward each other, overlapping outer rim sections secured to the sides and ends of the basket, their ends being secured together, inner end sections of less length than the length of the basket, reinforcing strips disposed transversely of the basket and secured to the outer and inner rim sections, and handles bent to conform with the ends of the basket and pivotally secured to the inner and outer rim sections and to the ends of the reinforcing strips.

3. A basket constructed of a blank made from a single piece of wood veneer, covered with paper, so that the same may be bent into basket form without disturbing the wood fiber, comprising a bottom portion, integral sides and ends, each end being outwardly curved and formed of an inner flap and two outside overlapping flaps, the inner edges of the overlapping flaps projecting beyond the inner edges of the inner flaps, overlapping outer rim sections secured to the sides and outwardly curved ends of the basket, inner reinforcing strips of less length than the length of the basket, transverse reinforcing strips disposed between the wood veneer and paper, and a pair of handles bent to conform to the outwardly curved ends of the basket, pivotally secured to the inner and outer rims and reinforcing strips.

[Claim 2 not printed in the Gazette.]

1,272,325. FREIGHT-CAR GRAIN-DOOR. BEVILL WALLER WHITWORTH, Cedar Falls, Iowa, assignor of one-third to Thomas A. Whitworth and one-third to Charles S. Whitworth, Cedar Falls, Iowa. Filed Sept. 22, 1917. Serial No. 192,682. (Cl. 20—34.)



1. A door-casing, a sectional closure therefor whose sections are connected by double-joint hinges, the lowermost section having vertical longitudinally rigged bars fixed thereon, each hinge including an element projecting therefrom adapted to fit and co-engage with the rib on the adjacent vertical bar when the section and said element are respectively moved to a certain relative position, and clips on said lowermost section movable to detachably clamp said elements upon said ribs.

2. A door-casing, a sectional closure therefor whose sections are connected together by hinges which permit both translatory and swinging movements of one section relative to the one to which it is hinged, the uppermost of said sections having fixed thereon depending parts abutting on the ends of the swinging section, and having in the rear depending bars extending across the lowermost section to project laterally therefrom at each end thereof to cover the joint between said section and said depending parts of the uppermost section, and said bars each having an upturned lower extremity adapted to receive and co-engage with the lower edge of said last-mentioned section when in a position closed against said bars and first-mentioned section.

1,272,326. OPTICAL ADJUSTER FOR RANGE-FINDERS. ARCHIBALD BARR and WILLIAM STROUD, Glasgow, Scotland, assignors to Barr and Stroud, Limited, Glasgow, Scotland. Filed June 8, 1915. Serial No. 32,989. (Cl. 88—2.7.)



1. The method of increasing the accuracy of optical adjusters for use in connection with self-contained base rangefinders by reducing to a minimum the difference in the refractive indices of portions of the air inclosed in the apparatus through which different parts of the operative beams of light pass.

2. An optical adjuster for use in connection with a self-contained base rangefinder having a partially evacuated case inclosing the whole or a part of the space traversed by the adjuster beams of light.

3. An optical adjuster for use in connection with a self-contained base rangefinder having objective mark glasses with a space between them, an airtight case inclosing the said space, a connection with the case adapted for use in connection with an appliance for reducing the pressure within the space.

4. An optical adjuster for use in connection with a self-contained base rangefinder having objective mark glasses with a space between them, an airtight case inclosing the said space, a connection with the case adapted for use in conjunction with an appliance for reducing the pressure within the space, associated with prisms forming parts of the adjuster placed outside the airtight case.

6. An optical adjuster for use in connection with a self-contained base rangefinder having a partially evacuated case inclosing the whole or a part of the space traversed by the adjuster beams of light, in combination with means for giving support at portions of the transverse surfaces not traversed by beams of light of optical parts of the adjuster that are subjected to differential air pressure.

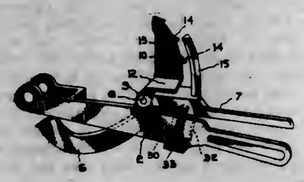
[Claim 5 not printed in the Gazette.]

1,272,327. KEYLESS LOCK. ZENOPHILE BISAILLON, Laprairie, Quebec, Canada, assignor to himself, Joseph Moise Longtin, Hercule Arthur Longtin, Joseph Bernard, and J. Amedee Dulude, Laprairie, Quebec, Canada. Filed Nov. 24, 1913, Serial No. 802,728. Renewed Dec. 14, 1916. Serial No. 137,062. (Cl. 70—102.)

1. In a lock for sliding doors the combination with inter-engaging locking devices of a vibratory member operatively connected to one of the locking devices, and means intermediate of the member and locking device and requiring a plurality of vibrations of the vibratory member to disengage the locking devices.

2. In a lock for sliding doors the combination with inter-engaging locking devices; of means for disengaging

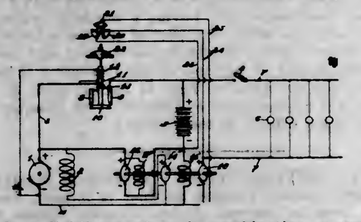
the said devices, said means consisting of a manually-operated vibratory lever, a pinion mounted upon one end of said lever, a rack upon one of said devices and intermeshing with the pinion and means constructed and arranged to prevent rotation of the pinion relatively to the rack when the lever is moved in one direction and to permit rotation of the pinion when the lever is moved in the opposite direction.



3. In a lock for sliding doors, the combination with inter-engaging locking devices consisting of a fixed device and a hook fulcrumed substantially midway its length and having a rack on one end thereof; of means for disengaging the said devices, said means consisting of a manually operated vibratory lever having a forked end, a pinion pivotally mounted within the forked end and having a ratchet wheel formed integrally therewith, said pinion intermeshing with the rack and a pawl carried by said lever and constructed and arranged to engage the ratchet wheel for the purpose of preventing rotation of the pinion relatively to the rack when the lever is moved in one direction and to permit rotation of the pinion when the lever is moved in the opposite direction.

4. In a keyless lock comprising a relative stationary part and a part movable with one member of the structure to be locked, a fixed device within the stationary part, a hook within the movable part and adapted to engage the fixed device, a manually operated member within the movable part, means operatively connecting the manually operated member to the hook and translating the motion of the manually operated member into a motion effecting the disengaging of the hook from the fixed device and supplemental locking means operated by the hook, which supplemental locking means consists of a tongue projecting from the movable part having an aperture, and a tumbler within the stationary part to engage the aperture, such tumbler having a part engaged by the hook for the purpose set forth.

1,272,328. SYSTEM OF ELECTRICAL DISTRIBUTION. WILLIAM L. BLISS, New York, N. Y., assignor, by mesne assignments, to U. S. Light & Heat Corporation, Niagara Falls, N. Y., a Corporation of New York. Filed July 2, 1904, Serial No. 215,085. Renewed Sept. 8, 1914. Serial No. 860,790. (Cl. 171—313.)



1. In a lighting system, in combination, a generator driven at a variable speed, a storage battery and translating devices arranged in circuit with said generator, provided also with means for regulating said generator to confine the output thereof within pre-arranged limits, said means being provided with an electromagnetic winding for controlling the action thereof, arranged in circuit in series with said storage battery, and said regulating means including means for causing current from said generator to prevent said winding from being rendered effective by current from said storage battery.

5. In a lighting system, in combination, a generator running at variable speed, a storage battery and translating devices arranged in circuit with said generator, a dynamo electric machine for modifying the electric conditions in said system, said machine being provided with an electro-magnetic winding for controlling the action thereof, and said winding being arranged in circuit, in series with said storage battery, an electric motor co-acting with said dynamo electric machine and circuit connections for causing the motor current to prevent said winding from being rendered effective by the current from said storage battery.

8. In a lighting system, in combination, a generator driven at a variable speed, a storage battery and translating devices arranged in circuit with said generator, a dynamo electric machine operatively arranged in circuit with said generator to confine the output thereof within pre-arranged limits, the field winding of said machine being arranged in circuit in series with said storage battery, and said circuit being arranged to cause current from said generator to prevent said winding being rendered effective by current from said storage battery.

12. In a lighting system, in combination, a generator, a storage battery and translating devices arranged in circuit with said generator, a dynamo electric machine for regulating the voltage impressed upon said translating devices, the field winding of said dynamo electric machine being arranged in circuit in series with said storage battery and circuit connections being arranged for causing current from said generator to prevent said winding from being rendered effective by current from said storage battery.

[Claims 2 to 4, 6, 7, 9 to 11, and 13 to 27 not printed in the Gazette.]

1,272,329. PNEUMATIC ABDOMINAL SUPPORT. ROSE SCHUESSLER CARLING, Los Angeles, Cal. Filed Nov. 6, 1916. Serial No. 129,757. (Cl. 128—26.)



A pad for abdominal supports and the like comprising a metal back, a fabric cover cemented to the metal back, a sheet of soft rubber cemented to the fabric cover upon the inner side of the metal back and having its marginal edge extending beyond the metal back all the way around, a front wall having its marginal edge placed near to the marginal edge of the back plate and within the marginal edge of the rubber sheet and vulcanized, a marginal rubber strip forming a binding around the edge of the back plate and overlapping the edge of the back plate and cemented to the back plate fabric cover and to the marginal portion of the rubber sheet extending beyond the edge of the back plate, a cover of soft fabric cemented to the face of the front wall and extending over the marginal strip forming the soft edge around the back plate, and a pneumatic valve inserted through the back plate and coverings.

1,272,330. WAGON. ORAL CARMICHAEL, Toledo, Ohio, assignor to Gendron Wheel Company, Toledo, Ohio, a Corporation of Ohio. Filed Sept. 28, 1917. Serial No. 193,673. (Cl. 21—43.)

1. A wagon, comprising sides, ends and a bottom formed of fixed and movable sections, parallel links connected to said movable section and arranged on opposite sides thereof, said links being positioned and proportioned to swing said movable section from the plane of the bottom to a plane adjacent to the top, with the rear edge in contact with the rear end of the wagon, said links being rearwardly inclined to the raised position of the movable section.



2. A wagon, comprising sides, ends and a bottom formed of fixed and movable sections, the movable section being intermediate fixed sections at opposite ends of the wagon, and parallel links arranged at opposite sides of the movable section and pivotally connected thereto, said links permitting the swinging of said movable section from the plane of the bottom to a plane adjacent to the top and in the upper position of adjustment standing obliquely to the rear with the rear edge of the movable section butting against the rear end of the wagon.

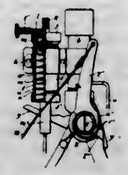
4. A wagon, comprising sides, ends and a bottom, the latter being formed of edge bars and a plurality of sections intermediate said edge bars of slightly lesser width than the space between said sides, the intermediate section being movable and the end sections fixed, top edge bars on said sides and ends, and parallel links connecting said movable sections to said edge bars, said links being positioned and proportioned to permit the swinging of said section from the plane of the bottom into a plane adjacent to the top, with its upper face flush with the upper face of said top edge strips and its rear edge abutting against the rear end, the links in this position of adjustment being inclined obliquely to the rear, for the purpose described.

5. A wagon, comprising sides, ends and a bottom formed of fixed and movable sections, the movable section being intermediate fixed sections at opposite ends of the wagon, and parallel links arranged at opposite sides of the movable section and pivotally connected thereto, said links permitting the swinging of said movable section from the plane of the bottom to a plane adjacent to the top and in the upper position of adjustment being inclined to the vertical, and an abutment engaged by the rear edge of the movable section in its raised position.

6. A wagon, comprising sides, ends and a bottom, the latter being formed of edge bars and a plurality of sections intermediate said edge bars of slightly lesser width than the space between said sides, and top edge bars on said sides and ends, the end section of the bottom being fixed and the intermediate section being adjustable from the plane of the end section to a position substantially flush with the top edge strips, with its rear edge abutting against the rear end.

[Claim 3 not printed in the Gazette.]

1,272,331. GAS LIGHTING AND EXTINGUISHING APPARATUS. DANIEL CARTER, Toronto, Ontario, Canada, assignor of one-half to James D. B. McNeice, Toronto, Ontario, Canada. Filed Jan. 15, 1917. Serial No. 142,453. (Cl. 67—16.)



1. In a gas lighting and extinguishing apparatus, comprising a gas burner and a stop-cock governing the flow of gas thereto, the combination of an air check controlling the movement of the stop-cock, a detent to hold the stop-cock open, and means actuated by the air check to render the detent inoperative by a partial actuation when the stop-cock is opened.

2. In a gas lighting and extinguishing apparatus, comprising a gas burner, and, a stop-cock governing the flow of gas thereto, the combination of an air check, controlling the movement of the stop-cock, a detent to hold the stop-cock open, and a mechanical actuator to open the stop-cock and release the detent for the closing action of the stop cock.

3. In a gas lighting and extinguishing apparatus, comprising a gas burner, and a stop-cock governing the flow of gas thereto, the combination of an air check, controlling the movement of the stop-cock, and a mechanical actuator to open the stop-cock and cause the operation of the air check, said air check comprising an air cylinder having inlet, exhaust, and relief ports, a piston movable within the air cylinder, and a piston rod for the piston connected with the stop-cock.

[Claims 4 to 15 not printed in the Gazette.]

1,272,332. GARMENT. BURTON R. CHARLES and PHYLLIS E. CHARLES, Victorville, Cal. Filed May 29, 1917. Serial No. 171,694. (Cl. 219—46.)



An electrothermal garment, comprising a flexible electrothermal ply, electrical conductors stitched to the outer face of said ply, an outer ply adjustably secured along its edge to the electrothermal ply, said outer ply carrying and supporting said electrothermal ply, and an inner ply or lining detachably secured to said outer ply, whereby the various plies may be detached from one another for cleansing purposes.

1,272,333. AERIAL MINE. RALPH J. DALY, Philadelphia, Pa. Filed Mar. 29, 1916. Serial No. 87,604. (Cl. 244—1.)



1. An aerial mine comprising a gas bag, a plurality of fuse bombs supported within said bag and electrical means for destroying said bag.

3. An aerial mine comprising a gas bag, a mine suspended therefrom, an ignition system for igniting the gas within the bag including an electric circuit, a manual operated switch for said circuit, and a plurality of circuit

closers carried by the bag exteriorly thereof and adapted to be operated by impact.

5. An aerial mine comprising a gas bag, a mine supported thereby, a plurality of fuse bombs supported within the bag, and electrical means for destroying said bag and mine.

7. An aerial mine comprising a gas bag, a mine supported thereby, a plurality of fuse bombs supported within the bag, electrical means for destroying said bag and mine, and said means including a plurality of circuit closers carried by said bag and mine, said closers being disposed exteriorly of the bag and mine respectively and adapted to be actuated by impact.

[Claims 2, 4, and 6 not printed in the Gazette.]

1,272,334. ELECTRIC-SPARK TIMER FOR GASOLENE-ENGINES. WILBURT B. DEAN, Grand Rapids, Mich. Filed Sept. 18, 1916. Serial No. 120,894. (Cl. 123—167.)



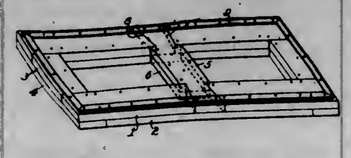
1. In combination with a cylinder having contact points extending inward from the inner surface thereof, and the central revoluble shaft of an electric spark timer for gasolene engines; a substantially annular spring metal plate having a contact point extending from one position of its edge in position to successively engage the contact points in the cylinder, said metal plate having a groove cut around outside of its connection with the shaft in such manner as to leave a connecting neck between the outer and inner circles thus formed, upon the side of the shaft bearing opposite from the contact point thus forming a spring member extending from the contact point around the shaft bearing and to the opposite side thereof, to insure perfect contact between the contact points on the plates and the contact points in the cylinder.

2. In combination with a metal cylinder having contact points equally spaced and extending inwardly from the inner periphery of the cylinder, and a revoluble shaft concentric of the cylinder, in spark timers for gasolene engines; annular plates securely mounted on the shaft and having a slot formed therein and extending nearly around outside of the shaft bearing forming a connecting neck at one point, contact points formed at the edge of the outer circle of said plate opposite to the connecting neck and in position to successively engage the several points in the cylinder as the shaft revolves, said outer circles of said plates forming long flexible springs to insure perfect contact between the contact points on the plates and the contact points in the cylinder as the shaft revolves.

3. In combination with a metal cylinder having inwardly extending contact points, and a centrally located revoluble shaft mounted therein; annular plates securely mounted on the shaft and having circular slots formed through just outside of the shaft bearings and arranged to form a narrow spring neck connecting the inner circle and the outer circle of each of said plates, a contact point formed on each plate opposite from the connecting neck, the ends of said contact points bent outward from each other to insure perfect contact between the points on the plates and the points in the cylinder, the outer circles of the plates forming long flexible springs for use in short space.

1,272,335. CRATE-BOTTOM FOR TOMBSTONES. CHARLES HAMILTON FAWCETT, Independence, Iowa. Filed May 3, 1917. Serial No. 166,178. (Cl. 217—36.)

1. A crate-bottom for tombstones and the like, comprising an open frame, and an intermediate supporting element removably connected thereto by a tongue and groove connection only, adapted to become disassociated



therefrom when the crate-bottom is moved downwardly only relatively to said element.

[Claim 2 not printed in the Gazette.]

1,272,336. LIFE-PRESERVER. SAMUEL P. EDMONDS, Catonsville, Md. Filed May 14, 1917. Serial No. 168,534. (Cl. 9—20.)

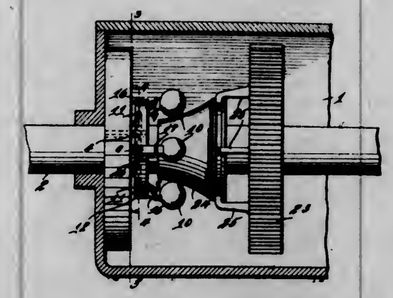


1. A life preserver, comprising a buoyant body member having the greater portion of its buoyancy in the front part, and a buoyant collar member secured to the neck of body member and normally outstanding therefrom.

4. A life preserver, comprising a jacket body member of suitable fabric and carrying buoyant material substantially throughout its front part and in the upper part only of its back part, and a buoyant collar member secured by a neck seam to the body member and normally outstanding therefrom.

[Claims 2 and 3 not printed in the Gazette.]

1,272,337. SAFETY-BRAKE FOR AUTOMOBILES AND OTHER VEHICLES. LEONARD J. HARVEY, Seattle, Wash. Filed Feb. 8, 1916. Serial No. 77,027. (Cl. 74—58.)



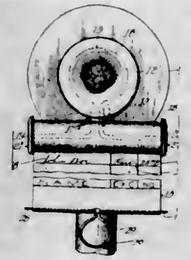
1. A device of the class described comprising a driving shaft, a casing, a collar formed upon said casing and provided with a plurality of notches, a disk carried by said driving shaft, and sliding dogs carried by said disk and engaging said notches for locking said shaft against rotation in one direction.

4. A device of the class described comprising a driving shaft, a casing, a collar formed upon said casing and provided with a plurality of notches, a disk carried by said driving shaft, sliding dogs carried by said disk and engaging said notches for locking said shaft against rotation in one direction, governor arms engaging said dogs for controlling the sliding movement of said dogs upon said disk, a governor arm supporting disk keyed to said shaft, yieldable means for normally urging the outer ends of said arms inwardly toward said shaft thereby normally urging said dogs to a locked position, a reverse gear carried by said driving shaft, and an operating cone on said driving shaft and connected to said reverse gear and adapted to engage the outer ends of said governor arms for swinging said arms and controlling the sliding movement of said dogs upon said disk.

5. A device of the class described comprising a driving shaft, a casing, locking means carried by said driving shaft, and adapted to move outwardly with respect to said shaft and into engagement with said casing, and means engaging said locking means at their inner ends for forcing said locking means to a locked position and thereby holding said shaft against rotation in one direction.

[Claims 2 and 3 not printed in the Gazette.]

1,272,338. ROLLER AND FLEXIBLE SHEET. WARREN W. HELLE, Hinsdale, Ill., assignor to Starite Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed May 29, 1915. Serial No. 31,129. (Cl. 40—1.)

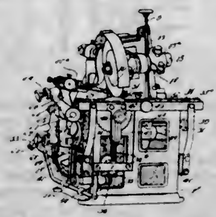


1. In a device of the character described, a roller formed of sheet material and of uniform diameter throughout its length, a flexible sheet secured thereto and means for rotatably supporting said roller comprising a bearing cap surrounding one end of said roller and engaging the periphery thereof.

10. In a device of the character described, a hollow roller, a flexible sheet secured thereto, means for rotatably supporting said roller comprising a bearing cap, a bar located within said hollow roller and having one end connected thereto, and a coiled torsion spring surrounding said bar and having one end connected thereto and its other end connected to said bearing cap, said roller having a notch therein and said bar having a lug engaging said notch.

[Claims 2 to 9 not printed in the Gazette.]

1,272,339. MACHINE FOR SHARPENING SAWS. GEORGE C. HUNTER, Cleveland, Ohio. Filed Dec. 28, 1917. Serial No. 209,217. (Cl. 76—41.)



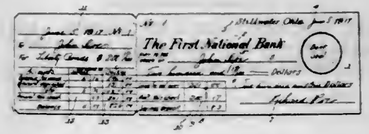
1. The combination with a saw sharpening machine of the type having a guide-way for a straight saw and means to advance the saw along the same, of a removable plate forming part of said guide-way, and means to support a circular saw for rotation in the position occupied by said plate, upon removal thereof.

9. In a saw sharpening machine, the combination of a fixed supporting circular rim, a guide having a circular cuff fitting said rim and adjustable angularly thereon, a carrier slidable on the guide, a rotary grinding disk mounted on the carrier, means to drive the disk, and means to reciprocate the carrier.

13. The combination of a fixed ring, an adjustable ring mounted to turn circumferentially therein, a grinding disk spindle extending transversely across one side of the adjustable ring and supported thereon, and a driving belt extending through the rings from the opposite side thereof and engaging the spindle to drive the same.

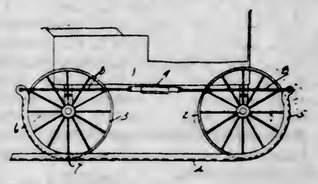
[Claims 2 to 8 and 10 to 12 not printed in the Gazette.]

1,272,340. CHECK. JACOB GARRETT KEMP, Stillwater, Okla., assignor of one-half to Monroe Job Otey, Stillwater, Okla. Filed Oct. 12, 1917. Serial No. 196,230. (Cl. 11—13.)



A check having the identification of a financial institution thereon and provided with spaces for the entry of the names of a payor and payee, a maximum payable amount specified in script thereon, an exact payable amount specified in script thereon, column spaces thereon, the maximum amount entered in figures at the tops of said spaces, the exact amount entered in figures in said column spaces below the first mentioned figures, and the difference between the two sets of figures entered in the spaces below the second mentioned figures.

1,272,341. DETACHABLE SLEIGH-RUNNER. JOHN F. LOUGHRAN, Chehalis, Wash. Filed Jan. 10, 1917, Serial No. 141,702. Renewed May 31, 1918. Serial No. 237,676. (Cl. 21—96.)

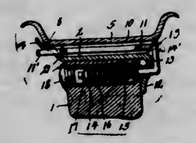


In a device of the class described the combination of a continuously channeled runner member having an upturned forward end which is curved to fit a front wheel, a continuously channeled and curved member pivoted within the first mentioned channeled member and adapted to fit the periphery of a rear wheel, clamping forks secured to the upper curved ends of each of the said channeled members and straddling the said wheels, and a turnbuckle clamp intermediate the said forks.

1,272,342. DEMOUNTABLE RIM. OSCAR ONSAL, Fremont, Mich. Filed Feb. 17, 1917. Serial No. 149,247. (Cl. 152—21.)

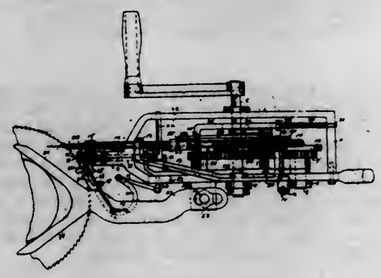
In a vehicle wheel an inner rim, lugs formed on the outer surface of said inner rim, an outer rim, lugs formed upon the inner surface of said outer rim and

engageable with said lugs on said inner rim, a flange on said inner rim engaged by said outer rim for preventing lateral displacement thereof, spaced shoulders on the inner and outer peripheries of said outer and inner rims respectively, a wedge driven between said shoulders whereby said outer rim is moved to engage said lugs with one another, a reduced tongue on the narrow



end of said wedge passing through a hole in said flange, a socket member secured laterally of the felly, a pin slidable and rotatable in said socket and having an angular end engageable within the notch in the wide end of said wedge, and a spring surrounding said pin within said socket and holding said angular end in engagement with said wedge.

1,272,343. GIN-SAW FILER AND GUMMER. JAMES E. NORMAN, Thorp Spring, Tex. Filed July 21, 1917. Serial No. 182,070. (Cl. 76—32.)



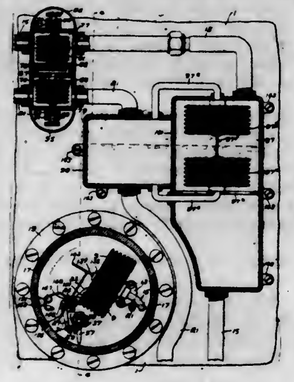
1. A saw filer and gummer including a reciprocating file, a chisel-like gummer arranged to engage between the saw teeth successively to secure the saw against rotation while being operated on by the file, and means arranged to impinge against the gummer at predetermined intervals to swage out the throats between the teeth.

4. In a saw filer and gummer, a chisel-like gummer whose operative end normally rests in the throat between two teeth of the saw, a hammer having a yieldable member resisting against the same, means for withdrawing said hammer to overcome the resistance of said yieldable member, said means being formed to permit the sudden release of the hammer whereby the yieldable member operates to cause said hammer to suddenly strike the opposing end of the gummer.

17. A saw filer and gummer including a pair of reciprocating files, a chisel-like gummer arranged to engage between the saw teeth to secure the saw against rotation, a hammer, means for withdrawing the hammer from the gummer and then releasing the hammer, a yieldable member operating upon the release thereof to cause it to strike said chisel and swadge out the throat between the teeth into which the gummer projects, a feed mechanism which clamps the saw and imparts successive partial rotationa thereto, to bring the saw teeth successively into position to be operated upon by the files and gummer, means for withdrawing the files and gummer from operative connection with the saw teeth, said means also actuating the feeder to partially rotate the saw when the files and gummer have been withdrawn from operative connection therewith.

[Claims 2, 3, 5 to 16, 18, and 19 not printed in the Gazette.]

1,272,344. MEASURING INSTRUMENT. EDGAR H. BRISTOL, Foxboro, Mass., assignor to The Foxboro Company, Foxboro, Mass., a Corporation of Massachusetts. Filed Jan. 10, 1913. Serial No. 741,198. (Cl. 73—110.)

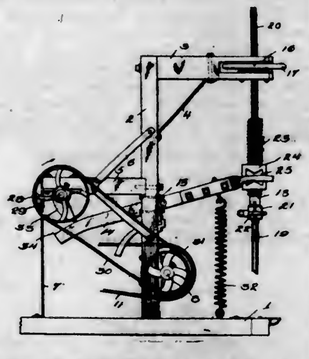


1. In an instrument of the class described, the combination of an index, an actuating shaft therefor, responsive means, a shaft movable thereby, said shafts being substantially alined and a coupling for said shafts having arms secured to said shafts and yieldable in the line thereof.

38. An instrument of the class described comprising responsive means arranged for reaction to differential pressures; means to transmit pressure thereto comprising liquid columns; and means rendered effective by depression of the liquid level in one column by increase of pressure thereon and acting temporarily to discharge sufficient liquid from the other column so as to occupy space in the first named column to maintain equality of the hydraulic pressures of said columns.

[Claims 2 to 37 not printed in the Gazette.]

1,272,345. DRILLING-MACHINE. JOSEPH BEAUDRY, Waterville, Me. Filed Jan. 15, 1916, Serial No. 72,318. Renewed Apr. 7, 1917. Serial No. 160,544. (Cl. 255—39.)

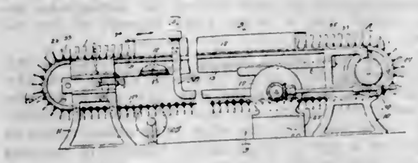


1. A drilling machine comprising an upright having an arm disposed to extend therefrom and provided at its outer end with a bifurcated opening, a drill carrier mounted in conjunction with said arm to be capable of vertical reciprocatory movement, a feed nut received around said drill carrier, an operating lever pivotally mounted on the upright standard to be capable of swinging movement and connected with the feed nut to transmit reciprocatory movement thereto as the lever is swung, and a hand-wheel mounted in the bifurcated portion of the arm to allow reciprocatory movement of the drill carrier and to turn the same to accomplish adjustment of the drill carrier vertically through the feed nut to raise and lower the drill.

2. A drilling machine comprising a base, an upright carried by said base, an arm disposed from the upright to overhang the base and provided at its end with a bifurcated opening, a drill carrier mounted in conjunction with said arm to be capable of vertical reciprocatory movement, a feed nut received around said drill carrier, an operating lever pivotally mounted in its middle portion on the standard to be capable of swinging movement, fork arms carried by one end of said operating lever and engaged to transmit reciprocatory movement to said feed nut as the lever is rocked, means to rock the lever, and a hand wheel mounted in the bifurcated portion of the arm to allow reciprocatory movement of the drill carrier and to turn the same to accomplish adjustment of the drill carrier vertically through the feed nut to raise and lower the drill.

3. A drilling machine comprising a base, an upright mounted on said base, an arm carried by the upper end of said upright and provided on its free end with a bifurcated portion, a frame member mounted on the opposite side of the upright, a power shaft mounted near the lower end of the upright, a hand wheel mounted in the bifurcated portion of the arm, a drill carrier mounted in conjunction with said arm and said hand wheel to be capable of vertical reciprocatory movement and provided with screw-threads, a feed nut received on the screw-threaded portion of said drill carrier, means to hold a drill secured with said drill carrier, an operating lever pivoted in its middle portion to the upright above the mounting of the power shaft, fork arms on said operating lever connected with said feed nut, a spring connected between the operating lever and the base to normally swing said lever in one of its paths of movement, an operating shaft carried by the frame member at a point adjacent the free end of the operating lever, a driving connection from the power shaft to said operating shaft, and a cam carried by said operating shaft to swing the operating lever against the tension of the spring and to release the same to permit return movement under the action of the spring.

1,272,346. APPARATUS FOR DRYING BOTTLES. FREDERICK L. JEFFERIES and WILLIAM SPAIN, Riverside, Ill., assignors to Corn Products Refining Company, a Corporation of New Jersey. Filed June 22, 1917. Serial No. 176,337. (Cl. 34—12.)



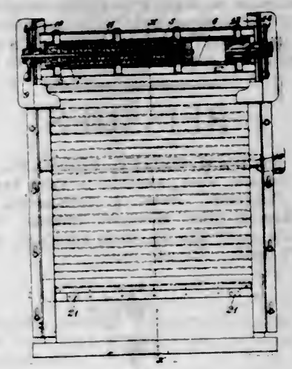
1. In apparatus for drying receptacles, the combination of a hot air trunk, a conveyer which is movable lengthwise of the trunk and forms the top of the same, and means for holding receptacles in inverted position on said conveyer provided with air ducts for introducing hot air from the trunk into the receptacles.

2. In apparatus for drying receptacles, the combination of a hot air trunk, a conveyer which is movable lengthwise of the trunk and forms the top of the same, means for holding receptacles in inverted position on said conveyer provided with air ducts for introducing hot air from the trunk into the receptacles, and cushioning supports for the necks of the receptacles.

3. In apparatus for drying receptacles, the combination of a receptacle support, a tubular member extending through said support over which a receptacle is adapted to be placed in inverted position, and a coiled spring surrounding the lower end of the tubular member and bearing against said support upon which the receptacle is adapted to rest so that the open end of the same is raised from the support.

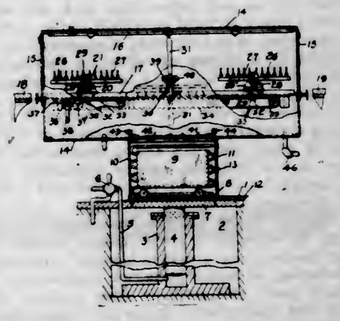
[Claims 4 to 22 not printed in the Gazette.]

1,272,347. FIRE-SHUTTER. WILLIAM M. BRUNST, Columbus, Ohio, assignor to The Kinnear Manufacturing Company, Columbus, Ohio, a Corporation of West Virginia. Filed Oct. 22, 1914. Serial No. 868,010. (Cl. 189—58.)



In combination with a flexible fire resisting curtain, a roller therefor, means for partially counterbalancing the curtain, a removable weight auxiliary to the curtain, means on the lower portion of the curtain for receiving and supporting said weight in the normally raised position of the curtain, thermally controlled means for holding the curtain with the weight in normally raised position and fixed means for supporting said weight in the path of movement of the said weight-receiving means at a point intermediate the completely raised and completely closed positions of the curtain whereby when the curtain is raised to its normal position the removable weight is picked up by said receiving means and when the curtain is lowered said weight is caught and detained by the aforesaid fixed weight-supporting means.

1,272,348. APPARATUS FOR MANUFACTURING ARTICLES FROM LIQUID MATERIAL. NEIL D. CRAWFORD, Elizabeth, N. J., assignor to Rubber Regenerating Company, a Corporation of Indiana. Filed Nov. 9, 1915. Serial No. 60,595. (Cl. 18—24.)



1. In a dipping and drying apparatus, a vacuum chamber, means for controlling a drying medium therein, a chamber for a dipping solution, a horizontal support and

a plurality of carriers thereon for forms, a carrier being disposed at each side of said chamber, means for reciprocating each carrier into and out of register with said chamber, and means for realtively moving the carrier and chamber to immerse the forms in the dipping solution.

10. In a dipping and drying apparatus, a container, a guide-way therein, trucks adapted to travel on said guide-way, carriers for the forms on which articles are to be made mounted on said trucks, means operated externally of said container for propelling two trucks therein independently of each other, alternately to the dipping point, means operated externally of said container for inverting said carriers at the dipping point, and means for raising a mass of the material, used in the manufacture of said articles, into contact with said forms when inverted.

[Claims 2 to 9 not printed in the Gazette.]

REISSUES.

14,492. STUD-AND-SOCKET FASTENER. FRED S. CARR, Newton, Mass., assignor to Carr Fastener Company, Cambridge, Mass., a Corporation of Maine. Filed May 22, 1918. Serial No. 236,059. Original No. 1,184,319, dated May 23, 1916, Serial No. 46,069, filed Aug. 18, 1915. (Cl. 24—218.)



1. A stud and socket fastener comprising a stud member having an annular inwardly facing shoulder at its outer end portion, and a socket member composed of a casing including an outer plate having a centering opening fitting the stud, an intermediate plate, and a back plate, and resilient jaws confined between said outer and intermediate plates and coöperating with said shoulder in opposing a direct outward movement of the casing relatively to the stud, said jaws being displaceable to release said shoulder by a tipping movement of the casing and jaws relatively to the stud, said back plate being spaced from the jaws and provided with an elongated opening formed to coöperate with the inner portion of the stud in opposing a tipping movement of the socket and jaws in one or more directions, and in permitting such tipping movement in a different direction.

2. A stud and socket fastener comprising a stud member having an annular inwardly facing shoulder at its outer end portion, and a socket member composed of a casing including an outer plate having a centering opening fitting the stud, an intermediate plate, and a back plate, and resilient jaws confined between said outer and intermediate plates and coöperating with said shoulder in opposing a direct outward movement of the casing relatively to the stud, said jaws being displaceable to release said shoulder by a tipping movement of the casing and jaws relatively to the stud, said back plate being spaced from the jaws and provided with an elongated opening formed to coöperate with the inner portion of the stud in opposing a transverse tipping movement of the socket and jaws in either direction and a longitudinal tipping movement in one direction, and in permitting a longitudinal tipping movement of the socket and jaws in a different direction.

3. A stud and socket fastener comprising a stud member having an annular inwardly facing shoulder at its outer end portion, and a socket member composed of a casing including an outer plate, an intermediate plate, and a back plate, and resilient jaws confined between said outer and intermediate plates and coöperating with said shoulder in opposing a direct outward movement of the casing relatively to the stud, said jaws being displaceable to release said shoulder by a tipping movement of the casing and jaws relatively to the stud, said front plate being provided with a centering opening fitting the stud, and the intermediate and back plates being provided with elongated openings formed to coöperate with the inner portion of the stud in opposing a tipping movement of the socket and jaws in one or more directions, and in permitting such tipping movement in a different direction.

4. A stud and socket fastener comprising a stud member having an inwardly facing jaw-engaging shoulder, and a socket member including an outer plate, an intermediate plate and a back plate having openings to receive the stud member, and resilient jaws confined between the front and intermediate plates, one of the two last mentioned plates being provided with a flange constituting a relatively wide wear-reducing seat for the stud between said plates.

5. A stud and socket fastener comprising a stud member having an inwardly facing jaw-engaging shoulder, and a socket member including an outer plate, an intermediate plate and a back plate having openings to receive the stud member, and resilient jaws confined between the front and intermediate plates, the front plate and the intermediate plate being provided with means for preventing contact between the burred outer ends of said jaws and the surfaces of said plates.

6. A stud and socket fastener comprising a stud having a head providing a locking shoulder and a socket comprising a casing, means in the casing for engaging said shoulder, said casing having an opening for the introduction of said stud formed closely to fit said stud on one side thereof rearwardly of said shoulder and being extended on the opposite side to provide a clearance.

7. A stud and socket fastener comprising a stud having an annular reduced neck and a socket comprising a casing, resilient means within said casing for engaging said neck, said casing having an opening in the wall thereof providing for the insertion of said stud having a width substantially equal to the diameter of the stud and a length greater whereby relative tipping of the parts from three sides will be resisted by engagement of said wall with the stud at a point spaced from said neck and permitted from the fourth side.

8. A stud and socket fastener comprising a stud having a reduced annular neck providing a symmetrical head and a socket having a wall provided with an elongated opening to receive the stud, the socket providing means coöperating with said head to hold the elements against axial separation and with the stud positioned against one end of the opening.

9. A fastener comprising a stud and a socket having means for interlocking therewith, said socket providing two-point support for said stud at the bottom and two sides thereof and a single point support at the top thereof.

10. A stud and socket fastener comprising a stud having a reduced neck, a socket comprising spaced walls having apertures to receive the stud, jaw means between said walls for engaging said neck, one aperture substantially fitting said stud, the other being alined therewith throughout a part of the perimeter thereof but extended on one side to provide a clearance between the same and the stud.

11. A fastener as defined in claim 10 wherein the stud is symmetrical and annularly grooved to provide said neck.

12. A fastener comprising a stud having a shoulder, a socket having resilient means for engaging the shoulder and tending to separate therefrom on relative tilting of the stud and socket, said socket having an elongated opening at one end of which the stud seats at a point remote from the neck.

13. A fastener comprising a stud and a socket having jaws for engagement therewith and having an elongated opening to receive said stud provided with a flange at one end extending lengthwise of the stud for engagement therewith.

14. A socket for fasteners comprising a casing having walls, a resilient jaw member confined between the same.

the casing having means for preventing contact between the burred ends of said member and the walls.

15. In combination with a symmetrical stud of circular section, a socket having yielding means for interlocking with the stud and provided with an opening to admit the stud partially circular but eccentrically extended at one side.

DESIGNS.

52,157. COMBINATION-TOOL. LOUIS V. ARONSON, Newark, N. J. Filed Apr. 30, 1918. Serial No. 231,762. Term of patent 7 years.



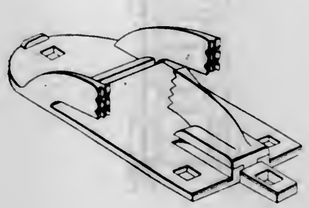
The ornamental design for a combination tool, as shown.

52,158. WASTE-BASKET. EDWIN H. DERRY, Erie, Pa. Filed Jan. 11, 1918. Serial No. 211,441. Term of patent 7 years.



The ornamental design for a waste basket as shown.

52,159. RAILROAD-TIE PLATE. ISAAC L. EDWARDS, Aurora, Ill. Filed Apr. 20, 1917. Serial No. 163,534. Term of patent 14 years.



The ornamental design for a railroad tie plate as shown and described.

52,160. PANEL FOR FURNITURE, CASKETS, AND INTERIOR AND EXTERIOR DECORATIONS. ADOLPH M. HOLSTEIN, Syracuse, N. Y. Filed May 2, 1917. Serial No. 166,041. Term of patent 3½ years.



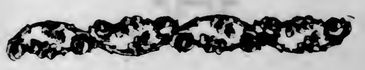
The ornamental design for a panel for furniture, caskets, and interior and exterior decorations, substantially as shown and described.

52,161. PILASTER FOR FURNITURE, CASKET, INTERIOR OR EXTERIOR DECORATION. ADOLPH M. HOLSTEIN, Syracuse, N. Y. Filed May 2, 1917. Serial No. 166,042. Term of patent 3½ years.



The ornamental design for a pilaster for furniture, casket, interior or exterior decoration, substantially as shown and described.

52,162. BORDER ORNAMENT FOR FURNITURE, CASKET, INTERIOR OR EXTERIOR DECORATION. ADOLPH M. HOLSTEIN, Syracuse, N. Y. Filed May 2, 1917. Serial No. 166,043. Term of patent 3½ years.



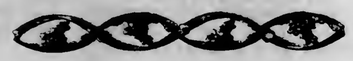
The ornamental design for a border ornament for furniture, casket, interior or exterior decoration, substantially as shown and described.

52,163. BORDER ORNAMENT FOR FURNITURE, CASKET, INTERIOR OR EXTERIOR DECORATION. ADOLPH M. HOLSTEIN, Syracuse, N. Y. Filed May 2, 1917. Serial No. 166,045. Term of patent 3½ years.



The ornamental design for a border ornament for furniture, casket, interior or exterior decoration, substantially as shown and described.

52,164. BORDER ORNAMENT FOR FURNITURE, CASKET, INTERIOR OR EXTERIOR DECORATION. ADOLPH M. HOLSTEIN, Syracuse, N. Y. Filed May 2, 1917. Serial No. 166,046. Term of patent 3½ years.



The ornamental design for a border ornament for furniture, casket, interior or exterior decoration, substantially as shown and described.

52,165. CORNER ORNAMENT FOR FURNITURE, CASKETS, AND INTERIOR AND EXTERIOR DECORATIONS. ADOLPH M. HOLSTEIN, Syracuse, N. Y. Filed May 2, 1917. Serial No. 166,047. Term of patent 3½ years.



The ornamental design for a corner ornament for furniture, caskets, and interior and exterior decorations, substantially as shown and described.

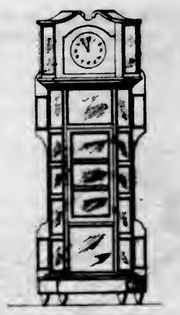
52,166. FURNITURE, CASKET, INTERIOR OR EXTERIOR DECORATION. ADOLPH M. HOLSTEIN, Syracuse, N. Y. Filed Aug. 22, 1917. Serial No. 187,548. Term of patent 3½ years.



The ornamental design for furniture, casket, interior or exterior decoration, substantially as shown and described.

52,167. ADVERTISING-CABINET. WILLIAM F. JONES and WOODUS KELLUM, Wilmington, N. C. Filed Mar. 13, 1918. Serial No. 222,250. Term of patent 14 years.





The ornamental design for an advertising cabinet, substantially as shown.

52,168. SPOON, FORK, OR SIMILAR ARTICLE. FREDERICK KAUPMANS, Brooklyn, N. Y., assignor to Joseph Fahys & Company, New York, N. Y., a Corporation of New York. Filed Apr. 27, 1918. Serial No. 231,259. Term of patent 7 years.



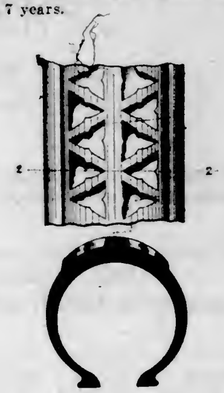
The ornamental design for a spoon, fork or similar article, as shown.

52,169. MIRROR-PEDESTAL. EVELD L. NELSON, Minneapolis, Minn. Filed Apr. 18, 1918. Serial No. 229,453. Term of patent 14 years.



The ornamental design for a mirror pedestal, as shown.

52,170. TIRE-CASING. WILLIAM C. OWEN, Cleveland, Ohio. Filed Dec. 26, 1917. Serial No. 208,996. Term of patent 7 years.



The ornamental design for a tire-casing, as shown.

52,171. GLASS PLATE OR SIMILAR ARTICLE. CHARLES L. REIZENSTEIN, Pittsburgh, Pa. Filed July 16, 1917. Serial No. 180,947. Term of patent 14 years.



The ornamental design for a glass plate or similar article, as shown and described.

TRADE-MARKS

OFFICIAL GAZETTE, JULY 9, 1918.

(PUBLISHED JULY 27, 1918.)

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 14 of said act, a fee of ten dollars must accompany each notice of opposition.

Ser. No. 99,301. (CLASS 28. JEWELRY AND PRECIOUS-METAL WARE.) R & G Co., Attleboro, Mass. Filed Nov. 14, 1916. Under ten-year proviso.



Particular description of goods.—Articles of Merchandise Made of or Plated with Precious Metal—Namely, Link-Buttons, Studs, Collar-Buttons, Vest-Buttons, Full-Dress-Shirt Sets, Bracelets; Chains for Personal Wear, Including Vest-Chains, Coat-Chains, Neck-Chains, and Outing-Belt Chains; Match-Boxes, Cigar-Cutters, Cigarette-Cases, Pencils, Nail-Clips, Cigar-Piercers, Pocket-Knives, Knife and Pencil Combinations, Pencil and Cigar-Cutter Combinations, Perfume-Balls, Lockets, Tie-Clips, Collar-Holders, Fobs, Coin-Holders, and Belt-Buckles.

Claims use since the year 1880.

Ser. No. 102,778. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS, NOT INCLUDING ELECTRICAL APPARATUS.) MAXON PREMIX BURNER COMPANY, Muncie, Ind. Filed Apr. 6, 1917.

PREMIX

Consisting in the word "Premix."

Particular description of goods.—Gas-Burning Apparatus Employing a Fan, Producing a Blast of Gas and Air Which is Burned to Produce a Heat of Great Intensity and is Used Commercially for Such Work as Metal Forging, Brazing, Case-Hardening, &c.

Claims use since January, 1917.

Ser. No. 102,896. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) TAYLOR, CLAPP & BEALL, New York, N. Y. Filed Apr. 11, 1917.



The picture being fanciful.

Particular description of goods.—Bleached and Brown Cotton Sheetings.

Claims use since 1901.

Ser. No. 102,978. (CLASS 38. PRINTS AND PUBLICATIONS.) H. M. VAN HOESEN, INC., Chicago, Ill. Filed Apr. 13, 1917.



Particular description of goods.—A Magazine or Periodical Irregularly Issued.

Claims use since about Mar. 1, 1917.

Ser. No. 103,067. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) PEP PHARMACAL CO., Kansas City, Mo. Filed Apr. 17, 1917.

PEP

Particular description of goods.—A Medicinal Compound in the Form of Pills for Loss of Appetite, Nervousness, Impure Blood, Rheumatism, Sallow Complexion, Constipation, Impotence, Loss of Weight, Senile Weakness, and General Tonic for a Run-Down System.
Claims use since the 7th day of April, 1917.

Ser. No. 103,455. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) THERMOID RUBBER COMPANY, Hamilton township, Trenton, N. J. Filed May 1, 1917.

Thermoid

Particular description of goods.—Brake-Linings.
Claims use since February, 1915.

Ser. No. 103,744. (CLASS 19. VEHICLES, NOT INCLUDING ENGINES.) WILLIAM A. PERVIER, INC., Brookline, Mass. Filed May 12, 1917.

HOLFORD BRAKES

No claim being made to exclusive rights in the word "Brakes" apart from the mark shown on the drawing.
Particular description of goods.—Motor-Vehicle Brakes.
Claims use since Mar. 1, 1917.

Ser. No. 103,884. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) BOSTON BLACKING COMPANY, East Cambridge, Mass. Filed May 17, 1917.

KLINGWHITE

The word "Klingwhite."
Particular description of goods.—Shoe-Dressing.
Claims use since Jan. 1, 1917.

Ser. No. 103,997. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) SANSBY BROTHERS, St. Paul, Minn. Filed May 21, 1917.

Hemol

Particular description of goods.—A Medicinal Compound in Pill or Tablet Form for Internal Use in the Treatment of Various Human Ailments—Namely, Nervousness, Anemia, Dyspepsia, Constipation, Lack of Blood, Rheumatism, Skin Diseases and Eruptions, Diseases of the Stomach and Liver.
Claims use since January, 1915.

Ser. No. 104,074. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) FREDERICK J. KALTEYER, Philadelphia, Pa. Filed May 25, 1917.

Electostrop

Particular description of goods.—Razor-Sharpening Machines.
Claims use since about Feb. 1, 1917.

Ser. No. 104,410. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) OSCAR KORN, Detroit, Mich. Filed June 12, 1917.

Salt-o-Vilac

Particular description of goods.—A Laxative.
Claims use since April, 1917.

Ser. No. 105,023. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) O'BANNON CORPORATION, New York, N. Y. Filed July 13, 1917.

O'BANNON INTERNATIONAL

Particular description of goods.—Leather or Composition Carriage-Cloth.
Claims use since Jan. 1, 1917.

Ser. No. 105,179. (CLASS 43. THREAD AND YARN.) F. A. PATRICK & Co., Duluth, Minn. Filed July 21, 1917.

SPRUCE TREE

Particular description of goods.—Cotton Thread, Silk Thread, Linen Thread, Thread Made of Cotton and Silk, Thread Made of Cotton and Linen, Thread Made of Silk and Linen; Thread Made of Cotton, Silk, and Linen; Woolen Yarn, Worsted Yarn, Cotton Yarn, Silk Yarn, Linen Yarn, and Yarn Containing Any Two or More of the Following Materials—Namely, Wool, Cotton, Silk, and Flax.
Claims use since July 1, 1910.

Ser. No. 105,325. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) SPRAGUE ROLLER MILLS, Sprague, Wash. Filed July 27, 1917.

Particular description of goods.—Wheat-Flour.
Claims use since June 1, 1917.

Ser. No. 105,779. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) HENRI ROMOGNINO, Levallois-Perret, Paris, France. Filed Aug. 21, 1917.

LE PURIFIC

Particular description of goods.—Antiseptics, Disinfectants, and Germicides.
Claims use since the 14th day of September, 1915.

Ser. No. 106,526. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) PERCY ERNEST HURST, South Croydon, England. Filed Sept. 29, 1917.

KOSMO

Particular description of goods.—Farinaceous Foods—Namely, a Highly-Concentrated Vegetable Compound Composed of Selected Cereal and Pulse Products Which may be Also Used as a Beverage.
Claims use since Nov. 28, 1916.

Ser. No. 107,036. (CLASS 19. VEHICLES, NOT INCLUDING ENGINES.) GUY L. WOODJARD, San Diego, Cal. Filed Oct. 30, 1917.

G·L·W·

Particular description of goods.—Oiler Devices to be Secured to Vehicle-Springs for Feeding Oil to Said Springs.
Claims use since Jan. 1, 1916.

Ser. No. 107,196. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) DAVIS & GECK, INC., Brooklyn, N. Y. Filed Nov. 6, 1917.

Trench

Particular description of goods.—A Packaged Antiseptic for Surgical Purposes.
Claims use since Oct. 15, 1917.

Ser. No. 108,004. (CLASS 26. MUSICAL INSTRUMENTS AND SUPPLIES.) THOMAS A. EDISON, INCORPORATED, West Orange, N. J. Filed Dec. 17, 1917.

Ediphone

Particular description of goods.—Dictating-Machines.
Claims use since Nov. 21, 1917.

Ser. No. 108,182. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) FRED RUEPING LEATHER CO., Fond du Lac, Wis. Filed Dec. 24, 1917.



Particular description of goods.—Shoe and Glove Leathers—Namely, Calf, Kip, Veals, Sides, and Splits.
Claims use since February, 1915.

Ser. No. 108,243. (CLASS 39. CLOTHING.) THE ELBINGER SHOE MFG. CO., Lebanon, Ohio. Filed Jan. 2, 1918.



Particular description of goods.—Shoes Made of Leather, Canvas, and a Combination of Both.
Claims use since Oct. 31, 1917.

Ser. No. 108,338. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) CHICKASHA MILLING COMPANY, Chickasha, Okla. Filed Jan. 7, 1918.



BOB WHITE

Particular description of goods.—Cornmeal.
Claims use since Jan. 1, 1902.

Ser. No. 108,700. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) THE STAR DRILLING MACHINE COMPANY, Akron, Ohio. Filed Jan. 30, 1918.



Particular description of goods.—Star Well-Drilling Machines, Power Percussion Well-Drilling Machines, Cable Well-Drilling Machines, Steam-Engines, Internal-Combustion Engines, Sand-Pumps, Bailers, Wrench-Bars, Floor-Jacks, Pipe-Pulling Rings, Pipe-Pulling Jars, Well-Drilling Bits, Well-Drilling Jars, Well-Drilling Stems, Well-Drilling Sockets, Rope-Spears, Rope-Knives, Hook-Spears, Horn-Sockets, Combination-Sockets, Slip-Sockets, Jar-Sockets; Mud-Scows, (a Tool;) Hydraulic Jacks, All for Use in the Drilling of Wells.
Claims use since February, 1915.

Ser. No. 108,721. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) REY & CO., New York, N. Y., and Habana, Cuba. Filed Jan. 31, 1918.



Particular description of goods.—Wheat-Flour.
Claims use since Oct. 4, 1917.

Ser. No. 108,830. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) THE LORENZ COMPANY, Everett, Mass., assignor to Mihalovitch Brothers Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Feb. 5, 1918. Under ten-year proviso.

George Lorenz

Particular description of goods.—Toilet and Shaving Soaps.
Claims use since 1864.

Ser. No. 108,920½. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) FERD. T. HOPKINS & SON, New York, N. Y. Filed Feb. 9, 1918. Under ten-year proviso.

GOURAUD'S

Particular description of goods.—Medicated Soap.
Claims use since about 1848.

Ser. No. 108,930. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) SKINNER MFG. CO., Omaha, Nebr. Filed Feb. 9, 1918.

RICERONI

Particular description of goods.—Prepared Flour Made from About 40% Rice-Flour and 60% Wheat-Flour to be Used as a Food and for Mixing with other Foods.
Claims use since Jan. 26, 1918.

Ser. No. 109,162. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) SCHOENHOFEN COMPANY, Chicago, Ill. Filed Feb. 21, 1918.

Edelweiss

Particular description of goods.—Ginger-Ale.
Claims use since Jan. 1, 1918.

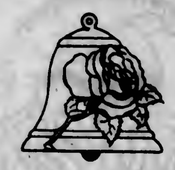
Ser. No. 109,374. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) HENRY THAYER & CO., INC., Cambridge, Mass. Filed Mar. 4, 1918.

REM-OLA

The word "Rem-Ola."
Particular description of goods.—Preparation for Diseases of the Ano-Rectal Region.
Claims use since Jan. 25, 1918.

Ser. No. 109,403. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) BELLE ROSENTHAL, Chicago, Ill. Filed Mar. 6, 1918.

BELLE-ROSE



Particular description of goods.—Liquid, Powder, and Cream for Polishing Shoes and Fine Leather Goods; Liquid for Cleaning Leather and Canvas Shoes, Furs, Laces, and Clothing.
Claims use since Aug. 6, 1917.

Ser. No. 109,455. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) CALIFORNIA RIPE OLIVE CO., San Francisco, Cal. Filed Mar. 9, 1918.

"Over the Top"

Particular description of goods.—Chilli Sauce, Olive-Oil, Tomato Catsup, Salad-Dressing, Marmalade, Jellies, Jams, Honey, Mayonnaise, Worcestershire Sauces, Spices; Maple, Corn, and Molasses Syrups; Peanut-Butter, Apple Butter, Peach-Butter, and Butter.
Claims use since Feb. 15, 1918.

Ser. No. 109,525. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) M. LILIAN MYERS, Atlantic City, N. J. Filed Mar. 12, 1918.



Particular description of goods.—A Preparation for the Treatment of Neuralgia, Rheumatism, and Malaria.
Claims use since Sept. 19, 1900.

Ser. No. 109,629. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) WILLIAM M. LEE, Nocona, Tex. Filed Mar. 18, 1918.

LEEBELLA

Particular description of goods.—An Asthma Medicine.
Claims use since Dec. 6, 1917.

Ser. No. 109,632. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) THE PHOENIX RUBBER CO., Akron, Ohio. Filed Mar. 18, 1918.



Particular description of goods.—Reclaimed Rubber in Bulk as a Rendered Product in Whatsoever Form, Commonly Rolls or Blocks.
Claims use since Feb. 28, 1918.

Ser. No. 109,756. (CLASS 32. FURNITURE AND UPHOLSTERY.) THE URBANA FURNITURE COMPANY, Urbana, Ohio. Filed Mar. 28, 1918.

HAppi-TymE

Comprising the words "HAppi-TymE."
Particular description of goods.—Nursery Furniture—viz., Settee-Chest, Child's Costumer, Nursery-Chair, Cane Round-End Crib, Child's Wardrobe, Child's Wardrobe-Chest, Child's Bed, Child's Dresser, Child's Dressing-Table, Child's Chiffonnier, Child's Chest of Drawers, Baby's Chest of Drawers, Child's Round-Ended Crib, Child's Nursery-Bed, Child's Drop-Side Crib, Bassinet, Hospital-Bassinet, Child's Combination High Chair, Child's Sand-Box, Child's Play-Yard, Child's Folding Toilet-Seat, Baby's Folding Dressing-Table, Child's Straight-Arm Chair; Child's Play Set—viz., Child's Table and Child's Chairs; Child's Rocker.
Claims use since Feb. 21, 1918.

Ser. No. 109,797. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) THE FALLS RUBBER COMPANY, Cuyahoga Falls, Ohio. Filed Mar. 26, 1918.

"EVERGREEN"

Particular description of goods.—Vehicle-Tires of Rubber and Rubber and Fabric.
Claims use since Sept. 26, 1917.

Ser. No. 109,814. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) ALBERT H. SCHWEITZER, Chicago, Ill. Filed Mar. 26, 1918.

TRENCH

Particular description of goods.—Games—Namely, Game-Boards; Chess and Checker Boards; Chess and Checker Men; Card Games and Playing-Cards.
Claims use since Mar. 5, 1918.

Ser. No. 109,828. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) ROBERT M. KLIEMANT, Baltimore, Md. Filed Mar. 27, 1918.

LICK THE KAISER



Particular description of goods.—Candy.
Claims use since Feb. 1, 1918.

Ser. No. 109,875. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) PERFO STAMPING WORKS, Detroit, Mich. Filed Mar. 29, 1918.

PERFO

Particular description of goods.—A Combination Handle and Perforating Attachment for Cans.
Claims use since Nov. 15, 1917.

Ser. No. 110,053. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) GLENDINNING, MCLEISH & CO., INC., New York, N. Y. Filed Apr. 8, 1918.

Glen Erin

Particular description of goods.—Handkerchiefs.
Claims use since January, 1918.

Ser. No. 110,086. (CLASS 5. ADHESIVES.) BEMIS MANUFACTURING ASSOCIATES, Boston, Mass. Filed Apr. 10, 1918.

B

Particular description of goods.—Adhesive Material in Sheets or Strips Particularly Adapted for Use in Joining Fabrics, Paper, and the Like.
Claims use since Jan. 15, 1916.

Ser. No. 110,093. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) COMMERCIAL CHEMICAL CO., Memphis, Tenn. Filed Apr. 10, 1918.



Particular description of goods.—Chemical Composition for Destroying Insects and Rodents.
Claims use since Jan. 1, 1918.

Ser. No. 110,102. (CLASS 12. CONSTRUCTION MATERIALS.) LYON METALLIC MANUFACTURING COMPANY, Montgomery, Ill. Filed Apr. 10, 1918.

LYON

Particular description of goods.—Metallic Doors and Window-Sash and Door and Window Frames.
Claims use since about the 1st day of December, 1913.

Ser. No. 110,132. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) REID BROS., Seattle, Wash., and San Francisco, Cal. Filed Apr. 11, 1918.

Buckskin

Particular description of goods.—Impervious Sheeting of Rubber and Rubberized Fabric.
Claims use since September, 1915.

Ser. No. 110,147. (CLASS 38. PRINTS AND PUBLICATIONS.) THE PRICE TRADE PUBLISHING CO., INC., New York, N. Y. Filed Apr. 12, 1918.

INTERIOR DECORATIONS

Particular description of goods.—Magazine Issued Monthly.
Claims use since Feb. 20, 1918.

Ser. No. 110,170. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) INDERRIEDEN CANNING CO., Chicago, Ill. Filed Apr. 13, 1918.

JOCKEY CLUB

Particular description of goods.—Canned Corn and Canned Red Beans, Canned Red Kidney-Beans, and Canned Pork and Beans.
Claims use since Apr. 26, 1907.

Ser. No. 110,199. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) CONNECTICUT TELEPHONE & ELECTRIC CO. INC., Meriden, Conn. Filed Apr. 15, 1918.



Particular description of goods.—Electric Switches.
Claims use since on or about September, 1916.

Ser. No. 110,209. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) HOLSAM COMPANY, INC., New York, N. Y. Filed Apr. 15, 1918.

SAMOL

Particular description of goods.—Leather.
Claims use since the 1st day of January, 1918.

Ser. No. 110,319. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) COLLINS & AIKMAN COMPANY, Jersey City, N. J., and Philadelphia, Pa. Filed Apr. 19, 1918.

VELFAST

Particular description of goods.—Plushes.
Claims use since Apr. 12, 1918.

Ser. No. 110,349. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) LEKAS & DRIVAS, New York, N. Y. Filed Apr. 20, 1918.



Particular description of goods.—Salad-Oil—a Compound of Winter-Pressed Cotton-Seed Salad-Oil Flavored Slightly with Pure Olive Oil.
Claims use since Apr. 3, 1918.

Ser. No. 110,407. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) JOHN CAMPBELL & Co., New York, N. Y. Filed Apr. 24, 1918.

AMALTHION

Consisting of the word "Amalthion."
Particular description of goods.—Chemicals—viz., Dyestuffs, Aniline Dyes, and Aniline Colors.
Claims use since January, 1918.

Ser. No. 110,431. (CLASS 12. CONSTRUCTION MATERIALS.) FAIRMONT WALL PLASTER COMPANY, Fairmont, W. Va. Filed Apr. 25, 1918.

OVERALL



Particular description of goods.—Composite Roofing Having Fabric as a Base.
Claims use since Feb. 1, 1916.

Ser. No. 110,442. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE VICK CHEMICAL CO., near Greensboro, N. C. Filed Apr. 25, 1918. Under ten-year proviso.

VICK'S

Particular description of goods.—A Medicinal Salve for External Use, Liver-Pills, and a Liniment.
Claims use since 1894.

Ser. No. 110,461. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) AMERICAN LA FRANCE FIRE ENGINE CO., INC., Elmira, N. Y. Filed Apr. 27, 1918.

ALFCO

Particular description of goods.—Nozzles and Play-Pipes.
Claims use since July 1, 1915.

Ser. No. 110,542. (CLASS 17. TOBACCO PRODUCTS.) LINDSEY N. OLIVER, Boston, Mass. Filed Apr. 29, 1918.

Old 76

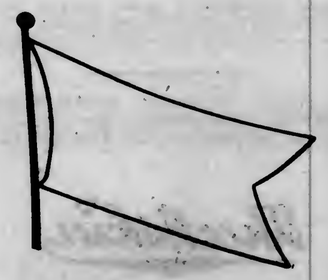
Particular description of goods.—Cigars and Cigarettes.
Claims use since about Jan. 1, 1875.

Ser. No. 110,575. (CLASS 38. PRINTS AND PUBLICATIONS.) WAYLAND W. WILSON, Los Angeles, Cal. Filed Apr. 30, 1918.

Effici-graphs

Particular description of goods.—A Monthly Publication.
Claims use since Apr. 12, 1918.

Ser. No. 110,598. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) GEO. B. CARPENTER & Co., Chicago, Ill. Filed May 2, 1918.



Particular description of goods.—Rubber and Composition Hose and Rubber, Leather, and Composition Belting and Packing.
Claims use since January, 1917.

Ser. No. 110,654. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) J. H. AND G. L. ATWOOD, INC., Boston, Mass. Filed May 6, 1918.

VACUO

The word "Vacuo."
Particular description of goods.—Tire Patches and Reliners.
Claims use since July, 1917.

Ser. No. 110,696. (CLASS 38. PRINTS AND PUBLICATIONS.) COMMERCIAL LIQUIDATION COMPANY, St. Louis, Mo. Filed May 6, 1918.



Particular description of goods.—An Advertising Book or Manual.
Claims use since Apr. 13, 1918.

Ser. No. 110,699. (CLASS 37. PAPER AND STATIONERY.) DUBOC PAPER COMPANY, Chicago, Ill. Filed May 6, 1918.

HYLITE

Particular description of goods.—Enameled Book-Paper.
Claims use since Apr. 1, 1918.

Ser. No. 110,747. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) KUZMA DOMONICK JAKOVICH, Galveston, Tex. Filed May 7, 1918. Under ten-year proviso.

AUNT SUSAN'S



The picture being fanciful.
Particular description of goods.—Wash-Bluing.
Claims use since 1893.

Ser. No. 110,773. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) WADSWORTH, HOWLAND & Co., INCORPORATED, Boston, Mass. Filed May 8, 1918.

HIGHLAND

Particular description of goods.—Colors in Oil—Namely, Paste and Liquid or Ready-Mixed Paint—and Wood-Filler.
Claims use since the year 1887.

Ser. No. 110,786. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) H. REINSHAGEN & COMPANY, Chicago, Ill. Filed May 9, 1918.

HERCO

The trade-mark consists of the arbitrary coined word "Herco" placed in a black field having a four-cornered fanciful outline.
Particular description of goods.—A Substitute for Eggs.
Claims use since Jan. 1, 1918.

Ser. No. 110,787. (CLASS 38. PRINTS AND PUBLICATIONS.) STEPHENS-ADAMSON MFG. CO., Aurora, Ill. Filed May 9, 1918.

THE LABOR-SAVER

Particular description of goods.—House Organ Published Monthly.
Claims use since May, 1911.

Ser. No. 110,815. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) LIVE LEATHER BELT CO. INC., New York, N. Y. Filed May 10, 1918.

Duo Tex

Comprising the words "Duo Tex."
Particular description of goods.—Leather or Fabric Belts for Personal Wear.
Claims use since Apr. 22, 1918.

Ser. No. 110,821. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) BELLE ROSENTHAL, Chicago, Ill. Filed May 10, 1918.

BELLEROSE



Particular description of goods.—Soap Dye for Silk, Satin, and Garments; Liquid Dye for Shoes and Leather Articles.
Claims use since Aug. 6, 1917.

Ser. No. 110,848. (CLASS 19. VEHICLES, NOT INCLUDING ENGINES.) REX MANUFACTURING COMPANY, Conneraville, Ind. Filed May 11, 1918.

Rex

Particular description of goods.—Convertible Automobile-Tops.
Claims use since Jan. 5, 1918.

Ser. No. 110,871. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) THE O'BRIEN VARNISH CO., South Bend, Ind. Filed May 13, 1918.

CELLUSEAL

Particular description of goods.—An Enamel Paint.
Claims use since on or about Jan. 4, 1915.

Ser. No. 110,917. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) JAMES PERCY BALL, Chicago, Ill. Filed May 16, 1918.

YANKEE

Particular description of goods.—Preservatives for Eggs.
Claims use since Apr. 14, 1917.

Ser. No. 111,067. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) THE WM. MEYER CO., Chicago, Ill. Filed May 20, 1918.

RECTHODE

Particular description goods.—X-Ray Tubes.
Claims use since Apr. 1, 1918.

Ser. No. 111,068. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) THE WM. MEYER CO., Chicago, Ill. Filed May 20, 1918.

MULTOSCOPE

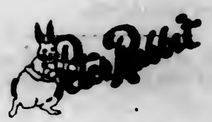
Particular description of goods.—X-Ray Tables and Stands.
Claims use since Feb. 1, 1918.

Ser. No. 111,073. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) THOMAS HENRY SMITH, Buffalo, N. Y. Filed May 20, 1918.

GRIP

Particular description of goods.—A Compound for Washing Fabrics.
Claims use since Feb. 10, 1918.

Ser. No. 111,121. (CLASS 39. CLOTHING.) A. W. TEDCASTLE & Co., Boston, Mass. Filed May 22, 1918.



Particular description of goods.—Misses' and Children's Leather and Canvas and Leather Shoes.
Claims use since May 10, 1898.

Ser. No. 111,136. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) THE CELLULOID COMPANY, Newark, N. J., and New York, N. Y. Filed May 23, 1918.

IVALEUR

Particular description of goods.—Nail-Cleaners, Nail-Files, Cuticle-Knives, Manicure-Scissors, Manicure Nail-Polishers, Manicure-Sticks, Corn-Knives, Toilet-Tweezers, Teething-Rings, and Handles for Manicure Implements. The Said Articles, Excepting the Files of the Nail-Files, the Knives of the Cuticle and Corn Knives, the Blades of the Scissors, and the Polishing Part of the Nail-Polishers, are Made of Compounds of Pyroxylin.
Claims use since Dec. 3, 1917, on nail-cleaners, nail-files, cuticle-knives, manicure-scissors, manicure nail-polishers, corn-knives, and toilet-tweezers; since Dec. 11, 1917, on teething-rings; since Dec. 20, 1917, on manicure-sticks, and since Jan. 4, 1918, on handles for manicure implements.

Ser. No. 111,139. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) THE CELLULOID COMPANY, Newark, N. J., and New York, N. Y. Filed May 23, 1918.

IVALEUR

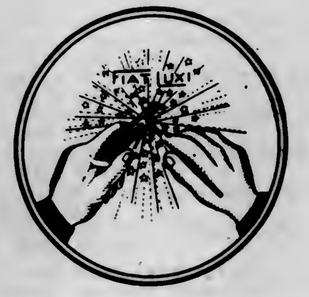
Particular description of goods.—Organ-Stop Keys, Organ-Stop Buttons, Banjo-Keys, Guitar-Buttons or End Pins, Guitar Bridge-Pins, and Zither-Rings. The Said Articles are Made of Compounds of Pyroxylin.
Claims use since Jan. 4, 1918, on all the articles excepting organ-stop buttons and since Jan. 5, 1918, on organ-stop buttons.

Ser. No. 111,142. (CLASS 8. SMOKERS' ARTICLES, NOT INCLUDING TOBACCO PRODUCTS.) THE CELLULOID COMPANY, Newark, N. J., and New York, N. Y. Filed May 23, 1918.

IVALEUR

Particular description of goods.—Pipe-Bits and Cigar-Holders. The Said Articles are Made of Compounds of Pyroxylin.
Claims use since Dec. 11, 1917, on pipe-bits and since Jan. 4, 1918, on cigar-holders.

Ser. No. 111,163. (CLASS 14. METALS AND METAL CASTINGS AND FORGINGS.) NEW PROCESS METALS CO., INC., New York, N. Y. Filed May 23, 1918.



Particular description of goods.—Pyrophoric Alloys or Sparking Metal Alloys.
Claims use since Apr. 1, 1918.

Ser. No. 111,169. (CLASS 47. WINES.) THE CHARDEAU COMPANY, New York, N. Y. Filed May 24, 1918.

CHARDEAU

Particular description of goods.—Wine.
Claims use since Jan. 1, 1918.

Ser. No. 111,188. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) NORTHWESTERN EXPANDED METAL COMPANY, Chicago, Ill. Filed May 23, 1918.

Nemco

Particular description of goods.—Expanded-Metal Door-Mats.
Claims use since on or about June 12, 1917.

Ser. No. 111,232. (CLASS 39. CLOTHING.) VON DER HEYDE & JOHN, New York, N. Y. Filed May 27, 1918.



Particular description of goods.—Boots and Shoes Made of Leather, Textile Fabrics, Rubber, or Felt.
Claims use since Oct. 11, 1917.

Ser. No. 111,234. (CLASS 39. CLOTHING.) VON DER HEYDE & JOHN, New York, N. Y. Filed May 27, 1918.



Particular description of goods.—Cotton, Wool, and Silk Hosiery; Leather, Wool, Cotton, and Silk Gloves; Ladies' Cotton, Wool, Silk, and Embroidery Waists; Cotton, Wool, Silk, Leather, and Rubber Coats; Cotton, Wool, Silk, Lace, and Embroidery Neckwear.
Claims use since Oct. 11, 1917.

Ser. No. 111,263. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) EASTMAN KODAK COMPANY, Rochester, N. Y. Filed May 31, 1918.

P.M.C.

Particular description of goods.—Photographic Paper.
Claims use since Sept. 1, 1893.

Ser. No. 111,276. (CLASS 39. CLOTHING.) LEOPOLD, MORSE CO., Boston, Mass. Filed May 31, 1918.

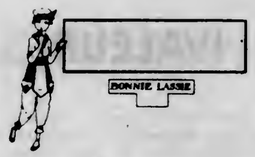
THRIFT

The word "Thrift."

Particular description of goods.—Men's, Boys', and Youths' Suits and Overcoats.

Claims use since May 10, 1918.

Ser. No. 111,298. (CLASS 39. CLOTHING.) BONNIE LASSIE M'F'G. CO., San Francisco, Cal. Filed June 1, 1918.



Particular description of goods.—House and Street Dresses for Women.

Claims use since about July, 1917.

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TRADE-MARK REGISTRATIONS GRANTED

JULY 9, 1918.

122,174. NON-FREEZE COMPOUND APPLICABLE FOR THE RADIATORS OF AUTOMOBILES. ALCEMO MANUFACTURING COMPANY, Newark, N. J.
Filed January 3, 1918. Serial No. 108,269. PUBLISHED APRIL 23, 1918.

122,175. CERTAIN NAMED MEASURING AND SCIENTIFIC APPLIANCES AND PARTS. AMERICAN OPTICAL COMPANY, Southbridge, Mass.
Filed January 11, 1918. Serial No. 108,412. PUBLISHED MARCH 5, 1918.

122,176. OPHTHALMIC MOUNTINGS, AND PARTS THEREOF. AMERICAN OPTICAL COMPANY, Southbridge, Mass.
Filed September 13, 1917. Serial No. 106,220. PUBLISHED JANUARY 1, 1918.

122,177. LADIES' AND MISSES' ONE AND TWO PIECE FLAT UNDERWEAR. BARROW MFG. CO., New York, N. Y.
Filed February 27, 1918. Serial No. 109,239. PUBLISHED APRIL 16, 1918.

122,178. WRITING AND PRINTING PAPERS. BEEKMAN PAPER AND CARD COMPANY, INC., New York, N. Y.
Filed January 21, 1918. Serial No. 108,563. PUBLISHED APRIL 9, 1918.

122,179. TOILET SOAP, SHAVING-SOAP, AND SHAVING-CREAM. THE BRAD-SITE COMPANY, New York, N. Y.
Filed February 28, 1918. Serial No. 109,266. PUBLISHED APRIL 9, 1918.

122,180. CIGARS. THE BANNER CIGAR MANUFACTURING CO., Detroit, Mich.
Filed January 25, 1918. Serial No. 108,625. PUBLISHED APRIL 9, 1918.

122,181. REGULATING DEVICES FOR ELECTRIC LAMPS. BENJAMIN ELECTRIC MANUFACTURING COMPANY, Chicago, Ill.
Filed January 18, 1918. Serial No. 108,520. PUBLISHED APRIL 9, 1918.

122,182. OUTER SUITS AND DRESSES. BLASKOFF & Co., New York, N. Y.
Filed January 25, 1918. Serial No. 108,627. PUBLISHED APRIL 16, 1918.

122,183. LUMBER. THE BENN LUMBER COMPANY, INC., Cincinnati, Ohio.
Filed February 27, 1918. Serial No. 109,237. PUBLISHED APRIL 16, 1918.

122,184. BEDSTEADS, BED-SPRINGS, AND MATTRESSES. BERNSTEIN MANUFACTURING COMPANY, Philadelphia, Pa.
Filed February 25, 1918. Serial No. 109,191. PUBLISHED APRIL 23, 1918.

122,185. APPARATUS FOR MOISTENING AIR FOR USE ON GAS-ENGINES. CARBON DESTROYER CORPORATION, New York, N. Y.
Filed December 12, 1917. Serial No. 107,906. PUBLISHED APRIL 2, 1918.

122,186. CRUDE AND REFINED PETROLEUM AND ASPHALT. CARIB SYNDICATE, LIMITED, New York, N. Y.
Filed July 24, 1917. Serial No. 105,221. PUBLISHED NOVEMBER 13, 1917.

122,187. CARBON-PAPERS, TYPE-WRITER RIBBONS, AND PRINTING AND WRITING INKS. THE CARBONUM COMPANY LIMITED, Leyton, London, England
Filed November 6, 1917. Serial No. 107,195. PUBLISHED APRIL 9, 1918.

122,188. SHELL HAIR-PINS. CARSON, PIRIE, SCOTT & Co., Chicago, Ill.
Filed February 18, 1918. Serial No. 109,053. PUBLISHED APRIL 9, 1918.

122,189. CERTAIN NAMED CLOTHING FOR MEN AND BOYS. CARSON, PIRIE, SCOTT & Co., Chicago, Ill.
Filed September 15, 1914. Serial No. 81,259. PUBLISHED APRIL 16, 1918.

122,190. FERTILIZER. CHICKAMAUGA FERTILIZER WORKS, Atlanta, Ga.
Filed February 16, 1918. Serial No. 109,022. PUBLISHED APRIL 23, 1918.

122,191. VARNISHES. COOPER-BELL VARNISH CO., Chicago, Ill.
Filed February 9, 1918. Serial No. 108,916. PUBLISHED APRIL 16, 1918.

122,192. SAFETY-PINS. CONSOLIDATED SAFETY PIN CO., Bloomfield, N. J.
Filed December 19, 1917. Serial No. 108,056. PUBLISHED FEBRUARY 5, 1918.

122,193. SAFETY-PINS. CONSOLIDATED SAFETY PIN CO., Bloomfield, N. J.
Filed December 19, 1917. Serial No. 108,054. PUBLISHED FEBRUARY 5, 1918.

122,194. DRESS, NEGLIGÉE, WORK, AND UNDER SHIRTS. COMMERCIAL SHIRT COMPANY, New York, N. Y.
Filed December 19, 1917. Serial No. 108,051. PUBLISHED APRIL 16, 1918.

122,195. MEN'S DRESS, NEGLIGÉE, AND WORK SHIRTS. DAGO, DERNEDEN CO., Seattle, Wash.
Filed June 5, 1917. Serial No. 104,279. PUBLISHED APRIL 16, 1918.

122,196. NON-ALCOHOLIC MALTLESS BEVERAGES SOLD AS SOFT DRINKS AND EXTRACTS AND SYRUPS FOR MAKING THE SAME. THE DELAWARE PUNCH COMPANY OF TEXAS, San Antonio, Tex.
Filed November 30, 1917. Serial No. 107,677. PUBLISHED APRIL 23, 1918.

122,197. CERTAIN NAMED LADIES' AND CHILDREN'S GARMENTS. THE DENNINGER GARMENT MANUFACTURING COMPANY, Los Angeles, Cal.
Filed November 19, 1917. Serial No. 107,462. PUBLISHED APRIL 16, 1918.

122,198. WATCHES. DUBOIS WATCH CASE COMPANY, Brooklyn, N. Y.
Filed October 20, 1917. Serial No. 106,876. PUBLISHED MARCH 19, 1918.

122,199. WRITING-TABLETS AND PRINTING AND WRITING PAPERS. EASTERN TABLET COMPANY, Albany, N. Y.
Filed December 10, 1917. Serial No. 107,865. PUBLISHED APRIL 9, 1918.

122,200. PHOTOGRAPHIC PAPER. EASTMAN KODAK COMPANY, Rochester, N. Y.
Filed December 14, 1917. Serial No. 107,958. PUBLISHED APRIL 9, 1918.

122,201. COMPOSITION SOLES AND HEELS FOR SHOES AND BOOTS. THE ELECTRIC RUBBER RECLAIMING COMPANY, Barberton, Ohio.
Filed February 26, 1917. Serial No. 101,683. PUBLISHED APRIL 16, 1918.

122,202. SOAP. EMPIRE SOAP COMPANY, New York, N. Y.
Filed January 31, 1918. Serial No. 108,709. PUBLISHED MARCH 26, 1918.

122,203. OINTMENT TO BE APPLIED TO THE SCALP TO PROMOTE THE GROWTH OF HAIR. Mrs. KETURAH RALPH ELLIS, Louisville, Ky.
Filed March 5, 1918. Serial No. 109,384. PUBLISHED APRIL 23, 1918.

122,204. ANTIFRICTION-BEARINGS. THE FEDERAL BEARINGS CO. INC., Fairview, Poughkeepsie, N. Y.
Filed January 17, 1918. Serial No. 108,502. PUBLISHED APRIL 16, 1918.

122,205. FERTILIZER. THE FERTILE COMPANY, Cleveland, Ohio.
Filed September 28, 1917. Serial No. 106,479. PUBLISHED APRIL 9, 1918.

122,206. PANAMA HATS. RUNOSUKE FUJITA, New York, N. Y.
Filed December 26, 1917. Serial No. 108,142. PUBLISHED APRIL 16, 1918.

122,207. METALLIC PARTICLES IN GRAIN, POWDERED, OR PULVERIZED FORM FOR STONE-WORKING OPERATIONS. THE GLOBE STEEL COMPANY, Mansfield, Ohio.
Filed December 30, 1916. Serial No. 100,254. PUBLISHED MARCH 26, 1918.

122,208. CAMERAS AND TRIPODS, MOVING-PICTURE PROJECTORS AND SCREENS THEREFOR. THE GREEN CAMERA COMPANY, Chicago, Ill.
Filed September 13, 1917. Serial No. 106,224. PUBLISHED APRIL 16, 1918.

122,209. WHEAT-FLOUR. LEOPOLD GROSS, New York, N. Y., assignor to W. P. Tanner-Gross & Co. Inc., a Corporation.
Filed November 28, 1917. Serial No. 107,551. PUBLISHED MARCH 26, 1918.

122,210. HAND SEWING-NEEDLES. THOMAS HARPER & SONS LTD., Redditch and London, England.
Filed May 23, 1917. Serial No. 104,026. PUBLISHED APRIL 2, 1918.

122,211. LAMINATED WOOD. HASKELITE MANUFACTURING CORPORATION, Grand Rapids, Mich.
Filed March 18, 1918. Serial No. 109,627. PUBLISHED APRIL 23, 1918.

122,212. TOP LIFTS FOR SHOE-HEELS. ISABELLE HENNE, Brooklyn, N. Y.
Filed February 4, 1918. Serial No. 108,795. PUBLISHED APRIL 16, 1918.

122,213. HOUSE-BROOMS WHICH CONSIST OF A FIBER BRUSH WITH WOODEN TOPS AND WOODEN HANDLES. JOSEPH HERSBNRETHER & SON, Chicago, Ill.
Filed February 28, 1918. Serial No. 109,274. PUBLISHED APRIL 23, 1918.

122,214. AUTOMOBILE LUBRICATING OILS AND GREASES. ELMER S. HOBSON, New York, N. Y.
Filed October 11, 1917. Serial No. 106,717. PUBLISHED APRIL 16, 1918.

122,215. BREWED FERMENTED BEVERAGE WITHOUT ALCOHOL MADE FROM HOPS, BARLEY, AND MALT. CHARLES P. HOLZDERBER, New York, N. Y.
Filed March 9, 1918. Serial No. 109,465. PUBLISHED APRIL 23, 1918.

122,216. SALVE USED IN THE TREATMENT OF BOILS AND KINDRED TROUBLES. RALPH H. KELLEY, Brooklyn, N. Y.
Filed March 16, 1918. Serial No. 109,598. PUBLISHED APRIL 23, 1918.

122,217. WALL-BOARD AND BUILDING-PAPER. THE KENMORE WALL BOARD COMPANY, Buffalo, N. Y.
Filed January 13, 1916. Serial No. 92,108. PUBLISHED APRIL 23, 1918.

122,218. CERTAIN NAMED LEATHER GOODS. KEYSTONE LEATHER GOODS CO., New York, N. Y.
Filed May 19, 1917. Serial No. 103,953. PUBLISHED APRIL 23, 1918.

122,219. MATTRESSES. LEVY MATTRESS COMPANY, INC., New Orleans, La.
Filed February 5, 1918. Serial No. 108,829. PUBLISHED APRIL 23, 1918.

122,220. NON-INTOXICATING BEVERAGE BREWED FROM MALT, HOPS, AND CEREALS. S. LIEBMANN'S SONS INC., Brooklyn, N. Y.
Filed March 13, 1918. Serial No. 109,588. PUBLISHED APRIL 23, 1918.

122,221. CERTAIN NAMED FURNITURE. THE LONG FURNITURE COMPANY, Hanover, Pa.
Filed November 10, 1917. Serial No. 107,280. PUBLISHED APRIL 9, 1918.

122,222. CIGARS, SMOKING-TOBACCO, CHEWING-TOBACCO, AND CIGARETTES. MILFORD B. MARTIN, Spokane, Wash.
Filed December 17, 1917. Serial No. 108,018. PUBLISHED MARCH 26, 1918.

122,223. EMBALMING FLUIDS. THE MAX HUNCKE CHEMICAL CO., Brooklyn, N. Y.
Filed March 14, 1918. Serial No. 109,563. PUBLISHED APRIL 23, 1918.

122,224. HOSIERY. MOORHEAD KNITTING COMPANY, Harrisburg, Pa.
Filed February 16, 1918. Serial No. 109,033. PUBLISHED APRIL 16, 1918.

122,225. TOY TORPEDO CONSISTING OF A MASS OF PYROTECHNIC COMPOSITION. THE NATIONAL FIREWORKS DISTRIBUTING CO., Boston, Mass.
Filed February 18, 1916. Serial No. 92,948. PUBLISHED APRIL 9, 1918.

122,226. METAL RAIL-ANCHORS, ANTICREEPERS, TIE-PLATES, SPLICE-BARS, GUARD-RAIL CLAMPS, AND RAIL-BOND WIRE-HOLDERS. THE P. & M. CO., Chicago, Ill.
Filed October 15, 1917. Serial No. 106,778. PUBLISHED JANUARY 22, 1918.

122,227. PURGATIVE BEVERAGE. HARRY W. PAPE, Cincinnati, Ohio.
Filed March 18, 1918. Serial No. 109,634. PUBLISHED APRIL 16, 1918.

122,228. MOTION-PICTURE FILMS. PARALTA PLAYS, INC., New York, N. Y.
Filed October 19, 1917. Serial No. 106,867. PUBLISHED APRIL 9, 1918.

122,229. CERTAIN NAMED INKS AND INKING MATERIALS. PARSONS TRADING COMPANY, New York, N. Y.
Filed January 12, 1918. Serial No. 108,434. PUBLISHED MARCH 19, 1918.

122,230. CINEMATOGRAPH-FILMS. PATHÉ EXCHANGE, INC., New York, N. Y.
Filed September 13, 1917. Serial No. 106,232. PUBLISHED JANUARY 1, 1918.

122,231. CERTAIN NAMED JEWELRY AND PRECIOUS-METAL WARE. JOHN H. PECKHAM, North Attleboro, Mass.
Filed June 6, 1917. Serial No. 104,307. PUBLISHED MARCH 26, 1918.

122,232. PETROLEUM PRODUCTS, CONSISTING OF GASOLENE, KEROSENE, LUBRICATING-OILS, LUBRICATING-GREASE, AND PARAFFIN-WAX. PIERCE OIL CORPORATION, New York, N. Y., and St. Louis, Mo.
Filed February 20, 1917. Serial No. 101,555. PUBLISHED JUNE 12, 1917.

122,233. RAZOR-STROPS. PIKE MANUFACTURING COMPANY, Pike and Littleton, N. H.; Evansville, Vt.; Orleans, Ind.; Hot Springs, Ark., and New York, N. Y.
Filed September 25, 1917. Serial No. 106,429. PUBLISHED APRIL 9, 1918.

122,234. PREPARATION FOR DYSPEPSIA. THOMAS A. PORTER, La Fayette, La.
Filed March 16, 1918. Serial No. 109,604. PUBLISHED APRIL 23, 1918.

122,235. HAIR-TONIC. JOHN M. SCHINKO, Des Moines, Iowa.
Filed February 8, 1918. Serial No. 108,899. PUBLISHED APRIL 23, 1918

122,236. UNDERGARMENT FOR WOMEN, COMPRISING A KNIT SILK KNICKERBOCKER. SCHUYLKILL SILK MILLS, Reading, Pa.
Filed September 4, 1917. Serial No. 106,043. PUBLISHED NOVEMBER 27, 1917.

122,237. THERMOMETERS. MORRIS C. SHRIVER, Pittsburgh, Pa.
Filed February 8, 1918. Serial No. 108,897. PUBLISHED APRIL 16, 1918.

122,238. MEDICINE TO RELIEVE HOG-CHOLERA. EUGENE W. SIKES, Savannah, Ga.
Filed December 19, 1917. Serial No. 108,065. PUBLISHED APRIL 23, 1918.

122,239. TOBACCO CIGARETTES. CLARENCE R. SMITH, Philadelphia, Pa.
Filed August 7, 1917. Serial No. 105,527. PUBLISHED OCTOBER 9, 1917.

122,240. CERTAIN NAMED CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS. SOUTHERN OIL & INK COMPANY, Savannah, Ga.; Nashville, Tenn., and New York, N. Y.
Filed October 16, 1914. Serial No. 81,947. PUBLISHED APRIL 23, 1918.

122,241. VARNISHES, STAINS, ENAMELS, JAPANS, DRIERS, DRY AND READY-MIXED PAINTS. STANDARD VARNISH WORKS, New York, N. Y.
Filed January 18, 1918. Serial No. 108,536. PUBLISHED APRIL 9, 1918.

122,242. CHEMICAL COMPOUNDS SUITABLE FOR THE SOFTENING OF WATER. THE STATEN ISLAND CHEMICAL CORPORATION, Paterson, N. J., and New York, N. Y.
Filed February 18, 1918. Serial No. 109,111. PUBLISHED APRIL 23, 1918.

122,243. SEED-GRADERS. SUCCESS SEED GRADER COMPANY, Spokane, Wash.
Filed January 17, 1918. Serial No. 108,512. PUBLISHED APRIL 9, 1918.

122,244. CERTAIN NAMED HOUSE-FURNISHING WOODENWARE AND CABINET-WORK. J. CHAS. TEEPE, INC., New York and Long Island City, N. Y.
Filed October 20, 1916. Serial No. 98,792. PUBLISHED APRIL 16, 1918.

122,245. ELECTRIC SWITCHES. JOHN M. TERZICH, Sutter Creek, Cal.
Filed February 16, 1918. Serial No. 109,047. PUBLISHED APRIL 9, 1918.

122,246. CHEMICAL ANT-EXTERMINATOR. THAMES DRUG COMPANY, Beaumont, Tex.
Filed March 1, 1918. Serial No. 109,305. PUBLISHED APRIL 23, 1918.

122,247. GASOLENE. WESTERN OIL REFINING COMPANY, Indianapolis, Ind.
Filed October 26, 1917. Serial No. 106,976. PUBLISHED APRIL 9, 1918.

122,248. WIPER DEVICES FOR WIND-SHIELDS, WINDOWS, AND THE LIKE. WHITE LOCK COMPANY, Chicago, Ill.
Filed February 9, 1918. Serial No. 108,933. PUBLISHED APRIL 9, 1918.

122,249. SEWING-MACHINES. WHITE SEWING MACHINE COMPANY, Cleveland, Ohio.
Filed November 9, 1917. Serial No. 107,274. PUBLISHED FEBRUARY 19, 1918.

122,250. GRAIN-ELEVATOR SPOUTS, SECTIONAL GRAIN-ELEVATOR SPOUTS, GRAIN-ELEVATOR-SPOUT SECTIONS, AND PARTS OF GRAIN-ELEVATOR SPOUTS. WHITMORE MANUFACTURING CO., Galva, Ill.
Filed March 28, 1917. Serial No. 102,544. PUBLISHED FEBRUARY 12, 1918.

TRADE-MARK REGISTRATIONS RENEWED.

15,822. HOG MEATS AND LARD. CO-OPERATIVE WHOLESALE SOCIETY, (LIMITED,) Manchester, London, and Newcastle-upon-Tyne, England, and New York, N. Y.
Registered September 4, 1888. Renewed September 4, 1918.

15,846. FLOUR. CO-OPERATIVE WHOLESALE SOCIETY, (LIMITED,) Manchester, London, and Newcastle-upon-Tyne, England, and New York, N. Y.
Registered September 11, 1888. Renewed September 11, 1918.

15,875. UNDERWEAR AND HOSIERY FOR BOTH SEXES AND FOR CHILDREN. I. & R. MORLEY, London, England, and New York, N. Y.
Registered September 18, 1888. Renewed September 18, 1918.

15,922. UNDERWEAR AND HOSIERY. I. & R. MORLEY, London, England, and New York, N. Y.
Registered October 2, 1888. Renewed October 2, 1918.

16,005. UNDERWEAR AND HOSIERY FOR BOTH SEXES AND FOR CHILDREN. I. & R. MORLEY, London, England, and New York, N. Y.
Registered November 13, 1888. Renewed November 13, 1918.

16,009. CAPSULES FOR MEDICINAL OR OTHER USE. BETTS & COMPANY, (LIMITED,) London, England.
Registered November 20, 1888. Renewed November 20, 1918.

LABELS

REGISTERED JULY 9, 1918.

20,729.—*Title:* "ASCHERS KNIT GOODS, WITH THE FIGURE OF THE LAMB." (For Knit Goods.) SIMON ASCHER & Co., INC., New York, N. Y. Filed May 10, 1918.

20,730.—*Title:* "ACTIVE BLOCKS." (For Toy Building-Blocks.) GEORGE BORGFELDT & Co., New York, N. Y. Filed May 22, 1918.

20,731.—*Title:* "LOYALTY." (For Flour.) CENTENNIAL MILL Co., Memphis, Tenn. Filed May 16, 1918.

20,732.—*Title:* "THE NEW EDISON 'THE PHONOGRAPH WITH A SOUL.'" (For Phonographs.) THOMAS A. EDISON, INCORPORATED, West Orange, N. J. Filed April 1, 1918.

20,733.—*Title:* "THE NEW EDISON 'THE PHONOGRAPH WITH A SOUL.'" (For Phonographs.) THOMAS A. EDISON, INCORPORATED, West Orange, N. J. Filed April 1, 1918.

20,734.—*Title:* "ANTISEPTIC GEORGE'S MEDICATED CONES." (For Antiseptic Suppositories.) GEORGE A. FINKELMAN, Chicago, Ill. Filed May 22, 1918.

20,735.—*Title:* "PALL MALL OLIVE OIL." (For Pure Olive-Oil.) LEO E. SCHOENFELD, Chicago, Ill. Filed November 15, 1917.

20,736.—*Title:* "THORO." (For Powdered Skin-Cleanser.) THE THORO CORPORATION, Chicago, Ill. Filed May 6, 1918.

PRINTS

REGISTERED JULY 9, 1918.

4,915.—*Title:* "LATEST METAL AND GRAVEL KATCHER, THE GREATEST AND ONLY FIRE PREVENTOR." (For Gravel-Catchers.) WILLIAMS PATENT CRUSHER & PULVERIZER Co., St. Louis, Mo. Filed May 2, 1918.

DECISIONS

OF THE

COMMISSIONER OF PATENTS

AND OF

UNITED STATES COURTS IN PATENT CASES.

DECISIONS OF THE U. S. COURTS.

Court of Appeals of the District of Columbia.

IN RE BECHMAN.

Decided March 4, 1918.

1. PATENTABILITY—PRINTING-PRESS-INK-FOUNTAIN CONTROL.

In an application for an ink-fountain having regulating devices, individual operating means therefor, and electric controlling devices located at a point remote from the fountain *Held* that a claim was patentable over the prior art, although not limited to electric controlling devices.

2. SAME—SAME.

Certain claims not limited to centrally-located controlling devices for adjusting the individual regulating devices of printing-press ink-fountains *Held* to be too broad in view of the art of record.

Mr. Arthur E. Doucell for the appellant.

Mr. T. A. Hostetler for the Commissioner of Patents.

ROBB, *J.:*

Appeal from a decision of the Patent Office tribunals rejecting claims 1, 2, 3, 5, 6, 8, 9, 11, 12, 13, 15, 17, 19, 21, 22, 23, 24, 25, 27, 28 and 30 in appellant's application for patent. Claims 2 and 11 sufficiently illustrate the rejected claims and read as follows:

2. In combination a fountain provided with a plurality of devices for regulating the supply from different points thereof, with electrically controlled means for independently operating the adjusting devices.

11. In combination with an ink fountain having adjustable devices for regulating the amount of ink delivered by the fountain, and means for individually operating said devices; with controlling devices located at a point remote from the fountain, and connection between said controlling devices and the several operating means, substantially as described.

The invention relates to a control for inking-fountains in printing-presses and marks a distinct and radical advance in the art. In his specification the applicant says:

This invention has particular reference to inking mechanism for large printing presses and other color applying machines, and its major object is to enable the amount of ink supplied from any ink fountain to be controlled by means located at any desired point remote from the fountain; and whereby different amounts of ink may be supplied by the same fountain at different points of its length, and the amount of ink supplied at any desired point in the length of the fountain roll can be increased or diminished at the will of the operator.

The specification then directs attention to the fact that heretofore the screws controlling the scraper-blade of the ordinary type of ink-fountains have been manipulated manually, and that in large presses the pressman has been compelled to climb to the different tiers of the press and sometimes to stop the press entirely to make the proper adjustments. The specification continues:

My invention more specifically provides means whereby each fountain of a press, or any set of fountains, may be controlled from a central point or switch board, and the operator by simply pressing the proper buttons thereon can increase or diminish the supply of ink obtained from any given fountain, at any point or section in the length of the fountain roll. The controlling devices can be located at any convenient point, and in practice would be preferably located where the operator can observe the product of the press and can increase or diminish the supply of ink to any part of the width of the paper, or printed web, as he pleases, without having to leave the spot; and if the color on the web be too light or too heavy it can be increased or diminished practically instantly without the pressman having to leave his station or climb to upper decks of the press.

The specification then points out that the advantage of such an electrically-controlled apparatus lies in the fact that the pressman may have the switch-board located near the folder, from which point all adjustments may be made.

The first group of claims, including claim 2, was rejected because in the opinion of the Patent Office they are sufficiently broad to cover the adoption of a plurality of independent electric circuits and motors in connection with the machines of Goss and Spalckhaver, patents for which were granted in 1907 and 1910, respectively. These patents disclose ink-fountains in which manually-operated means are provided at the ends of the fountains for adjusting the individual screws. It is the view of the Patent Office that it was common practice to employ electric circuits and magnets to control mechanical motion, but it is strange, indeed, if this was so obvious, that Goss and Spalckhaver did not employ them instead of the less desirable devices they did use. However, we agree with the Patent Office that this group of claims is very general and not drawn to cover applicant's real invention, which was a centrally-located control for inking-fountains. As the Assistant Commissioner said:

Applicant has devised a scheme for controlling the inking fountain from a distant point, preferably the point where the paper issues from the press.

The, Assistant Commissioner thereupon allowed applicant nine claims, which had been disallowed by the lower tribunals. But in the allowed claims applicant was restricted to electric means for controlling the fountains. We do not think he should be thus limited. He is the first to conceive and work out the idea of distant control and should be given a claim as broad as his invention. Obviously, his claims ought not to be so narrowed as to invite competitors, by substitution of other means, to effect the same result and thus deprive the real inventor

of the fruits of his discovery. We think the allowance of claim 11, or of a claim or claims of equal breadth, will accomplish the desired end.

The decision is reversed as to claim 11 but affirmed as to the other claims involved.

Court of Appeals of the District of Columbia.

HENDLER *v.* HANSEN.

Decided May 27, 1918.

1. INTERFERENCE—ISSUE CONSTRUED—LAMP-LIGHTERS.
   Where the issue in an interference recites igniting mechanism that is operable by a sweep of the palm of the hand, *Held* that a device in which a corresponding mechanism is arranged to be operated by the thumb or finger, although it may be operated by a sweep of the hand, comes within the terms of the issue.
2. SAME—PRIORITY.
   Record reviewed and priority awarded to Hendler, the senior party.

Mr. James Q. Rice and *Mr. R. F. Steward* for the appellant.

Mr. Melville Church, *Mr. James R. Offield*, and *Mr. James A. Watson* for the appellee.

VAN ORSDEL, *J.:*

This appeal is from the decision of the Commissioner of Patents in an interference proceeding awarding priority of invention to the junior party, Hansen. The invention relates to "miners' lamp lighters." The issue is in four counts, of which count 1 is illustrative:

In an acetylene lamp, the combination of a body part provided with means for generating gas, a reflector supported on the body part, a burner within the reflector for receiving the generated gas, and a pyrophoric ignition attachment comprising a spark wheel, said mechanism being so positioned with reference to the plane of the outer edge of the reflector that when the palm of the hand is wiped across said reflector it will engage the periphery of the wheel to cause rotation thereof and operation of the pyrophoric ignition mechanism to ignite the gas.

Hendler described the operation of his invention in his specification as follows:

The operation of my improved device is apparent, for it is only necessary to place the thumb or finger on the serrated edges of the disk 8 and to partially rotate said disk with a quick motion, and as a result, the teeth on said disk scrape across the forward end of the section of spark-producing material, and as a result, sparks of fire are produced which are thrown directly across the orifice in the burner tip 13, thereby igniting the gas as it issues therefrom.

It was held by the Commissioner and the Board of Examiners-in-Chief that the location of the sparking wheel on the reflector is of the essence of the invention. We think this was error. The location of the wheel is merely mechanical, so long as it can be successfully operated by a sweep of the hand. This sweep may be in either a perpendicular, horizontal or angular direction to best suit the convenience and demands of the trade. The invention consists in the ability of the user, from the relative position of the spark-wheel to the rim of the reflector, to successfully light the lamp by a sweep of the palm of the hand across the face of the reflector in contact with the spark-wheel.

True, Hendler contemplated this operation by a sweep of the thumb or finger; but the Examiner of Interferences, in awarding priority to Hendler, found from a comparative operation of the devices of the respective parties that each was equally capable of operation by a sweep of the hand. This conclusion is strongly supported by the fact that over twenty-five thousand of the Hendler lamps have been manufactured, put on the market and successfully used. Further convincing proof is afforded from our investigation of the operation of the respective devices at bar. Each could be successfully operated by a sweep of the thumb or finger, and each could be successfully operated by a sweep of the hand.

The device is a simple one; and, where it clearly appears that it is inherently capable of being operated in the manner described in the issue, it comes within the rule of law that the patentee is entitled to all the uses to which his invention may be put. As held by the Examiner, we think the present case comes clearly within this rule. With this point settled in Hendler's favor, the proof clearly establishes his right to prevail.

The decision of the Commissioner of Patents is reversed, and the clerk is directed to certify these proceedings as by law required.

Reversed.

U. S. Circuit Court of Appeals—Second Circuit.

BAYLEY & SONS, INC., *v.* STANDART ART GLASS CO. *et al.*

Decided January 21, 1918.

249 FED. REP., 478.

1. PATENTS—VALIDITY—DOUBLE PATENTING.
   Where an inventor at the same time devises a container for electric lights of pleasing design and a mechanical contrivance conveniently united with an esthetic cover, he has made two inventions, and though he at first secures only a mechanical patent he may within the two-year period procure a design patent without violating the rule against double patenting.
2. SAME—DESIGN PATENTS—CONSIDERATION.
   A design patent for an ornamental electric-light fixture must be viewed in its entirety, its effect being optical.
3. SAME—VALIDITY—ANTICIPATION.
   Design Patent No. 49,593, for an ornamental electric-lighting fixture comprising a bell-shaped canopy having a straight lower edge, below which is suspended in close proximity a hemispherical bowl having a straight upper edge, *Held* invalid for lack of invention.

STATEMENT OF THE CASE.

Appeal from the District Court of the United States for the Southern District of New York.

Bill by Bayley & Sons, Incorporated, against the Standart Art Glass Company and another. From a decree for complainant, defendants appeal. Reversed and remanded, with directions to dismiss the bill.

The action is upon Design Patent 49,593, applied for March 25, and issued September 5, 1916. The specification is for an "ornamental electric lighting fixture," comprising a "bell-shaped canopy having a straight lower edge," below which is suspended in close proximity "a hemispherical bowl having a straight upper edge." The claim is for the fixture "substantially as shown and described." The drawing adds nothing to the above description, except that it shows the "canopy" as having six equidistant ribs, which (for all that is disclosed) might be either integral with the material of the fixture, or functionally a skeleton or framing into which the material is inserted or built. On October 12, 1915,

the same patentee obtained a mechanical patent (1,156,454) for an "improvement in electric lighting fixtures," claiming such fixture—

having a shade and a dish; the shade being formed of a plurality of panels formed of glass—

secured together by ribs, with top and bottom binding-channels, each of them being "a flat ring with inclined walls," in conjunction with—

means for securing the ribs to the channels and for connecting the dish to the shade.

The evidence shows that plaintiff called this fixture the "Equalite," and sold it with success; witnesses testifying that the—

light * * * was pleasing to the esthetic emotions [and] it acquired distinctiveness and individuality among the trade.

Comparing the drawing of the mechanical patent, as explained in its specification, with the drawing of the patent in suit, it is plain that both draftsmen had before them a single device, that the ribs of both drawings are the same, that said ribs have a mechanical purpose, and, in short, that the design patented is the contour shown in vertical section of the "shade and dish" of the mechanical improvement, though for design purposes the words "canopy and hemispherical bowl" are substituted.

The trial court found infringement, but denied an accounting, for reasons here immaterial. A final decree having therefore issued, defendant took this appeal.

Mr. John L. Lotsch and *Mr. Isaac Steinhaus* for the appellant.

Mr. Lester F. Dittenhoefer (*Messrs. Dodson & Roe* of counsel) for the appellee.

Before WARD, ROGERS, and HOUGH, Circuit Judges.

HOUGH, *Cir. J.*, (after stating the facts as above:)

Error is alleged in that the patent in suit was not held anticipated by the earlier grant to the same patentee for a mechanical improvement.

(1) If the same man at the same time devises a container of pleasing design and a mechanical contrivance conveniently united with the esthetic covering, he has made two inventions; and, though he patents one, that is no reason why within the statutory two years he may not patent the other. Such act would not be necessarily a case of double patenting, which is always unlawful. The question is unaffected by the accident that one of the two compared patents is for a design and the other for a mechanical arrangement of matter; and it is always the same, viz: Is the same thing or inventive thought disclosed by both? (*Williams, etc., Co.* v. *Neverslip, etc., Co.*, C. C., 136 Fed., 210; *President, etc., Co.* v. *Macwilliam*, D. C., 233 Fed., 439.)

The "shade and dish" of the mechanical patent were shown as of the design shape but that shape was neither part of the invention nor essential to its operation or success; whatever merit that improvement possessed depended on the construction and mechanical interrelation of parts, which might just as well have been conical or polygonal, as bell-shaped or hemispherical. But the design patent covers nothing but the shape and effect thereof upon the eye of the particularly-shown form of "canopy and bowl." Therefore there was no double patenting; and, as the later patent was applied for within two years after the earlier, the question whether, regarded as a publication, the first specification left no room for patentable invention in the second, is not before us.

(2, 3) There are, however, other design patents issued to other inventors, relating to the shapes of canopies and bowls for electric lights, and antedating the one in suit, which, in our opinion prevent the discovery of any invention in the patent at bar.

It is urged in support of the decree below that the novelty of a design is to be tested as a whole and that invention is persuasively shown by the commercial success of "Equalite." Undoubtedly a design must be viewed in its entirety; its effect is optical, and it can no more be tested piecemeal than can a picture, (*Dobson* v. *Dornan*, 118 U. S., 10; 6 Sup. Ct., 946; 30 L. Ed., 63;) but novelty is not invention, nor can aid be found in the sales of "Equalite." That word covers the light and the fitting thereof, all the material as fastened together; and the evidence wholly fails to show whether success is due to the mechanical excellence of the whole article, or the pleasing shape of its "canopy and bowl," which (as shown above) has no necessary connection with the mechanics of the contrivance. To ascertain whether it required invention to conceive and produce a plainly-ribbed bell-shaped canopy proximately surmounting a hemispherical bowl, we have considered the design patents below noted,[1] and applied rules of decision often and lately stated by this court.[2]

Finding no invention, it is ordered that the decree appealed from be reversed, and the case remanded, with directions to dismiss the bill, with costs in both courts.

[1] Grant, 45,629; Raymond, 48,082; and Pickhardt, 47,934—left no room for this invention in bell-shaped ribbed canopies with or without hemispherical bowls. The kind of mental operation involved is well shown by the slightly-later applications of the same patentee (49,567 and 49,558) showing canopies of hexagonal and circular horizontal section respectively. There would seem to be no difficulty in patenting one design for every figure of plane geometry.

[2] *Baker, etc., Co.* v. *Case Co.*, (220 Fed., 918; 136 C. C. A., 484;) *Denton* v. *Fulda*, (225 Fed., 537; 140 C. C. A., 521;) *Strause, etc., Co.* v. *Crane Co.*, (235 Fed., 126; 148 C. C. A., 620,) and *Dietz Co.* v. *Burr*, (243 Fed., 592; 156 C. C. A., 290,) with the cases there collated.

Applications Made to the Federal Trade Commission for Licenses Under Enemy-Controlled Patents and Trade-Marks Pursuant to the "Trading with the Enemy Act."

Patent No. 718,340, dated January 13, 1903, to Otto J. Graul, of Ludwigshafen-on-the-Rhine, Germany, assignor to Badische Anilin and Soda Fabrik, of Ludwigshafen-on-the-Rhine, Germany, a corporation of Germany. "Process of making cyan-methyl derivatives of aromatic amids." License applied for by E. I. du Pont de Nemours & Company, Wilmington, Del.

Patent No. 1,078,125, dated November 11, 1913, to August Büttner, of Uerdingen, Germany. "Cellular drying apparatus." License applied for by The Stearns-Roger Manufacturing Company, 1718–1720 California street, Denver, Colo.

Iceland—Decree Making the Law of November 13th, 1903, Covering the Protection of Trade-Marks, Applicable to the United States of America.

We, Christian the Tenth, by the Grace of God, King of Denmark, etc., etc., etc., hereby make known: that inasmuch as the protection of trade-marks in the United States of America has been made available—to the same extent as to her own citizens—to all such parties on Iceland as are operating any factory, industrial undertaking, agriculturing, mining, commerce, or any other trade, we desire by virtue of the law of November 13th, 1903, paragraph 15, to issue the following order:

The protection of trade-marks, provided by law of November 13th, 1903, shall also be extended to such parties in the United States of America as are operating any factory or industrial undertaking, agriculturing, mining, commerce, or any other trade upon the following conditions:

1. The application should be accompanied by a statement furnishing evidence that the applicant has fulfilled the conditions which are to be observed in the United States of America in order to obtain the said protection.

2. The applicant should adopt the "Reykjavik Byting" as venue in all matters concerning the trade-mark, in addition to which he should appoint an attorney who should represent him in lawsuits.

3. The scope of the protection of this trade-mark shall extend no further and will be valid no longer than is the custom in the United States of America.

4. The trade-mark shall be registered in the shape in which it is registered in the United States, provided its character is not in violation of the moral or the public justice.

5. If the application for the registration of a trade-mark is made in Iceland within four months after the date upon which it was applied for in the United States of America, such an application shall, in comparison to other applications, be regarded as having been applied for simultaneously with the one made in the United States.

6. If the registration of a trade-mark is refused in accordance with paragraph 5, No. 5, and the applicant proves, through the medium of proceeding against the party who has registered the trade-mark, that the said mark was originally used by him and that the same has been adopted by the other party, he may be entitled, through the decision of the court, to have the mark registered with sole right of use for the kind of goods in connection with which the mark was used when the mutual protection became effective, provided he brings action against the other party within six months from the date on which the mutual protection became effective. In this connection, however, no restriction is made with respect to the right granted in paragraph 11, section 3.

This decree becomes effective immediately.

This should be observed by all parties concerned.

Given at Amalienborg, April 16th, 1918, under our royal hand and seal.

(L. S.)

CHRISTIAN R.
SIGUDUR JÖNSSON.

THE OFFICIAL GAZETTE OF THE United States Patent Office.

Vol. 252—No. 3. TUESDAY, JULY 16, 1918. Price—$5 per year.

[PUBLISHED AUGUST 5, 1918.]

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Issue of July 16, 1918.

Patents	767	No. 1,272,349 to No. 1,273,115,	inclusive.
Designs	29	No. 52,172 to No. 52,200,	inclusive.
Trade-Marks	45	No. 122,251 to No. 122,295,	inclusive.
Labels	None.		
Prints	None.		
Reissues	1	No. 14,493.	
Total	842		

Interference Notice.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., July 6, 1918.

Davis Chemical Co., its assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of the Fig-O-Lax Manufacturing Company, 521 Margin street, Grenada, Miss., for registration of a trade-mark and trade-mark registered April 26, 1892, No. 21,056, to the Davis Chemical Co., Ypsilanti, Mich., and a notice of such declaration sent by registered mail to the said Davis Chemical Co. at the said address having been returned by the post-office undeliverable, notice is hereby given that unless said Davis Chemical Co., its assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

R. F. WHITEHEAD,
First Assistant Commissioner.

Changes in Classification.

(ORDER No. 2,412.)

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., July 23, 1918.

The following correction in the OFFICIAL GAZETTE of June 11, 1918, is hereby directed:

In Classification Order No. 2,397, on page 465, first column, cancel the paragraph beginning "In class 171, Electricity—Generation," as it has been decided not to establish the subclass mentioned therein.

J. T. NEWTON,
Commissioner.

Changes in Classification.

(ORDER No. 2,413.)

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., July 24, 1918.

The following change in the classification of inventions is hereby directed, to take effect immediately:

In class 169, Fire-Extinguishers, (Division XLIII,) establish subclass—

26. **Fusible connections.**

The patents contained in this subclass have been taken from class 236, Dampers, Automatic, subclass 16, Fusible.

J. T. NEWTON,
Commissioner.

Changes in Classification.

(ORDER No. 2,414.)

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., July 24, 1918.

The following change in the classification of inventions is hereby directed, to take effect immediately:

In class 32, Dentistry, (Division XX,) establish subclass—

35. **Veterinary.**

The patents contained in this subclass have been taken from class 128, Surgery, subclass 27, Veterinary.

J. T. NEWTON,
Commissioner.

Changes in Classification.

(ORDER No. 2,415.)

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., July 24, 1918.

The following change in the classification of inventions is hereby directed, to take effect immediately:

In class 15, Brushing and Scrubbing, (Division XXVII,) establish subclass—

73. **Rail-sweepers.**

The patents contained in this subclass have been taken from the various subclasses indented under "Track-cleaners," in class 104, Railways.

J. T. NEWTON,
Commissioner.

APPLICATIONS UNDER EXAMINATION.

Condition at Close of Business July 12, 1918.

Room No.	Divisions and subjects of invention.	Oldest new application and oldest action by applicant awaiting office action. New.	Amended.	No. of applications awaiting action.
314	1. Closure Operators; Fences; Gates; Harrows and Diggers; Plows; Railway Gates; Planting; Scattering Unloaders; Trees, Plants, and Flowers.	June 8	June 12	141
128	2. Bee Culture; Curtains, Shades, and Screens; Dairy; Label Pasting and Paper Hanging; Paper Files and Binders; Medicines; Pneumatics; Presses; Tents, Canopies, Umbrellas, and Canes; Tobacco.	Apr. 1	May 10	311
175	3. Annealing and Tempering; Electric Heating and Rheostats; Electrochemistry; Heating; Metal-Founding; Metallurgical Apparatus; Metallurgy; Plastic Metal Working.	Apr. 22	May 8	239
234	4. Conveyers; Elevators; Excavating; Hoisting; Material or Article Handling; Pneumatic Despatch; Pushing and Pulling Implements; Railway Mail Delivery; Store-Service; Traversing Hoists.	May 28	June 21	147
167	5. Bookbinding; Harvesters; Jewelry; Music	Mar. 23	May 27	217
318	6. Bleaching and Dyeing; Chemicals; Explosives; Fertilizers; Liquid Coating Compositions; Plastic Compositions; Preserving; Substance Preparation.	Mar. 16	May 27	379
312	7. Educational Appliances; Games and Toys; Optics; Velocipedes	Mar. 21	June 3	320
131	8. Beds; Chairs; Flexible-Sheet Securing Devices; Furniture; Kitchen and Table Articles; Store Furniture; Supports.	May 20	June 17	223
221	9. Air and Gas Pumps; Hydraulic Motors; Motors, Fluid; Motors, Fluid-Current; Pumps; Marine Propulsion.	Jan. 23	Jan. 25	624
235	10. Carriages and Wagons; Motor Vehicles	Mar. 27	June 8	561
154	11. Boot and Shoe Making; Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Spring Devices; Whips and Whip Apparatus.	May 6	May 28	186
322	12. Journal-Boxes, Pulleys, and Shafting; Machine Elements	Mar. 28	May 8	711
329	13. Ammunition and Explosive Charge Making; Bolt, Nail, Nut, Rivet, and Screw Making; Button Making; Chain, Staple, and Horseshoe Making; Driven, Headed, and Screw-Threaded Fastenings; Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Tools and Implements, Making; Metal Working; Needle and Pin Making; Nut and Bolt Locks; Turning.	Mar. 5	May 4	563
323	14. Compound Tools; Cutting and Punching Sheets and Bars; Farriery; Metal-Bending; Sheet-Metal Ware, Making; Tools; Wire Fabrics and Structure; Wire-Working.	Apr. 10	Apr. 11	161
308	15. Bread, Pastry, and Confection Making; Coating; Fuel; Glass; Laminated Fabrics and Analogous Manufactures; Paper-Making and Fiber Liberation; Plastic Block and Earthenware Apparatus; Plastics.	June 5	June 12	233
112	16. Electric Signaling-A; Radiant Energy; Telegraphy; Telephony	Mar. 18	Apr. 20	507
307	17. Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet Material Associating or Folding; Sheet Feeding or Delivering; Type Setting.	May 14	May 8	93
229	18. Fluid-Pressure Regulators; Injectors and Ejectors; Liquid Heaters and Vaporizers; Miscellaneous Heat-Engine Plants; Speed Responsive Devices; Steam and Vacuum Pumps; Steam-Engines; Steam-Engine Valves.	Mar. 25	Apr. 11	398
236	19. Dampers, Automatic; Furnaces; Heating Systems; Stoves and Furnaces; Domestic Cooking Vessels	Apr. 15	Apr. 9	327
179	20. Artificial Body Members; Builders' Hardware; Cutlery; Dentistry; Locks and Latches; Safes; Undertaking.	May 27	June 15	147
212	21. Brakes and Gins; Carding; Cloth-Finishing; Continuous-Strip Feeding; Cordage; Felt and Fur; Knitting and Netting; Silk; Spinning; Weaving; Winding and Reeling.	Mar. 13	May 4	244
249	22. Aeronautics; Firearms; Ordnance	Apr. 5	June 12	284
217	23. Acoustics; Coin-Handling; Horology; Recorders; Registers; Sound Recording and Reproducing; Time-Controlling Mechanism.	May 2	June 8	233
144	24. Apparel; Apparel Apparatus; Sewing-Machines; Garment Supporters	May 11	May 7	198
315	25. Agitating; Butchering; Centrifugal Bowl Separators; Mills; Threshing; Vegetable Cutters and Crushers; Gas Separation	May 22	May 29	147
105	26. Electricity, Generation; Motive Power	Dec. 8	Apr. 4	525
214	27. Brushing and Scrubbing; Grinding and Polishing; Laundry; Washing Apparatus	May 6	June 8	244
225	28. Internal-Combustion Engines	Mar. 20	Apr. 11	432
147	29. Boring and Drilling; Coopering; Fire-Escapes; Ladders; Wheelwright-Machines; Wooden Buildings; Wood-Sawing; Wood-Turning; Woodworking; Woodworking Tools.	Feb. 23	Mar. 1	488
152	30. Illuminating-Burners; Illumination; Liquid and Gaseous Fuel Burners; Type-Writing Machines	Apr. 19	June 21	354
172	31. Alcohol; Ammonia, Water, and Wood Distillation; Charcoal and Coke; Gas, Heating and Illuminating; Hides, Skins, and Leather; Hydraulic Cement and Lime; Mineral Oils; Oils, Fats, and Glue: Sugar and Salt.	Apr. 6	May 16	285
278	32. Gas and Liquid Contact Apparatus; Heat Exchange; Packaging Liquids; Refrigeration	Jan. 17	May 7	622
70	33. Bridges; Hydraulic Engineering; Masonry and Concrete Structures; Metallic Building Structures: Paving; Roofs.	Apr. 22	May 23	229
304	34. Railways; Railway Rails and Joints; Railway Rolling Stock; Railway Ties and Fasteners	June 14	June 27	64
57	35. Buckles, Buttons, Clasps, Etc.; Card, Picture, and Sign Exhibiting; Signals; Toilet	Feb. 15	Feb. 21	522
204	36. Driers; Geometrical Instruments; Measuring Instruments; Photography: Force Measuring	May 16	June 6	481
107	37. Electric Lamps; Electricity, Circuit Makers and Breakers; Electricity, Conduits; Electricity, General Applications.	Apr. 5	Mar. 7	670
378	38. Animal Husbandry; Earth Boring; Fishing and Trapping; Stationery; Stone-Working; Wells	June 19	June 5	114
290	39. Water Distribution; Multiple Valves	Apr. 23	Apr. 13	323
273	40. Baggage; Bottles and Jars; Check-Controlled Apparatus; Cloth, Leather, and Rubber Receptacles; Deposit and Collection Receptacles; Metallic Shipping and Storing Vessels; Package and Article Carriers; Paper Receptacles; Special Receptacles and Packages; Wooden Receptacles.	Apr. 5	Apr. 25	499
125	41. Railway Draft Appliances; Resilient Tires and Wheels	Apr. 4	May 7	282
114	42. Electricity, Conductors; Railway Signaling; Electricity-Transmission to Vehicles; Electric Signaling.	Jan. 23	Jan. 25	624
382	43. Baths and Closets; Dispensing; Dispensing Beverages; Electricity, Medical and Surgical; Fire-Extinguishers; Sewerage; Surgery; Water Purification.	Apr. 2	May 17	184
253	44. Air-Guns, Catapults, and Targets; Ammunition and Explosive Devices; Boats and Buoys; Ships	May 22	May 31	148
379	45. Clutches; Lubrication; Motors; Railway Brakes	Mar. 11	Apr. 11	315

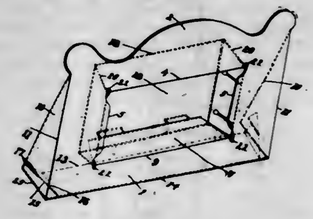
Oldest new case, Dec. 8; oldest amended, Jan. 25.
Total number of applications awaiting action 14,795

163	TRADE-MARKS, DESIGNS, LABELS AND PRINTS:			
	Trade-Marks	June 8	June 21	701
	Designs	Apr. 14	June 4	495
	Labels and Prints	May 31	June 21	103

PATENTS

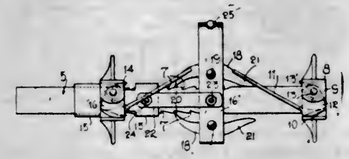
GRANTED JULY 16, 1918.

1,272,349. FOLDING DISPLAYING-EASEL. EDGAR E. ABRAHAMS, Dorchester, Mass. Filed June 24, 1916. Serial No. 105,627. (Cl. 211—24.)



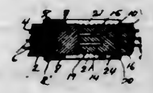
An article of manufacture, consisting of a front panel-member, provided with a display opening having retaining-tabs and locking-slots, side supporting brackets integral with said panel member and foldable therewith, and provided with locking-slots; a foldable brace member integral with said panel-member and foldable therewith at the bottom thereof, and provided with locking-tongues adapted to engage with the locking-slots in said side supporting-brackets; a container-flap provided with supporting-tabs, a container member provided with supporting-slots adapted to receive said supporting-tabs of said container-flap, side members made integral with said container-member and foldable therewith, and provided with locking-tongues and expansion-slots adapted to engage said container-member with said panel-member substantially as shown.

1,272,350. BELT-TIGHTENER. ANTONE J. ADAMEK, Orient, S. D. Filed Apr. 21, 1917. Serial No. 163,685. (Cl. 254—56.)



A belt tightener including a body bar substantially T-shaped in cross section, the longitudinal marginal portions of the head of said bar being provided with spaced notches to afford shoulders, the shoulders of one margin being in staggered relation relative to the shoulders of the second margin, a lever having an end portion overlying the outer face of the head of the bar and provided with lugs underlying the longitudinal margins of the head of the bar, arcuate dogs arranged at opposite sides of the head of the bar, each of said dogs being pivotally engaged intermediate its length with the lever, one end of each of the dogs being engageable with the adjacent shoulders in the bar and the opposite end of said dog contacting with the adjacent longitudinal edge of the head of the bar, a slide mounted upon the head of the bar, a link pivotally engaged at one end with a lever at a point midway between the pivotal connections of the dogs with the lever, the opposite end of the link being pivotally engaged with the slide at substantially the transverse center of the head of the bar, belt clamping means extending upwardly from the slide, and belt clamping means carried by an end portion of the head of the bar, said lever being positioned between the clamping means carried by the bar and the slide and capable of swinging movement and movement longitudinally of the bar.

1,272,351. EMERGENCY AUTO-TIRE. CHARLES W. ALBRECHT, Jr., Schleisingerville, Wis. Filed Dec. 1, 1917. Serial No. 204,861. (Cl. 152—23.)



2. In combination with a rim, of a tire, a block carried by each end of said tire, one of said blocks provided with a depending pin, said rim provided with an aperture for receiving said pin, one of said blocks provided with teeth formed upon the sides thereof, spring arms carried by the other block, said spring arms provided with teeth upon their inner faces for engaging the teeth formed upon the outer faces of said first mentioned block, means for securing said blocks to the ends of said tire, and one of said arms provided with an aperture formed therein for receiving a tightening tool.

3. A tire comprising a one piece body formed of resilient material, a locking block carried by each end of said body, means for locking said blocks together, reinforcing wires extending circumferentially throughout said body, said blocks provided with notches formed upon their inner ends, said reinforcing wires provided with looped portions formed upon their respective ends and fitting within said notches, a securing pin carried by each block and passing through said looped portions, and transversely extending connecting wires secured to said longitudinally extending wires.

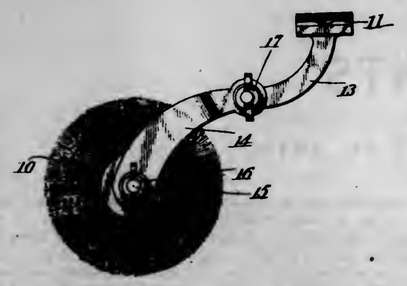
6. A tire of the class described comprising a body, a connecting block secured to each end of said body, means for anchoring one of said connecting blocks in engagement with the wheel rim, progressively adjustable means formed upon the respective blocks for permitting said blocks to be progressively adjusted with respect to each other for firmly tightening said tire upon the rim of a wheel, and means carried by one block and engaging the other block for holding said blocks against lateral shifting movement with respect to each other.

[Claims 1, 4, and 5 not printed in the Gazette.]

1,272,352. TIRE-CLEANING BRUSH. CLAUDE N. ALLEN, Michigan City, Ind., assignor to A. T. S. D. Manufacturing Company, Michigan City, Ind. Filed Jan. 24, 1917. Serial No. 144,240. (Cl. 208—151.)

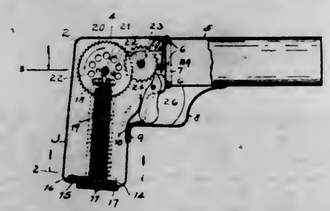
A tire cleaning device for motor vehicle, comprising an elongated plate adapted to be secured at an appropriate part of the machine, an arm projecting from said plate, a yoke pivotally associated with the extremity of said arm, a shaft carried by the yoke and having a threaded extremity, an annular brush capable of rotation mounted on said shaft, a nut associated with the threaded ex-

tremity of said shaft for holding said brush fixed relative to the yoke, and a thumb screw at the pivotal connection



of said yoke and the projected arm for holding the said brush in adjusted positions.

1,272,353. AUTOMATIC TOY PISTOL. MARTIN P. APPELL, near Galva, Ill. Filed Jan. 14, 1918. Serial No. 211,826. (Cl. 46—46.)



1. In a toy such as described, a pistol-shaped hollow frame, a noise-producing vibratory element therein, means for vibrating the latter, a spring from which the last recited element derives motion, and a trigger adapted to normally hold the last recited two elements from action.

2. In a toy such as described, a pistol-shaped hollow frame, a clatter-plate therein, means for actuating it, means for holding the actuating means inoperative, and means for releasing such actuating means.

3. In a toy such as described, a pistol-shaped hollow frame, a clatter-plate therein, a ratchet-wheel adapted to strike the clatter-plate, a spring from which the ratchet-wheel derives motion, and a trigger adapted to engage the ratchet wheel to stop rotations thereof and to be freed therefrom to permit it to rotate.

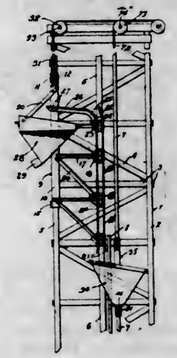
4. In a toy such as described, a pistol-shaped hollow frame, a vibratory element therein, a ratchet-wheel for vibrating it, a spur-wheel for driving the ratchet-wheel, a spring-actuated wheel for driving the spur-wheel, and a trigger for normally holding the ratchet-wheel and thereby said spur-wheel, spring-actuated wheel and spring from movement.

5. In a toy such as described, a pistol shaped hollow frame, a vibratory noise-creating element therein, a spring from which said vibratory element derives motion, a shaft embraced by said spring, and a spring-winding wheel secured on said shaft.

[Claims 6 to 8 not printed in the Gazette.]

1,272,354. SHIFTING HOPPER FOR CONCRETE WORK. THOMAS W. BAKER, Vancouver, British Columbia, Canada. Filed Jan. 6, 1915. Serial No. 853. (Cl. 214—120.)

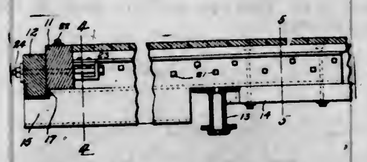
1. An apparatus of the character set forth, comprising a tower, a frame slidably mounted in the tower, a hopper carried by the frame, frame raising and lowering means, a second frame slidably mounted in the tower, means for raising and lowering the second frame, a bucket pivoted in the second frame at a point to one side of its center of gravity to permit it to gravitate into a dumping position, a guide carried by the tower and terminating at a point below the hopper, a roller carried by the bucket and engaging the guide to hold the bucket in upright position, a second guide carried by the first frame and terminating at a point above the hopper and beginning at a point below the upper end of the first guide, a second roller carried by the bucket and adapted to engage the second guide to hold the bucket in upright position after the first roller passes upwardly beyond the first guide, and a track extending from the upper end of the second guide to and over the hopper to receive the second roller after it passes above the second guide.



2. An apparatus of the character set forth, including a tower provided with pairs of guides, a frame provided with pairs of channeled members slidably engaging said guides, a hopper secured to and between one pair of said channeled members, and bucket guides carried by the opposing sides of the other pair of channeled members.

[Claim 3 not printed in the Gazette.]

1,272,355. DRAFT-SILL. FRANK S. BARKS, St. Louis, Mo. Filed May 8, 1916. Serial No. 96,103. (Cl. 105—76.)



1. The herein described draft sill formed in a single piece and comprising a front lower portion having the same cross sectional shape throughout its length and composed of a vertical web and a pair of outwardly presented parallel flanges, and an upper rear portion having the same cross sectional shape throughout its length and composed of a vertically disposed web and a horizontally disposed flange projecting inwardly from the upper portion thereof.

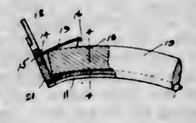
5. The herein described draft sill formed in a single piece and comprising a lower front portion which is channel-shape in cross section with the flanges outwardly presented, and a rear upper portion which is substantially Z-shape in cross section with the upper flange inwardly presented and the lower flange being a continuation of the outwardly presented flange at the upper edge of the lower front portion, all of said flanges being straight and occupying parallel horizontal planes.

9. The combination with railway car center sills, bolster, and end sill, of draft sills associated with said parts, each of which draft sills is formed in a single piece and comprises a front lower portion arranged in front of the bolster beneath the end sill and composed of a vertical web and a pair of outwardly presented parallel flanges, and an upper rear portion overlying the bolster and secured to one of the center sills, which upper rear portion comprises a vertically disposed web, and integral flanges projecting in opposite directions from the upper and lower portions of said last mentioned web, all of said flanges being straight and occupying parallel horizontal planes.

12. The combination with railway car center sills, bolster, and end sill, of draft sills associated with said parts, each of which draft sills comprises a lower front portion positioned in front of the bolster and beneath the end sill, a rear upper portion integrally connected to said lower front portion and overlying the bolster and secured to one of the center sills, brackets fixed to the forward portions of the draft sills, and tie rods seated in said brackets and the end sill for rigidly connecting the draft sills to said end sill.

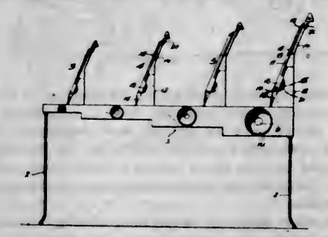
[Claims 2 to 4, 6 to 8, 10, and 11 not printed in the Gazette.]

1,272,356. EYEGLASS-MOUNTING. EARLE J. R. BEATTY, Providence, R. I., assignor to Universal Optical Corporation, Providence, R. I., a Corporation of Rhode Island. Filed Jan. 23, 1918. Serial No. 213,283. (Cl. 88—47.)



An eyeglass mounting comprising a split metallic lens-receiving frame having outwardly-extending end pieces at the split, the metal of the lens-receiving frame being pliable in order that it may be bent adjacent the end pieces so that the latter may be tilted with reference to the main part of the frame, a split non-metallic rim surrounding the lens-receiving frame and having depressions adjacent the end pieces, and a band of thin sheet metal soldered to each end piece and curved about the adjacent portion of the metallic rim to provide a pocket, the bottom of the pocket being formed by the end piece and said band being provided at its free edge with an inwardly-extending tongue, formed from the stock of the band, and whose dimensions and location are such that when the pocket is tilted outwardly by bending the pliable frame at the base of the pocket, the non-metallic frame can be fitted therein, and when the pocket is straightened out again the tongue will enter the depression in the end of the non-metallic rim, this being the only means required for retaining the non-metallic frame in place on the metallic frame.

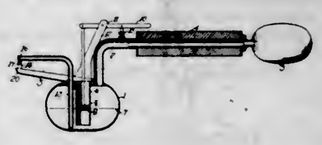
1,272,357. STRINGED MUSICAL INSTRUMENT. OWEN F. BEER, St. Johnsbury, Vt. Filed Dec. 19, 1916. Serial No. 137,859. (Cl. 84—44.)



5. A device of the class described comprising a body having a plurality of sound chambers therein, a sound bar extending through said chambers, a horn connected with each chamber, a string carrying member located above each chamber and provided with a sound box opening into said chamber, and a sound bar in each box connected with the first mentioned sound bar.

[Claims 1 to 4 not printed in the Gazette.]

1,272,358. PORTABLE SOLDERING DEVICE. JOHN MONTGOMERY BELL, Chester, S. C. Filed Aug. 7, 1917. Serial No. 184,886. (Cl. 113—111.)



1. A soldering apparatus comprising a reservoir for solder, a passage communicating therewith, a valve in said passage adapted when opened to permit molten solder to flow therethrough, means for applying air pressure to said reservoir, and a second passage communicating with said reservoir and having an orifice through which molten solder may be ejected.

3. A soldering apparatus comprising a reservoir for solder, a passage communicating therewith, a valve in said passage adapted when opened to permit molten solder to flow therethrough, means for applying air pressure to said reservoir, a second passage communicating with said reservoir and having an orifice through which molten solder may be ejected, a member underneath said orifice adapted to conduct molten solder to said first mentioned passage and means supported by said member for positioning the work to be soldered under said orifice.

4. A soldering apparatus comprising a reservoir for solder, a passage communicating therewith and extending therefrom, means for producing air pressure connected to said passage, a valve in said passage, a second passage communicating with said reservoir, a valve in said second passage and common means for operating both said valves.

8. A soldering apparatus comprising a reservoir for solder, means for applying air pressure communicating with the upper portion thereof, a valve for controlling the air pressure in said reservoir, a tube communicating with said reservoir and adapted to conduct molten solder outwardly therefrom, said tube having an orifice, a trough positioned adjacent said orifice, said trough having work positioning guides thereon adapted to position the work to be soldered, and a connection between said trough and said reservoir, said connection being valve controlled, substantially as described.

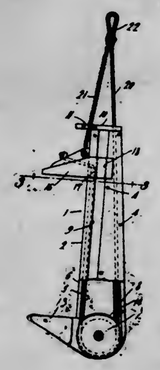
10. A soldering apparatus comprising a reservoir for solder, means for applying air pressure to said reservoir above the solder, a tube communicating with the lower portion of said reservoir and having an orifice through which molten solder may be ejected, a work holder secured to said reservoir and positioned adjacent said orifice, and valve controlled means whereby the flow of molten solder and the air pressure may be regulated, substantially as described.

[Claims 2, 5 to 7, and 9 not printed in the Gazette.]

1,272,359. CRANE-HOOK. JOHN M. BELL, Portsmouth, Ohio. Filed May 10, 1918. Serial No. 233,717. (Cl. 57—9.)

1. A device of the class described including a shank, a fixed jaw at one end thereof, a sliding jaw upon the shank, means for engaging a hoisting apparatus, a connection between said means and the movable jaw for shifting the movable jaw toward the fixed jaw during the upward movement of said means relative to the shank, a spring connected to said means for returning the parts to their initial relative positions when relieved of a load.

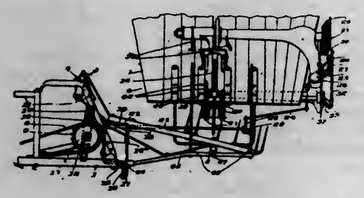
2. The combination with a shank, a fixed jaw and a slidable jaw, of support engaging means, a flexible operative connection between the movable jaw and said means to shift the jaw downwardly toward the fixed jaw during the upward movement of said means relative to the shank, and an elastic connection between said means and the movable jaw placed under increasing tension during such relative movement of the jaws.



3. The combination with a shank having a fixed jaw at its lower end, there being a passage extending longitudinally within the shank, of a sheave journaled in the shank and back of said jaw, a slidable jaw upon the shank, a support engaging element, a flexible connection between said element and the slidable jaw, said connection extending through the passage and into engagement with the sheave, and elastic connections between said element and the slidable jaw.

4. The combination with a shank, a fixed jaw and a slidable jaw, of support engaging means, a flexible operative connection between the movable jaw and said means to shift the jaw downwardly toward the fixed jaw during the upward movement of said means relative to the shank, and an elastic member connected to the slidable jaw and adapted to be placed under increasing tension during the movement of said jaw toward the fixed jaw.

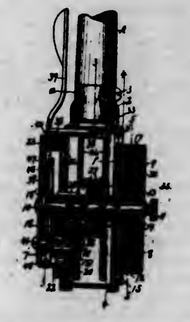
1,272,360. AUTOMATIC TRIP FOR SHOCKING-MACHINES. BERT R. BENJAMIN, Oak Park, Ill., assignor to International Harvester Company of New Jersey, a Corporation of New Jersey. Filed Apr. 23, 1914. Serial No. 833,947. (Cl. 56—121.)



1. In combination, a binder including a sheaf discharging member, an upwardly and rearwardly swinging sheaf delivery member movable through 180° for carrying away a sheaf discharged by said discharging member and depositing the sheaf prostrate, and means distinct from said sheaf discharging member and located out of the path of movement of the sheaf for controlling the operation of said sheaf delivery member operatively connected between the latter and a moving part of the binder.

[Claims 2 to 7 not printed in the Gazette.]

1,272,361. LINE-REEL. GEORGE P. BERGEVIN, Utica, N. Y. Filed Sept. 17, 1915. Serial No. 51,208. (Cl. 242—84.5.)



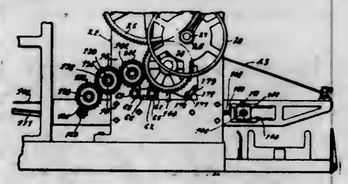
1. In a line-reeling device, the combination of a spool and a collar co-axial therewith and each rotatable relatively to the other, a motor-spring connecting the collar and spool to operate the spool, means for frictionally holding the collar against rotation under a resistance exceeding the maximum power of the spring tending to rotate it, a self-applying brake for the spool, means operable at will for releasing the brake, and means for locking the last-named means in its releasing position.

3. In a line-reeling device, the combination of relatively rotatable co-axial sleeves, a spring motor for rotating one of the sleeves, means for transmitting motion from such sleeve to the other sleeve, a spool, and means including a coil spring for transmitting motion from the last-named sleeve to the spool.

5. In a line-reeling device, the combination of relatively rotatable co-axial sleeves, a spring motor for rotating one of the sleeves, means for transmitting motion from such sleeve to the other sleeve, a spool, a collar frictionally mounted on the last-named sleeve to turn therewith, a motor spring connecting the collar and spool, the friction between the collar and its sleeve being sufficient to resist the tendency of both springs to rotate such sleeve and collar relatively to each other, a self-acting brake for the spool, and means operable at will for releasing the brake.

[Claims 2 and 4 not printed in the Gazette.]

1,272,362. SHEET-DELIVERY MECHANISM. FREDERICK H. BEROLD, Wyoming, Ohio. Filed Nov. 28, 1918. Serial No. 803,561. (Cl. 271—78.)



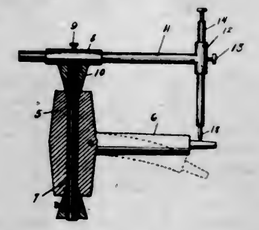
1. A sheet delivery mechanism comprising in combination, a moving sheet transfer device, a moving sheet-receiving device, and an endless cord mechanism having diagonally arranged stretches acting on the moving sheet between said moving sheet transfer device and said moving sheet for directing said moving sheet toward said receiving device.

5. In a sheet delivery mechanism of the character described, a rotary sheet transferrer comprising a cord-receiving sheave provided with a peripheral groove the walls whereof are formed with peripheral serrations, and a gripper, said sheave provided with a peripheral coacting surface for said gripper, and said peripheral coacting surface being coincident with the longitudinal projection of the peripheral edges of said peripheral serrations.

8. In a sheet delivery mechanism of the character described, the combination of a rotary sheet-transferrer comprising a draw-roll, a coacting draw-roll therefor, said draw-rolls acting to draw the sheet from said sheet-transferrer, and means for locating said coacting draw-roll with relation to said first-named draw-roll comprising a lever in which said coacting draw-roll is mounted, adjusting means acting on said lever for forming a positive stop limiting recession of said coacting draw-roll from said first-named draw-roll, and a spring urging said coacting draw-roll away from said first-named draw-roll.

[Claims 2 to 4, 6, 7, 9, and 10 not printed in the Gazette.]

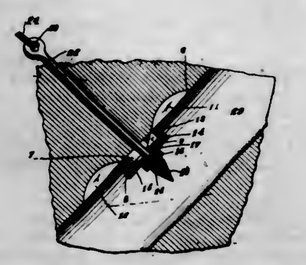
1,272,363. GAGE. THOMAS C. BEVAN and JOHN T. BEVAN, Utica, N. Y. Filed Jan. 26, 1917. Serial No. 144,700. (Cl. 33—203.)



1. In a knuckle straightening gage, a supporting rod adapted to be applied to the bore of a knuckle, a horizontally disposed sleeve carried thereby, an arm adjustably mounted in the sleeve and also provided with a vertically disposed sleeve, and a gage stem vertically adjustable in the second mentioned sleeve.

2. In an axle straightening gage, the combination of a vertical rod adapted to be supported in the bore of a knuckle, a horizontal bearing formed on one end of said rod, a horizontal rod slidably adjustable in said bearing, a vertically disposed sleeve formed on one end of said horizontal rod, a tube slidably adjustable in said sleeve, and a gage stem extended through said sleeve and threadedly engaged therewith.

1,272,364. EARTH-ANCHOR. JASPER BLACKBURN, Webster Groves, Mo. Filed Feb. 5, 1917. Serial No. 146,707. (Cl. 189—92.)

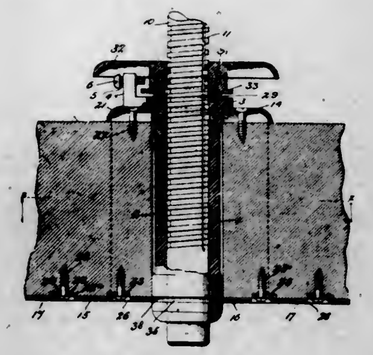


1. An earth anchor comprising two plates pivotally connected so that the longitudinal axis of the plates may be relatively adjusted, there being openings in each plate through which the driving point of an anchor rod may be passed, said plates being further provided with registering openings of lesser diameters than the first mentioned openings, in which an anchor rod may be seated.

7. An earth anchor comprising an anchor plate provided with an opening therethrough, through which the driving point of an anchor rod may be inserted and removed in any position and with a reduced opening leading from the first mentioned opening, an angular socket formed integral with the plate and surrounding the reduced opening, an anchor rod provided on one end with an eye and on its opposite end with screw threads, a detachable driving point having an angular head provided with a screw threaded socket adapted to receive the screw threaded end of the anchor rod, the said head adapted to be seated in the angular socket carried by the plate to prevent the turning of the anchor head while the anchor rod is being unscrewed from the driving point.

[Claims 2 to 6 not printed in the Gazette.]

1,272,365. CHAIR-IRON. HARRY W. BOLENS, Port Washington, Wis. Filed Mar. 18, 1918. Serial No. 223,193. (Cl. 155—41.)



2. In a chair-iron, the combination with a bored hub, an upper leg clamping-means, and radiating legs, of an annular groove formed in said hub near its lower end, a groove leading thereto and from the end of the hub, a lower leg clamping-plate adapted to slip over the lower end of the hub and provided with an internal extension adapted to engage the grooves of the hub, and means for securing the leg clamping-plate within the annular groove of the hub subsequent to a partial rotation of said plate.

3. In a chair-iron, the combination with a bored hub, an upper leg clamping-means, and radiating legs, of an annular groove formed in the hub and eccentrically with relation to the same, a groove leading to the annular groove and from the lower end of the hub and communicating with the groove at its deepest point, and a lower leg clamping-plate having an annular opening provided with an inward extension or lug, said plate being adapted to be slipped over the end of the hub and into the annular groove thereof and the extension or lug being adapted to travel in the communicating groove and into the annular groove, whereby when said plate and lug are in engagement with the annular groove of the hub and said plate partially rotated the lug or extension is caused to bind against the hub within the groove and thus secure the plate in position.

[Claim 1 not printed in the Gazette.]

1,272,366. LEGGING. CHARLES F. BOWMAN, Kalamazoo, Mich., assignor to Kalamazoo Corset Company, Kalamazoo, Mich. Filed Mar. 12, 1918. Serial No. 221,963. (Cl. 36—2.)

1. A legging having plait-like edge folds in its body material, the inner lap of the fold of the inner edge being extended into an underlying closure flap, pocket strips

disposed on the inner sides of the inner laps of said edge folds, said pocket strips and the fold laps being stitched longitudinally providing lacing pockets and stiffening strip pockets thereunder, lacing eyelets in the top walls of said lacing pockets, the said lacing pockets being open at their front edges opposite said eyelets, the outer edge having eyelets adjacent each end and a pair of spaced eyelets, the inner edge having eyelets at each end and a hook disposed opposite said pair of eyelets of the outer edge, a lacing having one end secured within the lacing pocket of the inner edge and laced out through the bottom eyelet thereof and across the edges and through the bottom eyelet of the outer edge, and thence longitudinally of its lacing pocket and out through the lower and in through the upper of said pair of eyelets providing a hook engaging loop, and thence longitudinally of the lacing pocket and out through the upper eyelet and across the edges and through the upper eyelet of the inner edge, and out of the opening at the edge thereof, and stiffening members disposed in said stiffening pockets and constituting shields for the eyelets and lace.



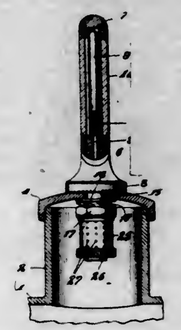
3. A legging having longitudinal lacing pockets at its edges and stiffening pockets thereunder, lacing eyelets in the top walls of said lacing pockets, the outer edge having eyelets adjacent each end and a pair of spaced eyelets, the inner edge having eyelets at each end and a hook disposed opposite said pair of eyelets of the outer edge, a lacing having one end secured within the lacing pocket of the inner edge and laced out through the bottom eyelet thereof and across the edges and through the bottom eyelet of the outer edge, and thence longitudinally of its lacing pocket and out through the lower and in through through the upper of said pair of eyelets providing a hook engaging loop, and thence longitudinally of the lacing pocket and out through the upper eyelet and across the edges and through the upper eyelet of the inner edge, and stiffening members disposed in said stiffening pockets and constituting shields for the eyelets and lace.

6. A legging having plait-like edge folds in its body material, pocket strips disposed on the inner sides of the inner laps of said edge folds, said pocket strips and the fold laps being stitched longitudinally providing lacing pockets and stiffening strip pockets thereunder, lacing members in the top walls of said lacing pockets, a lacing disposed longitudinally of the lacing pocket of one edge and in coacting relation to the lacing members of both edges, and stiffening members disposed in said stiffening pockets and constituting shields for said lacing members and lace.

[Claims 2, 4, 5, and 7 to 9 not printed in the Gazette.]

1,272,367. INDICATING INSTRUMENT FOR AUTOMOBILE-RADIATORS. HARRISON H. BOYCE, Forest Hills, N. Y. Original application filed June 20, 1914, Serial No. 846,247. Divided and this application filed Apr. 5, 1917. Serial No. 159,906. (Cl. 73—52.)

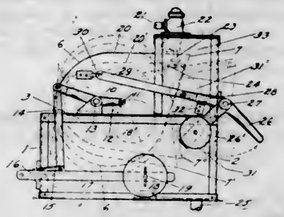
1. In indicating means for the radiators of vehicle propelling motors, the combination with a radiator having a filler opening, a closure member for said opening having a hole therethrough and connections for said closure member whereby said member may be drawn tight by a turning movement, of an instrument for indicating thermal conditions within the radiator having a visible indicating portion exterior to said closure member and a portion adapted to be influenced by conditions within the radiator and projecting through the hole in said closure member, and yielding clamping means for frictionally and rotatably but firmly and tightly clamping said instrument to said closure member.



8. In an instrument of the character described, the combination of a frame having a base adapted to rest upon a radiator cap and having a downwardly projecting screw threaded stem, a glass tube mounted in said frame and having a portion projecting through said stem, and a combined clamping nut and protective sleeve adapted to screw on said stem to clamp said instrument to a radiator cap, said sleeve having a faceted head at the upper end thereof and a knurled portion at the lower end thereof and being provided with a series of perforations between said head and knurled portion.

[Claims 2 to 7 not printed in the Gazette.]

1,272,368. AUTOMATIC WATER-WEIGHING DEVICE. EDWARD W. BRACKENBURY, Milwaukee, Wis., assignor to The T. L. Smith Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Jan. 8, 1917. Serial No. 141,101. (Cl. 73—177.)



1. In a water weighing device, a weigh beam, a tiltable weighing tank carried by one arm of said beam, a counterpoise attached to the other arm of said beam, an inlet valve adapted to be engaged and opened by said tank when the tank is returned from its tilting position while in its highest position and to be released and closed as the tank sinks under the weight of water contained thereby, and means for tilting the tank.

2. In a water weighing device, a receiving tank, a tiltable weighing tank supported above said receiving tank, means for tilting said weighing tank to discharge its contents into said receiving tank, the supporting means for the weighing tank consisting of a weigh beam on one arm of which the tank is pivotally mounted and to the other arm of which an adjustable counterpoise is attached, and an inlet valve opened by the movements of the weighing tank as it is returned from its tilting position.

[Claims 3 to 5 not printed in the Gazette.]

1,272,369. FUSIBLE LINK. CHARLES BRISBINE, Lisbon, N. D. Filed June 5, 1917. Serial No. 173,013. (Cl. 236—16.)

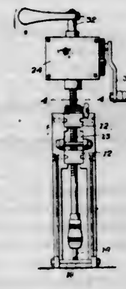


2. A fusible link, comprising a pair of link members having openings formed in one end thereof the opposite ends of said members being twisted and adapted to be interlocked by a slight turning movement, and fusible means for binding said interlocked ends together.

5. A link comprising a pair of separable link members adapted to be locked together at one end by a slight rotative movement and fusible binding means surrounding said interlocked ends.

[Claims 1, 3, and 4 not printed in the Gazette.]

1,272,370. PORTABLE BORING-MACHINE. JOHN J. BROSNAN, Worcester, Mass. Filed Sept. 21, 1917. Serial No. 192,445. (Cl. 144—104.)

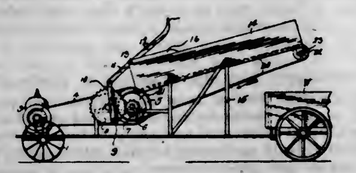


1. In a boring device, the combination of a frame having a nut, a threaded shaft mounted in said nut and supported thereby and provided with means for holding an auger at its end, a casing supported by said shaft at the other end adapted to be turned independently of said frame, and gearing carried by said casing and connected with said shaft for operating it.

3. In a boring device, the combination of a frame having a split-nut, a threaded shaft rotatable in said nut and supported thereby and provided with means for holding an auger at its end, a casing supported by the other end of said shaft, gearing on said casing connected with said shaft for operating it, a hub having a ball-race provided with bearing-balls mounted on the end of the shaft, a casing resting on said bearing-balls, a gear in said casing fixed to the end of the shaft, multiplying gearing carried by said casing, and a handle connected therewith for operating the shaft.

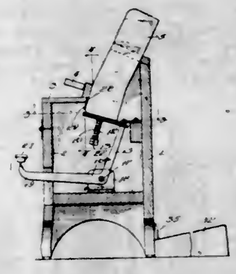
[Claims 2 and 4 not printed in the Gazette.]

1,272,371. KAFIR-CORN HEADER. MARSHALL A. BROWN, Eureka, Kans. Filed Mar. 5, 1918. Serial No. 220,539. (Cl. 56—131.)



In a header for Kafir corn and the like, the combination with a box-like body supported in an inclined position, and a conveyer moving upwardly over the bottom thereof; of a fixed blade standing in an upright plane and carried by one side board of the body at its lower end, a moving blade pivoted alongside the fixed blade at and projecting beyond the heel of the latter, a link connected with the projecting end of the moving blade, and unitary power mechanism for moving said link and driving said conveyer simultaneously.

1,272,372. CHANGE-MAKER. MAX C. BRUHN and GEORGE F. MCGILL, Chicago, Ill. Filed May 5, 1916. Serial No. 95,580. (Cl. 133—5.)



1. In a change maker, a coin tube and a bottom support for a stack of coins in the tube, and a movable ejector pivoted at one side of the coin stack for engaging the lowermost coin in one direction of movement, yieldingly supported for depression below the lowermost coin in the other direction of movement.

10. In a change maker, a casing, a plurality of open coin tubes supported by the casing in a substantially upright position, a common plate for supporting a stack of coins in each tube, means for ejecting the lowermost coin from each tube, a hinged cover disposed over the lower portion of the tube, and a plate carried thereby having projections disposed at the open sides of the tube for preventing more than one coin from being simultaneously ejected from any one of the tubes.

16. In a change maker, a coin tube and a bottom plate for supporting a stack of coins, the said plate being provided with an elongated slot, an ejector yieldingly supported below the plate for pivotal movement and movement toward and from the plate, the said ejector having a slot which extends at an angle to the slot of the plate, and an actuating lever for the ejector having an arm extending through the slot of the plate and the slot of the ejector, for moving the ejector in accordance with the movement of the arm.

17. In a change maker, a casing having a hinged top, a plurality of upright coin tubes secured to the casing, and extending above and below the hinged top, the fronts of the tubes being open and contiguous to the adjacent edge of the top, a coin ejector at the bottom of each tube, a common chute into which the ejectors discharge the coins, the chute extending from the end of the casing, a plate secured to the edge of the top adjacent the tubes for preventing more than one coin from being simultaneously ejected from each tube, a coin receptacle arranged at the back of the casing, and a connecting chute extending from the first-named chute and discharging into the receptacle.

[Claims 2 to 9 and 11 to 15 not printed in the Gazette.]

1,272,373. AIRCRAFT CONSTRUCTION. RANDOLPH BRUNSON, East Orange, N. J. Filed Oct. 18, 1917. Serial No. 197,283. (Cl. 244—31.)

1. In combination with an aircraft frame structure, a flexible covering extending around and inclosing the same, one member of the frame structure being formed with a longitudinal groove, the opposite edges of the covering lying in said groove, and a retaining and stretching strip

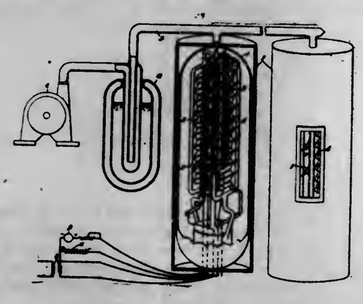
for said covering inserted flush in said groove and serving to hold the edges of the covering therein, said opposite



edges of the covering being connected before said covering is applied to the frame structure.

[Claims 2 to 4 not printed in the Gazette.]

1,272,374. METHOD OF PREPARING VACUUM-TUBES. OLIVER ELLSWORTH BUCKLEY, East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 30, 1915. Serial No. 69,418. (Cl. 250—27.)



1. The method of preliminary treatment of a vacuum tube containing a heated cathode, an anode, and an auxiliary electrode, which method consists in evacuating said tube and before said evacuation is completed in performing the following steps, *i. e.*, in maintaining an electron discharged between said cathode and anode and in applying between said auxiliary electrode and said cathode a voltage which shall limit the current to a given value while permitting a large voltage between anode and cathode whereby the energy of the electrons striking the anode shall be large.

[Claim 2 not printed in the Gazette.]

1,272,375. PURIFICATION OF PRECIPITATES. DEANE BURNS, Lakewood, Ohio, assignor, by mesne assignments, to National Carbon Company, Inc., a Corporation of New York. Filed Sept. 19, 1914. Serial No. 862,561. (Cl. 23—13.)

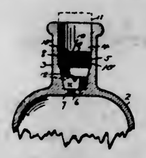
1. The steps in the process of freeing precipitated fluorids of rare-earth metals of occluded rare-earth metal sulfates, which consists in mixing them with a fluorid adapted to react with said occluded sulfates on application of heat, and applying heat to bring about the reaction.

4. The process of eliminating sulfates from fluorids of rare-earth metals, which consists in mixing said fluorids with sodium fluorid, calcining it to a temperature above substantially 500° C. and washing out the soluble salts thus formed.

[Claims 2 and 3 not printed in the Gazette.]

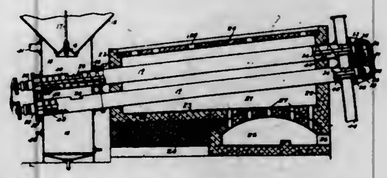
1,272,376. NON-REFILLABLE BOTTLE. RAY E. BURNS, Syracuse, N. Y. Filed Mar. 20, 1917. Serial No. 156,026. (Cl. 215—65.)

In a non-refillable bottle, the combination of a hollow neck separated interiorly from the body of the bottle by an annular flange forming a central port, the interior of the neck provided intermediate its ends with screw threads, the portion of the neck between said threads and the free end thereof being cylindrical and adapted to receive a cork, the interior of the neck below said threads gradually tapering and contracting to said flange, a threaded stopper having a central liquid port irremovably



disposed in the threaded portion of the neck, and a gravitative float valve disposed in the contracted interior adapted to control the flow of the liquid through the port in said flange.

1,272,377. APPARATUS FOR THE TREATMENT OF SHALE OR THE LIKE. ROBERT M. CATLIN, Franklin, N. J., assignor to Catlin Shale Products Company, Wilmington, Del., a Corporation of Delaware. Filed Aug. 9, 1917. Serial No. 185,244. (Cl. 263—25.)



1. In apparatus for the treatment of materials such as shale, a retort, and a conveyer for moving the material through the retort including means for spreading out the material in a thinner mass near the delivery end of the retort.

2. In apparatus for the treatment of materials such as shale, a retort, and a conveyer for moving the material through the retort including means for spreading out the material in a gradually thinning mass as it approaches the delivery end of the retort.

3. In apparatus for the treatment of materials such as shale, a retort, and a conveyer for moving the material through the retort including means for feeding the material faster near the delivery end.

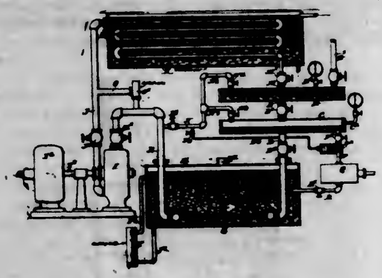
11. The combination of a tubular retort, and a conveyer, for moving the material to be treated through the retort, having a helical blade of varying pitch.

12. The combination of a tubular retort, and a conveyer, for moving the material to be treated through the retort, having a helical blade of varying pitch, said retort being concentric with the conveyer and having a radius slightly larger than that of the conveyer.

[Claims 4 to 10 not printed in the Gazette.]

1,272,378. POWER-GENERATING APPARATUS. ELBRIDGE C. COLLINS, Detroit, Mich. Filed Jan. 26, 1916, Serial No. 74,410. Renewed Jan. 8, 1918. Serial No. 210,948. (Cl. 60—6.)

1. In an apparatus of the character described, a reservoir having a valved inlet and a valved outlet depending therefrom, a supply tank into which said outlet depends, having a depending valved pipe, a fluid holding generator, means for heating the fluid within said generator, a high pressure coil within said generator and to one end of which said supply tank pipe is connected, a valved high pressure gas pipe leading from the opposite end of said coil, an impact member to which said gas pipe leads, a condenser, an exhaust pipe leading from the said impact member to the said condenser, a valved pipe leading from the condenser into said reservoir, a pressure equalizing pipe leading from said high pressure gas pipe, a feed pump for feeding liquid gas into the high pressure coil, having an intake pipe communicating with said supply tank, and a regulating valve in said intake pipe having a controlling pressure pipe leading into said pressure equalising pipe.



2. In an apparatus of the character described, a reservoir having a valved inlet and a valved outlet depending therefrom, a supply tank into which said outlet depends, having a depending valved pipe, a fluid holding generator, means for heating the fluid within said generator, a high pressure coil within said generator and to one end of which said supply tank pipe is connected, a valved high pressure gas pipe leading from the opposite end of said coil, an impact member to which said gas pipe leads, a condenser, an exhaust pipe leading from the said impact member to the said condenser, a valved pipe leading from the condenser into said reservoir, a pressure equalizing pipe leading from said high pressure gas pipe, and having valved branches respectively communicating with said reservoir and said supply tank.

3. In an apparatus of the character described, a reservoir having a valved inlet and a valved outlet depending therefrom, a supply tank into which said outlet depends having a depending valved pipe, a fluid holding generator, a high pressure coil within said generator and to one end of which said supply tank is connected, a valved high pressure gas pipe leading from the opposite end of said coil, an impact member to which said gas pipe leads, a condenser, an exhaust leading from the said impact member to the condenser, and a valved pipe leading from the condenser into the said reservoir.

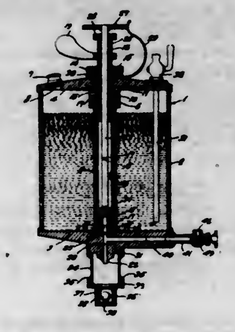
4. In an apparatus of the character described, a generator including a high pressure coil, a supply tank communicating with said generator coil, a high pressure gas pipe also communicating with said coil, an impact member to which said gas pipe leads, a condenser connected to the exhaust side of said impact member, a reservoir with which said condenser communicates, having a valved connection with said supply tank, and a valved pressure equalizing pipe leading from said high pressure gas pipe and having valved branches respectively communicating with said reservoir and with said supply tank.

5. In an apparatus of the character described, a generator including a high pressure coil, a supply tank communicating with said generator coil, a high pressure gas pipe also communicating with said coil, an impact member to which said gas pipe leads, a condenser connected to the exhaust side of said impact member, a reservoir with which said condenser communicates, having a valved connection with said supply tank, and valved pressure equalizing connections between said gas pipe and said reservoir and supply tank.

[Claims 6 to 8 not printed in the Gazette.]

1,272,379. AIR AND LIQUID SUPPLYING DEVICE. FRANK W. COLLINS, Manistee, Mich. Filed Jan. 9, 1917. Serial No. 141,479. (Cl. 261—44.)

1. A device of the character described embodying a receptacle for both air and liquid having an air inlet, an air and liquid outlet, and means for the flow of air and liquid from the receptacle above and below the liquid level respectively to the outlet, and a manually operable valve for simultaneously establishing and shutting off the flow of air and liquid from the receptacle to the outlet.



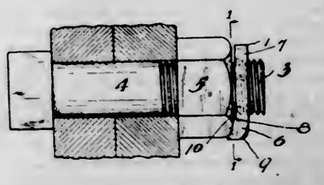
2. A device of the character described embodying a liquid receptacle having a tubular member projecting upwardly from its bottom and an outlet in its bottom leading from the lower end of said member, said member being apertured for the flow of liquid and air from the receptacle to the outlet, means within said tubular member for regulating the flow of air and liquid, and air inlet means leading from above to a point below the liquid level.

3. A device of the character described embodying a liquid receptacle having an air inlet and a tubular member projecting upwardly from its bottom and an outlet in its bottom communicating with the lower end of said member, said member being apertured for the flow of air and liquid therethrough from the receptacle, a tubular valve rotatable within said member for regulating the flow of air and liquid, and a valve within the tubular valve controlling the flow of air and liquid through the outlet.

4. A device of the character described embodying a liquid receptacle having an air inlet and a tubular member extending upwardly from its bottom and an outlet in its bottom communicating with the lower end of said member, said member being apertured for the flow of air and liquid from the receptacle to said outlet, the tubular valve fitting said member and projecting upwardly through the top of the receptacle, said valve controlling the flow of air and liquid, and a needle valve within said member and valve having its tip lowermost to control the flow of air and liquid through the outlet, said needle valve projecting upwardly beyond the tubular valve.

[Claims 5 to 7 not printed in the Gazette.]

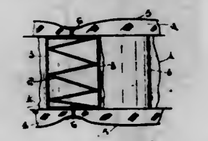
1,272,380. NUT-LOCK. JAMES F. COLLINS, Pittsburgh, Pa., assignor of one-third to Frederick T. Aschman and fifty-one one-hundredths to William F. Phillips, Pittsburgh, Pa. Filed Aug. 7, 1915, Serial No. 44,194. Renewed Dec. 8, 1917. Serial No. 206,329. (Cl. 151—15.)



1. A poly-sided washer of flexible elastic material formed with a threaded opening and provided with a shouldered offset, the portion of which said offset forms a part being beveled with relation to the body of the washer, and said beveled portion having an additionally bent corner.

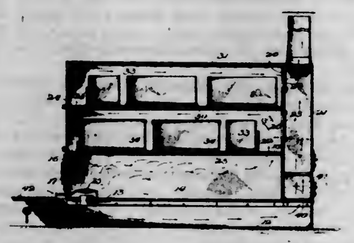
2. The combination with a screw bolt and a nut with a rounded head of a poly-sided elastic washer having a beveled portion impinging over the rounded head of the nut and having also a bent corner overhanging the nut between two of its corners.

1,272,381. MATTRESS. GEORGE A. CONLAN, Toronto, Ontario, Canada, assignor of one-half to Alan C. Thompson, Toronto, Ontario, Canada. Filed Aug. 1, 1916. Serial No. 112,600. (Cl. 5—13.)



A mattress comprising a plurality of coil springs incased in connected closed pockets; a covering of padding material incased in ticking applied over the springs at each side of the mattress; and independent flat tufting tapes for each side of the mattress, each tape passing through pairs of adjacent holes in the coverings, through the adjacent end of a spring pocket, around part of the inclosed spring, and tied externally in a flat bow sufficiently tight to produce a shallow depression in the surface of the covering sufficient only to receive the bow.

1,272,382. ARMY KITCHEN. JOSEPH CONLEY, Anadarko, Okla. Filed Dec. 5, 1917. Serial No. 205,593. (Cl. 126—276.)

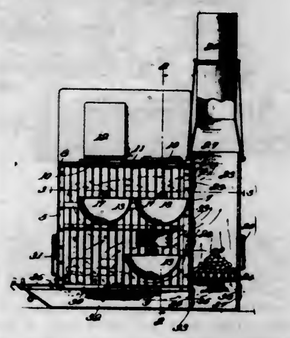


1. In an oven of the character described in combination, an outer casing provided with a plurality of horizontal decks arranged one above the other, the space above the bottom deck constituting an ash-pit, and the space above the second deck constituting a combustion chamber, a stack at one end of the casing and dampers associated with the space above each deck and the stack as well as between the spaces above the decks whereby the products of combustion may pass in any desired quantity either directly to the stack through the ash pit or back and forth over one or more of the decks.

2. In an oven of the character described in combination, a casing, a series of superposed decks within said casing, a combustion chamber, a flue below said combustion chamber, a stack and dampers associated with said flue and stack whereby the products of combustion may be caused to pass from the combustion chamber into the flue and thence to the stack, or back and forth through one or more of the decks and to the stack.

1,272,383. INCINERATOR. JOSEPH CONLEY, Anadarko, Okla. Filed Oct. 27, 1917. Serial No. 198,810. (Cl. 110—9.)

1. In a latrine incinerator the combination with a casing provided with grate bars at its lower portion, a plurality of pans pivoted in the sides of the casing, one of the tiers of pans being spaced from one side wall of the casing and the other tier being spaced from the other side of the casing, a stack adjacent the casing, said casing being provided with openings communicating with the stack above and between the tiers of pans, a second grate located below the stack and dampers for controlling the opening from the casing to the stack.

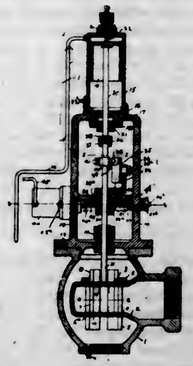


2. In a latrine incinerator the combination with a casing provided with grate bars in its lower portion, a plurality of pans located in the upper portion of the casing and forming a tier, a single pan located in the lower rear portion of the casing, a grate located in the lower forward portion of the casing, said lower pan being spaced from the bottom of the casing and the rear wall thereof, a stack adjacent the casing, said casing being provided with openings communicating with the stack, dampers for controlling said openings, one of said openings being located between the lower pan and the upper tier, and another of said openings being located above the upper tier.

3. In a latrine incinerator the combination with grate bars in its lower portion, a plurality of tiers of pans pivoted in the sides of the casing, a stack adjacent the casing, said casing being provided with openings above and between the tiers of pans communicating with the stack, a second grate located below the stack, dampers for controlling the opening from said casing to said stack, and a pan located under the entire bottom of the casing, the rear wall of the pan being provided with an opening communicating with the portion of the stack below the second grate.

[Claims 4 to 6 not printed in the Gazette.]

1,272,384. GOVERNOR. RUDOLPH CONRADER, Erie, Pa. Filed May 29 1916. Serial No. 100,550. (Cl. 103—92.)



1. In a pump governor, the combination of a governor valve controlling by rotative and axial movement; devices sensitive to changes of pressure; and mechanism acting with said devices to move said valve rotatively and axially.

7. In a governor, the combination of a governor valve controlling by rotative and axial movement; a controlling means actuating the valve axially; and a cam actuating the valve rotatively as it is moved axially by said means.

11. In a governor, the combination of a governor valve controlling by rotative and axial movement; a controlling means actuating the valve axially; a cam actuating the valve rotatively as it is moved axially by said means; and means for adjusting the cam to vary the rotative effect.

19. In a pump governor, the combination of a governor valve controlling by rotative and axial movement; a controlling means actuating the valve axially; a gear locked to rotate with the stem; a rack meshing the gear; a pressure device actuating the gear; a lever having a tooth thereon adapted to engage the teeth of the gear; and stops acting on the lever.

[Claims 2 to 6, 8 to 10, 12 to 18, and 20 not printed in the Gazette.]

1,272,385. PIVOT FOR SCISSORS AND SHEARS. JOHN J. CONWAY, Bridgeport, Conn., assignor to The Acme Shear Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Dec. 5, 1917. Serial No. 205,660. (Cl. 85—53.)



1. A device of the character described comprising a body provided with a head at one end and threaded at the other end, said head having a socket therein, a jewel within said socket, and means for maintaining a body of cementing material within said socket and in contact with the base of the jewel.

2. A device of the character described comprising a body provided with a head at one end and threaded at the other end, said head having a socket therein provided with a recess in its bottom, a jewel within said socket, and a cementing material within said recess and attached to the base of the jewel.

1,272,386. LEGGING. HENRY W. COOK, Syracuse, N. Y. Filed Apr. 15, 1918. Serial No. 228,627. (Cl. 36—2.)



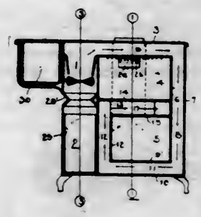
1. A legging comprising a body portion, a plate in contact with the body portion, said plate and body portion provided with a plurality of spaced registering openings, a stud secured to the plate and extending through the body portion intermediate said spaced openings, eyelets passed through said registering openings and having flanged portions gripping the plate and the legging body for securing the parts together, and a strap having one end secured to the legging body and its opposite end extended successively through said eyelets and having an opening fitted over said stud.

3. A legging comprising a body portion, a plate, a plurality of registering spaced openings in the body portion and the plate, a stud carried by the plate and extending through the body portion intermediate the spaced openings, and a strap extending through said registering openings and engaged with said stud.

8. A legging comprising a fabric body portion, a plate positioned upon the interior of said fabric body portion and having a stud penetrating the fabric body portion and extending externally therefrom, spaced registering openings through the body portion and the plate, means for securing the plate to the body portion, and a strap having a portion extended through the spaced registering openings and having a part engaged with said stud.

[Claims 2 and 4 to 7 not printed in the Gazette.]

1,272,387. STOVE. PROCTOR P. COOLEY, Peoria, Ill., assignor to Culter & Proctor Stove Co., Peoria, Ill., a Corporation of Illinois. Filed Jan. 12, 1914. Serial No. 811,652. (Cl. 126—1.)



A stove having a fire-box and underlying ash-pit on one side, a continuous and uninterrupted vertical flue on the opposite side, a pair of intervening, vertically spaced ovens, the upper oven being next to the fire box and spaced from the top of the stove to provide a connecting passage between said flue and fire-box, the lower oven being spaced from the ash-pit and the bottom of the stove to provide a connecting passage between the flue and the space between the ovens, the ovens being connected adjacent the flue to cause the heated gases to pass around the lower oven before coming into contact with the under side of the upper oven, and an outlet for the space between the ovens.

1,272,388. BLOTTER-HOLDER. JAMES J. G. COOPER, Jacksonville, Fla. Filed Mar. 30, 1917. Serial No. 158,714. (Cl. 120—27.)



1. In a device of the class described, the combination of a stand having a standard projecting thereabove, the rear surface of the stand and standard being substantially plane and inclined to the vertical, a supporting means rotatably mounted upon the upper end of said standard, a supporting arm pivotally mounted on said supporting means, said arm being capable of being swung in a vertical plane, said arm being capable of being swung to either side of the rotation of said means upon said standard, said arm having a weighted rear end, said weighted end swinging into engagement with the plane inclined

surface of said stand when said arm is released, thus preventing the arm from accidentally swinging to either side when not in use.

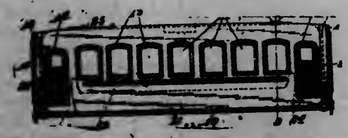
2. In a device of the class described, the combination of a stand, said stand having a standard projecting therefrom, the rear surface of said stand and standard being substantially plane and inclined to the vertical, a pin extending from the upper end of said standard, a U-shaped bracket rotatably mounted upon said pin, a cross pin carried by said bracket, a supporting arm having an off-set portion intermediate its ends pivotally mounted upon said cross pin, thus allowing the arm to be swung vertically upon said bracket, while said bracket may rotate for permitting the arm to be swung to either side, a weight carried upon the rear end of said arm, said weight being adapted to swing the arm to an inoperative position when the same is released, thus causing the weight to bear upon the inclined plane surface of said stand thus preventing the arm from accidentally swinging to either side when not in use.

1,272,389. SMOKER'S PIPE. JAMES S. COOPER, Naugatuck, Conn. Filed Oct. 16, 1916. Serial No. 125,958. (Cl. 131—12.)



A pipe, comprising a body having a bit socket and a chamber bored therein in axial alinement, a cap element closing said chamber, a barrel carried by the cap and snugly fitted to the interior of said chamber, a passage extending axially forward in the cap and from the bottom of the cavity therein, an elongated duct through the body and terminating in the bit socket, an extension duct in the cap element to connect the axially directed passage with the body duct, a lighting opening in the body rearwardly inclined from said chamber, and draft openings also rearwardly directed from the chamber through the body.

1,272,390. TOY CAR. JOSHUA L. COWEN, New York, N. Y. Filed Oct. 28, 1915. Serial No. 57,410. (Cl. 46—48.)



1. A toy car body comprising a bottom portion and side portions integral therewith having window openings therein, and end portions extending from the opposite ends of the side portions, the vertical edges of the end portions and the adjacent side portions being formed with overlapping overturned portions secured together.

2. A toy car body comprising a bottom portion and side portions integral therewith having window openings therein, and end portions extending from the diagonally opposite ends of the side portions, the vertical edges of the end portions and the adjacent side portions being formed with overlapping overturned portions secured together.

3. A toy car body comprising side portions having window openings therein and a separate sheet of a different color within the side portions and having openings of a smaller size registering with the openings in the sides, the portions of said sheet showing through the window openings providing different colored frames for the windows.

4. A toy car body comprising a bottom portion and side portions having window openings therein and a separate sheet of a different color within the side portions and having openings of a smaller size registering with the openings in the sides, and means on the car body for securing the frame in place.

5. A toy car body comprising a bottom portion and side portions having window openings therein, there being a groove formed at the junction of the bottom and side portions, and a frame of different color having openings corresponding to the window openings and retained in said groove.

[Claims 6 to 15 not printed in the Gazette.]

1,272,391. TOY CAR. JOSHUA L. COWEN, New York, N. Y. Original application filed Oct. 28, 1915, Serial No. 57,410. Divided and this application filed Dec. 19, 1916. Serial No. 137,830. (Cl. 46—48.)



3. The process of making a toy car body consisting in stamping a sheet metal blank comprising a bottom portion and side portions with openings for the windows in the side portions, then bending over the side portions, and then inserting frames of a different color at the interior of the side portions with the openings of said frames registering with the openings in the side portions.

[Claims 1, 2, and 4 not printed in the Gazette.]

1,272,392. CABLE-GRIP. THOMAS J. CRAVEN and DANIEL J. CRILLY, Detroit, Mich. Filed Mar. 31, 1917. Serial No. 158,813. (Cl. 24—126.)

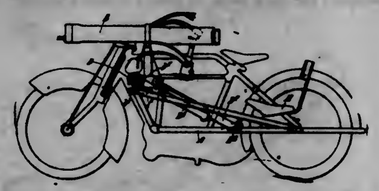


3. A cable grip comprising a hollow casing having openings in opposite ends thereof for the passage of a cable therethrough, a gripping jaw pivotally and slidably supported in said casing and having eccentric engagement with said cable to wedgingly confine the same against withdrawal therefrom, means normally retaining said jaw yieldably engaged with said cable, and means to manually retract said jaw against said retaining means.

5. A cable grip comprising a hollow casing having opposed arcuate passages for the reception of the leads of a cable, a gripping jaw pivoted to swing and to move transversely within said casing and having reversely opposed cam faces engageable respectively with the leads of said cable to wedgingly confine the same against the walls of said passages, a spring interposed between said casing and said jaw and acting on the latter to retain the cams thereof yieldably engaged with the leads of said cable, and a projection on the jaw freely extending through said casing and operable to retract said jaw against the tension of said spring.

[Claims 1, 2, and 4 not printed in the Gazette.]

1,272,393. MOUNTING FOR AUTOMATIC GUNS. ARTHUR TREVOR DAWSON and GEORGE THOMAS BUCKHAM, Westminster, London, England, assignors to Vickers Limited, Westminster, England. Filed Oct. 14, 1915. Serial No. 55,793. (Cl. 89—40.)



1. The combination with a cycle side car, of an automatic gun, a mounting for the gun having three protuberances, a bed plate having three curved seatings adapted to receive said protuberances, and means for detachably connecting the mounting to the said bed plate with the muzzle of the gun projecting in a forward direction.

5. The combination with a motor cycle, controlled by a driver, of a cycle side car comprising a one-wheeled chassis, means for connecting said chassis to said cycle, a support on said chassis, a breech loading gun and its tripod mounting pivotally mounted on the said support, a gunner's seat also carried on said chassis and located below the breech end of said gun, the position of said seat relatively to the breech end of the gun being such that said gun can normally be operated by the gunner while the carriage is in motion and without its being necessary for either the motor cycle driver or the gunner to leave his seat, and quick release catches for detachably connecting the gun and its tripod mounting to the said support.

[Claims 2 to 4 not printed in the Gazette.]

1,272,394. ADVERTISING-SIGN HANGER. RICHARD E. DEWNEY, Cleveland, Ohio. Filed Nov. 1, 1917. Serial No. 199,647. (Cl. 40—128.)



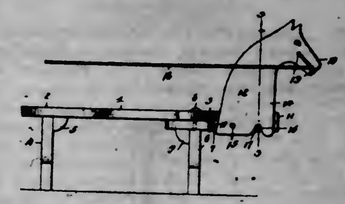
1. An advertising sign hanger, comprising a sign constructed of resilient material, the sign being provided with an opening, the sign having slots extending vertically from the opening, and the sign having incisions cutting through the slots above and below said opening for forming wings, substantially as described.

3. An advertising sign hanger, comprising a sign constructed of resilient material, the sign being provided with an opening, the sign having a pair of slots extending from opposite sides of the opening, the sign having incisions at the ends of the slots, the incisions extending at right angles to the slots and at each side thereof for forming wings, and the wings being divided into a plurality of parts by incisions extending from their free edges, substantially as described.

[Claim 2 not printed in the Gazette.]

1,272,395. TOY CART. MARK B. DEWEY, Sidney Center, N. Y. Filed Sept. 29, 1917. Serial No. 194,006. (Cl. 46—22.)

1. The herein described toy comprising a rear truck, a reach member extending forwardly from the truck and formed with a seat at the rear end, a front truck having a forwardly extending arm and pivotally mounted under the front end of the reach member, said arm having a longitudinal slot, and a head pivotally mounted in said arm and arranged for movement in said slot, and adapted to move forwardly and downwardly by its own weight, and means to limit such movement of the head.



2. The herein described toy comprising a rear truck, a reach member extending forwardly from the rear truck, a front truck pivotally mounted under the front end of the reach member and having a forwardly extending arm, and a head pivotally mounted on said arm and arranged for vertical angular movement to simulate the tossing movement of the head of a horse.

1,272,396. SPEEDOMETER DIAL AND INDICATOR. GEORGE C. DIXON, DIXON, and WALTER N. HASKELL, Sterling, Ill. Filed Nov. 2, 1916. Serial No. 129,114. (Cl. 116—49.)



1. In a device of the class named, a dial, provided with a suitable index, and having transparent sections of varying colors adjacent thereto; an indicator operable on the face of said dial; and a lighting device in rear of said transparent sections, and movable with said indicator.

2. A device of the class described, comprising a dial; a plurality of vari-colored transparent sections in the face of said dial; an indicator movable on the face of said dial; and a lighting device in rear of said transparent sections, movable coincidently with said indicator.

4. A device of the class described, comprising a casing, a dial fixed therein and provided with a suitable index; a shaft rotatably mounted centrally of said casing; an indicator fixed to said shaft and operable on the face of said dial; a plurality of vari-colored arcs in the face of said dial; and a lighting device fixed to said shaft and movable in rear of said arcs coincidently with said indicator.

5. A device of the class described, comprising a dial provided with a suitable index; a plurality of vari-colored arcs in the face of said dial; a shaft rotatably mounted centrally of said dial; a lighting device carried by said shaft and movable in rear of said arcs; an indicator fixed to said shaft and movable coincidently with said lighting device; and a plurality of sectors adjacent to said arcs, and corresponding in color therewith, and traversed by said indicator.

7. A device of the class described, comprising a suitably mounted dial; a plurality of vari-colored trans-

parent sections in the face of said dial; a plurality of field sections corresponding in color with said transparent sections; an indicator adapted to coincidently traverse said transparent and field sections and contrasting in color therefrom; and means for illuminating the rear face of said dial.

[Claims 3 and 6 not printed in the Gazette.]

1,272,397. APPARATUS FOR EFFECTING ELECTROLYSIS. ARTHUR DOHMEN, Cologne, Germany, assignor to Albert F. Krause, Buffalo, N. Y. Filed Dec. 1, 1914. Serial No. 875,036. (Cl. 204—5.)



1. In an electrolytic battery of the filter press type, alternate sheet metal electrodes that are both frameless and flangeless, and frames containing diaphragms.

4. A frameless, sheet nickel bi-polar electrode less than one millimeter in thickness, and diaphragm supporting frames between which said electrodes are clamped.

5. In an electrolytic apparatus of the filter press type, the combination with diaphragm frames, each having a diaphragm mounted therein to divide the interior of the frame into two compartments and having two transverse gas passages through the top thereof, one of said passages being connected with the compartment on one side of the diaphragm by an enlarged, laterally extending chamber and the other of said passages being similarly connected to the other compartment, and electrodes alternating with each frame having holes registering with said passages.

7. An electrolytic cell of the filter press type having alternating elements constituting electrode members and diaphragm members, one of said elements constituting a frame; rigid parallel flanges on the frame within the frame opening and contained between the faces of said frame, and a member secured between said flanges.

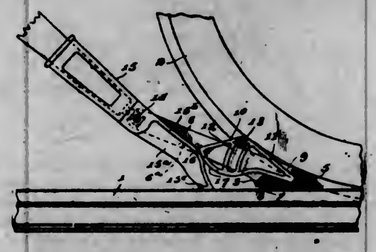
9. In an electrolytic cell of the filter press type, alternating elements constituting electrode members and diaphragm members, one of said elements constituting a frame, parallel flanges within the frame opening, and a member held within said opening between said parallel flanges in crimped connection therewith.

[Claims 2, 3, 6, and 8 not printed in the Gazette.]

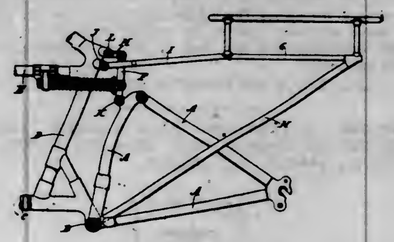
1,272,398. CAR-MOVER. WALTER A. DORSEY, Columbus, Ohio, assignor to The Bonnet-Floyd Company, Columbus, Ohio, a Corporation of Ohio. Filed May 18, 1914, Serial No. 839,417. Renewed Dec. 12, 1917. Serial No. 206,854. (Cl. 254—38.)

1. In a car mover, the combination with the pinch bar adapted to be fulcrumed on the rail and formed with an open pivot socket in front of its fulcrum, and the operating lever pivoted to the rear end of the pinch bar and having an arm projecting forward of its pivot, of the thrust lever having its forward and lower end loosely and detachably pivoted in the said socket in the pinch bar, and a bracing holder securing the rear end of the thrust lever to the pinch bar with limited looseness whereby the rear end of the thrust lever is laterally braced but can be bodily moved by the operating lever while the front end rocks loosely in said socket.

2. In a car mover, the combination of a pinch bar adapted at its forward end to engage a car wheel and provided between its ends with a rail engaging fulcrum and with a socket, a wheel engaging thrust lever having its forward end seated in the socket the walls of which form a pivotal abutment, the said lever having a transverse slot concentric with the pivotal axis, a pin mounted on the pinch bar and extending through the slot for holding the thrust lever in place without preventing upward and downward movement, and an operating lever pivoted to the pinch bar and adapted to move the thrust lever about its forward pivotal axis.



1,272,399. CYCLE. WILLIAM DOUGLAS, Bristol, England. Filed Jan. 22, 1918. Serial No. 213,247. (Cl. 208—97.)



1. In a cycle frame the combination of a main frame, a back fork frame pivoted to the lower part of said main frame, links pivoted to the upper part of said main frame and to said back fork frame so as to form with the latter a toggle having an angle of nearly 180°, a shock absorber operatively connected between said main frame and a point intermediate the ends of said links, a rear carrier platform, struts connected to said platform and to the lower part of said main frame where pivoted to said back fork frame, and tie members connecting said platform with the upper part of said main frame.

6. In a cycle frame the combination of a main frame, a back fork frame pivoted to the lower part of said main frame, links pivoted to the upper part of said main frame and to said back fork frame so as to form with the latter a toggle having an angle of nearly 180°, a cylindrical helical spring operatively connected between said main frame and a point intermediate the ends of said links, a rod operatively connected to one end of said spring and passing axially therethrough, an auxiliary cylindrical helical spring operatively connected axially on the outer end of said rod, a second auxiliary cylindrical helical spring shorter than the first named spring within which it is located axially and to one end of which it is operatively connected, a rear carrier platform, struts connected to said platform and to the lower part of said main frame where pivoted to said back fork frame, and tie members connecting said platform with the upper part of said main frame.

[Claims 2 to 5 not printed in the Gazette.]

1,272,400. COVER FOR DISPLAY-LASTS FOR SHOES AND THE LIKE. RUDOLPH E. DRALLE, St. Louis, Mo. Filed Jan. 8, 1918. Serial No. 210,898. (Cl. 211—13.)



2. As a new article of manufacture, an enveloping-cover for shoe display-lasts, the same comprising a flexible casing cut-away or apertured at its under forward portion, the casing being adapted to be slipped endwise forwardly upon a last and to assume when upon the last approximately the shape and contour of the enveloped last, the casing at its forward end having a flexible extension adapted, when the casing is upon the last, to be folded over and under, and to be attached to and beneath, the toe-portion of the envelop last, and the casing at its heel-portion having a tab that is adapted, when the casing is upon the last, to be attached to and beneath the heel-portion of the enveloped last.

[Claims 1 and 3 not printed in the Gazette.]

1,272,401. ELECTRODE FOR ARC-LAMPS. HENRY R. EDGECOMB, St. Marys, Pa., assignor to Speer Carbon Company, a Corporation of Pennsylvania. Filed Dec. 7, 1916. Serial No. 135,618. (Cl. 176—133.)



1. An electrode for arc lamps comprising an inner core, an outer shell, and an electrically conducting, heat-insulating partition disposed between the said core and the said shell.

4. An electrode for arc lamps comprising an inner core, an outer shell coated with a material of greater electrical conductivity than the material composing the said shell, and an electrically conducting, heat-insulating film disposed between the said core and the said shell.

5. An electrode for arc lamps comprising an inner core, an outer shell capable of burning at approximately the same rate as the said core, the said shell being coated with a material of greater electrical conductivity than the material composing the said shell, and an electrically conducting, heat-insulating film disposed between the said core and the said shell.

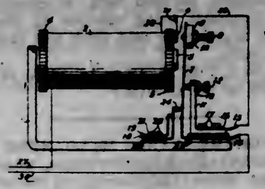
8. An electrode for arc lamps comprising an inner core, an outer shell of carbon, and an intermediate film of carbon-containing material having less heat conductivity than the material composing the said core.

[Claims 2, 3, 5, 7, and 9 to 16 not printed in the Gazette.]

1,272,402. ELECTROMAGNETIC SWITCHING DEVICE. HENRY C. EGERTON, Passaic, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 10, 1917. Serial No. 195,722. (Cl. 175—321.)

1. In an electromagnetic device, an electromagnet adapted to be energized, an armature therefor adapted to vibrate with increasing excursions upon the energization of said electromagnet, means for retaining said armature in a fixed position upon attaining a certain amplitude of vibration, and adjustable means for predetermining such certain amplitude.

6. In an electromagnetic device, an electromagnet adapted to be energized, means for delaying the actuation of said device, said means comprising an armature adapted to vibrate with increasing excursions upon the energization of said electromagnet, and means for retaining said armature in a fixed actuated position upon attaining a certain amplitude of vibration.



8. In an electromagnetic device, an electromagnet adapted to be energized, an armature adapted to vibrate with increasing excursions upon the energization of said electromagnet and to intermittently interrupt such energization of said electromagnet, means for retaining said armature in a fixed actuated position upon attaining a certain amplitude of vibration, and adjustable means for predetermining such certain amplitude.

[Claims 2 to 5 and 7 not printed in the Gazette.]

1,272,403. [WITHDRAWN.]

1,272,404. AUTOMATIC STARTING AND STOPPING MECHANISM FOR IRRIGATION SYSTEMS. DONALD ELDER, Onehunga, New Zealand, assignor, by mesne assignments, to Automatic Irrigating Machinery Corporation, a Corporation of New York. Filed July 19, 1915. Serial No. 40,693. (Cl. 137—66.)



1. Mechanism of the character described, comprising in combination, a conduit connected to a source of liquid supply, a valve located in said conduit, a liquid receptacle, means operated by the pressure of said liquid for controlling the supply of liquid to said receptacle, and means operated by the weight of liquid in said receptacle for closing said valve.

6. Mechanism of the character described comprising in combination, a conduit connected to a source of liquid supply, a valve located in said conduit, a liquid receptacle, means operated by the pressure of said liquid for controlling the supply of liquid to said receptacle, means for controlling the time of operation of said pressure operated means, and means operated by the weight of liquid in said receptacle for closing said valve.

11. Mechanism of the character described, comprising in combination, a conduit connected to a source of liquid supply, a valve in said conduit, mechanism operated by the weight of a body of said liquid for closing said valve, and mechanism operated by the pressure of said liquid for supplying liquid to the first named mechanism.

17. Mechanism of the character described, comprising in combination, a conduit connected to a source of liquid supply, a valve located in said conduit, a liquid receptacle, a second conduit connected with the first conduit in advance of said valve for supplying liquid to said receptacle, a cock in said second conduit, means operated by the weight of liquid in said receptacle for opening said valve and closing said cock, and means operated by the pressure of said liquid for closing said valve and opening said cock.

21. Mechanism of the character described, comprising in combination, a conduit connected to a source of liquid supply, a valve located in said conduit, a liquid receptacle, means connected with said conduit in advance of said valve for supplying liquid to said receptacle, a wheel

connected to the stem of said valve, a catch normally engaging said wheel to prevent turning thereof, and a flexible connection between said receptacle and said wheel, said receptacle being movable by the weight of liquid therein to overcome said catch and turn the wheel to open the valve.

[Claims 2 to 5, 7 to 10, 12 to 16, 18 to 20, and 22 to 25 not printed in the Gazette.]

1,272,405. VOLUME-STABLE MANGANESE DEPOLARIZING MATERIAL. CARLETON ELLIS, Montclair, N. J., assignor, by mesne assignments, to National Carbon Company, Inc., Long Island City, N. Y., a Corporation of New York. Filed Oct. 23, 1915. Serial No. 57,434. (Cl. 204—38.)

1. The process of making a depolarizing compound adapted for dry batteries of the Leclanché type which comprises heating a normal dioxid in an atmosphere of oxygen to a sintering temperature.

[Claims 2 and 3 not printed in the Gazette.]

1,272,406. VOID-FILLED DEPOLARIZING MASS. CARLETON ELLIS, Montclair, N. J., assignor, by mesne assignments, to National Carbon Company, Inc., Long Island City, N. Y., a Corporation of New York. Filed Oct. 18, 1915. Serial No. 56,447. (Cl. 204—38.)

1. A depolarizer for dry batteries in the form of a molded mass having the voids thereof substantially filled and comprising finely-divided psilomelane.

[Claims 2 to 4 not printed in the Gazette.]

1,272,407. NON-CONDUCTING MANGANESE DEPOLARIZING-ELECTRODE. CARLETON ELLIS, Montclair, N. J., assignor, by mesne assignments, to National Carbon Company, Inc., Long Island City, N. Y., a Corporation of New York. Filed Oct. 18, 1915. Serial No. 56,448. (Cl. 204—38.)

1. A depolarizing electrode for dry batteries of the Leclanché type consisting of a rod shaped carbon structure supporting an annular compressed mass of graphite and artificial substantially non-conducting manganese dioxid in a slight state of hydration.

[Claims 2 to 11 not printed in the Gazette.]

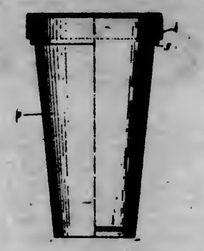
1,272,408. SIGNALING APPARATUS FOR VEHICLES. WALTER D. FAIRFAX, Brewster, Ohio. Filed Sept. 18, 1917. Serial No. 192,017. (Cl. 116—31.)



In a signal operating device for vehicles, a foot pedal located through the floor of said vehicle, a spring normally adapted to hold said foot pedal in raised position, a pair of rollers carried by said foot pedal beneath said floor, a flexible cable extending over and engaging said rollers, said cable being secured at one extremity to the brake operating rod of the vehicle, and at the opposite extremity to a pivoted signal arm carried upon said vehicle, the said rollers being arranged to exert a pull upon the said cable when the foot pedal is depressed and to move the signal into exposed position.

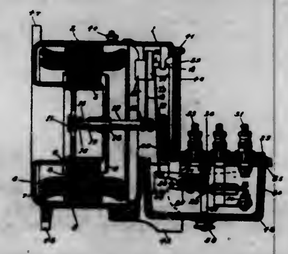
1,272,409. PAPER CARTON. LUKE W. FARMER, Somerville, Mass. Filed Mar. 4, 1914. Serial No. 822,260. (Cl. 229—2.)

A cap receiving collar for cartons of frusto-conical body shape comprising a cylindrical section of uniform thickness throughout, an inner section of approximately uniform thickness throughout, and an intermediate section of gradually reduced thickness from the lower to the upper edge thereof, said sections being secured together



to present a collar having the relatively inner and outer surfaces inclining toward each other from the lower edge of the collar to the upper edge thereof.

1,272,410. ALTERNATING-CURRENT RELAY. OSCAR S. FIELD, New York, N. Y., assignor to Hall Switch & Signal Co., a Corporation of Maine. Filed Jan. 3, 1917. Serial No. 140,489. (Cl. 175—281.)

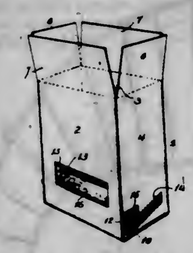


1. In combination in a relay, a back member containing an alternating current motor, a front member, an opening in the upper part of said front member to allow inspection of the operating mechanism, a cover for said opening, a forward extension below the opening in said front member adapted to carry an insulating panel, an insulating panel, contacts carried by said insulating panel, a contact finger bar carried by said front member, contact fingers carried by said bar in operative relation to said contacts, means for transmitting motion from the motor to the contact finger carrying bar to operate the contact fingers, and a cover adapted to inclose said contacts and contact fingers.

6. In combination in a relay, a back member adapted to carry an inner magnetic core, lugs formed on said back member for suspending the relay, an outer stator inclosed in said back member, operating windings on said stator, insulating panels in said back member adapted to carry binding posts for the operating windings and to retain said outer stator in place, a shaft, a nonmagnetic rotor on said shaft in operative relation to said inner core and outer stator, a friction drive between said rotor and said shaft, a front member, an opening in the upper part of said front member to allow inspection of the operating mechanism, a cover for said opening, a forward extension below the opening in said front member adapted to carry an insulating panel, an insulating panel, contacts carried by said insulating panel, a contact finger bar carried by said front member, contact fingers carried by said bar in operative relation to said contacts, means for transmitting motion from the motor to the contact finger carrying bar to operate the contact fingers, extensions formed on the front and back members to form supporting feet, and a cover adapted to inclose said contacts and contact fingers.

[Claims 2 to 5 not printed in the Gazette.]

1,272,411. DISPLAY-CARTON. RAY H. FITZ GERALD, Pittsburgh, Pa. Filed Sept. 28, 1917. Serial No. 193,733. (Cl. 229—17.)

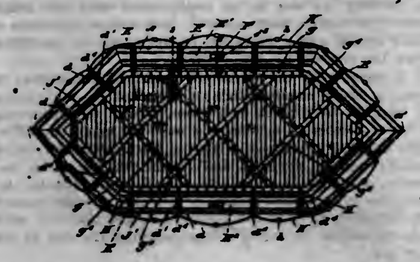


1. A display carton provided at its lower end with a false bottom inclined from the rear to the front wall of the carton, and having each side of the carton at a point slightly above the lower portion and respective ends of the false bottom provided with alined openings, each of sufficient size to permit the insertion of a finger of a customer and either of said openings constituting a discharge outlet.

5. A display carton having alined openings in its side walls near the bottom thereof, an inclined false bottom terminating at its lower edge below said openings and provided at said lower edge with an upwardly projecting flange having a lip projecting inwardly from its upper edge, and a shelf projecting inwardly from the front wall of the carton and disposed over said lip.

[Claims 2 to 4 not printed in the Gazette.]

1,272,412. LIFE-RAFT. EDMUND T. FLYNN, Cambridge, Mass., assignor to Cambridge Reversible Life Float, Inc., Boston, Mass., a Corporation of Massachusetts. Filed Mar. 16, 1918. Serial No. 222,976. (Cl. 9—11.)



1. A life raft comprising a metal shell which is polygonal in cross-section; and a buoyant member made of wood outside of said shell.

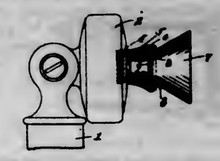
2. A life raft comprising a metal shell which is polygonal in cross-section; and a buoyant member outside of said shell.

[Claims 3 to 11 not printed in the Gazette.]

1,272,413. TELEPHONE-MOUTHPIECE. MELVIN C. FREDRICKSON, Cameron, Wis. Filed June 13, 1917. Serial No. 174,535. (Cl. 179—185.)

1. In combination, a telephone mouth piece constructed of readily destructible material and made in the form of a hollow cone, a perforated disk secured to the smaller end of said mouth piece, said disk being of greater circumference than the smaller end of the cone, and a holder for attaching the mouth piece to a telephone, said holder being grooved to receive the peripheral edge of said disk.

3. The combination with a sound transmitting device having a central threaded opening, of a holder consisting of a hollow shell, a threaded stem formed on the inner end of said shell and engaged in said threaded opening, the outer end of said shell being rectangular and having a groove extending along the inner surface of certain of its walls, a portion of one wall thereof being cut away to provide an entrance to said groove and a cone shaped mouth piece having a perforated disk attached to its smaller end and adapted to be received in said groove.



5. As a new article of manufacture, a mouth piece for sound transmitting device constructed of flexible material capable of being readily destroyed and made in the form of a cone, a rectangular perforated disk secured to the smaller end of the mouth piece, and a holder for receiving said disk and attaching the mouth piece to a sound transmitting device.

[Claims 2, 4, and 6 not printed in the Gazette.]

1,272,414. AUXILIARY AIR-INTAKE. JOHN W. FUDGE, Dunkirk, Ind. Filed May 18, 1916. Serial No. 98,413. (Cl. 48—180.)



1. An auxiliary air inlet device comprising a flat plate for disposition between a carbureter outlet and an intake manifold, said plate having an opening for registration with said manifold and outlet, a vertically disposed perforated tube extending diametrically across said opening, a horizontal arm joined integrally at one end to the lower edge of said plate and having a longitudinal air inlet port turned upwardly at its inner end and discharging into the lower end of said tube, the upper end of the latter being closed, and a head on the outer end of said arm having in its upper side an internally threaded socket with which the outer end of said port communicates, said arm extending in a plane at obtuse angles to that in which said plate is disposed to locate its free end in spaced relation to the carbureter to permit attachment of an air valve to said end.

2. An auxiliary air intake device comprising a flat plate for disposition between a carbureter outlet and an intake manifold, said plate having formed therethrough an opening for registration with said manifold and outlet, the outlet end of said opening having an annular groove, a perforated tube extending diametrically across said opening and spaced toward the inlet end of said opening from said groove, a screen between said tube and groove and contacting with the former whereby it is prevented from moving in one direction, a ring positioned in said groove for preventing movement of the screen in the other direction, a horizontally extending arm joined integrally at one end with the lower edge of said plate and having a horizontal air inlet port with its inner end turned upwardly and discharging into the lower end of said tube, the outer end of said arm having a head formed on its upper side with an internally threaded socket with which the outer end of said port communicates, said arm extending horizontally in a plane at an obtuse angle to that of the plate to space the free end of said arm from the carbureter to permit the attachment of an air valve.

1,272,425. METHOD OF AND APPARATUS FOR PRODUCING DESIGNATIONS UPON PHOTOGRAPHIC MATERIAL. HENRY J. GAISMAN, New York, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Mar. 28, 1911. Serial No. 616,428. (Cl. 95—1.1.)



1. The method of producing designations on film while protected from light within a photographic holder consisting in supporting a film opposite a support in said holder, in writing against said film from the exterior of the holder to press it against said support and thereby alter its inherent characteristics through the application of pressure alone and finally developing said film.

9. A camera having means to support a film in the line of exposure and an opening to permit marking against the film while it is within the camera, and means to prevent light through said opening from striking the film while the marking is being effected on the film.

25. In a camera, the combination with means for positioning a film therein, a support arranged at one side of the film and an associated transfer medium disposed to receive jointly with the film writing pressure from the exterior of the camera exerted against the support, the camera being provided with an opening through which such pressure may be exerted.

42. A camera having a perforated wall and a film abrader opposed to and spaced apart from such perforation; said space affording room for located a light-protected photographic film between the inward surface of the wall and the film abrader whereby the film may be pressed against the abrader by means of a stylus.

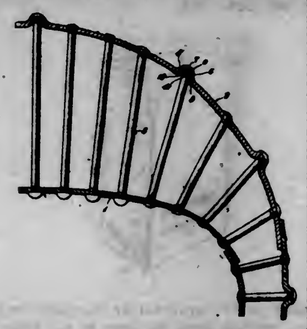
44. The method of producing designations upon a photographically sensitive element while contained in a holder and protected from light in part thereby and in part by locally deformable opaque covering adjacent one side of said element, there being a member having transfer material adjacent the opposite side of said element, said method consisting in forming markings upon said element by pressure applied through said covering to locally transfer such material onto said element, and then exposing the marked portions of said element to light.

[Claims 2 to 8, 10 to 24, 26 to 41, 43, and 45 not printed in the Gazette.]

1,272,416. STAY-BOLT CONNECTION. PETER F. GALLAGHER, Baltimore, Md., assignor to Flannery Bolt Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed July 13, 1915. Serial No. 39,702. (Cl. 85—1.5.)

1. In a flexible stay bolt connection, an outer sheet having a bolt opening and an integral projection punched outwardly therefrom in line with said opening, the outer internal portion of said projection being cylindrical and threaded, and the portion of the sheet around the inner end of the opening being bell-shaped or flared, and a bolt passing through the bell shaped base of the opening and provided with threads to engage the threads in the projection and also with a head to rest on the outer end of said projection.

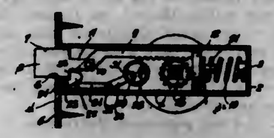
2. In a flexible stay bolt connection, an outer sheet having a bolt opening and an integral projection punched outwardly therefrom and in line with said opening, the outer internal portion of said projection being cylindrical and threaded and the portion of the sheet around the inner end of the opening being bell-shaped or flared, and a bolt passing through said bell-shaped portion and having a threaded portion to engage the threads in the projection, the said projection having its outer end plane



surfaced and said bolt being provided with an integral head bearing against said plane surface of the projection

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1,272,417. LOCK. DAVID A. GEE, Astoria, Oreg. Filed Sept. 19, 1916. Serial No. 121,008. (Cl. 70—29.)



1. A device of the character described, which comprises a casing, a latch member slidably mounted in one end of the casing, means for operating the latch member, a pivotally mounted and resiliently actuated dog adapted to engage with the latch member, and means for releasably holding the dog in an engagement with the latch member for locking said member, said means including a locking device and a plurality of links, one of the links having the dog mounted at its free end.

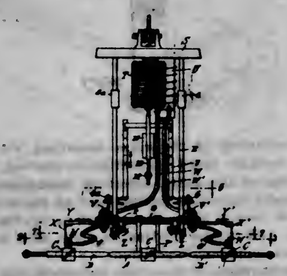
3. A member of the character described, comprising a casing, a latch member slidably disposed in the casing and adapted to project therefrom, means for operating the latch member, a locking dog movably mounted in the casing adapted to engage with the latch member, means normally tending to move and retain the dog in an ineffective position, and actuating means arranged in the casing for moving and retaining said dog in engagement with the latch to hold the latter in locked position, said actuating means including a link carrying the dog at its outer end.

6. A device of the character described, which comprises a casing, a latch member slidably mounted in the casing, and having one end adapted to project therefrom, said member including a rack portion, a spindle having a gear thereon, said gear being capable of coöperating with the rack, a locking mechanism including a barrel, a plurality of connected links, one end of one of the links being connected to the locking mechanism, a locking dog pivotally mounted at the end of another link, said dog being adapted to coöperate with the latch member, said locking mechanism being adapted on rotation to move the dog to permit the latch member to be drawn within the casing.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,272,418. ELECTRIC-ARC LAMP. JOSEPH GELB, New York, N. Y. Filed June 29, 1916. Serial No. 106,602. (Cl. 176—59.)

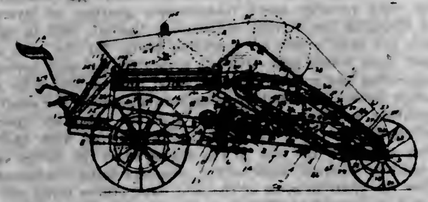
1. An electric arc lamp including in combination a clutch, a vertical rack actuated by gravity in one direction and magnetically in the opposite direction to maintain the length of the arc, a horizontal electrode, a clamp for holding the same, a bracket connected at its outer end with said clamp, means for adjusting said clamp toward and away from said bracket, movable cross-bars connected to the inner end of said bracket, longitudinally extending rods adapted for engagement with and upon which said cross-bars are slidable and a horizontal rack to shift said electrode.



5. An electric arc lamp including in combination supporting means, a stationary electrode, a bracket carried by said supporting means, a radially and transversely adjustable clamp carried by said bracket for the stationary electrode, a plurality of movable electrodes, slidable brackets and radially and transversely adjustable clamps carried by said slidable brackets for the movable electrodes, means for shifting each of said slidable brackets independently in one direction, magnetic means for shifting the movable brackets and electrodes, clutches to control the shifting of said brackets and electrodes and a compensating device between said clutches and said magnetic means to maintain arcs of equal length between the electrodes.

[Claims 2 to 4 not printed in the Gazette.]

1,272,419. LOADER. ORRA L. GILLILAND, Summit, S. D., assignor, to National Shock Loader Co., Minneapolis, Minn., a Corporation of South Dakota. Filed July 17, 1916. Serial No. 109,628. (Cl. 198—8.)



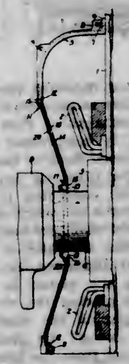
1. In a loader of the kind described, the combination with a truck, of a plurality of fork bars, means connecting the fork bars and causing the same to move in an endless course, said means including cam-actuated devices for bodily moving the fork bars transversely of the endless course they travel, and pickup forks carried by the fork bars.

5. In a loader of the kind described, the combination with a truck having side plates with cam surfaces and wheels, of a pair of chains arranged to run over the wheels, a plurality of opposite pairs of arms having one of their ends pivotally attached to the chains, studs on the other ends of said arms and engaging the cam surfaces on the side plates, a fork bar rigidly connected to each pair of arms at their intermediate portions, and a plurality of pickup forks carried by each fork bar, said cam surfaces and studs arranged to constantly hold the arms with the pickup forks in forwardly projecting positions during the travel of their endless course and for bodily oscillating the fork bars independent of the movement imparted thereto by the chains.

7. In a loader of the kind described, the combination with a truck having side plates with an endless runway and cam surfaces on each thereof, and wheels journaled in said runways, of a pair of endless chains mounted in said runways and arranged to run over the wheels, a plurality of horizontal fork bars having at their ends arms, a multiplicity of horizontally spaced and forwardly projecting tines rigidly secured to the fork bars, said arms being eccentrically secured to the chains with respect to the fork bars to permit limited vertical oscillatory movement of the arms, and studs carried by the arms and having engagement with the cam surfaces for positioning the tines.

[Claims 2 to 4 and 6 not printed in the Gazette.]

1,272,420. TURBO END BELL. RALPH E. GILMAN, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 4, 1915. Serial No. 12,132. (Cl. 171—252.)



1. In a dynamo-electric machine, the combination with a metallic end bell for partially closing one end of said machine, of an annular disk of insulating material extending from said end bell to the shaft of said machine for completely inclosing the end of said machine.

2. In a dynamo-electric machine, the combination with a metallic end bell for partially closing one end of said machine, of an annular disk of insulating material extending from said end bell to the shaft of said machine for completely inclosing the end of said machine, said disk comprising a plurality of readily separable segments, and a plurality of radial supports rigidly secured to said end bell for holding said segments in place.

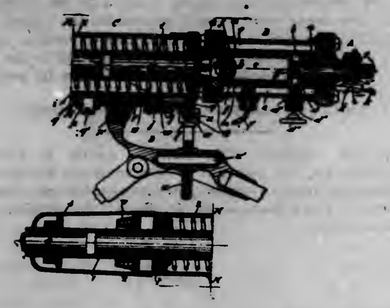
3. In a dynamo-electric machine, the combination with a metallic end bell for partially inclosing the ends of said machine, of an annular disk for completely closing the end of said machine, said disk comprising a metallic ring closely encircling the shaft of said machine, a plurality of radial supports secured to said bell and said ring and insulated from said ring, and a plurality of segments of insulating material positioned between said supports and held in place thereby.

4. In a dynamo-electric machine, the combination with a metallic end bell for partially inclosing the ends of said machine, of annular disks for completing the closure of the ends of said machine, each of said disks comprising a metallic ring closely surrounding the shaft of said machine, a plurality of radial supports rigidly connected to said bell and said ring and insulated from one of said members, a plurality of notched segments of insulating material, and a plurality of strips adapted to be secured to said supports for holding said segments in place.

1,272,421. APPARATUS FOR THROWING PROJECTILES. ANGELO GLISSENTI, Brescia, Italy. Filed May 6, 1918. Serial No. 232,989. (Cl. 124—8.)

1. An apparatus for throwing projectiles comprising a firing tube, a cylinder connected to the breech of said

tube and arranged in alinement therewith, means for admitting compressed fluid to the said cylinder, and a fluid controlled piston mounted in said cylinder for controlling the passage of the fluid from the cylinder to the firing tube.



3. An apparatus for throwing projectiles comprising a firing tube, a cylinder communicating therewith, means for permitting the exhaust of fluid from said cylinder, and means operated by compressed fluid in the cylinder for admitting compressed fluid to the firing tube.

4. An apparatus for throwing projectiles comprising a firing tube, a cylinder connected to the breech of said firing tube and having a plurality of chambers, a piston mounted in one of said chambers and normally preventing communication between the interior of the cylinder and firing tube, means for admitting compressed fluid to said chamber for holding the piston in normal position, a valve controlled port placing the chambers in communication, other ports placing the chambers in communication near the front end of the piston, and means permitting fluid to exhaust from the piston chamber.

[Claims 2 and 5 not printed in the Gazette.]

1,272,422. REINFORCING-BAR FOR CONCRETE CONSTRUCTION. WILLIAM GOLDIN, Wilkinsburg, Pa. Filed July 16, 1917. Serial No. 180,768. (Cl. 72—111.)



1. A reinforcing-bar for concrete construction formed of a twisted bar having a central web portion and enlargements beyond the web.

3. A reinforcing-bar for concrete construction formed of a twisted I-shaped bar.

5. In reinforced concrete construction, the combination of a twisted bar having a sectional web portion and enlarged heads, and a filling of concrete surrounding the beam and entering within the spiral pockets between the enlarged heads.

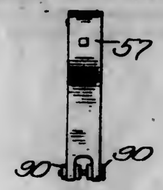
7. A reinforcing-bar for concrete construction formed of a twisted I-shaped bar, the outer faces of the convolutions so produced being concave.

9. A reinforcing bar for concrete construction formed of a twisted bar having a central web portion, and laterally extending edge portions.

[Claims 2, 4, 6, and 8 not printed in the Gazette.]

1,272,423. GEAR-SHIFTING MECHANISM. EDWARD E. GRAY, Aurora, Ill., assignor to Gray Pneumatic Gear Shift Company, a Corporation of Illinois. Filed Apr. 11, 1912. Serial No. 690,117. (Cl. 74—58.)

1. A gear shifting mechanism comprising movable gears, means for selecting the desired gear to be moved, a foot pedal, and means connected to the pedal only to directly effect the selected gear change upon the positive actuation of the pedal.



5. In mechanism of the class described, the combination with variable speed transmission gearing, of means to shift some of the gears, selecting mechanism for said means, a pedal operative during part of its movement to operate said means after the operation of the selecting mechanism, and means tending to press said first named means to its inoperative position.

13. In mechanism of the class described, the combination with variable speed transmission gearing, of a clutch to connect the gearing to a source of power, means to shift some of the gears, selective mechanism for said means, a shaft extending transversely of the frame, a clutch operating sleeve freely rotatable upon said shaft, a pedal having a sleeve member rotatable on the shaft and with a portion to engage the said clutch operating sleeve to rotate it when the pedal is pressed and to move the sleeve along the shaft at a predetermined point, means to engage the sleeve, and means tending to press the sleeve in the other direction.

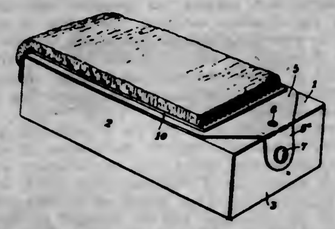
20. In mechanism of the class described, the combination with variable speed transmission gearing, of an operating device comprising end members, spaced apart and connected by a sleeve and rotatably mounted upon a shaft, the said sleeve being slotted between the end members, and operating members rotatable upon the sleeve, each having a notch which registers with notches in the other members and with the slot in the sleeve member, some of the members being perforated at the ends for pivotal connection.

21. In mechanism of the class described, the combination with variable speed transmission gearing, of levers for changing the driving connections thereof, rods to operate the said levers, an operating device for the rods, a shaft upon which said device is rotatable, the said device comprising end members spaced apart and connected by a slotted sleeve, the members being rotatable upon the shaft, operating members connected to the rods rotatable upon the sleeve, provided with notches to register with each other and with the slot in the sleeve when the device is in neutral position, some of the members being connected below the shaft to some of the said rods, others being connected above the shaft to other rods, one member being unconnected, a selector member movable upon the shaft having a lug which projects through the slotted sleeve and engages one of the operating members by means of its notch, means to rotate the device and the selected member to move one of the rods, means tending to return the device to a neutral position, a releasable latch operative to hold the device in its rotated position, and selecting mechanism operative to move the selector member along the shaft to engage the desired operating member when it is rotated with the said device.

[Claims 2 to 4, 6 to 12, and 14 to 19 not printed in the Gazette.]

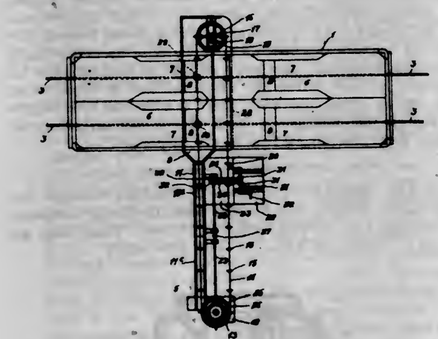
1,272,424. SHOE-SHINING KIT. ROBERT W. GREGG, Springfield, Ohio, assignor to The Elwood Myers Company, Springfield, Ohio, a Corporation of Ohio. Filed Jan. 8, 1915. Serial No. 1,164. (Cl. 15—1.)

In a shoe shining kit, an open top box, a flexible cover for said box, one end of said cover being permanently secured to one end of said box, fastening devices on the opposite ends of the cover and box respectively, said cover being provided with a perforation at a point removed from said fastening device to permit the folding back of the end of the cover and the securing of the fastening devices together through said perforation, said cover being



adapted to be folded beneath said box and held in position by said fastening devices, and polishing material on the under surface of said cover.

1,272,425. METHOD OF AND APPARATUS FOR UNLOADING CARS. TRACY W. GUTHRIE, Sewickley, Pa. Filed May 9, 1917. Serial No. 167,471. (Cl. 193—8.)



1. An apparatus of the class described, comprising a shallow hopper having a closed bottom and adapted to be placed under a loaded car and upon the rails upon which the car stands, and a trough connected to one end of said hopper, the bottom of said trough forming a continuation of the bottom of said hopper, and a conveying element having flights mounted to operate through said trough and upon the closed bottom of said hopper.

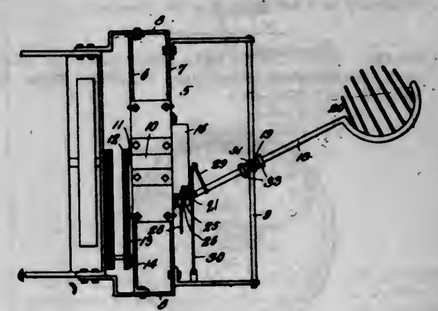
7. An apparatus of the class described, comprising a wide shallow hopper provided with a closed bottom and an apron at one side having a depressed end, said hopper being adapted to be positioned transversely beneath a dump car between its bottom discharge opening and the track rails, a relatively narrow shallow conveyer trough connected to one end of said hopper, and an endless conveying element having flights approximately as high as the depth of the hopper and mounted to position one leg thereof within the hopper and trough, and the other leg on the outside of the same in the same horizontal plane of the first mentioned leg, said last mentioned leg adapted to engage the depressed end of the apron on the hopper to guide it over the track rails.

[Claims 2 to 6 not printed in the Gazette.]

1,272,426. SHOCKER ATTACHMENT FOR BINDERS. DANIEL A. HAAS, Belleville, Ill. Filed June 28, 1917. Serial No. 177,608. (Cl. 56—37.)

1. In a device of the class described; a power mechanism having a rotatable member, a shocker bar pivoted intermediate its ends and being capable of oscillating, a shock holder carried by said bar, and means for establishing a connection between one end of said bar and said rotatable member.

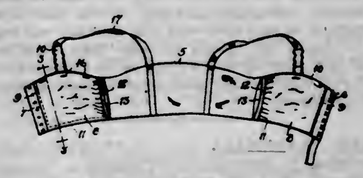
4. In a device of the class described; a frame, a rotatable member on said frame, a shocker bar pivoted intermediate its ends to said frame and being capable of swinging and oscillatory movement, an arm secured to the said



bar adjacent the inner end of the latter, a link connecting said arm and frame, and the inner end of said bar being adapted to be engaged with and carried by said rotatable member.

[Claims 2, 3, and 5 to 7 not printed in the Gazette.]

1,272,427. BREAST-WAIST. GRACE A. HADERLEIN, Chicago, Ill., assignor to Kabo Corset Co., Chicago, Ill., a Corporation of West Virginia. Filed May 2, 1917. Serial No. 166,032. (Cl. 2—98.)



A garment of the character described, consisting of a body portion formed of a band-like piece of fabric adapted to encircle the body of the wearer and cover the breasts, means for detachably connecting the ends of said garment, a section of fabric material secured to the body portion adjacent each end thereof, each of said sections being secured to said body portion on three sides with the fourth side open to provide an elongated flat pocket adjacent each end of said body portion, a section of moisture-resisting material for each of said pockets adapted to be inserted therein and when inserted constituting flat moisture-resisting sections in the body portion, and said moisture-resisting sections being adapted to overlie the breasts when the garment is placed on the wearer, substantially as described.

1,272,428. ENVELOP-CLOSURE. OLIVER R. HADLEY, Bradford, N. H. Filed Mar. 12, 1917. Serial No. 154,232. (Cl. 229—78.)



1. The combination with an envelop having a closure flap provided with an opening, of a closure device for said flap including relatively adjustable and eccentrically

mounted disks which extend through the opening in said closure flap when the same is in closing position, one of said disks being adjustable to overlap said closure flap and prevent opening thereof.

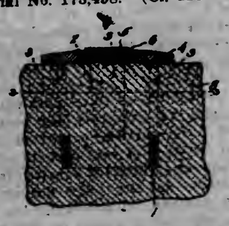
[Claims 2 to 4 not printed in the Gazette.]

1,272,429. VEHICLE-WHEEL RIM. JOHN D. HANDBURY, Goshen, Ind. Filed Apr. 12, 1917. Serial No. 161,415. (Cl. 152—21.)



The combination of a fixed felly rim provided with an elongated key aperture; a plurality of stop lugs rigidly fastened to said fixed rim; a demountable tire carrying rim provided on its inner periphery with a plurality of L shaped lugs adapted to engage said stop lugs for preventing lateral movement of said demountable rim, one of said lugs having one edge flush with one end wall of said elongated key aperture; an endless inwardly projecting flange carried by said demountable rim and covering said lugs and said fixed felly rim; and an elongated key member removably arranged within said elongated key aperture in said fixed felly rim, said key end engaging said L shaped lug having its edge flush with the end wall of said aperture and serving as an abutment thereto, whereby circumferential movement of said demountable rim is prevented.

1,272,430. LANDMARK AND ELEVATION CAP FOR SETTING IN CONCRETE. CHARLES A. HANSON and ALBERT L. HANSON, Munising, Mich. Filed June 8, 1917. Serial No. 173,498. (Cl. 125—15.)



1. A permanent metal landmark cap consisting of a cap of circular form having a flat upwardly projecting disk on its central upper portion, a hollow cap shaft extending downwardly from the cap, said shaft having openings, the openings being narrower at the bottom than at the top to permit of the cap being firmly embedded in a concrete base, whereby it would be impossible to move it without complete destruction of the concrete base.

[Claim 2 not printed in the Gazette.]

1,272,431. METHOD OF MAINTAINING ELECTRIC-SPARK-PLUG INSULATORS FREE FROM CONDUCTING-CARBON. CHARLES KNOX HARDING, Chicago, Ill. Filed Nov. 11, 1916. Serial No. 130,896. (Cl. 123—169.)

1. The improved method of preventing the accumulation of conducting carbon on the surfaces of electrical insulators of spark plugs for the electrical ignition of explosive mixtures of hydrocarbons in internal combustion engines which consists in causing part of the mixture to pass in contact with a non-igniting, oxidising catalytic agent placed in heat transmitting proximity to the insulator, and heating the insulator and catalytic agent by the flameless catalytic combustion of part of the mixture during a relatively long period of time in the presence of oxygen or the unexploded mixture preceding the instant at which the whole mixture is exploded by the electric spark and thereby burning conducting carbon from the heated insulator.

2. As an improvement in the art of electrical ignition for internal combustion engines the process of burning electrically conducting carbon from the interiorly exposed surfaces of electric spark plug insulators which consists in heating the surface of the insulators in contact with a portion of the explosive fuel-air mixture by flameless catalytic combustion of part of said mixture at a time before the whole mixture is exploded by the electric ignition at which time there is sufficient free oxygen in the mixture to oxidize and burn off conducting carbon deposits from the hot insulator.

3. As an improvement in the art of electric ignition for internal combustion engines the process of burning electrically conducting carbon from the interiorly exposed surfaces of electric spark plug insulators which consists in heating said insulating surface to a high temperature in the presence of oxygen of the unexploded combustible fuel-air mixture and heating said insulator by catalytically produced flameless combustion of part of said mixture for a period of time before the whole mixture is exploded by the electric spark and when there is sufficient free oxygen in the air-fuel mixture to burn off conducting carbon deposits from the hot surface of the insulator.

1,272,432. RELAY. CLARENCE B. HARLOW, Chicago, Ill., assignor to Benjamin Electric Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 28, 1917. Serial No. 188,577. (Cl. 175—323.)



1. An alternating-current signaling relay for telephone lines having, in combination a U-shaped, converging-legged core, a winding upon each leg, an armature opposite the free ends of said legs and attracted by the magnetism produced by the alternating ringing current through said coils, and circuit-controlling contacts operated by said armature and maintained in operating condition during the flow of said ringing current and automatically restored upon cessation thereof.

8. An alternating-current signaling relay for telephone lines having, in combination, a U-shaped converging-legged core, a winding upon each leg, circuit-controlling contact springs extending forwardly to the front end of the magnet, one of said springs having an upturned end, and an armature poised in front of the ends of said core legs, with its free end coöperating with the said upturned end of the spring to operate the same.

12. In a relay, the combination with an insulating base, of a magnet core comprising a plurality of triangular laminations placed one upon the other flatwise on said base, a clamping plate on the top of said magnet core, clamping it in position on said base, a pair of contact-carrying springs mounted at their rear ends upon said clamping plate, insulating strips interposed between said springs and between the bottommost spring and the clamping plate, said springs projecting forwardly along the top of said magnet core, and an armature for the magnet at its forward end arranged to operate said springs to open and close the circuit.

[Claims 2 and 4 to 11 not printed in the Gazette.]

1,272,433. CARBURETER ATTACHMENT. LINN BOYD HARROD, Little Rock, Ark. Filed Dec. 7, 1917. Serial No. 206,067. (Cl. 219—38.)



1. A carbureter attachment comprising an outer tube of heat insulating material, an inner cylindrical heat insulating core, conducting end plates secured to said core and having laterally extending portions parallel to the axis of the core and lying on the surface of the core, resistance wires carried by the core and in electrical connection with said extensions, and means carried by the plates for spacing the core from the tube and for centering it.

2. A carbureter attachment comprising an outer tube of heat insulating material, an inner core of heat insulating material, means for spacing the core centrally within the outer tube, electrical heating elements carried by said inner core on the outer surface thereof, and binding posts carried by the tube and arranged to engage conducting extensions of the core for holding the core in position and for effecting electrical connections with the heating elements of the core.

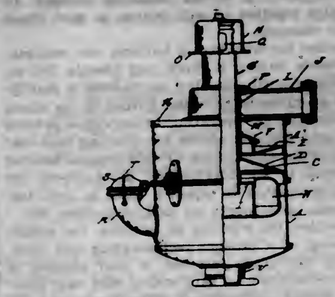
9. A carbureter attachment comprising an outer cylindrical heat insulating tube, an inner cylindrical heat insulating core, conducting end plates for said core, said conducting end plates having lugs extending laterally and engaging the inner surface of the tube for centering the core, said end plates having central openings, insulating bushings extending through the central openings in the end plates and into the core, a retaining rod extending through said bushings and being provided with nuts for holding the end plates in place, a conducting strip extending from each end plate along the outer surface of the core, wire securing means carried by said conducting strip, resistance wires extending from one conducting strip to the other in the space between the core and the tube, one of said conducting plates having a lug bent laterally and slotted to receive a screw bolt, a backing plate in electrical engagement with the other plate and having a lug bent laterally and slotted to receive a screw bolt, screw bolts carried by the tube and arranged to enter said slotted lugs for securing the parts in position and for effecting electrical connection with the respective plates, and a strainer at the end of said outer tube, and means for securing the strainer in position.

10. In a carburetor attachment, an outer cylindrical heat insulating tube, an inner cylindrical heat insulating core, conducting end plates secured to said core, said conducting end plates having spacing lugs for centering the core with respect to the tube, retaining means passing through the center of the core for holding the end plates to the tube, said retaining means being insulated from said end plates, binding posts carried by the outer tube, electrical connections between the end plates and said binding posts, and binding posts carried by the tube for holding the end plates and for conducting current to said end plates.

[Claims 3 to 8 not printed in the Gazette.]

1,272,434. AIR-WASHER. DONALD T. HASTINGS, Detroit, Mich., assignor to Holley Brothers Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 8, 1917. Serial No. 153,275. (Cl. 261—120.)

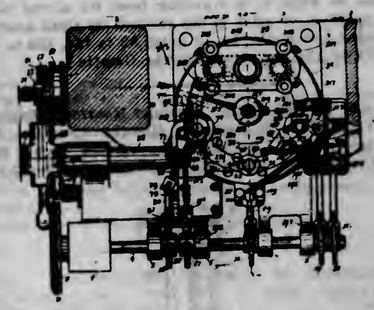
1. In an air-washer, the combination with a receptacle containing the washing liquid, of air inlet and outlet connections to said receptacle, a float for supporting the air inlet connection and for maintaining the same in constant relation to the level of the liquid, and means operated by said float for shutting off the air when the liquid has dropped to a predetermined level.



6. In an air-washer, the combination with a receptacle containing in the lower portion thereof the washing fluid, of air inlet and outlet connections for said receptacle, a float for adjustably supporting the air inlet connection and maintaining the same in constant relation to the level of the liquid, means for automatically cutting off the air supply when the liquid level drops to a predetermined point, means for separating the liquid from the air located in said receptacle above the liquid level, a filler for the liquid located to limit the level of liquid introduced therethrough to below said separating means, and a removable closure for said filler permitting the use of the same as an auxiliary air inlet when the normal air inlet is cut off.

[Claims 2 to 5 not printed in the Gazette.]

1,272,435. MACHINE FOR LOCATING AND EMBOSSING BUTTONS. HERBERT HASTINGS, Rochester, N. Y., assignor to Art in Buttons, Incorporated, a Corporation of New York. Filed Feb. 23, 1912. Serial No. 679,520. (Cl. 79—6.)



5. In a machine for working on buttons, the combination of a dial plate, chucks mounted therein, a feeding mechanism for delivering buttons to said chucks, means for intermittently rotating said dial plate to carry each chuck away from said feeding mechanism after a button has been fed thereto, means operating in connection with said feeding mechanism for changing the angular position of the button in the chuck, means operating independent of said feeding mechanism, again changing the angular position of each button in its chuck.

15. In a machine for working on buttons, the combination of a frame and a dial plate rotating therein, chucks mounted in said dial plate, feeding mechanism mounted on said frame for feeding a button into each of said chucks as said chucks are successively presented to said feeding mechanism by the rotation of the dial plate, a plunger coöperating with said feeding mechanism to seat the button in said chuck, means for rotating said plunger in contact with said button to adjust the angu-

lar position of the holes of the button in said chuck, means for advancing said dial plate to carry said button into engagement with a second rotating plunger, by which the angular position of said button in said chuck may be further changed.

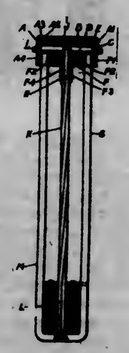
91. In a machine for working on buttons, the combination of a dial plate having a chuck cup therein for exposing the button, a button feeding mechanism, a justifying mechanism operable to turn the button in its chuck cup and an embossing die operating to emboss a pattern on a button in said cup and means for rotating said dial plate by intermediate steps, first to said button feeding mechanism, second to an intermediate point where the chuck cup with its button is exposed, third to said justifying mechanism, and fourth to said embossing die.

135. In a machine for working on buttons, the combination of a casing, of a plunger reciprocating and oscillating therein, a cam plate fastened to said plunger, a bar mounted to reciprocate on said casing, said cam plate being normally carried over said bar without engaging the same during a portion of the oscillation, said plate engaging with said bar on the downward movement of the plunger and carrying said bar therewith, a plate mounted on said bar, a pin mounted thereon, a cam carried on said cam plate capable of moving across the bar, carrying said bar, plate and pin down through an extra movement only upon the oscillation of the plunger, an interlocking mechanism comprising blocks supported under said pin, said pin upon its extra movement causing the movement of one or more of said interlocking blocks, operating devices locked and interlocked by said blocks, said operating devices being released by the extra downward movement of said pin.

170. In a machine for working on buttons, the combination of a dial plate, having a chuck cup therein, means for rotating said dial plate by a plurality of intermittent steps carrying said cup to a plurality of positions, said cup being capable of holding a button therein, mechanism for turning the button in the cup when the cup is in its third position, means for controlling the operation of said mechanism, said means being capable of being set for selected operation before said cup leaves its second position or while it is traveling from its second to its third position, or after it has reached its third position.

[Claims 1 to 4, 6 to 14, 16 to 90, 92 to 134, 136 to 169, and 171 to 174 not printed in the Gazette.]

1,272,436. **FLUID-GAGE.** HERBERT HASTINGS, Brighton, N. Y., assignor to Rochester Manufacturing Co., Inc., Rochester, N. Y., a Corporation of New York. Filed Mar. 20, 1915. Serial No. 15,986. (Cl. 73—82.)



2. In a fluid gage in combination a head provided with a bored portion and a crystal retaining flange and provided externally with a threaded portion and a polygonal portion, a body, a crystal and a dial compressed between said flange and body, means mounted upon said body for guiding a float, a float, a revoluble member actuated by the float and an indicator actuated by the revoluble member.

3. In a fluid gage the combination of a body, a head, a graduated dial and a crystal retained between said body and head, an indicator stem journaled in said body and provided with indicating means, said body and stem being shaped to provide a recess therebetween at spaced distances from each end of the indicator bearings, a fluid packing substance retained within said recess, a float, a guide for said float, an oscillating member adapted to be turned by said float and means for communicating the motion of the oscillating member to the indicator stem.

[Claims 1, 4, and 5 not printed in the Gazette.]

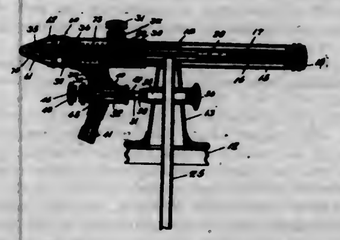
1,272,437. **GUARD-RAIL.** THOMAS J. HEARD, Wilson, Kans. Filed Mar. 29, 1918. Serial No. 225,595. (Cl. 239—17.)



1. The combination with a tie having a rail mounted thereon, of a foot member secured to said tie and having a portion of its inner terminal reduced to abut the web of said rail and be snugly engaged between the head and base flange thereof, said foot member having its upper portion extending above the level of the rail tread and in proximity thereto and a guard rail seated upon said reduced portion and secured to said foot member to prevent displacement of the car wheels from the rails.

2. The combination with a tie having a rail mounted thereon, of a foot member secured to said tie and having a portion of its terminal reduced to abut the web of said rail and be snugly engaged between the head and base flange thereof, said foot member having the edge laterally adjacent the rail tread cut away, at right angles to said reduced portion, to provide a passage way, a guard rail seated in said passage way and in proximity to said rail tread, said guard rail secured to said foot member and extending longitudinally of the rail tread to provide guiding means for a wheel flange and prevent displacement of the wheels from the rails.

1,272,438. **AIR-BRUSH.** STEPHEN J. HEINRICH, Newton Highlands, Mass. Filed Mar. 13, 1917. Serial No. 154,572. (Cl. 91—45.)

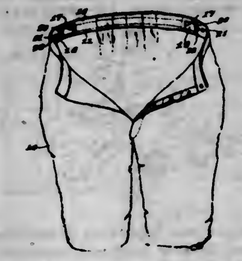


1. In an air brush, a frame bearing air and liquid spraying nozzles, a support for said frame, a regulating valve on said support and extended into said spraying nozzles, said frame being movably related to its support whereby the spraying nozzles are movable toward and from the regulating valve.

17. In an air brush, a liquid nozzle, an air nozzle in normally fixed adjustment with the liquid nozzle, a support for said nozzles, a liquid regulating valve on said support, said nozzles being arranged to be moved to adjust said liquid nozzle with respect to the regulating valve to vary the flow of liquid therethrough.

[Claims 2 to 16 and 18 not printed in the Gazette.]

1,272,439. **WAISTBAND.** MILTON L. HELLER, Brooklyn, N. Y. Filed June 6, 1917. Serial No. 173,220. (Cl. 2—143.)

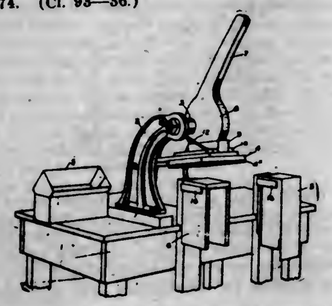


2. In a waist band of the class described, a non-elastic webbing having transverse slits formed therein in spaced relation, an elastic webbing having portions thereof passing through the slit portions of the non-elastic webbing, and fasteners carried by the elastic webbing of a size greater than the slit portion to necessitate displacement of said fasteners from their normal position relative to the slit portions for passage though said slit portions.

3. In a waist band of the class described, a non-elastic webbing having eyelets formed therein in spaced relation, an elastic webbing detachably carried by said non-elastic webbing, and fasteners carried by the end of said elastic webbing, said fasteners comprising folded members, having one of the folded portions formed in a plurality of teeth which are embedded into the elastic webbing, and having the other folded portion provided with extensions from the ends thereof and with a hook member centrally formed therein.

[Claims 1 and 4 not printed in the Gazette.]

1,272,440. **CLAMP MECHANISM FOR BOX-FORMING MACHINES.** MICHAEL HESS, Indianapolis, Ind., assignor to International Printing Co. of Indiana, Indianapolis, Ind. Filed Jan. 28, 1918. Serial No. 214,174. (Cl. 93—36.)

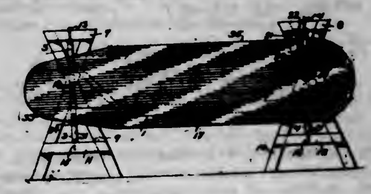


3. The combination with a pedestal adapted to receive and support a box structure, of a pressing block above the pedestal, a pair of standards between which one end of the pressing block is pivotally mounted, a shaft carried by the upper end of said standards, a lever on said shaft, a cam on the lever adapted to lower said pressing block, a follow block slidably mounted upon said pressing block and having a curved recess to receive said cam, and means to raise said pressing block when the lever is in elevated position.

[Claims 1 and 2 not printed in the Gazette.]

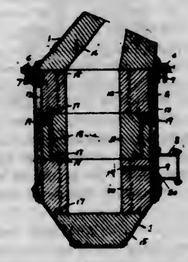
1,272,441. **IRONING-TABLE.** JOHN T. HILBERRY, Lansdale, Pa. Filed Mar. 5, 1918. Serial No. 220,426. (Cl. 68—10.)

An ironing table including a frame; standards pivotally connected to said frame and adapted to be turned in a position substantially parallel with and at one side of the frame; an ironing board adapted to be operatively supported by said frame; and hinges including an arm and two pivoted brackets secured



respectively to the frame and to the under surface of the ironing board to permit the latter to be turned down into a position at the side of said frame, substantially as described.

1,272,442. **CONVERTER-LINING.** FRANK E. HINNERS, Milwaukee, Wis. Application filed Oct. 19, 1917. Serial No. 197,411. (Cl. 266—43.)



1. A converter lining formed as a unit to the shape of the converter shell with a space therein adapted to receive molten metal and baked or dried outside of the shell of the converter.

5. The method of lining converters which consists in forming the linings to shape and baking or drying them outside of the converter shells, inserting the linings in the shells with a wet packing between a lining and a shell, and permitting the wet packing to dry from the heat of the charge of molten metal in the converter.

[Claims 2 to 4 not printed in the Gazette.]
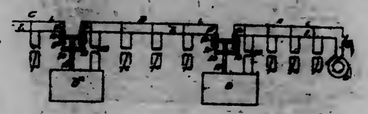
1,272,443. **RECEPTACLE.** RICHARD W. HIMMELBERGER, Lebanon, Pa. Filed Sept. 9, 1916. Serial No. 119,292. (Cl. 220—47.)



1. The combination with a receptacle of a rotatable valve plate mounted therein a notched disk fixed to rotate with the valve plate, and a pivoted latch member adapted for engagement with one of the notches to normally retain the plate in a horizontal position.

[Claims 2 to 6 not printed in the Gazette.]

1,272,444. SYSTEM FOR THE TRANSMISSION AND DISTRIBUTION OF ELECTRICAL ENERGY. JOHN S. HOLLIDAY, Wilkinsburg, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Dec. 18, 1914. Serial No. 877,882. (Cl. 171—97.)



4. In combination, a sectionalized transmission line, slow-acting circuit controllers for connecting together adjacent sections of said transmission line, each circuit controller being biased to the open position, and means for each circuit controller for holding the circuit controller in the closed position as long as potential is applied to an adjacent section of the transmission line.

10. A sectionalized line for transmitting electrical energy and distributing it to apparatus which consumes more current when energy is first applied than after energy has been applied for a period of time, a generator for the line the capacity of which is substantially the same as the normal energy required for the operation of said apparatus, circuit controllers for connecting adjacent sections of said line, and slow acting means for each circuit controller for closing said controller, said means receiving energy from the adjacent section nearer to the generator, the time required for the operation of each said means being such that the energy drawn from the generator when the line is being energized does not exceed the overload capacity of the generator.

11. In combination, a sectionalized transmission line, and slow-acting means for connecting adjacent sections of said line together upon the lapse of a predetermined time interval after potential has been applied to one of said sections.

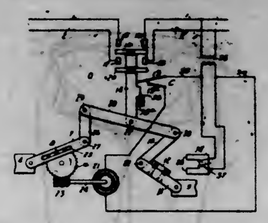
12. In combination, a sectionalized transmission line, a generator for supplying electrical energy thereto, and slow-acting means for connecting adjacent sections of said line together upon the lapse of a predetermined time interval after potential has been applied to the section nearer the generator.

13. In combination, a sectionalized transmission line, a source of current at one end of the line, the line being so arranged that as each two adjacent sections are connected together the section farther from the source receives current from the source through the section nearer the source, and slow-acting means at the junction of each two adjacent sections for connecting said sections together upon the lapse of a predetermined time interval after potential has been applied to the section nearer the source.

[Claims 1 to 3 and 5 to 9 not printed in the Gazette.]

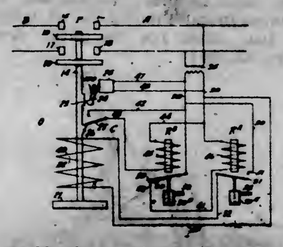
1,272,445. CIRCUIT-CONTROLLING DEVICE. JOHN S. HOLLIDAY, Wilkinsburg, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Original application filed Dec. 18, 1914, Serial No. 877,882. Divided and this application filed Sept. 1, 1916. Serial No. 48,534. (Cl. 175—281.)

1. Circuit controlling apparatus comprising a floating lever, a contact member pivotally connected with said lever at a point intermediate the ends of the lever, means operatively connected with one end of the lever for moving said end from an initial position to another position and back to the initial position, the resultant rocking of the lever taking place about said intermediate pivotal point unless movement of the other end of the lever is restrained, and electrically controlled means moved into operative position by the rocking of the lever about said intermediate point due to movement of the first end away from its initial position for restraining said other end of the lever whereby during the return movement of the first end of the lever to its initial position the lever swings around the other end as a center to move the contact member.



2. Circuit controlling apparatus comprising a floating lever, a contact member pivotally connected with said lever at a point intermediate the ends of the lever, means operatively connected with one end of the lever for moving said end from an initial position to another position and back to the initial position, the resultant rocking of the lever taking place about said intermediate pivotal point unless movement of the other end of the lever is restrained, an electromagnet, an armature operatively connected with said other end of the lever and moved into the attractive range of said magnet by the swinging of the lever about said intermediate point due to movement of the first end away from its initial position, whereby if the magnet is then energized the lever rocks about said other end as a center during the return movement of the first end to its initial position and so moves said contact member.

1,272,446. SLOW-ACTING SECTIONALIZING DEVICE. HARRY M. JACOBS, Schenectady, N. Y., assignor, by mesne assignments, to Union Switch and Signal Company, a Corporation of Pennsylvania. Filed Feb. 17, 1915, Serial No. 8,971. Renewed May 21, 1918. Serial No. 235,857. (Cl. 175—281.)



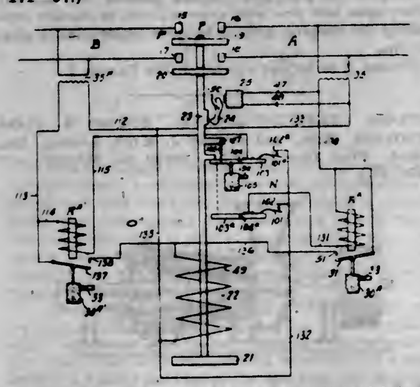
5. In combination, a circuit controller biased to the open position, an electromagnetic device for moving said controller to its closed position, means for latching said controller in its closed position, and slow-acting means set into operation by the movement of said controller to its closed position for deënergizing said electromagnetic device.

6. In combination, a circuit controller biased to the open position, an electromagnetic device for moving said member to its closed position, a relay adapted when energized to supply energy to said electromagnetic device, means for latching said controller in the closed position, a contact for deënergizing said relay, and slow-acting means set into operation by the movement of said controller to its closed position for opening said contact.

7. A circuit controller biased to the open position, an electromagnetic device for moving said controller to its closed position, means for latching said controller in its closed position, a relay adapted when closed to supply energy to said electromagnetic device, means for retarding the closure of said relay when the latter is energized, and slow acting means set into operation by the movement of said controller to its closed position for deënergizing said relay.

[Claims 1 to 4 not printed in the Gazette.]

1,272,447. SYSTEM FOR THE TRANSMISSION AND DISTRIBUTION OF ELECTRICAL ENERGY. HARRY M. JACOBS, Schenectady, N. Y., assignor, by mesne assignments, to Union Switch and Signal Company, a Corporation of Pennsylvania. Original application filed Feb. 17, 1915, Serial No. 8,971. Divided and this application filed June 5, 1916. Serial No. 101,817. (Cl. 171—97.)

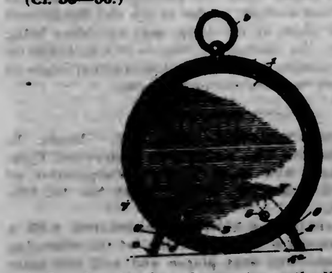


1. In combination, a transmission line divided into sections, circuit controllers for connecting adjacent sections of said line, an electromagnetic control device for each circuit controller, a control relay for each electromagnetic device, a circuit for each relay energized by current from an adjacent section of the line, a contact governed by each electromagnetic device for deënergizing the corresponding relay when the corresponding circuit controller is closed, and means for preventing the operation of said contact until a definite period of time after said circuit controller has closed.

5. In combination, a sectionalized transmission line, means for supplying energy to said line from either end, circuit controllers for connecting adjacent sections of said line, an electromagnetic device for each circuit controller for the operation thereof, two relays for each circuit controller, a circuit for each electromagnetic device controlled by the said relays, a circuit for each of said relays, means for supplying energy to one relay from one section of the transmission line adjacent a circuit controller and means for supplying energy to the other relay from the other adjacent section of the transmission line, and two contacts for each circuit controller and controlled thereby, for controlling the energizing circuits of said relays, said contacts being normally closed, and opened after the circuit controller has been closed.

[Claims 2 to 4 not printed in the Gazette.]

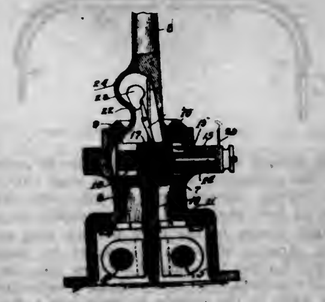
1,272,448. INSTRUMENT-HOUSING SUPPORT. JAMES A. HOWE, Rochester, N. Y., assignor to Taylor Instrument Companies, Rochester, N. Y., a Corporation of New York. Filed Feb. 24, 1916. Serial No. 80,281. (Cl. 52—56.)



1. In a housing for a barometer or the like, the combination with a rear wall of substantially circular form, a substantially cylindrical bottom wall secured to the outer edge of the rear wall and provided with a slot, a pair of supporting legs pivoted to said rear wall and extending into said slot and closing the same substantially flush with the outer surface of said bottom wall, and means for withdrawing the legs against the outer ends of the slot to support the casing.

[Claim 2 not printed in the Gazette.]

1,272,449. GEAR-SHIFT AND IGNITION LOCK. JOHN H. IMHOFF, Chazy, N. Y., assignor, by mesne assignments, to Johnson Automobile Lock Co., Chicago, Ill., a Corporation of Illinois. Original application filed Feb. 21, 1916, Serial No. 79,642. Divided and this application filed Nov. 27, 1916. Serial No. 133,732. (Cl. 70—127.)



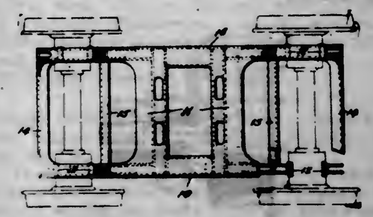
1. In a device of the class described the combination with a gear shift lever, of spring actuated means slidable transversely in the lever to lock the same from movement, and spring actuated means within said lever normally holding said locking pin retracted to permit actuation of the lever.

2. In a device of the class described the combination with a gear shift lever, of a block transversely slidable therein, mechanism therein adapted to project the block outwardly, and means rigidly mounted at one side of said lever adapted to receive said block engaged therewith to lock the lever from movement.

3. In a device of the class described the combination with a gear shift lever, of a block slidable therein, springs within said block for moving the same into locking position, spring actuated means normally holding said block retracted, a key operated lock for positively retracting said block, and rigid means mounted adjacent said lever adapted to receive said block engaged therewith when released by said means and actuated by said springs to lock the lever from movement.

[Claims 4 to 8 not printed in the Gazette.]

1,272,450. LOCOMOTIVE-TRUCK. FRED A. ISAACSON, Topeka, Kans. Filed Aug. 15, 1917. Serial No. 186,410. (Cl. 105—243.)



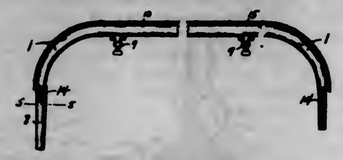
1. A locomotive truck having a frame comprising wheel pieces, transom members formed integral therewith, pedestal jaws formed integral with said wheel pieces, end rails

formed integral with and connecting the outer ones of the pedestals at both ends of said frame, and separable rails connecting the inner ones of the pedestals.

2. A locomotive truck having a frame comprising wheel pieces, transom members formed integral therewith, pedestal jaws integral with the end portions of said wheel pieces, and rails connecting both the members of the pairs of pedestals transversely of the truck.

[Claims 3 and 4 not printed in the Gazette.]

1,272,451. METHOD OF MANUFACTURING TOPS AND BOWS FOR SAME. JESSE JENNISON and GEORGE H. HIGGINS, Cortland, N. Y. Filed Jan. 4, 1918. Serial No. 210,273. (Cl. 29—152.)

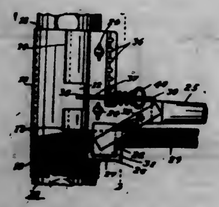


1. The method of manufacturing tops for automobiles and the like comprising the following steps: 1st, forming opposite tubular tapered bow sockets; 2nd, forming a sheet metal bow having its ends extending at substantially right angles to the body portion, and of a construction capable of being contracted by compression forces; 3rd, forcing the ends of the bow into the tubular tapered bow sockets until said ends are contracted by the inclosing walls of the sockets to constitute a rigid structure.

2. The method of manufacturing tops for automobiles and the like comprising the following steps: 1st, forming opposite tubular tapered bow sockets; 2nd, forming a sheet metal bow consisting of a body portion formed of a complete rigid tube and end portions extending at substantially right angles to the body portion, and of a construction capable of being contracted by compression forces; 3rd, forcing the ends of the bow into the tubular tapered bow sockets until said ends are contracted by the inclosing walls of the sockets to constitute a rigid structure.

3. The method of manufacturing a bow structure comprising the following steps: 1st, forming opposite tubular tapered bow sockets; 2nd, forming a bow comprising a rigid complete metallic tube having a longitudinal groove extending throughout substantially its entire length and interrupting the continuity of the exterior contour of the tube, and a wooden insert secured in and substantially fitting the groove and exposed upon the outer face of the tube, the ends of the tube being contractile; 3rd, forcing said contractile ends into respective tubular bow sockets until the ends are compressed by the inclosing walls of the sockets to constitute a rigid structure.

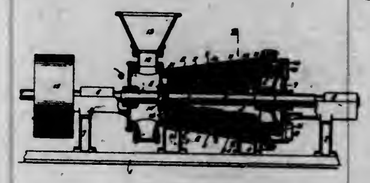
1,272,452. DEVICE FOR APPLYING METAL RIBBON TO PERFORATED PIPE. EDWARD E. JOHNSON, St. Paul, Minn. Filed Sept. 10, 1914. Serial No. 861,031. (Cl. 81—15.)



1. A device for winding strainer ribbon upon pipe, comprising a handle having secured thereto, a substantially cylindrical clasping member having a spiral edge, means for securing said clasping member about a pipe so that said spiral edge will form a guide for laying ribbon spirally upon the pipe, and means associated with said handle for guiding said ribbon so that the edges thereof will contact respectively with the spiral edge and the edge of the last coil of ribbon laid and that the relative turning of the pipe and clasping member will lay said ribbon upon said pipe with adjacent coils in contact while causing the clasping member to move longitudinally along the pipe.

[Claims 2 to 10 not printed in the Gazette.]

1,272,453. REFINING-ENGINE. EDWARD A. JONES, Pittsfield, Mass., and ROBERT J. MARX, London, England. Filed June 13, 1914. Serial No. 844,000. (Cl. 92—27.)



2. In a refining engine, a shell provided with groups of grinding bars arranged circumferentially of the shell, each group being made up of sets of bars arranged longitudinally of the shell with their ends abutting, the number of sets in one group being different from those of a succeeding group, the sets in one group being in staggered relation with respect to the sets in a circumferentially adjacent group, and the bars of certain of the sets of each group being in staggered relation at their ends with the bars of an adjacent set in the same group.

[Claims 1 and 3 to 12 not printed in the Gazette.]

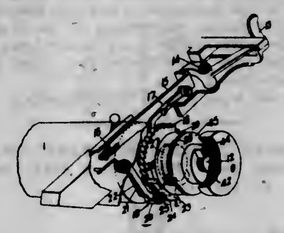
1,272,454. PHOTOGRAPHIC-FILM CARTRIDGE. JOHN G. JONES, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed June 28, 1917. Serial No. 177,575. (Cl. 95—9.)



In a film cartridge, the combination with a spool embodying a core and end flanges, the core being provided with a longitudinal slot the ends of which are spaced from the end flanges, of a film strip having a lead portion provided with a tongue adapted to closely fit and be centered by the slot and having shoulders at each side of the base of the tongue that are parallel to the axis of the core and extend at right angles to the end flanges and the longitudinal edges of the strip, said shoulders being adapted to abut the surface of the core longitudinally thereof and automatically guide the longitudinal edges of the strip squarely between the end flanges.

1,272,455. TYPE-WRITING MACHINE. ROGER B. JONES, Philadelphia, Pa., assignor to Underwood Typewriter Company, New York, N. Y., a Corporation of Delaware. Filed Mar. 3, 1917. Serial No. 152,165. (Cl. 197—123.)

1. In a typewriting machine, the combination with a platen and a line-space wheel therefor, of interengaging elements for connecting said platen and said line-space wheel, and arms having cam surfaces acting on said elements, and also having a toggle movement to force and hold said elements in gripping relation with each other.

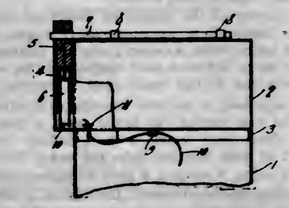


3. The combination with a platen, of a line-space wheel for said platen, a gripping mechanism for connecting said platen and said line-space wheel to move as a unit, said mechanism comprising a friction drum, a pair of separate friction shoes, and a pair of wedging cam arms acting with a toggle movement to engage between said friction shoes at two points spreading and expanding them into engagement with said friction drum.

7. The combination with a platen, of a line-space wheel for said platen, a releasable connection between said line-space wheel and said platen enabling them to normally move as a unit, including gripping elements, and a pair of double cam arms for forcing the said elements in gripping engagement, each of said cam arms having a slot therein and conical screws for engaging said slots to spread the cam surfaces greater or less distances from each other, so as to determine accurately the gripping action.

[Claims 2, 4 to 6, 8, and 9 not printed in the Gazette.]

1,272,456. TWINE-BOX TOP. THOMAS KAMPHEFNER, Waldron, Mo. Filed Apr. 25, 1918. Serial No. 230,734. (Cl. 56—126.)



1. A twine box cover, including a tank, a cup secured to the tank and in communication therewith, and means for guiding twine through the cup.

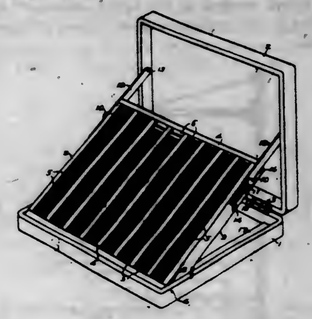
2. A twine box cover, including a liquid container, and means for guiding twine through the liquid container.

[Claims 3 to 5 not printed in the Gazette.]

1,272,457. SEMI-AUTOMATIC TRAY-SUPPORT. EDMUND KANDLER and PAUL SACHSE, Rochester, N. Y., assignors to Bausch & Lomb Optical Company, Rochester, N. Y., a Corporation of New York. Filed Feb. 5, 1917. Serial No. 146,640. (Cl. 211—28.)

1. The combination with two relatively hinged members and a tray having a tilting movement relatively to one of them, of a link connecting the other member and the tray secured to one of said parts by a fixed pivot and to the other by a sliding pivot, and means for locking the link against pivotal movement arranged for coöperation with the link by a sliding movement of the latter as the hinged members are moved relatively.

2. The combination with two relatively hinged members and a tray having a tilting movement relatively to one of them, of a link connecting the other member and the tray secured to one of said parts by a fixed pivot and to the other by a sliding pivot and locking means for holding the link against pivotal movement about the sliding pivot, the link being adapted to swing about the sliding pivot while the hinged members are moved apart and being adapted to slide along said pivot into engagement with the locking means while said hinged members are moved toward one another.



4. In a semi-automatic tray support, the combination with a pair of relatively openable members, and a tray having pivotal relation with one of the members, of a stud on the tray, a link slotted at one end and engaging the tray stud at said slot, and pivotally and longitudinally movable relatively to the tray, and an abutment on the tray adapted when the link is moved longitudinally in one direction to support the tray by intercepting the pivotal movement of the link relatively thereto, and adapted when the link is moved longitudinally in the other direction to be out of the path of pivotal movement of the link while the tray is lowered.

5. In a semi-automatic tray support, the combination with a pair of relatively openable members, and a tray having pivotal relation with one of the members, of a stud on the tray, a link having at one end an elongated slot engaging the stud and thus being pivotally and longitudinally movable relatively to the tray, and an elongated abutment on the tray in front of said stud and at a different level and adapted when the link is moved longitudinally in one direction to support the tray by intercepting the pivotal movement of the link relatively thereto, and adapted when the link is moved longitudinally in the other direction to be out of the path of pivotal movement of the link while the tray is lowered.

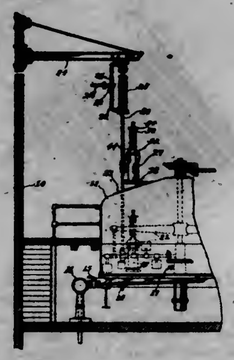
6. In a semi-automatic tray support, the combination with a case comprising hinged body and cover portions, of a tray having yielding pivotal relation with the case body and also having a laterally projecting stud, a link pivoted at one end to the case cover and having at its opposite end portion an elongated slot entered by the tray stud, and an elongated abutment on the tray in front of said stud and at a different level and adapted when the link is moved longitudinally by the case cover in one direction to support the raised tray by intercepting the pivotal movement of the link relatively thereto, and adapted when the link is moved longitudinally by the case cover in the other direction to be out of the path of pivotal movement of the link while the tray is lowered, said tray when raised bracing itself firmly at the case body front and when lowered lying flat upon the case body floor to relieve the tray and its pivots from injurious strains.

[Claim 3 not printed in the Gazette.]

1,272,458. STRAINER APPARATUS. ANDREAS R. KELLER, Melrose Park, Ill. Filed Dec. 27, 1917. Serial No. 209,138. (Cl. 195—30.)

1. In strainer apparatus, the combination with a mash tub of a tube movable into the mash contained in the tube and of sufficient length to extend from a position near the bottom of the tub to the upper level of mash in the tub, and screens for the upper and lower ends of said tube.

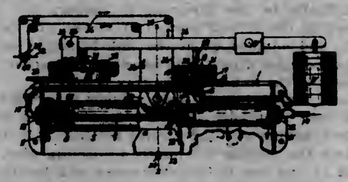
7. In strainer apparatus, the combination with a tube of means for vertically reciprocating said tube, a yoke carried by the tube, a cover for the upper end of the tube, a threaded rod carried in the yoke above said cover, an operating nut threaded upon said rod and bottomed upon the yoke, a socket carried at the lower end of said rod, and a ball secured to the upper surface of said cover and carried in the socket, said ball being removable from the socket.



10. In a strainer apparatus, the combination with a mash tub of a vertically disposed tube and means whereby said tube may be positioned within the vat at any desired elevation, said tube being open at its upper and lower ends for passage of fluid therethrough.

[Claims 2 to 6, 8, and 9 not printed in the Gazette.]

1,272,459. DAMPER-REGULATOR. WILLARD A. KITTS, Jr., Mountain Lakes, N. J., assignor to Kitts Steam Specialty Co., Inc., Oswego, N. Y., a Corporation of New York. Filed Feb. 1, 1917. Serial No. 145,898. (Cl. 236—8.)

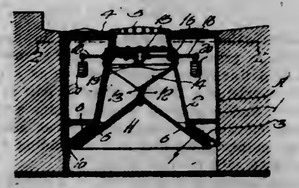


1. In a damper regulator, the combination of a pair of hydraulic motors having rigidly connected coaxial pistons of unequal diameter for operating the damper, means for supplying fluid under pressure to one end of the smaller motor a by-pass leading from the supply pipe around said motors to the opposite end of the larger motor and including therein a valve case having a self-opening valve controlling the flow of the fluid under pressure through the by-pass, weight-operated means for closing the valve, and steam-pressure operated means for operating the first-named means against the action of its weight to release and permit the opening of the valve.

2. In a damper regulator, the combination of a pair of hydraulic motors having rigidly connected coaxial pistons of unequal diameter for operating the damper, means for supplying fluid under pressure to one end of the smaller motor, a by-pass leading from the supply pipe around said motors to the opposite end of the larger motor and including therein a valve case having a self-opening valve controlling the flow of the fluid under pressure through the by-pass, weight-operating means for closing the valve, and steam-pressure operated means for operating the first-named means against the action of its weight to release and permit the opening of the valve, said valve case having an exhaust port and a secondary valve controlling the same, said secondary valve being closed by the opening of the first-named valve and opened by said weight-operated means, the portion of the by-pass leading from the valve to the larger motor being in open communication with the exhaust port when the first-named valve is closed.

[Claims 3 and 4 not printed in the Gazette.]

1,272,460. SEAL DEVICE FOR SEWERS. CHARLES W. KNOLL, Crete, Nebr. Filed Dec. 1, 1917. Serial No. 204,816. (Cl. 182—14.)



1. In a device of the character described, the combination of an outer shell, an inner shell disposed centrally within the outer shell, a cover plate for closing the upper end of the space between said shells, a valve seat formed at the lower end of the inner shell, a vertically movable valve for said seat, a narrow housing extending diametrically across and within the inner shell, a rod projecting upwardly from said valve and extending through the lower part of said housing into the same, levers pivotally mounted intermediate of their ends to said housing and having their inner ends connected to said rod, said levers extending through said housing and the inner shell and into the space between said shells, and weights carried at the outer ends of said levers.

2. In a device of the character described, the combination of an outer shell, an inner shell disposed centrally within the outer shell, a cover plate for closing the upper end of the space between said shells, a valve seat formed at the lower end of the inner shell, a vertically movable valve for said seat, a narrow housing extending diametrically across and within the inner shell, a rod projecting upwardly from said valve and extending through the lower part of said housing into the same, the upper end of said rod being Y-shaped, a pair of oppositely extending levers pivoted intermediate of their ends to said housing and having their inner ends connected to the arms of the Y-shaped portion of said rod, the other ends of said levers extending into the space between said shells, and weights suspended from said other ends of said levers.

3. In a device of the character described, the combination of an outer cylindrical shell, an inner frusto conical shaped shell disposed centrally within the outer shell and having its lower end flared outwardly to form a valve seat, a cover plate for closing the upper end of the space between said shells, a conical shaped vertically movable valve for said seat, a rod extending upwardly from the apex of said valve, a lever fulcrumed intermediate of its ends to the inner shell and having its inner end connected to the upper end of said rod, the upper end of said lever extending into the space between said shells, and a weight suspended from said outer end of said lever

[Claims 4 to 6 not printed in the Gazette.]

1,272,461. WATER-BOMB. GEORGE J. KOCIALEK, Avoca, Pa. Filed Mar. 20, 1918. Serial No. 228,506. (Cl. 102—2.)

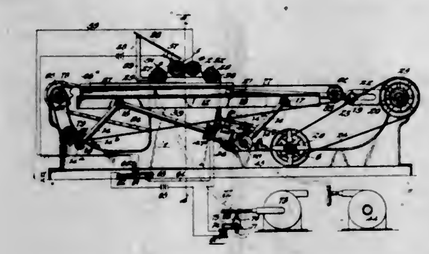
1. A device of the class described comprising a conical weight, a sleeve detachably connected to the base end of said weight, a bomb supported at the upper end of the said sleeve, steering wings attached to the sleeve arranged in overlying restraining relations with respect to the bomb when the device is assembled, and automatic firing means for the bomb.



4. A device of the class described providing a conical weight, a sleeve overlying the larger end of the weight, bayonet slot connections between the sleeve and weight, a partition within the sleeve having a central perforation, oppositely positioned ledges arranged within the sleeve, an explosive bomb extending into the sleeve, a firing cap for the bomb arranged over said perforation, automatic firing means for the cap having a path of movement through the said perforation, substantially circular wings adapted for relative movement during the assembling of the device having cutaway portions for overlying the said bomb when the device is assembled, connections between the said wings and sleeve, and a resilient strap seated upon said ledges and in contact with the bomb at the opposite end thereof from the points of engagement of the wings with the said bomb.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,272,462. FABRIC-FOLDING MACHINE. LEO M. KOHN, Buffalo, N. Y. Filed Oct. 25, 1916. Serial No. 127,726. (Cl. 270—30.)

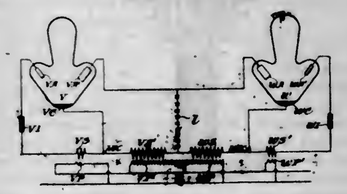


1. A sheet fabric folding machine comprising a folding roller, a folding table having a reciprocating movement past said roller and coöperating with the latter for folding a sheet of fabric between the same and means which control the operative relation of said roller and table and which are responsive to the absence and presence of a sheet moving into the machine.

29. In a machine for folding towels and the like, the combination of feeding rollers, a hollow reciprocating table provided with perforations in its top for supporting the article to be folded, folding rollers arranged above said table, and means for simultaneously raising the table into engagement with said folding rollers and for producing a vacuum therein when a towel is between said feeding rollers, comprising air suction and compression devices, including a cylinder, a piston movable in said cylinder and coöperating with the latter to raise said table, a valve for regulating the admission of air to said cylinder, a valve for regulating the vacuum in the table, and electro-magnets for controlling the opening and closing of said valve.

[Claims 2 to 28 and 30 to 35 not printed in the Gazette.]

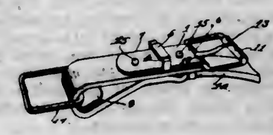
1,272,463. DISTRIBUTION SYSTEM FOR VAPOR ELECTRIC APPARATUS. CHARLES A. KRAUS, Newton Highlands, and ROY D. MAILEY, Lynn, Mass. Filed Aug. 27, 1909. Serial No. 514,907. (Cl. 175—363.)



1. In a distribution system, a pair of vacuum containers, each comprising a vaporizable cathode and two anodes, an alternating circuit peculiar to each anode of each container, certain of said circuits being of different current carrying capacity from the others, a load common to the anode circuits of higher current capacity and a source of alternating current common to anode circuits of both containers.

2. In a distribution system, a pair of vacuum containers, each container included in an alternating current circuit which is divided into two branches, in each of which branches is one anode and both of which branches have a cathode connection in common and a control reactance between an anode and the common circuit connection, a load common to the anode circuits unaffected by control reactance and a source of alternating current common to anode circuits of both containers.

1,272,464. LOOP-SHIELD. FREDERICK B. LA BELLE, Wagoner, Okla. Filed May 6, 1916, Serial No. 95,895. Renewed Dec. 20, 1917. Serial No. 208,141. (Cl. 24—183.)



A loop shield of the class described comprising a flat metal strip having a body portion with one end bent back in parallel spaced relation, a transverse retaining loop carried by said bent end, the curved portion of said end having an aperture therethrough for the reception of a buckle tongue, the other end of said body portion of the strip being bent oppositely from said first mentioned end to form a loop shield, and an additional transverse retaining loop carried by the body portion of said strip and extending oppositely from the loop on the first mentioned bent end.

1,272,465. STAY-BOLT FOR BOILERS. HARRY ANTHONY LACERDA, Schenectady, N. Y., assignor to Flannery Bolt Company, Schenectady, N. Y. Filed Oct. 25, 1917. Serial No. 198,460. (Cl. 85—1.5.)

2. A stay bolt structure comprising a plug having an internal curved seat at its outer end, a nut having an integral inwardly projecting sleeve, the inner end of the latter being integrally connected to the inner end of the plug by a U-shape bend, and a bolt passing through the sleeve of the nut and rigidly secured to the nut, the said nut having a curved outer face coincident with the curved seat in the plug and conforming in shape to the latter.

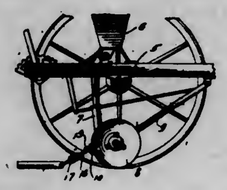
8. A stay bolt structure comprising a plug having an internal curved seat at its outer end, a nut having an inwardly projecting integral sleeve, the latter being integrally connected to the inner end of the plug by a U-shape bend, the nut having a curved outer face con-



forming in shape to the curvature of the seat in the plug and adapted to engage the same, and a bolt screwed into the head of the nut and locked thereto by upsetting its end over the outer face of the nut.

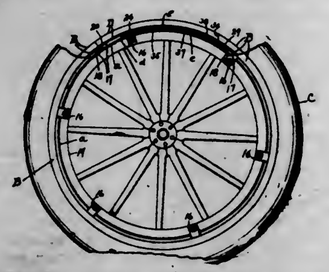
[Claim 1 not printed in the Gazette.]

1,272,466. COVERING ATTACHMENT FOR DRILLS. ALBERT C. LARSON, New Cambria, Kans. Filed Aug. 21, 1917. Serial No. 187,420. (Cl. 111—66.)



In a seed drill, the combination with the seed boots thereof; of a supporting bar secured to said seed boots and extending transversely thereof in a horizontal plane, a plurality of rods carried by said bar, swivel joints connected to said rods, and elongated cylindrical covering elements connected to certain of said swivel joints and adapted to drag along the ground rearwardly of said seed boots whereby to cover furrows.

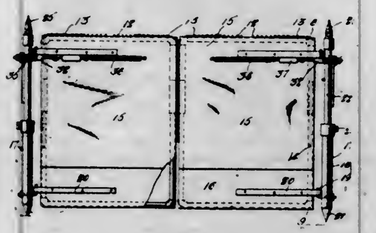
1,272,467. DEMOUNTABLE WHEEL-RIM. BENNO B. LEUSTIG, Cleveland, Ohio. Filed Jan. 21, 1918. Serial No. 212,997. (Cl. 152—21.)



1. A demountable wheel-rim provided internally with an annular recess which is concentric relative to the axis of the rim and comprising two sections which are unequal in length and in line endwise circumferentially of said axis, the shorter of said sections being pivotally connected at one end to the longer of said sections and arranged to be swung inwardly, and means whereby the ends of the longer rim-section are drawn toward each other during inward swinging of the shorter rim-section, the pivotal connection between said rim-sections comprising a pivotal pin extending transversely of the aforesaid recess, said rim-sections having members embracing said pin, and said pin and said pin-embracing members occupying portions of said recess.

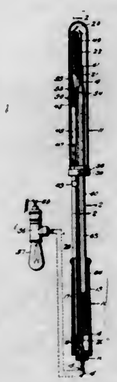
[Claims 2 to 13 not printed in the Gazette.]

1,272,468. COAL-MINE TRAP-DOOR. THOMAS LEWIS, Frankfort Heights, Ill. Filed May 25, 1917. Serial No. 171,062. (Cl. 20—16.)



A door structure including an extensible door frame including upper and lower parts, an extensible post including relatively movable upper and lower sections, and means hingedly connecting the upper and lower sections of the post with the upper and lower parts of the door, respectively.

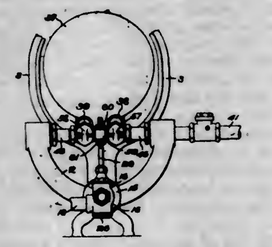
1,272,469. ELECTROTHERAPEUTIC INSTRUMENT. THEODOLF LIDBERG, Chicago, Ill. Original application filed Dec. 18, 1916, Serial No. 137,488. Divided and this application filed Mar. 4, 1918. Serial No. 220,129. (Cl. 219—21.)



3. An electro-thermic instrument comprising an applicator, consisting of a heating element inclosed by a tube, supported by a handle at the other end of the instrument; a graduated thermometer tube, having its liquid-containing bulb within said tube, with its other end extending to and secured in the handle, the intermediate, graduated portion of said thermometer being visible within the open space between said tube and handle, and a heat-responsive current-regulator within said tube.

[Claims 1, 2, and 4 to 10 not printed in the Gazette.]

1,272,470. STEAM-TRAP AND VALVE THEREFOR. FRANK A. LITTLEFIELD, Nashua, N. H., assignor to Nashua Machine Company, Nashua, N. H., a Corporation of Maine. Filed June 21, 1915. Serial No. 35,260. (Cl. 137—103.)



58. The combination with a support of a receiver mounted thereon, a water discharge valve, a steam admission valve, a vent valve, a fitting containing all of said valves, and means for automatically operating said valves on movement of said receiver.

59. The combination with a support, of a receiver mounted thereon, a water discharge valve, a steam admission valve, a fitting containing both of said valves, and means for automatically operating said valves on movement of said receiver.

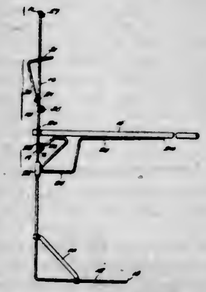
60. The combination with a support of a receiver mounted thereon, a water discharge valve, a vent valve, a fitting containing both of said valves, and means for automatically operating said valves on movement of said receiver.

63. The combination of means for receiving water of condensation of steam with a support therefor, water outlet and steam inlet valves connected to the bottom of the support, and means connecting said valves with said receiver for operating the former by the latter.

76. The combination with a support, of a movable receiver mounted thereon, a water discharge valve, a steam admission valve, a fitting distinct from said receiver and containing both of said valves and means to operate said valves.

[Claims 1 to 57, 61, 62, 64 to 75, and 77 to 82 not printed in the Gazette.]

1,272,471. IRONING-BOARD STAND. VIRGINIA H. LOFLIN, Centerville, Md. Filed Aug. 27, 1917. Serial No. 188,398. (Cl. 68—10.)

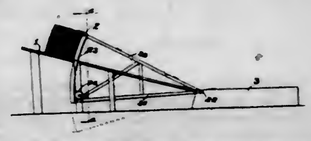


1. A device of the class described comprising a standard including side members in spaced relation and with bearings in transverse alinement, each side member having a lateral projection, a bracket device having bearings swingingly engaging the bearings of the standard, means for maintaining said bracket substantially in horizontal position relative to the standard, and an ironing board having a portion engaging said standard members and provided with upwardly opening seats to receive said projections and maintain the board from lateral or vertical displacement.

2. A device of the class described comprising a supporting standard, and a bracket device formed from a single length of wire bent substantially into U-shape and swingingly coupled to the standard, the side members of the bracket being bent into downwardly directed loops to engage the standard and support the bracket at right angles thereto, an ironing board bearing upon the bracket, and means for holding the ironing board from lateral and longitudinal displacement.

3. A device of the class described comprising a supporting standard including vertical side members in spaced relation, a bracket device swinging from said standard and having means for maintaining the body of the bracket at right angles to the vertical axis of the standard, inturned projections carried by the side members, and an ironing board resting upon the bracket device and reduced to engage between the side members, said reduced portions having upwardly opening seats to receive said projections to permit the removal of the board, and maintain the same from lateral or vertical displacement.

1,272,472. UNPILING DEVICE FOR LUMBER. CARL A. LOHMAN, Seattle, Wash. Filed Nov. 15, 1916. Serial No. 131,438. (Cl. 193—46.)



3. In a means for sorting lumber, a sorting table, a slideway pivoted at one side of said table and having an arcuate outer end extending downward from its upper sliding surface, elevated supports for a pile of lumber inclined toward said slideway and extending to the swinging end thereof, and means for raising and lowering said slideway.

7. In a means for taking down and sorting a pile of lumber that is disposed in a number of layers one above the other, the combination with a support for the pile of lumber which is disposed at such an angle as to cause the lumber to tend to slide therefrom, of a receiving element for the pile of lumber and a structure disposed between the receiving element and the pile of lumber and comprising spaced stops against which the front face of the pile of lumber rests and inclined guides extending from the upper ends of said stops to such a point as to discharge the lumber upon the receiving element, said stops and guides being bodily movable together, means for pivoting the structure at its end adjacent the receiving element and means for imparting vertical movement to that end of the structure against which the pile of lumber lies.

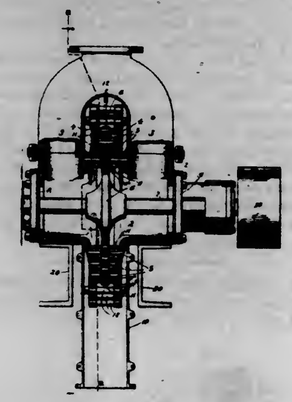
[Claims 1, 2, and 4 to 6 not printed in the Gazette.]

1,272,473. PULP-BEATING MECHANISM. NATHANIEL LOMBARD, Worcester, Mass., assignor to International Paper Company, a Corporation of New York. Filed May 19, 1915. Serial No. 29,035. (Cl. 92—26.)

1. In a pulp beating engine, the combination of two annular plates disposed side by side and having pins extending inwardly therefrom, a disk rotatable between said plates and provided on opposite sides with laterally projecting pins, the said disk and plate forming radial spaces between them extending at opposite sides of the disk and having non-communicating inner portions, the said pins on the disk and plates being formed and related to comb out the fibers, and means for feeding the pulp in separate streams to the opposite sides of the disk respectively into said non-communicating portions of the spaces.

8. In a pulp beating engine, the combination of two fixed annular members provided on their adjacent faces with inwardly extending projections, a disk rotatable be-

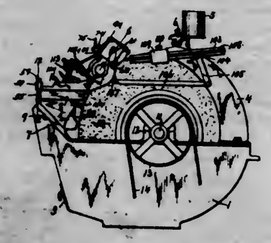
tween said plates and provided on opposite sides with outwardly extending projections, means for feeding the pulp between the disk and plates, whereby the pulp will be urged outwardly, and a series of obstructing devices bridging the space between the annular plates beyond the outer edge of the disk between which obstructing devices the pulp flows, whereby the outward movement of the pulp between said members is retarded.



17. In a pulp beating engine, the combination of a fixed member provided on its side with laterally extending projections, a rotary member arranged alongside the fixed member and provided on its adjacent side with laterally extending projections coöperating with the projections on the fixed member in subjecting the pulp to a beating action, the said projections on the rotary member being formed with flat surfaces facing in the direction of rotation and inclined outwardly from the axis of rotation to cause the pulp to feed outwardly.

[Claims 2 to 7 and 9 to 16 not printed in the Gazette.]

1,272,474. EDGE-GRINDING MACHINE FOR LENSES. ELI MAYNARD LONG, Geneva, N. Y., assignor to The Standard Optical Company, Geneva, N. Y., a Corporation of New York. Filed June 2, 1916. Serial No. 101,282. (Cl. 51—3.)



1. In an edge-grinding machine for elliptical lenses, the combination with a grinder, of a rotary lens-holder, and means for rotating said holder at such different speeds during different parts of each revolution as to cause all portions in the periphery of the lens to travel against the grinder at such a rate of speed that all portions of said periphery shall be completed at practically the same time and means for maintaining the periphery of the lens against the grinder.

3. In a machine for grinding the edges of lenses having axes of different lengths, the combination with a grinder, of a rotary lens-holder, and means for rotating said lens-holder under gradually decreasing speed as the point of contact of the lens with the grinder passes from the end of the longer axis toward the end of the shorter axis.

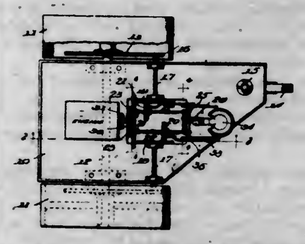
5. In an edge grinding machine for lenses, the combination with a grinder, of a rotary lens-holder, and means for rotating said holder including eccentrically connected driving and driven members rotating in the same direction about parallel axes offset one from the other.

8. In an edge grinding machine for lenses, the combination with a grinder, of coaxial rotary lens-clamping members, separate driving shafts therefor, a rocker arm pivoted to swing in a plane parallel with one of said shafts and provided with bearings at opposite sides of its pivot, and a manually operated rocker having cam faces at opposite sides of its axis engaging said bearings.

12. In an edge-grinding machine of the character described, the combination with a grinding element, a workholder, and a swinging support therefor, of means for rotating the workholder including a pair of rotary driving members contacting at a point in approximate alinement with the axis of movement of said support.

[Claims 2, 4, 6, 7, 9 to 11, and 13 to 15 not printed in the Gazette.]

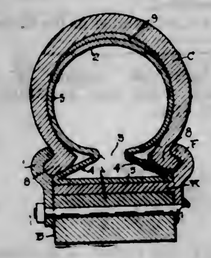
1,272,475. TRACTOR. JOHN E. LONG, Hot Springs, Mont. Filed May 7, 1917. Serial No. 166,877. (Cl. 180—17.)



In a tractor of the character described, the combination of a main frame, a pair of forward side traction wheels, operatively connected to the main frame, a pair of transversely disposed shafts mounted on the main frame and having gear connections with the traction wheels, and provided with inner friction disks opposing one another in spaced relation, a pair of friction wheels engageable with said friction disks, shafts on which the friction wheels are mounted and shiftable for adjustment with respect to the disks, controlling connections for independently shifting the said friction wheels, a source of power on the main frame, geared connections between the said source of power and the said friction wheel shafts, said shafts of said friction wheels having universally movable joints adjacent one another, a guide member in which the opposite ends of said shafts are shiftable, a controlling member through which the last mentioned ends of the shafts are journaled, having a hinged joint intermediate the shafts, and an operating lever connected to the said controlling member for moving the latter to shift the said friction wheel shafts toward and away from one another.

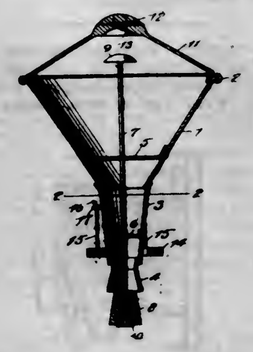
1,272,476. TIRE STRUCTURE. FRANK H. LOPEZ, Cumming, Cal. Filed Sept. 22, 1917. Serial No. 192,730. (Cl. 152—8.)

In combination with the rim of a wheel having side flanges, a carcass disposed around the rim and having its marginal portions engaged with the side flanges thereof, a continuous coiled spring arranged within the carcass and disposed circumferentially of the rim, each of the convolutions of the spring having its outer portion substantially circular in form and terminating in diverging portions, said diverging portions being continued by a base portion disposed transversely of the rim and in contact therewith, the junction of each of said diverging portions and the base portion being in contact with the flanges of the rim, and the inner extremities of the diverging portions and the adjacent portions of the circular portions of the convolutions being free of the carcass and out of



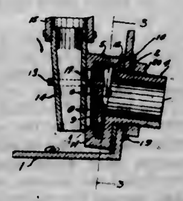
contact, said diverging portions initially flexing when the wheel is under load.

1,272,477. FUNNEL. MARION H. LOWRIMORE, Obatchee, Ala. Filed Oct. 29, 1915. Serial No. 58,651. (Cl. 226—33.)



A funnel comprising a body portion, a spout, a handle extending over the top of the body portion, a magnetized enlargement formed centrally of the handle and having a recess in the under side thereof, a rod slidably mounted in the body, guides therefor, a float valve on the lower end of the rod, said float valve supporting the weight of the rod on the surface of the liquid when in contact therewith, and an enlarged head on the upper end of the rod, said head being adapted to enter the recess in the magnetized enlargement when the level of the liquid has raised the rod sufficiently to bring the enlarged head thereon within the magnetic zone around the recess.

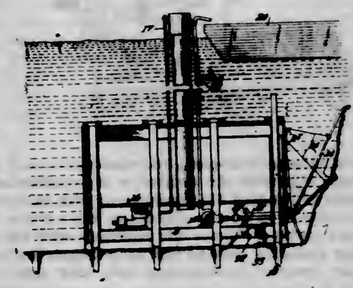
1,272,478. WASHTUB. ALINA LUKUS, Flagstaff, Ariz. Filed Jan. 17, 1918. Serial No. 212,247. (Cl. 137—21.)



1. In a wash tub, a container having a perforation in its side wall, water supply means for said container, said supply means including a spout, a nozzle adjustably applied to the perforated portion of said side wall, said nozzle terminating within the body portion of said container in an enlarged head, said head being formed with a mouth, a perforated partition arranged in said head, a valve within said head between the said perforated partition and the said nozzle, and means connecting said valve and the aforesaid spout whereby said valve is yieldingly retained in closest relation to said perforated partition.

2. In a wash tub, a container having a perforation in its side wall, water supply means for said container, said supply means including a spout, a nozzle adjustably applied to the perforated portion of said side wall, said nozzle terminating within the body portion of said container in an enlarged hollow head, said head being formed with a mouth, a perforated partition arranged in said head, a pressure valve within said head between the said perforated partition and the said nozzle, a washer between said valve and said perforated partition, and a flexible member adjustably engaging said spout and operatively connecting the same to said pressure valve.

1,272,479. METHOD OF BUILDING FOUNDATIONS FOR SUBAQUEOUS TUNNELS. DUNCAN D. MCBRAIN, New York, N. Y. Original application filed Feb. 21, 1916, Serial No. 79,594. Divided and this application filed Sept. 13, 1916. Serial No. 119,802. (Cl. 61—16.)



2. The method of building foundations for subaqueous tunnels and the like placed thereon, which has been herein described, which consists in lowering to the bottom of a river or other body of water a submarine locomotive structure having at its lower portion an open bottom compressed air chamber, unwatering the site of the foundation under the structure, excavating by suitable appliances contained in said chamber, progressively a length of trench, driving piles through passages extending from the top to the bottom of the structure to form a foundation in the trench, and then lowering thereon the tunnel or other structure intended therefor.

9. The method of preparing foundations for a subaqueous tunnel in a trench in the bottom of a body of water, which consists in lowering to the bottom a submarine structure having an open bottom compressed air working chamber under it, advancing the structure on tracks laid in the trench, preparing progressively by appliances contained in the working chamber, a foundation in the bottom of the trench and lowering and laying tunnel sections thereon.

[Claims 1, 3 to 8, and 10 to 24 not printed in the Gazette.]

1,272,480. PLAYING-CARDS. WILLIAM S. MCBRIDE, Caldwell, Ohio. Filed Aug. 10, 1917. Serial No. 185,562. (Cl. 46—25.)

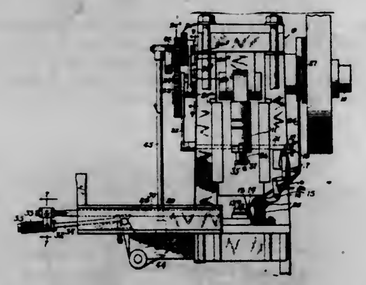
A pack of game playing cards comprising suits, each card of each suit bearing a sand characteristic designation as "water," "oil," "dry," "gas" or the like, and also

bearing a number, and the name of a sand, said names and numbers indicating the relative depths of the sands



and said numbers indicating the relative game values of the cards.

1,272,481. DIE-PRESS MECHANISM. CHARLES D. McDONALD, Chicago, Ill. Filed Apr. 23, 1917. Serial No. 164,025. (Cl. 164—21.)



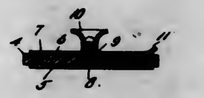
1. In an automatic die-press, the combination of a fixed die member, a movable die member, a gage positioned on the far side of the fixed die in alinement with the cutting edge thereof, said gage acting to center the work so that the far side of one cut comes into alinement with the near side of the preceding cut and the work entirely cut away at a point centrally between the cuts, said gage being positioned in alinement with said cut-away parts, whereby the work may be fed past said gage without movement of the latter, means for automatically moving the gage after the last cut has been made out of the path of travel of the work to enable the web at the end of the work to pass by the gage and the scrap work ejected from the machine, and means for feeding the work through the machine and out therefrom, substantially as described.

3. In an automatic die-press, the combination of a fixed die member, a movable die member, a gage in the form of a pivoted finger positioned on the far side of the fixed die in alinement with the cutting edge, said gage acting to center the work so that the far side of one cut comes into alinement with the near side of the preceding cut and the work entirely cut away at a point centrally between the cuts, said gage being positioned in alinement with said cut-away parts, whereby the work may be fed past said gage without movement of the latter, a series of links and levers operatively connected to said finger, and means acting automatically when a predetermined number of cuts have been made to move said links and levers and raise the finger to enable the web at the end of the work to pass by the gage and the scrap work ejected from the machine, and means for feeding the work through the machine and out therefrom, substantially as described.

6. In an automatic die-press, the combination of a fixed die member, a movable die member, a gage member adapted to contact the work and center it prior to each cutting operation, means for feeding the work through the machine, comprising a reciprocating feed bar, an actuating member for said bar, and a resilient connection between the actuating member and feed bar allowing the bar to give in case the work is brought into contact with the gage prior to the completion of the stroke of said bar, whereby buckling of the work by pressure of the feed means after the work has contacted the gage is prevented, substantially as described.

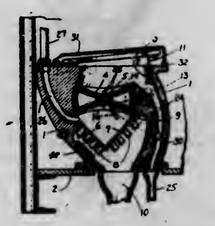
[Claims 2, 4, and 5 not printed in the Gazette.]

1,272,482. PACKAGE-TIE. ALBERT R. MCFADDEN, Jeromesville, Ohio. Filed Sept. 11, 1916. Serial No. 119,564. (Cl. 24—18.)



In a package tie, a disk formed of a thickness of compressible and flexible material, a block inserted in the central portion of said disk and being of equal thickness therewith, metallic plates arranged upon the opposite sides of said disk and extending across said block, a rivet connecting certain of the ends of said plates, a rivet passing centrally through said plates, block and disk, a binding post secured upon one end of said center rivet, and the free end of one of said plates comprising a clamp, substantially as described.

1,272,483. CLOSET. ALEXANDER MCGARY and JOHN P. SUNDERLAND, New York, N. Y., assignors, by mesne assignments, to Gould Coupler Company, a Corporation of New York. Filed Aug. 4, 1913. Serial No. 782,781. (Cl. 4—17.)



1. The combination of a closet seat adapted to be depressed, a heater adapted to receive and heat the excreta, means for heating said excreta by alternating current, and means for turning on the current to heat the heater upon a rise of said seat.

5. The combination of a closet seat adapted to be depressed when occupied, a pan below said seat, an alternating current electric heater below said pan, means for discharging the excreta from the pan into the heater, and means for causing said heater to heat the excreta therein upon one leaving the seat.

9. The combination in a device of the class described of a closet seat, a heater adapted to receive and heat the excreta, means automatically set into operation by the ordinary use of the device for heating the heater by means of an electric current and means for automatically discontinuing the heat of the heater upon the attainment of the required degree of heat.

20. The combination of a closet seat, a tilting pan therebeneath for receiving the excreta, a heater below said pan, means for automatically tilting said pan to discharge the same into the heater and turning on the heat of the heater, said pan when so tilted forming a cover for the heater to prevent the heat reaching the seat and means for automatically turning off the heat of said heater.

24. The combination of a closet seat, a tilting pan therebeneath for receiving the excreta, an electric heater below said pan, and means for tilting said pan to discharge the same into the heater upon one leaving the seat, said pan when so tilted forming a cover for the heater to prevent the heat reaching the seat, means for automatically turning on the heat of said heater upon a rise of the seat and means for automatically turning off the heat of said heater.

[Claims 2 to 4, 6 to 8, 10 to 19, 21 to 23, and 25 to 33 not printed in the Gazette.]

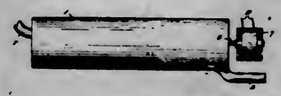
1,272,484. ORNAMENTAL PLAQUE AND METHOD OF MAKING THE SAME. MICHAEL J. MCLAUGHLIN, St. Louis, Mo. Filed Mar. 28, 1916. Serial No. 87,263. (Cl. 41—32.)



1. An ornamental plaque comprising a transparent sheet, a sheet having a pictorial representation thereon placed against said transparent sheet, and a backing of a moldable material placed over the pictorial sheet and the transparent sheet to extend around the edges thereof.

2. The method of making hermetically sealed ornamental plaques consisting of placing pictorial representations or designs upon a transparent sheet, locating said sheet in a mold, and casting a backing material to cover over the pictorial representation or design and the back of the sheet, and at the same time to mold around the edge of the transparent sheet to establish a hermetical seal between the transparent sheet and the backing material.

1,272,485. MUFFLER. WILLIAM H. MCMAHON, Bruce, S. D. Filed July 14, 1917. Serial No. 180,550. (Cl. 60—32.)

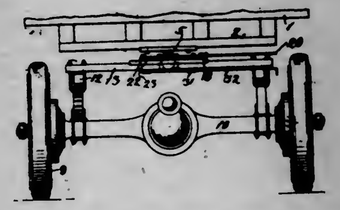


1. A muffler comprising a plurality of concentrically arranged cylindrical casings spaced radially apart and with their ends positioned to form a tortuous passage, a longitudinal shaft extending throughout the length of the innermost casing, fan blades secured to said shaft, means for locating said shaft, an inlet pipe opening into one end of the innermost casing, and an outlet leading from the opposed end of the outer casing.

2. A muffler comprising three concentric casings spaced radially apart, the outer casings being closed at both ends and the inner and intermediate casings closed at one end and open at the other, the closed end of one being adjacent the open end of the other thereby forming a tortuous passage, a revolubly mounted shaft extending longitudinally throughout the inner casing and having fan blades secured thereto, and means for rotating said shaft.

1,272,486. COUPLING. CHARLES H. MCMANIS, Akron, Ohio. Filed Nov. 24, 1917. Serial No. 203,759. (Cl. 21—137.)

1. A coupling for the purpose described comprising a base secured to one element, a stud on said base said stud terminating in a ball-shaped lower end, a plate on the other element said plate provided with a socket and further provided in said socket with an appropriate semispherical recess to receive said ball-shaped end, a pair of clamps slidably mounted on said plate and arranged when in their normal operative position to meet at the vertical axis of said recess, the opposing edges of said clamps provided with coöperating grooves arranged when said clamps are in their operative positions to form an opening the side walls of which inclose said stud and the upper portion of said ball-shaped end for locking it in said recess, and a pair of spring pressed pins arranged to engage said clamps when the latter are in their operative positions and lock said clamps against movement.



2. A coupling for the purpose described comprising a base secured to one element, a stud on said base said stud terminating in a ball-shaped lower end, a plate on the other element said plate provided with a socket and further provided in said socket with an appropriate semispherical recess to receive said ball-shaped end, a pair of clamps slidably mounted on said plate and arranged when in their normal operative position to meet at the vertical axis of said recess, the opposing edges of said clamps provided with coöperating grooves arranged when said clamps are in their operative positions to form an opening the side walls of which inclose said stud and the upper portion of said ball-shaped end for locking it in said recess, a rod extending loosely through one clamp and anchored to the other clamp, a lever pivotally secured to the first clamp and to said rod and arranged when shifted to move said clamps to their respective operative and inoperative positions.

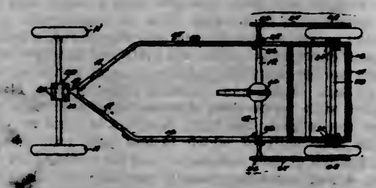
3. A coupling for the purpose described comprising a base secured to one element, a stud on said base said stud terminating in a ball-shaped lower end, a plate on the other element said plate provided with a socket and further provided in said socket with an appropriate semispherical recess to receive said ball-shaped end, a pair of clamps slidably mounted on said plate and arranged when in their normal operative position to meet at the vertical axis of said recess, the opposing edges of said clamps provided with coöperating grooves arranged when said clamps are in their operative positions to form an opening the side walls of which inclose said stud and the upper portion of said ball-shaped end for locking it in said recess, a rod extending loosely through one clamp and anchored to the other clamp, a lever pivotally secured to the first clamp and to the rod and fulcrumed on said plate and arranged when oscillated to move said clamps to their respective operative and inoperative positions.

4. A coupling for the purpose described comprising a base secured to one element, a stud on said base said stud terminating in a ball-shaped lower end a plate on the other element said plate provided with a socket and further provided in said socket with an appropriate semispherical recess to receive said ball-shaped end, a pair of clamps slidably mounted on said plate and arranged when in their normal operative position to meet at the vertical axis of said recess, the opposing edges of said clamps provided with coöperating grooves arranged when said clamps are in their operative positions to form an opening the side walls of which inclose said stud and the upper portion of said ball-shaped end for locking it in said recess, and a pair of spring pressed pins arranged to engage said clamps when the latter are in their operative positions and lock said clamps against movement, a pair of cranks connected

with said pins and arranged when oscillated to actuate them.

5. A coupling for the purpose described comprising a base secured to one element, a stud on said base said stud terminating in a ball shaped lower end a plate on the other element said plate provided with a socket and further provided in said socket with an appropriate semispherical recess to receive said ball-shaped end, a pair of clamps slidably mounted on said plate and arranged when in their normal operative position to meet at the vertical axis of said recess, the opposing edges of said clamps provided with coöperating grooves arranged when said clamps are in their operative positions to form an opening the side walls of which inclose said stud and the upper portion of said ball-shaped end for locking it in said recess, and a pair of spring pressed pins arranged to engage said clamps when the latter are in their operative positions and lock said clamps against movement, a pair of cranks connected with said pins and arranged when oscillated to actuate them, a suitably mounted operating rod on which said clamps are mounted and arranged to control the movement of said cranks for withdrawing said pins from engagement with said clamps.

1,272,487. TRAILER ATTACHMENT FOR AUTOMOBILES. WALLIE C. MANGEL, Fairfax, Minn., assignor of one-half to Edward F. Berkner, Sleepy Eye, Minn. Filed June 18, 1917. Serial No. 175,413. (Cl. 180—16.)



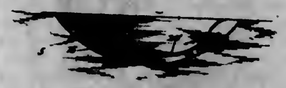
1. In apparatus of the character described, the combination with a main frame, of means for pivotally connecting the forward end of the main frame with the forward axle of an automobile, means for clamping the frame to the rear axle of the automobile, independently rotatable axle sections carried by the main frame and adapted to have the rear wheels of the automobile rigidly secured thereto, sprocket wheels connected with said rear wheels for rotation therewith, sprocket wheels carried by the axle sections of the rear axle of the automobile, and sprocket chains connecting the first and second named sprocket wheels.

2. In apparatus of the character described, a main frame, a tubular housing extending transversely of the main frame and secured to the rear end of the main frame, a pair of axle sections independently rotatable in the tubular housing and having outer tapered ends, traction wheels having tapered tubular hubs provided with inner annular flanges and adapted to be arranged upon the tapered ends of the axle sections, sprocket wheels having body portions arranged upon the opposite sides of the wheels in opposition to the flanges and having tubular hubs to receive the first named tubular hubs, a plurality of bolts connecting the flanges and the body portions of the sprocket wheels, a plurality of nuts having screw-threaded engagement with the ends of the outer tapered portions of the axle sections to retain the parts of the traction wheels thereon, means to pivotally connect the forward end of the main frame with the front axle of an automobile, means for connecting the rear portion of the main frame with the rear axle casing of the automobile, sprocket wheels adapted for connection with the axle sections arranged within the rear axle casing of the automobile, and sprocket chains connecting the two sets of sprocket wheels.

3. A trailer attachment for automobiles, comprising a main frame, means for connecting the main frame with the automobile, independently rotatable axle sections carried by the main frame and adapted to have the rear wheels of the automobile rigidly secured thereto, sprocket wheels connected with said rear wheels for rotation therewith, sprocket wheels carried by the axle sections of the rear axle of the automobile, and sprocket chains connecting the first and second named sprocket wheels.

4. A trailer attachment for automobiles, comprising a main frame, means for connecting the main frame with the automobile, independently rotatable axle sections carried by the main frame and adapted to have the rear wheels of the automobile rigidly secured thereto, and gearing connecting the axle sections of the rear axle of the automobile with the said rear wheels.

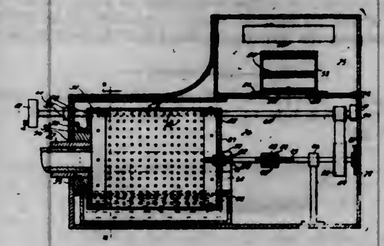
1,272,488. AMUSEMENT DEVICE. CHESTER B. MANZER, New York, N. Y. Filed Sept. 27, 1917. Serial No. 193,427. (Cl. 46—27.)



1. An amusement device comprising in combination a rotatable disk, a car supported by said disk and free to move on the surface thereof, and buffer means protecting the edge of said disk, and presenting a sinuous surface to said car.

2. An amusement device comprising in combination a rotatable disk, a car supported by said disk and free to move on the surface thereof, and resilient buffer means protecting the edge of said disk, and presenting a sinuous surface to said car.

1,272,489. DUST-COLLECTOR. FRANK A. MARASCIO, Phillipsburg, N. J. Filed Feb. 14, 1918. Serial No. 217,124. (Cl. 183—17.)



2. Apparatus of the character described, comprising a casing provided with an opening, a door for said opening, a water pan within the said casing and removable through the opening, a guard plate secured to the closed side of the casing and inclined downwardly toward the pan to conduct water into the same, a coacting guard plate connected with the inner side of the door and inclined downwardly toward the pan to conduct water into the same, a tubular bearing within the casing and connected with one end thereof in proximity to the end of the pan, a supply pipe for the dust laden air having one end thereof extending into the tubular bearing, a horizontal perforated rotatable drum within the casing and operating in contact with the water within the pan and adapted to be passed through the opening, a ring connected with one end of the drum and rotatably and removably mounted upon the tubular bearing, an imperforate head connected with the opposite end of the drum, a sectional shaft rigidly secured to the imperforate head, a stationary bearing near the opposite end of the casing and having the sectional shaft journaled therein, and means to rotate the sectional shaft.

[Claim 1 not printed in the Gazette.]

1,272,490. INTERNAL SPRING HEEL-SEAT. HUGH ARTHUR MATHER, Liverpool, England. Filed Oct. 11, 1917. Serial No. 195,987. (Cl. 36—37.)

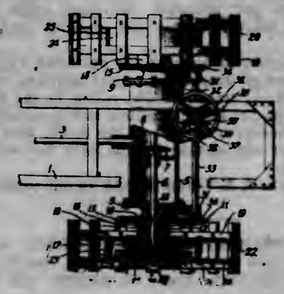


1. In a spring heel-seat the combination of a base, an upper plate, resilient means in tension connected both to the upper plate and to the base to draw these parts toward one another and a resilient compression member between the base and upper plate.

7. In a spring heel-seat the combination of a base, an upper plate that is distinct from the plate upon which the wearer's heel rests and is provided with a loose false top fitted with an upwardly extending shield for the rear of the wearer's heel, resilient means in tension connected both to the upper plate and to the base to draw these parts toward one another, and a resilient compression member between the base and upper plate.

[Claims 2 to 6 and 8 not printed in the Gazette.]

1,272,491. TRACTOR. CHARLES F. MEGOW, Detroit, Mich. Filed Mar. 16, 1917. Serial No. 155,165. (Cl. 180—17.)



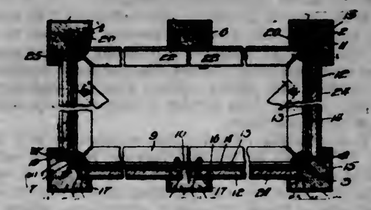
1. In a tractor, traction wheels, gearing mechanism in each wheel, means for operating said gearing mechanism, and manually actuated means common to said gearing mechanisms adapted for regulating the speed of said wheels.

2. In a tractor, a frame, a housing supporting said frame, traction wheels at the ends of said housing, a semifloating driven shaft extending through said housing into said traction wheels, gearing mechanisms at the ends of said shaft and operated thereby for imparting movement to said traction wheels, and means operatable relative to each gearing mechanism adapted for simultaneously controlling the speed of each wheel.

3. In a tractor, a housing, traction wheels at the ends thereof, a semifloating driven shaft extending through said housing into said wheels, a gearing mechanism in each wheel operated by said shaft adapted for imparting movement to said traction wheels, each gearing mechanism including a manually adjusted gear wheel adapted for regulating the speed of the gearing mechanism.

4. In a tractor, a frame, a housing supporting said frame, a semifloating driven shaft extending through said housing, traction wheels supporting the ends of said housing, a variable speed mechanism in each wheel operated by said semifloating driven shaft, and means carried by said frame common to said wheels for controlling the variable speed mechanism in each traction wheel.

1,272,492. COUNTER CONSTRUCTION. GEORGE B. MEYERCORD, Chicago, Ill. Filed Dec. 21, 1917. Serial No. 208,214. (Cl. 211—11.)



1. A counter comprising a rigid frame structure determining the size and shape of the counter and provided with posts having grooves facing each other and opening out of the tops of the posts, sanitary slabs extending between the posts and having their ends lying in the grooves in the latter, and detachable metal shells forming coverings for said posts and engaging with said slabs so as to form therewith a detachable sanitary covering having an exposed surface made up wholly of the slabs and of said coverings.

3. A counter having a frame structure determining the size and shape of the counter and provided with projecting posts, and a detachable covering for concealing said frame structure comprising sanitary slabs adapted to extend between the posts and sheathing members adapted to extend over the exposed portions of the posts and engage with the slabs.

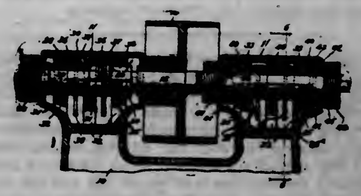
6. A counter having a frame structure provided with projecting posts, sanitary slabs lying against said frame structure between the posts, sheathing members extending over the exposed portions of said posts and engaging with said slabs to hold them against said frame, said sheathing members being interlocked with said posts against lateral displacement and being removable therefrom by sliding movements in the upward direction.

8. A counter having a frame structure comprising separated parallel metal frames lying one above the other, vertical wooden posts distributed about and secured to said frames, sanitary slabs provided with cushioned surfaces engaging said frames, and sanitary sheathing members on said posts and engaging with said slabs to hold them against said frames.

9. A counter comprising a rigid self-sustaining frame-like structure having upright posts, and a sanitary covering of vitreous slabs and metal sheathing members completely concealing the exterior of said frame structure, said covering being interlocked with the posts against lateral displacement and freely movable on the posts in the vertical direction for assembling purposes.

[Claims 2, 4, 5, and 7 not printed in the Gazette.]

1,272,493. BEARING FOR DISK GRINDERS. JOHN MILLER, Jr., Beloit, Wis., assignor to Charles H. Besly & Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 30, 1917. Serial No. 165,331. (Cl. 64—10.)



1. In a grinding machine, the combination of a head stock, a spindle, a bearing bushing for said spindle, mounted in said head stock and provided with a radial

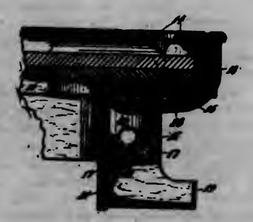
bearing surface and at each end with a thrust bearing surface, adapted to contact with thrust collars fixed on said spindle, and said bushing being so formed as to permit the same to expand longitudinally.

2. In a grinding machine, the combination of a head stock, a spindle, and a bearing bushing mounted in said head stock and provided with a radial bearing surface and at each end with a thrust bearing flange adapted to have contact with thrust collars fixed on said spindle, and said bushing being divided intermediate its ends to form a clearance space.

7. In a grinding machine, the combination of a head stock, a spindle, a bearing bushing for said spindle mounted in said head stock and provided with a radial bearing surface and with oppositely facing thrust bearing surfaces, adapted to contact with thrust collars carried by said spindle, said bushing being divided transversely between its ends to form a clearance space, and means for anchoring each section of said bushing in said head stock, comprising a fixed member on one of such parts extending into an elongated slot in the other of such parts.

[Claims 3 to 6 not printed in the Gazette.]

1,272,494. RETURN-CHUTE FOR POOL-TABLES. BERNARD A. MINN, Milwaukee, Wis. Filed Mar. 3, 1917. Serial No. 152,172. (Cl. 46—12.)



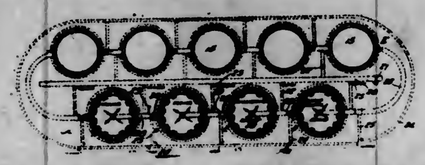
1. A return chute for pool tables, comprising a box like cornice around the table beneath the table top and outside the legs, inclined pairs of strips secured within this cornice and extending along each side of the table from one end thereof to the other and having the pockets discharge therein, said strips at their lower parts turning around the end of the table and terminating in a discharge opening and a receiving box beneath the discharge opening.

2. An invisible silent return chute for pool tables, comprising a box like cornice around the table beneath the table top and outside the legs and apron, inclined pairs of strips secured to the cornice and the apron respectively to form a runway extending along each side of the table from one end thereof to the other, pockets curved around the edge of the table top and discharging obliquely into the runways in the direction of the travel of the balls in the runways, cushioning strips of soft material on the strips forming the runways, said runways at their lower parts turning around the end of the table and terminating in a discharge opening, and a receiving box beneath the discharge opening.

1,272,495. KILN. MAURICE M. MINTER, Albany, Ga., assignor of one-half to Paul Joe Brown, Albany, Ga. Filed Apr. 10, 1918. Serial No. 227,651. (Cl. 25—135.)

1. The combination of a series of kilns, an induction flue having draft inducing means, damper controlled connections between the said flue and the several kilns, a circuit flue around the series of kilns, damper controlled connections between the said circuit flue and the several kilns, and damper controlled connections between the several kilns of the series.

5. A series of progressively operating kilns having surrounding intake flues, and each provided with an outlet flue leading from its center to the intake flue of the next adjacent kiln in advance thereof, dampers controlling the said outlet flues, an induction flue, and damper controlled connections between the induction flue and the kilns leading into the outlet flues at points between the kilns and the said dampers of the outlet flues.



8. A series of kilns each having an annular series of door openings, intake flues extending around opposite sides of each of said kilns and having adjacent open ends, pipes leading from the said intake flues into the door openings of the kilns, and an outlet flue leading from each of the kilns and communicating with the adjacent open ends of the intake flues of the next advanced kiln.

14. A plurality of progressively operating kilns each having intake flues, and an outlet flue communicating at its outer end with the intake flues of the next adjacent kiln in advance thereof, each of said outlet flues having longitudinally spaced openings adjacent the intake flues with which it communicates, dampers between the said openings of the outlet flues, and a portable fan having means of communication with the said openings, whereby to withdraw products of the outlet flues at one side of the dampers and introduce the same under pressure within the intake flues at the opposite sides of the dampers.

16. A plurality of progressively operating kilns having annular series of door openings and provided with inlet and outlet flues, grates for disposition in the said door openings when the kiln is burning, and a plurality of intake pipes leading from each of the intake flues into the door openings and opening therein below the said grates, as described.

[Claims 2 to 4, 6, 7, 9 to 13, and 15 not printed in the Gazette.]

1,272,496. TRANSMISSION-GEAR CASING. ALFRED C. MOELLER and JOHN F. STEVENSON, Seattle, Wash. Filed Dec. 20, 1917. Serial No. 208,009. (Cl. 74—56.)

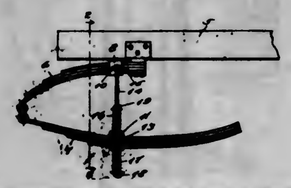


1. A transmission gear casing comprising two separable members, one superposed on the other, means to secure said members together, the upper of said members being formed with an inlet opening in its top, a detachable apertured cover for said opening, said cover having bearings for transversely arranged pedal shafts, said upper of said casing members having bearings for a transversely arranged clutch-lever shaft, releasable means for operatively connecting one of said pedal shafts with the clutch-lever shaft, and a plate removably secured to said cover for closing the aperture thereof.

2. A transmission gear casing formed with a cylindrical front portion and a conical rear portion having an opening extending through both said portions of the casing, a cover for said opening, means to detachably secure said cover to the casing, the walls of the cover and the subjacent part of the casing being provided with shaft

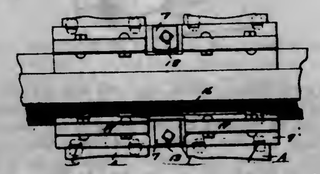
bearings, and shafts journaled in said bearings, the shafts which are journaled in the cover being removable therewith without disturbing the shaft which is journaled in the transverse bearing of the casing part below said cover.

1,272,497. VEHICLE SPRING CONSTRUCTION. EARL H. MONAHAN, Hyannis, Nebr. Filed Jan. 3, 1917. Serial No. 140,407. (Cl. 267—19.)



The combination with upper and lower elliptical springs having corresponding ends suitably connected; of a sleeve receiving a portion of the upper elliptical spring and clamped thereto, said sleeve being provided upon its opposite ends with horizontal ears which are rigidly secured thereto and provided with vertical apertures; a second sleeve receiving a portion of the lower elliptical spring and clamped thereto, said second sleeve being provided upon its opposite ends with horizontal ears which are rigidly secured to the sleeve and have vertical apertures; rigid rods vertically disposed upon opposite sides of the elliptical springs and having their upper ends clamped within the vertical apertures in the ears of the first named sleeve, the lower portions of these rods being arranged to reciprocate within the vertical apertures in the ears of the second named sleeve, compressible coil springs surrounding the rods above and below the last named ears to contact therewith; and adjustable elements carried by the rods to engage the ends of said coil springs.

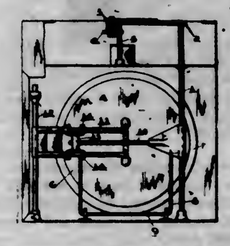
1,272,498. RAIL-JOINT. MILEDEN S. MONDAY, Caney, Okla. Filed Apr. 22, 1918. Serial No. 230,116. (Cl. 239—2.)



1. The combination with two cross ties and with two meeting ends of railway rails, supported by said ties, of a pair of truss bars seated on two adjacent ties and disposed at opposite sides of said meeting ends of the rails, and a substantially U-shaped plate having its middle portion under said meeting ends and having its end portions seated on and secured to said truss bars, and having elements which connect said end portions with said intermediate portion seated substantially against the longitudinal edges of the bases of the rails, whereby the rail ends are supported against downward and lateral movement.

2. The combination with two railway ties and with the meeting ends of two railway rails, of a pair of truss bars each having its ends secured respectively to said ties, said truss bars being disposed at opposite sides of the rail ends, and being of a height considerably greater than the height of the rail base flanges, a supporting plate having its end portions seated respectively on said truss bars and having its intermediate portion depending from said end portions and disposed in position for supporting said meetings ends of the rails and a pair of fish plates each provided with means for securing it to the rail web and with means for securing it to the adjacent one of said truss bars, each of said fish plates being provided with a notch into which said end portions of said supporting plate fit so as to prevent relative movement of the fish plates and truss bars longitudinally of the latter.

1,272,499. GAS-METER. SYLVESTER JOSEPH MOORE, London, Ontario, Canada, assignor of one-half to John Sylvester Moore, London, Canada. Filed Feb. 14, 1918. Serial No. 217,281. (Cl. 73—1.)

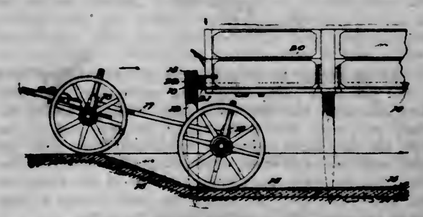


1. In a meter provided with movable diaphragms operating flag wires, which by suitable rock arm and linkage systems actuate the valves and registering mechanism, a compound lever system between each flag wire and its corresponding diaphragm comprising a lever arm connected to the flag wire; a lever arm pivotally connected to the diaphragm; and a stationary part on which the lever arm is fulcrumed, said lever arms having a rocking and sliding engagement the one with the other.

2. A specific construction of the device set forth in claim 1 in which the second lever arm is arranged to rock on an axis parallel to the axis of the flag wire lever arm and is fulcrumed at the opposite end of the meter and the connection between the two lever arms comprises a member pivotally connected to one lever arm and through which the other arm slides.

3. A specific construction of the lever system set forth in claims 1 and 2 in which the second lever arm is double and the connecting member through which the flag wire lever arm slides is pivoted to each part of the arm.

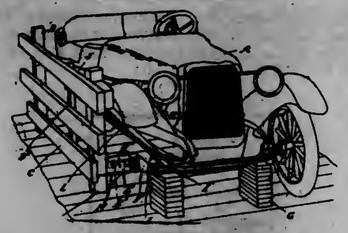
1,272,500. DEVICE FOR REMOVING AND REPLACING WAGON-BODIES AND THE LIKE. HENRY O. MOSER, Buffalo Gap, Saskatchewan, Canada. Filed May 26, 1917. Serial No. 171,198. (Cl. 254—45.)



2. A device of the class described comprising horizontal supporting rails in spaced relation, a driveway associated with said rails and including a horizontal intermediate portion and inclined end portions, one of said inclined end portions being disposed intermediate the terminals of the rails and the other inclined end portion disposed in advance of the rails, a vehicle body, loop devices attached to the body and including upper and lower members in spaced relation, bars extending through said loop devices and extended to bear upon the rails and having transverse seats adapted to engage the upper members thereof when elevated and thus lock the bars to the loops.

[Claims 1 and 3 not printed in the Gazette.]

1,272,501. AUTOMOBILE-LOADING SYSTEM. HARRY R. MOORE, Detroit, Mich., assignor to Maxwell Motor Company, Inc., Detroit, Mich., a Corporation of Delaware. Filed May 13, 1918. Serial No. 234,009. (Cl. 105—15.)



1. The method of loading automobiles in freight cars which comprises securing a crate to one side of the automobile, turning the automobile on to its side so as to rest on said crate, and securing the crate and automobile as a unit in the freight car.

8. The method of loading automobiles in freight cars which comprises removing the wheels from one side of the automobile, securing a crate to said side of the automobile, turning the automobile on its side so as to rest on the crate, rolling the crate and automobile as a unit into the freight car, and bracing the upper side of the automobile against the side of the freight car.

7. In a system for loading automobiles or the like in freight cars, the combination with automobiles, of means for loading a plurality of said automobiles in freight cars, said means comprising cutter secure to one side of the automobiles, each of said crates and automobiles being movable as a unit into desired position in the car, and means for securing said crate to the floor of the car.

[Claims 2 and 4 to 6 not printed in the Gazette.]

1,272,502. WIRE-TIE AND METHOD OF MAKING SAME. ROY M. MOWRY, Los Angeles, Cal., assignor to Mowry Machinery Manufacturing Company, Los Angeles, Cal., a Corporation of California. Filed Oct. 16, 1916. Serial No. 125,893. (Cl. 24—27.)

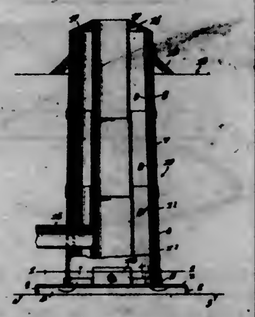


1. As an article of manufacture, the herein described tie for wire ends, comprising substantially a twist which embodies the two wire ends directly twisted together with both wire terminals at the same end of the twist, the two wires extending oppositely away from the twist, said twist extending from the point of entry of the wires into the twist back alongside one of the wires, so that said wire where it enters the twist makes a loop around the other wire where it enters the twist.

[Claims 2 to 5 not printed in the Gazette.]

1,272,503. CHIMNEY-FLUE. ALICE C. NELSON, Tipton, Mo. Filed Jan. 16, 1917. Serial No. 142,725. (Cl. 98—30.)

In a device of the class described, the combination of a supporting platform, said platform having an upwardly extending annular flange formed thereon, said flange having a cut-out portion, thus having spaced apart ends, a heat insulating flue carried upon said platform and having its lower end fitting within said flange, thus being held against side displacement upon said platform, a smoke flue positioned centrally within the heat insulating flue, a spacing member secured to the inner portions of said heat insulating flue and bearing upon said smoke flue, thus spanning the distance between said flues, whereby the smoke flue will be held against accidental shifting within



said heat insulating flue, and a soot pan passing through said flange and said flues in direct alinement with the spacing member, thus further assisting in holding said smoke flue against shifting within the heat insulating flue.

1,272,504. ADVERTISING DISPLAY-CARD. CHARLES S. NETSONG, Chicago, Ill. Filed Nov. 21, 1917. Serial No. 203,112. (Cl. 211—24.)



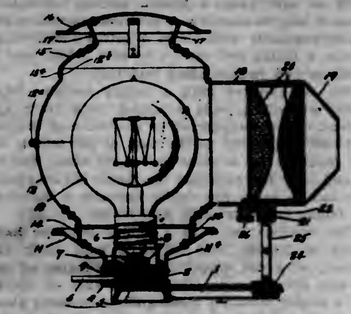
2. An advertising display card cut and bent to provide a base portion and an upright portion, said upright portion having an opening therein adapted for the reception of a package to extend partially on either side of said upright portion, and a flap adapted to exactly cover the part of the top of said package extending in front of said upright portion, said upright portion and said flap bearing an appropriate picture to represent said package as opened.

[Claims 1, 3, and 4 not printed in the Gazette.]

1,272,505. PROJECTING-LAMP. JOSEPH G. E. O'HARA, St. Louis, Mo., assignor to Educational Motion Picture Machine and Film Company, St. Louis, Mo., a Corporation of Missouri. Filed June 22, 1916. Serial No. 104,241. (Cl. 240—41.)

1. A lantern including means for supporting an incandescent bulb, a lower housing portion, an intermediate housing portion, and an upper housing portion arranged to encompass a bulb supported on said means and spaced apart from one another to provide vertically spaced apart ventilative openings about the circumference of such bulb.

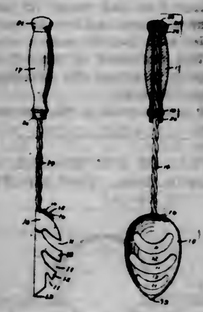
7. A lantern including a housing portion, a lamp support disposed in the lower portion of said housing, a light producing bulb supported on said lamp support and with its body portion spaced apart from the walls of the housing; said housing including a portion removable to permit the removal of the bulb from the lamp support and having a lower ventilative opening below the neck of the bulb and an upper ventilative opening adjacent the upper extremity of the bulb, the portion of the housing intermediate said ventilative openings being imperforate and



including a transparent portion for the passage of light from the bulb.

[Claims 2 to 6 not printed in the Gazette.]

1,272,506. EGG-BEATER AND MIXING-SPOON. ERNEST V. OLANDER, Grand Rapids, Mich. Filed Mar. 26, 1917. Serial No. 157,436. (Cl. 74—40.)
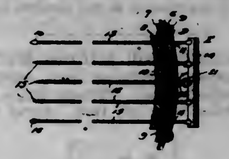


1. In an implement as specified, the combination with an article adapted at times to be rotated and at times to be held from turning, of a shank secured at one end axially to the article and having an exterior spiral rib, a cap swiveled to the free end of the shank for receiving the hand to hold the shank for turning, a handle mounted on the shank and fitting the spiral rib for turning the shank and article by the longitudinal movement, and means for locking the handle to the cap for holding the handle from movement upon and about the shank whereby the article may be supported from turning by the handle.

2. In an implement as specified, the combination with an article adapted to be at times rotated and at other times held from turning, of a shank secured at one end axially to the article, and having an exterior spiral rib, a cap swiveled to the free end of the shank for receiving the hand to hold the shank for turning and provided with a threaded counter-bore and a handle mounted on the shank and fitting the spiral rib for turning the shank and article when the handle is moved longitudinally, said handle having an exteriorly threaded upper end adapted to engage in said counter-bore of the cap for locking the handle to the cap and maintaining the handle from movement upon and about the shank whereby the article may be supported from turning by the handle.

1,272,507. HAT-RETAINER. MELVIN J. OTWESS, Stony Plain, Alberta, Canada. Filed Jan. 15, 1917. Serial No. 142,528. (Cl. 132—25.)

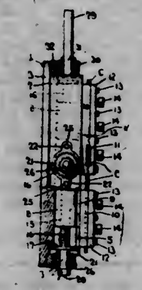
1. In a hat retainer, the combination of a guide including a plurality of plates adapted to be secured to the crown of a hat, said plates each provided with a way, said ways of said plates alined, with their axis diagonally crosswise through said plates, and a pin including a tine slidable in said ways.



3. In a hat retainer, the combination of a plurality of plates adapted to be secured to the crown of a hat, in spaced-apart relation, said plates provided with alined transverse ways, a pin carried by said plates including tines extending through said ways, and a catch carried by one of said tines adapted to releasably engage one of said plates between said plates.

[Claim 2 not printed in the Gazette.]

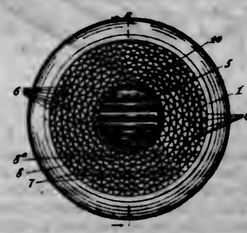
1,272,508. CUTTING-OFF TOOL FOR BAR METALS. MOSES OWEN, Westmont, Johnstown, Pa.; Mary Ann Owen, executrix of said Moses Owen, deceased, assignor to herself, John A. Northwood, and Emyln Harris, Westmont, Johnstown, Pa. Filed Nov. 29, 1915. Serial No. 64,002. (Cl. 81—191.)



2. A cutting tool comprising a stationary head having a central opening and a plurality of radially disposed guideways, an annular flange carried by the body portion and having openings communicating with the guide-ways, caps secured to the flange opposite the openings, tool holders having lateral extensions within the guide-way, and screw-threaded, screws journaled in the caps and screwed into the lateral extensions, pinions carried by the screw, a ring gear carried by the head and engaging the pinion, and means for rotating one of said screws whereby all of the screws are simultaneously rotated at the same speed.

[Claim 1 not printed in the Gazette.]

1,272,509. LAMP. HERBERT R. PALMER, Cleveland, Ohio. Filed Feb. 8, 1917. Serial No. 147,289. (Cl. 240—48.4.)

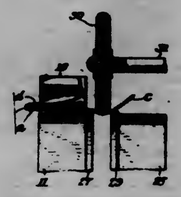


1. In a lamp the combination of a casing extending from the front of the lamp body; a tubular core member in said casing; a longitudinally corrugated member coiled

around said core thereby forming a series of longitudinal cells in said casing; and a glass member in the forward end of said tubular core, the outer face of said glass member being prismatic and the inner face plain.

[Claims 2 to 4 not printed in the Gazette.]

1,272,510. MACHINE FOR MAKING MATCH-BOOKS. MICHAEL PARIDON, Barberton, Ohio, assignor to The Diamond Match Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 28, 1917. Serial No. 193,640. (Cl. 93—7.)

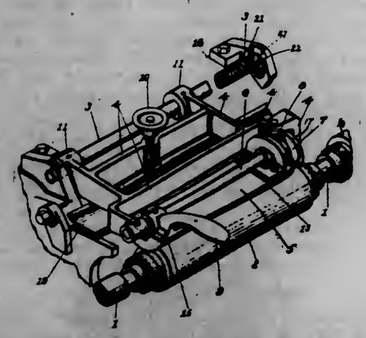


3. In a match-book machine having a carrier for match books whereof the covers each include a fastened fold at one end and an outwardly extending flap at the opposite end, and having also means for folding the said flap and tucking its free end beneath the fastened fold of the cover, a presser device arranged in advance of the said means and positioned to act upon the successive cover flaps and impart a transverse bend thereto.

8. In a match-book machine having a carrier for match books, whereof the covers each include a fastened fold at one end and an outwardly-extending flap at the opposite end, and having also means for folding the said flap and tucking its free end beneath the fastened fold, a pair of spaced wheel elements upon which the cover flaps are supported in advance of the said means, and a freely rotatable presser wheel arranged to act with an ironing effect upon the portions of the flaps bridging the spaces between said elements.

[Claims 1, 2, and 4 to 7 not printed in the Gazette.]

1,272,511. TRUING DEVICE FOR ROLLS OF BUFFING-MACHINES. CHANDLER L. PARKER, Lynn, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Dec. 30, 1913. Serial No. 809,579. (Cl. 51—5.)



1. The combination with a buffing machine having a plurality of buffing rolls arranged with their axes in alinement, of a track on the frame of the machine extending parallel to said axes, a holder slidable on said track whereby it may be moved into position opposite a selected roll, and angularly movable in a path at right angles to said axes, and a truing tool carried by said holder.

2. The combination with a buffing machine having a plurality of buffing rolls arranged with their axes in alinement, of a track on the frame of the machine extending parallel to said axes, a holder slidable on said track whereby it may be moved into position opposite a selected roll, and angularly movable in a path at right angles to said axes, a truing tool carried by said holder, and means for rocking and reciprocating said tool.

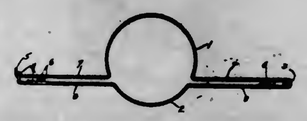
3. The combination with a buffing machine having a plurality of buffing rolls arranged with their axes in alinement, of a rod supported by the frame of the machine and extending parallel to the axes of the buffing rolls, a holder mounted for angular movement about the rod toward and from the rolls and for movement longitudinally of the rod to bring the holder opposite a selected roll, and a truing tool carried by said holder.

4. The combination with a buffing machine having a plurality of buffing rolls arranged with their axes in alinement, of a rod supported by the frame of the machine and extending parallel to the axes of the buffing rolls, a holder mounted for angular movement about the rod toward and from the rolls and for movement longitudinally of the rod to bring the holder opposite a selected roll, a truing tool carried by said holder, and means for limiting the angular movement of the holder toward the rolls.

5. The combination with a buffing machine having an abrading roll and an exhaust conduit for carrying away the dust generated by said roll, of a truing device comprising a holder pivoted to the frame of the machine and arranged to be swung into and out of operative position, a tool carried by said holder, and a stop also carried by said holder and arranged to contact with a wall of the exhaust conduit to arrest the swinging movement of the holder toward the roll.

[Claims 6 to 9 not printed in the Gazette.]

1,272,512. NAPKIN OR BIB HOLDER. JAMES ROBERT PARRISH, Nashville, Tenn. Filed Mar. 27, 1918. Serial No. 224,966. (Cl. 24—9.)



1. A device of the character specified, comprising opposed clamping members of resilient material connected at one end by a resilient coil, one of the members having a hook at the other end for engaging the other member, each of the said members having intermediate its ends an outwardly bent portion coöperating when the members are closed together to form a ring for encircling a child's neck, one of the said members having teeth near each end for the purpose specified.

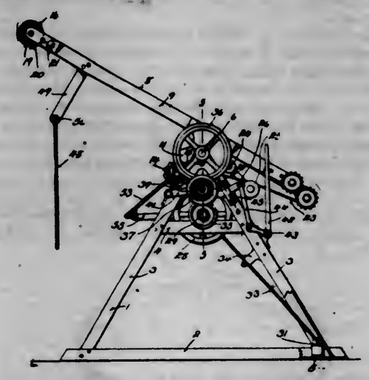
[Claim 2 not printed in the Gazette.]

1,272,513. MACHINE FOR EXAMINING TEXTILES. FREDERICK E. PARSLOW, Milwaukee, Wis. Filed Nov. 26, 1917. Serial No. 203,997. (Cl. 26—2.)

1. In a machine of the class described comprising a supporting base, a material examining member, a segmental plate fixed to the member and pivoted to the supporting base, gear teeth on the plate, a shaft carried by the supporting base, a pinion on the shaft and meshing with said gear teeth, and means for rotating said shaft for tilting the member.

3. A machine of the class described comprising a supporting base, a feed roll journally mounted in said base, a material examining member pivoted on the axis of said feed roll and disposed immediately above the same, a guide roller carried by the member at each side thereof, an additional guide roller disposed substantially parallel with one of the first guide rollers and spaced outwardly thereof,

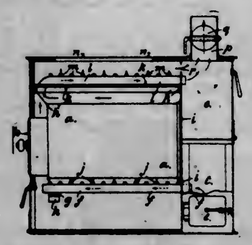
means for holding the member in adjusted tilted positions, and means for revolving the finishing roll to move a strip of material around the single guide roller at one side of the examining member, over the outer face of the latter, between the pair of guide rollers and around the feed roll between the same and the inner face of the examining member.



7. A machine of the class described comprising a supporting base, a material examining member mounted on the base, a guide roller carried by the member at one side thereof, a feed roll journally mounted on the base, a feed belt disposed around the feed roll and guide roller, means for revolving the feed roll, and means for retaining the feed belt under tension, including an arm pivotally connected with the examining member, means for urging the arm toward the belt, and a roller on the free end of the arm for engagement with the belt.

[Claims 2, 4 to 6, and 8 not printed in the Gazette.]

1,272,514. COOKING-OVEN. HENRY PAULETT, Godrergraig, WILLIAM AUBREY JONES, Swansea, and WILLIAM HUGHES, Ystalyfera, Wales. Filed June 27, 1916. Serial No. 106,171. (Cl. 126—1.)



1. An oven, comprising a compartment, in which the articles to be baked are placed, a hot plate in spaced relation to the top thereof, a fire place arranged at a lower level than said compartment, pipes below said compartment adapted to receive hot air and gases from said fire place, jets carried by said pipes for admitting the air and gases to said oven to heat the bottom and side walls of said compartment, pipes below said hot plate having ends thereof depending to receive the air and gases from about said compartment, jets carried by said pipe for directing air and gases against said hot plate, and an exhaust for the last mentioned pipes.

2. An oven comprising a compartment, in which the articles to be baked are placed, with spaces thereabout, a hot plate forming the top of said compartment, a fire place, arranged at a lower level than said compartment, a series of pipes establishing communication between said fireplace and the spaces about said compartment so that heated gases may enter said oven and heat the walls of said compartment, and a series of pipes between said hot plate and the top of said compartment adapted to receive the heated gases from about said compartment and heat said hot plate.

[Claim 3 not printed in the Gazette.]

1,272,515. HOPPER-DOOR. JAMES F. PECK, Sherman, Tex. Filed Mar. 12, 1917. Serial No. 154,256. (Cl. 193—46.)



1. The combination with a hopper having a door hinged at its upper end to one side wall of the hopper at a point above the lower end thereof, and adapted to extend at a downward inclination across the bottom of the hopper and engage a portion on the opposite side wall when in closed position, of operating means for the door including a shaft extending across that side of the hopper to which the door is hinged, said shaft being supported for rotation on the hopper below the hinged connection of the door, a lever pivotally connected at one end with the lower end of the door, a second lever pivotally connected at one end to one end of the first mentioned lever and fixedly secured at its other end to said shaft, and a coiled spring connected at one end with said levers at the pivotal connection thereof with each other, and connected at its opposite end with the hopper above said shaft, said levers when the door is in closed position extending in longitudinal alinement with each other.

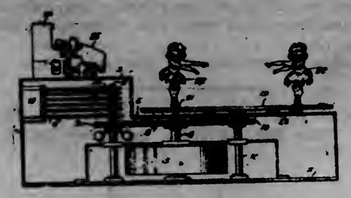
3. The combination with a hopper having a door hinged at its upper end to a side wall of the hopper at a point above the lower end thereof and adapted to extend in a downward inclination across the bottom of the hopper and to engage a portion on the opposite side wall of the hopper when in closed position, of operating means for the door including a shaft extending across that side of the hopper to which the door is hinged, said shaft being supported for rotation on the hopper below the hinged connection of the door, a lever connection between opposite end portions of the shaft and opposite side portions of the door at the lower end thereof, each lever connection including a lever pivotally connected at one end with the door, and a lever fixedly secured at one end to said shaft, a transverse shaft pivotally connecting the inner end of the pairs of levers, and a pair of coiled springs each connected at one end to said last mentioned shaft at one end thereof and connected at its opposite end to the hopper above the first mentioned shaft, each pair of levers extending in longitudinal alinement with each other when the door is in closed position.

[Claim 2 not printed in the Gazette.]

1,272,516. FIGURE TOY. MATT PELTO, Warren, Ohio. Filed Apr. 13, 1917. Serial No. 161,759. (Cl. 46—40.)

1. In a toy comprising a casing formed with a platform, a series of gear-connected driven rotary shafts, one of said shafts being projected through the said platform, a disk fast to the last named shaft and spaced above the said platform, rods movably carried by said disk, the lower ends of said rods being projected below said disk, stop collars carried by said rods, figures movably carried by said rods above said stop collars, and means arranged in the path of movement of said rods, upon said plat-

form, for engagement therewith to cause movement thereof with relation to said disk.



2. In a toy comprising a casing formed with a platform, gear-connected driven rotary shafts, one of said shafts being projected through the said platform, a disk fast to the last named shaft and spaced away from the said platform, movable rods carried by said disk, the lower ends of said rods being projected below said disk, stop collars carried by said rods, figures movably carried by said rods above said stop collars, and ridges arranged in the path of movement of said rods, upon said platform, for engagement therewith to cause movement thereof with relation to said disk.

1,272,517. LAMP. LEO L. PFEIFFER, Columbus, Ohio. Filed Dec. 8, 1916. Serial No. 135,883. (Cl. 240—41.)



1. In a headlight, a lamp body, a reflector therein, a laterally projecting flange on said reflector, means carried by said body on which said flange directly rests to prevent inward movement of said reflector, a lens ring provided with an inner annular flat portion adapted to rest on said flange, and spring means carried by the lamp for resiliently holding said flat portion and said flange together when said ring is in locked position on said body.

3. In a headlight, a lamp body, an inwardly projecting flange on said body, a plurality of hook-shaped springs carried by said flange, a reflector within said body resting directly on said flange and having its inward movement thereby arrested, and a lens ring provided with an inner or bottom wall having a plurality of slots through which said hook springs are adapted to pass and which serve to resiliently lock said ring on said body when the ring is given a partial turn.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,272,518. LUBRICATING-BEARING. OSCAR H. PIEPER and ALPHONSE F. PIEPER, Rochester, N. Y. Original application filed May 27, 1912, Serial No. 699,938. Divided and this application filed Nov. 12, 1917. Serial No. 201,545. (Cl. 64—56.)

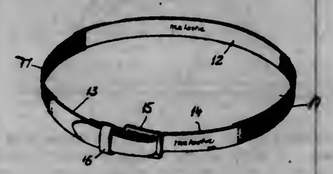


1. The combination with a rotatable shaft, of a bearing sleeve surrounding it and having a transverse opening communicating with the shaft and terminating at its outer end in an enlarged annular recess formed in the exterior of the sleeve, the sleeve having openings extending longitudinally from its ends to said recess, absorbent material located in said recess and extending through the aforementioned transverse opening into contact with the shaft, and absorbent strands extending through the longitudinal openings into contact with said absorbent material in the recess.

3. The combination with a rotatable shaft, of a bearing sleeve surrounding it having a transverse opening extending therethrough and communicating with a plurality of helical grooves on the interior of the sleeve which extend to its ends, the sleeve also having longitudinal openings extending from its ends to the transverse opening, and absorbent strands arranged in said longitudinal openings.

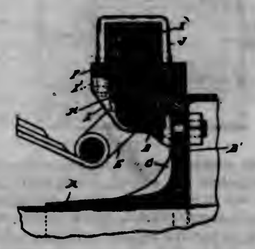
[Claims 2 and 4 to 7 not printed in the Gazette.]

1,272,519. TROUSERS-BELT. MARK A. PIPER, Marblehead, Mass. Filed Oct. 1, 1917. Serial No. 194,100. (Cl. 241—8.)



A trousers belt having substantially parallel longitudinal edges and adapted for application to a waist-band without positive attachment thereto, said belt comprising longer flexible inelastic back and abdominal sections, one of said sections being composed of adjustably connected members so that the circumference of the belt may be varied, and two shorter elastic hip sections connecting the inelastic sections and adapted to be stretched and exert a localized pressure on the wearer's hips when the belt is adjusted to stretch said hip sections, the pressure of the inelastic sections on the back and abdomen of the wearer being limited to that required to stretch the hip sections.

1,272,520. SPRING ATTACHMENT FOR MOTOR-VEHICLES. JOSEPH B. POSPESHIL, Detroit, Mich. Filed Nov. 1, 1917. Serial No. 199,783. (Cl. 267—34.)



1. In a motor vehicle, the combination with the axle housing having a flanged end forming a brake-head, of an auxiliary spring support secured to said head and having a bearing on the ledge formed by the edge of said flange.

3. In a motor vehicle, the combination with the axle housing forming a brake-head and a shackle bracket projecting inward from said brake head, of an auxiliary spring support seated upon said bracket, and means for clamping said support upon said seat.

[Claims 2 and 4 to 6 not printed in the Gazette.]

1,272,521. PROCESS FOR MAKING PHOTOMECHANICAL COLOR-PRINTING PLATES. FRANK T. POWERS, New York, N. Y., assignor to Powers Photo Engraving Company, New York, N. Y., a Corporation of New York. Filed July 6, 1916. Serial No. 107,843. (Cl. 95—5.1.)



1. The process of making color printing plates which comprises making a line negative from the colored copy, making a line plate from said line negative, taking a plurality of impressions from said line plate, applying to these impressions, respectively, the various desired primary colors in such portions and disposition as may be desired, making screen figure negatives of the various colored impressions by making the red negative with the screen rulings running one way only, making the blue negative with the screen rulings running one way only and substantially at right angles to the rulings in the red negative, making the yellow negative with the rulings running both ways, and making the corresponding printing plates from said negatives.

2. The process of making color printing plates which comprises making a line negative from the colored copy, making a line plate from said line negative, taking an impression from said line plate, coloring said impression as desired, making three color plates therefrom, for red, blue and yellow, making the red plate with screen rulings running one way only, making the blue plate with screen rulings running one way only and at right angles to those of the red plate, and making the yellow plate.

5. The process of making color printing plates which comprises making a line negative from a colored copy, making a line plate from said line negative, taking an impression from said line plate, applying thereto one or more colors in such portions and dispositions as may be desired, making a one color screen figure negative from said colored impression with the screen rulings running one way only, making a screen figure negative for another color with the screen figures running in a substantially perpendicular direction, and making the respective color plates from said negatives.

[Claims 3 and 4 not printed in the Gazette.]

1,272,522. METHOD OF MAKING BENZALDEHYDE. MARK B. PUTNAM, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Sept. 18, 1916. Serial No. 120,590. (Cl. 23—24.)

1. The method of making benzaldehyde, which consists in heating a mixture of benzyl bromid and a nitrate without other reagents being present, substantially as described.

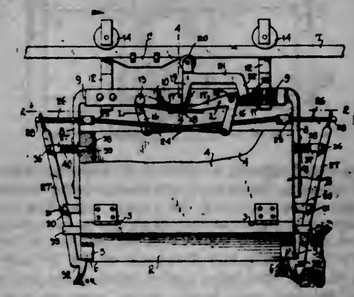
2. The method of making benzaldehyde, which consists in heating a mixture of benzyl bromid and the nitrate of an alkali metal or alkaline-earth without other reagents being present, substantially as described.

3. The method of making benzaldehyde, which consists in heating a mixture of benzyl bromid and an alkali metal nitrate without other reagents being present, substantially as described.

4. The method of making benzaldehyde, which consists in mixing together benzyl bromid and Chile saltpeter without other reagents being present, and then heating and stirring the mixture, substantially as described.

1,272,523. LITTER-CARRIER. FREDERICK W. RABBEL, Alexandria, Minn. Filed Jan. 19, 1916. Serial No. 212,694. (Cl. 214—50.)

1. A device of the character described comprising in combination, an elevated track, a body, hangers carried by the body and riding upon the track-way, a hinged bottom for the body, levers pivotally engaged with the opposite end portions of the body and provided with arms underlying the bottom for holding the same in closed position, an inwardly directed arm operatively engaged with the opposite end portion of each of the levers, bell levers supported by the body, each of said bell levers including a depending arm and an inwardly directed arm, the inwardly directed arm of one bell lever overlapping the inwardly directed arm of the second lever, the depending arm of each of the bell levers being operatively engaged with the inner end of a rod, a substantially vertically disposed arm having its lower end engaged with the overlapping portions of the bell levers, the opposite end portions of the arm traveling along the under face of the track, an arm extending laterally from the first named arm and pivotally engaged with the body, a member carried by the track for imparting downward movement to the first named arm, and means coacting with the first named levers for constantly urging the same in one direction.



5. In combination with an elevated trackway, a body, a swinging bottom for said body, arms extending upwardly from the body at opposite ends thereof and terminating in inwardly directed extensions, parallel members connecting said extensions and spaced one from the other, a pair of bell levers pivotally connected at their heel portions between the members, said bell levers having downwardly depending arms and inwardly directed arms, the inwardly directed arms being in overlying relation, locking levers coacting with the swinging bottom and mounted for rocking movement intermediate their lengths, reversely extending rods engaged with the depending arms of the bell levers and the upper end portions of the locking levers, a vertically movable arm having its lower end portion straddling the overlapping portions of the inwardly directed arms of the bell levers, a laterally directed arm carried by the last named arm and supported for pivotal movement between the members connecting the extensions of the upstanding arms carried by the body, means for constantly urging the upper end portion of the locking levers outwardly, and a member carried by the track for imparting downward movement to the arm coacting with the bell levers.

[Claims 2 to 4 not printed in the Gazette.]

1,272,524. LAMP. CHARLES F. RABBOLD, Glenside, and GEORGE W. CARNS, Philadelphia, Pa. Filed September 17, 1917. Serial No. 191,866. (Cl. 240—41.)

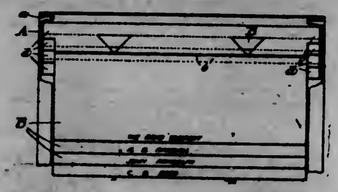


8. A lamp casing having an opening in its front, the top of said casing adjacent said opening having a portion

slanting downwardly, a source of light within said casing, a reflector within said casing, and a movable plate positioned within said casing and having a portion adapted to be interposed between the top of said reflector and the portion of the casing providing the top of said opening, said plate having a rear light-reflecting surface for deflecting intercepted rays from the source of light and from said first reflector back to said first reflector and thence out of that portion of the opening in the casing which is located below a horizontal plane including the bottom of said plate, substantially as described.

[Claims 1 and 2 not printed in the Gazette.]

1,272,525. CARD-INDEX SYSTEM. JAMES H. RAND, Jr., North Tonawanda, N. Y. Filed Sept. 18, 1915. Serial No. 51,439. (Cl. 129—16.)



1. In a card system, a series of overlapping cards, each having a tongue, the base of said tongue being spaced from one edge of the card and the tongue extending from its base toward the opposite edge of the card, each card being provided with a hinge connecting that portion of the card carrying the tongue and the body of the card and the margin of each card being nested between the tongue and body of the next card in the series, whereby said cards are interlocked by said tongues and are spaced by said tongues relatively to one another with their margins projecting one beyond another.

3. In a card system, a series of overlapping cards, each having a tongue, the base of said tongue being spaced from one edge of the card and the tongue extending from its base toward the opposite edge of the card, each card being provided with a hinge connecting the portion carrying the tongue with the flap portion and located in a line removed from the base of the tongue and between the base of the tongue and the free edge of the card, and the margin of each card being nested between the tongue and body of the next card in the series, whereby said cards are interlocked by said tongues and are spaced by said tongues relatively to one another with their margins projecting one beyond another.
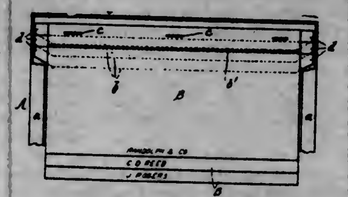
5. In a card system, a series of overlapping cards, each having a tongue formed integrally of the same sheet material as the card, the base of said tongue being spaced from one edge of the card and the tongue extending from its base toward the opposite edge of the card, each card being provided with a hinge connecting that portion of the card carrying the tongue and the body of the card and the margin of each card being nested between the tongue and body of the next card in the series, whereby said cards are interlocked by said tongues and are spaced by said tongues relatively to one another with their margins projecting one beyond another.

11. A card having a tongue the base of which is spaced from one edge of the card, said tongue extending from its base toward the opposite edge of the card, and a pair of projections extending laterally from opposite ends of that margin of the card lying between the base of the tongue and the proximate edge of the card.

16. In a card system, a series of overlapping cards each having a tongue, the base of said tongue being spaced from one edge of the card and the tongue extending from its base toward the opposite edge of the card, one margin of each card being confined between the tongue and body of the next card of the series whereby said cards are interlocked with their margins projecting one beyond the other, projections extending laterally from opposite ends of that portion of the card carrying the tongue and adapted to engage a frame, and each card being provided with a hinge connecting the body portion of the card to the portion thereof carrying the tongue.

[Claims 2, 4, 6 to 10, and 12 to 15 not printed in the Gazette.]

1,272,526. CARD-INDEX SYSTEM. JAMES H. RAND, Jr., Tonawanda, N. Y., assignor to Zenith Systems Corporation, Tonawanda, N. Y. Original application filed Sept. 18, 1915, Serial No. 51,439. Divided and this application filed Feb. 16, 1917. Serial No. 149,131. (Cl. 129—16.)



1. In a card system, a series of overlapping cards, each having a tongue formed by a strip of material extending crosswise of the card on one side thereof, means fastening the tongue between its edges to the card and determining the base of the tongue, the base of said tongue being spaced from one edge of the card and the tongue extending from its base toward the opposite edge of the card, and one margin of each card being nested between the tongue and body of the next card in the series, whereby said cards are interlocked and spaced by said tongues relatively to one another with their margins projecting one beyond another.

4. In a card system, a series of overlapping cards, each having a tongue formed by an integral portion of the card folded over and secured against one face thereof, the base of said tongue being spaced from one edge of the card and the tongue extending from its base toward the opposite edge of the card, and one margin of each card being nested between the tongue and body of the next card in the series, whereby said cards are interlocked and spaced by said tongues relatively to one another with their margins projecting one beyond another.

10. A card for card systems having a tongue formed by a strip of material extending crosswise of the card on one side thereof, the base of the tongue being spaced from one edge of the card and the tongue extending from its base toward the opposite edge of the card, and a pair of projections extending laterally from the ends of that portion of the card at which the tongue is located.

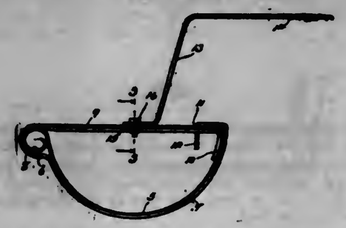
11. A card for card systems having a tongue formed by a relatively narrow strip of material extending crosswise of the card on one side thereof adjacent one edge only of the card, the base of the tongue being spaced from said edge of the card and the tongue extending from its base part way toward the opposite edge of the card, the ends of said tongue forming laterally extending projections adapted to engage a frame.

12. A card for card systems having a tongue formed by a strip of material extending crosswise of the card on one side thereof, the base of the tongue being spaced from one edge of the card and the tongue extending from its base toward the opposite edge of the card, said card being provided with a hinge connecting that portion of the card carrying the tongue with the flap portion of the card, and a pair of projections extending laterally from the ends of that portion of the card at which the tongue is located.

[Claims 2, 3, and 5 to 9 not printed in the Gazette.]

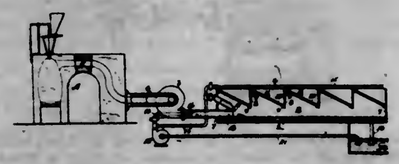
1,272,527. RAIN-TROUGH SUPPORT. RANDOLPH REHBAUER, Two Rivers, Wis. Filed July 18, 1917. Serial No. 181,199. (Cl. 108—28.)

The combination with an eaves trough semi-circular in cross section, of a hanger therefor comprising a strap portion disposed about the outer wall of the trough and conforming closely to the contour thereof, one end being extended beyond the adjacent edge of the trough and bent laterally over the open top thereof to engage said edge, a down-turned tongue extending into the trough at right angles to said laterally bent end, a bridge portion of sheet material connected at one end with the other end of the strap portion, the free end of the bridge portion being disposed adjacent said tongue and laterally and downwardly turned to form a foot, the other part being substantially



straight, said foot being curved for engagement with the inner wall of the trough, said bridge portion having a hole spaced from the free end of the straight part thereof, or from said foot, a distance substantially equal the length of the laterally bent end of the strap portion whereby when said tongue is inserted through said hole, the foot will be drawn toward the adjacent part of the strap portion and the upper edge of the trough firmly gripped therebetween, the brige portion thus constituting in connection with the strap portion a reinforced stay for the trough in opposition to inward and outward strain.

1,272,528. FUME-CONDENSER. GEORGE C. RICHARDS, Berkeley, Cal. Filed Apr. 30, 1917. Serial No. 165,594. (Cl. 261—105.)



1. A fume condenser comprising an open, elongated, box-like structure, a plurality of vertically positioned baffle plates extending crosswise of the box, a plurality of fabric covered frames angularly disposed between the baffle plates forming a covering for the box, means for directing a water spray against the fabric covering, and means for forcing the fumes to be condensed into the box.

7. A fume condenser comprising an elongated box-like structure, a plurality of vertically positioned baffle plates extending cross-wise of the box, a plurality of fabric covered frames angularly disposed between the baffle plates and forming a covering for the box, means for delivering water to the upper surface of each fabric covered frame, means for forcing the fumes to be condensed into the box, means for delivering water to the interior of the box, means for maintaining a predetermined water level within the box and means for draining the box.

[Claims 2 to 6 not printed in the Gazette.]

1,272,529. GAS-GENERATOR. JOE HENRY RICHARDS, Detroit, Mich. Filed Nov. 7, 1917. Serial No. 200,843. (Cl. 48—38.)

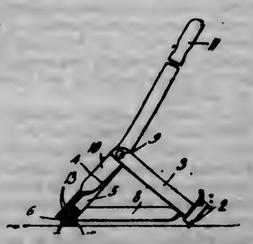
1. In an acetylene gas generator, a water tank, a carbid hopper in said tank, a weight controlled valve closing the outlet mouth of the hopper, a stem for said valve extending through the hopper, a purifying receptacle arranged below the hopper, and including a member having an inner perforated wall, a sleeve on the purifying receptacle engaging with the hopper for retaining the said hopper spaced from said receptacle, a generator tank below the purifying receptacle and frictionally engaging therewith, and said tank having an opening above its water level, a cooling chamber below the generating tank, pipe members between the chamber and the purifying receptacle, means on said pipes supporting the generator tank, an outlet pipe also communicating with the chamber, a bell surrounding the carbid hopper and purifying receptacle, and having its open end received in the water in the first mentioned tank, and anti-frictional guiding elements between the bell and the water tank.



6. In an acetylene gas generator, a water tank, a carbid hopper therein, a weight influenced valve normally closing the mouth of the hopper, a stem for the valve extending through the top of the hopper, a bell surrounding the hopper and having its open end received in the water of the water tank, a handle for the bell, a purifying receptacle having an inner reticulated wall below the hopper, a member frictionally engaging with the receptacle and contacting with the hopper for retaining the same spaced, a cooling chamber in the bottom of the tank, pipe members between said chamber of the purifying receptacle, a platform adjustably secured on said pipes, a generating tank supported on said platform and having its open mouth frictionally engaging with the purifying receptacle, said generating tank having an opening above the water line therein, a sleeve extending vertically through the bottom of the generator tank and through the platform, a rod movable through said sleeve, a head upon the upper end of the rod, rod members depending from the head, an agitater comprising a ring member having inturned lugs connected with the said rods, a lever pivotally connected with one of the sustaining members for the platform, and with the rod passing through the sleeve and an operating rod movable through guides in the water tank and having its end provided with a handle disposed adjacent to the mouth of the said water tank.

[Claims 2 to 5 not printed in the Gazette.]

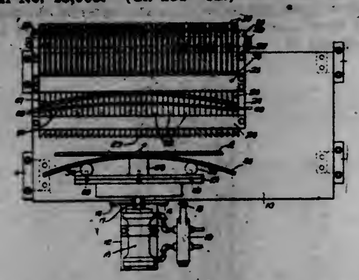
1,272,530. SPROUT-PULLER. ABNER B. RIDDLE, Bynum, N. C., assignor of one-half to Adonnos T. Ward, Bynum, N. C. Filed Sept. 24, 1917. Serial No. 192,962. (Cl. 254—182.)



A sprout puller, comprising a base, a triangular support secured to the base, one leg of the support merging

at its apex into an offset arm, the arm terminating in an angularly disposed jaw, a brace secured to the base and the arm, and a lever fulcrumed in the apex of the support and swingable transversely of the jaw, and a curved jaw formed on the lever and adapted to engage the first jaw.

1,272,531. UNIVERSAL ELLIPTICAL-SPRING FORMER. JOHN W. RILEY, Waverly, N. Y. Filed Aug. 11, 1915. Serial No. 45,008. (Cl. 153—51.)



1. An elliptical spring forming machine comprising a table, a compound conformable die comprising nested, relatively slidable die sections supported on the table, a shaft in rear and below the level of the plane of said die sections, weighted levers pivoted to said shaft and having above the shaft portions to separately engage the rear ends of said die sections and inclined downwardly and forwardly from said shaft and a templet backing plunger movable toward and from the leaf forming faces of said die sections.

4. An elliptical spring-forming machine comprising a table, a compound conformable die comprising nested, relatively slidable die sections supported on the table, resistance elements to separately engage the die sections, a templet backing plunger movable toward and from the leaf forming faces of the die sections, and provided with end templet backing members adjustable toward and from each other, and a supplemental spring bearing against the machine frame with means to bring the same into interchangeable coöperative relation to two or more die sections.

5. An elliptical spring forming machine comprising a table, a compound conformable die composed of relatively slidable die sections arranged side by side on the table, frame members to confine the sections, yielding resistance elements severally applied to said sections to hold them in their forward positions, a templet backing plunger supported on the table and movable toward and from the leaf forming ends of the die sections, a bowed spring lying transversely across said die sections and adapted to bear against the frame, and projections adapted to be interchangeably fitted to the die sections to bear against the bowed spring near the ends thereof whereby the latter constitutes a supplemental resistance element to the main resistance element.

6. An elliptical spring forming machine comprising a conformable compound die composed of a plurality of nested, relatively slidable sections separately backed by independently acting resistance elements, a templet backing plunger movable toward and from leaf forming faces of the die sections and a single supplemental resistance element adapted to interchangeably act upon corresponding pairs of die sections.

7. An elliptical spring forming machine comprising a conformable compound die composed of a plurality of nested, relatively slidable sections separately backed by independently acting resistance elements, a templet backing plunger movable toward and from leaf forming faces of the die sections and a single supplemental resistance element adapted to interchangeably act upon corresponding pairs of die sections, constructed to be brought into action only after the die sections have been initially urged against the main resistance elements.

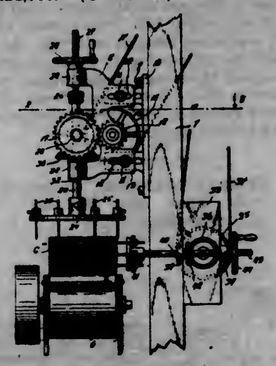
[Claims 2 and 3 not printed in the Gazette.]

1,272,532. LOOM ATTACHMENT. JOHN ANDERSON ROBINSON and HENRY EARL LITTLEJOHN, Greer, S. C. Filed Feb. 19, 1917. Serial No. 149,567. (Cl. 139—57.)



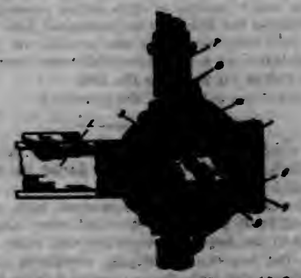
As a new article of manufacture, a double-backed reed having like mountings, having a projecting comb and a mounting to which the shanks of the projecting comb elements are fastened, the comb projecting through and at right angles to the reed, and having its end permanently soldered to the reed.

1,272,533. BRICK-SCORING MECHANISM. WILLIAM B. ROBINSON, Denver, Colo. Filed Oct. 9, 1916. Serial No. 124,707. (Cl. 25—1.)



The combination with a brick making machine having a belt adapted to convey a column of clay, a bracket above said belt adjustable laterally of the width of the belt, a vertical spindle mounted in said bracket approximately centrally of the belt, a rotatable scoring device on the lower end of said spindle, and means connected with the upper end of the spindle for vertical adjustment thereof, by which adjustments the design and depth of the scoring may be varied.

1,272,534. STEERING-KNUCKLE. OVID H. ROGERS, Sacramento, Cal., assignor to himself and JACOB BRACK, trustees, San Francisco, Cal. Filed May 8, 1917. Serial No. 167,190. (Cl. 21—142.)



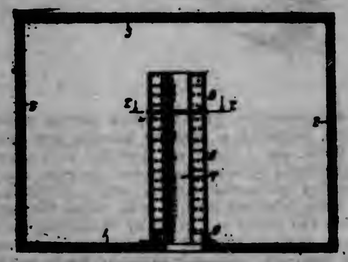
An axle terminating in a ball provided with a slot cut horizontally into its outer end, a plate projecting into and freely movable through the slot, the faces of the plate bearing against the top and bottom of the slot, a socket member turnable horizontally on the ball and fixed to the plate to prevent the plate from pulling out of the slot and also to hold the socket member against vertical rotary motion on the ball, and a wheel turnably mounted on the socket member.

1,272,535. AUTOMOBILE SAFETY-SIGNAL. THOMAS SCOTT ROLLO, Galveston, Tex. Filed Oct. 9, 1915. Serial No. 55,070. (Cl. 116—31.)



The combination with the body of a vehicle, of a pair of lamps positioned normally within the side lines of the vehicle at the rear of the vehicle body, a horizontally disposed lamp-supporting arm for each lamp slidable in the direction of its length, guiding means for said arms housed within the vehicle body, and selective means for imparting a sliding movement to said arms independently of each other to project and retract the respective lamp, said means comprising parallel rock shafts extending in a fore and aft direction under the vehicle body in spaced relation to each other, arms fast on the rear extremities of said rock shafts extending through slots in the bottom of the vehicle body, and having a jointed connection at their free ends with said lamp-supporting arms, cranks at the forward extremity of said arms, independently operable levers arranged in front of the driver's seat, and extending through the floor of the vehicle, and links extending in opposite directions from said levers to the last named crank arms.

1,272,536. BIN-VENTILATOR. MICHAEL ROURKE, Windsor, Ontario, Canada. Filed June 9, 1917. Serial No. 173,900. (Cl. 98—26.)



1. A grain bin having a hole in its bottom, a tubular foraminous element surrounding said hole and extending upwardly therefrom, a pipe of lesser diameter arranged within the tubular element and substantially concentrically therewith, the lower edge of the pipe being spaced from the edge of the hole, whereby an upward current of warm moist air is set up in the annular space surrounding the pipe, and whereby moisture condensing on the outer surface of the tube may drip through the hole in the bottom without coming into contact with the grain.

4. A bin having a hole in its bottom, and a screen in sealing engagement with the edge of said hole and extending upwardly therefrom, a tubular member inclosed by the screen, said member being of lesser diameter than the screen, and a cross bar having its ends received in the walls of the screen, said tubular member being supported by the cross bar.

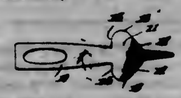
[Claims 2, 3, and 5 not printed in the Gazette.]

1,272,537. SUIT FOR AVIATORS. FRED M. SAMPLE, Jacksonville, Oreg. Filed Mar. 20, 1917. Serial No. 156,160. (Cl. 128—42.)



An apparatus for the purpose set forth comprising a helmet consisting of hingedly connected front and rear sections constructed to form an air-tight joint between their meeting edges, and a garment constructed to fit the wearer approximately air-tight, said garment having a division at its front and adapted to be closed along said division and being connected at its neck to the lower edge of the rear section of the helmet through the entire extent of the same and connected to the forward section of the helmet at only one side of the division in the front of the garment, whereby when the garment is opened the forward section of the helmet may be swung to open position, and fastening devices along the division in the garment, the helmet having an air inlet and a vent.

1,272,538. SPLITTING-AX. THOMAS R. SANDIDGE, Sr., Fort Worth, Tex. Filed Sept. 18, 1917. Serial No. 191,224. (Cl. 145—2.)



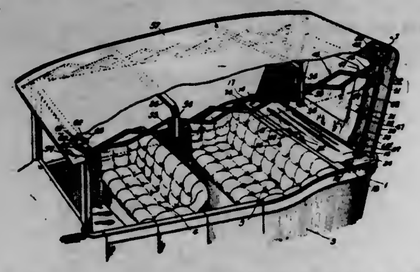
3. A splitting ax comprising a body having a general tapering form and a penetrating member having a general tapering form with the planes thereof in the planes of said body member and splitting members projecting from the planes of said body and penetrating member and at angles thereto and projecting symmetrically from opposite sides of said body member and penetrating member and forming the connection between said body member and penetrating member.

[Claims 1 and 2 not printed in the Gazette.]

1,272,539. VEHICLE-TOP. DANIEL G. SAUNDERS, Jr., Kansas City, Mo. Filed Mar. 31, 1916. Serial No. 88,007. (Cl. 21—62.)

1. In combination with a vehicle body, having a housing therein, a rigid back member spaced from the front of the housing and movable vertically from or into the housing, lazy tongs carried by the back member adjacent the upper edge and at the front thereof, whereby when the back member is in its lowered position the said lazy tongs are contained within the housing in front of the back member, a cover mounted on said lazy tongs, and a toggle lever having a link connected with the lazy tongs

and a link anchored to said back member, and operable to expand or collapse the lazy tongs, and movable, when expanded, past a dead center position into engagement with said back to retain the lazy tongs in extended position.



2. The combination with a vehicle body, having a housing at the rear, of a rigid back member movable into and from the housing, rods carried by said back member at the sides thereof and spaced therefrom, a fixed and a movable collar on each of said rods, lazy tongs having their rear links connected with the fixed and movable collars respectively, bows carried by said lazy tongs, and a cover carried by said back member and by the bows.

4. The combination with a vehicle body having a housing at the rear, of a rigid back slidable in the housing, a cross bar on said back, a drum carried by said body at the front of the housing, a cable connecting the drum and cross bar, and means extending through the front of the housing for actuating said drum.

6. The combination with a vehicle body having a housing at the rear, of a rigid back member slidable in said housing, a cross bar on said back member, a drum carried by said body at the front of the housing, a cable connecting the drum and cross bar, and means extending through the front of the housing for actuating said drum, the said drum having a protective casing and the pawl being exposed at the outside of the casing.

9. The combination with a vehicle body, having a housing at the rear, of a rigid back member movable into and from the housing, a cover carried by said back member and supported entirely therefrom, a cover for the housing and a receptacle at the front of and projecting into the housing for containing said cover.

[Claims 3, 5, 7, and 8 not printed in the Gazette.]

1,272,540. OIL-WELL SCREEN. CLARENCE N. SCOTT, Houston, Tex., assignor to Producers Oil Company, Houston, Tex., a Corporation of Texas. Filed Nov. 1, 1916. Serial No. 128,946. (Cl. 166—5.)



1. The combination of a pipe adapted to extend into a well and deliver liquid or gas therefrom normally closed at its lower end but having a foraminous portion near that end, with a foraminous pipe surrounding and concentric with the foraminous portion of said first mentioned pipe, a closely packed filling of fine hard material between said foraminous portions, and a spring pressed collar between said pipes bearing on said granular material to keep it closely packed.

[Claims 2 to 6 not printed in the Gazette.]

1,272,541. HOSE-CLAMP. FREDERICK C. SCOTT, Detroit, Mich. Filed Dec. 17, 1917. Serial No. 207,539. (Cl. 137—28.)



A hose clamp comprising a band having inter-engaging ends with one end of said band bent to form a socket member having one wall apertured and the other ribbed, the opposite end of said band having an apertured lug, a nut connected to the face of the lug of said band and a stove bolt adjustable in said nut adapted to extend through the apertured wall of the socket member of said band and engage between the ribs of said band.

1,272,542. HEADLIGHT-STEERING MECHANISM. WILLIAM H. SHANNON and JOHN H. BOGARD, San Saba, Tex. Filed Aug. 2, 1917. Serial No. 184,100. (Cl. 240—62.)



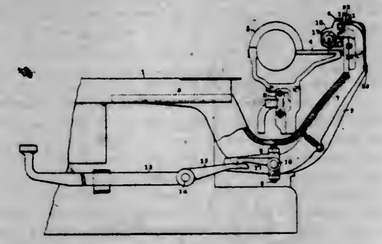
1. The combination with a vehicle having a steering mechanism including a steering knuckle arm provided with a sleeve, and a reach rod provided with a yoke receiving the sleeve between the arms of the yoke, of a headlight steering mechanism for the vehicle including a rotatable lamp receiving post, a post fitted through said yoke, arms and sleeve and pivotally connecting the steering knuckle arm and rod, and coacting pivotally connected rods one rotatably connected with the lower end of the lamp receiving post and the other pivotally connected with the upper end of said last mentioned post and forming an operative connection between the said posts for rotating the lamp receiving post as the vehicle is steered.

[Claim 2 not printed in the Gazette.]

1,272,643. TYPE-WRITING MACHINE. EDWARD J. SHEEHAN, New York, N. Y., assignor to The Noiseless Typewriter Company, Middletown, Conn., a Corporation of Connecticut. Filed June 12, 1914. Serial No. 844,602. (Cl. 197—63.)

1. In a typewriting machine, in combination, a carriage, coöperable margin stops therefor, means to release said stops, and auxiliary coöperable indenting stops for the carriage controlled by said means.

13. In a typewriting machine, in combination, a carriage, a stop carried thereby having two effective portions, one of which is adjustable relatively to the other, and



separate means coacting with two portions of said stop for controlling the margin and paragraphing lines.

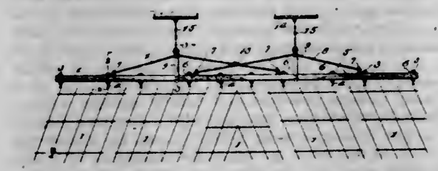
[Claims 2 to 12 not printed in the Gazette.]

1,272,544. DISPENSING ATTACHMENT FOR ETHER-CANS. LOUIS SHEINMAN, New York, N. Y. Filed Aug. 18, 1917. Serial No. 186,996. (Cl. 221—74.)



In a device of the class described, a cork with openings, one of which has a tube extending to a point near the bottom of an ether can when the device is in place on this can, the other opening being connected to an air pressure tube, a disk on said cork and attached to said tube, a frustum attached to said disk and means for forcing said frustum against said can to cause the cork to fit with an ether tight joint.

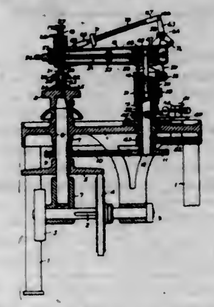
1,272,545. DRAFT-BAR. FRANK SHERWIN, Brookings, S. D. Filed Jan. 16, 1918. Serial No. 212,008. (Cl. 55—84.)



The combination of a draft-bar, posts secured to and projecting forwardly from the draft-bar, harrow-attaching bolts mounted in the draft-bar, anchor lugs held by said bolts and adjustable laterally with respect thereto, and truss-rods secured at their ends to the anchor lugs and intermediate their ends to the ends of the posts.

1,272,546. LENS-GRINDING MACHINE. LEON G. SIMPSON, Rochester, N. Y., assignor to Bausch & Lomb Optical Company, Rochester, N. Y., a Corporation of New York. Filed Mar. 6, 1917. Serial No. 152,516. (Cl. 51—3.)

1. In a lens grinding machine, the combination of a rotatable spindle carrying a curved surface abrading lap, an arm overhanging the lap, a lens carrier spindle carried by the overhanging portion of the arm and having an end opposed to the lap surface, a support for the arm, means for constraining the lens carrier spindle to cause it when moved laterally to traverse the surface of the lap, an adjustment for tilting the lens carrier spindle in the plane of its traversal to set its axis normal to an eccentric element of the curvature of the lap surface lying in the path of the lens carrier spindle's traversal thereof, means for constraining the longitudinal movement of said lens carrier spindle to cause it to move axially in all of its settings whereby said lens carrier spindle may be normally incident upon any element of the curvature of the lap surface lying in the path of traversal of the lens carrier spindle to which element the axis of the spindle has been perpendicularly set, and means for applying the abrading pressure through the lens carrier spindle in the direction of its longitudinal axis.



3. A lens grinding machine comprising a support, an arm trunnioned in said support for vertical movement at its outer end and obliquely adjustable laterally about an axis perpendicular to the trunnion axis, a rotatable lens carrier spindle carried by the arm, and universal angle driving gearing on the arm adapted to rotate said spindle at any oblique or vertical adjustment of the arm.

8. In a lens gripping machine, the combination with a supporting arm and a lens carrier spindle longitudinally adjustable in the arm, of a loosely fitting thrust collar surrounding the spindle, a clamp plate pivotally attached at one end to said thrust collar and having an opening embracing the spindle, which opening is adapted when lying in a plane substantially perpendicular to the longitudinal axis of the spindle to permit the free passage of the spindle therethrough and which when tilted relatively to the spindle grips the sides of the spindle, means normally tilting the clamp plate whereby the thrust collar is adjustably locked to the spindle, and a plurality of opposed bearing surfaces on the thrust collar and the adjacent portion of the arm coöperating to hold the thrust collar axially immovable relatively thereto.

12. In a grinding machine, the combination with a lap, an arm having a relatively long end adapted to overhang the lap, a support to which the arm is pivoted for vertical movement at its ends and a lens carrier spindle mounted in the forward end of the arm to be operatively related to the lap when the arm is in a lowered position and movable with the arm toward and from the lap, of a rocking lever fulcrumed intermediate its ends to the arm support, a toggle link connection between the end of the arm and the adjacent limb of the rocking lever, and a yielding extensible means interposed between the other limb of said lever and the longer end of the arm to urge the lens carrier spindle toward the lap when the arm is lowered and said spindle is in the vicinity of the lap, the rocking lever meanwhile being held immovable by the buckled toggle link connection; said lever, toggle connection and extensible means operating when the long end of the arm is raised and the link elements of the toggle are extended, to hold the lens carrier spindle elevated.

18. The combination with a lap and a post, a sleeve surrounding the post and mechanism for oscillating the sleeve, of one or more detachable and interchangeable lens carrier actuating and constraining mechanisms each comprising a support provided with a sleeve adapted to slide over and be clamped to the post surrounding sleeve in various longitudinal positions thereon, an arm attached to the support at one end and overhanging the lap at its other end and a lens carrier spindle mounted in the lap overhanging end of the arm.

[Claims 2, 4 to 7, 9 to 11, 13 to 17, and 19 not printed in the Gazette.]

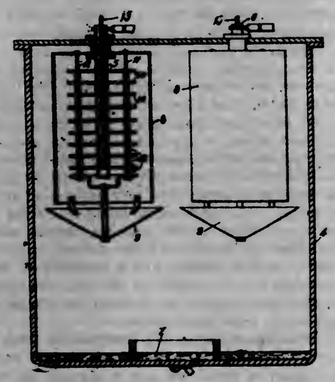
1,272,547. ILLUMINATING DEVICE FOR TRANSPARENT PICTURES AND PHOTOGRAPHIC NEGATIVES. JACOB J. SINGER, St. Louis, Mo. Filed Feb. 16, 1918. Serial No. 217,516. (Cl. 40—132.)



5. An illuminating device for the purpose described, comprising a housing or casing having a front wall provided with an opening and a curved rear wall whose inner side serves as a concaved reflecting surface, the housing being provided with a flexible accordion portion that carries said rear wall, lighting units arranged inside of said housing in such a position with relation to said reflecting surface that reflected rays of light of unequal intensity will be projected forwardly through the opening in the front wall of said housing, and means for assisting the user in properly adjusting the rear wall of said housing.

[Claims 1 to 4 not printed in the Gazette.]

1,272,548. SHIELDING SYSTEM FOR VAPOR-CONVERTERS. EDMUND F. SIPHER, Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 28, 1915. Serial No. 47,900. (Cl. 175—354.)



1. In a vapor converter, the combination with an elongated electrode, of a shielding device therefor so shaped as to cause the arc to impinge thereupon in a plurality of distinct zones.

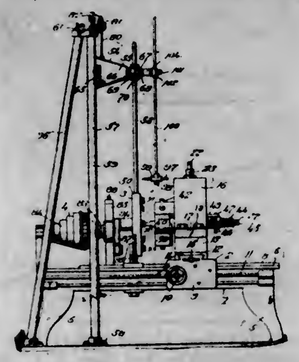
8. In a vapor converter, the combination with an elongated anode, of a shield therefor including a plurality of refractory rings mounted coaxially therewith, a baffle member across the end of said electrode, and a cylindrical member surrounding said rings and said baffle member and spaced therefrom.

9. In a vapor converter, the combination with an elongated anode, of a shield therefor including a plurality of refractory rings mounted coaxially therewith, a baffle member across the end of said electrode, a cylindrical member surrounding said rings and said baffle member, and a baffle member across the ends of said cylindrical member and spaced therefrom.

11. In a vapor converter, the combination with an elongated anode, of a shielding system therefor comprising a plurality of spaced rings surrounding the anode, a baffle member across the end of the cylinder determined by said rings, a cylindrical casing surrounding and spaced from said rings and baffle member, a plurality of spaced rings mounted on the end of said cylinder, and a baffle member across the end of the cylinder determined by said last mentioned rings.

[Claims 2 to 7 and 10 not printed in the Gazette.]

1,272,549. LATHE ATTACHMENT. CHARLES HENRY SMITH, Sanford, Fla. Filed Jan. 26, 1915. Serial No. 4,510. (Cl. 90—24.)



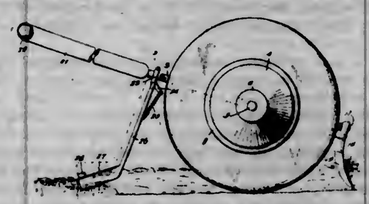
1. As an attachment to a lathe, an oscillatable work holder for positioning adjacent the tool holder of the lathe, guide means for the holder, means to oscillate the holder, a support for the holder, the holder being oscillatable relatively to the support, means to move the support toward and from the holder to vary the radius of the arc described by the holder during movement, said means being operable to lock the support against relative movement subsequent to adjustment.

3. In a machine of the character described, an oscillatable work holder, means to oscillate the holder, an upright frame, means movable relatively to the holder to vary the radius of the arc described thereby during movement, and a screw rod turnable to adjust said last mentioned means.

14. In combination with a lathe, a frame comprising vertical members adapted to rest upon the floor and to be disposed at opposite sides of the lathe, a horizontal member connecting the upper ends of said vertical members of the frame, vertical guide members depending from said horizontal member, and secured to the head stock of the lathe, a screw extended vertically and between said guide members, a block movable vertically in said guide members, and having a threaded aperture in which to receive the screw, means for rotating the screw to move the block vertically, a counter-weight and flexible element connecting said counter-weight with the block to counter balance the weight thereof, a work holder, means for suspending the work holder from the block for oscillation in a vertical plane and in a direction transversely of the lathe, means attachable to the lathe for guiding the work holder during oscillation thereof, and a tool holder positioned upon the lathe adjacent the work holder.

[Claim 2, 4 to 13, and 15 to 17 not printed in the Gazette.]

1,272,550. PLANTER. JAMES H. SMITH, Farmville, N. C. Filed May 22, 1917. Serial No. 170,248. (Cl. 111—74.)

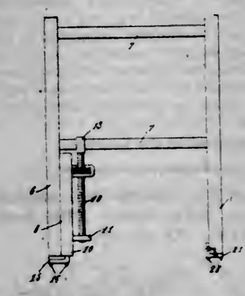


1. In a planter of the class described, a frame comprising a bar having longitudinally spaced laterally extending arms, an axle fixed to and extending laterally from said bar in the same direction as said arms, a wheel mounted to rotate on said axle between said arms, said axle projecting beyond the outer face of said wheel, a hopper supported on said projecting axle end and having discharge openings in its periphery, a furrow opener carried by the front arm of said bar and a coverer by its rear arm, and a handle connected with said rear arm and projecting rearwardly in longitudinal alinement with the wheel and parallel with the body of the bar.

3. In a planter of the class described, the combination of a supporting frame, a handle carried thereby, a bracket also carried thereby, a seed covering member pivotally mounted on said bracket, a coiled spring connecting said member with said bracket at a point in advance of its pivotal connection therewith, a wheel revolubly mounted in said frame, a hopper carried by said wheel and having peripheral openings, and means for varying the size of said openings.

[Claims 2 and 4 not printed in the Gazette.]

1,272,551. LADDER ATTACHMENT. NELSON I. SMITH, Winsted, Conn. Filed Sept. 15, 1916. Serial No. 120,378. (Cl. 228—5.)



1. In a device of the class described, a base, a leg slidably mounted upon said base, a screw shank fixedly secured to said base and arranged in spaced parallel relation therewith, a screw member carried by said leg and engaged with the threads of said shank and a clip carried at the free end of said shank.

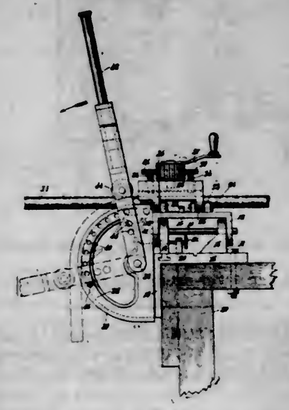
2. In a device of the class described, a leg slidably arranged upon a ladder rail, a screw member rotatably mounted upon said leg, a threaded shank for engagement through said screw member, and means for securing said shank to a rung of said ladder.

3. In a device of the class described, a base having a guide way and adapted to be secured to the ladder rail, a leg slidably mounted in said guide way, a foot at one end of said leg, a platform fixed to said leg, a rotatable screw member on said platform, a threaded shank fixed at one end to said base and projecting through said platform and screw member, and a malleable slip at the free end of said screw member adapted to be engaged with the rung of said ladder.

1,272,552. PIPE-BENDING MACHINE. ROBERT P. SPENCER, Seattle, Wash. Filed July 31, 1917. Serial No. 183,750. (Cl. 153—46.)

1. A machine of the character described comprising a base, a vise having a bottom member and a top member, said bottom member being mounted upon said base, said top member being hinged to said bottom member, a jaw supported by said bottom member, a jaw movably supported by said top member, means mounted upon said top member for moving said movable jaw, an anvil carried by said vise, and means to engage a pipe to conform the same to said anvil, substantially as specified.

2. A machine of the character described comprising a base, a vise having a bottom member and a top member, said bottom member being mounted upon said base and being provided with upwardly extending lugs, said top member being hinged to said lugs on said bottom member, a jaw supported by said bottom member, a jaw movably supported by said top member, means mounted upon said top member for moving said movable jaw, an anvil carried by said vise, and means to engage a pipe to conform the same to said anvil, substantially as specified.



3. A machine of the character described comprising a base, a vise having a bottom member and a top member, said bottom member being mounted upon said base and being provided with upwardly extending lugs, said top member being provided with downwardly extending lugs registering with said lugs on said bottom member, pins extending through said registering lugs whereby said top member is hinged to said bottom member, a jaw supported by said bottom member, a jaw movably supported by said top member, means mounted upon said top member for moving said movable jaw, an anvil carried by said vise, and means to engage a pipe to conform the same to said anvil, substantially as specified.

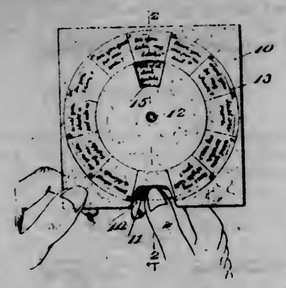
4. A machine of the character described comprising a base having lugs thereon, a vise pivotally supported by said lugs, a bearing on said base intermediate said lugs, a pin supported in said bearing and extending through one of said lugs and adapted to engage said vise, an anvil carried by said vise, and means to engage a pipe to conform the same to said anvil, substantially as specified.

5. A machine of the character described, comprising an L-shape base having lugs thereon, a platform pivotally supported by said lugs, a bearing on said L-shape base intermediate said lugs, a pin supported in said bearing and extending through one of the lugs on said base and adapted to engage said platform, a projection at the front end of said platform, a member mounted on said platform, a jaw arranged on said platform, a bar adjustably mounted in said member above said jaw, a jaw carried by said bar, screws extending through said member and engaging said bar, gears fixed upon the upper ends of said screws, a gear revolubly mounted upon said member intermediate and engaging the gears on said screws, an operating handle on said intermediate gear, a semi-circular anvil having a recessed portion adapted for securement to the projection on said platform, a series of apertures in said anvil adjacent to its edge adapted to receive a pin, a lever having a forked end pivotally secured to said anvil, and a roller carried by said forked end adapted to engage a pipe and conform the same to said anvil, substantially as specified.

1,272,553. GAME DEVICE. FRANK D. SPOTSWOOD, Lexington, Ky. Filed Aug. 23, 1917. Serial No. 187,829. (Cl. 46—56.)

1. A game device including a body having a plurality of numbered spaces thereon each containing a question,

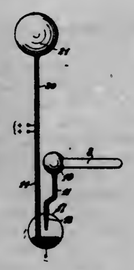
and a disk rotatable upon the body and having a plurality of spaces thereon each containing an answer, the spaces of the disk being numbered and adapted to be selectively



brought into position for display upon rotation of the disk.

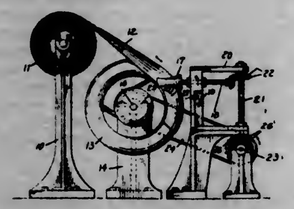
[Claims 2 and 3 not printed in the Gazette.]

1,272,554. TEMPERATURE-INDICATOR. PEDER JÖRGENSEN STEENBJERG, Frederiksberg, near Copenhagen, Denmark. Filed June 6, 1913. Serial No. 772,100. (Cl. 73—52.)



In a temperature indicating device, a receptacle, chlorid of silver therein having chemically united therewith ammonia gas capable of being liberated by heat and chemically reunited upon cooling, said liberation and absorption being a function of the temperature, a container, a body of mercury therein actuated by said gas, a chamber into which said mercury may be moved and containing a volume of like gas counteracting on said mercury, and means operated by the movement of said mercury.

1,272,555. DEVICE FOR LAYING TIRE FABRIC ON CORES. WILLIAM J. STEINLE, Elmhurst Heights, N. Y., assignor to Rubber Regenerating Company, a Corporation of Indiana. Filed Sept. 24, 1915. Serial No. 52,352. (Cl. 154—10.)



1. A tire building machine comprising the combination of a ring core, rollers having their axes disposed substantially perpendicular to the vertical central transverse plane of the core and above the axis of the core for shaping material on the core, and a positive drive for producing rotation of the core and rollers at a predetermined ratio of surface speeds.

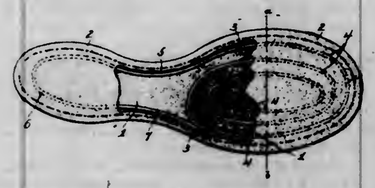
2. A tire building machine comprising the combination of a ring core, a pair of rollers having their axes disposed substantially perpendicular to the vertical central transverse plane of the core and above the axis of the core, said rollers being pressed toward the sides of the core and each adapted to intimately press fabric on to the core from near the crown portion of the core to near the edge portion of the core, and a positive drive for producing rotation of the core and rollers at a predetermined ratio of surface speeds.

3. A tire building machine comprising the combination of a ring core, a pair of concave rollers having their axes positioned substantially perpendicular to the vertical central transverse plane of the core and above the axis of the core and serving to shape fabric on the core, and a positive drive for producing rotation of the core and rollers at a predetermined ratio of surface speeds.

5. A tire building machine comprising the combination of a ring core, a shaft for driving said ring core, a pair of rollers stationed to engage the sides of fabric and shape the same to the configuration of the core, said rollers having their axes disposed substantially perpendicular to the vertical transverse plane of the core and above the axis of the core, a shaft operatively connected to each of said rollers, a shaft operatively connected to the roller shafts for positively driving the rollers, and a positive connection between the core shaft and the last named shaft whereby the last named shaft is positively driven by said core shaft.

[Claim 4 not printed in the Gazette.]

1,272,556. SOLE FOR BOOTS AND SHOES. LOUISA DARBY STEWARD, Boise, Idaho. Filed June 6, 1917. Serial No. 173,172. (Cl. 36—25.)



2. In a boot or shoe sole, a spring wire bent to form a flat spiral and embodied therein and having an extension embodied in the instep and heel portions.

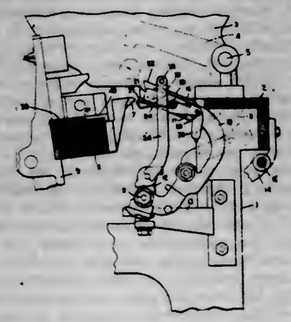
6. The combination with a boot or shoe sole, of a spring wire bent to form a flat elongated spiral and embodied in said sole, said flat spiral being so disposed that the maximum resistance to bending of the sole will come at that portion which is subjected to the greatest bending strain and a lesser resistance to bending strain be offered at the toe portion of the sole.

[Claims 1 and 3 to 5 not printed in the Gazette.]

1,272,557. FILLING-PARTING MECHANISM. EDWARD S. STIMPSON, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed June 21, 1917. Serial No. 176,215. (Cl. 139—85.)

1. In a loom comprising a shuttle feeler, means upon said shuttle feeler to part and clamp the filling adjacent the shuttle including a stationary ledger plate, cutting and clamping members located respectively on opposite sides thereof and movable relatively thereto, means located intermediate of said cutting and clamping members adapted to enter beneath the filling as the lay beats up and to guide the filling into the clamping and guiding means.

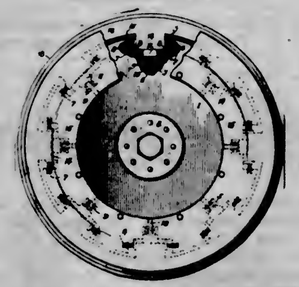
3. In a loom comprising a shuttle feeler, means upon said shuttle feeler to part and clamp the filling adjacent the shuttle including a stationary ledger plate, cutting and clamping members located respectively on opposite sides thereof and having a common pivotal connection, means operable by engagement with the lay upon its beat-up simultaneously to oscillate said members, means for picking up the filling including a spring wire coiled upon the pivotal support of said cutting and clamping members



and guided in a slot in said ledger plate intermediate of said cutting and clamping plates, the end of said yieldable member being formed to engage said lay and to enter beneath the filling and means upon said lay for raising the end of said yieldable member to cause the filling to enter the cutting and clamping means.

[Claims 2, 4, and 5 not printed in the Gazette.]

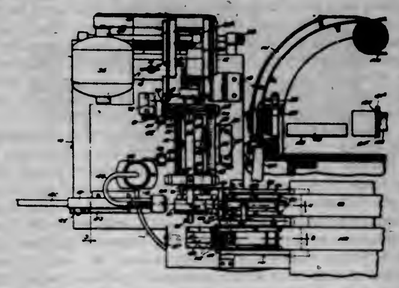
1,272,558. RESILIENT WHEEL. EARL STINES and JOHN M. KOSS, Detroit, Mich. Filed Feb. 25, 1918. Serial No. 218,964. (Cl. 152—37.)



1. A resilient wheel comprising a circular body having the periphery thereof provided with a plurality of recesses, and the walls of said recesses provided with pockets, compression springs in the pockets of said wheel body, slide blocks against said springs with one of the slide blocks in each recess extending into one pocket of each recess, a rim in spaced relation to the periphery of said wheel body, inwardly projecting enlargements carried by said rim and bearing against said slide blocks, and side plates carried by said wheel body and extending onto the sides of said rim.

2. A resilient wheel comprising a body, having the periphery thereof provided with recesses and the walls of each recess provided with pockets and one pocket of each recess provided with a socket, compression springs in the pockets of said wheel body, slide blocks against said springs with one of the slide blocks in each recess extending into one pocket of each recess and provided with a pin extending into the socket of the pocket, a rim in spaced relation to the periphery of said wheel body, enlargements carried by said rim and extending between some of said slide blocks on to the other of said slide blocks, and side plates connected to said wheel body and extending on to the sides of said rim.

1,272,559. CAPPING-MACHINE. JULIUS A. STOCK, Chicago, Ill., assignor to W. C. Ritchie & Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 14, 1916. Serial No. 78,149. (Cl. 93—55.)



1. In a machine of the character described, the combination of means to support a flanged cap including one or more spring-actuated retaining elements for the cap, converging guiding means adapted to project into the cap while the latter is retained in position by said retaining element or elements, and means to push a body tube into said cap through said guiding means and past said retaining element or elements, said guiding means facilitating the assembly of said tube and cap, substantially as described.

4. In a machine of the character described, the combination of means to move a body tube and a flanged-cap relatively to one another to assemble them, an abutment, spring-actuated retaining-elements for the cap, and a series of converging fingers to facilitate such assembly and adapted to project into the cap while the latter is maintained in position by said retaining-elements, the yielding of such retaining-elements permitting the tube to pass by said fingers and carry the cap against the abutment, substantially as described.

8. In a machine of the character described, the combination of means to support a flanged-cap, a plunger adapted to push a body-tube into said cap, and an air-blast means adapted to act through said tube on said cap to hold it in position, substantially as described.

[Claims 2, 3, 5 to 7, 9, and 10 not printed in the Gazette.]

1,272,560. COLLAPSIBLE TABLE. JAMES STONE, La Crosse, Wis. Filed Oct. 7, 1915. Serial No. 54,481. (Cl. 45—116.)



1. A collapsible table having a foldable top substantially rectangular in shape, a supporting leg adjacent each corner of said table, said legs being pivotally secured to said top and adapted to be swung inwardly against the same, a pair of brace members for holding said top distended and adapted to be extended along said top in the direction in which the same is folded up, said brace members when extended having their outer ends engaged with the table and their inner ends engaged with each other, and a clamp member adapted to detachably engage at least one of said brace members for holding the same in their table supporting position.

4. A collapsible table having a foldable top substantially rectangular in shape, three supporting legs along each side of said table, one adjacent each end thereof, and the

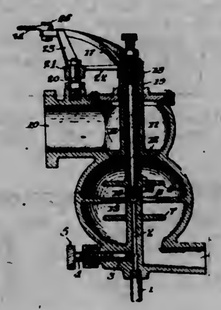
other intermediate the ends thereof, said legs being pivotally secured to the under side of said top and adapted to be swung inwardly against the same, two pairs of brace members for holding said top distended and adapted to be extended one pair along each side of said top in the direction in which the same is folded up, the brace members of each pair when extended having their inner ends overlapping each other adjacent the leg intermediate the ends of said table, and a clamping member adjacent each intermediate leg and adapted to engage the overlapped ends of the associated pair of brace members, for holding the latter in their table-bracing positions.

8. A table having a flexible top substantially rectangular in shape, base members secured to the under side of said flexible top and extending transversely across the table, there being a base member at each end of the table and one intermediate the ends thereof, supporting legs, one being pivotally secured at each end of each base member and adapted to be swung inward against the same, a brace member pivotally secured to each leg at each end of the table and adapted to extend between the same and the leg intermediate the ends of the table, the free ends of said brace members overlapping adjacent said intermediate legs, clamping members pivotally mounted on the intermediate base member adjacent the ends thereof and adapted to engage the overlapping ends of the associated brace members, and a brace rod for holding each leg in its table-supporting position.

11. A table having a flexible top, supporting legs pivotally secured thereto at each end of the table and adapted to be swung inward against said flexible top, a brace bar pivoted to each leg and adapted to extend lengthwise of the table; the brace bars pivoted to the legs on one side of the table having their meeting ends overlapping when said brace bars are extended, and one of said brace bars having a part against which the other brace bar is adapted to abut.

[Claims 2, 3, 5 to 7, 9, and 10 not printed in the Gazette.]

1,272,561. CARBURETER. GEORGE W. STORCH, Appleton, Wis. Filed Oct. 19, 1916. Serial No. 126,486. (Cl. 261—69.)



1. In a device of the described class, the combination of a carbureting chamber provided with both air and gasolene inlet ducts, a valve for controlling the passage through one of said ducts, a mixing chamber located in close proximity to said carbureting chamber, a mixture actuated valve for controlling the passage of said combustible mixture from said carbureting chamber to said mixing chamber, manually actuated means for simultaneously forcing both of said last named valves toward their seats, both of said valves being connected together and adapted to be simultaneously opened by the pressure of said combustible mixture as it passes from said carbureting to said mixing chamber.

2. In a device of the described class, the combination of a carbureting chamber provided with both air and gasolene inlet ducts, a valve for controlling the passage of gasolene from one of said ducts to said carbureting chamber, a mixing chamber located in close proximity to said carbureting chamber, a mixture actuated valve for controlling the passage of combustible mixture from said carbureting chamber to said mixing chamber, manually actuated means for simultaneously forcing both of said last named valves toward their seats, comprising an inclined circular bearing revolubly supported above said valves, said bearing being adapted as it is turned in one direction to force said valves toward their seats, and when turned in the opposite direction to permit said valves to be opened by the pressure of said combustible mixture against the lower side of said mixture controlled valve, both of said valves being connected together and adapted to be simultaneously opened by the pressure of said combustible mixture.

3. In a device of the described class, the combination of a carbureting chamber provided with both air and gasolene ducts, a manually actuated valve for controlling the passage of gasolene through said gasolene duct, a second valve for controlling the passage of gasolene from said duct to a mixing chamber, a mixing chamber located in close proximity to said carbureting chamber, a large valve for controlling the passage of combustible mixture from said carbureting chamber to said mixing chamber, manually actuated means for forcing said controlled valve toward its seat, said valve being adapted to be opened by the passage of combustible vapor from said carbureting chamber to said mixing chamber, an inclined curved bearing revolubly supported above said last mentioned valve, said bearing being adapted as it is moved in one direction to force said valve to its seat, and when moved in the opposite direction to permit said valve to be opened by the pressure of the combustible fluid in said carbureting chamber, and a hand actuated lever affixed to said curved bearing, all substantially as and for the purpose specified.

1,272,562. BOB-SLED. ARNOLD STORUD, Farm Park River, N. D. Filed June 29, 1917. Serial No. 177,748. (Cl. 21—48.)



1. In a runner mounting, the combination of a pair of longitudinally spaced-apart rods upstanding from the runner, a block fitting between the rods, a head fitting between the rods above the block and having a transverse aperture therethrough, said block and head being provided with spaced-apart vertically extending ribs outstanding from the opposite sides thereof for engagement against the opposite sides of said rods, a transverse brace bar engaging at its end through said head, and means for securing the end of said brace bar adjustably in the head.

[Claim 2 not printed in the Gazette.]

1,272,563. RECLAIMING APPARATUS. FRANCIS LEE STUART, Washington, D. C., assignor to International Conveyor Corporation, New York, N. Y. Original application filed Nov. 13, 1917, Serial No. 201,798. Divided and this application filed Mar. 4, 1918. Serial No. 220,302. (Cl. 198—3.)



1. An apparatus for reclaiming material, comprising two parallel belt conveyers, a truck movable to any desired extent over each of said belts, a hopper supported by each truck and delivering to the belt conveyer beneath it, a horizontally arranged frame supported at its opposite ends by the trucks, a horizontally arranged conveyer mounted in said frame and which delivers to said hoppers, a motor carried by the frame for moving said last-mentioned conveyer in opposite directions, a truck mounted to move longitudinally over said frame, a hopper carried by said truck which delivers to the conveyer on said frame, and a digger extending sidewise from the frame and pivotally connected with said last-mentioned truck to move about a vertical axis.

2. An apparatus for reclaiming material, comprising two parallel belt conveyers, a truck movable to any desired extent over each of said belts, a hopper supported by said trucks and delivering to the belt conveyer beneath it, a horizontally arranged frame supported at opposite ends by the trucks, a horizontally arranged conveyer mounted in said frame and which delivers to said hoppers, a truck mounted to move longitudinally over said frame, a turn-table on said truck, a hopper carried by said turn-table and which delivers to the conveyer on said frame, and a digger supported by said turn-table projecting sidewise therefrom, turning therewith about a vertical axis and pivoted to move also about a horizontal axis.

3. An apparatus for reclaiming material, comprising two parallel belt conveyers, a truck movable to any desired extent over each of said belts, a hopper supported by each truck and delivering to the belt conveyer beneath it, a horizontally arranged frame supported at opposite ends by the trucks, a horizontally arranged conveyer mounted in said frame and which delivers to said hoppers, a truck mounted to move longitudinally over said frame, a turn-table on said truck, a hopper carried by said turn-table and which delivers to said conveyer on said frame, and a digger supported by said turn-table adapted to turn therewith and to be shifted from one side of said frame to the other and also pivotally connected with the turn-table to move about a horizontal axis, and means interposed between the inner and outer ends of the conveyer for moving it vertically.

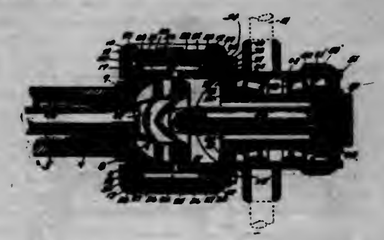
1,272,564. RECLAIMING AND ELEVATING APPARATUS. FRANCIS LEE STUART, Washington, D. C., assignor to International Conveyor Corporation, New York, N. Y. Original application filed Nov. 13, 1917, Serial No. 201,798. Divided and this application filed Mar. 4, 1918. Serial No. 220,303. (Cl. 198—3.)



1. An apparatus for reclaiming stored material, comprising a vertically arranged elevating conveyer, a hopper through which material is supplied to said conveyer, a boom conveyer mounted at one end to swing about a vertical axis, and which delivers to said hopper, means on the outer end of said boom conveyer for supporting it and for swinging it about said vertical axis, a digger, means for pivotally supporting said digger on the outer end of the boom conveyer to swing about a vertical axis thereon.

2. An apparatus for reclaiming stored material, comprising a vertically arranged elevating conveyer, a hopper through which material is supplied to said conveyer, a turn-table on which said hopper is supported, a boom conveyer supported at its inner end by said turn-table swinging therewith about a vertical axis and which delivers to said hopper, a hopper supported adjacent the outer end of the boom conveyer and mounted to move about a vertical axis passing through the outer end of said boom conveyer, and a digger delivering to said hopper and mounted to turn therewith.

1,272,565. COMBINED DRIVING AND STEERING AXLE. FRANK J. SULLIVAN, Clintonville, Wis. Filed May 25, 1916. Serial No. 99,833. (Cl. 21—141.)



1. A steering axle; comprising an inner substantially vertical substantially cylindrical shell having upper and lower ends; an outer substantially vertical substantially cylindrical shell surrounding the inner shell and having an interior diameter substantially greater than the exterior diameter of the inner shell so that the sides of the two shells are permanently out of contact, the outer shell being provided with upper and lower ends; pairs of co-acting annular tracks interposed between the adjacent ends of the inner and outer shells and arranged near their peripheries and having oppositely arranged oblique faces; means to rigidly attach the annular tracks with the ends of the inner and outer shells; bearing elements arranged between the co-acting tracks and contacting with the oppositely arranged oblique faces to prevent perceptible lateral and longitudinal movement of one shell with respect to the other; and a wheel rotatably connected with the outer shell.

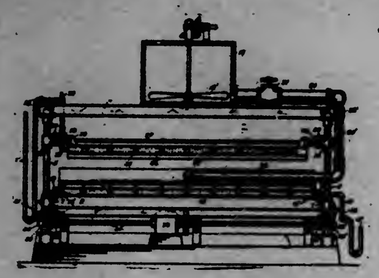
2. A steering axle; comprising an inner substantially vertical substantially cylindrical shell having upper and lower substantially horizontal ends, the ends being provided with retaining flanges; an outer substantially vertical substantially cylindrical shell receiving the inner shell and having a larger interior diameter than the exterior diameter of the inner shell to provide a permanent space therebetween and having upper and lower substantially horizontal ends, which are in turn provided with retaining flanges; pairs of co-acting annular tracks arranged between the adjacent ends of the inner and outer shells and interfitting with the retaining flanges to have rigid connection with the shells and located near their peripheries, the co-acting tracks being oppositely arranged; bearing elements arranged between the opposed tracks and contacting with the tracks for preventing perceptible lateral movement of one shell with respect to the other; a spindle attached to the outer shell; a wheel rotatably mounted upon the spindle; and bearing elements between the wheel and spindle.

1,272,566. MANUFACTURE OF PULP BOARDS. DANIEL MANSON SUTHERLAND, Jr., Trenton, N. J., assignor to The Agasote Millboard Co., Ewing township, N. J., a Corporation of New Jersey. Filed Dec. 20, 1913. Serial No. 807,867. (Cl. 92—59.)

1. The improvement in the art of making compressed pulp articles, which consists in placing the water-containing pulp in a lower mold, creating a reduced air pressure in said mold and simultaneously agitating said mold, whereby the bulk of the water is removed and the pulp fibers are closely felted together, then placing an upper mold in contact with the upper surface of said pulp and creating a reduced air pressure in said mold, the vacua of both molds being maintained simultaneously, whereby the molds are drawn together to compress the pulp and the expressed water of the pulp is removed from both sides thereof, substantially as and for the purpose described.

6. An apparatus for making compressed pulp articles, comprising a mold provided with a porous bottom and drainage passages leading therefrom, a flow-box extend-

ing along one side of the mold and having an overflow wall, the upper edge of which is horizontal and a baffle plate within said box and extending downwardly below



said horizontal edge and means for supplying water-containing pulp to said flow box at the side of said baffle plate which is remote from said overflow wall.

[Claims 2 to 5 and 7 not printed in the Gazette.]

1,272,567. HAND-CULTIVATOR. JOHN B. SWAN, Denver, Colo. Filed Sept. 4, 1917. Serial No. 189,481. (Cl. 97—41.)



1. In a cultivator, a handle, a pair of arms pivotally mounted at the inner ends thereof on one end of said handle, each arm being composed of a pair of separable plates having a plurality of diverting grooves in their engaging faces, and a plurality of cultivator teeth carried by each arm, the shank of each tooth being receivable in a plurality of said grooves, whereby the angularity of said tooth may be adjusted with relation to its arm.

2. In a cultivator, a handle, a pair of arms pivotally mounted at the inner ends thereof on one end of said handle, each arm being composed of a pair of separable plates, the upper of said plates having a plurality of tooth shank receiving holes and the lower of said plates having a plurality of tooth shank receiving grooves so placed as to diverge from the center of each of said holes, and a cultivator tooth having a shank with an upwardly turned end received in each of said holes.

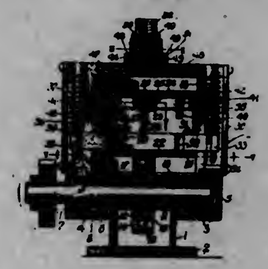
3. In a cultivator, a handle, a pair of arms pivotally mounted at the inner ends thereof on one end of said handle, each arm being composed of a pair of separable plates, the upper of said plates having a plurality of tooth shank receiving holes and the lower of said plates having a plurality of tooth shank receiving grooves so placed as to diverge from the center of each of said holes, a cultivator tooth having a shank with an upwardly turned end received in each of said holes, and releasable means for securing said plates together.

4. In a cultivator, a handle, a pair of arms pivotally mounted at the inner ends thereof on one end of said handle, each arm being composed of a pair of separable plates, the upper of said plates having a plurality of tooth shank receiving holes and the lower of said plates having three tooth shank receiving grooves so placed as to diverge from the center of each of said holes, the one of said grooves being at right angles to the axis of its arm and the other two grooves being disposed on opposite sides of the first mentioned groove and forming acute angles with said axis; a cultivator tooth having a shank with an upwardly turned end received in each of said holes, and releasable means for securing said plates together.

5. In a cultivator, a handle, a collar slidably mounted on said handle, a pair of arms pivotally mounted at the inner ends thereof on one end of said handle, braces connecting said collar with the outer ends of said arms, means for holding said collar in adjusted position, and cultivator teeth carried by said arms.

[Claims 6 to 8 not printed in the Gazette.]

1,272,568. AIR-PUMP. WILLIS A. SWAN and WILLIAM A. HIGGS, Detroit, Mich., assignors to The Swan Manufacturing Company, a Corporation of Michigan. Filed June 10, 1916. Serial No. 102,806. (Cl. 230—27.)



1. An air pump comprising a casing, a driven eccentric in said casing, a cylinder on said casing, a hollow piston reciprocable in said cylinder in one direction by said eccentric, said cylinder having air inlet ports therein communicating with said hollow piston, a check valve at the outer end of said piston, a check valve at the outer end of said cylinder, housings at the sides of said cylinder, a guide bar carried by said hollow piston and extending into said housings, and means in said housings maintaining said piston normally in engagement with said eccentric and adapted to move said piston in a direction opposite that moved by said eccentric.

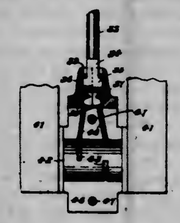
2. An air pump comprising a casing, a cylinder on said casing, a hollow piston reciprocable in said cylinder, said cylinder having air inlet ports therein communicating with said hollow piston, a check valve at the outer end of said piston, a check valve at the outer end of said cylinder, housings at the sides of said cylinder, a guide bar carried by said hollow piston and extending into the housings, means in said housings adapted to move said hollow piston in one direction in said cylinder, and means in said casing engaging said hollow piston adapted to move said piston in an opposite direction in said cylinder.

3. An air pump comprising a casing, a driven eccentric in said casing, a cylinder on said casing, a hollow piston reciprocable in said cylinder in one direction by said eccentric, said cylinder having air inlet ports therein communicating with said hollow piston, a check valve at the outer end of said piston, a check valve at the outer end of said cylinder, housings at the sides of said cylinder, a guide bar carried by said hollow piston, and extending into said housings, cross heads carried by the ends of said guide bar, and springs in said housings engaging the ends of said cross heads adapted to maintain said hollow piston normally in engagement with said eccentric and move said hollow piston in an opposite direction to that which it is moved by said eccentric.

1,272,569. LUBRICATING DEVICE. JOHN C. SWAYKUS and ALEX TKACZ, Lackawanna, N. Y. Filed Aug. 11, 1917. Serial No. 185,665. (Cl. 74—17.)

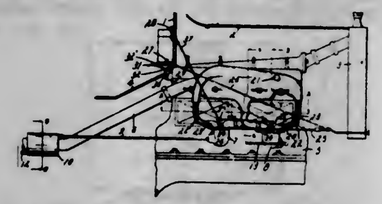
1. In combination, a crank pin provided with a plurality of spaced arc-shaped circumferential grooves, a wrist provided with a plurality of ports therethrough, each arranged to intermittently register with one of said grooves, and means to supply lubricant to said ports.

2. In a lubricating device including a hollow supporting means, a rod having one end adjustably mounted in the hollow support, and provided at its upper end with a tubular member, a second rod slidably and adjustably mounted in said tubular member and having a tubular member at one end, a third rod adjustably and slidably



mounted in the last named tubular member, a valve in the last named rod, means for controlling the valve, an oil cup carried by said last named rod and in communication with the valve, said rods providing means whereby said oil cup may be adjusted vertically, transversely and longitudinally relative to a machine.

1,272,570. INTERNAL-COMBUSTION ENGINE. WILLIAM E. SWANEY, Dowagiac, Mich. Filed Aug. 6, 1917. Serial No. 184,683. (Cl. 123—127.)



1. In an internal combustion engine, the combination of an intake manifold, an air heating conduit and an exhaust manifold formed integrally therewith and having walls in common therewith so that the intake manifold and air heating conduit are heated thereby, said intake manifold having an intake conduit with oppositely disposed branches symmetrically related thereto, a pair of carbureters one adapted for lighter hydrocarbons, such as gasolene, and the other for the heavier hydrocarbons, such as kerosene, connected to the said branches of said intake conduit, the fuel supply to the carbureters for the heavier fuel being provided with heating means associated with the exhaust to be heated thereby, the air heating conduit being provided with delivery connections from its ends to said carbureters, the air inlet of said air heating conduit being closer to the carbureter for the lighter fuel, fuel feed regulating valves for said carbureters provided with a common actuating means, chokers for said carbureters provided with a common actuating means, and throttles for said carbureters provided with independent actuating means, the gasolene carbureter throttle control means being provided with a spring retracted detent for holding said throttle open.

2. In an internal combustion engine, the combination of an intake manifold, an air heating conduit and an exhaust manifold formed integrally therewith and having walls in common therewith so that the intake manifold and air heating conduit are heated thereby, said intake manifold having an intake conduit with oppositely disposed branches symmetrically related thereto, a pair of carbureters one adapted for lighter hydrocarbons, such as gasolene, and the other for the heavier hydrocarbons, such as kerosene, connected to the said branches of said intake conduit, the fuel supply to the carbureters for the heavier fuel being provided with heating means associated with the exhaust to be heated thereby, the air heating conduit being provided with delivery connections from its ends to said carbureters, the air inlet of said air heating conduit being closer to the carbureter for the lighter fuel, and throttles for said carbureters provided with independent actuating means, the gasolene carbureter throttle control means being provided with a spring retracted detent for holding said throttle open.

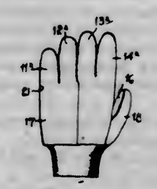
3. In an internal combustion engine, the combination of an intake manifold, an air heating conduit and an exhaust manifold formed integrally therewith and having walls in common therewith so that the intake manifold and air heating conduit are heated thereby, said intake manifold having an intake conduit with oppositely disposed branches symmetrically related thereto, a pair of carbureters one adapted for lighter hydrocarbons, such as gasolene, and the other for the heavier hydrocarbons, such as kerosene, connected to the said branches of said intake conduit, the fuel supply to the carbureters for the heavier fuel being provided with heating means associated with the exhaust to be heated thereby, the air heating conduit being provided with delivery connections from its ends to said carbureters, the air inlet of said air heating conduit being closer to the carbureter for the lighter fuel, fuel feed regulating valves for said carbureters provided with a common actuating means, chokers for said carbureters provided with a common actuating means, and throttles for said carbureters provided with independent actuating means.

4. In an internal combustion engine, the combination of an intake manifold, an air heating conduit and an exhaust manifold formed integrally therewith and having walls in common therewith so that the intake manifold and air heating conduit are heated thereby, said intake manifold having an intake conduit with oppositely disposed branches symmetrically related thereto, a pair of carbureters one adapted for lighter hydrocarbons, such as gasolene, and the other for the heavier hydrocarbons, such as kerosene, connected to the said branches of said intake conduit, the fuel supply to the carbureters for the heavier fuel being provided with heating means associated with the exhaust to be heated thereby, the air heating conduit being provided with delivery connections from its ends to said carbureters, the air inlet of said air heating conduit being closer to the carbureter for the lighter fuel, and throttle means for said carbureters.

5. In an internal combustion engine, the combination of an intake manifold, an air heating conduit and an exhaust manifold associated therewith so that the intake manifold and air heating conduit are heated thereby, a pair of carbureters connected to the said intake conduit, the air heating conduit being provided with delivery connections from its ends to said carbureters, fuel feed regulating valves for said carbureters provided with a common actuating means, chokers for said carbureters provided with common actuating means, and throttles for said carbureters provided with independent actuating means.

[Claims 6 to 16 not printed in the Gazette.]

1,272,571. REVERSIBLE GLOVE. HENRY H. TAYLOR, Keokuk, Iowa. Filed Aug. 26, 1916. Serial No. 117,100. (Cl. 2—9.)



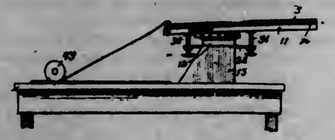
1. A reversible glove formed from a plurality of blanks, one of the blanks being cut to provide the face of the thumb of the glove and the faces for the little finger, third finger and second finger, the back and front of the first finger and the back of the second finger, the faces for the

little finger and the third and second fingers being separated from each other and from the back and front of the first finger, and the back of the second finger being separated from the back and front of the first finger, the back and front of the first finger being connected to each other, said blank also forming part of the back of the glove and at its margin opposite the fingers being cut to form the palm member of the thumb, the other blank being stitched to the first named blank at its margins and formed to provide the remainder of the back of the glove and the backs of the little finger and the third finger, and a separate thumb piece attached to the palm member of the thumb and to the body of the glove.

2. A reversible glove formed from a plurality of blanks, one of the blanks being cut to provide the faces for the little finger, third finger, and second finger, the back and front of the first finger and the back of the second finger, the faces for the little finger and the third and second fingers being separated from each other and from the back and front of the first finger, and the back of the second finger being separated from the back and front of the first finger, the back and front of the first finger being connected to each other, said blank also forming part of the back of the glove and at its margin opposite the fingers being cut to form the palm member of the thumb, the other blank being stitched to the first named blank at its margin and formed to provide the remainder of the back of the glove and the backs of the little finger and the third finger, a separate thumb piece attached to the palm member of the thumb and to the body of the glove, and a partition secured around its side and top margins to the inner face of the separate thumb pieces.

[Claims 3 and 4 not printed in the Gazette.]

1,272,572. TISSUE-HOLDER FOR MANUFACTURING MATRIX-MATS. ARTHUR J. THIBODEAUX, Chicago, Ill., assignor of one-half to John W. Kramer, Chicago, Ill. Filed Apr. 9, 1917. Serial No. 160,881. (Cl. 271—8.)



1. The combination with a stationary table having a mat assembling area, of a tissue supporting device comprising a shelf located in rear of and above the level of the table to receive and support a group of tissue sheets, tissue sheet retaining means at one margin of the shelf, a support for said shelf and means for adjusting said shelf on said support relatively to said assembling area.

6. The combination with an assembling table, of a tissue supporting device comprising a fixed support, a shelf above the level, and at the rear, of the table, adapted to receive and support a group of tissue sheets, a shaft extending across said support to which said leaf is hinged to swing relatively and means to adjust the shelf longitudinally of said shaft, with other means to adjust said shaft toward and from the assembling table.

10. In combination, a mat supporting table, a tissue supporting shelf above and in rear of the assembling area of the table, with means at the forward edge of the shelf to retain a group of tissue sheets, and pivot means for supporting said shelf, constructed to permit the forward end of the shelf to rise and fall relatively to the mat assembling area of the table, with means to control the pivoting movements of said table.

[Claims 2 to 5, 7 to 9, and 11 to 14 not printed in the Gazette.]

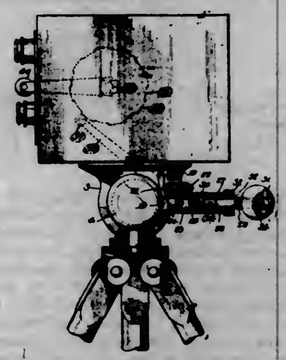
1,272,573. IDENTIFICATION-TAG. NEWTON FLOID THOMAS, Jasper, Tenn. Filed Mar. 5, 1918. Serial No. 220,971. (Cl. 40—2.)

1. An identification tag embodying a hermetic transparent water-proof container; and a refractory fire-proof tablet within the container, the constituent material of the tablet being altered mechanically to fashion an inscription.



2. An identification tag embodying a hermetic transparent glass container and a mica tablet in the container, the constituent material of the tablet being punched to fashion an inscription.

1,272,574. SUPPORT FOR CAMERAS, MACHINE-GUNS, AND THE LIKE. WILLIAM M. THOMAS, New York, N. Y., assignor to Thomas-Oberkirch Company, Limited, New York, N. Y., a Corporation of New York. Filed June 14, 1917. Serial No. 174,820. (Cl. 248—45.)



1. In a device of the character described, in combination, a supporting base, a cylindrical member secured to said supporting base, a sphere fixedly mounted upon said cylindrical member, sphere inclosing means adapted to have movements in two directions within predetermined limits upon said sphere, a device to restrain said means from any movement in a third direction, a carrying platform fixedly secured to said sphere inclosing means, and a clamping member carried by said sphere inclosing means and being adaptable to lock said means to said sphere.

5. In a device of the class described, in combination, a rigidly mounted supporting sphere, an instrument carrying means mounted upon said sphere for movement in two directions between predetermined limits relatively thereto, a rotating base adapted to rotate around the axis of the support for said sphere and adapted to guide said means to prevent movement of said means in a third direction.

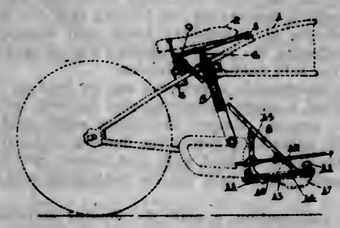
8. In a device of the character described, in combination, a rigidly mounted supporting sphere, instrument carrying means mounted upon said sphere for movement in two directions between predetermined limits with one axis of said means being maintained at all times coincident with a fixed axis extending through the center of said sphere, a locking device carried by said means and in operative relation to said sphere, a directing handle, and devices operatively connected with said handle and said locking device so that the operation of said handle to direct the said means automatically unlocks the locking device.

16. A device of the class described comprising, in combination, a rigidly mounted supporting sphere, instrument supporting means carried by said sphere and rotatable relatively thereto in such manner that the central plane of said means always includes a predetermined fixed line passing through the center of said sphere and comprising the axis of the support for said sphere, and devices whereby the movement of said means may be restricted to a single rotative direction.

18. In a device of the character described, in combination, a supporting base, a supporting cylinder rigidly secured to said base, a sphere fixedly mounted on said cylinder, a pair of oppositely disposed rings encompassing opposite sides of said sphere and movable upon said sphere, a rotating base upon said cylinder and rotatable around the axis thereof, a pair of clamp screws carried by said rotating base, one of said screws being adapted to lock said base to said cylinder, the other of said screws being adapted to lock said rotating base to said rings, and means provided on said rotating base for causing said base to be at all times in operative connection with said rings.

[Claims 2 to 4, 6, 7, 9 to 15, 17, and 19 not printed in the Gazette.]

1,272,575. AUTOMATIC FOOT-REST SHOCK-ABSORBER. HERBERT THOMPSON, Toronto, Ontario, Canada. Filed Apr. 10, 1917. Serial No. 161,020. (Cl. 208—26.)



1. In a motorcycle, the combination of a saddle resiliently supported on the frame in a position between the wheels; a member partaking of the vertical movements of the saddle; a pair of connecting members independent of the saddle supporting means and straddling the cycle frame and connected to said vertical movable member; a slotted guide at each side of the frame for the lower end of each connecting member, in which guide the member is capable only of movement substantially in the direction of its length; and a foot rest secured to each connecting member and supported solely thereby.

[Claims 2 to 5 not printed in the Gazette.]

1,272,576. RESILIENT TIRE. LEWIS P. THOMPSON, Minneapolis, Minn. Filed Feb. 25, 1918. Serial No. 218,963. (Cl. 152—8.)

3. The combination with a wheel rim, of a tire casing, a tread member in the casing made up of independent relatively rigid segmental sections having presser heads on their ends, one end of each tread section overlapping the presser head of the adjacent tread section, anchor brackets secured to the rim and connecting adjacent presser heads with freedom for limited circumferential and radial movements and holding the same against lateral movement, springs connecting the presser heads to the anchor brackets, and yielding fulcrums interposed between the intermediate portions of the tread sections and the rim.

5. The combination with a wheel rim, of a tire casing, a tread member in the casing made up of relatively rigid independent segmental sections that are transversely curved to fit said casing, presser heads on the ends of the tread sections, and each thereof having inwardly projecting laterally spaced side flanges and a circumferentially projecting spring retaining finger spaced radially inward from the respective tread sections, the spring retaining fingers on the presser heads of each tread section projecting toward each other, anchor brackets secured to the rim and having outwardly extended looped portions projecting between the laterally spaced side flanges of adjacent presser heads and holding the same against lateral movement, said anchor brackets also having circumferentially extended spring retaining fingers that are



radially alined with the spring retaining fingers of the presser heads and spaced radially outward from the rim, means interlocking the side flanges of the presser heads with the looped portions of the anchor brackets to permit limited circumferential and radial movements of the presser heads, laminated spring rings connected to the rim and tread sections by said radially alined pairs of spring retaining fingers, and yielding fulcrums interposed between the intermediate portions of the tread sections and the rim.

[Claims 1, 2, and 4 not printed in the Gazette.]

1,272,577. TRUSS. JOHN I. THROCKMORTON, Clarksburg, Ohio. Filed Mar. 17, 1915. Serial No. 14,905. (Cl. 128—26.)



1. In a truss, a presser element comprising a presser head capable of partial rotation and a supporting structure comprising hinged parallel plates.

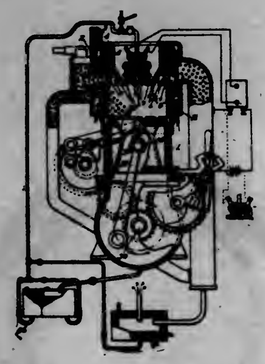
3. In a truss, a presser element, a supporting structure of collapsible box-like form and a threaded bolt and sleeve structure comprising an outer sleeve element, said outer sleeve element being slotted, an inner threaded sleeve element, a bolt to fit therein, and means on said inner sleeve element to prevent its rotating within said outer sleeve element.

6. In a truss, a supporting structure for a presser head comprising parallel plates hinged together, said plates being collapsible in parallelism without rotating.

13. In a truss, a presser element comprising a presser head, a base element resiliently connected to said presser head, an interconnecting element rigidly connected to said presser head, said interconnecting element being hingedly secured to said base element, and means on said interconnecting element to provide upward pressure by said presser head independently of any resilient member.

[Claims 2, 4, 7 to 12, and 14 not printed in the Gazette.]

1,272,578. CYLINDER AND PISTON DEVICE. PAUL G. TISMER, New York, N. Y. Filed Sept. 14, 1914. Serial No. 861,659. (Cl. 74—85.)



3. In devices subject to expansion and contraction for the purpose of maintaining pressure to one side of a movable member within a container; the combination of a container and a movable member having a wall of substantially uniform thickness and smooth surface providing uniformity of expansion of the journaling surface to keep in close proximity substantially throughout its length the bearing surface of a container, thereby maintaining a substantial oil film between the rubbing surfaces to form a seal; and a movable seal or web adjacent to the outer journaling shell at an angle remote from a right angle to avoid distortion of said journaling surface, and said movable seal or web forming a deep cone, or the reverse.

6. In a device of the character described, a piston comprising a shell having its rubbing surface of unbroken contour and a web forming an acute angle with said shell, said web being provided with an anchorage remote from the outer or journaling shell for a pitman which is expansible without distorting said shell.

[Claims 1, 2, 4, and 5 not printed in the Gazette.]

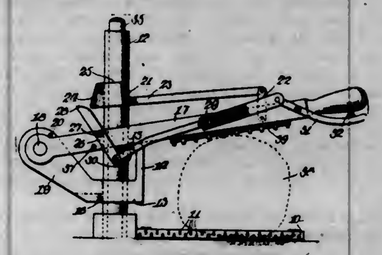
1,272,579. DISPENSING-RECEPTACLE FOR LIQUID ANESTHETICS. GEORGE W. TODD, Omaha, Nebr. Filed Jan. 26, 1918. Serial No. 213,988. (Cl. 128—13.)



1. A dispenser for liquid anesthetics consisting of a receptacle having an air intake port, an exit port and an opening in its end, a second receptacle having a foraminous wall and disposed within the first named receptacle, a fibrous element between the walls of said receptacles, a fibrous element in the second receptacle, said last named receptacle having its open end disposed adjacent to the opening in the end of the first named receptacle to permit a deposit therein of a liquid element, and removable closures for the intake and exit ports and opening in the end of the first named receptacle.

2. A dispenser for liquid anesthetics consisting of a receptacle having a discharge conduit at one of its ends, its opposite end having an opening formed therein, said receptacle being provided with a port for a movement of air therethrough to said discharge conduit, adjustable means for limiting the movement of air through said air intake port, a removable closure for the opening in the end of said receptacle, a second receptacle having an open end and a foraminous wall, said second receptacle being disposed within the first named receptacle with its open end adjacent to the opening in the end of the first named receptacle, a fibrous element between the walls of said receptacles, and a fibrous element in the second receptacle.

1,272,580. GRIP FOR SLICING-MACHINES. CORNELIS F. M. VAN BERKEL, Laporte, Ind., assignor to U. S. Slicing Machine Company, Laporte, Ind., a Corporation of Indiana. Filed June 18, 1917. Serial No. 175,283. (Cl. 17—14.)



1. A clamp for holding material to be sliced comprising an upright standard, a clamping bar having one end thereof slidably mounted on said standard, said bar being entirely supported from said slidably mounted end thereof thus leaving the other end freely projecting away from said standard, mechanism for holding said bar in different positions of adjustment along said standard, and means adjacent the freely projecting end of said bar for controlling said holding mechanism.

3. In combination, a gripping bar for holding material to be sliced, a single supporting post for said bar located adjacent one end thereof and along which said bar is vertically adjustable, means for holding said bar in adjusted positions on said post, and means operable from the opposite end of said bar for controlling said holding means.

5. In combination, a plate for holding material to be sliced, a bar for clamping material in position on said plate, a support for said bar located adjacent one corner of said plate leaving the other portions of the periphery of said plate entirely unobstructed, said bar being connected with said support to move bodily in a vertical direction thereon, means for holding said bar in its various positions of vertical adjustment on said support, and means located adjacent the end of said bar opposite said support for operating said holding means.

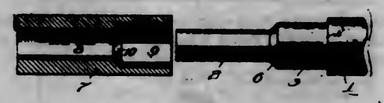
7. In combination, a bar for holding material to be sliced, an upright post for entirely supporting said bar, a clutch sleeve surrounding said post, a connection between said sleeve and bar arranged to cause said sleeve to grip said post when pressure is exerted upon said bar by a clamping operation, and means for preventing said sleeve from gripping said post to permit adjustment of said bar along said post.

9. In combination, a plate for holding material to be sliced, an upright supporting standard carried by said plate, a bar having a clamping portion positioned above said plate and having the end thereof on one side of said clamping portion adjustably connected with said upright standard, and means carried at the opposite end of said bar for controlling the connection between said bar and said standard.

[Claims 2, 4, 6, 8, and 10 to 12 not printed in the Gazette.]

1,272,581. CAR-AXLE AND METHOD OF REPAIRING CAR-AXLES. WILLIAM T. VAN DORN, Chicago, Ill. Filed Mar. 19, 1918. Serial No. 223,341. (Cl. 105—4.)

1. A car axle having at the end a reduced portion, and a sleeve having at its outer end the exterior contour of a completed journal provided with end thrust collars pressed on said reduced portion and held thereon by radial pressure produced and maintained by tension in the metal of the sleeve, said reduced portion and said sleeve being sufficiently longer than the journal that a portion of the sleeve will grip the axle without being influenced by the conditions in the zone occupied by the journal.



2. A car axle having at the end a reduced portion considerably longer than a completed journal and a sleeve fitting upon said reduced portion and being in a state of tension caused by the tendency of the sleeve to contract until its interior diameter is considerably less than that of the reduced portion so that the sleeve is held on the axle by pressure maintained by the tension in the sleeve, said sleeve having its outer end fashioned so as to have the contour of a complete car axle journal, and the inner end of the sleeve extending sufficiently beyond the zone occupied by the journal to prevent the conditions at the journal from influencing the grip at the inner end of the sleeve.

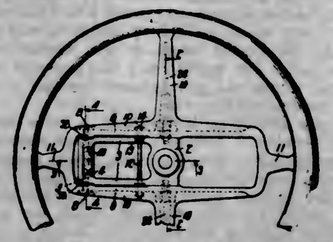
3. The method of producing a journal on a car axle which consists in forming on the axle a portion of reduced diameter extending inwardly from an end of the axle for a distance considerably longer than a completed journal, making a sleeve having an internal diameter considerably smaller than the diameter of the reduced portion of the axle, telescoping the sleeve upon the said reduced portion in such a manner that the sleeve grips the axle with a strong radial pressure, and finally finishing the sleeve to give the outer end of it the shape of a complete car axle journal.

4. A car axle having at the end a reduced portion forming with the body of the axle an abrupt shoulder, said reduced portion terminating at its outer end in a rudimentary journal of still smaller diameter gradually merged into that part of the reduced portion of larger diameter than the rudimentary journal so as to avoid an abrupt shoulder, and a sleeve having at its outer end the contour of a complete car axle journal surrounding said reduced portion including the rudimentary journal and held thereon by radial pressure produced and maintained by tension in the metal of the sleeve, the sleeve fitting at its inner end against the aforesaid shoulder.

5. A car axle having at the end a portion of reduced diameter provided with depressions in its surface, and a sleeve having the exterior contour of a complete journal surrounding said portion of reduced diameter and having the metal thereof extending into said depressions, the construction and arrangement of the depressions being such that the sleeve and the axle are interlocked against relative axial movements and against rotary movements.

[Claims 6 to 28 not printed in the Gazette.]

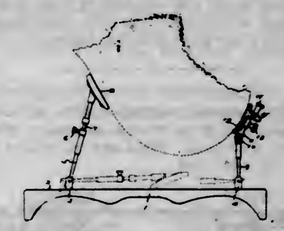
1,272,582. SHIFTABLE STEERING-WHEEL. EDWARD H. VINCENT, Detroit, Mich. Filed Mar. 16, 1917. Serial No. 155,154. (Cl. 74—33.)



1. In combination, a shaft, a head fixed to the end thereof and having a socket, a spider tiltable on the head, said spider including a boss having a perforation in substantial alinement with said socket when the spider is in steering position, a hollow plug for the socket, the opening in the plug being of greater cross section in its inner portion than in its outer portion, a latch head slidable in the inner portion of the plug toward and from the socket, a latch rod secured to the latch head and extending out through the outer end of the plug, and a compression spring pocketed in the plug whereby the latch head is normally held in the socket.

[Claims 2 to 8 not printed in the Gazette.]

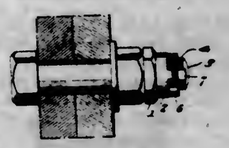
1,272,583. MANDOLIN-SUPPORT. JOSEPH F. VRUBEL, Hartford, Conn. Filed Dec. 31, 1917. Serial No. 209,748. (Cl. 84—115.)



3. A mandolin support consisting of a base shaped to rest upon the thighs of a player, a post hinged to the base near each end so as to swing up from and down toward the base, a rod carried by and adjustable longitudinally of one post, means for securing the rod in adjusted position, a pad swiveled upon the free end of said rod, a stem detachably connected to the other post, and a spring clamp pivotally attached to said stem, said clamp having means for securing it to the tail piece of a mandolin.

[Claims 1 and 2 not printed in the Gazette.]

1,272,584. NUT-LOCK. FREDERICK C. WARNE, Mansfield, Ohio. Filed Jan. 25, 1917. Serial No. 144,513. (Cl. 151—21.)



A nut having a threaded bore, a bolt, a separate cylindrical member of less external diameter than the size of the nut and engaging one face of the nut the cylindrical member having a threaded bore alining with and forming a continuation of the bore of the nut and a series of circularly arranged fingers projecting from the free edge of such cylindrical member and having their outer and inner surfaces respectively coincident with the outer surface of the cylindrical member and with the inner surface of said member and of the nut immediately beyond the threads.

1,272,585. INKSTAND. FRANK A. WEEKS, Plainfield, N. J. Filed Apr. 9, 1917. Serial No. 160,636. (Cl. 120—57.)

1. An inkstand comprising a base containing an inkwell and a cover mounted on said base and covering said inkwell and having a raised rear portion and a depressed forward portion above the front end of said inkwell and containing a pen-opening, and said cover also having over its forward depressed portion a hinged lid whose edges follow the general outline of the front portion of the main body of the cover and whose upper surface follows the general outline of the raised rear portion of said

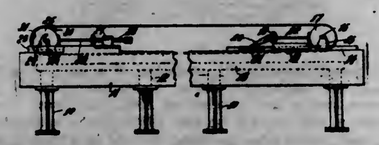
cover, and which lid is adapted to lie upon the depressed forward portion of said body and over said pen-opening.



2. An instand comprising a base containing an inkwell, a cover mounted on said base and covering said inkwell and having a forward depressed portion containing a pen-opening and rearwardly thereof a raised portion recessed in its front edge, a pintle crossing said recess, and a lid hinged on said pintle and adapted to rest upon said depressed portion of the cover and close said opening.

[Claims 3 to 7 not printed in the Gazette.]

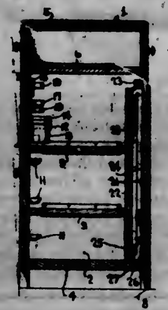
1,272,586. FOURDRINIER-WIRE STRETCHER. ALBERT B. WEMSENDORN, Appleton, Wis., assignor of one-half to Appleton Wire Works, Appleton, Wis., a Corporation of Wisconsin. Filed Apr. 8, 1915. Serial No. 20,070. (Cl. 140—108.)



3. A machine for stretching Fourdrinier wire, comprising a fixed roll and a movable roll around which the Fourdrinier wire fits, and a removable impressionable covering adapted to be interposed between one roll and the seam portion of the Fourdrinier wire to have the knuckles of the wire on either side of the seam become indented therein to relieve the same from strain during the stretching operation.

[Claims 1 and 2 not printed in the Gazette.]

1,272,587. SEWING-CABINET. HENRY E. WELLS, Kahoka, Mo. Filed Sept. 14, 1917. Serial No. 191,461. (Cl. 223—53.)



1. A sewing cabinet comprising a body part, a door for closing the same, trough shaped receptacles carried by said door, a metal strap secured to the door and having loops formed thereon, receptacles carried in said loops, a second strap secured to the door and having loops and projections formed thereon for supporting different instruments, needle and pin receptacles carried by the door, and loops arranged in pairs for supporting knitting and like needles.

2. A sewing cabinet comprising a body part, front and rear doors for the same, sewing implement holding means on one door, a work table hinged to the upper end of the other door, and legs hinged to the outer end of said table and swinging inwardly.

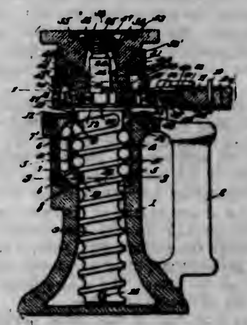
3. A sewing cabinet comprising a body part, front and rear doors for the same, a work table connected with one of the doors, sewing implement supporting means connected with the other door, and a drawer carried by the upper part of the cabinet and opening in two directions.

1,272,588. TUMBLING TOY. THOMAS C. C. BUCHANAN WHITE, Cowley, Alberta, Canada. Filed July 31, 1917. Serial No. 183,751. (Cl. 46—40.)



A tumbling toy of the class described comprising a hollow elongated body substantially square in cross section, the ends of said body being rounded on their outer faces and curved on their inner faces, and a spherical weight disposed in said body, said weight corresponding in diameter to both diameters of said body.

1,272,589. BALL-BEARING JACK. WILLIAM A. WHITNEY, Oregon, Ill. Filed Aug. 21, 1917. Serial No. 187,448. (Cl. 254—98.)



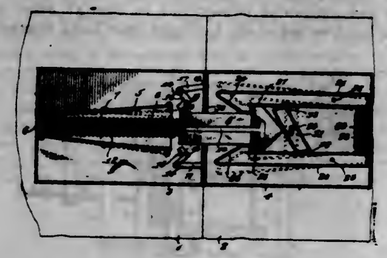
1. A jack embodying a screw and a nut having complementary helical grooves providing a helical ball runway, balls seated in said grooves to roll in said runway, the nut having notches at the ends of said runway, and a guide having lugs entering said notches and a channel extending from one lug to the other for transferring the balls between the ends of the runway, said lugs having deflectors extending into the groove of the screw for deflecting the balls into the guide.

5. A jack embodying a standard, a screw having a threaded connection therewith, a ratchet wheel seated upon the screw and engaged thereto to rotate therewith, a member seated above said ratchet wheel and mounted rotatably upon the screw, a pawl carried by said member to engage the ratchet wheel, a seat member swiveled upon the screw and seated upon the aforesaid member, and means for locking said members together to prevent relative rotation therebetween.

7. A jack embodying a standard, a screw having a threaded connection therewith, a member supported by the screw having a concaved recess, a seat member having a lower convexed surface seated in said recess and an opening through which the screw extends, said seat member having an upper concaved cavity, and a retaining member engaging the screw and having a convexed surface seating in said cavity.

[Claims 2 to 4, 6, 8, and 9 not printed in the Gazette.]

1,272,590. SLIDING-DOOR LOCK. MARK A. WIGHTMAN, Bath, N. Y. Filed Jan. 28, 1916. Serial No. 74,923. (Cl. 70—31.)



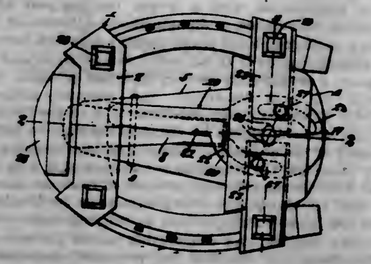
1. A lock for sliding doors, including a casing, a guideway formed within the casing, a sliding spring actuated bolt adapted to be received by said guideway, an elongated slotted portion arranged longitudinally of the bolt and provided with offset portions, a pin supported by the casing and traveling within said slotted portion adapted to engage with the offset portions whereby the bolt is held in a retracted position, pivoted means arranged adjacent the bolt for effecting the release of said bolt, and a keeper adapted to receive the bolt.

5. A lock, including a casing, a keeper, a pivotal guideway in said casing, a slidable spring actuated bolt arranged in the guideway and movable therewith, fixed means mounted within the casing engageable with the bolt for maintaining the same in inoperative position, and means also engageable with said bolt for moving the same out of engagement with said fixed means whereby the keeper will be engaged thereby at times, and said guideway holding said bolt in an operative condition and being adapted to swing as said bolt is moved to an operative or inoperative position.

8. A lock including a casing, a keeper, a slidable spring actuated bolt arranged within said casing, fixed means mounted within the casing and engageable with the bolt for maintaining the same in an inoperative position, an L shaped plate carried by said casing and engaging said bolt, an arm carried by plate and projecting from said casing, said arm being adapted to be struck by a foreign object, thus causing said plate to be swung for moving said bolt out of engagement with said fixed means, whereby the bolt will engage said keeper.

[Claims 2 to 4, 6, and 7 not printed in the Gazette.]

1,272,591. HORSESHOE. LOUIS WILLETT, Annapolis Junction, Md. Filed Mar. 18, 1918. Serial No. 223,176. (Cl. 168—30.)

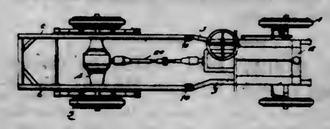


1. In a supplemental horseshoe, a main member; a retaining lever fulcrumed intermediate its ends on the main member to swing in a plane at right angles to the plane defined by the main member; and a laterally operating retaining means including an operating lever movable in a plane parallel to the plane defined by the main member, to actuate the laterally operating retaining means, and to assume a position beneath the retaining lever, thereby to prevent the latter from tilting.

2. In a supplemental horseshoe, a main member; a retaining lever fulcrumed intermediate its ends on the main member to swing in a plane at right angles to the plane defined by the main member, the forward end of the retaining lever being adapted to coact with a main horseshoe to hold the supplemental horseshoe thereon; and movable means carried by the main member and engaging the rear end of the retaining lever to hold the latter against tilting movement.

3. In a supplemental horseshoe, a main member including a heel, a toe, and a connection between the heel and the toe; grip bars mounted to slide transversely of the main member in the heel and having projections; and a lever mounted to swing in the heel, the lever having cam parts coacting with the projections to advance and retract the grip bars, the toe having a part wherewith the lever interlocks to hold the lever against swinging movement.

1,272,592. TRACTOR ATTACHMENT. EMERSON E. WILLHITE, Algona, Iowa. Filed Jan. 23, 1918. Serial No. 213,292. (Cl. 180—16.)



1. In combination, a motor truck comprising a frame and front and rear wheels supporting the frame, the side members of the frame being divided intermediate their ends and detachably connected, and a tractor section having depending stirrups at the ends of the axle housing through which the rear ends of the front sections of the side members are adapted to pass, and a detachable connection between each frame section and the adjacent stirrup, the detachable connection between the frame sections comprising stirrups on the rear sections through which the rear ends of the front sections are adapted to pass, and clamps on the front ends of the rear sections for engaging the front sections.

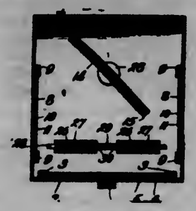
2. In combination, a motor truck comprising a frame and front and rear wheels supporting the frame, the side members of the frame being divided intermediate their ends and detachably connected, and a tractor section having depending stirrups at the ends of the axle housing through which the rear ends of the front sections of the side members are adapted to pass, and a detachable connection between each frame section and the adjacent stirrup.

3. In combination, a motor truck comprising a frame and front and rear wheels supporting the frame, the side members of the frame being divided intermediate their ends and detachably connected, a tractor section having depending stirrups at the ends of the axle housing through which the rear ends of the front sections of the side members are adapted to pass.

4. In combination, a motor truck comprising a frame and front and rear wheels supporting the frame, the side members of the frame being divided intermediate their ends and detachably connected, a tractor section having depending stirrups at the ends of the axle housing through which the rear ends of the front sections of the side members are adapted to pass, each stirrup having an upstanding lug, and the front frame sections having openings for engagement by the lugs.

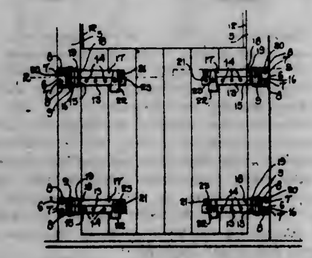
5. In combination, in a motor vehicle, a frame divided intermediate its ends into front and rear sections, a detachable connection between the sections, and a tractor section for connection with the front section of the frame when the rear section of the frame is removed, said tractor section and rear section having depending stirrups for engagement by the front section, and having clamps for engaging the said section.

1,272,593. ILLUMINATED SIGN. EDGAR I. WILSON, Kansas City, Mo. Filed Jan. 5, 1916. Serial No. 70,419. (Cl. 40—132.)



A sign comprising a casing provided with an opening through which light rays may enter, a sign plate, a horizontally turning reflector within the casing for reflecting the light entering the casing through said opening, onto said sign plate, a multi-color translucent disk in the casing for intercepting the reflected rays of light to the sign plate to effect changes of color in said rays, a toothed ring carrying said translucent disk, a plurality of grooved wheels for supporting said ring, and a driven cog wheel projecting into the casing and engaging said ring to impart rotation thereto.

1,272,594. HINGE. FRED WOLTER, St. Charles, Minn. Filed Apr. 3, 1918. Serial No. 226,466. (Cl. 16—106.)

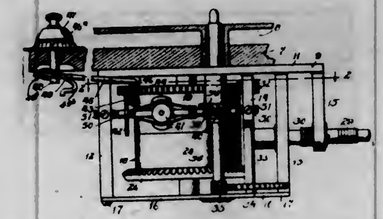


1. In a hinge adapted to be used with fixed and movable parts, a pintle secured upon the fixed part, fixed and movable hinge members carried by the movable parts and having terminal hooks on their corresponding ends reversely disposed and arranged in superposed relation for operative engagement with the pintle, and means for retaining the movable hinge member in operative engagement with the pintle.

2. In a hinge adapted to be used with fixed and movable parts, a hinge including a pintle secured upon one of said parts, a hinge bar fixed to the other part, a second relatively movable hinge bar, said hinge bars being provided with reversely extending terminal hooks for operative engagement with the pintle, and latch means to co-act with the movable hinge bar and retain said hooks in engagement with the pintle.

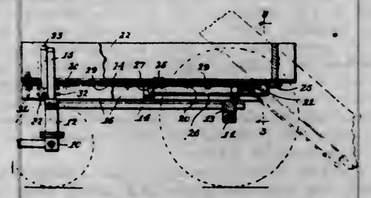
1,272,595. GOVERNOR MECHANISM FOR SPRING-MOTORS. ADOLPH ANDERSON, Chicago, Ill., assignor to Aurora Automatic Machinery Co., Chicago, Ill., a Corporation of Delaware. Filed July 12, 1917. Serial No. 180,121. (Cl. 74—45.)

In a governor mechanism for spring motors for talking machines, the combination of a driven shaft, a governor shaft geared to the driven shaft, governor mechanism on said governor shaft, means for controlling the position of the governor mechanism on its shaft to determine the speed of the driven shaft, said controlling means comprising an L-shaped lever pivoted intermediate its ends, one free end of the lever engaging the governor mechanism, a pivoted post, a finger-piece on the upper end of the post, a scale-surface in juxtaposition to said post, a member secured to the post and bent to extend outward therefrom, then upwardly to form a bend at its inner end, then downward in an eccentric manner from said inner bend and continuing downwardly to form an outer bend, the other free end of the L-shaped lever being engaged by



the under side of said bent member and moved by actuation of said member to swing the L-shaped lever back and forth about its pivot and cause a movement of said governor mechanism, and the inner and outer bends in said member engaging the lever to limit the movements of said post, substantially as described.

1,272,596. DUMPING-WAGON. OSCAR D. ANDERSON, Conway, S. C. Filed Mar. 6, 1918. Serial No. 220,730. (Cl. 21—20.)



1. In combination with a wagon running-gear having upstanding side-stakes, a dumping-body attachment comprising a rectangular bed-frame formed with side-bars and cross-bars to enable it to be bodily moved from said running-gear, a wagon-body or box mounted to move longitudinally on said bed-frame, and upwardly-projecting standards secured to said bed-frame and so positioned as to engage the side-stakes of the running-gear to prevent movement of the bed-frame thereon and also to extend upwardly alongside the wagon-body to retain said body upon the bed-frame when the same is removed from the running-gear, and coöperating means on said body and bed-frame for limiting the rearward movement of said body at the dumping position.

2. In combination with a wagon running-gear having upstanding side-stakes, a dumping-body attachment comprising a rectangular bed-frame formed with side-bars and cross-bars to enable it to be bodily moved from said running-gear, a wagon-body or box mounted to move longitudinally on said bed-frame, and upwardly-projecting standards secured to said bed-frame and so positioned as to engage the side-stakes of the running-gear to prevent movement of the bed-frame thereon and also to extend upwardly alongside the wagon-body to retain said body upon the bed-frame when the same is removed from the running-gear, said standards also being adjustable longitudinally of said bed-frame to adapt them to running-gears coupled in varying lengths, and coöperating means on said body and bed-frame for limiting the rearward movement of said body at the dumping position.

1,272,597. CASING-PERFORATOR. LAWRENCE F. BAASH, Fillmore, Cal. Filed Sept. 13, 1917. Serial No. 191,825. (Cl. 81—198.)

4. In a casing perforator, a body member having upper flattened faces at opposite sides and lower flattened faces at opposite sides, said upper and lower faces being offset relatively to each other and there being guides along corresponding sides of the upper faces and guides along corresponding sides of the lower faces, the upper guides being at opposite sides of the faces from the lower guides, and there being a longitudinal slot extending through the body at right angles to the faces and each pair of faces being provided with a transverse slot at right angles to the longitudinal slot, the lower portions of said transverse slots being longitudinal and the upper portions of said slots being oppositely inclined, slide plates mounted on the flattened faces and against the guides and having cutter wheel bearings transversely elongated, cutter wheels in the longitudinal slot and having spindles extending into the elongated cutter wheel bearings; so that



as the slide plates move upwardly relatively to the body the cutter wheels will move laterally and project their teeth beyond the body; cutting teeth upon the cutter wheels; said teeth projecting from the peripheries of the wheels and said cutting teeth each having a straight rear face radial to the axis of the wheel and a rounded inclined face leaving tangentially an inner circle of the wheel and meeting the outer end of the straight face to form a transverse cutting edge; means for holding the slide plates in position to withdraw the cutter wheels while the perforator is being pushed downwardly into a casing, and means to cause the slide plates to stick in the casing and force the cutter wheels outwardly to perforate the casing.

[Claims 1 to 3 not printed in the Gazette.]

1,272,598. PAPER-HOLDER. STEPHEN D. BAKER, New York, N. Y. Filed Jan. 20, 1917. Serial No. 143,487. (Cl. 211—29.)

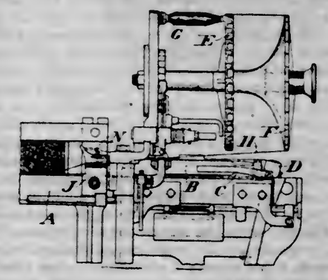


1. In combination, a support having spaced supporting portions, a revoluble roller on which to place a roll of sheet material arranged between said portions and having all but a relatively small part of its surface at one end thereof covered by the corresponding supporting portion, means affording an axial journal for and torsional resistance to the rotation of the roller and including trunnions respectively arranged in said portions, one of said trunnions being retractive and one being non-revoluble, and means, exposed at one end of said roller and near its periphery, for imparting retracting movement to the retractive trunnion.

5. In combination, a support having spaced supporting portions, a revoluble roller, arranged between said portions, on which to place a roll of sheet material, a system of parts affording an axial journal for and torsional resistance to the rotation of the roller and including conjointly retracting trunnions arranged respectively in said supporting portions, one non-revolubly, and means, exposed at one end of the roller, for imparting retracting movement to the trunnions.

[Claims 2 to 4 and 6 not printed in the Gazette.]

1,272,599. WEFT-THREAD CATCHER AND HOLDER FOR AUTOMATIC WEFT-REPLENISHING LOOMS. EUGENE H. BALLOU, Pawtucket, R. I., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Aug. 6, 1917. Serial No. 184,702. (Cl. 139—85.)

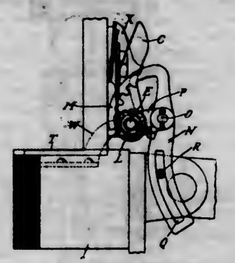


1. A weft replenishing loom having, in combination, a weft end holder carried by the lay and extending in front of the race plate of the lay and located close to the mouth of the shuttle box at the replenishing side of the loom; a pivoted gravity catcher closing the rear of the holder and resting on the bottom of the holder with a flaring entrance between it and the bottom of the holder facing the shuttle path; and an inclined weft thread directing guide between the shuttle path and the thread catcher.

4. A weft replenishing loom having, in combination, a weft end holder carried by the lay and extending forward of the shuttle box at the replenishing side of the loom, and a movable catcher normally closing the rear of the holder.

[Claims 2 and 3 not printed in the Gazette.]

1,272,600. SPENT-WEFT CUTTER. EUGENE H. BALLOU, Pawtucket, R. I., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Aug. 6, 1917. Serial No. 184,703. (Cl. 139—85.)



1. An automatic weft replenishing loom wherein the shuttle box at the replenishing side of the loom is brought to a standstill before the lay reaches its extreme forward position preparatory to weft replenishment having, in combination, a lay with a recess in its top between the warp and the shuttle box at the replenishing side of the loom; a reed on the lay; a stationary shear blade located in said recess; a rock shaft mounted on the back of the lay having a pinion on its outer end and a cutter on its inner end; a spring acting on said rock shaft to maintain

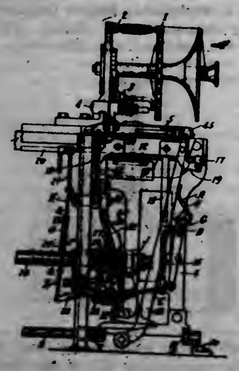
said cutter in contact with the stationary shear blade during the cutting operation; a weft clamp mounted to turn on said rock shaft and yieldingly connected with the cutter so that said cutter may be moved farther than the clamp, said clamp being adapted to clamp a strand of weft against the lay close to the recess therein; a lever pivotally mounted on the lay and having an internal rack engaging said pinion and a cam slot; and a stud on the shuttle box entering said cam slot, whereby said cutter and clamp are normally maintained idle back of the reed but, when the shuttle box stops, the cutter swings into the slot in the lay and the weft clamp clamps the strand of weft to be cut.

4. An automatic weft replenishing loom wherein the shuttle box at the replenishing side of the loom is brought to a standstill before the lay reaches its extreme forward position preparatory to weft replenishment having, in combination, a lay; a rock shaft mounted on the lay having a pinion and a cutter; a lever pivotally mounted on the lay and having an internal rack engaging said pinion and a cam slot; and a stud on the shuttle box entering said cam slot, whereby said cutter is normally maintained idle but when the shuttle box stops, the forward movement of the lay through action of said stud on said lever causes said pinion to rotate thereby swinging the cutter.

7. An automatic weft replenishing loom wherein the shuttle box at the replenishing side of the loom is brought to a standstill before the lay reaches its extreme forward position preparatory to weft replenishment having, in combination, a lay having a recess in its top between the warp and the shuttle box at the replenishing side of the loom; a movable cutter on the lay; a weft clamp mounted on the lay to move with the cutter and yieldingly connected with the cutter so that said cutter may be moved farther than the clamp, said clamp being adapted to clamp a strand of weft against the lay close to the recess therein; and actuating means for the cutter connected with the shuttle box so that when the shuttle box stops and the forward movement of the lay continues the cutter moves into the slot in the lay and causes the weft clamp to move until it clamps the strand of weft extending from the fell of the cloth to the shuttle against the lay.

[Claims 2, 3, 5, and 6 not printed in the Gazette.]

1,272,601. AUTOMATIC WEFT-REPLENISHING LOOM. EUGENE H. BALLOU, Pawtucket, R. I., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Aug. 6, 1917. Serial No. 184,704. (Cl. 139—85.)

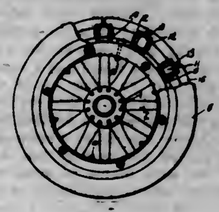


1. An automatic weft replenishing loom wherein when replenishment is effected the shuttle box stands still while the lay continues to move forward having, in combination, a replenishing lever which by its movement causes the dwell of the shuttle box and the supply of weft thereto; a normally ineffective rotary and sliding replenishing cam cooperating with said replenishing lever when replenishment is demanded; a rock-shaft connected with said cam and acting to slide said replenishing cam into and out of reach of the replenishing lever; a starting shaft which is rocked when replenishment is required; a yieldingly extensible connection between said shafts; a guide fast on said rock shaft; a rtud movable on said guide; a rotary controlling cam; a controller moved by said controlling cam and adapted to encounter said stud so as to move said replenishing cam to ineffective position in the event that the shuttle is not properly boxed at the replenishing side of the loom; the picker at the replenishing side of the loom; a spring actuated lever which is swung in opposition to its spring when the picker is forced outwardly by the shuttle; and connections between said lever and said stud whereby said stud is in the path of the controller when the shuttle is not properly boxed and is out of such path when the shuttle is correctly boxed.

4. An automatic weft replenishing loom wherein when replenishment is effected the shuttle box stands still while the lay continues to move forward having, in combination, a replenishing lever which by its movement causes the dwell of the shuttle box and the supply of weft thereto; a replenishing cam coöperating with said replenishing lever when replenishment is demanded; a controller acting to move said cam to ineffective position in the event that the shuttle is not properly boxed at the replenishing side of the loom; and means governed by the position of the shuttle in the box at the replenishing side of the loom to render said controller active when the shuttle is not properly boxed and to render said controller idle when the shuttle is correctly boxed.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,272,602. RESILIENT WHEEL. SAMUEL CLAY BARR, Chillicothe, Ohio. Filed Jan. 11, 1915. Serial No. 1,557. (Cl. 152—5.)



1. In a resilient wheel, a felly, an annular member comprising tread sections, plates joining said tread sections, and resilient means mounted upon said felly to support said plates, said plates being positioned inward of the tread surfaces of said tread sections.

3. In a resilient wheel, a felly and an annular member comprising tread sections, resilient members supporting said sections, hinge members connecting said sections to said felly, and lateral extensions on the inner ends of said hinge members to limit their movement.

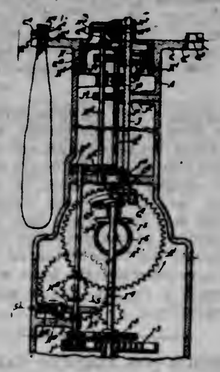
9. In a resilient wheel, the combination of a wheel body, a unitary member comprising tread sections disposed about said wheel body, and yieldable box-like formations to connect said tread sections to the wheel body, the two sides of said box-like formations being collapsible independently of each other.

12. A resilient wheel, which comprises a wheel body, a plurality of tread sections, and a yieldable box-like element connecting each two adjacent tread sections to the wheel body and to each other, said box-like elements being constructed to permit one tread section to yield toward the wheel body without influencing the adjacent section to yield toward the wheel body.

13. In a resilient wheel, a felly, an annular member comprising tread sections, resilient means positioned between said member and felly to support adjacent ends of tread sections, and links connecting said adjacent ends of tread sections, said links positioned upon said means so that movement of one tread section toward said felly will tend to cause the adjacent tread section to move away from said felly.

[Claims 2, 4 to 8, 10, 11, and 14 not printed in the Gazette.]

1,272,603. BAG-TYING MACHINE. ADELMER M. BATES, Chicago, Ill., assignor to Bates Valve Bag Company, Chicago, Ill., a Corporation of West Virginia. Filed May 10, 1915. Serial No. 27,002. (Cl. 140—93.)



1. A bag tying machine comprising means for forming a tie, means for puckering the neck of a bag, means for feeding the tie to the bag, and for twisting it about the neck thereof.

9. A bag tying machine comprising means for forming a tie, means for puckering the neck of a bag, means for feeding the tie to the bag and for twisting it about the neck thereof, and a master timing and driving member, and means for driving all of said operating means in coördination therefrom.

17. A rotary bag-feeding plate the periphery of which is provided with a series of separate bag-containing pockets and yielding bag-holding means within each of said pockets, said means comprising a substantially U-shape spring, the free arms of the spring being bent across one another and then bent back to form a normally closed spring clamp for the bag.

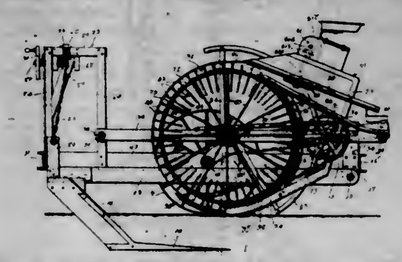
18. A rotary bag-feeding plate the periphery of which is provided with a series of separate bag-containing pockets, bag guide means arranged radially about said plate open for discharge of the bag into said bag-holding means.

24. In a tie forming machine, a surface upon which the tie blank is adapted to rest, a presser foot and means for moving the presser foot toward and holding it against the surface to hold the blank in position, and a yielding connection between said presser foot and its supporting means to permit movement thereof after the foot has seated, and means responsive to such further movement for upsetting the ends of a blank to form a tie, said means comprising a pair of head-forming dies one on either end of the blank and a toggle connection between them and the supporting means.

[Claims 2 to 8, 10 to 16, and 19 to 23 not printed in the Gazette.]

1,272,604. BEET-HARVESTER. SAMUEL C. BEALS and ANNA B. KNIGHT, Los Angeles, Cal., assignors, by direct and mesne assignments, to American Beet Harvester Company, Santa Ana, Cal., a Corporation of California. Filed Mar. 8, 1917. Serial No. 153,261. (Cl. 55—108.)

1. In a beet-harvester, a frame, a wheel rotatably mounted on the frame, beet clamping members carried by the wheel, means to rotate the wheel, said clamping members being normally in clamped position, means to force said members apart and then allow them to move together to clamp beets, and rearwardly and upwardly curved skids having their under faces adapted for engaging the surface of the ground on opposite sides of the lowermost point of the wheel to dispose beets into position to be clamped by the clamping arms at the time said arms are allowed to move together.



2. In a beet harvester, a frame, a means for picking the beets from the ground carried by the frame and comprising a wheel, a plurality of equidistantly spaced slats mounted on the periphery of the wheel transversely thereof, a pair of U-shaped resilient clamping members mounted in the spaces between the slats, means to secure the ends of the outermost arms of the clamping members to the wheel, the opposed inner arms of the clamping members of each pair being longer than the other arms and extending between the slats outwardly therefrom, and a cam means for forcing the arms apart and releasing them at points adjacent the lower side of the wheel whereby beets will be clamped by the arms and removed from the ground upon rotation of the wheel.

6. In a beet harvester, a wheeled frame, a rotary wheel mounted upon the wheeled frame, a plurality of beet clamping members carried upon the periphery of the rotary wheel, means to rotate the wheel, said wheel and the beet clamping means being spaced from the ground, and means carried by the wheeled frame and having sliding engagement with the ground on opposite sides of the lower side of the wheel for guiding beets into position to be clamped and picked up by the beet clamping members.

8. In a beet harvester, a wheeled frame, a beet clamping means carried by the frame, and upwardly and rearwardly curved skids carried by the wheeled frame and having their under faces adapted to come into engagement with the surface of the ground on opposite sides of the lowermost point of the beet clamping means so as to guide beets into position to be clamped.

10. In a beet harvester, a frame, an endless carrier mounted on the frame, resilient beet clamping arms mounted on the endless carrier in two opposed series normally tending to be held toward one another, means to operate the carrier to move the beet clamping arms, means to guide the beets into the path of movement of the beet clamping arms, and means adjacent the beet guiding means and adjacent another portion of the carrier to spread the opposed arms apart as said arms travel past said means.

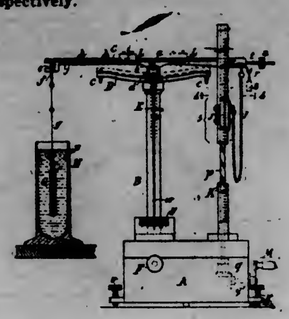
[Claims 3 to 5, 7, and 9 not printed in the Gazette.]

1,272,605. SPECIFIC-GRAVITY SCALE. CHRISTOPHER A. BECKER, West Nutley, N. J., assignor to The Torsion Balance Company, New York, N. Y., a Corporation of New York. Filed Dec. 11, 1917. Serial No. 206,621. (Cl. 265—44.)

1. In a specific gravity scale, a beam, a plummet suspended from one arm thereof, a counterpoise movable on the beam to definite locating points thereon, a weighing chain hung to the beam at one end, a movable support to which the other end of the chain is hung and by which it is vertically adjustable, and a graduated part indicating the movement of said support, the graduations thereon covering a total range corresponding to the range between successive positions of said counterpoise.

2. The specific gravity scale of claim 1, said support being a vertically-movable slide, with a vertical guide.

for said slide, the graduations being on the slide and guide respectively.

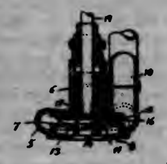


3. The specific gravity scale of claim 1, combined with a weight adapted to be hung on the beam at a point opposed to the plummet, and to counterbalance the latter, to enable the scale to be adjusted before weighing.

4. The specific gravity scale of claim 1, the beam formed with longitudinal grooves, and the counterpoise formed as a slider having projections engaging said grooves, to hold the slider in engagement with the beam.

5. In a scale, the combination of a beam having longitudinal grooves and having successive locating notches, and a counterpoise formed as a slide having means for engaging said notches and having projections engaging said grooves, to hold the slide in engagement with the beam, the engagement between the slide and beam having sufficient play in vertical direction to permit the slide to be lifted from such notches.

1,272,606. CENTRIFUGAL PUMP. JAMES D. BELL, Seattle, Wash. Filed Oct. 26, 1915. Serial No. 57,921. (Cl. 253—198.)

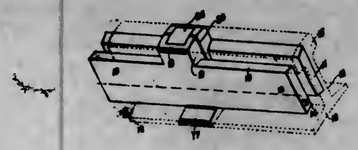


1. A pump including a horizontal casing having a central opening formed in the bottom wall thereof, a vertical flange surrounding said opening, a plurality of spaced dams connecting said flange with the upper wall of the casing, and an impeller rotatable within said flange and including a plurality of blades adapted to direct the water against said dams and outwardly through the spaces therebetween.

2. A centrifugal pump, including a horizontal casing provided with a central inlet opening in the bottom wall thereof, a vertical flange surrounding said opening, a water passage surrounding said flange and having an outlet communicating therewith, a partition interrupting the continuity of said water passage adjacent said outlet, a plurality of dams connecting the upper edge of said flange with the top wall of the casing, and an impeller rotatable within said flanges and dams, said impeller including a pair of superimposed disks, a plurality of blades connecting said disks, and an inlet depending from one of said disks.

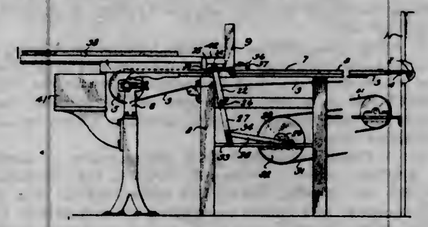
1,272,607. RAIL-JOINT. JOSEPH BENCSH and JOHN ROMBSOM, Detroit, Mich. Filed May 22, 1918. Serial No. 236,046. (Cl. 238—3.)

1. In a rail-joint, a pair of splice-bars fitted flat against the webs of the rails between the base flanges and heads thereof, an offset vertical enlargement integral with the inner side of each bar, said enlargements confronting each other and fitting between the rail extremities and comprising a bridge therebetween, a dovetailed recess in each enlargement vertically therein, and means seated in said dovetailed recesses whereby to inter-lock the splice-bars together.



2. In a rail-point, a pair of splice-bars formed to lie flat against the webs of rail extremities, one bar on each side thereof between the base flanges and rail heads, each bar being formed intermediate its length on its inner side with an offset vertical enlargement to fit between the rail extremities, said enlargements together comprising a bridge between said extremities, each of said enlargements being provided with a dovetailed recess vertically thereof, a clamping pin inserted partly in each recess to lock said plates together, the head of said clamping pin being recessed in the top ends of said enlargements to lie flush therewith.

1,272,608. DEVICE FOR FEEDING CAKES AND THE LIKE. ALBERT BLEILE, Dayton, Ohio. Filed Dec. 6, 1917. Serial No. 205,796. (Cl. 193—48.)



1. In a device of the character described, a supporting structure, a conveyer movable over said structure, a housing mounted above said conveyer and extending transversely thereof, said housing comprising a bottom plate and a series of compartments extending upwardly therefrom and each adapted to receive a stack of superimposed cakes, and each having a discharge opening near one edge of said bottom plate, an ejector arranged on that side of said housing opposite said discharge openings and having parts adapted to enter the respective compartments to discharge the lowermost cakes therefrom onto said conveyer, means for actuating said ejector, and a series of fingers supported above said conveyer adjacent to the discharge openings for said compartments and arranged in planes extending between the respective compartments of said housing, whereby the cakes discharged from said openings will be held against turning movement.

2. In a device of the character described, a supporting structure, a conveyer movable over said structure, a housing mounted above said conveyer and extending transversely thereof, said housing comprising a bottom plate and a series of compartments extending upwardly therefrom and each adapted to receive a stack of superimposed cakes, and each having a discharge opening near one edge of said bottom plate, an ejector arranged on that side of said housing opposite said discharge openings and having parts adapted to enter the respective compartments to discharge the lowermost cakes therefrom onto said conveyer, means for actuating said ejector, a bar mounted on said structure adjacent to the discharge side of said housing and extending transversely of said conveyer above the same, a series of fingers carried by said bar and depending therefrom in planes extending between the respective compartments of said housing, said fingers being supported with their lower edges out of engagement with said conveyer.

3. In a device of the character described, a conveyer, a structure arranged above said conveyer comprising a plurality of compartments each adapted to receive a pile of cakes, an ejector having parts adapted to engage the cakes therein and discharge the same onto said conveyer, a stacking device arranged in the rear of said structure beyond said ejector, and a removable tray interposed between said stacking device and said structure above said ejector.

4. In a device of the character described, a conveyer, a structure arranged above said conveyer and comprising a plurality of compartments each adapted to receive a pile of cakes, an ejector having parts adapted to engage the cakes therein and discharge the same onto said conveyer, a stacking device arranged in the rear of said structure beyond said ejector, and a guard interposed between said stacking device and said structure to prevent crumbs and the like from falling on said ejector.

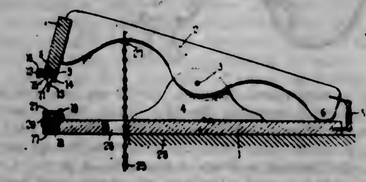
1,272,609. LAWN-SPRINKLER. GEORGE C. BOHNENKEMPER, Denver, Colo. Filed Oct. 6, 1917. Serial No. 195,045. (Cl. 137—63.)



1. A sprinkler of the character described, comprising an axle, supporting wheels loosely mounted on the axle, a reciprocating propelling member, and a rotating sprinkler operatively connected with the reciprocating propelling member, whereby the rotation of the sprinkler causes a reciprocation of the propelling member and an intermittent movement of the sprinkler.

[Claims 2 to 10 not printed in the Gazette.]

1,272,610. MACHINE FOR MARKING THE POSITION OF BUTTONS AND BUTTONHOLES IN GARMENTS. GUSTAVE BRAF, Brooklyn, N. Y. Filed June 1, 1916. Serial No. 101,167. (Cl. 33—190.)



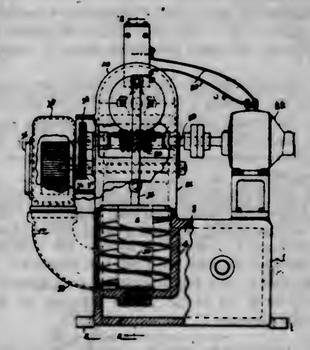
3. A device of the character described comprising a base, a movable member mounted thereon, a bar carried by one end of said member, means for locking said bar against movement in the member, a plurality of markers longitudinally adjustable on the bar, a gage adapted to coact with said markers and means for operating the member.

4. A device of the character described comprising a base, a movable member mounted thereon, a bar carried by one end of said member, means for locking said bar against movement in the member, a plurality of markers rotatably adjustable on the bar, a gage adapted to coact with said markers and means for operating the member.

5. A device of the character described comprising a base, a movable member mounted thereon, a bar carried by one end of said member, means for locking said bar against movement in the member, a plurality of markers longitudinally and rotatably adjustable on the bar, a gage adapted to coact with said markers and means for operating the member.

[Claims 1, 2, and 6 to 13 not printed in the Gazette.]

1,272,611. AIR-COMPRESSOR. CHARLES L. BRALEY, Cincinnati, Ohio, assignor to The American Laundry Machinery Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Sept. 9, 1916. Serial No. 119,289. (Cl. 230—6.)



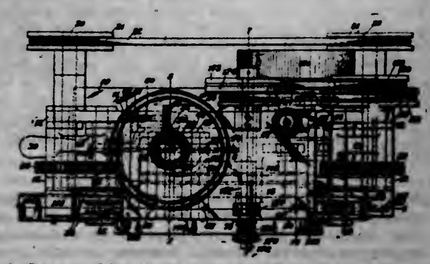
1. An air compressor, comprising a cylinder having a hollow wall provided with a passage therethrough open to the atmosphere at one end, motor means, a piston driven thereby and operating in said cylinder, means operated by said motor means for circulating air through said passage to the atmosphere, and means for supplying air to said cylinder directly from the atmosphere.

3. An air compressor, comprising a cylinder having a hollow wall provided with a tortuous passage therethrough open at one end to the atmosphere, a valve in one end of said cylinder, a piston, a valve therein, means for reciprocating said piston, and an air pump operated by said piston reciprocating means for circulating air through said passage to the atmosphere.

7. An air compressor, comprising a hollow casing forming a reservoir for air, a pump for supplying air to said reservoir, a motor operating said pump, a fan driven by said motor for circulating cooling air around said pump, a switch controlling said motor, and a piston subject on one side to the pressure in said reservoir and arranged when said pressure reaches a maximum to move outwardly and open said switch.

[Claims 2, 4 to 6, 8 and 9 not printed in the Gazette.]

1,272,612. STRAP-WORKING MACHINE. ARTHUR J. BRAUER, St. Louis, Mo. Filed July 17, 1913. Serial No. 779,554. (Cl. 164—15.)



1. In a machine of the class described, the combination with strap supporting means, of means for operating on

the strap, and mechanism for controlling the operation of said operating means constructed and arranged to cause said operating means to operate on the strap body between its ends and at a predetermined position with respect to a predetermined point on the strap.

10. In a machine of the class described, the combination with means for feeding a strap endwise, of means for operating on the strap, and mechanism controlled by the engagement of the strap therewith, constructed and arranged to cause said operating means to operate on the strap body between its ends at a predetermined position with respect to a predetermined point on the strap.

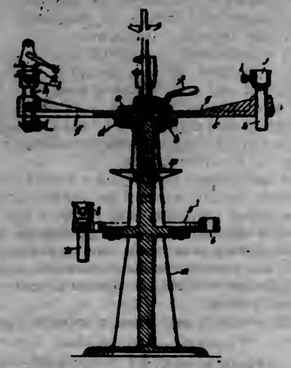
22. In a machine of the class described, the combination with means for feeding a strap endwise, of a device for operating on the strap body between its ends, and controlling mechanism for said device including a movable member in the path of the strap, together with means for moving said member through the strap when it engages said member.

31. In a machine of the class described, the combination with means for feeding a strap endwise, of means for operating on the front end of the strap, means comprising a series of operating elements for operating on the strap intermediate its ends, and means for operating on the rear end of the strap.

55. In a machine of the class described, the combination with means for feeding a strap endwise, of means for operating on the strap, driving means for said operating means including a clutch, a spring for tripping said clutch, a member in the path of the strap for tripping said spring, and a cam for tensioning said spring.

[Claims 2 to 9, 11 to 21, 23 to 30, and 32 to 54 not printed in the Gazette.]

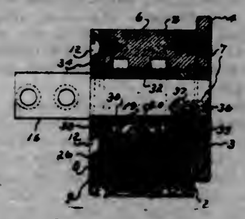
1,272,613. MACHINE-STAND. LOUIS BROMMEL, Southington, Conn., assignor to The Peck, Stow & Wilcox Company, Southington, Conn., a Corporation of Connecticut. Filed Mar. 16, 1917. Serial No. 155,204. (Cl. 29—1.)



A machine stand comprising a pedestal, a circular bearing head at the upper end of said pedestal, a table centrally recessed to fit upon said bearing head, said table having a plurality of spaced radially extending arms, each of said arms having an aperture adjacent its outer terminal to removably support a tool holder, tool holding means carried by each arm whereby said tool holders may be vertically adjusted with relation to its respective arm, and a locking means for said table whereby the latter may be held in any position of rotary adjustment with relation to the pedestal.

1,272,614. CHUCK. ROSWELL S. BROWN, New Britain, Conn., assignor to The New Britain Machine Company, New Britain, Conn., a Corporation of Connecticut. Filed Sept. 28, 1917. Serial No. 193,639. (Cl. 279—110.)

1. A chuck comprising a body having separate projections, a plate bridging the projections, a tube connected with the body extending between the projections, and constituting a support for the pilot end of a tool, the plate being provided with means to clamp the tube against the projections, and two diametrically opposite jaws carried by the body, the latter being provided with a rotary screw furnished with oppositely threaded portions, the jaws being provided with oppositely threaded portions to receive the corresponding portions of the screw and the work gripping parts of the jaws extending outwardly beyond the face plate.

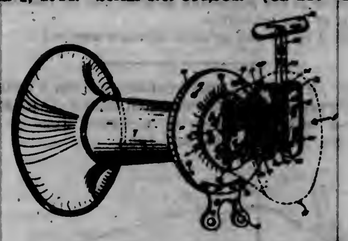


3. A chuck comprising a body having separate projections, a plate bridging the projections, a tube connected with the body, extending between the projections, and constituting a support for the pilot end of a tool, the front end of the tube having an external bead, and the plate having a rabbet on its inner side to receive the bead and thus bind the same against the projections, and jaws carried by the body, the latter being provided with means for effecting the action of the jaws.

5. A chuck comprising a body having separate projections, a plate bridging the projections, a tube connected with the body extending between the projections, the plate having means to engage a part of the tube to force said tube part against the projections, means carried by the body and engaging the tube to prevent rotation thereof, and jaws carried by the body, the latter being provided with means for effecting the action of the jaws.

[Claims 2 and 4 not printed in the Gazette.]

1,272,615. HORN. IGNATUS BUCKMAN, New York, N. Y., assignor to Leonye V. Howard, New York, N. Y. Filed Oct. 1, 1914. Serial No. 864,884. (Cl. 116—1).



1. In a mechanical horn, a vibratable diaphragm, a movable impact member therefor, said impact member when moved being adapted to cause vibrations of said diaphragm, a ratchet operatively connected with and adapted to drive said impact member, a plurality of pawls, a movable support for said plurality of pawls, said support being spring-pressed to a certain position and having an edge facing the impact member and beyond which the pawl tips project, and a guiding means for said support, and means adapted during movement of said support to bring about, first, a coöperation between one of said pawls and one of the teeth carried by said ratchet thereby to rotate the ratchet, and, next, a coöperation between another of said pawls and another of the teeth carried by said ratchet thereby further to rotate said ratchet, said pawls being urged to project their tips toward said ratchet and farther beyond said edge of the support than the shortest perpendicular distance between a portion of said ratchet and said edge.

2. In a mechanical horn, a vibratable diaphragm, a movable impact member therefor, said impact member when moved being adapted to cause vibrations of said diaphragm, a ratchet operatively connected with and adapted to drive said impact member, a plurality of pawls, a movable support for said plurality of pawls, said support being spring-pressed to a certain position, and a guiding means for said support, and means adapted during movement of said support to bring about, first, a coöperation between one of said pawls and one of the teeth carried by said ratchet thereby to rotate the ratchet, and, next, a coöperation between another of said pawls and another of the teeth carried by said ratchet thereby further to rotate said ratchet, said guiding means limiting to a substantially straight line the movement of said support.

3. In a mechanical horn, a vibratable diaphragm, a movable impact member therefor, said impact member when moved being adapted to cause vibrations of said diaphragm, a ratchet operatively connected with and adapted to drive said impact member, a plurality of pawls, a movable support for said plurality of pawls, said support being spring-pressed to a certain position, and a guiding means for said support, and means adapted during movement of said support to bring about, first, the coöperation between one of said pawls and one of the teeth carried by said ratchet thereby to rotate the ratchet, and, next, a coöperation between another of said pawls and another of the teeth carried by said ratchet thereby further to rotate said ratchet, said guiding means limiting to a substantially straight line the movement of said support and said straight line being substantially perpendicular to a line passing through the center of the ratchet and the point whereat, with the said support located in its said spring-pressed position, there is initiated the coöperation first above-mentioned.

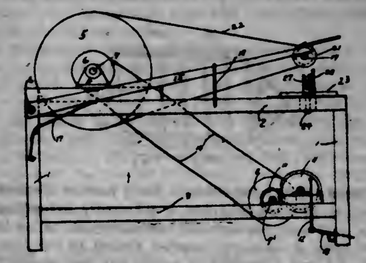
4. In a mechanical horn, a vibratable diaphragm, a movable impact member therefor, said impact member when moved being adapted to cause vibrations of said diaphragm, a ratchet operatively connected with and adapted to drive said impact member, a plurality of pawls, a movable support for said plurality of pawls, said support being spring-pressed to a certain position, and a guiding means for said support, and means adapted during movement of said support to bring about, first, a coöperation between one of said pawls and one of the teeth carried by said ratchet thereby to rotate the ratchet, and, next, a coöperation between another of said pawls and another of the teeth carried by said ratchet thereby further to rotate said ratchet, said guiding means limiting to a substantially straight line the movement of said support; said pawls being spring-urged to project their tips away from said straight line and toward the teeth of said ratchet.

5. In a mechanical horn, a vibratable diaphragm, a movable impact member therefor, said impact member when moved being adapted to cause vibrations of said diaphragm, a ratchet operatively connected with and adapted to drive said impact member, a plurality of pawls, a movable support for said plurality of pawls, said support being spring-pressed to a certain position and a guiding means for said support, and means adapted during movement of said support to bring about, first, a coöperation between one of said pawls and one of the teeth carried by said ratchet thereby to rotate the ratchet, and, next, a coöperation between another of said pawls and another of the teeth carried by said ratchet thereby further to rotate said ratchet; said support having associated therewith a bow-spring adapted to press said support to a certain position.

[Claims 6 and 7 not printed in the Gazette.]

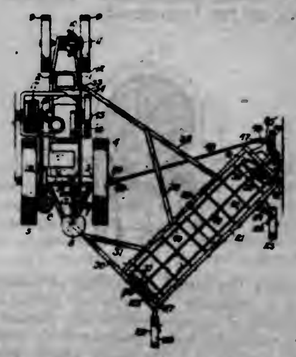
1,272,616. SAW-SHARPENING DEVICE. JOSEPH B. BUJOLD, Granite Falls, Wash. Filed Nov. 18, 1916. Serial No. 130,976. (Cl. 76—40.)

2. In a manually operated cross cut saw filing device, the combination of a frame, file supporting vertically swinging arms pivoted to said frame, a saw supporting table pivoted to and horizontally swingable on said frame directly beneath the free end of said swinging arms, whereby a saw which is mounted on said table may be moved in adjustable angular relationship to the filing device.



[Claim 1 not printed in the Gazette.]

1,272,617. HAY-RAKE. EDWARD W. BURGESS, Chicago, Ill., assignor to International Harvester Company of New Jersey, a Corporation of New Jersey. Filed Dec. 9, 1915. Serial No. 66,004. (Cl. 56—115.)



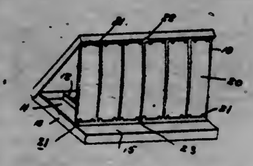
1. In combination, a rake frame, a rotatable hay raking element carried by said frame, a motor-operated vehicle having power driven traction wheels thereon, means for detachably connecting said frame with said vehicle, and means operatively connecting said hay raking element with one of the power driven traction wheels for giving the raking element a raking action.

2. In combination, a rake frame, a rotatable hay raking element carried by said frame, a motor operated vehicle having power driven traction wheels thereon, means for detachably connecting said frame with said motor-operated vehicle in trailing and offset relation, and including a plurality of braces connected to said vehicle in spaced relation, means for operatively connecting said hay raking element with one of the power driven wheels of said vehicle for actuating said raking elements.

3. In combination, a rake frame disposed at an angle with the line of draft, a draft frame forming a part of said rake frame, a rotatable hay raking cylinder journaled in bearings carried by said rake frame, a motor-operated vehicle having power driven traction wheels and disposed in advance of and at one side of said rake frame, means including a plurality of braces for detachably connecting said draft frame with said vehicle, and flexible operating connections between said cylinder and one of the power driven traction wheels of said vehicle for actuating the said raking cylinder.

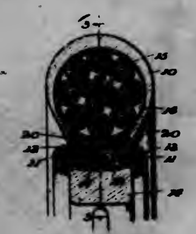
[Claim 4 not printed in the Gazette.]

1,272,618. DISPLAY-CASE. FREDERICK G. BURGESS, Brooklyn, N. Y., assignor to J. F. Sturdy's Sons Co., Attleboro Falls, Mass., a Corporation of Massachusetts. Filed Mar. 14, 1918. Serial No. 222,281. (Cl. 211—24.)



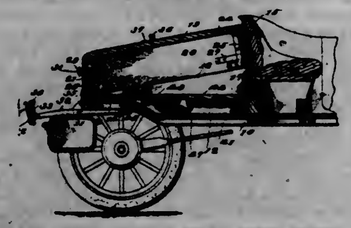
A display case comprising a body portion divided into a plurality of compartments, a forwardly extending portion on said body beyond said compartments, a lid hinged to said body, a standard member hinged to the free edge of said lid and arranged to swing out and support said lid in open position and swing back into the lid when the latter is to be closed, the inner edge of said extending portion serving as a stop for limiting the forward swing of said standard, and means on said standard for supporting a plurality of sets of goods in position to register with its corresponding compartment in the box.

1,272,619. YIELDABLE TIRE-FILLING. JULIAN G. CAMPAU, Monroe, Mich., assignor of one-fourth to Charles C. Grodi, Monroe, Mich. Filed Dec. 31, 1917. Serial No. 209,779. (Cl. 152—5.)



A filler for a tire casing comprising an annular member formed of a plurality of units of yieldable material grouped around a common center and incased in an envelop, said annular member adapted to be disposed within the outer portion of a tire casing, and an annular holding rib of yieldable material engaging the annular member and adapted to bear against the rim of the wheel on which the tire casing is disposed.

1,272,620. CONVERTIBLE AUTOMOBILE-BODY. CHARLES J. CARLSON, Helena, Mont. Filed Sept. 15, 1917. Serial No. 191,602. (Cl. 21—7.)



1. A vehicle body formed to provide a rumble compartment, a hinged top section for the said compartment, the said section being movable to inverted position projecting rearwardly from the said compartment to provide a truck body, bracket arms projecting rearwardly from the said compartment, a cross bar extending between the said arms to engage beneath the said section for supporting the said section in inverted position, and a cushion between the bar and the said section.

3. A vehicle body formed to provide a rumble compartment, a shiftable top section for said compartment, and floor sections for the said compartment shiftable to a position providing a seat and back rest respectively.

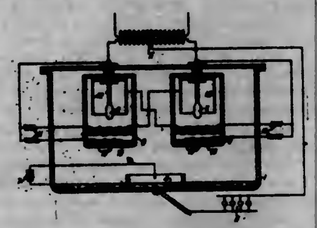
6. A vehicle body formed to provide a rumble compartment, a top section for the said compartment movable to a position coöperating therewith for providing a truck body, a handle upon the top section, means spaced from the rear of the compartment for supporting the top section in the said position, and means upon said first mentioned means adapted for engagement with the handle for locking the top section in the said position.

7. A vehicle body formed to provide a rumble compartment, a hinged top section for the said compartment movable to inverted position coöperating therewith to provide a truck body, bracket arms projecting rearwardly from the said compartment, an end gate for the compartment movable to open position resting against said bracket arms to be supported thereby, and a cross bar extending between the said arms to engage beneath the said section for supporting the section in inverted position.

8. A vehicle body formed to provide a rumble compartment, a shiftable top section for the said compartment, the floor of the compartment being formed with an opening, a false floor extending beneath said opening, and floor sections normally closing the opening and movable to position providing a seat and back rest respectively above said opening, the false floor being adapted to receive the feet of an occupant of the said seat.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,272,621. SHIELDING SYSTEM FOR VAPOR-CONVERTERS. LEWIS W. CHUBB, Edgewood Park, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 9, 1915. Serial No. 44,417. (Cl. 175—354.)



1. In an evacuated electric device, the combination with a pair of electrodes, of means for initiating and maintaining an arc therebetween, and means operative through electrostatic action for restricting said arc to a portion only of one of said electrodes.

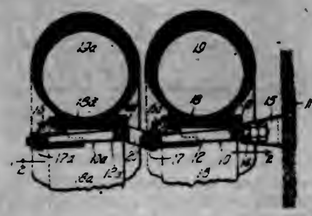
2. In an evacuated electric device, the combination with a pair of electrodes, one of which is solid and has occluded gases liberated from but a portion thereof, of means for initiating and maintaining an arc between said electrodes, and means operative through electrostatic action, for confining said arc to the gas-free portion of said solid electrode.

9. In a vapor converter, the combination with a pair of anodes alternating in potential, of a cathode, perforated suppressor shields associated with each of said anodes and electrically connected thereto through current-limiting devices, an auxiliary conducting shield associated with each anode, and connections from each auxiliary shield to the other anode, whereby the movement of electrons to each anode is controlled.

10. In a vapor converter, the combination with a pair of anodes alternating in potential, each of said anodes having gas-free and gas-bearing portions, of a cathode, perforated suppressor shields associated with each of said anodes and electrically connected thereto through current-limiting devices, an auxiliary conducting shield associated with each anode, and connections from each auxiliary shield to the other anode, whereby the movement of electrons to said gas-bearing portions and the consequent liberation of gas therefrom is substantially prevented.

[Claims 3 to 8 not printed in the Gazette.]

1,272,622. TIRE-IRON. WILLIAM P. COLLINS, Los Angeles, Cal. Filed Oct. 28, 1915. Serial No. 58,490. (Cl. 224—29.)

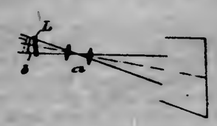


1. A tire iron for carrying spare tires, embodying a plurality of tire holding devices each comprising a stationary and a movable clamping member, the stationary clamping member of one device being rigidly and permanently connected with and mounted on the movable clamping member of another adjacent device, and stationary mounting means for the stationary member of the second mentioned device.

5. A tire iron or the like, embodying a plurality of holding devices each comprising a stationary clamping member and a tapered stud with a screw threaded end, a movable clamping member adjustable on said stud, and a nut engaging the screw threaded end and bearing against the movable member to hold it in place, means for permanently supporting the stationary clamping member and stud of one of said devices, the stationary clamping member and stud of each device being formed integrally, and the stationary member and stud of another adjacent one of said devices being integrally connected to and supported on the movable clamping member of the said first mentioned device, said connection embodying a connecting member in hollow rectangular formation, the hollow interior of said member providing for access to the nut engaging the screw threaded stud end of the first mentioned device.

[Claims 2 to 4 and 6 to 8 not printed in the Gazette.]

1,272,623. METHOD OF AND APPARATUS FOR NEUTRALIZING DISTORTIONS OF OPTICAL PROJECTIONS. DANIEL F. COMSTOCK, Brookline, Mass., assignor, by mesne assignments, to Technicolor Motion Picture Corporation, Boston, Mass., a Corporation of Maine. Filed June 21, 1915. Serial No. 35,196. (Cl. 88—24.)



1. The method of producing on a screen which is oblique to the central ray of the light striking the screen, a magnified substantially undistorted image of the object, comprising projecting a beam of light from the object to the screen, and distorting the beam in such manner that an oblique section of the image beam in the image region is substantially geometrically similar to the object.

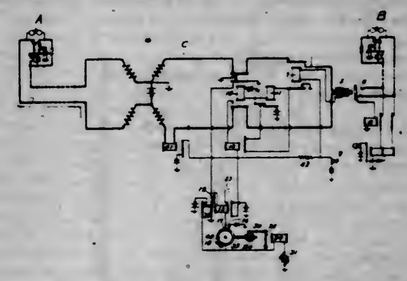
7. Projection apparatus for producing on a screen which is oblique to the object, a magnified substantially undistorted image of the object, comprising means for projecting a beam of light from the object to the screen, and means for distorting the beam by refraction in such manner than an oblique section of the image beam in the image region is substantially geometrically similar to the object.

15. Projection apparatus having an optical axis and an object, a positive cylindrical lens, an objective lens, and a screen, the cylindrical lens and the screen being oblique to the optical axis.

18. Projection apparatus for producing, on a screen which is oblique to the object, a magnified image of the object which is substantially free from keystone distortion, comprising means for projecting a beam of light from the object to the screen, and light deflecting means for laterally deflecting the beam in varying degree from top to bottom so that an oblique section of the beam in the region of the screen is laterally magnified uniformly.

[Claims 2 to 6, 8 to 14, 16, 17, 19, and 20 not printed in the Gazette.]

1,272,624. TELEPHONE-EXCHANGE SYSTEM. ROY D. CONWAY, Chatham, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 21, 1917. Serial No. 156,294. (Cl. 179—84.)



1. A telephone exchange system comprising telephone lines, a link circuit, a source of signaling current, a commutator, an electromagnetic switching device for connecting signaling current to a line and operating under the control of the commutator in response to the connection of the link circuit with a line, and motor mechanism for actuating the commutator started upon the operation of the electromagnetic switching device.

3. A telephone exchange system comprising telephone lines, a link circuit, a source of signaling current, a rotatable commutator adapted when started to make a complete revolution, an electromagnetic switching device operating under control of the commutator when the link circuit is connected with a line to connect signaling current therewith and released when the commutator has rotated a predetermined distance, motor mechanism for rotating the commutator, an operating circuit therefor completed upon the operation of the switching device, and a second operating circuit therefor substituted for the first operating circuit when the commutator has rotated the predetermined distance.

4. A telephone exchange system comprising telephone lines, a link circuit, a source of signaling current, a rotatable commutator adapted when started to make a complete revolution, an electromagnetc switching device adapted when operated to connect signaling current to a line, an operating circuit therefor including the commutator established upon the connection of the link circuit with a line and maintained until the commutator has rotated a predetermined distance, motor mechanism for rotating the commutator, an operating circuit for the motor mechanism including a contact of the switching device, and a second operating circuit for the motor mechanism substituted for the first mentioned operating circuit when the commutator has rotated a predetermined distance.

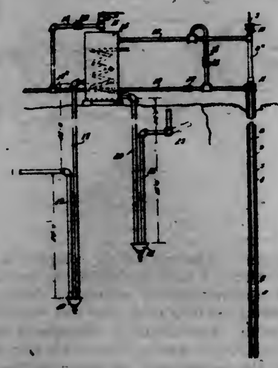
6. A telephone exchange system comprising telephone lines, a link circuit, a source of signaling current, a rotatable commutator adapted when started to make a complete revolution, an electromagnetic switching device adapted when operated to connect signaling current to a

line, an operating circuit therefor including the commutator established upon connection of the link circuit with a line and maintained until the commutator has rotated a predetermined distance, an intermittently actuated motor magnet for imparting step-by-step movement to the commutator, and an operating circuit for the motor magnet established by the operation of the electromagnetic switching mechanism and maintained by the commutator after the rotation thereof for the predetermined distance.

7. In a telephone exchange system comprising telephone lines, a link circuit, a source of signaling current, a commutator, an electromagnetic switching device for connecting signaling current to the line operating under the control of the commutator, motor mechanism for actuating the commutator, and means controlled by said switching means for starting said motor mechanism into operation.

[Claims 2 and 5 not printed in the Gazette.]

1,272,625. OIL-WELL APPARATUS. WALDEEN H. COOPER, Sistersville, W. Va. Filed May 2, 1918. Serial No. 232,127. (Cl. 166—1.)



1. The combination of an oil well pump, a suction line serving to conduct a flow of oil and gas therefrom, and means associated with said line for separating the oil from the gas, said line operative as a pressure reduction means for said pump.

5. The combination with an oil well pump, of pressure reducing means therefor including a vacuum line adapted to conduct a flow of gas and oil from said pump, a separater tank interposed in said line and designed to separate and receive the oil from said line, and means for applying heat to the oil in said tank.

11. The combination with an oil well pump, of a pressure reduction and equalising means therefor embodying a vacuum line wherein suction is employed to conduct a flow of liquid and gas from said pump, a vacuum separating tank interposed in said line and operating to receive the fluid from said line, and tubular means constructed to conduct the separated fluid from the tank without impairing the vacuum maintained in the line and tank.

[Claims 2 to 4 and 6 to 10 not printed in the Gazette.]

1,272,626. SOFA-BED. RUDOLPH COOPERSMITH, Toronto, Ontario, Canada. Filed Mar. 25, 1916. Serial No. 86,622. (Cl. 5—46.)

1. In a sofa bed, the combination with the lounge frame, of a folding bed pivotally mounted between the side portions of the lounge frame and comprising a plurality of sections hingedly connected together, one portion disposed normally in a vertical position another in a horizontal position and another portion folded thereunder, a lounge seat secured to the upper side of the horizontal portion of the bed frame, legs for supporting the outer end of such horizontal portion when in the unfolded position, a bracket extending inwardly from each of the supporting legs, a lounge back pivotally attached to such brackets in proximity to its lower edge, and means for swinging the upper portion of such back in a circular path as the bed is unfolded to carry such back portion beneath the seat portion of the lounge.



3. In a sofa bed, the combination with the lounge frame, of a folding bed pivotally mounted between the side portions of the lounge frame and comprising a plurality of sections hingedly connected together, one portion disposed normally in a vertical position another in a horizontal position and another portion folded thereunder, a lounge seat secured to the upper side of the horizontal portion of the bed frame, legs for supporting the outer end of such horizontal portion when in the unfolded position, a bracket extending inwardly from each of the supporting legs, a lounge back pivotally attached to such brackets in proximity to its lower edge, means for swinging the upper portion of such back in a circular path as the bed is unfolded to carry such back portion beneath the seat portion of the lounge, said means comprising an elbow lever having one arm pivotally supported intermediately of its length to the lounge frame and the other arm pivotally connected to the lounge back in proximity to its upper edge, and a tension spring connecting the extreme end of the pivotally supported arm to the lounge frame.

5. In a sofa bed, the combination with the lounge frame, of a folding bed swung between the sides of the lounge frame and comprising a series of sections hingedly connected together, an elbow lever having its normally horizontal arm pivoted to the frame intermediately of its length and its vertical arm supporting the seat and counterbalancing means connected to the outer end of the normally horizontal arm.

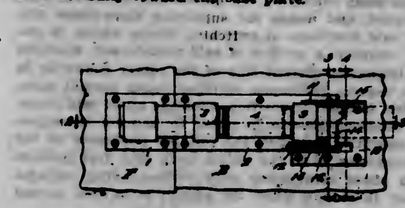
7. In a sofa bed, the combination with the lounge frame, lounge back and lounge seat section, of a bed frame comprising a plurality of sections hingedly connected together, said lounge seat section being invertibly carried by one of said sections, and means operated by the unfolding of the bed to swing the lounge back against the seat section as the seat section is inverted by the simultaneous operation of unfolding the bed whereby the lounge back is carried into a position beneath and against the lower face of the seat section when in the unfolded position.

9. In a sofa bed, the combination with the main frame, of a folding bed swung in the frame and comprising a plurality of sections hingedly connected together, one forming a foot section including legs, a substantially L-shaped lever having its horizontal arm pivoted to the main frame intermediately of its length, a lounge back to the upper end of which the vertical arm of the lever is connected, means for pivotally connecting the lower portion of the lounge back to the legs of the seat section, and a counterbalance connected to the opposite end of the lever.

[Claims 2, 4, 6, and 8 not printed in the Gazette.]

1,272,627. BURGLAR-PROOF BOLT ATTACHMENT. JOHN L. COPPING, New Orleans, La. Filed Apr. 10, 1916. Serial No. 227,736. (Cl. 16—64.)

1. The herein described bolt lock comprising a base plate disposed at the rear end of the bolt and having upstruck ears, its upper edge being bent at right angles into a guard overhanging the bolt and the ears, a pin pivotally mounted through said ears and carrying at one end an upstanding latch provided with a thumb-piece, and a spring coiled on the pin between the ears and throwing said latch normally toward the base plate.

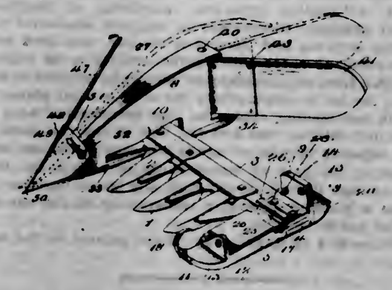


2. In a bolt for slatted doors and the like, the combination with a keeper, the base plate for the door having an enlarged rear end whose upper edge is bent inward at right angles to its bottom, guides on this plate, and a bolt slidably mounted through said guides; of a latch hinged at its lower end to said base plate at a point to pass the rear end of the bolt when the latter is projected, its upper end at this time standing beneath said guard, and a spring bearing said upper end normally against the enlarged portion of the base plate, for the purpose set forth.

3. In a device of the class described, the combination with a keeper adapted to be mounted on one member, a base plate adapted to be mounted on another member, its upper edge bent inward at right angle into a guard, and a bolt slidably mounted on the base plate with its tip adapted to enter said keeper, of guides upstruck from the lower portion of the base plate, a pin rotatably mounted therein, a latch fast on and upstanding from one end of the pin and having a thumb-piece at its free end, the latch moving in a plane across the rear end of the bolt when the latter is projected, and a spring turning said pin normally in a direction to press the free end of the latch against the base plate, for the purpose set forth.

[Claim 4 not printed in the Gazette.]

1,272,628. MOWER AND HARVESTER ATTACHMENT. FRED CRAWFORD, Prosser, Wash. Filed Aug. 11, 1917. Serial No. 185,694. (Cl. 56—80.)

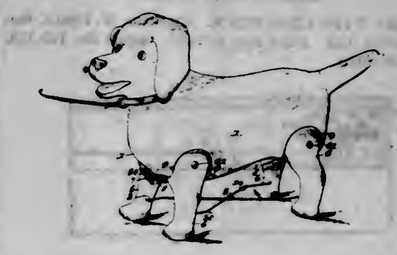


1. In a cutting apparatus, the combination of a shoe having longitudinal webs at its upper and lower edges on its outer side, a divider board pivotally mounted in and extending between said webs, and means for fixedly securing the said divider board in a set position relative to the shoe.

2. In a cutting apparatus, the combination of a shoe having a tapered front end, a conical cap fitting loosely over the tapered front end of the shoe, a divider rod extending rearwardly from the upper end of said cap, and means for securing the divider rod in a set position vertically relative to the shoe.

[Claims 3 and 4 to 6 not printed in the Gazette.]

1,272,629. WALKING TOY. FRANK CHIRET, Sharpsville, Pa. Continuation of application Serial No. 219,661, filed Feb. 28, 1918. This application filed Apr. 5, 1918. Serial No. 226,929. (Cl. 46—40.)

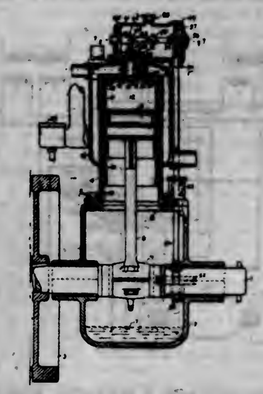


1. A walking toy that includes a body having a plurality of leg units adapted to frictionally engage a base, each unit comprising a pair of legs and means connecting the several leg units to cause them to assume a walking attitude as the toy is moved along on a base, and means independent of the legs by which the toy is adapted to be moved to cause the said legs to operate.

2. In a walking toy, a plurality of leg units adapted to frictionally engage a base, each of the said units comprising a pair of legs, a body for each pair of legs to which the leg units are pivotally connected to swing in a forward and backward direction relatively to their respective body portions, means for connecting all of the bodies whereby they have a fixed relation to each other and other means connecting all of the leg units whereby as the toy is moved forwardly or backwardly all of the leg units will assume a uniform walking attitude.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,272,630. ROTARY-VALVE GAS-ENGINE. HENRY M. CROWTHER, Kingman, Ariz. Filed Mar. 14, 1918. Serial No. 222,464. (Cl. 123—80.)

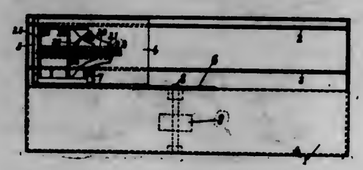


3. In a rotary valve gas engine, a piston cylinder case having a head provided with an exhaust port and an intake port, a valve fitting against the inner face of the head and having ports adapted to register with the exhaust port and intake port, a stem extending from the valve through the head, a driven gear fixed upon the stem, a mutilated driving gear mounted to mesh with the driven gear, a head rigid with the driven gear and having a transverse slot, a semi-disk shaped balancing cam rigid with the mutilated gear and having an edge adapted to fit in

the slot to hold the valve from rotating when the mutilated gear is out of mesh, and means for driving the mutilated gear in time with a crank shaft.

[Claims 1, 2, and 4 not printed in the Gazette.]

1,272,631. TYPE-LINE STICK. CHARLES W. CURLS, San Francisco, Cal. Filed Apr. 6, 1917. Serial No. 160,174. (Cl. 29—69.)

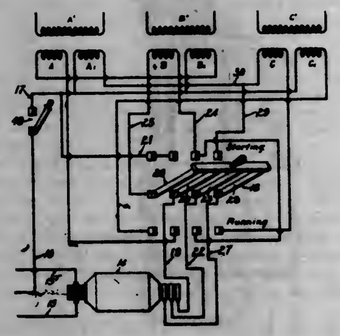


1. A type holding stick comprising a plate, means to secure a series of lines of type thereon, a plate under which the lines of type extend and having means thereon to determine the amount of extension of each line beyond the plate, and a saw against which the lines of type may be passed to remove a portion of said extensions.

4. A type line holding device comprising a slidable saw table, a type line holding plate having a flange at one edge, a second plate extending at right angles thereto, and under which a series of lines of type may be passed, means to hold a series of lines of type against the flange on said type line holding plate, a pair of pivot pins for mounting the type holding stick upon a reciprocating saw table, whereby the stick may be rotated substantially 90 degrees to bring the uncut edges of the type bar into a given plane for the purpose of removing a portion of each slug.

[Claims 2 and 3 not printed in the Gazette.]

1,272,632. METHOD OF STARTING THREE-PHASE, THREE-WIRE ROTARY CONVERTERS. WALTER M. DANN, Wilkinsburg, and HAROLD H. RUDD, Edgewood, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 12, 1915. Serial No. 20,688. (Cl. 172—123.)

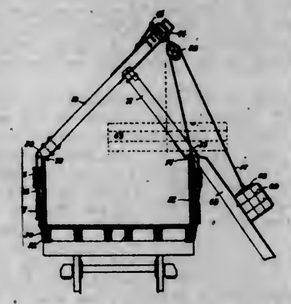


1. The combination with a three-wire, three-phase rotary converter, a plurality of transformer windings forming an interconnected star-formation and having a neutral point to which the main conveying the unbalanced direct currents is connected, and means for supplying three-phase currents to said windings, of switching means for connecting a portion of said transformer windings to the alternating-current side of the rotary converter in order to impress starting voltages thereupon and for subsequently impressing full operating voltages on the rotary converter, the full operating voltages being in phase coincidence with the corresponding starting voltages.

2. The combination with a three-wire, three-phase rotary converter, a plurality of transformer windings forming an interconnected star and having a neutral point to which the main conveying the unbalanced direct currents is connected, and means for supplying three-phase currents to said windings, of switching means which, in one position, connects a portion of said transformer windings to the alternating-current side of the rotary converter in order to impress thereupon voltages below normal value and which, in another position, connects all of said transformer windings thereto in order to impress thereupon normal operating voltages, the voltages impressed on the rotary converter when the switch is in said first position being in phase coincidence with corresponding voltages impressed thereupon when the switch is in said second position.

[Claims 3 to 5 not printed in the Gazette.]

1,272,633. CAR-LOADING DEVICE. GEORGE E. DAVISON, Silsbee, Tex. Filed Nov. 16, 1914. Serial No. 872,295. (Cl. 214—85.)



1. A car loading apparatus for railway cars comprising a member adapted to rest on the top of the car, means for detachably securing said member to the car whereby the upthrust and the downthrust on said member are transmitted to the car framing, and mechanism supported from said member for shifting the articles to be loaded.

3. A car loading apparatus comprising an overhead member arranged transversely of the car, means for detachably securing said member to the car, and block and tackle mechanism for shifting the articles to be loaded supported from said member and detachably secured to the side of the car in substantially the same vertical plane.

7. In car loading apparatus, the combination with a device for shifting ties and the like to the car from a point adjacent thereto, of means adjacent to the car and located in the path of travel so as to engage the ties near an end thereof to automatically move the ties to assume a position extending transversely of the car as the ties are in transit.

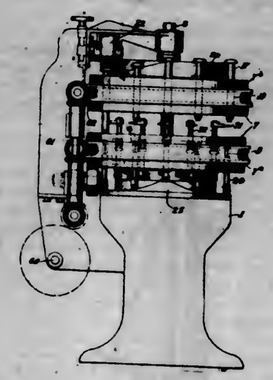
[Claims 2, 4 to 6, and 8 to 10 not printed in the Gazette.]

1,272,634. NAIL-CAPPING MACHINE. HILARION DE ESCOBALES, Tompkinsville, N. Y. Filed Mar. 15, 1915. Serial No. 14,375. (Cl. 10—158.)

1. In a nail capping machine, the combination of cooperating crimping devices, means for feeding and assembling a washer, a nail and a cap in said crimping devices and means for operating said devices to crimp the edges of the cap around the edges of the washer beneath the head of said cap.

14. In a nail-capping machine the combination of a continuously rotating carrier, a series of crimping dies arranged around the periphery of the carrier, a series of cooperating plungers also supported in the carrier, nail-positioning devices for directing the nails into the dies

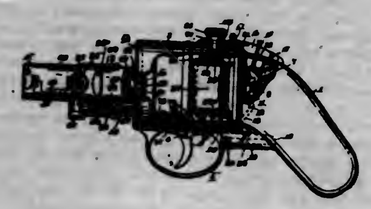
supported in the carrier, one for each said die, and means for operating said plungers and positioning devices con-



sisting of stationary cams arranged in the path of travel of said plungers and positioning devices, respectively.

[Claims 2 to 13 and 15 not printed in the Gazette.]

1,272,635. COMBINATION ILLUMINATING-LIGHT AND CAMERA. CHARLES DE MARCO, Rochester, N. Y. Filed Nov. 13, 1916. Serial No. 131,101. (Cl. 95—34.)



1. A revolver frame having a cylinder handle and barrel portions, a camera having an exposure opening mounted in the cylinder portion, an illuminating light mounted in the front of the barrel and a battery carried in the handle.

4. The combination of a revolver frame having a camera mounted therein, said camera having a lens at the front thereof, an illuminating light mounted in front of said lens, said illuminating light being mounted to swing from the front of said lens to uncover said lens and move to a position parallel to and in at the side of lens of said camera, a battery for lighting said illuminating light.

6. The combination of a revolver frame having a camera mounted therein, said camera having a lens at the front thereof, a tube mounted in front of said lens, said tube being mounted to swing from the front of said lens to uncover said lens and move to a position at right angles to said lens, a finder contained in said tube.

7. A revolver frame having a cylinder portion, a plate at the front of said cylinder portion closing the end thereof, a lens and shutter carried on said plate, means for detachably fastening said plate to said cylinder.

[Claims 2, 3, 5, and 8 not printed in the Gazette.]

1,272,636. CHAIR-LEG EXTENSION. JOHN DITTRICK, Perth, Ontario, Canada. Filed Apr. 9, 1918. Serial No. 227,538. (Cl. 155—36.)

A chair leg extension device consisting of extension pieces having upper horizontal surfaces engaging mem-

bers secured to the extensions and forming sockets to receive the chair legs and tie rods between the engaging



members, the parts being constructed and arranged so as to provide a complpete article capable of immediate use.

1,272,637. BRUSH UNIT. ALBERT E. DOMAN, Elbridge, N. Y., assignor, by mesne assignments, to Dyneto Electric Corporation, Syracuse, N. Y., a Corporation of New York. Filed June 8, 1916. Serial No. 102,490. (Cl. 200—24.)



2. In a device of the class described a brush unit formed of a single piece of insulating material and comprising a base formed with a plurality of upstanding brush-holders provided with substantially radial bores, said base provided with hollow bosses at opposite sides of said brush-holders, posts secured in said hollow bosses and spring bars having one of their ends secured to said posts and their other ends positioned at the rear of oppositely disposed brush-holders, respectively.

4. A brush-holder unit comprising a one-piece segmental insulating base having integral therewith a tubular upstanding brush-holder, and hollow bosses positioned at opposite sides of said brush-holder and projecting upwardly from said base.

6. In a dynamo electric machine, a brush unit comprising a one-piece insulating base having a central upstanding hollow brush-holder, said base provided with additional integral upstanding tubular brush-holders arranged, respectively, upon opposite sides of said central brush-holder, a brush arranged in each of said brush-holders, and separate spring means for holding each of said brushes in operative position.

8. In a dynamo electric machine, a brush unit comprising a one-piece insulating base having a central upstanding hollow brush-holder, said base provided with additional integral upstanding tubular brush-holders arranged, respectively, upon opposite sides of said central brush-holder, a brush arranged in each of said brush-holders, said base provided with integral hollow bosses at opposite sides of said additional brush-holders and upon opposite sides of the central brush-holder, posts mounted in said bosses, a spring mounted on each post and having portions in contact with the respective brushes arranged in said additional brush-holders, respectively, a plate in contact with said insulating base, and screws extending through said plate through the insulating base and engaged with said posts.

[Claims 1, 3, 5, 7, and 9 not printed in the Gazette.]

1,272,638. ELECTRIC-HEATED CLOTHES-PRESSER. JAMES A. DU LANEY, Seattle, Wash., assignor of one-half to Charles R. Nelson, Seattle, Wash. Filed Nov. 28, 1917. Serial No. 204,309. (Cl. 68—9.)



In a clothes presser, a hollow head having a steam chamber provided with a perforated pressing face, a perforated steam distributing pipe extending lengthwise said steam chamber, a cap constituting a cover fitting the back side of the head, the head having a marginal flange at its back, a heating element, a plate to which the heating element is secured, said plate being held between said marginal flange of the head and the cover with the heating element toward the steam chamber, and insulating material between said plate and the body of the cover.

1,272,639. MOTOR-PUMP FIRE-HYDRANT. HUGH THOMAS DUNN, New York, N. Y. Filed Aug. 7, 1914. Serial No. 856,715. (Cl. 137—18.)

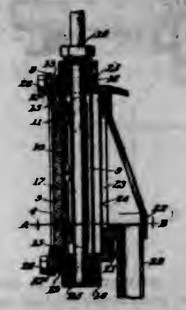


1. A hydrant comprising superposed sections, the lowermost section containing a pump, the section above containing a motor, and a section above the last-named section, a valve-head regulating the flow of water into the lower-most section, a valve-stem extending from the valve head into the uppermost section, a hollow shaft surrounding a portion of the valve stem and attached to the pump and motor, and a float in the lower-most section adapted, under the action of the water entering the lower-most section, to energise the motor.

2. A hydrant comprising superposed sections, the lowermost section containing a pump, the section above containing a motor, and a section above the last-named section a valve-head regulating the flow of water into the lowermost section, a valve-stem extending from the valve-head into the uppermost section, a hollow shaft surrounding a portion of the valve-stem and attached to the pump and motor, a float in the lowermost section adapted, under the action of the water entering the lowermost section, to energise the motor, and manual means for additionally energising the motor.

3. A hydrant comprising superposed sections, the lowermost section containing a pump, the section above containing a motor, and a section above the last named section a valve-head regulating the flow of water into the lowermost section, a valve-stem extending from the valve-head into the uppermost section, a hollow shaft surrounding a portion of the valve-stem and attached to the pump and motor, a float in the lowermost section, adapted, under the action of the water entering the lowermost section, to energise the motor, manual means for additionally energising the motor and means preventing undesirable pressure in the hydrant discharge.

1,272,640. PROTECTOR FOR WATER-GAGES. FRANK W. EDWARDS, Chicago, Ill., assignor to The Ohio Injector Company of Illinois, Chicago, Ill., a Corporation of Illinois. Filed July 5, 1917. Serial No. 178,656. (Cl. 73—54.)

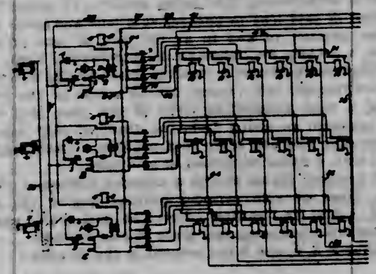


2. In a protector for water gages, a one-piece three-sided frame having pockets projecting laterally therefrom, and an open back, panes of glass in said pockets, longitudinally arranged strips engaging the inside edges of adjacent panes of glass, and means to fasten said strips in place to clamp the panes of glass in position.

8. A protector for water gages, comprising a glazed frame having openings at top and bottom and an open back flanked by longitudinal taper flanges, and a holder for said glazed frame having the gage glass, top and bottom bosses provided with seats to fit in and close the open top and bottom of the frame, and a back provided with longitudinal taper flanges to coöperate with the flanges of the frame to brace the frame against lateral spreading, said frame having lugs at top and bottom and the holder having projections at top and bottom, and means to connect said lugs and projections to tie the top and bottom bosses together and to unite the frame and holder.

[Claims 1 and 3 to 7 not printed in the Gazette.]

1,272,641. TELEPHONE SYSTEM. HENRY C. EGERTON, Passaic, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed July 24, 1916. Serial No. 110,970. (Cl. 179—1.)



1. A telephone system including a transmitting station, a plurality of amplifiers, loud-speaking receivers adapted to be actuated by said amplifiers, and circuit connections between said amplifiers and receivers to permit the volume of sound produced by said receivers to be relatively uniform as between said receivers or capable of relative variation as between different ones of said receivers.

4. A telephone system including a plurality of transmitting stations, loud speaking receivers arranged in predetermined groups for simultaneous operation of all receivers in any group, means individual to each of said stations to select any particular group for association with its respective station, and electro responsive means controlled by said selecting means to actively associate a selected group with the station making such selection.

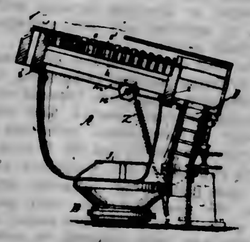
7. A telephone system including a transmitting station, amplifiers arranged in predetermined groups, loud speaking receivers arranged in groups adapted to be actuated by said amplifiers, the number of receivers in any group being independent of the number of receivers in other groups, means for associating any desired groups of said amplifiers with said transmitting station, and means for maintaining the energizing current for each of said amplifiers substantially constant, whereby the aggregate relative volume of sound produced on actuation of a receiver group associated with one of said amplifiers is substantially the same as the aggregate volume of sound produced by another of said receiver groups irrespective of any difference in the number of receivers in such receiver groups.

9. In a telephone system loud speaking receivers arranged in a subdivided group, and means for predetermining the relative volume of sound produced by each of the receivers comprising any of the subdivisions of said group as compared to the relative volume of sound produced by each of the receivers comprising other subdivisions of said group.

13. A telephone system including a plurality of transmitting stations, loud-speaking receivers in groups, selective means for each of said stations adapted to select any of the receiver groups for association with its respective station, and means for each of said stations to actively associate its respective station with the selected one of said receiver groups independent of the condition of the selective means of other stations.

[Claims 2, 3, 5, 6, 8, and 10 to 12 not printed in the Gazette.]

1,272,642. SEPARATION OF ORES AND THE LIKE. AUGUSTUS B. EMERY, Messina, North Transvaal, South Africa. Filed Mar. 29, 1911. Serial No. 617,623. (Cl. 83—54.)



1. The method of separating ores which consists in classifying a mass composed of particles having a substantial variance in size, into strata according to the size and specific weight, and coincidently concentrating the classified material to collect concentrates from a plurality of strata and to discharge gangue.

3. The method of separating ores which consists in classifying a mass composed of particles having a substantial variance in size into strata according to the size and specific weight by subjecting it to the lifting action of a rising body of air, and coincidently concentrating the classified material by subjecting it to a jerking motion upon a fractional surface to collect concentrates from a plurality of strata and to discharge gangue.

6. The process of separating ores consisting in classifying a mass containing particles having a substantial variance in size into strata according to the size and specific weight, coincidently separately concentrating each stratum to separately collect concentrates from a plurality of strata and to discharge gangue and discharging the concentrates at different points according to the size of the particles.

8. In apparatus for separating ores and the like the combination of means for classifying a mass composed of particles having a substantial variance in size into strata according to the size and specific weight of the particles, means for coincidently separately concentrating each stratum, and means for separately collecting the concentrates and gangue.

11. In apparatus for separating ores and the like a table for receiving a mass to be separated composed of particles having a substantial variance in size, said table having pockets, means for forcing a rising body of air through the material in the pockets thereby classifying the material in the strata according to the size and specific weight of the particles, frictional surfaces adjacent the pockets arranged to receive the different strata of material in the pockets at different points on the surfaces, and means for vibrating the table to concentrate the material on the frictional surfaces.

[Claims 2, 4, 5, 7, 9, 10, and 12 to 32 not printed in the Gazette.]

1,272,643. METHOD OF AND APPARATUS FOR SEPARATING ORES AND THE LIKE. AUGUSTUS B. EMERY, Messina, North Transvaal, South Africa. Filed Mar. 29, 1911, Serial No. 617,624. Renewed June 3, 1918. Serial No. 238,015. (Cl. 83—88.)



1. The method of separating ores and the like, which consists in lifting and classifying the same by the action of a rising body of water and further subjecting the classified material to a concentrating action by the combined effect of a washing body of water moving over it in one direction and of a force tending to move it in another direction upon a frictional surface and causing the different components of the material to spread fan-wise in bands; substantially as described.

2. The method of separating ores and the like, which consists in lifting and classifying the same by the action of a rising body of water, and concentrating the classified material by subjecting it to a jerking motion upon a frictional surface and simultaneously to a flow of water across said surface and causing the different components of the material to spread fan-wise in bands; substantially as described.

3. In the separation of ores and the like, the method of classifying, which consists in lifting and classifying the same by the action of a rising body of water, while at the same time moving the lower stratum of the material undergoing classification in one direction, by subjecting it to a jerking motion upon a frictional surface, and floating off in another direction portions of the upper stratum while causing the different components of the material to spread fan-wise in bands; substantially as described.

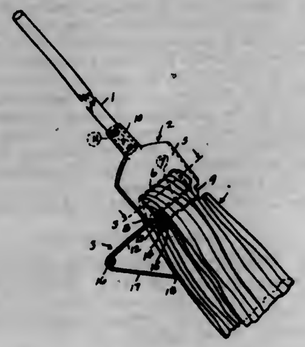
4. A separator for ores and the like, provided with an inclined deck having a pervious bottom, means for causing a body of water to rise through the pervious bottom, means for feeding the material at the upper end of the incline and means for imparting to the deck a motion tending to cause the particles to travel across the rising body of water, the slant of the deck being toward the discharge of both the heads and the tailings; substantially as described.

5. In a separator for ores and like material, an inclined deck having a pervious bottom, means for causing a body of water to rise through the pervious bottom, means for

feeding the material at the upper end of the incline, means for imparting to the deck a motion tending to cause the particles to travel across the rising body of water, and supplemental means for supplying to the top of the deck a washing down flow of water in addition to that which rises through the pervious bottom; substantially as described.

[Claims 6 to 21 not printed in the Gazette.]

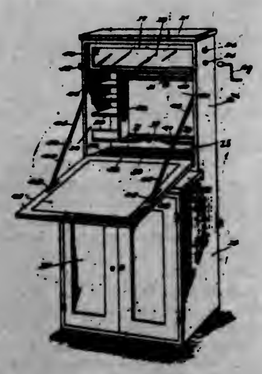
1,272,644. MOP-HOLDER. JULIUS ERICKSEN, Los Angeles, Cal. Filed Jan. 30, 1918. Serial No. 214,545. (Cl. 15—56.)



2. In a mop holder, a flat head having a transversely elongated slot, a supporting bar, and provided with an opening through one corner thereof; a mop inserted through the slot and bent around the supporting bar, and a securing device having a shank extending through the opening in said head and adapted to fit around the mop; the back bar of the securing device passing along one side of the mop and supporting bar and the front bar of the securing device passing along the other side of the mop and supporting bar; there being a hook at one end of the device to engage a point at the other end of it.

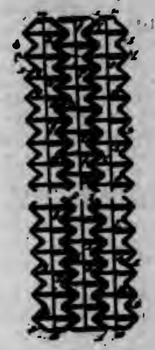
[Claim 1 not printed in the Gazette.]

1,272,645. COMBINED DESK AND MAP-CABINET. SAMUEL H. FANNING, Dallas, Tex. Filed May 22, 1917. Serial No. 170,255. (Cl. 45—6.)



In a device of the class described, a base having a forwardly extended top, a casing open at the front and of less width than the base and extending above the same, an upper receptacle above the casing, a seat encompassing the front of the casing and the front of the upper receptacle, a closure for the upper receptacle located inwardly of the seat, bayonet slots in said seat, a desk member engaging in said seat and closing the casing and the upper receptacle when in upper position, pins extending from said desk member and engaging in said slots, said pins and slots coacting with the projecting portion of the base to support the desk in its lower position, flexible elements connecting the desk member and the casing, hooks projecting from the casing, and catch devices carried by the desk member and adapted to engage the hooks when the desk member is reversed and bears against the projecting portion of the base.

1,272,646. RADIATOR UNIT. JOHN M. FEDDERS, Buffalo, N. Y., assignor to Fedders Manufacturing Company, Inc., Buffalo, N. Y., a Corporation of New York. Filed Oct. 10, 1917. Serial No. 195,848. (Cl. 257—130.)



1. A radiator unit comprising two outer walls, and an intermediate radiating member comprising end supporting sections arranged lengthwise between said walls at opposite longitudinal edges thereof, and a plurality of transverse plates arranged at intervals between said walls and each supported at its opposite ends on said supporting sections.

2. A radiator unit comprising two outer walls, and an intermediate radiating member comprising end supporting sections arranged lengthwise between said walls at opposite longitudinal edges thereof, and each provided with folded parts forming seats and a plurality of plates arranged at intervals between said walls and each engaging its opposite ends with corresponding seats of said supporting sections.

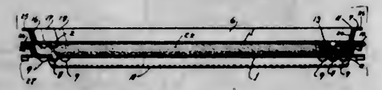
3. A radiator unit comprising two outer walls, and an intermediate radiating member comprising end supporting sections arranged lengthwise between said walls at opposite longitudinal edges thereof, and each provided with a plurality of longitudinal webs and a plurality of pairs of transverse plaits, one ply of each plait being connected with one ply of the companion plait and the other ply of each plait being connected with the adjacent web and the spaces between said plaits forming seats, and a plurality of transverse plates arranged between said walls and each engaging its ends with seats of a pair of plaits.

4. A radiator unit comprising two outer walls, and an intermediate radiating member comprising end supporting sections arranged lengthwise between said walls at opposite longitudinal edges thereof and each provided with a plurality of longitudinal webs and a plurality of pairs of transverse plaits, one ply of each plait being connected with one ply of the companion plait and the other ply of each plait being connected with the adjacent web and the spaces between said plaits forming seats, and a plurality of transverse plates arranged between said walls and each plate being provided at each of its ends with a longitudinal slit forming a pair of end tongues which engage respectively with the seats of a pair of said plaits.

5. A radiator unit comprising two outer walls, and an intermediate radiating member comprising end supporting sections arranged lengthwise between said walls at opposite longitudinal edges thereof and each provided with a plurality of longitudinal webs and a plurality of pairs of transverse plaits, one ply of each plait being connected with one ply of the companion plait and the other ply of each plait being connected with the adjacent web and the spaces between said plaits forming seats and a plurality of transverse plates arranged between said walls and each plate being provided at each of its ends with a longitudinal slit forming a pair of end tongues which engage respectively with the seats of a pair of said plaits, and each plate being also provided with beads engaging with the inner sides of said plaits.

[Claims 6 and 7 not printed in the Gazette.]

1,272,647. MOLD FOR TILES. JOHN A. FERGUSON, Denver, Colo. Filed Apr. 2, 1918. Serial No. 226,186. (Cl. 25—121.)



1. In molds for tiles, the combination of a plurality of uniform shallow settling mold pans, each having a closed bottom, formed with end transverse and side longitudinal pattern grooves and beads as set forth, and provided with flaring end walls, the upper terminal portions of the outer side walls of said longitudinal grooves being projected outwardly and thence continuing upwardly, as uninterrupted flaring side walls, substantially offset from said longitudinal grooves; and means for so supporting said pans, in superposed stacked relation, as to cause the side walls of adjacent assembled pans to coöperate in the formation of uncovered open spaces extending lengthwise therebetween, and functioning to permit of the free discharge of excess material in a pan below, substantially as described.

[Claim 2 not printed in the Gazette.]

1,272,648. MOTOR-VEHICLE. JOSEPH B. FERGUSON, Newark, N. J. Filed Apr. 11, 1917. Serial No. 161,122. (Cl. 180—1.)



1. In a motor vehicle, a frame, a driving axle, a propeller shaft for transmitting power to said axle and provided with means for conducting lubricant to said axle and means for conducting lubricant from said axle to said frame.

2. In a motor vehicle, a frame, a driving axle, means for conducting lubricant to said axle and means for conducting lubricant from said axle to said frame.

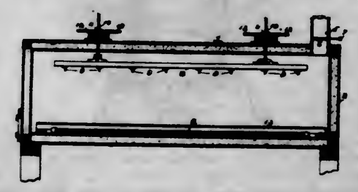
5. In a motor vehicle, a gear-box, a driving axle and a shaft for transmitting power from said gear-box to said axle, said shaft being provided with means for conducting lubricant to said driving axle from said gear-box.

7. In a motor vehicle, a driving axle and a shaft for transmitting power to said axle, said shaft being provided with means for conducting lubricant to said driving axle.

9. In a motor vehicle a driving axle, a driven axle, a propeller shaft, means for connecting said propeller shaft with said driving shaft at various speed relations, a universal joint between said means and said propeller shaft, each of said parts being provided with a passage through which lubricant under pressure may be forced thereby lubricating said parts.

[Claims 2, 4, 6, and 8 not printed in the Gazette.]

1,272,649. DRIER. FREDERICK K. FISH, Jr., New York, N. Y., assignor to Lumber Tie and Timber Vulcanizing Company, New York, N. Y. Filed Sept. 6, 1916. Serial No. 118,762. (Cl. 34—19.)

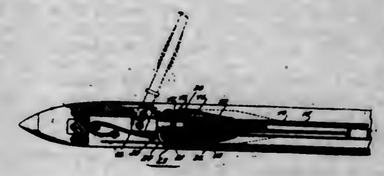


1. In a container, a plate extending longitudinally and intermediate the top and bottom thereof, a plurality of dependent members carried transversely of said plate and means for raising and lowering said plate in a vertical line.

2. In a container, a plate carried by the top thereof, a plurality of dependent members carried by said plate intermediate its ends and means for raising and lowering either end of said plate independently of the other end.

[Claims 3 and 4 not printed in the Gazette.]

1,272,650. SHUTTLE FOR LOOMS. STUART M. FORD, Bridgeport, Conn., assignor to The Salt's Textile Manufacturing Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Apr. 1, 1916. Serial No. 88,208. (Cl. 139—90.)

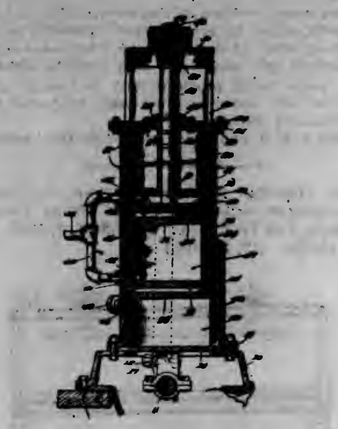


1. A shuttle comprising a spike, a weft holder supported on said spike and having a groove in the butt thereof to receive the initial winding, a spring-pressed feeler carried by the shuttle and pivoted beyond the initial winding and extending forwardly over the initial winding to contact with said holder upon the substantial exhaustion of the weft, and means on the shuttle and shuttle box to close a circuit through said holder and spike when such contact occurs.

2. A shuttle comprising a weft-holder, a spike over which said holder is placed, a feeler carried by the shuttle and adapted to bear against the weft and to contact with said holder upon the substantial exhaustion of the weft, plates secured to one side of the shuttle, and arranged longitudinally thereof and movable contact pieces projecting through openings in the side of the shuttle box and adapted to be engaged by said plates when the shuttle is boxed.

[Claim 3 not printed in the Gazette.]

1,272,651. AIR-COMPRESSOR. Lewis L. Foster, Govans, Md., assignor of one-half to John H. Ruehmling, Brooklyn, N. Y. Filed Sept. 27, 1917. Serial No. 193,869. (Cl. 230—32.)



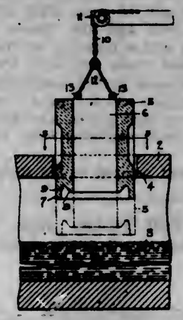
1. An air compressor including inner and outer cylinders, a sleeve valve slidably mounted between the said cylinders and coacting therewith to provide primary compression chambers, a piston mounted to reciprocate within the inner cylinder, the said inner cylinder providing secondary compression chambers at opposite sides of said piston, an intake port for the primary compression chambers, passages for establishing communication between the primary and secondary compression chambers, and exhaust ports for the said secondary compression chambers, the sleeve valve being movable for opening and closing said passages and the said ports.

3. An air compressor including inner and outer cylinders, a sleeve valve mounted to slide between the said cylinders and coacting therewith to provide primary compression chambers, a piston mounted to reciprocate within the inner cylinder, passages for establishing communication between the said chambers and the inner cylinder at opposite sides of the said piston, an intake port for the said chambers, and exhaust ports leading from the inner cylinder at opposite sides of the piston, the sleeve valve being movable with the piston for compressing a charge of air within one of said chambers and drawing in a charge of air within the other of said chambers and controlling communication between the chambers and the inner cylinder through said passages for admitting the compressed charge of air at one side of said piston at each stroke thereof as well as controlling the opening and closing of said ports.

8. An air compressor including inner and outer cylinders, a packing plug closing the inner cylinder, a piston mounted to reciprocate within the inner cylinder and having the rod thereof slidably received through said plug, means carried by the piston rod and cooperating with the plug to provide a tight joint between the piston rod and the plug, a sleeve valve connected with the piston and slidably mounted between the said cylinders, the said sleeve valve coacting with the cylinders to provide primary compression chambers and the inner cylinder providing secondary compression chambers at opposite sides of said piston, an intake port for the primary compression chambers, passages for establishing communication between the primary and secondary compression chambers, and exhaust ports for the said secondary compression chambers, the sleeve valve being movable with the piston for opening and closing said passages and the said ports.

[Claims 2 and 4 to 7 not printed in the Gazette.]

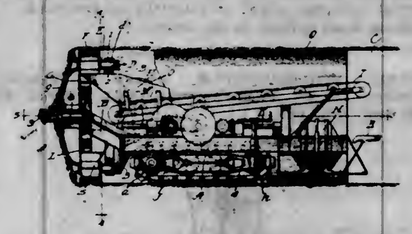
1,272,662. DEVICE FOR USE IN CONNECTION WITH THE DRAWING OF GLASS CYLINDERS. Fernand M. Francart, Springdale, Pa. Filed Apr. 17, 1916. Serial No. 91,779. (Cl. 49—17.)



1. A device for use in the drawing of glass cylinders comprising a member through which the glass is drawn adapted to be depressed into the glass around the drawing area whereby the surface impurities flow from the drawing area toward said depression, and means on said device for trapping the impurities outside the drawing area.

2. A device for use in connection with the drawing of glass cylinders having a passage extending through it, a skirt at the lower end thereof, and an inside ring-portion above the lower end of said skirt and forming between said ring and said skirt a trap or recess.

1,272,653. TUNNELING-MACHINE. James C. French, Kenosha, Wis., assignor to Frederick C. Austin, Chicago, Ill. Filed Oct. 21, 1915. Serial No. 57,118. (Cl. 61—44.)



1. A self-propelled tunneling machine comprising a rotary cutter for boring forward in the ground, a body upon the forward end of which said cutter is mounted to rotate about the axis of the tunnel, a thrust bearing for said cutter traction devices traveling on the bottom surface of the tunnel to support and propel said body forward, so that the entire machine while in operation moves slowly forward to positively force said cutter ahead into the ground, and whereby the machine may be propelled over the surface of the ground outside the tunnel, buckets mounted to operate transversely of the machine behind said cutter and in front of said traction devices to receive the borings, means for conveying the discharge from said buckets to the rear end of said body, and a motor carried on said body to simultaneously operate said cutter and buckets and devices and means, thereby to form the tunnel.

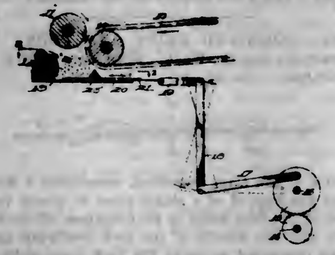
2. The said tunneling machine, as specified in claim 1, said buckets being secured to the back of said cutter.

8. In a machine for boring a tunnel, the combination of (1) a body, (2) a prime mover on said body, (3) traction devices operated by said prime mover to propel the machine on the bottom of the tunnel, (4) a rotary cutter at the forward end of said body, (5) conveyer buckets on said cutter, (6) means to receive the dirt from said buckets, (7) means to support said cutter for positive forward movement in unison with said body, so that said cutter is forced ahead into the ground by said traction devices, (8) power transmitting means to connect said cutter with said prime mover, (9) and means to engage the sides of the tunnel and traveling forward in unison with the forward movement of said cutter and body to hold the machine upright.

9. A structure as specified in claim 8, and a backing for said buckets to hold the rotary cutter against rearward displacement relatively to said body.

[Claims 3 to 7 and 10 not printed in the Gazette.]

1,272,654. FEEDING MECHANISM FOR FIBROUS MATERIAL. Frank L. Furbush and Osborn H. Cilley, Westford, Mass., assignors to C. G. Sargent's Sons Corporation, Graniteville, Westford, Mass., a Corporation of Massachusetts. Filed Aug. 30, 1917. Serial No. 188,918. (Cl. 193—48.)



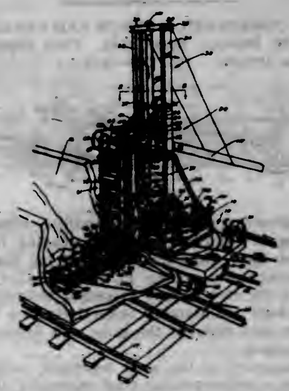
1. In a feeding device for fibrous material, the combination with a feed roll, and a feed plate in position for receiving and supporting such material and having a concave discharge end located under the feed roll and substantially in contact with it, of a flat plate located parallel with the axis of the feed roll and having a forward toothed edge, and means for reciprocating said flat plate in its own plane toward and from the bite of the feed roll.

2. In a feeding apparatus, the combination of an apron conveyer, a compressing roll therefor, a feed plate located under the space between the apron and the compressing roll, and a circumferentially fluted feed roll located over the feed plate, of a reciprocating plate having a serrated edge located just over said feed plate and parallel therewith, its serrations registering with the grooves of the feed rolls, and means for reciprocating said serrated plate toward the bite of the feed roll.

1,272,655. LOADING AND UNLOADING MACHINE. Gregory Gawlik, Los Angeles, Cal. Filed Oct. 29, 1917. Serial No. 199,054. (Cl. 198—8.)

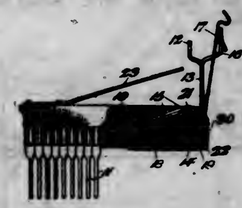
1. A loading and unloading machine comprising a truck, a turn-table formed upon said truck, a mast extending upwardly from said turn-table and pivoted for swinging movement therefrom, an adjustable mechanism for regulating the angular disposition of the mast, a conveyer carriage mounted upon the mast, means for adjustably disposing the conveyer carriage at points along the mast, a vertically extending elevating mechanism pivotally secured to the carriage, a substantially horizontally extending conveying mechanism pivoted to the lower end of the elevating mechanism, driving means, and means whereby said conveying and elevating mechanisms may be continuously driven irrespective of their angular relation to each other and the carriage and irrespective of the adjusted position of the carriage upon the mast and the angular disposition of the mast.

2. A loading and unloading machine comprising a truck, a turn-table upon the truck, a mast extending upwardly from the turn-table, a conveyer carriage slidingly connected to the mast, means for adjusting the conveyer carriage up and down on the mast, a vertically extending elevating mechanism pivotally secured to the carriage; said carriage serving to space the elevating mechanism from the mast so that the truck may be on one track and the elevating mechanism may extend over and down into a car upon another track; a horizontally extending



conveying mechanism connected to the lower end of the elevating mechanism and adapted to rest upon the bottom of the car, and means for simultaneously advancing the truck, the vertical elevator, and the horizontal conveyer.

1,272,656. TUFT-YARN FRAME FOR LOOMS. Victor Gero, Philadelphia, Pa. Filed May 14, 1918. Serial No. 234,519. (Cl. 139—66.)



1. In a device of the character stated, a tuft yarn frame, a member secured thereto, a spring clip, and means clamped between said frame and said member for supporting said clip.

2. In a device of the character stated, a tuft yarn frame, a member secured thereto, a spring clip, a means carried by said member for supporting said clip, and a guard fixed to said frame for preventing displacement of said clip.

[Claims 3 to 6 not printed in the Gazette.]

1,272,657. POULTRY-GUARD. La Roy Greenman, Holland, Mich. Filed Jan. 12, 1917. Serial No. 141,951. (Cl. 119—97.)



1. In a poultry guard, two wires, each bent to form a long rigid standard having a long curved arm at one end

and a short curved arm at the other end, said bodies pivotally connected, and means for interlocking the ends of the long curved arms.

[Claims 2 and 3 not printed in the Gazette.]

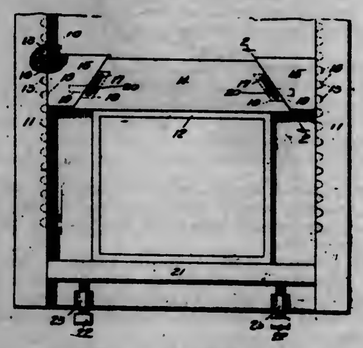
1,272,658. COMBINATION FENCE AND REPAIR TOOL. EDWARD W. GROGAN, Byers, Tex. Filed Sept. 6, 1917. Serial No. 190,068. (Cl. 140—123.6.)



1. An implement of the class described, comprising a stock having a wire-twisting head extending therefrom, said head having a transverse wire-receiving channel and with segmental spiral grooves in its outer face at opposite sides of the channel and extending obliquely to the axis of the head and merging respectively into the outer end and the side faces of the same and communicating with the channel.

2. An implement of the class described, comprising a stock having a wire-twisting head extending therefrom, said head having a transverse wire-receiving channel and with segmental spiral grooves in its outer face at opposite sides of the channel and extending obliquely to the axis of the head and merging respectively into the outer end and the side faces of the same and communicating with the channel, and a wire-serving device carried by the stock and operating transversely of the channel.

1,272,659. CHASE-FASTENING. REID T. GROOMES, Chicago, Ill. Filed Aug. 15, 1917. Serial No. 186,320. (Cl. 101—390.)

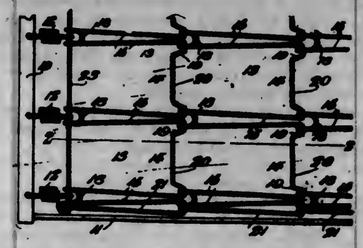


1. A fastening for printers' chases, comprising an abutment plate having its ends oppositely beveled, and its longer edge adapted to engage the end of the chase, locking plates seating against the ends of said plate and having their abutting ends correspondingly beveled, retaining studs extending from the outer ends of the locking plates, and keepers for said studs.

[Claims 2 and 3 not printed in the Gazette.]

1,272,660. WIRE FABRIC. JOHN HANCOCK, Philadelphia, Pa. Continuation in part of application Serial No. 186,092, filed Aug. 14, 1917. This application filed Apr. 3, 1918. Serial No. 226,415. (Cl. 245—5.)

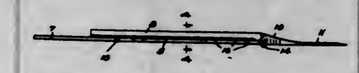
1. A metal fabric for mattresses comprising a plurality of elongated unit sections, each section consisting of a unitary structure forming wide loops at one edge and hooks at the opposite edge, said loops and hooks alternating throughout the length of the section, the sides of adjacent pairs of wide loops diverging toward and merging into said hooks and the opposite ends of said sides being in close proximity, said hooks each being adapted to interengage with a pair of wide loops at the point of



close proximity, whereby all of said sections are united to form a complete fabric.

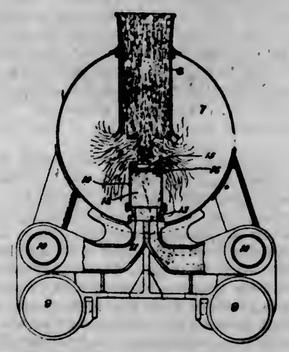
[Claims 2 and 3 not printed in the Gazette.]

1,272,661. COMBINED KNIFE AND FORK. YOSHIO HARRIGUCHI, Seattle, Wash. Filed Mar. 5, 1918. Serial No. 220,645. (Cl. 30—9.)



A device of the class described, comprising a knife and fork that are formed of a single piece of woody material, the tines of the fork being in prolongation of the blade of the knife and the handle of the fork overlying the knife and being connected adjacent the fork tines with the tip of the knife blade by a small integral section of material and the tip of the knife blade being separated from the tine portion of the fork by a notch whereby the knife and fork may be easily split apart.

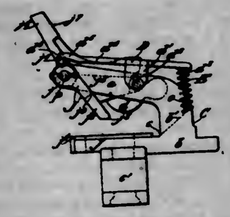
1,272,662. LOCOMOTIVE EXHAUST APPARATUS. ALBERT GORDON HENTZ, Collinwood, Ohio, assignor of two-thirds to B. B. Milner, New York, N. Y. Filed Oct. 13, 1916. Serial No. 125,350. (Cl. 162—4.)



1. A locomotive exhaust device comprising in combination a nozzle, a central head of smaller diameter than the interior of the nozzle located in the discharge end thereof, and a plurality of spaced members arranged about said head and between the head and the wall of the nozzle, the upper ends of the head and the spaced members being substantially flush with the end of the nozzle, and the spaced members being so formed that they serve in conjunction with said nozzle and head to discharge the steam in jets uniting at a point a substantial distance above the nozzle thereby providing spaces above the nozzle for the entrainment of the products of combustion.

[Claim 2 not printed in the Gazette.]

1,272,663. TENTER-CLIP. JOHN J. HOEY, Providence, R. I. Filed July 26, 1915. Serial No. 41,817. (Cl. 26—8.)



1. In a cloth-clamp for tentering- or like machines, the combination with the main frame thereof having a base providing a lower fixed jaw and arms overhanging the top of said base, of an upper movable jaw pivoted to the arms on the frame to adapt its lower end to swing into engagement with the fixed jaw, detent-lugs projecting vertically upwardly from the pivot of the movable jaw, a detent-lever pivoted on the top of the arms of the frame and formed with curved ends adapted to normally ride on the ends of the lugs on the movable jaw, and a spring to operate the detent-lever when the movable jaw is swung into open position to cause the ends of the lever to engage the sides of the lugs to hold the jaw from closing.

[Claims 2 and 3 not printed in the Gazette.]

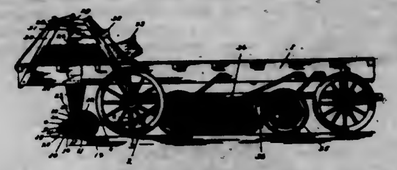
1,272,664. TIRE. JOHN W. HUMMEL and FREDERICK W. UHDE, Philadelphia, Pa. Filed Jan. 25, 1917. Serial No. 144,447. (Cl. 152—10.)



In a tire-and-rim structure, the combination of a rim having a central space, a radial flange at each side thereof, said flanges extending outwardly a considerable distance, and said rim also having a lateral extension at each side, a casing having side-walls seated on said extensions and lying against said flanges, and extending radially beyond the flanges, a rounded, central tread portion connecting the side walls and serving normally to carry the load, auxiliary treads formed at the peripheries of said side walls and an inflatable inner tube confined between the central part of the casing and the central space of the rim, whereby the load is normally carried pneumatically on said rounded tread portion, but when the inner tube is deflated the load is carried on said auxiliary tread portions, and the latter are stiffened and supported by said radial rim flanges.

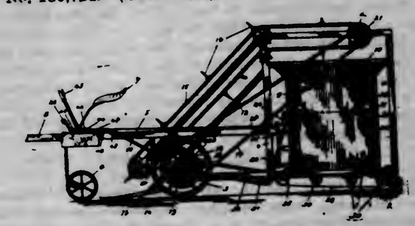
1,272,665. GRAIN-RECLAIMER. WALTER L. ISOM, Crows Landing, Cal. Filed Mar. 21, 1917. Serial No. 156,494. (Cl. 56—2.)

1. A grain reclaimer comprising a vehicle, a plurality of arms mounted for oscillating movement relative to the vehicle, a bracket secured to each arm, each bracket having one upwardly projecting support and a plurality of downwardly projecting supports, a suction hopper secured at one lower edge to the upper support and at the opposite edge to one of the lower supports to form a side and bottom opening into the same, means for driving the grain into the hopper through said opening, and means for applying suction to the hopper.



2. A grain reclaimer comprising a vehicle, a plurality of arms mounted for oscillating movement relative to the vehicle, a bracket secured to each arm, each bracket having one upwardly projecting support and three downwardly projecting supports, a suction hopper having one edge connected to the upper supports and its opposite edge connected to the foremost lower support to form a side and bottom opening into the hopper, a brush journaled on the central lower supports and arranged to sweep into the hopper, and flexible inclosing covers suspended from the front and rear lower supports to drag along the ground and confine the suction and the action of the sweeper within the hopper.

1,272,666. MECHANICAL HAY-SHOCKER. WALTER L. ISOM, Crows Landing, Cal. Filed July 16, 1917. Serial No. 180,724. (Cl. 56—68.)



1. A mechanical hay shocker comprising in combination a hopper, delivering means discharging into the hopper, tamping members within the hopper, hinged doors on the hopper, a draper forming the bottom of the hopper, and means whereby the delivery means may be stopped, the tamping members operated, the doors opened and the draper started in motion in the order named.

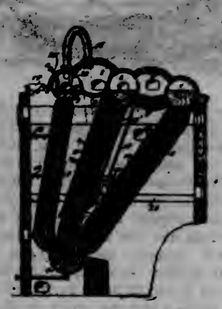
[Claims 2 and 3 not printed in the Gazette.]

1,272,667. STEAM-BOILER. DAVID S. JACOBUS, Jersey City, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Apr. 10, 1916. Serial No. 90,059. (Cl. 122—302.)

1. A steam boiler of the class described comprising at least three upper transverse drums connected by banks of tubes to a lower water chamber, the middle and rear upper drums being at substantially the same level, a main steam offtake leading from the rear upper drum, baffles arranged to give the gases serial up and down passes over the water tubes, an offtake for the gases in the rear of the rear bank of water tubes, water circulators between the middle and rear upper drums, water circulators between the front and middle upper drums, the combined cross sectional area of the front water circulators being greater than that of the rear water circulators, and a special baffle supported by said water circulators and acting to protect the rear drum from excessive heating.

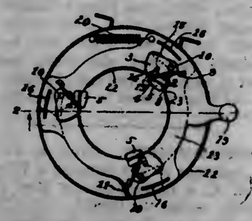
2. A steam boiler of the class described comprising at least three upper transverse drums connected by banks of tubes to a lower water chamber, the rear upper drum being at a higher level than the front upper drum, a main

steam off-take leading from the rear upper drum, baffles for giving the gases serial up and down passes over the banks of tubes, an off-take for the gases in the rear of the rear bank of water tubes, water circulators between the middle and rear upper drums, water circulators between the front and middle upper drums, the combined cross sectional area of the front water circulators being greater than that of the rear water circulators, and a special baffle overlying said water circulators and acting to protect the rear drum from excessive heating.



8. A steam boiler of the class described comprising at least three upper transverse drums connected by banks of tubes to a lower water chamber, a main steam offtake leading from the rear upper drum, baffles arranged to give the gases serial up and down passes over the water tubes, an offtake for the gases in the rear of the rear bank of water tubes, water circulators between the front and middle upper drums and also between the middle and rear upper drums, the combined area of the front water circulators being greater than that of the rear water circulators, and a special baffle extending rearwardly from the middle upper drum and arranged to protect the rear upper drum from excessive heating.

1,272,668. DISPENSING DEVICE. BERTHOLD JAHN, New Britain, Conn., assignor to Public Service Cup Company, Brooklyn, N. Y., a Corporation of New York. Filed Jan. 13, 1915, Serial No. 1,922. Renewed Mar. 16, 1918. Serial No. 222,988. (Cl. 211—8.)



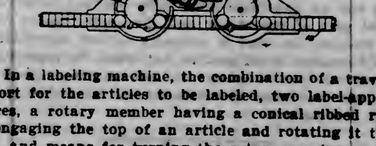
1. An escapement comprising three blades oscillatably mounted and in fixed relation to one another in the direction of their oscillation, one of said blades being movable away from another of said blades in a direction transverse the direction of said oscillation.

6. In a cup dispensing device the combination of means for guiding a stack of nested flanged cups in the direction of their common axis, a plurality of oscillatable escapements having their axes without the path of travel of said cups, each of said escapements comprising three peripheral blades, one of said blades being located and operable in one plane and the other two of said blades being arranged face to face and operable in planes parallel with and above the plane of the first mentioned blade, means for rotating said escapements to cause said first blade and said pair of blades to move out of and into supporting relation to adjacent cups in said stack respectively, and means for moving one of the blades of each pair away from the other blade of its respective pair in a direction parallel to the common axis of said cups.

10. In a cup dispensing device, the combination with supporting means for engaging the under side of the lowermost flange of a nested stack of flanged cups, of supporting means for engaging the under side of the flange of the next to the lowermost cup in such stack, a disengaging device located in position to engage the upper side of the flange of the said lowermost cup and move the same downwardly, and actuating means for sequentially moving the upper engaging means into engaging position, moving the lower engaging means out of engaging position, and moving the disengaging device downwardly, said upper engaging means, said lower engaging means and said disengaging device being oscillatably mounted and in fixed relation to one another in the direction of their oscillation.

[Claims 2 to 5 and 7 to 9 not printed in the Gazette.]

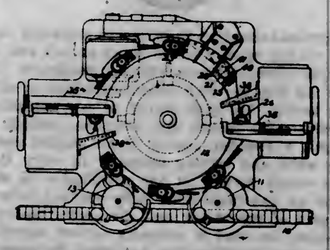
1,272,669. QUILLER. JESSE JEFFERS, Whitinsville, Mass., assignor to the Whitin Machine Works, Whitinsville, Mass., a Corporation of Massachusetts. Filed Aug. 16, 1913. Serial No. 785,066. (Cl. 242—32.)



1. In a quiller, a thread guide frame, means for normally traversing the same comprising lifter rods and levers and a connecting rod between the levers, a sleeve on such connecting rod, a lever connected to the sleeve and adapted for operation to cause the sleeve to move the rod beyond its normal traverse and means for normally maintaining said sleeve in an inoperative position with respect to the rod.

[Claims 2 to 4 not printed in the Gazette.]

1,272,670. LABELING-MACHINE. JOHN EMANUEL JOHNSON and CHARLES H. OSLUND, Worcester, Mass., assignors to the O. & J. Machine Company, Worcester, Mass., a Corporation of Massachusetts. Filed Jan. 11, 1917. Serial No. 141,891. (Cl. 216—12.)



1. In a labeling machine, the combination of a traveling support for the articles to be labeled, two label-applying devices, a rotary member having a conical ribbed recess for engaging the top of an article and rotating it therewith, and means for turning the rotary member and the articles during their travel between the two label-applying devices whereby labels can be applied to two sides thereof.

2. In a labeling machine, the combination of a rotary table for supporting the articles to be labeled, a plate located in fixed position on said table, anti-friction bearings on said plate, a second plate rotatably supported on said bearings, means projecting over the rotatable plate for holding it against the fixed plate, means for rotating an article mounted on the rotatable plate and rotating that plate with it, and means for applying a label to said article.

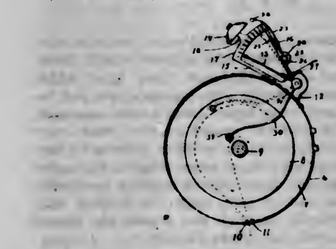
5. In a labeling machine, the combination of a movable support for carrying the articles to be labeled, a head movable with said support, a shaft carried by said head, means on said shaft for engaging an article to be labeled and transmitting the motion of the shaft to said article, means carried by said head for turning said shaft as the support moves along its path, and means for applying labels to said articles.

6. In a bottle labeling machine, the combination of a rotary table adapted to support bottles to be labeled, a head carried above said table and rotating therewith, two shafts supported by said head, gears on said shafts for turning one from the other, one of said shafts being provided with a depression in the lower side for engaging and holding the top of the bottle, means on the other shaft for turning it to rotate the bottle on its own axis, and means for applying labels to said bottles.

10. In a bottle labeling machine, the combination, of a rotatively moving bottle carrying table having a series of pivotal bottle-supporting seats at stations on its upper flat surface, means for automatically feeding bottles onto said carrier, a plurality of label-affixing mechanisms positioned at intervals about said table in position for applying labels to the bottles at the same level, and means for partially rotating the individual supporting seats and bottles intermediate to the respective label-affixing mechanisms.

[Claims 3, 4, 7 to 9, and 11 to 13 not printed in the Gazette.]

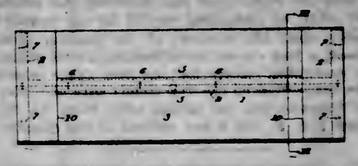
1,272,671. FILM-CONTROLLED INDICATOR FOR MOVING-PICTURE APPARATUS. JOHN G. JONSON, Seattle, Wash. Filed Dec. 19, 1917. Serial No. 207,971. (Cl. 33—169.)



A film-controlled indicator of the class described, which embodies a film magazine within which is rotatably disposed a reel of film and which is provided with an opening through its surrounding wall; a bracket fastened to the outer surface of said surrounding wall in a position adjacent to said opening; a signal bell mounted on said magazine in a position distant from said opening; a bell hammer whose shank is pivotally attached to said bracket in a position to adapt said bell hammer to strike said bell in response to swinging movements of said shank; mechanism associated with said shank of said bell hammer and with the outermost convolution of the film on said reel whereby said bell hammer may be actuated to strike said bell in response to a predetermined decrease in the diameter of the unwound portion of the film on said reel, there being a graduated indicator scale upon one of two relatively movable parts of said mechanism whereby may be indicated changes in the decreasing diameter of the roll of film on said reel during the process of unwinding said roll of film.

1,272,672. CLOTH-REEL. MARTIN W. JOYCE, New York, N. Y., assignor to John H. Wiemers, Inc., New York, N. Y., a Corporation of New York. Filed Apr. 17, 1918. Serial No. 229,047. (Cl. 206—50.)

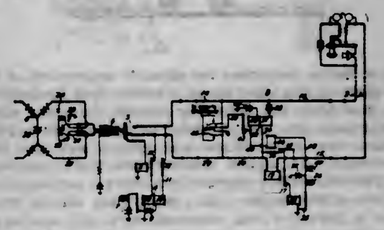
2. A cloth reel, having a wooden frame, and a longitudinally folded self-sustaining inclosing cover, said frame comprising a single longitudinal strip arranged centrally of the reel, and end strips arranged transversely to the longitudinal strip, the cover being folded over the longitudinal and end strips with its meeting ends abutting over



the longitudinal strip, and driven fastenings securing the cover to the longitudinal strip and the end strips, said cover alone forming the longitudinal edges of the reel.

[Claims 1 and 3 not printed in the Gazette.]

1,272,673. SERVICE-OBSERVING CIRCUIT FOR TELEPHONE-LINES. CHARLES W. KECKLER, Newark, N. J., assignor, by mesne assignments, to Western Electric Company, Incorporated, a Corporation of New York. Filed Apr. 14, 1915. Serial No. 21,251. (Cl. 179—73.)



1. In a telephone system, a line circuit terminating at a central office, a service observing circuit connected with the talking conductors of the line circuit, a signaling device therefor controlled over the line circuit and operated upon the removal of the receiver from the switchhook to furnish a signal, a connecting circuit at the central office, and a relay in circuit with the talking conductors of the line circuit rendered effective by the connection of the connecting circuit with the line circuit to cause the effacement of the signal.

3. In a telephone system, a line circuit extending from a subscriber's station to and terminating at a central office, a line signal for the telephone line, a service observing signal for the line, a relay energized upon the removal of the receiver from the switchhook for causing the operation of the service observing signal, a relay for causing the effacement of the service observing signal, a line relay controlling the line signal, an energizing circuit for the line relay established upon the removal of the receiver from the switchhook and including the winding of the second-mentioned relay, a link circuit for extending the telephone line, and an energizing circuit for the second-mentioned relay established upon the connection of the link circuit with the telephone line.

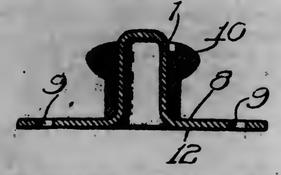
4. In a telephone system, a line circuit terminating at a central office, a service-observing circuit connected with the talking conductors of the line circuit, a signaling device therefor, a relay in circuit with the talking conductors for controlling the signaling device, a source of ringing current, a relay bridged across the talking conductors and responsive to current from said source, a signaling device controlled thereby, a relay actuated upon the operation of the bridged relay for disabling the first-mentioned relay while ringing current is applied to the line.

7. In a telephone system, a line circuit extending from a subscriber's station to and terminating at a central office, a line signal for the line, a line relay controlling the line signal, a service-observing signal, a first relay connected in series with the line circuit, a second relay con-

nected with the line circuit through a normally closed contact of the first relay and coöperating therewith to control the service observing signal, an energizing circuit for the line relay established upon the removal of the receiver from the switchhook and including the winding of the first relay, an energizing circuit for the second relay established upon the removal of the receiver from the switchhook, a link circuit for extending the telephone line, and an energizing circuit for the first relay established upon the connection of the link circuit with the telephone line for disconnecting the second relay from the line.

[Claims 2, 5, 6, and 8 not printed in the Gazette.]

1,272,674. BUTTON-MOUNTING FOR GARMENT-SUPPORTERS. HERMAN A. KELLER, Chicago, Ill., assignor to Kabo Corset Co., Chicago, Ill., a Corporation of West Virginia. Filed Nov. 20, 1917. Serial No. 202,910. (Cl. 24—90.)



In a button mounting for garment supporters, a stud base plate of thin sheet metal, a hollow stud integral with said base plate and extending upward therefrom and of substantially the same diameter throughout its length, a yieldable button having an axial opening, said stud being of outward configuration corresponding to the opening in said yieldable button thereby furnishing a support for all portions of the button, said button being formed with a recess in the upper edge concentric with said opening and of excess area with respect thereto, the stud being of greater height than the button, whereby the excess height of the stud may be upset on the top of the button said upset portion lying within said recess thereby holding the button on said stud with its inner end snug against the stud base plate and producing a smooth rounded head on the button.

1,272,675. CLASP FOR STRAPS OR RIBBONS. RUFUS KING, Plainville, Mass., assignor to Bugbee and Niles Co., North Attleboro, Mass., a Corporation of Massachusetts. Filed Nov. 10, 1917. Serial No. 201,198. (Cl. 24—77.)



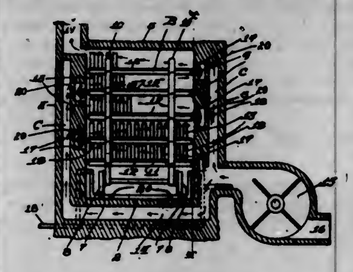
1. In a clasp for the straps and ribbons of wrist-watches or for like purposes, the combination with a slide adapted for adjustment on the strap and provided with ball-ended studs, of a plate-member having perforations forming two integral parallel spaced yieldable bars with circular openings in their opposed edges adapted to admit the balls on the ends of the studs therebetween by snapping them into place therethrough.

2. In a clasp for fastening the ends of straps, ribbons or the like, the combination with a substantially flat plate pieced with openings to form opposite, spaced spring-members having circular apertures at their ends, of a crowned shell surmounting the top of the plate with its rim rolled over the edges thereof to form a flush joint therebetween, and a slide-member having studs with spherically-shaped ends adapted to be snapped into place between the spring-members with their protruding ends inclosed and protected by the shell.

3. In a clasp for fastening the ends of straps, ribbons or the like, the combination with a plate-member having prong-like hooks at one end and perforations in its main part to provide integral, spaced spring-arms with circular apertures at their ends, of a relatively thin shell formed with a crowned top overlying the plate and having its rim rolled over the edges of the latter with the hooks projecting at the side, and a slide-member having studs with spherically-shaped ends adapted to be snapped through the apertures between the spring-arms to secure the two parts of the clasp together.

4. In a clasp for fastening the ends of straps, ribbons or the like, the combination with a base-plate perforated with openings to form integral, spaced spring-arms having circular apertures at their ends, a coöperating slide-member having ball-ended studs adapted to be forced through the apertures in the spring-arms to seat their balls in position above the base-plate, and a crowned shell surmounting the top of the base-plate with its rim secured to the edges thereof to adapt it to inclose the ends of the studs projecting therethrough whereby to provide a smooth unbroken covering for the two coöperating parts of the clasp.

1,272,676. DRIER. CHARLES H. KLEIN, Chaska, Minn. Filed Sept. 17, 1917. Serial No. 191,728. (Cl. 34—46.)

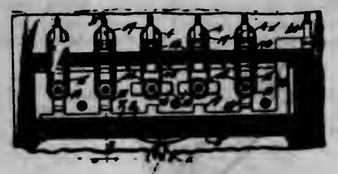


1. A drier comprising, in combination, a chamber having side walls, a truck movable into and out of said chamber having a series of superimposed trays upon which pallets of bricks may be placed with spaces above and between said bricks, said walls being formed with communicating ducts leading into the spaces between said trays and connecting the spaces in series from bottom to top, the uppermost ends of said ducts exhausting to the outer atmosphere and a source of air drying medium connected with the lowermost end of said ducts for forcing said drying medium upwardly through and across the spaces between said trays and the bricks thereon.

2. A drier, comprising, in combination, a chamber having side walls formed with a plurality of ducts, the lowermost of said ducts being connected with a suitable source of forced drying medium and the uppermost of said ducts exhausting outwardly, a plurality of trucks movable into and out of said drier, each of said trucks having a tier of superimposed trays spaced apart and adapted to hold pallets of spaced bricks thereon, said ducts being arranged in the opposite side walls of said structure to form communicating channels connecting the spaces between the superimposed trays in series, so that said drying medium is forced across the lowermost space between said trays, thence across the space between the pair of trays immediately above and so on back and forth across the spaces between said trays from the bottom to the top of said truck and finally exhausting outwardly.

3. A drier of the class set forth, comprising, in combination, a drying chamber having side walls and end doors, a conveyer track leading longitudinally through the space between said side walls, a plurality of trucks movable into and out of said chamber on said track, each of said trucks having tiers of superimposed trays spaced apart and fitting closely between said side walls, all of said trays of said trucks fitting closely endwise together and between said doors, a suitable source of air drying medium, and a blower for forcing said drying medium, said side walls being formed with upwardly leading ducts with which said source of drying medium is connected at the lower end of said structure, said ducts leading serially through the spaces between said trays upwardly back and forth across each of said trucks, whereby the drying medium is forced above and between bricks placed between said trays in a zig zag course upwardly, and passages connected directly with said source of drying medium and leading into said ducts at a series of points so that fresh drying medium is mixed with the moist drying medium to dry the latter during the zig zag course of the drying medium through the drying chamber.

1,272,677. OIL-SWITCHBOARD. HUBERT F. KRANTZ, Brooklyn, N. Y., assignor to Krantz Manufacturing Company Inc., Brooklyn, N. Y., a Corporation of New York. Filed May 19, 1918. Serial No. 768,416. (Cl. 247—13.)



1. An apparatus of the character described, comprising, in combination, a switch board, a covered container secured to one side thereof adapted to be filled with an insulating fluid, a pair of parallel bus bars therein having conductors connected therewith and passing out of said container, a plurality of coacting multipolar means above said bus bars adapted to be connected with conductors leading to a plurality of different conduits, a plurality of individual switching means in said container between said cross bars and said plurality of means for completing the circuit, said switching means coacting directly with said bus bars, and means without said container on the opposite side on said switch board for actuating said switch means through the cover of said container.

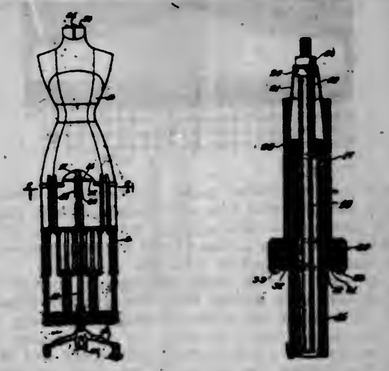
4. An oil switch mechanism combining a container having imperforate bottom and side walls and being adapted to contain a quantity of oil therein, a bus-bar having a part extending downwardly into said container and having another part extending along the bottom wall of the container adapted to stand beneath the level of oil within the container, a plurality of switch devices spaced apart along the length of the last mentioned portion of the bus-bar, and means extending exteriorly of the container independently operable to cause said switch devices respectively to make and break contact with the bus-bar at will.

5. An oil switch mechanism combining a container adapted to contain a quantity of oil, a bus-bar arranged within the container, a plurality of branch-line contacts arranged within the container spaced from the bus-bar and spaced apart along the length of the bus-bar, a pair of insulating plates carried by the container for supporting the bus-bar and the branch-line contacts one adapted to retain the bus-bar in a position beneath the level of oil within the container and the other adapted to support the branch-line contacts in a position in the upper portion of the container, a plurality of switch blades arranged within the container one for each of said branch-line contacts, and means to operate said switch blades for connecting the branch-line contacts respectively with the bus-bar.

[Claims 2 and 3 not printed in the Gazette.]

1,272,678. DRESS-FORM STAND. WALDEMAR KROLL, Weehawken, N. J., assignor to Hall-Borchert Dress Form Company, Hoboken, N. J., a Corporation of New Jersey. Filed Mar. 20, 1918. Serial No. 223,496. (Cl. 211—13.)

1. A stand for dress-forms comprising a tubular standard, the exterior surface of the upper end thereof being beveled, a tubular member telescoping with said standard, a rod movable lengthwise through said standard, a pair of spring metal strips secured to said rod and extending transversely of the end thereof and having their terminal portions extending lengthwise of said member and terminating adjacent said beveled surface, and means for moving said rod and strips endwise to effect the locking or releasing of said member.



7. A stand for dress-forms comprising a tubular support having a projection adjacent to but spaced from its upper end, a tube slidable upon said standard and having a collar at its lower end, an inwardly extending flange on said collar for engagement with said projection to limit the upward movement of said tube, a dress-form having its upper end secured to the upper end of said tube, and a coil spring resting on said collar for supporting the lower end of said dress-form.

[Claims 2 to 6 and 8 not printed in the Gazette.]

1,272,679. DRY-DOCK SYSTEM. JOHN LAKE, Philadelphia, Pa. Filed Dec. 16, 1916. Serial No. 137,320. (Cl. 61—8.)



1. In a dry-dock system, a plurality of docking chambers for vessels arranged to fill by gravity from a natural level supply, one of said docking chambers being normally open to said supply and the others normally closed thereto and empty, separate conduits affording communication between each two adjacent chambers, an independent auxiliary conduit connecting the end chambers, and means for controlling said conduits.

2. In a dry-dock system, a plurality of docking chambers for vessels arranged to fill by gravity from a natural level supply, one of said docking chambers being normally open to said supply and the others normally closed thereto and empty, separate conduits affording communication between each two adjacent chambers, an independent auxiliary conduit connecting the end chambers, valve means for controlling the first-named conduits, and independent valve means for controlling the independent auxiliary conduit and causing gravity flow from the one end chamber to the other.

1,272,680. TORPEDO-SNARE. ALFRED M. LANE, St. Louis, Mo. Filed Aug. 20, 1917. Serial No. 187,049. (Cl. 114—241.)

3. A missile torpedo snare comprising a buoyant body portion, said body portion being triangular in cross-sec-

tion, the inclined top portion sloping downwardly from its front portion and continuing for some distance past the body portion, a nose formed in the front wall of the float, the inclined top portion of the float overhanging said nose portion and forming wings, and a net suspended from the base of the float.

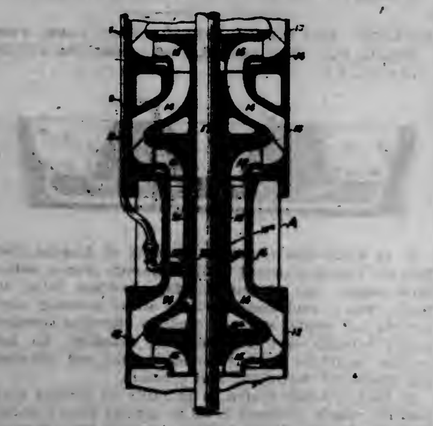


7. A missile torpedo snare comprising an elongated float, a net suspended from said float lengthwise thereof, and a curved plate secured along the lower edge of said net and constituting a drag to pull the float downwardly when the net is struck by a torpedo.

9. A missile torpedo snare comprising a buoyant body portion, said body portion being triangular in cross-section, the inclined top portion sloping downwardly from its front portion and continuing for some distance past the body portion, a nose formed in the front wall of the float, the inclined top portion of the float overhanging said nose portion and forming wings, a net suspended from said float, and a drag secured to the lower edge of said net.

[Claims 1, 2, 4 to 6, and 8 not printed in the Gazette.]

1,272,681. PUMP MECHANISM. MAHLON E. LAYNE, Houston, Tex. Filed July 19, 1916. Serial No. 110,012. (Cl. 253—188.)



1. The combination in a centrifugal pump having a plurality of stages, of a bearing for the driving shaft of the pump located between stages, said bearing being provided with means for substantially equalizing the pressure on the inside and outside of said bearing.

5. The combination in a centrifugal pump having a plurality of stages, of a driving shaft, a relatively fixed casing between the stages, a bearing for said shaft mounted in said casing and extending within the rotating part of one of the stages, means for introducing lubricant to the end of the bearing lying in said rotating part, and means giving access of substantially the same water pressure in the pump to the inner and outer surfaces of the bearing at a point remote from the end of the bearing in the said rotating part.

7. The combination in a centrifugal pump having a plurality of stages and impellers spaced apart, a driving shaft carrying the impellers, a relatively fixed casing between the impellers, a bushing mounted at one end in the casing and surrounding the shaft, a housing member mounted to rotate with the shaft and fitting over the free end of the bushing, and means whereby the water pressure on the inner and outer surfaces of the bushing are balanced, thereby preventing a circulation of fluid along the said surfaces.

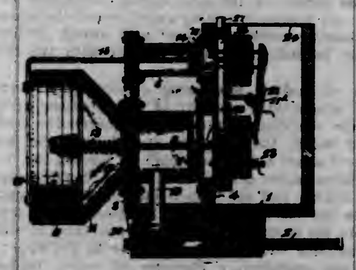
[Claims 2 to 4, 6, and 8 not printed in the Gazette.]

1,272,682. METHOD OF PRODUCING DUSTLESS STARCH. ADOLPH W. H. LENDERS, Cedar Rapids, Iowa. Filed Mar. 30, 1914. Serial No. 828,414. (Cl. 83—40.)



The process of cleaning a product of very friable material which consists of conducting said very friable material through a relatively short unobstructed chamber, subjecting the material in its vertical passage to a series of jets of air at various angles, and maintaining a current of air away from the field of said jets and away from the region of delivery to a receptacle.

1,272,683. EXPLOSION-ENGINE. ISIDOR LEBEM, Wichita, Kans. Filed Aug. 2, 1916. Serial No. 112,793. (Cl. 115—31.)



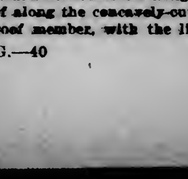
1. An explosion engine for boat propulsion, comprising a cylinder and a reciprocatory piston therein adapted to be located in the water on which the boat is supported, with the face of the piston directly exposed to the water, and a reciprocatory explosion engine having a piston directly connected with the first-named piston, with the connection yieldable in the direction of the movement of the pistons to absorb the shock of the explosion in transmitting the movement of the second piston to the first-named piston.

3. Boat propelling means, comprising a power unit having a reciprocatory piston with means for driving it by explosive impulses, a water engaging piston in line with the first-named piston and movable thereby in the same direction and to a like extent as the power piston, and a mounting for the power unit and the water engaging piston for the simultaneous and bodily adjustment of both the power unit and the water-engaging piston for adjusting the direction of movement of the parts with respect to the direction of movement of the boat through the water.

7. Means for boat propulsion, comprising an explosion engine with a power piston, another piston connected to the first-named piston for actuation thereby in the same direction and to a like extent, means for forcing explosive charges into the first-named piston, and connections between the second-named piston and said last-named means for actuating said last-named means by reciprocation of the second-named piston, said explosion engine being provided with valves and actuating means therefor, and connections between the valve actuating means and the second-named piston for the operation of the valve operating means by reciprocation of the second-named piston.

[Claims 2 and 4 to 6 not printed in the Gazette.]

1,272,684. DRESS-SHIELD AND PROCESS OF MAKING SAME. ROBERT LEVI, New York, N. Y. Filed May 15, 1916. Serial No. 97,481. (Cl. 2—34.)

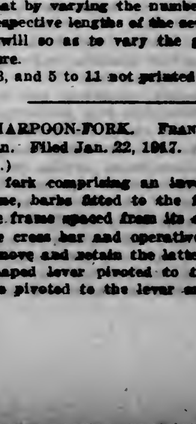


1. As a new article of manufacture, a dress-shield comprising a lining, an outside cover, and a moistureproof member extending between the same, said lining, cover and moistureproof member having rough convex edges, and being stitched together adjacent said edges, with the cover and lining meeting at the lines of stitching, at the extreme outside edges of the shield, and having their outer surfaces coextensive at such edges, the lining, cover and moistureproof member being bent back from the stitching to extend side by side therefrom to their rough edges, between the lining and the cover, the edges of the seams being concealed between the lining and cover.

2. The process of making a dress-shield, consisting in superposing a pair of shield-shaped cover members and stitching the same along the concavely-curved edge, reversing the members to place the ridge of the same inside, placing a moistureproof member, folded upon itself along a concavely-curved line, between the cover members, and a pair of lining members upon the outer faces of the cover members, stitching together one leaf of the moistureproof member and the adjacent cover and lining members along the outside or convex edge and similarly stitching together the other leaf of the moistureproof member and the other cover and lining member, turning each pocket thus formed inside out and folding the structure upon itself, along the concavely-curved median line of the moistureproof member, with the cover members superposed and the lining members outside, and stitching the lining members together along the concavely-curved edges thereof, about the fold of the moistureproof member, substantially as set forth.

3. The process of making a dress-shield, consisting in superposing, on a moistureproof member, an outer covering and a pair of lining members on the outer covering, with the curved inside edges of the lining members adapted to overlap, stitching each lining member through the outer covering to the moistureproof member, adjacent the outside convexly curved edges of all of the same, turning each pocket thus formed inside out, in position the moistureproof member and the ridges of the seams between the lining members and the outer covering, folding the structure upon itself along the concavely-curved median line of the moistureproof member, with the lining members outside and the folded outer covering inside, and stitching the lining members together along the curved meeting edges thereof, about the fold of the moistureproof member, substantially as set forth.

1,272,685. COMPOSITE FIGURE TOY. WILLIS SYLVESTER LEVIS, Yonkers, N. Y. Filed Mar. 23, 1918. Serial No. 224,141. (Cl. 46—40.)



2. In a composite figure toy, the combination of a number of separate units and means for connecting them together to form a member having a length equal to the aggregate length of the several units, the number of such units employed being variable at the will of the operator in order to vary the length of said member, said units being so shaped and having such appearance as to simulate, when connected together, a definite portion of a living figure.

4. In a composite figure toy the combination of a number of separate units having a plurality of distinct forms, the units of each form being provided with means whereby they may be detachably connected to each other to build up an elongated member, the length of each elongated member being controllable at the will of the operator by choosing the aggregate number of units of which the elongated member is built up, the various units in the different elongated members having such appearance that the elongated members respectively simulate distinct parts of a living figure.

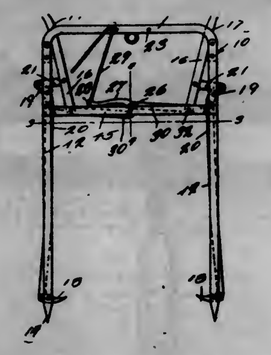
12. A device of the character described, comprising an inanimate figure representing a living figure and provided with distinct members simulating different anatomical portions thereof, said distinct members each being built up of separate units detachably connected together, the several units of each member being so related in size and appearance that by varying the number of units in each member the respective lengths of the several members may be varied at will so as to vary the general size of the inanimate figure.

[Claims 1, 3, and 5 to 11 not printed in the Gazette.]

1,272,686. HARPOON-FORK. FRANK E. LAWRENCE, Milaca, Minn. Filed Jan. 22, 1917. Serial No. 143,747. (Cl. 57—41.)

A harpoon fork comprising an inverted substantially U-shaped frame, barbs fitted to the frame, a cross bar secured in the frame spaced from its closed end, handles pivoted to the cross bar and operatively connected with the barbs to move and retain the latter in carrying position, an L-shaped lever pivoted to the cross bar, and operating bars pivoted to the lever on opposite sides of

its axis of movement and having slotted portions receiving the pivots for said handles to guide the outer ends



of said operating bars into abutting engagement with the connections between the barbs and handles, substantially as described.

1,272,687. FLEXIBLE SHAFT-COUPLING. HENRY H. LOGAN, Vancouver, British Columbia, Canada. Filed July 12, 1917. Serial No. 180,094. (Cl. 64—13.)



1. Means for flexibly connecting two rotatable parts, said means comprising rigid driving lugs projecting from each of the parts toward the other, the driving faces of said lugs being in planes which are substantially radial to the axis of rotation, a loose flange between the two rotational parts, said flange having rigid lugs projecting from each face to engage those of the rotatable parts, the lugs on one side of the flange being angularly located between those of the other, said means also including back-lash-absorbing lugs adjacent to and separated from said driving lugs.

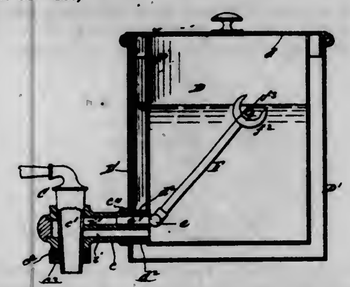
3. Means for flexibly connecting two rotatable parts, said means comprising rigid driving lugs projecting from each of the parts toward the other, the driving faces of said lugs being in planes which are substantially radial to the axis of rotation, a loose flange between the two rotational parts, said flange having rigid lugs projecting from each face to engage those of the rotatable parts, the lugs on one side of the flange being angularly located between those of the other, the driving faces of the lugs having a facing of indurated fiber or the like, said means also including back-lash-absorbing lugs adjacent to and separated from said driving lugs.

5. Means for flexibly connecting two rotatable parts, said means comprising rigid lugs projecting from each of the parts toward the other, the driving faces of said lugs being in planes which are substantially radial to the axis of rotation, a loose flange between the two rotational parts, said flange having rigid lugs projecting from each face to engage those of the rotatable parts, the lugs on one side of the flange being angularly located between those of the other, and bolts holding each pair of lugs in driving engagement, said bolt passing through apertures in each pair of lugs, the bolt apertures in the lugs and the bearing of the head and nut of each bolt on the same being such as will permit freedom of movement of one lug on the other within the required limit.

7. Means for flexibly connecting two rotatable parts, said means comprising rigid lugs projecting from each of the parts toward the other, the driving faces of said lugs being in planes which are substantially radial to the axis of rotation, a loose flange between the two rotational parts, said flange having rigid lugs projecting from each face to engage those of the rotatable parts, the lugs on one side of the flange being angularly located between those of the other, springs holding the lugs of the floating flange in contact with those of the rotatable parts, means for adjusting said springs, and means for limiting backward movement of the lugs of the floating flange against the springs.

[Claims 2, 4, and 6 not printed in the Gazette.]

1,272,688. LIQUID-DISPENSER. HARRY C. LYONS, New York, N. Y. Filed Apr. 28, 1917. Serial No. 166,131. (Cl. 31—85.)



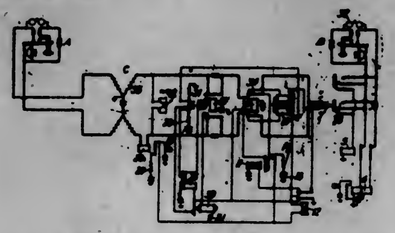
1. A mixing faucet for dispensing liquids of different specific gravities, comprising a casing having a plurality of discharge passages and a faucet plug having a central bore and an inlet and fitting in said casing capable of being turned to communicate with the passages in the casing, a reservoir in which said casing is removably secured with its inner end substantially flush with the wall thereof, and a floatable drain duct having a tubular coupling member at its lower end removably fitting within one of the discharge passages of the casing.

2. A mixing faucet for dispensing liquids of different specific gravities, comprising a casing having a plurality of discharge passages, and a faucet plug having a central bore and an inlet thereinto, said plug fitting in said casing and capable of being turned to communicate with the passages in said casing, a reservoir in the wall of which said casing is removably inserted from the exterior with its inner end substantially flush with the inner wall of the reservoir, a floatable drain duct and a fulcrum elbow supporting said duct and having a tubular coupling member removably supported in one of the discharge passages of said casing.

1,272,689. TELEPHONE-EXCHANGE SYSTEM. HARRY W. MACDOUGALL, East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed July 2, 1917. Serial No. 178,163. (Cl. 179—51.)

1. In a telephone exchange system, the combination of a telephone line, a link circuit comprising a pair of talking conductors, a relay bridged across the talking conductors, an energising circuit for the relay completed by the connection of the link circuit with the telephone line, a source of ringing current, and a relay operating upon the energisation of the bridged relay for connecting the source of ringing current to the line.

3. In a telephone exchange system, the combination of a telephone line, a link circuit comprising a pair of normally open talking conductors, a relay bridged across the talking conductors and energised upon the connection of the link circuit with the telephone line, a second relay operating upon energisation of the bridged relay, a locking circuit therefor established upon the operation thereof, a switching device rendered effective upon the operation of the second relay to disconnect the bridged relay from and to close the talking conductors, a source of ringing current, and a ringing relay energised upon the operation of the second relay for connecting the source of ringing current to the line.

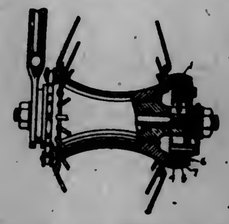


4. In a telephone exchange system, the combination of a telephone line extending from a subscriber's station to a central office, a switch at the station adapted to close the telephone line, a link circuit at the central office comprising a pair of normally open talking conductors, a relay bridged across the talking conductors and energised upon the connection of the link circuit with the telephone line when the telephone line is open and not energised when the telephone line is closed, a signaling device, interrupter mechanism, and a relay operating upon the connection of the link circuit with the telephone line for including the interrupter mechanism in circuit with the signaling device to cause the intermittent operation thereof when the bridged relay is not energised.

9. In a telephone exchange system, the combination of a telephone line extending from a subscriber's station to a central office; a switch at the station adapted to close the telephone line; a link circuit at the central office comprising a pair of normally open talking conductors; a relay bridged across the talking conductors and energised upon the connection of the link circuit with the telephone line when the telephone line is open and not energised when the telephone line is closed; means for closing the talking conductors upon connection of the link circuit with the telephone line when closed comprising a switching device, a relay energised upon the momentary actuation of the switching device, a locking circuit therefor established upon the energisation thereof, and a disconnect relay operating upon the energisation of the last mentioned relay to disconnect the bridged relay from and to close the talking conductors.

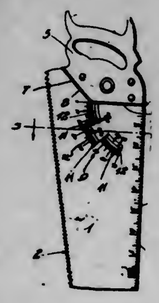
[Claims 2, 5 to 8, and 10 to 12 not printed in the Gazette.]

1,272,690. COASTER-BRAKE LINING. RASMUS H. MADSEN, Hollywood, Cal. Filed Feb. 26, 1918. Serial No. 219,334. (Cl. 208—57.)



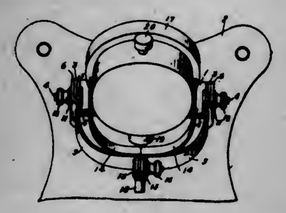
A coaster brake lining comprising a band formed of a strip of metal bent to a circle with its ends abutting together, and a flange bent inwardly from one edge of the band; the lining being adapted to fit expansively in the rim of a hub around a coaster brake shoe.

1,272,691. WOODWORKER'S SAW. SOLOMON MANES, North Adams, Mass. Filed Oct. 9, 1917. Serial No. 195,615. (Cl. 33—75.)



An angle marking instrument comprising a flat blade having a straight edge, a head on one end of said blade having a straight edge intersecting and at right angles to said straight edge of the blade, said blade having an arcuate scale provided with indicia representing degrees, said scale having its center located at the intersection point of the two straight edges, said blade having arcuate marking slots jointly equaling the length of the scale in degrees but disposed in staggered relation with their ends separated to prevent weakening of the blade, said straight edge of the head resting against the work when said scale is used and the indicia of said scale starting at said straight edge.

1,272,692. TRANSMITTER-SUPPORT. GEORGE H. MANNE, East Orange, N. J., and BERTRAM BAILEY, New York, N. Y., assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 2, 1917. Serial No. 152,066. (Cl. 179—152.)



1. An adjustable telephonic device comprising a base member, a U-shaped arm having its legs pivoted to said base member, a second U-shaped arm, means pivoting the bases of said U-shaped arms together, and a telephonic transmission element mounted between the legs of said second arm; said first arm being broader than the second, whereby the second arm may be positioned within said first arm.

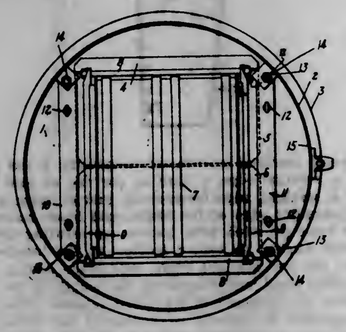
2. An adjustable telephonic device comprising a base member, a U-shaped arm having its legs pivoted to said base member and vertically movable relative thereto, a second U-shaped arm, means to pivot the bases of said U-shaped arms together, and a telephonic transmission element mounted between the legs of said second U-shaped arm; said first arm being broader than the second, whereby the second arm may be moved within said first arm to position said telephonic element within said arms and adjacent to said base member.

6. An adjustable telephonic element comprising a base member having an upstanding ear, an arm having a recess therein engaging one side of said ear, a separate plate engaging the other side of said ear and having a projection to engage said recess, a stud pivoting said arm

and plate to said lug, said stud being rotatable with said arm and plate, means carried by said stud to vary the friction of said arm and plate with said ear, and a telephonic transmission element carried by said arm.

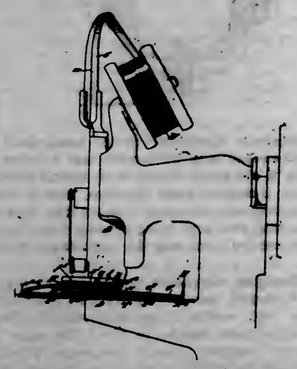
[Claims 3 to 5 not printed in the Gazette.]

1,272,693. RETAINING MEANS. EMIL MATTMAN, Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 24, 1914. Serial No. 814,057. (Cl. 175—361.)



The combination with a containing case having smooth inner walls, and an electrical apparatus disposed in said case, horizontally disposed and eccentrically apertured flat plates constituting bracing means, and means to secure said plates to the apparatus, said eccentric plates firmly abutting against the smooth-surfaced inner walls of said containing case, thereby precluding lateral displacement of the electrical apparatus.

1,272,694. WORK-GUIDE FOR WIRE-STITCHING MACHINES. ARTHUR H. MAYNARD, Warwick, R. I., assignor to Boston Wire Stitcher Company, Portland, Me., a Corporation of Maine. Filed Jan. 13, 1916. Serial No. 71,880. (Cl. 1—15.)

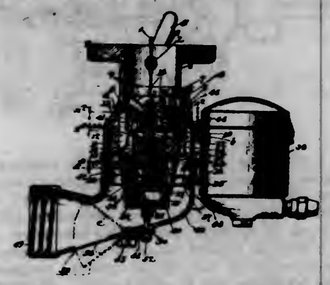


1. In a work-guide for wire-stitching machines, the combination with a lower horizontal work-support, of an upper plate overlying the support in parallel spaced relation thereabove and joined thereto along its longitudinal side, said plate bent upwardly at its rearward end to form a vertical flange extending laterally across the plate at right-angles to its longitudinal side to provide a fastening-means for attaching the work-guide to the machine.

3. In a work-guide for wire stitching machines, the combination with a lower horizontal plate, of a top-plate spaced above and overlying the lower plate, said top-plate joined to the lower plate along its longitudinal edge and provided with a slitted portion inclined upwardly from its horizontal plane to form a guard for directing the work down under the rear end of the top-plate after it feeds across the front portion thereof.

[Claims 2 and 4 to 12 not printed in the Gazette.]

1,272,695. CARBURETER. HARRY A. MILLER and FRANK M. ADAMSON, Los Angeles, Cal. Filed Sept. 18, 1916. Serial No. 120,672. (Cl. 261—40.)



2. A carbureter comprising a spraying device having nozzles arranged in a circle with air ports therebetween, the nozzle outlets being on the inner faces of the nozzles and a tubular air valve fitting the inner faces of the nozzles to control the nozzle outlets and air ports.

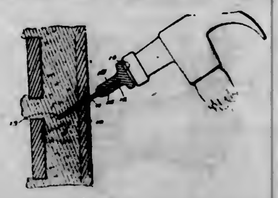
4. A carbureter comprising a mixing chamber, a nozzle projecting into said chamber, a cylindrical member having air ports arranged in a circle around said nozzle, other nozzles, having outlets at different levels circumferentially of the cylindrical member, and a tubular air valve to control the air ports.

8. A carbureter comprising a spraying device having spaced legs, the spaces between adjacent legs forming air ports and there being nozzle bores in the legs having outlets, and an air valve shiftable along the legs adjacent thereto to control the nozzle outlets and air ports.

15. A carbureter comprising a mixing chamber, a cylindrical spraying device having circumferentially arranged air ports, the inter-air port portions of the spraying device forming nozzles, and a cylindrical air valve shiftably engaging the spraying device and adapted to fit over the air ports and nozzle openings.

[Claims 1, 3, 5 to 7, 9 to 14, and 16 to 19 not printed in the Gazette.]

1,272,696. PICTURE-HANGER. HUGO MOCK, New Brighton, N. Y. Filed Mar. 22, 1916. Serial No. 85,897. (Cl. 85—14.)



1. The mode of hanging a picture which consists in driving a double-pointed pin of substantially uniform diameter throughout into a supporting medium, leaving one point of the pin exposed with the embedded portion disposed at an angle to the horizontal, and then forcing the picture frame against said exposed portion and embedding the latter into the frame and bringing the rear face of the frame into parallel close contact with said supporting medium.

2. The mode of hanging a picture which consists in applying a protecting member to one point of a double-pointed pin, forcing said pin into a supporting medium at an angle to the horizontal and leaving one point exposed, removing the protecting member and then applying the picture frame and exerting force thereagainst to embed the exposed portion of the pin thereinto until the rear face of the frame is brought into parallel close contact with the adjacent face of the supporting medium.

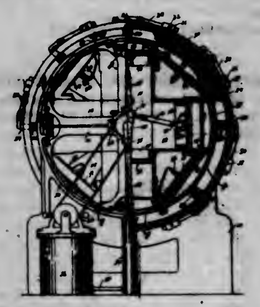
1,272,697. FOUNTAIN-PEN. FRANK H. MOONEY, Hinsdale, Ill., assignee to The Conklin Pen Manufacturing Company, Toledo, Ohio, a Corporation of Ohio. Filed Nov. 20, 1915. Serial No. 62,499. (Cl. 120—46.)



3. In a fountain pen, a barrel having an opening in its side wall, a reservoir compressor bar disposed within the barrel and having a part projecting outward therefrom and into said opening, said part being elongated in form lengthwise of the barrel and having its outer end portion provided with axially registering bearing sockets which are spaced lengthwise of the barrel, and a bowed form of control lever having its ends provided with pivot studs which are sprung into said sockets, said lever being operable to impart a compressing movement to said bar from without the barrel and to coact with the barrel to lock the bar in inoperative position.

[Claims 1 and 2 not printed in the Gazette.]

1,272,698. ROTARY INTERNAL-COMBUSTION ENGINE. JASMIN PIERRE BRUCERON, Pasadena, Cal. Filed June 18, 1917. Serial No. 175,262. (Cl. 123—9.)

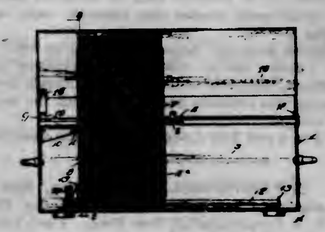


1. A rotary internal combustion engine comprising the combination of a combustion chamber, means for supplying a charge thereto, said chamber provided with a discharge outlet, means for igniting the charge in said combustion chamber, a rotatable shell surrounding said chamber, a closure band in said shell, and an impact member movable abreast of said discharge outlet for being impelled by the discharge of gases from said combustion chamber, said impact member being movably mounted in said shell to allow for temperature changes.

15. A rotary internal combustion engine, comprising the combination of a stationary member, a radially disposed cylinder therein, a piston reciprocating in said cylinder, a rotatable crank, a piston rod connecting said crank and said piston, a combustion chamber communicating with said cylinder but independent thereof, said combustion chamber having a discharge outlet, a rotatable member having an impact member movable abreast of said discharge outlet, ignition means for the charge in said combustion chamber, a closure band revolubly disposed over the periphery of said stationary member and fixed to said rotatable member, said closure band maintaining said discharge outlet closed while said impact member is not abreast of said opening, a lever pivotally mounted on said rotatable member one arm of said lever being weighted and the other arm linked to said band, so as to transmit the centrifugal force into pressure for holding said band on its seat.

[Claims 2 to 14 and 16 to 18 not printed in the Gazette.]

1,272,699. ACCOUNT-TRAY. WALTER H. HANNA, Benton Harbor, Mich., assignor, by mesne assignments, to Baker-Vawter Company, Benton Harbor, Mich., a Corporation of Michigan. Filed Mar. 6, 1916. Serial No. 82,297. (Cl. 129—16.)



1. A posting box of the character described and comprising the box proper, a hinged front plate, means for supporting said front plate in tilted and in vertical position, a detached rear plate, and an adjustable follower supporting said rear plate at the back of its upper portion whereby such rear plate may be set forwardly or rearwardly and tilted as desired.

2. A posting box of the character described and comprising the box proper, a hinged front plate, a hinged stop plate which in two opposite positions coöperates with said front plate to hold it vertical in the one position and tilted in the other, and a rear plate which is adjustable from front to rear and angularly adjustable.

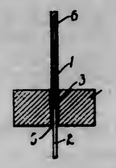
4. A posting box of the character described and comprising the box proper, a hinged front plate, a hinged stop plate which in two opposite positions coöperates with said front plate to hold it vertical in the one position and tilted in the other, said stop plate being arranged to contact the side of the box to limit its movement in one direction and being formed with a depending flange arranged to also contact the side of the box to limit its movement in the other direction, and a rear plate which is adjustable from front to rear and angularly adjustable.

6. A posting box of the character described and comprising the box proper, an angularly adjustable front plate, a loose rear plate, and an adjustable follower supporting said rear plate and having a broad extended vertical portion.

8. In a device of the character described and in combination with leaves formed with a pair of open slots in their bottom edges, a box wider than the cards, front and rear plates adapted to support said cards in inclined position, front and rear angle plates having their horizontal members secured to the bottom of the box and having similar sets of holes formed in their vertical members, a rod arranged to engage corresponding front and rear holes in said two angle-plates, and a sheet of fabric upon the bottom of the box between said angle-plate extending under the horizontal members of such plates and held in place thereby.

[Claims 3, 5, 7, and 9 to 11 not printed in the Gazette.]

1,272,700. METALLIC JOINT AND PROCESS OF MAKING THE SAME. HAROLD A. NEWCOMB, Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 2, 1914. Serial No. 864,581. (Cl. 173—263.)



1. A joint for connecting bars, wires and the like, that comprises an annular body of malleable material compressed substantially uniformly around the adjacent ends of the joined bodies.

5. A new article of manufacture comprising two rods or wires joined by an annular body of malleable material uniformly compressed around the adjacent ends of the joined bodies.

10. A spliced joint for connecting a rod or wire to a braided or twisted strand comprising a seamless copper tube of uniform thickness radially and uniformly pressed from all sides into intimate engagement with the ends of the joined bodies.

[Claims 2 to 4 and 6 to 9 not printed in the Gazette.]

1,272,701. CUP-DISPENSER. HENRY NIAS, Brooklyn, N. Y., assignor to Public Service Cup Company, Brooklyn, N. Y., a Corporation of New York. Filed Feb. 26, 1916. Serial No. 80,571. (Cl. 211—8.)

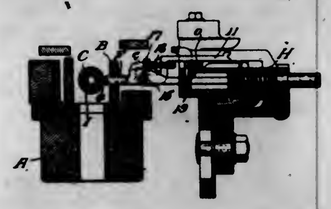


1. In a cup dispenser, a casing, means mounted on said casing for guiding a stack of nested flanged cups, a plurality of oscillatory escapements loosely mounted on vertical pins fixed in said casing and equally spaced around the common periphery of the cups, each escapement being provided with primary means movable into and out of supporting engagement with the lowermost cup of the stack and secondary means movable into and out of supporting engagement with the next to the lowermost cup of the stack, the primary means adapted to withdraw from engagement with the lowermost cup after the secondary means engages the next to the lowermost cup, gear teeth on said escapements, a U shaped slide member slidably mounted in said casing and having teeth on the inner faces of its parallel portions in operative engagement with the teeth of said escapements, and means for directly operating said slide by hand.

4. In a cup dispenser, means for releasing one cup at a time from a stack of nested flanged cups, and means for supporting the released cup in a position convenient to the hand comprising a pair of rigid lugs for supporting the cup flange at the rear and a rigid cam-faced lug for releasably supporting the cup flange at the front, space being provided between said rear lugs and said front lug for the free passage of the adjacent portions of the cup flange.

[Claims 2 and 3 not printed in the Gazette.]

1,272,702. WEFT-FEELER FOR LOOMS. CHARLES E. NUTTING, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Nov. 8, 1917. Serial No. 200,950. (Cl. 139—85.)

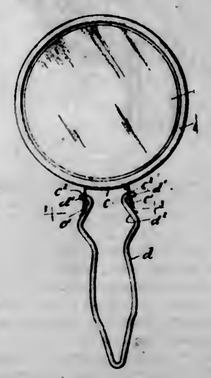


1. A weft feeler for automatic weft replenishing looms having, in combination, a sliding spring actuated blunt feeler finger; an actuator pivoted upon said blunt feeler finger, said actuator having an adjustable abutment with a socket on its rear end; a spring normally maintaining said actuator in its idle position; and a pointed penetrating finger mounted to slide on said blunt finger, said pointed finger having an upwardly and forwardly extending bunter with a ball on its forward end entering and contacting with the socket on the actuator abutment.

3. A weft feeler for automatic weft replenishing looms having, in combination, a sliding spring actuated feeler finger; an actuator pivoted upon said feeler finger, said actuator having an abutment with a socket on its rear end; and a second finger mounted to slide on said spring actuated finger having a bunter with a ball on its forward end entering and contacting with the socket on the actuator abutment.

[Claim 2 not printed in the Gazette.]

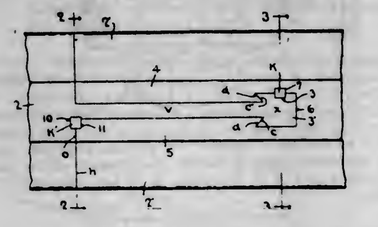
1,272,703. ATTACHMENT ON FRAME FOR HAND-MIRRORS. MAX OPPENHEIMER and SAMUEL L. ASHENFARB, New York, N. Y. Filed Apr. 24, 1918. Serial No. 230,403. (Cl. 45—98.)



1. In a hand mirror or the like, a frame having perforated lugs formed with oppositely directed grooves, a resilient member formed with lateral pivots engaging the perforations of said lugs and capable of engaging the grooves of said lugs to form a handle rigid with said frame and when disengaged from said grooves and turned at an angle to said lugs to form a base or support for said frame, said lugs serving as feet for the mirror when said member is turned at an angle to said lugs.

[Claims 2 to 5 not printed in the Gazette.]

1,272,704. RAIL-JOINT. EDWARD PAULSON, Greenvalley, Wis. Filed July 17, 1917. Serial No. 181,112. (Cl. 239—8.)

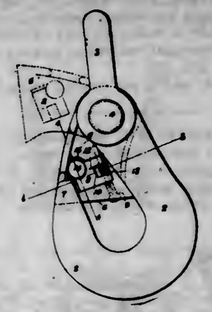


1. A rail joint comprising in combination the meeting ends of a pair of rails one of said rail ends having a flat extending web portion which ends flush with the upper surface of the head of the rail and ends at the union of the web and base, a locking head of a width less than the width of said rail head formed at the outer upper end of said web, its upper end ending flush with the tread of said rail and presenting two oppositely positioned obliquely extending faces at the inner ends, said rail head on one side having a vertically extending key slot 3, the other rail end having an extending base and two parallel extending side portions with a socket formed at the inner ends of said side portions to receive said locking head, one of said side portions having a vertically extending tapering slot for co-action with said key slot, said extending web portion adapted to fit between said side portions and rest on said extending base portion.

2. A rail joint comprising in combination the meeting ends of a pair of rails one of said rail ends having a flat extending web portion which ends flush with the upper surface of the head of the rail and ends at the union of the web and base, a locking head of a width less than the width of said rail head formed at the outer upper end of said web, its upper end ending flush with the tread of said rail and presenting two oppositely positioned obliquely extending faces at the inner ends, said rail head on one side having a vertically extending key slot, the other rail end having an extending base and two parallel extending side portions with a socket formed at the inner ends of said side portions to receive said locking head, one of said side portions having a vertically extending tapering slot for co-action with said key slot, said extending web portion adapted to fit between said side portions and rest on said extending base portion, and a key in said slot to hold said locking head against vibration, said socket at its outer end presenting two chamfer edge faces for co-action with said obliquely extending head faces, all arranged as and for the purpose set forth.

1,272,705. SAFETY-HOOK. NELS PEARSON, Deep Bay, British Columbia, Canada. Filed Feb. 14, 1918. Serial No. 217,135. (Cl. 24—241.)

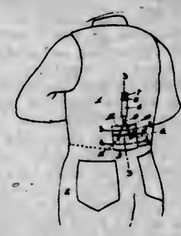
1. A safety hook, comprising the combination with a hook, of a member pivotally mounted on the eye portion of the hook and adapted to close the opening thereof, said member when in the closed position fitting a notch in the point of the hook, a latch member mounted to move laterally in the hook closing member and adapted to engage the inner side of the hook point when that member is in the closed position, means for limiting movement of the latch member at the latched and unlatched positions,



and a spring normally holding the latch member in the latched position.

[Claims 2 to 4 not printed in the Gazette.]

1,272,706. GARMENT. GEORGE W. PRAGH, Pittsfield, Mass. Filed Aug. 7, 1917. Serial No. 184,887. (Cl. 2—144.)



1. A union garment comprising a body portion and a trousers portion permanently secured together at the back and front, there being a substantially horizontal slit at the back of the garment, the length of said slit being less than the distance across the back of the garment, a member attached to the trousers portion and extending upward inside of the body portion, means for securing said member to the body portion at a point distant from the slit, an elastic element attached to the inside of the body portion above the member and means for attaching the element to the member above the slit.

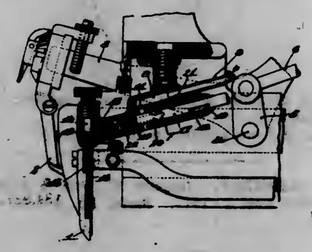
2. A union garment comprising a body portion and a trousers portion permanently secured together at the front and the back, there being a slit at the back in proximity to the waist line, a member secured to the inside of the back of the garment, a portion of said member being unattached to the garment, a suspender attached to the inside of the back of the garment in vertical alinement with the member, fastening means carried by the member and being located between the member and the back of the garment, the free end of the suspender extending between the back of the garment and the member and removably attached to the latter, said slit permitting access to the suspender from the outside of the garment at the back.

5. A union garment comprising a body portion and a trousers portion secured together at the front and the back, a member secured to the inside of the back of the garment, a portion of said member being unattached to the garment, a suspender attached to the inside of the back of the garment in vertical alinement with the member, fastening means carried by the member and being located between the member and the back of the garment, the free end of the suspender extending between the back of the garment and the member and removably attached

to the latter, there being a slit in the garment to permit access to suspender from the outside of the garment at the back, a stiffening stay carried by the back of the trousers portion and extending upward to the upper edge of the member, and a stiffening stay carried by the back of the body portion and extending upward from the upper edge of the slit.

[Claims 3, 4, 6, and 7 not printed in the Gazette.]

1,272,707. MACHINE FOR OPERATING ON SHOES. FREDERICK H. PERRY, Beverly, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Sept. 11, 1912. Serial No. 719,706. (Cl. 12—18.)



1. A machine for operating on shoes, having, in combination, rounding and channeling mechanism including work guiding devices, means for supplying a lubricant to the work-engaging surface of said devices comprising a valve normally shutting off the supply of lubricant, and means for automatically and temporarily opening the valve in operating the machine to round and channel the shoe and for closing it between successive operations.

6. A machine for operating on shoes, having, in combination, a crease guide, an oiling device therefor comprising a valve casing provided with a passage adapted to be connected with an oil supply, a valve chamber communicating with the passage and with a second valve chamber in the casing, an adjustable regulating valve in the latter chamber, a valve in the first chamber controlling communication with the passage, a forepart guide, and means for opening the latter valve in throwing the forepart guide into operation and closing the valve in throwing the forepart guide out of operation.

8. A machine for operating on shoes, having, in combination, a crease guide, an oiling device therefor comprising a valve casing provided with a passage adapted to be connected with an oil supply, a valve chamber communicating with the passage and with a second valve chamber in the casing, an adjustable regulating valve in the latter chamber, a valve in the first chamber controlling communication with the passage, and means for automatically opening and closing the latter valve in manipulating the machine to operate upon shoes.

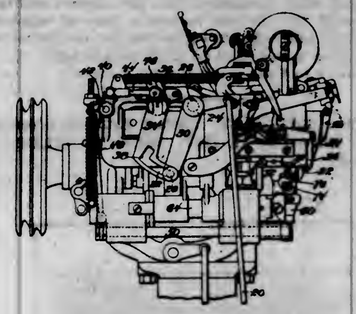
[Claims 2 to 5, 7, 9, and 10 not printed in the Gazette.]

1,272,708. ROUNDING AND CHANNELING MACHINE. FREDERICK H. PERRY, Beverly, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Sept. 28, 1916. Serial No. 122,604. (Cl. 12—18.)

1. A channeling machine, having, in combination, means for cutting a channel in the face of a shoe sole and for increasing the depth of the channel during the channeling.

5. A channeling machine, having, in combination, a channeling knife for cutting a channel a uniform distance from the edge of the sole, and an auxiliary knife movable during the channeling into and out of position to increase the depth of the channel.

9. A rounding and channeling machine, having, in combination, a trimming knife, a fixed channeling knife for cutting a channel in the sole at a uniform distance from the margin thereof, and an auxiliary knife movable into



and out of operative position for cutting a deeper channel in the shank than is cut in the forepart of the sole.

[Claims 2 to 4, 6 to 8, and 10 to 15 not printed in the Gazette.]

1,272,709. METHOD OF CHANNELING SHOE-SOLES. FREDERICK H. PERRY, Beverly, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Original application filed Sept. 25, 1916, Serial No. 122,604. Divided and this application filed Dec. 7, 1916. Serial No. 135,584. (Cl. 36—22.)

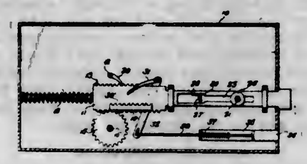


2. The method of channeling shoe soles consisting in cutting a channel in the face of the sole about the sole edge and varying the depth of the channel and breadth of the channel flap along portions of the sole edge.

8. A shoe sole having in its face a channel of greater depth through the shank than about the forepart, a channel flap of correspondingly greater breadth through the shank, and a beveled edge through the shank.

[Claims 1 and 3 to 7 not printed in the Gazette.]

1,272,710. LOCK. JOHN CYRUS RAMSHER, Shenandoah, Pa. Filed Dec. 29, 1916. Serial No. 139,571. (Cl. 70—64.)



1. In a door lock, a casing, a spring pressed sliding bolt, means for holding said bolt retracted against the tension of said spring, said means including a rack bar carried by said bolt, an outwardly spring pressed plunger slidable within said casing and having its outer end normally projecting therebeyond, a link pivoted within said casing transversely of said bolt and having one end pivotally and slidably connected with the inner end of said plunger, and a pawl pivoted upon the other end of said link and normally engaging said rack bar, engagement of the projecting end of said plunger with the door jamb releasing said pawl from engagement with said rack bar.

2. In a door lock, a casing, a spring pressed sliding bolt and releasable means for holding said bolt in its protracted position, said means comprising a transverse pin revoluble through the sides of said casing, oppositely extending lugs on the sides of said pin, said bolt being provided with a narrow longitudinal slot communicating with a relatively wide longitudinal slot, and a shoulder at the juncture of said slot, said pin and said lugs being disposed within said relatively wide slot when said bolt is in its protracted position, engagement of said shoulder with said lugs preventing retraction of said bolt, partial rotation of said pin to release said lugs from engagement with said shoulder permitting retraction of said bolt with said relatively narrow slot passing over said pin.

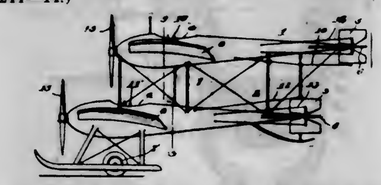
1,272,711. CORD-HOLDER FOR GRAIN-BINDERS. CLEMMA R. RANEY, Chicago, and BERT R. BENJAMIN, Oak Park, Ill., assignors to International Harvester Company of New Jersey, a Corporation of New Jersey. Filed Jan. 31, 1916. Serial No. 75,362. (Cl. 56—83.)



1. In a cord holder for binders, a rotatable cord holder disk, a knife for severing cord carried around thereby, and a cord holder plate on which said disk is rotatable having a laterally extending sharp edged portion disposed adjacent the pivot of said disk and within the path of a length of cord severed by said knife.

[Claims 2 to 4 not printed in the Gazette.]

1,272,712. AEROPLANE. J GABRIEL RECUERO, Panama, Panama. Filed May 13, 1916. Serial No. 97,896. (Cl. 244—14.)



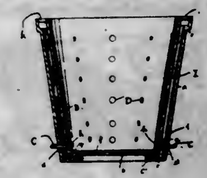
6. A flying machine comprising a pair of superposed aeroplane units, each having a pilot's compartment, a framing rigidly connecting said units and including a companionway connecting said compartments, propelling mechanism upon each unit, steering devices upon each unit, connected for movement in unison, and controlling devices in the respective pilot's compartments for controlling said steering devices.

7. A flying machine including a pair of rigidly connected, superposed aeroplane units, each having its own power plant, sets of steering and stabilizing devices upon the respective units, and means for controlling the same from either unit.

[Claims 1 to 5 and 8 not printed in the Gazette.]

1,272,713. PLANT-HOLDER. DANIEL J. REILY, San Francisco, Cal. Filed Apr. 15, 1918. Serial No. 228,816. (Cl. 47—19.)

1. A plant holder consisting of an outer vessel having a bottom providing an upstanding shoulder, a vessel within the outer vessel and provided with a pendant portion engaging the shoulder of the outer vessel, whereby the inner vessel is concentrically spaced from the outer vessel to provide a water holding chamber therebetween, the upper edge portion of the inner vessel having an external flange thereon engaging the upper edge portion of the outer vessel and having an opening in said flange, the vertical walls of the outer and inner vessel having registering openings, and an air tube inserted in said openings, whereby air may reach the roots of the plant in the inner



vessel, the vertical wall of the inner vessel having perforations therein to admit water from the water holding chamber between the two vessels.

[Claims 2 and 3 not printed in the Gazette.]

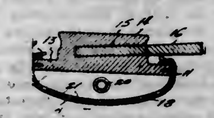
1,272,714. CONNECTOR FOR OUTLET-BOXES. PETER REINHALTER, Wilkes-Barre, Pa. Filed Jan. 4, 1915. Serial No. 494. (Cl. 247—1.)



3. The combination with an outlet box, of a connector having a body portion having at one end an inwardly extending flange and provided with an eccentric aperture opening through the other end, said body portion having intermediate its ends an outwardly extending flange and provided at one end with an outwardly extending flange the periphery of which is eccentric, said body portion having at its opposite end a flange which is cut away at its inner side to form cam faces and to form slots, a locking member having lugs to pass through said slots and to engage said cam faces, and conductor locking means mounted upon the eccentric periphery of said outwardly extending flange.

[Claims 1 and 2 not printed in the Gazette.]

1,272,715. PORTABLE BATHING APPARATUS. ROBERT L. RICHARDS, Meridian, Tex. Filed Nov. 30, 1917. Serial No. 204,552. (Cl. 15—69.)



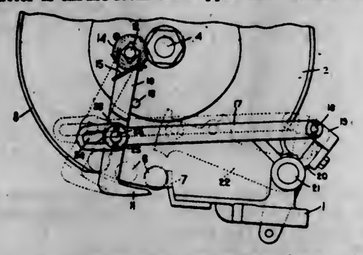
1. In a body washer for bathing apparatuses, a back having an upstanding hand-grip, a hollow metal body receiving the back and comprising sides and an arcuate face, the face of the body having openings, and the body having provision for admitting water, and jaws for holding the ends of a wash-cloth, said jaws being secured to the body member at spaced points and overhanging the back.

2. In a body washer for bathing apparatuses, a hollow body having an arcuate face provided with water outlets, a back fitting the body, wash cloth holding jaws comprising notched projections carried by the body and overhanging the back, and means for supplying water to the metal body.

1,272,716. BATTERY MECHANISM FOR AUTOMATIC FILLING-REPLENISHING LOOMS. ALONZO H. RHOADES, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Aug. 8, 1917. Serial No. 184,938. (Cl. 139—85.)

1. In an automatic filling replenishing loom comprising a hopper and transferring mechanism, a supporting and

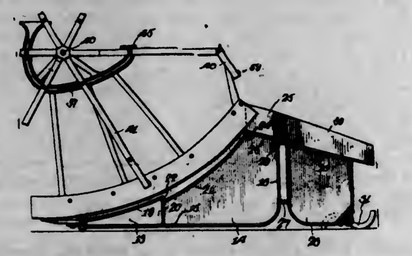
guiding instrumentality for the filling carrier to be transferred and means connecting the supporting and guiding instrumentality to the transferring mechanism and operable by the latter to move said supporting and guiding instrumentality out of the path of the filling carrier as the latter is thrust from the hopper into the shuttle.



2. In an automatic filling replenishing loom comprising a hopper and transferring mechanism, a spring actuated supporting and guiding instrumentality for the filling carrier to be transferred, a link connecting said transferring mechanism to said supporting and guiding instrumentality and operable by the movement of said transferring mechanism to move said supporting and guiding instrumentality out of the path of the filling carrier as the latter is thrust from the hopper into the shuttle.

[Claims 3 to 5 not printed in the Gazette.]

1,272,717. SEED-HARVESTING MACHINE. HERBERT M. RHODES, Natches, Miss. Filed Feb. 8, 1917. Serial No. 146,348. (Cl. 56—2.)



1. In combination, a device for severing plants from the surface of the ground, an upwardly inclined perforated plate positioned in the rear of said severing device and arranged to receive the plants severed thereby, a receiver for material passing through the perforations in said plate, means for moving said plants over the upper edge of said plate, and mechanism for causing said plant moving means to follow the contour of said plate to the upper edge thereof, and to continue past said edge in the same general direction in which it is moving at the time it reaches said edge.

2. In combination with a sickle for severing plants from the surface of the ground, a perforated plate for receiving the plants so severed, means for moving said plants in an unobstructed course to and over said plate, and means for agitating said plate to cause seeds to be separated thereby from said plants.

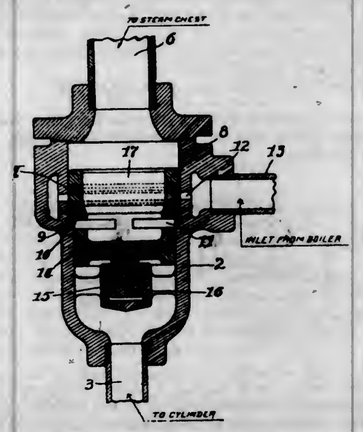
6. The combination with a mowing machine sickle, of an imperforate plate for receiving plants cut by said sickle, an upwardly inclined screen in the rear of said imperforate plate, and a downwardly inclined screen in the rear of said first-mentioned screen.

10. In combination, a device for severing plants from the surface of the ground, a reel for presenting plants to said severing device, means for rotating said reel, said reel having radially extensible arms, and a cam for varying the length of said reel arms as said reel rotates upon its axis to control the path of movement of said reel arms toward said sickle.

17. In combination, a sickle; an upwardly inclined table in the rear of said sickle for receiving plants cut thereby, said table having an imperforate section adjacent said sickle, a shoulder in the rear of said imperforate section, and a perforated section in the rear of said shoulder; a reel having extensible arms for presenting plants to said sickle and for moving said plants over the surface of said table after they have been cut by said sickle; a cam device for controlling the length of said arms to cause the extremities thereof to follow the contour of said table; jointed extensions on the ends of said arms; means for breaking the joints of said extensions to permit the plants to be readily discharged from the rear edge of said table; a receptacle for receiving seeds shattered from said plants and passing through the perforations in said table; a second downwardly and rearwardly inclined table in the rear of said first-mentioned table and arranged to receive the plants discharged from said first table, said second table having a perforated section, a receptacle arranged beneath said section, resilient means for securing said receptacle to said sickle to be drawn over the ground therewith, and an agitator arranged to engage the surface of the earth as said receptacle is drawn thereover and to impart a vibratory movement to said last-mentioned table and receptacle.

[Claims 3 to 5, 7 to 9, 11 to 16, and 18 not printed in the Gazette.]

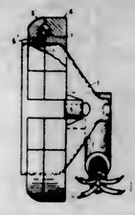
1,272,718. DRIFTING AND RELIEF VALVE. HUGO F. RIPKEN, Minneapolis, Minn., assignor of one-half to Charles A. McCulloch, Minneapolis, Minn. Filed July 10, 1916. Serial No. 108,328. (Cl. 121—14.)



1. In a reciprocating engine, the combination with the cylinder and steam chest, of a drifting valve comprising a valve casing open to communication with the cylinder at one end and the steam chest at the other end and having intermediately a lateral inlet port for live steam, and a pressure actuated valve piston having a projecting extension normally closing said live steam inlet port but adapted, when the piston is moved by the pressure in the cylinder after the main supply of steam thereto has been shut off and the engine is drifting, to slide over and uncover said live steam inlet, said valve having means of communication between the casing inlet and the steam chest when said inlet port is uncovered, whereby to allow live steam to enter the valve casing beyond the piston and pass to the steam chest for the purpose set forth.

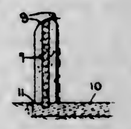
2. In a reciprocating engine, the combination with the cylinder and steam chest, of a balanced drifting valve comprising a valve casing open to communication with the cylinder at one end and the steam chest at the other end and having intermediately a circumferential inlet port for live steam, and a valve piston having a projecting sleeve extension normally covering said inlet port so as to prevent the live steam from entering the valve casing, said sleeve extension being formed with a circumferential port, which port, when the piston is moved by the pressure in the cylinder after the main supply of steam thereto has been shut off and the engine is drifting, will come into registration with the live steam inlet port in the casing and allow live steam to enter the portion of the valve casing beyond the piston and pass into the steam chest.

1,272,719. PROTECTING-CASING FOR ELECTRICAL CONDUCTORS. HENRY L. ROOKE, Jr., Houston, Tex. Filed May 1, 1917. Serial No. 165,653. (Cl. 123—167.)



The combination with a commutator having radiating terminals and electrical conductors connected to said terminals, of a casing ring like in form, said casing fitting closely over the body of the commutator and being formed of sections, the sections thereof being secured together, the adjacent sides of the sections being provided with annular coinciding grooves forming an annular space to receive the electrical conductors and being also provided with internal sockets to receive the corresponding terminals and a hollow neck crried by said casing through which said conductors pass.

1,272,720. STOCK-TANK. EMIL SCHREIER, Verdigre, Nebr., assignor to Emil Paul Schreier. Filed Jan. 18, 1917. Serial No. 143,092. (Cl. 72—18.)

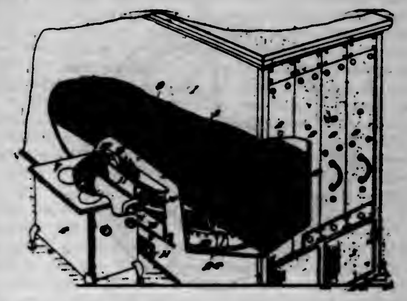


1. A stock tank of the character described comprising a multiplicity of arcuate staves having opposed grooves in their adjacent vertical edges, a base having recesses therein, in registration with the grooves in the staves, and fillers engaging said opposed grooves and extending below the lower ends of the staves and also engaging the recesses on the base which are in registration with the opposed grooves in which they are engaged, substantially as and for the purpose set forth.

2. A stock tank of the character described comprising a plurality of staves having grooves formed in the adjacent edges thereof, triangular reinforcements disposed within the said grooves and disposed in a plane at right angles to the length of the grooves and connecting the sides of the grooves with the bottoms thereof, and fillers occupying said grooves and contacting with said reinforcements.

1,272,721. COMBINED DRIER AND LAUNDRY-STOVE. JOHN S. SHANKS, Canton, Ohio. Filed Mar. 31, 1915, Serial No. 18,330. Renewed Feb. 11, 1918. Serial No. 216,650. (Cl. 34—40.)

1. The combination with a drier, of a laundry stove adjacent thereto and in communication with a drier at its upper and lower ends, a series of burners within the stove for heating the top of a laundry stove and a series of burners for supplying the drier with the proper amount of hot air.

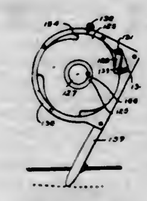


2. The combination with a drier, of a laundry stove adjacent the drier, flues communicating with the upper end of the stove and the drier, burners within the stove adjacent the flues, steel plates above the burners and extending into the flues for conveying the heat to the flues, substantially as shown and described.

3. The combination with a housing, means for removably supporting the clothes within the housing, of a laundry stove adjacent the housing, flues communicating with the upper end of the stove and the housing, burners within the stove adjacent the flues, shield plates above the burners and extending downwardly into the flues for conveying the heat from the burners to the flues, and a flue communicating with the lower end of the stove and the lower end of the housing.

[Claims 4 to 14 not printed in the Gazette.]

1,272,722. CHECK-HEAD DEVICE. EMMANUELL HENRY SNYDER, Davenport, Iowa. Filed Feb. 12, 1914. Serial No. 818,387. (Cl. 111—47.)



1. A check head composed of an escalloped disk keyed on a drop shaft, a hub on said disk, a groove in the hub, a box inclosing the disk, prongs attached to said box, a pawl pivoted to said box and engaging the escalloped disk, a hole in said pawl at its outer end, a coil spring seated in the hole and holding the pawl in contact with the escalloped disk, and an eye bolt attached to the disk box on its outer or polled side.

[Claim 2 not printed in the Gazette.]

1,272,723. AUTOMOBILE-WHEEL. WILLIAM M. SULLIVAN, Arcadia, Cal. Filed Sept. 18, 1917. Serial No. 191,302. (Cl. 21—69.)

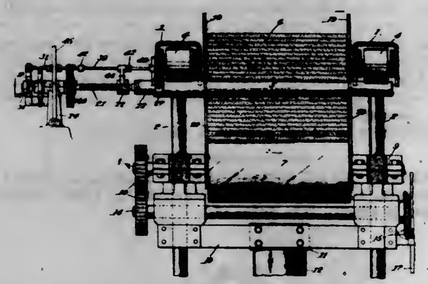
An automobile wheel comprising the combination with an axle having roller bearings, of a hub mounted upon the bearings; said hub having an enlarged central portion and rigid parallel spaced flanges extending outwardly around the central portion; circular bolting flanges secured to the hub and spaced from the rigid flanges, wheel side disks slidingly mounted between the bolting flanges and rigid flanges; said side disks having central bores through which the hub extends loosely; a pressed metal felly secured between and against the outer peripheries of the side disks, ears extending inwardly at spaced intervals around the

felly, cables secured to the hub and extending radially and secured to the ears; said cables being slightly loose so as to



allow the hub to sag; and cable stays connected to adjacent ears.

1,272,724. BALE-CORE-OPERATING DEVICE. JOHN A. TAFT, San Antonio, Tex., assignor to Reagan Bale Company, San Antonio, Tex., a Corporation of Texas. Filed Feb. 21, 1918. Serial No. 218,428. (Cl. 100—1.)



1. In a cotton bale forming machine, in combination, a head frame, bearings mounted therein, a tapered core pin in engagement with said bearings, means for wrapping cotton around said pin, a core withdrawing and supporting device comprising a plurality of oppositely threaded shafts, means for rotating said shafts in opposite directions, a yoke movable longitudinally of the shafts, means for connecting the yoke to the core pin, and means for reversing the direction of rotation of the shafts.

7. A device for controlling a core pin of a bale forming machine, comprising a pair of threaded shafts, a yoke in engagement therewith and movable longitudinally thereof, means for connecting the yoke to the core pin, and means for rotating said shafts in either direction to cause reciprocation of the yoke in either direction.

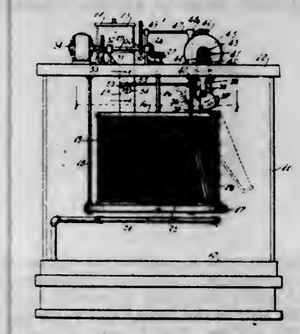
10. A core controlling device for a bale forming machine, comprising a pair of threaded shafts, a yoke carried by said shafts and operable thereon, means for connecting the core pin to the yoke, means for causing said shafts to rotate in unison, and separate driving means on each shaft.

13. A core controlling device for bale forming machines, comprising a pair of threaded shafts, a yoke carried by said shafts and operable thereon, means for connecting the core pin to the yoke, means for causing said shafts to rotate in synchronism, separate driving means loosely mounted on each shaft, and clutches for securing said driving means in operative driving engagement with the shafts.

15. In a bale forming machine, in combination, a head frame, bearings mounted therein, a core pin in engagement with said bearings, means for wrapping cotton around said pin, a core withdrawing and supporting device carried by the head frame and comprising a threaded shaft journaled at one end in said head frame, means for rotating said shaft, a yoke movable longitudinally thereof, means for connecting the yoke to the core pin, and means for reversing the direction of rotation of the shaft.

[Claims 2 to 6, 8, 9, 11, 12, and 14 not printed in the Gazette.]

1,272,725. CORN-POPPING MACHINE. DANIEL H. TALBERT, Indianapolis, Ind., and CLARENCE W. CARTER, Minneapolis, Minn., assignors to Holcomb & Hoke Manufacturing Company, Indianapolis, Ind., a Corporation. Filed Feb. 25, 1915. Serial No. 10,533. (Cl. 53—4.)



1. In a corn popping machine, a rimless popping plate, and radially extending means immediately above said plate, one of said elements being revolubly mounted with relation to the other, whereby said radially extending means will agitate and discharge the popped corn over the margin of the plate.

3. In a corn popping machine, a rimless popping plate, a cover thereon adapted to be raised for the discharge of the popped corn, and means coöperating with the popping plate for causing the discharge of the popped corn after the cover is raised.

5. In a corn popping machine, a rimless popping plate, a cover thereon adapted to be opened at the discharge point for the discharge of the popped corn, and means cooperating with the popping plate for causing the discharge of the popped corn after the cover is raised.

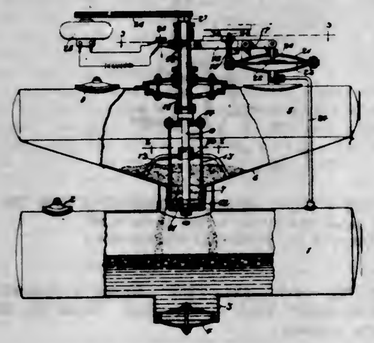
8. In a corn popping machine, a rimless popping plate, a cover therefor, a portion of which is adapted to be raised and opened for the discharge of the popped corn, and rotatable radial stirring blades immediately above the popping plate which cause the popped corn to be discharged over the margin of the plate after said portion of the cover is raised.

10. In a corn popping machine, popping apparatus having a suitable cover therefor adapted to be opened upwardly at the discharge point for the discharge of the popped corn, and means for feeding corn to said popping apparatus which is controlled by the closing movement of said cover.

[Claims 2, 4, 6, 7, 9, and 11 to 19 not printed in the Gazette.]

1,272,726. ACETYLENE-GAS GENERATOR. GEORGE W. THOMPSON, Springfield, Mo., assignor of thirty-two one-hundred-and-twenty-eighths to William B. Sanford, twenty-four one-hundred-and-twenty-eighths to Douglas J. Landers, twenty-one one-hundred-and-twenty-eighths to William A. McAtee, twelve one-hundred-and-twenty-eighths to Alphonso B. Lovan, twelve one-hundred-and-twenty-eighths to George W. Young, and three one-hundred-and-twenty-eighths to William T. Shores, Springfield, Mo., and six one-hundred-and-twenty-eighths to Clarence H. Nichols, New York, N. Y. Filed Dec. 8, 1917. Serial No. 206,166. (Cl. 48—52.)

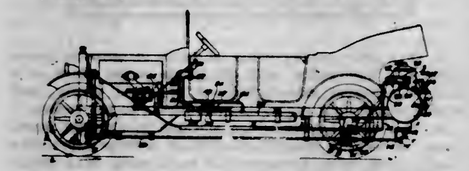
1. An acetylene gas generator, comprising a generating tank arranged to contain a gas forming material, a receptacle arranged to contain another gas forming material, a passage for conducting the gas forming material from the receptacle into the tank, a movable element controlling the passage of the gas forming material into the tank, a device movable to positions to open and to close said passage, means for moving said device to positions to open and to close said passage, and mechanism controlled by said means whereby said element will be maintained in motion when said device is in open position and will be maintained stationary when said device is in closed position.



6. An acetylene gas generator, comprising a generating tank arranged to contain a gas forming material, a receptacle arranged to contain another gas forming material which when brought into contact with the gas forming material in the tank will cause the generation of gas, a passage for conducting gas forming material from said receptacle into the generating tank, a support for supporting the gas forming material in said passage, a device movable to positions to open and to close said passage, means for moving said device to open and to closed positions, and actuating mechanism controlled by said means whereby said support will be maintained in motion when said device is in open position, and will be maintained stationary when said device is in closed position.

[Claims 2 to 5 not printed in the Gazette.]

1,272,727. ACETYLENE-GAS GENERATING AND SUPPLY SYSTEM. GEORGE W. THOMPSON, Springfield, Mo., assignor of thirty-two one-hundred-and-twenty-eighths to William B. Sanford, twenty-four one-hundred-and-twenty-eighths to Douglas J. Landers, twenty-one one-hundred-and-twenty-eighths to William A. McAtee, twelve one-hundred-and-twenty-eighths to Alphonso B. Lovan, twelve one-hundred-and-twenty-eighths to George W. Young, and three one-hundred-and-twenty-eighths to William T. Shores, Springfield, Mo., and six one-hundred-and-twenty-eighths to Clarence H. Nichols, New York, N. Y. Filed Dec. 8, 1917. Serial No. 206,167. (Cl. 48—4.)



1. The combination with the engine of a vehicle, of an acetylene gas supply system supported by the vehicle and comprising a tank arranged to contain one of the gas forming materials, a generating tank arranged to contain another of the gas forming materials, mechanism for delivering the gas forming material from the first-mentioned tank into the generating tank, a shaft driven by the engine, a shaft for operating said mechanism, a device settable in one position to drive the second-named shaft from the first-named one and settable in another position to enable the first-named shaft to operate while the second shaft remains idle, automatic means for moving said device to position to drive the second shaft from the first one, and means operated by the pressure of the gas in the generating tank for moving said device to position to enable the second-named shaft and said mechanism to remain idle while the first-named shaft continues to operate.

2. The combination with the engine of a vehicle, of an acetylene gas supply system supported by the vehicle and comprising a tank arranged to contain one of the gas forming materials, a generating tank arranged to contain another of the gas forming materials, mechanism operated by the engine for delivering the gas forming material from the first-mentioned tank into the generating tank, a passage for conducting the gas generated in the generating tank to the engine, and means controlled by the pressure of the gas in the generating tank for rendering said mechanism inoperative when the pressure of the gas in the generating tank exceeds a predetermined maximum.

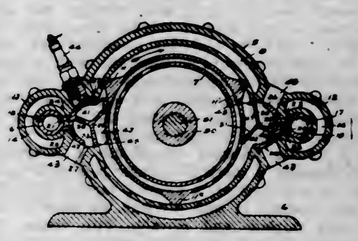
3. The combination with an engine, of an acetylene gas supply system for the engine comprising a tank arranged to contain one of the gas forming materials, a generating tank arranged to contain another of the gas forming materials, mechanism for delivering the gas forming material from the first-named tank into the generating tank, a device operated by the engine for operating said mechanism, and means controlled by the pressure of the gas in the generating tank for preventing operation of said mechanism by said device when the pressure of the gas in the generating tank exceeds a predetermined maximum.

4. In a gas supply system, the combination of a gas generating tank, a storage tank, a passage between said gas generating tank and said storage tank, a second storage tank, a passage between said first-named storage tank and said second-named storage tank, a passage for conducting the gas from the second-storage tank, and a float device controlling said last-named passage.

5. In a gas supply system, the combination of a gas generating tank, a storage tank, a passage between said gas generating tank and said storage tank, a second storage tank, a passage between said first-named storage tank and said second-named storage tank, a pressure reducing valve in said last-named passage, a passage for conducting the gas from the second storage tank, and a float device controlling said last-named passage.

[Claims 6 and 7 not printed in the Gazette.]

1,272,728. ROTARY ENGINE. WILLIS J. TOWER, Seattle, Wash. Filed Feb. 26, 1918. Serial No. 219,317. (Cl. 123—15.)

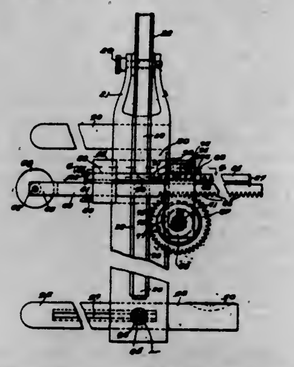


1. A rotary engine comprising a casing having a cylindrical chamber, a rotor disposed therein in concentric relation thereto, vanes extending lengthwise of the outer peripheral wall of said rotor and adapted to make a gas tight sliding contact with the interior wall of said casing, valve casings formed at diametrically opposite points in said main casing each of said valve casings having two valve chambers formed therein that communicate with each other by two separate spaced apart slots, a hollow tubular valve disposed in one of said chambers in each of said valve casings said tubular valves each having a slot that is adapted to register with one of said spaced apart slots, fuel inlet means connected with said tubular valves,

means for moving said tubular valves simultaneously, an oscillating valve disposed in one of said valve chambers in each of said valve casings, each of said oscillating valves having three radial partition walls and a semicircular segment connected with one of said partition walls and terminating in spaced relation from the said other two partition walls to form explosion chambers and the said semicircular segment having slots that are adapted to communicate with said fuel inlet slots, ignition devices communicating with said oscillating valve chamber, means connected with said rotor for oscillating said valve and exhaust pipes connected with the valve chambers in which said oscillating valves are disposed.

[Claim 2 not printed in the Gazette.]

1,272,729. PROFILE-RECORDER. KATHRYN TOWSLEY and IRVING S. TOWSLEY, Philadelphia, Pa. Filed June 25, 1914. Serial No. 847,190. (Cl. 234—1.)



3. A profile recorder comprising an elongated standard, two spacing members carried by said standard and extending transversely with respect thereto, a carriage carried by, and movable longitudinally of said standard, an element mounted on said carriage and movable with respect thereto transversely of said standard, and means for automatically recording the movement of said element with respect to said standard and with respect to said carriage.

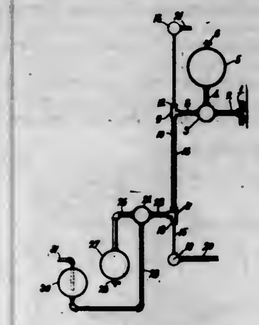
10. A profile recorder comprising an elongated standard, a carriage movable longitudinally of said standard, an element mounted upon said carriage and arranged to reciprocate with respect thereto transversely of said standard, a strip of material mounted upon and carried by said element and provided with a series of characters extending longitudinally thereof, and a vibratory member mounted upon said carriage and arranged to engage said strip for recording the movement of said element with respect to said standard.

16. A profile recorder comprising a relatively stationary member, a carriage movable in a fixed path with respect to said member, a member carried by and vibratory with respect to said carriage, an element mounted upon said carriage and movable with respect thereto transversely of said path with respect to said carriage and with respect to said first mentioned member, and means providing a series of characters mounted upon said element and arranged to be moved thereby across the path of said vibratory member.

[Claims 1, 2, 4 to 9, 11 to 15, 17, and 18 not printed in the Gazette.]

1,272,730. CONDENSER FOR REFRIGERATING APPARATUS. ELIHU C. UNDERWOOD and WILLIAM C. MOORE, Kansas City, Mo. Filed Mar. 3, 1916. Serial No. 81,852. (Cl. 257—246.)

1. In refrigerating apparatus, in combination with a manifold, a cooling member, a conduit leading from the cooling member to the manifold, a purge tank having communication with the manifold above the bottom thereof, and a liquid offtake communicating with the manifold below the intake to the purge tank.



[Claim 2 not printed in the Gazette.]
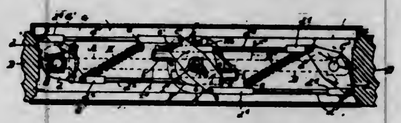
1,272,731. FOUNTAIN-PEN. HENRY J. UPTON, Medford, Mass. Filed Apr. 1, 1918. Serial No. 225,855. (Cl. 120—49.)



1. In a fountain pen of the type described, in combination, a barrel, open at both ends; a plug and pen point at one end; a stuffing box at the other end; a connecting rod passing from the plug to and through the stuffing box; an outer sleeve upon the barrel connected to the rod and connected to the barrel by multiple threads of small angle to the axis of the barrel and sleeve, to actuate the rod longitudinally of the barrel by the rotation of the sleeve upon the barrel.

[Claims 2 and 8 not printed in the Gazette.]

1,272,732. WIND AND GRAVITY BALANCED DOOR. THEOPHILUS VAN KANNEL, Yardville, N. J., assignor to The Universal Balance Door Incorporated, New York, N. Y., a Corporation of New York. Filed May 22, 1917. Serial No. 170,236. (Cl. 20—16.)



1. In a door having wings movable in opposite directions, the combination, with the pivots of the wings, of a rocker journaled intermediate to the said pivots, and duplex connections connecting the pivots to the rocker.

8. In a door having wings movable in opposite directions, to balance gravity, inertia or wind-pressure, the combination, with the pivot of each wing, of a wing-crank operating upon the base of each wing, a connecting-rod jointed to the said wing-cranks and arranged to move the wings reversely, a control-box provided with a checking-device intermediate to the wing-cranks, the control-box having a spindle connected with the checking device, and a rocker-arm upon such spindle jointed to the connection of the wing-cranks.

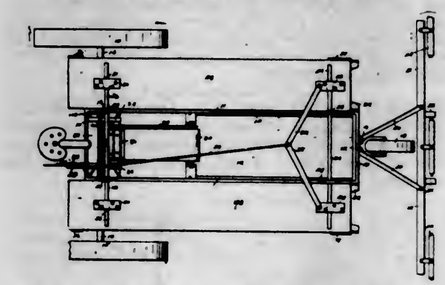
9. In a door having wings movable in opposite directions, the combination, with the pivots of the wings, of a two-armed wing-crank applied to each pivot, a control-box provided with a checking device intermediate to the wing-cranks, the control-box having a spindle connected with the checking-device, a rocker movable with the said spindle, two rods from each wing-crank connected to adjacent crank-pins upon the rocker, and the rocker serving to operate both arms of each wing-crank and thus have a duplicate connection to both door-wings.

12. In a door having two wings both hinged to move outwardly, the combination, with the pivots of the wings, of wing-cranks applied to the pivots and connected together to move the wings normally in opposite directions, and one of the cranks having a detachable connection with its pivot adapted to yield and release the wing when subjected to undue pressure, thus opening the entire doorway outward when required.

17. In a door having wings movable in opposite directions, the combination, with the pivots of the wings, of a rocker journaled intermediate to the said pivots, connections from the pivots to the rocker to move the wings in opposite directions, a control-box adjacent to the rocker, the rocker having a spindle with a check-lever thereon movable in the said box, a check-cylinder or cylinders substantially in line with the arm of the check-lever and having a port l' at its outer end, and a piston moved in the cylinder by the check-arm to close the said port and having its surface beveled to effect such closing gradually, substantially as herein described.

[Claims 2 to 7, 10, 11, and 13 to 16 not printed in the Gazette.]

1,272,733. CORN PICKING AND HUSKING MACHINE. MARTEMUS VAN OMME, Des Moines, Iowa. Filed Oct. 16, 1917. Serial No. 196,951. (Cl. 56—110.)



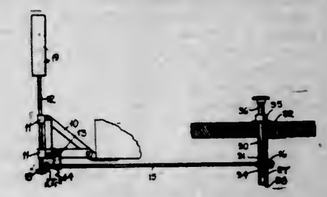
5. In a corn husking and picking machine, a wheel supported frame, a member having a longitudinal slot therein, and means whereby when the machine is advanced along a row of corn the rooted stalks will be manipulated so that the stalks will be on one side of said member and the ears on the other side thereof, and means for removing the ears from the stalks after the ears and stalks have been manipulated as described.

8. In a corn husking and picking machine, a wheel supported frame, a member having a longitudinal slot therein, means whereby when the machine is advanced along a row of corn the rooted stalks will be manipulated so that the stalks will be on one side of said member and the ears on the other side thereof, means for conveying ears along said member, yieldingly mounted pins arranged to project into the path of said ears for stripping the husks from the ears, a knocker device and means for intermittently moving said knocker device across the path of said ears to strike the ears and knock them laterally for separating them from the stalks.

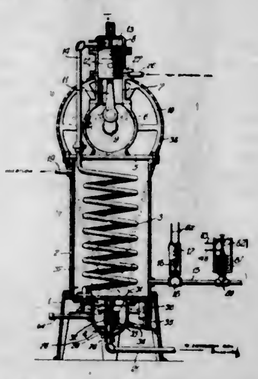
[Claims 1 to 4, 6, and 7 not printed in the Gazette.]

1,272,734. AUTOMOBILE DIRECTION-SIGNAL. PEDRO VACA, San Antonio, Tex. Filed June 9, 1917. Serial No. 173,847. (Cl. 74—27.)

A signaling mechanism for automobiles including a longitudinally extending operating shaft carrying gear teeth at one end, and means for rotating said shaft comprising a hanger attached to the floor of the automobile and having an angularly bent terminal end, said hanger being longitudinally slotted and formed with outwardly extending ears forming a bearing for the shaft, the toothed portion of the shaft crossing the slot in the hanger, a vertically slotted plunger casing supported at its lower end upon the lower end of the hanger and cut away for the passage of the toothed portion of the shaft, a plunger disposed within the plunger casing and having teeth engaging the toothed portion of the shaft, the lower end of the plunger being formed with a socket, a spring resting upon the lower end of the plunger casing and extending up into said socket, and a guide pin around which said spring is supported.



1,272,735. REFRIGERATING APPARATUS. ORIE E. VES SELLS, Detroit, Mich. Filed July 16, 1917. Serial No. 180,697. (Cl. 62—116.)



1. In a refrigeratory apparatus having a condenser coil and an expansion coil, a basin interposed between said coils and adapted to establish communication therebetween, a spring pressed normally closed valve in said basin shutting off said basin to the expansion coil, a cam shaft in said basin adapted for opening said valve, a solenoid switch outside of said basin and adapted for actuating said cam shaft, and thermostatic means controlling the operation of said solenoid switch.

[Claim 2 not printed in the Gazette.]

1,272,736. CORE-MOLD FOR HOLLOW WALLS. ROWLAND T. WALES, Sewaren, N. J. Filed Aug. 26, 1916. Serial No. 117,008. (Cl. 25—131.)



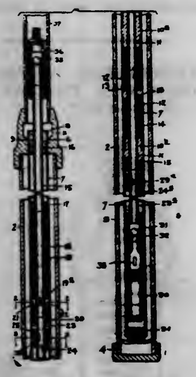
1. A core mold for forming a cavity and comprising a pair of side plates, the largest molding face of one being parallel to the largest molding face of the other, a spacer for holding said plates apart and adapted for disengagement while the core conforms in and with said cavity, and

an angular shaped splint adapted to cover the space between upright edges of said side plates and to overlap them to a substantial distance each side of said space, part of the inner surface of said splint constituting part of the inner surface of the core and extending in two planes each at an obtuse angle to the largest exterior face of one of said side plates.

6. A core mold comprising a pair of side plates and a pair of spacers for holding them apart, each of said spacers having a bearing edge adapted to prevent movement of one of said plates toward the other, said bearing edge being substantially thin and extending in an upright position when the core is set, the said spacer also having a other spacer in said pair, and has an upright edge disposed bearing face which, when the core is set, bears against the in substantially the same plane which contains both the said thin edge and the like thin edge of the other spacer, and being disposed nearer to the center of the core than any other edge of said bearing face.

[Claims 2 to 5 not printed in the Gazette.]

1,272,737. PUMP. HENRY B. WALKER, Lancaster, Ohio. Filed Apr. 14, 1916. Serial No. 91,163. (Cl. 103—70.)



1. In a pump, the combination of a working-barrel, a plurality of pumping pistons therein, an eduction-pipe, fluid chambers in the working-barrel between the pistons communicating with said pipe, and means for alternately forcing fluid from the chambers into the eduction-pipe by reciprocation of the pistons.

5. In a pump, the combination of a working-barrel, a plurality of pumping-pistons contained therein, an eduction-pipe on which said pumping-pistons are mounted, one of said pumping-pistons slidable on said eduction-pipe, openings in said eduction-pipe communicating with a trapping space formed between said eduction-pipe and working-barrel, means for closing said openings by said slidable pumping-piston moving over said openings, valve-controlled openings in said working barrel, means for opening said openings by the suction created by the pumping-pistons alternately, and means for opening communication between the trapping space between said eduction-pipe and said working-barrel whereby on one movement of said pumping-pistons the fluid trapped in one of said spaces is permitted to pass into said eduction-pipe, and means whereby the fluid trapped in the other of said spaces is admitted to said eduction-pipe by the opposite movement of said pumping-piston.

[Claims 2 to 4 and 6 not printed in the Gazette.]

1,272,738. WHEEL FOR VALVES AND THE LIKE. JAMES P. WALL, Pittsburgh, Pa. Filed May 24, 1916. Serial No. 99,851. (Cl. 16—171.)

1. A device of the character described, comprising a central member or core having a recessed rim portion, a helical wire hand grip seated in said recess, and a separate band or annulus within said helical wire for holding it in position in the recess; substantially as described.



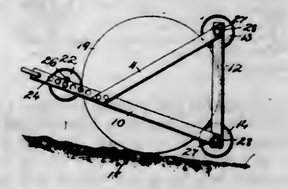
2. A device of the character described, comprising a central member having two flanges on the periphery thereof, a coiled wire hand grip seated between the flanges, and means within the hand grip engaging the different coils of the hand grip, said coils being frictionally clamped in position between said means and the said flanges; substantially as described.

3. A device of the character described, comprising a central member or core having a double flanged rim portion, there being an annular space between said flanges, a coiled wire hand-grip seated in said recess, and an annulus within the coils of the hand grip, said hand-grip being secured therein by being compressed between the flanges and the annulus; substantially as described.

4. A device of the character described, comprising a central body member having a concave rim portion, a hand grip seated on said rim portion and consisting of a wire helix, and a clamping member engaging the individual turns of the helix and clamping each of them against pivotal movement on their points of contact with the rim, substantially as described.

5. A device of the character described, comprising a central body member having a concave rim portion, a hand grip seated on said rim portion and consisting of a wire helix, and a clamping member engaging the individual turns of the helix, said clamping member and rim having a forced clamping engagement with each other, substantially as described.

1,272,739. DEVICE FOR ROLLING CYLINDRICAL BODIES. ERNEST WALTER, Belleville, N. J., assignor to Verona Chemical Company, Newark, N. J., a Corporation of New Jersey. Filed Jan. 5, 1917. Serial No. 140,676. (Cl. 57—2.)



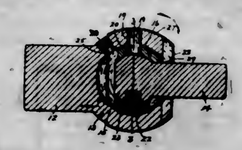
2. A device for rolling barrels comprising a frame having draft beams at the sides, brackets on the draft beams, rollers supported from the draft beams and the brackets, the side beams being perforated, an axle removable from the perforations, rollers on the removable axle, and means for fastening the removable axle in the perforations.

4. A device for rolling barrels comprising a frame provided at its forward end with an axle and a pair of rollers on said axle, and provided at its rearward end with an axle and a pair of rollers thereon, the axle of the forward pair of rollers being adjustable toward and away from the rear axle, and rollers on said frame received above the first and second sets of rollers, all of said rollers being adapted to engage a barrel by the periphery thereof and to receive the barrel bodily therebetween.

[Claims 1, 3, and 5 not printed in the Gazette.]

1,272,740. UNIVERSAL JOINT. HANS WANDERS, Boston, Mass. Filed Apr. 21, 1917. Serial No. 163,589. (Cl. 74—19.)

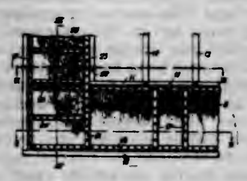
1. A universal joint comprising a shaft having an internally concave female member, a shaft having an externally convex male member, a torque-transmitting link interposed between said members, and having a concave external surface and a convex internal surface, a pivotal connection between one end portion of said link and the female member, and a pivotal connection between the opposite end portion of the link and the male member, the link being adapted to swing between said members.



2. A universal joint comprising a shaft having an internally concave female member, a shaft having an externally convex male member, a plurality of torque-transmitting links interposed between said members, each link having a concave internal surface and a convex external surface, conforming respectively to the external surface of the male member and to the internal surface of the female member, said links being concentric with the said members, pivotal connections between given end portions of said links and the female member, and pivotal connections between the opposite end portions of said links and the male member, said connections being substantially in alinement with each other when the axes of the shafts are alined, and in staggered relation to each other when said axes are out of alinement.

3. A universal joint comprising an internally concave and externally spherical female member, a shaft having an externally convex male member, and torque-transmitting connections interposed between said members, in combination with a dust-excluding cap comprising a substantially spherical body portion embracing and movable on the external surface of the female member, and having an expansible mouth adapted to be expanded by and to contract on said surface, and a flange embracing and movable with the shaft having the male member.

1,272,741. CAR CONSTRUCTION. AARON N. WARFIELD, London, Ontario, Canada. Filed Oct. 23, 1916. Serial No. 127,059. (Cl. 105—201.)



1. In a wall construction for railway passenger cars, side plate girders throughout the length of a car wall, corner channels at the ends thereof, panel posts in parallelism with said corner channels, and together with said corner channels extending above the upper edge of said girder at the ends thereof, panels between said corner channels and said panel posts, and means connecting said panels to the upper edge of said girder.

2. In a wall construction for railway passenger cars, web plate side girders, each composed of a plate, a sill member of less length than said plate connected to the upper edge thereof, a base member connected to the lower edge of said plate corresponding in length thereto, corner channels at the ends of said plate and extending above the upper edge of said plate, panel posts at the ends of said sill member extending onto both sides of said plate, and panels between said corner channels and said panel posts and connected to the upper edge of said plate.

1,272,742. COMBINED EYE-DROPPER, SYRINGE, AND MEDICINE-HOLDER. HAROLD A. WEGUELIN and RICHARD A. PHELAN, St. Louis, Mo. Filed Nov. 19, 1917. Serial No. 202,840. (Cl. 128—25.)



1. In a device of the class described, in combination, an outer hollow cylindrical barrel having an open upper end and a nozzle formed at its lower end provided with a liquid passage, a closure for said nozzle capable of receiving a hypodermic needle, an inner plunger-barrel having an open upper end, a stopper for said upper open end, a flange formed at the upper edge of said inner plunger-barrel, a finger engaging washer surrounding the upper edge of said plunger-barrel and adapted to engage said flange, a cylindrical neck formed at the lower end of said inner plunger-barrel having a small liquid passage, a packing forming a piston-head carried by said cylindrical neck and adapted to engage the inner wall surface of the outer hollow cylindrical barrel, said plunger-barrel adapted to receive a liquid medicament which upon an outer stroke of the plunger-barrel, when the stopper is removed, is all or partly transferred into the outer hollow cylindrical barrel below the piston-head and ready to be forced out of the aforesaid nozzle when the stopper is applied to the plunger-barrel, said liquid medicament if not all forced out of the outer hollow cylindrical barrel being retransferred back into the inner plunger-barrel by a downward stroke of the plunger-barrel, when the stopper is removed, said stopper adapted to be reapplied to the plunger barrel when the liquid medicament has been transferred thereinto.

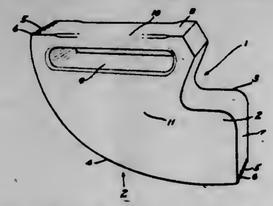
2. In a device of the class described, the combination with an outer barrel having an open end and a nozzle formed at its lower end provided with a liquid passage, a soft rubber closure for said nozzle capable of receiving a hypodermic needle, an inner barrel having an open upper end, a stopper for said open end, a flange, for the upper edge of said inner barrel, a finger engaging washer surrounding the upper end of said barrel and adapted for engagement with said flange, a cylindrical neck formed at the lower end of said inner barrel having a liquid passage, a rubber piston-ring mounted on the lower end of said neck, an asbestos piston-ring mounted upon the upper portion of said neck and engaging the upper face of said rubber piston-ring.

3. In a device of the class described, in combination, an outer hollow cylindrical barrel having a nozzle formed at its lower end provided with a liquid passage and an open upper end, a closure for said nozzle, a plunger-barrel having a cylindrical neck formed at its lower end provided with a liquid passage, a packing carried by said neck and within said outer hollow cylindrical barrel, a stopper for the plunger-barrel and a medicine supply bottle capable of being carried within said plunger-barrel when the plunger-barrel is not filled with a liquid medicament.

1,272,743. MEAT-POUNDER. VIRGIL JULIUS WELCOME, Los Angeles, Cal. Filed Apr. 9, 1918. Serial No. 227,538. (Cl. 17—27.)

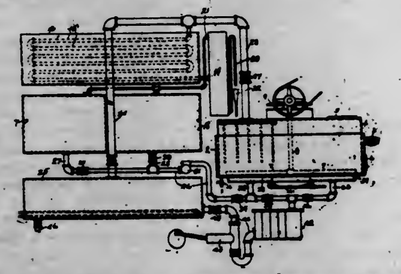
A meat pounder comprising a solid heavy metal block having parallel flat sides and a curved working face at right angles to the sides; said working face being substantially a quarter of a circle in side elevation and there being a plurality of longitudinally extending parallel grooves in said working face; said grooves being

evenly spaced apart to produce flat-faced ribs; the face of each rib being equal to substantially one-half the width of each groove and the curvature of the face serving to



make a rocker; the faces at the ends of the rocker face being at right angles to each other and there being a hand-hold transversely through the block parallel with one face.

1,272,744. APPARATUS FOR EXTRACTING OILS AND THE LIKE. RAYMOND WELLS, Homer, N. Y., assignor to Cobwell Corporation, Cleveland, Ohio, a Corporation of Virginia. Filed Apr. 23, 1915. Serial No. 23,475. (Cl. 87—6.)



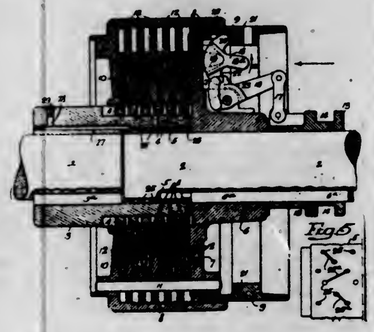
1. In apparatus of the character described, the combination of a reduction chamber of general cylindrical shape; a central vertical shaft therein; exterior driving means for said shaft; radially extending arms carried by said shaft close to the bottom of said chamber only; and depending independently pivotally supported arms in said chamber adapted to engage the material being treated as the latter is undulated by said radial arms.

2. In apparatus of the character described, the combination of a reduction chamber of general cylindrical shape; a central vertical shaft therein; exterior driving means for said shaft; radially extending arms carried by said shaft close to the bottom of said chamber only; and a series of arms depending independently in said chamber, said arms being pivotally supported at intervals along a radius of said chamber and being adapted to engage the upper surface of the mass of material being treated as the latter is undulated by said radial arms.

3. In apparatus of the character described, the combination of a reduction chamber of general cylindrical shape; a central vertical shaft therein; exterior driving means for said shaft; radially extending arms carried by said shaft close to the bottom of said chamber only; a radially extending shaft fixed in the upper part of said chamber; and a series of arms pivotally supported at intervals on said shaft so as to depend freely therefrom, the lower ends of said arms being recurved and arranged to engage the upper surface of the mass of material being treated as the latter is undulated by said radial arms.

1,272,745. FRICTION-CLUTCH. JOSEPH A. WHITE, Philadelphia, Pa., assignor to The Moore and White Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 29, 1916. Serial No. 139,552. (Cl. 192—10.)

1. The combination in a disk friction clutch, of a driving and a driven element; two series of disks, the disks of the two series being alternately arranged, one series of disks being connected to one element and the other series of disks being connected to the other element; a sliding hub forming part of one element; a sliding collar; lever mechanism connected with the collar for causing the sliding hub to clamp the several clutch disks together so that one element will be driven through the disks by the other element; and a separate counterbalance weight for counterbalancing the movement of the levers, due to centrifugal force.



3. The combination in a friction clutch of two shafts; a hub fixed to one shaft; disks carried by the said hub; a sliding hub on the other shaft; disks also carried by the said hub and alternating with the other disks; a casing inclosing the disks and attached to the sliding hub; a shell secured to the casing and having an internal flange; a sliding collar; a series of levers pivoted to the sliding hub; a link connecting the long arm of each lever with the collar; studs projecting from the face of the sliding hub; a rocking weight mounted on each stud, one end of the weight bearing against the inner surface of the shell and also against the flange on the shell, the other end of the weight bearing against a surface on the short arm of the lever so as to counteract the tendency of the long arm of the lever and its link to move outward due to centrifugal force.

5. The combination in a disk friction clutch, of two elements; a hub on each element, one of said hubs being movable; a casing to which the movable hub is connected; two series of disks alternately arranged, one series being connected to one hub and the other series being connected to the other hub through the casing; a lever for clamping the disks, said lever having a short arm and a long arm; a shell secured to the casing and extending over the lever; an internal flange on the shell; and a rocking counterbalance weight mounted on the movable hub and having two bearing portions, one bearing portion resting against the shell and the internal flange thereon, the other portion bearing against the short arm of the lever.

[Claims 2 and 4 not printed in the Gazette.]

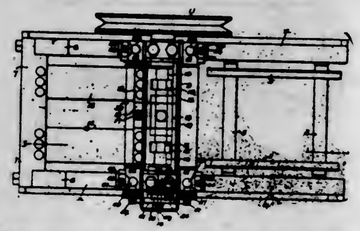
1,272,746. DIMMER FOR HEADLIGHTS. JOHN H. WHITE, North Yakima, Wash. Filed Aug. 23, 1917. Serial No. 187,815. (Cl. 240—48.2.)



1. In a headlight, the combination with a reflector; of a covering therefor consisting of wire fabric bent to conform to the contour of and engaging the reflector and having a lamp opening therein, and a cloth fabric secured to said wire fabric and covering substantially the lower half thereof.

[Claim 2 not printed in the Gazette.]

1,272,747. PUNCHING-MACHINE. FRANK E. WHITNEY and ALFRED K. EDWARDS, Philadelphia, Pa., assignors to Commercial Truck Company of America, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Aug. 2, 1916. Serial No. 112,712. (Cl. 164—58.)



1. The combination of a supporting structure; a pair of spring plates fixed thereto at one end so as to be spaced apart and extending therefrom parallel to each other; a punch head carried by the free ends of said plates; a punch carried by said head; a die for the punch; and means operative on the punch head for forcibly moving the punch toward the die.

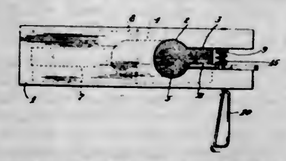
3. The combination of a supporting structure; two parallel spring plates projecting therefrom; a punch head carried by said plates; a roller on the punch head; a driven shaft having an eccentric operative on the roller to move the punch head in a line at right angles to the line of the spring plates; a punch carried by the head; and a die placed to coöperate with the punch.

6. The combination in a punching machine of a punch head; a block mounted therein and having a recess; a series of adjusting screws in the block extending into said recess; a pair of clamping bars in the recess; a series of metal strips clamped between said bars and respectively engaged at one end by said screws; with a die having openings for the reception of the projecting ends of the strips.

9. The combination in a punching machine of a supporting frame; a pair of parallel spring plates spaced apart and each rigidly connected thereto at one end; a punch head carried by said plates; a roller carried by the punch head; a driven shaft having an eccentric placed to coöperate with said roller to periodically depress the head; a series of punches carried by the head; a die having openings for the reception of said punches; and means for intermittently feeding a body of sheet material between the punches and the die.

[Claims 2, 4, 5, 7, and 8 not printed in the Gazette.]

1,272,748. TOY. BYRON P. WILLETT, Detroit, Mich. Filed Oct. 8, 1917. Serial No. 195,285. (Cl. 46—46.)



1. A toy of the class described comprising a body having an opening and a recessed face, a clapper member yieldably held on the recessed face of said body and adapted to be shifted therefrom to rebound against the recessed face of said body, a spindle journaled in one end of said body, an actuating member mounted thereon adapted to be engaged by said clapper member when said body is swung about said spindle as an axis.

2. A toy of the class described comprisig a body having an opening therein and a face provided with a recess communicating with the opening, a clapper member normally against the recessed face of said body, means at one end of said body for holding one end of said clapper member so that said clapper member may be shifted relative to said body to rebound thereagainst, a spindle journaled in one end of said body, and an actuating member carried thereby, adapted to be engaged by the free end of said clapper member when said body is swung about said spindle as an axis.

1,272,749. DRILL-EXTRACTOR. CORTEZ L. WILSON, Bisbee, Ariz. Filed Oct. 23, 1917. Serial No. 198,173. (Cl. 254—29.)



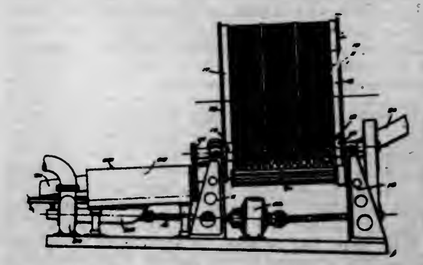
1. A device for the purpose set forth comprising a gripping member, a fulcrum member pivoted thereto, said gripping member and said fulcrum member being adapted to engage a drill, and means mounted upon the fulcrum member for imparting a longitudinal movement to the gripping member and the fulcrum member.

4. A device for the purpose set forth comprising a gripping member provided at one end with an opening to receive a drill and having a notch at its opposite end, a fulcrum member having a stem pivoted within said notch and a head extending laterally from the stem to bear against the side of the drill, and an operating member mounted upon said fulcrum member.

6. A drill extractor comprising a gripping member to extend at an angle to the drill and provided at one end with an opening whereby to receive and fit around the drill, a fulcrum block pivoted at one end to the end of the gripping member more remote from the drill and provided at its free end with an offset to bear against the drill, said offset having a groove in its face to engage the drill, and a cam fulcrumed upon said block at the side opposite the offset and the gripping member, said cam having its plane face arranged parallel with the fulcrum block and its peripheral edge presented to the body in which the drill is set.

[Claims 2, 3, and 5 not printed in the Gazette.]

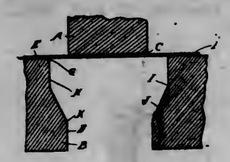
1,272,750. PROCESS OF PRESERVING CITRUS FRUIT. JOSEPH D. WILSON, Upland, Cal., assignor of one-half to George A. Hanson, Upland, Cal. Filed Mar. 14, 1917. Serial No. 154,777. (Cl. 99—9.)



A process of preserving fruits and vegetables, consisting in first passing the fruit or vegetables through a

gaseous fluid of sufficient temperature to render the surface of the objects sterile and thereafter burnishing the objects until their surface is free from all foreign substances.

1,272,751. APPARATUS FOR FORMING BRAKE-DRUMS. JOHN R. WINTER, Detroit, Mich., assignor to Kelsey Wheel Company, Detroit, Mich., a Corporation of Michigan. Filed Aug. 31, 1914. Serial No. 859,569. (Cl. 113—46.)

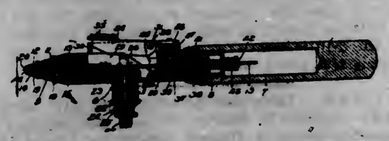


1. An apparatus for forming true cylindrical flanges on flat circular blanks, comprising a plunger for fitting the finished cylinder, and a recessed die having a finishing cylindrical portion for cooperating with said plunger, an enlarged mouth portion of a diameter relative to that of the circular blank, such as to form an unwrinkled conical flange on said blank when drawn therein, and a portion intermediate of said mouth portion and finishing cylindrical portion of a cross sectional contour permitting the inner end of the conical flange to be drawn into said finishing cylindrical portion while the periphery of said flange remains temporarily uncontracted in diameter.

4. An apparatus for forming true cylindrical flanges on flat circular blanks, comprising a plunger and a recessed die member having a finishing cylindrical portion, a rounded mouth portion of lesser diameter than that of the circular blank and such as to form an unwrinkled conical flange on said blank when drawn therein, a substantially cylindrical portion extending inward from said mouth portion, and an oblique portion connecting said cylindrical portion with said finishing cylindrical portion, being of lesser depth than the inwardly formed conical flange, whereby the inner end of said conical flange is re-fashioned by said finishing cylindrical portion while the periphery of said flange is traversing said cylindrical mouth portion.

[Claims 2 and 3 not printed in the Gazette.]

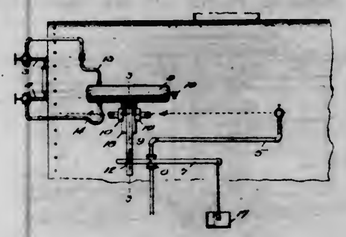
1,272,752. AIR-BRUSH. OLAUS C. WOLD, Chicago, Ill. Filed July 6, 1917. Serial No. 178,901. (Cl. 91—45.)



1. In an air brush, the combination of a body portion having suitable air and pigment orifices in its end, an air valve for controlling the delivery of air to the air orifice, a needle valve for controlling the delivery of pigment from the pigment orifice, a spring tending to normally close the needle valve, a spring normally tending to close the air valve, a finger-piece pivoted to the body portion in position for engagement by the fore-finger of a hand grasping the body portion, said finger-piece lying substantially parallel to the body portion, an operative connection from the finger-piece to the air valve, a bell crank lever pivoted to the body portion and having one arm adapted to actuate the needle valve against its spring, and having another arm lying substantially parallel to the finger-piece, and adapted for engagement by the finger-piece after a predetermined amount of lost motion in the movement of the finger-piece, and means for limiting the backward movement of the needle valve and its lever under the impulse of its spring, substantially as described.

[Claims 2 to 5 not printed in the Gazette.]

1,272,753. DEVICE FOR CONTROLLING SUPPLY OF WATER TO BOILERS. BENJAMIN FRANKLIN WOOD, Lenzburg, La. Filed Mar. 8, 1917. Serial No. 153,486. (Cl. 137—101.)



In combination with a boiler and the valve for controlling the flow of water thereto, a tank having communication with the boiler above and below the water level of the same, a slide rigidly secured to and depending from the tank, guides on the boiler for the slide to permit the slide to move vertically, a lever connected intermediate its ends to the valve for operating the same, an adjustable connection between one end of the lever and the tank for moving the said lever when the tank moves vertically, and a counterpoise connected with the other end.

1,272,754. TROUSERS-SUPPORTER. LEONARD WOODS, St. Louis, Mo. Filed Dec. 1, 1916. Serial No. 134,354. (Cl. 241—9.)



1. A trousers support comprising a belt, and wire struts carried by said belt at suitable intervals,—two of said struts being respectively located so as to come opposite the hip joints of the wearer, and each consisting of an open eye with depending legs,—the forward leg being bowed to accommodate forward movement of the body above the hip joints, and the rearward leg diverging backward, so as to spread said legs on opposite sides of the hip joint when in use, substantially as and for the purpose described.

2. A trousers support comprising a belt, collars mounted on said belt, and wire struts carried by said collars—each collar consisting of a plate portion having ends embracing said belt and having a band and a socket struck out from the face so as to form openings through which the end of a strut may be inserted and distorted by clamping pressure thereon.

3. A trousers support comprising a belt designed to be worn between shirt and trousers, struts mounted on said belt at suitable intervals and clips pivotally mounted on said belt, and each consisting of a stiff spring of U-shape, vertically disposed, with arms running back to the pivot connection with the belt,—one arm being flat on the inside of the belt, and the outer arm being turned outward near the spring, substantially as and for the purpose described.

1,272,755. ROAD-SCARIFIER. SIDNEY WRIGHT, Brooklyn, N. Y. Filed Sept. 26, 1914. Serial No. 863,737. (Cl. 37—50.)

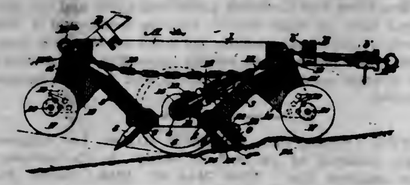
1. A road scarifier adapted for operation back and forth by a tractor and comprising a wheeled supporting axle, an oblong metal body centrally supported thereon and adapted to tilt about the axes of the wheels from one working position to the other, picks projecting from the lower portion of the body at each side of the axle, gage members supported at the ends of the body permanently higher than the pick points and each adapted to engage the ground only when the adjacent pick points are within the ground, and draft connections adapted to bear downwardly on the raised end of the body and rock the latter from one working position to the other at the initial pull of the tractor.



11. A road scarifier comprising a wheeled supporting axle, a metal body centrally supported thereon and having upwardly projecting end walls, said end walls having upwardly extending openings therein extending substantially radial to the axis of the body and on the longitudinal central line of the body, said openings having contracted portions, and said body having pick supporting means at each side of the axle, and flexible draft connections extending from the lower central portion of the body through said openings and fitting closely within said contracted portions.

[Claims 2 to 10 and 12 not printed in the Gazette.]

1,272,756. ROAD-PLANER. SIDNEY WRIGHT, Brooklyn, N. Y. Filed May 3, 1915, Serial No. 25,456. Renewed May 6, 1918. Serial No. 232,938. (Cl. 37—50.)



1. In a road planer, a pair of supporting wheels, a body mounted to rock about the axes of said wheels, picks projecting from the lower side of said body, and a planing knife secured against said picks.

8. In a road planer, a wheel-supported body having picks projecting from its lower side, and two planing knives clamped together on opposite sides of said picks.

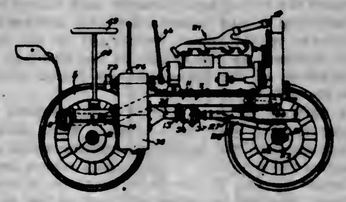
9. A road making machine comprising a wheel-supported body, cutting devices at the lower side of the body, a draft device extending from the body, and a buffer hinged to the body and adapted to swing vertically and having guiding means for said draft device.

11. A road making machine comprising a wheeled supporting axle, an oblong metal body centrally supported thereon and adapted to rock about the axes of the wheels, said body having bearing surfaces at its ends higher than the axle and having cutting devices in its lower portion at each side of the axle, flexible draft connections extending from the central portion of the body over said bearing surfaces, and yokes pivoted to the end portions of the body and having their free ends adapted to rest upon the draft connections, said yokes having guiding means for the draft connections.

[Claims 2, 4 to 8, and 10 not printed in the Gazette.]

1,272,757. MOTOR-VEHICLE. MAURICE J. YODER, Hemet, Cal. Filed Jan. 23, 1918. Serial No. 213,314. (Cl. 180—40.)

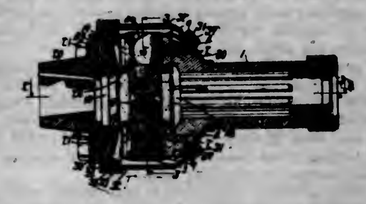
1. In a motor vehicle, a rear differential axle, a front differential axle, a reach member extending backwardly from the front axle, a reach member extending forwardly from the rear axle, means forming a ball and socket joint between the reach members, a bed fixed upon the rear axle, a rocker support fixed upon the forward axle, and means connecting the forward end of the bed to the rocker support.



2. In a motor vehicle, a rear differential axle, a front differential axle, an axle housing upon the rear differential axle, an axle housing upon the front differential axle, a bed frame rigidly mounted upon the rear differential axle housing and extending to the vertical plane of the front differential axle housing, a drive shaft housing extending forwardly from the rear axle housing and forming a reach member, a drive shaft housing extending backwardly from the front axle housing and forming a second reach member, means forming a ball and socket joint between the two reach members, a rocker support mounted upon the forward axle housing, and a rocker roller mounted at the forward end of the bed frame and running upon the rocker support.

3. In a motor vehicle, a rear differential axle, a front differential axle, an axle housing upon the rear differential axle, an axle housing upon the front differential axle, a bed frame rigidly mounted upon the rear differential axle housing and extending to the vertical plane of the front differential axle housing, a drive shaft housing extending forwardly from the rear axle housing and forming a reach member, a drive shaft housing extending backwardly from the front axle housing and forming a second reach member, means forming a ball and socket joint between the two reach members, a rocker support mounted upon the forward axle housing, a rocker roller mounted at the forward end of the bed frame and running upon the rocker support, a steering post shaft mounted vertically at the center of the rear end of the bed frame, guide rollers in the bed frame, and cables oppositely wound upon the steering post shaft and extending over the guide rollers to the outer ends of the rocker support.

1,272,758. UNIVERSAL JOINT. PRESTON M. YOUNG, Utica, N. Y. Filed May 31, 1917. Serial No. 171,831. (Cl. 74—19.)



1. A universal joint comprising two main members and a connecting member, said connecting member and one of the main members having relative pivotal movements in one direction and said connecting member and the other main member having relative pivotal movements in a direction at right angles to the first named direction, and means whereby said relative movements are utilized to insure lubrication of the bearing surfaces of the joint.

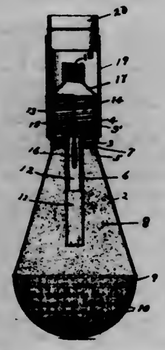
8. A universal joint comprising casing means, a main member including horns, each of the horns being furcated,

a connecting member including alined journals received between the furcations, bushings interposed between the journals and the horns, a second main member pivotally connected to the connecting member, the bushings being open on the side adjacent the second main member and having flanges along their outer edges, said flanges projecting toward the second main member, said second main member including means constructed and arranged to pocket lubricant in the spaces determined by the openings in the bushings by the flanges of the bushings and by the furcations of the horns whereby forced lubrication of the journals is secured.

15. In a universal joint, a pair of main members and a connecting member, said main members being adapted to swing in respect to the connecting member about axes at right angles to each other, a spherically curved casing element carried by one of the main members, a second casing element arranged to inclose the end portion of the first named element to form a tight joint therewith, a third casing element adjustably connected to the second element, said third element having a flange from which resilient tongues are struck, said tongues being adapted to urge the second element into sealing relation with the first casing element.

[Claims 2 to 7, 9 to 14, and 16 not printed in the Gazette.]

1,272,759. HAND-GRENADE. JOHN F. C. YTTRUP, Pittsburgh, Pa. Filed Feb. 4, 1918. Serial No. 215,246. (Cl. 102—29.)



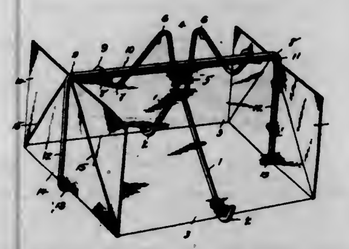
1. The combination with a projectile comprising a body portion of relatively thin metal to contain explosives, a detonator, and ignition means, of an inner head of relatively thick cast metal arranged in the head of said projectile, said cast head having dividing grooves on its inner surface in checker formation to facilitate its breaking apart when the device is exploded.

2. A projectile comprising a body portion to contain explosive, a detonating tube within said body portion, an automatic ignition means, said means comprising a spring accelerated stem extending within said tube, means for locking said stem in inoperative position, said means comprising locking arms bent over said stem to depress the same, and means for releasing said arms.

6. A hand grenade comprising a pear-shaped body portion composed of relatively thin metal to contain an explosive, a head of relatively thick cast metal having dividing lines therein to facilitate it breaking apart when the device is exploded, a detonator for discharging said explosive, said detonator comprising a tubular receptacle partially filled with an explosive, a fuse within said receptacle, an ignition stem extending into said receptacle to ignite said fuse, a spring member compressed under a cup member, a pair of locking arms bent over said cup member to hold said spring in its compressed position, and a flexible cord member wound around the free ends of said arms to hold them in position, said cup being secured to said ignition stem, and said stem being ignited when said spring and cap are released.

[Claims 3 to 5 not printed in the Gazette.]

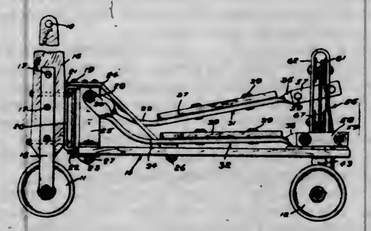
1,272,760. CLOCHE USEFUL FOR HORTICULTURAL AND AGRICULTURAL PURPOSES. CHARLES H. ALLENDER, New York, N. Y. Filed Jan. 24, 1917. Serial No. 144,213. (Cl. 47—22.)



1. In a device of the character described, a frame composed of three separable parts consisting of an angular transverse member having bent over ends; a longitudinal upper member having depending and upwardly projecting portions and loops formed at the ends thereof; and a continuous longitudinal member terminating in depending legs provided with inwardly bent ends.

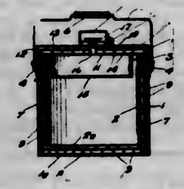
2. In a cloche as described, a frame for holding sheet glass forming the sides and ends of the cloche, said frame being composed of an angular transverse member provided with hooked ends, a longitudinal upper member having depending and upwardly projecting parts and the ends thereof bent at right angles forming loops, and a continuous longitudinal member threaded in the said loops of the upper member and having depending legs provided with hooked ends, substantially as and for the purpose described.

1,272,761. COASTER. WALTER F. BAILEY, Los Angeles, Cal., assignor of one-half to George A. Cadwallader, Los Angeles, Cal. Filed May 31, 1916. Serial No. 100,894. (Cl. 208—35.)



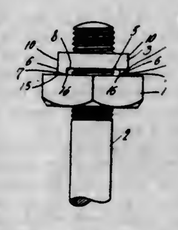
In a coaster, a horizontally disposed floor board, a front steering wheel pivotally secured adjacent one end of said floor board, a driving axle rotatably mounted beneath the opposite end of the floor, a pair of driving wheels secured to the driving axle at its opposite outer ends, a ratchet member fixedly mounted upon said driving axle, rotatable clutch sleeves mounted upon opposite ends of said driving axle, engaging dogs pivotally mounted within the rotatable sleeves and adapted to engage the ratchet member, means for holding said dogs in engagement with the ratchet, a pair of vertically moving treadle members pivoted above the floor board, means for steering the coaster and suitably steadying the rider upon the treadles, and transmission means connecting the treadles and the rotatable clutch sleeves whereby the downward movement of either treadle will act to rotate said sleeves and thereby impart driving motion to the axle member to propel the vehicle in a forward direction.

1,272,762. RECEPTACLE. WILLIAM H. BAUGHMAN, Bay City, Mich. Filed June 19, 1915. Serial No. 35,024. (Cl. 220—146.)



In combination, a receptacle, a cover for the receptacle including upper and lower plates spaced apart, a ring inclosing the space between the plates at their edges, a flange projecting from the lower plate adapted to be inserted into and bear against the inner side of the receptacle, heat passage prevention means interposed between the upper and lower plates, a receptacle depending from the lower plate inside the flange, an outlet thereto extending through both plates, a closure for the outlet, and an upwardly projecting flange surrounding said closure and adapted to detachably retain a cup or like article.

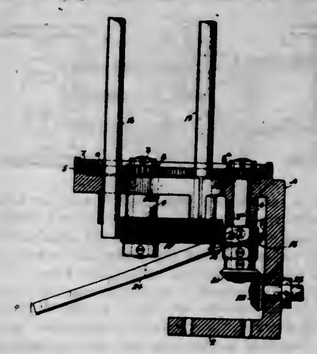
1,272,763. NUT-LOCK. SAMUEL C. BAUGHN, Canalou, Mo., assignor of one-half to John M. Jones, Canalou, Mo. Filed Apr. 15, 1918. Serial No. 228,659. (Cl. 151—37.)



The combination with a nut and bolt, of a washer plate threaded on the bolt and provided on its under side and at its outer edges with oppositely disposed approximately parallel ribs, the inner surfaces of the ribs being disposed at acute angles to the outer surfaces of the ribs and meeting the outer surfaces of the ribs at opposite ends of the ribs, the under surfaces of the ribs slanting in opposite directions longitudinally of the ribs and slanting inwardly in opposite directions transversely of the ribs to form, with the inner surfaces of the ribs, nut engaging edges which slant in opposite directions longitudinally of the ribs.

1,272,764. CAN-END SEPARATOR AND FEEDER. GEORGE W. BLANKENHORN and THOMAS CASTBERG, San Francisco, Cal. Filed May 16, 1917. Serial No. 168,977. (Cl. 113—114.)

1. In a can end separator and feeder, a frame having a central opening formed therein, a plurality of vertically positioned rods secured adjacent said opening adapted to receive and guide a can end stack, a plurality of shafts journaled in the frame adjacent the central opening, a collar member secured on each shaft, a pair of overlapping supporting shoulders formed on each collar, said shoulders being offset with relation to each other and superposed to assume different planes, the distance between the shoulders in a vertical direction being equal to the thickness of one can end flange, and means for transmitting a movement to the shafts in unison which will bring each pair of supporting shoulders alternately into and out of engagement with the can end stack.



2. In a can end separator and feeder, a frame having a central opening formed therein, means for receiving and guiding a stack of can ends, a plurality of shafts journaled in the frame adjacent the central opening, a pair of overlapping supporting shoulder members carried by each shaft, said shoulders being offset with relation to each other and superposed to assume different planes, the distance between the shoulders in a vertical direction being equal to the thickness of one can end flange, and means for transmitting a movement to the shafts in unison which will bring each pair of supporting shoulders alternately into and out of engagement with the can end stack.

4. In a can end separator and feeder, a frame having a central opening formed therein, a plurality of vertically positioned rods secured adjacent said opening adapted to receive and guide a can end stack, a plurality of shafts journaled in the frame adjacent the central opening, a collar member secured on each shaft, a pair of overlapping supporting shoulders formed on each collar, said shoulders being offset with relation to each other and superposed to assume different planes, the distance between the shoulders in a vertical direction being equal to the thickness of one can end flange, a gear secured on each shaft, an internal gear intermeshing with said gears, and means for transmitting a rotary movement to the internal gear to bring the supporting shoulders alternately into and out of engagement with the can end stack.

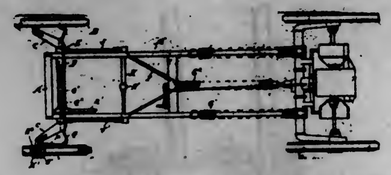
6. In a can end separator, a separating device including a rotatable support mounted on a vertical axis and carrying a pair of circumferential ledges or detents, each ledge of approximately 180° in length and arranged in different planes slightly spaced one from the other, so that the can end may drop from one ledge to the other and finally off of the lowermost edge by the rotative movement of the support, said ledges being wedge-shaped for entry between the can ends.

[Claims 3 and 5 not printed in the Gazette.]

1,272,765. RUNNING-GEAR FOR VEHICLES. WILLIAM EMIL BOCK and HENRY L. BOCK, Toledo, Ohio; said Henry L. Bock assignor to said William Emil Bock. Filed June 28, 1913. Serial No. 776,457. (Cl. 21—198.)

1. A vehicle, comprising a frame, wheels, independent rock arms for supporting said frame upon said wheels, axially alined hollow shafts for connecting said rock arms with said frame, knuckles for pivotally supporting said wheels on said rock arms, actuating arms for said knuckles having ends extending in substantial alinement with the axis of said hollow shafts, a rod connecting said actuating arms extending through said hollow shaft, and means for adjusting said rod.

2. A vehicle, comprising a frame, wheels, independent rock arms for supporting said frame upon said wheels, knuckles for attaching said wheels to said rock arms, hollow shafts for said rock arms, and steering mechanism for actuating said knuckles passing through said hollow shafts.

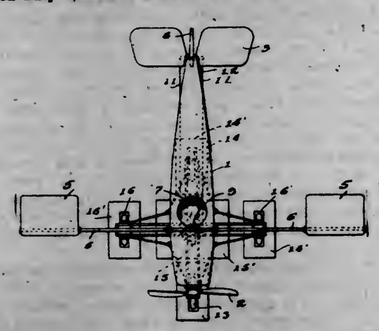


3. A vehicle comprising a frame, a wheel, an independently yieldable rock arm for supporting said frame upon said wheel, said rock arm being journaled upon said frame, and steering mechanism for actuating said wheel passing through the journaled portion of the rock arm.

4. A vehicle, comprising a frame, wheels for supporting said frame, independently vertically yieldable in relation thereto, rock arms for said wheels, journaled upon said frame, and steering mechanism for each of said wheels permitting and unaffected by said independent vertical movement, comprising an actuating arm, a link pivotally connected to said arm in substantial alinement with the journal of the rock arm, and means for actuating said link.

5. A vehicle, comprising a frame, a wheel, a rock arm for supporting said frame upon said wheel, said rock arm being journaled upon said frame and steering mechanism for actuating said wheel provided with a pivotal connection in alinement with the journal for the rock arm.

1,272,766. AVIATOR'S INSTRUCTION-MACHINE. BENNO J. BONGARTZ, Brooklyn, N. Y., assignor to United States Air Craft Corporation, Inc., New York, N. Y. Filed July 3, 1917. Serial No. 178,497. (Cl. 244—1.)



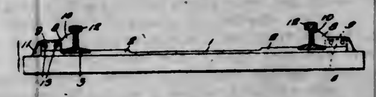
1. An aviator's instruction machine, comprising a body, an engine driven propeller, lateral balancing means, fore and aft balancing means, steering means, and supporting base elements, certain of which are adapted to be raised and lowered with respect to the body of the machine and the surface on which the machine is being operated, said supporting base elements comprising a plurality of members arranged in a central fore and aft line with relation to the body of the machine, and means for independently adjusting the last named elements up and down, for the purpose specified.

3. An aviator's instruction machine, comprising a body, an engine driven propeller, a horizontal rudder, a vertical rudder, lateral balancing surfaces, manually controlled means for operating said vertical rudder, horisontal rudder and lateral balancing surfaces, and supporting base elements, certain of which are adapted to be raised and lowered with respect to the body of the machine and the surface on which the machine is being operated, said supporting base elements comprising one or more members located in line with the fore and aft axis of the body, and other elements located at opposite sides of the body and equi-distantly from the longitudinal axis thereof, each of said elements being independently adjustable up and down, for the purpose specified.

5. An aviator's instruction machine, comprising a body, an engine driven propeller, a horizontal rudder, a vertical rudder, lateral balancing surfaces, manually controlled means for operating said vertical rudder, horizontal rudder and lateral balancing surfaces, and supporting base elements, certain of which are adapted to be raised and lowered with respect to the body of the machine and the surface on which the machine is being operated, one of said supporting base elements being mounted for steering movement and being controlled by the same means used for controlling the vertical rudder.

[Claims 2 and 4 not printed in the Gazette.]

1,272,767. RAIL-CLAMP. PLEASANT BRADBURN and WALTER CHAMBERS, Muncie, Ind. Filed Apr. 16, 1918. Serial No. 228,937. (Cl. 238—5.)



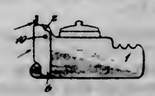
1. In a rail clamp of the class described, the combination of a bar having rail receiving pockets adjacent its ends, tenons formed upon said bar and extending to said pockets, clamping blocks having internal pockets formed therein, each block having a rail engaging head at one end and a depending lug at the opposite end thereof, said heads being adapted to engage rails fitting within said pockets, while said lugs engage the ends of said bar, thus steadying said blocks, and securing means passing through said blocks and said tenons for holding said blocks in set position.

6. In a rail clamp of the class described, the combination of a bar having receiving pockets adjacent its ends, clamping blocks having depending lugs at their outer ends, said blocks being adapted to engage rails fitting within said pockets, while said lugs engage the ends of the bar, thus steadying said blocks, and means for holding said blocks in set positions upon said bar.

9. In a rail clamp of the class described, the combination of a bar including means for engaging the base of rails for holding the rails against side shifting, tenons formed on said bar, clamping blocks having depending lugs at their outer ends, said blocks being adapted to engage rails carried by said bar, while said lugs engage the ends of said bar, thus steadying said blocks, said blocks engaging said tenons, and means connecting said blocks and said tenons for holding said blocks in set position.

[Claims 2 to 5, 7, and 8 not printed in the Gazette.]

1,272,768. PIN-HOLDER. CHARLES A. BULL, Albion, Nebr. Filed Aug. 6, 1917. Serial No. 184,748. (Cl. 223—60.)



1. A device of the class described comprising a base having a substantially rectangular side, a flat clamping plate disposed adjacent said side of the base and having a pair of laterally extending arms on its ends to contact the opposite ends of said base, said arms being pivotally connected adjacent their lower edges to the adjacent ends of said base whereby the clamp may be swung outwardly and downwardly to receive a strip of pins between the plate and said side of the base.

[Claim 2 not printed in the Gazette.]

1,272,769. BATHING-SUIT. JOHN F. BURKE, Philadelphia, Pa. Filed July 19, 1916. Serial No. 110,065. (Cl. 9—20.)



1. In a bathing garment, a blouse portion provided with a large broad collar attached to the neck and extending loosely down the back and also over the shoulders and down the front, said front portions being separated by a deep V-neck opening, the back portion being provided on its under side with a plurality of longitudinally arranged buoyant bodies arranged to give buoyancy and great transverse flexibility whereby the collar may be turned up back of the head and caused to fit up upon each side thereof when floating, and means at the outer edges of the front portions of the collar adjacent to the shoulder portions thereof for fastening the collar in position around the neck of the wearer.

8. In a bathing garment, the combination of the waist or blouse portion provided with a large collar of textile fabric having at the rear of the neck opening buoyant portions, whereby the collar may be turned up back of the head to act as a buoyant support therefor while floating, the said buoyant portions comprising a series of buoyant bodies of elongated form arranged side by side lengthwise of the garment and permitting the collar to be bent freely upward on each side of the head.

[Claims 2 and 4 not printed in the Gazette.]

1,272,770. AIR-VALVE FOR PUMPS. ARTHUR W. BURKS, Decatur, Ill., assignor to Decatur Pump & Mfg. Co., Decatur, Ill., a Corporation of Illinois. Filed Aug. 13, 1917. Serial No. 185,850. (Cl. 103—79.)



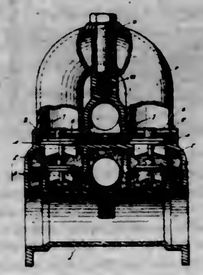
1. A device of the character described, including in combination, a body adapted to be attached to a pump and to communicate with the interior of the cylinder thereof, said body being enlarged to form a reservoir, the passage into the cylinder opening near the bottom of the reservoir, a valve in said passage, and means for admitting air into said reservoir.

3. A device of the character described, including in combination, a body adapted to be attached to a pump and to communicate with the interior of the cylinder thereof, said body being enlarged to form a reservoir and also having a tube mounted therein, a valve having a stem slidably mounted within said tube, and means for admitting air into said reservoir.

7. In combination with a cylinder of a pump having a compartment in communication therewith, an air valve connected to said compartment and comprising a body portion having a reservoir, a tube mounted therein and extending to a point near the bottom thereof, a valve mounted to move in said compartment and having a stem fitting said tube, adjustable means for admitting air into said reservoir, said adjustable means comprising a screw and a plurality of grooves along its sides.

[Claims 2 and 4 to 6 not printed in the Gazette.]

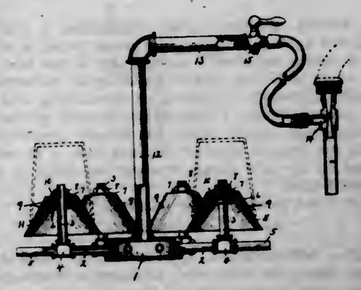
1,272,771. PUMP. ARTHUR W. BURKS, Decatur, Ill., assignor to Decatur Pump & Mfg. Co., Decatur, Ill., a Corporation of Illinois. Filed Aug. 13, 1917. Serial No. 185,851. (Cl. 103—88.)



1. A device of the character described, including in combination with the cylinder of a pump having valve compartments near each end, with valves mounted in said compartments, the casing of the pump having openings above and in alinement with said valves, said openings being provided with annular shoulders, an arcuate tubular air compartment member arranged to be positioned on said shoulders and single securing means passing through said arcuate shaped member and into the casing so as to form a cover for the valves and also an air compartment.

2. A device of the character described including in combination with the cylinder of a pump having valve compartments near each end, valves mounted in said compartments, the casing of the pump having openings above and in alinement with the valves and also having a projection located between said openings, an arcuate shaped tubular air chamber member mounted on top of said casing with its ends in registration with said openings, and a single securing means passing through said arcuate shaped member and into said projection.

1,272,772. ARTICLE-SUPPORTING DEVICE. JOSEPH E. BURNS, Canastota, N. Y. Filed Oct. 26, 1917. Serial No. 198,589. (Cl. 41—9.)

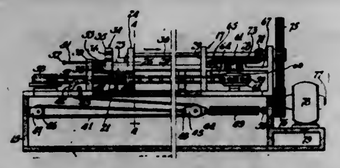


1. In a device of the class described, a hollow casing, a tube in communication therewith, and a cone shaped cup supported from its upper wall only by said tube.

14. In a device of the class described, a cup for supporting an article to be dipped, said cup formed of resilient material and comprising a cross wall and a tubular side wall secured to the cross wall and diverging outwardly and decreasing in thickness as it extends therefrom.

[Claims 2 to 13 not printed in the Gazette.]

1,272,773. STAY-MACHINE. JOHN F. CALAHAN, Los Angeles, Cal., assignor of one-half to Herbert B. Perdew, Los Angeles, Cal. Filed Jan. 30, 1917. Serial No. 145,542. (Cl. 140—90.)



A stay machine comprising a base, a head-stock secured to said base, a tail-stock secured to said base, guide rods extending between and fixed to said head and tail stocks, a forming die slidable on said rods having a hole extending therethrough, a follower on said rods behind said die, said follower having an opening therethrough in alinement with the opening in said die, coiled cushion springs on said rods between said tail-stock and said follower, a rod slidably extending through said tail-stock fixed to said follower, a head on the outer end of said last-named rod, a coiled spring on said last-named rod between said follower and said tail-stock, a shaft mounted in said head-stock, a hollow mandrel secured to said shaft and having a notched outer end extending through the hole in said die, a stub shaft in said head-stock, means for driving said stub shaft from said first-named shaft, clutch members on said stub shaft, a sprocket on one of said clutch member, a sprocket mounted in said tail-stock, a chain running over said sprockets, means for securing said die to said chain to move said die positively forward, controlling means for said clutch operated by said die, and means for elastically returning said die after its forward movement.

1,272,774. SEWING-MACHINE ATTACHMENT. EUGENE H. CHESSMAN, Seattle, Wash. Filed Feb. 10, 1917. Serial No. 147,842. (Cl. 112—8.)



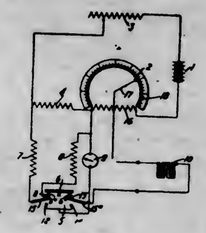
1. A sewing machine corder comprising a flat and tapered foot having an upstanding shank which is attachable to a sewing machine, a tapered side of the foot making an angle with the normal direction of movement of the material beneath the foot, an upstanding and outwardly curved flange, a horizontal tapered member integral with said curved flange, the flanged member lying adjacent the tapered edge of the said foot, a flared forward end on the said flange, whereby the entry of material is facilitated.

[Claim 2 not printed in the Gazette.]

1,272,775. MEASURING INSTRUMENT. LEWIS W. CHUBB, Edgewood Park, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 3, 1914. Serial No. 829,193. (Cl. 73—32.)

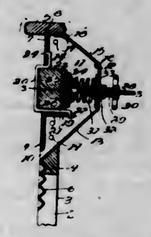
1. In a measuring instrument, the combination in a circuit comprising a source of electromotive force and a plurality of resistors connected in series relation, of a resistor, an electrical indicating device, a thermo-electric generator and means for alternately connecting the said resistor and the said indicating device in shunt relation to one resistor of the said circuit and for connecting the thermo-electric generator in shunt relation to another of the said resistors in the said circuit and in series relation to the said electrical indicating device.

3. In a measuring instrument, the combination with a potentiometer conductor, a resistor, a galvanometer and a thermo-electric generator, of a switch for connecting the thermo-electric generator in series with the galvanometer, the partial circuit thus constituted in shunt relation to the potentiometer conductor and the resistor in shunt relation to the potentiometer conductor.



[Claims 2 and 4 to 9 not printed in the Gazette.]

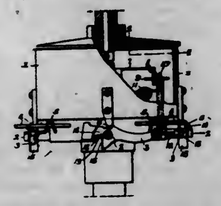
1,272,776. WASHBOARD. GERTRUDE CLINE and AARON HORTON, Coleman, Mich.; said Cline assignor of one-third to said Horton. Filed Dec. 31, 1918. Serial No. 809,786. (Cl. 68—29.)



1. A washboard including a rubbing plate having a soap exposing opening, means for supporting a cake of soap in said opening, a follower, a screw engaging the follower and operable to positively and forcibly feed the soap against said supporting means and through said opening, and a spring engaging said follower to automatically feed the soap independently of the screw.

2. A washboard including a rubbing plate having a soap exposing opening, means for supporting a cake of soap in said opening, a follower disposed behind the opening, a screw threaded rod connected to the follower, a screw threaded sleeve engaging the rod, an operative support for the sleeve and through which the sleeve is slidable, and a spring engaging said support and bearing against the follower.

1,272,777. STOP-MOTION FOR KNITTING-MACHINES. FRANK CRAWFORD, Sr., New Brunswick, N. J., assignor to The Crawford Manufacturing Company, New Brunswick, N. J., a Corporation of New Jersey. Filed Nov. 25, 1916. Serial No. 133,348. (Cl. 66—7.)

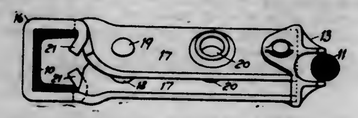


1. The combination in a stop motion; of a casing; trip mechanism including a disk; a shaft having arms; a spring

for moving the shaft when a thread breaks; a pivoted trip lever arranged to be held in its raised position by the thread and having two surfaces beyond the pivot, one for holding an arm of the shaft when the lever is held in the raised position by the thread, the other being located in the path of the arm when it is returned after actuating the trip mechanism, so as to automatically raise the trip lever into its normal position for threading.

[Claim 2 not printed in the Gazette.]

1,272,778. BRAKE-BEAM. SETH A. CRONE, East Orange, N. J. Filed Nov. 3, 1916. Serial No. 129,282. (Cl. 188—22.)



1. A brake-beam comprising a compression member having corresponding flanges, a tension member and a strut intermediate said members for the brake-lever, said strut being a forged metal folded bar encompassing said compression member and at the edges of said flanges being deflected angularly to form parallel sides for the brake-lever, and said bar adjacent to said compression member having a lip cut therefrom to initially project in a direction toward the tension member and being bent inwardly from said bar to present its inner flat face toward said compression member, for securing the strut and compression member together.

4. A brake beam comprising a compression member, a tension member and a strut intermediate said members for the brake lever, said strut being a forged metal folded bar encompassing said compression member, whence the members of the bar are deflected to form angularly disposed parallel sides, and having lips cut from diagonally opposite edges thereof and bent inwardly for securing the strut and compression member, said lips being cut from those diagonally opposite edges where the side members of the strut are curved inwardly toward the compression member in the formation of the angular sides of the strut.

5. A brake beam comprising a compression member, a tension member and a strut intermediate said members for the brake lever, said strut being a forged metal folded bar encompassing said compression member, whence the members of the bar are deflected to form angularly disposed parallel sides and having a lip cut from the edge thereof and bent inwardly for securing the strut and compression member.

[Claims 2 and 3 not printed in the Gazette.]

1,272,779. RAILWAY-BRAKE. SETH A. CRONE, East Orange, N. J. Filed Sept. 22, 1917. Serial No. 192,663. (Cl. 188—70.)



1. A brake-head having a face adapted to receive a brake-shoe and key and provided in said face with an open recess back of the path of the key to receive the wrist of a brake-hanger, and a brake-hanger having a wrist adapted to said recess, said head being formed with a slot extending along the wall of said recess and closed at its outer end, and said wrist having a projection freely confined within said slot and adapted to prevent the unintended escape of the head from the hanger.

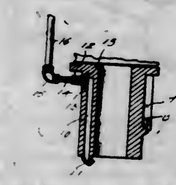
2. A brake-head having a face adapted to receive a brake-shoe and key and provided in said face with an open recess back of the path of the key to receive the wrist of a brake-hanger, and a brake-hanger having a wrist adapted to said recess, said head being formed with an arcuate slot extending along the lower and rear wall of said recess and closed at its outer end, and said wrist having a projection freely confined within said slot and adapted to prevent the unintended escape of the head from the hanger.

3. A brake-head having a face adapted to receive a brake-shoe and key and provided in said face with upper and lower open recesses back of the path of the key to receive, in either recess, the wrist of the brake-hanger, and a brake-hanger having a wrist adapted to either of said recesses, said head being formed with slots extending along the walls of said recesses and closed at their outer ends, and said wrist having a projection to be freely confined within either of said slots and adapted to prevent the unintended escape of the head from the hanger.

4. A brake-head having a face adapted to receive a brake-shoe and key and provided in said face with upper and lower open recesses back of the path of the key to receive, in either recess, the wrist of a brake-hanger, and a brake-hanger having a wrist adapted to either of said recesses, said head being formed with arcuate slots extending along the lower and rear walls of said recesses and closed at their outer ends, and said wrist having a projection to be freely confined within either of said slots and adapted to prevent the unintended escape of the head from the hanger.

5. A brake-head having a face adapted to receive a brake-shoe and key and provided in said face with an open recess back of the path of the key to receive the wrist of a brake-hanger, and a brake-hanger having a wrist adapted to said recess, said head being formed with a slot at said recess, and said wrist having rigidly secured thereto a projection confined within said slot and adapted to prevent the unintended escape of the head from the hanger, and said recess, wrist, projection and slot being so related that the wrist carrying the projection may, when in one position, enter said recess and position said projection within said slot.

1,272,780. PILOT FOR GAS-BURNERS. MICHAEL M. DILUCHIO, Wilmington, Del. Filed Nov. 3, 1917. Serial No. 200,117. (Cl. 67—16.)



1. A pilot for gas burners comprising a mantle support having a passage formed therein, a nipple formed on the support and in communication with the passage, a cylindrical member embedded in the mantle and within the passage, a pipe threaded to said cylindrical member, an elbow threaded to said pipe, a feed pipe threaded to the elbow, a sleeve detachably connected to the feed pipe, and a curved pipe connected to the main gas feed pipe of a gas burner and detachably connected to the sleeve.

[Claim 2 not printed in the Gazette.]

1,272,781. PORTABLE ELECTRIC LIGHT. JOHN T. DRUFVA, Longmeadow, Mass., assignor to Henry Hyman & Co., Inc., New York, N. Y., a Corporation of New York. Filed Apr. 4, 1918. Serial No. 226,582. (Cl. 240—8.5.)

1. In a flash light having a casing, reflector, lens, lamp bulb and battery, said reflector having a portion

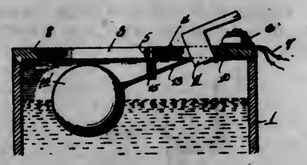
receiving the lamp-socket, in combination, an insulating disk within the forward end of the casing, a metal disk at the lower face thereof, a depending flange electrically connected with said metal disk, and means for making and breaking the circuit through the lamp and battery comprising a slide on said casing, a spring blade within the casing connected with said slide and movable thereby to complete the circuit through said metal disk, and a push button mounted in said casing and engaging



said spring blade and adapted on being pressed inwardly to move said blade against the aforesaid depending flange, the normal position of the upper end of said blade being opposite to said flange and the lower terminal of the lamp being in engagement with the positive pole of the battery, while said metal disk is in electrical connection with the other terminal of the lamp.

[Claims 2 to 6 not printed in the Gazette.]

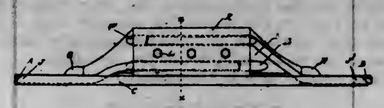
1,272,782. DRIP-PAN ALARM. PATRICK F. DUFFY, Newburyport, Mass. Filed Oct. 16, 1916. Serial No. 125,928. (Cl. 200—34.)



An alarm for a drip pan comprising a removable cover for the drip pan having a large and a small opening, the said openings being longitudinally spaced apart and communicating through a restricted portion, a retaining yoke secured to the bottom of the cover and at a point directly beneath the point of intersection of the openings, a lever pivotally mounted on the bottom of the closure and movable in the smaller of the said openings, one portion of the lever extending over the top of the cover, the opposite end of the lever being provided with a rod having a float of a size smaller than the said large opening, the said float being movable through the said opening, its lowermost movement being restricted by the said retaining yoke engageable with the said rod, the said large opening permitting the said float to be extended above the said closure.

1,272,783. TROLLEY-SPLICER. FRANK T. ELWELL, Los Angeles, Cal. Filed Dec. 2, 1916. Serial No. 134,687. (Cl. 191—44.)

1. The combination with wires to be spliced, of a trolley splicer, comprising a grooved member adapted to receive the ends of the wires in overlapping relation, and a clamping plate for holding the wires in the grooves, and means for securing said clamping plate to produce an equal gripping tension on both of the wires.



4. The combination with wires to be spliced, of a trolley splicer, comprising a grooved member adapted to receive the ends of the wires in overlapping relation, a clamping plate for holding the wires in the grooves and a protecting plate member positioned below the clamping plate, said protecting plate member having grooved portions extending beneath the wires.

[Claims 2 and 3 not printed in the Gazette.]

1,272,784. SHELL-MAKING MACHINE. JOHN EL-MARD ENNIS, St. Boniface, Manitoba, Canada. Filed Dec. 15, 1915. Serial No. 66,969. (Cl. 29—38.)



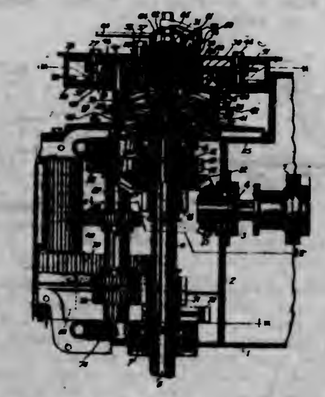
1. A multiple station machine of the character specified including in combination, a rotatable carrier having a plurality of rotatable chucks, each of which is provided with means for clamping a work piece, and means concentric with the axis of the rotatable carrier for simultaneously rotating said chucks, operating tools disposed relative to certain of said chucks for operating simultaneously upon the work pieces carried thereby, and means whereby any one of said chucks may be thrown out of gear while the work pieces held by the other chucks are rotated and operated upon.

5. In a shell making machine in combination, a suitably supported stationary drum, a sleeve rotatably mounted on the drum, an outstanding head formed integral with the sleeve, concentrically arranged shell billet receiving and containing holders rotatably mounted in the head, means for intermittently rotating the head on the drum, gear wheels permanently secured to the shell billet holders and housed within the head, concentrically arranged driving shafts mounted in the sleeve and having their forward ends projecting beyond the forward end of the sleeve, pinions located on the rear ends of the shafts and meshing with the respective gear wheels, a stationary, centrally located shaft carried by the forward end of the drum, a sleeve rotatably mounted on the latter shaft, means for rotating the sleeve and intermeshing gears and pinions mounted on the sleeve and the forward ends of the shafts.

10. In a shell making machine in combination, a front, a rear and an intermediate pedestal, a stationary drum carried by the pedestals, a head rotatably mounted on the drum between the front and intermediate pedestals, concentrically arranged, equally spaced shell billet receiving and containing holders rotatably mounted in the head, means for continuously rotating the holders, a plurality of concentrically arranged tool carrying working shafts arranged around the drum and slidably mounted in the intermediate and rear pedestals, said shafts being alined with the billets in the head, a plurality of base tool carrying shafts slidably mounted in the front pedestal and alined with the billets in the head, a cam roller secured to each of the working tool shafts, an advancing and retracting cam for each roller rotatably mounted on the drum, said cams being connected to rotate together, an operating connection between the working tool shafts and the base tool shafts, said connection being designed to advance the base tool shafts toward the billets coincident with the advancement of the working tool shafts toward the billets, means for driving the cams to advance and retract the tools in respect to the billets, means for rotating the head one billet displacement for each complete revolution of the cams, said means being actuated during the interval that the tools are withdrawn, automatic means for positively locking the head against rotation during the interval the tools are working on the billets and means for automatically unlocking the head prior to the turning of the same.

[Claims 2 to 4, 6 to 9, and 11 to 13 not printed in the Gazette.]

1,272,785. VARIABLE-SPEED WINCH. EDWIN R. EVANS, Detroit, Mich. Filed June 4, 1917. Serial No. 172,578. (Cl. 74—58.)



1. In a tractor, a work shaft, a change speed gear transmission mechanism for said work shaft, and a winch containing means adapted to establish driving connection between said work shaft and said winch.

3. In a tractor, a work shaft, a change speed gear transmission mechanism for said work shaft, a winch, a reduction gearing in a portion of said winch adapted for operation by said work shaft to revolve said winch, and a clutch mechanism adapted to fix said reduction gearing relative to said work shaft for operation thereby.

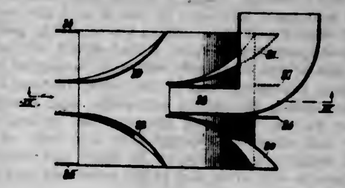
4. In a tractor, a transverse work shaft, a change speed gear transmission mechanism adapted to establish a driving relation with said work shaft, a winch at an end of said work shaft adapted to be revolved thereby, planetary gearing in a portion of said winch adapted to operate said winch at a reduced speed relative to said work shaft, and means axially of said winch adapted for establishing a driving connection between said planetary gearing and said work shaft.

8. A winch operating means comprising a work shaft, a winch, means axially of said winch adapted for shifting said outer clutch member, and means between said outer and inner clutch members adapted for establishing a driving relation therebetween.

[Claims 2, 5 to 7, 9, and 10 not printed in the Gazette.]

1,272,786. MACHINE FOR REMOVING SNOW AND LIKE MATERIAL. HENRY S. FARQUHAR, Wayne, Pa. Filed Oct. 28, 1916. Serial No. 128,156. (Cl. 37—35.)

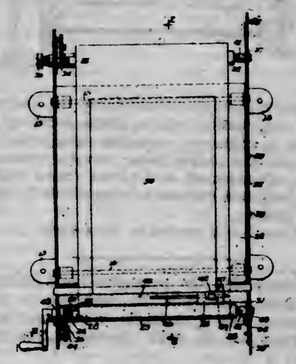
1. In a device for removing snow, the combination of a traveling support; a relatively movable member mounted thereon, said member being provided with projecting walls forming a channel adapted to engage and receive snow through the progressive movement of said member, said walls having convergences adapted to form a contracted region; means for moving the convergence of said wall toward a region of discharge; and means for removing the compacted snow when said region of discharge is reached, substantially as set forth.



4. In a device for removing snow, the combination of a traveling support; a rotatable drum carried by said support and provided with a deep peripheral flange at its extremity; a substantially spiral wall mounted upon the periphery of the drum and converging toward said peripheral flange; means for rotating the drum; a scoop having a periphery substantially concentric to that of the flange; means for retaining said scoop in a position subtending the rear quadrant of the drum, with relation to the direction of travel of the latter; and a chute entering between said peripheral flange and said wall at the region of their nearest approach to one another, substantially as set forth.

[Claims 2 and 3 not printed in the Gazette.]

1,272,787. MULTIPLE-COPYING MACHINE. JOHN J. FLANIGAN, Chicago, Ill., assignor to Duplicator Manufacturing Company, Chicago, Ill., a Corporation of West Virginia. Filed Jan. 21, 1916. Serial No. 73,297. (Cl. 242—55.)



3. In a duplicating machine, the combination with a frame structure including parallel side frame members, of a reversible spool for a copying apron having squared ends each provided with a central recess, a supporting member for one end of said spool journaled in one of said side frame members and formed with a chuck adapted to engage one squared end of said spool, and a centering pin adapted to engage the recess in said end, a spring secured to the other side frame member, and a supporting member for the other end of the spool directly carried by said spring and formed with a non-rotatable spindle adapted to engage the recess in said other end of the spool.

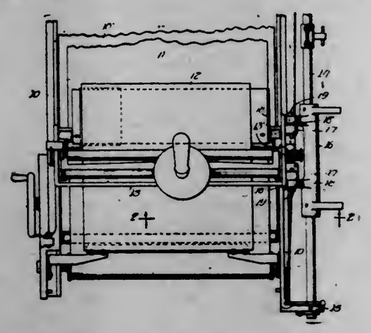
7. As a new article of manufacture a winding spool for a copying apron consisting of a cylindrical body portion and duplicate end portions of polygonal cross-section rigid with said body portion, each of said end portions

having formed in its outer face an outwardly flaring bearing recess or socket axially coincident with the axis of the spool body.

14. In a duplicating machine, the combination with a frame structure including parallel side walls, of a copying-apron spool having squared ends each formed in its outer face with a central recess, a supporting member for one end of said spool journaled in one of said side walls and formed with a driving chuck and a centering pin for engaging one end of said spool, a leaf spring secured to the outer side of the other side wall and having its free end projecting beyond the end of the latter to form a finger-hold for flexing the spring outwardly, and a supporting member for the other end of said spool secured to said spring and extending through said side wall, said last-named supporting member at its inner end engaging in the recess in said other end of the spool and serving as a bearing therefor.

[Claims 1, 2, 4 to 6, and 8 to 13 not printed in the Gazette.]

1,272,788. MULTIPLE-COPYING MACHINE. JOHN J. FLANIGAN, Chicago, Ill., assignor to Duplicator Manufacturing Company, Chicago, Ill., a Corporation of West Virginia. Filed Apr. 17, 1918. Serial No. 229,009. (Cl. 101—133.)



1. In a multiple-copying machine of the character described, the combination with a frame carrying a printing-bed, and a guide-rod extending lengthwise of said frame and bed, of a platen frame movable over said bed, and a hinge extension of said platen frame slidably engaging said rod, said extension being pivotally jointed to said platen frame.

[Claims 2 and 3 not printed in the Gazette.]

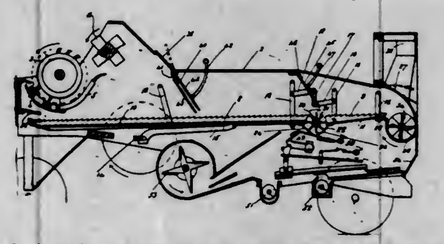
1,272,789. PROCESS OF MAKING JACKETED CANS. BEN K. FORD, Oak Park, Ill., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Nov. 22, 1913. Serial No. 802,373. (Cl. 113—116.)



1. A process of manufacturing jacketed cans, which consists in first separately forming a complete circumferentially continuous jacket body, a complete can body, and an incomplete flanged cover adapted to fit within the can body and having an edge adapted to extend beyond the edge of the can and jacket bodies; and second, assembling the same by inserting the can body longitudinally within the jacket and the cover within the body; and, third, bending the edge of the cover to clench the jacket and can bodies to each other and to the cover.

2. The process of manufacturing jacketed cans, which consists in first providing independent jacket and can bodies, a closure having an outstanding flange and an upstanding flange located at its edge, and a jacket disk; and second, assembling said parts, the can body within the jacket body, the closure within the can body and the disk with the closure; and third, bending said flanges in opposite directions, the outstanding flange to clench the jacket and can bodies together and to the closure and the upstanding flange to incase the end jacket disk.

1,272,790. GRAIN-SEPARATOR. CHRISTIAN FRANTZ, Niagara Falls, N. Y. Filed Oct. 8, 1917. Serial No. 195,317. (Cl. 130—24.)



1. A method of separating wheat or similar grain from straw and chaff, which consists in first separating the bulk of the grain from the current of grain and chaff discharged rearwardly by the threshing mechanism, drawing the light chaff directly from the loose previously threshed straw by pneumatic suction, thereby preventing the chaff from becoming matted with the straw, completely baffling the direct current or course of the flying grain and deflecting it and the loose straw into the lower part of the air current where the suction is not sufficient to carry off the grain, and simultaneously drawing off the light chaff by the full force of the air current from the upper side of the deflected straw, and permitting the grain to separate from the deflected straw by gravity.

6. In a grain separator, a casing, a shaking straw rack provided with an imperforate grain bottom, strips of flexible packing material secured to the casing and bearing against the sides of the straw rack by pneumatic suction, thereby preventing the upward passage of air, guards secured to the casing and extending over the tops of the side portions of the straw rack, and a pneumatic suction device connected with the air space of the casing above the straw rack and operating to remove the chaff from the straw and to hold the said packing strips in engagement with the straw rack.

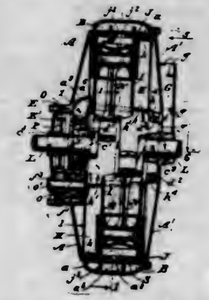
9. In a grain separator, a casing, a shaking straw rack provided with an imperforate grain bottom, a straw deflector pivoted to the casing and provided with slats arranged in staggered relation to permit the passage of air and chaff, and a pneumatic device arranged at the rear end of the casing and operating to draw air through the casing to remove the chaff upwardly from the straw.

16. In a grain separator, a casing, a straw rack formed in two sections arranged endwise and each provided with an imperforate grain bottom, means for shaking the front section longitudinally, pivoted lever mechanism connecting the sections so that the rear section is shaken from the front section but in the reverse direction, a grain outlet valve arranged between the adjacent ends of the sections, and a pneumatic device operating to draw air through the casing and over the straw rack to remove the chaff.

20. In a grain separator, a shaking straw rack provided with an imperforate bottom having an outlet for grain, means for regulating the upward passage of air through the said outlet, and a pneumatic device operating to draw air upwardly through the said outlet to assist in removing the chaff from the straw.

[Claims 2 to 5, 7, 8, 10 to 15, and 17 to 19 not printed in the Gazette.]

1,272,791. ROTARY GAS-ENGINE. PHELPS M. FREER, Detroit, Mich. Filed Nov. 6, 1912, Serial No. 729,720. Renewed Oct. 19, 1917. Serial No. 197,497. (Cl. 123—44.)



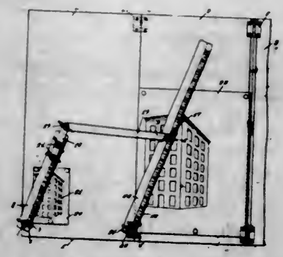
2. In a rotary gas engine, the combination of an inclosing stator-member; a rotor member within the latter; a crank-shaft journaled in said stator-member; a radially disposed cylinder in said rotor-member; and a piston within said cylinder suitably connected with said shaft; said stator-member being provided with a journal upon which said rotor-member is mounted.

3. In a rotary gas engine, the combination with a stator member having an interior slightly elliptical bearing surface, intake and exhaust ports formed in said stator member, a rotor member formed with an outer cylindrical bearing surface adapted to coöperate with the interior bearing surface of the stator, a cylinder carried by said rotor, a piston within said cylinder, a crank shaft journaled in the stator member and suitable connections between the piston and the crank shaft.

5. In a rotary gas engine, the combination of an engine stator member, comprising a casing having alined bearings, annular projections upon the casing extending inwardly, said projections being axially disposed with respect to the said bearings, a rotor member, comprising a central crank casing and radially disposed cylinder castings, said rotor member having alined bearing portions which coöperate with the annular projections upon the stator member, to rotatably support the rotor.

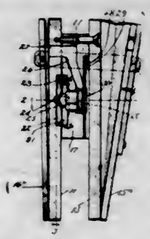
[Claims 1 and 4 not printed in the Gazette.]

1,272,792. DRAWING DEVICE. JOHN GALADAKES, Lewiston, Me. Filed Feb. 12, 1918. Serial No. 216,693. (Cl. 33—25.)



A device for reproducing designs on a scale differing from the scale of the original, comprising a table; parallel arms mounted to move over the surface of the table and having scales, the units of the scales on the respective arms being of different lengths; means for pivoting corresponding parts of the arms of the table; a link; and means for pivotally connecting the link with the arms in spaced relation to said pivoting means.

1,272,793. TRACKING DEVICE FOR MUSIC-SHEETS AND THE LIKE. CHARLES G. GILBERG, Chicago, Ill. Filed Sept. 8, 1914. Serial No. 860,576. (Cl. 84—161.)



1. In an automatic musical instrument, the combination of a pair of bellows, a valve block located between the same, a valve in said valve block, a tube leading to said valve block, said tube being for connection with a wind inducing apparatus, said tube having a connection with one of said bellows and a connection whereby said valve is actuated, and a duct leading from the chamber of said valve to the other of said bellows.

3. In apparatus of the class specified, the combination of a pair of pneumatics connected together, a block interposed between said pneumatics, said block having a duct or passage leading from one pneumatic and terminating in a valve chamber, a tube or duct for connection with a wind inducing apparatus extending from said chamber, a valve in said valve chamber, a diaphragm located between said block and the pneumatic to which said duct or passage extends, a tube having a connection with said block and with the chamber containing said diaphragm, and a valve device controlling the other end of said tube and having a portion adapted for contact with the music sheet.

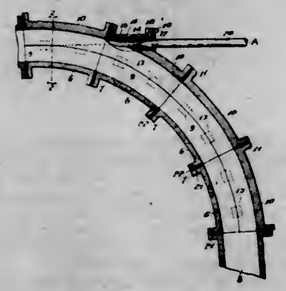
5. In an automatic musical instrument, the combination of a pair of pneumatics connected together, a valve block containing valve mechanism located between said pneumatics, a tubular member extending from the valve chamber to the vicinity of the music sheet, and means controlled by the music sheet for actuating said valve mechanism, said valve mechanism controlling both of said pneumatics.

7. Apparatus of the class specified comprising a pair of pneumatics connected together, a block located between said pneumatics and secured to the same, said block having a valve chamber containing a valve and also having a duct 26 leading from said valve chamber to one of said pneumatics, and also having a chamber 21 coöperating with a chamber 22 formed in one of the pneumatics, a diaphragm between said chambers 21 and 22, said diaphragm coöperating with said valve in said valve chamber, a pipe or tube 20 running to said block and communicating with the chamber 21, an air pipe or tube 11 also running to said block and connected with a duct or passage formed in said block which duct or passage extends to the chamber 22, a tube or pipe 41 in said block communicating with said last mentioned duct or passage and having an opening into the other pneumatic, a tubular member 43 communicating with said other pneumatic and also with a duct or passage 32 formed in said block, a pivoted member 2 having a portion adapted to contact with a music sheet and having another portion adapted to serve as a valve for controlling said air tube or pipe, and means whereby the actuation of said connected pneumatics causes a lateral shifting movement of the music sheet.

10. In a device of the class described in combination, a pair of pneumatics, a valve block mounted between said pneumatics, said valve block having a chamber provided at the sides adjacent said pneumatics, an apertured diaphragm forming a valve seat provided in one of said chambers, a flexible diaphragm provided in the other of said chambers, a valve mounted between said diaphragms, a port leading to said flexible diaphragm, a tube or pipe leading to the chamber in which said valve is mounted, and a duct leading from said valve chamber to one of the pneumatics.

[Claims 2, 4, 6, 8, and 9 not printed in the Gazette.]

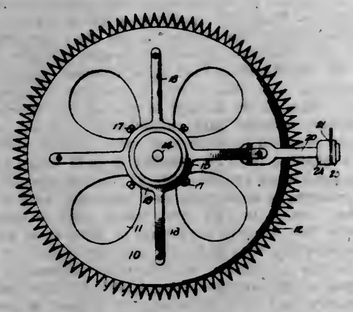
1,272,794. ASH-CONVEYER. ALEXANDER GIRTANNER, New York, N. Y., assignor to American Steam Conveyor Corporation, Chicago, Ill., a Corporation of New York. Filed Feb. 12, 1917. Serial No. 148,102. (Cl. 193—10.)



1. In an ash conveyer, the combination with a conduit having a curved portion and a straight portion, the outer part of said curved portion being formed of a plurality of removable members, of a nozzle carried by one of said removable members, all of said removable members being interchangeable, whereby the axis of said jet may be brought into substantial alinement with the axis of any portion of said conduit.

2. In an ash conveyer, the combination with a conduit divided both longitudinally and transversely into interchangeable removable members, of a nozzle carried by one of said removable members.

1,272,795. HEDGE-TRIMMER. FREDERICK M. GODDARD, Brooklyn, N. Y. Filed Dec. 5, 1916. Serial No. 135,103. (Cl. 56—16.)



1. In a hedge trimmer, the combination with a circular base having a cutting edge, of a circular blade coöperating with the cutting edge, a motor carried by the base and rotating the circular blade, radial handles on the base and arranged about the center of the edge and blade and supporting the motor, and a controller for the motor on a handle and adapted to be operated as the trimmer is held in its working position.

2. In a hedge trimmer, the combination with a base plate having a cutting edge, of a coöperating rotating blade, a spider radiating from a center common to that of the blades, a motor carried by the spider, a shaft for the motor and carrying the rotating blade, anti-friction cones supporting the shaft and adapted to regulate the proximity of the blade and the cutting edge, and a controller for the motor carried by a handle.

3. In a hedge trimmer, the combination with a circular base plate having an opening at its center, of a cutting edge on the plate, handles on the upper side of the plate, a motor above the opening in the base plate and supported by the handles, a switch for the motor in a circuit therefor and on one of the handles, a shaft for the motor and passing through the opening, and a circular blade at the end of the shaft and coöperating with the cutting edge.

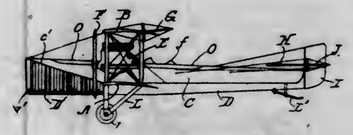
1,272,796. VELOCIPEDE-HORSE. ABRAHAM T. GOLDFIELD, Spring Valley, N. Y., assignor to Spring Valley Wood Products Corporation, Spring Valley, N. Y., a Corporation of New York. Filed Mar. 29, 1917, Serial No. 158,160. Renewed Apr. 18, 1918. Serial No. 229,418. (Cl. 208—42.)



1. In a velocipede horse, the combination with the body of a toy horse having an opening with a recess at its lower end, of a cross bar and wheels supporting the rear of the horse, front legs comprising a fork, a wheel in the fork, treadles for the latter wheel, a spindle having a steering cross bar and secured to the fork and playing in the opening, and retaining means for the spindle and located in the recess.

[Claim 2 not printed in the Gazette.]

1,272,797. AIRCRAFT. FREDERICK W. GORE, Huntington, N. Y. Filed Aug. 13, 1917. Serial No. 185,808. (Cl. 244—12.)

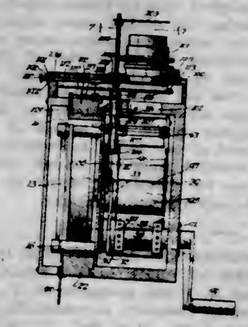


4. An aircraft embodying a plurality of superposed planes and a cross sectionally curved plane positioned below the upper plane and extending longitudinally of the craft, said latter plane tapering lengthwise and positioned for its under curved surface to present an angle of incidence to the line of horizontal flight of the craft.

6. An aircraft embodying a plurality of planes positioned one above the other, a cross sectionally curved plane extending lengthwise of the craft, said latter plane being below the upper plane and intermediate the members composing the lower plane, and a stabilizing plane depending from the top arched portion of the cross sectionally curved plane for the lower edge portion of the stabilizing plane to be exposed below the lower plane and the side edge portions of said cross sectionally curved plane.

[Claims 1 to 3, 5, and 7 not printed in the Gazette.]

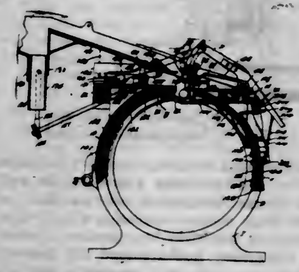
1,272,798. CAMERA. WILLIAM M. GREEN, Evanston, Ill. Filed Mar. 23, 1916. Serial No. 86,071. (Cl. 88—17.)



3. The combination with a motion picture camera having a lens support, a film support at the rear of said lens support, means for moving a film across said lens support, and a taking shutter at the rear of said lens support, of a projecting shutter at the front of said lens support.

[Claims 1 and 2 not printed in the Gazette.]

1,272,799. CANDY-WRAPPING MACHINE. JOHN H. GREER, Fort Worth, Tex. Filed Jan. 3, 1916. Serial No. 69,921. (Cl. 93—5.)



1. A candy wrapping machine having a frame, a shaft journaled in said frame, a disk rigid with said shaft, a cam carried by said disk, means for feeding paper to said machine, a paper guide mounted on said machine, fingers for clamping the paper in said guide, means operatively connected with the said fingers and standing in the path of said cam to be actuated by said cam, means for restoring said fingers to inoperative position, a blade fulcrumed on said frame, and an actuating mechanism operatively connected with said blade and standing in the path of said cam to be actuated by said cam.

5. A candy wrapping machine comprising a frame, means for feeding paper periodically to the machine, a paper guide mounted on the machine and having a slot therein, means for clamping the paper in place in said guide, means for cutting the paper into wrapping lengths, means for feeding the candy to the machine, means for positioning the candy on the paper, means for pressing the candy down on the paper and through said slot, yielding fingers for receiving the candy with the paper thereon, and means for rolling the candy for wrapping the paper about the candy.

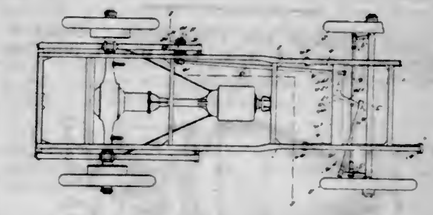
16. A candy wrapping machine comprising a curved frame having circular members, a shaft journaled in said frame, disks having cams therein rigid with said shaft and moving in said circular members, means for feeding wrapping paper to the machine, means for feeding candy to the machine, means for holding the candy in position prior to depositing the same on the paper, including a guard member and a yielding support pivotally mounted, means for pressing the candy down on the paper into operative position including an automatically actuated feeder mechanism having a curved member for engaging the candy, means for starting the paper on the candy including said guard member, operative connections between said guard member and the cams in one of said disks for actuating said guard member, and means for rolling the candy to wrap the paper thereon.

21. A candy wrapping machine having a curved frame, means for feeding wrapping paper to the machine, means for feeding candy to the machine, a feeder for positioning the candy on the paper, a reciprocating folder actuated by said feeder for folding the paper on the candy, a vibrating arm automatically actuated for coöperating with said folder in folding the paper, and means for rolling the candy to wrap the paper thereon including a cylindrical frame member and a curved plate revolving within said cylindrical member.

23. A candy wrapping machine having a frame provided with circular members, disks revolving in said members for maintaining the working parts of the machine in operative position, a shaft journaled in said frame, a cam rigid with said shaft, means for feeding paper to the machine, means for feeding candy to the machine consisting of a chute and a hopper in connection with said chute, a reciprocating plunger movable vertically in said hopper and composed of two parts yieldingly connected together and one part telescoping within the other part for feeding candy piece by piece from said hopper to chute, and means for wrapping the candy.

[Claims 2 to 4, 6 to 15, 17 to 20, 22, and 24 to 26 not printed in the Gazette.]

1,272,800. STEERING-GEAR. EMIL GRUENFELDT, Cleveland, Ohio, assignor, by mesne assignments, to The Baker R & L Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 17, 1913. Serial No. 754,981. (Cl. 21—197.)



1. In apparatus of the class described, the combination of a frame, a hand steering device swiveled thereon, a rod disposed longitudinally of said frame and pivotally connected to the lower end of said hand steering device, a lever pivoted intermediate of its ends to said frame and having one of its ends connected with the front end of said longitudinally disposed rod, an axle having steering knuckles connected together for simultaneous operation and a steering arm, a rod disposed obliquely to the steering axle and having its rearmost end pivotally connected to one end of said steering arm and having its foremost end pivotally connected to the other end of said lever, and means connecting said axle and frame together.

4. In apparatus of the class described, the combination of a frame, a pair of steering rods disposed at an angle

to each other, and one obliquely to the frame, a lever pivotally connected intermediate of its ends to said frame and having its ends pivotally connected to adjacent ends of said rods, respectively, an axle having steering knuckles connected together for simultaneous operation and a steering arm with its free end pivotally connected to the rearmost end of the oblique rod, a hand steering device swiveled on said frame and having its lower end pivotally connected to the adjacent end of the second of said steering rods, and a resilient support between said frame and axle.

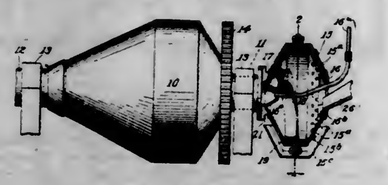
6. In steering mechanism for vehicles, the combination with an axle, steering wheels thereon, means connecting said steering wheels together for simultaneous movement about their respective steering axes, a frame supported at one end on said axle, and a hand steering device, of a steering arm for said axle, a lever pivotally connected intermediate of its ends to said frame, a rod disposed obliquely to the frame and pivotally connected at its foremost end to one end of said lever and at its other end to said steering arm, and connections between the other end of said lever and said hand steering device.

9. In steering mechanism for vehicles, the combination of a frame, a hand steering device swiveled thereon, a rod disposed longitudinally of said frame and pivotally connected to the lower end of said hand steering device, a lever pivoted intermediate of its ends to said frame and having one of its ends connected with the front end of said longitudinally disposed rod, a rod connected at one end to the other end of said pivoted lever and extending at an angle to said longitudinally disposed rod, an axle having steering knuckles connected by a tie rod and a steering arm with its free end connected to the other end of said rod, means for resiliently supporting the frame on said axle, and a shock absorbing device interposed between said lever and said frame.

12. In apparatus of the class described, the combination of a frame, a hand steering device mounted thereon, a rod disposed and shiftable longitudinally of said frame and operatively connected at its rear end to said hand steering device, a lever pivoted intermediate of its ends to said frame and having one of its ends connected to the front end of said longitudinally disposed rod, an axle having steering knuckles connected together for simultaneous operation, a rod disposed obliquely to the steering axle and pivotally connected at foremost end to the other end of said lever, means connecting the other end of said rod and said steering knuckles together, and means connecting said axle and frame together.

[Claims 2, 3, 5, 7, 8, 10, and 11 not printed in the Gazette.]

1,272,801. FEEDER FOR TUBE-MILLS. HARRY W. HARDINGE, New York, N. Y. Filed May 11, 1916. Serial No. 96,765. (Cl. 83—9.)

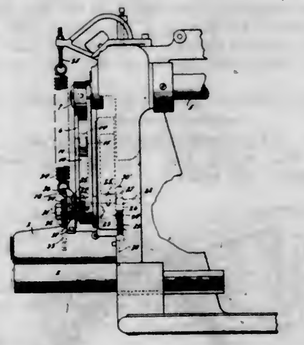


1. The combination with a tube mill rotatable about its axis having an axial inlet opening, of a feeder comprising a rotary hollow conical casing having an axial outlet communicating with said opening, and an open-top trough-conveyer of helico-spiral form carried by the casing inside of the same and following the conical inner surface of the casing from its periphery to its axial outlet, over the upper longitudinal edge of which conveyer there is free communication between the interior of the trough and the surrounding casing.

2. The combination with a tube mill rotatable about its axis having an axial inlet opening, of a feeder comprising a rotary hollow conical casing having an axial outlet communicating with said inlet opening, and an open-top trough-conveyer of helico-spiral form following the conical inner surface of the casing from its periphery to its axial outlet, the conical inner surface of the casing constituting the inner wall of the trough and the outer wall of the trough consisting of a longitudinal flange over the upper edge of which there is free communication between the interior of the trough and the surrounding casing.

3. A feeder for tube mills comprising a rotatable hollow conical casing having an axial outlet, and an inlet opening, a helico-spiral open-top-trough-conveyer within the feeder, following the conical inner surface of the feeder to the axial outlet, the conical inner surface of the feeder constituting the inner wall of the trough and the outer wall of the trough consisting of a longitudinal flange over the upper edge of which there is free communication between the interior of the trough and the surrounding casing, the bottom of the conveyer being inclined at said outlet to facilitate the discharge of the material from the trough through the outlet, and means for discharging a jet of water or air outwardly through the outlet opening.

1,272,802. PRESSURE ADJUSTMENT FOR BOX-STAYING MACHINES AND THE LIKE. EDGAR M. HAWKINS and OTTO M. HOCH, Rochester N. Y., assignors to M. D. Knowlton Company, Rochester, N. Y., a Corporation of New York. Filed Sept. 15, 1916. Serial No. 120,293. (Cl. 74—47.)

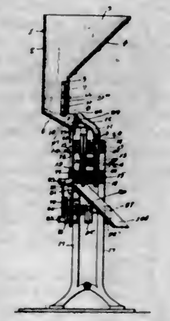


1. In a box staying machine, a rotary actuating part, a reciprocating slide carrying a presser die and a cut-off knife, a pitman connection between said actuating part and the slide, means connecting the pitman to the slide including an eccentric pin member rotatably connected with the pitman and a second pin member rigidly connected with the slide and rotatably supporting the eccentric pin member, means for maintaining the eccentric pin member in adjusted position, and adjusting means for the cut-off knife supported by said second pin member.

6. In a machine of the class described, the combination with a rotary power transmission element and a reciprocating work-performing element, of a collapsible pitman extending between the same, the said pitman including an element connected to the transmission element, an element connected to the work-performing element, and means for causing the engagement and disengagement of said pitman elements, and means for varying the point of connection between the work-performing element and the pitman element connected thereto including an eccentric pin member carried with the work-performing element and rotatably connected with the pitman.

[Claims 2 to 5 not printed in the Gazette.]

1,272,803. NUTCRACKER. FRANK HAYES and CARL RUPP, Los Angeles, Cal., assignors to California Walnut Growers Association, Los Angeles, Cal., a Corporation of California. Filed Nov. 13, 1916. Serial No. 131,030. (Cl. 146—3.)



3. A nut cracker comprising a receptacle for nuts, nut-cracking means, means to operate the nut-cracking means, means operative in timed relation with the nut-cracking operating means to feed nuts from the receptacle to the nut-cracking means, and agitating means movable longitudinally in the receptacle adjacent the feeding means.

5. A nut cracker comprising a receptacle for nuts, nut-cracking means, means to operate the nut-cracking means, a plunger having its upper end passing through the bottom of the receptacle, means to reciprocate the plunger, conveying means extending from the rim of the trough and discharging into the inter-jaw space, and agitating means movable longitudinally in the receptacle adjacent the plungers.

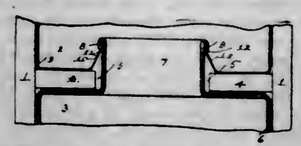
12. A nut cracker comprising a receptacle for nuts, pairs of spaced jaws, said pairs being in staggered relation, means to cause relative movement of the jaws of each pair, tubes having their upper ends positioned in alinement with one another and having their lower ends in staggered relation to discharge into the inter-jaw spaces respectively, plungers extending through the bottom of the receptacle opposite the tubes respectively, means to reciprocate the plungers, and means in the receptacle to agitate the nuts adjacent the plungers.

13. A nut cracker comprising a pair of jaws, and means to produce relative movement between the jaws, said means being adjustable when the jaws are stationary and when the jaws are moving to increase or diminish the amount of said movement.

25. A nut cracker comprising a plurality of pairs of spaced jaws, and means to produce operation of one jaw of each pair simultaneously, and operating means being adjustable to simultaneously increase or diminish the spacing of the jaws while the jaws are in motion.

[Claims 1, 2, 4, 6 to 11, 14 to 24, and 26 to 30 not printed in the Gazette.]

1,272,804. REFRIGERATOR. HERBERT H. HILLMAN, Grand Haven, Mich. Filed Dec. 1, 1917. Serial No. 204,991. (Cl. 62—89.)

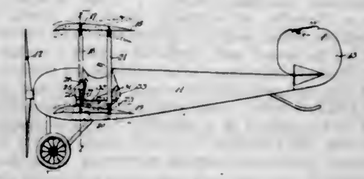


1. In a structure of the character described; a lining having an outwardly-extending hollow neck provided with a laterally-extending projection; and a lining having an inwardly-extending springable hollow neck whose opposite sides converge toward its mouth, and adapted to be passed over and along the first mentioned neck and to spring against the same beneath said projection.

3. In a structure having two chambers and a partition between them with an opening therethrough, the combination of; a lining for one chamber having a hollow neck extending through said opening and provided with a peripheral laterally-extending rib formed by bending over a portion of said neck adjacent its mouth; and a lining for the other chamber having an inwardly-extending springable hollow neck whose opposite sides converge toward its mouth, and adapted to be passed over and along the first mentioned neck and to spring against the same beneath said rib.

[Claims 2 and 4 not printed in the Gazette.]

1,272,805. AEROPLANE. HEBBERT J. HOGAN, Los Angeles, Cal. Filed June 25, 1917. Serial No. 176,846. (Cl. 244—29.)

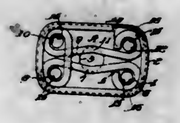


1. An aeroplane comprising a body; propelling and guiding means for said body; a pair of struts secured to said body; an upper pivot secured at the upper end of each of said struts; a lower pivot secured to the lower end of each of said struts; upper planes pivoted on said upper pivots; lower planes pivoted on said lower pivots; connecting bars connecting said upper and lower planes; a lever system for raising and lowering said connecting bars; a sliding seat on which the aviator may sit; means for operating said sliding seat from said lever system; and means for locking said lever system in any one of several positions.

2. An aeroplane comprising a body; propelling and guiding means for said body; a pair of struts secured to said body; an upper pivot secured at the upper end of each of said struts; a lower pivot secured to the lower end of each of said struts; upper planes pivoted on said upper pivots; lower planes pivoted on said lower pivots; connecting bars connecting said upper and lower planes; operating levers rigidly secured to said lower pivot and connected at their outer ends to said connecting bars; a hand lever fixed to said lower pivot; and means for locking said hand lever at various positions.

[Claim 3 not printed in the Gazette.]

1,272,806. SNAP-FASTENER. ALEXANDER HOLSTEIN, Philadelphia, Pa. Filed Mar. 23, 1916. Serial No. 86,039. (Cl. 24—218.)

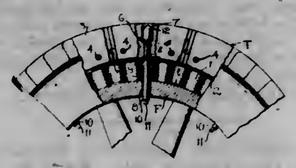


1. A snap fastener comprising a substantially oblong plate having a central aperture, a plurality of other apertures disposed symmetrically with respect thereto, and a marginal, upwardly curved rim, and a gripping member composed of a single piece of wire bent to define a plurality of eyes arranged to register with said last mentioned apertures and to present a pair of substantially longitudinally extending bowed wires projecting over the margin of said first mentioned aperture, those portions of

the wire defining the eyes engaging beneath said rim to position said gripping member on said plate and prevent the permanent lateral displacement of said longitudinally extending wires.

[Claim 2 not printed in the Gazette.]

1,272,807. RESILIENT WHEEL. ILION ILIEFF, Washington, D. C. Filed Feb. 9, 1918. Serial No. 216,252. (Cl. 152—8.)



1. A wheel having its periphery provided with a circumferentially disposed channel, a tread member comprising a plurality of pivotally connected blocks, said tread member being disposed circumferentially of the periphery of the wheel and extending partially within the channel thereof, cushioning means interposed between the base of the channel and the tread member, said blocks of the tread member being substantially diamond-shape in plan and arranged in a plurality of series positioned side by side, the blocks of one series overlying the blocks of adjacent series, the sides of the blocks being parallel to the sides of the wheel and transversely disposed pivotal members connecting the blocks of the series.

2. The combination with the felly of a wheel provided with a circumferentially disposed annular channel, a flexible tread member disposed therearound, and a cushioning element interposed between the base of the channel and the tread member, said cushioning member being formed of a single strand of material and embodying a plurality of transversely disposed portions, the opposite extremities of adjacent transverse portions being alternately connected, said transverse portions being provided with coils extending outwardly of the felly.

3. In combination with the felly of a wheel provided with a circumferentially disposed annular channel, a flexible tread member disposed therearound, and a cushioning element interposed between the base of the channel and the tread member, said cushioning member being formed of a single strand of material and embodying a plurality of transversely disposed portions, the opposite extremities of adjacent transverse portions being alternately connected, said transverse portions being coiled at their extremities and midway their lengths.

1,272,808. TRENCH FLASH-LIGHT. ARNOST JANOVSKY, Brooklyn, N. Y., assignor to Interstate Electric Novelty Company, Brooklyn, N. Y., a Corporation of New York. Filed Sept. 11,1917. Serial No. 190,704. (Cl. 240—8.5.)



2. In a device as described, in combination, a metallic casing, a lamp reflector fitted in a wall thereof so as to contact the same, a neck formed on said reflector, an electric bulb screwed into the neck of said reflector, a cap supported by said reflector and electrically engaged by said bulb, a battery in said casing, an upstanding yieldable contact arm electrically connected to one pole of said battery, an upstanding yieldable contact arm engaging said cap and electrically connected to the other pole of said battery and a shutter mounted in said casing adapted to cover said reflector and to contact said first-yieldable contact so as to close the battery circuit.

4. In a device as described, in combination, a casing, a battery fitting snugly in the bottom thereof, an electric lamp carried by said casing above said battery, a bridge secured to said casing, a contact insulatedly supported upon said bridge and engaging said electric lamp, guides being formed upon said bridge, a vertical pole-piece on one side of said battery adapted to contact either of said guides, and a curved pole-piece on the other side of said battery and terminating in the curved portion so disposed as to engage said contact when the other pole-piece engages with either guide.

6. In a device as described, in combination, a casing having a lamp reflector projecting forwardly thereof, an electric bulb projecting with said reflector into said casing, a semi-spherical cover trunnioned in said casing and adapted when horizontally disposed to project down in back of said bulb but movable downwardly so as to completely cover said reflector, a battery in said casing, a contact device interposed between said bulb and said battery, a contact device interposed between said battery and said cover and engaged by the latter for the purpose of closing the battery circuit.

[Claims 1, 3, 5, 7, and 8 not printed in the Gazette.]

1,272,809. JOINT FOR METAL SASHES AND METHOD OF FORMING THE SAME. ALLAN W. JOHNSON, Colton, Cal., assignor to American Steel-Window Company, Chicago, Ill., a Corporation of Illinois. Filed Feb 17, 1915. Serial No. 8,762. (Cl. 113—112.)



1. The method of forming joints between intersecting upper and lower metal muntins which consists in forming the lower member with a top notch adapted to receive the upper member and forming the upper member with a relatively short top notch, assembling the muntins with said notches in registration at the point of intersection, thereby forming a cavity inclosed by the walls of the notches, and filling such cavity with a molten metal which unites with the metal of the strips and forms a coherent joint upon cooling.

2. The method of forming joints between intersecting lower and upper metal muntin webs which consists in forming the lower and upper webs respectively with top and bottom notches whereby the webs are adapted to be fitted together in interlocking engagement, and also forming the upper web with a top notch at the point of intersection, whereby upon assembling the muntins the walls of the top notch of such upper web and adjacent parts of the walls of the top notch of the lower web will inclose a cavity at the point of intersection, assembling the muntin members in said relation to each other and bringing the walls of the cavity to a welding heat, and filling the cavity with molten iron, whereby the metal of the muntin webs and the filling unite and become welded together to form a coherent mass of iron at the joint upon cooling.

1,272,810. AUTOMATIC CONTROL DEVICE. CARL F. JOHNSON, Milwaukee, Wis., assignor to Johnson Service Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Apr. 12, 1915. Serial No. 20,930. (Cl. 236—8.)



1. The combination of a fluid pressure motor having a fluid pressure chamber provided with a single movable wall; a source of fluid pressure leading to said chamber; two co-acting valve members for jointly controlling by their relative movement the venting of pressure from said motor; a responsive element operatively connected with one of said valve members for moving the same in response to variations in atmospheric condition; and mechanical connections between the movable wall and the other of said valve members for moving the latter in a closing direction upon the movement of the movable wall under an increase of pressure.

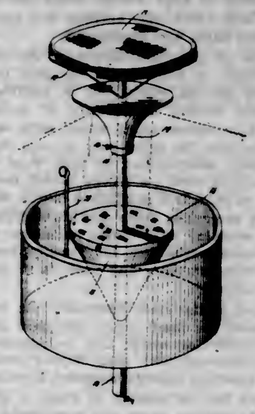
7. The combination of an actuating mechanism having a definite range of movement and including a fluid pressure actuated abutment for causing such movement; a control mechanism operatively connected to said actuating mechanism and adapted to be actuated by a portion of the movement of said actuating mechanism lying intermediate the limits of said movement; a source of fluid pressure leading to said abutment; two coacting valve members for jointly controlling by their relative movement the venting of pressure from said abutment; a responsive element operatively connected with one of said valve members for moving the same in response to variations in atmospheric condition; and operative connections between said actuating mechanism and the other of said valve members for moving the latter by the initial movement of the actuating mechanism, and prior to the movement of said control mechanism thereby, to accelerate the action of said actuating mechanism upon said control mechanism by a sympathetic control of the venting action.

15. The combination with an automatic control device including a fluid pressure motor, a restricted port leading thereto, a movable member provided with a port leading from said motor, and driving connections between said movable member and said motor, of a clearing pin movable in said restricted supply port and operatively connected with said movable member to move therewith.

[Claims 2 to 6 and 8 to 14 not printed in Gazette.]

1,272,811. SUBMARINE-DETECTOR. EDWARD S. JONES, Mobile, Ala., assignor of one-twentieth to John H. Jones and one-fourth to Lucius G. Adams, Mobile, Ala. Filed June 22, 1917. Serial No. 176,230. (Cl. 88—1.

1. A submarine detector comprising in combination with a support, a basket arranged on said support, a horizontally disposed mirror on said support, and a substantially vertically disposed reflecting mirror above said horizontal mirror, said last named mirror being adapted



to reflect images within a given radius of said support onto said first named mirror.

[Claims 2 and 3 not printed in Gazette.]

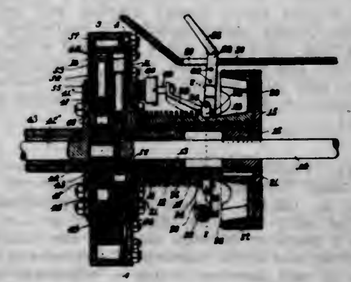
1,272,812. ARTIFICIAL BAIT. ARCHIBALD J. KEISTER, Grinnell, Iowa, assignor of one-half to E. S. Erdice, Keota, Iowa. Filed Dec. 12, 1917. Serial No. 206,838. (Cl. 43—30.)



1. An artificial bait comprising a body having a recess, a plate for covering said recess having an elongated opening, a spring on the under side of said plate having a free end extended across said opening substantially at right-angles to its longitudinal axis.

[Claim 2 not printed in Gazette.]

1,272,813. POWER-TRANSMISSION DEVICE. JUSTUS R. KINNEY, Allston, Mass. Filed Nov. 18, 1916. Serial No. 132,477. (Cl. 192—18.)



1. In a device of the class described, the combination of a two-part clutch, one part of which is adapted for end movement; means for normally retaining said clutch parts in engagement; a driven shaft supporting said two-part clutch; a member under the control of the operator for disengaging said clutch parts; a fluid clutch; a valve

for controlling the operation thereof positively connected to the clutch member adapted for end movement; and means actuated by the movement of said member and movable relatively to said driven shaft for controlling the action of said valve and opening the ports thereof when said clutch parts are disengaged.

3. In a device of the class described, the combination of a driving shaft; a fluid clutch one part of which is secured to said driving shaft and is provided with a controlling valve having a plurality of ports for the passage of fluid; a driven shaft alined with said driving shaft and supporting the other part of said fluid clutch; a clutch member independent of said fluid clutch secured to said driven shaft; a second clutch member movable relatively to said first mentioned clutch member and keyed to a hub projecting from said fluid clutch; means for normally retaining said clutch members in engagement; and treadle mechanism for simultaneously disengaging said clutch members and said valve whereby its ports may be opened.

5. In a device of the class described, the combination of a driving shaft; a fluid clutch one part of which is secured to said driving shaft and is provided with a hub in axial alinement with said driving shaft; a controlling valve therefor slidably mounted therein and provided with ports for the passage of fluid; a driven shaft alined with said driving shaft and supporting the other part of said fluid clutch; a clutch member secured to said driven shaft at a point removed from said fluid clutch; a second clutch member movable relatively to said first mentioned clutch member and slidably mounted on said hub; means for normally retaining said clutch members in engagement; and means for simultaneously disengaging said clutch members and importing a sliding movement to said valve thereby opening its ports.

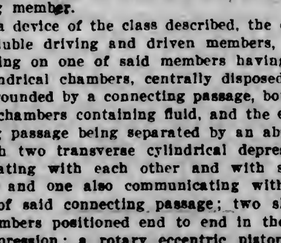
8. In a device of the class described, the combination of a driving shaft; a fluid clutch one part of which is secured to said driving shaft; a controlling valve therefor slidably mounted therein and provided with ports for the passage of fluid; a driven shaft alined with said driving shaft and supporting the other part of said fluid clutch; a clutch member secured to said driven shaft; a second clutch member movable relatively to said first mentioned clutch member, said movable member being provided with an annular groove and a radial arm; means for normally retaining said clutch members in engagement; a connector between said arm and valve; a pivoted treadle; and means interposed between said treadle and said annular groove for moving the movable member of said clutch during the movement of said treadle about its pivot.

14. In a device of the class described the combination of a revoluble fluid clutch; a shaft on which one part of said clutch is adapted to rotate; a friction clutch member secured to and revoluble with said shaft; a slidable friction clutch member coacting with the first mentioned friction clutch member; a controlling valve for said fluid clutch; and means interposed between said fluid clutch and said friction clutch for simultaneously actuating said valve and said slidable clutch member.

[Claims 2, 4, 6, 7, and 9 to 13 not printed in the Gazette.]

1,272,814. FLUID-CLUTCH. JUSTUS R. KINNEY, Allston, Mass. Original application filed Nov. 18, 1916. Serial No. 132,477. Divided and this application filed Apr. 26, 1917. Serial No. 165,271. (Cl. 192—18.)

1. In a device of the class described, the combination with driving and driven members, of a cylindrical casing on one of said members having a cylindrical central chamber partially surrounded by a connecting passage communicating therewith at one end by two communicating passages, said chamber and connecting passage both containing fluid; an eccentric piston in said chamber secured to the other member and provided with a radial blade having a fluid passage therein communicating with said chamber; an oscillating member in one communicating passage provided with a diametral slot therein through which said blade extends; and a valve in the other communicating passage adapted to control the flow of fluid between said chamber and connecting passage.



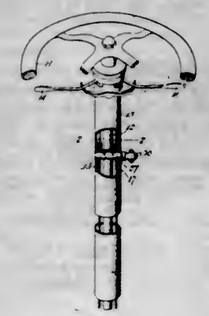
4. In a device of the class described, the combination with driving and driven members, of a cylindrical casing on one of said members having a cylindrical central chamber partially surrounded by a connecting passage communicating at one end by two communicating passages, said chamber and connecting passage both containing fluid; an eccentric piston in said chamber secured to the other member and provided with a radial blade having a fluid passage therein communicating with said chamber; an oscillating member in one communicating passage provided with a diametral slot therein through which said blade extends; and a slidable valve in the other communicating passage adapted to control the flow of fluid between said chamber and connecting passage, said valve having two sets of ports, one set of which communicates with the passage to the fluid passage in said radial blade while the other set is adapted to communicate with ports into said chamber.

7. In a device of the class described, the combination with revoluble driving and driven members, of a cylindrical casing on one of said members having a cylindrical central chamber partially surrounded by a connecting passage and both containing fluid, the ends of said connecting passage being separated by an abutment provided with two transverse cylindrical depressions both communicating with each other and with said central chamber, and one also communicating with an end of said connecting passage; a slotted oscillating member in the first mentioned depression; a rotary eccentric piston in the central chamber provided with a radial blade extending through the slot in said oscillating member and having a fluid passage therein communicating with said chamber, said piston being secured to the other revoluble member; a valve member in the other depression having ports adapted to control the flow of fluid between said central chamber and connecting passage; and means for controlling the operation of the fluid controlling member.

10. In a device of the class described, the combination with revoluble driving and driven members, of a cylindrical casing on one of said members having two separated cylindrical chambers, centrally disposed, both partially surrounded by a connecting passage, both said passage and chambers containing fluid, and the ends of said connecting passage being separated by an abutment provided with two transverse cylindrical depressions, both communicating with each other and with said central chambers, and one also communicating with the opposite end of said connecting passage; two slotted oscillating members positioned end to end in the first mentioned depression; a rotary eccentric pistoned in each central chamber provided with a radial blade extending through the slot in an oscillating member and having a fluid passage therethrough communicating with said chamber, said piston being secured to the other revoluble member; a ported valve in the other depression adapted to control the flow of fluid between said central chambers and connecting passage; and means for controlling the operation of said fluid controlling member.

[Claims 2, 3, 5, 6, 8, 9, and 11 not printed in the Gazette.]

1,272,815. POWER-LOCK FOR AUTOMOBILES. JOHN C. KUATZ, Los Angeles, Cal. Filed Mar. 20, 1917. Serial No. 156,219. (Cl. 70—126.)



1. In combination, a steering post, spark and throttle rods extending through said post, a projection on each of said rods within the post, a lock secured in said post, and a locking plate secured to the lock adapted to swing into the path of said projections whereby said rods are prevented from turning.

2. In combination, a steering post, spark and throttle rods extending therethrough, a lock secured to said post, a locking plate operated by said lock, a U-member secured to each rod, and arms on said plate adapted to extend into the free ends of said U-members to prevent said rods from turning.

1,272,816. SAFETY-RAZOR. GRAHAM P. LESLIE, Boston, Mass., assignor to James W. Leslie, trustee, Boston, Mass. Filed Oct. 23, 1916. Serial No. 127,290. (Cl. 30—12.)



1. In a safety razor, a substantially nonflexible blade; clamp plates therefor the bodies of which are substantially nonflexible, one of said plates having a knifelike edge adjacent the cutting edge of the said blade adapted to yield under pressure; a chamber between said clamp plates in which said blade is adapted to swing; means movable perpendicularly to said clamp plates to swing said blade to any desired angle to the inner clamp plate; and means to clamp said plates.

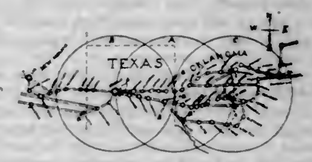
2. In a safety razor, a substantially nonflexible blade; clamp plates therefor the bodies of which are substantially nonflexible, one of said plates having a knifelike edge adjacent the cutting edge of said blade adapted to yield under pressure, said plates being so arranged as to form a chamber in which said blade is adapted to swing with relation to said plates when said plates are held in clamped position; means to swing said blades when said plates are in clamped position; and means to clamp said plates.

3. In a safety razor, a substantially nonflexible blade; clamp plates therefor the bodies of which are substantially nonflexible, one of said plates having a knifelike edge between which and the other plate said blade is pivotally mounted; means acting on the rear edge of said blade to pivotally swing said blade relatively to said plates; and means to clamp said plates.

4. In a safety razor, a substantially nonflexible blade; substantially nonflexible clamp plates therefor between which said blade is adapted to be swung; a chamber between said plates; means within the chamber adapted to swing said blade; and means to clamp said plates.

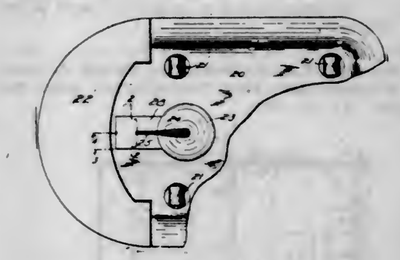
[Claims 5 to 10 not printed in the Gazette.]

1,272,817. ROAD-MAP SYSTEM AND APPARATUS. JAMES WRENLEY LEWIS; Boley, Okla., assignor of one-half to Ranzy Boykin, Boley, Okla. Filed May 26, 1917. Serial No. 171,122. (Cl. 35—6.)



The combination of a plurality of maps of certain divisions of terrain, the divisions mapped overlapping, whereby the map of one division will show one half of each of the next adjacent divisions.

1,272,818. CLOTH-CUTTING MACHINE. IRVING LIVSHITZ, New York, N. Y. Filed Apr. 5, 1918. Serial No. 226,924. (Cl. 164—75.)



1. A cloth cutting machine having a reciprocating knife presenting a longitudinally extending cutting side and a transversely extending cutting end and a sharpening member in the path of movement of said knife and with which said transversely extending cutting end may engage during the final operation of its downward stroke.

4. A cloth cutting machine having a base, a standard rising therefrom, a reciprocating knife, and a sharpener for the latter carried by the base beneath the upper surface of the latter.

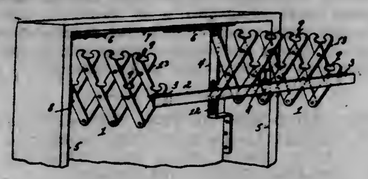
8. A cloth cutting machine having a base, and a pair of sharpening rollers secured thereto beneath the upper surface thereof.

12. In combination, a housing, a pair of sharpening rollers disposed therein and resiliently pressed together and means for securing said housing to the base of a cloth cutting machine.

17. In a cloth cutting machine a combination of a base having an aperture therethrough, a housing disposed within said base, a pair of knife sharpening members within said housing, and a throat plate secured to said housing and serving as a cover for the latter.

[Claims 2, 3, 5 to 7, 9 to 11, and 13 to 16 not printed in the Gazette.]

1,272,819. WARDROBE-TRUNK CLOTHES-CARRIER. EDGAR B. LINNETT, Newark, N. J., assignor to Searls Manufacturing Company, Newark, N. J., a Corporation of New Jersey. Filed June 19, 1916. Serial No. 104,896. (Cl. 211—16.)

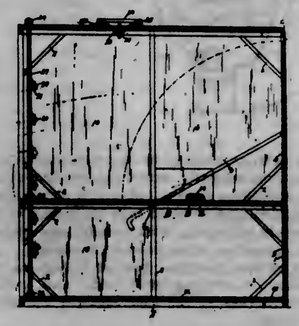


1. In a clothes carrier, the combination with a suitable support, of a pair of lazy-tong supporting brackets secured thereon, a pair of lazy tongs operatively connected to said supporting brackets, the crossed-levers of the lazy tongs above the center and top pivots thereof each provided with open receiving means for receiving and permitting the ready removal of clothes hangers when the lazy tongs are in extended position, said open receiving means forming closures or locking means for locking the said clothes hangers when the device is in contracted position.

2. In a clothes carrier, the combination with a suitable support, of a pair of lazy tongs operatively connected thereon, the crossed-levers of the lazy tongs above the center and top pivots thereof, each provided with open receiving means for receiving, and permitting the ready removal of, clothes hangers.

3. In a clothes carrier, the combination with a suitable support, of a pair of lazy tongs operatively connected thereon, the crossed-levers of the lazy tongs provided with means for receiving and permitting the ready removal of clothes hangers, said means comprising cut-away portions in the crossed-levers to receive the ends of the clothes hangers.

1,272,820. STAGE-SHADOWGRAPH. GEORGE G. LONG, San Francisco, Cal. Filed Nov. 6, 1917. Serial No. 200,505. (Cl. 46—70.)

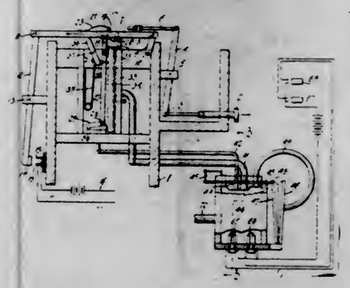


1. A stage shadowgraph comprising a frame, a screen pivotally mounted therein, means to secure said screen in different angular adjustments in said frame, a figure support and lights for throwing a shadow from said figure on said screen.

2. A stage shadowgraph comprising a rectangular frame having a translucent screen therein, a movable figure support, a series of movable lights for throwing shadows upon the screen from the figures, and a movable bridge above the screen from which other figures may be suspended at will.

3. A stage shadowgraph comprising a rectangular frame, a pivotally supported translucent screen therein, means for supporting said screen in different angular adjustments, a movable support for figures adjacent the screen, a movable frame, a series of lights carried by said frame for illuminating the screen and throwing shadows from said figures thereon, and a movable bridge above the screen from which additional figures may be supported at will.

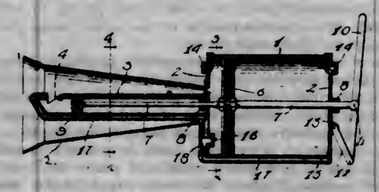
1,272,821. ORGAN. ELEK LOUIS, New York, N. Y. Filed Nov. 6, 1916. Serial No. 129,734. (Cl. 84—54.)



1. In an organ stop action, the combination with a horizontally disposed shiftable stop-bar, of a rocker pivotally mounted on said bar having two distinct portions extending at an angle to each other, either one of said portions being adapted to project below the underface of said bar when the other one is above said underface, an actuator for setting said rocker, means adapted to cooperate with either portion of said rocker for shifting said stop-bar endwise, a bellows for operating said rocker setting means, a bellows for actuating said bar shifting means, a wind-chest for supplying compressed air to said bellows, and a slide on said wind-chest for controlling the communication between the latter and either one of said bellows.

2. In an organ stop action, the combination with a horizontally disposed shiftable stop-bar, of a rocker pivotally mounted on said bar having two distinct portions extending at an angle to each other, either one of said portions being adapted to project below the underface of said bar when the other one is above said underface, an actuator for setting said rocker, means adapted to cooperate with either portion of said rocker for shifting said stop-bar endwise, said last named means comprising a bellows, an upwardly projecting lug on the movable leaf of said bellows adapted to coöperate with one of the portions of said rocker, an oscillatable lever adapted to cooperate with the opposite portion of said rocker, and means upon the movable leaf of said bellows for actuating said lever.

1,272,822. WHISTLE. CHARLES WALTER LUND, Willow, California. Filed Sept. 1, 1916. Serial No. 118,082. (Cl. 116—1.)



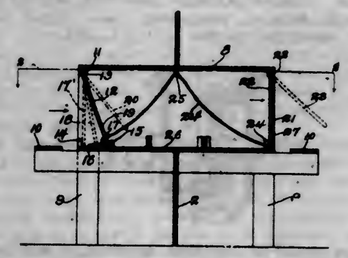
1. A whistle, a pump for supplying compressed fluid for operating the same, and means for simultaneously changing the size of the fluid chamber of said whistle with the movement of the piston of said pump.

2. In combination, a whistle, a pump for supplying compressed fluid for operating the same, and a piston disposed in said whistle for changing the size of the fluid chamber and operatable simultaneously with the piston of the pump whereby to change the tone of the whistle.

3. In a device of the class described, a pump cylinder, a whistle connected thereto, a piston rod extending through said pump cylinder and into said whistle, a piston disposed intermediate the ends of said rod within said pump cylinder, an additional piston on said rod within said whistle and forming one end of the latter, and means for conveying compressed fluid from said pump cylinder to the whistle.

4. A whistle comprising a compressed air supply device, a whistle tube connected to said device, said tube having a mouth near the outer end thereof, a passageway extending along one side of said tube, across the outer end thereof, partway down the other side and provided with an outlet discharging directly into the mouth of said tube, and means of communication between said air supply device and said passageway.

1,272,823. SEPARATOR-COOP FOR POULTRY. MICHAEL J. MCCARTHY, Florence, Mass. Filed May 7, 1917. Serial No. 166,976. (Cl. 119—50.)



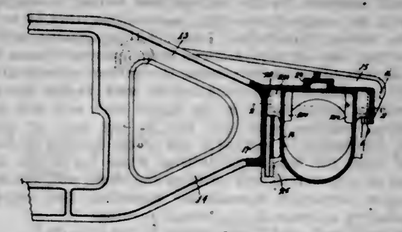
1. In trap nests, a casing having an inlet and an outlet opening, closure members loosely secured at their upper edges to the top of said casing and acting to close said openings, the closure member for the inlet opening being movable inwardly of the casing and the closure member of the outlet opening being movable outwardly of the casing, an abutment member carried by said casing for engagement by the lower edge of said inlet closure member so as to hold said member in adjustment about its axis of movement to permit entry of fowl into the casing, and flexible connections between the said closure members adapted to permit movement of the inlet closure member into a substantially vertical position by gravity when raised and released by a fowl entering the casing, said connections being also adapted to return the inlet closure member to set position when the outlet closure member is raised by a fowl escaping from the casing.

[Claim 2 not printed in the Gazette.]

1,272,824. MEANS FOR COMBINING SIDE FRAMES AND JOURNAL-BOXES WITH CAR-TRUCKS. ALVIN C. MCCONN, Chicago, Ill. Filed Mar. 15, 1918. Serial No. 222,550. (Cl. 105—243.)

1. The combination with a truck side frame having permanently connected compression and tension members, of an independently formed complete journal box, and interlocking means on both of said frame members and said box coöperative to interlock the box between the outer ends of said frame members in position to afford a tie completing the truss of the side frame.

2. The combination with a truck side frame having compression and tension members with the compression members extended outward beyond the tension members of independently formed journal boxes adapted to be seated between said compression member extensions and the ends of the body of the frame, and interlocking connections partly on the frame and partly on the boxes, and which, when engaged and interlocked closely connect the top portions of the boxes to the compression members of the frame and the bottom portions of the boxes to the tension members of the frame with the boxes completing the trusses of the side frame.

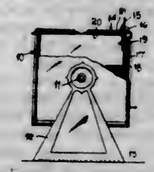


3. The combination with a truck side frame, of an independently formed journal box, and interlocking means on the side frame and box for connecting said parts together and which interlocking means are adapted to be pivotally connected by a vertical motion of the box in respect to the frame when at an oblique angle thereto and to be interlocked with each other when the box is thereafter rotated relatively to the frame.

4. The combination with a truck side frame having compression and tension members, of an independently formed journal box, and interlocking means on said side frame and box adapted to be engaged with each other by an angular motion of the box with respect to the frame and when the box is brought into working position, adapted to interlock the box between the outer ends of said frame members in position to afford a tie completing the truss of the side frame.

[Claims 5 and 6 not printed in the Gazette.]

1,272,825. TOOTHPICK-DISPENSING DEVICE. WILLIAM JOHN MCINTYRE, Hannah, N. D. Filed Oct. 6, 1917. Serial No. 195,084. (Cl. 206—21.)



1. A dispensing device comprising an article container provided with a longitudinally extending slot and adapted to be rotated, and means mounted on the wall of the container adjacent said slot with which one of the articles is adapted to engage when the holder is rotated to a predetermined position whereby said article will be segregated from the remaining articles and supported for gravity movement when the holder is returned to its normal position to cause said article to project outwardly through the opening.

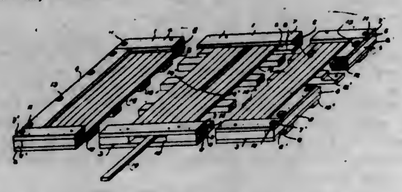
4. A dispensing device comprising a container consisting of two sections having interfitting telescopic engagement with each other, the container when the sections are engaged being approximately rectangular in cross section, one of said sections being provided upon one wall with a slot, the slot being disposed at the corner of the section, and in alinement with the wall extending at right angles to the first named wall, this slot being adapted to be exposed when the sections of the container are slightly separated from each other, and a fulcrum member fixed to the second named wall below the inner end of the slot and having a free end portion disposed contiguous to the wall in which the slot is formed, said

member being adapted to receive one of the articles in the container when the container is rotated to a predetermined position, said article rocking by gravity upon said fulcrum member and having one end projected through the slot when the container is reversely rotated to another predetermined position.

6. A dispensing device comprising a support, a holder rotatably mounted in the support and having a slot in one wall, in combination with a carton consisting of two sections having interfitting telescopic engagement with each other, one of said sections being provided with a slot adapted to be exposed when the carton sections are slightly separated from each other, said carton being adapted for arrangement in the holder with said slot in coinciding relation with the slot in the wall of the holder, and means to segregate one of the articles in the carton from the remaining articles when the holder is rotated to a predetermined position and cause said article to project outwardly through the coinciding slots when the holder is returned to its normal position.

[Claims 2, 3, 5, and 7 not printed in the Gazette.]

1,272,826. FLOOR. NORMAN JOHN MACDONALD, Winnipeg, Manitoba, Canada. Original application filed July 28, 1916, Serial No. 111,928. Divided and this application filed Sept. 18, 1917. Serial No. 191,990. (Cl. 20—6.)



1. In a portable house a take-down floor comprising a substantially rectangular frame formed from side and end members detachably connected and formed to provide a continuous channel at the inner side of the frame, equal length floor boards crossing the frame and having their ends received within the channels of the side members, floor joists passing lengthwise of the frame beneath the floor and having their ends detachably secured to the end members of the frame and filler strips inserted in the channels above the floor boards.

2. In a portable house a take-down floor comprising a substantially rectangular frame formed from side and end members jointed at the corners and releasably fastened together and constructed to provide a continuous channel passing around the inner side of the frame, there being an entrance opening reserved in one of the side members of the frame to admit of entrance to the channel, equal length floor boards insertible in the frame through the entrance opening and having their ends received within the channels of the side members of the frame, joists passing lengthwise of the frame and located beneath and supporting the cross boards and having their ends detachably secured to the end members of the frame and filling strips inserted in the channel above the floor boards.

3. In a portable house a substantially rectangular take-down frame comprising side and end members releasably connected at the corners and constructed to present a continuous channel at the inner side of the frame and provided with an entrance opening to the channel through one of the side members.

4. In a portable house a substantially rectangular take-down floor frame comprising side and end members formed each from body strips and applied top and bottom strips, the inner edges of which extend beyond the body strips and provide a continuous channel at the inner side of the frame and having the body strips of the end members projecting beyond the ends of the top and bottom strips thereof and the top and bottom strips of the side members projected beyond the body strips thereof, and means releasably fastening the projected ends of the side top and bottom strips to the inserted projected ends of the body strips of the end members of the frame.

1,272,827. RAILROAD CONSTRUCTION. MADS H. MADSEN, Kimballton, Iowa. Filed July 16, 1917. Serial No. 180,790. (Cl. 238—6.)



The combination of a pair of parallel rails with a tie bar having near its opposite ends spaced shoulders extending upwardly and inclined toward each other, said tie bar having a flat surface upon which the respective rails rest, each rail being between one pair of shoulders, said shoulders being spaced above the base of the rails, and locking devices each comprising a flat horizontal bar adapted to be slipped between a shoulder and a rail base, each of said flat bars having at its ends projecting lugs bent downwardly on opposite sides of said tie bar and adjacent to the side edge of the rail base.

1,272,828. CORN-PLANTER DROPPER MECHANISM. MADS H. MADSEN, Kimballton, Iowa. Filed Oct. 3, 1917. Serial No. 194,628. (Cl. 221—118.)



1. In a device of the class described, a seed box, a shaft extended through said box, a member fixed on said shaft, a dropper plate adapted to be detachably mounted on said shaft, and coact with said member for locking the dropper plate against rotation with relation to the shaft, said dropper plate having an annular band provided with openings, said seed box having a hinged upper portion provided with a cover member for said dropper plate, whereby corn may drop downwardly in the seed box and enter said dropper plate from the side thereof, and then enter the holes in the dropper plate from above.

5. In a device of the class described, a seed box, a shaft extended through said box, a member fixed on said shaft, a dropper plate adapted to be detachably mounted on said shaft, and to coact with said member for locking the dropper plate against rotation with relation to the shaft, said dropper plate having an annular band provided with openings, said seed box having a hinged upper portion provided with a cover member for said dropper plate, whereby corn may drop downwardly into the seed box and enter said dropper plate from the side thereof, and then enter the holes in the dropper plate from above, said box having an opening in its bottom designed in different positions of said band to register with an opening in said band, a shaft extended through said box, and coacting means on said shaft and said dropper plate, for locking the dropper plate against rotation with relation to the shaft.

[Claims 2 to 4 not printed in the Gazette.]

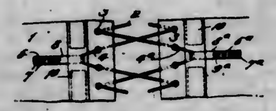
1,272,829. BUTTON. PETER M. MAHLBERG, Hopkins, Minn. Filed Feb. 12, 1918. Serial No. 216,728. (Cl. 24—113.)

A button consisting of a substantially flat piece of stiff material, a thread wound about the same in a fanciful manner to form a covering for said button, said thread crossing itself a number of times at the center of the back side of the button, whereby a bump is



formed, said bump of thread adapted to be used in sewing the button to a garment.

1,272,830. CORSET. ALBERT MALSIN, New York, N. Y., assignor to Lane Bryant, Inc., New York, N. Y., a Corporation of New York. Filed June 9, 1916. Serial No. 102,625. (Cl. 2—74.)



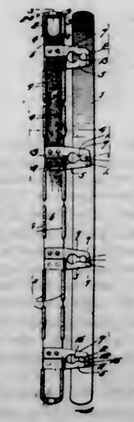
1. In a corset, the combination with the body of the same, of a lace threaded through openings and left loose at one or more points, and a strap attached to the body and passing through said slack portion and having a fastening means that enables it to be held adjustably in position after taking up the slack.

2. In a corset, the combination with the body of the same having eyelets therein, and a lace threaded through said eyelets from side to side, but left loose at one or more points, of strap devices on the body engaging the slack portions of the lace, said strap devices having free ends provided with fastenings that enable them to be turned back and secured to the body of the corset in different positions.

9. In a corset, an endless lace threaded through openings in the corset body across the gap between the edges of said body and having certain portions thereof furnishing loops, and means engaging said loops and adjustably connected to the body of the corset at different points so as to enable the lace to be tightened or loosened as desired, said means consisting of straps attached to the body of the corset with free ends provided with fastening devices arranged with the straps passing through loops and then fastened to the body of the corset at different points so as to take up the slack.

[Claims 3 to 8, 10, and 11 not printed in the Gazette.]

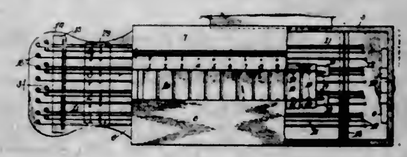
1,272,831. CORSET-CLASP. ALBERT MALSIN, New York, N. Y. Filed June 9, 1916. Serial No. 102,626. (Cl. 24—204.)



1. In a corset clasp, the combination of a strip having a series of projections, a second movable strip having also a series of projections located contiguous to the first series of projections, said projections being recessed and the members of each pair having separated edges to provide an opening and a communicating slot and means for locking the two strips together consisting of a catch pivoted to one strip and having a snap button adapted to pass through coincident openings in the two strips for the purpose of holding the latter in a relatively predetermined position and preventing the outer one from sliding out of place, and a strip having headed pins that engage the spaces between the projections on the aforesaid strips and are released when the latter are opened.

[Claims 2 to 4 not printed in the Gazette.]

1,272,832. COMBINED METALLOPHONE AND ZITHER. HENRY C. MARX, Chicago, Ill. Filed July 2, 1917. Serial No. 178,161. (Cl. 84—80.)



1. In a musical instrument, the combination with a sounding box, of a series of metal bars tuned to a musical scale and mounted within said box, and a series of grouped musical strings capable of being tuned to musical chords to harmonize with the metal bar scale and also mounted within said box but below said strips.

[Claims 2 to 4 not printed in the Gazette.]

1,272,833. EYEGLASSES. JEFFERSON D. METCALF, Gilbert, La., assignor of one-half to William L. Ream, Gilbert, La. Filed Sept. 12, 1916. Serial No. 119,679. (Cl. 88—47.)



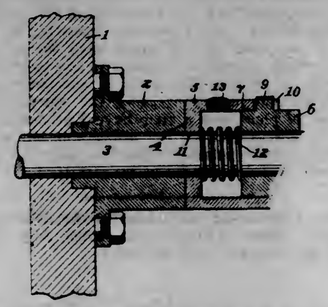
1. A pair of eyeglasses comprising rim portions left open at their outer sides and provided with outstanding ends which are screw threaded exteriorly with a thread common to both, each of the projecting ends being provided with a transverse notch on the inner side, bow mounting members provided with stem and head portions shaped to be fitted between the ends of the rim portions in such relation that the head portions are received in the notches thereof, bows carried by said bow mounting members, and internally screw threaded sleeves arranged to be received over the screw threaded ends of the rim portion to hold the same tightened against the lenses and to secure the bow mounting members in place.

[Claim 2 not printed in the Gazette.]

1,272,834. WATER-TIGHT BEARING FOR PROPELLER-SHAFTS AND THE LIKE. ARTHUR R. MIDDLETON, Wayside, Md. Filed Aug. 28, 1917. Serial No. 188,665. (Cl. 64—22.)

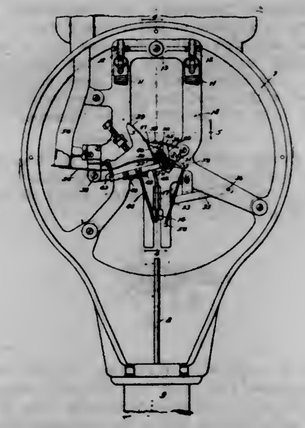
In combination a revoluble propeller shaft, a fixed bearing, a driving member fixed on the shaft, a driven member in the form of a shell open at the rear and having the plane front face of its end head contacting with a running fit with the plane face of the bearing and having also a close fit with the shaft, a spring for pressing the driven member against said plane faced bearing member and a loose splined connection between the driving member and the shell of the driven member, permitting

the driving member to have axial vibration without affecting the driven member, said driven member having a



close sliding fit with the peripheral surface of the driving member, substantially as described.

1,272,835. **WEIGHING-SCALE.** BERTIE E. MILLS, Chicago, Ill., assignor to Mills Novelty Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 24, 1917. Serial No. 164,094. (Cl. 265—68.)



1. In a weighing scale, the combination of a dial, a shiftable member operable by the application of weight to the scale and forming a stop, a second, shiftable, member coöperating with said stop and tending to shift toward said stop, releasable means for controlling the movement of said second member, a pointer for coöperation with said dial, means tending to move said pointer relative to said dial, and means for controlling the rotation of said pointer under the action of said second-named means, from said second member.

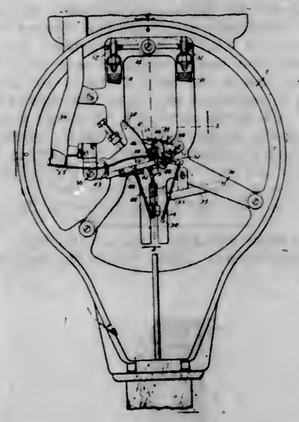
4. In a weighing scale, the combination of a dial, a pointer for coöperation therewith and mounted to rotate, a shoulder on said pointer, means tending to move said pointer relative to said dial, a movable member having a shoulder opposing said first-named shoulder and controlling the movement of said pointer by said first-named means and tending to move in a direction for shifting said second-named shoulder in a direction away from said first-named shoulder, releasable means for controlling the movement of said movable member, and a second, shiftable, member forming a stop for said movable member and operating when weight is applied to the scale to move in a direction away from said movable member.

7. In a weighing scale, the combination of a dial, a pointer for coöperation therewith mounted to rotate, a shoulder on said pointer, means tending to move said pointer relative to said dial, a rack, a pinion meshing with said rack, a shoulder operatively engaging said pinion and opposing said first-named shoulder and controlling the movement of said pointer by said first-named means, said rack tending to move in a direction for shifting said second-named shoulder in a direction away from said first-named shoulder, releasable means for controlling the movement of said rack, and a shiftable member forming a stop for said rack when released and operating when weight is applied to the scale to move in a direction away from said rack.

9. In a weighing scale, the combination of a dial, a pointer for coöperation therewith, mounted to rotate, a cable extending about the axis of said pointer, a pivotally supported lever connected with the lower end of said cable and operating to rotate said pointer in one direction relative to said dial through the medium of said cable, and means restraining the movement of said pointer operable by the application of a weight to the scale to permit said first-named means to actuate said pointer.

[Claims 2, 3, 5, 6, and 8 not printed in the Gazette.]

1,272,836. **WEIGHING-SCALE.** BERTIE E. MILLS, Chicago, Ill., assignor to Mills Novelty Company, Chicago, Ill., a Corporation of Illinois. Original application filed Apr. 24, 1917, Serial No. 164,094. Divided and this application filed Nov. 15, 1917. Serial No. 202,093. (Cl. 194—47.)



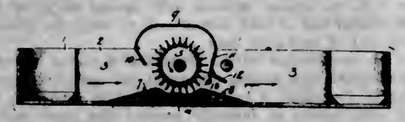
1. In a weighing scale, the combination of a shiftable member, means tending to shift said member in one direction, and means releasably holding said member against actuation and arranged to be automatically actuated by the engagement of a coin therewith to release said member, comprising a dog adapted to engage said shiftable member and hold it against actuation and provided with a tail-piece, a member engaging said tail-piece and operated by a coin to shift said dog out of engagement with said first named member and returnable, automatically, to normal position for operation by a coin, and a spring yieldingly restraining the movement of said last-named member to normal position after the coin disengages therefrom.

12. In a weighing scale, the combination of a pivoted lever adapted to be actuated by a coin, a spring supported to yieldingly bear against said lever substantially in a vertical line with its pivot, thereby to retard the rocking of said lever on its pivot, a shiftable member,

and means controlled by said lever for releasably holding said shiftable member against actuation.

[Claims 2 to 11 and 13 to 15 not printed in the Gazette.]

1,272,837. **BEATING-ENGINE.** MELVIN A. MILLS, Methuen, Mass. Filed Sept. 20, 1916. Serial No. 121,228. (Cl. 92—24.)

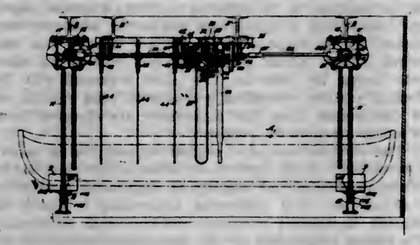


1. In a beating engine, a pulp tub having a circulating channel, a disintegrating roll therein, a hood across the channel over said roll and having a portion thereof extending down into the channel at and toward the delivery side of the roll and to a point below a horizontal plane intersecting the axis of the latter, a wing carried by the lower edge of the said downward extension of the hood and coöperating with the floor of the channel to form a constricted outlet.

6. In a beating engine, a pulp tub having a circulating channel, a beater roll arranged therein, a hood for said roll having a stock directing wing depending from the front edge thereof and inclined toward and terminating a short distance from the feeding in side of the roll and approximately at a point in a horizontal plane intersecting the axis of the roll, and another stock directing wing depending from the rear edge of the hood and inclined downwardly and away from the roll, said wing having its front edge portion arranged in close proximity to the periphery of the roll and disposed below the axis thereof.

[Claims 2 to 5 and 7 to 14 not printed in the Gazette.]

1,272,838. **HOISTING MECHANISM.** EDWARD Y. MOORE, Cleveland, Ohio. Filed June 27, 1917. Serial No. 177,182. (Cl. 187—21.)



1. In a hoisting mechanism, the combination of raising mechanism provided with a ratchet device adapted to hold the load, driving mechanism, a clutch adapted to connect the driving mechanism with the raising mechanism or disconnect it therefrom, a brake adapted to control the load on the descending movement, and mechanism for insuring the disengagement of the clutch and of the ratchet device when the brake is released.

5. In a hoisting mechanism, the combination of a flexible lift member, a lift wheel therefor, power mechanism for rotating the lift wheel, a hand wheel, a clutch adapted to connect it with the power mechanism or disconnect it therefrom, a brake adapted to retard downward movement of the flexible lifting member, means tending to constantly apply the brake, means to relieve such application, means for shifting the clutch, means for automatically locking the brake reliever in idle position when the clutch is engaged, and a ratchet member which the brake engages and which operates idly on raising movement.

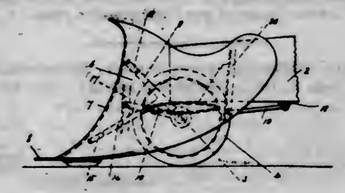
16. The combination of two beams spaced apart and adapted to support a boat, two hoisting mechanisms for the two beams respectively, and operating mechanism therefor, and a fly wheel on the operating mechanism, whereby the lowering movement of the operating mechanism may be continued after the load stops descending.

23. In a hoisting mechanism, the combination of raising mechanism, driving mechanism, a clutch adapted to connect the driving mechanism with the raising mechanism, a ratchet device for holding the load comprising a ratchet wheel and pawl, releasable means for clutching the ratchet wheel to the raising mechanism, and means for insuring the disengagement of the clutch when the releasable means is released.

25. In a hoisting mechanism, the combination of a raising mechanism, provided with a normally active ratchet device adapted to hold the load, mechanism for freeing the ratchet device, driving mechanism, a clutch adapted to connect the driving mechanism with the raising mechanism, a brake adapted to retard the descending movement, mechanism for controlling the brake, mechanism connecting the clutch with the brake controller to insure the disengagement of the clutch when the brake is released, said ratchet being connected to the driving mechanism by said brake and adapted to be released when the brake is released.

[Claims 2 to 4, 6 to 15, 17 to 22, and 24 not printed in the Gazette.]

1,272,839. **SNOW-PLOW.** HARRY MORRIS, Groveland, N. Y. Filed Mar. 13, 1918. Serial No. 222,109. (Cl. 37—5.)



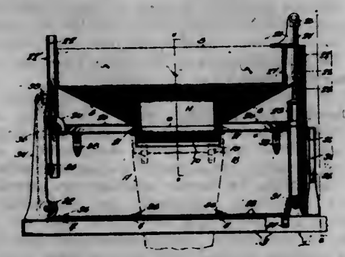
1. The combination, with a motor car, of a snow plow formed of diverging plates which form a cutting edge in front of the car, said plates being arranged to straddle and extend rearwardly beyond the front ground wheels and axle of the car, means for supporting the front parts of the plow plates from the ground, front braces secured to the plow plates and pivoted to the said axle, and rear braces pivotally connected at their front ends with the plow plates and having their rear ends pivotally connected with the frame of the car.

2. The combination, with a motor car, of a snow plow formed of diverging plates which form a cutting edge in front of the car, said plates being arranged to straddle and extend rearwardly beyond the front ground wheels and axle of the car, means for supporting the front parts of the plow plates from the ground, a center front brace secured to the plow plates and pivoted to the middle part of the said axle, side front braces also secured to the plow plates and pivoted to the end portions of the said axle, and rear braces pivotally connected at their front ends with the plow plates and having their rear ends pivotally connected with the frame of the car.

1,272,840. **ELEVATING MECHANISM FOR TRUCK-BODIES.** GEORGE P. MYERS, Sheboygan, Wis., assignor to Myers Machine Co., Sheboygan, Wis. Filed June 11, 1917. Serial No. 173,952. (Cl. 214—76.)

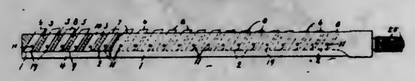
1. A machine of the class described comprising in combination, a vehicle frame, a body supported thereon, a cylinder secured to the vehicle frame at one end of

the body, a fluid operated piston movable in said cylinder, one end of the piston being pivoted to the adjacent end of the body, a guide on the vehicle frame adjacent the cylinder, a standard at the other end of the vehicle frame, a guide on the upper end of the standard, an additional guide on the vehicle frame adjacent the base of the standard, and a flexible member trained around said guides and secured at its opposite ends to the opposite ends of the body whereby when said piston is moved upwardly, the body will be raised horizontally.



2. A machine of the class described comprising in combination, a vehicle frame including side bars, a body supported on the frame, means for raising and lowering said body with respect to said frame, a plurality of right angular plates, each secured by one flange to the side bars of the frame, the other flanges being extended laterally, and a plurality of fingers depending from the body, each finger being engaged with one face of one side bar and the lateral flange of one right angular plate.

1,272,841. BROACH. JOHN OAKLEY, Springfield, Mass. Filed Aug. 8, 1917. Serial No. 185,152. (Cl. 90—33.)

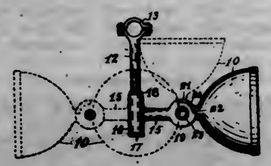


1. As an improved article of manufacture, a broach comprising a shank provided with a plurality of openings for teeth, which openings have orifices at both ends, a plurality of teeth fitting such openings, said openings and teeth being in part cylindrical, and said teeth only partially filling said openings so that free passages are left for the chips, and means to retain said teeth in place in said openings.

6. A broach having separately formed teeth and having lateral passages extending along the forward faces of said teeth and a longitudinal passage communicating with the rear ends of said lateral passages.

[Claims 2 to 5 not printed in the Gazette.]

1,272,842. SPOT-LIGHT MOUNTING. OTHO M. OTTE, Jamestown, N. Y. Filed Oct. 18, 1917. Serial No. 197,353. (Cl. 240—57.)

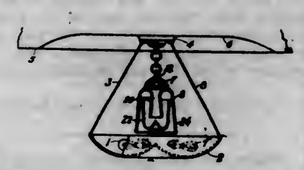


1. A mounting for a spot light comprising a supporting arm having a clamp for an upright standard on one end and a journal on the other end, a second arm having a sleeved end fitting on said journal end of said supporting arm and a flattened disk on the other end, said flattened disk having a hole therethrough and spaced stops on its outer edge, a set screw to adjustably attach said sleeve to said journal, a spot light having a disk shaped end with a hole therethrough for attachment to the disk shaped end of said second arm, a bolt to adjustably clamp said disks, and a projection on said disk shaped end of said spot light to engage between said spaced stops on the disk shaped end of said second arm to limit the rotative movement of said spot light.

4. In combination with a light and a casing therefor, a horizontal arm having means at one end for attachment to a support, a second arm at right angles to the first arm, means to turnably connect the inner end of the second arm to the first arm so as to allow the second arm to swing throughout the circumference of the first arm, a disk on the rear end of the light casing arranged in the plane of the longitudinal axis of the latter and a disk on the outer end of the second arm pivotally connected to the first disk so that the longitudinal axis of the light casing in one position thereof forms a continuation of the longitudinal axis of the second arm and is in the same plane as said longitudinal axis of the second arm.

[Claims 2 and 3 not printed in the Gazette.]

1,272,843. COMBINED SOUND-REPRODUCER AND LIGHTING-FIXTURE. HERMAN G. PAPE, New York, N. Y. Filed Dec. 17, 1914. Serial No. 877,802. (Cl. 179—178.)



1. The combination of a reflector, means to support a light in position to be reflected thereby, a sound reproducer comprising a diaphragm supported adjacent said reflector, electro-responsive means to vibrate the diaphragm, and a sound amplifying bell having an open mouth facing the reflector, the latter arranged with its reflecting surface extending across said open mouth, so that the sounds from the reproducer are directed from said mouth against the reflector.

3. The combination of a chandelier comprising means for supporting lights thereon, a reflector for said lights, a sound producing and amplifying apparatus carried on the chandelier; said apparatus comprising a sound reproducing membrane, a casing inclosing said membrane, and a sound amplifying device comprising means for increasing the volume of the sound and directing it against the reflector, the latter arranged with its reflecting surface extending across the mouth of the amplifying device.

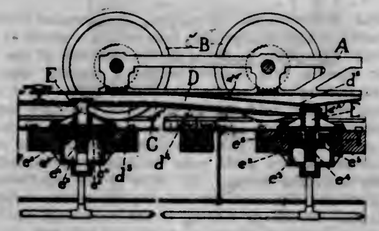
5. The combination with a reflector, of an electric sound reproducing device, a sound amplifier arranged to receive and amplify the sounds from said device, said amplifier positioned and arranged to direct the sounds on to the reflector, the latter arranged with its reflecting surface extending across the month of the amplifier, and a lamp adjacent to said reflector in position for the light therefrom to be directed against said reflector.

11. The combination with a ceiling, of an electro-responsive sound reproducing device, a sound amplifying device therefor, a lamp, means whereby said devices and said lamp are supported from said ceiling, and adjacent thereto, and means to direct the light and sound waves against the ceiling so that the latter serves as means for the amplification or diffusion of the sounds ejected from the amplifier and the light from said lamp.

14. The combination of an electro-responsive sound reproducing device, a sound amplifying device, means for supporting said devices from a ceiling, means forming a concave reflecting surface arranged above the amplifying device and facing downward, means providing a concave reflecting surface beneath the amplifier, the latter having an open mouth facing said last named surface, through which mouth the sounds are directed against said upwardly facing reflector, and reflected upward against the downwardly facing reflecting surface.

[Claims 2, 4, 6 to 10, 12, and 13 not printed in the Gazette.]

1,272,844. ELECTRIC-RAILWAY SYSTEM. ERICH J. PATELSKI, Chicago, Ill. Filed Mar. 8, 1915, Serial No. 12,782. Renewed Aug. 23, 1916. Serial No. 116,559. (Cl. 191—20.)



1. An electric railway system comprising a housing carried by the rolling stock and constructed of reticulated sections to permit lateral flexing thereof when the trucks travel around curves in the track, said housing being open along one side thereof, members disposed along the track to enter the front end of said housing and leave at the rear end thereof, a contact strip extending longitudinally within said housing, insulated contacts fixed on said members, the arrangement being such that the upper surface of said contact strip engages the under sides of said contacts by upward pressure, springs disposed in a plane below said strip to yield under said pressure, said members being such a distance apart that said strip is always in engagement with at least one of said contacts, and means to connect said contacts with a source of current.

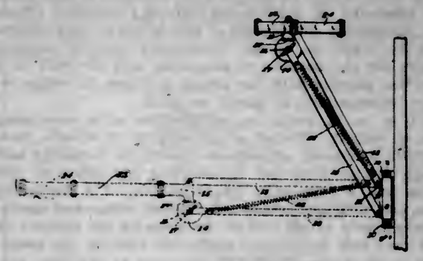
7. An electric railway system as specified in claim 1, and boxes in which said members slide up and down vertically, each box containing one of said springs to normally hold the member down, said means including normally open switches inclosed in said boxes and operated by said members, and said housing having means to raise said members.

15. In an electric railway system, a series of contact-bearing members disposed along the track having exposed heads, guides in which said members slide up and down vertically, springs to normally hold said members in depressed position, means to supply current to said system, means on the trains to raise said members, thereby to receive the current to propel the trains, and normally open current-supply switches arranged to close when said members are raised, the trains having means to depress said members before they are disengaged therefrom.

16. In a railway system, an upstanding member having a head, a guide in which said member slides up and down, wherein said member is normally in depressed position, means on the rolling stock to engage the under side of said head and thereby lift said member, the top of said guide being closed to gravel and dirt in all positions of said member, and devices to produce the desired result by the lifting of said member.

[Claims 2 to 6, 8 to 14, and 17 to 21 not printed in the Gazette.]

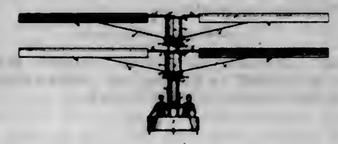
1,272,845. UNIVERSAL, EXTENSIBLE, BALANCED BRACKET. RODERICK A. PECK and ALEXANDER W. MCCLEAN, St. Louis, Mo. Filed Mar. 23, 1917. Serial No. 156,904. (Cl. 248—9.)



2. A bracket comprising bearings adapted to be attached to a support, a base pivotally mounted in said bearings, a pair of parallel bars pivotally mounted adjacent the lower end of said base, a pair of parallel bars pivotally secured to the upper end of said base, a coil spring having one end attached to the uppermost pair of bars and its opposite end attached to the lowermost pair of bars, clamping members carried by the lowermost pair of bars, a yielding detent located between the clamping members for temporarily holding the bars in different positions, a pivotal connection between one of the clamping members and the uppermost pair of bars, a series of folding sections carried by one of said clamping members, and a pivotal support for the article to be supported carried by the outermost one of the folding sections.

[Claim 1 not printed in the Gazette.]

1,272,846. AIRCRAFT FOR MECHANICAL FLIGHT AND AUTOMATIC SOARING. THOMAS O. PERRY, Oak Park, Ill. Filed June 22, 1914, Serial No. 846,648. Renewed Dec. 4, 1916. Serial No. 135,007. (Cl. 244—19.)



1. In an air-craft, the combination with an upper set of radially pivoted wings adapted to revolve about an approximately vertical axis, an under set of radially pivoted wings adapted to revolve about said vertical axis in an opposite direction from the upper set of wings and a motor adapted to actuate both sets of wings simultaneously, of means for changing the weather angles of all the wings in like manner for controlling vertical movement of the air-craft, additional means for relatively changing the weather angles of one set of wings with reference to the other set for balancing or unbalancing opposing torsional effects and mechanism whereby all the said wings as they revolve may be made to assume continually varying weather angles for the purpose of propelling the air-craft in a direction at right angles to the common axis of the revolving wings, substantially as herein set forth.

5. In an air-craft, the combination with a supporting column approximately vertical in normal position, a passenger car located at the base of said column, an upper structure carrying radially pivoted wings and other parts adapted to revolve around the upper part of said column, an under structure similar to said upper structure but adapted to revolve in an opposite direction about said column and a motor adapted to rotate said struc-

tures simultaneously in opposite directions, of means for changing the weather angles of all the wings in like manner for controlling vertical movement of the air-craft, additional means for changing relatively the resistance to rotation of said structures with reference to each other for balancing or unbalancing opposing torsional effects and mechanism whereby all of said wings as they revolve may be made to assume continually varying weather angles for the purpose of propelling said air-craft in a direction parallel with the planes in which the wings revolve, substantially as herein set forth.

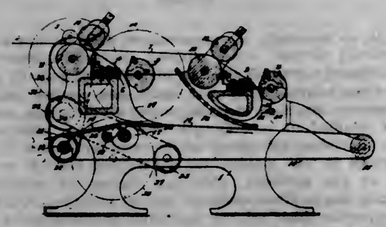
10. In an air-craft, the combination with superposed sets of radially pivoted wings adapted to revolve horizontally in opposite directions, a motor for actuating said wings, driving gears for transmitting the power of said motor and a supporting spinal column, of a feathering race, race followers connected with said wings and mechanism whereby at the will of the operator the position of said race may be changed bodily for altering the amplitude of the weather angles of the wings at any time, substantially as herein set forth.

15. In an air-craft, the combination with upper and lower sets of radially pivoted wings adapted to revolve in opposite directions about approximately vertical axes, a motor for actuating simultaneously said oppositely revolving sets of wings and driving gears for transmitting the power of said motor to said wings, of mechanism for feathering all the wings in unison to various weather angles for varying the vertical lifting effort of the wings and means whereby the weather angles of one set of wings may be changed relatively to the weather angles of the other set of wings for balancing or unbalancing the torsional resistances to revolution of opposing sets of wings, substantially as herein set forth.

25. In an air-craft, the combination with superposed sets of radially pivoted wings adapted to revolve horizontally in opposite directions, a motor for actuating said wings and driving gears for transmitting the power of said motor to each set of wings, of feathering races, race followers connected with said wings and mechanism whereby the position of said races may be changed bodily either in unison or with respect to each other, substantially as herein set forth.

[Claims 2 to 4, 6 to 9, 11 to 14, 16 to 24, and 26 to 30 not printed in the Gazette.]

1,272,847. PAPER OR FIBER BOARD MACHINE. JOHN WM. PEETZ, La Fayette, Ind. Filed July 25, 1917. Serial No. 182,650. (Cl. 271—65.)

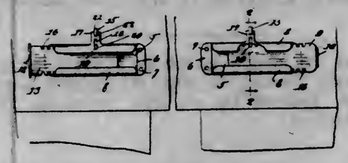


1. In a machine for manufacturing board from pulp in a continuous forwardly moving band or strip and including cutting means for cutting the band transversely into sheets or sections, means for turning the forward ends of alternate sheets backward and upside down and permitting the forward ends of the other sheets to feed forwardly, and means for feeding both sets of sheets forwardly.

5. In a machine for manufacturing board from pulp in a continuous forwardly moving band or strip, a cutter for cutting the band transversely into sheets or sections, means for engaging the end of the band in advance of the cutter and turning it to the rear before one actuation of the cutter, means whereby the end of the band is turned to the front before the next actuation of the cutter, and a conveyer which receives both sheets and carries them forwardly.

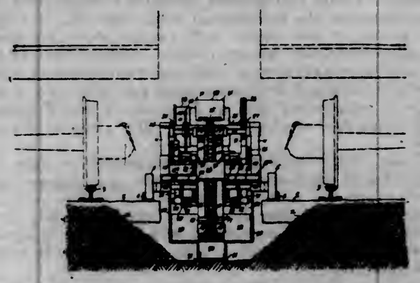
[Claims 2 to 4 and 6 to 9 not printed in the Gazette.]

1,272,848. ADJUSTABLE CURTAIN-BRACKET. HENRY E. PLACK, Towson, Md. Filed May 14, 1918. Serial No. 234,363. (Cl. 156—24.)



A shade roller bracket comprising a channeled attaching member, a roller-supporting arm having a shank at its inner edge adjustably mounted in the channels of the attaching member, said shank having a notched edge, a latch carried by one of the channeled portions of the attaching member, said channeled portion having a recess exposing the notched edge of the shank, and through which recess the latch passes to engage the notched edge of the shank, and a guide yoke for the latch extending from the attaching member, the sides of the yoke having guide slots and the latch having side extensions forming a head, said extensions seating in the slots, and the top of the yoke having a recess and the outer end of the latch having a lateral enlargement seating in said recess.

1,272,849. MACHINE FOR CLEANING RAILROAD-BALLAST. HOWELL D. PRATT, Philadelphia, Pa., assignor to Link-Belt Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 13, 1917. Serial No. 201,769. (Cl. 83–56.)

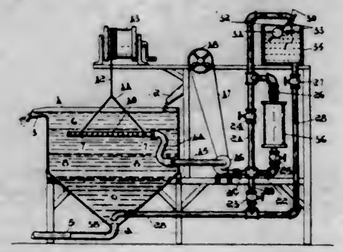


1. The combination in a machine for cleaning ballast, of a frame arranged to travel in the clear space between the tracks of a double track railway; means on said frame for removing the ballast from the roadbed; means for screening the ballast and returning it to the roadbed, the entire mechanism being located on the frame in such position that trains can pass on either track without interfering with the frame and the mechanism carried thereby.

2. The combination in a machine for cleaning railroad ballast, of rails independent of the rails of the track and mounted on the projecting ends of the ties; a frame less in width than the space between the ties and having wheels arranged to travel on the rails; means on the frame for removing the ballast from the roadbed; means for screening the ballast and returning it to the roadbed; and means, carried by the frame, for receiving the fine material removed from the ballast, the frame and its mechanism being of such a width and height as to be within the clear space between the cars traveling on the two tracks.

3. The combination in a machine for cleaning ballast, of two tracks arranged side by side; rails on the adjoining ends of the ties of each track; and a frame having wheels adapted to the rails and located in the clear space between the cars traveling on the two tracks, said frame carrying means for cleaning the ballast between the tracks.

1,272,850. SETTLER FOR FLUID MIXTURES. PERCY A. ROBBINS, Timmins, Ontario, Canada. Filed January 22, 1917. Serial No. 143,688. (Cl. 210–5.)



1. The combination with apparatus used for the separation by settlement of a fluid mixture of component parts having different specific gravities comprising a vessel in which the parts tend to settle in such sequence that the parts of relatively low specific gravities float upon the parts of relatively high specific gravities, said vessel being provided with discharge openings at different levels, of means for conducting a part of relatively low specific gravity to be discharged with a part of relatively high specific gravity and for imparting pressure to the part of relatively low specific gravity to facilitate the discharge of the part of relatively high specific gravity.

[Claims 2 to 6 not printed in Gazette.]

1,272,851. PROCESS FOR TREATING FIBER. ROBERT R. ROBERTS, Washington, D. C., assignor to United Textile Company, a Corporation of Delaware. Filed July 30, 1917. Serial No. 183,460. (Cl. 92–17.)

1. That process of treating vegetable fibers which consists in boiling the fibers in an alkaline solution containing kerosene, removing the boiled fibers and treating them in an acid bath, washing the fibers in a saponaceous solution, rinsing the washed fibers, and finally drying the rinsed fibers.

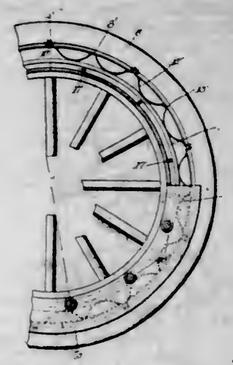
2. That process of treating vegetable fibers which consists in boiling the fibers under pressure in an alkaline solution containing kerosene, removing the boiled fibers and treating them in an acid bath, washing the fibers in a saponaceous solution, rinsing the washed fibers, and finally drying the rinsed fibers.

Claims 3 and 4 not printed in Gazette.]

1,272,852. SPRING-WHEEL. WILLIAM H. ROBINSON, Brooklyn, N. Y., assignor to George H. Brown, Brooklyn, N. Y. Filed Oct. 20, 1916. Serial No. 126,792. (Cl. 152–8.)

1. A spring wheel comprising a felly, side plates contacting with the felly to form a channel, means for uniting the felly and the side plates, a tire in said channel, facing plates on the inner surface of the tire and rigidly connected thereto, a flange on the inner face of each side plate adapted to give support to the tire, means on the facing plates and the said flange for interlocking the tire and side plates against relative circumferential movement and springs between the felly and the facing plates.

4. A spring wheel comprising a felly, side plates contacting with the felly to form a channel, means for uniting the felly and the side plates, a substantially continuous flange on the inner face of each of the side plates, a tire seated on the outer side of said flanges, facing plates on the inner face of the tire having support on the inner side of said flanges and forming a substantially continuous closure of the channel, recesses in the flanges and tongues on the facing plates for interlocking the tire and the side plates against relative circumferential movement and springs within the channel to resiliently support the tire on the felly.

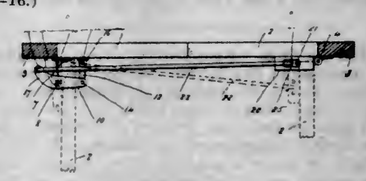


6. A spring wheel comprising a felly, having side plates forming a channel, inwardly extending flanges on the outer edges of said side plates, slots in said flanges, a tire in said channel bearing on said flanges, facing plates for the inner surface of the tire, spring members between the tire and the felly having their free ends bearing on the facing plates and means on said plates for engaging with the tire and with said slots for preventing peripheral movement of the tire with respect to the felly.

8. A spring-wheel comprising a felly, a circular plate on each side of said felly forming a channel, means for holding said plates to said felly, inwardly extending flanges on the outer edges of said plates, slots in said flanges, a tire resting on said flanges, metal facing plates on the inner face of said tire, said plates being of equal width with the channel, an upturned central ear on each end of each of said facing plates, said central ears being molded into the tire, and an upturned ear on each side of each central ear projecting into the slots in the flanges, slots in the tire above said flanges to receive the upper ends of said side ears, and resilient means between the tire and said felly.

[Claims 2, 3, 5, and 7 not printed in the Gazette.]

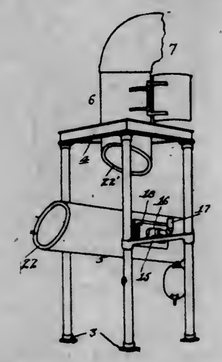
1,272,853. DOOR-OPENER. CHARLES RODIN, Isanti, Minn. Filed Nov. 19, 1917. Serial No. 202,852. (Cl. 20—16.)



The combination, with a door frame, and two doors pivoted to the side portions of the door frame and both opening forwardly; of a supporting arm secured to one side portion of the door frame adjacent to the pivot of one door and projecting forwardly, a lever having its middle part fulcrumed on the said arm, said lever having a front end portion arranged substantially parallel to the said door when closed, and having a rear end

portion which projects rearwardly toward the door frame, a link pivoted to the front end portion of the lever and to the said door, an anchor piece secured to the other door adjacent to its pivot, and a connecting-rod pivoted to the rear end portion of the said lever and to the said anchor piece and working crosswise of the said arm and to the rear of the fulcrum of the said lever.

1,272,854. CUPOLA. GEORGE A. ROSS, Chicago, Ill. Filed Jan. 21, 1916. Serial No. 73,323. (Cl. 266—30.)



In a cupola of the character described, the combination of a tilting section, an intermediate section and a stack section arranged in superimposed vertical alinement, said intermediate and tilting sections having sloping contiguous faces whereby said tilting section can be swung to and from said intermediate section without elevating the intermediate section, means for separately and independently supporting brick lining in each section, trunnions on which the tilting section is carried, and air conduits entering the tilting section through said trunnions.

1,272,855. TITANIC-OXID CONCENTRATE AND METHOD FOR OBTAINING THE SAME. AUGUSTE J. ROSSI, Niagara Falls, N. Y., assignor to The Titanium Alloy Manufacturing Company, New York, N. Y., a Corporation of Maine. Filed Nov. 27, 1917. Serial No. 204,139. (Cl. 23—13.)

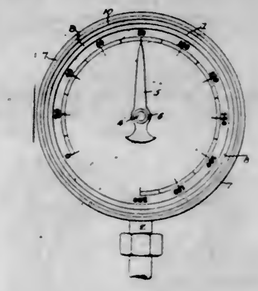
6. In obtaining titanic oxid from a titanic sulfate solution, the steps which consist in adding to the solution an extract of vegetable matter, also a compound of calcium in quantity sufficient to nearly neutralize excess of sulfuric acid, boiling the charge and separating therefrom the resulting composite precipitate, and dehydrating it.

[Claims 1 to 5 and 7 not printed in the Gazette.]

1,272,856. GAGE. KENNETH RUSHTON, Philadelphia, Pa., assignor to The Baldwin Locomotive Works, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Feb. 7, 1918. Serial No. 215,754. (Cl. 73—31.)

1. A gage for indicating pressure or vacuum; a casing; a dial having indicating marks thereon, said dial being adjustable to nearly a complete circle; a shaft mounted in the casing; and a pointer adjustable on the shaft to approximately the same extent as the dial so that both the dial and the pointer can be adjusted so that when the normal pressure is carried the pointer will be in a vertical position.

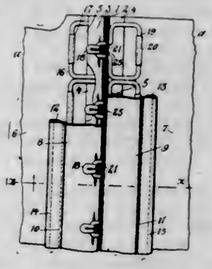
3. The combination in a gage, of a casing; a dial adjustably mounted in the casing so that it can be turned to bring any of the marks to the vertical position; means for clamping the dial to the casing; and a pointed adjustably mounted on the shaft so that the pointer can be set at zero when no pressure is on the gage and the predetermined pressure mark is at the top of the gage



so that the pointer will be in a vertical position when the machine is working under predetermined pressure.

[Claim 2 not printed in the Gazette.]

1,272,857. HOOK AND EYE. JOHN B. RUSS, Shelton, Conn., assignor to Robert N. Bassett Company, Shelton, Conn., a Corporation of Connecticut. Continuation of application Serial No. 822,850, filed Mar. 6, 1914. This application filed June 15, 1915. Serial No. 34,280. (Cl. 24—228.)



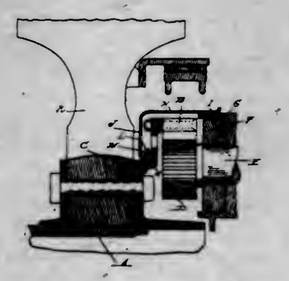
1. The combination with a fold or passage in fabric material, of a wire hook for hook and eye fasteners comprising an anchoring portion incased within and of a length greater than the width of said fold, the said anchoring portion being provided with an opening and having abutting surfaces disposed in a straight line along each side thereof, and a prong mounted on the outer side and passed through said fabric material, the said prong being bent inwardly and disposed sufficiently close to said fold to coöperate therewith when the said prong is engaged by the eye member.

[Claims 2 and 3 not printed in the Gazette.]

1,272,858. VEHICLE-AXLE. ALBERT W. RUSSEL, Detroit, Mich., assignor to Russel Motor Axle Company, Detroit, Mich., a Corporation of Michigan. Filed July 13, 1917. Serial No. 180,269. (Cl. 74—7.)

1. In an axle, the combination with the wheel and ring-gear carried thereby, of a housing having a stationary head on the inner side of said gear provided with a peripheral cylindrical portion and a detachable housing section having a cylindrical portion forming a press fit on said cylindrical peripheral portion and provided with an inwardly-extending flange on the outer side of said ring-gear, said inwardly-extending flange provided with means for directing the drainage of the lubricant.

2. In an axle, the combination with the wheel and ring-gear mounted thereon, of a housing on the inner side of said ring-gear having a cylindrical peripheral portion with a groove therein, a detachable housing section having a cylindrical portion for pressing upon the first-mentioned cylindrical portion and provided with an inwardly-extending flange on the outer side of the ring-gear.



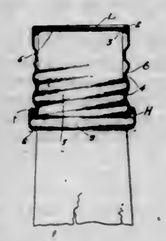
3. In an axle, the combination with the wheel and ring-gear carried thereby, of a housing for inclosing said ring-gear having an inwardly-extending flange, and a returnbent flange on the inner face of said inwardly-extending flange forming an intermediate channel for directing the drainage of the lubricant.

4. In an axle, the combination with the wheel and ring-gear mounted thereon, of a housing for inclosing said ring-gear having an inwardly-extending flange with a returnbent portion at its inner end and on the inner face thereof, and a flange on the rotating wheel adjacent to said returnbent flange.

5. In an axle, the combination with a rotating wheel and ring-gear carried thereby, of a housing for said ring-gear having an inwardly-extending flange terminating in a returnbent portion, and a flange on the rotating part adjacent to said returnbent flange, said adjacent flanges providing grooves between the same and the members by which they are respectively carried for drainage of lubricant away from the joint.

[Claim 6 not printed in the Gazette.]

1,272,859. CLOSURE FOR RECEPTACLES. ROBERT A. RUSSELL, New York, N. Y. Filed Nov. 27, 1915. Serial No. 63,702. (Cl. 215—84.)

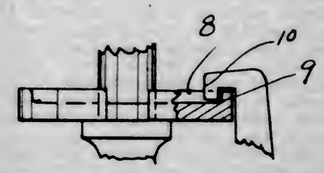


1. A screw closure comprising, a threaded body portion adapted for coöperative engagement with a threaded receptacle for drawing the closure into sealing engagement therewith, and a bendable sleeve depending from the lower part of the body portion and rotatable with respect thereto, said sleeve being adapted to be crimped about a beading on the receptacle for normally holding the closure in sealing position, whereby the forcible unscrewing of the closure will break the engagemetn of the sleeve with the beading and permit the removal of the closure.

2. A screw closure comprising, a threaded body portion adapted for coöperative engagement with a threaded receptacle for drawing the closure into sealing engagement therewith, and a removable bendable sleeve depending from the lower part of the body portion and rotatable with respect thereto, said sleeve being adapted to be crimped about a beading on the receptacle for normally holding the closure in sealing position, whereby the forcible unscrewing of the closure will break the engagement of the sleeve with the beading and permit the removal of the closure.

3. A screw closure comprising, a threaded body portion adapted for coöperative engagement with a threaded receptacle for drawing the closure into sealing engagement therewith, said body portion having its lower edge turned upwardly, and a bendable sleeve having its upper edge turned downwardly for rotatable engagement with the upturned edge of the body portion, said sleeve being adapted to be crimped about a beading on the receptacle for normally holding the closure in sealing position, whereby the forcible unscrewing of the closure will break the engagement of the sleeve with the beading and permit the removal of the closure.

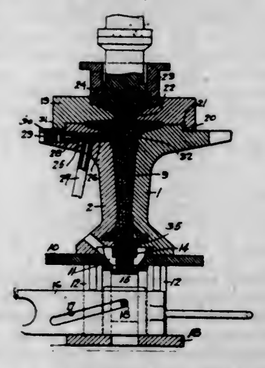
1,272,860. LOGGING-HOOK. JOSEPH E. SAINDON, Chehalis, Wash. Filed May 3, 1917. Serial No. 166,108. (Cl. 24—241.)



2. In a device of the class described the combination of an open hook having a round shank, a shoulder intermediate the hook proper and the shank, a circular lock plate having a principal notch and slidably and revolubly mounted on said shank adjacent said shoulder, an annular upstanding rim on said lock plate, an inwardly extending and downwardly projecting point on said hook and normally engaging the said rim, whereby the point of the hook is restrained against outward and downward movement.

[Claim 1 not printed in the Gazette.]

1,272,861. APPARATUS FOR MAKING CORD-PASSAGES IN CANDLESTICKS. ANDREW J. SANFORD, Newark, Ohio, assignor to A. H. Heisey & Co., Newark, Ohio, a Copartnership. Filed June 24, 1913. Serial No. 775,603. (Cl. 49—80.)



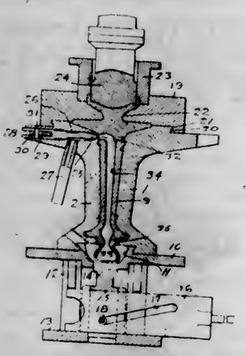
1. In a glass molding and blowing apparatus, the combination with a mold, of a plunger for closing the lower end of said mold, a top font overlying the upper end of said mold, a plunger operating in said top font to press the glass into all parts of the mold, a valve plunger operating laterally through said mold to form a lateral passage in the article, and means for introducing a blast of air through the passage occupied by said valve plunger

to blow a longitudinal passage from said lateral passage out through one end of said article.

2. In apparatus for molding and blowing glass articles, the combination with a sectional mold and a base plate therefor, said base plate having a cavity therein registering with the lower end of the mold cavity, of means adapted normally to close the lower end of the mold cavity, a valve plunger operating through the opposite end of one of said mold sections and adapted to form a lateral passage in the article during the molding operation, means for actuating said valve plunger to admit a blast of air through said lateral passage to continue said lateral passage longitudinally of the article and out through the lower end thereof and means to open said cavity for the reception of the glass displaced in blowing said longitudinal passage.

3. In a glass molding and blowing apparatus, the combination of longitudinal sectional mold members, of a base plate adapted to carry the same, said base plate having a cavity registering with the lower end of the mold cavity, a top font carried by said mold sections, a presser plunger operating in said top font to force the glass into all parts of the mold cavity, a closer member for the lower end of the mold cavity operating in said base plate cavity, a valve plunger operable in the upper end of one of said mold sections and adapted to form a lateral passage in one end of the molded article during the molding operation, means for withdrawing said closer member from the mold cavity to the bottom of said base plate cavity, and means for withdrawing said valve plunger from the mold cavity to thereby admit a blast of air through the lateral passage formed by said plunger to blow a passage longitudinally of the article and carry the surplus glass into said base plate cavity.

1,272,862. PROCESS OF MAKING CORD-PASSAGES IN CANDLESTICKS. ANDREW J. SANFORD, Newark, Ohio, assignor to A. H. Heisey & Co., Newark, Ohio, a Copartnership. Filed June 24, 1913. Serial No. 775,604. (Cl. 49—80.)

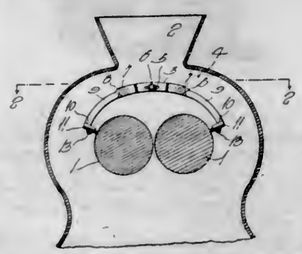


1. The method of manufacture of glass articles which consists in casting the article in solid form in a mold and simultaneously forming a passage through one side thereof and then continuing said passage by blowing operation longitudinally of the article and out through one end thereof while still in the mold.

2. The process of manufacturing a candlestick with a conductor passage therein which consists in casting said candlestick in solid form within a mold and around a blower head projecting into the mold cavity to form a lateral passage through one side of the candlestick and thereafter continuing the passage longitudinally through said candlestick to and through the top thereof by a blast of air from said blower.

3. The process of manufacturing candlesticks having conductor passages therein which consists in casting the candlestick in solid form within a mold and around a blower head to form a lateral passage through one side thereof, withdrawing a portion of the mold from the top of the candlestick, then withdrawing said blower head and continuing said passage longitudinally through the candlestick and out through the upper end thereof by a blast of air from said blower head.

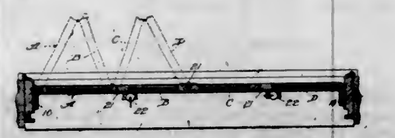
1,272,863. ROLLER-MILL SCRAPER. ADOLPHE WM. SCHMIDT, Lewiston, Idaho. Filed June 21, 1917. Serial No. 176,241. (Cl. 83—12.)



1. A roller mill scraper comprising a pair of arched end members having vertically movable ends, means for securing the central portions of said members to the ends of the crushing chamber of the roller mill, and roller scraping bars secured at their ends to said vertically movable ends of said end members.

2. A roller mill scraper comprising a pair of arched end members each formed of a central and two end sections, said central sections having openings to receive bolts for securing them to the ends of the crushing chamber of a roller mill, each end of said central sections being increased in width and formed with a pair of horizontally spaced ears, the upper ends of said outer sections having ears received between said pair of ears and pivoted thereto, laterally extending flat shoes on the lower ends of said outer sections, the shoes of each end member extending toward those of the other, roller scraping bars whose end contact with the lower faces of said shoes, and fasteners securing said bars and said shoes together.

1,272,864. MOUNTING FOR FOLDING WINDOWS AND THE LIKE. WILLIAM A. SCHOENING and JOSEPH PACHYNSKI, Chicago, Ill. Original application filed Aug. 24, 1916, Serial No. 116,614. Divided and this application filed Oct. 29, 1917. Serial No. 199,094. (Cl. 20—42.)



connection between one of the sashes and the frame consisting of a guideway secured to the sash, a slide plate arranged to move longitudinally within the guideway, a roller mounted on the end portion of the slide plate, the roller being formed with an annular groove therein, a guideway secured to the frame within which the roller may travel, and a projecting portion within the guideway arranged to engage within the annular groove of the roller, the roller being free to move in the direction of its axis upon the slide plate, substantially as described.

2. In a multifolding window, a pivotal and sliding connection between one of the sashes and the frame consisting of a plate secured to the sash, a roller mounted on the end portion of the plate, the roller being formed with an annular groove therein, a guideway secured to the frame within which the roller may travel, and a projecting portion within the guideway arranged to engage within the annular groove of the roller, the roller being free to move in the direction of its axis upon the slide plate, and means for limiting the extent of such roller movement, substantially as described.

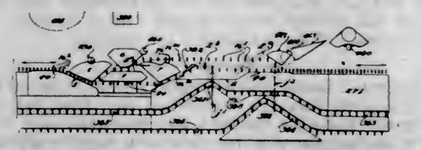
3. In a multifolding window, a pivotal, sliding and extensible connection between one of the sashes and the frame consisting of a grooved plate secured to the frame, a guideway secured to the sash, a slide plate arranged within the guideway and held therewithin against any but longitudinal movements, a ball secured within the end portion of the slide plate and arranged to travel within the grooved plate upon the frame; and means for limiting the range of movement of the slide plate within the guideway consisting of a slot within the guideway, and a member carried by the slide plate arranged to travel within the slot, the position of the member longitudinally of the slide plate being adjustable to vary the range of movements of the slide plate relative to the guideway, substantially as described.

4. In a multifolding window, a pivotal connection between one sash and the frame consisting of alined pivot pins extended from the upper and lower ends of the sash, the upper pivot pin being extended farther than the lower pivot pin, bearing plates secured to opposite sides of the frame arranged to coöperate with the pivot pins, there being a recess formed in the frame head extending transversely thereof within which the upper bearing plate is located, whereby a clearance is provided between the upper sash end and the proximate bearing plate, the sash being adapted to swing into a position transversely of the frame and into alinement with the recess whereby it may be raised into the recess to disengage the lower pivot pin from its bearing plate preparatory to removing the sash from the frame, substantially as described.

5. In a multifolding window, a pivotal connection between one sash and the frame consisting of members secured to the upper and lower ends of the sash in flush relation therewith, the lower member being provided with a boss depending below the bottom end of the sash, alined pivot pins extended from each member, the lower pin being extended from the boss and for a less distance than the upper pivot pin, and bearing plates adapted to coöperate with the pivot pins one secured to the frame sill and the other to the frame head, there being a recess in the frame head extending transversely thereof within which the upper bearing plate is located, whereby a clearance is provided between the upper sash end and the proximate bearing plate, the sash being adapted to swing into a position transversely of the frame and into alinement with the recess whereby it may be raised into the recess to disengage the lower pivot pin from its bearing plate preparatory to removing the sash from the frame, substantially as described.

[Claims 6 and 7 not printed in the Gazette.]

1,272,865. CIRCULAR-KNITTING MACHINE. ROBERT W. SCOTT, Boston, Mass., assignor, by mesne assignments, to Scott & Williams, Incorporated, a Corporation of Massachusetts. Filed Dec. 19, 1914. Serial No. 878,007. (Cl. 66—21.)



6. A knitting machine having needles and means for knitting a welt on recurrent needles only during the retention of withheld loops on other needles, in combination with means for casting the fabric from needles engaged in knitting the welt, and means for knitting fabric on said other needles during retirement from operative movement of said recurrent needles.

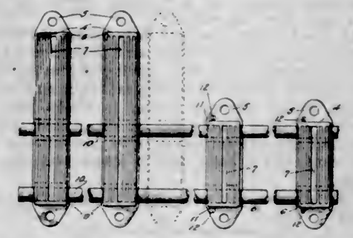
10. A knitting machine having needles and means for knitting a selvage structure on the bare needles comprising a device for causing the yarn to be taken at successive courses by recurrent needles and by all the needles respectively, in combination with means for knitting at said recurrent needles and means for casting off the loops from said recurrent needles, the fabric being retained for further knitting at said other needles.

30. In a knitting machine having devices for starting knitting on the bare needles, a needle cylinder, and a device for maintaining the fabric in a central position in said cylinder comprising a tube extending within said cylinder and means to support said tube, said tube and cylinder being relatively movable whereby the forming fabric is twisted by its friction with said tube.

32. A circular knitting machine having needles and devices for separating the needles and for knitting longitudinally successive sections of fabric respectively on different intercalated sets of said needles, in combination with means for beginning knitting on each set at adjacent needles.

[Claims 1 to 5, 7 to 9, 11 to 29, 31, and 33 not printed in the Gazette.]

1,272,866. BASE. WILLIAM A. SHORB, Decatur, Ill., assignor to Decatur Pump & Manufacturing Co., Decatur, Ill., a Corporation of Illinois. Filed June 8, 1917. Serial No. 173,663. (Cl. 248—30.)



3. A construction of the character described including in combination, a plurality of base elements, each having a flat supporting portion provided with an elongated slot adapted to receive the fastening means of a machine to be supported thereon, and also having a depending flange portion provided with apertures therethrough, said base elements also having securing ears adapted to be secured to a suitable foundation, and connecting elements passing through the apertures in said flange portions for connecting the base elements together.

[Claims 1, 2, and 4 to 6 not printed in the Gazette.]

1,272,867. SELF-CLOSING FAUCET. FRED SCHULDER, Cleveland, Ohio, assignor to United Brass Manufacturing Company, Cleveland, Ohio, a Copartnership composed of Wm. J. Schoenberger and Benjamin F. Klein. Filed Feb. 17, 1917. Serial No. 149,156. (Cl. 137—4.)

2. In a self-closing faucet, a body and valve therein having a stem; a rotatable handle, supported in non-rising position upon said body, having a bottom bearing surface and an annular undulating upper surface; rolling members seated upon the undulating upper surface of said handle; an annular disk removably affixed upon said stem having an undulating bottom adapted to seat upon said rolling members; and a tension device to seat said valve.

3. In a self-closing faucet, a passaged body having a valve seat, a valve having a stem, a tension device to seat said valve, a hollow handle supported in rotatable non-rising position upon said body and sleeved upon said stem and having an annular undulating surface in-

ternally, a disk removably secured upon said stem internally of said handle and having an annular undulating bottom surface, rolling members seated upon the undulating surface of said handle beneath said disk, and a removable cap for said hollow handle.



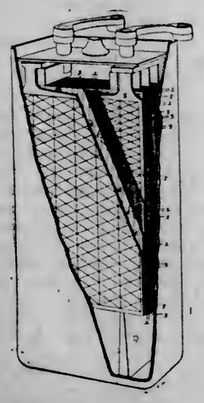
9. In a self-closing faucet, a body having a water passage and a valve seat, a spring pressed valve having a stem, a packing ring to support said stem, a union nut to secure said ring upon the body, and a flat washer in the top face of said ring, in combination with a hollow rotatable handle having a flat smooth bottom seated upon said washer, and means internally of said handle to raise said stem without a rising movement of the handle.

10. In a self-closing faucet, a body having a water passage and a valve seat, a valve having a stem, a packing ring supporting said stem, a slotted follower member sleeved upon said stem and slidably interlocked with both said ring and said stem, and a union nut to lock said ring and associated parts in non-rotating position upon said body, in combination with a rotatable handle and means to raise said stem and valve.

12. In a self-closing faucet, a body having a valve seat, a valve having a stem provided with projections, a packing ring supporting said stem having depending lugs, a follower having notches to receive said lugs and provided with open slot at one end thereof to receive said stem projections, a coiled spring sleeved about said stem and follower and engaged with said valve and follower at its opposite ends, and a union nut to fasten said ring upon said body.

[Claims 1, 4 to 8, 11, and 13 to 17 not printed in the Gazette.]

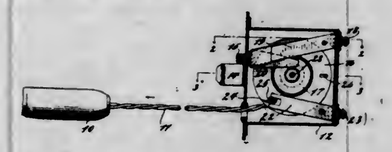
1,272,868. RETAINER FOR ACTIVE MATERIAL OF STORAGE-BATTERY ELECTRODES. JAMES M. SKINNER, Philadelphia, Pa., assignor to Philadelphia Storage Battery Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Apr. 19, 1917. Serial No. 163,120. (Cl. 204—29.)



2. As a new article of manufacture a storage battery retainer consisting of a sheet of insulating material substantially one-sixty-fourth of an inch in thickness and having circular perforations substantially one-fiftieth of an inch in diameter.

[Claims 1 and 3 to 5 not printed in the Gazette.]

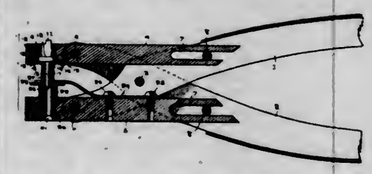
1,272,869. CIGAR-LIGHTER. MAXIMILLIAN H. SPIELMAN, New York, N. Y. Filed May 5, 1916. Serial No. 95,571. (Cl. 200—27.)



1. The combination with an electrical device and a two part flexible conductor for supplying electric current thereto, of a reel for winding the conductor, said reel having two insulated contact members, a pair of electric current supply terminals, means for forming an electrical connection between one of the said contact members and one of the terminals, a spring contact finger for conducting current from the other terminal to the other contact member, said contact finger being provided with a conducting rotary part which is provided with an insulation segment on its periphery, said rotary part engaging the corresponding contact member, the said contact member being provided with means for positively engaging the said rotary part to periodically turn the same.

[Claims 2 and 3 not printed in the Gazette.]

1,272,870. COMBINED PUNCH AND BUTTON-SET TOOL. MAREA H. STOLL, Beatrice, Nebr. Filed Nov. 20, 1917. Serial No. 202,976. (Cl. 218—19.)



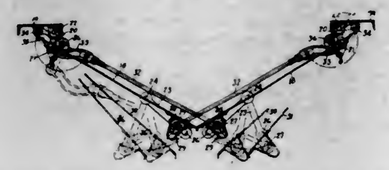
1. A combined punch and button set tool comprising a pair of handles pivotally connected adjacent their forward ends in overlapping relation, a pair of jaw bars pivotally connected to the forward ends of said handles for movement to and from each other in parallel planes, an anvil carried by one of said jaws, means for holding a telescopic button part on said anvil, a piercing element carried by the other jaw bar and means for holding the other telescopic button part on said jaw bar over and in axial alinement with said piercing element, said button parts adapted to be telescoped when said jaw bars are moved together.

5. A combined punch and button set tool comprising a pair of handles, jaw bars mounted thereon to move in parallel planes, a tubular anvil carried by one of said jaw bars, means for retaining a tubular button part on said anvil, means for supporting a coöperating button part upon the opposite jaw bar, and a piercing element carried by said last mentioned jaw bar in alinement with said anvil and provided with a swaging face at its base.

[Claims 2 to 4 not printed in the Gazette.]

1,272,871. DOOR ARRANGEMENT FOR DUMP-CARS. EDGAR W. SUMMERS, Pittsburgh, Pa. Filed Feb. 26, 1918. Serial No. 219,301. (Cl. 105—185.)

1. An inclined door for bottom discharge dump cars having independent mountings at its upper and lower edges arranged to allow the door at the beginning of its opening movement to pivot about its upper edge and allow the lower edge to drop away from the load and after such initial movement to move bodily outward without materially lowering its center of gravity, and door actuating means, substantially as and for the purpose described.



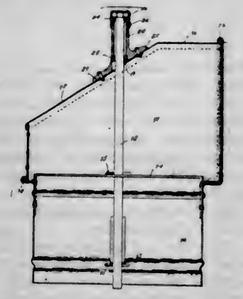
4. In a bottom discharge railway dump car, a pair of longitudinally hung doors in the bottom thereof meeting on the longitudinal center line of the car in their closed position, independent mountings for the upper and lower edges of said doors so arranged that the initial opening movement of said doors is about fixed points at or near their upper edges and the concluding opening movement is a substantially bodily movement sidewise, and door actuating means, substantially as and for the purpose described.

7. In a bottom discharge railway dump car, a pair of longitudinally hung doors in the bottom thereof meeting on the longitudinal center line of the car when closed, actuating means for said doors comprising a longitudinal shaft mounted on each side of the car at the side of the discharge opening, means directly connecting each of said shafts to the door on the opposite side of the car, and operating means for said shafts.

9. A hopper car body provided with a central bottom discharge opening arranged low and near to the track and provided with end plates sloping from the end of the body to said opening and being of V-form transversely of the car, thereby providing a rectangular discharge opening, oppositely swinging inclined doors longitudinally pivoted at the sides of said discharge opening and inclining downwardly and meeting at the longitudinal center line of the car when closed and so mounted that at the beginning of their opening movements they pivot about their upper edges to allow their lower edges to drop away from the load and after such initial pivotal movement they move bodily to increase their inclinations and increase the door opening without materially lowering their centers of gravity, and door actuating means.

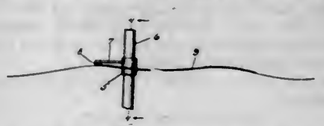
[Claims 2, 3, 5, 6, and 8 not printed in the Gazette.]

1,272,872. VENTILATOR. DENTON K. SWARTWOUT, Cleveland, Ohio, assignor to The Ohio Blower Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 30, 1915. Serial No. 47,955. (Cl. 98—3.)



A ventilator comprising a vertical shaft or spindle and a rotary cowl or hood, said cowl or hood having an axial opening in its top wall, and a cast metal sleeve having a flange at its lower end, said sleeve and flange being secured upon the exterior of the cowl, with the sleeve in register with said opening, a cap secured to the upper end of the sleeve, a collar fixed to said shaft near its upper end and within said cap, and anti-friction balls arranged within said cap above said collar and surrounding the upper end of said vertical shaft or spindle for the purpose described.

1,272,873. PERISCOPE ATTACHMENT FOR SUBMARINES. ALVA P. TESKEY, Luverne, Minn. Filed Sept. 10, 1917. Serial No. 190,610. (Cl. 114—15.)



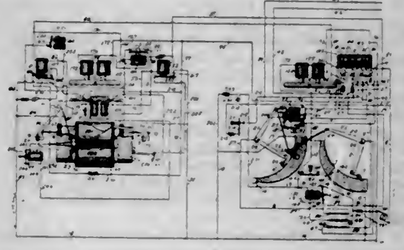
1. The combination with a periscope; of a wake-concealing device made of flexible material connected with said periscope for movement longitudinally thereof and extending laterally of the periscope in all directions.

4. The combination with a periscope, of a wake concealing device including a sheet of flexible material adapted to float upon the surface of the water.

6. The combination with a periscope, of a wake concealing device including a sheet of flexible material adapted to float upon the surface of the water, and a sleeve movable longitudinally of said periscope and carrying said sheet.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,272,874. TELAUTOGRAPHIC APPARATUS. GEORGE STEELE TIFFANY, Summit, N. J., assignor to Gray National Telautograph Company, New York, N. Y., a Corporation of Virginia. Filed Feb. 24, 1912. Serial No. 679,598. Renewed Dec. 1, 1917. Serial No. 205,003. (Cl. 178—20.)



1. In a telautographic system, the combination, with main line tracer circuits from the transmitter to the receiver, a transmitter tracer, a receiving pen, a magnetic circuit at the receiver comprising a pair of core pieces, end yokes in contact with one core piece, said end yokes having holes through which the other core piece extends loosely to form a gap at each end of the said core piece, and means for energizing said magnetic circuit, of coils surrounding the latter core piece, and each movable in the respective gap in the magnetic circuit in a direction parallel to the axis of the core piece which said coils surround, said coils being included in the main line circuits, and connections between said coils and the receiving pen for effecting lateral movement thereof in accordance with the lateral movements of the transmitting tracer, substantially as described.

10. The combination with a telautographic instrument, of a rectilinearly movable paper-gripping device, an electro-magnet and circuit therefor for operating it, and means controlled by the operator for making and breaking said circuit, substantially as described.

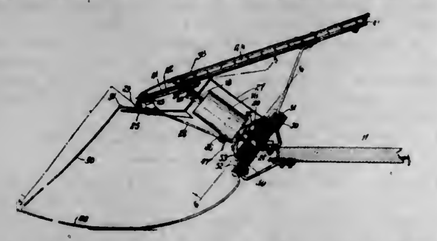
15. In a telautographic system the combination of main line tracer circuits from the transmitter to the

receiver, a receiving pen, a suitable magnetic field in the receiver and pen-controlling members movable therein in accordance with the currents traversing the main lines, and a signal current controlled by the magnetic field, substantially as described.

18. In a telautographic system the combination of a transmitter and receiver at one station, a transmitter and receiver at another station, main line tracer circuits between the two stations, an electrically operated switch mechanism at each transmitter for electrically connecting it with the receiver of the other station through said tracer lines, and switch locking means at each station controlled from the other station whereby operation of such switch mechanism at the station which is receiving is prevented, substantially as described.

[Claims 2 to 9, 11 to 14, 16, 17, 19, and 20 not printed in the Gazette.]

1,272,875. FLAX ATTACHMENT FOR HARVESTERS. THOMAS HANSEN TOMBYLL, Montreal, Canada, and LORENZ BOTTGER, New York, N. Y., assignors to United States Flax Harvesting Co. (Inc.), City Island, N. Y. Filed Jan. 5, 1917. Serial No. 140,799. (Cl. 55—66.)



1. A flax pulling attachment for harvesters including pairs of co-acting hollow rolls, said rolls having a resilient periphery.

13. A flax pulling attachment for harvesters including a row of co-acting pulling elements, means for driving said elements, guiding means located above said elements for directing the flax therebetween and means carried by the guiding means for bunching the flax fed to the pulling elements.

18. A flax pulling attachment for harvesters including a row of co-acting rolls, means for driving said rolls from below, and a flax guard for said driving means.

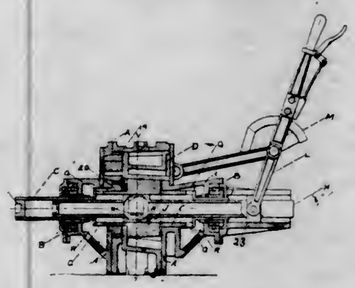
21. A flax pulling attachment for harvesters including a row of co-acting rolls, dividers in front of pairs of said rolls, and a grain lifter pivotally connected to the dividers.

23. A flax pulling attachment for harvesters including substantially hollow pulling rolls, rotatable shafts carrying the rolls, driving means for the shafts and a member having a tapered outline protecting said driving means and extending upwardly into the rolls encircling the shafts whereby a long bearing is provided for the shafts.

[Claims 2 to 12, 14 to 17, 19, 20, 22, and 24 not printed in the Gazette.]

1,272,876. BALANCED REVERSING ROTARY ENGINE. JAMES WALLACE TYGARD, Plainfield, N. J. Filed Jan. 11, 1915. Serial No. 1,687. (Cl. 121—51.)

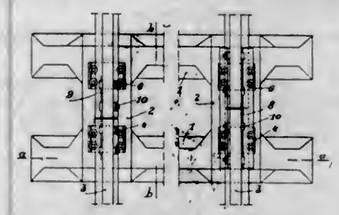
1. In a rotary steam engine the combination of a fixed member; a rotary member mounted in the fixed member and carrying a plurality of pistons adapted to travel in a chamber within the fixed member; revolving abutments actuated by the rotary member; having cut-away portions adapted to allow the passage of the pistons across their axis and to close the piston pathway after such passage; a central supply valve mounted in a bore in the rotary member and movable back and forth in said bore; ports in the valve adapted to co-act with ports in the rotary member leading to one side of the pistons; ports on the rotary member leading from the opposite side of the pistons to the shaft bore; ports leading from the shaft bore to exhaust passages in the fixed member; means whereby movement of the supply valve in the bore will cause the valve ports to register alternately with either set of piston ports or to such position as to register with neither set of piston ports allowing a single movement of the valve to stop, start and reverse the engine; means whereby the products of exhaust are continuously expelled from the engine, and means whereby the rotation of the rotary member will cause the admission of pressure into the spaces between the moving pistons and the abutment closed piston pathway at such times as to produce a continuous rotative effort of the rotary member.



14. In a rotary engine, the combination of two relatively rotatable members having contiguous conical surfaces, one having a plurality of conical recesses each having bearings at its ends only, a plurality of conical rotary abutments rotatable in said recesses and supported at their ends solely by said bearings, just out of actual contact with the recesses to admit a film of gas or vapor between their surfaces, and means for adjusting said abutments longitudinally for regulating the clearance.

[Claims 2 to 13 and 15 to 19 not printed in the Gazette.]

1,272,877. DEVICE FOR STRENGTHENING RAIL-JOINTS. EDMOND VAGNEUX, Clermont-Ferrand, France. Filed Jan. 16, 1915. Serial No. 2,759. (Cl. 238—3.)



1. A support in one piece comprising two cross ties connected together by longitudinals, said support being located solely under the rail points and consisting of a block of reinforced concrete, said support being provided with bearing surfaces for supporting the rails, the ends of which latter are unsupported or overhanging, the centers of the bearing surfaces being located between the axes of the cross ties.

2. A support in one piece comprising two cross ties connected together by longitudinals, said support being located solely under the rail joints, and consisting of a block of reinforced concrete, said support being provided with bearing surfaces for supporting the rails, the ends of which are connected together by an unsupported or overhanging joint, the centers of the bearing surfaces being located between the axes of the cross ties, the rails being fixed upon the support by means of screw spikes screwed into holes provided with metal linings of the Thiollier type sunk in the concrete.

1,272,878. FOLDING BOX. RICHARD H. VOIGT, Milwaukee, Wis. Filed Nov. 13, 1914. Serial No. 871,866. (Cl. 229—34.)



1. A folding box, consisting of a blank having side and end creases to form bottom, side, end and side portions and reinforcing end portions having edge notches, the side walls adapted to be folded over upon the bottom portion and the reinforcing end walls folded over upon the ends walls and secured thereto, the reinforcing end walls having locking flaps extending approximately parallel to the end creases which engage the edge notched locking parts of the side walls when the blank is opened into box form to form side walls of single thickness of material throughout their lengths.

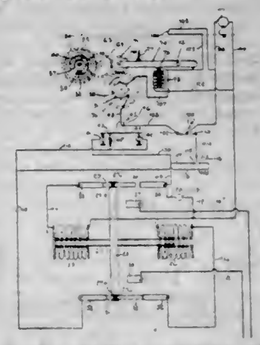
4. A folding box, consisting of a blank having side creases and transverse creases to form bottom, side, end and reinforcing end walls, the side walls near their ends being provided with locking recesses and being creased on lines extending diagonally from the corners of the bottom portion of the blank to the said recesses, the end walls of the blank being recessed to form transversely extending locking flaps within the marginal edges of the end walls which underlap and engage the diagonally creased portions of the side walls adjacent to the side recesses, the side walls adapted to be folded over the bottom portion and the reinforcing end walls adapted to be folded over the end walls and secured thereto when in collapsed position, said construction permitting the end walls to be bent upwardly and the side walls to be bent upwardly by the movement of the end walls and when in upright position the transversely extending locking flaps underlapping the diagonally creased end portions of the side walls adjacent to the end walls to lock the parts in open position, the side walls of said box being formed of single thickness of material throughout their length.

[Claims 2 and 3 not printed in the Gazette.]

1,272,879. ELECTRIC-CIRCUIT-CONTROLLING MECHANISM. JULIUS B. WANTZ, Chicago, Ill., assignor, by mesne assignments, to Victor Electric Corporation, Chicago, Ill., a Corporation of New York. Filed June 4, 1914. Serial No. 842,948. (Cl. 175—281.)

1. In circuit-controlling mechanism, the combination of a pair of contacts, a shiftable contact member movable to alternately engage said contacts, a movable member provided with projections adapted to be moved successively into engagement with said contact member for actuating the latter out of engagement with one of said contacts and into engagement with the other of said contacts, said projections being relatively abrupt and said contact member operating to return to normal position in which it engages the other of said contacts, after disengaging from a projection and opposing the surface of said movable member at the base of the projection, a constantly operating power device and means for alternately connecting and disconnecting said member from said power device for controlling the actuation of said member from said device while the latter is operating.

4. In circuit-controlling mechanism, the combination of a pair of stationary contacts, a movable contact member coöperating with said contacts, a shiftable device for operating said movable contact member, means for shifting said device comprising a gear connected with said member, gear-mechanism, means for operating said gear-mechanism, a gear constantly in mesh with said gear-mechanism and shiftable into and mesh with said first-named gear for driving the latter from said gear-mechanism, and means for shifting said last-named gear.

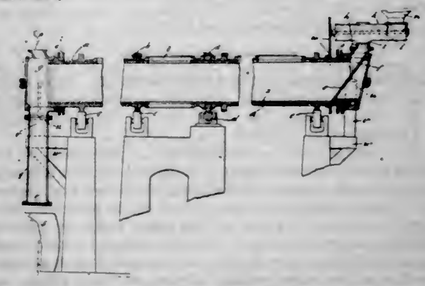


13. In circuit-controlling mechanism, the combination with a main line circuit, of a switch for opening and closing said circuit, a pair of electro-magnets, one of said magnets when energized moving said switch to open position and the other magnet when energized moving said switch to closed position, a second switch having two positions, the normal position closing the circuit through the magnet which causes said main line switch to be open, and its second position closing the circuit through the magnet which causes said main line switch to be closed, means adapted to operate said second switch to move it to its said second position, time-operated mechanism to control the movement of said last-mentioned means, and manual means to throw said time-mechanism into and out of operation.

17. In circuit-controlling mechanism, the combination with a main line circuit, of a switch for opening and closing said circuit, a pair of electro-magnets, one of said magnets when energized moving said switch to open position and the other magnet when energized moving said switch to closed position, a second switch having two positions, the normal position closing the circuit through the magnet which causes said main line switch to be open, and its second position closing the circuit through the magnet which causes said main line switch to be closed, a rotatable member provided with projections which are engaged by said second switch in the rotation of said member and which operate to move said second switch to its said second position, time-operated mechanism to control the movement of said rotatable member, and manual means to throw said time-mechanism into and out of operation.

[Claims 2, 3, 5 to 12, 14 to 16, and 18 not printed in the Gazette.]

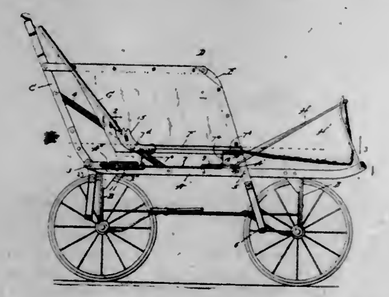
1,272,880. MANUFACTURE OF BLEACHING-POWDER. JOSEPH WILLIAM MOORE, Runcorn, England, assignor to Castner-Kellner Alkali Company, Limited, London, England. Filed Feb. 5, 1918. Serial No. 215,528. (Cl. 23—13.)



A process for the manufacture of bleaching powder, which consists in causing lime to travel down an inclined

rotating tube about 80 feet long and causing chlorin to travel up the tube by applying a slight suction at the upper part of the tube.

1,272,881. PERAMBULATOR. ARTHUR J. ADAMS, Bay City, Mich., assignor, by mesne assignments, to Ferris-Stevenson Corporation, Buffalo, N. Y., a Corporation of New York. Filed Feb. 20, 1917. Serial No. 149,775. (Cl. 21—12.)



1. In a perambulator, the combination with a frame, of a seat and tension supporting means forming the sole support for said seat, including seat supports and substantially horizontal spring devices disposed beneath the plane of the seat and connecting said seat supports to said frame.

2. In a perambulator, the combination with a supporting frame, of a seat equipped with depending brackets, and tension suspension means forming the sole support for said seat and comprising means connecting the front end of said brackets movably with the frame, and substantially horizontal coil-spring connections between the rear ends of the brackets and the frame.

3. In a perambulator, the combination with a substantially horizontal supporting frame, of a seat disposed above said frame, and tension suspension means forming the sole support of said seat and comprising link supports, including coil-springs disposed substantially in the plane of the main frame, and seat-carrying members connected therewith.

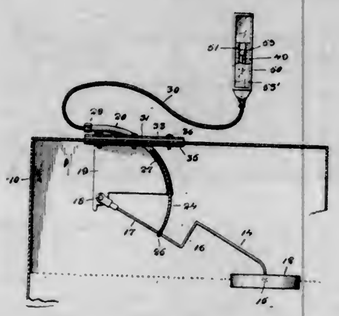
4. In a perambulator, the combination with a main horizontal frame and cross-members carried thereby, of a seat disposed above the plane of said cross-members and equipped at its lower side with brackets, and link and spring connections between said brackets and said cross-members and forming therewith the sole support of said seat.

5. In a perambulator, the combination with a main horizontal frame, of a seat disposed above the plane thereof, a pair of substantially longitudinal brackets carrying said seat, links connecting said brackets with the frame near one end of the seat, and substantially horizontal coil springs connecting said brackets with the frame near the opposite end of the seat.

[Claim 6 not printed in the Gazette.]

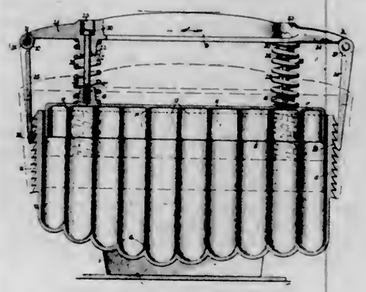
1,272,882. FLOAT INDICATING DEVICE. WILLIAM S. ADAMS, Riverton, Wyo., assignor of one-half to Clifford M. Cole, Chicago, Ill. Filed Feb. 8, 1917. Serial No. 147,459. (Cl. 73—82.)

In a device of the class described, a plate member provided with an opening therein, a corresponding plate member having an opening therein, a plate member of segmental formation passing through each of the aforesaid openings and secured to one of the plate members, the segmental member having a tubular portion formed along the curved edge thereof, and being provided with an offset portion at the inner angular portion of the segment, and with a projecting member constituting a stop on said offset, a pivotally mounted arm connected with the offset portion, a float, and means for pivoting said arm to the float, a flexible member connected with the arm at a



point between its pivotal connection with the segment and with the float, and an indicating device connected to the flexible member.

1,272,883. HAM-BOILER. HANS ADELMANN, New York, N. Y., assignor to Ham Boiler Corporation, New York, N. Y., a Corporation of New York. Filed Sept. 5, 1917. Serial No. 189,714. (Cl. 100—57.)

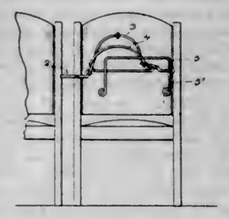


1. In a ham boiler, the combination of a body receptacle having formed as an integral part of each end a vertical series of rack teeth which project outward and downward, a cover for the receptacle telescoping therewith, a bar having ends projecting over and beyond the vertical planes of the racks aforesaid, members pivoted to the ends of the bar and having hooked coöperation with the rack teeth to hold the bar in fixed adjusted position with respect to the body, and resilient means interposed between the cover and the bar.

2. In a ham boiler, the combination with a receptacle and a cover telescopically connected therewith, of a bar extending above the cover and longitudinally of the same and the receptacle, members pivoted to the ends of the bar and coöperating with the ends of the receptacle to hold the bar from upward movement, a pair of bolts connected to the cover and slidable through the bar and serving to limit the extent of relative separation of the bar and cover, and a pair of springs acting between the cover and the bar tending to prevent relative movement of the cover and bar toward each other.

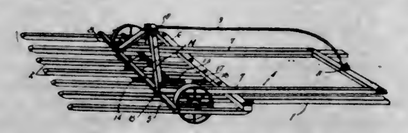
3. In a ham boiler, the combination with a receptacle and cover telescopically connected therewith, of a bar extending above and longitudinally of the cover, a pair of bolts extending between the bar and the cover and fixed to one of them and slidable through the other, a pair of springs between the bar and the cover tending to keep the cover and the bar separated as far as will be permitted by the bolts, and means to lock the cover and bar to the receptacle.

1,272,884. GARMENT-HANGER. BESSIE M. ALLEN, Kingston, N. Y. Filed Apr. 24, 1918. Serial No. 230,529. (Cl. 155—26.)



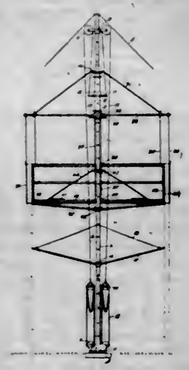
A device of the class described comprising a main member having a circular loop formed at one end thereof, a pair of U-shaped loops projecting upwardly from said member and forming a clamp, and a looped part connected with said member and forming a coat supporting portion.

1,272,885. ATTACHMENT FOR HAY-RAKES. ALFRED G. ARGO, Kenesaw, Nebr. Filed Nov. 27, 1916. Serial No. 133,687. (Cl. 56—137.)



The combination with a sweep rake having a hay ejector, of a U shaped bracket fixed transversely to the ejector medially thereof, and a substantially Y shaped trip member having a fish tail shaped ground engaging end and the opposite arm ends pivotally connected to the sides of said bracket for free vertical swinging movement, and a flexible connection joined at one end to the rear end of said rake and at its opposite end to the trip member near its fish tail shaped end for the automatic engagement of the latter end in the ground and its disengagement therefrom on movements of the ejector.

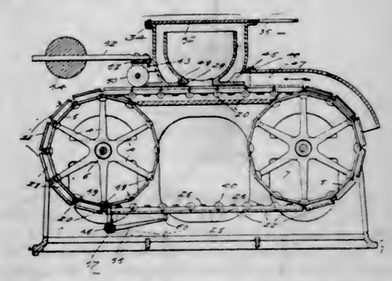
1,272,886. APPARATUS FOR MOLDING SILOS AND THE LIKE. THOMAS B. ATKINS, Canutillo, Tex. Filed Aug. 25, 1917. Serial No. 188,239. (Cl. 25—127.)



1. An apparatus of the character described comprising a mast, a sleeve slidably mounted thereon, means for moving the sleeve on the mast, means for securing the sleeve at an adjusted position upon the mast, radially disposed arms connected with the sleeve, hook members connecting the outer portions of the arms with the sleeve, hangers depending from the outer portions of the said arms, wall form sections connected with the said hangers, the outer wall form section having overlapping edge portions, means for expanding the outer wall form sections with relation to each other, hangers depending from the said sleeve, rings carried by the last mentioned hangers, arms carried by the said rings, levers mounted upon the arms, frames carried by the levers and adapted to bear against the inner wall form sections, jacking devices for spreading the said frames with relation to each other, filling strips adapted to be interposed between the frames and means for sustaining the inner wall form sections at adjusted positions along the structure.

[Claims 2 and 3 not printed in the Gazette.]

1,272,887. METALLIC-LETTER-CASTING MACHINE. FRANK W. AYERS, Portland, Oreg., assignor of one-half to Charles C. Felt, Portland, Oreg. Filed Feb. 16, 1917. Serial No. 149,115. (Cl. 22—76.)



1. A metallic letter casting machine including a bowl provided at the bottom with a centrally arranged outlet, said bowl being composed of inner and outer shells connected together at the said outlet centrally of the bottom and being spaced apart from the bottom to the top to provide an uninterrupted open intervening space, extending entirely around the bowl and beneath the bottom thereof, said outer shell being provided at one side with an opening, heating means located at the said opening for heating the contents of the inner shell, and a conveyer provided with molds arranged to pass beneath the said outlet.

4. A metallic letter casting machine including a superimposed bowl or receptacle having an outlet, a frame or casing supporting the bowl or receptacle and provided with opposite slots, transverse shafts, one of the said shafts extending through the said slots, sprocket wheels mounted on the said shafts, an endless sprocket chain arranged on the sprocket wheels and having molds adapted to be carried to and from the outlet of the bowl by the said chain, and means for adjusting the chain for maintaining the same at the proper tension, said means comprising inner and outer plates having bearing openings receiving one of the said shafts, fastening means connecting the said plates, and adjusting screws for moving the said plates inwardly and outwardly.

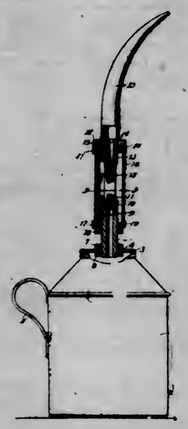
5. A metallic letter casting machine including a bowl or receptacle having an outlet, a conveyer provided with molds and adapted to carry the same to and from the said outlet, and a weighted lever provided with a roller arranged to engage the cast material after the same leaves the bowl.

6. A metallic letter casting machine including vertical sprocket wheels, a conveyer chain arranged on the sprocket wheels and having upper and lower horizontal flights and provided with molds, means for supplying material to the said molds, and an ejecting device comprising an angle lever pivoted below the lower flight, a spring for urging the angle lever in one direction, and lugs carried by one of the sprocket wheels and arranged to engage and release the said lever, one arm of the lever being arranged to engage the said molds of the bottom flight.

7. A metallic letter casting machine including a frame or casing having a longitudinally disposed hot air outlet constituting a draft passage, a superimposed bowl composed of spaced inner and outer shells and having an opening communicating with the space between the shells and the said passage, the inner shell being provided with an outlet, and a conveyer having molds arranged to pass beneath the outlet of the inner shell and along the said passage whereby the chill is removed from the molds.

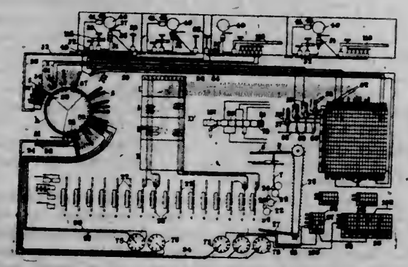
[Claims 2, 3, and 8 not printed in the Gazette.]

1,272,888. OIL-CAN INDICATOR. LEONARD S. BALUTA, Keiser, Pa. Filed Apr. 4, 1916. Serial No. 88,887. (Cl. 221—44.)



In an oil can of the class described the combination of a body, a filling cap mounted upon said body, a conduit having threaded engagement with said cap, a pair of arms extending upwardly from the conduit providing supporting means for an extension formed on the upper ends thereof, a transparent body surrounding the conduit, fluid tight connections between the opposite ends of said body and the conduit, a detachable nipple connected to the conduit providing means for adjusting the same to different grades of oil, and a spout mounted upon the extension for a purpose described.

1,272,889. CALCULATING-MACHINE. MARK BARR, London, and ROBERT ARTHUR BELL, Wimbledon, England, assignors of one-third to Henry Ramie Beeton, London, England. Filed Oct. 24, 1911. Serial No. 656,366. (Cl. 235—59.)



1. In a calculating machine of the character set forth, groups of separate objects to represent the partial products, the number in each group corresponding to the value of the particular partial product concerned.

7. In a calculating machine of the character set forth, groups of separate objects to represent the partial products, the number in each group corresponding to the value of the particular partial product, means for finding the partial products required for any particular calculation, means for determining the value of the partial products when found, means for adding the various partial products when found and determined in order to give the complete product, and means for utilizing the significant positions of the totalizing devices to show or print the total product or extension.

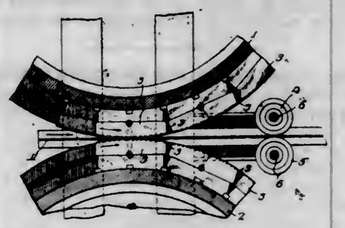
30. In a calculating machine of the character set forth, balls to represent the partial products, a hopper for storing said balls, tubes depending from said hopper and adapted to deliver said balls when required, a type-writer machine and a coördinator operated upon depressing the type-writer keys for determining which of said tubes are to be operated for any given values of the keys depressed.

40. In a calculating machine of the character set forth, balls to represent the partial products, a hopper for storing said balls, tubes depending from said hopper, troughs arranged beneath said tubes and having delivery openings normally out of register with said tubes, a type-writer machine, means operated on depressing the type-writer keys for determining which of said tubes are to be operated corresponding to the values of the keys depressed, means for moving said tubes into register with the corresponding delivery openings and counting mechanism to which said balls are delivered.

51. In a calculating machine of the character set forth, balls to represent the partial products, a hopper for storing said balls, tubes depending from said hopper, a type-writer machine, means operated on depressing the type-writer keys for delivering the required number of balls from said tubes, counting mechanism for giving the value of the balls so delivered, means for printing the result of the calculation and a minor coördinator to facilitate the printing of split numbers.

[Claims 2 to 6, 8 to 29, 31 to 39, and 41 to 50 not printed in the Gazette.]

1,272,890. METHOD OF SHEARING METALS. ALBERT J. BATES, Chicago, Ill., assignor to Bates Expanded Steel Truss Co., Wilmington, Del., a Corporation of Delaware. Filed Dec. 22, 1915. Serial No. 68,149. (Cl. 164—17.)

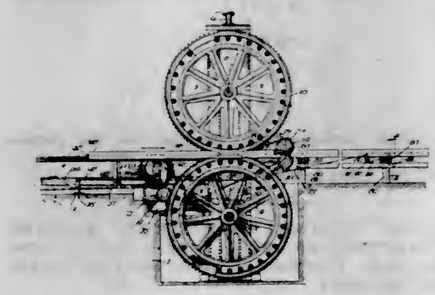


A method of shearing steel to provide alternating slits and intact portions which comprises successively subjecting the cold steel to pressure between a pair of shear elements, and advancing the shear elements toward each other after contact with the steel a distance substantially equal to one-half the thickness of the steel to be sheared to form each slit in a single operation.

1,272,891. ROTARY SHEARS. ALBERT J. BATES, Chicago, Ill., assignor to Bates Expanded Steel Truss Co., Wilmington, Del., a Corporation of Delaware. Filed Dec. 22, 1915. Serial No. 68,145. (Cl. 164—6.6.)

1. A machine for shearing cold metal, comprising a frame, a pair of members rotatably supported thereon, and shear elements mounted on the peripheries of said members to coöperate as said members are rotated, the axes of said members being so disposed that the shear elements on the respective members are spaced apart a distance substantially equal to one half the thickness of the material sheared, at a line joining said axes.

6. A rotary shear comprising a frame, a pair of members rotatably supported thereon, a source of power, means for operatively connecting said members at will to said source of power, shear elements secured to the periphery of said rotatable members and adapted to coöperate as said members are rotated, an elongated table to support the material to be sheared, and means thereon to advance said material toward said members while the latter are connected to said source of power.

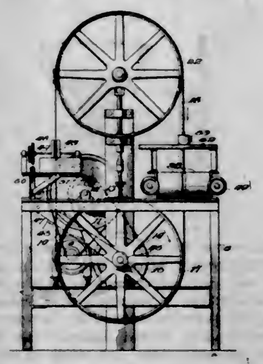


15. A machine for shearing cold metal comprising a frame, a pair of rotatable members mounted thereon and provided with coöperating shear elements, an elongated table, means thereon to feed material to be sheared toward said members, a source of power for actuating said members and feeding means, means for automatically disconnecting said source of power from said members and feeding means at the conclusion of each shearing operation, and means preventing reëstablishment of the connection between said source of power and said members and feeding means until the sheared material has been removed from the machine.

22. A rotary shear, comprising a support, a pair of rotatable members mounted thereon, shear elements carried by each of said rotatable members and adapted to coöperate as said members are rotated, coöperating rolls through which the sheared material passes as it leaves said rotatable members, means for continuously driving said rolls, means for establishing a driving connection between said driving means and said rotatable members, and means for automatically breaking said driving connection after each rotation of said rotatable members.

[Claims 2 to 5, 7 to 14, and 16 to 21 not printed in the Gazette.]

1,272,892. CONFECTIONERY MACHINERY. PHILLIP J. BAUR, Philadelphia, Pa. Filed Nov. 15, 1917. Serial No. 202,166. (Cl. 146—12.)



1. In an apparatus of the character described, in combination, a supporting frame, a conveyer, an endless cutting instrumentality, pulleys therefor, a single driving means for operating the conveyer and cutting instrumentality, and means for varying the tension of said cutting instrumentality comprising a tilting journal box for one of the pulleys, and means for tilting the same about a line transverse to the axis of said pulley and at one side thereof.

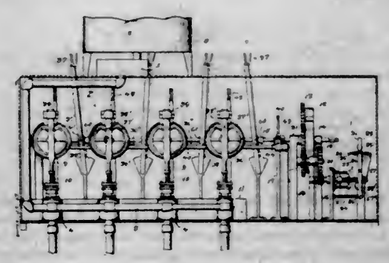
2. In an apparatus of the character described, in combination, a frame, an endless cutter, and means for cleaning said cutter after the cutting operation including a pair of disks disposed at opposite sides of the cutter having cork inserts adapted to clean the same as it passes therebetween.

1,272,893. HEADLIGHT-SWITCH FOR AUTOMOBILES. HARVEY E. BAWTINHEIMER, Red Deer, Alberta, Canada. Filed July 21, 1917. Serial No. 182,087. (Cl. 175—282.)



In an electric switch, a switch plate having an off-set member and a shoulder, a pair of terminal poles in the plate, a pair of levers pivoted on the plate and adapted to be connected respectively for grounding and with a magneto, and a hand lever having said levers fulcrumed thereto and working on the offset member for engaging the shoulder to limit the movement of said levers with respect to the terminal poles.

1,272,894. VENDING-MACHINE. EDGAR V. BEAN, Danville, Ill., assignor of one-half to James Peery, Guymon, Okla. Filed Oct. 20, 1917. Serial No. 197,732. (Cl. 221—101.)

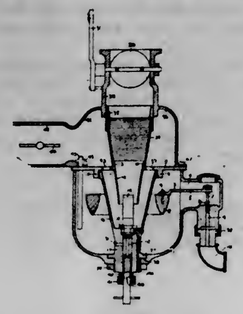


1. A vending machine, comprising a source of fluid supply, a plurality of valves connected with said source, a power shaft, a shaft connected with each valve for operating same, means for connecting any one of the said shafts to the power shaft, coin controlled means for controlling the rotation of said valve shafts, and means connected with the aforementioned means for controlling the rotation of the power shaft.

2. A vending machine, comprising a source of fluid supply, a plurality of valves connected with said supply, cams connected with said valves, a shaft carrying each cam, a power shaft, gears for connecting said power shaft with the cam-shafts, hand levers for moving said gears into operative position, coin controlled means for controlling the rotation of the cam-shafts, and means connected with the aforementioned means for controlling the power shaft.

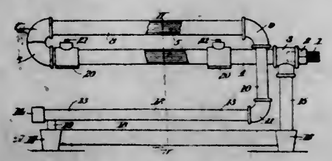
[Claims 3 and 4 not printed in the Gazette.]

1,272,895. CARBURETER FOR GAS-ENGINES. THEODATUS G. BEEDE, Youngstown, Ohio. Filed Mar. 21, 1917. Serial No. 156,273. (Cl. 261—41.)



In a carbureter, the combination of a primary jet located within an air chamber centered within a fuel bowl, a venturi located directly above said primary jet, an auxiliary air valve consisting of a closely wound wire coil spring attached to the upper portion of the venturi, a circular band slidably fitted within a supply pipe, the upper portion of the above described auxiliary air valve firmly fastened to the circular band, an air chamber surrounding said auxiliary air valve, a needle jet casing, a fuel inlet channel, for said needle jet casing, an air chamber surrounding the lower portion of said needle jet casing, an air channel connected to said air chamber, channels extending upwardly through the extended wall of the needle jet casing connecting the said lower air chamber with an upper air chamber which surrounds the needle jet casing at its upper portion, a primary jet cap provided with a circular inverted cup, channels radiating from said cup substantially as described for the purpose set forth.

1,272,896. OIL-BURNER. LEON K. BELCHER, New York, N. Y. Filed Aug. 15, 1917. Serial No. 186,358. (Cl. 158—63.)



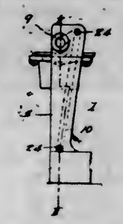
1. In a burner of the character described, the combination with a burner, of a generating pipe arranged directly over the burner, flame deflectors on said generating pipe, a drying and expansion pipe arranged over the generating pipe and communicating therewith, said drying and expansion pipe being protected from the flame by the generating pipe and the deflectors thereon, and a pipe of smaller gage than the drying and expansion pipe leading therefrom to the burner.

[Claim 2 not printed in the Gazette.]

1,272,897. OIL-BURNER. LEON K. BELCHER, New York, N. Y. Filed Dec. 31, 1917. Serial No. 209,710. (Cl. 158—64.)

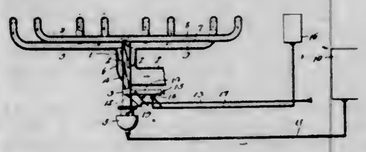
1. An oil burner of the character described having a gas generating chamber, a burner having sliding interlocking connection with the under surface of the chamber, and means for supplying gas from said chamber to the burner.

4. A burner comprising a body portion having a central bore, a disk covering the bore at the top of the body portion, and means for retaining the disk in spaced relation to the body portion for providing an annular flame opening around the top of the burner, said disk being dished over the bore, and the top of the body portion being correspondingly concaved for the purpose specified.



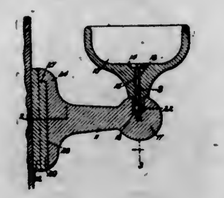
[Claims 2 and 3 not printed in the Gazette.]

1,272,898. VAPORIZER AND MIXER FOR INTERNAL-COMBUSTION ENGINES. RALPH B. BELDON, Jefferson, Ohio. Filed Sept. 12, 1916. Serial No. 119,742. (Cl. 257—241.)



The combination with an internal combustion engine, of an exhaust manifold outlet embodying a relatively large main body portion, a fuel intake pipe having spirally disposed deflectors on the outer surface thereof lying within said outlet, said fuel intake pipe extending centrally through said body portion of the exhaust manifold and having internal spirally disposed deflectors, manifold branches leading from the said intake pipe, and exhaust manifold branches leading toward the said main body portion of the exhaust manifold, the said intake and exhaust manifold branches for each cylinder being formed by the same pipe, the latter having a partition to separate the intake from the exhaust and cause the exhaust to heat the incoming mixture.

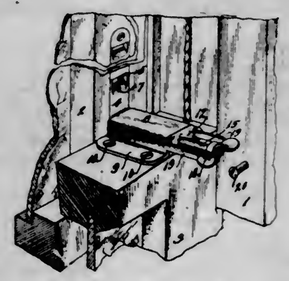
1,272,899. BATH-ROOM FIXTURE. EMILE BERKO, Brooklyn, N. Y., assignor to Charles Jaeger, Brooklyn, N. Y. Filed Nov. 29, 1916. Serial No. 134,055. (Cl. 45—28.)



2. A bath room fixture comprising a shank member having a head formed in one side with a socket extending toward but short of the center of the head and also counterbored forming a shoulder, said socket being provided with side seats or extensions on opposite sides of the shoulder, a nut seated against the shoulder and spaced from the side seats and walls of the socket, anchoring means surrounding the nut extending into said side seats to lock the nut from movement, a bowl member having a shank extending into the socket and provided with a central bore registering with the hole in the nut, and a threaded bolt extending into and through said bore through the nut and into the counterbore, substantially as set forth.

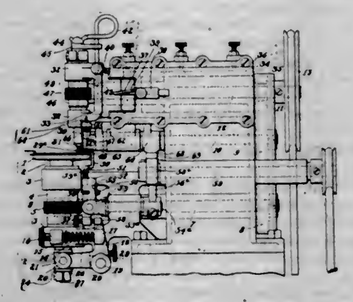
[Claims 1 and 3 not printed in the Gazette.]

1,272,900. AUTOMATIC SASH-LOCK. HARRY BERMAN, Brooklyn, N. Y. Filed Apr. 19, 1917. Serial No. 163,285. (Cl. 16—58.)



A window sash lock, comprising a casing closed at its rear end, a spring actuated bolt mounted therein and having a portion projecting through the rear end of the casing, a head loosely mounted on the rear extremity of the projecting portion of the bolt for rotation, the sides of the casing having integral extensions forming spaced arms with the ends of which the rotatable head is engageable to hold the bolt retracted in the casing, and relatively stationary means adapted to be impinged upon movement of the sash to turn the head relatively to the bolt to disengage the head from the arms whereby the bolt may move into locking position.

1,272,901. MACHINE FOR OPERATING ON INSOLES. FREDERIC E. BERTRAND, Swampscott, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Sept. 25, 1911. Serial No. 651,056. (Cl. 12—20.)



1. A machine for reinforcing insoles, having, in combination, a work support, and a single pair of inside and outside forming devices arranged to operate on an insole mounted on the work support, the fabric engaging and forming portion of one device being a material distance in advance of the fabric engaging and forming portion of the other in the line of feed, to continuously and progressively form a bead or crimp in the reinforcing fabric and secure it to the insole, substantially as described.

4. A machine for reinforcing insoles, having, in combination, a work support, and a pair of rotary tools for crimping the reinforcing material into a bead, said tools having complementary inclined faces adapted to engage the bead from base to top and bend it inward at an inclination to the insole and operating with the bead between them, one in advance of the other, substantially as described.

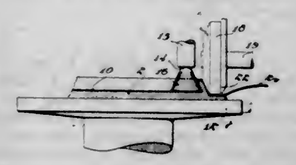
23. A machine for applying reinforcing material to lipped insoles, having, in combination, means for forming a bead or crimp in the reinforcing material and securing it to the lip of the insole and the feather, and means for removing a portion of the reinforcing material from above the margin of the feather, along the shank portion at least, of the insole, substantially as described.

35. A machine for operating on reinforced insoles, having, in combination, means for supporting and feeding the insole, and cutting means for severing the reinforcing fabric alone along a line on the feather, at the shank portion at least, lying within the edge of the insole, substantially as described.

45. A machine for operating on soles having a reinforced stitch receiving rib, having, in combination, a horizontal work support, a fabric pressing roll at the inner side of the rib mounted to rotate about a substantially vertical axis, a fabric pressing roll at the outer side of the rib mounted to rotate about a substantially horizontal axis, and a fabric trimming cutter above the feather having its blade mounted adjacent the outer face of said outside pressing roll, substantially as described.

[Claims 2, 3, 5 to 22, 24 to 34, 36 to 44, and 46 not printed in the Gazette.]

1,272,902. METHOD OF MAKING REINFORCED INSOLES. FREDERIC E. BERTRAND, Lynn, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Original application filed Sept. 25, 1911, Serial No. 651,056. Divided and this application filed Oct. 8, 1915. Serial No. 54,765. (Cl. 12—146.)



1. The method of making reinforced insoles which comprises providing a blank with an upstanding marginal lip or rib, applying reinforcing fabric to the lip or rib, and severing the fabric alone, during the fabric applying operation, along such a line that when the application of the fabric is completed its edge will lie on the feather within the edge of the blank.

5. That step in the method of making reinforced insoles which consists in severing the reinforcing fabric along a line on the feather within the edge of the blank without a reduction of the thickness of the feather.

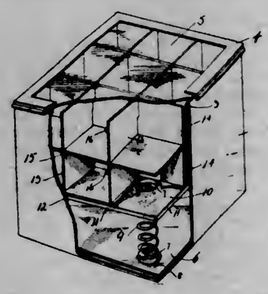
11. A method of trimming the canvas on a reinforced insole, which consists in securing the canvas over the feather and cutting through the canvas on the feather against the surface of the insole, inside of the edge of the insole, without cutting away any of the body of the insole.

[Claims 2 to 4 and 6 to 10 not printed in the Gazette.]

1,272,903. CONTAINER FOR CAKES, CRACKERS, &c. SOLOMON H. BOLTZ, Philadelphia, Pa., assignor of one-fourth to George H. Smith, Philadelphia, Pa. Filed May 16, 1917. Serial No. 168,929. (Cl. 217—64.)

1. In a device of the character stated, the combination with a receptacle having an open end and provided with an inturned bead at said open end, and a false bottom within the container and resting on the bottom thereof, a tray slidably mounted in the container, springs arranged between the false bottom and said tray for normally forcing the latter toward the open end, separators ar

ranged above the tray and adjusting strips adapted to coact with the tray and the separating strips and the



beads on the container for adjusting the position of the tray.

[Claims 2 and 3 not printed in the Gazette.]

1,272,904. WIRE-TWISTING TOOL. JOHN BOBBLEY, Athens, Ohio. Filed Jan. 24, 1918. Serial No. 213,534. (Cl. 140–117.)

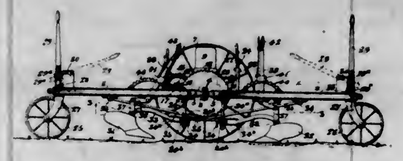


1. A wire twisting tool including a head, a handle projecting rearwardly from the head, a main hooked arm projecting forwardly from the head and opening laterally on one side thereof, an arm projecting from the head at one end of the main hooked arm and terminating in a guide hook which has a spaced and parallel relation to the main hooked arm and opens laterally on the opposite sides of the head, said hooked arms being adapted to loosely receive the strands of wire to be twisted, and a twisting shoulder projecting from the head at the opposite end of the main hooked arm and provided with a guide groove adapted to receive the laterally projecting end of one of the wire strands.

2. A wire twisting tool including a head having a polygonal recess in one side thereof, a handle extending rearwardly from the head, a hooked arm projecting forwardly from the head and adapted to loosely receive the strands of wire to be twisted, a twisting shoulder projecting laterally from one side of the head and provided with a guide groove adapted to receive the laterally projecting end of one of the strands of wire, an arm projecting laterally from the head on the opposite side of the hooked arm and terminating in a guide hook which has a spaced and parallel relation to the hooked arm, a base provided at the inner end of the lateral arm and fitting against the side of the head, a polygonal stud projecting from the base and received within the before mentioned polygonal recess of the head, and a fastening member detachably securing the base to the head.

1,272,905. TRACTOR-PLOW. FRANCIS MARION BOWELL, Laporte, Ind. Filed July 26, 1917. Serial No. 182,899. (Cl. 97—50.)

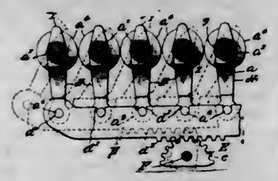
1. A tractor plow having a main frame formed of sections hinged together at their meeting ends, plow members carried by the separate sections of the frame, a power unit on the frame, and traction wheels carrying the frame and provided with an axle constituting a pintle for the hinges and connected to the power unit for actuation thereby.



4. A tractor plow structure provided with a main frame, opposed plows carried by the main frame, means for raising and lowering the share ends of the plows, and a suspension means for the forward end of the beam of each plow comprising a yoke with pivoted suspension legs and a link extending from the yoke toward and connected to that end portion of the main frame remote from the plow.

[Claims 2, 3, and 5 to 7 not printed in the Gazette.]

1,272,906. GRATE AND GRATE-BAR. ANTONIO CARLOS BRAZIL, Rio de Janeiro, Brazil, assignor to Companhia Grelhas Economicas Brasil, a Corporation. Filed Jan. 29, 1918. Serial No. 214,384. (Cl. 126—176.)



1. A grate comprising a plurality of grate bars each having a cross section substantially in the form of two wedges with their larger ends abutting, and the ends of the wedges rounded, each bar being provided with a pivot lug at each end thereof, and with a cylindrical spacing lug intermediate of said ends and coaxial with its pivots, with means for rocking said bars about said lugs, substantially as described.

2. A grate comprising a plurality of grate bars each having a cross section substantially in the form of two wedges with their larger ends abutting, and the ends of the wedges rounded, each bar being provided with a pivot lug at each end thereof, with a shaking pin below said pivot lug, and with a cylindrical spacing lug intermediate of said ends and coaxial with its pivots, with a shaking plate connected to said pins, and means for imparting a vibratory motion to said plate, substantially as described.

3. A grate comprising a plurality of grate bars each having a cross section substantially in the form of two wedges with their larger ends abutting, and the ends of the wedges rounded, each bar being provided with a pivot lug at each end thereof, with a shaking pin below said pivot lug, and with a cylindrical spacing lug intermediate of said ends and coaxial with its pivots, with a shaking plate connected to said pins, and means for imparting a vibratory motion to said plate, comprising rack teeth on said plate and a segmental gear wheel engaging said rack teeth, a spindle for said gear wheel secured eccentric thereto, and means for rocking said spindle, substantially as described.

5. A grate bar having a cross section substantially in the form of two wedges with their larger ends abutting, and the ends of the wedges rounded, said bar being provided with a pivot lug at each end thereof, and with a cylindrical spacing lug located between said pivot lugs and coaxial with said pivot lugs, substantially as and for the purposes described.

[Claims 4 and 6 not printed in the Gazette.]

1,272,907. TOILET-BRUSH. WILLIAM H. BRIDGES, Grand Rapids, Mich., assignor to Benjamin Feld, Fulton county, Ga. Filed July 17, 1915. Serial No. 40,523. Renewed May 13, 1918. Serial No. 234,340. (Cl. 15—30.)



1. In a toilet brush, a sheet metal frame having the sides and one end closed and a narrow rim turned inward from the upper edges of the sides and end, a sheet metal plate pivotally connected at one end to each side of the frame and provided with a series of holes for the reception of the pivotal pins J on the bristle holders, bristle holders having two pins projecting outward from each end, a slide at each side of the brush between the ends of the bristle holders and the pivotal plates, and having right angled slots therein, the pivotal pins at the ends of the bristle holders passed through said slots and one of said pins at each end passing through the holes in the pivotal plates forming fixed pivotal bearings for the holders, and the other pins at the ends of the holders made to slide in the vertical arm of the right angled slots, and means for moving the slotted slides endwise to adjust the bristle holders to hold the bristles in different positions.

2. In a toilet brush, a frame made of sheet metal with the sides and one end closed, inwardly extending flanges at the upper edges thereof, a plate pivotally secured at one end to each side of the frame and provided with a line of holes near the lower edges, a slide located at the side of each of the pivotal plates and made longitudinally movable thereon and having right angled slots with the corner openings opposite the holes in the pivotal plates, and also having a diagonal slot near the adjustable end of each slide, bristle holders mounted in said slides by means of a set of pins on each holder passing through the slots in the slides and into the holes in the pivoted plates and one pair of pins passing through the vertical slots in the inner slides, a longitudinally movable handle slidingly mounted in the frame, pins connected with said handle and passing through the diagonal slots in the slides, in such a manner that the longitudinal movement of the handle will cause the ends of the plates to move laterally and will draw the slides longitudinally to adjust the positions of the bristle holders.

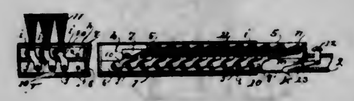
3. In a toilet brush, a sheet metal frame having the back, sides and one end closed, plates pivotally connected at one end with the inner surface of the sides and having a line of holes near one edge, longitudinally movable slides connected with the pivotal plate and having properly formed slots therein, bristle holders having pivot-pins projecting from the ends in position to engage the slots in the slides and the holes in the pivoted plate, a longitudinally movable handle so connected with the longitudinally movable slides as to cause the plates to swing on their pivotal bearing and the slides to move longitudinally to adjust the bristle holders to desired positions, and means for locking the handle in position in the frame.

4. In a toilet brush, a frame having the sides and one end closed, a plate pivotally connected at one end with each side of the frame and having a row of holes near one edge, a longitudinally movable slide connected with each of the pivoted plates and having specially formed slots through them, means connected with said pivoted plates to move one end thereof edgewise and the longitudinally movable slides lengthwise, bristle holders so connected with said slides and plates as to be made to revolve part of a revolution by the longitudinal movement of the slides, substantially as, and for the purpose set forth.

5. In a toilet brush, a hollow frame, a plate pivoted at one end to each side of the frame and having a row of holes near one edge, a longitudinally movable slide connected with each of the pivoted plates and having specially formed slots through them, bristle holders, pins at the ends of said bristle holders pivotally connecting them with the pivoted plates, pins at the ends of the bristle holders slidably connected in the slots in the longitudinally movable slides, a handle so connected with the slides and plates as to form or close an opening between the first bristle holder and the end of the handle and at the same time to shift the bristle holders from a right angle to a horizontal position with the back of the brush frame, and to shift the free end of the plates edgewise.

[Claims 6 to 8 not printed in the Gazette.]

1,272,908. TOILET-BRUSH. WILLIAM H. BRIDGES, Grand Rapids, Mich., assignor to Benjamin Feld, Fulton county, Ga. Filed Aug. 11, 1915. Serial No. 45,044. Renewed May 13, 1918. Serial No. 234,341. (Cl. 15—30.)



1. A toilet brush consisting of a frame having a recess formed in each side, an actuating bar permanently secured in the lower half of each of said recesses and having a series of holes formed therein, slides located in the recesses between the permanent bars and edges of the sides of the frame and provided with suitable slots, means for reciprocating said slides, sliding bars mounted at the sides of the slides and provided with pins that extend into the slots in the slides, and bristle bars having pins projecting longitudinally from each end into the holes in the permanent bars and having means engaging the sliding bars to operated the bristle bars to extend or fold the bristles.

2. In toilet brush construction, a frame having a recess formed in each side, an actuating bar permanently secured in the back halves of the recesses, actuating bars slidingly secured in the forward halves of the recesses, slides connected together at one end and arranged between the sliding actuating bars and the sides of the frame, said bars being provided with slots straight at one end and having oppositely directed inclined portions at the other ends, pins on the sliding actuating bars extending into said slots, the permanent actuating bars and the sliding actuating bars having holes through them for mounting bristle bars, bristle bars pivotally mounted in said actuating bars, and means for moving the slides endwise for opening and closing the bristle bars, substantially as shown and described.

3. In toilet brush construction, a sheet metal frame, an actuating bar permanently secured to the inner surface of each side of the frame, a sliding bar in each side of the frame, an actuating slide adjacent to each sliding bar, bristle bars pivotally mounted between the respective pairs of sliding and actuating bars, means connected with the slides to fold or extend the bristle bars, and means for locking the slides in place.

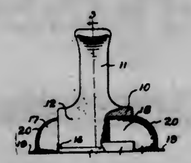
4. In a toilet brush, a sheet metal frame having recesses formed in the sides, actuating bars secured to the sides in said recesses forming a slot at each side between said bars and the back of the frame, a handle having a slide at the back to work in the slots formed by the actuating bars, a slide at each side of the handle extending into the recesses in the frame and having properly formed slots therein, a sliding actuating bar in each side of the frame, pins on said bars to engage the slots in the slides, bristle bars pivotally mounted in the actuating bars, means for operating the slides to actuate the sliding actuating bars to fold or extend the bristles of the brush, and means for locking the slides in fixed position when the bristles are extended.

5. In combination with the channeled sheet metal frame of a toilet brush, actuating bars permanently secured in the sides of the frame forming slots between them and the back of the frame, a handle having a sheet metal back extending longitudinally therefrom to slide in said slots, slides connected with the sides of the handle

and extending longitudinally of the sides of the frame, sliding actuating bars so connected with the slides as to be given a longitudinal, and slightly lateral movement when the slides are moved lengthwise of the frame, bristle bars so pivotally connected with the actuating bars that the longitudinal movement of the slides will extend or fold the bristles, as desired.

[Claims 6 and 7 not printed in the Gazette.]

1,272,909. CONCRETE-INSERT. DAVID W. BROOKS, New York, N. Y., assignor to Concrete Steel Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 3, 1918. Serial No. 210,152. (Cl. 72—105.)

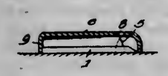


1. An insert for concrete having a body portion substantially uniform in cross-section throughout its length provided with inwardly projecting hanger engaging flanges integral with said body portion, and end caps adapted to close partially the end openings of said body portion and thereby provide an entrance passage for a hanger.

5. A concrete insert having a body portion provided with internally extending hanger engaging flanges, upwardly extending concrete engaging means, said body portion being open in a plane substantially at right angles to the base of the insert, and an end cap to close said opening and to provide an entrance passage from the base plane of the insert.

[Claims 2 to 4 and 6 not printed in the Gazette.]

1,272,910. SHOE-STITCHING-MACHINE ATTACHMENT. FRANK E. BROWN, San Francisco, Cal. Filed July 23, 1917. Serial No. 182,254. (Cl. 112—20.)



1. The combination with a needle plate of a shoe stitching machine, an upstanding channeling knife thereon, of a guard plate correspondingly shaped to said needle plate positioned over the same in spaced superposed relation, and flanges on the edges of said guard plate adapted for frictional engagement with the sides of the needle plate to hold said guard plate in position.

2. The combination with a needle plate of a shoe stitching machine having an elongated aperture therein, a channeling knife disposed adjacent said aperture, of a guard plate adapted to be positioned over said needle plate, said guard plate having an alining aperture therein, and downwardly projecting flanges on the edges of said guard plate adapted to hold the same in superposed spaced relation above the needle plate, whereby the channeling knife is rendered inoperative.

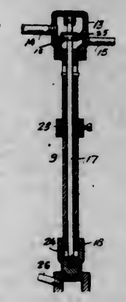
1,272,911. WATCHMAKER'S MAGNIFYING-GLASS. FRANK S. BUCKMINSTER, Waterbury, Conn. Filed Nov. 9, 1917. Serial No. 201,053. (Cl. 88—39.)



2. The combination with a magnifying glass holder, of a hinge plate secured to the holder, a yoke hinged to said plate, said yoke provided at its ends with pads and formed with a forwardly projecting bowed tail the end of which bears upon the said plate.

[Claim 1 not printed in the Gazette.]

1,272,912. DENTAL CASTING-MACHINE. JOHN E. BURNS, Flushing, N. Y. Filed Nov. 24, 1917. Serial No. 203,685. (Cl. 22—69.)



1. In a dental casting machine, the combination of a flask, a cap to close the same, a source of compressed air for the cap, a valve controlling the same, a plunger loosely playing on and adapted to depress the cap and carrying the valve, means for operating the plunger, and a stem below the valve and attached to and adapted to be operated by the cap to open the valve when it is seated on the flask.

2. In a dental casting machine, the combination for a flask for a mold, a cap with a nipple to close the same, a compressed air pipe connected to the nipple, a plunger with a head constituting a part of the air pipe, a valve closing the air pipe, a stem to the valve and secured to the cap, means for providing lost motion between the plunger and the cap, and means for depressing the plunger.

3. In a dental casting machine, the combination with a flask for a mold, of a cap adapted to close the same, a plunger above the cap, means for operating the plunger, a valve casing at the top of the plunger and having an air outlet, an outlet pipe connecting the casing with the interior of the cap, a valve between the inlet and outlet, a valve stem secured to the cap and enveloped by the plunger and means for opening the valve when the cap is seated on the flask.

4. In a dental casting machine, the combination with a flask, of a cap for the same, an upright, a plunger having the cap at its lower end and playing through the upright, a valve casing at the top of the plunger, air supply means passing through the casing to the cap, an interposed valve, a stem for the same passing down the plunger and attached to the cap, means for affording movement of the cap on the plunger, and a lever operating the plunger.

5. In a dental casting machine, the combination with a flask, of an upright with an overhang, a plunger playing through the latter, a cap playing on the end of the plunger, a valve casing at the top of the plunger and having an inlet, an outlet pipe for the air and connected with the interior of the cap, a valve interposed between the inlet and outlet, a stem for the valve and suspending the cap, and a lever operating the plunger.

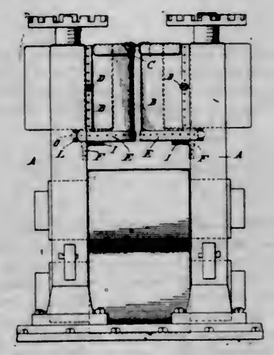
1,272,913. VALVE. JAMESON M. BURROWS and HENRY F. TRENARY, Newkirk, Okla. Filed June 13, 1916. Serial No. 103,523. (Cl. 67—115.)

In a device of the class described, a casing, a cap at one end of said casing, having a central opening therein, a valve in said casing movable under pressure having a stem extending exteriorly of said casing through said opening, a spring controlled bar pivotally connected with said cap engageable with said stem to lock the valve against movement under pressure, and an extension on the top of said cap arranged concentrically of said opening having a slot therein through which said bar is passed whereby undue strain is prevented from being imposed



on the pivotal connection between the bar and cap when said bar is engaged with said stem, and a receptacle mounted on the outer end of the stem and adapted to engage said extension.

1,272,914. SELF FEEDING AND HEATING GREASE-BOX FOR TIN-MILLS. JAMES CARL, Wheeling, W. Va. Filed Jan. 24, 1918. Serial No. 213,563. (Cl. 184—102.)

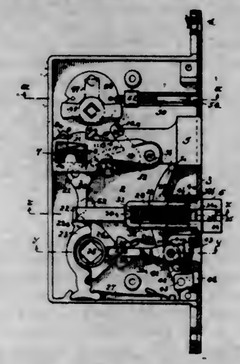


1. A self feeding and heating grease box for tin mills, comprising a casing, and means for attaching the same to the frame of the mill, said box having a laterally extending compartment with an exit tube leading therefrom, a valve for controlling the inlet to said tube, said compartment having an opening in the side thereof, and a slide controlling said opening.

2. A self-feeding and heating grease box for tin mills, comprising a casing, and means for attaching the same to the frame of the mill, said box having a laterally extending compartment with an exit tube leading therefrom, a valve for controlling the inlet to said tube, the side of said compartment having laterally extending flanges parallel to each other and also in the side between the flanges, rods extending through the flanges, and a slide mounted between the flanges and held in place by said rods.

1,272,915. LOCK. GEORGE E. CLEAVER, Reading, Pa., assignor to Penn Hardware Company, a Corporation of Pennsylvania. Filed Mar. 24, 1913. Serial No. 756,366. (Cl. 70—29.)

1. In a lock, the combination of a dead bolt and its operating means, a latch bolt, hand operated means for operating the latch bolt, stop mechanism for locking the hand operated means against movement and arranged to be moved manually for unlocking said means, and separate pivoted connecting means operated by the dead bolt and its operating means when moved in one direction for automatically operating the stop mechanism in the other direction to lock the hand operated means and thereby the latch bolt whenever the dead bolt is protected.

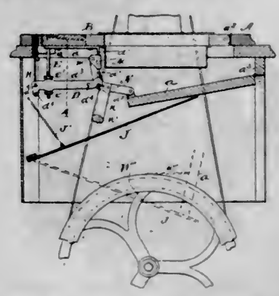


8. In a lock, the combination of a case, a dead bolt having operating talons, an oscillating cam for engaging the talons for operating it, a lever pivoted to the case adjacent to the dead bolt and having a flange extending fully across the dead bolt and interior of the case in line with the travel of the oscillating cam, said lever being operated by the dead bolt to be moved out of reach of the cam when the dead bolt is almost fully protracted and means to prevent independent movement of said lever with respect to said dead bolt in partially protracted or retracted position of said dead bolt.

14. In a lock, the combination with a dead bolt, of night latch mechanism, and means operable by the protraction of said bolt for dogging said night latch mechanism, said means including a pivoted lever having one end movable in contact with the dead bolt and the other end in operative association with the night latch mechanism to move it when said lever is oscillated by the dead bolt.

[Claims 2 to 7, 9 to 13, and 15 to 23 not printed in the Gazette.]

1,272,916. DROP-HEAD MECHANISM FOR SEWING-MACHINES. CHARLES E. COLEGROVE, East Cleveland, Ohio, assignor to The White Sewing Machine Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 14, 1915. Serial No. 21,436. (Cl. 45—27.)



1. In a sewing machine cabinet having a table in which is an opening, the combination of a front cabinet member which is hinged along its upper edge to the table, a drop leaf hinged along its front edge to the table and fitted to the said opening therein, a link pivoted at one end of said front cabinet member, a bracket to which the other end of said link is pivoted, a slotted arm fixed to and extending downward from said drop leaf, and a screw for connecting said bracket to said slotted arm.

3. In a sewing machine cabinet having a table in which is an opening, and a rigid downwardly extended back member, the combination of a front cabinet member which is hinged along its upper edge to the table, a drop leaf hinged along its front edge to the table and fitted to the said opening therein, a link pivoted at one end to the front member and at its other end to the drop leaf, an arm connected to said link and extending downward therefrom for engagement with the dust board, and a dust board hinged along its rear edge to the rear cabinet member, a spring acting to swing said dust board upward, a lever adjustably fixed to the under side of said drop leaf and extending forward therefrom and having at its front end an anti-friction roller, which will engage said dust board as the drop leaf is swinging from one end to the other of its path of movement.

5. In a sewing machine cabinet having a table in which is an opening, the combination of a front cabinet member which is hinged along its upper edge to the table and extends downwardly therefrom, a drop leaf hinged along its front edge to the table and fitted to the opening therein, an arm fixed to the under side of said drop leaf adjacent its rear edge, a link pivoted at one end to said front member, and a bracket to which the other end of said link is pivoted, said bracket being movable upon said arm, and means to fix the bracket to said arm at any desired point in the length thereof.

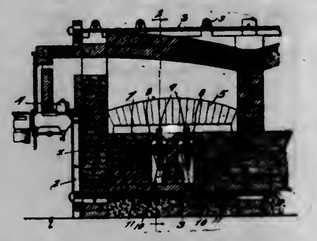
[Claims 2 and 4 not printed in the Gazette.]

1,272,917. **REMOVING ENAMEL FROM ENAMELED METAL ARTICLES.** RAYMOND D. COOKE, Terre Haute, Ind., assignor to Columbian Enameling & Stamping Company, Terre Haute, Ind., a Corporation of Indiana. Filed Sept. 5, 1917. Serial No. 189,735. (Cl. 87—5.)

1. The herein described process for removing vitreous enamel from a metallic base which comprises rendering the enamel porous by treating the article with an acid solution and then loosening the enamel by an alkaline solution.

2. The herein described process for removing vitreous enamel from a metallic base which comprises first treating the articles with a hydrochloric acid solution of about 10% strength heated to about 160°, and then with a sodium hydroxid solution of about 25% strength heated to about 160°.

1,272,918. MATERIAL-CONVEYER FOR FURNACES. TIM B. CRAM, Chicago, Ill., assignor to The Railway Materials Company, Chicago, Ill., a Corporation of Illinois. Filed July 26, 1915. Serial No. 41,881. (Cl. 263—6.)

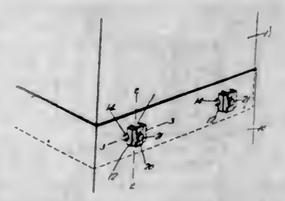


1. A furnace comprising a hearth having a plurality of longitudinally disposed spaced narrow slots and relatively enlarged chambers therein beneath said slots open at both ends to the atmosphere, supports in said chambers extending beyond the ends of said hearth, eccentrics rotatably mounted at both ends of the hearth and operatively connected to the ends of said supports, refractory elements mounted in said supports and projecting into said slots, means for rotating said eccentrics whereby said refractory elements are caused to move in an arcuate path upwardly and forwardly in said slots, an inclosing shell forming a furnace above said hearth, and means for supplying heating gases to said furnace, said chambers being adapted to permit the circulation of air about said supports thereby cooling and protecting them from the heat of said furnace.

4. A furnace comprising a heating chamber having a fixed hearth provided with a pair of longitudinal chambers intersecting opposite ends of the furnace, the top of the hearth having relatively narrow longitudinal slots communicating with the respective hearth chambers, one end wall of the furnace having an inlet opening extending transversely across the hearth, the opposite end wall of the furnace having a corresponding discharge opening, supports extending through the respective hearth chambers and projecting through the open ends thereof, refractory material upon the supports and adapted to project through the slots and into the heating chamber, and eccentrics mounted externally of the furnace at both ends thereof, beyond said chambers, the eccentrics being associated with the supports for imparting reciprocating and combined upward and forward movements thereto.

[Claims 2 and 3 not printed in the Gazette.]

1,272,919. NUT OR RIVET HOLDER FOR SHEET METAL. JAMES CRAWFORD, New York, N. Y. Filed Mar. 27, 1918. Serial No. 224,974. (Cl. 151—32.)

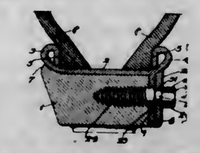


1. The herein described sheet metal joint, one sheet being provided with two parallel slits and a slit extending from one slit to the other of the parallel slits, thus forming two free ended tongues which when bent outward from the plane of the sheet form an open slot for the passage of the shank of a fastener, a two part fastener, one part of which is adapted to be gripped within and between said tongues while the other part of the fastener may be attached thereto solely from the other side of the other sheet remote from the tongues.

3. The combination of a sheet provided with a pair of slits and a transverse slit extending from one of the aforesaid slits to the other in a direction oblique to either of the first mentioned slits, the slitted metal when bent outward thus forming two free ended tongues, the end of each tongue being diagonal to the main part of the tongue, the slitting and the outward bending forming an open slot in the sheet for the passage of the shank of a fastening member and the tongue ends being sufficiently spaced from each other for the same purpose, and a fastening device coöperating with said slitted sheet.

[Claim 2 not printed in the Gazette.]

1,272,920. VEHICLE-WHEEL. HAROLD M. CROWLEY, Tuckerton, N. J. Filed Aug. 14, 1917. Serial No. 186,085. (Cl. 152—21.)



1. A wheel including a tire-supporting rim split within its circumference, a flange extending inwardly from said rim and being interrupted within its length to provide a recess, a lever positioned within said recess, said lever having portions respectively pivoted to the ends of said flange adjacent the recess, substantially as described.

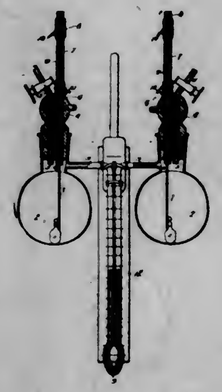
[Claims 2 to 4 not printed in the Gazette.]

1,272,921. TRANSPARENT COLLAPSIBLE BOTTLE OR OTHER CONTAINER. ARMISTEAD C. CRUMP, New York, N. Y. Filed June 26, 1917. Serial No. 176,995. (Cl. 221—60.)



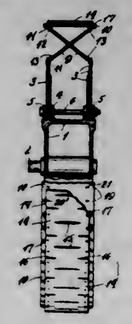
A container comprising a separately formed collapsible resilient tubular body and a separately formed collapsible resilient conical bottom telescopically engaged in the body and permanently fastened thereto.

1,272,922. PROCESS FOR THE QUANTITATIVE ESTIMATION OF VAPORS IN GASES. HAROLD SIMMONDS DAVIS and MARY DAVIDSON DAVIS, Winnipeg, Manitoba, Canada. Filed Oct. 15, 1917. Serial No. 196,720. (Cl. 23—3.)



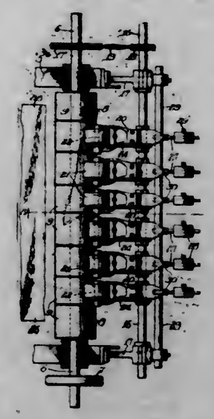
The process for the quantitative estimation of a vapor in a gas which consists in filling to the same pressure two similar flasks connected by a manometer, the one with the gas to be analyzed, the other with an inert gas free from the vapor in question and of breaking inside each flask a sealed glass bulb, which bulb contains a liquid of the same composition as the vapor to be estimated in a larger quantity than that required to saturate with the vapor, at that temperature, the flask in which it is broken, and of calculating the original concentration of the vapor in the gas from the differential pressure which develops between the two flasks.

1,272,923. ELASTIC WHEEL. MANUEL S. DE CARMONA, Mexico, Mexico. Filed Mar. 16, 1914. Serial No. 824,864. (Cl. 152—29.)



A spring wheel comprising a continuous flexible annular tread member deformable radially so that its portions may move toward and from the center of the wheel, a centrally-disposed hub, two spaced annular spring members located at opposite sides of the wheel and having their inner portions secured to said hub, the other edges of said spring members being of smaller diameter than said tread member and having an unobstructed movement toward and from each other lengthwise of the wheel's axis, and oblique connections extending from the tread member inwardly to the outer portions of said spring members, and acting to pull the said spring members toward each other at such points of the wheel periphery at which the tread member is deformed or bulged outwardly, thereby producing a local stiffening action in said spring members to brace them against lateral strains.

1,272,924. WEFT-STRAIGHTENING APPARATUS. CHARLES A. DORAN, Chicago, Ill., assignor to Bauer & Black, Chicago, Ill., a Corporation of Illinois. Filed Jan. 4, 1918. Serial No. 210,348. (Cl. 26—8.)



1. In a weft straightening apparatus for textile fabrics, the combination of a web support and means actuated independently of the web and adjustable to engagement with the web at selected positions transversely thereof, and adapted to tension the portion of the web engaged, thereby straightening the weft threads.

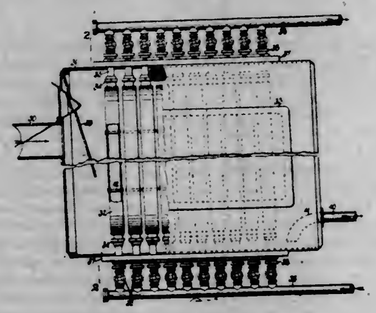
5. In a weft straightening apparatus, the combination of a web support comprising a plurality of driven rolls, a plurality of pivoted arms, weft straightening rollers sup-

ported by said arms, and means for driving said weft straightening rollers at a peripheral speed higher than that of said driven rolls.

10. In a weft straightening apparatus, the combination of a web support comprising a driven shaft, a plurality of web supporting rolls loosely supported on said shaft, a one way driving connection between said said shaft and web supporting rolls, a plurality of pivoted arms, a weft straightening roller carried by each of said arms, and means for driving said weft straightening rollers at a peripheral speed higher than that of said web supporting rolls, whereby portions of the web engaged by said weft straightening rollers are accelerated and the weft threads are straightened.

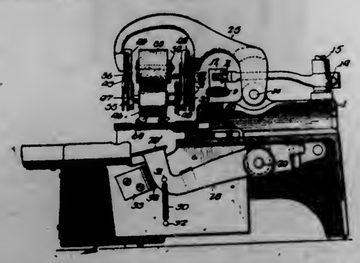
[Claims 2 to 4 and 6 to 9 not printed in the Gazette.]

1,272,925. CONDENSER FOR DISTILLING PLANTS. WILLIAM ALOYSIUS DUFFY, Newport, R. I. Filed Aug. 1, 1917. Serial No. 183,893. (Cl. 257—28.)



In a plant for distilling salt water, a condenser having a housing, said housing having a vapor inlet at one end thereof and a siphoning condensed-vapor outlet at the other end near the bottom of the housing, a baffle within the housing extending from the top in front of the vapor inlet for deflecting the coming-in vapor toward the bottom of the housing, a series of flasks adapted to be disposed side by side within the housing between the inlet and outlet, said housing having a trap in one of the sides thereof through which a flask may be entered or removed, valve-controlled tubular extensions at the top and bottom of the housing, means for detachably connecting each of the flasks to one of the extensions of the top and to one at the bottom, and means associated with said valve-controlled tubular extensions for circulating a cooling medium through said flasks.

1,272,926. STENCIL ADDRESSING-MACHINE. JOSEPH S. DUNCAN and ULYSSES G. LEE, Chicago, Ill., assignors to Addressograph Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 30, 1915. Serial No. 53,285. (Cl. 101—51.)



1. In a stencil printing machine, the combination of a bed, pivoted arms supporting respectively a platen and a bodily movable inking roller carriage, inking and ink-supplying rollers journaled in said carriage, means for actuating said arms to move said platen and carriage oppositely toward and from said bed, means for reciprocating said carriage relatively to its supporting arm, and means for advancing stencils along said bed to printing position between said platen and carriage.

[Claims 2 to 15 not printed in the Gazette.]

1,272,927. DRINKING-FOUNTAIN HEAD. ROBERT JAMES EAST, Winnipeg, Manitoba, Canada. Filed Nov. 21, 1917. Serial No. 203,161. (Cl. 137—109.)



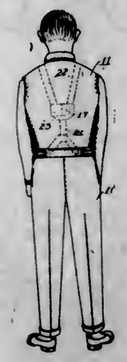
1. A drinking fountain head connected directly with a water supply pipe of variable pressure and constructed to discharge a stream of water expelled by the force of gravity.

3. A drinking fountain head having an inlet water passage, an outlet nozzle and an intervening water chamber surrounding the inlet water passage and communicating therewith and with the outlet nozzle and with the entrance end of the passage to the chamber elevated above the nozzle whereby a head of water can be maintained within the chamber.

9. The combination with a drinking fountain head constructed to discharge a laterally directed stream, a casing surrounding said drinking head and a guard ring on said casing and in a location such that the stream of water is expelled therethrough, the said guard ring being spaced from the casing by means of upper and lower legs and detachably secured to the same by a pair of said legs, one of which is provided with a keyhole slot adapted to receive a headed pin on the casing and the other being secured to the casing by a screw, substantially as described.

[Claims 2 and 4 to 8 not printed in the Gazette.]

1,272,928. OVERALL-WAIST. JOSEPH S. ELLIOTT, Eddy, Tex. Filed July 21, 1917. Serial No. 182,031. (Cl. 2—96.)



1. A garment of the character described including a waist or coat section, provided with a tab at its inner surface and the central rear portion thereof, and a supporting suspender arranged to extend over the shoulders of the wearer within the waist or coat section and having a portion detachably connected to the said tab of the said waist or coat section.

2. A garment of the character described including a coat or waist section, provided with a central rear tab having button holes, and supporting suspenders arranged to extend over the shoulders of the wearer within the waist or coat section and having an intermediate pad provided with buttons for engagement in the button holes of the tab of the waist or coat section to detachably connect the suspenders in position.

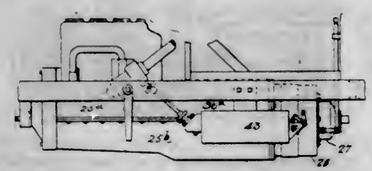
1,272,929. SHOE-HEEL. GILBERT S. ELLITHORPE, Chicago, Ill. Filed July 26, 1917. Serial No. 182,868. (Cl. 36—35.)



1. A tread lift of resilient material having a tread face provided with a relatively flat central portion and deflected marginal portions, and a body portion concavo-convex in transverse section, the forward edge or breast portion of the lift having curved upper and lower edges, and fastening means embedded in the body of the lift within the central portion located and arranged to exert a substantially equal pressure coextensive with said central portion.

[Claims 2 to 5 not printed in the Gazette.]

1,272,930. MOTOR-VEHICLE. JUSTUS B. ENTZ, Cleveland, Ohio. Filed Apr. 3, 1913. Serial No. 758,521. (Cl. 171—315.)



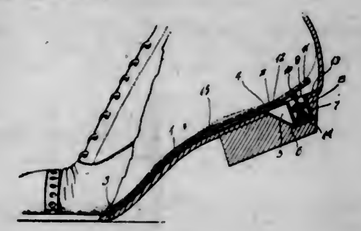
1. In a propelling mechanism for a motor vehicle, an engine including a crank shaft, a shaft alined with the crank shaft, a generator having rotary field and armature elements, one secured to the crank shaft and the other secured to said alined shaft, a driving motor adapted to receive current from the generator, the engine having an integral extension provided with a bearing for the said element of the generator which is secured to the crank shaft, said bearing being located between the generator and motor.

3. In a propelling mechanism for a motor vehicle, an engine including a crank shaft, a shaft alined with the crank shaft, a generator at the rear of the engine, a motor at the rear of the generator and adapted to receive current from the generator, said generator having rotary field and armature elements, one connected to the crank shaft and the other connected to said alined shaft, the motor having a stationary housing and a rotary armature, said engine having a casing provided with a rearward extension inclosing the generator, said casing supporting the crank shaft, the forward end of said alined shaft, the rear end of said generator element which is connected to the crank shaft, and the said motor housing being secured to said casing and having a bearing for the rear end of said alined shaft.

5. In a propelling mechanism for a motor vehicle, an engine having a crank shaft, a shaft alined therewith, a generator having rotary field and armature elements, one connected to the crank shaft and the other to the alined shaft, the generator being at the rear of the engine, bearings for the rear end of the crank shaft, for the forward end of the alined shaft, and for the rear end of the element of the generator which is connected to the crank shaft, said bearings being supported in integral extensions of the engine frame.

[Claims 2 and 4 not printed in the Gazette.]

1,272,931. FOOT-WARMER. HALLS B. ETHERIDGE, Gilmerton, Va. Filed Feb. 1, 1918. Serial No. 214,895. (Cl. 126—204.)

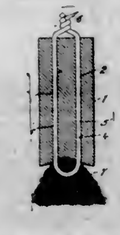


1. The combination with a shoe, of a foot warmer therein comprising an air compressor operated by the motion of walking, said compressor having restricted air outlet means into the shoe and having relatively large air inlet means independent of said outlet means.

4. A foot warmer comprising a hollow insole having an air outlet, a cylinder depending from the rear end of said insole and open at its upper end, the lower end of said cylinder being closed, a piston in said cylinder having an upstanding piston rod, a vertically swinging heel-operated flap pivoted to said insole and connected to the upper end of said rod, and a passage from the lower end of said cylinder into said hollow insole.

[Claims 2 and 3 not printed in the Gazette.]

1,272,932. ANIMAL-POKE. JOHN FAY, Columbus, N. D. Filed Feb. 28, 1917. Serial No. 151,416. (Cl. 119—136.)

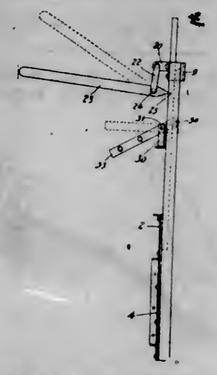


A device of the class described comprising a cylindrical block having one end shaped to fit the neck of an animal and having two longitudinal passages extending entirely through the block from one end to the other and a fastening wire doubled on itself to form a loop, having its members extending through the passages and projecting out of the same whereby the ends can be tied together.

1,272,933. WATER-GATE. NORMAN V. FITTS, Denver, Colo. Filed Mar. 21, 1917. Serial No. 156,361. (Cl. 61—46.)

1. In a device of the class described, a framework having an aperture at its lower portion and provided with a series of selective holes, a closure movable across said aperture, a stem on the closure and provided with a series of holes differently pitched from those in said framework, means for adjusting the stem and closure, and a locking device for passing through selected registering holes.

2. In a device of the class described, a framework having an aperture at its lower portion and provided with rows of staggered holes pitched equidistant, an element movable across said aperture, a stem on the element pro-



vided with rows of staggered holes alined with the respective rows but differently pitched, means selectively engageable with the holes in the stem for adjusting its position, and a locking device for passing through selected registering holes.

1,272,934. SECURING APPARATUS FOR MEAT-SLICING MACHINES. RAYMOND S. C. FOW and SAMUEL M. TEMPLETON, Philadelphia, Pa.; said Fow assignor to said Templeton. Filed Apr. 23, 1918. Serial No. 230,236. (Cl. 17—14.)



1. Apparatus of the character described including an abutment plate; pins having pointed hooked portions; means for moving the hooked portions of said pins to a predetermined extent beyond the outer surface of said plate and so that said hooked portions move in the direction of their lengths to pierce material held against said plate; and means then operative to retract said pins to clamp said material to the abutment plate, substantially as described.

3. Apparatus of the character described including an abutment plate having slots therein; actuating means located to the rear of said abutment plate; and a second plate positioned between said actuating means and the abutment plate and having pins freely movable through said slots when the second mentioned plate is operatively moved, said second plate being operatively connected with said actuating means with a sliding connection whereby the second plate and the actuating means can be slidably disconnected to permit the ready removal of said second plate, substantially as described.

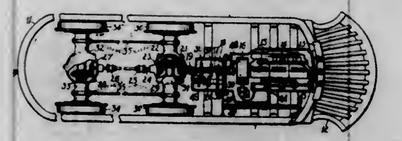
5. Apparatus of the character described including an abutment plate having slots therein; a second plate having pins thereon, said pins having hooked portions movable through said slots; a spring on said second plate; and means operative through the medium of the resiliency of said spring for moving said second plate to move said pins through said slots to a position beyond the outer surface of said first plate and to move said hooked portions of the pins in the direction of their lengths, substantially as described.

7. Apparatus of the character described including an abutment plate having slots therein; a second plate having pins thereon, said pins having hooked portions movable through said slots, said second plate having recesses therein, said first plate having lugs thereon adapted to register with said recesses; a spring on said second plate; a shoe on said spring; and a lever having a portion for actuating said shoe whereby a movement of said lever will place the spring under tension and slide said second plate to alternately cause said lugs to engage said recesses to permit the pins to be projected through said slots and to engage portions of said plate adjacent the recesses to cause the pins to be retracted, substantially as described.

9. Apparatus of the character described including an abutment plate having slots therein; a second plate having pins thereon, said pins having hooked portions movable through said slots, said second plate having recesses therein, said first plate having lugs thereon adapted to register with said recesses; a spring on said second plate; a shoe on said spring; a lever having a portion for actuating said shoe whereby a movement of said lever will place the spring under tension and slide said second plate to alternately cause said lugs to engage said recesses to permit the pins to be projected through said slots and to engage portions of said plate adjacent the recesses to cause the pins to be retracted; and means for locking said second mentioned plate when the pins are in their retracted position, substantially as described.

[Claims 2, 4, 6, 8, and 10 not printed in the Gazette.]

1,272,935. MOTOR TRACTION-CAR. JOSEPH L. FRICK and HARRY G. CLEMENGER, Jamestown, N. Y. Filed Dec. 17, 1917. Serial No. 207,455. (Cl. 105—227.)



1. A railway car comprising a car body, a motor supported by the frame of the body beneath its forward end, spaced two-wheel trucks yieldably supporting the body frame, transmission gearing universally connecting the motor to the axle of the forward truck, and transmission means universally connecting the axles of both trucks.

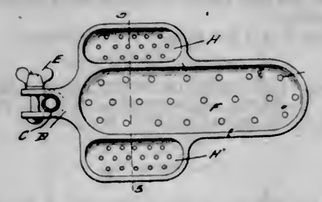
2. A railway car comprising a car body having a supporting frame, longitudinally spaced pairs of springs on the frame, a single journal box supported by each spring, an axle having its ends journaled in the boxes of each pair of springs, traction wheels on the axles, transmission means connecting the axles, a motor, transmission gearing connecting the motor to one axle, and means within the car for controlling the transmission gearing.

3. In a railway car, forward and rearward axles having supporting traction wheels, a gear fixed on each axle between its wheels a casing inclosing each gear, a universally jointed shaft journaled in the casings and carrying terminal gears in mesh with the first gears, brace rods having pivotal connection at their opposite ends with the forward and rearward axles, and a motor geared to operate one of the axles.

1,272,936. BATH-TUB APPLIANCE. FRANK FRAZZANO, Washington, D. C. Filed Oct. 29, 1917. Serial No. 199,083. (Cl. 4—2.)

1. A bath-tub appliance, consisting of a foot rest formed with an open yoke fitting upon and forming a clamp adapted to be connected with the spigot and formed with an integral holder for soap and for a brush or wash cloth.

2. A bath tub appliance, consisting of an elongated foot rest formed at one end with an open yoke adapted to fit



and be clamped upon the spigot to dispose the foot rest portion in proper relation to the tub and spigot.

1,272,937. REFRIGERATOR. SAMUEL M. FULTON, Pomona, Cal. Filed Dec. 6, 1916. Serial No. 135,422. (Cl. 45—134.)



1. A refrigerator, comprising a base having a chamber formed therein provided with a water and air outlet, a hollow walled body member mounted upon said base having a provision chamber communicating with the chamber of the base and provided with air outlets, a top member mounted upon said base having hollow walls and provided with a water reservoir, the hollow walls of said body member and top member forming air flues communicating with the chamber of the base, a hood arranged over said top member having an air inlet, a spray nozzle arranged within said hood, and a spreader arranged above said spray nozzle.

4. A refrigerator having a base provided with an air chamber, and a body provided with air flues communicating with said air chamber, said body being provided with a chamber in communication at the lower end with the chamber of the base and provided with an air outlet at its upper end, a hood member arranged over said body having an air inlet, and a spray nozzle disposed in said hood.

11. A refrigerator having superposed chambers surrounded by hollow walls, one of said chambers forming a provision chamber and the other a reservoir, a hood arranged over the upper chamber having an air inlet, a spray nozzle disposed within said hood, a spreader disposed above said spray nozzle, and a dish-shaped perforated plate arranged over the water chamber.

14. An iceless refrigerator, comprising a base having porous superposed members mounted thereon, said base having a chamber provided with an outlet, said members having hollow walls forming air flues, the flues of the lower member communicating with the chamber of the base, a hood arranged over the upper member forming a mixing chamber in communication with the flues of the upper member, said hood having an air inlet, and a spray nozzle disposed within said mixing chamber.

16. An iceless refrigerator having a provision chamber surrounded by air flues, a drinking water reservoir mounted upon said provision chamber surrounded by aid flues in communication with the flues of the provision chamber, a hood arranged over said drinking water chamber having an air inlet, and a spray nozzle disposed within said hood.

[Claims 2, 3, 5 to 10, 12, 13, 15, and 17 not printed in the Gazette.]

1,272,938. NON-SKID DEVICE FOR AUTOMOBILE-TRUCKS. JOSEPH GAJAN, New York, N. Y. Filed Nov. 30, 1915. Serial No. 64,249. (Cl. 152—2.)

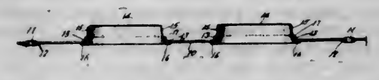


1. The herein described anti-skid device for automobile truck wheels comprising an annular series of similar gripping blocks, each block including a curved attachment member extending circumferentially therefrom in each direction, one extension of each block overlapping a complemental extension of the next adjacent block in the series, and means passing transversely through the overlapping portions of the extensions to secure the blocks together, said overlapping portions being provided with rigid interlocking devices to sustain the main strain imposed upon the blocks.

3. As an article of manufacture, an elongated block having a ground-gripping surface, and a pair of complementary clamping members extending from opposite sides of said block, said members being laterally offset with respect to a plane passing through said block parallel to its transverse axis and each having a surface lying substantially in said plane, and complementary radially directed teeth and depressions disposed upon said surfaces.

[Claim 2 not printed in the Gazette.]

1,272,939. GOGGLES. BENJAMIN WELLS GAMMON, Brooklyn, N. Y. Filed Jan. 4, 1918. Serial No. 210,319. (Cl. 2—149.)



1. A goggle, comprising a frame, of flexible material and having spaced openings, and cup-shaped lenses of diaphanous material and having their side walls curved outwardly and terminating in annular flanges, the lenses being of a diameter greater than the openings of the frame, so that when they are forced into the openings of the frame the walls of the said openings will be curved outwardly and into engagement with the side walls and flanges of the lenses, with sufficient frictional force to hold the lenses in the openings.

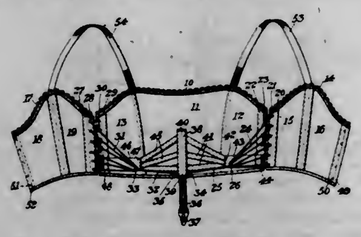
2. A goggle, comprising a goggle frame having spaced openings and cup-shaped lenses made of diaphanous material and having their side walls fitting the walls of the said openings to project the lenses beyond the front face of the said goggle frame, and integral fastening means on the said side walls of the lenses engaging the said goggle frame to hold the lenses in place on the goggle frame.

3. A goggle, comprising a goggle frame of a flexible material and having spaced openings and cup-shaped lenses of celluloid having their side walls snugly fitting the walls of the said openings to project the lenses beyond the front face of the said frame, the side walls of the lenses terminating in flanges fitting against the back of the frame, and the said side walls of the lenses having

struck-up fastening lugs engaging the edges of the walls of the openings in the goggle frame.

4. A goggle, comprising a frame of flexible material and having spaced openings, and cup-shaped lenses of diaphanous material and terminating in flanges engaging the back of the frame, the lenses being of a diameter greater than that of the openings so that when forced into the openings the walls thereof will be forced outward to form flanges engaging the lenses, the walls of the lenses having a plurality of struck-up lugs engaging the edges of the flanges of the frame.

1,272,940. BRASSIÈRE. DANIEL KOPS, New York, N. Y. Filed May 11, 1918. Serial No. 233,833. (Cl. 2—73.)

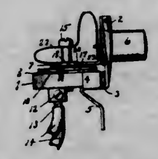


1. In a brassière or similar garment, adjustable to position on the body of the wearer, a pad member placed centrally to the lower front central portion of the garment and extending laterally to both sides thereof, and means for applying tension to the said pad member in adjusting the garment to position for use.

3. A brassière comprising a front member, a back member, a pad member secured to the lower front central portion of the front member and extending laterally therefrom, and lacing devices for adjusting the front and back members to position along the axillary lines of the garment and simultaneously adjusting the ends of the said pad member to position to vary the tension thereon and consequently the pressure exerted thereby against the underlying parts of the body of the wearer.

[Claims 2, 4, and 5 not printed in the Gazette.]

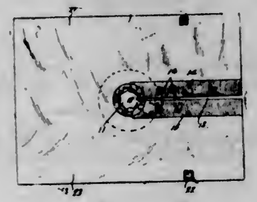
1,272,941. SWITCH. CHARLES E. GODLEY, Detroit, Mich., assignor to Edmunds and Jones Corporation, Detroit, Mich., a Corporation of New York. Filed Dec. 30, 1916. Serial No. 139,914. (Cl. 175—291.)



1. In a switch, the combination of a support and a block of insulating material supported thereby, a headed pin mounted on the block, a notched stop-plate mounted on the bed and positioned by the pin, a pair of contacts carried by the bed and extending upward therefrom, a switch-plate rotatably mounted on the stop-plate and having downwardly extending tongues adapted to engage and disengage the contacts and also to engage in the notches in the stop-plate to prevent the switch-plate from turning back, said switch-plate having a central opening to receive the pin and a ring of upwardly projecting ratchet teeth concentric with the pin, an actuator slidable over the switch-plate and guided by the pin and having a downwardly projecting tongue that engages the ratchet teeth of the switch-plate, a push-button connected to the actuator, and a spring formed of a thin strip of metal mounted on the pin, one end engaging the actuator to hold it against the switch-plate and the other engaging the push-button to return the actuator to normal position.

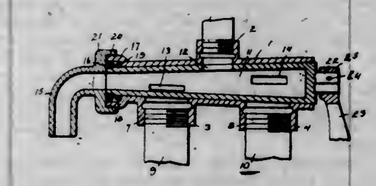
[Claims 2 to 4 not printed in the Gazette.]

1,272,942. CONVERTIBLE CAPE, COAT, AND BLANKET. LOUIS GOLDSTEIN, Morristown, N. J. Filed Nov. 20, 1917. Serial No. 203,010. (Cl. 2—60.)



A convertible cape and blanket, comprising a body made of a single piece of fabric material of rectangular shape and having a central neck opening and a slit extending from the said neck opening to one end of the body and parallel with and midway between the sides of the body, the said slit providing an open front for the cape or coat, a collar attached to the said body at the neck opening, fastening means for closing the collar at the said slit, fastening means connecting the upper portion of the sides of the open front with each other, and sets of fastening members on the sides of the body, the fastening members of each set being arranged opposite to each other and the sets of fastening members being spaced apart and spaced from the ends of the body, the fastening members of the said sets of fastening members when closed converting the middle portions of the sides into sleeves having a length extending from the said neck opening to the hands of the wearer.

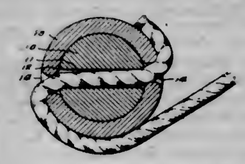
1,272,943. UNIVERSAL STERILIZING-STOP-COCK DEVICE. SAMUEL W. GORDON, Newark, N. J., assignor of one-half to Henry M. Brant, Newark, N. J. Filed Mar. 30, 1915. Serial No. 18,075. (Cl. 137—7.)



A valve casing having an inlet opening, a core rotatable therein, having an inlet port and an axial outlet in one end, a nut threaded to the said end of the core, a spring bearing against the nut and casing for establishing a tight fit between the core and casing and still permit free rotation of the core, a screw threaded extension on one end of said casing and overlying the spring and nut, a spout, and an internally screw threaded enlarged portion on said spout for connection with the extension.

1,272,944. CABLE-CLAMP. PERCIVAL GREEN, San Francisco, Cal. Filed Mar. 1, 1917. Serial No. 151,810. (Cl. 24—71.2.)

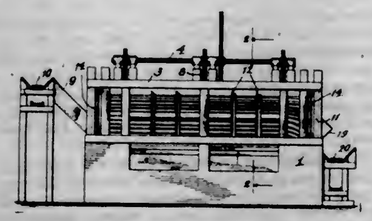
1. In a cable clamp, a relatively fixed member, a movable member with respect thereto, and a cable to be clamped, said fixed and movable members having contacting surfaces and having passages formed therein, which also meet in certain positions of said contacting surfaces, to receive and bind the end of said cable as



said members are relatively moved to offset said passage sections from alinement.

[Claims 2 and 3 not printed in the Gazette.]

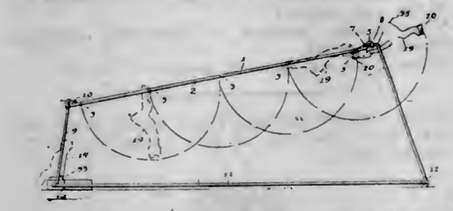
1,272,945. BARKING-DRUM. HERBERT GUETTLER, Chicago, Ill., and WILLIAM LLYWELYN DAVIS, Eau Claire, Wis. Filed May 2, 1916, Serial No. 94,913. Renewed May 29, 1918. Serial No. 237,365. (Cl. 144—208.)



1. A barking drum having longitudinal bars with spaces between forming slots for the escape of bark, said bars being bent backward near the discharge end of the drum to facilitate discharge of wood therefrom.

[Claims 2 to 5 not printed in the Gazette.]

1,272,946. ACROBATIC FIGURE TOY. ALBERT GUNDLING, Jersey City, N. J. Filed Apr. 29, 1918. Serial No. 231,396. (Cl. 46—40.)



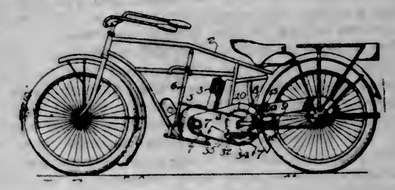
2. A toy comprising a sloping ladder, a figure, and means at opposite ends of the figure for automatically catching and releasing the rungs of the ladder, whereby the figure will swing from rung to rung and drop in a sitting position at the end.

6. A toy comprising a ladder adapted to be supported in a sloping position and in combination therewith a figure having automatic catches at its ends whereby it will swing from rung to rung, each of said catches including a sliding stop.

13. In a toy ladder frame, a ladder member having side rods formed with eyes at one end and a leg structure comprising two legs having lateral bent upper portions passed through said eyes and a transverse portion continuous with and connecting said laterally bent portions and constructed to bear upon said side rods at the top and in rear of said eyes, whereby a bracing hinged connection is formed.

[Claims 1, 3 to 5, 7 to 12, 14, and 15 not printed in the Gazette.]

1,272,947. MOTOR-CYCLE STARTER. EARL H. HAHN, Mallard, Iowa. Filed Nov. 3, 1916. Serial No. 129,345. (Cl. 123—185.)



1. The combination with a member to be rotated, a crank hanger carrying pedals and a guard, of a ratchet wheel secured to the member, a clamp adapted to be secured to the crank hanger, a trunnion or short shaft formed integral therewith, an integral right angled extension formed with said trunnion, a pawl or dog pivotally mounted on said trunnion, having a nose at one end for engaging the ratchet wheel and provided at the other end with a knob or projection, a lug formed with the dog, means mounted on the trunnion for preventing the displacement of the dog, a spring connected with the right angled extension and lug for normally forcing the nose of the dog into engagement with the ratchet wheel, and a spring catch secured to the guard, said catch having a cam surface at its free end and a socket to the rear thereof, the knob or projection on the dog adapted to register with said socket for holding the dog out of engagement with the ratchet wheel.

[Claims 2 and 3 not printed in the Gazette.]

1,272,948. HANDLE. WILLIAM HANDLER, Newark, N. J. Filed Feb. 28, 1917. Serial No. 151,410. (Cl. 190—57.)



1. A handle comprising a filler member or wickle, a bottom member, and a reinforcing member of stiff material disposed between said bottom member and a portion of said filler member, all of said members being substantially co-extensive and secured together, the end portions of said members being bent into loops for the reception of rings or the like adapted to be applied to a bag, substantially as described.

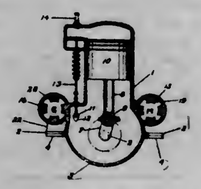
10. A handle comprising a filler member or wickle, a bottom member, a reinforcing member disposed between a portion of said filler member and said bottom member, a covering fitting closely over said filler member and secured to said bottom member, said covering having its side portions turned upwardly and back onto the main portion thereof, all said members and covering being substantially co-extensive and having their end portions bent downwardly and backwardly underneath the main portions thereof into loops for the reception of bag supporting rings, the side portions of said bottom member being turned upwardly and over the upwardly turned side portions of said covering, a filler disposed underneath and secured to said bottom member between the bent end portions of said filler, bottom and reinforcing members, the side portions of said filler extending upwardly into close engagement with the outer surfaces of the upwardly extending side portions of said bottom member, and a coating of flexible material covering the bottom and sides of the handle and having its side portions turned downwardly over the edges of said bottom member and covering and fitting closely between the turned up side portions

of the covering of said wickle or filler member and the portions of the latter covering the sides of the wickle, substantially as described.

12. A handle for bags, suit-cases, and the like, comprising a wickle, and a reinforcing element, said reinforcing element having portions thereof contacting with outer surface-portions of said wickle, said wickle and reinforcing element having their end portions bent to provide receiving loops, and an outer covering for said wickle and reinforcing element, combined with a central piece arranged between the ends of the said loop-shaped end portions, and an additional covering mounted upon said central piece and the said loop-shaped end portions, said second-mentioned covering being connected at its longitudinal marginal edges with the longitudinal marginal edges of said first-mentioned covering.

[Claims 2 to 9, 11, and 13 to 18 not printed in the Gazette.]

1,272,949. COMBINED ENGINE AND DYNAMO-ELECTRIC-MACHINE FRAME. WILLIAM J. HART, Mount Vernon, N. Y., assignor to Splitdorf Electrical Company, Newark, N. J. Filed Dec. 12, 1916. Serial No. 136,437. (Cl. 123—195.)



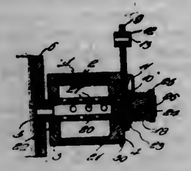
1. In combination an engine and a plurality of dynamo electric machines, a casing for said engine, a field frame and pole pieces for each of said dynamo electric machines and support brackets for said frames, said casing, frames, pole pieces and brackets all being formed as a single integral unitary structure.

3. In combination with an autovehicle engine, an electric motor for the purpose of starting said engine, and an electric generator adapted to be operated by said engine, the field frame and pole pieces of both motor and generator being cast integral with the casing of said engine.

6. In combination, an internal combustion engine having a crank case the walls of which are of magnetic material, and a plurality of dynamo electric machines having their field structures of magnetic material, one of said dynamo electric machines acting as a starting motor for said engine and another of the dynamo electric machines acting as a generator for producing electrical current, said field structures being cast integrally with the crank case of said engine.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,272,950. AUXILIARY AIR DEVICE FOR INTERNAL-COMBUSTION ENGINES. HARRY E. F. HAWKINS, Vineland, N. J. Filed Feb. 7, 1918. Serial No. 215,807. (Cl. 137—7.)



An auxiliary air inlet device for internal combustion engines comprising a cylindrical casing whose wall is formed by two telescoping annular flanges formed on end members of said casing, said flanges having air inlet openings for total or partial registration, one end member of said casing having a central air outlet nipple and the other end member having a central opening, means connected to said last named end member for turning it and its flange with respect to the other end member and flange, a tubular stem passing through said central opening and secured to the opposite end member of the casing about said air outlet nipple, and a stop on said stem to prevent relative outward movement of the two end members, said stem having perforations within said casing and having a closed outer end.

1,272,951. CONTAINER. JOHN HICKS, Edgeworth, Pa. Filed May 3, 1918. Serial No. 232,289. (Cl. 221—64.)



1. A container comprising a body, top and neck and a cap embracing and rotatable upon the neck, the cap and neck being provided with longitudinal slots, the edges of the slot of the cap being turned slightly inward, and a pair of depressions being formed in the neck at one side of and parallel with its slot and in relative position to engage both inturned edges of the cap slot, and thus close the slots.

3. A container comprising a body, top and neck and a cap embracing and rotatable upon the neck, the cap and neck being provided with longitudinal slots, the edges of the slot of the cap being turned slightly inward, and a pair of depressions being formed in the neck at each side of and parallel with its slot and in relative position to engage both inturned edges of the cap slot, and thus close the slots.

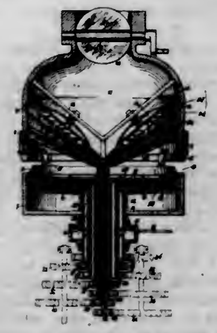
[Claim 2 not printed in the Gazette.]

1,272,952. ELECTRIC-BATTERY DEPOLARIZER. MAJOR E. HOLMES, Lakewood, Ohio, assignor, by mesne assignments, to National Carbon Company, Inc., a Corporation of New York. Filed Jan. 7, 1916. Serial No. 70,768. (Cl. 204—38.)

1. In primary batteries, a depolarizer containing molybdenum trioxid.

[Claim 2 not printed in the Gazette.]

1,272,953. CARBURETER. PETER HENRY HOLTZ, Detroit, Mich. Filed Aug. 29, 1917. Serial No. 188,776. (Cl. 261—85.)



1. A carbureter comprising,—a two-part casing forming an air gap therebetween, means for varying the size of the gap, and positively driven centrifugal means associated with one of said parts, means for supplying liquid hydrocarbon to the centrifugal means and whereby the same is vaporized in said part, and revoluble means in said other part of casing for drawing vapors from the first part and air through the gap and forcing the two through said second part.

2. A carbureter comprising,—a two-part casing forming an air gap therebetween, a plurality of disks in one of said parts, means for revolving adjacent disks in opposite directions, means for supplying liquid hydrocarbon between said disks near the central part of same, and means associated with the other part of the casing for forcing hydrocarbon vapors and air coming from the first part and draw air through the gap.

5. A carbureter comprising, a two-part casing forming an air gap therebetween, a centrifuge in one of said parts, means for supplying liquid hydrocarbon to said centrifuge whereby the same is broken up into vapors, a mixer associated with the other part of casing for drawing the vapors from the first part and air through the gap, a cone-shaped cup revolubly mounted above the mixer, said cup having spiral slots through which the mixer forces the mixture, said cup having also annular grooves on the inner face thereof to increase resistance to the outward movement of the mixture through the rotation of the cup, a partition above said cup, and valves in said partition opening away from the cup.

8. A carbureter comprising,—a two-part casing forming an air gap therebetween, means for varying the size of the gap, positively driven centrifugal means in one of said parts, means for supplying liquid hydrocarbon to the centrifugal means, a revoluble mixer associated with the other part for drawing the vapors from the first part and air through the gap, and valves above said mixer for checking the return flow.

9. A carbureter comprising,—a two-part casing forming an air gap therebetween, a plurality of disks in one of said parts, means for revolving adjacent disks in opposite directions, means for supplying liquid hydrocarbon between said disks near the central part of same, said disks having also means for drawing air therebetween, and a revoluble mixer in the other part of the casing for drawing the hydrocarbon vapors and air coming from the first part and air through the gap.

[Claims 3, 4, 6, 7, and 10 not printed in the Gazette.]

1,272,954. SPARK-PLUG. HERMAN G. HORNING, New York, N. Y. Filed Mar. 6, 1917. Serial No. 152,749. (Cl. 123—169.)



2. A spark plug, comprising a body, an insulating core mounted within the said body and provided with a central opening, a rod conductor extending through the said opening, a disk mounted on the inner end of the said conductor and provided with sparking members of triangular shape, a ring-shaped member fitting onto the inner end of the said body and provided with sparking members of triangular shape and extending between the sparking members of the said disk, and a ring of insulating material mounted at its center on the said rod conductor, said insulating ring having one face resting on the said disk and fitting into the said ring-shaped member, said ring-shaped member having an inner shouldered portion engaging the opposite face of the insulating ring whereby the latter acts directly against portions of said conductors to hold the two conductors in spaced relation.

[Claim 1 not printed in the Gazette.]

1,272,955. WIND-SHIELD ATTACHMENT. CHARLES R. HOUGH, Washington, D. C. Filed Jan. 8, 1916. Serial No. 71,050. (Cl. 21—148.)



1. The combination with a wind shield having a lower section and an upper section adapted to be swung outwardly, of a flexible transparent member adapted to be detachably secured in position behind said upper section, whereby said section will act as a water shed for said member, and means for holding said member in parallelism with said lower section.

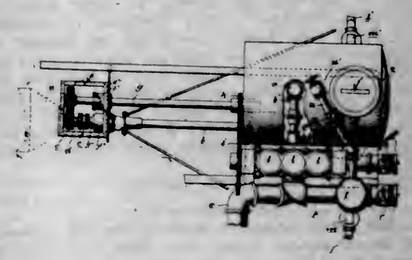
2. The combination with a wind shield having a pivoted section, of a flexible transparent member adapted to be detachably secured in position behind said pivoted section, whereby said section may act as a water shed for said member, and resilient means for tensioning the upper portion of said member.

4. The combination with a wind shield having upper and lower pivoted sections and associated uprights, of a flexible transparent member adapted to be detachably secured to said uprights behind the upper section and extending below the top of the lower section, whereby, when the upper section is swung outwardly on its pivots, it will act as a rain shed for said member, a supplemental rain shed connected to said member and extending over the top edge of said lower section and across the front face thereof, and resilient means for tensioning the upper portion of said member.

6. The combination with a wind shield having upper and lower pivoted sections and their inclosing uprights having projections at the top, of a flexible transparent member adapted for attachment at its sides to said uprights and behind the upper section, whereby said section, when swung outwardly, will act as a water shed for said member, springs secured to the top corners of said members and carrying hooks adapted for engagement with said projections and a flap connected to said member near its lower edge, and adapted to extend across the top edge of the lower section and across part of the front face thereof.

[Claims 3, 5, and 7 not printed in the Gazette.]

1,272,956. MOTOR-VEHICLE FIRE-ENGINE. PERLEY G. HOWE and ALVAN RAY LAMBERT, Anderson, Ind. Filed Nov. 2, 1916. Serial No. 129,177. (Cl. 169—19.)



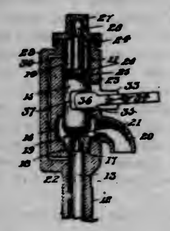
1. In a fire extinguishing apparatus, the combination of a pump having a main inlet and a main outlet and means

for closing each, a chemical attachment therefor embodying a tank having a filling opening, a pipe connecting the outlet of this tank to the inlet side of the pump and provided with a manually-controlled valve, a by-pass pipe of smaller diameter than the main outlet and inlet connecting the inlet of the tank to the outlet side of the pump, this by-pass pipe being provided with a manually-controlled valve and also with an outlet for the chemical stream which is connected to the by-pass pipe at a point between said valve and the pump, this chemical outlet pipe being provided with a manually-controlled valve, for the purposes set forth.

2. The combination with a motor vehicle embodying a change-speed transmission and a vehicle-driving shaft, of a pumping-apparatus mounted on the vehicle, and means whereby the vehicle shaft or the pumping-apparatus may be alternately and independently driven from said transmission, said means embodying a box or casing arranged adjacent the transmission, a supplemental-shaft journaled in said box and geared to the pumping-apparatus, a universal-joint mounted in the rear wall of said box and having connected to its forward end a clutch-member located within the box and journaled on the rear wall thereof, the forward end of this clutch-member being provided with an axial passage for the reception of the rear end of the driven shaft of said transmission, said driven shaft of the transmission passing through the front wall of said box, gearing for driving said supplemental shaft from said transmission-driven shaft including a gear mounted rotatably on said transmission-driven shaft and provided with a clutch-member which faces the aforesaid clutch-member connected to the universal joint, and a double clutch-member slidably mounted on the transmission-driven shaft and adapted to be engaged with either one of the aforesaid clutch-members.

[Claims 3 and 4 not printed in the Gazette.]

1,272,957. FLUSH-TANK VALVE. ALEXANDER F. HUMPHREY and RAYMOND C. MICHAELS, Pittsburgh, Pa., assignors of one-fifth to William L. Swartz, Pittsburgh, Pa. Filed Apr. 5, 1917. Serial No. 160,024. (Cl. 137—104.)

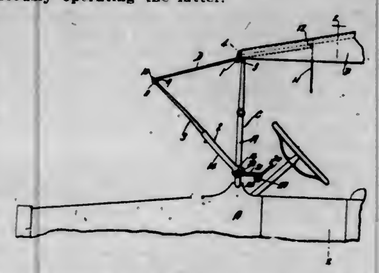


2. A device of the class described comprising a casing having an axial chamber therein provided with an enlarged lower portion having a plurality of relatively small side outlet ports, a valve seat arranged at the bottom of said enlarged portion, an outlet spout for said enlarged portion, a float controlled reciprocating valve within said chamber having one end adapted for engagement with said seat when the valve is closed and provided with a reduced guide stem on the other end thereof having a packing secured thereon, and a guide and stop cap for said stem secured to the upper end of the casing, said casing having a water inlet opening communicating with said chamber at points above and below said valve.

[Claim 1 not printed in the Gazette.]

1,272,958. AUTOMOBILE STORM-AWNING. GEORGE H. HUNT, Monroe Center, Ill. Filed Jan. 17, 1918. Serial No. 212,267. (Cl. 21—148.)

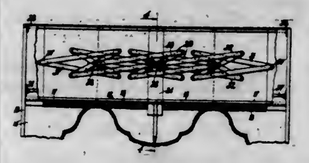
1. The combination of an automobile top, a wind shield, an awning projectable forwardly from the said top, arms supporting the free edge of the awning, brackets secured to the wind shield and on which the arms are pivoted, means for locking the arms in different positions, and actuating means extending from one bracket to the other and operatively connected with the said means for simultaneously operating the latter.



2. The combination of an automobile top, a wind-shield, an awning projectable forwardly from the top, pivoted arms on the wind-shield to support the awning, springs for moving the arms in one direction, teeth on the pivoted ends of the arms, spring-actuated pawls engaging the teeth for preventing movement of the arms, and means for simultaneously releasing the pawls.

3. The combination of an automobile top, a wind-shield, an awning projectable forwardly from the top, pivoted arms on the wind-shield to support the awning, springs for moving the arms in one direction, teeth on the pivoted ends of the arms, spring-actuated pawls engaging the teeth for preventing movement of the arms, a rock shaft mounted adjacent the wind-shield, means for actuating the rock shaft, and connections between the rock shaft and pawls for moving the latter to and from releasing position.

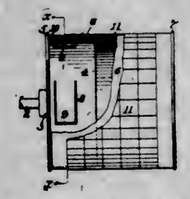
1,272,959. LAMBREQUIN. JACOB JARVIK, New York, N. Y. Filed Oct. 11, 1917. Serial No. 196,085. (Cl. 156—13.)



A lambrequin comprising a plurality of slidably connected rigid supporting sections; a plurality of cross arms pivotally connected in paired relation and mounted, one pair on each of said supporting sections; a plurality of l inks pivotally connecting the ends of each of said arms and the adjacent supporting section for moving said adjacent section in conformity with the swing of said arms, the length of said links being unrelated to the length of said arms; and a plurality of cover plates, each mounted at the rear of one of said supporting sections for forming in connection therewith box-like recesses for said cross arms and links, said cover plates being arranged to slide each upon the other for forming box-like members telescopically related.

1,272,960. CHART-DRUM FOR RECORDING APPARATUS. EDWARD G. JAY, Jr., Philadelphia, Pa., assignor to Warren Webster and Company, a Corporation of New Jersey. Original application filed Aug. 4, 1917, Serial No. 184,506. Divided and this application filed Apr. 2, 1918. Serial No. 226,167. (Cl. 234—1.)

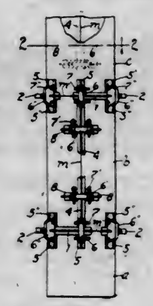
3. In a device of the character stated, a driving member comprising a head having a circumferential flange concentric with the axis of the head, and also having a projecting portion beyond the flange, combined with a chart carrying drum of cylindrical form, sleeved upon the circumferential flange, and having its end adapted for adjustment against the projecting portion of the head to bring the drum into axial alinement with the head, and friction creating means between the drum and the flange



comprising tongues secured to one of the parts and spring pressed against the other of the parts, whereby the drum and its chart may be circumferentially adjusted about the head, and also whereby the drum may be readily removed for replacing a record with a fresh sheet when necessary.

[Claims 1, 2, and 4 not printed in the Gazette.]

1,272,961. COLUMN-FORM. HENRY JENTZER, St. Louis, Mo. Filed Apr. 19, 1918. Serial No. 229,564. (Cl. 25—118.)



3. A column form comprising a series of sheet metal tubular sections disposed in contiguous relation and formed with longitudinal seams or joints relatively out of alinement with one another, sectional T binding rings disposed around the column opposite the joints between the sections, longitudinal stiffeners disposed opposite the longitudinal joints of successive sections and having their terminals engaging the sides of the webs of the T rings, T anchor brackets on each section alining with the longitudinal stiffener of an adjacent section, detachable coupling blocks spanning the rings and connecting the adjacent ends of the anchor brackets and stiffener members, means for connecting the adjacent ends of consecutive sections on either side of the stiffener of a section, and means for spanning the stiffeners and connecting together the parts of each section disposed on opposite sides of the longitudinal joint of said section.

[Claims 1, 2, and 4 to 6 not printed in the Gazette.]

1,272,962. MARLINESPIKE. JOHAN E. JOHANNESSEN, Brooklyn, N. Y., assignor of one-fifth to Johan A. Sether, one-fifth to Olaf C. Hoff, and one-fifth to Charles J. Christiansen, Brooklyn, N. Y., and one-fifth to O. A. Waage, New York, N. Y. Filed Jan. 12, 1918. Serial No. 211,601. (Cl. 114—225.)

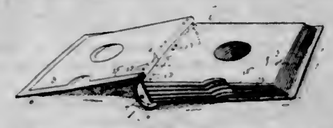
2. A marline spike comprising, a shank having a substantially cylindrical section and a connected tapered section having a starting point provided with a plurality of straight grooves which extend through a portion of the length of said tapered section, said grooves terminating at one end at the apex of the point, said tapered section having spiral grooves therein whose forward ends extend into the immediate proximity of the inner ends of said



straight grooves in said starting point, the said spiral grooves each having a straight branch extending approximately throughout the length of said cylindrical section, a manipulating handle extending from said cylindrical section.

[Claims 1 and 3 not printed in the Gazette.]

1,272,963. LOOSE-LEAF DEVICE. CORNELIUS EVAN JOHNSON, Grand Rapids, Mich., assignor to The Proudfit Loose Leaf Company, Grand Rapids, Mich., a Corporation of Michigan. Filed Feb. 8, 1917. Serial No. 147,372. (Cl. 129—20.)



1. In a device of the character described; a back member having longitudinally-extending grooves; leaf members having pockets adapted to contain phonograph records and having bight portions adapted to be inserted into the grooves; and releasable means for retaining the bight portions in the grooves.

2. In a device of the character described; a back member having longitudinally-extending grooves with sides converging toward the mouths of the grooves; leaf members having pockets adapted to contain phonograph records and having bight portions adapted to be inserted into the grooves; and releasable means for retaining the bight portions in the grooves.

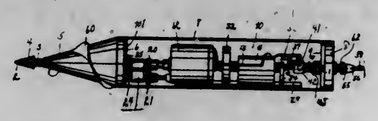
3. In a device of the character described; a back member having longitudinally-extending grooves with sides converging toward the mouths of the grooves; leaf members having pockets adapted to contain phonograph records and having bight portions adapted to be inserted into the grooves; rods in the bights of said portions and adapted to releasably hold the same in the grooves against lateral removal.

5. In a device of the character described; a back member having longitudinally-extending grooves with sides converging toward the mouths of the grooves; leaf members having bight portions adapted to be inserted into the grooves; rods in the bights of said portions and adapted to releasably hold the same in the grooves against lateral removal; and a removable plate at the end of the back member extending across the open ends of the grooves and adapted to hold the bight portions and the rods against longitudinal removal.

7. In a device of the character described; a leaf member having a binding-edge portion and a pocket made by folding a sheet to form an edge of the pocket at the free end of said member opposite the binding-edge portion and by riveting the edge portions of the sheet to the binding-edge portion between them, and by folding the bottom portion of one fold of the sheet and securing the same to the other fold of the sheet.

[Claims 4 and 6 not printed in the Gazette.]

1,272,964. LONG-RANGE TORPEDO. JAMES S. JOHNSTON, Utica, N. Y. Filed Mar. 29, 1915. Serial No. 17,591. (Cl. 114—20.)



1. In a long range torpedo, a casing, a conical forward end having a chamber stored with an explosive, a spiral propeller secured to said conical forward end, and means for revolving said spiral propeller, whereby to move the torpedo through the water.

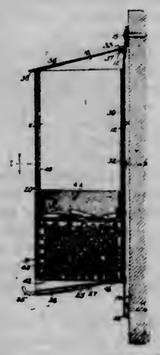
3. In a long range torpedo, a casing, a rod extending through said casing, a motor, a battery, a recess in said rod, a switch adapted to be inserted in said recess, whereby to break the electrical connections of said battery with said motor, and means for holding said switch in said given position.

5. In a long range torpedo, a casing, a rod extending through said casing, a motor, a battery, bars attached to said battery, another bar adapted to make contact with said first named bars, means for normally holding said second named bar in contact with said first named bar, and a switch for breaking said contact.

7. In a long range torpedo, a casing, a forward conical end mounted to turn independently of said casing, a motor, a battery, a hollow shaft mounted in said motor, a rod extending through said hollow shaft, means for communicating the revolution of the hollow shaft to said rod, whereby to turn the forward conical end to propel the torpedo through the water.

[Claims 2, 4, 6, and 8 not printed in the Gazette.]

1,272,965. MATCH-SAFE. OTTO KARTZMARK, Jersey City, N. J. Filed Apr. 3, 1917. Serial No. 159,447. (Cl. 206—28.)



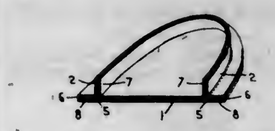
1. In a single delivery match safe, the combination of an outer casing, means to fix the same in position, said casing having a delivery space at its bottom, a yoke bounding said space and comprising a U-shaped wire structure having its free ends projected forwardly and upwardly, a holder for matches fitted into the fixed casing and having a delivery space registering with the first mentioned space, said inner holder being provided with flexible means supporting the bulk of matches to permit the withdrawal of the same singly.

4. In a match safe, the combination of a fixed casing comprising a rear panel of sheet metal bent along a horizontal line to form an offset adjacent to the upper end thereof, a flat thin cover hinged to the upper portion of the casing and adapted to seat rearwardly into said offset when being opened leaving the front surface of the main portion of the rear panel flush with the then front face of the cover, and an inner casing removably fitted to slide into and out of the fixed casing without obstruction past the cover when open, means being provided at the bottoms of both of the casings for the delivery of matches singly therefrom.

7. In a match safe, the combination of a fixed casing comprising a rear panel having an offset adjacent to the upper end thereof, a cover hinged to the upper portion of the casing and adapted to seat within said offset when open leaving the front surface of the main portion of the rear panel flush with the then front face of the cover, and inner casing fitted to slide into the fixed casing without obstruction past the cover when open, means at the bottom of the casing providing for the single delivery of the matches, and a burned match tray slidably fitted into the upper end of the inner casing and supported therein upon the bulk of matches contained in the inner casing below the tray.

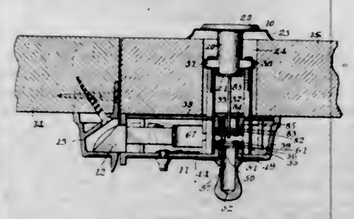
[Claims 2, 3, 5, and 6 not printed in the Gazette.]

1,272,966. INSOLE. FREDERICK R. KEITH, Randolph, Mass. Filed Apr. 11, 1918. Serial No. 227,965. (Cl. 36—22.)



An insole comprising a body portion provided near its marginal edge with an upturned positioning lip and a folded tape encircling said lip and positioned thereby, said tape being sewed to the body portion exterior to the lip, that part of the body portion which is exterior to the lip being thinner than the central part of said body portion.

1,272,967. LOCK. ANTHONY KIRSCH, Brooklyn, N. Y., assignor to Wilson Bohannen, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Nov. 10, 1917. Serial No. 201,323. (Cl. 70—46.)



1. A door lock, comprising a key-controlled cylinder section having threaded lugs, a latch bolt section having a casing provided with a back plate and a front plate, the said back and front plates having sets of registering apertures either of which is adapted to register with the said threaded lugs, and connecting screws extending through a set of registering apertures in the said back and front plates and screwing into the said threaded lugs.

3. In a door lock, a rollback having a hub provided with a diametrical slot, arms having rings mounted to turn on the said hub, the arms extending in opposite directions, the rings having lugs extending into the ends of the said slot, the lugs being narrower than the slot, the arms in one position being diametrically opposite each other and in another position extending at an angle one relative to the other.

4. A door lock, comprising a key controlled cylinder section having threaded lugs, a latch bolt section having a casing provided with two sets of apertures either of which is adapted to register with the said threaded lugs, a bolt slidable in the said casing, two rollbacks each having a hub and arms having limited swinging movement on the hubs, the hub of one rollback being controlled by the cylinder section and the hub of the other rollback having a manually controlled knob, a disk mounted to turn on the hub having the knob, the disk having apertures adapted to register with either set of casing apertures on correspondingly turning the disk, and connecting screws extending through the said disk apertures, and the casing apertures in register with the disk apertures at the time, the screws screwing in the said threaded lugs and being out of the paths of the said arms.

[Claim 2 not printed in the Gazette.]

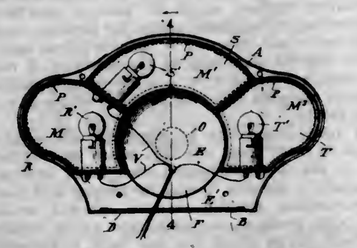
1,272,968. SHIPPING-TAG. CHARLES P. KLEEBAUER, Brooklyn, N. Y., assignor to Cohoes Envelope Co., Inc., Cohoes, New York, a Corporation of New York. Filed Aug. 8, 1917. Serial No. 185,050. (Cl. 40—27.)



1. A shipping tag comprising a body; a head for said body, said head embodying a plurality of layers of material, each having a partially severed section, each section having formed therein an opening, the entrance to the openings of said sections being extended in relatively opposite directions to avoid alinement when said sections are adhered; and means for uniting said sections to form a unit structure.

[Claim 2 not printed in the Gazette.]

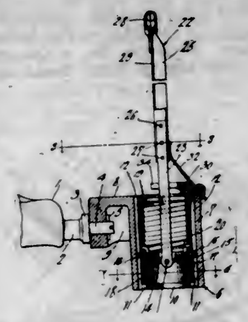
1,272,969. VISUAL SIGNAL FOR AUTOMOBILES. OSCAR KORN, Detroit, Mich. Filed Sept. 27, 1917. Serial No. 193,535. (Cl. 116—31.)



A visual signal for automobiles, comprising a casing having a central cylindrical outlined compartment, and a plurality of frames with their walls adjacent to the wall of the central compartment concaved, the walls of said frames being in contact with one another, and lugs projecting from the edges of said frames, sheets of translucent material held by said lugs against the marginal edges of said frames, and lamps mounted upon said frames behind the said translucent sheets.

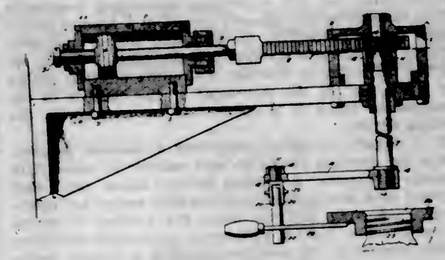
1,272,970. MOTOR-CYCLE BACK-REST. CHARLES KUDEARS, Pittsburgh, Pa. Filed Oct. 25, 1917. Serial No. 198,483. (Cl. 208—138.)

5. In a device for sustaining the rider of a cycle at the arm pit, a casing; a follower mounted to reciprocate in the casing; spring means for limiting the downward movement of the follower; a support having its lower end pivoted to the follower; and a guide on the casing, the guide coacting with the support to limit the swinging movement of the support on the follower to a single plane.



[Claims 1 to 4 not printed in the Gazette.]

1,272,971. DEVICE FOR REMOVING RINGS FROM GLASSWARE. JOHN ANDREW LEWIS, Grafton, W. Va., assignor to Tygart Valley Glass Company, Grafton, W. Va. Filed Jan. 9, 1918. Serial No. 211,051. (Cl. 49—14.)



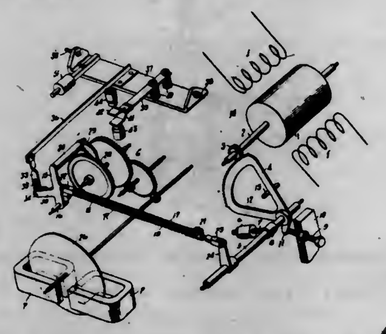
1. A device of the character specified, comprising a support, a shaft journaled in the support and provided at its lower end with a radial arm, a finger depending from the arm and connected thereto by a rule joint to permit the finger to swing freely in one direction from a vertical position, and to hold the finger in a vertical position when it swings in the other direction, power operated means for rotating the shaft, said means comprising a cylinder, a piston in the cylinder, a rack bar connected with the piston, the shaft having a pinion for engagement by the rack bar, and means for limiting the movement of the piston away from the shaft, said means being adjustable.

2. A device of the character specified, comprising a support, a shaft journaled in the support and provided at its lower end with a radial arm, a finger depending from the arm and connected thereto by a rule joint to permit the finger to swing freely in one direction from a vertical position, and to hold the finger in a vertical position when it swings in the other direction, power operated means for rotating the shaft, said means comprising a cylinder, a piston in the cylinder, and a rack bar connected with the piston, the shaft having a pinion for engagement by the rack bar.

3. A device of the character specified, comprising a support, a shaft journaled in the support and provided at its lower end with a radial arm, a finger depending from the arm and connected thereto by a rule joint to permit the finger to swing freely in one direction from

a vertical position, and to hold the finger in a vertical position when it swings in the other direction, and power operated means for rotating the shaft.

1,272,972. CIRCUIT-CONTROLLER. LLOYD V. LEWIS, Edgewood borough, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Aug. 10, 1915. Serial No. 44,761. (Cl. 161—25.)



1. A circuit controller comprising a movable member, means for exerting forces on said member to move it in opposite directions, a braking device, means interposed between said member and said braking device for operatively connecting the two when the member is moved in one direction but for permitting unretarded movement of the member in the opposite direction, a contact device biased to one controlling position, and means interposed between the movable member and the contact device for moving the latter to another controlling position during the latter part of the movement of the member in the direction in which it is operatively connected with the braking device.

2. A circuit controller comprising a movable member, means for exerting forces on said member to move it in opposite directions, a braking device, means interposed between said member and said braking device for operatively connecting the two when the member is moved in one direction but for permitting unretarded movement of the member in the opposite direction, a contact device biased to one controlling position, and a pin and slot connection between said movable member and said contact device for moving the contact device to another controlling position during the latter part of the movement of the member in the first mentioned direction and for permitting return of the contact device in response to its bias during the early part of the movement of the said member in the other direction.

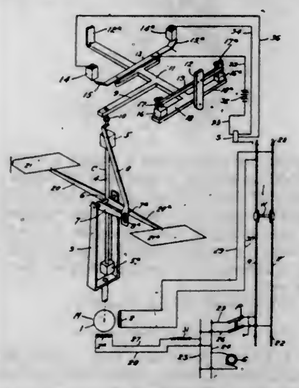
3. A circuit controller comprising a movable member, a spring attached to said member, means for storing energy in said spring whereby the spring exerts a force on said member tending to move the latter, a braking device, means interposed between said movable member and said braking device for operatively connecting the two when the movable member is moved by the energy stored in the spring but for permitting unretarded movement of the said member in the opposite direction, a contact biased to one controlling position, and means interposed between said contact and said member for moving the contact in opposition to its bias to another controlling position during the latter part of the movement of the movable member in response to the force exerted thereon by said spring.

7. A slow acting circuit controller comprising a motor, a pivotally mounted member, resilient mechanism for rocking said member uniformly by said motor, a magnet, a disk adapted to rotate in the field of said magnet, mechanism for rotating said disk by said member when said member is being rocked by said motor, and contacts adapted to be operated by said member.

8. A slow acting circuit controller comprising a motor, a shaft, means for biasing said shaft to turn in one direction, means for rocking said shaft by said motor in the opposite direction, a crank arm on said shaft, a pivotally mounted member, a resilient connection between said crank arm and said member whereby said member may be rocked by said motor, a magnet, a disk adapted to revolve between the poles of the magnet, a ratchet, a pawl on said member for driving the ratchet when the member is being rocked by said motor, means for rotating the disk by the ratchet, a contact comprising a block and a finger biased away from said block, a link operatively connected at one end to said finger, a slot near the other end of the link, and a pin on said pivotally mounted member adapted to slide in said slot, so that the said finger is not operated to engage the said block until after said pin has engaged one end of said slot.

[Claims 4 to 6, 9, and 10 not printed in the Gazette.]

1,272,973. RELAY. SAMUEL M. LUCAS, Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Feb. 14, 1917. Serial No. 148,649. (Cl. 175—281.)



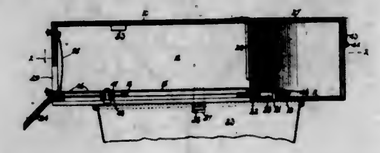
1. A relay comprising a centrifugal device biased to an intermediate position, means for rotating said device in one direction or the other, means for initially displacing said device in one direction or the other from said intermediate position depending on the direction of rotation, and contacts controlled by said centrifugal device and selectively operated according to the direction of rotation of said device.

7. A relay comprising a centrifugal device pivotally mounted to swing about one axis, means for rotating said device in one direction or the other about another axis at an angle to the first, means for biasing said device to an intermediate position wherein rotation about the second axis produces no centrifugal action tending to swing said device about the first axis, a non-rotatable member, a second member carried by said centrifugal device for engagement with said non-rotatable member when said device is in or near said intermediate position whereby said device is initially swung about its first axis from said intermediate position in one direction or the other according as said device is rotated in one direction or the other about its second axis, and contacts controlled by said centrifugal device and selectively operated according as said device is swung in one direction or the other from its intermediate position about said first axis.

10. In combination, a centrifugal device pivotally mounted to swing about one axis, means for rotating said device in one direction or the other about another axis at an angle to the first, means for biasing said device to an intermediate position wherein rotation about the second axis produces no centrifugal action tending to swing said device about the first axis, and means for initially swinging said device about its first axis in one direction or the other from said intermediate position according as it is rotated in one direction or the other about its second axis.

[Claims 2 to 6, 8, and 9 not printed in the Gazette.]

1,272,974. TRAP. ALBERT ELLSWORTH LYCAN, Kooskia, Idaho. Filed June 22, 1917. Serial No. 176,371. (Cl. 43—24.)

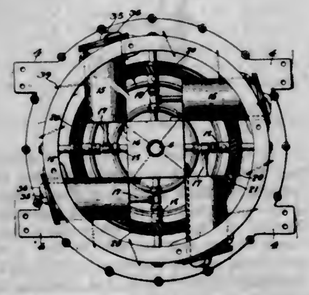


1. In a trap, a body having a bait compartment, a passage leading thereto and a passage leading therefrom, a tilting bottom in the first passage, means for locking the tilting bottom, a panel for separating the bait compartment from the second passage, and a glass panel for separating the first passage from the bait compartment.

3. A trap having a body with two orifices, a bait compartment and a passage leading thereto, a tilting bottom in the passage, a spring engaging the tilting bottom and having a projection engaging the body and two threaded terminals disposed in the orifices, and nuts meshing with the threaded terminals and engaging the body to hold the spring in adjusted position.

[Claims 2 and 4 not printed in the Gazette.]

1,272,975. ROTARY INTERNAL-COMBUSTION ENGINE. OWEN J. MCGANN, Carrollton, Ohio, assignor of one-half to George Sinclair, Hanoverton, Ohio. Filed Mar. 21, 1918. Serial No. 223,717. (Cl. 123—43.)

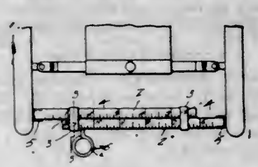


1. In an internal combustion engine, the combination with a casing, of a shaft rotatable therein, a rotor mounted on said shaft and including a central body portion, a pair of spaced annular elements, cylinders arranged tangentially with respect to the shaft and supported by the annular elements and body portion, crank shafts extending radially with respect to the first mentioned shaft and supported by the annular elements and by the body portion, and gearing between the crank shafts and the casing.

2. In an internal combustion engine, the combination with a casing, of a shaft rotatable therein, a rotor mounted on said shaft and including a central body portion, a pair of spaced annular elements, cylinders arranged tangentially with respect to the shaft and supported by the annular elements and body portion, crank shafts extending radially with respect to the first mentioned shaft and supported by the annular elements and by the body portion, gearing between the crank shafts and the casing, spark plugs carried by the outer ends of the cylinders, a distributer associated with the first mentioned shaft, and electrical conductors extending from said distributer through said shaft and through the cylinder castings to the spark plugs.

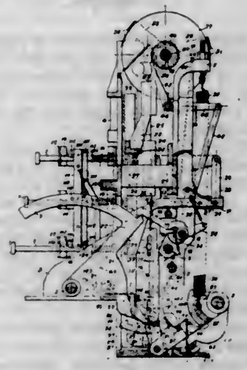
[Claims 3 to 5 not printed in the Gazette.]

1,272,976. WHEEL-TRUING DEVICE. EARL R. MCLUCAS, North Yakima, Wash. Filed Mar. 27, 1917. Serial No. 157,687. (Cl. 33—180.)



A wheel truing device comprising a pair of companion members having graduations thereon, a cuff secured to one end of each member and adapted to slidably receive the other member, substantially U-shaped wear plates disposed over the ends of said members and having one arm portion of each disposed in a plane above the faces of the members to abut the cuffs for preventing the members from becoming detached, and a set screw threaded in one of said members and adapted to be turned against the other member for holding said members against relative movement.

1,272,977. CASH-REGISTER. GEORGE MACBETH and MALCOLM MACBETH, Liverpool, England. Original application filed Jan. 8, 1915, Serial No. 1,263. Divided and this application filed Oct. 12, 1916. Serial No. 125,244. (Cl. 235—26.)



1. In a cash register, a plurality of longitudinally movable keys, cam parts on each key, a unitary locking and releasing pawl device common to all said keys and cam parts and operable by any of said cam parts, said keys having parts to be enganged and disengaged by said pawl device.

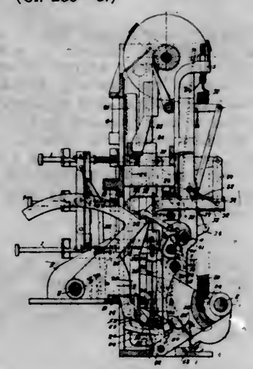
4. In a cash register a plurality of longitudinally movable keys, cam parts on each, a locking and releasing pawl device common to all said keys and cam parts, to be operated by any of said cam parts; parts on the keys adapted to be engaged and disengaged by the said pawl device; a spring to operate the pawl devices in one direction; the cam part being adapted to act on the pawl when the key is pushed in; a certain amount to cause the front catch of the pawl which has passed the end of the cam surfaces to engage with a locking or detent part on the key, and lock it, and also to move the back catches of the pawls into locking or detent parts at the opposite side of

the cam surfaces to the front locking or detent part so as to lock the keys not actuated; substantially as set forth.

7. In a cash register, a plurality of longitudinally movable keys, a locking device mounted above all of said keys and comprising a plate having depending catches, means on each key whereby to operate the plate in one direction in the operative movement of the key, each key being formed with notches to be engaged by one of said catches when the keys are in normal position and with notches to be engaged by the other of said catches when the key has been moved to operative position.

[Claims 2, 3, 5, and 6 not printed in the Gazette.]

1,272,978. CASH-REGISTER. GEORGE MACBETH and MALCOLM MACBETH, Liverpool, England. Original application filed Jan. 8, 1915, Serial No. 1,263. Divided and this application filed Oct. 2, 1916. Serial No. 123,425. (Cl. 235—3.)



1. In a cash register, the combination of a gate adapted to be moved rectilinearly; type wheels for printing the record or strip, and rack bars for operating said type wheels, the said rack bars being governed in the first portion of the stroke by the gate, and having limited movement independent of the gate.

4. A cash register comprising sets of keys; a bodily rectilinearly movable gate controlled by the keys; spring actuated rack bars which are released by the gate; a ticket marking and delivering mechanism having type wheels which are moved from the zero position to the position of action; an inking roller which inks the type wheels in their movement from the zero position to the position of action; so that in all cases the types will be inked before they act on the ticket to be printed on; substantially as herein set forth.

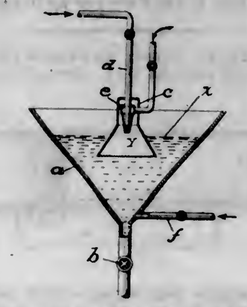
5. In a cash register, a rectilinearly movable gate, type wheels for printing the record, and means governed in part by the movement of the gate for operating the type wheels.

[Claims 2, 3, 6, and 7 not printed in the Gazette.]

1,272,979. PROCESS OF REFINING HYDROCARBON OILS. HAROLD T. MAITLAND, Marcus Hook, Pa., assignor to Sun Company, Philadelphia, Pa., a Corporation of New Jersey. Filed Jan. 13, 1916. Serial No. 71,849. (Cl. 196—26.)

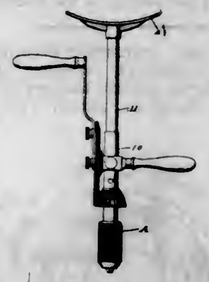
1. The process of refining oils which consists in creating a spray of gas and of sulfuric acid in a finely divided state approximating a mist of vapor the separate particles of which are substantially smaller than those which naturally form by agitation of oil and acid mechanically or by air, and forcibly directing said spray, within a confined space outside that occupied by the body of oil, toward the level of the oil.

2. The process of refining oils which consists in vaporizing a flowing stream of acid by means of a surrounding flowing stream of gas serving to break up the acid into an extremely finely divided state and forcibly directing the same into a space outside of that occupied by the body of oil and toward the level of the oil.



3. The process of refining oils which consists in vaporizing a flowing stream of acid by means of a surrounding flowing stream of gas serving to break up the acid into an extremely finely divided state and forcibly directing the same into a space outside of that occupied by the body of oil and toward the level of the oil, and independently agitating the body of oil to insure a thorough distribution of the acid particles which by gaseous pressure are forced below its surface.

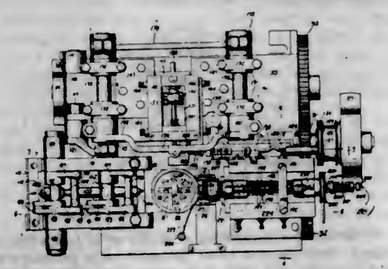
1,272,980. BIT-STOCK. JACOB MARCUS, Rochester, N. Y. Filed July 31, 1917. Serial No. 183,737. (Cl. 145—67.)



In a device of the character described, a standard including a fixed section, and a movable section telescopically fitted within the fixed section, said movable section being hollow for a portion of its length opening at the lower end thereof, and internally threaded, a cup-shaped element threaded within said movable section, a rigid pin rising centrally from within the fixed section and passed through an opening in the cup-shaped element, said pin having its upper extremity threaded, a second cup-shaped element reversely disposed with respect to the first mentioned element and formed to provide an internally threaded sleeve portion associated with the threaded extremity of said pin, each of said cup-shaped elements being stamped to provide a pair of spaced hooks, and a coil spring surrounding said pin interposed between the said cup-shaped elements, and engaged by said hoops of the respective cup-shaped elements whereby said movable section is yieldably supported within the fixed section.

1,272,981. MACHINE FOR MAKING FASTENING DEVICES. DAVIS MARINSKY, New York, N. Y. Filed Dec. 27, 1916. Serial No. 139,077. (Cl. 79—3.)

1. In a machine for manufacturing socket members of the class described, said socket members comprising originally a shell, an intermittently rotated member, means for operating said member, means mounted in said member for supporting a shell, means for supplying shells to the machine, means for feeding a shell from said supplying means to said supporting means, means for inserting a spring into said shell, and means for securing the spring in said shell.

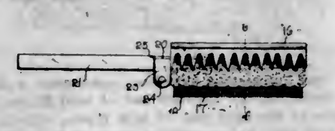


4. In a machine of the class described, a main drive shaft, supplemental shafts geared in connection with said main shaft, an intermittently rotated member, means mounted on one of said supplemental shafts for operating said member, a device adapted to feed shells into the machine, a mechanism operated by means of said last named shaft for feeding said shells from said device to said member, means mounted in said member for supporting said shells, means for feeding wire into the machine, means for bending said wire to form U-shaped springs, means for feeding the springs thus formed into said shells, said wire feeding and forming means and spring feeding means being operated by means on the other supplemental shaft, and means for securing the springs in said shells.

6. In a machine of the class described, a frame, a workpiece supporting member mounted therein, means for giving said member an intermittent rotary movement, means for intermittently locking said member against movement, means mounted in said member for supporting workpieces applied thereto, means for feeding workpieces to said supporting means, means for feeding wire into the machine, means for bending said wire to form U-shaped springs, means for feeding the springs thus formed into the workpieces supported by said member, and spinning tools movable toward and from said member and adapted to operate in connection with the workpieces supported thereby to secure said springs therein, and means for detaching the workpieces with the springs secured therein from said member.

[Claims 2, 3, 5, and 7 to 21 not printed in the Gazette.]

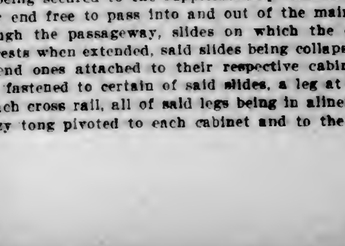
1,272,982. COMBINED HAIR BRUSH AND COMB. HARRY T. MAZE, Anderson, Ind. Filed Mar. 23, 1918. Serial No. 224,308. (Cl. 132—35.)



1. A brush including a body, and a comb projecting from the body and bristles extending from the body on each side of the comb, one end of the body being reduced in thickness and extending in the direction of the comb teeth and parallel thereto, a handle having at one end an angularly disposed, U-shaped portion embracing the reduced portion of the body and pivoted thereto, whereby the handle may be turned into a position beneath the comb teeth and parallel to the body or be rotated into a position in alinement with the body, and a spring tongue projecting from the body above the reduced portion thereof and engaging with the U-shaped portion of the handle when the handle is turned into alinement with the body to hold the handle yieldingly in alinement with said body.

2. A brush including a body, a comb projecting from the body, bristles extending from the body on each side of the comb, a handle U-shaped in cross section and having at one end an angular portion, said angular portion being hinged at one end to the end of the body, the handle being adapted to be turned into a position beneath the comb teeth and parallel to the body, or to be rotated to a position in alinement with the body with its angular portion abutted against the end of the body to thereby limit the movement of the handle in a direction away from the comb teeth, and means mounted upon the body for yieldingly holding the body in alinement therewith.

1,272,983. FURNITURE CONSTRUCTION. SALVATORE GUZZO MENZO, Philadelphia, Pa. Filed Feb. 26, 1918. Serial No. 219,190. (Cl. 45—9.)



1. In a device of the character stated the combination of a cabinet including front, back and side walls, an inclined bottom and a top spaced from the upper end of the front wall to form a passage way, vertical baffle members having inclined upper ends secured to the back wall within the cabinet and terminating short of the top wall, a guide block located at each end of the interior of the cabinet adjacent the passage way, said guide blocks having arcuate upper surfaces with the ends terminating short of the back wall, a covering of soft material on the back wall and edges of the baffle members, a supplementary cabinet open at the rear, a plurality of leaves attached together by flexible means to form an extension top, one end of which is secured to the supplementary cabinet with the other end free to pass into and out of the main cabinet through the passage way, supporting means for the extension top adapted to be housed in the supplementary cabinet when the device is closed and means for positioning said supporting means beneath the extension top when the device is opened.

3. In a device of the character stated the combination of a cabinet including front, back and side walls, an inclined bottom and a top spaced from the upper end of the front wall to form a passageway, vertical baffle members having inclined upper ends secured to the back wall within the cabinet and terminating short of the top wall, a guide block located at each end of the interior of the cabinet adjacent the passageway, said guide blocks having arcuate upper surfaces with the ends terminating short of the back wall, a covering of soft material on the back wall and edges of the baffle members, a supplementary cabinet open at the rear, an extension top comprising a plurality of leaves each having a transverse slot or channel adjacent each end, provided with grooves in one edge and having tongues projecting from the opposite edge, the tongues of leaves adapted to register with the grooves of coacting or adjacent leaves and flexible straps for attaching said leaves together, said straps lying in the transverse slots or channels and fastened at one point to each leaf adjacent one edge thereof, one end of said extension top being secured to the supplementary cabinet with the other end free to pass into and out of the main cabinet through the passageway, slides on which the extension top rests when extended, said slides being collapsible with the end ones attached to their respective cabinet, cross rails fastened to certain of said slides, a leg at each end of each cross rail, all of said legs being in alinement and a lazy tong pivoted to each cabinet and to the different

cross rails for positioning the legs, cross rails and the slides.

5. In furniture construction, an extension top comprising a plurality of leaves with coacting parallel beveled edges, each leaf having a transverse channel in its under face adjacent each end and provided with interlocking means along its beveled edges and flexible straps lying in said channels and secured to each leaf at one point adjacent one edge whereby said leaves may be laid on top of one another with all top faces upward, the free portions of the straps under each leaf folding upon themselves and passing around one edge of each leaf as shown.

[Claims 2 and 4 not printed in the Gazette.]

1,272,984. PROJECTILE FOR FIELD-GUNS. MICHAEL MUTRO, Chester, Pa. Filed Feb. 5, 1917. Serial No. 146,675. (Cl. 102—29.)



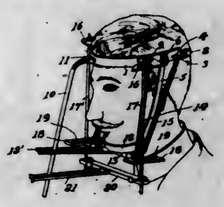
1. An explosive projectile consisting of front and rear hollow bodies connected together at adjacent ends, a plug closing the rear end of the rear body and readily detachable rearwardly therefrom, a powder charge resting against said plug, a partition intermediate the ends of the rear body, an annulus of shrapnel forward of said partition in the rear body, an explosive charge filling the space forward of the partition in the rear body left by said shrapnel, said explosive charge having a core of guncotton, a partition between the ends of the front body, an explosive charge in the rear end of the front body, and means to fire the first charge and thereafter fire the second and third charge.

2. An explosive projectile consisting of front and rear hollow bodies connected together at adjacent ends, a plug closing the rear end of the rear body and readily detachable rearwardly therefrom, a powder charge resting against said plug, a partition intermediate the ends of the rear body, an annulus of shrapnel forward of said partition in the rear body, an explosive charge filling the space forward of the partition in the rear body left by said shrapnel, a partition between the ends of the front body, an explosive charge in the rear end of the front body, means to fire the first charge and thereafter fire the second and third charge, an explosive charge in front of the partition in the front body, impact actuated means for firing the last-mentioned explosive charge, said first-mentioned explosive charge having a core of guncotton.

1,272,985. DENTAL ARTICULATOR. ICHIGORO NAKAHARA, Tokyo, Japan. Filed Jan. 15, 1917. Serial No. 142,543. (Cl. 32—1.)

1. A device for preparing a model of a tooth-bite comprising a ring adapted to be fastened on a patient's head, a guide rod on said ring, a jaw presser, springs connecting said jaw presser with said head ring, and a guide bar on said jaw presser coöperating with said guide rod for maintaining the patient's jaws sufficiently straight.

2. A device for preparing a model of a tooth-bite comprising a ring adapted to be fastened on a patient's head, a guide rod on said ring, a jaw presser, a guide bar projecting from the front of said jaw presser and coöperating with said guide rod for maintaining the patient's jaws sufficiently straight, and spiral springs connecting said jaw presser with said head ring.



3. A device for preparing a model of a tooth-bite comprising a ring adapted to be fastened on a patient's head, a guide rod on said ring, a transverse bar, a jaw presser supported on said bar, a guide bar projecting from the middle point of the said transverse bar and coöperating with said guide rod for maintaining the patient's jaws sufficiently straight, and spiral springs connecting said head ring with the ends of said transverse bar.

4. A device for preparing a model of a tooth-bite comprising an adjustable ring adapted to be fastened on a patient's head, a guide rod on said ring, a jaw presser, a guide bar on the front of said jaw presser, said guide bar and said guide rod coöperating for maintaining the patient's jaws sufficiently straight, vertical rods connected to said head ring, a connecting rod connecting the lower ends of said vertical rod, an additional guide bar on said connecting rod coöperating with said guide rod, and springs connecting said jaw presser to said head ring.

5. A device for preparing a model of a tooth-bite comprising a ring adapted to be fastened on a patient's head, a guide rod on said ring, a transverse bar, a guide bar on the front of said transverse bar coöperating with said guide rod for maintaining the patient's jaws sufficiently straight, a jaw presser fixed on said transverse bar, projecting pieces fixed on said head ring, vertical rods fixed to said pieces, a connecting rod connecting the lower end of said vertical rod, an additional guide bar on said connecting rod coöperating with said guide rod, and springs connecting said transverse bar to said head ring.

[Claim 6 not printed in the Gazette.]

1,272,986. BEET-HARVESTING MACHINE. THEODOR NIELSEN, Lundeljerggaard, Sönder-Bjerre, Denmark. Filed Sept. 6, 1917. Serial No. 189,969. (Cl. 55—9.)



1. A beet harvesting machine comprising a frame, a truck supporting the forward end of said frame, a revoluble axle at the rear end of said frame, wheels on the end of said axle, an unearthing share at the forward end of said frame, means adjacent said share adapted for laying beets to one side, a scoop supported by said frame and adapted to scoop up said beets, conveyers adjacent said scoop and between which said beets are adapted to move, a rotary carrier adapted to receive beets from said conveyers, means on said frame at one end of said rotary carrier and adapted to remove crests from the beets, a tumbling barrel at the rear end of said frame adapted to receive beets from said rotary carrier, and means operated by said revoluble axle adapted to impart movement to said conveyers, said rotary carrier, said tumbling barrel and the first mentioned means.

2. A beet harvesting machine comprising a frame, a revoluble axle at the rear end thereof, wheels on the ends of said axle, an unearthing share at the forward end of said frame, a scoop supported below said frame adapted to scoop up beets unearthed by said share, conveyers adjacent said scoop and between which beets are adapted to move, a rotary carrier supported by said frame and adapted to receive beets from said conveyers, means on said frame at one end of said rotary carrier and adapted for removing crests from the beets, a tumbling barrel supported by said frame adapted to receive beets from said rotary carrier, and means operated by said revoluble axle adapted for imparting movement to said conveyer, said rotary carrier and said tumbling barrel.

3. A beet harvesting machine comprising a frame adapted to be moved over the ground, an unearthing share at the forward end of said frame adapted to uproot beets, resilient arms supported from said share and adapted to be actuated to lay beets to one side with the longitudinal axis thereof at right angles to the direction of movement of said frame, a scoop supported below said frame adapted to scoop up the beets, endless conveyers associated with said scoop and between which the beets are adapted to move, means on said frame adapted for removing crests from the beets, and means operated from the rear end of said frame adapted for imparting movement to said conveyers and actuating said resilient arms.

4. A beet harvesting machine comprising a frame adapted to move above the ground, an unearthing share at the forward end of said frame, resilient arms supported from said unearthing share and adapted to be flexed to cause beets to lie in a row, a scoop supported by said frame adapted to scoop up the beets, endless conveyers associated with said scoop between which said beets are adapted to move, means on said frame adapted for removing crests from the beets, a tumbling barrel supported by said frame and adapted to receive the beets, and means operated from the rear end of said frame and adapted for imparting movement to said tumbling barrel, said endless conveyers and said arms.

1,272,987. PREPARATION OF PROTEID SILVER. YUTAKA NUKADA, Tokyo, Japan. Filed Sept. 24, 1917. Serial No. 192,949. (Cl. 167—7.)

1. A preparation of proteid silver which consists in adding silver nitrate to the liquid extracted from natto in the ratio of approximately one gram of silver nitrate to each one and one-half to two pounds of natto.

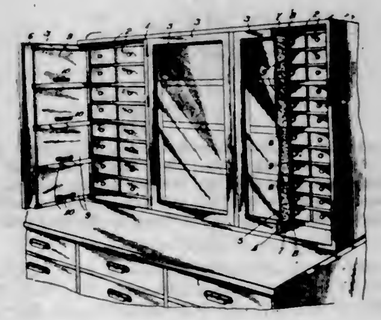
2. A preparation of proteid silver which consists in adding 17.5 grams of silver nitrate into the liquid extracted from natto, which liquid is produced by taking approximately 30 pounds of natto and adding the same to 12 gallons of water, which is heated for about 6 hours at a temperature of 100° C., then filtered and heated in water bath until the solution has evaporated to 9 cubic meters in volume, upon which it is allowed to stand 12 hours and then removing the precipitate by filtering through filter paper.

1,272,988. NUT-LOCK. GEORGE F. OLISH, Minneapolis, Minn.; Peter S. Olish executor of said George F. Olish, deceased. Filed Sept. 18, 1915. Serial No. 51,364. (Cl. 151—25).



In combination with a nut and bolt, said nut having a recess therein opening through the bore of the nut, a key mounted in the recess and extending into the bore of the nut for engagement with the bolt, one wall of the recess being at an angle to a plane passing through the axis of the nut and the bottom of the recess, the opposite wall being parallel to said plane, and merging into a wall arranged at an opposite angle to said plane.

1,272,989. STORE-FIXTURE. ROY ARCHER OSTRAM, Duluth, Minn., assignor to Duluth Show Case Company, Duluth, Minn., a Corporation of Minnesota. Filed Nov. 22, 1916. Serial No. 132,782. (Cl. 211—7.)



1. In a store fixture, the combination of a cabinet embodying a plurality of compartments for the reception of merchandise and a closure hinged to said cabinet to swing about a substantially vertical axis and normally concealing said compartments, said closure comprising a frame, a transparent front rigidly mounted in said frame, and a sectional back mounted in and movable with said frame and adapted to support individual articles of merchandise, the separate sections of said back being individually removable from said frame to simultaneously and collectively remove the articles of merchandise secured thereto.

[Claims 2 and 3 not printed in the Gazette.]

1,272,990. PORT-LIGHT SCREEN. ARTHUR L. OTTO, Philadelphia, Pa., and WILLIAM W. WATSON, CHARLES ANDERSON, and ELLIOT M. UNDERWOOD, Jamestown, N. Y.; said Watson, Anderson, and Underwood assignors to said Otto. Filed May 10, 1918. Serial No. 233,660. (Cl. 114—174.)

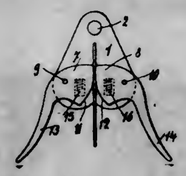


1. In a port light screen, a collar, a gauze-like sheet, and a ring, the latter being rigidly connected with the peripheral portion of said sheet as one, and both freely seated on said collar.

5. In a port light screen, a collar provided with an inturned flange, a guaze-like sheet, a ring, the latter and said sheet being adapted to be seated on and secured to said flange, and a handle-like device for said sheet consisting of a bail, an ear on which the latter is mounted, and means for connecting said car with said ring, said means being common fastenings for said ears with said ring and for the latter, and said sheet with said flange.

[Claims 2 to 4 not printed in the Gazette.]

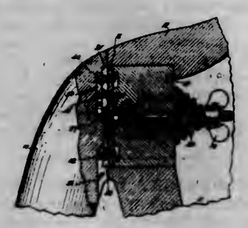
1,272,991. HAND-VISE. FERRUCCIO PAGLIERI, Bologna, Italy. Filed Apr. 28, 1915. Serial No. 24,460. (Cl. 24—134.)



A wire-stretching apparatus comprising a plate fitted with ring,—two cams fitted with hand levers and constituting two jaws pivotally secured to the said plate,—recesses for maintaining the said jaws in closed position, the said recesses being tightly closed by the said cams.

1,272,992. ARM-ADJUSTING DEVICE FOR DISPLAY-FIGURES. EMIL THEO. PALMENBERG, New York, N. Y. Filed Apr. 6, 1918. Serial No. 227,130. (Cl. 211—13.)





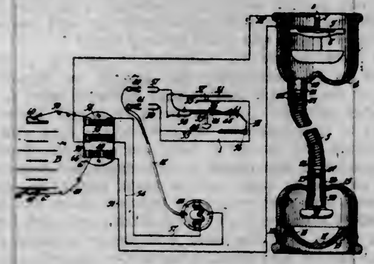
2. An arm adjusting device for display figures, comprising a plate held under tension on a shoulder of a figure, a plate secured to an arm, and means detachably connecting the plates with each other, the arm plate being adapted to impart a turning motion to the tension plate on swinging the arm up or down, the tension plate holding the arm plate and its arm in the adjusted position.

6. An arm adjusting device, comprising a block fixed in a shoulder of a display figure, a shoulder plate on the outer face of the said block and having a hub mounted to turn in the said block, a bolt attached to the said hub and provided with a nut, a spring coiled on the bolt and resting with one end on the inner face of the block and pressing with its other end against the said nut, an arm plate attached to an arm of the display figure and provided with a nut, a spring coiled on the bolt and resting with one end on the inner face of the block and pressing with its other end against the said nut, an arm plate attached to an arm of the display figure and provided with a central recess, a bayonet slot, a bayonet slot above the said central recess a marginal cut-out portion located diametrically opposite the said bayonet slot, headed studs on the said shoulder plate and engaging the said bayonet slot and said cut-out portion, and a spring-pressed pin held in the shoulder plate and engaging the said central recess.

[Claims 1, 3 to 5, and 7 not printed in the Gazette.]

1,272,993. SPEAKING AND SIGNALING APPARATUS. HERMAN G. PAPE, New York, N. Y. Filed Dec. 26, 1914. Serial No. 879,012. (Cl. 179—1.)

1. In a telephone system, in combination, a telephone circuit, a microphone hand set in said circuit, a support for the hand set, an exterior pressure operated current switch carried by the hand set, said switch being operable by the hand of the operator to make and break the circuit for signaling purposes, and operable by the removal of the hand set from the support to make the circuit, and also operable by the restoring of the hand set to the support, to break the circuit.



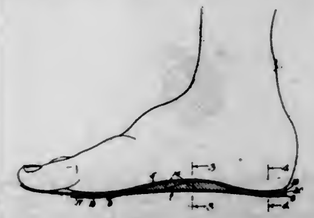
3. The combination of a microphone, a receiver, a fixed resistance, a source of current supply, means to transmit current from said source of current supply automatically and selectively through the fixed resistance and the receiver and thereafter with the fixed resistance out of the circuit through the varying resistance of the microphone and the receiver.

9. In a telephone system, a telephone circuit, a hand telephone comprising electro-responsive sound transforming mechanism in said circuit, a normally open shunt circuit across said transforming mechanism, means to automatically establish a circuit through said shunt and through said mechanism when external pressure on the said hand telephone is removed by removing the telephone from its support and to open the circuits when pressure is applied by restoring the telephone to its container or support, and a telephone receiver comprising a signal device in said circuit controlled by said switch.

13. In a telephone system, the combination with a telephone circuit, of a hand instrument in said circuit, a signal device in said circuit at a point remote from said hand instrument, a fixed resistance, a source of current supply, a switch comprising a push member projecting from said hand instrument and operable when released from an external pressure to establish an electrical circuit through said hand instrument, and operable when external pressure is applied to said push member, to break the circuit through said hand instrument, then to establish the circuit through said resistance and through said signal device, and then also to open said circuit.

[Claims 2, 4 to 8, and 10 to 12 not printed in the Gazette.]

1,272,994. ARCH-SUPPORT. WILLIAM S. PHELPS, Portland, Oreg. Filed May 16, 1917. Serial No. 168,908. (Cl. 36—71.)



In an arch support, a body member for disposal under the ball and the arch of the foot, a member disposed against the body member at the ball of the foot, and a third member disposed against the body member at the arch of the foot and overlapping the rear of the second

member, the third member having a forwardly extending tongue to form with the second member a pocket, there being a transverse row of stitches disposed between the body of the third member and its tongue for securing the rear of the second member and the front of the body of the third member to the first member, there being a second transverse row of stitches for securing the rear of the third member to the first member, and there being rows of stitches at the sides of the first member for securing the sides of the second member and one side of the third member to the first member.

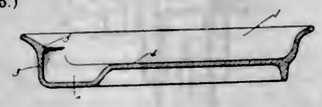
1,272,995. ALCOHOL-BURNER. MIKOLAJ PIOTROWSKI, Elmira Heights, N. Y. Filed Mar. 20, 1918. Serial No. 223,504. (Cl. 126—43.)



1. A grid for burners, comprising an annular member having side depressions, each depression being provided with a longitudinal slot and an outer side notch, a supporting leg having a loop hinged upon the portion of the grid lying inwardly of the adjacent one of said slots, the said leg having an integral stop finger projecting from the loop thereof supportingly arranged beneath the outer portion of the adjacent depression and seated within the outer notch thereof.

2. A grid comprising an annular metallic support having inwardly projecting ears, the said support having a depression provided with a longitudinal slot forming a pintle at the inner side of the support, the said depression further having a notch at its outer side, a supporting leg formed of strip metal looped in hinged arrangement over the said pintle and extending through said slot, an integral finger carried by the looped portion of the leg adapted for supportingly underlying the adjacent outer portion of said depressed portion and extending within the said notch when the grid is set up for use with the leg arranged substantially in perpendicular relations therewith.

1,272,996. DISH. LEONARD R. PORCHADEL, New York, N. Y. Filed Mar. 5, 1918. Serial No. 220,504. (Cl. 65—15.)



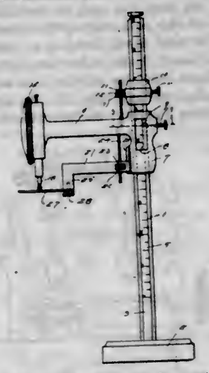
1. A dish comprising a body formed as a bowl structure for receiving a liquid and other foods, said body being formed with a depression therein adjacent one of the walls thereof, said depression being in free communication with the remaining part of the dish, and means bordering the depression presenting a bead overhanging the depression.

[Claim 2 not printed in the Gazette.]

1,272,997. COMBINED MICROMETER HEIGHT-GAGE AND INDICATOR. WALTER B. POWELL, Washington, D. C. Filed Jan. 25, 1918. Serial No. 213,777. (Cl. 33—172.)

1. A height gage including a graduated standard, a member adjustable on the standard, means for securing the member in adjusted position on said standard, a gage carried by the member, a scriber adapted for coöperation with the gage, and means adjustably securing the scriber to the member.

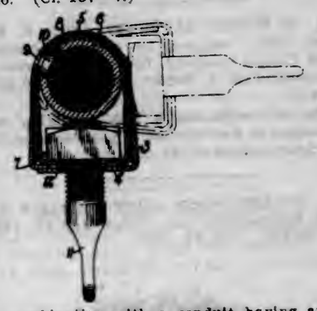
2. A height gage including a graduated standard, an arm adjustable on the standard, an index pointer carried by the arm and coöperating with the graduations on the standard, a measuring arm adjustable with relation to the first arm, a flat reversible scriber having plane upper and lower surfaces carried by the measuring arm, and a dial



gage carried by the first arm for coöperation with and operated by the scriber.

[Claims 3 and 4 not printed in the Gazette.]

1,272,998. VALVE. ALBERT EDWARD RASMUSSEN, North Yakima, Wash. Filed July 13, 1917. Serial No. 180,336. (Cl. 137—7.)



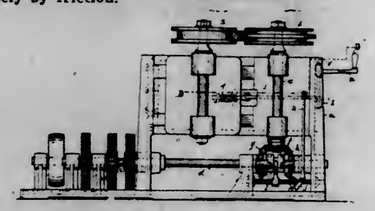
1. In combination with a conduit having an aperture in the side thereof, a valve comprising a stirrup straddling the conduit, a gasket between the conduit and the stirrup, said gasket and stirrup having an aperture adapted to communicate with the aperture in the conduit, a nut in the stirrup, a screw engaging the nut and adapted to engage the conduit whereby the stirrup is locked to the conduit and whereby the communication between the apertures is controlled, and means associated with the nut for locking the gasket to the stirrup.

2. In combination with a conduit having an aperture in the side thereof, a valve comprising a stirrup straddling the conduit at the aperture, a gasket in said stirrup for engaging the surface of the conduit, said stirrup and gasket having an aperture adapted to communicate with the aperture in the conduit, a U-shaped washer the sides of which engage the gasket and retain the same against the sides of the stirrup, a nut resting on said washer in the stirrup, and a thumb screw engaging the nut and adapted to engage the conduit, whereby the stirrup may be locked to the conduit and whereby the communication of the apertures in the conduit stirrup, and washer may be controlled.

1,272,999. EDGE-BENDING MACHINE. CONRAD REHBEIN, Detroit, Mich., assignor to Hayes Manufacturing Co., Detroit, Mich., a Corporation of Michigan. Filed June 25, 1917. Serial No. 176,708. (Cl. 153—32.)

1. In an edge bending machine for bending stiffening strips for automobile fenders and similar strips, the com-

bination of a driving roll, an idler roll, means for drawing the said roll toward and away from said driving roll including a spring for allowing relative movement after the rolls are in a set position and to furnish pressure for frictional driving of the roll and devices passing between the rolls, and a forming block having a longitudinal contour curved to the bend desired for the strip, the peripheries of the said block and one of the rolls being shaped to completely ensheathe and restrain all the sides of one or more strips, said idler roll and forming block being driven solely by friction.



2. In an edge bending machine, the combination of a driven roll, an idler roll opposite the driven roll and both provided with grooves having uninterrupted surfaces, a longitudinally arcuate forming block having one or more grooves in one face and propelled through the rollers solely by friction, and means for yieldingly pressing the rollers and forming block together.

1,273,000. ELECTRIC BATTERY. LLOYD R. RHOADES, Fremont, Ohio, assignor, by mesne assignments, to National Carbon Company, Inc., a Corporation of New York. Filed Jan. 5, 1916. Serial No. 70,407. (Cl. 204—38.)

1. A dry cell containing a bibulous lining having a uniform coating of flour and water paste adherent thereto.

[Claim 2 not printed in the Gazette.]

1,273,001. SILENT-CHAIN JOINT. WILLIAM A. ROCKENFIELD, Indianapolis, Ind. Filed May 17, 1915. Serial No. 28,716. (Cl. 74—32.)



1. A chain formed of opposite overlapping pairs of side links, a transverse tooth engaging member secured to each end of each pair of opposite links and extended inward to form teeth for engaging the teeth of a sprocket wheel, the inner side links being pivoted on the tooth engaging members connecting the adjacent pairs of outer side links and the tooth engaging members connecting the adjacent pairs of links having adjacent convex surfaces with grooves therein extending transversely of the chain and registering with each other, and a pivot pin lying in the grooves in each adjacent pair of tooth engaging members.

2. A chain formed of opposite overlapping pairs of side links, a transverse tooth engaging member secured to each end of each pair of opposite links and extended inward to form teeth adapted to engage the teeth of a sprocket wheel, the inner side links being pivoted on the tooth engaging members connecting the adjacent pairs of outer side links, and the tooth engaging members connecting the adjacent pairs of links having adjacent convex surfaces and grooves in said surfaces extending transversely of the chain and registering with each other, and a pivot pin lying in said grooves between each adjacent pair of said transverse tooth engaging members and extending at its ends through both pairs of links, substantially as set forth.

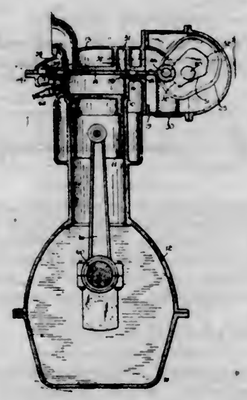
3. A chain comprising a plurality of links, each of which comprises two longitudinal members and two cross bars, adjacent links overlapping so that a cross bar of each of alternate links is located between the two cross bars of an intermediate link, each cross bar being provided with a plane surface for engaging a tooth of a sprocket wheel, and a pivot bearing member located between each pair of cooperating cross-bars of adjacent links.

4. A silent chain, comprising a plurality of overlapping links, said links comprising longitudinal members and cross bars at both ends of each longitudinal member and extending out of the planes of the longitudinal members, the cross bars at the ends of each link being nearer such ends than are the cross bars at the adjacent ends of the two adjacent links, and the two cross bars at the joint of articulation between two adjacent links having concave surfaces on their adjacent faces, and a pivot pin at each joint of articulation coöperating with said concave surfaces, the cross bars being provided with plane surfaces on the sides remote from the centers of the links of which they form part, and the plane surfaces on the two cross bars of each link being at a fixed angle to each other.

11. A chain comprising a plurality of links, each of which has a longitudinal member and two cross bars at the ends of such longitudinal member, said links overlapping so that between the two cross bars of each link, are located the two cross bars at the adjacent ends of the two adjacent links, each cross bar being provided on the side remote from the other cross bar at the same joint of articulation with an exposed plane surface, one cross bar at each joint of articulation having on its face toward the other cross bar at such joint a concave cylindrical surface having as its axis the axis of articulation, and the link which articulates at such joint with the link provided with the cross bar having such concave surface, being provided with a part having a convex cylindrical surface interfitting with said concave cylindrical surface.

[Claims 5 to 10 not printed in the Gazette.]

1,273,002. SLIDE-VALVE MECHANISM. WILHELM SAMUELS, Indianapolis, Ind. Filed Mar. 26, 1914. Serial No. 827,409. (Cl. 123—75.)



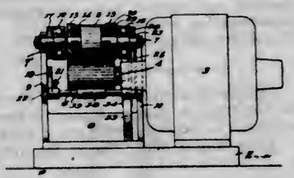
1. In an internal combustion four cycle engine, a cylinder open on the explosion end, a cylinder head, and a single slide valve entirely covering with its inner surface the open cylinder end and resting with its outer surface against the cylinder head, the cylinder head having toward the flat cylinder end a recess so as to form together with the latter the chamber for the single slide valve in such a way that said slide chamber has an open outlet to one side from which the single slide valve is actuated and to which it is laterally extended.

2. In an internal combustion engine, a cylinder open on the explosion end, a cylinder head, a slide valve entirely covering with its inner flat surface the open cylinder end, said cylinder having in its otherwise flat explosion end adjacent to the slide valve an annular chamber concentric to the cylinder bore, and a yieldingly supported packing ring in said chamber bearing with a flat surface on the flat inner surface of the slide valve.

5. In an internal combustion engine, a cylinder having a head with suitable intake and exhaust ports, and a single slide valve located and operating between the cylinder head and the explosion end of the cylinder and having intake and exhaust ports therethrough and adapted to communicate at proper times with the ports in the cylinder head and sufficiently far apart so that at another time they will be closed by the walls of the cylinder.

[Claims 3, 4, 6, and 7 not printed in the Gazette.]

1,273,003. ROTATABLE ELECTROMAGNETIC CLUTCH. FERDINAND SATTERSTROM, Hastings, Minn., assignor to Magnetic Power Transmitter Company, Faribault, Minn., a Corporation of Minnesota. Filed Mar. 20, 1917. Serial No. 155,974. (Cl. 74—46.)

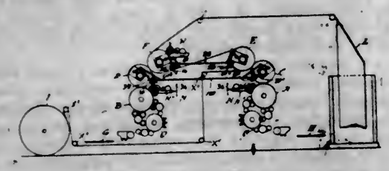


1. A device of the class described, comprising a relatively revoluble magnet and armature, said magnet being movable toward and from the armature and having an electric circuit and a circuit maker and breaker, a driven member operated by said magnet, and means for operating said circuit maker and breaker.

6. A device of the class described, comprising a revolving magnet and an armature for revolving the same, an electric circuit and circuit closer for said magnet, a member having a driving connection with said magnet, a locking means for said magnet having a trip for releasing said magnet, and a magnet having a circuit and an armature connected with said locking means for checking said revolving magnet at the end of each revolution.

[Claims 2 to 5 not printed in the Gazette.]

1,273,004. OFFSET PERFECTING-PRESS. DAVID JOHN SCOTT, Plainfield, N. J., assignor to Isabella Scott and David J. Scott, executors of Walter Scott, deceased. Filed Sept. 29, 1916. Serial No. 122,833. (Cl. 101—148.)

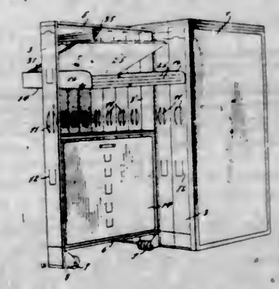


1. A rotary offset perfecting machine comprising: a plurality of side-by-side units printing from positive forms on opposite sides of impression receiving material, each unit consisting of a form-carrying, a transfer and an impression cylinder all of substantially the same diameter, the form-carrying and transfer cylinders being arranged in an upright column and the impression cylinder being arranged out of line with the other cylinders and uppermost of said column to afford an exposed operating side for the unit, said units being grouped with their operating sides outermost and with their impression cylinders innermost, and an anti-smutting device, engaging with said impression cylinder of said second unit, located intermediate the two units.

6. An offset web perfecting machine comprising: a plurality of units, each unit including a form-carrying, a transfer and an impression cylinder, means for bodily moving the impression cylinder of the second unit away from its transfer cylinder, an anti-smutting device engaging the impression cylinder of the second unit and mounted to move bodily with said impression cylinder, and means for throwing the anti-smutting device off said impression cylinder.

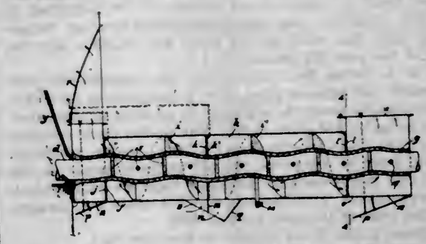
[Claims 2 to 5 not printed in the Gazette.]

1,273,005. FILE-CABINET. OSCAR M. SHANNON, Larchmont, N. Y. Filed Feb. 15, 1917. Serial No. 148,703. (Cl. 45—2.)



In a file cabinet, a file section, a drawer having trunnions for mounting said drawer, sockets for said trunnions carried by said section, one of said sockets having a locking slot therein, a lug carried by said trunnion adapted to engage in said slot, and a spring engaging said trunnion.

1,273,006. HEATER AND VENTILATOR FOR AUTOMOBILES. NATHAN LOUIS SHATEN, Philadelphia, Pa. Filed June 12, 1916. Serial No. 103,142. Renewed Feb. 14, 1918. Serial No. 217,224. (Cl. 237—21.)



1. In a heater for automobiles, the combination with a gas exhaust pipe, of a water chamber and an air chamber surrounding said pipe, a water reservoir, an inflow pipe connecting the reservoir and the water chamber, a check valve normally closed, but adapted to permit the water, in seeking its level, to flow from the reservoir to the water chamber, an outflow pipe communicating with the water chamber, and an automatic release valve in said outflow pipe, normally closed, but adapted to open to relieve a predetermined pressure in said water chamber.

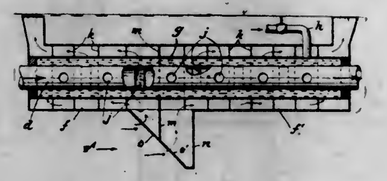
3. In a heater for automobiles, the combination with a gas exhaust pipe of an air chamber surrounding the same having an inlet for atmospheric air at both ends thereof, an outlet at one end of said chamber communicating with a register within the automobile body, and a valve adapted to close the inlet for atmospheric air adjacent the outlet communicating with the register,

whereby more or less air may be admitted to the register without its having previously passed through the length of said chamber.

6. In a heater for automobiles, the combination with a gas exhaust pipe, of a water chamber surrounding said pipe, an air chamber surrounding the water chamber, there being an air inlet and an air outlet at different points along the chamber, a spiral extending longitudinally in the air chamber between the air inlet and the air outlet, and a register communicating with the air outlet.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,273,007. HEATER AND VENTILATOR FOR AUTOMOBILES. NATHAN LOUIS SHATEN, Philadelphia, Pa. Filed Mar. 21, 1916, Serial No. 85,581. Renewed Feb. 14, 1918. Serial No. 217,225. (Cl. 237—21.)



1. In a heater for automobiles, the combination with an engine gas exhaust pipe, of a chamber extending around the gas pipe and adapted to contain water which will abstract heat from the exhaust gas, and an air chamber surrounding the water chamber and provided with an inlet and an outlet for air which, in its passage therethrough, will abstract heat from the water in the first chamber and thereby warm the interior of the car.

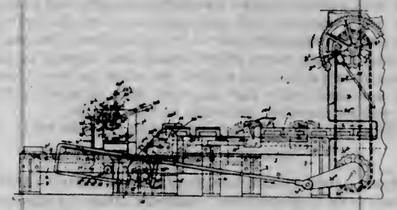
3. In a heater for automobiles, the combination with an engine gas exhaust pipe, of two independent air chambers arranged along the pipe one in advance of the other, a common casing affording an inlet to both chambers, said casing having an inclined front, a partition rising from said inclined front and diverting the air to the respective chambers, a movable closure for said inclined front to regulate the volume of air admitted to the air chamber, and registers communicating respectively with the front of the front air chamber and the rear of the rear air chamber.

4. In a heater for automobiles, the combination with an engine gas exhaust pipe, of two independent air chambers arranged along the pipe one in advance of the other, there being an air inlet at the rear of the front chamber and at the front of the rear chamber, means positioned at said inlet to distribute the air proportionately to the front and rear chambers, and two registers communicating respectively with the front of the front air chamber and the rear of the rear air chamber.

[Claims 2 and 5 not printed in the Gazette.]

1,273,008. AUTOMATIC MOLD-FEEDING APPARATUS FOR BRICK-MOLDING MACHINES. WILLIAM SHERIDON, Toledo, Ohio. Filed Nov. 24, 1913. Serial No. 802,628. (Cl. 25—2.)

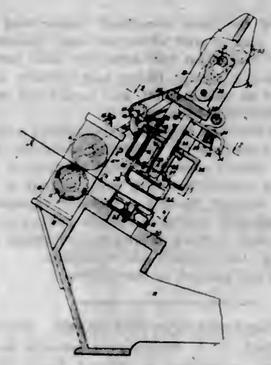
1. In an apparatus of the kind and for the purpose described, the combination with the apron, crank shaft, press plunger and ejector of a mold filling brick machine, of a mold slide track connecting the apron with the mold feed opening of the machine, said track comprising a plurality of sections, a mold shifter for each section, each shifter reciprocable forward and backward along its respective section, an auxiliary crank connected to the crank shaft of the machine and revoluble thereby in unison therewith, and in fixed time relation to the cranks of the press plunger and ejector, a main driving member connected to the auxiliary crank and reciprocable thereby forward and backward between points of rest at the dead centers of the auxiliary crank in a fixed and definite time relation to the forward and backward movement of the ejector and the upward and downward strokes of the press plunger, as set forth, means severally connecting each mold shifter with the main driving member and adapting the driving member to reciprocate the mold shifters in unison therewith, and by like



speed motion, and whereby a series of molds consecutively delivered from the machine over the apron on the track, are consecutively returned over the track sections, and fed emptied and sanded into the machine for refilling, substantially as set forth.

[Claim 2 not printed in the Gazette.]

1,273,009. DISH-FORMING MACHINE. PAUL RAYMOND SIMMONS, Huntington, Ind., assignor to The Simmons Manufacturing Co., Huntington, Ind., a Corporation of Indiana. Filed May 9, 1917. Serial No. 167,600. (Cl. 18—19.)

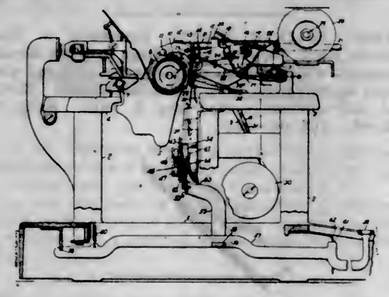


1. In a machine for forming dishes from a paper sheet, reciprocating breakers for the waste material, means connecting the breakers in couples, levers to actuate the several connecting means, and means to rock said levers to actuate the respective couples.

2. In a machine for forming dishes from a paper sheet, reciprocating breakers for the waste material, springs normally tending to move the breakers in one direction, means connecting the breakers in couples, levers each having an arm engaging the connecting means of the respective couples, a cam engaging the opposite arm of each lever, and means actuating said cams.

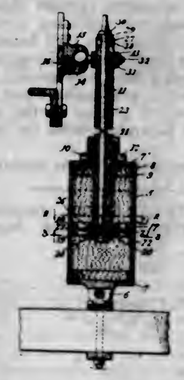
1,273,010. TYPE-WRITING MACHINE. ARTHUR W. SMITH, New York, N. Y., assignor to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Filed May 10, 1917. Serial No. 167,629. (Cl. 197—151.)

20. In a typewriting machine, the combination of a carriage, a platen, a ribbon guide mounted on a stationary part of the machine, said guide remaining quiescent during printing operations, a carriage carried ribbon guide, and a type shield, said shield and said first recited ribbon guide being independently settable in predetermined positions.



[Claims 1 to 19 not printed in the Gazette.]

1,273,011. SHOCK-ABSORBER. THOMAS J. SNYDER, Anatone, Wash. Filed May 24, 1917. Serial No. 170,709. (Cl. 74—69.)

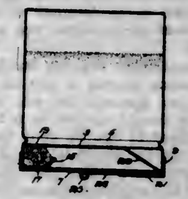


A piston for cylinders of shock absorbers, said piston comprising two sections, the adjacent faces of which have recesses therein, one of said sections having a hollow integral stem and the other section apertured and provided with notches in its outer face, a disk valve seated in said recesses and having an integral rod mounted in the hollow stem, and a stub headed end passing through the aperture in the other section, a washer having teeth thereon and mounted upon said stub end and held by the head in said notches, and means for holding the sections together.

1,273,012. DISPENSING DEVICE. JOHN G. SOUTHER, Jamaica Plain, Mass. Filed June 9, 1915. Serial No. 33,162. (Cl. 221—98.)

1. A dispensing device comprising a container having a supply chamber and a removable top provided with a discharge opening; sheet material forming a measuring chamber adjacent said top for segregating predetermined charges of material from said supply chamber and a passage connecting said measuring chamber with said discharge opening; said top and said sheet material being removable from the body of said container to permit unobstructed replenishing thereof.

3. A dispensing container comprising a can having a removable cover constituting substantially one entire end thereof, a measuring chamber adjacent one side of said cover, a discharge opening adjacent the other end of said cover, a passage extending parallel to said cover and connecting said measuring chamber with said discharge opening and a port connecting said measuring chamber with the main supply chamber of said can; the whole being organized to deliver a predetermined supply of material on bodily manipulation of said container, while permitting unimpeded replenishment thereof.



6. A dispensing device comprising a container, a partition having a port therein and dividing said container into chambers, a substantially U-shaped plate secured to said partition forming an elongated passage, a wall extending partially across said passage to provide a measuring chamber for receiving material through said port, and a cover for said container.

8. A dispensing device comprising a container, a partition having a port therein dividing said container into chambers, a substantially U-shaped plate secured to said partition, a wall died out of and bent from said plate extending toward said partition to provide a measuring chamber, a cover for said container, registering apertures in said plate and cover providing a delivery port, and a deflecting wall died out of and bent from said partition toward said cover to guide the material toward said delivery port.

[Claims 2, 4, 5, and 7 not printed in the Gazette.]

1,273,013. COIN-CONTROLLED VENDING-MACHINE. JACOB STIRIAS, Brooklyn, N. Y. Filed Aug. 30, 1917. Serial No. 188,885. (Cl. 194—80.)



1. In a coin controlled vending machine, the combination with a spring, of a delivery shelf normally retained in its inoperative position by one end of the spring, a coin chute and plunger held by the other end of the spring in receptive and inoperative positions, and means operated by the plunger when the coin is interposed to tilt the delivery shelf.

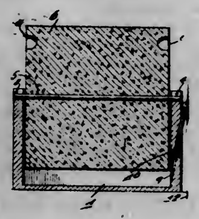
3. In a coin controlled vending device, the combination with a shifting rest adapted to receive the coin, of a moving box, a supporting shelf for the articles vended and adapted to be tilted by the box to deliver one of the articles, a plunger with a finger adapted to engage the coin and move the box, means for releasing the coin, and a spring under tension and connecting the plunger and shelf to return them to their normal positions.

8. In a coin controlled vending device, the combination with a chute for carrying the articles to be vended, of a tilting shelf at the lower end of the same, fingers on the shelf adapted to separate the articles, a keeper normally closing the outlet of the chute, means connecting the shelf and keeper to cause them to operate together, a downwardly moving box adapted to tilt the shelf, a coin rest in the box, a plunger and finger to engage the coin on the rest, and a spring under tension connected at one end to the plunger to retract it and connected to the shelf at the other end to restore it to its normal position.

11. In a coin controlled vending machine, the combination with a casing having a slot in the top, of a coin rest transversely disposed beneath the slot, means for turning the coin from a vertical to a horizontal position, a plunger adapted to operate upon the coin when it is turned, a box carrying the coin rest and adapted to move downward with the plunger and coin, a containing chute, and delivery means at the bottom of the chute and operated by the box.

[Claims 2, 4 to 7, 9, and 10 not printed in the Gazette.]

1,273,014. HOG-OILER. FRANK E. THARP and PAUL C. AMBLER, Shenandoah, Iowa. Filed Nov. 27, 1917. Serial No. 204,240. (Cl. 119—157.)



1. A hog oiler comprising an oil container, a roller rotatably mounted upon said container, said roller provided with a plurality of longitudinally extending ribs, arranged in wave like relation, for constituting a plurality of irregular channels upon the periphery thereof, said irregular channels adapted to constitute pockets for lifting the oil from said oil container, where said roller is rotated.

[Claim 2 not printed in the Gazette.]

1,273,015. ELECTRIC INSULATOR. PERCY H. THOMAS, Upper Montclair, N. J. Filed Aug. 29, 1913. Serial No. 787,248. (Cl. 173—318.)



1. A line insulator comprising a tube of vitreous material having straight sides, metal hanger pieces fitted to each end and means for transmitting the entire load to be carried by the insulator directly from the hanger pieces to the walls of the tube.

4. An insulating support comprising a metal hanger attached to the support, a second metal hanger attached to the object to be supported and means for insulating said hangers from each other and for carrying the entire load to be supported, said means consisting of a tube of vitreous material having its ends fitted to and secured in said metal hangers.

11. A line insulator comprising a tube of vitreous material and metallic end caps therefor closing the ends of said tube and extending beyond the side walls of the tube to form a rain guard, said caps being provided with flanges adapted to engage both the inner and outer surfaces of the ends of the tube.

[Claims 2, 3, 5 to 10, and 12 not printed in the Gazette.]

1,273,016. SPLINED SHAFT. FREDERICK A. WARD, Detroit, Mich., assignor to The Gear Grinding Machine Company, a Corporation of Michigan. Original application filed Aug. 13, 1912, Serial No. 714,810. Divided and this application filed May 7, 1918. Serial No. 233,088. (Cl. 64—29.)

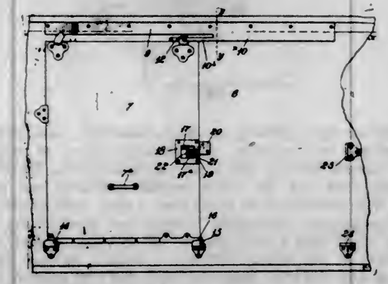


1. A shaft of hardened steel having integral projecting splines with grooves between them, the bottoms of the grooves forming curved bearing faces, which bearing faces are ground to finished dimensions at all points in their length and width.

5. A shaft of hardened steel having integral projecting splines with grooves between them, the bottoms of the grooves forming curved bearing faces, which bearing faces are ground at all points in their length and width, and which are symmetrically located with reference to the axis of the shaft throughout their length, in combination with a member mounted on the splined portion of said shaft and having a bore with ground faces symmetrical with the center of said member and corresponding with the bottoms of the grooves in the shaft so as to center said member accurately with the central axis of the shaft.

[Claims 2 to 4 not printed in the Gazette.]

1,273,017. FREIGHT-CAR DOOR. JOHNSON S. WAUGH, Shepard, Ohio. Filed Jan. 10, 1916. Serial No. 71,141. (Cl. 20—25.)



1. In combination with a freight car having a door opening, a door, a supporting device for the door consisting of a hood secured near the eave of the car, said hood having two lower edges one above the other bent inward toward the car and constituting tracks independent of each other, said tracks having portions curved abruptly and substantially parallel toward the door and a roller for each track on the door to travel on said tracks.

2. In combination with a freight car having a door opening, a door, supporting device for the door consisting of a hood secured near the eave of the car, said hood having lower edges one above the other bent inward toward the car and constituting tracks, said tracks also having portions abruptly and substantially parallelly curved toward the car, and a roller for each track on the door to travel on said tracks, said rollers each having a mounting adapted to embrace the under side of the track and the outer side of the hood.

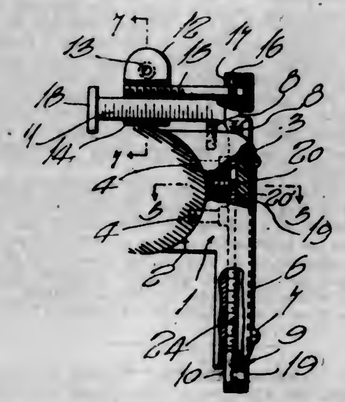
1,273,018. CAN. JESSE S. WENTWORTH, Norwood, Ohio, assignor to The Heekin Can Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Aug. 27, 1917. Serial No. 188,314. (Cl. 154—53.)



1. A can, the body of which comprises a cylinder of mutable metal, layers of fibrous paper covering the metal, and a lining and a cover for the fibrous paper.

2. A can, the body of which comprises a cylinder of mutable metal, layers of fibrous paper covering the metal, and a lining and a cover of woven paper for the fibrous paper.

1,273,019. SIGHT FOR FIREARMS. DONEGAN REEDER WIGGINS, Salem, Oreg. Filed Sept. 20, 1917. Serial No. 192,351. (Cl. 33—56.)



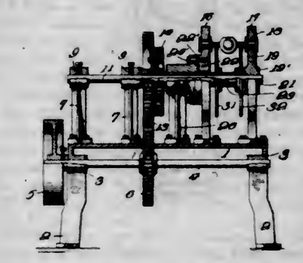
1. A gun sight comprising a base, means for securing said base to any one of a plurality of guns of various kinds and sizes, a sight-carrying device mounted for vertical adjustment on said base and provided with a vertical series of graduations, and a vertically adjustable range indicating element on said base and adapted to register with the said graduations.

2. A gun sight comprising a base, means for securing said base to any one of a plurality of guns of various kinds and sizes, a sight-carrying device mounted for vertical adjustment on said base and provided with a vertical series of graduations, a vertically adjustable range indicating element on said base and adapted to register with the said graduations, and a vertically adjustable point blank element for limiting the downward movement of the said sight-carrying device.

3. In a device of the class described, the combination of a block having means for attachment to the side of a rifle and provided with a vertical undercut guide-way therein, a sight limb comprising a horizontal arm and a vertical portion, T-shaped in cross section to adapt it to fit and slide vertically in said guide-way, the inner side of the vertical portion of said sight limb being provided with a longitudinal recess terminating a short distance from the ends thereof, a screw carried by said block and projected into said recess to prevent the vertical portions of said sight limb from sliding out of said guide-way, cooperating means carried by said block and said vertical portion of said sight limb for holding the latter in its vertically adjusted positions, a sight slidable longitudinally upon said arm, and means for adjusting said sight upon said arm.

4. In a device of the class described, the combination of a block having means for attachment to the side of a rifle and being provided with a vertical guide-way, a sight limb having a horizontal arm extending across the top of said block and a vertical portion fitting in and slidably mounted in said guide-way, means for holding said sight limb in its vertically adjusted positions, a point blank screw threaded into the top of said block beneath said arm and adapted to be engaged by the same for limiting the downward movement of said sight limb, a sight slidably mounted upon said arm, and means for adjusting said sight upon said arm.

1,273,020. WIRE-BENDING MACHINE. JOHN WINSOR, Corry, Pa. Filed May 17, 1916. Serial No. 98,110. (Cl. 140—91.)



1. In a wire bending machine, the combination with a pair of opposing spaced parallel guideways, of a plurality of shuttles suspended in said guideways, and drivers engaging the shuttles for causing the said shuttles to traverse said guideways.

2. In a wire bending machine, the combination with a pair of opposing spaced figure-8 guideways, of a plurality of shuttles suspended in said guideways, and drivers having two-point contacts with said shuttles for causing said shuttles to traverse said guideways.

3. A wire bending machine, comprising a pair of opposing spaced figure-8 guideways, a plurality of shuttles suspended between said guideways and adapted to traverse said guideways, and drivers comprising spaced members engaging said shuttles at each side of the bobbin casing thereof.

11. In a wire bending machine, the combination with a pair of opposing spaced guide plates having guideways, of shuttles having guide members slidably mounted in said guideways for suspending said shuttles between said guide plates, and a driver formed of spaced members contacting with said shuttles to cause said shuttles to move in said guideways.

19. A wire bending machine having a pair of opposing spaced guideways, a plurality of shuttles slidably mounted in said guideways forming a two-point suspension therefor, and drivers formed of spaced members formed of two-point contacts for said shuttles.

[Claims 4 to 10, 12 to 18, and 20 to 28 not printed in the Gazette.]

1,273,021. LIQUID-DISPENSING APPARATUS. EDWARD ZAHM, Buffalo, N. Y. Filed Jan. 22, 1915, Serial No. 3,709. Renewed June 5, 1918. Serial No. 238,893. (Cl. 225—8.)

1. A liquid dispensing apparatus comprising a tank having a liquid inlet and a liquid outlet, a controlling chamber connected with said tank by a controlling passage and having a diaphragm exposed to the pressure in said chamber and a vent passage, a controlling valve adapted to open and close said controlling passage, a float arranged in said tank and operating said controlling valve, and a valve which opens and closes said vent passage and which is operated by said diaphragm.

2. A liquid dispensing apparatus comprising a tank having a liquid inlet and a liquid outlet, a controlling chamber connected with said tank by a controlling passage and having a diaphragm exposed to the pressure in said chamber and a vent passage, a controlling valve adapted to open and close said controlling passage, a float

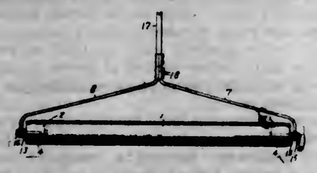
arranged in said tank and operating said controlling valve, a valve which opens and closes said vent passage and which is operated by said diaphragm, and a whistle which is blown by the fluid escaping from said relief passage.



3. A liquid dispensing apparatus comprising a tank having a liquid inlet and a liquid outlet, a controlling chamber connected with said tank by a controlling passage and having a diaphragm exposed to the pressure in said chamber and a vent passage, a controlling valve adapted to open and close said controlling passage, a float arranged in said tank and operating said controlling valve, a valve which opens and closes said vent passage and which is operated by said diaphragm, and a spring for yieldingly moving said diaphragm in a direction for closing said relief valve.

[Claims 4 to 10 not printed in the Gazette.]

1,273,022. PROCESS AND DEVICE FOR FINISHING CONCRETE PAVEMENTS. WALTER LORENZO ASHMORE and WILLIAM T. MORGAN, Jr., Macon, Ga.; said Morgan assignor of two-sixths of the whole right to H. R. Powell, Bibb county, Ga. Filed Mar. 27, 1916. Serial No. 87,099. (Cl. 94—6.)



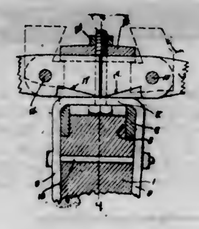
5. A device for finishing concrete pavements and the like, consisting of a hollow liquid-tight roller of small diameter and comparatively great length and light weight adapted to float on freshly laid plastic concrete and to act on the surface thereof as a straight edge for straightening and smoothing such surface.

6. The herein described method of finishing concrete pavements and the like, which consists in rolling the surface of freshly laid soft plastic concrete with a roller of small diameter and comparatively great length and light weight adapted to float on the soft plastic concrete and to act on the surface thereof as a straight edge for straightening and smoothing the surface of the concrete mass and eliminating any excess water.

[Claims 1 to 4 and 7 not printed in the Gazette.]

1,273,023. PICKAX. CHARLES M. BRAGDON, Bangor, Me., assignor of one-half to Leslie W. Davis, Bangor, Me. Filed Dec. 28, 1917. Serial No. 209,325. (Cl. 287—29.)

1. A pick ax of the class described comprising a handle, a shank formed from a blank sheet of material, said shank constituting a body, side flanges bent at right angles to said body, securing fingers bent inwardly from said body and extending from between said side flanges, means for securing said fingers to said handle, and means for holding said picking blades in a set position upon said shank.



3. A pick ax of the class described comprising a handle, a shank formed from a blank sheet of material, said shank constituting a body, side flanges bent at right angles to said body, securing fingers bent inwardly from said body and extending from between said side flanges, means for securing said fingers to said handle, a clamping plate, a securing bolt carried by said shank passing through said clamping plate, means for retaining said clamping plate upon said bolt, picking blades provided with notches upon the inner ends thereof for receiving said clamping plate when said picking blades are swung to an open position and thereby holding said blades in an open position.

5. A pick ax of the class described comprising a shank, a pair of picking blades secured thereto, and retaining means adapted to overhang the inner ends of said picking blades for holding the same in an extended position and also adapted to fit between the inner ends of said blades when the same are swung to a folded position for firmly locking said blades in a folded position.

[Claims 2 and 4 not printed in the Gazette.]

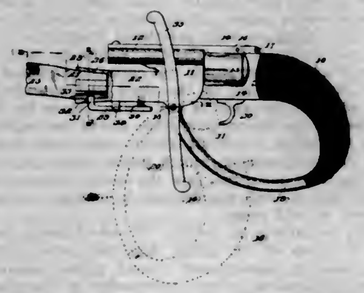
1,273,024. GAME APPARATUS. THOMAS W. BRANCH, Columbus, Ga. Filed Dec. 5, 1916. Serial No. 135,215. (Cl. 46—25.)



The herein described game card inscribed with the name of a political division, a word indicating the section in which said political division is located, and also with a number indicating the relative rank of said political division and also indicating the point value of said card, said number being distinctive in appearance and said card also having a suit symbol which corresponds with the distinctively indicated point number.

1,273,025. SWORD AND PISTOL. WALTER BRONGEL, Chicago, Ill. Filed Mar. 2, 1918. Serial No. 219,968. (Cl. 42—53.)

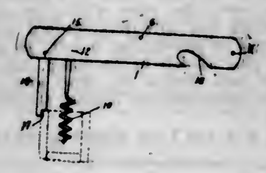
1. A pistol sword comprising a revolver having a casting formed with a barrel and a stock, an extension-guard integrally attached to the butt end of said stock, a forwardly projecting extension carried by the casting beneath the barrel formed with a flaring head at its free end provided with an axial tapered socket, a blade having a shank adapted for dove-tailed engagement within the said socket, a spring-pressed securing latch carried by the casting adapted for engaging said shank, and a cross-guard for the sword integrally mounted upon the casting.



3. In combination with a revolver-casting having a barrel, a body pivotally connected to said casting, a tapered stock upon the body having a curved extension connected to the body at a point adjacent the said pivotal connection, a forwardly projecting extension upon said casting having a flaring head forwardly of the barrel formed with a socket therein, a sword-blade detachably positioned within the said socket, a retaining latch for the blade carried by the casting, and transversely positioned guards connected to the casting adjacent said pivotal connection between the body and casting.

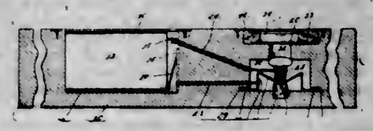
[Claims 2 and 4 not printed in the Gazette.]

1,273,026. CORKSCREW AND BOTTLE-OPENER. GORDON BROWN, Chicago, Ill. Filed Sept. 28, 1916. Serial No. 122,715. (Cl. 65—51.)



A cork screw comprising a handle having side sections and a recessed division plate, spring members securable between the sections adjacent one of the edges thereof for holding the sections in spaced relation with each other, and forming the back of the handle, an upstanding lug formed on the free end of one end of the spring members, a cork engaging screw pivotally secured between one of the side sections and the division plate, a lever pivoted between the plate and the other side section to rotate longitudinally of the handle in a plane parallel to the cork screw, and adapted to be held in a position therebetween at right angles thereto or longitudinally of the handle by means of the lug on the spring member, the lever and cork screw being adapted to lie side by side when folded into the handle, the lever being provided at its inner end with a notch for engaging with the lug when the lever is in the right angle position for limiting the movement thereof, the opposite end of the lever being also provided with a notch adapted to engage with the upper edge of the bottle after the screw has been applied to a cork to facilitate the removal of a cork from a bottle when the handle is raised, said screw, when disposed within the handle, having its helical end positioned in the recess of the division plate, and parallel with the lever, said members and division plate being notched to provide a crown or cap remover.

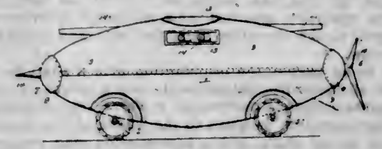
1,273,027. LEVEL. PAUL BUDDE, Bethalto, Ill. Filed Jan. 26, 1918. Serial No. 213,961. (Cl. 240—8.4.)



1. In a device of the class described, a body portion, a leveling device mounted therein, said body portion being provided with a recess below the leveling device and with an opening communicating with the recess and located below the leveling device, a lamp within the recess and engaging the walls of the opening, a resilient contact member comprising a plate mounted in the recess and engaging one terminal of the lamp, said plate extending beneath the lamp and exerting upward pressure thereon to retain the lamp in engagement with the edges of the opening, a cushioning member beneath the plate, a battery, means for connecting one terminal of the battery with the plate, and means for connecting the other terminal of the battery with the base of the lamp.

[Claim 2 not printed in the Gazette.]

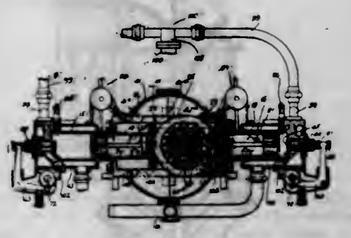
1,273,028. WAR-MACHINE. PETER M. BULATOVICH, Sesser, Ill. Filed Mar. 8, 1918. Serial No. 221,264. (Cl. 89—36.)



4. In a war machine a body consisting of a pair of pressed sheet metal sections having their longitudinal edges riveted together, a cutting element including a cap inclosing and riveted to one end of these sections and a penetrating member including a cap inclosing the remaining end of the sections and riveted thereto.

[Claims 1 to 3 not printed in the Gazette.]

1,273,029. INTERNAL-COMBUSTION ENGINE. ALMON B. CALKINS, White Plains, N. Y., assignor of one-third to David H. McFalls and one-third to Thomas E. Iredale, White Plains, N. Y. Filed Feb. 8, 1916. Serial No. 76,896. (Cl. 121—29.)



1. An engine comprising a pair of spaced cylinders in alinement, an interposed crank shaft at right angles to the center line of the cylinders and having a pair of spaced concentric collars or enlargements forming circular guide plates, an eccentric integral crank disk substantially equal in diameter to the circular guide plates, a unitary ring of material radial thickness surrounding the crank disk and fitted between the guide plates, an interposed rolling bearing between the crank disk and the unitary driving

ring, a rigid piston structure comprising a frame having parallel actuating surfaces adapted to receive the driving ring between them, piston projections extending outwardly from the surfaces at right angles thereto, and a pair of spaced connecting members adapted to receive the concentric collars or enlargements of the shaft between them.

3. An engine comprising a crank shaft having a plurality of concentric collars or enlargements forming circular guide plates and spaced at short distances apart in pairs, eccentric integral crank disks substantially equal in diameter to the concentric collars or enlargements and interposed between them, a unitary driving ring rotatably mounted on each of said integral crank disks, and a piston structure comprising a yoke having an opening to receive the shaft and the concentric shaft collars, and a slot at right angles to the opening adapted to receive the ring.

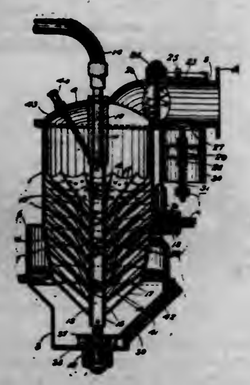
5. An engine comprising a plurality of cylinders arranged in two opposed groups, an interposed crank casing between the groups having guideways formed therein, a unitary piston structure for each pair of opposed cylinders having a central yoke, a crank shaft having a plurality of short crank pins, and relatively massive power transmitting rings rotatable on the crank pins and adapted to revolve about the shaft center and conjunctively act as a flywheel; said rings being fitted into the central yoke of the piston structure and extending into the guideways of the casing.

7. An engine comprising a pair of opposed alining cylinders, a double piston structure having a central guide frame with a slot in the central plane of the structure, a driving ring axially fitted into the slot and adapted to roll between its opposite end surfaces, a shaft extending through the ring and having an eccentric on which the ring is rotatively mounted, and concentric enlargements adjacent to the eccentric on either side and guided by the frame.

10. In an engine, the combination with a shaft having a pair of concentric enlargements and a relatively short interposed eccentric portion, of a piston frame having a slot corresponding in width to the length of the eccentric portion of the shaft, and a transmission ring rotatively mounted on the eccentric portion of the shaft and fitted into the slot, said piston frame having an axial opening into which the concentric enlargements of the shaft are fitted.

[Claims 2, 4, 6, 8, and 9 not printed in the Gazette.]

1,273,030. CARBURETER. DONALD J. CAMPBELL, Muskegon Heights, Mich. Filed July 26, 1916. Serial No. 111,334. (Cl. 261—83.)



1. In a carbureter, an upright casing having inlet and outlet openings at the lower and upper parts of the casing respectively, a vertical shaft positioned lengthwise of and mounted for rotation in the casing, a plurality of nested conical disks each provided with a plurality of openings mounted on and rotatable with the shaft, a fuel inlet in the side of the casing to deliver fuel to an intermediate disk and means for rotating the shaft.

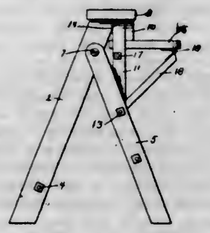
4. In a carbureter, an upright casing, a cover for the upper end of the casing, an outlet pipe on the cover adapted to be attached to the intake manifold of an internal combustion engine, a well member closing the lower end of the casing, a shaft positioned lengthwise of the casing and mounted for rotations, means to rotate the shaft, a plurality of upwardly and outwardly inclined perforated disks mounted on the shaft and extending to closely adjacent the walls of the casing, means for delivering fuel to an intermediate disk, means for supplying heat to the casing, a conduit leading away from the bottom of the well member, and a pump directly operated by the shaft to pump fuel into the conduit whereby fuel dropping into the well member may be pumped out of the carbureter by said pump.

6. In a carbureter, an upright cylindrical casing, means closing the ends of the casing, inlet and outlet conduits to the casing at opposite ends thereof, a plug secured in the side of the casing having a passageway for the passage of fuel, an upright rod mounted on the casing with its lower end passing into the plug across said passageway, means tending to force said rod downwardly, a member at the upper end of said rod, a second rod mounted vertically in the outlet conduit, a throttle on the rod within the conduit, a lever secured to the upper end of said rod, an arc shaped cam on said lever engaging with said member on the first rod to thereby elevate said rod on movement of the lever in one direction, a bell-crank lever having one end engaging with said member pivotally mounted on the casing whereby fuel may be entered into the casing without affecting the position of the throttle in the outlet conduit, and a mechanically operated agitating and atomizing means within the casing to which the fuel is delivered.

8. In a carbureter, a hollow upright casing having the lower portion of its walls inclined downwardly and inwardly, a hollow housing adapted to receive exhaust gases from an internal combustion engine positioned around the casing at said lower portion thereof, a plurality of disks mounted one above the other within the casing, each having upwardly and outwardly inclined sides formed with a plurality of perforations therein, an upper outlet and a lower inlet conduit to the casing, means to enter fuel into the disks between the upper and lower disks, and means for simultaneously rotating the disks about a vertical axis.

[Claims 2, 3, 5, and 7 not printed in the Gazette.]

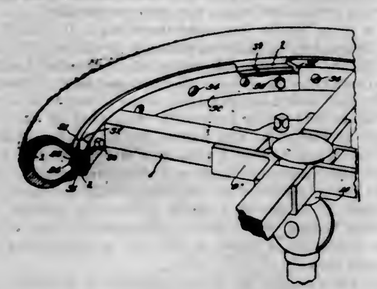
1,273,031. STEP-LADDER. GEORGE T. CARR, Owen, Wis. Filed Dec. 26, 1916. Serial No. 138,967. (Cl. 228—15.)



1. A step ladder comprising side bars having steps mounted in conjunction therewith to form a ladder structure, brace legs connected together and mounted in conjunction with the ladder structure to be capable of swinging movement to a spread relation with respect to the side bars to support the ladder structure, brace bars connected with said brace legs to bear against a portion of the ladder structure and hold the brace legs against excessive spreading from the side bars and the ladder structure proper, a shelf mounted in conjunction with the brace bars to be capable of movement to raised and lowered positions, and a brace member mounted in conjunction with the shelf to support the same in the raised position.

2. A step ladder comprising side bars having steps mounted in conjunction therewith to form a ladder structure, brace legs connected together and mounted in conjunction with the ladder structure to be capable of swinging movement to a spread relation with respect to the side bars to support the ladder structure, brace bars connected with said brace legs to bear against a portion of the ladder structure and hold the brace legs against excessive spreading from the side bars and the ladder structure proper, a shelf mounted in conjunction with the brace bars to be capable of movement to raised and lowered positions, a brace member mounted in conjunction with the shelf to support the same in the raised position, and means arranged to hold the brace bars against displacement from their supporting and bracing positions.

1,273,032. TIRE-CORE. DON A. CLARK, Willoughby, and CLYDE E. LOWE, East Cleveland, Ohio, assignors to The Clyde E. Lowe Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 22, 1917. Serial No. 197,785. (Cl. 18—45.)

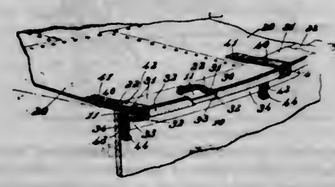


1. A tire-forming core comprising a series of hollow arcuate sheet metal bodies of requisite cross-section, each having at its portion of least diameter a pair of parallel flanges spaced from each other a distance less than the width of the body; a rigid circular metal ring located between said flanges, and means clamping said flanges to said ring.

34. A tire core comprising a plurality of toric segments and a supporting ring about which said segments are assembled end to end, each of said segments being of sheet metal and having an inwardly projecting rectangular rib secured to said ring, in combination with a supporting and stiffening member inserted into the end of each segment and bracing the walls thereof and engaging the adjacent segment.

[Claims 2 to 33 and 35 not printed in the Gazette.]

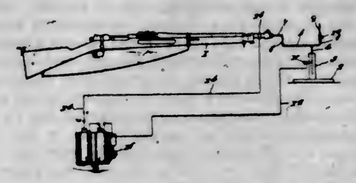
1,273,033. OIL-STORAGE TANK. VICTOR CLIFFORD, Tulsa, Okla., assignor to Donnell Tank Protector Company, Tulsa, Okla, a Corporation of Oklahoma. Filed June 8, 1916, Serial No. 102,492. Renewed May 21, 1918. Serial No. 235,899. (Cl. 220—121.)



1. A metallic storage tank for petroleum or other liquid having commingled vapor or gas, comprising a body having an outward flange, a roof having a peripheral extension supported on said flange, an exterior sealing strip covering the joint between said extension and flange, and metallic clips in conductive contact at their opposite ends with said roof and body respectively, engaging said extension and flange, clamping said sealing strip thereover and serving as conductors between said roof and body over said sealing strip.

[Claim 2 not printed in the Gazette.]

1,273,034. APPARATUS FOR USE IN INSTRUCTION WITH SMALL-ARMS. WILLIS P. COLEMAN, U. S. Army. Filed Nov. 26, 1917. Serial No. 204,131. (Cl. 124—15.)

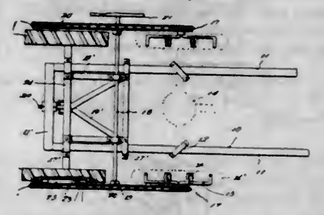


1. Apparatus for use in instruction with small arms comprising a frame, a metal pin of less diameter than the bore of the piece carried by said frame and adapted to be caused to project into the muzzle of the piece, a source of electricity, and an electric circuit having its terminals connected respectively to the barrel of said piece, and to said pin, which circuit is closed when said pin contacts with the wall of the bore of the piece, and an electric signaling device operated only when the circuit is closed, substantially as described.

6. Apparatus for use in instruction with small arms comprising a frame having a vertically adjustable yoke mounted thereon, a metal pin of less diameter than the bore of the piece adjustably mounted in said yoke and adapted to be caused to project into the muzzle of the piece, a source of electricity, and an electric circuit having its terminals connected respectively to the barrel of said piece, and to said pin, which circuit is closed when said pin contacts with the wall of the bore of the piece, and an electric bell operated only when the circuit is closed, substantially as described.

[Claims 2 to 5 not printed in the Gazette.]

1,273,035. TRACTION AND POWER ATTACHMENT. HARLEY J. COLLIER, Deshler, Ohio. Filed July 3, 1916. Serial No. 107,371. (Cl. 180—16.)

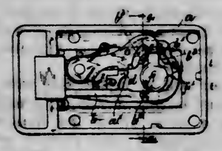


1. The combination with a motor car, of an attachment therefor including a main frame, means for detachably connecting the forward end of the main frame to the sides of the chassis of the motor car, sprocket wheels, means for detachably connecting the sprocket wheels to the rear wheels of the motor car, an auxiliary frame slidable on the rear portion of the main frame, the rear end bar of which constitutes an axle and has its respective terminals projecting beyond the sides of the main frame, tractor wheels journaled on the respective ends of the axle, sprocket wheels connected for independent movement on the tractor wheels, a shaft journaled transversely in the auxiliary frame, means for transmitting power from

the first mentioned sprocket wheels to the last mentioned sprocket wheels and to the shaft, coöperative means connecting the stationary and auxiliary frames for adjusting the auxiliary frame on the stationary frame.

2. The combination with a motor car of an attachment therefor comprising a main frame embodying side sills and a rear end sill, means for detachably connecting the forward portions of the side sills to the sides of the chassis of the motor car, spiders, clamping arms on the ends of the spiders for engagement with the spokes of the rear wheel of the motor car, sprocket wheels carried centrally of the spiders, an auxiliary frame slidably mounted on the rear portion of the main frame the rear cross bar of which constitutes an axle, the opposite ends of the axle projecting beyond the sides of the main frame, tractor wheels journaled on the projecting ends of the axle, other sprocket wheels connected to the tractor wheels to permit of independent relative movement of the tractor wheels, a power transmitting shaft journaled through the auxiliary frame, sprocket chains trained about the first mentioned sprocket wheels and adapted to be trained about the last-mentioned sprocket wheels and operably connected to the power transmitting shaft, and means carried by the axle on the frame and adjustably connected to the rear end bar of the main frame for holding the auxiliary frame in various positions of adjustment.

1,273,036. LOCK. HENRY H. CRANE, Floral Park, N. Y., assignor to Huber Mfg. Co., New York, N. Y., a Corporation of New York. Filed Mar. 28, 1918. Serial No. 225,202. (Cl. 70—75.)



1. In a lock, the combination of a casing, a knob-operated cam or dog on one side of the casing, a key-operated cam or dog on the other side of the casing, and a bolt adapted for coöperation with the knob-operated cam and provided on one side with posts for coöperation with the key-operated cam and with a supplemental gate post for coöperation with the key-operated cam.

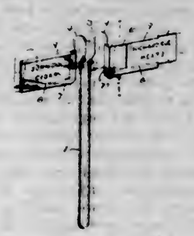
2. In a lock, the combination of a casing, a knob-operated cam or dog on one side of the casing, a key-operated cam or dog on the other side of the casing, and a bolt having gate posts on one side for coöperation with the knob-operated cam, gate posts on the other side for normal coöperation with the key-operated cam and with a supplemental gate post on the same side but opposite the usual gate posts, for coöperation with the key-operated cam in throwing the bolt forward from an intermediate position.

1,273,037. SPRING-FASTENER. JACOB CRANZLER, New York, N. Y. Filed July 24, 1917. Serial No. 182,468. (Cl. 70—103.)



In a fastener of the character described, the combination with a receptacle, of a plate, a tongue carried by one end of the plate and extending upwardly over the upper edge of the receptacle and embracing the inner face of the receptacle, a pivoted clasp carried by the plate and a lateral stud carried by the clasp opposite the tongue and extending through an opening in the cover of the receptacle contacting with the tongue.

1,273,038. PLACE-HOLDER FOR BOOKS. WILLIAM LEWIS CROWELL, Danielson, Conn. Filed Feb. 9, 1918. Serial No. 216,328. (Cl. 281—42.)

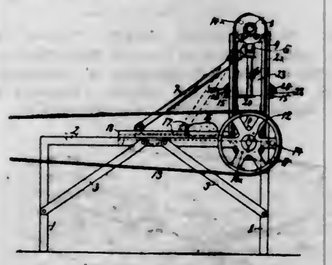


1. A place holder for books including a wire stock having a looped back adapted to be inserted between the pages of an open book at the back thereof, an end of the wire being returned and terminating in an L-shaped arm arranged in a plane parallel to and offset forwardly from the looped back of the body, and a plate applied to the L-shaped arm and having edge portions rolled around the sides thereof to retain the plate in position.

2. A place holder for books including a U-shaped wire body adapted to be inserted between the pages of an open book at the back thereof, oppositely extending L-shaped arms carried by the sides of the U-shaped body at the upper end thereof, said L-shaped arms being arranged in a plane parallel to and offset forwardly from that of the lower portion of the body, and plates applied to the L-shaped arms and each having a side and an end thereof rolled around the respective L-shaped arm, the extreme edges of the roller portions of the plate being extended over the plate in a spaced relation thereto to provide card retaining flanges, while one of the opposite edges of each of the plates is returned to provide a coöperating card retaining flange.

3. A place holder for books including a U-shaped wire body adapted to be inserted between the pages of an open book at the back thereof, the sides of the U-shaped body having the upper ends thereof offset forwardly and returned in a plane parallel to and spaced from that of the lower portion of the body, the extremities of the returned ends being extended laterally in opposite directions to provide L-shaped arms, and plates applied to the L-shaped arms, each of the plates having a side end thereof rolled around the respective L-shaped arm and the extreme edge of the rolled portion being extended over the plate in a spaced relation thereto to provide a card retaining flange, while an opposite edge of the plate is returned to provide a coöperating card retaining flange.

1,273,039. POTATO-CUTTING MACHINE. BARTHOLOMEW O. CUDDIGAN, Wadena, Minn. Filed Feb. 23, 1918. Serial No. 218,855. (Cl. 146—7.)



1. In a potato cutting machine, and mounted in a suitable frame, a cutting device composed of fixed crossed blades with their edges upward, a vertically reciprocated plunger having projections by which to push each potato through said cutting device, a horizontal feed channel into which the potato is placed, a feeding slide in said channel, a crank shaft mounted in the frame, and two connecting rods extending from the crank and having their other ends connected one to the plunger and the other to the feeding slide, and means for rotating the crank shaft.

2. In a potato cutting machine and mounted in a suitable frame, a cutting device, a vertically reciprocated plunger arranged to push each potato through the cutting device, a horizontal feed channel into which the potato is placed, a feeding slide in the channel, a crank shaft operatively connected with said plunger and slide to operate them in successive alternate order, and means for rotating the crank shaft by hand or by other power, as may be desired.

3. In a seed potato cutting machine, a frame, a cutting device, a pair of hinged spring-closed plates arranged to guide each potato to the middle of the cutting device, a reciprocated plunger arranged to spread the plates and press the potato against the cutting device; said plates arranged to have their closing movement stopped by their contact with the frame, the plates being each pivoted in a pair of inclined arms, means for securing each of said arms to the frame in such a manner that the incline of the arm may be varied and the plates thereby allowed to close more or less before stopping against the frame.

1,273,040. POTATO-LOADER. BARTHOLOMEW O. CUDDIGAN, Wadena, Minn. Filed Feb. 23, 1918. Serial No. 218,856. (Cl. 130—32.)



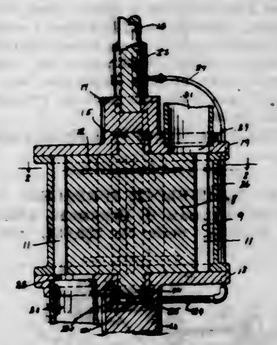
1. In a potato loading machine, a suitably supported inclined elevator frame mounted on ground wheels, a series of longitudinally arranged parallel bars extending from the lower end to the upper end of the frame, fixed upward fingers at the lower ends of the parallel bars, an endless skeleton carrier apron arranged in the elevator frame with one run above and the other below the series of parallel bars and operative connection between the apron and the ground wheels, fingers secured to said carrier apron and arranged to pass between the fixed fingers and move upward along the upper side of the parallel bars, and a laterally inclined chute arranged to convey the potatoes from the upper end of the frame.

2. In a potato loading machine having a rearwardly inclined wheel supported elevator frame, a skeleton bottom mounted within the frame and means for elevating potatoes upwardly along said bottom to a delivery chute near the top of the frame, fixed fingers arranged near the lower end of the skeleton bottom adapted to prevent the downward escape of potatoes.

3. A potato loading machine comprising a rearwardly inclined wheel supported elevator frame, a transversely arranged potato chute mounted under the rear end of the frame, a series of longitudinal parallel bars extnding from near the front end of the frame to the potato chute and means for elevating potatoes upwardly along the parallel bars to said potato chute, special bars bridging the chute to prevent objects other than potatoes from dropping thereinto.

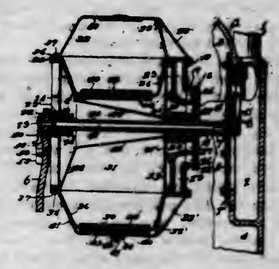
1,273,041. ROTARY PUMP. WILLARD N. CUMMINGS, Los Angeles, Cal. Filed Aug. 1, 1916. Serial No. 112,633. (Cl. 103—44.)

A single piston rotary pump comprising a pump chamber casing whose side walls are cylindrical and provided with a suction and a relief groove therein; parallel end walls secured to said side walls, the upper end wall having a discharge port therein and a recess in its lower face, and the lower end wall having a suction port therein and a recess in its upper face, said recesses being eccentrically located as to the center of said end walls, said ports being on opposite sides of the pump chamber; a cylindrical piston having trunnions on the ends thereof, said trunnions entering the recesses in said end walls, said piston having radial slots therein for the reception of piston



blades, the lower trunnion being shorter than the recess in which it is received; balls in said lower recess; piston blades slidably mounted in said slots; an operating shaft rigidly mounted in said piston and projecting through the upper end wall of said casing; a lubricating pipe surrounding said operating shaft and secured at the bottom thereon to said upper head; a branch pipe leading from said lubricating pipe to and terminating in the recess in the lower head; and a discharge pipe connected to the upper head.

1,273,042. DOUBLE-ACTING-DIAPHRAGM ROTARY GAS-METER. ELIAS B. DE LA MAYER, Los Angeles, Cal. Filed June 3, 1916, Serial No. 101,626. Renewed June 18, 1918. Serial No. 240,072. (Cl. 73—1.)



1. A gas meter drum having a double acting diaphragm adapted to revolve with the drum and means on opposite sides of the diaphragm to coöperate therewith to constitute two measuring chambers.

9. In a rotary gas meter, two ported pans having marginal flanges; a centrally weighted diaphragm having its margins clamped between said marginal flanges and being adapted to oscillate for inflation of one of said pans and deflation of the other, and vice versa, and means to allow said pans to turn on an axis responsive to the movement of the weight from the axis.

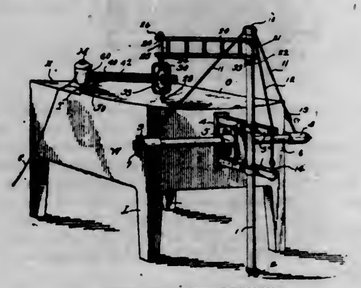
18. The combination with a rotary measuring drum having pairs of outer and inner measuring chambers separated by diaphragms, of valve mechanism having a stationary valve member provided with inlet ports and with outlet ports; a rotary valve member connected to and rotating with the drum and provided with inner and outer

ports for the measuring chambers on opposite sides of the diaphragms respectively, there being an inlet port and an outlet port on opposite sides of the produced axis of the drum between the oppositely-arranged cut-offs between the sets of inlet and outlet ports, so that at the rotation of the drum oppositely-arranged sets of inlet and outlet ports may be cut off while two other sets of inlet and outlet ports will be opened thereby allowing inflation of two measuring chambers and deflation of two other measuring chambers to occur while the intermediate sets of inner and outer chambers are cut off.

22. A meter provided with a rotary drum having independently-acting, circumferentially-disposed weighted diaphragms, the rotation of the drum being controlled by the shifting of said weighted diaphragms, the drum having pans on opposite sides of each diaphragm, and means to admit and emit gas from the pans in response to the rotation of the drum.

[Claims 2 to 8, 10 to 17, and 19 to 21 not printed in the Gazette.]

1,273,043. MEAT-BLOCK SURFACER. JOSEPH M. DENSMORE and WILLIAM H. DENSMORE, Ashland, Oreg. Filed Mar. 15, 1918. Serial No. 222,633. (Cl. 144—2.)



1. In a machine of the class described, the combination with an upright post, a bracket mounted thereon and having a clip, a cross bar extending through said clip and having threaded extremities, nuts on the latter, and a sleeve mounted on the bar inside each nut and having a finger; of a collar fast on said post at its upper end, a bracket having eyes mounted on the post above said collar, and a tool carried by said bracket.

6. In a machine of the class described, the combination with an upright post, and a work-clamp carried thereby for holding the post adjacent the work; of a bracket mounted to swing around the upper end of the post, a frame having an upper trunnion swivelly mounted in the outer end of said bracket arm and a lower trunnion engaging the work, bearings at the sides of said frame, a disk having side trunnions mounted in these bearings, means for tilting the disk and setting it within the frame, guides carried by the disk, parallel arms slidably mounted through said guides, means for adjusting them therein, and a motor and tool at the outer ends of said arms.

[Claims 2 to 5, 7, and 8 not printed in the Gazette.]

1,273,044. AUTOMATIC TIMING MECHANISM FOR MAGNETOS. HERMANN DIEHL, Frankfort-on-the-Main-Bockenheim, Germany, assignor to the Firm of Mafam Motor-Apparate G. M. B. H., Frankfort-on-the-Main, Germany. Filed Nov. 9, 1911, Serial No. 659,312. Renewed Dec. 10, 1917. Serial No. 206,546. (Cl. 264—16.)

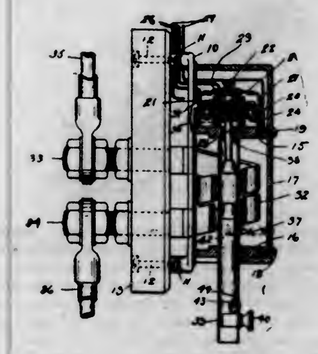
1. In mechanism of the class described, in combination, a motor shaft, a magneto shaft, two connected parts concentrically rotatable relatively to each other, means for attaching one of said parts concentrically to one of said shafts; said parts being so arranged that both of said parts will be intersected by a single plane at right angles to the axis of said one of said shafts and so arranged that each of said parts presents a bearing surface for the other, and connecting means between said two parts which automatically varies their relative angular position depending upon the speed of rotation of said one of said shafts.



4. In mechanism of the class described, in combination, a motor shaft, a magneto shaft, a hub mounted upon one of said shafts, an external gear on the hub, a hollow member centrifugally and rotatably arranged on said hub and inclosing said external gear, an internal gear within said member concentric with the external gear, and a centrifugal body pivoted in said member and bearing a gear adjacent its pivot in intermediate mesh with both of the other gears.

[Claims 2 and 3 not printed in the Gazette.]

1,273,045. RELAY-SWITCH. LOUIS W. DOWNES and WALTER S. MAYER, Providence, R. I., assignors to D. & W. Fuse Company, Providence, R. I., a Corporation of Rhode Island. Filed Sept. 30, 1915. Serial No. 53,373. (Cl. 175—281.)



1. A relay switch comprising a base, a frame attached to the base and open at its center, a solenoid coil attached to said base and extended through the open center of said frame, spaced apart plates carried by said frame, a cover attached to said plates, a core for said solenoid, and a switch operated by said core.

4. A relay switch comprising a base, a frame attached to said base and open at its center, a solenoid coil attached to said base and extended through the open center of said frame, spaced apart plates carried by said frame, a guide tube supported by said plates and inclosed by the coils of the solenoid, a switch carried by one of said plates and having a movable member extended into said tube, and a solenoid core movable within the tube to operate said switch.

[Claims 2 and 3 not printed in the Gazette.]

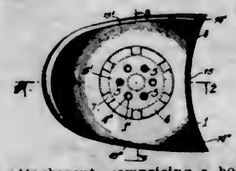
1,273,046. TIRE-TREAD CONSTRUCTION. HARRY W. DYER, East Orange, N. J. Continuation in part of application Serial No. 615,053, filed Mar. 17, 1911. This application filed Mar. 16, 1914, Serial No. 824,863. Renewed Dec. 13, 1917. Serial No. 207,005. (Cl. 152—16.)

1. A tire tread comprising a number of separate sections of rectangular form in plan view, such sections being arranged in rows and having laterally projecting base-flanges extending around all four sides thereof, a number of retaining strips of yielding material each extending the length of each row of sections, such strips crossing over one another and engaging the upper surfaces of said base-flanges, each of said strips overlapping a pair of adjacent base-flanges and means securing said retaining strips together at the points where they cross each other.



2. A tire tread comprising a number of separate sections of rectangular form in plan view and arranged in rows disposed diagonally of the tire, such sections having laterally projecting base-flanges extending around all four sides thereof, a number of retaining strips of yielding material each extending the length of each row of sections and arranged diagonally of the tire, such strips crossing over one another and engaging the upper surfaces of the same base-flanges, each of said strips overlapping a pair of adjacent base-flanges and means securing said retaining strips together at the points where they cross each other.

1,273,047. HEEL-LIFT. GILBERT S. ELLITHORPE, Chicago, Ill. Filed Nov. 12, 1917. Serial No. 201,517. (Cl. 36—35.)



1. A heel attachment, comprising a body part and attaching means embodied in the central part thereof, said means having upwardly projecting brads and said body part having a plurality of apertures adapted to receive the brads of a similar heel attachment when two of the devices are placed face to face.

4. A tread lift fastening, comprising a discoidal punching having a diagonal cut in its edge and a second cut substantially parallel with said edge and disposed inwardly thereof and terminating at the inner end of the first mentioned cut, and the complementary triangular parts being turned up on their integral bases to a mutually parallel position.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,273,048. STRETCHER-BRACE. ANTHON W. ELSTER, Canton, S. D. Filed July 12, 1917. Serial No. 180,195. (Cl. 254—51.)



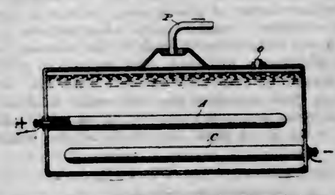
In a device of the class described, the combination with a cross head adapted to be attached to the fence wires, and a wire stretcher connected with said cross head; of a trussed brace comprising a pair of arms of L-shaped cross section having forks in their outer ends adapted to be seated against a fence post and their leaves at their inner ends drawn toward each other, a plate pivoted between said leaves, a connection between its inner end and said stretcher, a double hook through its outer end, and a chain connected with one extremity of said hook and adapted to be led laterally from the truss and attached to a peg in the ground.

1,273,049. MANIFOLD-HEATING DEVICE. JOHN H. ETTER, Memphis, Tenn. Filed Nov. 10, 1917. Serial No. 201,340. (Cl. 126—93.)



A portable heater comprising a hollow cylindrical body portion, an inclined cone-shaped spout formed contiguous with the upper end of said body portion and the contracted end of said spout providing an outlet, a covering for said body and spout, an apertured closure hinged to the lower end of said body, and a torch secured to the inner face of said closure at a point inwardly of the apertures substantially as and for the purpose specified.

1,273,050. PROCESS OF MAKING COMBUSTIBLE GAS. CLIDE F. EULER, Topeka, Kans. Filed Apr. 4, 1916. Serial No. 88,927. (Cl. 204—1.)



A process of generating an intimate mixture of hydrogen and oxygen, which comprises passing an electric current through an electrolyte consisting essentially of water, free from such amounts of salts, alkalis and acids as would liberate large quantities of gases other than oxygen and hydrogen, while causing uniform amounts of current to flow from the anode to the cathode and through all parts of the intervening liquid, by maintaining a uniform resistance through all parts of such intervening liquid, causing the gas as liberated uniformly at all parts of the length of the cathode to rise through said intervening liquid to said anode, and thereby come into contact with the gas as being liberated uniformly at all parts of the length of said anode, whereby said two gases are very thoroughly mixed, and withdrawing the mixed gases from the electrolytic generator without admixture with extraneous gases, substantially as hereinabove described.

1,273,051. SHADE-HOLDER. THEOPHILE EUPHRAT, Norwalk, Conn. Filed Dec. 7, 1917. Serial No. 205,960. (Cl. 240—115.)

A shade holder of the kind described formed from a blank of metal to provide an inner and outer ring connected together by web portions, the inner ring being stamped to provide an upstanding annular flange having a circumferential groove in its inner wall and vertical slots extending downwardly from the upper edge thereof and crossing said groove, the outer ring being stamped to provide a downwardly depending flange having an inwardly extending lug on the lower edge thereof, and a slot substantially opposite to said lug, an elongated resilient member having one end secured to the inner face of said flange and having its other end extending to a point substantially opposite said lug and normally lying spaced from the inner surface of the flange, and a finger

place secured to the free end of said resilient member and projecting outwardly through said slot whereby the



free end of the resilient member may be brought to lie against the inner face of the flange.

1,273,052. SPRING SUSPENSION FOR VEHICLES. ALFRED W. FARNSWORTH, Derby, England. Filed Dec. 22, 1917. Serial No. 208,483. (Cl. 267—19.)

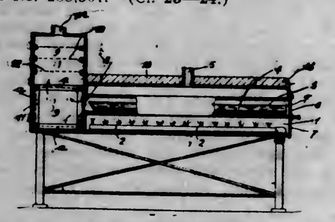


1. A vehicle in which the chassis is insulated from road shocks by means of overlapping cantaliver springs which are arranged longitudinally with respect to the vehicle and are suitably connected to the chassis framework and which are provided with secondary resilient members interposed between themselves and the chassis framework in such a manner that the center lines of said resilient members are approximately in the same plane, said plane being at or about the center of the length of the vehicle.

[Claim 2 not printed in the Gazette.]

1,273,053. [WITHDRAWN.]

1,273,054. PROCESS OF RECOVERING CAFFEIN. LUIGI FONTANELLI, Ferrara, Italy. Filed Aug. 27, 1917. Serial No. 188,507. (Cl. 23—24.)

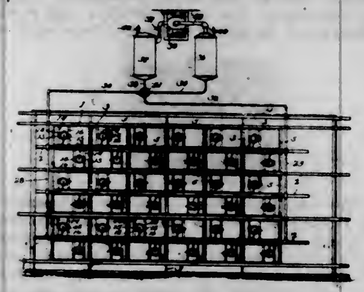


1. A process of separating caffein from solid material containing the same, which process comprises heating the caffein-containing material in a restricted current of gaseous medium, to a temperature capable of vaporizing the caffein, and condensing the vaporized caffein from the current of gaseous medium.

2. A process of obtaining caffein from the soot produced in the roasting of coffee, which comprises heating said soot in a restricted current of a gaseous medium, thereafter cooling the gaseous medium carrying the vaporized caffein and condensing the caffein therefrom.

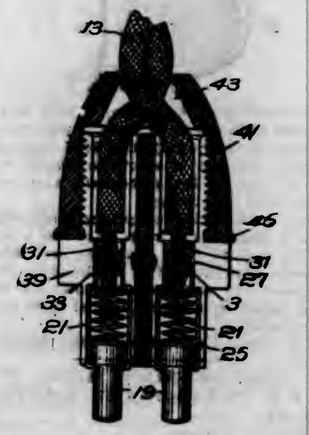
1,273,055. ICE-MAKING APPARATUS. CASSIUS M. GAY, Los Angeles, Cal.; Norman H. Gay executor of said Cassius M. Gay, deceased. Filed May 17, 1915. Serial No. 28,670. (Cl. 259—60.)

An ice making apparatus including in combination, a tank, means for supporting a plurality of containers in said tank, means for freezing the water in said container, a plurality of pipes supported by said tank, means for placing said pipes alternately under pressure and under vacuum, a pulsator for each container, means for removably supporting the pulsator on the container,



means for detachably connecting the pulsator to said pipes, said connecting means having a valve therein, each pulsator including a flexible diaphragm vibrated by the varying pressure in said pipes, and means whereby said vibrating diaphragm operates to agitate the water in the containers.

1,273,056. ELECTRICAL CONNECTION. JOHN H. GEORGE, Bridgeport, Conn., assignor to Hawthorne Manufacturing Company, Inc., Bridgeport, Conn., a Corporation of Connecticut. Filed Jan. 12, 1916. Serial No. 71,787. (Cl. 173—328.)



1. A device of the class described comprising a body of mating sections of insulating material having grooves therein forming a hole for receiving a conductor, sleeve sections of conductive material seated in said grooves having inwardly directed end portions, spring-pressed contact terminals in said sleeve sections having enlarged portions embraced and held by said inwardly directed portions, and a screw for securing said body sections together and for securing said conductor to said sleeve.

[Claims 2 to 9 not printed in the Gazette.]

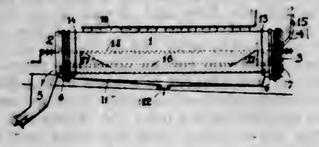
1,273,057. PICTURE-HANGER. AZARIA GREEN, St. Paul, Minn. Filed July 10, 1917. Serial No. 179,762. (Cl. 57—110.)

In a picture hanger, a pole, a stationary jaw having a socket mounted on said pole, said stationary jaw having a transverse slot above and adjacent to the socket, a movable jaw extending through the slot and connected pivotally with the stationary jaw, said movable jaw having a downwardly extending arm, said jaws being provided at their



meeting ends with flanges or projections adjacent to the lower edges thereof and with other flanges or projections adjacent to opposite side edges thereof, said flanges or projections coöperating to form a seat or socket.

1,273,058. APPARATUS FOR EFFECTING A CONTINUOUS CRYSTALLIZATION FROM SOLUTIONS. EINAR HANSEN, Rjukan, Norway, assignor to Norsk Hydro-Elektrisk Kvaelstofaktieselskab, Christiania, Norway. Filed Sept. 3, 1915. Serial No. 48,785. (Cl. 257—94.)

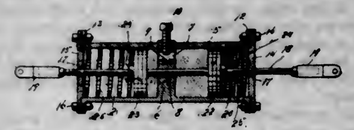


1. Apparatus for effecting continuous crystallization, comprising an inclined, cylindrical crystallizer vessel, means to rotate the same, means to continuously supply material to its upper end, means continuously discharging from its lower end, means to supply a cooling spray exteriorly of the vessel means below said vessel to collect and discharge the cooling medium, a scraper mounted in the vessel and adjustable with respect to the interior thereof.

2. Apparatus for effecting continuous crystallization, comprising an inclined, cylindrical crystallizing vessel, means to rotate the same, means to continuously supply material to the upper end of said vessel, means to permit a continuous discharge from the lower end of said vessel, means to supply a cooling spray over the entire length of said vessel, a pan below the vessel to collect and discharge the cooling medium, an adjustable shaft in said vessel and a scraper hung from said shaft and adjusted thereby with respect to the interior surface of said vessel.

1,273,059. DASH-POT. FREDERIC W. HILD, Denver, Colo. Filed July 19, 1917. Serial No. 181,564. (Cl. 74—69.)

4. A dash pot comprising a casing, a partition provided with an opening located in said casing and dividing the interior of the latter into two communicating chambers, adjustable means mounted in the wall of the casing adapted to project into the opening in the said partition, a rod slidably mounted in the casing and projecting beyond both extremities thereof, pistons mounted upon said rod, one being located in each chamber, springs also located in the said chambers between the pistons and the respective



heads of the casing, and the space between the said pistons adapted to be filled with liquid.

[Claims 1 to 3 not printed in the Gazette.]

1,273,060. CONCRETE EDGING AND MARKING TOOL, COMBINED. CARL P. HOFF, St. Joseph, Mo. Filed July 16, 1917. Serial No. 180,900. (Cl. 72—138.)



1. In a concrete edging and marking tool; a body plate having slots formed therethrough; a pair of bottom plates having screw threaded studs formed therewith, said studs being passed upward through said slots; thumb nuts screwed on said studs for adjustably securing said bottom plates in the same plane on said body plate with a space between them; a concrete cutter formed with each one of the adjacent edges of said bottom plates, said cutters being extended downward from said edges; a pair of uprights formed on the upper surface of said body plate; and a handle secured between the upper ends of said uprights.

3. In a concrete edging and marking tool; a body plate having a channel formed longitudinally in the center of the bottom thereof; a rider bar slidably mounted for vertical movement in said channel; bar adjusting and securing means whereby each end of said bar is independently adjusted and secured at various heights in said channel; a pair of bottom plates; adjustable securing means whereby said bottom plates are adjustably secured in the same plane on the bottom of said body plate; a concrete cutter of blade formation formed on each one of the adjacent edges of said bottom plates and extending downward therefrom; and a handle whereby said body plate and the therewith connected parts are moved over the surface of concrete.

[Claims 2 and 4 not printed in the Gazette.]

1,273,061. JOINT FOR DOLL-HEADS AND THE LIKE. RUDOLPH A. HOPF and CARL MAAS, New York, N. Y. Filed Feb. 4, 1918. Serial No. 215,255. (Cl. 46—40.)



5. The combination of a stuffed doll body, a support secured thereto having a socketed shank extending into the stuffing of the body, a head adjustably connected to

the exposed end of the support, and a spring connecting the head and support.

9. The combination of a body consisting of a fabric casing, stuffing therefor, a bearing member at the neck portion of the body, located between the stuffing and the fabric casing and provided with a central opening therethrough, a support passing through said opening into the stuffing, means to releasably secure the support and bearing member, and a head portion adjustably secured to said support.

11. The combination of a support, a shank projecting therefrom having a socket therein, said support being provided with a recess to form a seat, a doll-head adjustably engaging said seat, and a spring located within the socket connecting the shank and the head, whereby said head is maintained in position in said seat.

[Claims 1 to 4, 6 to 8, 10, and 12 not printed in the Gazette.]

1,273,062. METHOD OF FINISHING HEELS. WILLIAM HUBBARD, Rochester, N. Y., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Oct. 17, 1916. Serial No. 126,198. (Cl. 12—147.



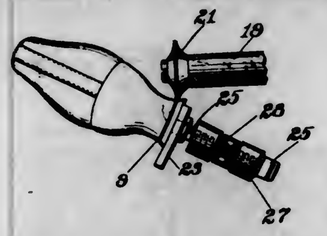
1. The method of producing a heel having an ornamental stripe which comprises assembling with a plurality of lifts of permeable material a lift of impermeable material, applying to the lateral surface of the heel so made up a coloring material which permeates the edges of the permeable lifts but merely coats the edge of the impermeable lift, and then removing the coloring matter from the edge of the impermeable lift while maintaining it undisturbed on the remainder of the heel.

2. The method of finishing a heel made up of leather lifts and an ornamental metal lift the edge of which is flush with the edges of the adjacent leather lifts which comprises coloring, waxing and burnishing the lateral surface of the heel and then removing the wax and coloring matter from the edge of the metal lift, beginning at a point in the junction of the lateral surface with the breast of the heel at one side of the heel and continuing progressively around said lateral surface to a similar point at the other side of the heel, and at the same time limiting the removing action to the area prescribed by the boundaries of the edge of the metal lift.

1,273,063. MACHINE FOR FINISHING HEELS. WILLIAM HUBBARD, Rochester, N. Y., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Original application filed Oct. 17, 1916, Serial No. 126,198. Divided and this application filed Mar. 13, 1918. Serial No. 222,131. (Cl. 12—42.)

1. A machine for cleaning the edge of an ornamental lift in a heel, having, in combination, a cleaning tool the width of the operative face of which is substantially equal to that of the edge of the lift, a rest for the tread face of the heel constructed and arranged to maintain the edge of the lift in contact with the tool as the heel is turned, means for producing relative adjustment between the tool and the rest to provide for differently located lifts and means for operating the tool.

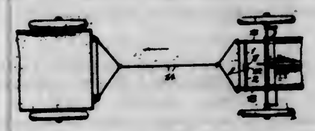
3. A machine for cleaning the edge of an ornamental lift in a heel, having, in combination, a rotary tool having a narrow face of a width not greater than that of the edge of the lift, and a tread rest for the heel, the supporting face of the rest being inclined to the plane of rotation of the tool.



5. A machine for cleaning the edge of an ornamental lift in a heel, having, in combination, a rotary tool having a narrow face of a width not greater than that of the edge of the lift, a tread rest for the heel, the supporting face of the rest being inclined to the plane of rotation of the tool, and means whereby the rest may be adjusted toward and from the tool.

[Claims 2, 4, 6, and 7 not printed in the Gazette.]

1,273,064. AUTOMOBILE-TOWING DEVICE. WERNER HUBER, Zurich, Switzerland. Filed Apr. 12, 1918. Serial No. 228,190. (Cl. 213—67.)



3. A towing device for vehicles, comprising a strut consisting of a tube and a rod, the latter being adapted to telescope into the tube and having a plurality of notches, a ledge fixed to the outer end of the tube, a second ledge fixed to the outer end of the rod, an adjustable ring mounted on said rod, an adjustable member carried by said ring and adapted to engage with a notch of the bar, an adjustable nut engaging with an external screw thread provided on the inner end of said tube and a belt consisting of two halves, each half being fixed to one of said ledges, said belt being for detachably securing the strut to the vehicle when it has been brought into the proper position relatively to the vehicle.

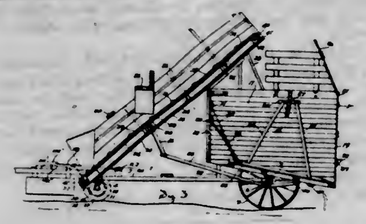
4. A towing device for vehicles, comprising a rigid structure, ledges provided on said structure and adapted to engage with parts of a vehicle, means provided on said structure for effecting a primary and a final exact adjustment of said ledges, means for detachably securing said structure to a vehicle, and means provided on said structure for securing a drawing member for towing the vehicle.

6. The combination with a towing and a towed car, of a towing device comprising a strut consisting of two telescopic members, ledges fixed to the outer ends of said members and adapted to engage parts of the underframe of one of said vehicles, means provided on said strut for effecting a primary and a final exact adjustment of its members, a horn on each member of the strut for securing a rope thereto and a belt consisting of two halves each of which is secured to one of said ledges and adapted to detachably connect the strut to said parts of the underframe, the ledges preventing together with the rigid strut any deformation of the vehicle parts with which they are in engagement.

[Claims 1, 2, 5, and 7 not printed in the Gazette.]

1,273,065. SHEAF-LOADER. NELSON JACKSON, Neepawa, Manitoba, Canada. Filed Apr. 8, 1914. Serial No. 830,512. (Cl. 21—20.)

1. In a sheaf loader the combination with an elevated open bottomed sheaf receiving rack, of pairs of upwardly converging hangers contained within the rack sides and having their upper ends pivotally connected to the inner sides of the rack, a rearwardly inclined pan normally closing the bottom of the rack and permanently suspended from the lower diverging ends of the hangers and releasable means retaining the pan in the closed position.



2. In a sheaf loader the combination with an elevated open bottomed sheaf receiving rack, of a pair of opposing short length side bars pivotally secured to the inner sides of the rack, opposing pairs of upwardly converging hangers having the upper ends thereof secured to the ends of the side bars, a rearwardly inclined pan normally closing the bottom of the rack and permanently secured to the lower diverging ends of the hangers and releasable means for retaining the pan in the closed position.

3. In a sheaf loader the combination with an elevated open bottomed sheaf receiving rack, of a pair of opposing short length side bars pivotally secured to the inner sides of the rack, opposing pairs of upwardly converging hangers having the upper ends thereof secured to the ends of the side bars, a rearwardly inclined pan normally closing the bottom of the rack and permanently secured to the lower diverging ends of the hangers, releasable means for retaining the pan in the closed position and an inclined apron having the upper edge thereof pivotally secured to the front end of the rack and the lower end raised on the upper face of the pan.

1,273,066. MEDICAL INSTRUMENT. PAULINE JANDOS, Chicago, Ill. Filed Feb. 23, 1918. Serial No. 218,776. (Cl. 128—9.)

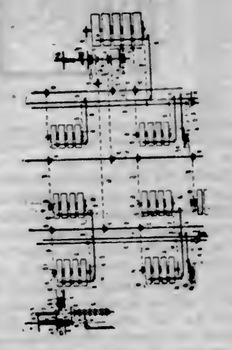


1. In a medical appliance, for the purpose set forth, a cup having a central opening therein, a stopper constituting a valve normally closing said opening, said stopper having its head portion provided with a slot to receive a suspending element, and a bracket in the cup designed to receive thereon an ignitible element.

[Claim 2 not printed in the Gazette.]

1,273,067. RACE-TOTALIZATOR. GEORGE ALFRED JULIUS, Sydney, New South Wales, Australia. Filed Mar. 5, 1918. Serial No. 220,475. (Cl. 235—91.)

1. In the totalizator counter and indicator which includes intergeared epicyclic trains in each horse element and control escapements on the epicyclic rotors actuated by connections from ticket issuing mechanisms, an accumulator device receptive of the aggregate of motions of said epicyclic trains, a floating weight drive associated with such accumulator and a back gear rewinding mechanism therefor driven by a pinion to which the accumulator delivers up the received motions, means for applying drive to said pinion and for arresting its motion when the accumulator has discharged itself therethrough of the motions received by it from said epicyclic trains, means governed by the rate of motion of the epicyclic trains for speeding up and slowing down the accumulator, a primary transfer wheel geared to said pinion and a secondary transfer wheel connected therewith through a spiral spring, means for bringing said secondary transfer wheel to rest when the rotations transmitted to it through said spiral spring have been delivered by it, a chain belt gear connecting the spindle of said primary transfer wheel with the unit drum of an indicator and transmitting said rotations to such indicator and means for transferring to the tens drum of the indicator one decimal advance movement for every complete rotation of said secondary transfer wheel.



7. In the totalizator apparatus of the type herein described, an accumulator drum pinion, a motor drive through a slipping belt to the accumulator drum pinion, a motor circuit, an accumulator nut, a rheostat controlling the motor circuit operated by the traverse of the accumulator nut, and a check for arresting the motion of the drum pinion and holding the drive, said device being also operated by the traverse of the accumulator nut, substantially as herein described.

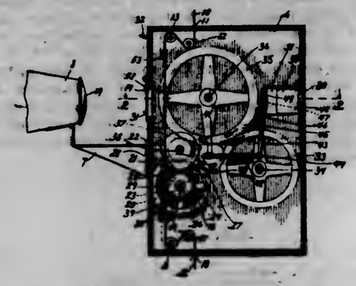
9. In totalizator mechanism of the type herein described, means whereby motions transferred from ticket issuing devices at irregular rates are transmitted through a motion accumulator to the indicating mechanism at a distributed and progressively varying rate, said means comprising an electric motor drive operating the accumulator and the transmission, a rheostat controller for the motor circuit, and means for changing the rheostat contacts progressively in timing with the difference between the rate of transmission of motion to and from said accumulator.

13. In combination with totalizator apparatus substantially as shown, comprising an accumulator, a traveling nut in said accumulator, a circuit, an escapement mechanism, a quick break knife switch controlled by the traverse movement of the accumulator unit, governing the return circuit of the escapement mechanism, and ticket issuing machines adapted to be arrested when the accumulator is over-loaded.

17. In totalizator mechanism of the type herein described, comprising ticket issuing mechanism, a grand ticket issuing mechanism, a grand total indicator, means for integrating the ticket issuing movements and transmitting them to the grand total indicator, motion receiving devices, means intermediate the ticket issuing element and the grand total indicator and associated with the driving mechanism of such indicator for transmitting the irregular rotational movements of the motion receiving devices in the transmission into intermittent movements and means for transferring said movements to said indicator thereby effecting step by step progression in the rotation of the indicator.

[Claims 2 to 6, 8, 10 to 12, and 14 to 16 not printed in the Gazette.]

1,273,068. OPTICAL APPARATUS. AUGUST P. JURGENSEN, New York, N. Y., assignor to Eureka Projector Device Co., Inc., New York, N. Y., a Corporation of New York. Filed Dec. 30, 1912. Serial No. 739,294. (Cl. 88—18.)



1. In a motion picture projecting apparatus, lighting means, a movable objective lens through which the light rays from the lighting means pass, means for advancing a succession of pictures intermittently into the path of the light rays, and means for intermittently moving the objective lens horizontally simultaneously with the advance of the film, thereby destroying the focus.

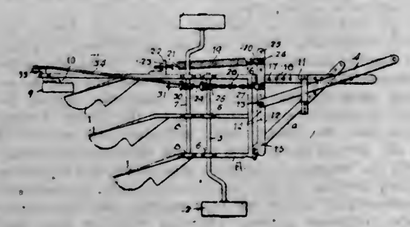
2. In a motion picture projecting apparatus, a lighting means, an objective lens through which the light rays from the lighting means pass, a support for a picture to be projected, a screen, means for moving one of said elements relative to the other thereby periodically destroying the focus and means for advancing a series of pictures to the support in correspondence with the movement of the movable element.

3. In a motion picture apparatus, a lens system, including a movable objective lens, and means for moving said movable lens intermittently simultaneously with the changing of the picture, whereby the focus through the lens system is intermittently destroyed at the moment of the changing of the picture.

4. In a motion picture apparatus, including a lens system and means for intermittently advancing a film, means for destroying the focus in the lens system simultaneously with the advance of the film while maintaining a constant amount of light upon the screen.

5. In a motion picture projecting apparatus, a lighting means, an objective lens through which the light rays from the lighting means pass, a support for a picture to be projected, a screen, means for moving one of said elements horizontally relative to the other thereby periodically destroying the focus and means for advancing a series of pictures to the support in correspondence with the horizontal movement of the movable element.

1,273,069. SPRING-GOVERNOR HITCH FOR PLOWS. ANTON RUDOLPH KECKRITZ, Union, Oreg. Filed Aug. 16, 1917. Serial No. 186,547. (Cl. 97—14.)

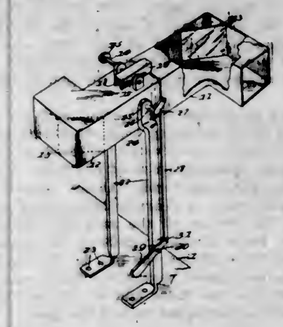


1. A device of the character described, including a frame, a plow carried by the frame, a draft bar for pulling the frame, a depth governing lever having the draft bar connected thereto, a spring connected to the depth governing lever for yieldably resisting movement thereof by the pull of the draft bar, supporting wheels for the frame, a crank axle for one of the wheels, and an operative connection between the crank axle and the depth governing lever for lowering the frame when there is a light draft and for raising the frame when there is a heavy draft.

8. A device of the character described, including a frame, a plow carried by the frame, a sliding draft bar, a yieldable connection between the draft bar and the frame, supporting wheels for the frame, crank axles carrying the supporting wheels, crank arms upon the crank axles, an operative connection between the two crank arms, and an operative connection between one of the crank arms and the draft bar.

[Claims 2 to 7 not printed in the Gazette.]

1,273,070. ATTACHMENT FOR MOTION-PICTURE-PROJECTING MACHINES. WILLIAM H. KELLY, Sparks, Nev. Filed July 3, 1917. Serial No. 178,874. (Cl. 88—24.)



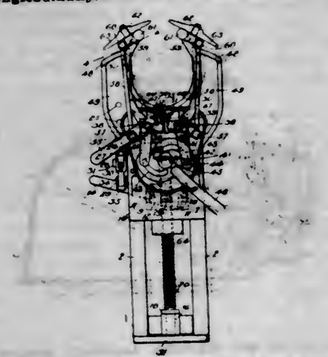
1. The combination with a support, a lamphouse adjustably mounted thereon, a bracket rigidly mounted with respect to the support, a casing carried by the outer end of the bracket and provided with a slot adjacent one end, an auxiliary objective lens mounted in the inner end of the casing, and a light reflecting tube pivotally mounted with respect to the support between the lamphouse and the auxiliary objective lens and adapted to be removably arranged in alinement with the lamphouse and the auxiliary objective lens.

[Claims 2 to 4 not printed in the Gazette.]

1,273,071. TIRE-MAKING MACHINE. CURT KUENTZEL, Youngstown, Ohio, assignor to The Republic Rubber Company, Youngstown, Ohio, a Corporation of Ohio. Filed Jan. 25, 1916. Serial No. 74,119. (Cl. 154—10.)

1. A machine for forming tire casings including, in combination, oppositely disposed manually controlled operating levers, a cam element for actuating said levers in reverse directions, a manipulating rod adjacent each of said operating levers, a roll-supporting link pivotally connected to each of said levers and to its cooperating manipulating rod, a stitching roll rotatively mounted upon each supporting link intermediate its pivotal connections, and means for reciprocating said rods longitudinally.

2. A machine for forming tire casings including in combination oppositely disposed manually controlled operating levers, a cam element for actuating said levers in reverse directions, a manipulating rod adjacent each of said operating levers, roll-supporting links each pivotally connected at its ends to the outer end of a lever and its cooperating rod respectively, a stitching roll rotatively mounted upon each of said supporting links intermediate its pivotal connections, and means for reciprocating said rods longitudinally.



3. A machine for forming tire casings including in combination oppositely disposed operating levers, manipulating rods adjacent said levers, roll-supporting links each pivotally connecting one of said levers with one of said rods at the outer ends thereof, a pintle projecting outwardly from each of said supporting links at right angles thereto and intermediate its pivotal connections, a stitching roll rotatively mounted upon each of said pintles, means for actuating said levers in reverse directions, and means for reciprocating said rods longitudinally.

1,273,072. PREPARED FOOD AND PROCESS FOR MAKING THE SAME. XENOPHON KUZMIER, Hartsdale, N. Y. Filed May 7, 1918. Serial No. 233,069. (Cl. 99—5.)

1. A process of preparing food which consists in cooking food in a liquid until substantially all the soluble constituents of said food are dissolved by said liquid and extracted from said food, separating the food from the solution, reducing the solid portion to substantial dryness, concentrating said solution to an amount as will be substantially absorbed by said dried portion, combining the concentrated solution with said dried portion, subjecting the combination to a heat of approximately 160° to 210° F. for a time sufficient to sterilize the same, and thereupon reducing the sterilized combination to substantial dryness with a heat insufficient to overcook the same.

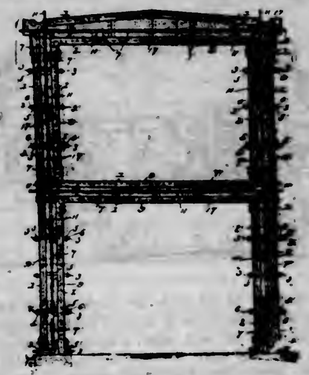
4. A process of preparing food which consists in cooking food in a liquid until substantially all the soluble constituents of said food are dissolved by said liquid and extracted from said food, separating the food from the solution, reducing the solid portion to substantial dryness, concentrating said solution to an amount as will be substantially absorbed by said dried portion, combining the concentrated solution with said dried portion, adding material to flavor the combination, subjecting the combination to a heat of approximately 160° to 210° F. for a time sufficient to sterilize the same, and thereupon subjecting the sterilized combination to a degree of heat to reduce the same to substantial dryness without overcooking the same.

7. A prepared food in a dried and substantially permanent form comprising a food substance cooked in liquid for a time sufficient to dissolve all soluble constituents, and from which said soluble extract has been removed, concentrated and recombined, flavored and sterilized, and packed in individual quantities and moisture-proof containers.

[Claims 2, 3, 5, and 6 not printed in the Gazette.]

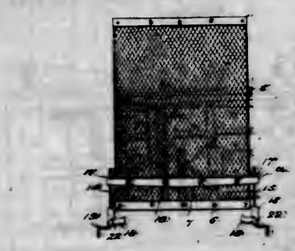
1,273,073. CONCRETE BUILDING CONSTRUCTION. SIMON LAKE, Milford, Conn. Filed Mar. 10, 1917. Serial No. 153,892. (Cl. 25—131.)

7. Means for forming a hollow wall building construction, comprising inner and outer mold members suitably spaced apart and supported in such relation, and a core of fusible material arranged in the space between the mold members and subdividing said space into spaces surrounding said core to receive building material in a plastic state, and means to liquefy the fusible core after the building material is hardened to effect the removal of such core.



[Claims 1 to 6 not printed in the Gazette.]

1,273,074. BED-SPRING TIGHTENER. HENRY LA ROE, North River, N. Y. Filed Oct. 20, 1916. Serial No. 126,667. (Cl. 5—69.)



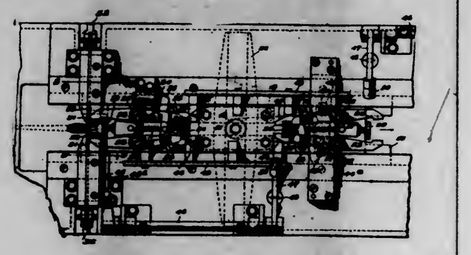
In a bed spring tightener a clamp including a pair of jaws and clamp screws passing through said jaws, one of said jaws having formed therein oblong openings and hollow movable screw threaded elements in alinement with said openings, the other of said jaws having means adapted to prevent rotation of said threaded elements and to allow of their adjustment along said oblong openings, a pair of hooks adapted for connection to one end of a bed spring frame and provided with transverse openings, and adjusting screws rotatably mounted in the openings of the jaw and hooks and screwed into the said screw threaded elements.

1,273,075. MACHINE FOR CLEANING BOBBINS. WALTER W. LINDER, Cooleemee, N. C., assignor, by mesne assignments, to Terrell Machine Company, a Corporation of North Carolina. Filed Feb. 17, 1917. Serial No. 149,293. (Cl. 19—15.)

1. Means for feeding bobbins to a stripping machine consisting of a downwardly-inclined runway comprising a pair of separated rails between which the bobbins are suspended by their heads, said runway leading to the bobbin-head gripping devices and a drag plate arranged underneath the runway to engage the depending ends of the bobbins and tilt the bobbins as they approach the delivery point to thus deliver them in a substantially horizontal position to the machine.

6. In a machine of the class set forth, a bobbin rest, a slide carrying a pair of bobbin grasping jaws, means for

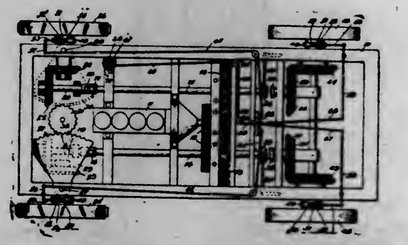
operating said jaws and said slide, and an adjustable bobbin adjuster adapted to position the bobbin head properly with respect to the jaws, said adjuster being carried by the slide.



9. In a machine of the class set forth, a slide and means for reciprocating the same, a pair of bobbin gripping jaws pivotally mounted on said slide, a spring tending to hold these jaws normally open, a latch device normally tending to latch the jaws open, a latch-releasing device arranged to operate when the jaws are in position to grasp the bobbin, and an automatically-operated quick-opening means for the jaws including a spring more powerful than the aforesaid spring and a tripping device for putting said powerful spring into action when the latch is released.

[Claims 2 to 5, 7, 8, and 10 not printed in the Gazette.]

1,273,076. AUTOMOBILE-TRUCK. GEORGE H. W. LINDHORST, Nisqually, Wash. Filed May 15, 1917. Serial No. 168,886. (Cl. 80—44.)

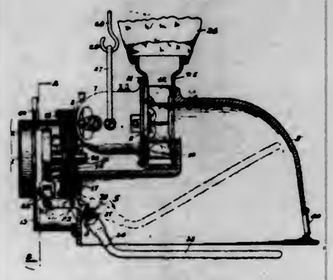


1. In a motor truck, a frame, front and rear tractor wheels, a pair of parallel shafts, gears on said shafts intermeshing together, a motor on said frame geared to one of said shafts, gear sets universally jointed to said shafts for driving the front wheels, gear sets for the rear wheels, and independent clutches for connecting the rear gear sets to the parallel shafts.

2. In a motor truck, a frame, front and rear tractor wheels, a pair of parallel shafts, gears on said shafts intermeshing together, a motor on said frame geared to one of said shafts, gear sets universally jointed to said shafts for driving the front wheels, gear sets for the rear wheels, and independent clutches for connecting the rear gear sets to the parallel shafts, said clutches disposed in said shafts between the rear wheels and the intermeshing gears of said shafts.

1,273,077. CLEANING-MACHINE. JAMES L. LUND, New York, N. Y. Filed Feb. 28, 1916. Serial No. 80,828. (Cl. 15—8.)

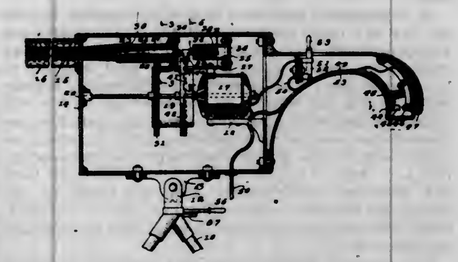
1. A device of the character described, comprising a casing having a relatively large opening at the bottom thereof and a relatively small opening at the top thereof leading to a discharge conduit, a fan mounted at the smaller opening adapted to direct a current of air therethrough, a beater mounted at the larger opening of said casing, independently incased actuating mechanism for said beater, and a motor interposed between said fan and said actuating mechanism and adapted to operate both thereof.



2. A device of the character described, comprising a casing having a relatively large opening at the bottom thereof and a relatively small opening at the top thereof leading to a discharge conduit, a fan mounted at the smaller opening adapted to direct a current of air therethrough, a beater mounted at the larger opening of said casing, independently incased actuating mechanism for said beater, a motor interposed between said fan and said actuating mechanism and adapted to operate both thereof, said beater having yielding connection with its actuating mechanism.

3. A device of the character described, comprising a casing having a relatively large opening at the bottom thereof and a relatively small opening at the top thereof leading to a discharge conduit, a fan mounted at the smaller opening adapted to direct a current of air therethrough, a beater mounted at the larger opening of said casing, independently incased actuating mechanism for said beater, a motor interposed between said fan and said actuating mechanism and adapted to operate both thereof, and means for disconnecting said beater from its actuating mechanism whereby said fan may be operated independently.

1,273,078. MACHINE-GUN. LUIS M. MCMANUS, Houston, Tex., assignor of one-half to James Harold Warner, New York, N. Y. Filed Mar. 29, 1917. Serial No. 158,317. (Cl. 89—9.)

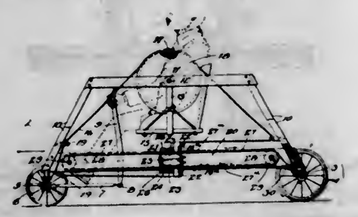


1. In a machine gun, the combination with a casing, of a firing chamber carried within the casing, a barrel having connection with the firing chamber and protruding through one end of the casing, the firing chamber having an opening on the bottom, the casing having openings on either side in communication with the firing chamber, a belt movable longitudinally through the firing chamber and being provided on its underface with a plurality of rack teeth in registration with the opening in the bottom of said firing chamber, a plurality of tubes carried on the top face of the belt, a firing pin slidably mounted in the casing and entering the rear end of the firing chamber, the tubes on the belt being of the proper internal conformation to receive and carry cartridges, means normally projecting the firing pin into said firing chamber, means for advancing the belt through the firing chamber so that successive cartridges carried thereby may be brought in registration with the barrel, and means conjoined with the said latter means for retracting the firing pin and releasing it at the time that the cartridge is in registration with the barrel.

3. In a machine gun, the combination with a casing, of a firing chamber carried within the casing, a barrel having connection with the firing chamber and protruding through one end of the casing, the firing chamber having an opening on the bottom, the casing having openings on either side in communication with the firing chamber, a belt movable longitudinally through the firing chamber and being provided on its underface with a plurality of rack teeth in registration with the opening in the bottom of said firing chamber, a plurality of tubes carried on the top face of the belt, a firing pin slidably mounted in the casing and entering the rear end of the firing chamber, the tubes on the belt being of the proper internal conformation to receive and carry cartridges, means normally projecting the firing pin into said firing chamber, a gear meshing with the teeth of the belt, a finger carried by the firing pin, a wheel having cam teeth on one side which teeth are adapted to engage the pawl to retract the firing pin, a motor carried within the casing and having its shaft projecting and journaled in one end of the casing, the gear and the cam toothed wheel being carried on the shaft, a grip member attached to the casing, and a device carried in the grip member to control said motor.

[Claim 2 not printed in the Gazette.]

1,273,079. MOTOR. MARTIN M. MATSON and CHARLES M. MATSON, Mabscott, W. Va. Filed Oct. 22, 1917. Serial No. 198,000. (Cl. 208—38.)



1. A vehicle comprising a running gear including a driven axle, with traction wheels, and steering wheels, a frame or body on the wheels, a pendulum suspended on the frame or body, and means actuated by the oscillations of the pendulum for driving said axle including a belt and alternately acting grippers engaging the belt.

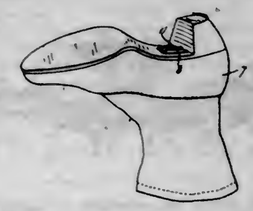
6. A vehicle having, in combination, a running gear including traction wheels and steering wheels, a belt, reciprocating means for engaging and driving the belt and said traction wheels, and gravity operated oscillatory means for actuating said reciprocating means.

9. In a motor, a pendulum, a reciprocating carriage, an endless, flexible member and rotary means driven thereby and supporting the same, grippers on the carriage for engaging said member, and means connecting the pendulum and said grippers.

[Claims 2 to 5, 7, 8, and 10 not printed in the Gazette.]

1,273,080. HEEL AND SHANK SUPPORT. ROBERT MEOW, Minneapolis, Minn. Filed Apr. 8, 1918. Serial No. 227,174. (Cl. 36—76.)

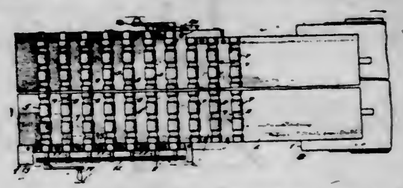
1. A heel and shank supporting plate for shoes stamped from a single piece of sheet metal, and formed at its driving end with laterally spaced flat prongs with a V-shaped centering notch between them, the said plate having a displaced centrally located longitudinal corrugation diminishing and terminating at the apex of said centering notch.



3. The combination with a shoe having a centrally located nail in the heel thereof, of a heel and shank supporting plate having at its driving end laterally spaced flat prongs with a V-shaped centering notch between them, the said plate being driven into the heel adjacent to the shank with the prongs straddling the said nail and centered thereby, the outer end of said plate being secured to the shank of the shoe, and the said plate having a displaced reinforcing corrugation diminishing and terminating at the apex of said centering notch.

[Claims 2 and 4 not printed in the Gazette.]

1,273,081. MECHANISM FOR ADJUSTING PAPER UPON FEED-BOARDS. ROBERT MIEHLE, Chicago, Ill. Filed Nov. 27, 1916. Serial No. 133,761. (Cl. 271—8.)



1. In mechanism for adjusting paper upon a feed board, the combination with a feed board for supporting the paper thereupon and having slots extending transversely of the board and through the paper supporting surface thereof; of rollers in said slots projecting above the paper supporting surface of the feed board and divided into spaced apart paper engaging sections, the feed board having continuations extending into the spaces between the sections of the rollers.

5. In mechanism for adjusting paper upon a feed board, the combination with a feed board for supporting the paper thereupon and having slots extending transversely of the board and through the paper supporting surface thereof; of rollers in said slots projecting above the paper supporting surface of the feed board and divided into spaced apart paper engaging sections, the feed board having continuations in the form of noses extending into the spaces between the sections of the rollers from opposite sides of the rollers and which noses terminate beneath the paper supporting surface of the board.

7. In mechanism for adjusting paper upon a feed board, the combination with a feed board for supporting the paper thereupon and having slots extending through the paper supporting surface thereof; of rollers projecting through said slots to engage the paper upon the feed board; and operating mechanism common to a portion of the rollers and serving to operate the same simultaneously, the balance of the rollers being idle.

[Claims 2 to 4, 6, and 8 not printed in the Gazette.]

1,273,082. DIE-STOCK. HARRY B. MILLER, Syracuse, N. Y. Filed Mar. 8, 1917. Serial No. 153,475. Renewed Apr. 27, 1918. Serial No. 231,280. (Cl. 10—126.)

1. In a die stock, die members, a movable guiding member, an oil chamber, and means operated by the

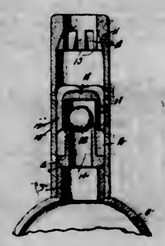
movement of said guiding member for discharging oil from said chamber to lubricate the die members.



4. In a die stock, die members, a rotatable guiding member having a cam surface, an oil chamber having an outlet and a flexible top, a valve closing said outlet and having its stem in substantial contact with said flexible top, a pivoted lever having one end in contact with said flexible top and its opposite end in the path of said cam surface.

[Claims 2, 3, 5, and 6 not printed in the Gazette.]

1,273,083. NON-REFILLABLE BOTTLE. JAMES M. MILLERS, Vancouver, British Columbia, Canada. Filed Aug. 30, 1916. Serial No. 117,724. (Cl. 215—65.)

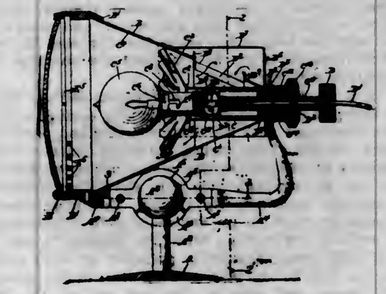


In a device of the class described, the combination with a bottle neck, of a supplemental neck inclosing the neck of the bottle and projecting beyond the latter, a valve seat comprising a tubular member arranged in said supplemental neck, a flange projecting outwardly from the lower end of said tubular member and resting on the neck of the bottle, ribs arranged in spaced relation around the outer surface of said tubular member and extending longitudinally thereon, a cage comprising a cup shaped member slidably arranged in said supplemental neck and being adapted to inclose the upper end of said tubular member, a ball confined between said cup member and said valve seat, webs extending longitudinally of said cup shaped member and projecting from the outer wall thereof, the said webs extending beyond the open end of said cup member and being adapted to engage between the ribs on said valve seat, and a notched annular shoulder on the supplemental neck at the outer end thereof to limit the outward sliding movement of said cage.

1,273,084. SEARCH-LIGHT. OLE MOMB, West Duluth, Minn. Filed Nov. 22, 1916. Serial No. 132,737. (Cl. 240—41.)

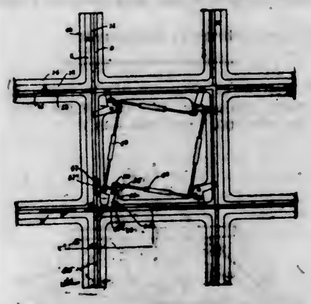
1. A searchlight comprising a conical reflector, a source of light located therein between the apex and the base thereof, and a fixed auxiliary reflector located within the conical reflector between the source of light and its apex, said reflector being conical in shape, but having its sides not as sharply inclined to the major axis as the sides of the conical reflector.

15. A search light comprising a reflector, a light source at the focal center thereof, and an auxiliary reflector interposed on the rear side of the light source between it and the main reflector, said auxiliary reflector being in contact with the main reflector and having its surface corrugated, said corrugations extending radially and located between the center of the auxiliary reflector and its periphery.



[Claims 2 to 14 not printed in the Gazette.]

1,273,085. RAILWAY-CROSSING. MILES F. MOORE, Los Angeles, Cal., assignor of one-half to Sydney I. Walles, Los Angeles, Cal. Filed June 20, 1916. Serial No. 104,679. (Cl. 104—116.)



5. In a railway crossing, members movably chambered in the trackage at rail intersections, bell cranks connecting such members at each intersection, and link rods connecting such bell cranks.

6. In a railway crossing, members movably chambered in the trackage at rail intersections, bell cranks connecting such members at each intersection, and link rods connecting such bell cranks; further members being operatively connected with said first named members and positioned to be depressed by engagement with rolling-stock wheels.

9. The combination, with two pairs of intersecting rails capable of traverse by flanged rolling-stock wheels; of movable means positioned within the dimensions of the rails for providing approximately continuous traction surface at the points of intersection of the rails, and means capable of accommodation within the space confined by the intersecting rails whereby said first named means are operatively inter-related; together with means accommodated within the confines of the rails for moving said first named means.

[Claims 1 to 4, 7, and 8 not printed in the Gazette.]

1,273,086. SCALE, RULE, AND LIKE MEASURE OF LENGTH. ALFRED LEONARD NAWELL, Prestbury, England. Filed Apr. 17, 1918. Serial No. 229,135. (Cl. 33—107.)

3. A scale, rule or like measure of length comprising a stiffening strip concaved on one side and flat on the other side and having its longitudinal edges beveled, and a thin metal strip of greater width than said stiffening strip and bent around the longitudinal edges thereof so that its side edges do not meet at the concaved side, said metal strip being permanently attached to said stiffening strip.



4. As a new article of manufacture, a ruler comprising a stiffening strip flat on one side and concave on the other and having longitudinal beveled edges, and a thin metallic strip bent around the edges and flat side of said stiffening strip and permanently attached thereto, said metallic strip being provided on both sides of both edges with graduations of measure, substantially as described.

[Claims 1 and 2 not printed in the Gazette.]

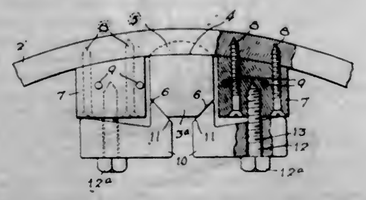
1,273,087. VEHICLE. RICHARD T. NEWTON, Nutley, N. J. Filed Apr. 13, 1914. Serial No. 831,442. (Cl. 267—19.)



1. In a vehicle, a leaf spring, a casing rigidly attached to the spring, coiled springs in the casing, a partition between the coiled springs and a rod flexibly connected with the partition and connected at the other end with one of the leaf springs.

[Claims 2 to 6 not printed in the Gazette.]

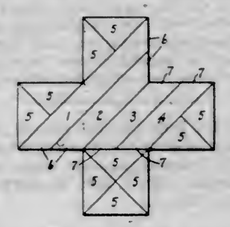
1,273,088. ADJUSTABLE TABLE-LEG CLAMP. RUFUS H. NULL, Greensboro, N. C. Filed Aug. 31, 1917. Serial No. 189,142. (Cl. 45—48.)



4. The combination with an article of furniture formed with a vertical side flange, and a supporting leg having a shank at the upper end thereof which is formed with a flat face fitting squarely against the said side of the flange and with beveled outer corners, of spaced positioning blocks secured to the flange on opposite sides of the shank, a pair of L-shaped clamping members, the short arm of each clamping member terminating in a wedge shaped nose which engages a beveled corner of the supporting leg shank, while the long arm of each of the clamping members has a wedge shaped formation and gradually increases in thickness from its intersections with the short arm to the free end thereof, said long arms of the clamping members having openings therein and the thickened free ends thereof having a rocking engagement with the outer faces of the positioning blocks, and clamping bolts extending through the openings of the long arms of the clamping members and engaging the positioning blocks.

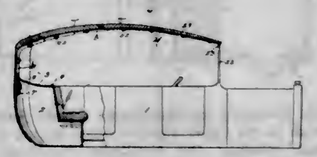
[Claims 1 to 3 and 5 not printed in the Gazette.]

1,273,089. PUZZLE. MARY LIGHT OGLE, Covington, Ky. Filed Oct. 4, 1917. Serial No. 194,809. (Cl. 46—41.)



A puzzle consisting of fourteen pieces, four pieces formed like strips having straight sides and inclined ends, these strips forming the key of the puzzle, and ten triangular shaped pieces, said pieces when laid so that their edges meet, forming a cross with short arms.

1,273,090. COLLAPSIBLE TOP FOR VEHICLES. HAROLD G. POWELL, Omaha, Nebr. Filed Oct. 31, 1917. Serial No. 199,458. (Cl. 21—62.)



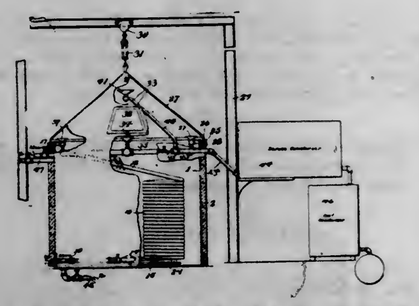
1. In a vehicle, the combination of a body having a windshield and also having a rear compartment and a cover therefor, said cover having notches in its edge, telescopic top-supporting sections the foremost of which are detachably connected with the windshield and the rearmost of which extend through said notches in the cover, means in the rear compartment for the support of said rearmost top-supporting sections, means for detachably connecting said sections with said supporting means, top sections superimposed on the top-supporting sections and arranged flush with each other and having interlocked edges, means detachably connecting the top sections together, and means detachably connecting the top sections with adjacent top-supporting sections; the said top supporting sections and top sections when disassembled being adapted to be stored in the said compartment.

2. In a vehicle, the combination of a body having a windshield and also having a rear compartment and a cover therefor, said cover having notches in its edge, rod sections fixed in the compartment in alinement with said notches and having their upper ends disposed below the cover, lock members on said rod sections, telescopic top-supporting sections the foremost of which are detachably connected with the windshield and the rearmost of which extend through said notches in the cover and are arranged on said rod sections, lock members on said rearmost sections complementary to the lock members of the rod sections, top sections superimposed on the top-supporting sections and arranged flush with each other and having

interlocked edges, lock members arranged on the undersides of said top sections adjacent to the interlocked edges thereof, complementary lock members arranged on the underside of the top sections at the opposite side of said edges, with reference to the first-named members, and adapted to engage the latter, and lock members arranged on the undersides of the top sections and having hooks in detachable engagement with adjacent top-supporting sections; said top-supporting sections and top sections when disassembled being adapted to be stored in the said compartment.

3. In a vehicle, the combination of a body having a windshield, telescopic top-supporting sections the foremost of which are detachably connected with the windshield and the rearmost of which are detachably connected with the rear portion of the body, top sections superimposed on the top-supporting sections and arranged flush with each other and having interlocked edges, means for detachably connecting said top sections together, and means for detachably connecting the top sections with adjacent top-supporting sections.

1,273,091. STILL FOR CRUDE BITUMINOUS MATERIALS. CHARLES P. PRICE, Malden, Mass., assignor to American Tar Company, Malden, Mass., a Corporation of Massachusetts. Filed Dec. 3, 1912. Serial No. 734,771. (Cl. 196—3.)



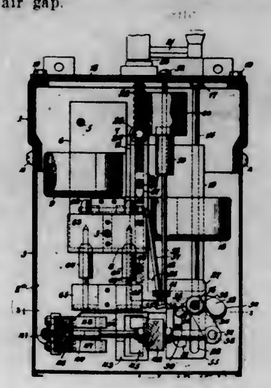
4. A still including in combination a body portion having a trough at its upper edge, a cover having a seat in said trough whereby the distillates collecting in the trough seal the cover, a collecting pipe for the distillates, means for connecting said collecting pipe with said trough, a plurality of vertical pipes leading to said collecting pipe, funnels supported by said vertical pipes, and means for heating said still including a vertically arranged coil located within the still, through which steam may be passed.

[Claims 1 to 3, 5, and 6 not printed in the Gazette.]

1,273,092. CIRCUIT-CONTROLLING DEVICE. CLEVELAND REDFIELD, Ogden, Utah, assignor to Automatic Controller and Manufacturing Company, a Corporation of Utah. Filed Aug. 10, 1916. Serial No. 114,240. (Cl. 172—179.)

1. A means for controlling alternating currents, comprising a transformer having primary and secondary windings with relatively movable magnetic cores individual thereto, said cores having polar extremities and the range of movements being sufficient and in a direction to move a core from an initial position having one polar extremity of one magnetic core bridging the gap between polar extremities of the other core to a position where the polar extremities of both cores register.

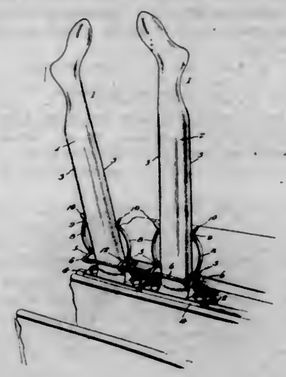
4. A controller for alternating electric currents, comprising a transformer having primary and secondary windings with magnetic structures individual thereto, one structure being movable on the other and having parts movable into and out of contact to provide a closed magnetic circuit about the primary side of the transformer, a variable air gap in such magnetic circuit, and another magnetic circuit about both the primary and secondary sides of the transformer controllable by the variation of the said air gap.



6. A means for controlling alternating electric currents, comprising a transformer with primary and secondary windings, magnetic structures individual to the primary and secondary sides of the transformer, one of the magnetic structures being fixed and the other movable on the fixed structure, the magnetic structures having polar extensions with end contact and movable into and out of side contact, whereby to produce a closed or substantially closed magnetic circuit in one position of the parts to include one of the electrical sides of the transformer, and another magnetic circuit in another position of the parts to include both of the electrical sides of the transformer.

[Claims 2, 3, 5, and 7 to 27 not printed in the Gazette.]

1,273,093. HOSIERY DRYING AND SHAPING STRUCTURE. WILLIAM L. RIECK, Kankakee, Ill., assignor to Paramount Hosiery Form Drying Co., Chicago, Ill., a Corporation of Illinois. Filed Mar. 30, 1918. Serial No. 225,767. (Cl. 223—17.)



1. An article of manufacture including a clip-member provided with a groove, and a fabric-engaging element disposed in the groove and adjustable in respect to the surface of the groove.

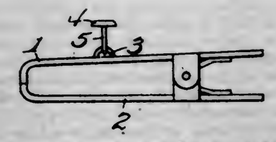
9. A drying and shaping structure including a hosiery form provided with beveled sides and reduced crease-forming edges, a holding device adjustable vertically thereon and comprising a plurality of clip members provided with slots in which the edges of the form are seated, and resilient fabric-engaging members engageable with the edges of the form.

10. A drying and shaping structure including a hosiery form provided with beveled sides and reduced crease-forming edges, a holding device adjustable vertically thereon and comprising a plurality of clip members provided with slots in which the edges of the form are seated, resilient fabric-engaging members engageable with the edges of the form, and means for angularly adjusting the engaging members in respect to such edges.

12. A hosiery-drying structure including a form having hosiery-shaping edges, a fabric-holding device adjustable longitudinally of the form and comprising fabric-holding members extending longitudinally of the form and engageable with its edges, and means for angularly adjusting the holding members in respect to the edges of the form.

[Claims 2 to 8 and 11 not printed in the Gazette.]

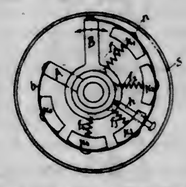
1,273,094. NECKTIE-FASTENER. PAUL RIGOT, Jr., Wheeling, W. Va. Filed Dec. 20, 1917. Serial No. 208,019. (Cl. 24—80.)



2. A tie fastener comprising a clasp composed of pivoted jaws, an eye-piece carried by one of said jaws, and a button having a link of loop form received in the eye of said eye-piece, said button being adapted for introduction through the free end of the tie and to permit the latter to have free relative movement in all directions.

[Claim 1 not printed in the Gazette.]

1,273,095. MEANS FOR USE IN AUTOMATICALLY CONTROLLING THE TIMING IN MAGNETO IGNITION APPARATUS. ALBERT RILLING, Frankfort-on-the-Main, Germany, assignor to the Firm of Mafam Motor-Apparate G. M. B. H., Frankfort-on-the-Main, Germany. Filed Nov. 25, 1911, Serial No. 662,263. Renewed Dec. 6, 1917. Serial No. 205,896. (Cl. 264—18.)



1. In apparatus of the class described, the combination of a driving part, a driven part, and an elongated flexible element connecting said parts to centrifugally vary their relative angular position.

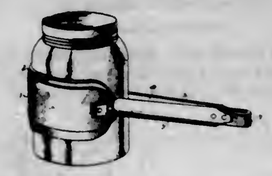
3. In apparatus of the class described, the combination of a driving part, a driven part, and an elongated flexible element connecting said parts to centrifugally vary their relative angular position, and comprising a series of heavy bodies mounted on a spring band.

6. In apparatus of the class described, the combination of a driving part, a driven part, and an elongated flexible element connecting said parts to centrifugally vary their relative angular position, and radially adjusting inclosing means which adjustably limits the outer centrifugal limits of the flexible element.

[Claims 2, 4, 5, 7, and 8 not printed in the Gazette.]

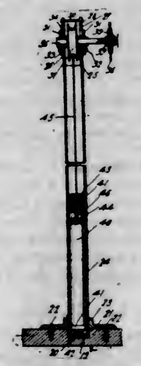
1,273,096. FRUIT-JAR HOLDER. PETER ROTH, New Salem, N. D. Filed July 18, 1917. Serial No. 181,346. (Cl. 65—26.)

A jar holder comprising relatively rigid handles, a pliable metallic arcuate band attached at its ends to the handles at one end thereof, an arcuate resilient strip attached at its ends to the other ends of the handles, the ends of the band being spaced apart for a greater distance than the ends of the strip whereby the handles normally converge toward each other from the band to the strip,



the band being of greater diameter than the strip, said band and strip serving as the only means which attach with the handles, thereby leaving an unobstructed space between the handles which leads at the ends of the handles into the spaces within the band and the strip.

1,273,097. ROCKING-CHAIR FAN. JOSEPH SCHMALZL, South Bethlehem, Pa. Filed Mar. 10, 1917, Serial No. 153,884. Renewed June 10, 1918. Serial No. 239,289. (Cl. 230—7.)



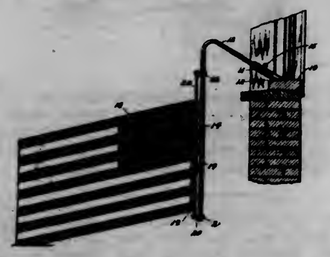
1. In a device of the class described, a base; a tubular standard carried by the base; a shaft journaled for rotation in the upper end of the standard; a fan carried by the shaft; a sheave carried by the shaft; a weight mounted to reciprocate in the standard; a flexible element connected with the weight and trained across the sheave; a track carried by the base; a chair including a rocker mounted to move on the track, the flexible element being connected with the chair; a keeper carried by the rocker and provided with a notch in its lower edge; and a spring one end of which is secured to the base, the other end of the spring being provided with a button received in the notch, the spring exerting an upward pressure on the button, to maintain the button firmly engaged in the notch.

2. In a device of the class described, a base provided with a recess; a resilient buffer seated in the recess; a tubular standard mounted in the recess and abutting at its lower end against the buffer; a weight mounted to reciprocate in the standard; a resilient band surrounding the weight and coacting with the bore of the standard, the band and the buffer coöperating to reduce the noise incident to the reciprocation of the weight in the standard; a shaft journaled for rotation in the upper end of the standard; a sheave carried by the shaft, the flexible element being trained across the sheave; and a fan carried by the shaft.

3. In a device of the class described, a base; a tubular standard carried by the base; a shaft journaled for rotation in the upper end of the standard; a fan carried by

the shaft; a sheave carried by the shaft; a weight mounted to reciprocate in the standard; a friction element carried by the weight and coacting with the standard to retard the downward movement of the weight; a flexible element connected to the weight and engaging a part of the periphery of the sheave; and a rocking chair whereunto the flexible element is connected.

1,273,098. FLAGPOLE AND SUPPORT THEREFOR. FRANK SCHUMANN, Philadelphia, Pa. Filed Jan. 12, 1918. Serial No. 211,626. (Cl. 116—12.)



1. A flag support, comprising a bracket, a pole having a vertical portion and an angular downwardly bent portion, said downwardly bent portion being removably connected to the bracket and means for attaching the flag to the vertical portion of the pole.

2. In a flag support, the combination with a bracket, of a pole having an angular part for connection with the bracket and a vertical depending part, collars on the vertical depending part, and means for attaching the flag to said collars.

3. A flag support comprising a tubular bracket, a pole having an angular portion and a vertical depending portion, said angular portion being adapted for connection with the bracket, means for connection with the bracket and the angular portion for locking said angular portion to said bracket, clamps on the vertical depending portion, and a flag cord for connection with the flag and said clamps.

1,273,099. WELL-BORING APPARATUS. THOMAS H. SLAVIN, Los Angeles, Cal., assignor, by direct and mesne assignments, of one-half to Charles E. Wilcox, Bakersfield, Cal., and one-half to William W. Wilson, Los Angeles, Cal. Filed Apr. 24, 1913. Serial No. 763,245. (Cl. 255—28.)



1. In a well boring apparatus, a boring string member beneath which members of the string and the boring tool are suspended, and a circulation pipe extending lengthwise of the member and exteriorly applied thereto.

5. In a well-boring apparatus, a boring string member, a circulation pipe extending lengthwise of the member; and lock nuts applied to the ends of the circulation pipe at and bearing against the ends of said member and opposing longitudinal displacement of said pipe.

12. In well boring apparatus, a boring string member having an outside lengthwise channel, and a circulation pipe extending lengthwise of the member in said outside channel therein.

[Claims 2 to 4 and 6 to 11 not printed in the Gazette.]

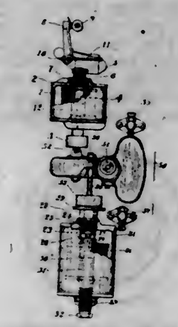
1,273,100. FASTENER. HARRY O. SMITH, Kansas City, Mo. Filed Oct. 30, 1917. Serial No. 199,340. (Cl. 24—217.)



1. A fastener comprising male and female members, said female member consisting of a socketed head, a plate having a plurality of slots and bent upon itself and into U-shaped formation positioned within the socketed head to form resilient fingers adapted to engage and hold the male member within the head, and means adjustably connecting the male member to the upper of the shoe so that the same may be moved toward and from the female member to cause the upper of the shoe to accomodate ankles of several sizes.

[Claims 2 and 3 not printed in the Gazette.]

1,273,101. OVERLOAD APPARATUS. JAY H. HALL, Cleveland, Ohio. Filed May 2, 1914. Serial No. 835,856. (Cl. 175—268.)



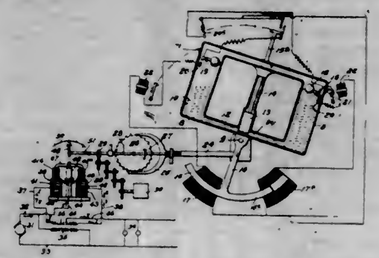
1. In an electromagnetic device, an electric circuit, a winding therein, an armature, a magnetic circuit energized by current in the winding and movable thereby from a normal position of rest to close an air-gap in the magnetic circuit when the current exceeds a predetermined value, and means whereby, when the current in the circuit is below a lower predetermined value, the armature is moved to a second position of rest at which the air-gap is partially closed.

[Claims 2 to 19 not printed in the Gazette.]

1,273,102. ELECTRIC RECORDING AND INTEGRATING DEVICE. PAUL M. LINCOLN, Pittsburgh, Pa. Filed July 27, 1915. Serial No. 42,176. (Cl. 171—84.)

1. In a wattmeter, the combination with a slow-responding indicator, of a relatively quick-acting reciprocating motor the time interval between the reciprocations of which bears a definite relation to the time of response of the indicator, and an integrating device adapted to be actuated by the motor and controlled by the indicator.

4. In a wattmeter, the combination with a slow-responding member, of a rotatable member, means for quickly turning the rotatable member at predetermined times, and an integrating mechanism adapted to be actuated by the rotatable member and to be controlled by the slow-responding member to indicate the integrated demand.



6. In a wattmeter, the combination with a slow-responding indicator, of a relatively quick-acting reciprocating motor, the time interval between the reciprocations of which bears a predetermined relation to the time lag of the slow responding indicator, and an intergrating mechanism actuated only when the motor operates and adapted to be controlled by the indicator.

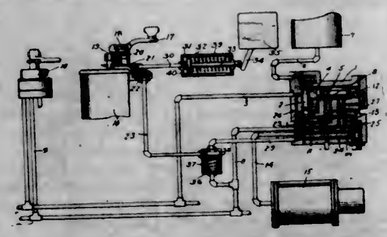
[Claims 2, 3, and 5 not printed in the Gazette.]

1,273,103. LIQUID-MEASURING TANK. WILLIAM E. SANDERS, Watertown, N. Y. Filed Aug. 25, 1917. Serial No. 188,123. (Cl. 73—54.)



A measuring tank of the class described having sight openings at opposite sides, hinged doors to cover and uncover the sight openings and each having a pintle rod provided with a pinion, a rack link having rack teeth on opposite sides engaging opposite sides of the pinions to cause said doors to simultaneously open or close, and a guide for said rack link and in which said rack link is longitudinally movable.

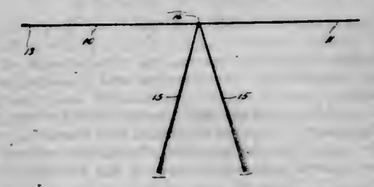
1,273,104. SAFETY CAR CONTROL. WALTER V. TURNER, Wilkinsburg, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Aug. 24, 1916. Serial No. 116,628. (Cl. 188—1.)



1. In a safety car control equipment, the combination with a controller handle, of automatic means operated upon a reduction in fluid pressure for effecting an application of the brakes, a valve operated upon release of the controller handle for venting fluid from said means, means for effecting a straight air application of the brakes, and a valve controlling communication through which fluid is vented from said automatic means and operated upon a straight air application of the brakes for closing said communication.

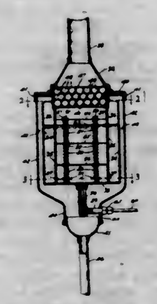
[Claims 2 to 5 not printed in the Gazette.]

1,273,105. LABEL. EDGAR C. VAN DYKE and JOSEPH HARRISON, Philadelphia, Pa. Filed Oct. 22, 1917. Serial No. 197,982. (Cl. 40—21.)



A label in the form of a leaflet consisting of an inner permanent section the face of which is printed to constitute an original label and the back of which is provided with an adhesive, an outer detachable section the face of which is printed in conformity with said inner section, said outer section being connected with and folded over the inner section said outer section having a tab the back of which is provided with an adhesive and a plurality of printed leaves connected with and normally concealed by the outer section.

1,273,106. VAPORIZER. JAMES I. GARDINER, Seattle, Wash., assignor of one-half to Francis G. Guest, Seattle, Wash. Filed Mar. 21, 1917. Serial No. 156,506. (Cl. 261—122.)
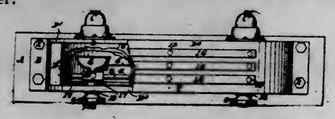


A vaporizer of the class described including a container having a bottom wall, spaced inner and outer walls formed integrally with the bottom wall, the upper edge of the inner wall extending upwardly beyond the edge of the outer wall, a cover formed on the extended portion of said inner wall and projecting laterally beyond the outer wall, a casing removably secured to the cover and inclosing said container and having its walls in spaced relation to the upper wall, an air pipe connected to and communicating with the bottom wall of the casing, an outlet pipe connected to the upper edge of the inner wall and communicating with the container, a plurality of vertical spaced rods secured to the bottom wall and located within the inner wall, spaced baffle screens mounted upon said rod and means for supplying fuel to the container and within the inner wall.

1,273,107. SOUND-TRANSMITTING APPARATUS. FRANK STEVENS, Philadelphia, Pa. Filed Jan. 17, 1917. Serial No. 142,921. (Cl. 179—100.1.)

1. In a device of the character described, in combination with a talking machine, a sound chamber attached thereto, intermediate means to exclude the transmission of

mechanical sounds and vibrations to said chamber, sound conducting means between said chamber and the reproducer on said talking machine, transmitters for recording and reproducing sound waves within said chamber, and conductors from the transmitters to the exterior of said chamber.



2. In a device of the character described, in combination with a talking machine, a sound chamber attached thereto, intermediate means to prevent the transmission of mechanical sounds and vibrations to said chamber, sound conducting means between said chamber and the reproducer on said talking machine, transmitters for recording and reproducing sound waves within said chamber, means to alter and adjust the locations of said transmitters, and conductors from said transmitters to the exterior of said chamber.

3. A device of the character described, comprising a sound-proof and air-tight chamber, a fiber casing therefor, means for introducing therein sounds produced by a talking machine, a transmitter for recording and reproducing sound waves therein, means for adjusting the location of said transmitter, and conductors from said transmitter to the exterior of said casing.

[Claims 4 to 13 not printed in the Gazette.]

1,273,108. PRESSER-FOOT FOR SEWING-MACHINES. REUBEN B. THOMPSON, Cohoes, N. Y., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed July 20, 1915. Serial No. 40,884. (Cl. 112—6.)



1. The combination of a presser foot having a fabric guiding slot extending rearwardly from the front end thereof and having a needle opening in rear of and in line with said slot and a trimming mechanism including a horizontal blade fixed to said presser foot and a horizontally disposed movable blade coöperating with said fixed blade to trim the fabric sections passing along said slot, said presser foot at one side of the slot having a vertically yieldable fabric engaging member whereby said presser foot is adapted to properly engage fabric sections of different thicknesses on opposite sides of the guiding slot.

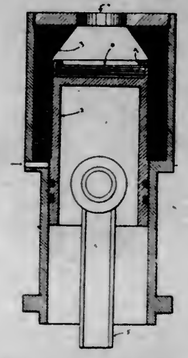
2. The combination of a presser foot having a fabric guiding slot extending rearwardly from the front end thereof and having a needle opening in rear of and in line with said slot, said presser foot being divided longitudinally to form independent foot sections respectively extending on opposite sides of said slot, means for supporting said sections whereby one section may vertically yield independently of the other section, and a trimming mechanism including horizontally disposed and relatively movable trimming blades operating at the inner end of said slot to sever fabric sections passing there along.

[Claims 3 to 5 not printed in the Gazette.]

1,273,109. INTERNAL-COMBUSTION-ENGINE CYLINDER. JAMES O. TOW, Columbia, Mo. Filed Apr. 24, 1917. Serial No. 164,088. (Cl. 123—191.)

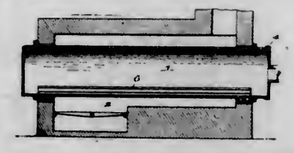
1. In an internal combustion engine cylinder, the combination with a metal cylinder wall of an insulation lining built up of rings of insulating material alternating with metal rings.

2. The combination, in an internal combustion engine cylinder of a metal cylinder shell of two diameters, a lining for the part of larger diameter composed of rings of insulating material alternating with rings of metal, together with a piston of two diameters, the larger part



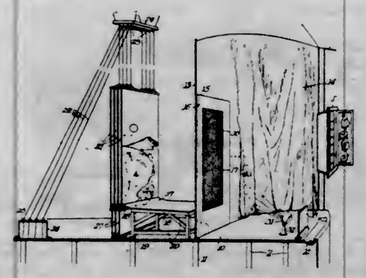
of said piston fitting and operating within the metal part of cylinder bore, the smaller part clearing but operating within the insulated part of cylinder and metal part as well.

1,273,110. PROCESS FOR OBTAINING MAGNESIUM OXID FROM DOLOMITE, &c. ARDON M. MITCHELL, Tuckahoe, N. Y., assignor to Mitchell & Grenelle, Inc., New York, N. Y. Filed Mar. 25, 1916. Serial No. 86,676. (Cl. 23—13.)



The process of obtaining magnesium oxid from dolomite which comprises heating the ground dolomite to approximately 1000° F. while tumbling and grinding the same, whereby the magnesium carbonate is decomposed forming magnesium oxid and the calcium carbonate is rendered crystalline and readily separable from the magnesia, separating the calcium carbonate from the magnesia and calcining the latter at a temperature sufficient to expel any carbon dioxid contained therein.

1,273,111. THEATRICAL DEVICE. PETER E. PAOLI, Wilmette, Ill. Filed Jan. 27, 1917. Serial No. 144,974. (Cl. 46—70.)



2. The combination of a platform to receive an object to be exhibited and a plurality of drops, ground pieces

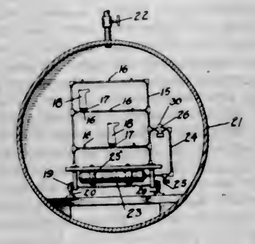
carried by the drops and disposed on the platform, means to raise the drops into exposed positions successively, a semi-transparent screen in front of the platform, a plurality of light sources behind the screen to illuminate the object and a varying light source in front of the screen to produce the effect of depth.

5. In a device for producing submarine effects, the combination of a platform to receive a set piece or object to be exhibited, a semi-transparent screen in front of said platform, a plurality of interchangeable drops behind the set piece, a stationary source of light to illuminate the set piece, and a varying light source for application to said screen.

8. In combination, a platform having objects thereon to be exhibited, means to illuminate the objects, a plurality of drops behind the platform, ground pieces carried by the drops to cover the platform, and means to independently dispose said drops singly at the rear of the objects to be exhibited.

[Claims 1, 3, 4, 6, and 7 not printed in the Gazette.]

1,273,112. APPARATUS FOR EXHAUSTING THE INTERIOR OF RUBBER ARTICLES. CHESTER J. RANDALL, Naugatuck, Conn., assignor to The Goodyear's Metallic Rubber Shoe Company, a Corporation of Connecticut. Filed Feb. 4, 1916. Serial No. 76,104. (Cl. 18—6.)



1. An apparatus of the class described comprising a portable frame, a perforated hollow last communicated with the interior of said frame, a low pressure or vacuum tank assembled as a unit with said frame, and a valve controlled pipe connecting the interior of said frame with the interior of said tank.

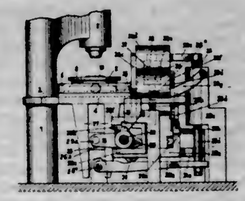
4. An apparatus of the class described comprising a vulcanizer, means for supplying pressure in the vulcanizer, a hollow frame in the vulcanizer, a perforated hollow last on said frame in communication with the interior of said frame, a low pressure or vacuum tank assembled as a unit with said frame, a pipe connecting the interior of said frame with said tank, and a check valve in said pipe adapted to automatically open when the pressure in said vulcanizer reaches a predetermined degree.

[Claims 2 and 3 not printed in the Gazette.]

1,273,113. APPARATUS FOR CONSECUTIVELY AFFIXING SERIAL VIEWS TO FILM-BANDS. WILHELM LÖW, Heidelberg, Germany. Filed Aug. 31, 1915. Serial No. 48,336. (Cl. 216—9.)

1. In apparatus for consecutively affixing serial views to a film band, in combination, a sliding carriage, a stage adjustably mounted on said carriage, means for holding and centering the mounts carrying the views on said stage, means for automatically moving said carriage with said stage below the film band, means for automatically affixing the mounts to the film band, and means for automatically intermittently advancing the film band.

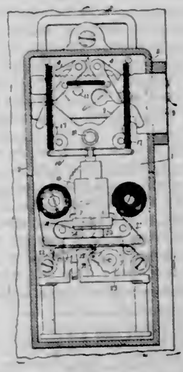
2. In apparatus for consecutively affixing serial views to a film band, in combination, a sliding carriage, a stage adjustably mounted on said carriage, grooves provided in the upper face of said stage so as to be covered by one of the view mounts located thereon, means for sucking off the air contained in said grooves, means for feeding air into said grooves, means for automatically affixing the mounts to the film band, and means for automatically intermittently advancing the film band.



3. In apparatus for consecutively affixing serial views to a film band, in combination, a sliding carriage, a stage adjustably mounted on said carriage, an auxiliary magnifying glass having a glass table, grooves provided in the upper face of said table so as to be covered by one of the view mounts located thereon, means for sucking off the air contained in said grooves, means for feeding air into said grooves, marking stops also provided on said table, means for holding and centering the view mounts on said stage, means for automatically affixing the mounts to the film band, and means for automatically intermittently advancing the film band.

4. In apparatus for consecutively affixing serial views to a film band, in combination, a sliding carriage, a stage adjustably mounted on said carriage, means for automatically moving said carriage with said stage below the film band, feeding drums and guiding rollers for the film band, means for automatically intermittently rotating said feeding drums and advancing the film band, means for lowering and raising said guiding rollers with the film band, a stamp and a moistened counter-stamp movably mounted above and below the film band respectively, a third stamp also movably mounted above the film band and in the rear of said stage, means for lowering and raising said stamps, a rotatable shaft, and means for transmitting movement from said shaft to said means for operating said carriage, drums, rollers and stamps.

1,273,114. RECORDING DEVICE. THOMAS A. KEEFER, Dayton, Ohio, assignor, by mesne assignments, to The Dayton Adding Machine and Time Lock Co., Dayton, Ohio, a Corporation of Ohio. Filed Mar. 20, 1916. Serial No. 85,245. (Cl. 234—1.)



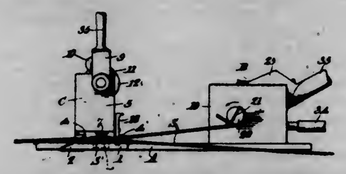
1. In a recording lock, a bolt, recording mechanism comprising a form and a platen, one of said members being movable toward and from the other to cause a record to be taken from said form on a record strip, said form including a numbering device, means to actuate said movable member to cause a record to be taken from said form upon each operation of said bolt, and means controlled by the movement of said movable member to adjust

said numbering device to cause a different number to be recorded upon each operation of said recording mechanism.

6. In a recording lock, a bolt, recording mechanism comprising a form and a platen, one of said members being movable toward and from the other to cause a record to be taken from said form on a record strip, said form including a numbering device, means to actuate said movable member to cause a record to be taken from said form upon each operation of said bolt, means controlled by the movement of said movable member to adjust said numbering device to cause a different number to be recorded upon each operation of said recording mechanism, and a locking device to hold said numbering device normally against adjustment in either direction, said locking device being controlled solely by the operation of said recording mechanism.

[Claims 2 to 5 and 7 to 9 not printed in the Gazette.]

1,273,115. TIGHTENER AND SEAL FOR BOX-STRAPS. WINFRED MUDGE BROOKS, East Orange, N. J., assignor to E. J. Brooks & Co., New York, N. Y., a Corporation of New York. Filed Apr. 15, 1918. Serial No. 228,626. (Cl. 81—9.1.)



1. An improved box-strap tightener and seal press, having in combination, seal-punching means, seal-lifting means, strap holding means, strap tightening means and strap releasing means, substantially as specified.

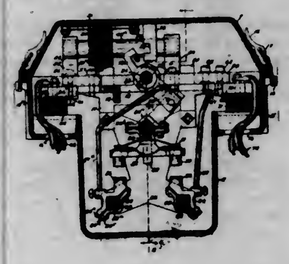
6. An improved box-strap tightener and seal comprising in combination, a base plate having a lateral projection near one end, said projection being beveled on its upper end edge; a vertical seal punch mounted on said base partially overhanging said projection and comprising a pedestal, a die post slidably mounted therein, means for positively depressing said die post, means for automatically relievating said die post; a two arm lever mounted on the side of said punch pedestal having a thumb press on one arm and the other arm adapted to lie in a recess in said projection of the base so that an auxiliary seal part when in position for sealing would lie over same and be lifted by it when raised by pressure on the thumb press arm; and a box-strap puller comprising a strap engaging spindle, a bearing support for same, a lever freely mounted on said spindle, a ratchet wheel fixedly attached to said spindle, a spring actuated pawl mounted on said lever adapted to engage said ratchet wheel and revolve same, a two-arm pawl mounted on the spindle support one arm being adapted to engage and lock said ratchet wheel while the other arm is adapted to engage and be depressed by a pin carried by said lever lifting said driving pawl and releasing said ratchet at the same time; and a hand wheel fixedly attached to said spindle to rotate same freely in either direction when thus released, substantially as specified.

[Claims 2 to 5 not printed in the Gazette.]

REISSUES.

14,493. SWITCH. HERBERT W. CHENEY, Milwaukee, Wis., assignor, by mesne assignments, to Allis-Chalmers Manufacturing Company, a Corporation of Delaware. Filed Feb. 19, 1917. Serial No. 150,284. Original No. 1,177,016, dated Mar. 28, 1916, Serial No. 529,066, filed Nov. 20, 1909. (Cl. 175—282.)

1. In combination, in a switch, movable and stationary contact members, an operating shaft for the movable contact members, said movable and stationary contact members being suspended from said shaft and bodily movable therewith, an operating handle mounted on the shaft and movable relatively thereto, a spring having operative connections with the shaft and handle, a pair of pawls each acting at times to temporarily hold the shaft against movement while the handle is being moved a predetermined amount and energy is being stored in the spring, and means movable with the handle for tripping said pawls so that the shaft will be turned and the switch will be opened or closed with a snap action.



2. In combination, in a switch, movable and stationary contact members, an operating shaft for said movable contact members, an operating handle mounted on the shaft, a spring surrounding the shaft, a member secured to the shaft and provided with a laterally projecting portion extending between the ends of the spring and having a pair of notches, a member movable with the handle and having a laterally projecting portion also extending between the ends of the spring, pawls coöperating with the notched member, one of the pawls engaging one of the notches so as to hold the shaft against movement while the handle is moved a predetermined amount in one direction and energy is stored in the spring, and the other pawl engaging the other notch and holding the shaft against movement when the handle is moved in the opposite direction and energy is stored in the spring, and said member movable with the handle serving to trip the pawls so that the switch will be opened or closed with a snap action.

3. In a switch, the combination of an inclosure adapted to contain insulating fluid, a supporting frame removably mounted within said inclosure, coöperative movable and stationary contact members and operating mechanism therefor carried by said frame, said contact members being normally suspended in insulating fluid in said inclosure, a removable cover for said inclosure, line terminals disposed within said inclosure and above the normal fluid-containing portion thereof, detachable connections between said line terminals and certain of said stationary contact members, and coöperative interlocking members associated with said cover and said operating mechanism, said interlocking members preventing the removal of said cover when the switch is closed, and said frame, contact members and operating mechanism therefor being removable from said inclosure as a unit when the coöperative contact members are in circuit-open condition and the cover removed, and said detachable connection being broken on removal of said unit from said inclosure.

4. In a switch, the combination of an inclosure adapted to contain insulating fluid, switch mechanism removably supported in position in said inclosure and including cooperative relatively movable contact members and operating mechanism therefor in the form of a self-contained unit, said contact members being normally suspended in the normal fluid containing portion of said inclosure, line terminals within said inclosure and above the normal fluid-containing portion thereof, detachable connections between said line terminals and certain of said contact members, and means operative to insure that said unit is removable from said inclosure only when the coöperative contact members are in circuit-open condition, said detachable connections being broken on the removal of said unit from said inclosure.

5. In a switch, an inclosure having lateral extensions on two opposite sides, a removable switch unit comprising a supporting frame, movable and stationary contacts and operating mechanism, said extensions having secured thereto insulating supporting bars, a plurality of members supported by each of said bars, said members being adapted to be connected to conductor terminals and having spring jaws, and a plurality of members supported by said frame and connected to stationary contacts, said last named members engaging in said jaws whereby the units may be removed without disturbing the terminals.

6. In a switch, the combination of a receptacle, a switch unit comprising fixed and movable contacts and operating mechanism therefor, said switch unit being removably mounted in said receptacle, a cover for said receptacle removable therefrom independently of said switch unit, line terminals mounted in fixed position relative to said receptacle, and detachable connections arranged in series-connected groups between the several line, terminals and corresponding ones of said switch contacts, certain of said detachable connections being broken by removal of said cover from said receptacle and others of said detachable connections being broken by removal of said switch unit from said receptacle.

7. In a switch, a receptacle, a removable cover therefor, a plurality of relatively fixed contacts, a frame for supporting said fixed contacts, a plurality of relatively movable contacts, means for actuating said movable contacts into and out of engagement with said fixed contacts, said means comprising an operating shaft from which said fixed contact supporting frame and said movable contacts are suspended, conductor terminals supported on said frame and insulated therefrom, and fuses mounted on said cover and adapted to connect said terminals when the cover is in place on said receptacle and to disconnect the same when said cover is open, said switch and actuating means, and said conductor terminals being bodily removable from said receptacle as a unit.

8. In a switch, the combination of a receptacle having a removable cover, a frame mounted in said receptacle and comprising two oppositely disposed members, fixed contacts supported in operative position by said members, a removable contact member comprising a yoke and bridging contacts mounted thereon and adapted to engage said fixed contacts, means for reciprocating said movable contact member comprising a shaft rotatably mounted in said frame and a toggle connection between said yoke and said shaft, said shaft and said cover being provided with interengaging members adapted to prevent the removal of said cover while said switch is in closed position, and detachably engaging contacts mounted on said frame and said cover for causing the switch parts to become dead when the cover is removed, said frame with its fixed and movable contacts and operating mechanism therefor being removable from said receptacle as a unit when said cover is open.

9. In a switch, the combination of a receptacle, a switch unit comprising relatively movable contacts and operating mechanism therefor, said switch unit being removably mounted in said receptacle, a cover for said receptacle removable therefrom independently of said switch unit, line terminals fixed in position relative to said receptacle, conductor terminals supported by said switch unit, certain of said conductor terminals being associated with certain of said switch contacts and others of said conductor terminals being detachably connected to certain of said line terminals, fuses mounted on said cover and serving when said cover is in position on said receptacle to detachably connect pairs of said conductor terminals, the detachable connection between said fuses and said pairs of conductor terminals being broken on removal of said cover from said receptacle, and the detachable connections between said line terminals and said conductor terminals being broken on the removal of said switch unit from said receptacle.

10. In a switch, the combination of a receptacle adapted to contain insulating fluid, a switch unit comprising relatively movable contacts and operating mechanism therefor, said switch unit being removably mounted in said receptacle with said contacts occupying the normal fluid-containing portion thereof, a cover for said receptacle removable therefrom independently of said switch unit, line terminals and detachable connections between said line terminals and certain ones of said contacts mounted in said receptacle above the normal fluid-containing portion thereof, and means for insuring that the circuit through said contacts is broken prior to removal of said unit from said receptacle, said means comprising a detachable connection in series with said contacts and broken by removal of said cover from said receptacle, the detachable connections between said line terminals and said contacts being broken on removal of said unit from said receptacle.

11. In combination, a receptacle adapted to contain insulating fluid and having its lower portion of smaller horizontal cross-sectional area than its upper portion, line terminal contacts in said receptacle, means for supporting said terminal contacts in operative position, switch mechanism comprising fixed and movable contacts and a support therefor removable from said receptacle as a unit, said fixed contacts comprising portions operatively engageable by said movable contacts, and portions adapted to be conductively connected with said first portions and engageable with said terminal contacts, and said supporting means for said terminal contacts and the major portion of the part of said terminal contacts engageable with portions of said fixed contacts being disposed in the portion of said receptacle of greater cross-sectional area.

12. In combination, a receptacle having its lower portion of smaller horizontal cross-sectional area than its upper portion, line terminals disposed in operative position in the portion of said receptacle of greater cross-sectional area, switch mechanism comprising fixed and movable contacts and a support therefor removable from said receptacle as a unit, said fixed contacts comprising portions engageable by said movable contacts, and means operative to conductively connect said line terminals with the portions of said fixed contacts with which said movable contacts are engageable when said switch mechanism is in operative position in said receptacle, the movable contacts and the portions of said fixed contacts engageable thereby being disposed in the portion of said receptacle of reduced cross-sectional area when in operative position in said receptacle.

13. In combination, a receptacle adapted to contain insulating fluid and having its lower portion of reduced horizontal cross-sectional area, line terminal contacts in said receptacle, means for supporting said terminal contacts, said supporting means being disposed in the portion of said receptacle of greater cross-sectional area, switch mechanism comprising fixed and movable contacts and operating mechanism therefor removable from said receptacle as a unit, said fixed contacts comprising portions operatively engageable with said terminal contacts and portions engageable by said movable contacts, said latter portions of the fixed contacts and said movable contacts being disposed in the portion of said receptacle of reduced cross-sectional area and said portions of said fixed contacts engageable with said terminal contacts being disposed in the portion of said receptacle of greater cross-sectional area when said switch mechanism is in operative position in said receptacle.

14. In combination, a receptacle adapted to contain insulating fluid and having its lower portion of smaller horizontal cross-sectional area than its upper portion, line terminal contacts in said receptacle, means for supporting said terminal contacts, said supporting means being disposed in the portion of said receptacle of greater cross-sectional area, switch mechanism comprising fixed and movable contacts and operating mechanism therefor removable from said receptacle as a unit, said fixed contacts comprising portions operatively engageable with said terminal contacts and portions engageable by said movable contacts, said latter portions and said movable contacts being disposed in the portion of said receptacle

of smaller cross-sectional area when said switch mechanism is in operative position in said receptacle.

15. In combination, in a switch, an inclosure having its upper portion of greater horizontal cross-sectional area than its lower portion, switch mechanism mounted in said inclosure and comprising relatively movable contacts and operating mechanism therefor removable from said inclosure as a unit, and terminal contact members insulatedly mounted in operative position in the portion of said inclosure of greater cross-sectional area, said contact members being adapted to be connected to line terminals and having a detachable connection with certain of the contacts of said switch mechanism which is broken by the removal of said switch mechanism from said receptacle.

16. In a switch, an inclosing casing having a lateral extension adjacent the upper edge thereof, terminal contact members and an insulating support therefor mounted on said extension, and switch mechanism comprising relatively movable contacts and operating mechanism therefor removable from said casing as a unit, said switch unit including conductive connections from certain of its contacts detachably connected to said terminal contact members when said switch unit is in operative position within said casing.

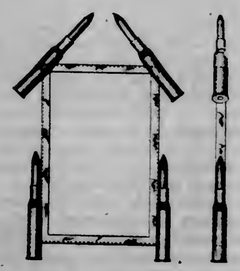
DESIGNS.

52,172. LAMP-SHADE. GEORGE J. BAUER, Detroit, Mich. Filed Apr. 29, 1918. Serial No. 231,556. Term of patent 14 years.



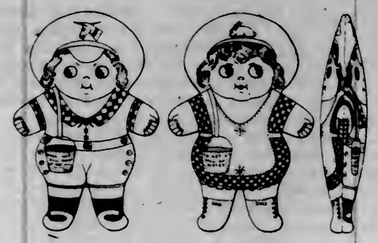
The ornamental design for a lamp shade, as shown.

52,173. PICTURE-FRAME. JOHN BENKO, New York, N. Y. Filed Mar. 23, 1918. Serial No. 224,351. Term of patent 7 years.



The ornamental design for a picture frame, as shown.

52,174. DOLL. LELIA MAY FELLOM, Los Angeles, Cal. Filed Jan. 8, 1918. Serial No. 210,939. Term of patent 14 years.



The ornamental design for a doll as shown.

52,175. DOLL. LELIA MAY FELLOM, Los Angeles, Cal. Filed Jan. 8, 1918. Serial No. 210,940. Term of patent 14 years.



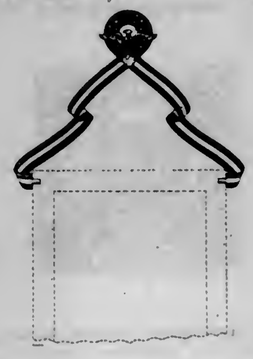
The ornamental design for a doll as shown.

52,176. POCKET-CASE. FRANK W. HARVEY, Jr., Chicago, Ill. Filed Apr. 18, 1918. Serial No. 229,452. Term of patent 7 years.



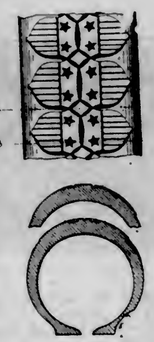
The ornamental design for a pocket case as shown.

52,177. PICTURE-HOLDER. ZVETKO ORIZAROFF, Harrisburg, Pa. Filed Apr. 27, 1918. Serial No. 231,264. Term of patent 14 years.



The ornamental design for a picture holder, as shown.

52,178. TIRE-CASING. HERBERT A. PHILLIPS and JOHN G. STAMM, Cleveland, Ohio. Filed Dec. 3, 1917. Serial No. 205,270. Term of patent 7 years.



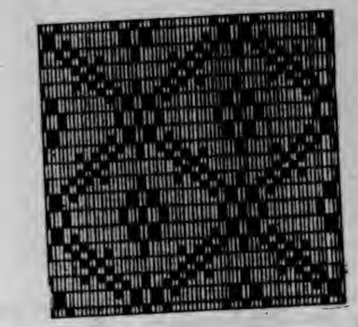
The ornamental design for a tire casing, as shown.

52,179. FLAG, BANNER, PENNANT, OR SIMILAR ARTICLE. HERBERT A. PHILLIPS and JOHN G. STAMM, Cleveland, Ohio. Filed Dec. 3, 1917. Serial No. 205,271. Term of patent 3½ years.



The ornamental design for a flag, banner, pennant, or similar article, as shown.

52,180. LINOLEUM, OIL-CLOTH, OR FLOOR-COVERING. CORNELIA M. POST, Philadelphia, Pa., assignor to The Paraffine Companies, Inc., San Francisco, Cal., a Corporation of California. Filed Apr. 2, 1918. Serial No. 226,318. Term of patent 14 years.



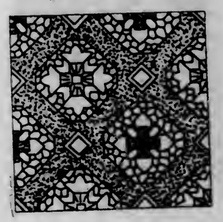
The ornamental design for linoleum, oil cloth, or floor covering, substantially as shown.

52,181. LINOLEUM, OIL-CLOTH, OR FLOOR-COVERING. CORNELIA M. POST, Philadelphia, Pa., assignor to The Paraffine Companies, Inc., San Francisco, Cal., a Corporation of California. Filed Apr. 2, 1918. Serial No. 226,319. Term of patent 14 years.



The ornamental design for linoleum, oil cloth, or floor covering, substantially as shown.

52,182. LINOLEUM, OIL-CLOTH, OR FLOOR-COVERING. CORNELIA M. POST, Philadelphia, Pa., assignor to The Paraffine Companies, Inc., San Francisco, Cal., a Corporation of California. Filed Apr. 2, 1918. Serial No. 226,320. Term of patent 14 years.



The ornamental design for linoleum, oil cloth, or floor covering, substantially as shown.

52,183. LINOLEUM, OIL-CLOTH, OR FLOOR-COVERING. CORNELIA M. POST, Philadelphia, Pa., assignor to The Paraffine Companies, Inc., San Francisco, Cal., a Corporation of California. Filed Apr. 2, 1918. Serial No. 226,321. Term of patent 14 years.



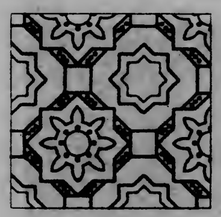
The ornamental design for linoleum, oil cloth, or floor covering, substantially as shown.

52,184. LINOLEUM, OIL-CLOTH, OR FLOOR-COVERING. CORNELIA M. POST, Philadelphia, Pa., assignor to The Paraffine Companies, Inc., San Francisco, Cal., a Corporation of California. Filed Apr. 2, 1918. Serial No. 226,322. Term of patent 14 years.



The ornamental design for linoleum, oil cloth, or floor covering, substantially as shown.

52,185. LINOLEUM, OIL-CLOTH, OR FLOOR-COVERING. CORNELIA M. POST, Philadelphia, Pa., assignor to The Paraffine Companies, Inc., San Francisco, Cal., a Corporation of California. Filed Apr. 2, 1918. Serial No. 226,323. Term of patent 14 years.



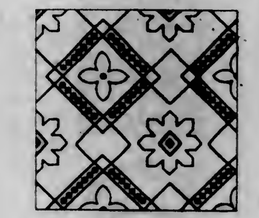
The ornamental design for linoleum, oil cloth, or floor covering, substantially as shown.

52,186. LINOLEUM, OIL-CLOTH, OR FLOOR-COVERING. CORNELIA M. POST, Philadelphia, Pa., assignor to The Paraffine Companies, Inc., San Francisco, Cal., a Corporation of California. Filed Apr. 2, 1918. Serial No. 226,324. Term of patent 14 years.



The ornamental design for linoleum, oil cloth, or floor covering, substantially as shown.

52,187. LINOLEUM, OIL-CLOTH, OR FLOOR-COVERING. CORNELIA M. POST, Philadelphia, Pa., assignor to The Paraffine Companies, Inc., San Francisco, Cal., a Corporation of California. Filed Apr. 2, 1918. Serial No. 226,325. Term of patent 14 years.



The ornamental design for linoleum, oil cloth, or floor covering, substantially as shown.

52,188. LINOLEUM, OIL-CLOTH, OR FLOOR-COVERING. CORNELIA M. POST, Philadelphia, Pa., assignor to The Paraffine Companies, Inc., San Francisco, Cal., a Corporation of California. Filed Apr. 2, 1918. Serial No. 226,326. Term of patent 14 years.



The ornamental design for linoleum, oil cloth, or floor covering, substantially as shown.

52,189. LINOLEUM, OIL-CLOTH, OR FLOOR-COVERING. CORNELIA M. POST, Philadelphia, Pa., assignor to The Paraffine Companies, Inc., San Francisco, Cal., a Corporation of California. Filed Apr. 2, 1918. Serial No. 226,327. Term of patent 14 years.



The ornamental design for linoleum, oil cloth, or floor covering, substantially as shown.

52,190. LINOLEUM, OIL-CLOTH, OR FLOOR-COVERING. CORNELIA M. POST, Philadelphia, Pa., assignor to The Paraffine Companies, Inc., San Francisco, Cal., a Corporation of California. Filed Apr. 2, 1918. Serial No. 226,328. Term of patent 14 years.



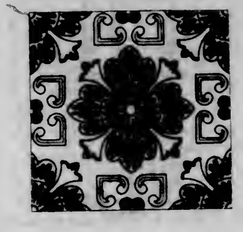
The ornamental design for linoleum, oil cloth, or floor covering, substantially as shown.

52,191. LINOLEUM, OIL-CLOTH, OR FLOOR-COVERING. CORNELIA M. POST, Philadelphia, Pa., assignor to The Paraffine Companies, Inc., San Francisco, Cal., a Corporation of California. Filed Apr. 2, 1918. Serial No. 226,329. Term of patent 14 years.



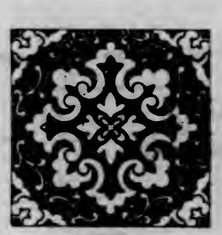
The ornamental design for linoleum, oil cloth, or floor covering, substantially as shown.

52,192. LINOLEUM, OIL-CLOTH, OR FLOOR-COVERING. CORNELIA M. POST, Philadelphia, Pa., assignor to The Paraffine Companies, Inc., San Francisco, Cal., a Corporation of California. Filed Apr. 2, 1918. Serial No. 226,330. Term of patent 14 years.



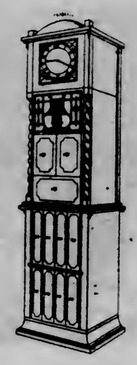
The ornamental design for linoleum, oil cloth, or floor covering, substantially as shown.

52,193. LINOLEUM, OIL-CLOTH, OR FLOOR-COVERING. CORNELIA M. POST, Philadelphia, Pa., assignor to The Paraffine Companies, Inc., San Francisco, Cal., a Corporation of California. Filed Apr. 2, 1918. Serial No. 226,331. Term of patent 14 years.



The ornamental design for linoleum, oil cloth, or floor covering, substantially as shown.

52,194. COMBINED PHONOGRAPH-CABINET AND HALL-CLOCK CASE. FRANK P. READ and WYCKLIFFE W. PARSONS, Chicago, Ill. Filed June 19, 1917. Serial No. 175,700. Term of patent 14 years.



The ornamental design for a combined phonograph cabinet and hall clock case, as shown.

52,195. DOLL. CHARLES RINGEL, New York, N. Y. Filed May 14, 1918. Serial No. 234,539. Term of patent 14 years.



The ornamental design for a doll, as shown.

52,196. MEMORIAL PIN. JAMES M. SCROGIN, Mare Island, Cal. Filed Mar. 29, 1918. Serial No. 225,604. Term of patent 3½ years.



The ornamental design for a memorial pin, as shown.

52,197. ARTICLE OF MANUFACTURE. JOHN S. SEARS, New York, N. Y. Filed Sept. 29, 1917. Serial No. 194,094. Term of patent 7 years.



The ornamental design for an article of manufacture substantially as shown and described.

52,198. PLAQUE. ANTONIO VIEIRA, New York, N. Y., assignor of one-half to Alfredo de Leon, New York, N. Y. Filed Feb. 2, 1918. Serial No. 215,211. Term of patent 7 years.



The ornamental design for a plaque substantially as shown and described.

52,199. HOLLOW RUBBER FIGURE TOY. FRANZ F. ZIEGLER, Providence, R. I., assignor to Davol Rubber Company, Providence, R. I., a Corporation of Rhode Island. Filed Apr. 28, 1917. Serial No. 165,277. Term of patent 14 years.



The ornamental design for a hollow rubber figure toy, as shown.

52,200. HOLLOW RUBBER FIGURE TOY. FRANZ F. ZIEGLER, Providence, R. I., assignor to Davol Rubber Company, Providence, R. I., a Corporation of Rhode Island. Filed Apr. 28, 1917. Serial No. 165,278. Term of patent 14 years.



The ornamental design for a hollow rubber figure toy, as shown.

TRADE-MARKS

OFFICIAL GAZETTE, JULY 16, 1918.

(PUBLISHED AUGUST 5, 1918.)

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 14 of said act, a fee of ten dollars must accompany each notice of opposition.

Ser. No. 91,414. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) BERDAN & CO., Toledo, Ohio, assignor to The Berdan Company, Toledo, Ohio, a Corporation of Ohio. Filed Dec. 13, 1915.

SPRING HILL



Particular description of goods.—Canned Pork and Beans, Canned Vegetables, Canned Fruits, Tea, Coffee, Rice, Cornmeal, Bird-Seed.
Claims use since Apr. 1, 1902.

Ser. No. 98,075. (CLASS 39. CLOTHING.) SOLON D. BAUSHER, Reading, Pa. Filed Sept. 19, 1916.

Glorie

Particular description of goods.—Knit Underwear.
Claims use since about Jan. 1, 1915.

Ser. No. 101,453. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) NORTH BRITISH RUBBER COMPANY, LTD., Edinburgh, Scotland. Filed Feb. 17, 1917.

OSPREY

Particular description of goods.—Golf-Balls.
Claims use since April, 1911.

Ser. No. 102,547. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) CHARLES F. ABEL, New York, N. Y. Filed Mar. 29, 1917.

SCORER-

Particular description of goods.—Candy.
Claims use since Mar. 6, 1917.

Ser. No. 104,051. (CLASS 17. TOBACCO PRODUCTS.) JOHN D. PIGGOTT, Highland Park, Mich. Filed May 24, 1917.

Pennant



Particular description of goods.—Cigars, Smoking and Chewing Tobacco, and Cigarettes.
Claims use since Apr. 5, 1917.

Ser. No. 104,228. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) NEW PROCESS CHEMICAL CO. INC., New York, N. Y. Filed June 2, 1917.

NUPRO

Particular description of goods.—Ready-Mixed Paints.
Claims use since the 9th day of April, 1917.

Ser. No. 104,242. (CLASS 39. CLOTHING.) FINCH, VAN SLYCK & MCCONVILLE, St. Paul, Minn. Filed June 4, 1917.

BLUE BIRD

Particular description of goods.—Men's Overalls.
Claims use since on or about Jan. 1, 1912.

Ser. No. 104,244. (CLASS 39. CLOTHING.) FINCH, VAN SLYCK & MCCONVILLE, St. Paul, Minn. Filed June 4, 1917.

HUMMER

Particular description of goods.—Men's Overalls.
Claims use since on or about Jan. 1, 1912.

Ser. No. 104,246. (CLASS 39. CLOTHING.) FINCH, VAN SLYCK & MCCONVILLE, St. Paul, Minn. Filed June 4, 1917.

NORTHWEST



Particular description of goods.—Men's Overalls.
Claims use since on or about Jan. 1, 1912.

Ser. No. 104,247. (CLASS 39. CLOTHING.) FINCH, VAN SLYCK & MCCONVILLE, St. Paul, Minn. Filed June 4, 1917.

Rondo

Particular description of goods.—Hosiery and Gloves.
Claims use since on or about Jan. 1, 1902.

Ser. No. 104,249. (CLASS 39. CLOTHING.) FINCH, VAN SLYCK & MCCONVILLE, St. Paul, Minn. Filed June 4, 1917.

Rondo

Particular description of goods.—Men's, Women's, and Children's Two-Piece Underwear-Garments and Union-Suits Made of Both Knitted and Textile Material.
Claims use since on or about Jan. 1, 1902.

Ser. No. 104,872. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) NYAL COMPANY, Detroit, Mich. Filed July 5, 1917.

PERSPIRINE

The trade-mark consisting of the word "Perspirine."
Particular description of goods.—A Preparation for the Treatment of Excessive Perspiration.
Claims use since Feb. 8, 1917.

Ser. No. 105,582. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) BARBARA REINICHEN, Springfield, Mo. Filed Aug. 10, 1917.



Particular description of goods.—A Medicinal Compound in the Shape of Tablets or Powder Form for the Treatment of and Used as a Protection Against Syphilis, Chancroid, and Gonorrhea.
Claims use since Apr. 15, 1901.

Ser. No. 107,154. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) EAR-EASE COMPANY, Milwaukee, Wis. Filed Nov. 5, 1917.



The lining shown in the drawing representing shading.
Particular description of goods.—A Preparation for the Treatment and Relief of Earache.
Claims use since June 1, 1916.

Ser. No. 107,215. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) THE ESCEJAY COMPANY, Cincinnati, Ohio. Filed Nov. 7, 1917.



In which the pictures of the men are fanciful.
Particular description of goods.—Soap.
Claims use since Oct. 20, 1917.

Ser. No. 107,341. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) TRU BLU BISCUIT COMPANY, Spokane, Wash. Filed Nov. 12, 1917.



Particular description of goods.—Candy.
Claims use since Apr. 1, 1916.

Ser. No. 107,636. (CLASS 39. CLOTHING.) LEVI STRAUSS & CO., San Francisco, Cal. Filed Nov. 27, 1917.

Freedom-Alls

Particular description of goods.—Women's One-Piece Outer Garments in the Nature of Overalls.
Claims use since Nov. 5, 1917.

Ser. No. 107,875. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) HARRY A. KESTING, Kansas City, Mo. Filed Dec. 10, 1917.

Snowflake

Particular description of goods.—Shelled Popcorn.
Claims use since Dec. 3, 1917.

Ser. No. 108,057. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) CONSOLIDATED SAFETY PIN CO., Bloomfield, N. J. Filed Dec. 19, 1917.

Guardian

Particular description of goods.—Safety-Pins.
Claims use since on or about the 3d day of December, 1900.

Ser. No. 108,881. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE BRUNDAGE BROTHERS COMPANY, Toledo, Ohio. Filed Feb. 8, 1918.



The picture of the boy contained in the trade-mark being fanciful.
Particular description of goods.—Coffee, Tea, Salted Peanuts, Peanut-Oil, and Peanut-Butter.
Claims use since May 1, 1917.

Ser. No. 109,016. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) WILLIAMS PATENT CRUSHER AND PULVERIZER COMPANY, St. Louis, Mo. Filed Feb. 15, 1918.

FARMERS FRIEND

Particular description of goods.—Machines Provided with Pivotally-Mounted Rotating Hammers or Beaters and Utilized for Grinding, Crushing, and Pulverizing Grain, Which is Utilized in the Preparation of Stock Food, and Machines Utilized for Grinding, Crushing, and Pulverizing Fertilizer Material, Such as Limestone, Shells, Bones, Corncobs, and the Like.
Claims use since January, 1908.

Ser. No. 109,325. (CLASS 39. CLOTHING.) M. KUTZ COMPANY, INC., Atlanta, Ga. Filed Mar. 2, 1918.



Particular description of goods.—Women's Trimmed and Untrimmed Hats.
Claims use since Dec. 20, 1916.

Ser. No. 109,376. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE J. B. WILLIAMS COMPANY, Glastonbury, Conn. Filed Mar. 4, 1918.

Khush-Amadi

Particular description of goods.—Toilet Waters and Talcum Powders.
Claims use since Aug. 10, 1917.

Ser. No. 109,482. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THREE MINUTE NOODLE CO., New York, N. Y. Filed Mar. 9, 1918.

VICTORY

Particular description of goods.—Noodles.
Claims use since about Feb. 26, 1918.

Ser. No. 109,496. (CLASS 39. CLOTHING.) 'CONOMY MUFFLER COMPANY, Milwaukee, Wis. Filed Mar. 11, 1918.

'Conomy

Particular description of goods.—Mufflers and Muffler Attachments for Coats.
Claims use since Jan. 15, 1918.

Ser. No. 109,593. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) JOHN FERNSLER, Philadelphia, Pa. Filed Mar. 16, 1918.



Particular description of goods.—Hair-Tonics.
Claims use since November, 1908.

Ser. No. 109,600. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) MARY AND TUMA, Washington, La. Filed Mar. 16, 1918.



Mary's



The portrait being that of Mr. James T. Mary, a member of the applicant firm.
Particular description of goods.—Table-Syrups.
Claims use since 1912.

Ser. No. 109,745. (CLASS 37. PAPER AND STATIONERY.) DIAMOND STATE FIBRE COMPANY, Elsmere, Del., and Bridgeport, Pa. Filed Mar. 23, 1918.

F
Diamond-F

In which the diamond is surrounded by a margin of vertical shade-lines.
Particular description of goods.—Wrapping-Papers Known as Glassine, Vegetable Parchment, and Parchmoid Papers.
Claims use since June, 1917.

Ser. No. 109,747. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE GREJOVAN COMPANY, Wilkes-Barre, Pa. Filed Mar. 23, 1918.

GREJOVAN

Particular description of goods.—An Antiseptic Pharmaceutical Preparation or Solution for Oral Prophylaxis, Loose Teeth, Sore Throat, &c., Catarrh, &c., Abrasions, Burns, Contusions, Cuts, Insect Bites or Lacerations, Sores, &c.
Claims use since January, 1916.

Ser. No. 109,769. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) C. H. KRONEBERGER & CO., Baltimore, Md. Filed Mar. 25, 1918.

OLD RESERVE

Consisting of the words "Old Reserve."
Particular description of goods.—Coffee.
Claims use since Feb. 15, 1918.

Ser. No. 109,854. (CLASS 24. LAUNDRY APPLIANCES AND MACHINES.) ST. LOUIS WASHING MACHINE COMPANY, Red Bud, Ill., and St. Louis, Mo. Filed Mar. 28, 1918.



Particular description of goods.—Laundry-Washing Machines and Combined Washing-Machines and Wringers.
Claims use since Mar. 12, 1918.

Ser. No. 109,916. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) GOWAN-LENNING-BROWN CO., Duluth, Minn. Filed Apr. 2, 1918.

SOCIETY

Particular description of goods.—Canned Fruits and Vegetables; Canned Fish; Canned Milk; Pickles; Chilli Sauce; Jams and Jellies; Catsup; Salad-Dressing; Extracts for Foods; Spices; Peanut-Butter.
Claims use since Mar. 15, 1918.

Ser. No. 110,107. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) BAKER & BENNETT CO., New York, N. Y. Filed Apr. 11, 1918.

WONDER

Comprising the word "Wonder."
Particular description of goods.—Character-Blocks Illustrating Nursery-Rhymes.
Claims use since early in the year 1917.

Ser. No. 110,127. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) PELOSO BROS., New York, N. Y. Filed Apr. 11, 1918.

PELOSO PURITY

No claim being made to the word "Purity" apart from the mark shown in the drawing.
Particular description of goods.—Candy.
Claims use since Nov. 1, 1917.

Ser. No. 110,168. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) INDERRIEDEN CANNING CO., Chicago, Ill. Filed Apr. 13, 1918.

HIGH LIFE

Particular description of goods.—Canned Corn and Canned Red Kidney-Beans, Canned Red Beans, and Canned Pork and Beans.
Claims use since Apr. 26, 1907.

Ser. No. 110,211. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) HURLEY MACHINE COMPANY, Chicago, Ill. Filed Apr. 15, 1918.

ATALOG

Consisting of the arbitrary word "Atalog."
Particular description of goods.—A Friction-Coupling for General Use in Machinery.
Claims use since Apr. 1, 1915.

Ser. No. 110,243. (CLASS 2. RECEPTACLES.) HEINRICH, HERRMANN & WEISS, New York, N. Y. Filed Apr. 16, 1918.

ADJUSTO

Particular description of goods.—Kit-Containers of Material Adapted to be Rolled or Folded for Toilet Articles—for Example, Combs, Brushes, Soap-Boxes, Mirrors, Shaving Outfits, and the Like.
Claims use since Dec. 25, 1917.

Ser. No. 110,289. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) BATES MFG. CO., Lewiston, Me. Filed Apr. 18, 1918.



The crown and rays and the word "Crown" being represented in gold and the lining of the crown and the streamer extending therefrom being represented in red.
Particular description of goods.—Bedspreads.
Claims use since Mar. 1, 1918.

Ser. No. 110,410. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) EVANS STAMPING & PLATING CO., Taunton, Mass. Filed Apr. 24, 1918.

PARAGON

Particular description of goods.—Transmission-Gearing for Internal-Combustion Engines and Clutches.
Claims use since Dec. 19, 1907.

Ser. No. 110,425. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE BRUNDAGE BROTHERS COMPANY, Toledo, Ohio. Filed Apr. 25, 1918.

SUNNY BOY

Particular description of goods.—Coffee, Tea, Salted Peanuts, Peanut-Oil, and Peanut-Butter.
Claims use since May 1, 1917.

Ser. No. 110,464. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) AMERICAN LA FRANCE FIRE ENGINE CO. INC., Elmira, N. Y. Filed Apr. 27, 1918.

ALFCO

Particular description of goods.—Electric Search-Lights and Electric Lanterns.
Claims use since July 1, 1915.

Ser. No. 110,500. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) THE SHARP SPARK PLUG COMPANY, Cleveland, Ohio. Filed Apr. 27, 1918.

GOLIATH

Particular description of goods.—Spark-Plugs for Internal-Combustion Engines.
Claims use since the fore part of 1914.

Ser. No. 110,518. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) DIAMOND FISH CO., Seattle, Wash. Filed Apr. 29, 1918.

DFC

Particular description of goods.—Cured Herring.
Claims use since Mar. 30, 1918.

Ser. No. 110,526. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) GORTON-PEW FISHERIES CO., Gloucester, Mass. Filed Apr. 29, 1918.

GOLD WEDGE

Particular description of goods.—Dried Boneless Fish.
Claims use since the 17th day of April, 1888.

Ser. No. 110,573. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) THE STRONG MACHY. & SUPPLY CO., New York, N. Y. Filed Apr. 30, 1918.



Particular description of goods.—Gage-Glasses.
Claims use since June 5, 1914.

Ser. No. 110,578. (CLASS 10. FERTILIZERS.) APOTHECARIES HALL COMPANY, Waterbury, Conn. Filed May 1, 1918.

LIBERTY

Particular description of goods.—Fertilizers.
Claims use since 1916.

Ser. No. 110,583. (CLASS 14. METALS AND METAL CASTINGS AND FORGINGS.) THE DAYTON MALLEABLE IRON CO., Dayton, Ohio. Filed May 1, 1918.

DAMICO

Particular description of goods.—Malleable-Iron Castings.
Claims use since Mar. 28, 1918.

Ser. No. 110,585. (CLASS 12. CONSTRUCTION MATERIALS.) INTERNATIONAL INSULATION COMPANY, International Falls, Minn. Filed May 1, 1918.

INSULITE

Particular description of goods.—Wood-Pulp Boards and Blocks for Insulating Dwellings, Cold-Storages, Refrigerators, Cars, Incubators, and Similar Structures.
Claims use since June 1, 1914.

Ser. No. 110,658. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) BISHOP & COMPANY, Los Angeles, Cal. Filed May 6, 1918.



Particular description of goods.—Eating-Chocolate.
Claims use since Oct. 27, 1915.

Ser. No. 110,709. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) MATHEWS CANDY CO., Los Angeles, Cal. Filed May 6, 1918.

JACK-FROST

Particular description of goods.—Marshmallows.
Claims use since May 18, 1916.

Ser. No. 110,807. (CLASS 20. LINOLEUM AND OILED CLOTH.) THE CONGOLEUM COMPANY, Philadelphia, Pa. Filed May 10, 1918.



The same being lined for gold.
Particular description of goods.—Prepared Floor-Coverings of the Oiled-Cloth Type.
Claims use since December, 1917.

Ser. No. 110,923. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) TILLIE S. FRANKENTHAL, Chicago, Ill. Filed May 16, 1918.

LIBERTY

Particular description of goods.—Potato Chips.
Claims use since May 11, 1918.

Ser. No. 110,936. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ROBERT C. WHITE, Philadelphia, Pa. Filed May 16, 1918.

An-hydro-cal

Particular description of goods.—Sugar-Coated White Compressed Medicinal Tablets Used as an Alterative, Reconstructive, and Anti-Asthmatic.
Claims use since Feb. 15, 1918.

Ser. No. 110,937. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ROBERT C. WHITE, Philadelphia, Pa. Filed May 16, 1918.

Car-so-nets

Particular description of goods.—Plain Uncoated Compressed Medicinal Tablets Used as an Absorbive, Antidyspeptic, and Antacid.
Claims use since Feb. 15, 1918.

Ser. No. 110,939. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ROBERT C. WHITE, Philadelphia, Pa. Filed May 16, 1918.

Sep-to-nets

Particular description of goods.—Prophylactic Antiseptic Throat-Tablets.
Claims use since Feb. 15, 1918.

Ser. No. 111,035. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) WILLIAM ALSBERG & CO. INC., New York, N. Y. Filed May 18, 1918.

Waeraft

Particular description of goods.—Cotton Piece Goods.
Claims use since about Feb. 1, 1918.

Ser. No. 111,040. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) CONVERSE & COMPANY, New York, N. Y. Filed May 18, 1918.

BLIZZARD

Particular description of goods.—Cotton Piece Goods.
Claims use since October, 1913.

Ser. No. 111,041. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) CONVERSE & COMPANY, New York, N. Y. Filed May 18, 1918.



Particular description of goods.—Cotton Piece Goods.
Claims use since March, 1916.

Ser. No. 111,079. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) RICHARD HAWORTH AND COMPANY, LIMITED, Manchester, England. Filed May 21, 1918.



Particular description of goods.—Long-Cloths, Sheetings, Nainsooks, Madapollams, and White Calicoes, All Being Cotton Piece Goods.
Claims use since Nov. 7, 1916.

Ser. No. 111,138. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) THE CELLULOID COMPANY, Newark, N. J., and New York, N. Y. Filed May 23, 1918.

IVALEUR

Particular description of goods.—Dressing-Combs, Pocket-Combs, Infant-Combs, Fine Combs, Gents' Combs, Pincushions, Glove-Stretchers, Crochet-Hooks, Knitting-Needles for Hand Use, Shoe-Horns, Shoe-Hooks, Thimbles, Glove-Darners for Hand Use, Stocking-Darners for Hand Use, Napkin-Rings, Miniature Clothes-Pins for Toilet Use, Hair-Pins, Beads, Hat-Eyelets, and Collar-Buttons. The Said Articles are Made of Compounds of Pyroxylin.
Claims use since Oct. 27, 1917, on dressing-combs; since Nov. 21, 1917, on pincushions; since Nov. 22, 1917, on pocket-combs, infant-combs, fine combs, and gents' combs; since Dec. 3, 1917, on glove-stretchers, shoe-horns, and shoe-hooks; since Dec. 11, 1917, on crochet-hooks, knitting-needles for hand use, and miniature clothes-pins for toilet use; since Dec. 20, 1917, on thimbles; since Jan. 4, 1918, on glove-darners for hand use, napkin-rings, hair-pins, beads, and hat-eyelets; since Jan. 5, 1918, on stocking-darners for hand use; and since Jan. 12, 1918, on collar-buttons.

Ser. No. 111,203. (CLASS 37. PAPER AND STATIONERY.) H. REEVE ANGEL & CO. INC., New York, N. Y. Filed May 25, 1918.



Particular description of goods.—Filter-Paper.
Claims use since July 11, 1917.

Ser. No. 111,204. (CLASS 37. PAPER AND STATIONERY.) H. REEVE ANGEL & CO., INC., New York, N. Y. Filed May 25, 1918.

LION

Particular description of goods.—Filter-Paper.
Claims use since Sept. 27, 1917.

Ser. No. 111,289. (CLASS 37. PAPER AND STATIONERY.) ADAMS, CUSHING & FOSTER, INC., Boston, Mass. Filed June 1, 1918.

INKTAB

The word "Inktab."
Particular description of goods.—Fountain-Pens.
Claims use since Nov. 15, 1917.

Ser. No. 111,290. (CLASS 37. PAPER AND STATIONERY.) ADAMS, CUSHING & FOSTER, INC., Boston, Mass. Filed June 1, 1918.



The word "Acfad."
Particular description of goods.—Blank Books, Lead-Pencils, Loose-Leaf Covers, Rubber Erasers, Board-Clips, Rubber Bands, Steel Pens, Fountain-Pens, Box-Files, Writing-Tablets, Envelops, Envelop-Bands, Paper-Clips.
Claims use since Mar. 1, 1907.

Ser. No. 111,292. (CLASS 37. PAPER AND STATIONERY.) ADAMS, CUSHING & FOSTER, INC., Boston, Mass. Filed June 1, 1918.

BEACON

The word "Beacon."
Particular description of goods.—Writing and Printing Paper and Writing-Tablets.
Claims use since Feb. 26, 1917.

Ser. No. 111,335. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) GLOBE CANNING CO., Eastport and North Lubec, Me. Filed June 3, 1918.

BRUNA

Particular description of goods.—Sardines.
Claims use since Sept. 28, 1917.

Ser. No. 111,336. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) GLOBE CANNING CO., Eastport and North Lubec, Me. Filed June 3, 1918.

PANDORA

Particular description of goods.—Sardines.
Claims use since Sept. 25, 1917.

Ser. No. 111,337. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) GLOBE CANNING CO., Eastport and North Lubec, Me. Filed June 3, 1918.

COLGA

Particular description of goods.—Sardines.
Claims use since May 15, 1918.

Ser. No. 111,338. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) GLOBE CANNING CO., Eastport and North Lubec, Me. Filed June 3, 1918.

LETO

Particular description of goods.—Sardines.
Claims use since Sept. 7, 1917.

Ser. No. 111,339. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) GLOBE CANNING CO., Eastport and North Lubec, Me. Filed June 3, 1918.

LUMEN

Particular description of goods.—Sardines.
Claims use since May 15, 1918.

Ser. No. 111,402. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) THE AUTOYRE CO., Oakville, Conn. Filed June 7, 1918.

MATADOR

Particular description of goods.—Snap-Fasteners.
Claims use since May 23, 1918.

Ser. No. 111,512. (CLASS 37. PAPER AND STATIONERY.) WESTERN BOTTLE MFG. CO., Chicago, Ill. Filed June 11, 1918.



Particular description of goods.—Writing-Paper.
Claims use since 1916.

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TRADE-MARK REGISTRATIONS GRANTED

JULY 16, 1918.

122,251. PALM-OIL, PALM-KERNELS, AND COCOA FOR FOOD PURPOSES. AFRICAN ASSOCIATION LIMITED, Liverpool, England.
Filed November 19, 1917. Serial No. 107,453. PUBLISHED APRIL 23, 1918.

122,252. CERTAIN NAMED OILS USED AS FUEL AND FOR ILLUMINATING OR LUBRICATING PURPOSES. AFRICAN ASSOCIATION LIMITED, Liverpool, England.
Filed November 19, 1917. Serial No. 107,455. PUBLISHED APRIL 23, 1918.

122,253. VEGETABLE FOOD EXTRACT. ALTONAER MARGARINE-WERKE MOHR & CO., G. M. B. H., Altona-Ottensen, Germany.
Filed July 14, 1914. Serial No. 79,774. PUBLISHED APRIL 23, 1918.

122,254. ANTIFRICTION METALS. HUGH WALLACE AITKEN, Glasgow, Scotland.
Filed March 11, 1918. Serial No. 109,487. PUBLISHED APRIL 23, 1918.

122,255. CERTAIN NAMED CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF. AMERICAN STEEL PRODUCTS CO., Macomb, Ill.
Filed March 3, 1917. Serial No. 101,843. PUBLISHED APRIL 30, 1918.

122,256. ANILIN DYES. ASSOCIATED IMPORT & EXPORT CO., INC., New York, N. Y.
Filed October 26, 1917. Serial No. 106,966. PUBLISHED JANUARY 29, 1918.

122,257. PIANOS, ORGANS, PLAYER-PIANOS, PLAYER-ACTIONS, AND PERFORATED NOTE-SHEETS. AUTOPIANO COMPANY, New York, N. Y.
Filed March 21, 1918. Serial No. 109,686. PUBLISHED APRIL 30, 1918.

122,258. CERTAIN NAMED CHEMICALS AND PHARMACEUTICAL PREPARATIONS FOR TOILET PURPOSES. HARRIET HUBBARD AYER, New York, N. Y.
Filed February 28, 1918. Serial No. 109,256. PUBLISHED APRIL 30, 1918.

122,259. CERTAIN NAMED CHEMICALS AND PHARMACEUTICAL PREPARATIONS FOR TOILET PURPOSES. HARRIET HUBBARD AYER, New York, N. Y.
Filed February 28, 1918. Serial No. 109,260. PUBLISHED APRIL 30, 1918.

122,260. CERTAIN NAMED CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF. GEO. BARNSLEY & SONS, Sheffield, England.
Filed May 2, 1916. Serial No. 94,850. PUBLISHED APRIL 30, 1918.

122,261. CERTAIN NAMED CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF. GEO. BARNSLEY & SONS, Sheffield, England.
Filed May 2, 1916. Serial No. 94,852. PUBLISHED APRIL 30, 1918.

122,262. CANDY. BOSTON CONFECTIONERY CO., Cambridge, Mass.
Filed July 6, 1917. Serial No. 104,882. PUBLISHED APRIL 23, 1918.

122,263. DYED COTTON PIECE GOODS. BURTON BROS. & CO., New York, N. Y.
Filed January 23, 1917. Serial No. 100,844. PUBLISHED APRIL 16, 1918.

122,264. PAPER-KNIVES, PENHOLDERS, AND MEMORANDUM-TABLETS MADE OF COMPOUNDS OF PYROXYLIN. THE CELLULOID COMPANY, Newark, N. J., and New York, N. Y.
Filed March 7, 1918. Serial No. 109,418. PUBLISHED APRIL 30, 1918.

122,265. DRESS-FASTENERS. COLUMBIA FASTENER COMPANY, Chicago, Ill.
Filed March 8, 1918. Serial No. 109,437. PUBLISHED APRIL 30, 1918.

122,266. TOILET SOAPS. CRYSTAL SOAP COMPANY, Milwaukee, Wis.
Filed March 4, 1918. Serial No. 109,353. PUBLISHED APRIL 30, 1918.

122,267. PAPER—NAMELY, BLOTTING-PAPER, BOOK-PAPER, COVER-PAPER, BOND-PAPER, WRITING-PAPER, AND LEDGER-PAPER. DISTRICT OF COLUMBIA PAPER MANUFACTURING COMPANY, Alexandria, Va., and Washington, D. C.
Filed November 2, 1917. Serial No. 107,108. PUBLISHED APRIL 30, 1918.

122,268. ENVELOPS. DUBOC PAPER COMPANY, Chicago, Ill.
Filed March 16, 1918. Serial No. 109,588. PUBLISHED APRIL 30, 1918.

122,269. CERTAIN NAMED FRESH FRUITS. EARL FRUIT COMPANY, Sacramento, Cal.
Filed October 27, 1917. Serial No. 106,987. PUBLISHED APRIL 23, 1918.

122,270. AUTO OIL-SOAP, CREAM METAL-POLISH, AND HAND-CLEANSERS. ELECTRIC APPLIANCE COMPANY, Chicago, Ill.
Filed November 11, 1916. Serial No. 99,240. PUBLISHED APRIL 23, 1918.

122,271. CANDY. ELMER CANDY COMPANY, INC., New Orleans, La.
Filed December 10, 1917. Serial No. 107,862. PUBLISHED APRIL 23, 1918.

122,272. EVAPORATED MILK. GRAND LEDGE MILK CO., Detroit, Mich.
Filed March 2, 1917. Serial No. 101,825. PUBLISHED APRIL 23, 1918.

122,273. LUMP OR POWDERED LIME USED BY HAND OR APPLIED TO BUFFING-WHEELS IN POLISHING METALS. CHARLES H. GAYLORD, Chicago, Ill.
Filed November 16, 1917. Serial No. 107,404. PUBLISHED APRIL 23, 1918.

122,274. TOILET SOAP. INTERNATIONAL DRUG COMPANY, Wilmington, Del.
Filed March 11, 1918. Serial No. 109,501. PUBLISHED APRIL 30, 1918.

122,275. AUTOMOBILE-RADIATOR-CAP HEAT OR TEMPERATURE INDICATING DEVICES. HELEN JEDELL, Newark, N. J.
Filed November 9, 1917. Serial No. 107,264. PUBLISHED FEBRUARY 26, 1918.

122,276. CANNED VEGETABLES, CANNED HOMINY. LANGE CANNING CO., Eau Claire, Wis.
Filed March 2, 1918. Serial No. 109,327. PUBLISHED APRIL 23, 1918.

122,277. FLOOR-POLISH. ELEANOR CAIN MCKELVY, Atchison, Kans.
Filed December 21, 1917. Serial No. 108,085. PUBLISHED APRIL 30, 1918.

122,278. FOUNTAIN-PENS. MABIE, TODD & Co., New York, N. Y.
Filed April 4, 1918. Serial No. 109,984. PUBLISHED APRIL 30, 1918.

122,279. DRIED BEANS. MACDONELL CHOW CORP., New York, N. Y.
Filed January 17, 1917. Serial No. 100,673. PUBLISHED APRIL 23, 1918.

122,280. SOAPS IN PASTE, POWDER, CAKE, OR LIQUID FORM. THE MORELL MANUFACTURING COMPANY, Denver, Colo.
Filed August 8, 1917. Serial No. 105,546. PUBLISHED APRIL 30, 1918.

122,281. HAIR-NETS. EMMA T. MITTELSTAEDT, New York, N. Y.
Filed January 28, 1918. Serial No. 108,674. PUBLISHED APRIL 16, 1918.

122,282. HAIR-NETS. EMMA T. MITTELSTAEDT, New York, N. Y.
Filed January 28, 1918. Serial No. 108,673. PUBLISHED APRIL 16, 1918

122,283. WASHING COMPOUND IN POWDER FORM USED AS AN AID TO REMOVE SOIL FROM FABRICS. MOREY BROS., Evanston, Ill.
Filed December 8, 1917. Serial No. 107,846. PUBLISHED APRIL 16, 1918.

122,284. FRESH EGGS. WILLIAM PATTEN, Rhinebeck, N. Y.
Filed November 13, 1917. Serial No. 107,358. PUBLISHED APRIL 23, 1918.

122,285. PHONOGRAPHS. ROYAL PHONOGRAPH COMPANY, Chicago, Ill.
Filed December 17, 1917. Serial No. 108,023. PUBLISHED APRIL 23, 1918.

122,286. FOOD-FLAVORING EXTRACTS. THE C. F. SAUER CO., Richmond, Va.
Filed October 17, 1917. Serial No. 106,821. PUBLISHED FEBRUARY 26, 1918.

122,287. DETERGENT IN GRAIN FORM USED AS AN AID TO SOAP FOR WASHING PURPOSES. SEIBERT MFG. COMPANY, Camden, N. J.
Filed May 22, 1915. Serial No. 86,840. PUBLISHED APRIL 23, 1918.

122,288. LUBRICATING-OIL. THE STAR OIL COMPANY, Chicago, Ill.
Filed February 21, 1918. Serial No. 109,164. PUBLISHED APRIL 23, 1918.

122,289. LUBRICATING-OIL. THE STAR OIL COMPANY, Chicago, Ill.
Filed February 21, 1918. Serial No. 109,163. PUBLISHED APRIL 23, 1918.

122,290. POULTRY FEED. SWIFT AND COMPANY, Chicago, Ill.
Filed July 7, 1916. Serial No. 96,415. PUBLISHED APRIL 23, 1918.

122,291. WRAPPING-PAPER. THE UNION PAPER AND TWINE COMPANY, Cleveland, Ohio.
Filed February 14, 1918. Serial No. 109,004. PUBLISHED APRIL 23, 1918.

122,292. TOILET-PAPER. THE UNION PAPER AND TWINE COMPANY, Cleveland, Ohio.
Filed February 14, 1918. Serial No. 109,003. PUBLISHED APRIL 23, 1918.

122,293. LIQUID FOR CLEANING AND POLISHING COLORED LEATHERS. WILKEY LABORATORIES, Chicago, Ill.
Filed November 20, 1916. Serial No. 99,416. PUBLISHED APRIL 23, 1918.

122,294. LIQUID FOR CLEANING AND POLISHING COLORED LEATHERS. WILKEY LABORATORIES, Chicago, Ill.
Filed November 20, 1916. Serial No. 99,415. PUBLISHED APRIL 23, 1918.

122,295. POULTRY FEED. BURT. H. WINCHESTER, INC., Newark, N. J.
Filed May 2, 1917. Serial No. 103,483. PUBLISHED APRIL 23, 1918.

DECISIONS
OF THE
COMMISSIONER OF PATENTS
AND OF
UNITED STATES COURTS IN PATENT CASES.

DECISIONS OF THE U. S. COURTS.

Court of Appeals of the District of Columbia.

FICKLEN *v.* BAKER.

Decided April 1, 1918.

1. INTERFERENCE — PRIORITY — RIGHT TO MAKE THE CLAIMS.
In the pavement disclosed by B.'s application, where reinforcing-plates of expansion-joints for concrete sections rest upon the prepared foundation and the application contains a statement that the plates may be of less width, *Held* that this forms no basis for incorporating an additional figure in a substitute application showing the plates out of contact with the foundation, for the purpose of contesting an interference with a patent, the counts of the issue being construed as limited to reinforcing means "supported by the concrete out of engagement with the earth road-bed."

2. SAME—SAME—SAME.
Held that B.'s application, containing the counts of the issue, cannot be sustained on the specification and claims as originally filed, and priority is awarded to F., the senior party.

Mr. W. H. C. Clarke for the appellant.

Mr. L. S. Bacon and *Mr. J. H. Milans* for the appellee.

VAN ORSDEL, *J.*:

This is an appeal from the decision of the Commissioner of Patents in an interference proceeding.

Appellant Ficklen, the senior party, filed his application August 21, 1909, on which he obtained a patent June 2, 1914. Appellee Baker, the junior party, filed his application February 16, 1910, which was sent to issue April 7, 1914. The issuance of the patent, however, was suspended at the instance of Baker, who filed a substituted specification in July, 1914, in which he copied Ficklen's first three claims, on which this interference was declared.

The invention of the issue relates to a concrete pavement provided with expansion-joints extending from the top of the pavement to the road-bed and reinforcing means embedded in the edges of the concrete blocks at the joints. The Commissioner properly has defined the reinforcing means as—

limited to reinforcing means which are supported by the concrete out of engagement with the earth road-bed.

The counts of the issue are as follows:

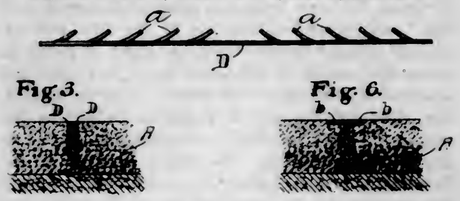
1. A pavement comprising an earth road-bed, a crust supported directly on said road-bed and comprising a plurality of concrete sections of relatively large area separated from each other by expansion joints extending from the top of the pavement to the road-bed, and reinforcing means embedded in and carried by and continuing along the upper portions of the edges of the concrete sections at the joints which require reinforcement.

2. A pavement comprising an earth road-bed, a crust supported directly on said road-bed and comprising a plurality of concrete sections of relatively large area separated from each other by expansion joints extending from the top of the pavement to the road-bed, said sections being formed with shoulders within the expansion joints, and reinforcing means embedded in and carried by and continuing along the upper portions of the edges of the concrete sections at the joints which require reinforcement, said reinforcing means consisting of metal strips located on edge within the expansion joints and resting upon said shoulders formed in the concrete.

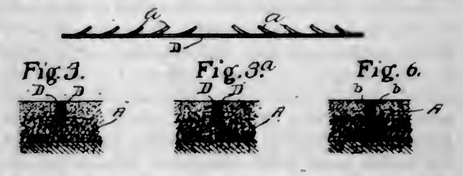
3. A pavement comprising an earth road-bed, a crust supported directly on said road bed and comprising a plurality of concrete sections of relatively large area separated from each other by expansion joints extending from the top of the pavement to the road-bed, and reinforcing means embedded in and carried by and continuing along the concrete sections at the joints which require reinforcement, said reinforcing means consisting of metal strips set into the upper surfaces of the concrete sections along the expansion joints.

The following portions of the drawings of the respective parties are sufficient to illustrate the issues here involved:

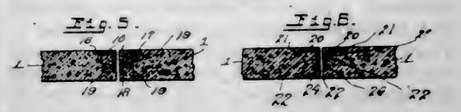
Figs. 3 and 6 of Baker's original application.



Figs. 3, 3ª and 6 of Baker's substitute application.



Figs. 5 and 6 of Ficklen's application on which patent was issued.



The right of Baker to amend his specifications after the issuance of the Ficklen patent to include Fig. 3ª was brought before the Commissioner of Patents on an order to show cause why the drawing

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in the Baker application should not be restored to its original form. Ficklen also appealed from the refusal of the Examiner of Interferences to transmit a motion to dissolve.

In the opinion the Commissioner, distinguishing the original specifications of the parties, said:

Ficklen's patent states expressly that the reinforcing means are supported by the concrete out of contact with the road-bed. * * * It is plain that claims 1, 2 and 3 are all limited to reinforcing means which are supported by the concrete out of engagement with the earth road-bed. This is the force of the clause "reinforcing means embedded in and carried by and continuing along the upper portions of the edges of the concrete sections" of claim 1. Claim 2 of the patent is limited in the same way and in addition specifies "shoulders" formed in the concrete. Claim 3 specifies that the reinforcing means embedded in and carried by the concrete sections are set into the upper surfaces of the concrete sections. Baker's application as originally filed indicates "the construction of expansion joints for concrete pavements in which the pavement or only the upper layer thereof is laid in sections with open joints between the sections." The reinforcing plates are described as "of suitable length and width to correspond to the cross section of the pavement." It is proposed to place the plates in pairs suitably spaced apart upon the prepared foundations, so that their upper edges are on a level with the road and then filled in with concrete.

The Commissioner turned his decision granting Baker the right to amend his application by inserting Fig. 3[a] upon the concluding sentence in his original specification, as follows:

For the construction of expansion joints the plates are preferably made of a width to reach through the entire depth of a pavement, but it is optional to make them of lesser width where the character of the pavement permits.

In our opinion the case turns upon this decision of the Commissioner. It will not be necessary to concern ourselves with the issues of fact on the question of priority, nor are we confronted with the rule as to concurring opinions of the various tribunals of the Patent Office. In the interference proceedings, the lower tribunals adopted this decision of the Commissioner as the law of the case, and expressly refused to pass upon the right of Baker to make the claims of the issue or to pass upon the question of whether or not Baker's original application disclosed the specific structure defined by the claims. We are reviewing, therefore, not three concurring decisions, but the single decision of the Commissioner. If Baker is not entitled to amend his specification by inserting Fig. 3[a], Ficklen must prevail.

Reading the alternative construction as expressed in the sentence above quoted from the original Baker application upon his disclosure then made in Figs. 3 and 6, it is not difficult to understand what he had in mind. It should be remembered that Baker, the junior party, upon whom the burden rests, is here seeking to appropriate the claims of the senior party after they have gone to patent. What was in Baker's mind at the time he filed his original application is to be deduced from what he disclosed. A glance at the drawings of the respective parties shows not only the superiority of the Ficklen structure, but that the parties were moving in entirely different directions. What Baker had in mind, as disclosed in Fig. 6, was the creation of expansion-joints by means of his metal plates extending through the concrete and resting on the road-base. In his original specification he says:

In constructing the expansion joints I use metal wearing plates as D which conform to the profile of the pavement and are of suitable length and width to correspond to the cross section of the pavement. Each plate is formed or provided with metal strips *a* which are either integral portions cut out of the plate or are separate strips secured thereto by riveting or otherwise, and which strips are bent to one side of the plate. By placing the plates in pairs suitably spaced apart upon the prepared foundation so that their upper edges are on a level with the road and with the strips extending outwardly, it will be seen that in filling in the concrete they will be wholly embedded in the concrete and act as ties or anchors to hold and unite the plates with the concrete. After removing the spacing means from between the pair of plates the joint then may be completed by filling in with tar, asphalt or other suitable material in the usual manner.

But this is not the invention of the issue as stated and disclosed by Ficklen. In Ficklen the reinforcing-plates—

are embedded in and supported by the concrete section above and out of contact with the earth road-bed, thus causing the reinforcement to form, in effect, a component part of the section, the face of the reinforcement within the expansion joint being flush with the face of the concrete section below the reinforcement.

Ficklen was not creating an expansion-joint, but protecting the surface of the concrete at the expansion-joint.

We come now to the more difficult question of whether or not the claims of the issue may be read into Baker's original specification as disclosed by Fig. 3 of his drawings. It will be observed that the expansion-plates extend a portion of the way through the pavement and there is no expansion-joint extending from the termination of the plates to the bottom of the pavement. Whether this form was intended for a double-layer concrete pavement, where the base is solid concrete and the upper layer in sections, does not appear. If so, the device shown by Fig. 3 would only differ from Fig. 6 in that the plates would rest on the concrete base instead of on the road-bed. Nowhere, either in Baker's specifications or his drawings, does he meet the claims of the issue by disclosing reinforcing means supported by the concrete out of contact with the road-bed.

It is significant that after Baker filed his original application, he filed amended claims in November, 1910, which were rejected. He then sought to substitute a single claim in December, 1911, which was also rejected. Again, in January, 1913, he substituted a claim, which was rejected. All of these amendments were rejected upon reference to a patent to one Kieserling. Finally, in February, 1914, he asked for the following claim, which was allowed:

In a pavement, the combination with curbs and a prepared foundation between said curbs, of sheet metal wearing plates extending from curb to curb with the lower edges thereof, bearing directly upon the foundation, said plates being arranged in spaced parallel relation to each other and having the lower edges thereof cut to form outwardly extending integral tongues that bear directly upon said foundation and serve functionally as feet for supporting said plates in a vertical position at right angles to the foundation.

It will be observed that up to this date Baker was still working upon the disclosure of his original specification as shown by Fig. 6. Nowhere has he said or done anything which even indicates that he had a conception of the invention of the issue. This seems to conclusively dispose of the contention that the alternative means stated in the closing sentence of his original specification should be construed to embrace the invention of the present issue. It was not until April 7, 1914, almost five years after Ficklen's filing date, that Baker, through his attorneys, prepared an additional claim which closed with the words—

said plates having integrally formed tongues that extend into the body of the pavement and support the plates in substantially upright position at an interval from the bottom of the pavement.

Even this is but a nebulous description of the Ficklen invention. Baker gives no evidence of a clear conception of the invention of the issue until July 21, 1914, when he filed a substitute specification and claims, containing the counts of the issue. This was over one month after the issuance of the Ficklen patent.

Baker lays great stress upon what is known as the Detroit experiment, where he laid a large amount of concrete pavement in 1909, and where he claims to have installed his device. The only question we are here called upon to consider involves Baker's right to amend his application by the addition of claims corresponding to the counts of the issue, a question which can be determined only by reference to the specification and claims as originally filed. In this view of the case, it becomes immaterial whether the Detroit experiment amounted to a disclosure of the invention in issue, or not.

The case of *Manly* v. *Williams* (37 App. D. C., 194; 168 O. G., 1034) is controlling here. There, the court said:

An additional ground is advanced by counsel for appellant in this court. It is insisted that, inasmuch as appellee seeks to adopt the claims in issue and have them relate back to the date of his original application, before he is entitled to adopt the claims, it must clearly appear that the invention in issue was set forth in his original application. It is vigorously argued that this does not appear from the original specification and claims of appellee. This appeal, we think, can be disposed of upon the latter point. * * * An examination of appellee's claims, specifications, and drawings, we think, discloses no conception by him of the exact thing here in issue. * * * It will be observed that when appellant entered the field, appellee had apparently no conception of the necessity of conserving the leakage. His idea was to provide against leakage by replenishing the supply of oil in the tank. It is insisted by counsel for appellee that the word "replenishing" is comprehensive enough to convey his conception of means for the collection of leakage; but, in the absence of anything in the context to indicate such a meaning, we cannot attribute this invention to appellee. In fact, the claims and specifications of appellee, up to the date of appellant's entry into the field, clearly indicate the contrary. When we consider appellee's refusal for more than two years to make the claims suggested, and his failure to embrace the idea in amendments during that period, it is apparent that he had no conception whatever of the invention embraced in the claims in issue until after appellant entered the field. Even then he was unable to so amend his claims as to intelligently express anything like a clear conception of the thing here in issue. The law is well settled that amendments will only be permitted to relate back to the date of the filing of the original application, where they can clearly be sustained on the claims and specifications as originally made. The law does not permit such an enlargement of the original specifications as will interfere with other inventors who have acquired intervening rights. "Courts should regard with jealousy and disfavor any attempts to enlarge the scope of an application once filed, or of a patent once granted, the effect of which would be to enable the patentee to appropriate other inventions made prior to such alteration, or to appropriate that which has, in the meantime, gone into public use." (*Chicago & N. W. R. Co.* v. *Sayles*, 97 U. S., 554.) The rule is the same as in reissue cases with respect to intervening rights. A patentee cannot, in a reissue application, so broaden his claims as to include an invention made subsequent to the grant of his patent. * * * Appellee in his original specification and the amendments thereof up to the time appellant entered the field totally failed to make any claim for means for collecting leakage. If appellee had made any such claim there would be presented a question of fact as to its operation, but in the absence of any such claim, the sole question here is whether he can now claim something which was not originally disclosed.

We are, therefore, of opinion that the amendment to Baker's application containing the counts of the issue cannot be sustained on the specification and claims as originally filed. The decision of the Commissioner of Patents is reversed, and the clerk is directed to certify these proceedings as by law required.

Reversed.

Summary of Supplemental List of Employees Who Have Entered the Military or Naval Service, as Reported Since June 15.

DEPARTMENT OF THE INTERIOR,
Washington, D. C., July 13, 1918.

(For the Honor Roll; total, 159.)

Office of the Secretary	8
General Land Office	14
Office of Indian Affairs	15
Pension Office	2
Patent Office	12
Geological Survey	3
Reclamation Service	48
Bureau of Mines	24
Alaskan Engineering Commission	25
National Park Service	1
St. Elizabeths Hospital	7
Total	159

OFFICE OF THE SECRETARY (8).

Altman, David, D. C., U. S. N.
Hart, Frank, Tex., Naval Reserves.
Healey, Raymond W., Pa., U. S. A.
Highman, Mainnie J., Ill., U. S. N.
Johnson, William C., D. C., U. S. A.
Lindsay, Robert B., D. C., Training School, U. S. A.
Smith, Ralph J., D. C., Training School, U. S. A.
Taylor, William F., D. C., U. S. A.

GENERAL LAND OFFICE (14).

Bradshaw, Clarence R., Miss., Training Camp, U. S. A.
Carlson, Carl E., Colo., U. S. N.
Dotter, Alvie H., Mo., U. S. A.
Glueck, Nathan H., Wis., U. S. A.
Lawson, Goodman, Mont., Infantry, U. S. A.
Levitt, Max P., Colo., U. S. A.
Leckman, Henry T., Mont., Aero Squadron, U. S. A.
Perkins, William C., Mo., Engineer Corps, U. S. A.
Rathbone, Thomas C., D. C., Engineer Corps, U. S. A.
Ridgway, George W., Oreg., Ordnance Corps, U. S. A.
Schmidt, Frank, N. Y., U. S. A.
Swenson, Nels V., Wash., U. S. A.
Whitehurst, Benjamin W., Ala., N. R. Force.
Wolf, Charles, U. S. N.

OFFICE OF INDIAN AFFAIRS (15).

Carmody, Arthur A., R. I., U. S. A.
Coursey, Joseph, Mass., U. S. A.
Daly, Richard E., Wis., Aviation Section, U. S. A.
Glenn, Alonzo M., Miss., Depot Brigade, U. S. A.
Hashbarger, William H., Ohio, Machine Gun Battalion, U. S. A.
Keith, Oliver S., Colo., Q. M. C., U. S. A.
Krigbaum, Clarence R., S. D., U. S. A.
Linnett, Harold A., Minn., Machine Gun Battalion, U. S. A.
Longhorn, Matthew, Okla., C. A. C., U. S. A.
Lundblade, Theodore, Iowa, Infantry, U. S. A.
Morris, William R., Kans., Signal Corps, U. S. A.
Nyce, George M., Ariz., U. S. G. N. A.
Oley, Joseph E., Mich., Infantry, U. S. A.
Simpkins, Edward, Mont., Machine Gun Battalion, U. S. A.
Sincock, Henry A., Ill., M. R. C., U. S. A.

PENSION OFFICE (2).

Carrington, Fred W., Vt., Marine Corps.
Reese, Lester H., N. C., Depot Brigade, U. S. A.

PATENT OFFICE (12).

Erwin, James T., Jr., N. Y., Naval Reserves.
Haas, Charles F., Pa., U. S. A.
Hampson, Edward A., Md., U. S. N.
Main, Herschel L., Ind., U. S. A.
Marze, Luther, D. C., Depot Brigade, U. S. A.
Maxson, Louis A., Md., Naval Auxiliary Reserves.
Pedersen, Aksel M., Conn., U. S. A.
Rauber, Benjamin T., N. Y., U. S. A.
Rosenthal, Ned D., Mo., U. S. A.
Salomon, Meyer J., Ill., U. S. A.
Smith, Oscar F., Ky., U. S. A.
Stoner, George A., Iowa, Q. M. C., U. S. A.

GEOLOGICAL SURVEY (3).

Murray, Malcolm G., Mo., National Army.
Phelps, George, D. C., Training School, U. S. A.
Sanderson, William H., D. C., Ordnance Corps, U. S. A.

RECLAMATION SERVICE (43).

Amundsen, Leo, Utah, Aviation Corps, U. S. A.
Anderson, R. E., Nebr., U. S. A.
Bonar, Clifford, N. Mex., U. S. A.
Briggs, Morris, Mont., U. S. A.
Cardiff, Stuart, Mont., National Army.
Chader, Ainer, Utah, U. S. A.
Coon, Roy W., Mont., National Army.
Cowgill, Philip S., Nev., U. S. A.
Craig, W. H., N. Mex., U. S. A.
Crismond, John E., Nebr., U. S. A.
Dawson, T. J., Mont., U. S. A.
Di Pirro, Andrew, Mont., U. S. A.
Doersch, G. C., Mont., U. S. A.
Donnelly, Harvey, Mont., U. S. A.
Evans, F. E., Nebr., U. S. A.
Flaten, Olav N., Nebr., U. S. N.
Garrett, W. H., N. Mex., U. S. A.
Garrison, William F., Nebr., Q. M. C., U. S. A.
Greene, B. R., Mont., U. S. A.
Hadeland, Ole, Mont., U. S. A.
Hammond, H. C., N. Mex., U. S. A.
Heath, John, Mont., U. S. N.
Holt, Carl A., Nebr., U. S. A.
Hostwet, Lester, Mont., U. S. A.
James, Russell W., Mont., U. S. N.
Jones, Everett, Mont., U. S. A.
Kerr, C. S., N. Mex., U. S. N.
Kesler, Edwin, Mont., U. S. A.
Klemola, Ferdinand, Nebr., U. S. N.
Longcore, W. H., Mont., U. S. A.
Lowenberg, Forrest, Mont., U. S. A.
McGee, T. R., N. Mex., U. S. A.
Naylor, John, Nebr., U. S. A.
Neel, George G., Nebr., Infantry, U. S. A.
Nichols, W. R., Nebr., U. S. A.
O'Brien, Dan, Mont., Marine Corps.
Osborne, A. L., Nebr., Q. M. C., U. S. A.
Pinder, Percy, Idaho, U. S. A.
Roberts, M., N. Mex., U. S. A.
Satterlee, Guy N., Oreg., U. S. A.
Selby, George, Idaho, U. S. A.
Shaw, William, Nebr., U. S. A.
Sletton, J. Oliver, Nebr., U. S. N.
Spiker, Charles, Mont., U. S. A.
Swicegood, Charles, Mont., National Army.
Thompson, Floyd B., Colo., U. S. A.
Trammel, C. P., Utah, U. S. A.
Wayne, Nelson L., Mont., U. S. A.

BUREAU OF MINES (24).

Byer, Charles, Conn., Chemical Service Section, U. S. A.
Carey, Michael T., Pa., field clerk, U. S. A.
Cottom, Paul L., U. S. N.
Coxe, Albert E., S. D., Chemical Service Section, U. S. A.
Fraser, William R., R. I., Chemical Service Section, U. S. A.
Goldsmith, Chester, D. C., Chemical Service Section, U. S. A.
Hopkins, Harold C., Ohio, Engineer Corps, U. S. A.
Hyde, Frederick Weston, Md., C. A. C., U. S. A.
Jarvis, A. Woodward, Pa., U. S. A.
Jenkins, David J., Pa., U. S. A.
Johns, Albert L., Mo., U. S. A.
McAdory, Robert K., Ala., Naval Reserves.
Patton, James E., Wash., U. S. N.
Peterman, Roy, Pa., U. S. A.
Pierce, Willis M., N. Y., Chemical Service Section, U. S. A.
Rosenfeld, Jacob, N. Y., Chemical Service Section, U. S. A.
Ross, Robert M., Colo., Ordnance Corps, National Army.
Boudebush, George E., Ohio, Chemical Service Section, U. S. A.
Sporley, Everett A., Mich., U. S. A.
Vinoverski, Frank, Pa., U. S. A.
Wadsworth, Charles, 3d, N. J., Ordnance Corps, National Army.
Wesson, Laurance C., Ohio, Chemical Service Section, U. S. A.
Wiggins, John H., Okla., Aviation Corps, U. S. A.
Winternitz, Milton C., Md., U. S. A.

ALASKAN ENGINEERING COMMISSION (25).

Ashby, Holly V., U. S. A.
Backstrom, Gust, U. S. A.
Baumgerger, A., U. S. A.
Calogero, George, U. S. A.
Chabitney, Mike, U. S. A.
Christensen, Paul Fred, U. S. A.
Christensen, William, U. S. A.
Cook, Elmer Curtis, U. S. A.
Cotter, Martin P., D. C., U. S. N.
Frost, John, U. S. A.
Henehan, John, U. S. A.
Henehan, William, U. S. A.
Lallos, Peter, U. S. A.
Larson, Theodore, U. S. A.
McFadden, John, U. S. A.
Miles, J. W., U. S. A.
Nelson, Carl, U. S. A.
Olsson, Carl Gustave, U. S. A.
Osbo, Thorwald, U. S. A.
Porter, Glenn W., Engineer Corps, U. S. A.
Ryan, Jack, U. S. A.
Skatbo, Siguard, U. S. A.
Stichler, Loyd Lois, U. S. A.
Switzer, George, Q. M. C., U. S. A.
Werner, Thomas, U. S. A.

NATIONAL PARK SERVICE (1).

Michel, Fred, Colo., Cavalry, U. S. A.

ST. ELIZABETHS HOSPITAL (7).

Dixon, Francis, D. C., U. S. N.
Glascock, Alfred, Va., M. R. C., U. S. A.
King, Edward, Md., U. S. A.
McDaniel, Paul I., D. C., M. R. C., U. S. A.
Parker, Philip C., D. C., U. S. A.
Peyton, Jerry, Va., M. R. C., U. S. A.
Pursley, Robert, Va., M. R. C., U. S. A.

The officer mentioned in the following memorandum was an Assistant Topographer in the Geological Survey when he entered the military service as first lieutenant, Engineer Officers' Reserve Corps, Seventh Regiment, Coast Artillery Brigade, July 16, 1917.

HEADQUARTERS RAILWAY ARTILLERY RESERVE, A. E. F., FRANCE, MAY 18, 1918.

[Memorandum No. 1.]

The following is published for the information of all concerned:

"8th Army Artillery Staff, No. 2916, Headquarters, May 11, 1918.

"[Order No. 24.]

"Colonel Rebourseau, acting artillery commander, 8th Army, cites in Army artillery orders:

"LIEUTENANT KOSTKA MUDD, C. E., U. S. R.,

"Group 8" Howitzers, American Howitzer Regiment, Orienteur Officer of a Group of 8" Howitzers,

"Displayed a most praiseworthy devotion to duty. On two separate occasions executed difficult topographic operations under heavy bombardment. Seriously wounded while engaged in this duty.

"Colonel Acting Artillery Commander, 8th Army.
"(Signed) REBOURSEAU."

By command of Brigadier General Coe:
J. F. HOWELL,
Colonel, General Staff Corps, Chief of Staff.

Official:
J. H. COCHRAN,
Captain, Coast Artillery Corps, Adjutant.

THE
OFFICIAL GAZETTE
OF THE
United States Patent Office.

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Printed copies of patents are furnished by the Patent Office at 5 cents each. For the latter, address the Commissioner of Patents, Washington, D. C.

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Issue of July 23, 1918.

Patents	684—No.	1,273,116 to No.	1,273,799, inclusive.
Designs	32—No.	52,201 to No.	52,232, inclusive.
Trade-Marks	67—No.	122,296 to No.	122,362, inclusive.
Labels	None.		
Prints	None.		
Reissues	3—No.	14,494 to No.	14,496, inclusive.
Total	786		

Amendment to the Rules of Practice.

(ORDER No. 2,417.)

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., July 31, 1918.

Acting under the provisions of section 483 of the Revised Statutes and with the approval of the Secretary of the Interior, Rule 17 of the Rules of Practice of the United States Patent Office is amended by adding thereto the following:

(*h*) Every attorney registered to practice before the United States Patent Office shall submit to the Commissioner of Patents for approval copies of all proposed advertising matter, circulars, letters, cards, etc., intended to solicit patent business, and if it be not disapproved by him and the attorney so notified within ten days after submission, it may be considered approved.

Any registered attorney sending out or using any such matter, a copy of which has not been submitted to the Commissioner of Patents in accordance with this rule, or which has been disapproved by the Commissioner of Patents, shall be subject to suspension or disbarment,

so that the rule as amended will read as follows:

17. An applicant or an assignee of the entire interest may prosecute his own case, but he is advised, unless familiar with such matters, to employ a competent patent attorney, as the value of patents depends largely upon the skilful preparation of the specification and claims. The office can not aid in the selection of an attorney.

A register of attorneys will be kept in this office, on which will be entered the names of all persons entitled to represent applicants before the Patent Office in the presentation and prosecution of applications for patent. The names of persons in the following classes will, upon their written request, be entered upon this register.

(*a*) Any attorney at law who is in good standing in any court of record in the United States or any of the States or Territories thereof and who shall furnish a certificate of the clerk of such United States, State, or Territorial court, duly authenticated under the seal of the court, that he is an attorney in good standing.

(*b*) Any person not an attorney at law who is a citizen or resident of the United States and who shall file proof to the satisfaction of the Commissioner that he is of good moral character and of good repute and possessed of the necessary legal and technical qualifications to enable him to render applicants for patents valuable service and is otherwise competent to advise and assist them in the presentation and prosecution of their applications before the Patent Office.

(*c*) Any foreign patent attorney not a resident of the United States, who shall file proof to the satisfaction of the Commissioner that he is registered and in good standing before the patent office of the country of which he is a citizen or subject, and is possessed of the qualifications stated in paragraph (*b*).

(*d*) Any firm will be registered which shall show that the individual members composing the firm are each and all registered under the provisions of the preceding sections.

(*e*) The Commissioner may require proof of qualifications other than those specified in paragraph (*a*) and reserves the right to decline to recognize any attorney, agent, or other person applying for registration under this rule.

(*f*) Any person or firm not registered and not entitled to be recognized under this rule as an attorney or agent to represent applicants generally may, upon a showing of circumstances which render it necessary or justifiable, be recognized by the Commissioner to prosecute as attorney or agent certain specified application or applications, but this limited recognition shall not extend further than the application or applications named.

(*g*) No person not registered or entitled to recognition as above provided will be permitted to prosecute applications before the Patent Office.

(*h*) Every attorney registered to practice before the United States Patent Office shall submit to the Commissioner of Patents for approval copies of all proposed advertising matter, circulars, letters, cards, etc., intended to solicit patent business, and if it be not disapproved by him and the attorney so notified within ten days after submission, it may be considered approved.

Any registered attorney sending out or using any such matter, a copy of which has not been submitted to the Commissioner of Patents in accordance with this rule, or which has been disapproved by the Commissioner of Patents, shall be subject to suspension or disbarment.

J. T. NEWTON,
Commissioner.

Adverse Decisions in Interference.

PATENT No. 1,200,197.

On July 5, 1918, a decision was rendered that Jacob H. Jacob was not the inventor of the subject-matter covered by claim 1 of his Patent No. 1,200,197, subject "Springs," and no appeal having been taken within the time allowed such decision has become final.

APPLICATIONS UNDER EXAMINATION.

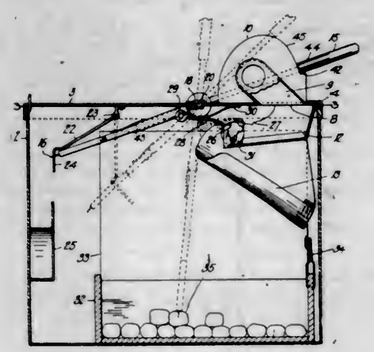
Condition at Close of Business July 19, 1918.

Room No.	Divisions and subjects of invention.	Oldest new application and oldest action by applicant awaiting office action. New.	Amended.	No. of applications awaiting action.
314	1. Closure Operators; Fences; Gates; Harrows and Diggers; Plows; Railway Gates; Planting; Scattering Unloaders; Trees, Plants, and Flowers.	June 8	June 25	153
128	2. Bee Culture; Curtains, Shades, and Screens; Dairy; Label Pasting and Paper Hanging; Paper Files and Binders; Medicines; Pneumatics; Presses; Tents, Canopies, Umbrellas, and Canes; Tobacco.	Apr. 15	May 17	304
175	3. Annealing and Tempering; Electric Heating and Rheostats; Electrochemistry; Heating; Metal-Founding; Metallurgical Apparatus; Metallurgy; Plastic Metal Working.	Apr. 22	May 8	217
234	4. Conveyers; Elevators; Excavating; Hoisting; Material or Article Handling; Pneumatic Despatch; Pushing and Pulling Implements; Railway Mail Delivery; Store-Service; Traversing Hoists.	June 12	July 2	149
167	5. Bookbinding; Harvesters; Jewelry; Music	Mar. 23	June 1	217
318	6. Bleaching and Dyeing; Chemicals; Explosives; Fertilizers; Liquid Coating Compositions; Plastic Compositions; Preserving; Substance Preparation.	Mar. 16	May 8	370
312	7. Educational Appliances; Games and Toys; Optics; Velocipedes	Mar. 21	June 3	295
121	8. Beds; Chairs; Flexible-Sheet Securing Devices; Furniture; Kitchen and Table Articles; Store Furniture; Supports.	May 24	June 21	219
221	9. Air and Gas Pumps; Hydraulic Motors; Motors, Fluid; Motors, Fluid-Current; Pumps; Marine Propulsion.	Feb. 13	June 27	422
235	10. Carriages and Wagons; Motor Vehicles	Apr. 2	June 17	561
154	11. Boot and Shoe Making; Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Spring Devices; Whips and Whip Apparatus.	May 16	June 22	183
322	12. Journal-Boxes, Pulleys, and Shafting; Machine Elements	Apr. 5	Apr. 15	741
329	13. Ammunition and Explosive Charge Making; Bolt, Nail, Nut, Rivet, and Screw Making; Button Making; Chain, Staple, and Horseshoe Making; Driven, Headed, and Screw-Threaded Fastenings; Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Tools and Implements, Making; Metal Working; Needle and Pin Making; Nut and Bolt Locks; Turning.	Mar. 5	May 4	561
223	14. Compound Tools; Cutting and Punching Sheets and Bars; Farriery; Metal-Bending; Sheet-Metal Ware, Making; Tools; Wire Fabrics and Structure; Wire-Working.	Apr. 10	May 18	158
308	15. Bread, Pastry, and Confection Making; Coating; Fuel; Glass; Laminated Fabrics and Analogous Manufactures; Paper-Making and Fiber Liberation; Plastic Block and Earthenware Apparatus; Plastics	June 13	June 24	232
112	16. Electric Signaling-A; Radiant Energy; Telegraphy; Telephony	Mar. 18	Apr. 23	518
307	17. Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet Material Associating or Folding; Sheet Feeding or Delivering; Type Setting.	May 14	May 8	104
229	18. Fluid-Pressure Regulators; Injectors and Ejectors; Liquid Heaters and Vaporizers; Miscellaneous Heat-Engine Plants; Speed Responsive Devices; Steam and Vacuum Pumps; Steam-Engines; Steam-Engine Valves.	Apr. 23	May 6	419
236	19. Dampers, Automatic; Furnaces; Heating Systems; Stoves and Furnaces; Domestic Cooking Vessels	Apr. 19	Apr. 15	324
179	20. Artificial Body Members; Builders' Hardware; Cutlery; Dentistry; Locks and Latches; Safes; Undertaking.	June 5	June 26	186
212	21. Brakes and Gins; Carding; Cloth-Finishing, Continuous-Strip Feeding; Cordage; Felt and Fur; Knitting and Netting; Silk; Spinning; Weaving; Winding and Reeling.	Mar. 30	May 4	264
249	22. Aeronautics; Firearms; Ordnance	Apr. 15	June 12	289
217	23. Acoustics; Coin-Handling; Horology; Recorders; Registers; Sound Recording and Reproducing; Time-Controlling Mechanism.	May 6	May 8	248
144	24. Apparel; Apparel Apparatus; Sewing-Machines; Garment Supporters	May 11	June 19	197
315	25. Agitating; Butchering; Centrifugal Bowl Separators; Mills; Threshing; Vegetable-Cutters and Crushers; Gas Separation.	May 31	June 6	147
105	26. Electricity, Generation; Motive Power	Dec. 13	Apr. 11	539
214	27. Brushing and Scrubbing; Grinding and Polishing; Laundry; Washing Apparatus	May 13	June 8	259
225	28. Internal-Combustion Engines	Mar. 28	May 3	469
147	29. Boring and Drilling; Coopering; Fire-Escapes; Ladders; Wheelwright-Machines; Wooden Buildings; Wood-Sawing; Wood-Turning; Woodworking; Woodworking Tools.	Feb. 23	May 1	475
152	30. Illuminating-Burners; Illumination; Liquid and Gaseous Fuel Burners; Type-Writing Machines	May 1	June 27	323
172	31. Alcohol; Ammonia, Water, and Wood Distillation; Charcoal and Coke; Gas, Heating and Illuminating; Hides, Skins, and Leather; Hydraulic Cement and Lime; Mineral Oils; Oils, Fats, and Glue; Sugar and Salt.	Apr. 11	May 16	285
278	32. Gas and Liquid Contact Apparatus; Heat Exchange; Packaging Liquids; Refrigeration	Feb. 2	May 7	641
70	33. Bridges; Hydraulic Engineering; Masonry and Concrete Structures; Metallic Building Structures; Paving; Roofs.	Apr. 23	May 18	223
304	34. Railways; Railway Rails and Joints; Railway Rolling Stock; Railway Ties and Fasteners	June 28	July 12	57
57	35. Buckles, Buttons, Clasps, Etc.; Card, Picture, and Sign Exhibiting; Signals; Toilet	Feb. 15	Feb. 2	541
204	36. Driers; Geometrical Instruments; Measuring Instruments; Photography; Force Measuring	May 29	June 10	485
107	37. Electric Lamps; Electricity, Circuit Makers and Breakers; Electricity, Conduits; Electricity, General Applications.	Mar. 15	Mar. 9	674
378	38. Animal Husbandry; Earth Boring; Fishing and Trapping; Stationery; Stone-Working; Wells	June 20	June 24	103
220	39. Water Distribution; Multiple Valves	Mar. 15	Apr. 13	307
273	40. Baggage; Bottles and Jars; Check-Controlled Apparatus; Cloth, Leather, and Rubber Receptacles; Deposit and Collection Receptacles; Metallic Shipping and Storing Vessels; Package and Article Carriers; Paper Receptacles; Special Receptacles and Packages; Wooden Receptacles.	Apr. 5	May 2	517
126	41. Railway Draft Appliances; Resilient Tires and Wheels	Apr. 9	May 9	270
114	42. Electricity, Conductors; Railway Signaling; Electricity-Transmission to Vehicles; Electric Signaling	Jan. 23	Jan. 25	620
282	43. Baths and Closets; Dispensing; Dispensing Beverages; Electricity, Medical and Surgical; Fire-Extinguishers; Sewerage; Surgery; Water Purification.	Apr. 2	May 24	186
253	44. Air-Guns, Catapults, and Targets; Ammunition and Explosive Devices; Boats and Buoys; Ships	May 27	May 31	147
379	45. Clutches; Lubrication; Motors; Railway Brakes	Mar. 11	Apr. 11	312
	Oldest new case, Dec. 13; oldest amended, Jan. 25.			
	Total number of applications awaiting action			14,911
168	TRADE-MARKS, DESIGNS, LABELS AND PRINTS:			
	Trade-Marks	June 8	July 3	688
	Designs	Apr. 14	June 10	456
	Labels and Prints	June 17	June 21	82

PATENTS

GRANTED JULY 23, 1918.

1,273,116. COIN-CONTROLLED VENDING-MACHINE. AUGUSTUS ABBOTT, Denver, Colo. Filed May 31, 1917. Serial No. 172,011. (Cl. 194—93.)



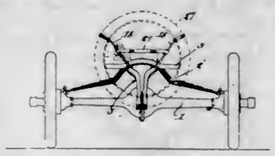
1. A coin-controlled vending-machine comprising a receptacle having a slot for the deposit of coins, and a port for the delivery of purchased articles, a receiver in connection with said port, a pivoted and longitudinally movable lifting-device extending through an opening in the receptacle, to reach any one of a quantity of articles contained therein, said device including a holding-member adapted to secure one of said articles during its lifting action, a chute connected with the coin-slot of the receptacle and having in its upper edge, a notch adapted to be bridged by a coin of determinate size, a stop on the lifting device bearing upon said edge of the chute to engage said notch and thereby prevent the pivotal movement of the lifting device, the stop being normally disposed to engage the edge of a coin which bridges the notch, and the chute having in its edge a second notch to limit the pivotal movement of the lifting device by engagement with the stop after it has passed across the first-mentioned notch, and means for detaching an article from the holding-member of the lifting device by its movement to a point above said receiver.

7. A coin-controlled vending machine, comprising a receptacle having a slot for the deposit of coins and a port for the delivery of purchased articles, a receiver in connection with said port, a pivoted and longitudinally movable lifting device extending through an opening of the receptacle and adapted to reach any one of a quantity of articles contained therein, a locking mechanism normally preventing the pivotal movement of said device and adapted to release the same through the instrumentality of a coin of determinate size deposited in the slot of the receptacle, a guide on the receptacle directing the pivotal movement of the lifting device by limiting the inward longitudinal movement thereof, means for limiting the outward longitudinal movement of the device, and means for detaching an article from the lifting-device by its movement to a point above said receiver.

9. In a coin-controlled vending-machine, a receptacle having a coin-slot and a delivery port, a coin-controlled lifting-device including an arm extending through an opening in the top of the receptacle and mounted to swing in a vertical plane about a transverse axis and to move longitudinally in a direction transverse to said axis, whereby to reach any one of a quantity of articles contained in the receptacle, and means for detaching an article lifted by said device by its movement to a determinate point of discharge.

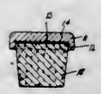
[Claims 2 to 6 and 8 not printed in the Gazette.]

1,273,117. COMBINATION TIRE-HOLDER LICENSE AND LAMP BRACKET. RAYMOND C. AGNER, Burlington, Wis. Filed Jan. 10, 1917. Serial No. 141,645. (Cl. 224—29.)



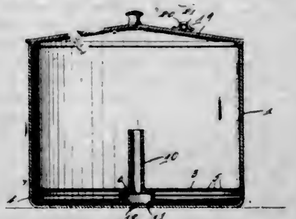
The combination with the rear spring of a vehicle, of a body support superposed on the spring; a rearwardly extended tire carrier including a central body bearing against the under side of the spring, and depressed members located on opposite sides of the body and spaced from the spring; tire supporting arms coöperating with the carrier and having their forward ends mounted on said members on opposite sides of the body and housed between the said members and the spring, and securing devices uniting the body support, the forward ends of the arms and the said members.

1,273,118. WOOD-TOP CORK. EMILIO ALBERTI, New York, N. Y., assignor to International Cork Company, Brooklyn, N. Y., a Corporation of New York. Filed Sept. 22, 1915. Serial No. 52,049. (Cl. 215—51.)



A stopper comprising a tapered body of cork or the like, a head or flange having a recess in which a portion of said body is seated, the taper of said recess being smaller than that of said stopper body, said recess being provided with depressions, and a cementing medium in said recess and depressions for uniting the said elements.

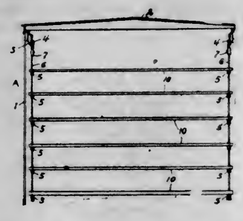
1,273,119. COOKING UTENSIL. BURTON W. ALLIS, Garnett, Kans. Filed May 2, 1916. Serial No. 94,992. (Cl. 53—8.)



In a device of the class described the combination with a kettle of a removable bottom plate, a hollow standard

provided with a reduced neck, said standard provided with an enlarged lower end having a roughened lower edge resting upon the bottom of said kettle, said removable bottom plate provided with a centrally located aperture, said reduced neck extending through said aperture, said removable bottom resting upon said enlarged lower end and being supported thereby, and said bottom plate provided with a radiating slot for permitting the adjoining edges of said plate to overlap and accommodate itself to different sized kettles, and a hollow extension adapted to be mounted upon the upper end of said hollow reduced neck.

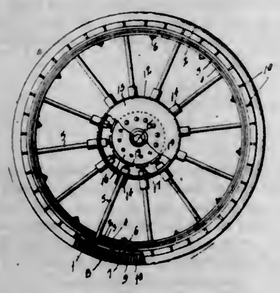
1,273,120. HEMP-DRYING RACK. JOHN L. ANDREAS, Pierceton, Ind. Filed May 2, 1917. Serial No. 165,844. (Cl. 34—26.)



1. In apparatus of the class described, the combination with a dry-house having elevated tracks therein, a drying rack each end of which is composed of a ladder-like structure supported movably upon the corresponding track, and a series of bars at each end of the rack, said bars being removably connected with and supported by the side-structures.

[Claim 2 not printed in the Gazette.]

1,273,121. RESILIENT WHEEL. JOHN M. AVERY, Dallas, Tex. Filed May 6, 1916. Serial No. 95,782. (Cl. 152—29.)



1. In a resilient wheel, a hub member, yieldable spokes radiating from the hub member, a metal resilient rim member confined on the outer ends of the spokes and comprising a plurality of contacting concentric spring metal rings penetrated by the spokes and a continuous outer spring metal ring member fitting snugly on the other rings and abutted by the ends of the spokes, all the ring members being united in one resilient rim member, the ends of the spokes being headed and the heads bearing against the inner surface of the outer ring member of the rim, and a tire carried by the rim, the outer ring member of the rim being interposed between the ends of the spokes and the tire, the heads of the spokes being immovable in the rim.

2. The combination with yieldable spokes, of a resilient rim member comprising a plurality of concentric contacting spring metal rings penetrated by the spokes and an outer metal ring embracing the other rings and bearing on the outer ends of the spokes, and bolts passed through all the rings between the spokes, said bolts having their heads projecting from the outer surface of the outer ring and constituting tire retaining lugs.

3. In a resilient wheel, the combination with a plurality of rigid spokes resiliently sustained at the hub of the wheel, said spokes having integral heads at their outer ends, of a rim comprising a plurality of resilient rings confined on the spokes under the heads thereof, and an outer resilient ring secured to the other rings and confining the heads of the spokes immovably in the said other rings and also covering the spoke heads.

[Claims 4 to 7 not printed in the Gazette.]

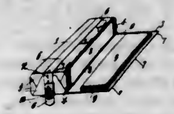
1,273,122. SOUND-EMITTING MEANS FOR TOYS. SOREN S. ADAMS, Plainfield, N. J. Filed Oct. 23, 1916. Serial No. 127,058. (Cl. 46—46.)



1. A doll comprising a head formed with a neck, a bag-like member open at the top and a block mounted in the open end of said member, said block and the surrounding portion of said bag-like member being mounted within the neck so that the said neck-portion serves as a support for said bag-like member and its block, combined with a sounding element coöperating with said bag-like element and adapted to cause a sound as air is drawn into the bag upon expansion of said bag-like member after the same has been compressed.

2. A doll comprising a head formed with a neck, a bag-like member open at the top and a channeled block mounted in the open end of said member, said block and the surrounding portion of said bag-like member being mounted within the neck so that the said neck-portion serves as a support for said bag-like member and its block, said channeled block carrying a sounding element in the channeled portion thereof and adapted to cause a sound as air is drawn into the body upon expansion of said bag-like member after the same has been compressed.

1,273,123. YARDAGE-CONTROLLING DEVICE FOR PIECES OF FABRIC. ISRAEL S. ADLERBLUM, Edgemere, N. Y. Filed Sept. 13, 1917. Serial No. 191,111. (Cl. 206—50.)



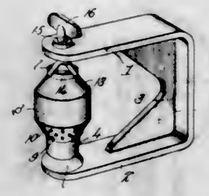
1. A guard for bolts of cloth comprising a body section, means for securing it to the inner edge of a partially unrolled bolt of cloth, so that the rolled-off portion of said bolt of cloth is free from said guard, and a strap section provided with locking means connected to said body section, and adapted to encircle the said bolt lengthwise.

3. In combination, a partially unrolled bolt of cloth, a guard having a body section rolled transversely around the inner edge of the rolled part of the said bolt of cloth intermediate a sufficient number of the windings of the said rolled portion to prevent the removal thereof, a strap section connected to said body section at right angles thereto and of sufficient length to encircle the said rolled portion lengthwise, and key-controlled locking means on said strap for preventing the removal thereof.

5. In combination, a partially unrolled bolt of cloth, a guard having a body section rolled transversely around the inner edge of the rolled part of the said bolt of cloth intermediate a sufficient number of the windings of the said rolled portion to prevent the removal thereof, a strap section connected to said body section at right angles thereto and of sufficient length to encircle the said rolled portion lengthwise, and locking means on said strap section, said body section having a flap section posterior to said strap and of sufficient length to be folded transversely around the adjacent part of the rolled portion of the bolt of cloth to overlap the inner edge of the rolled-off portion, and coöperating fastening means on said flap section and said body section whereby the rolled-off portion of said bolt of cloth can be tightly secured to the rolled portion of the said bolt of cloth.

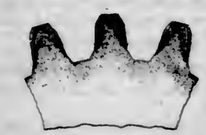
[Claims 2 and 4 not printed in the Gazette.]

1,273,124. TIRE-VULCANIZER. CECIL W. ALTER and WILTON J. ALTER, Hagerman, N. Mex. Filed July 15, 1916. Serial No. 109,458. (Cl. 18—18.)



In a vulcanizing device, a frame, a heater comprising a container having an enlarged intermediate portion, the lower portion of said enlarged portion being perforated, a perforate collar formed integral with and extending upwardly in the container to a point level with the uppermost perforations in the enlarged portion and in spaced relation thereto, and clamping means arranged on the frame engageable with the upper end of said container.

1,273,125. METHOD OF MAKING GEARS. HAROLD N. ANDERSON, Cleveland, Ohio, assignor to The Anderson Rolled Gear Company, Cleveland, Ohio, a Corporation of Ohio. Original application filed Aug. 28, 1913, Serial No. 787,215. Divided and this application filed Aug. 30, 1916. Serial No. 117,598. (Cl. 80—60.)



1. The method of forming teeth upon a blank by means of a toothed die, which consists in subjecting the periphery of the blank to a rolling action against the die, with a contemporaneous movement of approach between the blank and the die, the teeth of the die being made to enter the blank in a radial path during the entire tooth forming operation.

10. A method of forming teeth on gears, comprising rolling a blank successively against a toothed breaking down die and a toothed finishing die while maintaining synchronous relations between the die teeth and the developing teeth on the blank.

11. A method of forming teeth on gears, comprising rolling a heated blank and a toothed die against each other and concurrently pressing them together so as to force the die teeth into the blank, the die teeth being made to enter and leave the blank in such manner as to impart substantially the same degree of compactness and coherence to each side of the blank teeth.

12. A method of forming teeth on gears, comprising rolling a heated black and a toothed die against each other and concurrently pressing them together so as to force the die teeth into the blank, the die teeth being made to enter and leave the blank in such manner that both faces of the die teeth displace substantially the same quantity of metal.

[Claims 2 to 9 not printed in the Gazette.]

1,273,126. ELECTRICAL MEASURING INSTRUMENT. WILLIAM ANTHONY, Clyde, Ohio. Filed Sept. 5, 1916. Serial No. 118,497. (Cl. 171—95.)



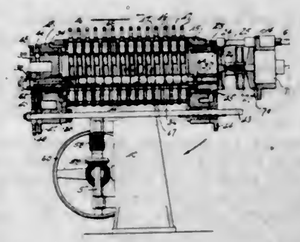
1. In an instrument of the class described, a magnet-carrying frame, and a coil-carrying spool, said frame and spool having interengaging tongues for rigidly securing the two together.

9. In an instrument of the class described, a coil carrying spool having spaced legs on which a coil is wound and having a cross-piece connecting said legs at one end, said cross-piece having a bearing projecting outward from one side edge thereof and having a U-shaped bearing strip projecting outward from its opposite edge, with its legs connected to said cross-piece, said strip being adjustable to vary the space between it and said bearing and to coöperate therewith to carry a needle-pivot.

11. In an instrument of the class described, a magnet carrying frame, a coil and indicator needle carrying frame, and means operable to engage said latter frame to the edge of the magnet carrying frame.

[Claims 2 to 8 and 10 not printed in the Gazette.]

1,273,127. FILTER. FRANK K. ATKINS, New York, N. Y., and EARL F. ATKINS, Arlington, N. J. Filed Sept. 18, 1917. Serial No. 191,928. (Cl. 210—13.)



1. In a filter, a filter plate having a nonfiltering area within its periphery, means for building up a cake on said plate, a cutter normally located opposite said non-filtering area while the cake is building and means to move said cutter and said plate relatively to break up and remove the cake.

2. In a filter, a pair of filter plates spaced apart, each plate having a central opening and such openings being in alinement, a cutter normally located in the space between the plates and in alinement with said openings,

means to deposit solids on said plates and means to move said plates and said cutter relatively to break up and remove such deposits.

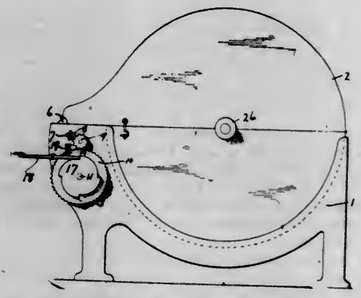
3. In a filter, a pair of filter plates spaced apart, each plate having a central opening and such openings being in alinement, a cutter normally located in the space between the plates and in alinement with said openings and means to move said cutter through the space between said plates and across the active faces thereof.

4. In a filter, a pair of filter plates spaced apart, each plate having a central opening and such openings being in alinement, a cutter normally located in the space between the plates and in alinement with said openings, means to deposit solids on said plates and means to feed the cutting edge of said cutter through such deposits to break up and remove them.

5. In a filter, a series of filter plates spaced apart, each plate having a central opening and such openings being in alinement, a shaft extending through said openings, a series of cutters on said shaft, each normally positioned in a space between a pair of said plates and in alinement with said openings and means to rotate said shaft to move said cutters across the active faces of said plates.

[Claims 6 to 22 not printed in the Gazette.]

1,273,128. AUTOMATIC TAPE-SEALING MACHINE. JOHN A. BANSCHBACH, Shelbyville, Ind. Filed Mar. 27, 1917. Serial No. 157,735. (Cl. 91—14.5.)



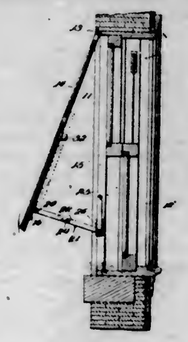
1. In an automatic tape sealing machine, means to hold a plurality of rolls of tape, a single laterally shiftable tape guide roll adapted to engage either of the tapes, a pressure roll, a moistener roll, a spring tensioned finger lever, geared mechanism operable by the finger lever, and arranged to rotate the moistener roll to cause a strip of moistened tape to be discharged for use, substantially as shown.

[Claims 2 and 3 not printed in the Gazette.]

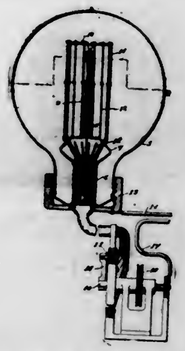
1,273,129. STORM-SASH FASTENER. OSCAR H. BARDILL, Minneapolis, Minn. Filed Apr. 6, 1915. Serial No. 19,517. Renewed Dec. 11, 1917. Serial No. 206,677. (Cl. 16—22.)

1. A fastener for swinging sashes including an arm adapted to be pivotally connected to the sash and having its lower face notched, and a retaining member adapted to be secured to a window casing and formed with a vertical slot through which the arm is movable, the slot intermediate its height being widened laterally at one side, whereby the arm may spring laterally into the widened portion and be held against such upward movement as would free its notch from the member.

2. A fastener for swinging sashes including a bracket adapted for attachment to the sash and having a laterally directed ear, a resilient arm pivoted to the ear and including a plurality of hingedly connected members, each provided in its lower edge with a notch adjacent that end more remote from the bracket, and a retaining member in the form of an L-shaped plate adapted to be secured to a window casing, one wing of the plate being formed with a slot through which the arm is movable and of a height greater than the width of the arm, the slot intermediate its length being widened laterally, whereby the arm may spring into the widened portion when one of its notches is in vertical alinement.



1,273,130. INCANDESCENT ELECTRIC LAMP. WILLIAM L. BARNARD, St. Louis, Mo. Filed Jan. 29, 1917. Serial No. 145,173. (Cl. 240—1.)

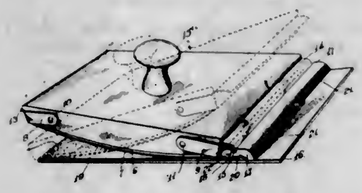


In combination with a single source of light, having a number of devices for translating electrical energy into light, a switch mechanically disconnected from the source of light, and arranged for continuous movement, and having a contact for each translating device of the source of light, and a circuit including said translating devices, said switch and a source of electrical energy whereby each translating device may be momentarily energized in its turn to produce light during which time the remaining translating devices will be deënergized and cooled.

1,273,131. COPYING DEVICE. ARTHUR M. BARRETT, Winnetka, Ill. Filed Apr. 23, 1918. Serial No. 230,198. (Cl. 101—125.)

5. In a device of the class described, the combination of a stationary base having a transverse strip secured thereon adjacent to one end of said base, a rocking holder for a flexible printing or impression sheet, and a bail pivoted to the sides of said holder and adapted to have its transverse member clamp said sheet between it and the end of said holder, said bail and said base strip being provided with means for interlocking with each other at the beginning of a printing operation.

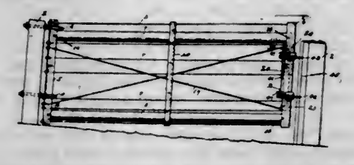
6. In a device of the class described, the combination of a rocking holder for a flexible printing or impression sheet, a movable device carried by said holder near one of its ends for clamping such sheet against said holder, a stationary base for said holder, and means carried by said base near one of its ends with which the said sheet-



clamping device has a temporary engagement at the beginning of a printing operation.

[Claims 1 to 4 not printed in the Gazette.]

1,273,132. GATE. CHARLES B. BAUMGARTNER, Manchester, Iowa. Filed Jan. 4, 1917. Serial No. 140,521. (Cl. 39—13.)



1. In a gate, the combination with an end member pivoted to swing on a vertical axis, of a main body portion pivoted to swing on a horizontal axis whereby it can be raised or lowered to any given position of adjustment relative to the end member, and means for positively locking said body portion in any adjusted position comprising a cable secured to one end of the gate and extending around relatively fixed guides and between clamping members and leverage mechanism for forcing said clamping members into locking engagement with the cable.

3. In a gate, the combination with an end member pivoted to swing on a vertical axis, of a main body portion pivoted to swing on a horizontal axis whereby it can be raised or lowered to any given position of adjustment, and means for positively locking said body portion to said adjusted position, comprising a cable, guides around which said cable extends clamping jaws mounted between said guides and between which the cable passes and a manually operated mechanism for forcing said jaws into locking engagement with the cable.

4. In a gate, the combination with an end member pivoted to swing on a vertical axis, of a main body portion pivoted to swing on a horizontal axis whereby it can be raised or lowered to any given position of adjustment, and means for positively locking said body portion to said adjusted position, comprising a locking mechanism having manually operated clamping jaws, guides mounted above and below said jaws, and a cable extending around said guides and through said jaws and secured to the body portion at points remote from said guides.

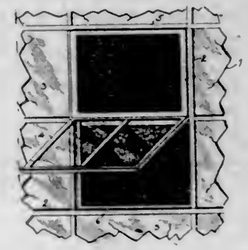
[Claim 2 not printed in the Gazette.]

1,273,133. WINDOW-SCREEN FOR SWINGING SASHES. WILLIAM BAYLEY, Springfield, Ohio. Filed Oct. 23, 1913. Serial No. 796,812. (Cl. 156—14.)

1. A swinging sash, having a transverse recess therein adjacent to the axis of oscillation, and a screen section to and from which the sash swings projecting within the transverse recess.

2. In a screen construction for swinging sash windows, a swinging sash, a reversed channel bar carried by the sash in a position in axial alinement therewith, a screen section to and from which the sash is oscillated, and a flexible flange carried by the screen and yieldingly engaging the reversed channel bar.

3. In a screen construction for swinging sash windows, a center pivoted sash, two screen sections located in substantially parallel planes one at the inside and one at the outside of the window space and at opposite sides of the pivotal center of the sash to and from which the corresponding leaves of the sash are oscillated, a substantially Z shaped contact bar carried by the sash adjacent to the axis of oscillation thereof, and flexible tensioned flanges carried by the screen sections engaging the opposite sides of the bar.

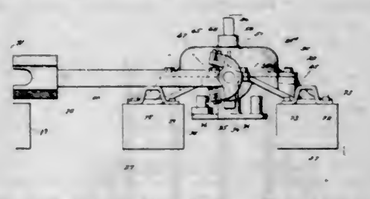


4. In a window of the character described, the combination of a window casing, a pivoted tilting sash, a lower screen secured to said window casing inside of said sash and below the pivoting points thereof, a filling strip secured to the sash substantially in line with the pivoting points and making a close joint with the top element of said screen, said filling strip having an angular recess for continuously engaging the upper portion of said element.

5. In a window construction as described, a swinging window sash having parallel transverse bars located adjacent to but on opposite sides of the axis of oscillation, screen sections located at opposite sides of the swinging sash, and flanges extending between the parallel sash bars and forming closures between the sash and adjacent screen sections.

[Claim 6 not printed in the Gazette.]

1,273,134. SWITCH-STAND. WILLIAM BENDER, Chicago, Ill., assignor to Ajax Forge Company, Chicago, Ill., a Corporation of Delaware. Filed May 17, 1915. Serial No. 28,680. (Cl. 104—25.)



1. In a device of the class described, an operating shaft, an adjustment member fixed on said shaft, an operating lever pivotally mounted on said shaft, said adjustment member having integral parts extending on opposite sides of said lever, and adjustable means carried by said integral parts and lying in the path of movement of said lever to limit the pivotal movement thereof with respect to said shaft.

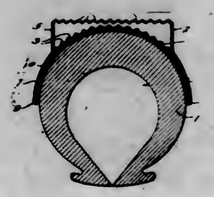
3. In a device of the class described, a shaft, an adjustment member fixed on said shaft, an operating lever, said adjustment member having an inwardly extending socket through which said shaft extends, said lever being pivoted on the shaft in said socket, and studs extending through the opposite walls of the socket in the plane of movement of said lever.

7. In a device of the class described, an operating shaft, an adjustment member mounted on said shaft,

said adjustment member being provided with a socket, an operating lever pivotally mounted in said socket, and adjustable means threadedly engaging the walls of said socket and arranged in the path of movement of said lever to vary the rotation of said shaft with a given rotation of said lever.

[Claims 2 and 4 to 6 not printed in the Gazette.]

1,273,135. TIRE-SHOE. GUSTAF BERGKVIST, Mosquero, N. Mex. Filed June 30, 1917. Serial No. 177,970. (Cl. 152—33.)

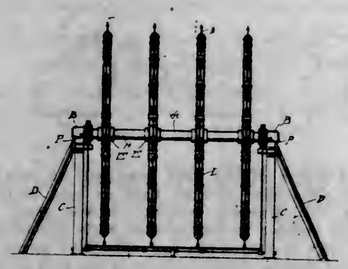


1. A tire shoe including a corrugated supporting member to be fitted upon a tire, and a corrugated tread member carried by said supporting member having its central portion spaced somewhat therefrom.

2. A tire shoe including a supporting member shaped to be fitted upon and to conform to the lines of a tire, and a tread member clenched to said supporting member and having its central portion thereof separated and spaced from the supporting member.

3. A tire shoe including a supporting member of ring shape curved in its transverse dimension to conform substantially to the shape of a tire and corrugated in its middle portion, and a tread member of ring shape formed to have its central corrugated portion substantially flat and spaced from the supporting member with shoulders at the sides thereof merging into the edges which are brought down to fit against the edges of the supporting member, said supporting member having the extreme edges thereof bent over and clenched upon the edges of the tread member.

1,273,136. CLAMPING-MACHINE. OSCAR BERGSTROM, Chicago, Ill., assignor to Handy Manufacturing Company, Chicago, Ill. Filed June 16, 1916. Serial No. 104,079. (Cl. 144—289.)



In a clamping machine of the character described, a head adapted to be slidingly mounted upon a shaft and to be held against relative rotation, said head having two opposed flanges, a series of clamp arms secured to the head and each comprising a central bar and an outer U-shaped bar, the outer ends thereof secured rigidly together, the inner end of the central bar positioned between the said flanges, and the inner ends of the outer member positioned against the outer faces of the flanges and fasteners passing through the flanges and the inner ends of all of said bars and rigidly securing said members in position, said arms adapted to carry suitable clamping members.

1,273,137. RAZOR. WILLIAM H. BLAKE, Jersey City, N. J. Filed Jan. 3, 1910. Serial No. 535,907. (Cl. 30—12.)



1. A razor consisting of a reversible razor-blade member and a blade-holder member therefor; said razor-blade member being formed with a pair of cutting edges and being susceptible of being stropped; one of said members being formed with a pair of notches and the other of said members being formed with a pair of coöperating raised portions adapted and designed to engage in said notches to interlock said members with each other; said notches being of different shapes, whereby an inadvertent mispositioning of the razor-blade member in the blade-holder member after stropping is prevented.

2. A razor having a blade-holder formed at one end with an apertured raised portion which projects from one of its faces and with a recess in its opposite face beneath said raised portion; a razor-blade which lies against the first-named face and is formed at one end with a notch the walls of which engage said raised portion to position said blade and hold the same against displacement; a locking-plate which overlies said razor-blade and is formed at one end with a tongue which fits in said recess; and a clasp which holds the other end of said locking-plate in position on said blade-holder.

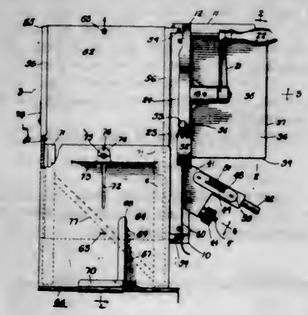
3. A razor having a blade-holder formed at one end with an apertured raised portion which projects from one of its faces and with a recess in its opposite face beneath said raised portion; a razor-blade which lies against the first-named face and is formed at one end with a notch the walls of which engage said raised portion to position said blade and hold the same against displacement; a lengthwise-slidable locking-plate which overlies said razor-blade and is formed at one end with a tongue which fits in said recess; and a clasp which holds said end of said locking-plate in position with respect to said raised portion and holds the other end of said locking-plate in position on said blade-holder.

4. A razor having a blade-holder formed at one end wit an apertured raised portion which projects from one of its faces and with a recess in its opposite face beneath said raised portion; a razor-blade which lies against the first-named face and is formed at one end with a notch the walls of which engage said raised portion to position said blade and hold the same against displacement; a locking-plate which overlies said razor-blade and is formed at one end with a tang and at its other end with a tongue which fits in said recess; and a clasp which presses said tang toward said blade-holder and thereby causes said locking-plate to grip said razor-blade firmly.

5. A razor having a blade-holder formed at one end with an apertured raised portion which projects from one of its faces and with a recess in its opposite face beneath said raised portion; a razor-blade which lies against the first-named face and is formed at one end with a notch the walls of which engage said raised portion to position said blade and hold the same against displacement; a lengthwise-slidable locking-plate which overlies said razor-blade and is formed at one end with a tang having a shoulder and formed at its other end with a tongue which fits in said recess; and a clasp which presses said tang toward said blade-holder and thereby causes said locking-plate to grip said razor-blade firmly and which bears against said shoulder and thereby holds the tongued end of said locking-plate in position with respect to said raised portion.

[Claims 6 to 21 not printed in the Gazette.]

1,273,138. SLICING-MACHINE. AUSTIN BOND, New York, N. Y. Filed Feb. 15, 1918. Serial No. 217,313. (Cl. 17—24.)



1. In a machine of the class described, a frame, comprising a base portion and an upright portion, a plate secured to the top of the base portion and provided at one end thereof with a beveled saw-cut, a rotary knife mounted in the upright portion of said frame and adapted to operate in said saw-cut, and means mounted in said upright portion of the frame for operating said rotary knife.

2. In a machine of the class described, a frame, comprising a base portion and an upright portion, a plate secured to the top of he base portion and provided at one end thereof with a beveled saw-cut, a rotary knife mounted in the upright portion of said frame and adapted to operate in said saw-cut, means mounted in said upright portion of the frame for operating said rotary knife, and a gage device adjustably mounted in connection with the base portion of said machine.

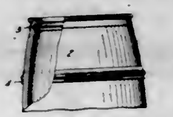
3. In a machine of the class described, a frame, comprising a base portion and an upright portion, a plate secured to the top of the base portion and provided at one end thereof with a beveled saw-cut, a rotary knife mounted in the upright portion of said frame and adapted to operate in said saw-cut, means mounted in said upright portion of the frame for operating said rotary knife, a gage device adjustably mounted in connection with the base portion of said frame, and a pick-up plate secured to the upright portion of the frame and operating in connection with one face of the rotary knife.

4. In a machine of the class described, a frame, comprising a base portion and an upright portion, a plate secured to the top of the base portion and provided at one end thereof with a beveled saw-cut, a rotary knife mounted in the upright portion of said frame and adapted to operate in said saw-cut, means mounted in said upright portion of the frame for operating said rotary knife, a gage device adjustably mounted in connection with the base portion of said frame, a pickup plate secured to the upright portion of the frame and operating in connection with one face of the rotary knife, and a tensionally controlled guard device pivoted to the upright portion of said frame.

5. In a machine of the class described, a main frame, comprising a base portion and an upright portion, a plate secured to the top of the base portion and provided at one end thereof with a beveled saw-cut, a rotary knife mounted in the upright portion of said frame and adapted to operate in said saw-cut, means mounted in said upright portion of the frame for operating said rotary knife, a gage device adjustably mounted in connection with the base portion of said frame, a pickup plate secured to the upright portion of the frame and operating in connection with one face of the rotary knife, a tensionally controlled guard device pivoted to the upright portion of said frame, a supplemental frame pivoted to the main frame and a table movable longitudinally of said supplemental frame.

[Claims 6 to 13 not printed in the Gazette.]

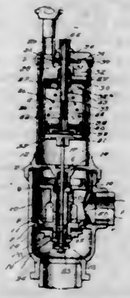
1,273,139. MANUFACTURE OF HOOPS. JAMES W. BRAINARD, Pittsburgh, Pa. Filed Dec. 29, 1914. Serial No. 879,479. (Cl. 29—156.)



1. In the manufacture of metal hoops, the steps consisting in stretching hot rolled metal strips beyond the elastic limit of the metal by cold rolling, cutting the stretched metal to length and fastening one end of the cut lengths to the other to form the hoop.

[Claims 2 and 3 not printed in the Gazette.]

1,273,140. FLUSHING-VALVE. ROBERT A. BROOKS, Chicago, Ill., assignor to The Brooks Manufacturing Company, Chicago, Ill., a Corporation of Arizona. Filed Sept. 15, 1915. Serial No. 50,734. (Cl. 137—93.)

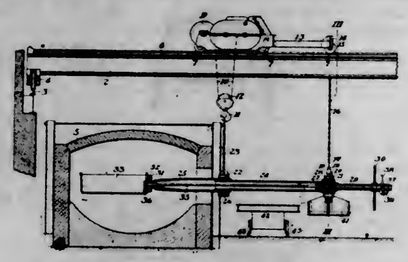


1. In a device of the character described and in combination with means for operating the hereinafter recited relief valve and automatic retarding means for closing such valves slowly, a main vale having a passage through its body and formed with a valve seat at the lower end of such passage and also having a block portion arranged to close the main valve opening in advance of the seating of the valve, a relief valve coöperating with said valve seat at the bottom of the passage through the main valve and arranged to carry said main valve toward its seat as said relief valve closes, said main valve having a relatively unretarded closing movement with respect to said relief valve, whereby said main valve will seat quickly in advance of the relief valve when the block portion of the main valve closes the main valve opening and a limited closing flow of water will occur through the relief valve.

2. A flushing valve mechanism comprising a valve casing formed with a partition which is provided with an inlet valve seat, a cylindrical shell within said casing having a closed upper end and with its lower end in communication with the discharge passages of the device, a main valve comprising an inlet valve at its lower end and a hollow stem and a disk loosely fitting in said cylindrical shell, said inlet valve being formed with a block portion arranged to close the inlet opening in advance of the seating of such valve and the lower end of the hollow stem of the valve being formed as a relief valve seat, a spring-pressed relief valve yieldingly tending to seat upon said last mentioned valve seat, said main valve having limited movement with respect to said relief valve, operating means for unseating said relief and main valves, and means for retarding the closing movement of the relief valve, said disk upon the main valve being arranged to exert a relatively slight retarding influence thereon, whereby said main valve will seat quickly in advance of the relief valve when the block portion of the main valve closes the main valve opening and a limited closing flow of water will occur through the relief valve.

[Claim 3 not printed in the Gazette.]

1,273,141. FURNACE-CHARGING DEVICE. EDGAR E. BROSIUS, Pittsburgh, Pa. Filed Dec. 2, 1916. Serial No. 134,608. (Cl. 214—31.)

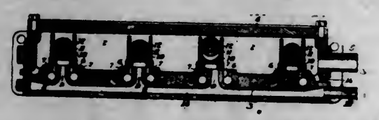


1. A charging bar having two supporting bearings, a tubular section rotatably mounted in one of said bearings and extending forwardly thereof, a charging head on the outer end of said section, a journal member rotatably mounted in the other bearing, a tubular section connected to said rotatable member and the end of the charging head in the other bearing, a third tubular section connected to the journal member and extending rearwardly thereof, a locking bar extending from the last mentioned tubular section through the other tubular section and charging head, and means on the last mentioned tubular section for actuating the locking bar; substantially as described.

3. A furnace charging device, comprising a charging bar, suspended bearings for supporting said bar, a charging head on one end of said bar, actuating devices on the other end of said bar, means for raising and lowering the bearing adjacent to the charging head, means for permitting the other bearing to be moved in a horizontal direction about the point of suspension of the other bearing member and a counterweight connected to the movable bearing to counterbalance the load on the charging end and permit the same to be moved freely in a horizontal direction; substantially as described.

[Claims 2 and 4 not printed in the Gazette.]

1,273,142. CONTROLLER. EDGAR E. BROSIUS, Pittsburgh, Pa. Filed Nov. 21, 1917. Serial No. 203,212. (Cl. 277—57.)

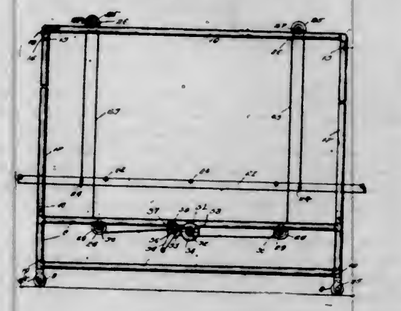


1. A controller for controlling the operation of a plurality of fluid pressure operated motive devices, comprising a casing which is structurally separate from the motive devices to be controlled and which may be positioned at any desired point with respect to said devices, said casing having a pressure inlet chamber therein, one wall of said chamber having a plurality of sets of ports therein, there being one set of such ports for each motive device, a plurality of valves in said chamber, one for each set of ports, said casing having means for the connection therewith of a steam-supply pipe for said chamber, and of pipes communicating with the respective ports for connecting such ports with the motive devices, and a separate actuating device for each valve; substantially as described.

7. A controller for controlling the operation of a plurality of fluid-pressure operated motive devices, comprising a casing which is structurally separate from the motive devices to be controlled and which may be positioned at a desired point with respect to such devices, said casing having a longitudinally extending pressure supply chamber, a longitudinally extending exhaust passage, and a wall separating the chamber and passage, said wall having a plurality of valve seats on its chamber side and a plurality of sets of ports opening through said seats, some of such ports leading into the exhaust passage and the casing having means whereby the other ports may be connected to the motive devices to be controlled, a plurality of separate valves, one for each seat and set of ports, a plurality of transverse actuating shafts for said valves, said shafts being spaced apart longitudinally of the casing, and having separate actuating means; substantially as described.

[Claims 2 to 6 not printed in the Gazette.]

1,273,148. COFFIN-ELEVATOR FOR MAUSOLEUMS. CECIL E. BRYAN, Chicago, Ill. Filed Nov. 20, 1916. Serial No. 132,468. (Cl. 187—11.)



1. In a coffin elevator for mausoleums, the combination of a pair of side frames, detachable connections between said frames, detachable posts extending upwardly from said frames, detachable cross members between the tops of said posts, a vertically movable carriage for receiving the coffin rollers on said carriage whereby the coffin may be moved longitudinally thereof, and elevating mechanism co-acting with said frame and carriage for elevating the carriage, the arrangement being such that the parts may be readily disassembled and packed together in a comparatively small space.

3. In an elevator of the character set forth, the combination of two relatively low side frames, detachable cross members for connecting said side frames, detachable posts extending upwardly from the ends of said frames, longitudinal connections between the tops of said posts, a vertically movable platform adapted to rest on said cross members when in lowered position, guide rollers on said platform, a winding drum mounted on said frames, means for turning said drum, a plurality of cables connected with said drum and adapted to be wound upon the same, said cables having their outer ends provided with means for connecting with the movable platform, brackets on said frames and on said longitudinal top connecting members, guide sheaves mounted on said brackets, each of said cables being adapted to be rove from the winding drum under one of the sheaves of the frame, and up and over one of the sheaves on the top member, and down to the platform, the arrangement being such that when the drum is turned, the platform will be raised or lowered, and also such that the parts may be readily disassembled for storage.

[Claim 2 not printed in the Gazette.]

1,273,144. PREPARED FOOD. ALFRED S. BURDICK and CARL NIELSEN, Chicago, Ill., assignors to The Abbott Laboratories, Chicago, Ill., a Corporation of Illinois. Filed July 13, 1917. Serial No. 180,353. (Cl. 99—11.)

1. The process of preparing a food having the ingredients necessary for body nutrition, which consists in soaking soy beans in water, draining off the water, mashing the beans, extracting the mash with water, removing the extract from the inextractable residue mechanically, malting cereal flour gruel to produce a syrupy liquid containing dextrins and sugar, filtering out the insoluble and inextractable substances from said last named liquid, mixing the bean extract with the malt liquid, and adding tissue salts in the desired proportions.

[Claim 2 not printed in the Gazette.]

1,273,145. VEGETABLE MILK. ALFRED S. BURDICK and CARL NIELSEN, Chicago, Ill., assignors to The Abbott Laboratories, Chicago, Ill., a Corporation of Illinois. Filed July 13, 1917. Serial No. 180,354. (Cl. 99—11.)

1. The process of preparing vegetable milk from a grain, which consists in soaking the grain in water, draining off the water, mashing the grain, extracting the mash with water, and subsequently separating the extract from the inextractible residue.

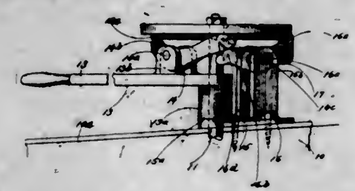
[Claim 2 not printed in the Gazette.]

1,273,146. ALUMINUM-SOLDER. DAVID M. CAMPBELL, Brooklyn, N. Y. Filed Aug. 22, 1917. Serial No. 187,580. (Cl. 75—1.)

1. An aluminum solder consisting of copper, from six to eight per cent.; aluminum, from seven to eleven per cent.; lead, from twelve to fifteen per cent.; tin, from twenty to thirty per cent.; and zinc, from forty to fifty per cent.

2. An aluminum solder comprising copper, from six to eight per cent.; aluminum, from seven to eleven per cent.; lead, from twelve to fifteen per cent.; tin, from twenty to thirty per cent.; zinc, from forty to fifty per cent.; and characterized by a melting point substantially that of solder, so that the same can be worked with a soldering iron.

1,273,147. BRAKE-OPERATING MECHANISM. JAMES A. CARNEY, Aurora, Ill. Filed Aug. 26, 1914. Serial No. 858,663. (Cl. 74—16.)



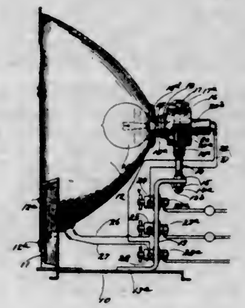
1. A device of the class described comprising a ratchet member substantially horizontally arranged, an operating lever also substantially horizontally arranged, a pawl pivotally attached to said lever and normally engaging said ratchet member whereby proper rotation of said lever will effect rotation in one direction of said ratchet member, and a detent arranged to prevent reverse rotation of said ratchet, said pawl being arranged to positively disengage said detent upon proper movement of said lever.

4. In combination with a vertically arranged brake shaft, a horizontally disposed ratchet member mounted thereon, a lever rotatably mounted on said shaft, a pawl actuated by said lever and normally engaging said ratchet member to effect rotation thereof on proper movement of the lever, a detent arranged normally to engage said ratchet member to prevent reverse rotation thereof, said pawl and detent having parts adapted to coact upon proper movement of the lever to effect the disengagement of both the pawl and detent with said ratchet member, and means to limit the disengaging movements of said pawl and detent.

9. In combination with a car body and a substantially vertical brake-shaft rotatably secured thereto and extending above the roof thereof, a substantially horizontally arranged ratchet wheel mounted on said shaft above said roof, teeth on the under face of said wheel, a peripheral flange on said wheel extending slightly beyond said teeth, and means arranged between said wheel and said roof for engagement with said teeth for rotating said wheel and for preventing reverse movement thereof.

[Claims 2, 3, 5 to 8, and 10 not printed in the Gazette.]

1,273,148. HEADLIGHT CONSTRUCTION. JAMES A. CARNEY, Aurora, Ill. Filed Jan. 31, 1917. Serial No. 145,735. (Cl. 240—44.)

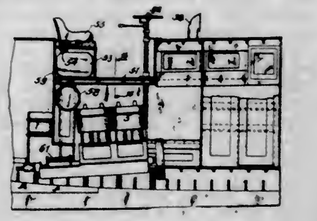


1. In combination, a reflector, a light element coacting therewith, a socket member carrying said light element and having a ball portion, and a clamping ring, the ball portion of said socket member being seated in said ring and being adjustable with said light element about a point or longitudinally with respect to said clamping ring.

3. In combination, a reflector, a light element coacting therewith, means carrying said light element, said means comprising a clamping ring, a second ring secured to said reflector, and a socket member having a ball portion seated in said first named ring and adjustable with said light element longitudinally in said ring.

[Claim 2 not printed in the Gazette.]

1,273,149. PLEASURE-CRUISER. IRWIN CHASE, Bayonne, N. J. Filed Feb. 15, 1915. Serial No. 8,184. (Cl. 114—78.)



1. In a cruiser, the combination of a main saloon forward, a stateroom aft, a flush bridge deck amidships, an engine under said bridge deck and controlled therefrom, and a gasolene supply for said engine located on said bridge deck.

4. In a cruiser, the combination of a main saloon forward, an engine room amidships, and a stateroom aft with a raised deck for said main saloon and a cabin trunk for said stateroom, and a flush bridge deck therebetween, of an engine under said bridge deck, and means for controlling said engine from said bridge deck, the raised deck of the main saloon extending aft far enough to afford head room at the forward part of the engine room.

5. In a cruiser of the character described, the combination of an engine room amidships, a deck house over the front end of the engine room to give head room therein, a stateroom aft, a cabin trunk for said state-

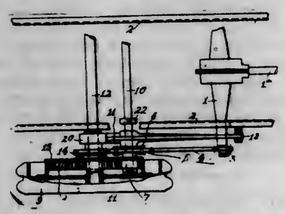
room, a flush bridge deck between said deck house and trunk, wardrobes and a bulk head between said engine room and said stateroom, means for controlling said engine from said bridge deck, and an offset in said bulk head to accommodate the rear end of the engine mechanism.

7. In a cruiser, the combination of a forward saloon, an engine room amidships, a companionway between said saloon and said engine room, a deck house over said companionway and the forward end of said engine room, a stateroom aft of said engine room, a cabin trunk for said stateroom, a flush bridge deck between said deck house and trunk, an engine in said engine room, and means mounted upon the bridge deck for controlling said engine and the cruiser.

11. In a cruiser, the combination of a compartment amidships, bulkhead separating said compartment from the forward and aft compartments of the cruiser, an engine in said compartment, a bridge deck over a portion of said compartment, a deck housing over the forward portion of said compartment forming a relatively high section therein, a removable hatch in said bridge deck, controlling apparatus for said engine mounted upon said bridge deck, and adjacent said deck housing, a fuel tank mounted on said bridge deck, and a supply connection between said tank and said engine.

[Claims 2, 3, 6, and 8 to 10 not printed in the Gazette.]

1,273,150. CHASSIS FOR CHAIN-DRIVEN MOTOR-VEHICLES. JAMES REGINALD CHURCHILL, Sheffield, England. Filed Jan. 4, 1916. Serial No. 70,238. (Cl. 180—72.)



1. A motor driven vehicle chassis having rear wheels and an axle therefor comprising in combination the Cardan shaft of the motor arranged longitudinally of the chassis, a transverse countershaft carried by the frame of the said chassis and adapted to be driven by said Cardan shaft, a second transverse shaft in spaced parallel relationship to the axle of the rear wheels, a torque member supporting said second transverse shaft, a chain sprocket and an interconnected gear pinion mounted upon the end of the second shaft, a toothed wheel on one of said wheels in gear with the aforesaid gear pinion, a chain pinion on the end of the countershaft and a chain between said chain pinion and in said chain sprocket on the end of the aforesaid second shaft, substantially as described.

4. A motor driven vehicle chassis having rear wheels and an axle therefor comprising in combination the Cardan shaft of the motor arranged longitudinally of the chassis, a transverse countershaft carried by the frame of the said chassis and adapted to be driven by said Cardan shaft, a second transverse shaft, means secured upon the rear axle supporting said second transverse shaft in spaced parallel relationship to the said wheel axle, an extension on said last named means, a universally jointed rod for securing the extension with said last named means to the frame of the chassis, a chain sprocket and an interconnected gear pinion mounted upon the end of the second shaft, a toothed wheel on one of said wheels in gear with the aforesaid gear pinion, a chain pinion on the end of the countershaft and a chain between said chain pinion and in said chain sprocket on the end of the aforesaid second shaft, substantially as described.

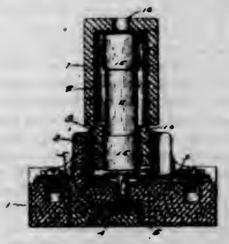
7. A motor driven vehicle chassis having rear wheels and an axle therefor comprising in combination the Cardan shaft of the motor arranged longitudinally of the chassis, a transverse countershaft carried by the frame of the said chassis and adapted to be driven by said Cardan shaft, a pair of alined transverse shafts in spaced relationship to the axle of the rear wheels, a chain sprocket and an interconnected gear pinion mounted upon each of the said shafts, a toothed wheel on one of the said rear wheels in gear with the aforesaid pinion, a chain pinion on each end of the countershaft, and a chain between each of said chain pinions and those on the end of the two alined shafts substantially as described.

8. A motor driven vehicle chassis comprising in combination the Cardan shaft of the motor arranged longitudinally of said chassis, a cranked rear axle, a transverse countershaft carried by the frame of the said chassis and adapted to be driven by said Cardan shaft, a pair of transverse shafts in spaced relationship to the said rear axle, a pair of members formed integrally with the said axle and carrying said pair of shafts, a chain sprocket and an interconnected gear pinion mounted upon each end of the two shafts, a toothed wheel on each of the rear road wheels in gear with the aforesaid gear pinion, a chain pinion on each end of the countershaft and a chain between each of said chain pinions and the sprocket wheels on the ends of the aforesaid shafts, substantially as described.

9. A motor driven vehicle chassis having rear wheels and an axle therefor comprising in combination the Cardan shaft of the motor arranged longitudinally of the chassis, a transverse countershaft carried by the frame of the said chassis and adapted to be driven by said Cardan shaft, a pair of transverse shafts in spaced relationship to the said rear axle, a pair of members secured upon said rear axle, and carrying said pair of shafts, an extension on said members by which they may be secured to the frame of the chassis, a chain sprocket and an interconnected gear pinion mounted upon each end of the two shafts, a toothed wheel on each of the rear road wheels in gear with the aforesaid gear pinions, a chain pinion on each end of the countershaft and a chain between each of said chain pinions and the sprocket wheels on the end of the aforesaid shafts, substantially as described.

[Claims 2, 3, 5, and 6 not printed in the Gazette.]

1,273,151. ELECTRICAL CUT-OUT. ROBERT C. COLE, Hartford, Conn., assignor to The Johns-Pratt Company, Hartford, Conn., a Corporation of Connecticut. Filed Oct. 3, 1917. Serial No. 194,467. (Cl. 175—273.)

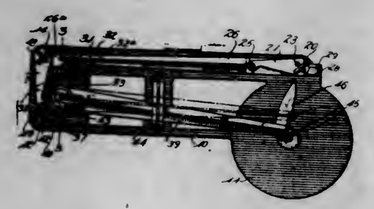


1. In a cut-out the combination of a threaded metallic shell, a metallic contact at an end of and connected with the shell, a threaded metallic socket for receiving the threaded shell, a metallic contact at an end of and insulated from the socket, an insulating tube fitting within the shell and having one end protruding therefrom, metallic washers loosely inserted in the ends of the tube, a fusible strip extending through the tube and having its ends bent over the outer faces of the washers, and metallic caps loosely fitted on the ends of the tube, said caps being held on said tube and caused to tightly clamp the bent ends of the fusible strip between the inner walls of the caps and the washers in the ends of the tube by the engagement with one cap of the contact at the end of the shell and by the engagement with the other cap of the contact at the end of the socket when the shell is screwed into the socket.

3. In a cut-out the combination of a screw socket, a screw plug adapted to be screwed into the socket, and a renewable fuse with loose end-caps, located between and having its parts held together by the socket and plug when the latter is screwed into the former.

[Claim 2 not printed in the Gazette.]

1,273,152. RANGE-FINDER. ABRAHAM B. COX, New York, N. Y. Filed Feb. 24, 1917. Serial No. 150,696. (Cl. 88—2.4.)



1. A range finder comprising a sight, a mirror partly clear and partly opaque in alinement with the sight, a second mirror arranged to cast a reflected image upon the first mirror, a lever supporting the second mirror, a swinging arm generally parallel with the lever, a flexible connection between the swinging arm and the lever, and a cam arm arranged to actuate the aforesaid swinging arm.

3. A range finder comprising a base, a sight thereon, a mirror partly opaque and partly clear alining with the sight, a lever lying flatwise on the base, said lever having a hinge at one end formed by a flat spring connecting the end of the lever with a support, a second mirror mounted on the lever and arranged to cast a reflected image upon the first mirror, a cam arm movable over a table on the base, and a connection between the cam arm and lever whereby the moving of the arm moves the lever.

5. A range finder having a fixed sight mirror, a lever arranged at essentially right angles to the sight line of the aforesaid mirror, a second mirror mounted on the lever and arranged to cast a reflected image upon the first mirror, a swinging arm having an eccentric connection with the aforesaid lever, a cam arm turning upon a table, and a sliding connection between the aforesaid arm and the cam arm.

6. A range finder comprising a sight mirror, a lever extending at generally right angles to the line of sight through the aforesaid mirror, a flat spring connected with one end of the lever and with a support and forming a hinge for the lever, a second mirror supported on the lever and arranged to reflect an image upon the first mirror, a spring to hold the lever under tension, a swinging arm having an eccentric connection with the lever, and a cam arm moving over a table and arranged to actuate the aforesaid arm.

8. A range finder comprising a flat base having one part formed into a table, a sight mirror partly clear and partly opaque at one end of the base, a lever lying flatwise upon the base, a second mirror supported on the lever and arranged to reflect an image upon the first mirror, a swinging arm lying generally parallel with the aforesaid lever, an eccentric connection between the swinging arm and the lever, said connection being by means of a flat spring, and a cam arm pivoted on the table and operatively connected with the said swinging arm to move it.

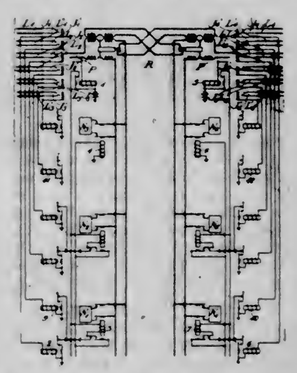
[Claims 2, 4, and 7 not printed in the Gazette.]

1,273,153. CIGAR-PROTECTOR AND ASH-RETAINER. BENJAMIN W. DEDRICK, State College, Pa. Filed Feb. 27, 1917. Serial No. 151,343. (Cl. 131—51.)



In a device of the character described, a cylindrical body tapered in one direction and having a perforated end and an opposite open end, ears cut and bent from the body at diametrically opposite points thereof to extend outwardly in spaced parallel relation to each other longitudinally of said body near the open end, opposed substantially semi-cylindrical clamping members disposed slightly beyond the open end of the body and normally in axial alinement with the wall of the latter, operating levers disposed longitudinally of the body and having intermediate pivot ears engaged between the ears on the body, pivots passed transversely through the ears on the body and levers for swingingly supporting the latter the levers beyond the open end of the body being fixed to the clamping members exteriorly thereof and at a medial point of the same, and coil tension springs surrounding the pivots between the ears and having their ends working against the levers and body.

1,273,154. RELAY SELECTING-CIRCUIT FOR ARTIFICIAL LINES. CHARLES S. DEMAREST, Flatbush, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed June 15, 1917. Serial No. 174,887. (Cl. 179—170.)



1. A plurality of transmission lines, a repeater for interconnecting said lines, a plurality of artificial lines associated with said repeater, one of said artificial lines being normally connected to said repeater, and means operating in response to the connection of said repeater to a transmission line to disconnect said artificial line and connect another artificial line to the repeater.

2. A plurality of transmission lines divided into groups, a repeater for interconnecting said lines, artificial lines associated with said repeater and corresponding to the various groups of transmission lines, the artificial line corresponding to one group being normally connected to the repeater so as to balance any line of that group when the repeater is associated therewith, and means responsive to the connection of the repeater to a line of another group to disconnect the normally connected artificial line from the repeater, and to connect an artificial line corresponding to said other group to the repeater.

3. A plurality of transmission lines divided into groups, a repeater for interconnecting said lines, artificial lines associated with the repeater and corresponding to the various groups of transmission lines, the artificial line

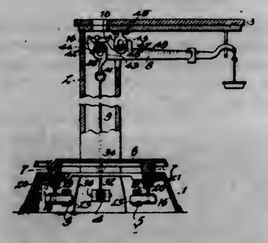
corresponding to one group being normally connected to the repeater so as to balance any line of that group when the repeater is associated therewith, and selecting relays responsive to the connection of the repeater to a line of another group to disconnect the normally connected artificial line from the repeater and to connect an artificial line corresponding to said other group to the repeater.

5. A telephone repeater, a plurality of artificial lines associated therewith, a relay normally connecting one of said artificial lines to the repeater, relays controlling the connection of each of the other artificial lines to the repeater, and means whereby when any one of the latter relays operates to connect an artificial line to the repeater said first relay operates to disconnect the corresponding artificial line from the repeater.

6. A plurality of transmission lines divided into groups, a repeater for interconnecting said lines, a plurality of artificial lines for said repeater, one of said lines being preselected to balance any line of one group when the repeater is associated therewith, and means to select another artificial line when the repeater is associated with a line in another group.

[Claim 4 not printed in the Gazette.]

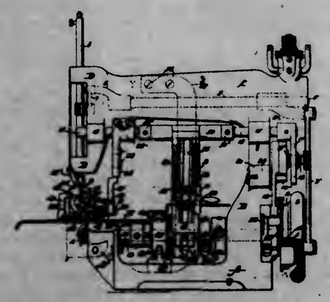
1,273,155. BEARING FOR SCALES. GEORGE C. DEVITT. Buffalo, N. Y., assignor to Buffalo Scale Company, Buffalo, N. Y., a Corporation of New York. Filed July 24, 1916. Serial No. 110,899. (Cl. 74—104.)



1. A bearing for scales comprising a supporting head provided with a slot, a bearing plate having its center provided on one side with a bearing face and resting on its opposite side against the end of said slot and provided at its opposite ends with notches into which the adjacent sides of the head project and stops projecting laterally from said head in front of said bearing plate and operating to hold the latter in said head.

[Claims 2 and 3 not printed in the Gazette.]

1,273,156. RUFFLING MECHANISM FOR SEWING-MACHINES. ALBERT H. DE VOE, Westfield, N. J., assignor to The Singer Manufacturing Company, a Corporation of New Jersey. Filed Sept. 2, 1915. Serial No. 48,595. (Cl. 112—16.)



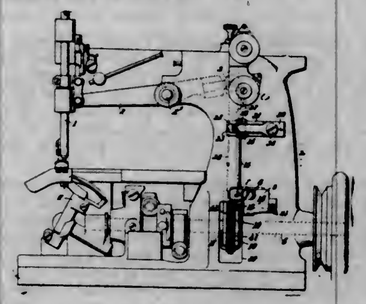
1. In a sewing machine, the combination with stitch-forming mechanism, of a ruffler-blade, means for imparting endwise reciprocatory movements in a fixed direction to said blade, and means for moving the said blade bodily laterally to lay the ruffles in different positions relatively to the line of stitching.

2. In a sewing machine, in combination, stitch-forming mechanism including a reciprocating needle, feeding mechanism, a ruffler-blade having an active fabric-engaging edge-portion, and means for maintaining said edge-portion in fixed angular relation to the line of feed while reciprocating said blade endwise and moving it laterally to lay the ruffles in different positions relatively to the line of stitching.

8. In ruffling devices for sewing machines, the combination with a supporting bracket formed with a guideway, of a ruffler-blade, a carrier for said ruffler-blade having a member slidably mounted in the bracket-guideway and formed with horizontally-disposed spaced plates and a vertical guide-wall, a second ruffler-blade and a carrier therefor interposed between the said carrier-plates and having a vertical guide-wall, means for relatively adjusting the said carriers, and means for reciprocating the said carriers.

[Claims 3 to 7 and 9 not printed in the Gazette.]

1,273,157. LOWER-THREAD CONTROL FOR CHAIN-STITCH MACHINES. ALBERT H. DE VOE, Westfield, N. J., assignor to The Singer Manufacturing Company, a Corporation of New Jersey. Filed Aug. 12, 1916. Serial No. 114,503. (Cl. 112—26.)



1. In a sewing machine, the combination of a main-shaft, means for taking up and giving up thread, means for intermittently gripping the thread, and a common member movable bodily lengthwise for actuating each of said means.

4. In a lower-thread control, an incisioned plate, slotted take-up arms on opposite sides thereof, actuating means for the arms and guiding eyelets on opposite sides of said slotted take-up arms whereby the thread may be bent thrice during the taking up action.

13. In a lower thread control for chain-stitch machines, the combination with stitching mechanism and actuating mechanism therefor including a pivoted needle-lever, a pitman connected thereto and a driving eccentric pivotally supporting said pitman, of take-up arms secured to said pitman adjacent said eccentric, and means for preventing the pitman from rocking appreciably about its own longitudinal axis to confine the movement of the take-up arms to a fixed path.

[Claims 2, 3, 5 to 12, and 14 not printed in the Gazette.]

1,273,158. HEAT-COIL PROTECTIVE DEVICE FOR ELECTRIC CIRCUITS. LEWIS E. DICKINSON, Boonton, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Continuation of application Serial No. 49,228, filed Sept. 17, 1915. This application filed July 14, 1917. Serial No. 180,607. (Cl. 175—275.)

1. A protective device for telephone circuits comprising a metal sleeve, a pin passing through said sleeve to which it is secured by a heat softenable material, and a heating element composed of an alloy containing more than 50% nickel surrounding a portion of said sleeve.

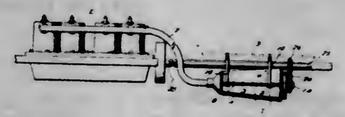


3. A protective device for telephone circuits comprising a metal sleeve, a pin passing through said sleeve to which it is secured by a heat softenable material, and a heating element surrounding a portion of said sleeve and composed of a nickel alloy having a positive temperature coefficient of more than .0018 per degree centigrade adapted to be connected in the circuit.

4. A protective device for telephone circuits comprising a metal sleeve, a pin passing through said sleeve to which it is secured by a heat softenable material, and a heating element surrounding a portion of said sleeve and composed of a material having a positive temperature coefficient of more than .0018 per degree centigrade and a specific resistance of more than ten microhms per centimeter cube at zero degrees centigrade adapted to be connected in the circuit.

[Claim 2 not printed in the Gazette.]

1,273,159. MUFFLER. ALFRED R. DORROH, Washington, D. C. Filed Oct. 3, 1917. Serial No. 194,537. (Cl. 123—178.)



1. The combination with a motor, of a chamber for receiving therefrom and expelling exhaust fluid, and means associated with said chamber for directly acting upon and moving air adjacent thereto, independently of the action of the exhaust fluid.

2. The combination with a motor, of a chamber for receiving therefrom and expelling exhaust fluid, and an air propeller associated with said chamber for directly acting upon and moving air adjacent thereto, independently of the action of the exhaust fluid.

3. The combination with a motor, of a chamber for receiving therefrom and expelling exhaust fluid, a fan within said chamber, and means associated with said chamber for directly acting upon and moving air adjacent thereto, independently of the action of the exhaust fluid.

[Claims 4 to 21 not printed in the Gazette.]

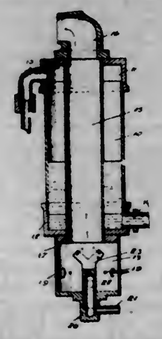
1,273,160. BUTTON. WILLIAM E. EDWARDS, Brooklyn, N. Y. Filed June 11, 1917. Serial No. 174,018. (Cl. 24—101.)



1. A button comprising a sheet metal back and a post integrally formed from the material of said back, and a front attached to the top of said post, said post comprising a pair of thin flat members in the same plane at right angles to the plane of said back, and symmetrically disposed on opposite sides of the center thereof, the tops of said members being disconnected from each other and adapted for the attachment of the button front.

[Claims 2 and 3 not printed in the Gazette.]

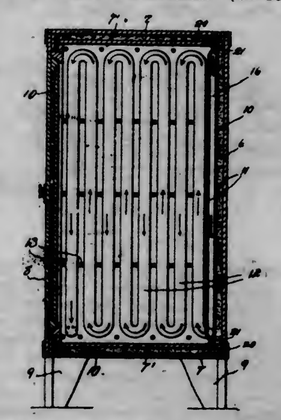
1,273,161. WATER-HEATER. WILLIAM H. EDWARDS, Des Moines, Iowa, assignor of one-half to George H. Neiswanger, Lorimor, Iowa. Filed July 12, 1917. Serial No. 180,234. (Cl. 122—156.)



1. A water heater comprising a tubular body, upper and lower caps for the body, the lower cap being provided with a water inlet and the upper cap with a water outlet, a heater tube passing through the body with its upper and lower end portions threaded into openings in the caps and extending beneath the lower cap, a collar threaded upon the lower end of the heater tube beneath the lower cap, a burner housing threaded upon the collar and provided with a fuel inlet, and a burner in the burner housing communicating with the fuel inlet.

2. A water heater comprising a hollow body having a closed upper end and a closed lower end and provided with a water inlet adjacent the lower end and a water outlet adjacent the upper end, a heater tube passing through the body and extending beneath the lower end thereof, a collar upon the lower end of the heater tube, a burner housing connected with the collar to inclose the lower end of the tube and provided with a fuel inlet, and a burner in the burner housing communicating with the fuel inlet.

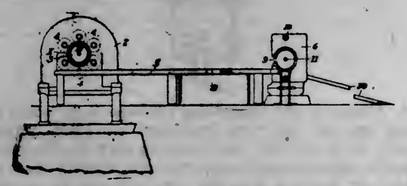
1,273,162. COOLING-COIL FOR REFRIGERATOR-BOXES. WILHELM EHMKE, Milwaukee, Wis. Filed May 3, 1917. Serial No. 166,261. (Cl. 257—21.)



In a refrigerator having the side wall provided with a layer of finely divided non-heat conducting material, composite top and bottom sections fitted thereto, the inner face of said sections each having a groove paralleling the side wall and spaced therefrom a distance equal to the thickness of the layer of said material, the combination of a metallic lining unit for the refrigerator side wall comprising a sheet formed from a pair of unbroken plates,

the same being complementarily stamped to provide longitudinally disposed channels communicating at their upper and lower ends to form a continuous passage-way, said lining being longitudinally bent at intervals between said channels to conform to the contour of the refrigerator side wall, the top and bottom edges of the plates forming the lining being brought together to constitute seam beads for disposition in said grooves of the top and bottom sections to secure said nonheat conducting material in position and to hold said lining in spaced relation to the side wall.

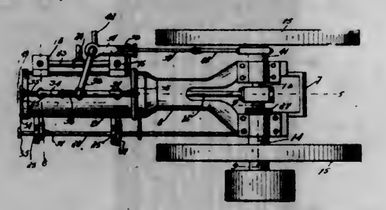
1,273,163. MANDREL-STRIPPING MACHINE. FRANK I. ELLIS, Pittsburgh, Pa., assignor of one-half to United Engineering & Foundry Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Nov. 26, 1917. Serial No. 203,922. (Cl. 29—86.)



1. Apparatus for use in the manufacture of pipe-couplings, comprising a machine for forming a pipe-coupling around a mandrel, a roll-way extending from one end of said machine and in position to receive the mandrel and the coupling thereon when they are removed from the forming machine, a die-block mounted adjacent to said roll-way at one side thereof and having a die portion formed with a seat for the end of the coupling, said die block and die having a radial opening in one side facing in the direction of the length of the roll-way and adapted to receive the mandrel shaft or handle, and a stripping plunger arranged to engage the end of the mandrel and to co-act with said die portion in forcing the mandrel out of the coupling; substantially as described.

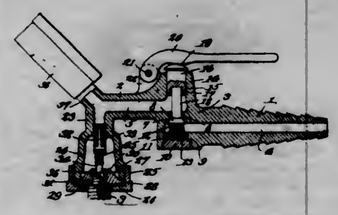
[Claims 2 and 3 not printed in the Gazette.]

1,273,164. EXPLOSIVE-ENGINE. WADE H. EMRICK, Windy, W. Va. Filed Jan. 11, 1913, Serial No. 741,559. Renewed Dec. 22, 1917. Serial No. 208,529. (Cl. 123—98.)



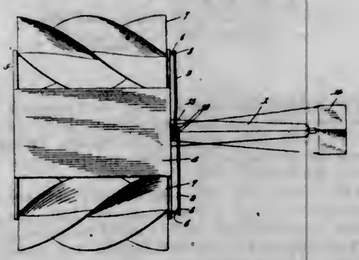
In an explosive engine, the combination with a cylinder having inlet and exhaust ports respectively formed in either end thereof, of a crank shaft, a piston slidable in the cylinder and operatively connected to said shaft, spring actuated valves including valve stems normally closing the exhaust ports, rock levers each fulcrumed on the cylinder and having one end engaged with a respective valve stem, means actuated by the crank shaft for alternately actuating said levers to unseat the valves, means engageable with said levers for locking either valve opening, said means consisting of a T-shaped lever comprising a leg and oppositely extending arms, the leg being fulcrumed upon the cylinder intermediate its ends and the arms being disposed in operative proximity to the levers, and means carried by the lever and engageable with the cylinder for locking said lever in its intermediate or either of its adjusted positions.

1,273,165. AIR-GAGE DEVICE. GEORGE H. ERICH, Minneapolis, and DAVID S. MILNE, Fairmont, Minn. Filed Sept. 24, 1917. Serial No. 193,004. (Cl. 152—11.)



A device of the class described, comprising a body provided at one end with a neck merging into a bell-shaped head; a gage at said end of the body; a valve disposed between the ends of the body and under the control of an operator to regulate the passage of fluid through the body; a gasket attached to the mouth of the head and having an opening; a stud threaded for adjustment into the neck and projecting into the head, the stud having a passage establishing communication between the interior of the neck and the interior of the head; a plunger projecting into the opening in the gasket; and a compression spring interposed between the plunger and the stud.

1,273,166. AEROPLANE. LOUIS W. ERWAY, Hastings, Mich. Filed Oct. 6, 1917. Serial No. 195,116. (Cl. 244—25.)

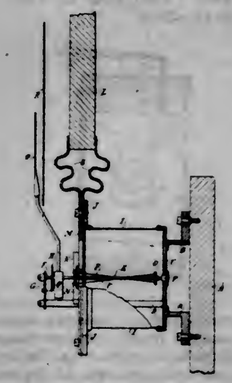


An airship including a sustaining plane, a propelling screw extending under and upwardly and outwardly beyond each side of the sustaining plane, and means for simultaneously rotating the screws at opposite sides of the sustaining plane in opposite directions respectively, said screws having a plurality of broad blades constituting means for displacing air laterally from above the sustaining plane, inwardly under the sustaining plane and downwardly.

1,173,167. MEASURING INSTRUMENT. HARRY ALEXANDER EWEN, London, England, assignor to Marconi Wireless Telegraph Company of America, New York, N. Y., a Corporation of New Jersey. Filed June 28, 1917. Serial No. 177,516. (Cl. 171—308.)

1. In a measuring instrument, the combination with a support, of means fixed to said support forming a bearing, a spindle arranged to thrust against said bearing, means for normally urging said spindle in one direction about its axis, and means for overcoming the action of said first mentioned means, comprising a member constructed to expand parallel to the axis of said spindle upon the passage of current through the connections between said member and said spindle symmetrical with respect to the axis of said spindle, the position of said bearing being unaffected by the passage of the current.

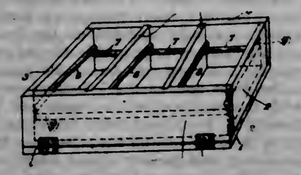
2. In a device of the class described, in combination a fixed support, a bearing carried by said support, means providing a bearing at a fixed distance from said first-mentioned bearing, a spindle supported by said bearings and arranged to thrust against said second mentioned bearing, a member constructed to expand upon the passage of current therethrough and arranged parallel to the axis of said spindle, one end of said member being secured to said support and the other end thereof being free to move, a filament connection between said member and spindle for turning said spindle in one direction upon the expansion of said member, said connection being symmetrical with respect to the longitudinal axis of said spindle, and means for resisting the turning movement of said connection.



3. In a measuring instrument, the combination of a spindle capable of rotational movement but not of movement parallel to its axis, a cylinder surrounding said spindle and formed of conducting material and having one end fixed in relation to the spindle, an arm upon the spindle, a filament stretched between the arm and the free end of the cylinder, means for applying to the spindle a controlling force and means for indicating the movement of the spindle.

4. In an electrical measuring instrument, the combination of an inexpansible frame, a cylinder formed of expansible metal and having one end secured to the frame, a spindle journaled in the frame, a ring formed of inexpansible material and carried by the free end of the cylinder, a cross piece on the spindle, a pair of wires having the same linear co-efficient of expansion as the metal of which the cylinder is formed and stretched between the cross piece and the ring, a spring connecting the spindle to the frame and an indicating arm fast on the spindle.

1,273,168. FORM FOR BUILDING SILO-BLOCKS. RAYMOND M. FERGUSON, Grand Rapids, Mich., assignor of one-half to Daisy Laughray, Grand Rapids, Mich. Filed Sept. 7, 1917. Serial No. 190,198. (Cl. 25—121.)



1. A form for use in making blocks of cementitious material comprising a base and upstanding ends, sides hingedly attached to the side edges of the base, a bar having a curved surface fixed in horizontal position to the inner side of each of said hinged sides, and bars loosely positioned against the inner sides of the ends of the form and resting at their ends on the bars attached to the sides of said form, substantially as and for the purpose described.

4. A form for use in making blocks of cementitious material comprising a base, side members hinged at their lower edges to and adapted to project above the base or be dropped to positions below the base, end members projecting upwardly at the ends of the base, a plurality of division members paralleling the end members and detachably interposed between the side members in spaced apart relation, thereby making a plurality of material receiving compartments, a plate having a convex upper surface located in the lower portion of and lengthwise of each compartment, the middle portion of said plates being at the highest level and thence curving downwardly to each end of said plates, a bar having a rounded outer surface attached to the inner side of each of said side members in each compartment at a point slightly half-way below the upper edges of the side members, and additional bars curved to substantially parallel the upper surface of said plates loosely disposed along each side of each division member and on the inner side of each of the end members at points substantially half-way below the upper edges of said division and end members, said last mentioned bars resting at their ends on the ends of the first mentioned bars attached to the side members of the form.

[Claims 2 and 3 not printed in the Gazette.]

1,273,169. SASH-FASTENER. EMMETT FISHER, Quincy, Ill. Filed July 5, 1917. Serial No. 178,744. (Cl. 16—18.)

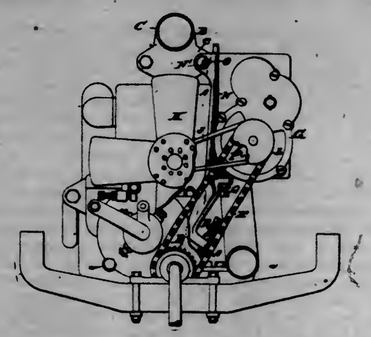


A window sash fastener comprising a rack bar adapted to be mounted upon the window frame and having ratchet teeth, a supporting member adapted to be mounted upon a sash and coact with the rack bar and comprising confronting plates, a dog pivoted between said plates, the dog being approximately semi-circular in form and having a detent tongue, a screw constituting the pivot of the dog and disposed through the dog adjacent the base of the tongue whereby to cause the dog to swing by gravity to carry its detent tongue inward into engagement with the teeth, said screw passing through both of said plates, that portion of the semi-circular dog diametrically opposite from the detent tongue extending laterally beyond said plates to thereby provide a curved surface with which the finger may contact to thereby shift the dog to a released position.

1,273,170. MEANS FOR SUPPORTING ELECTRIC LIGHTING AND STARTING UNITS. FRANK E. FISHER, Detroit, Mich. Filed June 15, 1916. Serial No. 103,856. (Cl. 123—179.)

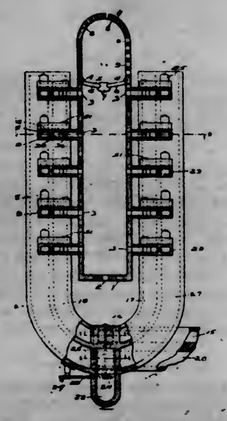
1. Means for attaching an electric starting unit to the frame of an internal combustion engine, the same consisting of a supporting member having means for mounting a starting unit adjustable on its upper portion and provided also at the top with attaching means for securing it to the frame of an engine, said member being provided intermediate of its ends with an adjusting screw located below the starting unit in position for adjusting the same, the lower portion of the said member being extended downwardly and inwardly and provided at the lower end with an adjusting screw arranged to rest upon the lower part of the frame of the engine to prevent the said member from swinging and to hold

the same and the starting unit in rigid relation with the engine frame.



2. In combination with an engine frame and starter unit, a device of the character described, comprising a supporting bracket having a plurality of slotted ways for the passage of bolts to secure the starter to the bracket, an adjustable screw carried by the bracket for shifting the position of the starter unit with reference to the slotted ways of the bracket, lugs integral with the bracket having a bolt opening registerable with bolt openings in the engine frame, whereby the bracket may be secured thereto without alteration of the frame, and an adjustable bolt carried by the bracket adapted to co-act in rigidly securing the bracket to the engine frame.

1,273,171. GAS AND AIR MIXER FOR GLASS-FURNACES. EMILE MAJOT, Maumee, Ohio. Filed Aug. 28, 1917. Serial No. 188,627. (Cl. 158—7.5.)

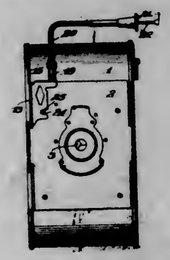


1. In a glass melting furnace, the combination of a mixer and a heating means, the mixer having two passageways having outlets located in a vertical plane, means for conducting air through the heating means and the upper of the two passageways, and means for conducting producer gas to the lower of the two passageways, the mixer having a third passageway having an outlet located in a horizontal plane and in proximity to the lower of the outlets of the first named passageways, and means for conducting air from the heating means through the third named passageway.

2. In a glass melting furnace, the combination of a mixer and a heating means, the mixer having two passageways having outlets located in a vertical plane, means for conducting air through the heating means and the upper of the two passageways, and means for conducting producer gas to the lower of the two passageways, the mixer having a third passageway having an outlet located in a horizontal plane and in proximity to the lower of the outlets of the first named passageways, means for conducting air from the heating means through the third named passageway, and a shutter for regulating the flow of air through the third named passageway.

[Claims 3 to 5 not printed in the Gazette.]

1,273,172. DETACHABLE SHUTTER-RELEASING DEVICE. PAUL J. MARKS, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed June 21, 1917. Serial No. 176,220. (Cl. 95—53.)



1. In a detachable shutter releasing device, the combination with a camera front, a shutter mounted thereon and a shutter operating member, of a clip detachably engaged with and embracing an edge of the front and two relatively longitudinally movable flexible actuating members, one of which is inextensible and the other incompressible, one of said members being adapted to move against the operating member while the other is adapted to react against the clip.

2. In a detachable shutter releasing device, the combination with a camera front, a shutter mounted thereon and a shutter operating member, of a substantially L-shaped clip detachably engaged over a corner of the front and two relatively longitudinally movable flexible actuating members, one of which is inextensible and the other of which is incompressible, one of said members being adapted to move against the operating member while the other is adapted to react against the clip.

3. In a detachable shutter releasing device, the combination with a shutter support and a shutter operating member thereon, of a clip detachably engaging the support, two relatively longitudinally movable flexible actuating members, one of which is inextensible and the other of which is incompressible, one of said members being adapted to move against the operating member while the other is adapted to react against the clip, and interlocking devices on the clip and support, said devices being moved into engagement as the clip is applied in a direction transverse to the direction of relative movement of the actuating members.

4. In a detachable shutter releasing device, the combination with a camera front having an abutment on one face thereof, a shutter mounted on the front and a shutter operating member on the other face of the latter, of a substantially L-shaped clip detachably engaged over a corner of the front and having a locking shoulder cooperating with the abutment on the latter and two relatively longitudinally movable flexible actuating members one of which is inextensible and the other of which is incompressible, one of said members being adapted to move against the operating member while the other is adapted to react against the clip in a direction transverse to the direction in which the said shoulder and locking abutment engage.

5. A detachable shutter releasing device comprising a substantially L-shaped clip adapted to embrace one corner of a camera front and coöperate with the edges thereof, one arm of the clip being provided with a locking shoulder and the other with a flange, and two relatively longitudinally movable flexible actuating members, one of which is inextensible and the other of which is incompressible, one of said members being adapted to move against a shutter operating member while the other is attached to and adapted to react against the flange of the clip in a direction transverse to the locking shoulder.

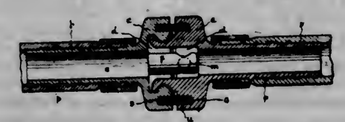
1,273,173. VAPOR-BURNER. EDWIN G. MUMMERY, Detroit, Mich. Filed Feb. 16, 1918. Serial No. 217,645. (Cl. 158—86.)



1. A vapor burner, comprising a base-ring having an upward foraminous extension, a detachable foraminous wall complementary to said upward extension, a coöperating foraminous wall rising from said base-ring to form an annular burner tube, and a lighter depending from said complementary foraminous wall, normally arranged in said base-ring and adapted to be lifted with the wall to which it is attached.

[Claims 2 to 8 not printed in the Gazette.]

1,273,174. PIPE-COUPLING. ROBERT J. NOAKES, Montreal, Quebec, Canada, assignor of one-half to George James Sheppard, Montreal, Canada. Filed Dec. 13, 1917. Serial No. 207,013. (Cl. 285—175.)

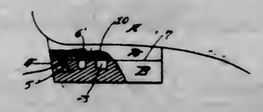


1. A hose or pipe coupling comprising a pair of members each consisting of an integral head and shank axially bored throughout their length, each head being of relatively large diameter, lugs and teats formed integrally with said head, the lugs having their outer faces coinciding with the wall of the chamber and having sockets each with an opening at one side to receive the teats of the other member, the diameter of the space between the lugs being greater than the diameter of the shank of each member; the face of each member having a concentric groove and a gasket seated therein.

2. A coupling for flexible pipes comprising a pair of members each consisting of a unitary integral head and shank axially bored throughout their length, each head being of relatively large diameter and having its bore of increased diameter to present a chamber, a pair of lugs formed integrally with each head and located at diametrically opposite points and a pair of teats formed integrally with each head and diametrically oppositely disposed in a plane at right-angles to the plane in which the lugs are located, the lugs having their outer faces coinciding with the wall of the chamber and having sockets each with an opening at one side to receive the teats of the other member, the diameter of the space between the lugs being greater than the diameter of the bore of the shank; the face of each member having a concentric groove and a gasket seated therein.

3. A coupling for flexible pipes comprising a pair of members each consisting of an integral head and shank axially bored throughout their length, each head being of relatively large diameter and having its bore of increased diameter to present a chamber, lugs and teats formed integrally with the said head, the lugs having their outer faces co-inciding with the wall of the chamber and having sockets each with an opening at one side to receive the teats of the other member, the diameter of the space between the lugs being greater than the diameter of the bore of the shank of each member, the edge of the said side opening into the socket in each lug being inclined; the face of each member having a concentric groove and a gasket seated therein.

1,273,175. RESILIENT SHOE-HEEL. FRANCIS A. NOLAN, St. Paul, Minn. Original application filed Nov. 26, 1915, Serial No. 63,353. Divided and this application filed Oct. 11, 1916. Serial No. 124,988. (Cl. 36—35.)



An elastic-heel having a lower tread surface and an upper side, said upper side being formed with a deep chamber surrounded by a laterally extending continuous surface portion and with an approximately cylindrical column of small diameter and terminating in the plane of the edge of said chamber to remain normally uncompressed, whereby a portion of the load of a person standing upon the heel is immediately carried by the column directly to the tread surface of the heel tending to produce a small sharply defined friction zone on the tread surface.

1,273,176. ROWING-BOAT. CHARLES J. OLSEN, New York, N. Y. Filed Dec. 4, 1916. Serial No. 134,907. (Cl. 115—30.)



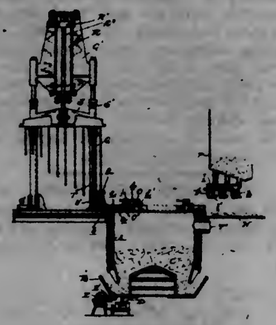
1. In a rowing boat, a hull, two sleeves one pivoted to opposite parts of the sides of the hull so as to be swung backwardly and forwardly, two oars one rotatable in each sleeve and movable with the sleeve, an operating bar, two eccentrics one pivoted to each end of the bar, and both eccentrics being adjustably connected to the oars whereby the oars when the bar is moved backwardly will be partially rotated to cause their blades to simultaneously cut the water and when the bar is moved forwardly the oars will be reversely rotated to take the pressure of the water, and means on the eccentrics whereby the oars may be adjustably arranged to cause the boat to be rowed backwardly.

[Claim 2 not printed in the Gazette.]

1,273,177. CHARGING AND POKING MECHANISM FOR GAS-PRODUCERS. MICHAEL J. OWENS, Toledo, Ohio, assignor to The Toledo Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Nov. 5, 1914. Serial No. 870,375. (Cl. 48—86.)

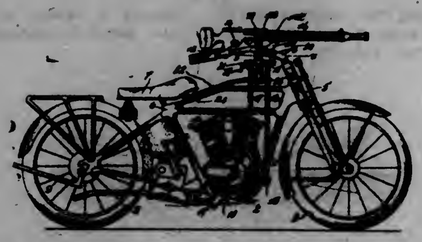
1. The combination of a gas producer furnace having an open top, a reciprocating cover-plate therefor, a series

of pockets in the plate, arranged to distribute coal uniformly over the grate surface, slides at the top and bottom of each pocket, and a complementary series of discharge chutes, arranged over the removed position of the cover, substantially as described.



2. The combination of a gas producer furnace having an open top, a reciprocating cover-plate therefor, a series of coal pockets on one end of the plate, arranged to distribute coal uniformly over the grate area, a series of guide tubes on the other half of the plate, a series of reciprocating pokers in said guide tubes, means for reciprocating the pokers, said pokers being arranged to effect the poking over the entire grate area.

1,273,178. MOUNTING FOR RAPID-FIRE GUNS AND THE LIKE. ORIN F. PERRY and ORIN F. PERRY, Jr., New York, N. Y. Filed Aug. 9, 1916. Serial No. 113,953. (Cl. 89—40.)

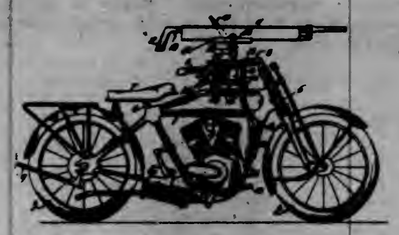


1. The combination with a two wheel cycle having a foot-rest at each side thereof, of a mounting, carried by said foot-rests, for supporting a rapid fire gun or the like.

7. The combination with a two-wheel cycle, comprising a frame having a steering head at the front part thereof and a seat support at the rear part thereof, and foot-rests at each side of the lower portion thereof, of a mounting for supporting a rapid fire gun or the like and located adjacent the head thereof, comprising upper and lower horizontal members and four vertical struts extending downwardly therefrom and connected with the foot rests of said cycle, a rearwardly inclined recoil brace connected with said cycle frame adjacent the seat support, a tubular bearing socket supported between the upper and lower members of said mounting, a vertical stem swivelly mounted in said socket bearing, a lever operated clamping device for holding said vertical stem in different adjustments, a bracket attached to said gun and pivotally mounted on said stem for swinging on a horizontal axis, a lever operated clamping device for holding said bracket in different angular positions, said vertical stem having circular rack teeth thereon, an operating pinion mounted for engaging said rack teeth, and a worm drive comprising a hand crank for operating said pinion, and a casing inclosing said operating pinion and said worm drive.

[Claims 2 to 6 not printed in the Gazette.]

1,273,179. MOUNTING FOR MACHINE-GUNS AND THE LIKE. ORIN F. PERRY and ORIN F. PERRY, Jr., New York, N. Y. Filed Feb. 2, 1917. Serial No. 146,087. (Cl. 89—40.)



5. The combination, with a two-wheel cycle, of a mounting for supporting a machine gun or the like upon the cycle frame, and front and rear supporting means for said mounting, straddling and connected with said frame at two points, one in advance of the other.

16. The combination with a two-wheel cycle, of a mounting for supporting a machine gun or the like, comprising a supporting stem swiveled on a vertical axis and having rack teeth thereon, and an operating means for engaging said rack teeth to elevate and lower said stem.

21. The combination with a two-wheel cycle, of a mounting for supporting a machine gun or the like, comprising a supporting stem swiveled on a vertical axis, a lever operated clamping device to hold said stem in different positions, circular rack teeth on said swiveled stem, an operating pinion engaging said rack teeth, and a worm drive comprising a hand crank for operating said pinion, a supporting bracket attached to said gun and pivoted on said stem to swing on a horizontal axis, and a lever operated clamp to hold said bracket in different angular adjustments.

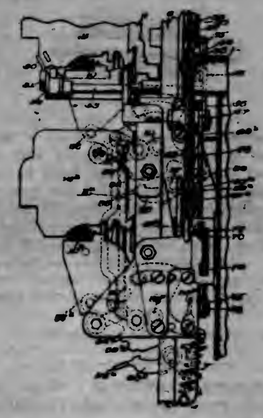
[Claims 1 to 4, 6 to 15, and 17 to 20 not printed in the Gazette.]

1,273,180. CALCULATING-MACHINE. ARTHUR F. POOLE, Chicago, Ill., assignor, by mesne assignments, to The Wahl Company, Wilmington, Del., a Corporation of Delaware. Filed July 12, 1912. Serial No. 709,010. (Cl. 235—59.)

1. In a calculating machine the combination of, a totalizer, a totalizer actuating mechanism, a change gear device determining the action of said actuating mechanism on said totalizer, and a floating lever determining the position of said change gear device.

2. In a calculating machine the combination of, a set of numeral keys, a totaliser, a conditioning part movable into one of three positions, in the first of which it determines that the action of the keys shall produce addition in the totaliser, in another that the action of the keys shall produce subtraction in the totalizer, and in the third that the action of the keys shall have no effect on the totaliser, a handle normally occupying one position and adapted to be manually located in another position, said handle in its second position bringing said conditioning part into the reversing position of the one previously occupied thereby, and means effective to move said conditioning part independently of the position of said handle.

14. In a calculating machine, the combination of a master mechanism, a handle to condition said master mechanism, (1) to add, (2) to subtract, (3) or not to calculate, a second master mechanism, a handle therefor to condition the second master mechanism (1) to add, (2) to subtract, (3) or not to calculate, a floating lever connected to each of said conditioning handles, and a reversing handle operative on both of said floating levers whereby the condition of both master mechanisms may be simultaneously reversed without disturbing the setting of the two previously recited handles.

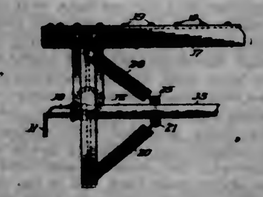


21. In a calculating machine the combination of: 1, a totaliser; 2, cam mechanism for conditioning the same to add, subtract or to not calculate; 3, manual settable mechanism for conditioning the totaliser to add, subtract or to not calculate; 4, a conditioning governing device to determine which of the two conditioning devices 2 and 3, shall temporarily condition the totaliser; 5, a reversing mechanism normally occupying one position and placeable to a reversing position to thereby reverse the totaliser; the reversing of the totalizer thus always taking place upon the movement of the reversing mechanism, independently of the position of the first conditioning mechanism and of the second conditioning mechanism and of the conditioning governing mechanism.

29. In a calculating machine, the combination of, a totaliser, a totaliser actuating mechanism, a change gear device determining the action of said actuating mechanism on said totaliser, a floating lever determining the position of said change gear device, a handle operative on one point of said floating lever, a cam controlled device operative on said floating lever, a handle whereby it may be determined whether said first recited handle or said cam controlled device operates on said floating lever, and a second handle controlling the position of another point in said floating lever.

[Claims 3 to 12, 15 to 20, 22 to 28, 30, and 31 not printed in the Gazette.]

1,273,181. BED-SPRING CONSTRUCTION. GEORGE G. POWERS, Chicago, Ill., assignor to Union Wire Mattress Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 10, 1916. Serial No. 71,197. (Cl. 5—63.)



1. In a construction of the character described, the combination of a mattress-frame, supporting means adapted to rest on a bedstead-frame, yielding means supporting such mattress-frame from said supporting-means, and supplemental centralising yielding means connecting said mattress-frame and supporting-means, substantially as described.

12. In a construction of the character described, the combination of a mattress-frame, supporting means adapted to rest on a bedstead frame, a mattress-frame supporting-spring at each corner of the mattress-frame connected at its upper end to said supporting-means and at its lower end to said mattress-frame, each of said springs being downwardly inclined inwardly longitudinally of the mattress-frame and downwardly inclined outwardly transversely of the mattress-frame, and restraining means acting on the mattress-frame, substantially as described.

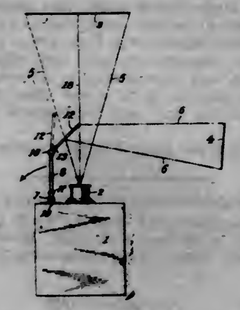
[Claims 2 to 11 not printed in the Gazette.]

1,273,182. ATTACHMENT FOR HULLER-GINS. WILLIAM MATHEW PRICHARD, Cooledge, Tex. Filed Feb. 12, 1918. Serial No. 216,712. (Cl. 13—9.)



In a huller gin, in combination with the roll box, the saws, the ribs and a picker roll, of a revoluble shaft with spiral grooves having pins mounted on the ridges between the grooves at right angles to the periphery of the shaft, said shaft arranged adjacent to the saws and between the roll box and picker roll and said pins presenting their points to the saws during the rotation of said shaft.

1,273,183. CAMERA. JAMES W. RAMSAY, Brooklyn, N. Y. Filed May 26, 1917. Serial No. 171,099. (Cl. 95—11.)



1. A photographic camera provided with a mirror pivotally supported at one side of the axis of the lens and adapted to be moved into and out of the normal field of the lens.

2. A photographic camera provided with means for the detachable support of a mirror which is pivotally supported at one side of the axis of the lens and adapted to be moved into and out of the normal field of the lens.

3. A photographic camera provided with means for the support of a mirror at one side of the axis of the lens and adapted to be moved into and out of the normal field of the lens, and means to lock the mirror in any desired position.

4. A photographic camera provided with a frameless mirror pivotally supported at one side of the axis of the lens and adapted to be moved into and out of the normal field of the lens.

1,273,184. ABRASIVE TOOL. LEO RAMSON, Leonia, N. J. Filed Mar. 2, 1917. Serial No. 151,878. Renewed June 8, 1918. Serial No. 239,042. (Cl. 29—79.)

1. An abrasive hand tool comprising a holder, a plurality of abrasive elements carried by said holder, means for adjusting said element vertically relative to each other to

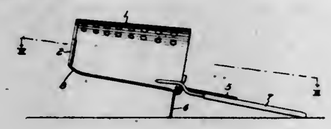
vary the contour of said tool from concave to convex and a handle for said tool.



14. In a tool of the class described, the combination with a holder provided with off set pins at its respective ends, and with side lugs intermediate its ends, of a plurality of substantially parallel abrasive elements carried by said pins to extend substantially the length of said holder, the outer of said plurality of elements abutting against said lugs, and removable bolts provided with a thumb nut for clamping said elements against said lugs, and means carried by said bolts for varying the space between said elements.

[Claims 2 to 13 not printed in the Gazette.]

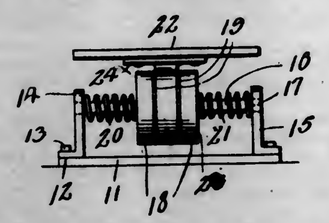
1,273,185. ANIMAL-TRAP. VALDEMAR F. REICH, Pittsburgh, Pa. Filed Oct. 27, 1917. Serial No. 198,785. (Cl. 43—19.)



1. An animal trap comprising a cage provided with an entrance, a counterweight connected to said cage, a foot pivoted in a position between the centers of gravity of said cage and counterweight and coöperating with said counterweight to hold said cage in an elevated position projecting beyond said foot, and a door for said cage entrance connected to said foot, said door being open when the cage is supported in elevated position by said foot and adapted to be closed when the weight of an animal entering said cage overbalances said counterweight.

[Claims 2 to 5 not printed in the Gazette.]

1,273,186. FOOT-OPERATING DEVICE. BYRON N. RUSSELL and THOMAS V. SMITH, Weed, Cal., assignors of one-third to Walter A. Russell, Weed, Cal. Filed Feb. 11, 1916. Serial No. 77,770. (Cl. 74—81.)

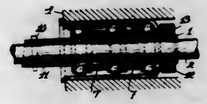


1. A device of the class described embodying a support, a connecting bolt, and a member movably mounted upon said bolt, said member comprising a shank of substantially circular configuration formed with supporting arms projecting in opposite directions from and tangentially of said shank, and a foot plate connected to and supported upon said arms.

4. In a foot throttle controlling device, the combination of a foot plate provided with a central bearing upon which said plate rocks, means for adding friction to said bearing, said means serving to yieldably lock said plate in any rocked position, said bearing and said means being mounted below and covered by said plate.

[Claims 2, 3, 5, and 6 not printed in the Gazette.]

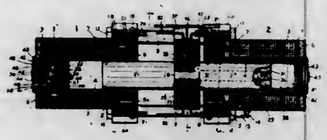
1,273,187. BALL-BEARING OR ROLLER-BEARING. BIRGER ISIDOR RYDBERG, Lindesberg, Sweden. Filed Jan. 16, 1917. Serial No. 142,731. (Cl. 64—36.)



1. In a bearing, the combination of a plurality of rows of solids of revolution, an inner bush having its one end curved outward, an outer bush having its one end curved inward, the said curved parts of the bushes forming races for the outermost rows of the said solids respectively, and a distance piece located between each pair of rows of solids of revolution and transmitting axial thrust, said distance pieces consisting of tube pieces each having one of its ends curved outward, substantially as described and shown in the accompanying drawing.

[Claim 2 not printed in the Gazette.]

1,273,188. ELECTRIC SWITCH. WILL R. SAVAGE, Omaha, Nebr. Filed Apr. 10, 1915. Serial No. 20,562. (Cl. 175—281.)



1. An electric switch including spaced solenoids having insulating heads, separate conductor rods connecting the heads and maintaining the solenoids in rigid spaced relation and forming conductors in the circuits in which the switch may be arranged, a cross head located between the insulating heads, cores carrying the cross head and arranged to be attracted by the solenoids, contacts mounted on the insulating heads and blades carried by the cross head and coacting with the contacts.

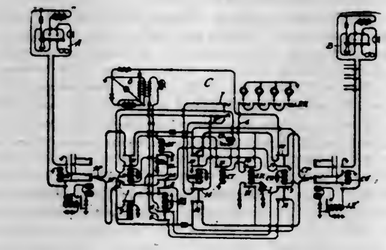
10. An electric switch including spaced solenoids having insulating heads, a cross head located between the insulating heads, cores carrying the cross heads and arranged to be attracted by the solenoids, electrical and mechanical contacts mounted in the insulating heads, and blades extending in opposite directions from the cross-head and coacting with the contacts, said electrical and mechanical contacts being located at opposite sides of the cores to equalize the friction of the contacts and blades and prevent binding of the cores.

16. An electrical switch including spaced solenoids having insulating heads, a cross-head located between the insulating heads, cores carrying the cross-head and arranged to be attracted by the solenoids, electrical and mechanical contacts mounted on the insulating heads, and blades coacting with the contacts, said blades being located at opposite sides of the cross-head and projecting in opposite directions and having connecting portions extending through the cross-head, said contacts being located opposite each other at opposite sides of the cores to equalize the friction and prevent binding of the cores.

17. An electric switch including spaced solenoids having insulating heads provided with contacts, a cross head located between the insulating heads and having blades coacting with the contacts, and cores located at opposite sides of the cross head, one of the cores having a stem extending through the cross head and provided with threads, and the other core having a bore to receive the stem and threaded to engage the same, said cores rigidly clamping the cross head.

[Claims 2 to 9 and 11 to 15 not printed in the Gazette.]

1,273,189. TELEPHONE SYSTEM WITH AUTOMATIC RINGING DISCONNECT. FRED SCHOENWOLF, Chicago, Ill., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 27, 1914. Serial No. 874,163. (Cl. 179—58.)



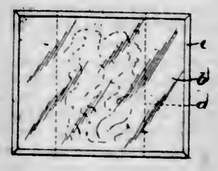
1. A telephone system comprising telephone lines, an operator's link circuit for interconnecting said lines, operator controlled means for applying ringing current and continuing such application to the called line, and means for interrupting such application of ringing current by a control exercised at both the calling and called substations.

2. A telephone system comprising telephone lines, an operator's link circuit for interconnecting said lines, answering and calling supervisory relays for said link circuit operable over the telephone lines, means for applying ringing current and continuing such application to the called line, operator controlled means for initiating the operation of said means, and means controlled by both supervisory relays for interrupting said application of ringing current.

12. A telephone system comprising a pair of connected telephone lines, means for applying ringing current to one of said lines, means controlled at the substation of one of said lines for disassociating said lines, and means controlled at the substation of either of said lines for interrupting such application of ringing current.

[Claims 3 to 11 and 13 to 22 not printed in the Gazette.]

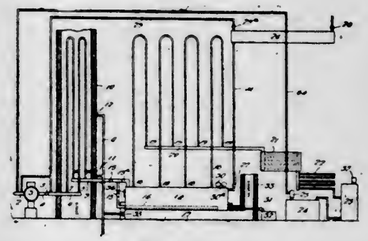
1,273,190. STEREOPTICON-SLIDE. JOHN D. SCOTT, New York, N. Y. Filed Oct. 4, 1917. Serial No. 194,762. (Cl. 41—21.)



A stereopticon slide comprising a flexible, gelatinous member having a picture printed thereon by mechanical means, and rigid plates supporting and inclosing said medium, substantially as described.

1,273,191. APPARATUS FOR OBTAINING LIQUID HYDROCARBONS. EARL H. SHEETS, Muskogee, Okla. Filed June 27, 1916. Serial No. 106,087. (Cl. 196—25.)

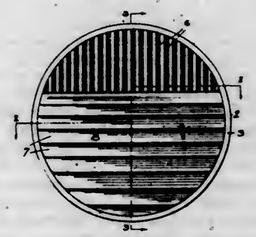
1. An apparatus of the class described comprising a mixing tank having a plurality of vertically arranged vapor tubes, each having a bend to form returned tubes which are connected with a header, whereby the heavier substances may be returned to the tank and the lighter substances carried away from the tank, an oil supply tank for the mixing tank, means to heat the mixing tank, a compressor, gas heating tubes connected with the compressor and the mixing tank, and means to conduct gases and vapors from the supply tank, and also gases and vapors from other sources to the compressor, to be compressed, expanded, and commingled with the oil in the mixing tank under heat and pressure to thereby cause combination of the gases and vapors with the liquid substances as a part of said substances.



3. In an apparatus of the class described, a mixing tank, a stack provided with vertically arranged vapor tubes, means to heat the tubes in the stack, one end of said tubes being provided with a header having a plurality of connections with the mixing tank, and a plurality of valves controlling the passage of heated and expanded vapors and gases from the vapor tubes to the upper and lower portions of the mixing tank.

[Claim 2 not printed in the Gazette.]

1,273,192. LENS. MAURICE A. SMITH, Jeannette, Pa., assignor to McKee Glass Company, Jeannette, Pa., a Corporation of Pennsylvania. Filed Apr. 2, 1917. Serial No. 159,188. (Cl. 240—48.4.)



1. In a lens having a concave inner and convex outer face, a series of vertically-disposed triangular prisms at the upper portion of said outer convex face whereby the light rays are diffused laterally by the outer ones of said prisms and the inner or central ones give substantially total reflection, and below the same horizontally-arranged prisms comprising a series of stepped bands with flat faces.

[Claim 2 not printed in the Gazette.]

1,273,193. SCREW-DRIVER. PERCY SMITH, Detroit, Mich. Filed Jan. 31, 1918. Serial No. 214,669. (Cl. 145—65.)

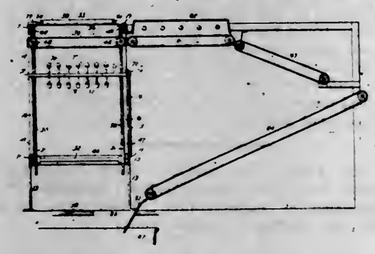
A screw driver including a stem having a screw engageable portion on one end, oppositely directed channeled arms on the other end of the stem, the ends of the arms being turned at right angles to the arms and in parallel relation to each other, the said ends being formed with centrally apertured disks, and a grip member disposed between the disks and seated in said channeled arms, said

grip member being longitudinally grooved to receive the side walls of the channel, and a retaining pin member dis-



posed through the grip member and through the apertured disks.

1,273,194. COATING AND DRYING MACHINE. MORRIS SMOLOWICH and JOSEPH STONE, Chicago, Ill. Filed July 11, 1917. Serial No. 179,868. (Cl. 91—62.)



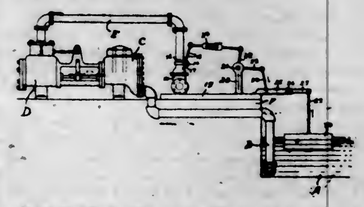
1. A machine for the purpose described comprising an endless carrier, a gripper mounted on said carrier adapted to hold the edge of a sheet of printed paper and pass said sheet through a quantity of powdered chemical substance to cause the same to flow over the printed surface, means for subjecting the sheet to a shaking operation to remove the superfluous powdered substance, a conveying means, a heater in the path of travel of said conveying means, and means for releasing the sheet from the gripper to cause the sheet to fall upon the conveyer and by the conveyer advanced to the heater to melt the substance and thence after cooling to deliver the same to a receiver.

5. In a machine for the purpose described, the combination with a rigid main frame, an endless carrier comprising a pair of spaced chains or belts, guiding means on the frame around which said belts or chains pass and which direct the path of travel of the carrier, driving means for said carrier, a plurality of grippers each mounted at its ends on one of said carrier belts and spaced apart at equal distances in the length of the carrier, fixed means at one point in the path of travel of the conveyer adapted to act on the grippers for opening the same, a horizontal table adapted to move longitudinally to feed printed sheets of paper to the grippers, means for moving said feeding table, means operated by the travel of the grippers for actuating said table moving means, a receptacle for holding a quantity of powdered chemical substance through which the paper sheets are carried by the grippers to cause the printed characters on said paper to be covered by said substance, a rotating shaft having striking fingers thereon for engaging the sheets as they pass and removing the superfluous substance therefrom, means actuated by one of said chain belts for rotating said shaft, a horizontal conveyer over which said grippers are adapted to be carried by the belts or chains, means for opening said grippers when above the conveyer to permit the sheets held thereby to fall upon the conveyer, a heater at one side of the main frame, a second conveyer receiving the sheets from the first-named conveyer and carrying them through said heater to cause the substance adhering to the characters to be melted, and other conveyers leading from the heater along which the sheets travel while said melted substance is cooling and hardening.

6. An automatic machine for producing raised printing on sheets of paper comprising an endless carrier, and guiding means therefor, means for driving said carrier, a plurality of paper grippers mounted on said carrier, a paper feeding table adjacent one end of the path of movement of the carrier and adapted to be moved to and from the grippers as they approach the table to feed to the grippers a sheet of paper with the ink in moist condition, means for containing a powdered chemical substance to be spread over said sheets as they are circulated by the conveyer and which substance adheres to the moist printed characters, means for removing superfluous powdered substance from the sheets, means for releasing in succession the sheets of paper from the grippers, a heating means, and means for receiving the released sheets and carrying them through the heater for melting the chemical substance thereon, and finally along a circuitous course for cooling and hardening the melted substance on the sheets.

[Claims 2 to 4 not printed in the Gazette.]

1,273,195. FLUID-CONTROL APPARATUS. HARRISON B. SNYDER, Palmyra, Pa. Filed July 17, 1917. Serial No. 181,171. (Cl. 137—68.)



1. In fluid control apparatus, the combination with a basin for liquid, of a valve controlling the amount of liquid in the basin, a float in the basin adapted to rise and fall with the surface level of the liquid therein, an operating arm for the valve, means for adjustably connecting the operating arm to the valve, and a connection between the arm and the float for actuating the valve by the movements of the float, said adjusting means for the arm being adapted to hold the arm in position for opening the valve upon the movement of the float in one direction, or in position for closing the valve upon the movement of the float in said direction.

2. In fluid control apparatus, the combination with a basin for liquid, of a valve controlling the amount of liquid in the basin, a float in the basin adapted to rise and fall with the surface level of the liquid therein, an arm connected to the valve and adjustable for either opening or closing the valve upon the movement of the arm in the same direction, and a connection between the arm and the float to swing the arm upon the rise and fall of the float.

3. In a fluid control apparatus, the combination with a basin for liquid, of a valve controlling the amount of liquid in the basin, a float in the basin adapted to rise and fall with the surface level of the liquid therein, regulating means connected to the float, and a connection between the regulating means and the valve to close the valve upon the rise of the float when it is desired to retain a quantity of liquid in the basin, and adapted to be adjusted for opening the valve upon the rise of the float when it is desired to exhaust fluid from the basin.

4. In fluid control apparatus, the combination with a basin for liquid, of a valve controlling the amount of liquid in the basin, a float in the basin adapted to rise and fall with the surface level of the liquid therein, a rocker arm, a connection between the float and the rocker arm, an arm on the valve, and an adjustable connection between the arm on the valve and the rocker arm and said connection being adjustable for either opening or closing the valve upon movement of the rocker arm in the same direction.

5. In fluid control apparatus, the combination with a basin for liquid, of a valve controlling the amount of liquid in the basin, a float in the basin adapted to rise and fall with the surface level of the liquid therein, a base, bracket arms on the base, a rocker arm pivotally mounted intermediate its ends on the bracket arms, a connection between one end of the rocker arm and the float, a rock shaft on the base, radially extending arms on the rock shaft projecting at right angles to each other, a link between one of said radially extending arms and the opposite end of said rocker arm, an arm on the valve, and an adjustable connecting rod between the opposite radially extending arm and said arm on the valve, said arm on the valve and said connection being adjustable for either opening or closing the valve upon movement of the rocker arm in the same direction.

[Claims 6 to 8 not printed in the Gazette.]

1,273,196. OVEN-TEMPERATURE REGULATOR. JOHN WM. SOUTHERN, Vancouver, British Columbia, Canada. Filed Nov. 30, 1917. Serial No. 204,657. (Cl. 236—5.)



1. An oven temperature time alarm, comprising in combination, a heat indicator exposed to the heat of the oven, a clock adjustable to ring an alarm a predetermined time after release of its mechanism, means for normally holding the clock mechanism against movement, and means operative with the heat indicator for releasing the clock mechanism when a predetermined heat is attained whereby the alarm may be given a predetermined time after the desired temperature is attained.

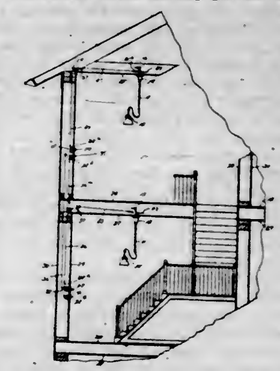
2. An oven temperature time alarm, comprising in combination, a heat indicator exposed to the heat of the oven, a clock mechanism adjustable to ring an alarm a predetermined time after release of its mechanism, means for normally holding the clock mechanism against movement, and means operative with the heat indicator permitting escape of heated air from the oven when a predetermined heat is attained, and means coöperative therewith for releasing the clock mechanism.

3. An oven temperature time alarm, comprising in combination, a chamber having a partition dividing it into two parts, one part of which is exposed to the heat of the oven and the other part open to the atmosphere through a closable aperture, a heat indicator in that portion of the chamber which is exposed to the oven heat, a duct connecting the oven to that portion of the chamber which is exposed to the atmosphere, a valve normally closing that duct, means operative by movement of the thermal indicator for opening the valve and permitting escape of heated air from the oven when a predetermined heat is attained, a clock mechanism adjustable to ring an alarm at any number of minutes after release of its mechanism, means normally arresting movement of the clock mechanism, and means operative by movement of the oven duct valve for releasing the clock mechanism.

[Claims 4 to 6 not printed in the Gazette.]

1,273,197. SYSTEM OF DISTANT CONTROL OF GAS IGNITION BY MECHANICAL MEANS. ADOLPH SPIELMAN and ALFRED P. POST, Philadelphia, Pa. Filed Dec. 11, 1916. Serial No. 136,233. (Cl. 240—123.)

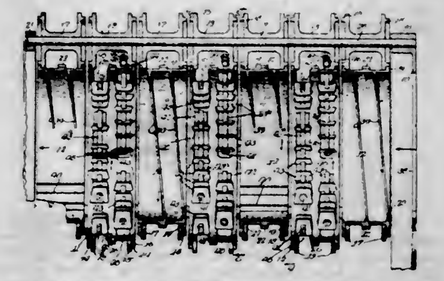
1. A system of distant control of gas ignition by mechanical means embracing in combination a gas fixture having a burner equipped with a pilot light attachment concealed throughout the major portion of its length, a concealed valve casing having a valve for controlling the gas supply to the burner, concealed means located so as to be free of attack from flowing gas for operating said



valve, a mechanical switch isolated from said burner and concealed means connecting said switch with said valve moving means, which means is also located free of attack from flowing gas.

[Claims 2 to 9 not printed in the Gazette.]

1,273,198. HOG-SCRAPING MACHINE. GRANVILLE H. STALLMAN, Chicago, Ill. Filed Nov. 27, 1917. Serial No. 204,181. (Cl. 17—11.)



1. A hog scraping machine embodying a series of adjacent annular elements through which the carcass is fed, means connected with one of the elements for advancing the carcass through the elements, and scraper elements carried by another of the elements and adapted for free adjustment by the carcass.

6. A hog scraping machine embodying a series of rotatable adjacent annular elements through which the carcass is fed, means connected with one of the elements for advancing the carcass through the elements, scraper elements pivotally carried by another of the elements, yielding means tending normally to move the said scraper elements in one direction about their pivots, and means for rotating the carcass.

11. A hog scraping machine embodying a plurality of concentrically arranged and laterally spaced annular rotatable members, means on the inner face of said members for advancing the carcass therethrough, a second series of concentrically arranged annular members alternately disposed with respect to the annular members of the first recited series, the second series of annular members being eccentrically arranged with respect to the members of the first recited series, whereby the lower portion of one series of members will be disposed at a higher elevation than the corresponding portion of the members of the other series, to support the carcass out

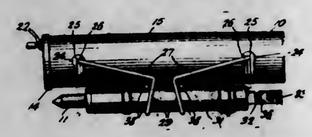
of contact with the lower portion of the members of the second recited series, and yielding and pivotally mounted scraper members supported by the second recited series of members.

16. A hog scraping machine embodying two series of rotatably supported annular members through which the carcass is passed, one of said series being eccentrically mounted with respect to the other series whereby the carcass will be supported out of contact with one series of members by the other series, scraper members arranged in the former series, advancing means arranged in the latter series, means arranged in some of the latter series of members for also rotating the carcass, said scraper members each embodying a pivotally mounted curved arm extending in a direction around the member, and laterally spaced blades connected with the arm and spaced from each other in a direction lengthwise of the arm, and yielding means connected with the arms and tending normally to move the arms in one direction about the pivot thereof.

20. A hog scraping machine embodying a series of alternately arranged rotatable annular supporting and advancing elements and scraping elements, means for supporting and means for rotating them, the diameter of the scraper elements being greater than the diameter of the other elements whereby the carcass will be supported by the latter out of contact with the former during the advancement thereof through the elements, means for intermittently rotating the carcass during its advancement, said scraper elements having openings through their walls for the passage of hair and water therethrough, and means for supplying water into the said elements.

[Claims 2 to 5, 7 to 10, 12 to 15, 17 to 19, and 21 to 30 not printed in the Gazette.]

1,273,199. ELECTRIC HAIR-CURLING KIT. SADIE STUCKEY, Tulsa, Okla. Filed July 10, 1917. Serial No. 179,689. (Cl. 219—22.)



1. A device of the character described comprising a tubular cylindrical heating element, longitudinally spaced supporting elements thereon having transverse portions adapted to bear toward the side of the heater element when the supports are moved inwardly, means tending to cause the supports to move to innermost positions, and a curling iron constructed to engage snugly against the side of a heater element within said transverse portion for retention thereby.

2. In a device of the character described a heater device comprising a tubular cylindrical casing, an electrical heating means therein, a plurality of pivot lugs on the side of the casing including grooved parts extending in one direction and spiral cam portions at their inner sides, and bail members of resilient material including arms having inturned portions and engaged in said lugs, said arms being under tension to bear yieldably against the lugs, and constructed to engage snugly in said grooves in one position, and to engage on said spiral cam portion at another position, whereby the bails will be moved inwardly and held in closed position.

1,273,200. MULTISPLITTER SPRAY-NOZZLE. GEORGE P. SYMONDS, New York, N. Y., assignor to Alberger Pump and Condenser Company, New York, N. Y., a Corporation of New York. Filed June 22, 1917. Serial No. 176,270. (Cl. 137—84.)

1. The combination with a spraying nozzle having a wide flat end formed with an elongated slot therein through which a sheet of water emerges, said slot being of a substantial width to prevent clogging with debris, of a plurality of parallel cutters arranged in the path of the issuing stream at a distance therefrom and lying in the same general direction as the elongated slot and longer than the same, the middle one of said cutters being nearer to the flat slot than the others and situated centrally with reference to said slot so that debris and foreign matter will not be caught by the cutters but will be thrown off therefrom.



2. The combination with a spraying nozzle having a wide flat end formed with an elongated slot through which a sheet of water emerges, said slot being of substantial width to prevent clogging with debris, of a plurality of parallel cutters arranged in the path of the issuing stream at a distance therefrom and lying in the same general direction as the slot, one or more of the cutters being located nearer to the slot than the other to prevent debris from being caught by the cutters, said cutters having the function of dividing the issuing stream into a plurality of thin diverging sheets which will bear a certain relation in their size to the size of the slot in the nozzle.

1,273,201. LUGGAGE-CARRIER. MAX TEUBER, New York, N. Y. Filed July 13, 1917. Serial No. 180,247. (Cl. 224—5.)



1. A baggage carrier comprising a flexible shoulder strap with side portions adapted to extend downward on opposite sides of the arm, and having means at its lower end for attaching the article to be carried, a back strap, the ends of which connect with the shoulder strap, a fastening device secured to the back strap and adapted to engage with the clothing at the back of the neck of the user to maintain the device in position, and a rigid reinforcing band connecting the back strap and the shoulder strap and serving to maintain the back strap in position.

[Claims 2 and 3 not printed in the Gazette.]

1,273,202. PROCESS FOR THE EXTRACTION OF PLATINUM AND SIMILAR METALS FROM THEIR SANDS AND ORES. RUSSELL THAYER, Philadelphia, Pa. Filed Aug. 15, 1917. Serial No. 186,303. (Cl. 75—17.)

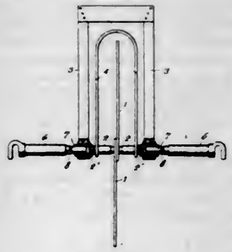
1. The hereinbefore described process of recovering finely divided platinum and similar metals from sands or ore, which consists in volatilizing the finely divided metallic particles by heat, at a temperature below the melting point of the metal; carrying away the volatilized particles by a suitable vehicle; and collecting the volatilized particles.

2. The hereinbefore described process of recovering finely divided platinum and similar metals from sands or ore, which consists in mixing the sands or ore with metallic mercury; subjecting the magma to a temperature sufficient to distil the mercury, but below the melting point of the platinum or similar metal; collecting the distilled mercury and volatilized platinum or similar metal; and separating the platinum or similar metal from the mercury.

3. The hereinbefore described process of recovering finely divided platinum and similar metals from sands or ore, which consists in mixing the sands or ore with metallic mercury and an alkali metal; subjecting the magma to a temperature sufficient to distil the mercury, but below the melting point of the platinum or similar metal; collecting the distilled mercury and volatilized platinum or similar metal; and separating the platinum or similar metal from the mercury.

4. The hereinbefore described process of recovering finely divided platinum and similar metals from sands or ore, which consists in mixing the sands or ore with metallic mercury; subjecting the magma to a temperature sufficient to distil the mercury, but below the melting point of the platinum or similar metal; collecting the mercury and platinum or similar metal in water; separating the mercury; collecting the platinum or similar metal by filtration; and recovering the platinum or similar metal from the filter residuum.

1,273,203. METHOD OF ELECTRIC WELDING. ELIHU THOMSON, Swampscott, Mass., assignor to Thomson Spot Welder Company, Boston, Mass., a Corporation of Massachusetts. Filed Nov. 6, 1917. Serial No. 200,485. (Cl. 219—10.)



1. The herein described improvement in electric metal working operations consisting in forcing a tool with a continuous or steady pressure against the work by the application of an intermittently acting percussive force acting on the tool through a body having considerable inertia and elastically connected to the tool.

4. An apparatus for electric welding, riveting or similar operations, comprising a freely movable electrode, an anvil adapted to receive the blows of a hammer and an elastic medium disposed between the anvil and hammer.

8. Means for obtaining practically steady pressure of a tool upon the work comprising an anvil, a tool mounted to be free to move independently of the anvil and a hammer adapted to deliver a rapid succession of blows upon said anvil.

[Claims 2, 3, and 5 to 7 not printed in the Gazette.]

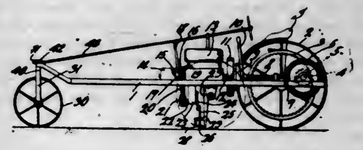
1,273,204. CUFF-BUTTON. VINCENT TUMMINELLO, Cefalù, Italy. Filed Dec. 22, 1917. Serial No. 208,431. (Cl. 24—102.)



1. A cuff button comprising a shank, the terminals of the shank being formed with helix coils, the end of the outermost of each coil being extended transversely through the coils.

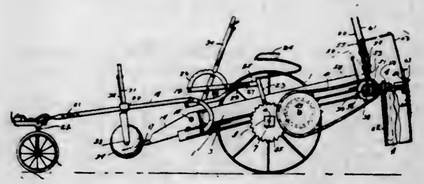
[Claims 2 and 3 not printed in the Gazette.]

1,273,205. AGRICULTURAL MACHINE. LOUIS M. WARD, Lincoln, Nebr. Filed Apr. 21, 1914. Serial No. 833,478. (Cl. 56—33.)



An agricultural machine embodying a wheel mounted frame including a rear tractor wheel, an explosion engine mounted on the frame between the ends thereof with its crank shaft disposed longitudinally above the frame, a clutch controlled transmission mechanism connecting the rear end of the crank shaft and tractor wheel, a transverse finger bar projecting to one side of the frame and having its inner end disposed below the engine, a depending bracket carried by the frame and attached to the inner end of said finger bar, a reciprocatory cutter bar carried by the finger bar, a counter shaft disposed between the horizontal planes of the frame and cutter bar at that side of the vertical plane of the crank shaft opposite the finger bar, a depending bracket carried by the frame in which the counter-shaft is journaled, a sprocket wheel carried by the forward end of the crank shaft, a clutch for connecting said sprocket wheel and shaft, a sprocket wheel carried by the counter shaft, a sprocket chain trained around said sprocket wheels, the rear end of said counter shaft having a crank, and a pitman connecting said crank and the inner end of the cutter bar.

1,273,206. DITCHING-MACHINE. HARVEY M. WATERHOUSE, Hayden, Colo., assignor of one-half to Albert G. Kimball, Hayden, Colo. Filed Sept. 18, 1916. Serial No. 120,882. (Cl. 37—25.)



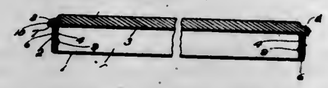
2. In a ditching machine, the combination with a frame, of wheels pivotally supporting the same between its ends, a pair of bars pivoted to the forward end of the frame, a second frame extending upwardly from the first mentioned frame, an arm extending forwardly from said second frame and having a slot therein, a link connected to said pair of bars and having slidable engagement in said slot, a lever pivoted to said link and said arm and means associated with said lever for retaining the same in adjusted positions.

[Claim 1 not printed in the Gazette.]

1,273,207. DESK OR TABLE TOP CONSTRUCTION. PETER M. WEGE, Grand Rapids, Mich., assignor to Metal Office Furniture Co., Grand Rapids, Mich., a Corporation of Michigan. Filed May 22, 1917. Serial No. 170,264. (Cl. 45—31.)

1. A top construction for desks, tables and like articles comprising an under member having vertical sides, an inverted pan having depending sides received within the sides of said under member, a cover pad lying upon said pan, having its edges extending slightly beyond the sides

of said pan, and a strip of spring metal secured adjacent its lower edge to each of the depending sides of said pan adjacent the lower edges thereof, said strip comprising a section lying alongside of but normally springing outwardly for a distance at its upper end from the pan, a second section at the upper end of the first mentioned section lying substantially at right angles thereto for a short distance and then turned back to cover the edges of the pad, said first section of the strip being received between the sides of said under member and pan, substantially as described.

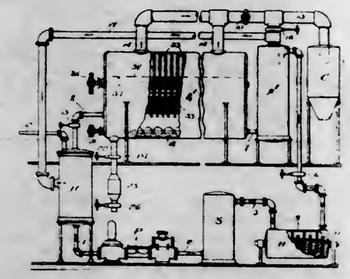


4. A top construction for desks, tables and like articles comprising an under member having vertical sides and ends, an inverted pan inserted between the sides and ends of the frame, a cover pad lying above and on said pan, and means connected to the pan and lying between the sides and ends thereof and the sides and ends of the under member for frictionally retaining the pan in place within the sides and ends of said under member and automatically engaging with the sides and ends of the pad to hold the same in place on the pan, substantially as described.

6. A top construction for desks, tables, and like articles comprising an under member having vertical sides and ends, an inverted pan inserted between the sides and ends of said member, a cover pad lying above and on said pan and means attached to the pan, said means lying partly between the pan and member and frictionally engaging with said member when the pan is connected therewith, and partly above the pan and frame and engaging with the pad to hold it in place on the pan, substantially as described.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,273,208. SALT MANUFACTURE. CHARLES L. WEIL, Port Huron, Mich. Filed Nov. 3, 1917. Serial No. 200,003. (Cl. 127—16.)



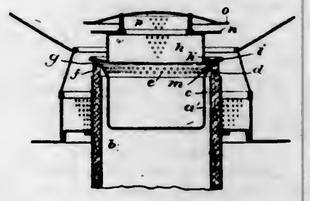
1. The method of manufacturing salt from brine comprising first flashing the brine so as to produce relatively small crystals of salt, then cooling the brine with a surface area exposed to evaporation so as to form relatively large crystals of salt at the surface and so as to build up the small crystals upon the large crystals, some of the small crystals being permitted to settle without substantial building-up, continuously bringing new brine to said surface, and regulating the rate of changing the brine at said surface to control the proportionate quantities of large and small crystals produced.

4. In manufacturing salt from brine by first flashing the brine and then slowly evaporating the brine from disk evaporators, the method of controlling the character of the salt produced comprising regulating the rate of rotation of the disks.

10. The method of manufacturing salt from brine comprising first flashing the brine so as to produce relatively small crystals of salt, then cooling the brine in a closed space with a surface area exposed to evaporation so as to form relatively large crystals of salt at the surface and so as to build up the small crystals upon the large crystals, continually changing the brine at said surface area during said cooling, regulating the rate of said changing so as to produce the desired degree of building-up at the surface, and regulating the pressure in said closed space, thereby to produce predetermined proportionate quantities of large and small crystals of salt.

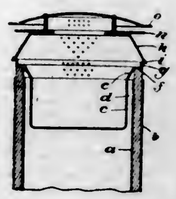
[Claims 2, 3, and 5 to 9 not printed in the Gazette.]

1,273,209. OIL-STOVE. FRED E. WHITE and FREDERICK E. HOOPER, Gardner, Mass., assignors to Central Oil & Gas Stove Company, Gardner, Mass., a Corporation of Massachusetts. Filed Oct. 9, 1917. Serial No. 195,639. (Cl. 67—63.)



An air distributer for wick stoves having an upper vertical cylindrical perforated portion and a lower cylindrical portion with an intervening hollow annular flange adapted to rest upon the top of the wick, the lower portion being adapted to fit within the central draft space of the stove and having a flared perforated portion adjacent said hollow flange, the inner surfaces of said upper and lower portions, including the flared portion and the hollow flange, defining the interior air space of the distributer.

1,273,210. OIL-STOVE. FRED E. WHITE and FREDERICK E. HOOPER, Gardner, Mass., assignors to Central Oil & Gas Stove Company, Gardner, Mass., a Corporation of Massachusetts. Filed Oct. 9, 1917. Serial No. 195,640. (Cl. 67—63.)

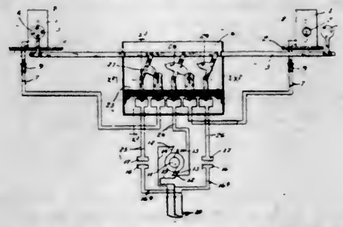


1. An air distributer for wick stoves consisting solely of two sections, one a lower section adapted to fit within the central draft space and formed to provide an integral overhanging flange adapted to rest upon the wick and the other an upper perforated section having its walls extending upwardly from the outer circumference of the wick flange, the inner surfaces of said sections defining the interior air space of the distributer, substantially as described.

[Claim 2 not printed in the Gazette.]

1,273,211. MASTER CUT-OVER SWITCH. JOHN B. FLOGERZI, St. Paul, Minn. Filed June 28, 1916. Serial No. 106,384. (Cl. 88—16.)

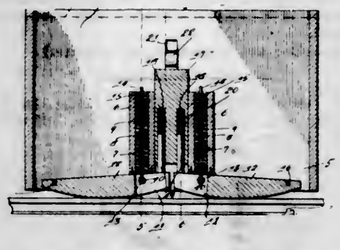
1. The combination with two moving picture machines, of sources of alternating and direct currents supplying the electrical connections thereof, to said two machines, switch mechanisms arranged to alternately connect the two sources of supply to said machines, and light controlling means coöperatively connected with said switch



and arranged to alternately project beams of light from the two machines.

[Claims 2 to 5 not printed in the Gazette.]

1,273,212. RAIL-BRAKE. OTTO FREIMARK, Martin, Ohio. Filed Aug. 17, 1917. Serial No. 186,789. (Cl. 188—47.)



1. A brake of the class described comprising a casing, a plurality of shoes pivotally mounted near their outer ends upon said casing, yieldable means engaging the inner ends of said shoes for normally holding the same in an inoperative position with respect to a rail, a sliding block, yieldably engaging the inner ends of said shoes and means engaging said sliding block for forcing said shoes downwardly to an operative position upon the rail.

3. A rail brake of the class described comprising a casing adapted to be supported upon a car, a plurality of shoes pivotally mounted within said casing, means for yieldably holding said shoes in a retracted position and out of engagement with a rail, a sliding block yieldably supported upon the inner ends of said shoes, a rocker arm, a plurality of arms secured to said casing, said rocker arm being pivotally connected to said arms carried by said casing, said rocker arm engaging said sliding block for forcing the same downwardly, and means connected to said rocker arm for swinging the same.

4. A rail brake of the class described comprising a casing, a plurality of shoes pivotally mounted within said casing, a plurality of spaced ribs carried within said casing, spring pressed plungers mounted within said ribs and engaging said shoes for normally holding said shoes in a retracted position, a sliding block interposed between said ribs, spring plungers mounted within said sliding block and engaging the inner ends of said shoes for yieldably supporting said block upon said shoes and means for engaging said sliding block for forcing said block downwardly and urging said shoes outwardly into engagement with a rail over which said truck is passing.

[Claim 2 not printed in the Gazette.]

1,273,213. FIREPROOFING AND WATERPROOFING COMPOSITION. CHARLES F. FROHE, Buffalo, N. Y., assignor to Scientific Products Company, Inc., Buffalo, N. Y., a Corporation of New York. Filed Dec. 7, 1917. Serial No. 205,944. (Cl. 134—16.)

1. The hereindescribed composition of matter comprising starch, alum, glue, silicate of sodium, ammonia and water in substantially the proportions specified.

[Claim 2 not printed in the Gazette.]

1,273,214. PORTABLE CRADLE FOR BATH-TUBS. THOMAS M. GLEASON, Racine, Wis. Filed Sept. 14, 1917. Serial No. 191,397. (Cl. 21—118.)



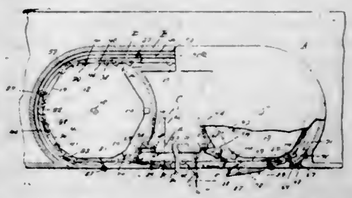
In a cradle of the class described having a frame including inverted U-shaped side sills provided with companion sets of slots in their inner walls, end sills and a center sill having depending slotted ears; the combination of raising and lowering instrumentalities including a spindle provided with a central wheel fitted between the sill ears, the spindle being extended through the ear slots, a pair of bored cross-couplings each having an arm in threaded union with an end of the spindle, spindle suspension rods extending through the other arms of the cross-couplings and side-sill slots, friction wheels carried by the rods and located between the side-sill walls, pairs of end-links pivotally mounted between the walls of the aforesaid side-sills, whereby they are held against lateral movement, pairs of floating-links in pivoted union with the rods and located between the side-sill walls, whereby they are held against lateral movement, a pivotal connection between the other end of each pair of floating-links and the companion pair of end-links, and caster-wheels mounted at the pivotal union of the sets of links.

1,273,215. BRACE FOR GRATED SHELVES. CARL E. GOLDTHWAIT, Lynn, Mass., assignor to C. W. H. Moulton Company, Somerville, Mass., a Corporation of Maine. Filed Mar. 21, 1917. Serial No. 156,288. (Cl. 211—14.)



In combination with a grated shelf, a brace composed of an elongated metal strap attached at its opposite ends to two outer shelf members and having between its ends a plurality of pairs of malleable clamping fingers projecting from one side of the brace, and adapted to retain any form imparted by bending pressure, the fingers of each pair being normally spaced apart to permit the interposition of an intermediate shelf member between them, and bent toward each other to engage and hold down said intermediate member, the outer ends of said fingers forming spurs which indent the sides of the intermediate members.

1,273,216. PROPELLING APPARATUS. SELBY GOSSE, Cambridge, Mass. Filed Oct. 31, 1917. Serial No. 199,524. (Cl. 115—63.)



2. A propelling apparatus which comprises a closure, a belt formed of connected links, a plurality of driving and spacing wheels for the belt, the alternate links being provided with blades adapted to be received within

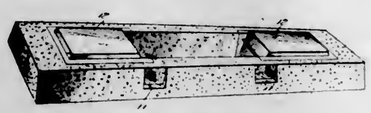
the links, the other links being provided with blades that are adapted to be received within the links, certain of the links having their blades extended when the belt is moved in one direction while the other blades are carried within their respective links, means for causing alternate blades to be extended for propelling in one direction, means for causing the blades to be received within their respective links, means for moving the other blades to their extending position for propelling in the opposite direction, and means for causing said latter blades to be received within their respective links.

5. An endless belt, which comprises a plurality of plates connected together and serving as links, one of said plates having an opening therein and bosses adjacent the opening, a blade to approximately fill the opening and pivotally mounted on the plate and in the bosses, said blade being provided with a closed slot and transversely with a boss, a pin projecting from the ends of the boss and beyond the sides of the plate, a rotatable arm secured at one end of each one of the plates and having its other end adapted to coöperate with and ride in the plate slot and also serving as a brace, an arm extending from the blade and oppositely thereto, and a roller carried by the outer end of said latter arm.

7. A propelling apparatus, which comprises a belt formed of connected plates having openings therein and constituting links, pivotally mounted blades carried by the plates, means for operating said belt, a closure for the apparatus, said closure having its upper portion formed with longitudinal grooves for inclosing the belt and causing it to travel therethrough with the several blades lying in their respective openings.

[Claims 1, 3, 4, and 6 not printed in the Gazette.]

1,273,217. RAILWAY-TIE. JOSEPH BLEWETT GRESSETT, Jr., Meridian, Miss. Filed Dec. 18, 1917. Serial No. 207,775. (Cl. 238—3.)



1. A cross tie comprising a body of concrete or the like, having a longitudinally extending opening opening at the top and bottom of the tie, a reinforcing socket at each end of the opening and open at its inner end, a wooden block in each opening and having its ends inclined to fit the inclined end of the socket, a bolt extending transversely of each socket at the open end thereof and engaging the block to hold it from displacement, and a connection between the bolts of each tie, said blocks being adapted for receiving the weight of the rails to take such weight from the tie.

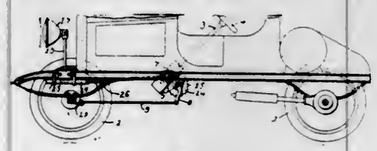
2. A cross tie comprising a body of concrete or the like, having a longitudinally extending opening opening at the top and bottom of the tie, a reinforcing socket at each end of the opening and open at its inner end, a wooden block in each socket and having its ends inclined to fit the inclined end of the socket, and a bolt extending transversely of each socket at the open end thereof and engaging the block to hold it from displacement.

4. A railroad tie comprising a body of concrete having a vertical opening at each end, a reinforcing socket held in each opening, and interchangeable blocks of fibrous material seated in the sockets and detachably held therein and freely movable downward.

6. A railroad tie comprising a body of plastic material capable of hardening, having a vertical opening at each end, and interchangeable blocks of fibrous material seated in the openings and detachably held therein and freely movable downward.

[Claims 3 and 5 not printed in the Gazette.]

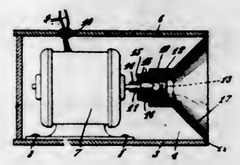
1,273,218. AUTOMOBILE-HEADLIGHT. CLYDE V. GUSTIN, Monett, Mo. Filed Oct. 15, 1917. Serial No. 196,689. (Cl. 240—62.)



1. A dirigible headlight for automobiles including in combination with a steering mechanism in which the steering post has a worm mounted thereon to be turned by movement of the steering wheel, a shaft carried by the vehicle frame, a sleeve revolubly mounted on said shaft, an arm connected with the sleeve, a headlight movably mounted on the vehicle frame, a pinion associated with said headlight, a rack bar slidably mounted in mesh with the pinion, a connection from the arm to said rack bar, means adapted to connect or disconnect this connection from the arm to the rack bar, and means to lock the headlight in a set position when this connection is disconnected.

[Claims 2 to 6 not printed in the Gazette.]

1,273,219. CHALKING-MACHINE. JAMES H. HALL, Lexington, Mo. Filed Nov. 20, 1916. Serial No. 132,409. (Cl. 46—8.)



1. In a chalking machine, comprising a casing, a chalking device within said casing, a horn extending within one end of said casing and attached to the outside thereof, a tube extending from said horn, said chalking device extending within said tube so that the tube will catch loosened chalk and the tube being disposed in the path of educed air from the means to operate the holder to expel chalk therefrom.

2. In a chalking device comprising a casing, a motor within the casing, a substantially frusto-conical horn extending within said casing, said horn having a laterally extending wall, means to secure said wall at one end of the casing to serve as a closure therefor, a tube extending inwardly from said horn, a chalking device secured to the motor and extending within said tube so that the tube will catch loosened chalk, and said tube being in the path of educed air from the motor to expel chalk from the machine.

3. In a chalking device comprising a casing, a source of power within said casing and having a power shaft extending therefrom, means mounted on said shaft serving as a base support for the chalk, corrugated fingers attached to said means and adapted to grip the chalk, and guide means for cues extending within the casing and attached to one end thereof, said means having a laterally extending tube within which said chalk gripping means extend so that the tube will catch loosened chalk, and the tube being disposed in the path of educed air from the source of power to expel chalk therefrom.

4. In a chalking device comprising a casing, a source of power within said casing, a chalking device attached thereto, a closure for one end of said casing in the form of a frusto-conical shaped depression, said frusto-conical shaped depression extending within said casing and having a lateral continuation extending inwardly from said depression and into which said chalking means extend so that the tube will catch loosened chalk, and the tube being disposed in the path of educed air from the source of power to expel chalk therefrom.

1,273,220. REDUCTION OF METALLIC OXIDS. PAUL R. HERSHMAN, Chicago, Ill., assignor to The Mineral Products Company, New York, N. Y., a Corporation of West Virginia. Filed Dec. 21, 1914. Serial No. 878,312. (Cl. 75—58.)

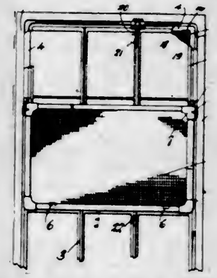
1. The method of reducing alumina to metal, which comprises mixing the alumina with carbids, and bringing the mixture to a fluid condition by heating to a temperature of about 2200° C., thereby reducing the alumina to the metallic state.

2. The method of reducing alumina to metal, which comprises mixing alumina with carbids, bringing the mixture to a fluid condition by heat, and quickly and positively removing from the mixture the gaseous products of the reaction thereby reducing the alumina to the metallic state.

3. The method of reducing alumina to metal, which comprises mixing the alumina with silicon carbid, and bringing the mixture to a fluid condition by heat, thereby reducing the alumina to the metallic state.

4. The method of reducing alumina to metal, which comprises mixing the alumina with silicon carbid, bringing the mixture to a fluid condition by heat, and quickly and positively removing from the mixture the gaseous products of the re-action thereby reducing the alumina to the metallic state.

1,273,221. SCREEN FOR REVOLVING WINDOWS. HENRY HIGGIN and CLIFFORD TRAUT, Newport, Ky., assignors to The Higgin Manufacturing Company, Newport, Ky., a Corporation of West Virginia. Filed Aug. 6, 1914. Serial No. 855,379. (Cl. 156—14.)



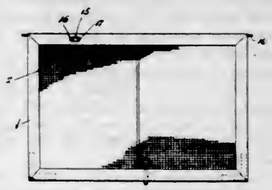
1. In combination with a metal window frame provided with a weathering, and an all metal screen bearing against the weathering on the outside, of corner plates at the upper corners of the screen frame bearing against the weathering on the inside, with screws for clamping the corner plates to the screen frame to hold the screen in place.

2. In combination with a metal window frame provided with weathering, an all metal screen, with reinforcing metal strips across the upper corners, the screen bearing against the weathering on the outside, of corner plates at the upper corners of the screen frame bearing against the weathering on the inside, with screws for clamping the corner plates to the screen frame to hold the screen in place, the screws passing through the corner plates and into the reinforcing metal strips of the screen.

1,273,222. WINDOW-SCREEN. HENRY HIGGIN and JOSEPH HAAS, Newport, Ky., assignors to The Higgin Manufacturing Company, Newport, Ky., a Corporation of West Virginia. Filed Apr. 27, 1917. Serial No. 164,852. (Cl. 156—14.)

1. In a screen adapted for hinging in suitable journals, a hollow frame for the screen, a pin hinge sliding in the frame, means on the pin adapted to be engaged by a screw or its equivalent, and an adjustable member on the frame carrying such screw, for the purpose described.

3. In a screen, a hollow frame member, a hinge pin therein and extending therefrom, a plate secured to the pin, said frame provided with a slot, a cover plate adjustable over said slot, and means thereon for engaging the plate on the pin whereby the adjustment of the cover plate will shift said hinge pin.



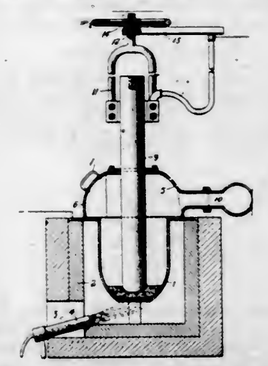
4. In a screen, a hollow frame member, provided with a slot therein, a cover plate having a lug on one end to engage the walls of the slot, and a screw on the other end passing through said slot, a sliding hinge pin, and means on the hinge pin for engaging the screw whereby the reversing of the position of the plate will work a longitudinal movement of the pin.

8. In a screen, a hollow frame, a sliding pin therein, and corner braces for said hollow frame, said braces being formed of metal pieces so shaped and set together as to leave a passageway for the pin inside of the said brace.

11. A wire screen comprising a frame-work, with a unitary piece of wire mesh mounted therein, said wire mesh provided with a rod extending across the width of the wire, with a metal strip bent around the wire to secure the same to the rod, said rod being of a length to fit snugly between the sides of the frame.

[Claims 2, 5 to 7, 9, 10, 12, and 13 not printed in the Gazette.]

1,273,223. PROCESS FOR MAKING METALLIC CERIUM AND THE LIKE. ALCAN HIRSCH and MARX HIRSCH, New York, N. Y., assignors to Alpha Manufacturing Company, a Corporation of New York. Filed Sept. 1, 1917. Serial No. 189,271. (Cl. 204—19.)



1. The process of producing metallic cerium and similar rare earth metals which consists in preparing a salt of the metal and electrolyzing the salt to cause deposition of the metal at a terminal voltage of less than 12 volts with a current density at the anode of less than 8 amperes per square inch while maintaining the temperature of the bath at about 850° C. throughout the greater part of the electrolysis, the electrolyte being sufficiently pure to permit of agglomeration of the metal in the electrolytic bath.

8. The process of manufacturing metallic cerium and similar rare earth metals which consists in preparing fused chlorid of the metal and electrolyzing the same dur-

ing a substantially continuous run of not less than eight hours while maintaining the temperature of the bath at about 850° C. throughout the greater part of the electrolysis, the electrolyte being sufficiently pure to permit of agglomeration of the metal in the electrolytic bath.

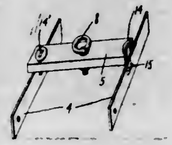
32. The process of making metallic cerium and similar rare earth metals which consists in electrolyzing the fused chlorid of the metal and adding to the electrolytic bath hot solid portions of the chlorid to regulate the temperature of the bath, said hot solid portions having been substantially freed from moisture by heating the same in an atmosphere containing a chlorinating agent.

38. The process of producing metallic cerium and similar rare earth metals which consists in preparing a salt of the metal and electrolyzing the fused salt to cause deposition of the metal while protecting the anode in the electrolytic bath above the surface of the bath with a coating of the electrolyte.

44. The process of manufacturing metallic cerium and similar rare earth metals which consists in preparing a salt of the metal and electrolyzing the fused salt at a temperature of about 850° C. with a cathode current density sufficient to cause lanthanum and didymium, if present, to separate out with cerium.

[Claims 2 to 7, 9 to 31, 33 to 37, 39 to 43, and 45 not printed in the Gazette.]

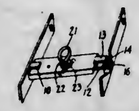
1,273,224. CONNECTOR. BRYSON DEXTER HORTON, Detroit, Mich. Filed Aug. 31, 1916. Serial No. 117,829. (Cl. 175—282.)



1. A connecting device embracing a cross head and fastening means comprising a sheet metal connector having fastening lugs extending through the cross head and riveted thereover, and fastening lugs extending at right angles thereto extending through the parts to be connected and having the ends riveted thereover.

[Claims 2 and 3 not printed in the Gazette.]

1,273,225. CONNECTOR. BRYSON DEXTER HORTON, Detroit, and FREDERICK ZENKER, Highland Park, Mich., assignors to Detroit Fuse & Mfg. Company, Detroit, Mich., a Corporation of Michigan. Filed July 14, 1916. Serial No. 109,280. (Cl. 175—282.)



1. A connector embracing a cross head located between the members to be connected, and connecting devices each interlocking with said cross head and one of the members to be connected to lock them to said cross head.

[Claims 2 to 10 not printed in the Gazette.]

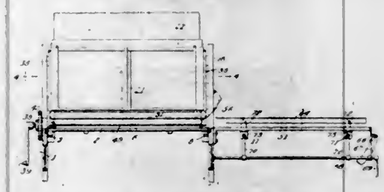
1,273,226. COMBINATION WAGON-BED AND HAY-FRAME. WILLIAM T. HOWE, Macon, Mo. Filed Nov. 13, 1916. Serial No. 131,082. (Cl. 21—74.)

1. A wagon body of the class described comprising a pair of side panels, side members hingedly secured to said side panels, a bracing member comprising a plurality of parallel arms secured to said body, a bracing member carried by said side members, a primary link pivotally secured between the parallel arms of said first mentioned bracing member, a plurality of fingers secured to said primary link and pivotally connected to said bracing member carried by said side members, said last mentioned fingers provided with gripping shanks for gripping said primary link and holding said fingers parallel with said link, and means for firmly binding said gripping shanks upon the primary link.



2. A wagon body of the class described comprising a pair of side panels, side members hingedly secured to said side panels, a bracing member comprising a plurality of parallel arms secured to said body, a bracing member carried by said side members, a primary link pivotally secured between the parallel arms of said first mentioned bracing member, a plurality of fingers secured to said primary link and pivotally connected to said bracing member carried by said side members, said last mentioned fingers provided with gripping shanks for gripping said primary link and holding said fingers parallel with said link, a pin passing through said primary link and the inner ends of said gripping shanks, and a spring mounted upon said pin for yieldably holding said gripping shanks tightly upon said primary link.

1,273,227. SLICING AND WRAPPING MACHINE. JOSEPH HAEN, Kingston, N. Y. Filed Nov. 23, 1916. Serial No. 132,932. (Cl. 93—2.)



1. A machine of the character described, comprising a container, a slide within the container, a track, means for moving the container into alinement with the track, and a pair of folders flanking the track.

3. A machine of the character described, comprising a track, a slide adapted to be received thereby, a forked spring-controlled deflector extending across the ingress end of the track, and a pair of folders flanking the track.

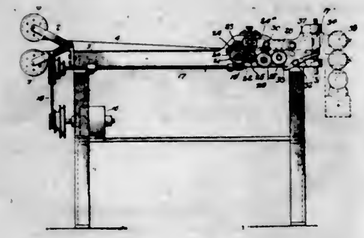
4. A machine of the character described, comprising a support adapted to sustain a charge, a hollow folder pivotally mounted at one side of said support, and means for projecting said charge into said folder.

8. A machine of the character described, comprising a support adapted to sustain a charge, and a hollow folder pivoted at one side of the support, said folder being provided with a plurality of finger slots and with an open side that is adapted to face said charge.

[Claims 2, 5 to 7, and 9 to 11 not printed in the Gazette.]

1,273,228. SLITTING AND WINDING MACHINE. DAWSON M. HUMISTON, Aurora, Ill. Filed Sept. 8, 1916. Serial No. 119,066. (Cl. 164—65.)

1. In slitting mechanism, the combination with rolls for holding and feeding a web, of a slitting couple, consisting of rollers having interfitting cutting flanges and grooves, a guide plate posterior to the slitting rolls having fingers extending into the grooves thereof to free the strips therefrom so that alternate strips pass above and below the guide plate.

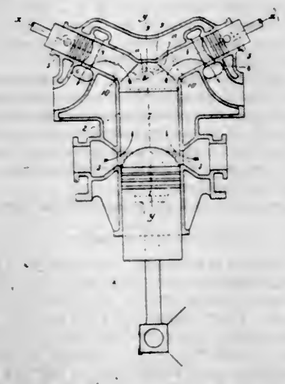


3. In slitting mechanism, the combination of holding reels for two webs to be fed together, a slitting couple to cut the webs simultaneously into strips, means for carrying the strips away from the slitting couple, and means for cutting the strips into lengths, said last named means including a fixed cutter, a movable weighted cutter-bar, a lever, a cam, and cam-driving means to operate the lever in definite relation to the travel of the strips.

7. In slitting mechanism, the combination of reels for holding two rolls of fabric, two slitting rolls having interfitting slitting flanges, means for feeding webs of fabric from the reels in contact with each other to the slitting rolls, and winding mechanism comprising shafts, separate containers removably placed on said shafts, means for securing the ends of slit strips within the containers and winding the strips within the containers, and driving means for the shafts.

[Claims 2 and 4 to 6 not printed in the Gazette.]

1,273,229. TWO-STROKE-CYCLE INTERNAL-COMBUSTION ENGINE. ERNST HUELSBRINK, Berlin-Friedenau, Germany. Filed Dec. 16, 1913. Serial No. 807,131. (Cl. 123—53.)

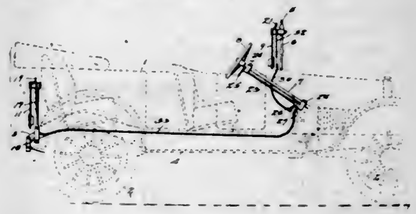


1. In a two-stroke cycle internal combustion engine, a main working cylinder; a main working piston for the latter; admission ports for said main working cylinder, overrun by said main working piston; exhaust cylinders of smaller cross-sectional area than the main working cylinder, disposed adjacent to the head of the main working cylinder and communicating with the latter; auxiliary pistons working in the exhaust cylinders; exhaust ports provided in said exhaust cylinders and overrun by said auxiliary pistons; and means to provide a smooth transit from the walls of the main working cylinder into the exhaust cylinders avoiding the deflection and backing up of the scavenging air flowing from the admission ports of the main cylinder toward the exhaust ports of the exhaust cylinders.

7. In a two-stroke cylinder internal combustion engine, in combination, a main working cylinder; a substantially semi-spherical cylinder head for the same; a plurality of exhaust cylinders communicating with said head; and means including curved wall portions to provide a smooth transit from the main working cylinder through said head into the exhaust cylinders.

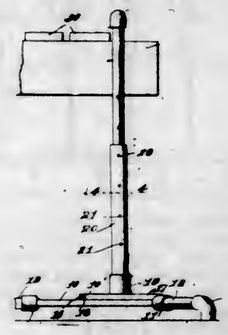
[Claims 2 to 6, 8, and 9 not printed in the Gazette.]

1,273,230. AUTOMOBILE-SIGNAL. ALPHONSE JANDRON, Marquette, Mich. Filed Aug. 23, 1917. Serial No. 187,788. (Cl. 116—31.)



The combination with an automobile including its frame, wind shield, and rear axle casing, of a signal arm pivoted at each end of the wind shield, a supporting frame fixed to the rear axle casing and a single, rear arm pivoted on said supporting frame and provided with a pair of short lever arms, wires forming connections between the rear lever arms and the front signal arms; the steering post, an operating lever pivoted thereon, a rock bar, and lever arms on said bar connected with said wires, whereby the rear pivoted arm may be swung in unison with a selected one of the front arms.

1,273,231. SCAFFOLD. THORVALD C. JOHANSEN, Grand Island, Nebr. Filed Nov. 9, 1917. Serial No. 201,170. (Cl. 20—81.)

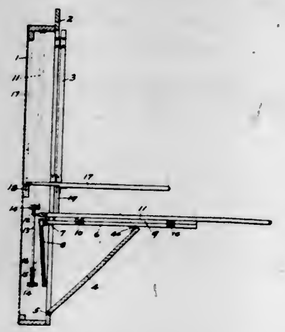


1. A scaffold member including a base having socket members, legs engaged in the sockets, a plate removably and pivotally mounted on the base, socket members carried by the plate, and vertical uprights engaged in the last-named socket members.

2. A scaffold member including a base having radially extending horizontal leg members, a plate pivotally and detachably mounted on the base, socket members carried

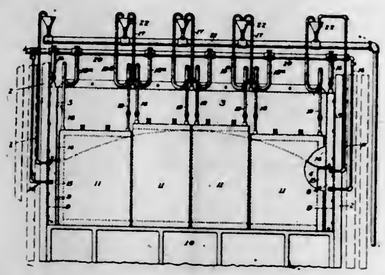
by the plate, upright members detachably engageable in the socket members, and platform supporting means carried by the upright members.

1,273,232. CABINET COMBINATION IRONING-BOARD AND BREAKFAST-TABLE. GEORGE W. KETCH and FREDERICK J. BERGER, Portland, Oreg. Filed Apr. 20, 1915. Serial No. 22,540. (Cl. 68—10.)



In a device of the character described, in combination, a cabinet casing, guide rods mounted within said casing, an ironing board provided with angular hinge members slidably connected with said guide rods, whereby said ironing board can be raised from a horizontal to a vertical position, and means for supporting said ironing board in a horizontal position.

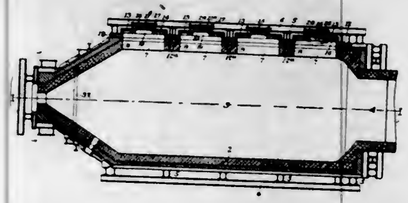
1,273,233. WATER-COOLED FRONT FOR FURNACES. LUTHER L. KNOX, Bellevue, Pa., assignor to Blaw-Knox Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Feb. 4, 1918. Serial No. 215,283. (Cl. 122—498.)



1. A water-cooled front for furnaces, comprising a water-cooled frame having a door opening therein, and a plurality of vertically movable water-cooled doors normally closing said opening, said doors being mounted for independent movement on the frame and each having its own water-circulating connections, said doors seating edge to edge, substantially as described.

2. A water-cooled front for furnaces, comprising a water-cooled frame consisting of vertical jamb members forming opposite sides of a single unobstructed door opening, and a horizontally extending mantel member forming the top of such opening, said jamb and mantel members having door-seating and guiding surfaces, and a plurality of water-cooled doors normally closing said opening, said doors being seated edge to edge and being mounted for independent movement, and each door having its own water-circulating connections, substantially as described.

1,273,234. WATER-COOLING SYSTEM FOR FURNACES. LUTHER L. KNOX, Bellevue, Pa., assignor to Blaw-Knox Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Feb. 4, 1918. Serial No. 215,284. (Cl. 122—498.)



1. The combination with a furnace having a side wall provided with a plurality of door openings with jamb portions between said door openings, said jamb portions comprising brick work and also frame members, and there being openings between the brick-work and the frame members, of hollow cooling members seated in said openings against the outer sides of the brickwork portion of said jamb portions, said members being removable separately by moving them laterally toward the said openings, substantially as described.

3. The combination with a furnace having a side wall provided with a plurality of door openings therein with jamb portions between said openings, said jamb portions having brick-work columns of hollow cooling boxes seated against the outer sides of said jamb portions, the cooling members for the intermediate columns being formed in two sections, the two sections together covering the width of one of said columns together with means for normally holding said boxes against the columns, substantially as described.

5. The combination with a furnace having a side wall provided with a plurality of door openings with jamb portions between said openings, of hollow cooling members removably seated against the outer sides of said jamb portions, and other hollow cooling members extending across the top of said openings and seating upon the upper ends of the first named members, the furnace having frame members behind which the said cooling members are removably seated, substantially as described.

10. In a furnace-cooling system, the combination with jamb coolers located at opposite sides of door-openings of the furnace, said jamb coolers having wedge-shaped door-seating portions, of hollow water-cooled doors seating on said wedge portions, and wedging means for forcing the doors to their seats as they are moved to closed position, substantially as described.

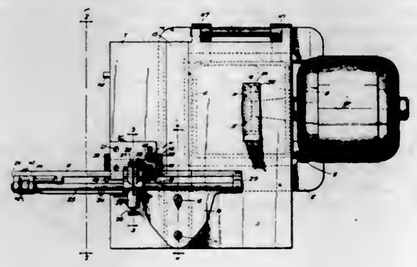
[Claims 2, 4, and 6 to 9 not printed in the Gazette.]

1,273,235. MITER-MACHINE. CHARLES S. LAMPHERE, Chicago, Ill., assignor to Illinois Publishing and Printing Company, Chicago, Ill., a Corporation of Illinois. Filed June 23, 1917. Serial No. 176,455. (Cl. 90—21.)

1. In a mitering machine, the combination of a supporting structure, a mitering cutter mounted on said structure for rotation, a carrier structure for shifting plates to be mitered through the field of said cutter, and an adjustable abutment head on said carrier structure having a plurality of abutment steps for receiving the plates to be mitered.

9. In a mitering machine, the combination of a supporting table, a rotary cutter mounted on and projecting above the top surface of said table, said table having a guide groove in its upper side parallel with the cutter, a supporting plate shiftable in said groove, a rail member secured to said plate parallel with the cutter axis, a carrier mounted on and shiftable on said rail member toward and away from said cutter, a rod secured to said rail member and graduated in accordance with the distance

between said carrier and said cutter, a frame extending from said carrier and receiving said rod, said rod being notched, a detent finger within said frame, an abutment secured to the rear end of said detent finger, a spring within the frame tending to force said abutment rearwardly to hold the front end of said finger in the notches



of said rod whereby to lock the carrier with reference to the cutter, pressure on said abutment causing release of said abutment from said rod to permit shifting of said carrier, said rod being longitudinally adjustable.

[Claims 2 to 8 not printed in the Gazette.]

1,273,236. WELL-SCREEN. MAHLON E. LAYNE, Houston, Tex. Filed Oct. 23, 1916. Serial No. 127,054. (Cl. 166—8.)



1. A well screen comprising in combination a supporting frame and a helix of screening wire thereon providing circulating channels, said frame having in its face a plurality of gathering compartments, each communicating with a number of circulating channels and having a discharge outlet of less capacity than the capacity of the channels communicating with the compartment.

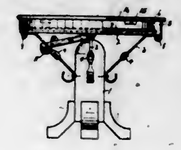
2. A well screen comprising in combination a supporting frame and a helix of screening wire thereon providing circulating channels, said frame having in its face a plurality of gathering compartments, each of varying width and depth, and each communicating with a number of circulating channels and having a discharge outlet, the compartments being widest and deepest adjacent said outlets.

6. A well screen comprising in combination a supporting frame and a helix of screening wire thereon providing circulating channels, said frame having in its face a plurality of gathering compartments arranged longitudinally of the frame in staggered relation, each communicating with a number of circulating channels and having an outlet, the compartment increasing in width and depth toward said outlet.

7. A well screen comprising in combination a supporting frame and a helix of screening wire thereon providing circulating channels, said frame having in its face a plurality of gathering compartments, each communicating with a number of circulating channels and having a discharge outlet of less capacity than the capacity of the channels communicating with the compartment and of less capacity than the compartment.

[Claims 3 to 5 not printed in the Gazette.]

1,273,237. COMBINATION POOL AND BILLIARD TABLE. HOARD LEE, Houston, Tex. Filed Apr. 5, 1915. Serial No. 19,091. (Cl. 46—12.)

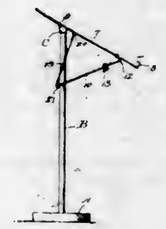


1. A device of the character described including a stand, a circular table mounted thereon, rods secured to said stand and table respectively, each rod being formed into sections and turn buckles connecting said sections and provided for adjusting the table relative to the stand.

2. In a device of the character described in combination, a table having a base therefor, rods secured to said base, rods secured to said table, turn buckles for adjusting the table relative to the base, an upstanding annular rim surrounding said table, peripheral pockets carried by the table, said pockets having square corners, a central pocket carried thereby, closures for said pockets, and a removable covering supported by said annular rim.

3. A device of the character described including a stand and circular table mounted thereon, an upstanding annular rim surrounding the same, peripheral pockets carried by the table, a circular covering resting on the rim, a shoulder projecting downwardly from the inner end of said covering and resting against said rim to prevent the lateral displacement of the covering and adjustable means securing the table on the stand and providing for the adjustment of the table relative to the stand.

1,273,238. DISPLAY-HOLDER. MORRIS LEON and ALPHA B. VANCE, Fort Smith, Ark.; said Vance assignor to said Leon. Filed Mar. 11, 1916. Serial No. 83,524. (Cl. 221—24.)



1. A display-holder comprising a sheet-metal normally inclined platform having in the upper part its side marginal portions slitted and material thereof bent outwardly whereby projections are provided that are arranged to engage removably over a crosspiece, and having also in its upper portion an outwardly-bent hook, an arm hinged to the lower portion of the platform and arranged to engage a standard of a stand, and a strut hinged to said arm and arranged to engage said hook at its free end.

[Claim 2 not printed in the Gazette.]

1,273,239. DISPLAY-HOLDER. MORRIS LEON and ALPHA B. VANCE, Fort Smith, Ark.; said Vance assignor to said Leon. Filed Sept. 14, 1916. Serial No. 120,148. (Cl. 211—24.)

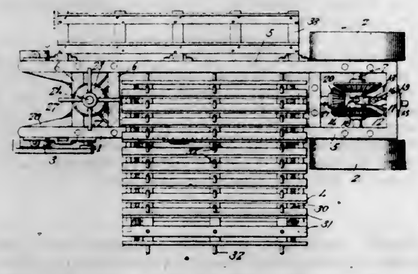
A display-holder comprising a platform having in its upper portion an opening adapted to accommodate a standard, an arm hinged to the lower portion of the platform

and arranged to engage the standard below the opening in the platform, and a strut hinged to said arm at a place



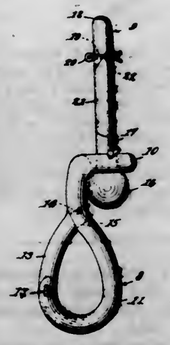
removed from the place of connection of the arm and platform and arranged to engage the upper portion of the platform.

1,273,240. CORNSTALK CUTTER AND LOADER. LEWIS L. LEONARD, Ocean Grove, N. J. Filed Nov. 2, 1915. Serial No. 59,281. (Cl. 56—130.)



In a corn cutter, a cutter shaft, a rotary cutter thereon, comprising radially disposed blades arranged in the same plane, each blade gradually widening from a middle point toward its ends, and having its edges beveled from opposite sides, said cutter being reversible, and each blade being furthermore cut away transversely at a point adjacent its central portion and extended at right angles thereacross whereby the blades may be disposed in contact and at right angles, and the cut away portions interlocked.

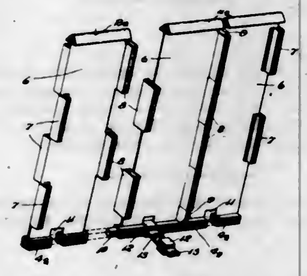
1,273,241. SWIVEL-CHAIN. MAURICE LEWIS, Paducah, Ky. Filed Sept. 20, 1917. Serial No. 192,338. (Cl. 59—95.)



1. In a swivel chain comprising links, each link having a shank with a seat therein, a loop on one end of the shank having a section of the said loop adapted to be removed, an extension on one end of the section adapted to enter the seat in the shank, means for detachably connecting the said section, and means for connecting the links.

2. In a swivel chain comprising links, each of said links having a shank with a seat therein, an eye on one end of the shank of one link and at right angles thereto, adapted to receive the shank of the companion link, the other link having an enlargement on one end to prevent its withdrawal from the eye, a loop on the other end of the shank having a section of the loop adapted to be removed, an extension on one end of the section adapted to enter the seat in the shank, and means for detachably connecting the section to the loop.

1,273,242. LEAF FOR FILING APPLIANCES. FRANK E. LIVERANCE, Jr., Wyoming Park, Mich., assignor to The McCaskey Register Company, (Incorporated in 1914,) Alliance, Ohio, a Corporation of Ohio. Filed Aug. 13, 1915. Serial No. 45,431. (Cl. 129—34.)



1. A filing leaf including a plurality of sections lying side by side extending the full length of the leaf, and means for securing the sections together in rigid relation to each other at adjacent edges thereof, substantially as described.

2. A filing leaf comprised of a plurality of sections located with the edges thereof adjacent each other, and means for tying the adjacent edges of the sections together to form a rigid leaf.

3. A filing leaf comprised of a plurality of sections, each section being provided with devices interengaging with like devices on an adjacent section, and means for securing the said devices of adjacent sections together.

4. A filing leaf comprised of a plurality of sections, means for connecting the edges of adjacent sections together, and separate means for securing all of the sections together at one end thereof.

6. In a filing leaf, a plurality of sections, tubular extensions formed at the edges thereof, said extensions on adjacent sections being interengaged, and a tie bar inserted through said extensions to tie the sections together.

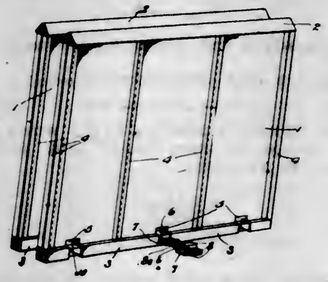
[Claims 5, 7, and 8 not printed in the Gazette.]

1,273,243. FILING APPLIANCE. FRANK E. LIVERANCE, Jr., Wyoming Park, Mich., assignor to The McCaskey Register Company, (incorporated in 1914,) Alliance, Ohio, a Corporation of Ohio. Filed Aug. 13, 1915. Serial No. 45,432. (Cl. 129—34.)

1. In combination, a plurality of filing leaves, each having a tubular lower end with parts thereof removed at a number of points in the width of the leaf, a plurality of devices hinged together, each device including a sleeve of substantially the same cross-section as and located in alinement with the tubular portion of a leaf, and a bar inserted through said tubular portion of each leaf and said hinged device associated with the leaf, substantially as described.

2. In combination, a plurality of filing leaves located one back of another, each having a tubular lower end with parts thereof removed at a number of points in the

width of the leaf, devices each including a sleeve having a cross-section substantially the same as and located in alinement with said tubular portions of each leaf at the openings therein, a bar extending through each tubular portion and the said devices associated therewith, and means hinging together the devices on adjacent leaves.

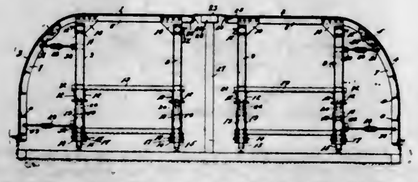


3. In combination, a plurality of filing leaves located one back of another, and each formed at its lower end with a tubular portion, a bar extending through said tubular portion, hinged devices connected to the bar between its ends and interlocked between the bar and the leaf, and means for pivotally connecting the hinging devices on one leaf to the similar devices on adjacent leaves.

4. A filing leaf including a body of sheet metal formed at its lower end into a tube, and having parts removed at a plurality of points in the length of the tube, sleeves located in the openings left by said removed portions, a bar extending through the tube and sleeves, and pintle receiving members formed on the sleeves, substantially as described.

5. A filing leaf including a body of sheet metal formed at its lower end into a tube, and having parts removed at a plurality of points in the length of the tube, sleeves located in the openings made at such removed portions, a bar extending through the tube and sleeves, and means on the sleeves whereby they may be pivotally connected to similar sleeves on similarly formed leaves, substantially as described.

1,273,244. TUNNEL MOLD-FORM. HOWARD B. LOXTERMAN, Pittsburgh, Pa., assignor to Blaw Steel Construction Company, Hoboken, Pa., a Corporation of New Jersey. Filed Feb. 5, 1916. Serial No. 76,345. (Cl. 25—131.6.)



1. A tunnel mold form comprising a pair of independently movable trucks each independently supporting a top mold section and a side mold section arranged with the free ends of the top sections facing one another, and a connecting plate supported between the free ends of the top sections whereby the sections are joined to form a complete tunnel mold.

2. A tunnel mold form comprising a pair of independently movable trucks each supporting a top mold section and a side mold section arranged with the free ends of the top sections facing one another, and means for withdrawing from the tunnel wall the forms carried upon one truck independently of the forms carried upon the other truck.

3. A tunnel mold form comprising a pair of independently movable trucks each supporting a top mold section and a side mold section arranged with the free ends of the top sections facing one another, a connecting plate supported between the free ends of the top sections whereby the sections are joined to form a complete tunnel mold, and means whereby the connecting plate is supported independently of the trucks.

1,273,245. ELECTROMAGNETIC SWITCHING DEVICE. ALBEN E. LUNDELL, New York, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 11, 1916. Serial No. 119,477. (Cl. 175—281.)

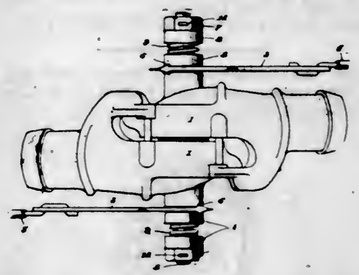


1. In an electromagnetic switching device, a magnetic core, an energizing winding therefor, a non-conductive oscillating disk supported on one end of said core, a plurality of contact plates mounted on said disk, an armature also mounted on said disk, and a plurality of contact springs supported upon the other end of said core, and coöperating with said contact plates.

3. In an electromagnetic switching device, a core, an energizing winding therefor, a non-conductive oscillating disk pivotally supported on one end and on a pivot transverse to the axis of said core, a plurality of contacts and an armature carried by said disk, a plurality of contact springs coöperating therewith extending parallel to the axis of said core, and means for supporting said contact springs on the core.

[Claims 2 and 4 to 8 not printed in the Gazette.]

1,273,246. CONNECTING DEVICE FOR TRAIN TELEPHONE-LINES. GUSTAF W. LUNDIN, Bellevue, Iowa. Filed Oct. 6, 1916. Serial No. 124,134. (Cl. 173—259.)



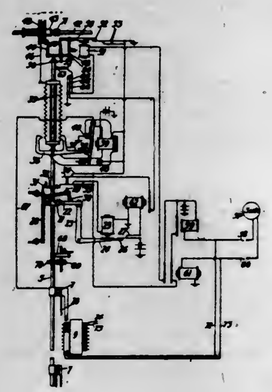
2. In a connector for telephone lines, the combination with a binding post, of a forked conductor terminal adapted to straddle said post, a spring pressed washer carried by the binding post and substantially arrow shaped terminals formed on each end of the conductor terminal to provide wedges for positioning the latter and shoulders to prevent its accidental displacement.

[Claim 1 not printed in the Gazette.]

1,273,247. AUTOMATIC SWITCH. FRANK A. LUNDQUIST, New York, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 2, 1916. Serial No. 134,577. (Cl. 179—27.5.)

1. In a terminal bank, a plurality of contact strips insulatively separated from each other, contacts on said strips extending from the face of said bank, contacting portions of certain of said contacts being in a plane parallel to the face of the bank, contacting portions of

certain others of said contacts being in a plane which intersects the face of the bank, and means for supporting said contact strips in fixed relation.

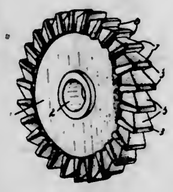


2. In a terminal bank, a plurality of contact strips insulatively separated from each other, contacts on said strips, the ends of certain of said contacts being arranged to serve as the contacting portions, and the sides of other of said contacts being arranged to serve as the contacting portions, and means for supporting said contact strips in fixed relation.

7. In a terminal bank, a plurality of contact strips insulatively separated from each other and arranged in sets, contacts on said sets of strips arranged in alinement, the ends of certain of the contacts in alinement being arranged to serve as the contacting portion, the sides of other of the contacts in alinement being arranged to serve as the contacting portion, and means for supporting said contact strips in fixed relation.

[Claims 3 to 6 not printed in the Gazette.]

1,273,248. MILLING-CUTTER. EDWARD LUBKER, Kokomo, Ind., assignor to Haynes Stellite Co., Kokomo, Ind. Filed Nov. 24, 1917. Serial No. 203,761. (Cl. 29—105.)



1. A cutter comprising a cast metal body of nickel steel alloy, and a cutter blade of "stellite" embedded in said cast metal body.

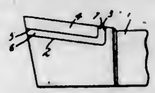
2. A cutter comprising a cast metal body and a cutter blade of "stellite" embedded in said cast metal body.

[Claim 3 not printed in the Gazette.]

1,273,249. CUTTING-TOOL FOR LATHES, PLANERS, SHAPERS, AND THE LIKE. EDWARD LUBKER, Kokomo, Ind., assignor to Haynes Stellite Co., Kokomo, Ind. Filed Nov. 24, 1917. Serial No. 203,762. (Cl. 29—95.)

6. A cutting tool comprising a shank of carbon steel, and a "stellite" bit disposed on and secured to said shank by a weld of "stellite."

7. A cutting tool comprising a metal shank having a bit seat, a bit disposed on said seat, and a welding insert



between the said bit and shank of the same metal as the bit.

[Claims 1 to 5 not printed in the Gazette.]

1,273,250. SPRING TERMINAL CLIP. WILLIAM LUXMORE, Chicago, Ill. Filed Jan. 27, 1916. Serial No. 74,570. (Cl. 173—259.)

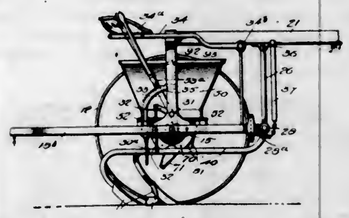


3. A metallic ribbon spring terminal for electrical conductors comprising a spring member, a body member, a resistant member, one of said members provided with slots, the resistant member adapted to engage an abutment disposed between said slots.

7. A fastening device for electrical conductors formed from a single piece of flat resilient metallic ribbon having substantially greater width than thickness and comprising a flat body member, adapted to lie upon a base and be fastened thereto, an opposing spring member situated opposite said body member, one of said members being provided with a resistant member bent intermediate its length to form an angular wire engaging portion, the apex of which projects through the opposite member, said members being so formed that opposing faces of each normally abut one another whereby a conductor may be clamped between the opposing faces without shearing the conductor.

[Claims 1, 2, 4 to 6, and 8 to 10 not printed in the Gazette.]

1,273,251. AGRICULTURAL IMPLEMENT. JOHN S. LYLE, McLoud, Okla. Filed June 29, 1916. Serial No. 106,721. (Cl. 275—7.)



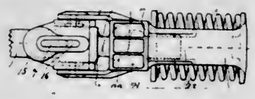
1. A seeder including a rotatable disk having a circumferential rib around its median line and forming annular recesses at its opposite sides, seed rings detachably mounted in said recesses and independently removable, a hopper for the seed, and means within the hopper to separately control the discharge of seed by the said seed rings.

2. A seeder including a seed hopper, a rotatable disk the upper portion of which projects into the hopper, provided with a circumferential median rib forming annular spaces at its opposite sides, seed feeding rings detachably mounted in said spaces, a casing surrounding the lower portion of the disk and having an intermediate channel to receive said rib, whereby to thus divide the casing into separate compartments at its opposite sides and adjacent to the feeding rings, and discharge spouts leading from the opposite sides of said casing, for the purpose described.

4. A seeder including a seed hopper, a rotating disk the upper portion of which projects into the hopper, seed feeding rings removably supported by said disk, a casing surrounding the lower portion of said disk and rings to receive the seed from the latter, and having discharge spouts leading therefrom, and a broad-casting device carried by said casing, including an adjustable hinged door onto which the seed falls from the said rings when the door is in operative position.

[Claims 3, 5, and 6 not printed in the Gazette.]

1,273,252. DRAFT-RIGGING FOR CARS. ALVIN C. McCONE, Chicago, Ill. Filed July 17, 1913. Serial No. 779,532. (Cl. 213—64.)

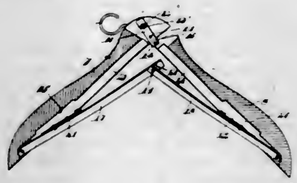


2. In a draft rigging for cars, the combination with a draft gear casing having rigidly projecting arms, of a differential draft gear within said casing, and a draw bar having a pivotal and longitudinally slidable connection with said arms, whereby said draw bar may move pivotally in respect to said casing, and may move rearwardly independent of said casing and forwardly with said casing.

4. In a draft rigging for cars, the combination with a draft casing and a frictional draft gear therein, of a draw bar pocket connected to said casing by headed trunnions and coöperating trunnion seats permitting pivotal and longitudinal sliding movements of said pocket in respect to said casing, a draw bar extended into said casing, and a key detachably connecting said pocket to said draw bar.

[Claims 1, 3, and 5 to 7 not printed in the Gazette.]

1,273,253. GARMENT-HANGER. WILLIAM A. McGINNIS, Chicago, Ill. Filed May 3, 1916. Serial No. 95,150. (Cl. 211—13.)

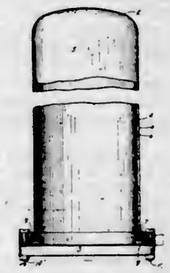


A garment hanger comprising two divergently arranged supporting arms having the inner ends thereof bifurcated to provide kerfs intermediate the side walls of said arms, a metallic plate set in the kerf of one arm, a sleeve extending through said arm and said plate, a hook having its inner end extending through said sleeve and rotatably held therein, means transversely of said arm holding said plate against movement relative to said arm, said plate having an end thereof protruding from said arm into the kerf of the other arm, and means transversely of the last mentioned arm maintaining a pivotal connection between said arm and said plate.

1,273,254. RECEPTACLE. GEORGE H. MAAS, Milwaukee, Wis. Filed July 26, 1917. Serial No. 182,969. (Cl. 220—108.)

1. The combination with a casing formed of metal, coated with enamel, of a clamping ring surrounding the open end of said casing and a solution adapted when heated to flow between said parts and form a water tight joint between said casing and ring.

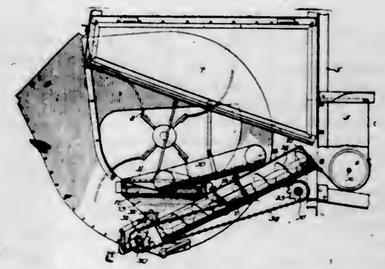
2. The combination of a metal casing having an out-turned peripheral flange at its open end, and an external and internal enameled surface secured to said metal, a clamping ring surrounding the open end of said casing provided with an inturned flange, said inturned flange being located above and lapping the casing flange, and a solution adapted, when heated, to flow between the joints of said casing and clamping ring, whereby a water tight joint is formed between said casing and clamping ring.



3. The combination with a casing formed of enameled metal, having an out-turned peripheral flange at its open end, a clamping member surrounding said open end, and provided with an internal flange located above and lapping the casing flange, and solder adapted to adhere to and form a tight joint between said casing and clamping ring.

4. The combination with a casing formed of enameled metal having an out-turned peripheral flange at one end, a clamping member surrounding said lower end and provided with an internal flange located above and lapping the casing flange, solder adapted when cold to adhere to and form a water tight joint between said ring and casing, a base plate secured to the lower side of said ring, a packing located between said base plate and ring, and means for securing said base plate to said ring beneath said packing.

1,273,255. PNEUMATIC STRAW-STACKER. WALLACE F. MACGREGOR, Racine, Wis., assignor to The Indiana Manufacturing Company, Indianapolis, Ind., a Corporation of West Virginia. Filed Feb. 15, 1918. Serial No. 217,373. (Cl. 130—17.)



1. The combination, with a pneumatic stacker, of a tailings auger, a countershaft in parallel relation thereto, driving means connecting said auger and shaft, a grain saving conveyer communicating with said tailings auger, actuating mechanisms at one end of said conveyer, a driving wheel on said countershaft, and means connecting said wheel and said actuating mechanisms for operating said conveyer to deliver material into said tailings auger.

2. The combination, with a pneumatic stacker, of a tailings auger, a countershaft in parallel relation thereto, driving means connecting said auger and shaft, a

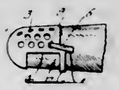
conveyer communicating with said auger, a gear boxing in which one end of said conveyer is mounted, driving gear therein, a sprocket on said countershaft, and a chain communicating with said sprocket and said driving gear whereby said conveyer is actuated from said gear.

3. The combination, with a pneumatic stacker comprising a fan, an auxiliary blast pipe, a grain trap adjacent said fan, and a hopper leading from said trap, of an auger conveyer communicating with said hopper, a gear boxing in which said conveyer is supported, driving gear in said boxing communicating with said conveyer, a tailings auger with which said conveyer communicates, a sprocket at the end of said auger, a countershaft arranged in parallel relation to said auger, a sprocket at the end thereof, a chain connecting said sprockets, a sprocket on said countershaft distant from its end and in alinement with said conveyer gearing, and means connecting said latter elements for actuating said conveyer from said auger.

4. In combination, a separator and a pneumatic stacker, said separator embodying means for conveying tailings, a countershaft in parallel relation to said conveying means, actuating means communicating with said conveyer and said countershaft, a grain saving conveyer communicating with said tailings conveyer, driving mechanism associated with said grain saving conveyer, and means communicating with said countershaft and said grain saving conveyer for actuating the latter to deliver material into said tailings elevator.

5. In combination, a separator and a pneumatic stacker, said separator embodying means for conveying tailings, a countershaft in parallel relation to said conveying means, actuating means communicating with said conveyer and said countershaft, a grain saving conveyer communicating with said tailings conveyer and having a door therein for the inspection of material, driving mechanism associated with said grain saving conveyer, and means communicating with said countershaft and said grain saving conveyer for actuating the latter to deliver material into said tailings elevator.

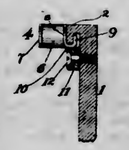
1,273,256. GLOVE-THIMBLE. WILLIAM W. MANNINO, Mountainair, N. Mex. Filed Apr. 24, 1918. Serial No. 230,541. (Cl. 2—104.)



1. A finger-stall in the form of a metallic cap provided on its inner surface with spaced ventilating perforations and provided at its sides with bendable hook-shaped glove-engaging prongs having their free ends extended into certain of the perforations.

[Claim 2 not printed in the Gazette.]

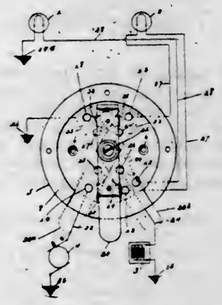
1,273,257. FLUID-TURBINE. WILLIAM T. MANOGUE, St. Louis, Mo., assignor, by mesne assignments, to Schroeder Headlight & Generator Company, Evansville, Ind., a Corporation of Indiana. Substitute for application Serial No. 9,430, filed Feb. 19, 1915. This application filed Oct. 26, 1916. Serial No. 127,945. (Cl. 253—77.)



1. A rotor-wheel composed of a circular disk or body-portion having an integral lateral peripheral rib with an undercut channel or circumferential groove formation constructed along its inner angle, and a circular continuous series of buckets each of which has a single hook formation along its inner or attaching edge and is thereby adapted to be laterally placed into locking-engagement with the said undercut channel on the rim of the disk.

2. A rotor-bucket comprising a semi-circular, pressure-receiving body-portion, side-walls having semicircular edges adapted to register and seat in contact with the body-portion of the next-succeeding body-portion in a circular, continuous series of buckets, and a single angular outwardly-turned hook formation projecting from the inner attaching-edge of one of the said side-walls for lateral, ready fastening-engagement in a rotor-wheel.

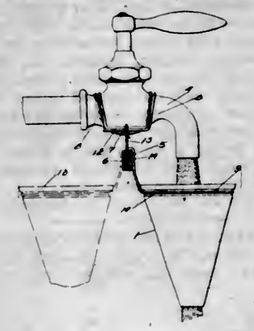
1,273,258. ELECTRIC-LIGHTING SYSTEM. WILLIAM S. MASON, Mayfield, N. Y. Filed June 28, 1915. Serial No. 36,625. (Cl. 171—97.)



In an electric-lighting system and in combination, a pair of electric lamps of substantially equal resistance; a dynamo of a voltage-capacity corresponding with the combined resistance of both lamps, one terminal of said dynamo being connected with ground; a battery of a voltage-capacity corresponding with the resistance of the individual lamps, one terminal of the battery being connected with ground; and switch mechanism having a contact connected with the other terminal of said dynamo, a contact connected with the other terminal of said battery, a contact connected with one terminal of one of said lamps, a contact connected with the other terminal of said lamp, a contact connected with one terminal of the other lamp, the other terminal of said last-mentioned lamp being connected with ground, said switch mechanism having means including a movable member whereby in one position of the movable member its said contact connected with ground is also connected with one of the contacts in connection with said first-mentioned lamp, and the contact connected with the battery is also connected with the contacts respectively in connection with the second-mentioned lamp and the other terminal of the first-mentioned lamp, and in another position of said movable switch-member the contact in connection with the dynamo is also connected with the contact in connection with one terminal of the first-mentioned lamp, and the contact in connection with the other terminal of the first-mentioned lamp is connected with the contact in connection with the second-mentioned lamp.

1,273,259. SOAPSUDS APPARATUS. ARTHUR F. MERRILL, Portland, Oreg. Filed June 10, 1914. Serial No. 844,140. (Cl. 45—28.)

1. A soap suds dispenser comprising a conic-frustum shaped soap holder, and having an annular outer groove near its largest end and an annular inner flange near its largest end, a cone shaped strainer carried within said holder and adapted to have its edge pressed beneath the flange of the holder so as to be retained thereby, a wire ring adapted to engage the aforesaid groove so as to carry the holder, and provided with an upwardly extending end having a bent over hook, a wire fastener adapted to be attached to a faucet and carrying a depend-



ing coil of wire arranged to pivotally hold the hook end of the wire ring.

[Claim 2 not printed in the Gazette.]

1,273,260. SIGNAL-FUSEE. FREDERICK H. MILLER, Wilkinsburg, and ROBSON DE S. BROWN, Pittsburgh, Pa., assignors of one-third to said Miller, one-third to said Brown, and one-third to Herbert L. Stitt, Pittsburgh, Pa. Filed Sept. 11, 1917. Serial No. 190,856. (Cl. 102—24.)



1. A signal fusee comprising a container, a body of combustible material therein, a removable closure for the said container, and means, attached to the said closure and extending into the said container, for automatically igniting the said combustible material when the said closure is removed from the said container.

4. A signal fusee comprising a tubular container, a body of combustible material disposed therein, a removable closure for the said container, and a flexible friction igniter, attached to the said closure and extending into the said combustible material, for automatically igniting the said combustible material when the said closure is removed from the said container.

9. An ignition device comprising a combustible disk having an opening, a body of frictionally ignitible material disposed on the disk and around the opening therein, a flexible frictional member extending through the opening in the disk, the said flexible frictional member being of one thickness at its portion adjacent to and on one side of the disk and of a greater thickness throughout the remainder of its length, and means for drawing the thicker portion of the flexible frictional member through the opening in the disk to ignite the body of frictionally ignitible material on the disk.

10. An ignition device comprising a combustible disk having a slot that extends from the axis to the periphery of the same, a body of frictionally ignitible material disposed on the disk and around the inner end of the slot, and a flexible frictional member that is adapted to be drawn through the slot to ignite the frictionally ignitible material on the disk.

[Claims 2, 3, 5 to 8, and 11 not printed in the Gazette.]

1,273,261. NECKWEAR. GEORGE W. MILLS, Jr., Brooklyn, N. Y. Filed Mar. 18, 1915. Serial No. 15,178. (Cl. 2—11.)



1. A necktie having a neckband and a tying end, a piece of material folded to form both faces of said necktie, a foundation fabric folded and positioned within and completely inclosed by said piece of material and stitches engaging with said piece of material and said foundation fabric to hold same together along the longitudinal folded edges of said tying end.

7. In a necktie, a cover fabric, an interlining in a tying end thereof, a supplemental strip of material extending longitudinally of said tying end and attached to said interlining within said tying end and separate means attaching said strip to the cover fabric on the inner face of the tie at or near the longitudinal edges of said tying end.

8. In a necktie, a cover fabric, a supplemental strip of foundation material extending longitudinally of a tying end of said tie, said strip being folded back with said cover fabric at the edges of said tying end, longitudinal rows of stitches attaching said folded back portions of said strip to the folded back portions of said cover fabric, substantially at the longitudinal edges of said tie in said tying end.

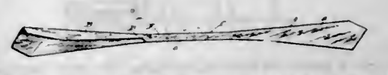
[Claims 2 to 6, 9, and 10 not printed in the Gazette.]

1,273,262. NECKWEAR. GEORGE W. MILLS, Jr., Brooklyn, N. Y. Filed Mar. 18, 1915. Serial No. 15,179. (Cl. 2—11.)



In a necktie having a neckband and two tying ends, a bias-cut cover fabric forming the outer face of the tying ends, the edges of the cover fabric being folded back and being spaced apart for substantially the length of a tying end, an interlining for a tying end, a straight-cut lining for a portion of the inner face of the tie, stitches securing said lining to said interlining substantially throughout the length of said lining, the said edges of said cover fabric being positioned between the edges of said interlining and said lining and additional stitches securing said lining to said edges of said cover fabric, said lining bridging the space between said edges and holding said interlining in place.

1,273,263. NECKTIE. GEORGE W. MILLS, Jr., New York, N. Y. Filed July 26, 1916. Serial No. 111,337. (Cl. 2—11.)



1. In a necktie formed of two pieces of fabric, one piece of fabric forming substantially entirely one tying end and one face of the neckband and the other piece of fabric

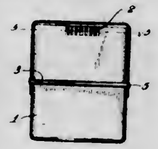
forming substantially entirely the reverse face of the neckband and the opposite tying end.

5. In a necktie having a neckband and two knot-forming portions comprising fabric folded back at the edge, the fabric forming one of said knot-forming portions being folded so the folds will be on the opposite face of the tie to the folds of the other knot-forming portion.

7. In a necktie, two pieces of fabric each having portions of its opposite edges doubled back to form tying ends for the tie, each piece having a single ply integral extension of the length of the neckband portion of the tie, said extensions being secured together forming a two-ply neckband for the tie.

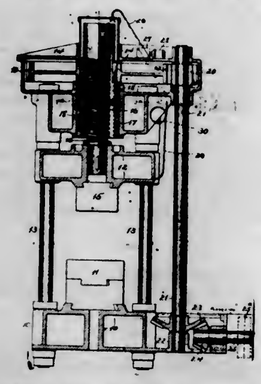
[Claims 2 to 4 and 6 not printed in the Gazette.]

1,273,264. CIGARETTE AND MATCH CASE. ARTHUR T. MORAN, Hopkinton, Mass. Filed Oct. 26, 1916. Serial No. 127,882. (Cl. 206—33.)



A cigarette and match safe comprising a container of elongated formation having a depression on its interior extending around the side and end walls of the container and forming a bead on the exterior of the container substantially intermediate the ends thereof, the upper marginal edge of one of the side walls at a point remote from the said bead being provided with a series of corrugations for forming a match striking surface, a cover for the said container having an elongated portion adapted to embrace the upper portion of the said container, the said cover having a struck out portion near its open end adapted to register with the said bead, the interior surface of the said cover being tightly engageable with the exterior of the upper portion of the said container to provide a water tight joint in addition to the joint provided by the said registration of the bead with the said struck out portion of the cover whereby the said match striking surface will be prevented from becoming damp when the container is submerged in water after the cover has been mounted in position.

1,273,265. FORGING, FLANGING, AND OTHER PRESS. WILLIAM HENRY MORGAN, Alliance, Ohio. Filed May 5, 1917. Serial No. 166,735. (Cl. 78—35.)

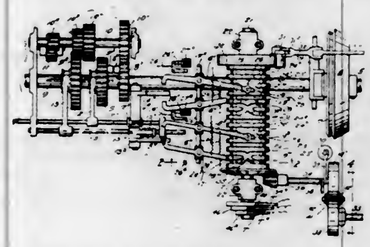


1. In a press for forging, flanging, etc., the combination of fixed upper and lower platens, a plurality of columns secured to the lower platen and carrying the upper platen, a movable platen mounted on the columns intermediate the two fixed platens, a screw secured to the movable platen and projecting upwardly into the upper fixed platen, a nut mounted in said upper platen and meshing with the screw on the movable platen, and gearing housed within the upper fixed platen for rotating the nut.

5. In a press for forging, flanging, etc., the combination of a fixed platen and a movable platen, a screw carrying the latter, a fixed nut secured to the fixed platen, an internally and externally threaded nut meshing with the fixed nut and also the screw on the movable platen, a gear wheel having a spline and a groove connection with the internally and externally threaded nut and gearing for actuating said gear wheel.

[Claims 2 to 4 not printed in the Gazette.]

1,273,266. CHANGE-SPEED MECHANISM FOR AUTOMOBILES. HARRY M. PATCH, Seattle, Wash. Filed Oct. 14, 1914. Serial No. 866,581. (Cl. 74—58.)



1. Change-speed gear apparatus for automobiles, comprising speed-gear shifters, controlling levers therefor, mechanical means for actuating said levers, power-operated means for driving the aforesaid means, and electro-magnetic devices comprising manually controlled electric switches whereby said levers may be selectively placed in operative relation with said means.

2. Change-speed gear apparatus for automobiles, comprising a series of gear-shifting devices, power-driven rotary means for actuating said devices, and manually-controlled electro-magnetic devices for selectively causing said gear-shifting devices to be subject to the action of said rotary means.

3. Change-speed gear apparatus for automobiles, comprising speed-gear shifting devices, a drum, means to drive the drum in selected rotary directions, and electro-magnetic means for positioning said devices so as to be actuated by the drum to shift selected change-speed gears.

4. Change-speed gear apparatus for automobiles, comprising speed-gear shifting devices, a drum, means to drive the drum in selected rotary directions, electro-magnetic means for positioning said devices so as to be actuated by the drum to shift selected change-speed gears, and electro-magnetic means for regulating the action of the aforesaid electro-magnetic means and also serving to control the actions of the drum-driving means.

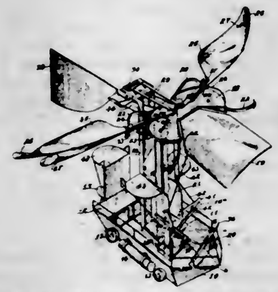
5. Change-speed gear apparatus for automobiles, comprising gear-shifters, mechanical means for operating the gear-shifters, electro-magnetic means including push-buttons for operating said means and causing selected ones of said gear-shifters to be in operative or inoperative relation with respect to said mechanical means, and clutch mechanism arranged to be uncoupled by said mechanical means when the latter effects the operation of a gear-shifter.

[Claims 6 to 13 not printed in the Gazette.]

1,273,267. FLYING-MACHINE. PER A. PETERSON, New York, N. Y. Filed May 27, 1916, Serial No. 100,182. Renewed June 5, 1918. Serial No. 238,395. (Cl. 244—20.)

1. In a flying machine, the combination with the frame thereof, of horizontal oscillating wings of upwardly concave contour whereby horizontal movement of the wings in either direction exerts force to raise the machine, and means for driving the wings.

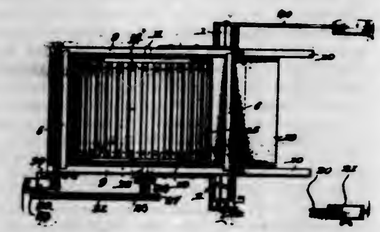
4. In a flying machine, lifting wings, propelling blades movably connected with the lifting wings, and manually controlled means for folding the propelling blades to the lifting wings when it is desired to land.



9. In a flying machine, the combination with a buoyant body having wheels, of a standard, a motor at the base of the standard, a propeller and shaft operated by the motor, a platform at the top of the standard, spring buffers, arms pivoted on the platform and having dished wings at their outer ends, a lever pivoted on the standard, means connected with the motor for operating the lever, links connecting the lever with the arms of the wings, blades hinged beneath the wings, means for throwing the blades out of operation, a rudder, and a deflector.

[Claims 2, 3, and 5 to 8 not printed in the Gazette.]

1,273,268. VEGETABLE-WASHING MACHINE. AUGUST PRANKE, North Detroit, Mich. Filed Apr. 8, 1918. Serial No. 227,158. (Cl. 146—14.)

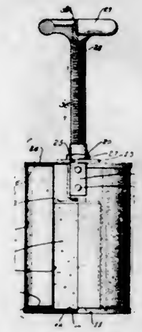


A vegetable washing machine comprising a tub, a frame having one end thereof pivotally connected to one end of said tub and normally resting on the upper edges of said tub, supports as a continuation of the side walls of said tub at the upper edges thereof and adjacent the pivoted end of said frame and adapted to have said frame rest thereon, a slatted tumbling barrel journaled in said frame and adapted to have a portion thereof immersed in water in said tub, side arms carried by the pivoted end of said frame in a plane therewith and adapted to facilitate swinging said frame and its tumbling barrel from the top of said tub on to said supports, adjustable weights on said arms as a counterbalance for said tumbling barrel, and means normally carried by said tub adapted for rotating said tumbling barrel when in said tub.

1,273,269. SOAP-SHAVER. FRITZ PUGGE, Cambridge, Mass. Filed Mar. 9, 1918. Serial No. 221,348. (Cl. 146—9.)

1. In a soap shaver, the combination with a cylindrical can, a cover, and means for engaging said cover with said can, of a plurality of cutters at the bottom of said can, said cutters covering openings extending therethrough, a tube fitted to the bar of soap to be shaved, said tube being rotatable within said can, means for rotating said tube, and means for pressing the soap against said cutters.

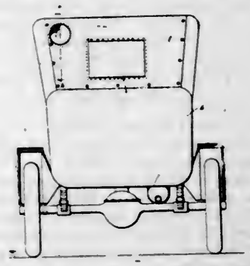
2. In a soap shaver, the combination with a cylindrical can and a cover therefor, of a plate secured to said cover, means on said can whereby said plate may be readily clamped in engagement, cutters covering open slots in the bottom of said can, means for guiding a bar of soap so as to rotate axially centrally of said can, means for raising said guiding means above said bottom, a rectangular plunger operating in said guiding means, means for rotating said plunger, and means for forcing said plunger downward.



3. In a soap shaver, the combination with a hollow cylindrical can and a cover therefor, means for clamping said cover in engagement with said can, a bottom fixed to the lower end of said can, a plurality of cutters disposed on said bottom and covering longitudinal slots thereunder, a rectangular casing rotatably engaged in said can, said casing being suited to receive a bar of soap, a spaced ring whereby said casing is held in raised relation to said bottom, a threaded hub formed with said cover, a screw suited to said hub, means for operating said screw, and a plunger plate at the lower end of said screw adapted to operate in said casing whereby said casing is rotated and the soap bar simultaneously pressed downward against said cutters.

4. In a soap shaver, the combination with a cylindrical can, a head removably engaged therewith, means for clamping said head in engagement, and a bottom fixed with said can, of a plurality of slots formed through said bottom, the material of said slots being upturned and forming cutters, a rotatable casing adapted to contain a bar of soap mounted axially in said can, a screw engageable with said head, a plunger plate at the lower end of said screw operable within said casing, and means for operating said screw whereby said plunger plate is pressed down and said casing rotated.

1,273,270. ATTACHMENT FOR MOTOR-VEHICLES. ROBERT ANDREW PULLAR, Anacortes, Wash. Filed Nov. 19, 1917. Serial No. 202,837. (Cl. 88—67.)



1. In combination with a motor vehicle, of a mirror mounted on the wind shield within the top, said top hav-

ing at the rear left upper corner an opening, and a disk of transparent material held over the opening in line with the mirror, said mirror and disk being above the level of the head of the driver when seated in the vehicle.

[Claim 2 not printed in the Gazette.]

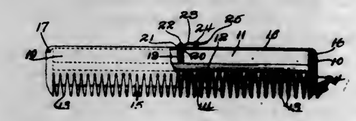
1,273,271. SNAP CONNECTION FOR TIRE-CHAINS. ALEXANDER PURDIE, Wyandotte, Mich. Filed May 13, 1915. Serial No. 27,742. (Cl. 152—14.)



1. An anti-skidding device for tires comprising a chain tread section adapted to embrace and conform to a tire tread, a pair of clamp sections adapted to grip the spokes between them and provided with oppositely disposed lugs, links engaging each pair of lugs and adapted to draw the clamp sections together when under strain, and means for detachably connecting one of the links with the adjacent end of the sections.

[Claim 2 not printed in the Gazette.]

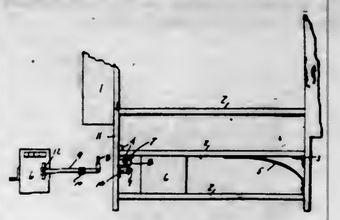
1,273,272. FOUNTAIN-COMB. JOSEPH PERRY RANKIN, Plenty, Saskatchewan, Canada. Filed May 10, 1917. Serial No. 167,759. (Cl. 132—3.)



A fountain comb comprising a back having a cavity therein with tapering sides, said cavity extending from end to end of the back, a closure for said cavity at the wider edge of the back and hinged to the back at one end, hollow tapering teeth projecting from the narrower edge of the back opposite said closure and communicating with said cavity and exteriorly through openings near the points of the teeth, a longitudinal valve with tapering sides extending the length of the cavity and normally seated in the narrower or lower portion thereof to close communication between the cavity and the hollow teeth, a pin projecting upwardly from the longitudinal center of said valve through the closure, resilient means between the closure and valve for pressing the valve to its seat, and a finger lever fulcrumed on the outer side of the closure for raising the valve when depressed.

1,273,273. AUTOMATIC REGISTERING DEVICE. BERTRAM F. RANCH, Seattle, Wash. Filed Feb. 10, 1917. Serial No. 147,794. (Cl. 235—99.)

In combination, a frame, a step hinged at one end to the frame, two spaced stops on the opposite side of the frame and between which the opposite free end of the step is fitted, a spring between the frame and the hinged end of the step, a register, a link pivoted to the under side of the free end of the step, a horizontal lever pivoted to the lower end of the link at right angles to the upper link pivot, a pivot extending from the frame to support the lever, and a pivotal connection between the free end of the lever and the register, said pivot being parallel



with the pivotal connection at the opposite end of the lever.

1,273,274. TERMINAL BANK. JOHN NEWBERRY REYNOLDS, Greenwich, Conn., and OSCAR F. FORSBERG, Yonkers, N. Y., assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed May 25, 1916. Serial No. 99,753. (Cl. 175—306.)



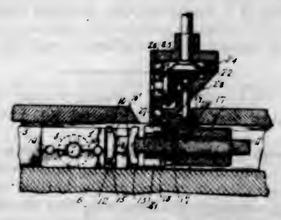
1. In a switch bank, clamping plates provided with laterally extending lugs having apertures, a plurality of insulatedly separated contact strips mounted between and having their long axes parallel with the long axes of the clamping plates, contacts extending from said contact strips and tie rods extending through said lugs for holding said plates in fixed relation.

2. In a switch bank, clamping plates provided with laterally extending lugs having apertures, insulatedly separated contact strips mounted between said clamping plates, each of said contact strips being provided with laterally-extending contacts, and tie rods extending through said lugs for holding said plates in fixed relation.

3. In a switch bank, the combination of a plurality of terminal units assembled in operative relation, each unit comprising clamping plates, insulatedly separated contact strips, and holding means for said plates and strips, the mentioned holding means of the various units being in staggered relation.

4. In a switch bank, the combination of a plurality of terminal units assembled in operative relation, each unit comprising clamping plates provided with laterally extending lugs having apertures, insulatedly separated contact strips, and tie rods extending through said lugs for holding said plates and strips in fixed relation, the mentioned tie rods of the various units being in staggered relation.

1,273,275. PLATE-CLAMP. OSCAR ROSEEN and ISIDOR TORNBERG, New York, N. Y., assignors to R. Hoe and Co., New York, N. Y., a Corporation of New York. Filed Nov. 10, 1915. Serial No. 60,652. (Cl. 101—388.)

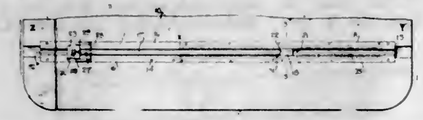


1. In a plate clamping device, the combination with a clamp, of an anchor base and means for adjustably locking it in a groove, a clamp carrier along which the clamp is movable secured to the base so as to swing relatively thereto, and means on the carrier arranged to coöperate with a suitable tool for adjusting the clamp.

14. In a plate clamping device, the combination with a plate support having undercut grooves, of a pair of spaced blocks having beveled sides, an adjusting screw located between the blocks for adjusting the blocks for locking each of them in position against the sides of the grooves, a threaded clamp carrier anchored to the blocks, and a clamp adjustable on the carrier.

[Claims 2 to 13 not printed in the Gazette.]

1,273,276. SHEET-GUIDE FOR CYLINDER-PRESSES. HERBERT ROTHWILL, Scobey, Mont. Filed Dec. 1, 1917. Serial No. 204,881. (Cl. 273.)



1. A feed board for presses having a transverse channel, there being graduations on one side of the channel, and a sheet guide sliding in said channel and coacting with the graduations and having means whereby it may be held at any desired point along the channel, said guide including a rod disposed in and having its upper face flush with the face of the feed board, said rod having an index mark at one end coacting with the graduations, and a sheet guiding head at the other end extending above the upper face of the rod.

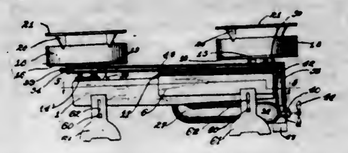
7. A feed board of a press having a transversely extending groove therein, a channeled strip disposed in said groove and having overhanging side walls, a sliding paper guide disposed within said channel and having portions thereof extending beneath said overhanging walls of the channel, and a leaf spring attached to the under side of said sliding guide at one end thereof and extending beyond the sliding guide and then upward and there formed with a thumb piece, said spring bearing resiliently against the bottom of the channel to thereby hold the sliding guide in place.

12. A feed board of a press having a transverse groove across its face, a metallic strip bent to form a channel disposed in said groove, the channel having overhanging side walls and laterally disposed wings, the upper faces of the wings for half the length of the channeled strip carrying graduations, the graduations on one wing reading reversely to the graduations on the other wing, the inner end of said graduated portion of the strip being disposed at the middle of the feed board, a slide disposed in the channel comprising a rod having heads at its opposite ends fitting beneath the overhanging walls of the channel, the upper faces of the heads having sockets and the inner edge of one of said heads constituting an index coacting with said graduations, and a guiding block having pins upon its under face adapted to be disposed in the sockets of either head to thereby permit the block to be shifted from one end of the slide to the other, one of said pins being disposed flush with the inner face of the block.

[Claims 2 to 6, 8 to 11, and 13 to 16 not printed in the Gazette.]

1,273,277. OIL-GAS GENERATOR AND BURNER. AUGUST A. RUSTEBERG, Chicago, Ill. Filed June 9, 1917. Serial No. 173,737. (Cl. 158—8.)

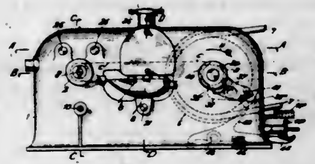
1. An oil-gas burner comprising a primary fuel gas storage casing, a secondary fuel gas storage casing secured thereto, a starting burner thereon, a generating burner also formed upon said secondary casing, an oil supply pipe disposed above said starting burner and said generating burner, said starting burner adapted to be lighted to initially heat the oil supply pipe to start the generation of an oil-gas, mixing mechanisms connected with said primary casing and to said oil supply pipe adapted to mix the generated oil-gas with air before passing into said primary and secondary casings, cooking burners rotatably mounted on said primary casing adapted to receive gas therefrom for cooking purposes, and an inclined generating burner adapted to receive gas from said secondary casing to heat said oil supply pipe to continue the generation of oil-gas.



9. In an oil-gas burner of the class described adapted to be used in combination with a cook stove, a storage casing for oil-gas, means for adjustably supporting the same within said cook stove, adjustable cooking burners on said casing adapted to be moved through a horizontal plane to fit the holes in the top of the cook stove, an oil supply pipe on said casing, metal springs therein, primary means for heating said pipe and springs to generate an oil-gas adapted to be burned by said cooking burners, an inclined pipe connected with said oil supply pipe, and secondary means below said inclined pipe adapted to burn said generated oil-gas to heat said inclined pipe to continue the process of oil-gas generation.

[Claims 2 to 8 and 10 not printed in the Gazette.]

1,273,278. DEVICE FOR CONTROLLING AND REGULATING THE THREAD TENSION IN SHUTTLES OF EMBROIDERING-MACHINES. HIPPOLYT SAURER, Arbon, Switzerland. Filed Aug. 1, 1917. Serial No. 183,901. (Cl. 242—147.)



1. In a device of the character described, in combination, means for securing the shuttle in a determinate position, a device for drawing the thread out of the shuttle, a movable member, adjustable means adapted to exert a variable tension upon this member to which is also transmitted the tension of the thread drawn out of the shuttle, a second movable member adapted to control the position of the clip acting upon the shuttle spring beneath which passes the thread drawn out of the shuttle and motion transmitting means adapted to impart a movement to this last mentioned movable member for the purpose of adjusting the position of the shuttle clip when said first mentioned member is moved out of its position of rest corresponding to the normal tension of the thread, so that each deviation from the normal tension of the thread causes an adjustment of the shuttle clip.

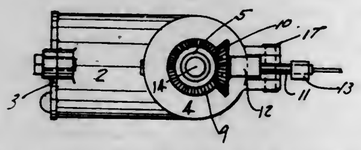
9. In a device of the character described, in combination, means for securing the shuttle in a determinate position, a driving shaft, a device operatively connected to this shaft for drawing the thread out of the shuttle, a roller, a pivoted member carrying this roller over which is fed said thread drawn out of the shuttle, a spring acting upon said pivoted member, the tension of the spring acting in the opposite sense upon this member as the thread tension, means for adjusting the tension of said spring, a movable shaft, fingers on the lower end of this shaft adapted to engage a prolongation of the clip acting upon the shuttle spring beneath which passes the thread drawn out of the shuttle and motion transmitting means imparting a movement to the shaft provided with said

fingers causing an adjustment of the shuttle clip upon a movement of said pivoted member out of its position of rest corresponding to the normal tension of the thread, each deviation from the normal tension of the thread causing thereby such an adjustment of the shuttle clip, that the normal tension is restored in the thread drawn out of the shuttle.

10. In a machine for adjusting the pressure of the thread tension springs of shuttles, in combination, means to support a shuttle, means to draw out thread from the shuttle, means external to the shuttle to vary the pressure on the thread tension spring of the shuttle, and devices also external to the shuttle and controlled by the tension of the thread to operate said last named means.

[Claims 2 to 8 and 11 to 15 not printed in the Gazette.]

1,273,279. MEASURING-SPIGOT. LESTER N. SAVARIA, Bremerton, Wash. Filed Feb. 1, 1917. Serial No. 145,841. (Cl. 221—79.)



1. In a device of the class described the combination of a covered casing, a tubular and threaded screw passing slidably through the said cover, a longitudinal slot extending throughout the greater part of length of said screw, a cylindrical stationary scale mounted within said screw, a pin passing through said slot and secured at one end to the said scale and at the other end to the said cover, whereby the said scale is retained against movement with respect to the cover.

[Claims 2 and 3 not printed in the Gazette.]

1,273,280. DISPENSING-CABINET. PAUL A. SCHUCHART and GOUVERNEUR G. BROWN, New York, N. Y., assignors to Paper Service Co., Inc., a Corporation of New York. Filed June 5, 1914. Serial No. 843,115. (Cl. 211—29.)



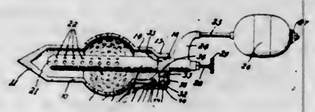
1. A dispensing cabinet for interleaved sheets having a delivery side with a delivery slot and having its delivery side provided with openings independent of the delivery slot for convenient manipulation of a sheet.

13. A dispensing cabinet for interleaved sheets having a delivery slot and supports for the edges of the pile of sheets on opposite sides of the slot, and having its delivery side provided on both sides of the delivery slot between the supports and slot with depressions extending below the level of said supports and throughout the length of the sheets to provide spaces for the rolling of the sheets in delivery.

[Claims 2 to 12 and 14 to 16 not printed in the Gazette.]

1,273,281. SOLDERING-TOOL. JULIAN SMIGIEL, Hartford, Conn. Filed Mar. 30, 1918. Serial No. 225,636. (Cl. 158—27.)

2. In a soldering tool, the combination with a hollow head having an applicator point and a globular element formed therewith, said globular element being perforated, of a burner enterable opposite to said applicator point, said burner having screw-threads formed upon the outer surface, a block slidably engaged in said head adjacent to the opening through which said burner enters, a lever for



operating said block, means for normally keeping said block in engagement with said thread, and means of supplying a liquid fuel to said burner.

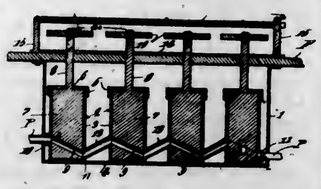
[Claims 1 and 3 not printed in the Gazette.]

1,273,282. AUTOMATIC SWITCH-OPERATING DEVICE. JESSE DE WITT SMITH, New York, N. Y. Filed May 8, 1916. Serial No. 96,204. (Cl. 104—24.)



A switch operating device comprising the combination with a track section including a pivoted switch point, of a single casing inset in and extending longitudinally of the track section and having a lateral etxension at one end projecting under the heel of the switch point, a shaft depending from the heel of the switch point into said lateral extension, a crank arm on the shaft, transverse shafts supported by the sides of the casing at an intermediate portion and at its end remote from said lateral extension, levers pivoted on said transverse shafts, link connections between said levers and crank arm and lever operating members slidable through the top of the casing and connected with said levers.

1,273,283. FUEL-CONTROLLING DEVICE FOR MOTOR-VEHICLES. JESSE D. SMITH, New York, N. Y. Filed Jan. 2, 1918. Serial No. 210,075. (Cl. 277—69.)

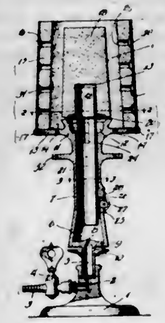


In a fuel controlling device a plurality of valves in intercommunication, a valve stem for each valve, a plate having openings to receive the stems, an angular plate secured to each stem utilizable conjunctly as a handle and dial, upstanding members at the ends of the first plate, a cover plate having a narrow opening hingedly connected to one upstanding member, a transparent plate mounted in said narrow opening, and means for locking the free end of the cover plate to the other upstanding member, whereby the angular plates may be arranged to expose certain characters for observation through the narrow opening of the cover plate whereby to communicate the valves.

1,273,284. GAS-HEATER. SIDNEY L. SMITH, Pittsburgh, Pa. Filed Apr. 25, 1918. Serial No. 230,779. (Cl. 158—99.)

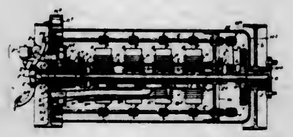
1. A gas heater comprising a base having a gas passage which opens through its upper end, a cast metal pipe-like standard rising from said base in communication with said passage, the lower end of said standard having an air inlet and the upper end thereof being provided with an enlarged integral head, said head having in its upper

end a central cavity of greater diameter than the bore of said standard and into which said bore opens, the lower end of said head being provided with an integral outstanding annular flange formed with perforations adjacent said head, an outer perforated mantle of cylindrical wall-like formation resting on said flange, an inner substantially cylindrical mantle circumscribed by said outer mantle and spaced slightly therefrom, and means supporting said inner mantle a slight distance above said head to permit the escape of gas into the space between the two mantles.



2. A gas heater comprising an outer mantle of wall-like formation, an inner mantle circumscribed by said outer mantle, means for supplying gaseous fuel to the space between said mantles, said outer mantle having perforations for admitting air to said space, and a metal covering surrounding said outer mantle and having other air inlet perforations, said outer mantle having external grooves with which the perforations of said mantle and said covering communicate, substantially as and for the purpose set forth.

1,273,285. INTERNAL-COMBUSTION ENGINE. ARTHUR M. SNYDER, Fairfield, Iowa. Filed Nov. 6, 1917. Serial No. 200,528. (Cl. 123—43.)

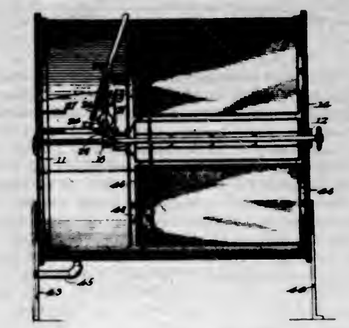


1. In an internal combustion engine, the combination with a fixed frame comprising two heads and a fixed shaft connecting them, of a rotary member disposed between said heads and comprising a revoluble casing, a pair of cylinders secured within said casing, two oppositely moving pistons in each of said cylinders, gearing mounted in said casing and operatively connected with said pistons, and a gear on the fixed shaft operatively associated with said gearing.

8. In an internal combustion engine, the combination with a fixed frame comprising two heads and a fixed shaft connecting them, one of said heads having an elongated exhaust passage and a plurality of blades in said passage, of a rotary member between said heads, cylinders constituting parts of said rotary member, pistons in said cylinders, gearing between said pistons and the fixed shaft, means for supplying explosive charges to said cylinders, and an exhaust pipe for receiving products of combustion from said cylinders, said exhaust pipe disposed to discharge the exhaust products of combustion against the blades in said exhaust passage.

[Claims 2 to 7 not printed in the Gazette.]

1,273,286. HORIZONTAL HONEY-EXTRACTOR. WALTER W. SOMERFORD, Rosslyn, Va. Filed Dec. 14, 1916. Serial No. 136,963. (Cl. 210—26.)



1. In a honey centrifugal a series of horizontally mounted comb pockets, means for centrifugally driving the same about, a horizontal axis, with shifting means to reverse said pockets while under the action of centrifugal force, and automatic means to return the same to initial position.

2. A honey extractor frame structure revolubly mounted, a series of comb-pockets movable bodily with said frame, to cause the centrifugal extraction of honey, and automatic means to rotate on individual axis and return said pockets to position at predetermined times during operation.

3. In a horizontal honey extractor, a horizontal container body, a carrying structure rotatably mounted therein, comb-pockets carried by said structure, driving means for said carrying structure, means for reversing said pockets at fixed times during the operation of centrifugal force, and yieldable means for returning said pockets to initial position at desired times of rotation.

4. In a centrifugal horizontal honey extractor, a container body, a rotatable frame, comb-pockets in pairs rotatably mounted therein, resilient means to hold one side of said comb pockets outwardly for the action of centrifugal force, and means for driving said frame, means to draw and reverse said comb pocket against tension of its spring to reversed position, where the inner side of each pair will be thrown to the outer position with respect to the carrying frame, and means operative at predetermined times to release said pairs of pockets for the purpose of reversing the same.

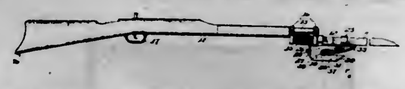
5. In a horizontal honey extractor a horizontal honey body container, a horizontal carrying shaft, a horizontal frame structure fixed to said shaft and rotatable bodily therewith, comb-pockets normally associated with said frame structure and bodily movable therewith, resilient means to retain said pockets in set position, a threaded shaft and a movable collar thereon, means connecting said collar thereon, means connecting said collar with said comb-pockets, means to drive the shaft and rotate the carrying frame structure, means to engage said collar with the screw threads to slide the collar on the shaft, and means to release said collar from the screw at predetermined times, to permit said springs to reverse the side of the pockets.

[Claims 6 to 9 not printed in the Gazette.]

1,273,287. WIRE-CUTTER. TADEUSZ STANKEWICZ, Carteret, N. J. Filed Mar. 16, 1918. Serial No. 222,926. (Cl. 42—90.)

1. A wire cutter for bayonets comprising a casing, loops upon said casing adapted for the slidable reception of the blade of the bayonet, a pivoted cutter within the casing having a substantially semi-circular cutting edge adapted for receiving a wire to be cut, normal positioning means

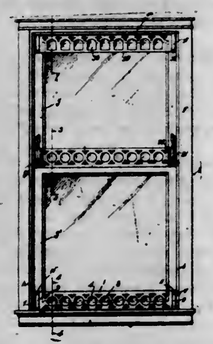
for the cutter and movement-preventing means for the casing.



4. An article of manufacture comprising a casing having a chamber therein and a mouth communicating with said chamber, a cutter pivoted within the chamber having a substantially semi-circular cutting edge normally arranged transversely of said mouth adapted for the reception of a wire to be cut, the said casing having a sharpened edge adapted for coöperating with the cutting edge of the cutter, a normal positioning spring for the cutter arranged within said chamber, supporting loops carried by the casing, the said casing having a receiving notch in one edge thereof rearwardly of said loops, a locking slide upon the end of the casing adapted for overlying the said notch and a retaining screw for the slide carried by the casing.

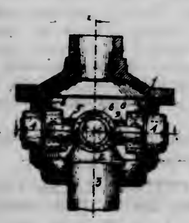
[Claims 2, 3, and 5 not printed in the Gazette.]

1,273,288. COMBINED WINDOW VENTILATOR AND SCREEN. GEORGE W. STEIN, Chicago, Ill. Filed Nov. 24, 1917. Serial No. 203,752. (Cl. 156—14.)



The combination with a window frame having vertically movable sash, of guides secured to opposite sides of said frame at its upper and lower ends, said guides each including inwardly opening laterally spaced plates, ventilators having their ends adapted to be inserted between said plates, and pliable fingers carried by said plates to be bent into engagement with said ventilators.

1,273,289. UNIVERSAL JOINT. BERTIS H. URSCHEL, Bowling Green, Ohio, assignor to The Universal Machine Company, Bowling Green, Ohio, a Corporation. Filed Oct. 8, 1917. Serial No. 195,214. (Cl. 64—102.)

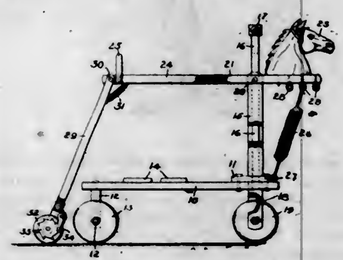


1. In a universal joint, a ring having opposed equi-distant radial holes, in each of said holes a flanged bushing, the flanges of one pair of bushings being disposed internally and the flanges of the other pair of bushings being disposed externally of said ring, a driving shaft yoke having its extremities journaled in one pair of said bushings, a shaft extending across said ring and being journaled in the other pair of bushings, a casing forming the driven member of the joint, and means for rigidly securing said casing in operative relation to said cross shaft.

3. In a universal joint, a pair of like ring-parts composed of metal stampings, said parts being secured together face to face to form a ring, said ring-parts having opposed coincident semi-circular depressions which together form four equi-distant radial holes, in each of said holes a flanged bushing, the flanges of one pair of bushings being disposed internally and the flanges of the other pair of bushings being disposed externally of said ring, a driving shaft-yoke having its extremities journaled in one pair of said bushings, and a casing rigidly connected with a cross shaft journaled in the other pair of said bushings.

[Claim 2 not printed in the Gazette.]

1,273,290. TOY VEHICLE. JOHN CLARK VAN AKEN, Manlius, N. Y. Filed Aug. 30, 1917. Serial No. 188,900. (Cl. 208—42.)

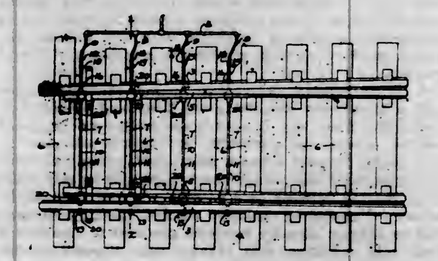


1. A vehicle of the character described comprising a wheeled body provided with a foot-rest, an upright carried by said body, a seat pivoted to said upright, and a pusher operated by said seat and engaging at its lower end the surface over which the vehicle moves.

9. A vehicle of the character described comprising a wheeled body provided with a foot-rest, an upright carried by said body, a lever pivoted to said upright and having a seat portion at one side of its pivot, a spring connecting said body with said lever at the opposite side of its pivot, means whereby said spring may be secured to said lever at any one of a plurality of points, a pusher pivoted at its upper end to the rear end of said lever, a spring connecting said pusher and lever, a wheel carried by the lower end of said pusher and engaging the surface over which the vehicle moves, and means for limiting the rotation of said wheel to a forward direction.

[Claims 2 to 8 not printed in the Gazette.]

1,273,291. SWITCH-HEATING DEVICE. DAVID F. VAUGHAN, Riverton, N. J. Filed Mar. 23, 1918. Serial No. 224,117. (Cl. 104—12.)



1. In a device of the character described, the combination with a railroad structure including a rail, of a fuel pipe adjacent to said rail, a fuel burner communicating with said pipe and carried thereby adjacent to said rail, and means supported by said rail and supporting said pipe.

2. In a device of the character described, the combination with railroad rails and cross ties supporting the same, a fuel pipe extending between adjacent ties and transversely beneath said rails, a fuel burner communicating with said pipe and carried thereby adjacent to one of said rails and means for clamping said pipe to said rails.

17. In a device of the character described, the combination with a railroad structure, including a rail, of a fuel burner supported adjacent to said rail and comprising a pipe, having a fuel discharging opening therein, and a box-like guard, having an open bottom and inclosing said pipe and the opening therein, said guard having a top wall and an inclined side wall extending downwardly and outwardly from the top wall.

[Claims 3 to 16 not printed in the Gazette.]

1,273,292. SHOE. PASQUALE VESCIO and PETER VESCIO, Port Chester, N. Y. Filed Feb. 23, 1918. Serial No. 218,894. (Cl. 36—12.)



1. In a shoe, the combination with the uppers and a sole thereof, of an auxiliary strip over-lying the lower regions of the uppers on the inner side thereof, said strip being curved inwardly and then outwardly to provide an exterior channel within which is confined the lower edges of the uppers, said outwardly projecting strip portions lying flat upon the sole, and means for binding the said inwardly and outwardly projecting portions with the said interposed edges together with the said sole.

2. In a shoe, the combination with the uppers and a sole thereof, of an auxiliary strip engagedly over-lying the lower inside regions of the uppers, said strip being curved inwardly and outwardly to provide an exterior channel receptive of the lower edges of the uppers, said outwardly projecting portions of the strip lying flat upon the sole, means for binding the inwardly and outwardly projecting portions with the interposed edges together with the sole, and insole material engaged upon the sole between the said inwardly and outwardly projecting strip portions, the top of said insole material being approximately level with said inwardly projecting portion.

9. In a shoe, the combination with the uppers and a sole formed with an elevated portion providing an exterior recess all around, of an auxiliary strip-engaged intermediate its width upon said elevated portion with its opposed sides curving upwardly in conformity with the uppers and curved upon itself and engaged between itself and the uppers and thence extending inwardly and outwardly in said exterior recess to provide an exterior channel receptive of the lower edges of the uppers, said outwardly projecting portion lying flat upon the sole, and means for binding the inwardly and outwardly projecting portions including the inter-engaged edges together and with the sole.

[Claims 3 to 8 and 10 not printed in the Gazette.]

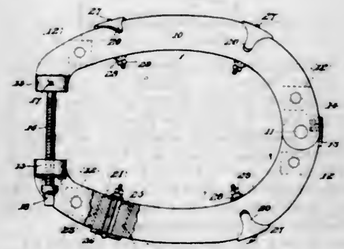
1,273,293. VEGETABLE DYE AND PROCESS OF MAKING SAME. HERBERT WARKUP, Kingston, N. Y., assignor to J. S. Young & Company, Hanover, Pa., a Corporation of Pennsylvania. Filed Dec. 20, 1917. Serial No. 208,125. (Cl. 8—6.)

4. A standard direct mordanting and dyeing composite material comprising a quercitron extract of about 51° Twaddell strength containing a plurality of mordanting materials in organic combination therewith, the material being neutral or slightly alkaline in character and being capable on redilution of producing a dyebath directly dyeing and mordanting cotton and the like in one operation.

6. The process of making standardized direct and mordanting vegetable extracts which comprises extracting quercitron, evaporating the extract to form a thick liquid, treating this thick liquid at a boiling heat with a plurality of mordanting substances, allowing it to stand for a time, neutralizing with sodium carbonate, heating in the open to get rid of carbon dioxid and finally evaporating *in vacuo* to a standard commercial strength.

[Claims 1 to 3 and 5 not printed in the Gazette.]

1,273,294. HORSESHOE. STANISLAW WARMINSKI, Baltimore, Md. Filed Feb. 27, 1918. Serial No. 219,440. (Cl. 168—19.)



1. In combination with an adjustable horseshoe having the sections thereof arranged with transverse flaring slots upon the bottom thereof and with transverse openings above the said slots, angular brackets shiftably positioned within the said slots having hoof-engaging portions projecting above the shoe, and securing bolts passing through said brackets and shiftably extending through the said openings.

3. In combination with a horseshoe having relatively shiftable side sections, each of said sections having transverse oppositely flaring slots upon its lower face and further having an opening transversely arranged centrally above each of said slots, an angular bracket for each slot having a bottom plate portion shiftably arranged within the slot, each of said brackets further having an upwardly projecting hoof-engaging portion outwardly of the shoe extending thereabove, a retaining bolt for each bracket projecting through the outer side of the bracket and freely positioned for lateral shifting movement through the adjacent perforation, a retaining washer upon the inner end portion of each bolt engaging the adjacent inner face of the shoe section, and a locking nut upon each bolt in operative engagement with the washer thereof.

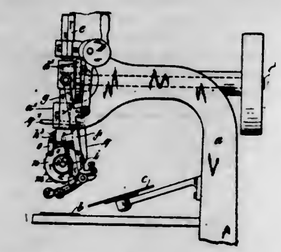
6. A horseshoe comprising, in combination, a pair of arcuate side sections pivotally connected together at their forward ends and having upwardly extending block portions at their rear ends, the block portion of one of said sections being formed with a socket, a clamping screw having one end circumferentially grooved and swiveled in said block portion socket of said one section and threaded through the block portion of the other section, and a set screw threaded through said block portion into the socket thereof and into the groove of said clamping screw end to detachably retain the latter in said socket.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,273,295. PRINTING-MACHINE. JOHN F. WERLE, Brooklyn, N. Y., assignor to Hoole Machine & Engraving Works, Incorporated, Brooklyn, N. Y., a Corporation of New York. Filed Apr. 2, 1918. Serial No. 226,164. (Cl. 101—62.)

1. In a printing machine, the combination of a reciprocating carrier having a spindle, a sleeve mounted rotatably on the spindle, a carrier drum mounted to rotate with the

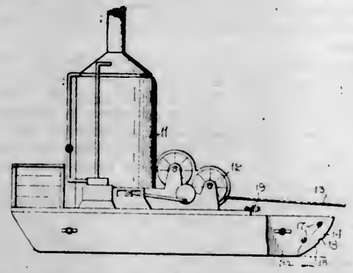
sleeve and detachable therefrom and provided with a plurality of radial slots to receive printing slugs, means to retain the sleeve on the spindle, means to retain the carrier drum detachably on the sleeve, and means to rotate the sleeve.



6. In a printing machine, the combination of a reciprocating carrier having a spindle, a shouldered sleeve mounted rotatably on the spindle, a feeding ratchet wheel and a stop wheel mounted to rotate with the sleeve, a carrier drum provided with a plurality of radial slots to receive printing slugs, means to retain the carrier drum detachably on the sleeve, a hold pawl mounted on the reciprocating carrier for coöperation with the stop wheel and a driving pawl mounted on a fixed part of the machine for coöperation with the driving ratchet wheel.

[Claims 2 to 5 not printed in the Gazette.]

1,273,296. SHOE FOR DONKEY-SLEDS. WILLIAM J. WEST, Seattle, Wash. Filed Mar. 27, 1918. Serial No. 225,032. (Cl. 21—48.)



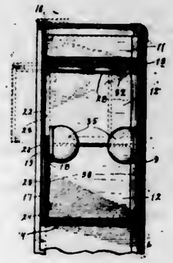
1. A shoe for the runners of donkey sleds adapted to be attached to the runner, the under face of the shoe being formed with a transversely extending cable receiving groove.

2. A shoe for the runners of donkey sleds comprising a relatively thick casting having a longitudinally rounded under face, the upper face of the casting being formed with a plurality of upwardly projecting attaching ears perforated for the passage of a bolt, the under face of the shoe being formed with a transversely extending cable receiving groove.

1,273,297. DRAWER CONSTRUCTION FOR TRUNKS. GEORGE HENRY WHEARY, Racine, Wis. Filed Feb. 28, 1916. Serial No. 80,857. (Cl. 190—3.)

1. A drawer construction for trunks and the like having a compartment, comprising drawers positioned in said compartment, one of the drawers having an open front portion, and the other drawer having a closed front portion, and a slidable cover for the open front portion movable to a position to be carried by the drawer with the closed front portion.

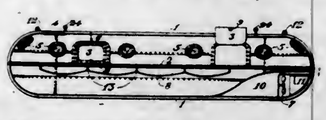
14. A drawer construction for trunks and the like having a drawer compartment comprising drawers positioned within said compartment, one of the drawers having an open front side, a slidable cover, said cover, under one adjustment thereof, being moved to a position to be carried by the drawer having a closed front portion, and, under the other slidable adjustment thereof, being moved to a position to close the open front portion of the other drawer, vertical outstanding angle-pieces along the side



edges of the drawers forming guide-ways in which the slidable cover moves, and a horizontal outstanding angle-piece along the lower edge of the lower drawer, and having a seat for the sliding cover, when said cover is moved to its lowermost position.

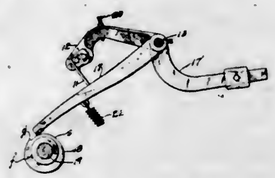
[Claims 2 to 13 and 15 to 19 not printed in the Gazette.]

1,273,298. LIFE-BOAT. DILLARD A. WHITAKER and HARRY W. THAYER, Sacramento, Cal. Filed Jan. 2, 1917. Serial No. 140,084. (Cl. 9—4.)



A life-boat comprising a hull of substantially elliptical form, a longitudinal T-shaped keel beam extending about the hull and having its cross top portion secured thereto so that its vertical web will extend outwardly therefrom the bottom of the hull having its rear part raised off the keel beam in an upwardly and rearward direction so as to space the cross top portion of said beam from the hull, a sheet-like false keel interposed between the raised part of the hull and the keel beam and secured to the cross top portion of the latter, said false keel being cut away to provide an opening for a propeller and rudder above the keel beam, a propeller and a rudder both arranged in the opening of the false keel, the cross top portion of the keel beam extending from opposite sides of the false keel to reinforce the same and to afford protection to the propeller and rudder.

1,273,299. HEILMANN-TYPE COMBER. GEORGE M. WHITIN, Whitinsville, Mass., assignor to The Whitin Machine Works, Whitinsville, Mass., a Corporation of Massachusetts. Filed Feb. 14, 1914. Serial No. 818,616. (Cl. 19—6.)



1. In a Heilmann cotton comber, the combination with the lap feed mechanism, the comb cylinder, the detaching segment thereon and a detaching roll engaged by the segment, of an actuated top comb and controlling means therefor producing a gradual rise and relatively abrupt descent of said comb in the same path, such descent taking place during the engagement of said roll with the tuft.

3. In a Heilmann cotton comber, the combination of the comb cylinder having a detaching segment, a detaching roll engaging the latter, and an oscillated top comb, controlled to move from its waste limit—*i. e.*, the position of approach to the tuft in which it begins to throw down waste,—to its lowest depression during the interval between the gripping of the tuft on the segment and the passage of the first fibers thereunder.

6. In a Heilmann cotton comber, means for nipping and feeding the lap, a comb cylinder provided with a needle half-lap and a detaching segment, a detaching roll engaging the latter to detach the tuft, means for starting the feeding means after such detachment and a top comb engaged with the said tuft prior to the detachment.

11. In a Heilmann type cotton comber, the combination with the lap feeding and nipping means, a comb cylinder having a detaching segment and a detaching roll therefor, of a top comb and controlling means therefor, comprising a spring and a cam device whereby the top comb is subject to quick depression during the forward passage of the tuft upon the segment.

[Claims 2, 4, 5, 7 to 10, and 12 to 15 not printed in the Gazette.]

1,273,300. MOTOR-CONTROLLING MECHANISM. THEO CLIFFORD WHITING, Philadelphia, Pa. Filed July 31, 1916. Serial No. 112,610. (Cl. 74—39.)



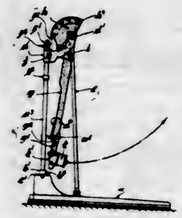
4. The combination with a frame base plate having a bearing flange, and a screw threaded aperture in said base plate; of a fulcrum stud extending from said flange; a lever, fulcrumed on said stud, having a stop arm extending in registry with said threaded opening, a handle arm, and a connector arm; a spring tending to snap and detain said lever, at either limit of its movement; an adjustable stop screw extending in engagement with said threaded opening in said base plate and in registry with said stop arm, adjustably limiting the range of movement of said lever, in one direction; and a connector extending from said connector arm; whereby the throw of said lever may be varied, by adjustment of said screw.

5. The combination with a base; of a lever fulcrumed on said base; a tension spring connecting said base and lever, tending to snap and detain said lever, at either limit of its movement; a connector extending from said lever; and means, carried by said base adjustably limiting the movement of said lever and connector.

[Claims 1 to 3 and 6 to 15 not printed in the Gazette.]

1,273,301. GRENADE AND LIKE THROWING APPARATUS. ABRAHAM WOOD, Ramsbottom, England. Filed Mar. 8, 1917. Serial No. 153,378. (Cl. 124—1.)

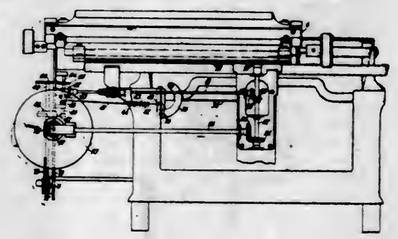
1. In apparatus for throwing grenades and the like, and for like throwing purposes, a relatively fixed air chamber, movable air-compressing means within the chamber, a non-return air inlet valve for allowing air to be stored in said air chamber under pressure, a throwing arm axially supported upon said chamber, grenade or like holding and controlling means on said throwing arm, means for holding the arm retracted against the resistance of the air in the air chamber, and means for releasing the arm, the movable air-compressing means, under the pressure of the air within the air chamber, acting upon the throwing arm, and, on the arm being released, operating the arm to throw the grenade, or other object, as set forth.



10. In apparatus for throwing grenades and the like, and for like throwing purposes, a relatively fixed air chamber, air-compressing means within the said chamber, an air inlet valve for allowing air to be stored into said air chamber under pressure, a throwing arm axially mounted on said air chamber, and means for transmitting the motion of the said air-compressing means to the throwing arm, a cup-like grenade holder angularly adjustable upon said arm, means for holding same in various positions relatively to the arm, and means whereby the grenade is temporarily held in the holder but is free to leave the holder on the throwing arm reaching the limit of its throwing movement, as set forth.

[Claims 2 to 9 not printed in the Gazette.]

1,273,302. TYPE-WRITING MACHINE. WALTER WRIGHT, New York, N. Y., assignor to Underwood Computing Machine Company, New York, N. Y., a Corporation of New York. Original application filed June 29, 1910, Serial No. 569,502. Divided and this application filed Sept. 1, 1917. Serial No. 189,255. (Cl. 197—157.)



1. The combination with a platen and a carriage, of a polychrome ribbon mechanism coöperating with said platen to enable the printing in two colors, and a rotary automatic control for said polychrome ribbon mechanism connected to the carriage and arranged to shift the same according to a pre-arranged plan to print in a plurality of colors.

2. The combination with a platen and a carriage, of type-actions coöperating with said platen, a polychrome ribbon mechanism coöperating with said carriage and said type-actions to print selectively in any one of a plurality of colors, a manual control for said polychrome ribbon mechanism arranged to shift the same, so as to select the color of printing, and a rotary automatic control connected with the carriage for shifting said polychrome mechanism to determine the color of printing.

[Claims 3 to 17 not printed in the Gazette.]

1,273,303. AIR-TORPEDO. FRANK B. WUERBEN, Dayton, Ohio. Filed July 11, 1917. Serial No. 179,897. (Cl. 244—1.)

1. A device of the class described comprising a body adapted to contain an explosive charge, propelling means

for said body, an elevating plane for said body, a time fuse, and means operated by said time fuse for actuating said plane and for stopping the propelling means.

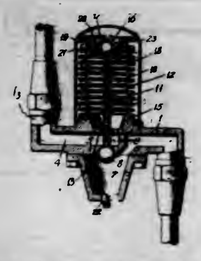


3. In a device of the class described, a body adapted for containing an explosive charge, propelling means for said body, sustaining means for said body and controlling means for said body; a device for exploding such charge and having connection with said body, and means having connection with said propelling means whereby the propelling means will be rendered inoperative after a predetermined period of operation; the last mentioned means adapted to be actuated by said exploding device.

5. In a device of the class described, a body adapted for containing an explosive charge, propelling means for said body, controlling surfaces for said body, sustaining means for said body, and a device on said body for exploding such charge; means having connection with said controlling surfaces and said exploding device whereby the controlling surfaces will normally be retained in one position and will be permitted movement to another position after a predetermined interval of time, means having connection with said exploding device and said propelling means whereby the propelling means will be rendered inoperative after a predetermined interval of time, and a mechanism for automatically governing said controlling surfaces.

[Claims 2 and 4 not printed in the Gazette.]

1,273,304. PRESSURE-REGULATING VALVE. CHARLES E. YATES, Detroit, Mich., assignor,, by mesne assignments, to Kelvinator Corporation, Wilmington, Del., a Corporation of Delaware. Filed Feb. 26, 1917. Serial No. 151,072. (Cl. 50—21.)

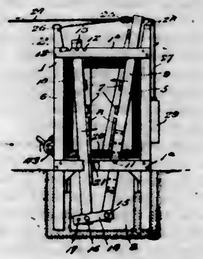


1. In a device of the character described, in combination, a hollow casing having a valve seat therein, a valve member coöperating with said seat and having a stem, a longitudinally extensible chamber surrounding said stem and communicating with the interior of said casing, said chamber having an aperture in its end farthest from said valve seat, and a hollow connecting member located in said aperture and receiving said stem, said member being connected to one of the adjacent parts by screw threads whereby the tension may be adjusted and to the other of the parts by a swivel joint to permit rotation of the valve without changing the tension.

[Claims 2 to 6 not printed in the Gazette.]

1,273,305. BRANDING AND DEHORNING SQUEEZERS FOR CATTLE. JOHN C. YOKUM, Chicago, Ill. Filed Sept. 17, 1917. Serial No. 191,780. (Cl. 119—99.)

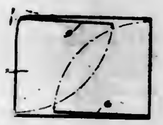
1. In a squeezer for cattle, the combination with a floor, of movable sides, one of which is pivoted at its lower portion below the floor, an adjustable pivot for the upper portion of the remaining side whereby it may be set closer to or farther from the first-named side, operative connections between the sides located below the floor, whereby both of said sides are adapted to move when one of them is shifted, and means for imparting movement to one of the sides.



4. A de-horning gate for a squeezer for cattle, comprising hinged sections, one of which has a member adapted to engage the head of the animal, the other section carrying an upright shiftable lever pivoted at its lower end and adapted to engage the head of the animal, means for locking the sections in closed position, and means for holding the lever in locked position.

[Claims 2 and 3 not printed in the Gazette.]

1,273,306. METHOD OF COLLAPSING TIN CANS FOR SHIPMENT. DWAYNE G. YOUNG, Seattle, Wash. Filed Apr. 23, 1918. Serial No. 230,364. (Cl. 220—17.)



1. The method of collapsing a rectangular can which consists in cutting the two ends around the edges of three sides thereof, then bending the ends inwardly against the sides of the can and then crushing the can into a flat form.

2. The method of collapsing a rectangular can into a flat form for shipment which consists in cutting one end of said can around the edge of three sides thereof, turning said end so severed inwardly, cutting the other end of said can around the edge of three sides thereof, turning the said other end so severed inwardly and then pressing said can into a flat form.

1,273,307. FIRE-RESISTANT COMPOSITION AND PROCESS OF MAKING SAME. JULIUS A. ZIBELL, Tappan, N. Y. Filed Mar. 9, 1918. Serial No. 221,515. (Cl. 134—50.)

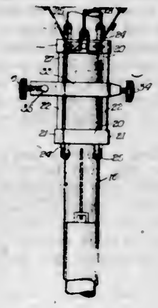
2. The process of making fire-resistant composition which consists in ripening milk, converting the ripened mixture into a lasting emulsion and incorporating therewith a substantial quantity of hydrated lime and sodium chlorid.

5. The herein described composition for rendering inflammable materials fire-resistant, comprising the product resulting from the intimate mixture of emulsified ripened milk, a preservative, a thickener and a pigment.

[Claims 1, 3, 4, and 6 not printed in the Gazette.]

1,273,308. X-RAY-MACHINE STAND. JULIUS ZSABKA, New York, N. Y. Filed Jan. 2, 1918. Serial No. 209,943. (Cl. 248—5.)

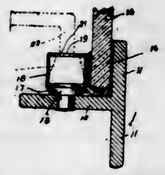
1. In a stand of the class described, the combination with a rigid base, a column journaled to rotate freely therein, a carriage slidable along said column, wheels interposed between said carriage and column whereby the former may be moved freely therealong, a cord attached to said carriage, a pulley at the top of said column over which said cord runs, and a counterweight movable within said column, said counterweight being secured to the opposite end of the cord.



2. In a stand of the class described, the combination with a rigid base and a hollow column rotatably mounted therein, of a carriage slidable on said column, anti-frictional elements between said carriage and said column, a counter-balance for said carriage, said counter-balance being movable within said column, and means for clamping said counter-balance at any point within said column, whereby said carriage may be rigidly supported.

[Claim 3 not printed in the Gazette.]

1,273,309. WINDOW CONSTRUCTION. FRANK ARBTER, Chicago Heights, Ill. Filed Dec. 27, 1917. Serial No. 209,015. (Cl. 189—78.)



1. In a window casing, the combination with undercut studs, of glass-holding ribs adapted to snap over said studs, each of said ribs comprising a spring metal channel having the free edges of its side webs bent toward each other, said channels having their bottom webs slotted at a point opposite each of the studs for insertion of a tool.

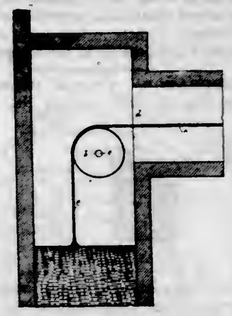
2. In a window casing; the combination with a frame; of an upper glass-holding rib comprising a channel member split at its ends, and a tongue bent outwardly of said channel at the split portion of each end; and channel-shaped side ribs each abutting at its upper end against the bottom surface of said upper rib; each of said tongues fitting snugly between the side webs of its respective side rib.

[Claims 3 and 4 not printed in the Gazette.]

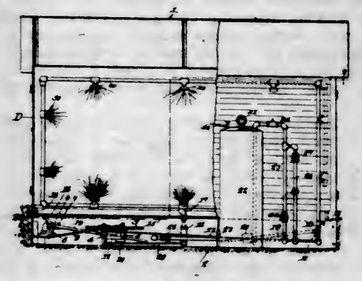
1,273,310. BENDING-ROLL FOR SHEET-GLASS APPARATUS. ULYSSES G. BAKER, Indianapolis, Ind. Filed Mar. 16, 1918. Serial No. 222,823. (Cl. 49—3.)

1. In a device of the described character, a bending roll surfaced with a compound consisting of finely powdered graphite and plaster of Paris in substantially the proportions specified.

2. In a device of the described character, a bending roll having a smooth cylindrical surface-portion which consists of a compound of about twenty-five per cent. graphite and seventy-five per cent. plaster of Paris, both ingredients being finely powdered and thoroughly mixed.

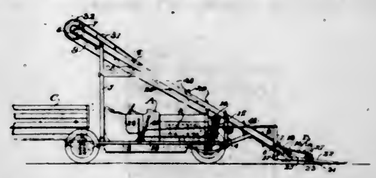


1,273,311. SPRAYING APPARATUS. EUGENE K. BARNES, Marietta, Ga. Filed Apr. 22, 1918. Serial No. 230,095. (Cl. 119—159.)



The combination with a housing having end doors, of a vertically movable platform between the doors and extending throughout the width of the interior of the housing, yielding means for supporting the platform, spraying nozzles arranged within the housing, a liquid supply, means operated by the downward movement of the platform for opening communication between the supply and the nozzles, a stationary trap below the platform, and an overflow pipe movable with the platform and within the trap, said platform having marginal walls.

1,273,312. PORTABLE LOADER AND ELEVATOR. FRANK G. BAUM, Piedmont, Cal. Filed July 18, 1916. Serial No. 109,913. (Cl. 56—61.)



1. In combination with a vehicle and an inclined frame carried thereby, brackets having vertical arms pivoted between their ends to the lower end of said frame, a rake frame connected to the brackets and extending forwardly therefrom and located below said pivots, a connection above the pivots of one of said brackets and secured to the upper end of one of the vertical arms for

raising and lowering the rake frame, and conveying means extending from the rake frame to the top of the inclined frame, said brackets being movable about said pivots while the conveying means retains its operative connection with the inclined frame.

[Claims 2 and 3 not printed in the Gazette.]

1,273,313. INSULATOR. THOMAS W. BEATTY, Carey, Ohio. Filed Aug. 9, 1917. Serial No. 185,354. (Cl. 173—314.)



1. An insulator formed of a pair of sections having a wire receiving groove between sections for the reception of a wire, and resilient means arranged to return said sections to coöperating position after a separation to permit insertion of a wire upon release of one of said sections.

5. An insulator formed of a pair of sections each formed with an attaching opening and a wire receiving groove, and means for yieldingly holding said sections in assembled relation to permit a separating movement of one from the other to permit the insertion of a wire.

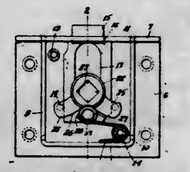
8. An insulator formed of a pair of sections each formed with an attaching opening and a wire receiving groove, and yielding means entirely independent of any attaching means for holding said parts in assembled relation, said parts being formed to permit a separating pivotal movement of one about the other to permit the insertion of a wire.

15. An insulator formed of a pair of sections each provided with an attaching opening and a wire receiving groove, said sections being each formed with an additional opening extending in the same general direction as said attaching openings, and a spring clip passing through said additional openings to yieldingly hold said sections in assembled and abutting relation, said clip being formed to bear on at least one of said sections at a point between said two openings, said clips being also formed to permit a pivotal separating movement.

20. An insulator formed of a pair of sections each provided with an attaching opening and a wire receiving groove, one section being formed with a substantially centrally disposed upstanding tongue merging into an upstanding arcuately shaped tongue portion disposed at one side of said section, the body of said section adjacent said arcuately shaped tongue being also shaped to arcuate form, the other section being correspondingly shaped to fit the first named section.

[Claims 2 to 4, 6, 7, 9 to 14, and 16 to 19 not printed in the Gazette.]

1,273,314. LATCH. ARTHUR J. BEAUCHEMIN and ARTHUR J. LABOCHE, Hartford, Conn. Filed Aug. 30, 1916. Serial No. 117,576. (Cl. 70—42.)

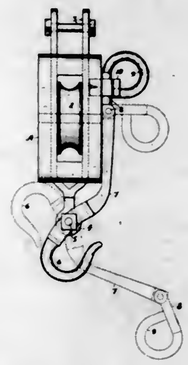


1. A latch comprising a latch casing, guide studs projecting from said casing, a latch member slidably mounted between and guided in its movements by said studs, said latch having a slot therein, an actuator rotatably attached to said casing and having a guide portion located within the slot in the latch member, and wings projecting in divergent directions one from the other providing a V-shaped recess, a stud projecting from the latch member within said recess, and means for forcing the stud into engagement with the smaller part of said recess.

2. A latch comprising a latch casing, a latch member slidably mounted within the casing and having a slot therein, a stud having a reduced end secured to the latch by riveting and a larger portion having a roller mounted thereon and a groove at the end of said roller, a spring projecting with one end in engagement with said groove, a latch actuator comprising a pivoted portion attached within said latch casing, a guide portion engaging the sides of the slot in the latch member, and wings projecting in divergent directions one from the other on said actuator providing a V-shaped slot within which said roller is received.

3. A latch including a case, a latch member slidably mounted within the case and having a lengthwise slot therein, an actuating stud projecting from said latch member and an actuator having a reduced portion located within said slot and wings extending in divergent directions and overlying said latch member, said wings having curved outer edges to engage said stud that is received between them.

1,273,315. DAVIT TACKLE-BLOCK. JOHN T. BELL, deceased, San Francisco, Cal., by Josephine T. Bell, administratrix, San Francisco, Cal. Filed Jan. 8, 1917. Serial No. 141,152. (Cl. 254—196.)



1. In a boat detaching apparatus, a tackle block, a boat supporting hook pivotally supported from the lower portion of the block and formed with a rigid arm extending up along side of the block, a latch pivoted to the upper end of the arm for being disposed in alinement therewith alongside the block and adapted to be swung outwardly therefrom, the upper end of said latch being bent outwardly in loop form to provide an eye, and means carried by the block for detachably engaging the latch to hold it alongside the block.

3. In a boat detaching apparatus of the character described, pulley blocks having invertible hooks fulcrumed at the lower end, and having extension lever arms with hinged latch attachments, and clamps having transverse bars secured to the interior of the block with elastic parallel arms extending through the face of the block to engage and retain the latch attachments.

[Claims 2 and 4 not printed in the Gazette.]

1,273,316. SPARK-PLUG. NORMAN E. BENSINGER, Chicago, Ill. Filed Apr. 27, 1917. Serial No. 164,845. (Cl. 123—169.)

1. A spark plug, including a casing having an inturned shoulder, a bushing arranged in said casing and supported by the shoulder of the casing, an insulating member inserted in said bushing and carried thereby, said insulating member containing an electrode, a pressure screw adapted to bear against said insulating member, and means pivotally secured to said casing and oscillatable about an axis transverse with respect to the longitudinal axis of the casing for holding said pressure screw in engagement with said member and adapted upon release to hold said pressure screw in idle position to permit removal of the insulating member by withdrawal of the bushing.

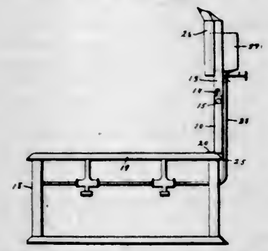


2. In a spark plug, a casing, a metallic bushing in said casing, an insulating member arranged in said bushing and containing an electrode, a yoke pivotally secured to said casing and oscillatable about an axis transverse to the longitudinal axis of the casing, and a pressure screw carried by said yoke and adapted to engage said insulating member to pivot it to said casing and said bushing.

3. A spark plug, includin ga casing, a bushing in said casing, an insulating member in said bushing and containing an electrode, a pressure screw adapted to maintain the parts in operative relation, means pivotally secured to said casing for supporting said pressure screw in or out of engaging position, and means for locking said pressure screw in adjusted position.

[Claim 4 not printed in the Gazette.]

1,273,317. GASOLENE-STOVE SHIELD ATTACHMENT. JOHN BERGMAN, Des Moines, Iowa. Filed Sept. 21, 1917. Serial No. 192,620. (Cl. 158—46.)



1. In a gasolene stove having a burner and a fuel-supply tank spaced from said burner and at greater altitude than the top of the stove, a shield attachment comprising a device adapted to be mounted in vertical position on and rise from the stove top between said burner and supply-tank, whereby said tank is isolated from said burner.

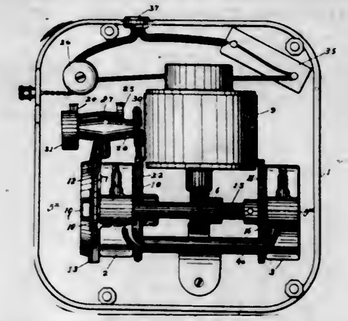
5. In a gasolene-stove having a burner and fuel-supply tank, a shield attachment, comprising a body portion, and means for attaching said body portion to and transversely of the top of said stove adjacent the supply tank and between said tank and the burner, said body portion being formed with a generally plane lower portion and with a swell or bay in its upper portion to accommodate said tank.

[Claims 2 to 4 and 6 to 9 not printed in the Gazette.]

1,273,318. MACHINE FOR OPENING ENVELOPS. EUGENE A. BIRCHER, Rochester, N. Y., assignor to The Bircher Co. Inc., Rochester, N. Y., a Corporation of New York. Filed Feb. 2, 1912. Serial No. 675,011. (Cl. 164—61.)

1. In a machine for cutting envelops, the combination of a feed table having a flange thereon, a pair of circular cutting knives rotating against each other through said table, a disk placed back of one of said cutting knives and substantially in line with the flange on the table.

6. In a machine for cutting envelops, the combination, with cutting-mechanism adapted to feed an envelop during the cutting operation, of a guide for controlling the envelop during the cutting operation, and means for producing a dragging action on the envelop at one side of the cutting-line in order to hold the envelop against the guide.



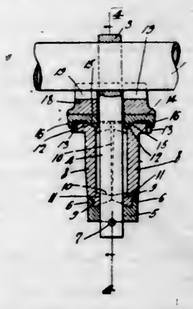
11. In an envelop-opening machine, the combination, with cutting-mechanism tending to move an envelop in the direction of feed through the machine, of a guide for controlling the envelop during the cutting operation, and means adapted to advance the envelop into engagement with the cutting-mechanism and thereafter to produce a dragging action on the envelop at one side of the cutting-line, in order to hold the envelop against the guide.

18. In a machine for cutting envelops, the combination of a feed table having a flange thereon, a pair of circular cutting knives rotating against each other through said table, said flange serving to hold envelops in line with said knives, a positively driven roller placed in said table with its axis at an angle to the axis of said cutters and a second roller yieldingly mounted and making contact with said first named roller, said second roller also having its axis at an angle to the axes of said cutters, said rollers being adapted to feed the envelops between them.

27. A machine for opening envelops comprising a cutting mechanism, mechanism for feeding the envelops to the cutting mechanism and for bulging the envelops along one of their edges on their contents and means for causing portions of the bulged portions to be presented to the cutting mechanism free from the contents of the envelops.

[Claims 2 to 5, 7 to 10, 12 to 17, and 19 to 26 not printed in the Gazette.]

1,273,319. VISE. CHARLES A. BLAKELY, Plano, Ill. Filed Apr. 2, 1918. Serial No. 226,212. (Cl. 81—38.)



An auxiliary clamp attachment for vises, including a bolt having an eye, a shank adjustably mounted in the

eye, clamping members carried by the shank, a supporting block upon the bolt, oppositely disposed tiltable blocks upon the supporting block, a saddle resting on the tiltable blocks and limiting the movement of said blocks from each other, a shank engaging member upon the saddle, and coöperating means upon the saddle and tiltable blocks for shifting the saddle along the bolt and binding the last named member upon the shank when the tiltable blocks are pressed toward each other.

1,273,320. LOCKING DEVICE FOR DEMOUNTABLE WHEELS. CLEMENT BOOTH, Narberth, Pa. Filed Apr. 11, 1917. Serial No. 161,149. (Cl. 21—31.)



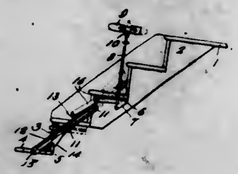
1. The combination with fixed and demountable hub sections, of a nut having a part engaging one of said sections and a part engaging the other of said sections to hold them together, and a wedging device acting between said parts for locking said nut.

3. The combination with a hub body and a shell sleeved thereon, of a nut comprising an inner threaded split ring adapted to be screwed on said body and an outer threaded ring having a flange adapted for engaging said shell, said split ring having a bevel, and a nut having a thread adapted for engaging the thread of said outer ring and a bevel adapted for engaging said bevel first named to clamp said split ring to said hub body.

6. The combination of an inner threaded part, an outer part having an interlocking engagement with said inner part, a nut provided with an internally threaded body having an outwardly extending flange adapted for engaging said outer member and inturned resilient threaded parts adapted for engaging said inner part, and a nut adapted for pressing said resilient part against said inner part and having an external thread adapted for engaging said threaded body.

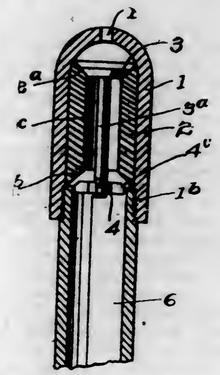
[Claims 2, 4, and 5 not printed in the Gazette.]

1,273,321. FOLDING CAR-STEP. GEORGE A. BOSLER, Chicago, Ill. Filed Mar. 25, 1918. Serial No. 224,628. (Cl. 105—86.)



In a device of the class described, a platform having fixed steps, a folding step comprising a riser and a hingedly connected tread, said riser being hingedly connected to the fixed steps, lugs carried by the fixed steps, a bar having a longitudinal slot formed therein for slidably engaging the lugs, a shaft journaled transversely of the fixed steps, arms carried by the shaft, jointed links connecting the bar and arms, shoulders carried by the bars, said riser and tread having lugs and pins carried respectively thereby, said pins being pivotally engaged with the lower ends of the bar, the lugs of the riser being adapted to be engaged by the shoulders, and means for rocking the shaft to move the bar upwardly or downwardly, as and for the purpose set forth.

1,273,322. DRINKING-FOUNTAIN. JOSEPH W. BRENKERT, San Diego, Cal. Filed May 2, 1917. Serial No. 165,869. (Cl. 137—110.)

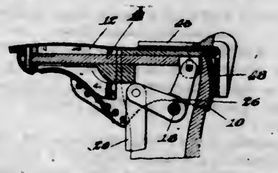


1. In a drinking fountain, the combination of a cylindrical member provided with a semi-spherical end integral therewith and with a hole centrally therein, a water supply pipe upon which the open end of said member is screwed, a sleeve fitted snugly in said cylindrical member provided with tapering ends, a valve adapted to seat on one of said tapering ends, a spider adjustably mounted on the stem of said valve adapted to rest against the other tapering end of said sleeve when said valve is in certain position, and a control valve in said supply pipe whereby said valve will reciprocate in said sleeve with the opening and closing of said control valve.

2. In a drinking fountain, the combination of a cylindrical member provided with a closed end and an open end and provided with a hole centrally in said closed end, a sleeve fitted into said cylindrical member, a valve seating on the upper end of said sleeve, and means for regulating the movement of said valve adjustably mounted on the stem thereof.

[Claims 3 to 5 not printed in the Gazette.]

1,273,323. PROCESS OF MAKING SHOES. MATTHIAS BROCK, Boston, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Original application filed June 10, 1914, Serial No. 844,209. Divided and this application filed June 14, 1916. Serial No. 103,647. (Cl. 12—142.)



1. That improvement in the art of making shoes which comprises molding to shape the heel and toe ends of a shoe upper off the last, attaching a sole to the upper, and then stretching the shoe permanently to increase its size.

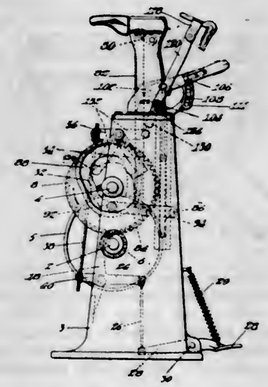
3. That improvement in the art of making shoes which comprises shaping the heel and toe ends of an upper substantially to the shape which they are to have in the finished shoe, attaching a sole to the upper, stretching the shoe as a whole longitudinally and stretching the forepart laterally permanently to increase the size of the shoe, and then completing the shoe.

5. That improvement in the art of making shoes which comprises preparing the shoe upper off the last with a sole attached thereto, inserting a form in the shoe, adjusting the form to fill the shoe and then expanding the form, removing the form, inserting a last of substantially the size of the expanded form, and then completing the shoe.

20. That improvement in the art of making shoes which consists in forming portions of a shoe upper substantially to the shape of a last and attaching the upper to a sole, then stretching the shoe permanently to increase its size, inserting a last of the size to which the shoe has been stretched, and completing the shoe.

[Claims 2, 4, 6 to 19, and 21 to 26 not printed in the Gazette.]

1,273,324. MACHINE FOR OPERATING UPON BOOTS OR SHOES. MATTHIAS BROCK, Boston, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed June 10, 1914. Serial No. 844,209. (Cl. 12—131.)



1. In a machine of the class described, means for stretching a shoe to a larger size, and means for adjusting said stretching means to the size of the shoe to be stretched before the actuation of said stretching means.

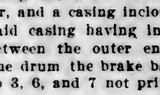
6. In a machine of the class described, means for stretching a shoe, means for operating said means by power to a predetermined extent, and means for initially adjusting said stretching means to a variable point having fixed relation to the limit of the predetermined stretching movement.

42. In a machine of the class described, power driven means for stretching a shoe to a predetermined extent, and automatic means for controlling the extent of the stretching movement.

[Claims 2 to 5 and 7 to 41 not printed in the Gazette.]

1,273,325. COLLAR-FASTENER. BERNIE BROOKS, St. Louis, Mo. Filed June 6, 1917. Serial No. 173,105. (Cl. 24—87.)

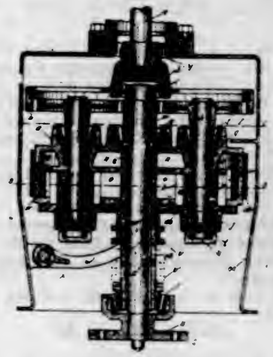
1. A collar fastener, comprising a relatively long and narrow bar, and a single prong attached to the inner face of the bar at relatively a considerable distance from each end of the bar leaving an extended portion of the bar beyond each of said prongs for engagement by the thumb



and finger of the wearer in attaching the bar to the collar and detaching the bar from the collar.

[Claim 2 not printed in the Gazette.]

1,273,326. TRANSMISSION MECHANISM. GEORGE H. BUGENHAGEN, Minot, N. D. Filed Aug. 22, 1917. Serial No. 187,698. (Cl. 74—34.)



4. A transmission mechanism comprising a driving member, a driven member, a hollow drum carried by the driving member, a rotary pump in the drum, said drum containing fluid reservoir and pressure chambers for the pump, a valve-controlled connection between said chambers, a relief valve between the pressure chamber and the reservoir chamber, and means for transmitting motion of the drum to the driven member.

5. A transmission mechanism comprising a driving member, a driven member, a planetary gearing between the said members, a drum carrying the planetary pinions of said gearing, a pump in the drum driven by said pinions, said drum containing fluid reservoir and pressure chambers for the pump, a valve-controlled connection between the chambers, a brake-band associated with the drum for holding the same stationary relative to the driving member, and a casing inclosing the drum and the brake band, said casing having inturned projections on its interior between the outer ends of which and the periphery of the drum the brake band is located.

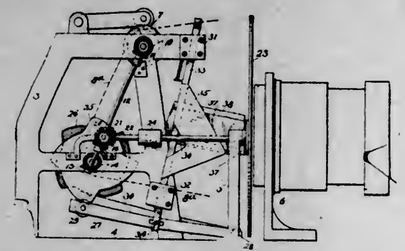
[Claims 1 to 3, 6, and 7 not printed in the Gazette.]

1,273,327. PICTURE-PROJECTING AND PHOTOGRAPHING DEVICE. ARTHUR R. BULLOCK, Cleveland, Ohio. Filed May 14, 1913. Serial No. 767,495. (Cl. 88—16.8.)

1. In a device of the character described, the combination with a film having or adapted to have a single series of pictures thereon, means for moving the film continuously at uniform speed, of a lens, a plurality of light transmitting devices between the film and lens, means for moving said light transmitting means with a motion of translation, said light transmitting devices being moved in succession with the film, and transmitting the light beams between the film and the lens to maintain a constant optical relation between the film and lens.

9. In a device of the character described, the combination with a film, means for moving said film continuously at uniform speed, of a lens, a light transmitting device between the film and lens to maintain a constant optical relation between the film and lens, means for bodily moving

with a motion of translation the light transmitting device toward and way from the film and at a definite speed with respect to the movement of the film.

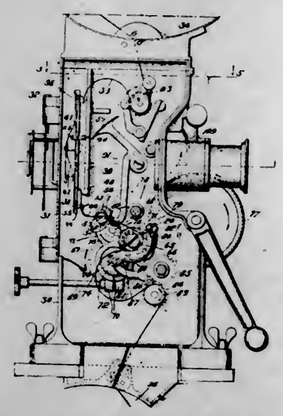


20. In a device of the character described, the combination with a film, means for moving said film continuously at uniform speed, of a lens, a prism between the film and lens, means for imparting to the prism a motion of translation in a substantially lineal path toward and away from the film and at a definite speed with respect to the movement of the film.

21. In a device of the character described, the combination with a film, means for moving said film continuously at uniform speed, of a lens, a prism between the film and lens, means for bodily moving with a motion of translation the prism toward and away from the film and in a direction which is substantially at right angles to the plane of the film.

[Claims 2 to 8, 10 to 19, and 22 to 32 not printed in the Gazette.]

1,273,328. MOVING-PICTURE MACHINE. JAMES A. CAMERON, Brooklyn, N. Y., assignor to Cameron Picture Machine Co., a Corporation of New York. Filed Sept. 24, 1912. Serial No. 722,009. Renewed June 8, 1918. Serial No. 239,046. (Cl. 88—18.6.)



1. The combination in a moving picture machine provided with an exposure opening, of a take-up device for taking up an equal amount of film once to each cycle of the machine, a tension device exerting a substantially uniform tension on the film and guiding the film in a predetermined path, and a beater movable in a substantial continuation of said predetermined path, said beater acting upon the film to intermittently advance the same in said continuation of the path in which the film is guided by the tension device, whereby to maintain the uniformity of the tension exerted by the tension device.

9. Film advancing mechanism for moving picture machines comprising a beater arm extending forwardly from a given center, a pivotal support for the beater arm eccentrically disposed with respect to the said center, and means for rocking the beater arm upon the pivotal support.

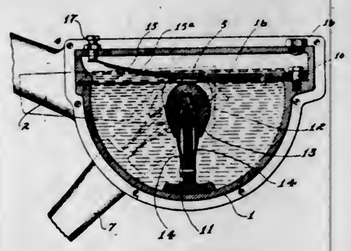
14. Film advancing means for moving picture machines comprising a rock shaft, a supporting member carried at one end of the rock-shaft and eccentrically disposed with respect to the same, a film-engaging plate secured to the supporting member, and means for oscillating the rock shaft.

18. The combination in a moving picture machine provided with an exposure opening, of a take-up device, means for guiding the film with relation to the take-up device, a beater interposed between the exposure opening and the take-up device for intermittently advancing the film past the exposure opening, and means for bodily shifting the take-up device and the guiding means to adjust the film with respect to the exposure opening.

32. The combination in a moving picture machine, of a film support over which the film is guided, a beater below the film support, and clamping shoes bearing upon the film passing across the face of the film support, the said clamping shoes projecting downwardly from the lower edge of the film support to a point substantially in line with the beater.

[Claims 2 to 8, 10 to 13, 15 to 17, 19 to 31, and 33 not printed in the Gazette.]

1,273,329. SHOCK-ABSORBER. RUSSELL S. CARTER, Hewlitt, N. Y. Filed Jan. 27, 1916. Serial No. 74,529. (Cl. 21—105.)



1. A shock absorber comprising a nonyielding piston member, a liquid-confining chamber wherein liquid may flow from one side of the piston to the other, and an elastic wall fixed to said chamber and controlling the flow through said passage and having an area exposed to the pressure of said liquid substantially equal to the area of the piston.

2. A shock absorber comprising a liquid-containing casing, a hub-mounted rotary piston therein, and a stiff spring-yielding wall adjacent the hub end of the piston, having an area exposed to the liquid pressure which is substantially equal to the piston area, said wall being mounted to yield variably to accommodate liquid flow from one side of the piston to the other, and means for connecting said piston and casing, respectively, to the parts between which shock is to be absorbed.

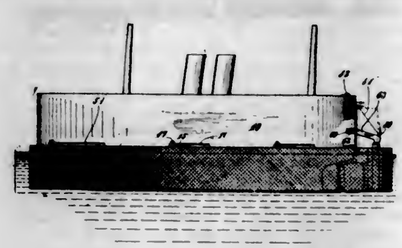
3. A shock absorber comprising a liquid-containing casing, a hub-mounted piston therein, and a stiff, spring-yielding wall fixed to said casing adjacent the hub of the piston and providing therewith a resiliently restricted flow passage from one side of the piston to the other.

4. A shock absorber comprising a liquid-containing chamber, a piston therein, and an elastic chamber wall opposing displacement of the liquid, said wall comprising superposed spring leaves and exposing an area subject to the pressure of the liquid which is substantially equal to the piston area.

5. In a shock absorber, the combination of a liquid-containing chamber, a slotted hub journaled therein, a rotary piston member having its blade portion within the slot and held therein by the engagement of its free end with said chamber whereby a limited lost motion is provided between hub and piston, and attachment arms on said chamber and hub, respectively.

[Claims 6 and 7 not printed in the Gazette.]

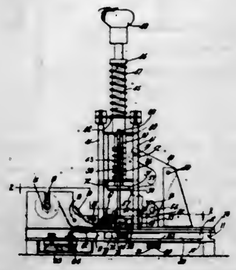
1,273,330. TORPEDO-REPELLING DEVICE. MICHELE CIGANENKO, Pittsburgh, Pa. Filed July 27, 1917. Serial No. 183,051. (Cl. 114—240.)



1. In a device as described, in combination, with the side of a ship, a plate extending along one side thereof, a strip secured upon the inner face of said plate and formed at its opposite ends with right angular portions, angle strips also secured above and below the first strip to said plate and providing arms disposed parallel to the right angular portions, similar strips secured upon the side of said ship and also providing the right angular portions and the arms, a bracket secured to the upper side of said ship so as to provide an additional arm, a lever pivoted between the arms and right angular portions at the lower ends of said ship and plate, and another lever similarly pivoted at the upper end of said ship side and said plate, a pin projecting through the upper arm of said plate, and a third lever slidably pivoted to the uppermost arm of the ship side and carrying at its outer end a depending sleeve engaging said pin.

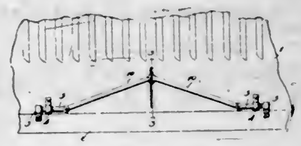
[Claim 2 not printed in the Gazette.]

1,273,331. LABEL OR STAMP AFFIXING DEVICE. WILLIAM E. CLAY, Nantasket Beach, Mass. Filed May 17, 1916. Serial No. 98,204. (Cl. 216—30.)



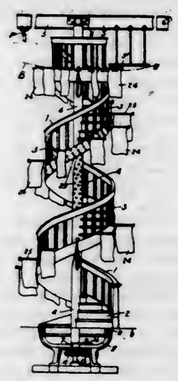
A device of the class described having, in combination, a work support, an affixing pad movable toward and away from said work support, means for positioning predetermined portions of the work in alinement with said affixing pad, means for feeding a strip of sheet material into a position between said affixing pad and the work, a moistening pad movable toward and away from said work support, and means operatively connecting said moistening pad with said affixing pad adapted to permit said moistening pad to engage said work support only when said affixing pad is in its uppermost position away from said work support, whereby the work may be moistened during the insertion thereof.

1,273,332. FASTENER FOR AUTOMOBILE-HOODS. BENJAMIN FREDERICK CLINE, Orange, N. J. Filed May 8, 1918. Serial No. 233,334. (Cl. 70—81.)



In an automobile, the combination with the hood and the frame of the vehicle, of means for locking the same to the frame, said means comprising bolts mounted to slide on the inner face of the hood at the opposite ends thereof and in opposite directions, a keeper on the frame for engagement by each bolt, a handle mounted to slide vertically in the hood wall, said wall having a vertical slot and the handle having a shank extending through the slot, links connecting the shank with the bolts, plates on the shank on opposite sides of the hood, and springs between the handle and the outermost plate for pressing said handle outward, the lifting movement of the handle serving to open the bolts.

1,273,333. STAIRCASE FOR SCENIC EFFECTS. ARTHUR COLLINS, Weybridge, England. Filed Oct. 16, 1917. Serial No. 196,940. (Cl. 46—70.)



2. A staircase for scenic effects, comprising a stairway wound spirally around a vertical axis, said stairway tapering upwardly, means for supporting said stairway at bottom upon a stage, said means allowing the staircase to be moved from one position to another, means for engaging the upper part of the staircase and retaining the same in the desired position, and a landing adjacent to the top of the stairway so that artistes can pass to or from said staircase and said landing.

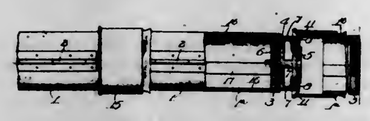
14. A staircase for scenic effects, having means whereby it may be wheeled into position, means whereby it may be locked in position upon a stage, and a landing arranged adjacent to the top of said staircase and concealed from the spectators.

24. A revoluble spiral staircase for scenic effects, comprising a tapering spiral stairway, a central column about which the stairway is arranged, means for rotating said staircase, means for supporting said column at each end, wheeled members arranged at the bottom of said staircase, said wheeled members allowing the staircase to be moved from one position to another and also serving for the rotation of the staircase, means for engaging and locking said column to support and lock the staircase in

position, a landing adjacent to the top of said staircase and means for concealing said landing and the top of said staircase, said central column being provided with a worm wheel, a worm engaging said worm wheel and means for driving said worm.

[Claims 1, 3 to 13, 15 to 23, and 25 to 34 not printed in the Gazette.]

1,273,334. CHEESE-MOLD. DELL S. CROSBY, Chicago, Ill. Filed Dec. 14, 1917. Serial No. 207,145. (Cl. 31—21.)



1. A cheese mold having, in combination, a hoop and a follower, said follower having a plurality of sector-shaped sections movable toward and from their common geometrical center and together forming a complete disk, means to which said sections are attached so as to be movable as aforesaid, and yielding means for normally forcing said sections away from said center.

8. A cheese mold having, in combination, a hoop and a follower, said follower having a body-portion and a face plate made up of sector-shaped sections of sheet metal, each offset at one of its edges overlapping the adjacent flat edge of the next adjacent section, and means slidably connecting each section of the face plate to the body-portion so that said sections may move toward and from a common center.

9. A cheese mold having, in combination, a hoop and a follower, said follower having a body-portion comprising two circular disks and struts connecting said disks, a radially expansible face plate of larger diameter than said disks and means securing said face plate to one of said disks.

14. A cheese mold having, in combination, a hoop and a follower said follower having a body-portion comprising two parallel disks and struts connecting them, a segmental face plate, and means connecting the segments of face plate with one of said disks, the disk last aforesaid having radially disposed sockets or cavities, and springs located in said sockets or cavities, the segmental sections of the face plate having projections extending into said sockets and engaging the outer ends of said springs.

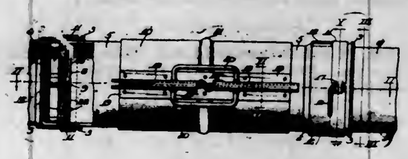
16. A cheese mold having, in combination a hoop formed of two longitudinal sections, a hinge connecting the edges of said sections at one side of the hoop, and a fastening device connecting the edges of said sections at the side of the hoop opposite said hinge said fastening device consisting of radial flanges extending outward from the hoop sections and a U-shaped latch pivotally connected to one of said flanges and adapted to straddle and embrace both of them, said flanges having notches and said latch having a part adapted to enter said notches for preventing the relative longitudinal movement of said flanges.

[Claims 2 to 7, 10 to 13, 15, and 17 to 19 not printed in the Gazette.]

1,273,335. CHEESE-MOLD. DELL S. CROSBY, Chicago, Ill. Filed Mar. 6, 1918. Serial No. 220,755. (Cl. 31—21.)

1. A cheese mold having in combination a hoop made in longitudinal sections, a split clamping sleeve surrounding said hoop, and means for securing together the meeting edges of the clamping sleeve.

2. A cheese mold having in combination a tubular hoop made in longitudinal sections and open at one end, a head closing the hoop at the other end, said head comprising two disks, one of which is circular, equal in diameter to the internal diameter of the hoop and secured at one of its sides to one of the hoop-sections and the other of which is made in two semi-circular parts, each secured at its peripheral edge to one of the hoop-sections and means for separably securing the edges of the longitudinal hoop-section together.

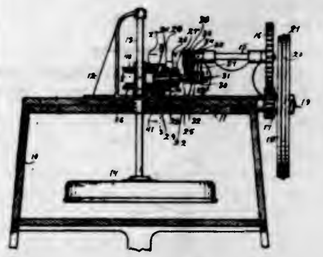


3. A cheese mold having in combination a tubular hoop made in longitudinal sections and open at one end a split clamping ring surrounding the hoop near its open end, and means for drawing together the adjacent ends of said clamping ring to contract it around the hoop.

4. A cheese mold having in combination a tubular hoop made of longitudinal sections, said hoop being open at one end and of two diameters being of larger diameter at its open end to provide an internal annular shoulder, a split clamping ring surrounding the hoop at its portion of larger diameter, and means for drawing together the adjacent ends of said clamping ring to contract it around the hoop.

5. A cheese mold having in combination, a tubular hoop, adapted to receive within it a tubular casing of cheese cloth or the like, the open end of which is reflexed or doubled backward over the end of the hoop, a split clamping ring surrounding the end of the hoop and the reflexed portion of the tubular casing, and means for drawing together the adjacent ends of said clamping ring to clasp it upon the reflexed end of the tubular casing aforesaid, and the latter against the hoop.

1,273,336. DRIVING MECHANISM FOR WASHING-MACHINES. JOHN P. DORAU, Jefferson, Wis. Filed July 2, 1917. Serial No. 178,224. (Cl. 74—50.)



1. In a driving mechanism, the combination, with a vertical shaft, of a drive shaft disposed at an angle thereto, and a driving connection between said shafts for imparting a rotary movement in one direction to said vertical shaft during several oscillations and vertical reciprocations of said vertical shaft and for imparting rotary movement in the opposite direction to said vertical shaft during several oscillations and vertical reciprocations of said vertical shaft.

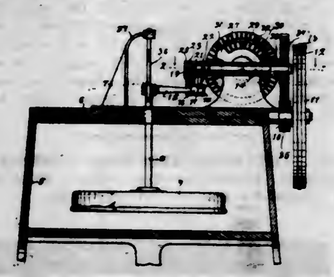
2. In a driving mechanism, the combination, with a vertical shaft, of a drive shaft disposed at an angle thereto, and a driving connection between said shafts comprising a member having an offset joint connection with one of said shafts and an automatically reversible driving connection with the other of said shafts.

3. In a driving mechanism, the combination, with a vertical shaft, of a drive shaft disposed at an angle thereto, and a driving connection between said shafts comprising a member having a yieldingly mounted offset joint connection with one of said shafts and an automatically reversible driving connection with the other of said shafts.

4. In a driving mechanism, the combination, with a vertical shaft, of a drive shaft disposed at an angle thereto, and a driving connection between said shafts comprising a member having an automatically reversible gear drive connection with the vertical shaft and an offset connection with the drive shaft.

5. In a driving mechanism, the combination, with a vertical shaft, of a drive shaft disposed at an angle thereto, and a driving connection between said shafts comprising a member having an offset connection with the drive shaft and carrying a gear, a pair of reverse gears carried by the vertical shaft, and means for automatically bringing said first named gear into alternate driving engagement with the gears on the vertical shaft.

1,273,337. DRIVING MECHANISM FOR WASHING-MACHINES. JOHN P. DORAU, North Fond du Lac, Wis. Filed Aug. 18, 1917. Serial No. 186,964. (Cl. 74—50.)

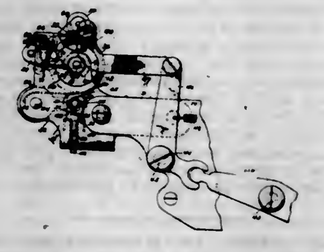


1. In a driving mechanism, the combination, with a vertical shaft, of a drive shaft disposed at an angle thereto, a driving connection between said shafts for imparting several oscillations and vertical reciprocations to said vertical shaft, and means for turning said drive shaft several times in one direction and then in the opposite direction to reverse the oscillations of the vertical shaft.

5. In a driving mechanism, the combination of a bracket having an upwardly projecting bearing arm, a hollow pounder shaft vertically slidably and pivotally mounted in said bracket, a bearing shaft depending from said arm and adapted to telescope within the hollow of said pounder shaft, and means for agitating and vertically reciprocating said pounder shaft.

[Claims 2 to 4 not printed in the Gazette.]

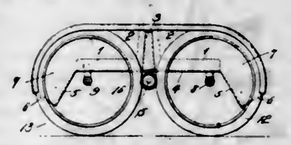
1,273,338. TYPE-WRITING MACHINE. WILLIAM H. EDELHART and CLARENCE G. ARVIDSON, Indianapolis, Ind., assignors to The Stenotype Company, Indianapolis, Ind. Filed Nov. 21, 1916. Serial No. 132,613. (Cl. 197—133.)



1. In a typewriting machine, the combination with feeding means, of a ratchet wheel connected therewith, an oscillatory pawl carrier, a spring-actuated pawl mounted on said carrier, a disk mounted to move independently of said ratchet wheel, said disk having a flange provided with a slot for the passage of the pawl, and one end of said slot being beveled, and means for causing said disk to move with the pawl carrier during a portion of the movement of the latter.

[Claims 2 to 5 not printed in the Gazette.]

1,273,339. FOUR-WHEEL DRIVE FOR AUTOMOBILES AND OTHER VEHICLES. GEORGE D. EIGHMIE, New York, N. Y. Filed June 5, 1917. Serial No. 172,966. (Cl. 180—74.)



The herein-described gasolene or internal combustion engine perambulator, consisting of a main frame, pivoted axles supported thereon, drive wheels on said axles, a pair of friction wheels for driving the four-drive wheels as a four-wheel drive, front and rear seats supported on the main frame, lateral mudguards, foot rests at the ends of the main frame, and a receptacle between the seat backs for containing paraphernalia.

1,273,340. BUCKLE. AXEL GEORGE EKLUND, Attleboro Falls, Mass., assignor to J. F. Sturdy's Sons Co., Attleboro Falls, Mass., a Corporation of Massachusetts. Filed Mar. 23, 1918. Serial No. 224,147. (Cl. 24—163.)



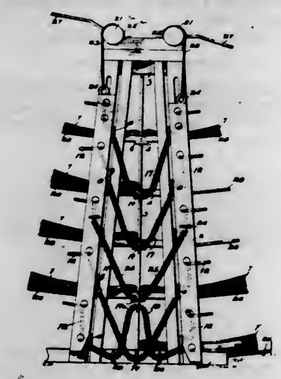
1. A buckle comprising two independent superimposed plates, one having a transverse bar by which the bight of a strap is frictionally retained, a bail on one of said plates to which the end of the strap is connected, and hook-shaped members serving as a spring snap lock for releasably connecting one of said plates to the other.

2. A buckle comprising two independent superimposed plates, one having a transverse bar by which the bight of the strap is frictionally retained, said plates having a relatively deep outwardly turned hook adjacent one end and an oppositely turned relatively shallow hook adjacent its opposite end, the other of said plates being provided with a complemental under beveled bar to snap into said shallow hook to releasably retain said plates together, and a bail on one of said plates to which the strap end may be fastened.

1,273,341. PAPER-BAG HOLDER. WILLIAM DOUGLAS ELLIOT, Bigtimber, Mont. Filed May 13, 1918. Serial No. 234,202. (Cl. 211—2.)

2. A paper bag holder comprising a stand having a plurality of series of shelves, the shelves of each series being arranged one above the other for receiving bundles of bags of varying sizes, a rod slidably connected with the standard at each shelf and adapted to rest upon the bundle of bags to hold them on the shelf, springs normally pressing each rod downward, a common lifting means for all of the rods of each series of bags and slidably connected with the stand and normally disconnected from the rod, and independent means at each shelf for connecting the adjacent rod to the lifting means, each of the said lifting means comprising slides slidably con-

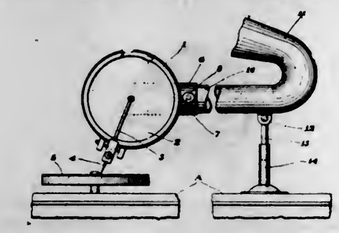
nected with the standard at opposite sides thereof, a roller journaled at the top of the stand and having a handle, a flexible connection winding upon each roller at



the adjacent slide and connected with the slide, and springs normally pressing the slides downward.

[Claims 1 and 3 to 7 not printed in the Gazette.]

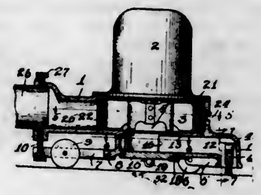
1,273,342. TALKING-MACHINE. VICTOR H. EMERSON, New York, N. Y., assignor to Emerson Phonograph Company, Inc., a Corporation of New York. Filed Feb. 18, 1916. Serial No. 79,217. (Cl. 274—24.)



A tone arm including two sections and a swivel joint connecting the sections, one section consisting of an upper arm and a forearm, the forearm having its swinging end at an angle of substantially 90° to the axis of the joint, the upper arm and the portion of the other section adjacent the swivel joint and the axis of the swivel joint being normally substantially horizontal, a sound box secured to the swinging end of the forearm so that the diaphragm and the needle are in a plane substantially parallel to the axis of the swivel joint, and vertical in one position of the forearm whereby the device is adapted to play one type of record and may be rotated about the axis of the swivel joint until the diaphragm and needle plane are substantially at forty-five degrees to the previous mentioned position so that the apparatus is also adapted to play another type of record.

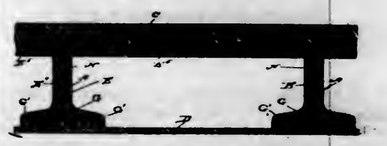
1,273,343. PUMP FOR VACUUM-CLEANERS. CHARLES ENDORF, Jr., Chicago, Ill., assignor to Lindstrom, Smith Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 22, 1915. Serial No. 23,094. (Cl. 230—11.)

1. In a pump for a vacuum cleaner of the class described the combination with a casing, of a fan chamber formed therein, a plurality of eduction passages communicating with said fan chamber, an annular horizontally rotatable valve element within the fan chamber adapted to establish communication between either one of said eduction passages and said chamber, and a cylindrical valve in an inlet passage communicating with said fan chamber adapted to be removed to permit cleaning of the interior of said casing.



2. In a device of the class described, the combination of a casing having an opening in the bottom thereof, a fan chamber therein, a plurality of eduction passages communicating therewith, a ring valve in said fan chamber controlling the flow from the same into said eduction passages, said valve actuatable from the exterior of the casing, a plurality of inlet passages formed in said casing, and a valve closed at one end and opened at the other end rotatably and removably engaged in said casing opening to close the same and adapted to control the communication of said inlet passages with said fan chamber.

1,273,344. CONCRETE FLOORING CONSTRUCTION. WILLIAM H. EVERS, Cleveland, Ohio. Filed Jan. 17, 1914. Serial No. 812,701. (Cl. 72—66.)



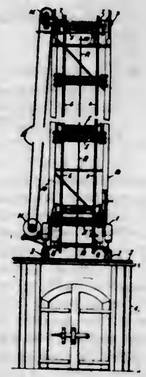
1. A concrete floor construction comprising a plurality of spaced apart beams and an overlaying layer or slab, a series of tie or positioning wires each of which is coiled upon itself in such a manner as to lie substantially in a single plane and formed with an upper and a plurality of separated lower positioning eyes or coils and the sections of the wires between said eyes being double and intersecting each other, said positioning wires arranged at definite and separated intervals in said spaced beams and adapted to receive longitudinal reinforcing bars in said eyes or coils, an upper longitudinal reinforcing compression bar supported within the upper positioning eyes or coils, a lower longitudinal reinforcing tension bar supported within each of the lower positioning eyes or coils, the ends of each of the said tie or positioning wires being bent laterally and in opposite directions for reinforcing said overlying layer or slab.

4. As a new article of manufacture an element for concrete floor construction comprising a positioning wire which is made from a single piece and coiled upon itself in such a manner as to lie substantially in a single plane and formed with a plurality of separated upper and lower positioning eyes or coils and the sections of the wire between the eyes being double and intersecting each other, and each of said positioning eyes or wire adapted to receive either a compression or tension longitudinal reinforcing bar and the ends of the said tie or positioning wire being adapted to be bent laterally and in opposite directions in the plane of the positioning wire.

[Claims 2 and 3 not printed in the Gazette.]

1,273,345. CANE-GLASS MANUFACTURE. JOHN T. FAGAN, Cleveland, Ohio, assignor to General Electric Company, a Corporation of New York. Filed June 3, 1913. Serial No. 771,407. (Cl. 49—17.)

1. A machine for the manufacture of cane glass, comprising an endless carrier with automatically operated gripping devices attached to it at suitable intervals and following the entire path of travel thereof, means for causing each of said gripping devices, as it ascends, to close upon and grip cane glass at the time extending from a supply of heated glass beneath and the gripping devices next above that last mentioned; severing means located in the path of the ascending grippers for successively severing the glass cane between ascending gripping devices, said gripping devices being adapted to hold and maintain the detached sections firmly with their lengths in the direction of travel throughout the travel of the detached sections, and releasing means in the path of travel for successively releasing said gripping devices.



3. A machine for the manufacture of cane glass or glass tubing comprising a frame adapted to be mounted over a receptacle for molten glass, a vertically disposed endless chain carrier carried by said frame, gripping members permanently attached to said endless carrier, severing means for automatically detaching a section of the glass rod or tube held by said gripping members, means for thereafter releasing the gripping members, holding said detached section and an adjustable chute adapted to be positioned in the path of the detached section to receive the same when the gripping members are released.

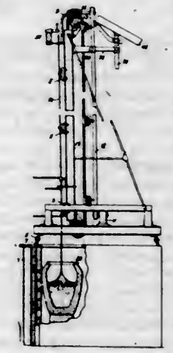
6. A machine for the manufacture of cane glass comprising a vertically disposed endless chain conveyer with gripping devices attached to it at suitable intervals, means for causing each of said gripping devices as it ascends to close upon and grip a cane of glass at the time extending from a supply of heated glass beneath and the gripping device next above that last mentioned, so that as they repeatedly and successively travel upward the gripping devices may uninterruptedly draw glass from the supply into cane form, severing means for detaching a glass cane between successive gripping devices at a point substantially midway therebetween during their ascension, releasing means for successively releasing the sections during the downward journey, and receiving means adapted to receive the detached and released sections from the gripping members.

8. A machine for the manufacture of cane glass comprising a pair of vertically disposed endless chains located in different parallel planes and means supporting the same over a receptacle of molten glass, a frame attached to each of said chains and movable with them in a confined path, relatively movable gripping members carried by the said frame and normally urged to open position by suitable springs, a cam located in the upward path of said grippers and adapted to cause said gripping members to engage a glass cane drawn from the receptacle, said cam extending upwardly to the point where the gripping members are to be released, severing means for detaching successively the sections of glass, and receiving means located at the point of release for receiving the detached and released sections.

11. A machine for the manufacture of cane glass, comprising a vertically disposed endless carrier with gripping devices attached to it at suitable intervals and following the entire path of travel thereof, means for causing each of said gripping devices as it ascends to close upon and grip cane glass at the time extending from a supply of heated glass beneath and the gripping devices next above that last mentioned, so that as they repeatedly and successively travel upward the gripping devices may uninterruptedly draw glass from the supply into cane form, severing means for detaching the glass cane between successive gripping devices, said gripping devices being adapted to hold and maintain the detached sections firmly with their lengths in the direction of travel throughout the travel of the detached sections, releasing means for successively releasing the detached sections during the period when the gripping members are changing from the upward to the downward movement and while the sections of glass are inclined to the vertical, and a receiving means positioned to receive the inclined sections.

[Claims 2, 4, 5, 7, 9, and 10 not printed in the Gazette.]

1,273,346. MANUFACTURE OF GLASS RODS AND TUBES. JOHN T. FAGAN, Cleveland, Ohio, assignor to General Electric Company, a Corporation of New York. Original application filed June 3, 1913, Serial No. 771,407. Divided and this application filed July 20, 1916. Serial No. 110,390. (Cl. 49—83.1.)



1. The method of producing glass cane or tubing which consists in continuously drawing a thread or rod from a supply of heated glass and concurrently with the continuous drawing of the rod or thread intermittently detaching lengths therefrom.

2. The method of producing glass cane or tubing continuously from a supply of heated glass which consists in drawing an initial thread or rod from the supply and thereafter gripping the thread or rod itself to continue drawing it, from time to time taking a fresh grip near the supply and releasing the grip farther on so that the drawing may go on uninterruptedly, and concurrently with the continuous drawing of the thread or rod from time to time detaching and removing lengths therefrom.

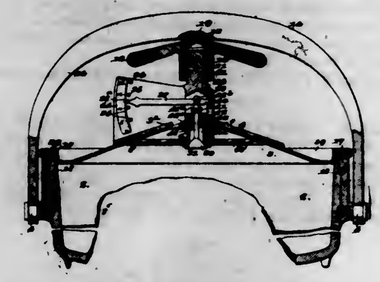
5. The method of producing lengths of cane glass or glass tubing from a supply of molten glass which consists in continuously repeatedly drawing the rod or tubing from the supply container by gripping the drawn rod or tubing at two or more points simultaneously, detaching the rod or tubing at a point between two of the grips and thereafter carrying the detached section in a depository and releasing the grip.

9. The method of producing lengths of cane glass or glass tubing from a supply of molten glass which consists in drawing up an initial rod or tube from the supply, gripping the rod or tube to continue drawing it up, taking a second grip near the supply and thereafter breaking the rod or tube at a point between said grips whereby the detached length is free to be carried to a depository.

10. The method of producing lengths of cane glass or glass tubing from a supply of molten glass which consists in continuously and repeatedly drawing upward the rod or tubing from the supply container by gripping the drawn rod or tubing at two or more points simultaneously, detaching the rod or tubing at a point between the two uppermost gripe and thereafter carrying the detached section to a depository and releasing the grip.

[Claims 3, 4, and 6 to 8 not printed in the Gazette.]

1,273,347. STEAM-PRESSURE COOKER. WALTON C. FERRIS, Lincoln, Nebr., assignor to National Manufacturing Company, Lincoln, Nebr., a Corporation. Filed Oct. 17, 1917. Serial No. 197,103. (Cl. 53—1.)



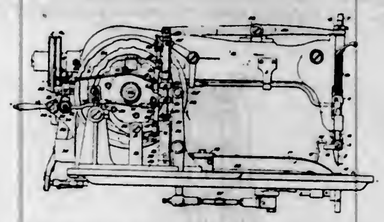
1. A safety valve mechanism, said mechanism comprising a normally extended flexible diaphragm subject to the steam pressure within the cooker, a valve seat, a puppet valve movable with the diaphragm and normally held closed against the valve seat, a blow-off normally closed as the diaphragm and the valve move together under steam pressure less than that for which the valve is set for being opened, and means coöperative with the valve that shifts the valve to the open position when the steam pressure exceeds the predetermined point, whereby to open the steam space to atmosphere through the blow-off.

7. In a pressure cooker, in combination with a kettle; a centrally apertured cover, a hub-like post on the cover located over the central aperture thereof, a normally extended flexible diaphragm attached to the inside of the cover, the said diaphragm being subjected to the steam pressure within the cooker, a tubular upright attached to and projected from the diaphragm into the hub-like post, a sleeve mounted on and movable with the upright, the said tube and the sleeve having communicating blow-off passages the tubular upright having a valve seat, a puppet valve normally held closed under steam pressure coöperating with the said seat, the said valve including a stem that has movement through the tubular upright and the sleeve, the said valve and the tubular upright moving together under excess pressure on the diaphragm, means cooperating with the valve stem and the hub-like upright for engaging the valve stem and forcing it and the valve back to an open position for bringing the blow-off passages into communication with the pressure chamber of the kettle, the said means consisting of a finger member fulcrumed at one end on the hub-like upright, pivotally connected to the valve stem and projected laterally with respect to the said stem and upright whereby the down pressure on the said finger tends to open the puppet valve.

9. In a pressure cooker, a normally extended diaphragm subjected to internal steam pressure, a tubular bearing mounted on the diaphragm and having a valve seat, a sleeve mounted on and movable with the said bearing, the said sleeve and the bearing having alining steam passages, a valve normally engaging the valve seat in the bearing and including a stem freely movable in the alining apertures in the bearing and the sleeve, the bearing and the sleeve having coengaging blow-off passages, the passage in the bearing including a whistle producing cavity, the said valve, the bearing and the sleeve moving together under pressure below that for which the valve is set to open, and means for opening the valve when the pressure exceeds the predetermined point.

[Claims 2 to 6 and 8 not printed in the Gazette.]

1,273,348. SEWING-MACHINE. ALBERT F. FIFIELD, Newark, N. J., assignor to The Singer Manufacturing Company, a Corporation of New Jersey. Filed Sept. 10, 1914. Serial No. 860,984. (Cl. 112—13.)



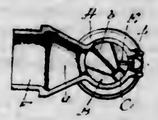
1. In a sewing machine, a presser-bar, a spring normally acting thereon, a reciprocatory lifting member, a support, independent releasable couplings between said member and the presser-bar and between said member and said support, a spring acting upon said lifting member in opposition to the presser-bar spring, means for shifting the lifting member in opposition to its spring, and controlling means for alternately establishing and interrupting the couplings between the lifting member and the presser-bar and between the lifting member and said support.

5. In a sewing-machine, in combination, stitch-forming mechanism, a stop-motion device for controlling the period of action thereof, a presser-bar, a pressure spring therefor, a presser-bar lifting spring, means actuated independently of the stop-motion device for compressing said lifting spring, and means tripped into action by a connection with said stop-motion device whereby the presser-bar is successively subjected to the action of said springs.

11. In a sewing machine, in combination, a spring pressed presser-bar, a presser-bar lifting member, a spring acting upon said member in opposition to the thrust of the presser-bar spring, means for shifting said member in opposition to its spring, and a releasable coupling operable without shifting the lifting member whereby said presser-bar may be uncoupled from said lifting member.

[Claims 2 to 4, 6 to 10, and 12 not printed in the Gazette.]

1,273,349. COMBINED FLUSHER AND SPRINKLER NOZZLE. JAMES D. FILBIN, Cleveland, Ohio, assignor to Municipal Engineering and Contracting Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 2, 1917. Serial No. 159,129. (Cl. 137—64.)



1. A combined flushing and sprinkling nozzle, comprising a rotary valve-member which is tapered toward one end thereof, a valve-casing providing a tapered seat for said valve-member, the said casing having an inlet at one side and a longitudinal discharge-slot at the other side thereof, and said valve-member being provided with a transverse passage for connecting said inlet with said discharge-slot, said transverse passage terminating at the discharge side of said valve-member in a longitudinal row of holes and a slot extending parallel with said row of holes, so that said member can be adjusted to bring either its slot or its row of holes opposite said discharge-slot of the casing, thereby to adapt said nozzle for use either as a flusher or a sprinkler.

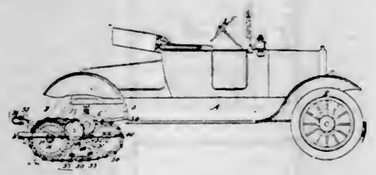
2. The said nozzle (substantially as set forth in claim 1) in which said discharge-slot of the casing tapers toward the smaller end of the rotary valve-member, and in which said holes grow smaller along the row toward the smaller end of said discharge-slot.

3. The said nozzle (substantially as set forth in claim 1) in which said holes converge toward the inlet side of said rotary valve-member.

4. A combined flushing and sprinkling nozzle, comprising a valve-casing and a movable valve-member therein, one of said elements having both a discharge-slot and a row of discharge-holes extending parallel with said slot, and the other element having an opening to communicate with either said slot or said row of holes, whereby said nozzle can be used either as a flusher or a sprinkler.

5. A discharge-nozzle comprising a rotary valve-member which is tapered toward one end thereof, a valve-casing providing a tapered seat for said valve-member, the said casing having an inlet at one side and a longitudinal discharge-slot at the other side thereof, said rotary valve-member having a transverse passage to connect said inlet with said discharge-slot to produce one kind of discharge, and means adjustable to a position opposite said slot to connect said passage with the slot and thereby to produce a different character of discharge, said discharge-slot being tapered toward one end thereof, said means comprising a row of openings, and said row tapering in the same direction as said discharge-slot.

1,273,350. AUTO-TRACTOR. JOHN FRANCO, San Juan Bautista, Cal. Filed Aug. 1, 1917. Serial No. 183,890. (Cl. 180—9.)



1. In a tractor attachment for automobiles having a differential gear in the rear axle, an independent tractor frame supported upon endless, self-laying tracks disposed between the axle spindles and the differential, means to pivotally support the rear end of the automobile upon the tractor frame, and means to transmit power from the rear axle to the tractor attachment.

2. The combination with the rear driving axle on a motor vehicle and the axle housing surrounding same, of a frame adapted to be pivotally attached to the axle housing, a pair of driving pinions adapted to be secured one on each axle spindle, an intermediate shaft journaled on the frame, a gear on each end of said shaft intermeshing with the driving pinions, a pair of endless flexible track members on the frame, and means for transmitting power from the rear axle to drive the track members.

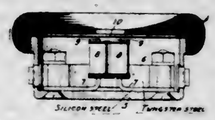
3. In a tractor attachment for automobiles having a differential gear in the rear axle, an independent tractor frame supported upon endless, self-laying tracks disposed between the axle spindles and the differential, means to pivotally support the rear end of the automobile upon the tractor frame, means to transmit power from the rear axle to the tractor attachment, said means comprising driving pinions on each axle spindle, an intermediate shaft journaled on the tractor frame and geared to the driving pinions, stationary shafts secured crosswise at the front and rear ends of the tractor frame, gear sprockets on the rear shaft to support the rear end of and drive the tracks, idlers on the front shaft to support the front end of the tracks, and gears on the intermediate shaft intermeshing with the gear sprockets on the rear shaft.

4. The combination with the rear driving axle on a motor vehicle and the axle housing surrounding same, of a frame adapted to be pivotally attached to the axle housing, a pair of driving pinions adapted to be secured one on each axle spindle, a divided intermediate shaft journaled on the frame, a gear on each end of said shaft intermeshing with the driving pinions, a pair of endless flexible track members on the frame, and means for transmitting power from the rear axle to drive the track members.

7. In a tractor attachment for automobiles, a U-shaped frame, a pair of bearing members on the frame adapted to receive the rear axle housing of the automobile, said bearings permitting an oscillating movement of the frame on the axle housing, a pair of stationary shafts extending crosswise of the frame serving as cross-bar braces for same, a pair of sprocket gear wheels journaled on each shaft, and endless flexible track members carried by the sprockets interiorly of the U-shaped frame.

[Claims 5, 6, 8, and 9 not printed in the Gazette.]

1,273,351. TELEPHONE-RECEIVER. HALSEY A. FREDERICK, Hackensack, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed July 20, 1916. Serial No. 110,319. (Cl. 179—114.)



1. In a telephone receiver, a vibrating diaphragm and a motor system therefor including electromagnetic cores of silicon steel having a pole face area of between ten and thirteen thousandths of a square inch and a ratio of breadth to thickness of between five to one (5:1) and six to one (6:1).

2. In a telephone receiver, a vibrating diaphragm and a motor system therefor including silicon steel cores and windings thereon, said cores having a pole face area of between ten and thirteen thousandths of a square inch and an area of cross section below the windings thereon of approximately eight fifths (8/5) the area of the pole face.

4. In a telephone receiver, a vibrating diaphragm having a free diameter of approximately one and six-tenths inches and a thickness of approximately six-thousandths of an inch, electromagnetic cores located adjacent to said diaphragm, each having a pole face area of between ten and thirteen thousandths of a square inch, said cores being formed of a material having a permeability curve with a sharply defined peak, and a permanent magnet to the opposite poles of which said cores are attached, said permanent magnet having a cross-sectional area of approximately one-sixteenth square inches and a mean radius of approximately five-eighths of an inch.

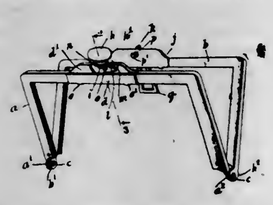
8. In a telephone receiver adapted to be applied to the ear of the user, a diaphragm of magnetic material clamped at its periphery and so proportioned that a damping constant, as defined by the resistance divided by twice the mass, equal to five hundred or more c. g. s. units is obtained when the receiver is held closely to the ear of the user.

13. In a telephone receiver adapted to be applied to the ear of the user, a diaphragm of magnetic material clamped at its periphery and so proportioned that a damping constant, of the resistance divided by twice the mass, equal to five hundred or more c. g. s. units is obtained when the receiver is held closely to the ear, and a motor system for said diaphragm including electromagnetic cores having a sharply defined permeability peak and a permanent magnetic force of such strength

that the flux density at the tips of the cores will be at a value above the point required to produce maximum permeability at normal air-gap separation of the diaphragm and tips of said cores and the permeability will decrease upon a decrease of this air-gap.

[Claims 3, 5 to 7, and 9 to 12 not printed in the Gazette.]

1,273,352. BAG-FASTENER. FRANZ A. FULLER, Newark, N. J., assignor to J. E. Mergott Company, Newark, N. J., a Corporation of New Jersey. Filed Nov. 21, 1914. Serial No. 873,260. (Cl. 70—116.)



A bag fastener embodying therein a frame consisting of hinged frame members, a box-like support carried by one of said members and having an opening through the top thereof adapted to receive the spring lug of a lift member or knob, a nose or catch carried by the other frame member, a lift member or knob provided with a spring lug having an angular spring socket therein adapted to pass through said opening and extend into said support, and a controlling spring for said lift member or knob comprising a coiled section, a straight section extending axially of said coil and having its end angularly formed to have a sliding fit in the spring socket in said lug and a section projected substantially tangentially of said coil toward the side wall of said support whereby the engagement of said wall will tension said spring.

1,273,353. PAD HOLDER OR CASE. FRANZ A. FULLER, Newark, N. J., assignor to The J. E. Mergott Company, Newark, N. J., a Corporation of New Jersey. Filed Oct. 3, 1916. Serial No. 123,489. (Cl. 129—37.)

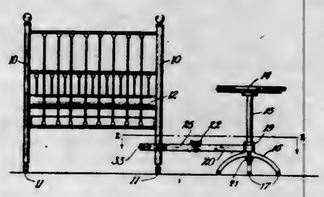


1. A pad holder or case comprising a back portion, the top of which is provided with an integral upturned bearing, and the longitudinal edges of which are provided with upwardly extending flanges, a spring actuated lid, provided at one end with tubular bearings and at its opposite end with a flange, designed to engage with the said back portion, and a spring-actuated intermediate plate having integral bearings, hingedly connected to the bearings of the back portion and the spring-actuated lid.

[Claim 2 not printed in the Gazette.]

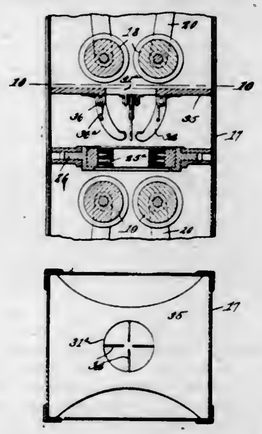
1,273,354. BED-TABLE. CHARLES D. GANZEL, Cleveland, Ohio. Filed Feb. 27, 1918. Serial No. 219,493. (Cl. 45—82.)

In a bed table, the combination with the post of a bed, and a table having a support, of an arm adjustably secured to said support, said arm extending horizontally outward therefrom, of a pair of hingedly engaged clamp elements adapted to surround the post of the bed, pliable blocks set in said clamp elements, means for adjusting



said blocks therein, means for attaching said clamp elements so that the blocks are engaged rigidly with the post of the bed, means for engaging said arm with one of said clamp elements, and means for securing said arm rigidly therein at any desired angular adjustment.

1,273,355. CORN-HUSKING MACHINE. SOLOMON GERMAN, Halethorpe, Md. Filed Dec. 22, 1916. Serial No. 138,385. (Cl. 130—5.)

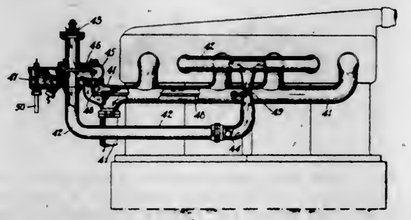


1. In a corn husking machine, a hollow rotary brush, means for feeding the ears lengthwise through the brush, and a series of husk cutting blades carried by the brush at the entrance end thereof and having their cutting edges in the path of the ears.

2. In a corn husking machine, a husk stripping device comprising a rotary member having an opening through which the ears are adapted to be fed lengthwise, and a series of brushes carried by the member and encircling the entrance end of the opening, said brushes being pivoted, and means for yieldingly holding the brushes pressed inward into working position.

3. In a corn husking machine, a husk stripping mechanism, and a pair of feed rollers associated with said mechanism, shafts on which the rollers are mounted, a pair of swinging arms carrying each shaft, the rollers being mounted between the respective pairs of arms, sleeves to which the respective pairs of arms are fastened, shafts on which the sleeves are rotatably mounted, means for yieldingly holding the rollers pressed toward each other, a drive gearing between the roller shafts and the second mentioned shafts, and driving means for said second mentioned shafts.

1,273,356. FUEL-SUPPLY MEANS FOR COMBUSTION-ENGINES. JOHN GOOD, Brooklyn, N. Y., assignor to Good Inventions Co., Brooklyn, N. Y., a Corporation of New York. Filed Feb. 3, 1915. Serial No. 5,850. (Cl. 261—12.)



1. Means for supplying combustible mixture to internal combustion engines, comprising a mixing chamber having an intake for pure air only, a constant level liquid fuel supply receptacle having a liquid discharge opening subject to the pressure of the air near the entrance to said intake and adapted to deliver the liquid in predetermined ratio to the air entering the intake, a liquid transfer pipe separate from said air intake for conducting all the liquid from said discharge opening to said mixing chamber, and means constantly preserving a pressure difference between the ends of said transfer pipe whereby the liquid fuel is discharged thereby into the mixing chamber under all conditions of engine adjustment.

2. Means for supplying combustible mixture to internal combustion engines, comprising a mixing chamber having an air intake pipe, a liquid fuel supply receptacle having a discharge opening subject to the pressure of the air at the entrance to said pipe and adapted to discharge the liquid in predetermined ratio to the air entering said pipe, a liquid transfer pipe for separately conducting the so-discharged liquid to the mixing chamber, means for permanently maintaining a relatively low pressure in the mixing chamber for discharging the liquid from said transfer pipe, and means for heating one of said pipes.

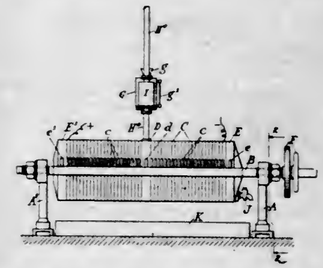
7. In fuel supply means for internal combustion engines, an air and fuel proportioning device comprising a valve-controlled air inlet and a liquid discharge nozzle subject to the pressure determined by said inlet, a mixing chamber, a pipe or passage conducting air only from said device to the chamber, a second pipe or passage conducting all the fuel from said device to the chamber, and means for permanently maintaining a lower pressure in the mixing chamber than at said proportioning device during the full range of engine operation.

14. Means for supplying combustible mixture to combustion apparatus comprising a space in which liquid fuel is mixed with air and having an air intake pipe leading thereto, a liquid fuel receptacle having a discharge opening subject to the pressure in said intake and located above the liquid level of said receptacle and adapted to discharge the liquid in a predetermined ratio to the air flow through said pipe, a liquid transfer pipe for separately conducting the so-discharged liquid to said mixing space, means for permanently maintaining a relatively low pressure in the mixing space for discharging the liquid from said transfer pipe, means for heating one of said pipes and means for varying the air flow to control the rate of mixture delivery.

[Claims 3 to 6 and 8 to 13 not printed in the Gazette.]

1,273,357. ELECTROLYZING APPARATUS. HENRI CLÉMENT LAMBERT GOUGNARD, Paris, France, assignor, by mesne assignments, to The Linde Air Products Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 4, 1913. Serial No. 788,076. (Cl. 204—5.)

3. In electrolyzing apparatus the combination of parallel insulated supporting rods and a series of electrolyzing elements each comprising a diaphragm held between two insulating frames which form cells on opposite sides thereof, and a metal plate electrode applied to one of the frames over the cell therein parallel with the diaphragm and provided on opposite sides with lugs adapted to rest on and shift lengthwise of said rods, and means for



clamping the elements together on said rods, the several elements having registering openings forming electrolyte and gas conduits, the electrolyte conduit communicating with all the cells and each gas conduit with alternate cells through passages in the frames.

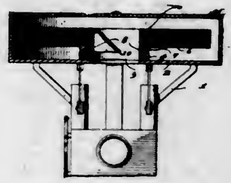
[Claims 1, 2, and 4 to 12 not printed in the Gazette.]

1,273,358. GALVANIZED IRON. JAMES H. GRAVELL, New York, N. Y. Filed Mar. 23, 1918. Serial No. 224,211. (Cl. 91—68.)

1. An improved article of manufacture consisting of galvanized iron provided with a superficial coating of zinc phosphate, substantially as described.

2. An improved article of manufacture consisting of galvanized iron provided with a superficial coating of zinc phosphate and having a coat of paint adherent to the zinc phosphate, substantially as described.

1,273,359. FILM-RECTIFIER. LEWIS B. GRIFFIN, Candor, N. Y. Filed June 28, 1917. Serial No. 177,558. (Cl. 88—18.7.)



1. In a film unwinding device, a stationary support, a tubular sleeve mounted upon the support and having a slot in one side, a rotary table on the sleeve, and a sheet metal guide plate mounted within the sleeve and being shaped from one side of said said slot to the lower end of the sleeve to turn the film mounted upon the table into a vertical direction, said plate having its lower end extended in a horizontal portion and secured to the stationary support.

2. In a film unwinding device, a stationary support, a tubular sleeve mounted upon the support and having a slot in one side, a rotary table on the sleeve, and a conoidally shaped plate having one end shaped into a flange and secured to one side of said slot and having its opposite end extended in a horizontal portion at the lower end of the sleeve and secured to the stationary support below the lower end of the sleeve.

1,273,360. SHOE-FASTENING. MICHAEL G. GRUNDMANN, Faribault, Minn. Filed Oct. 12, 1916. Serial No. 125,238. (Cl. 24—208.)

1. A shoe fastening comprising in combination with a shoe having a closing fly adapted to overlap the edge of

the quarter, a plurality of upstanding members mounted in spaced relation upon the quarter adjacent to the edge thereof, a flap on the edge of the closing fly provided with a plurality of openings and folded under and secured



down to the closing fly to present the openings in relation to receive the upstanding members, said upstanding members being protected and covered by the outer or main portion of the fly.

[Claims 2 to 4 not printed in the Gazette.]

1,273,361. COMPOSITION FOR USE WITH PRINTERS' INK. WILLIAM N. HAAS and HERBERT C. YOUNG, Denver, Colo., assignors, by direct and mesne assignments, to Roko Mfg. Co., Denver, Colo., a Corporation of Colorado. Filed Oct. 5, 1916, Serial No. 123,947. Renewed Jan. 29, 1918. Serial No. 214,416. (Cl. 134—35.)

1. A composition for use with printers' ink embodying a mixture of petrolatum, magnesium carbonate, and sodium silicate.

2. A composition for use with printers' ink embodying a mixture of petrolatum, about one pound, magnesium carbonate, from two to three ounces, and sodium silicate from one-fourth to one full fluid ounce.

3. A composition for use with printers' ink embodying a mixture of petrolatum, one pound, magnesium carbonate, 2.5 ounces, and sodium silicate one-fourth fluid ounce.

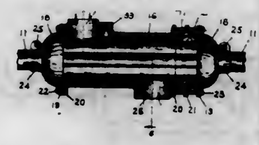
1,273,362. CONVERTIBLE VEHICLE-BODY. JAMES T. HACKNEY, Versailles, Ky. Filed Feb. 25, 1918. Serial No. 219,061. (Cl. 21—74.)



A wagon body of the character described including a floor, permanent side sections attached to the floor and extending upwardly therefrom, side sections superposed upon the first named side sections, hinges connecting the side sections at a plurality of points, each of said hinges being reduced at its lower end to form a screw-threaded bolt shank, beams passing beneath the bottom of the wagon and through which said shanks pass, nuts engaging the bolt shanks and holding the beams in place, strips attached to the inside faces of the swinging side sections extending upward over the outer edges thereof and then downward beneath the upper ends of said hinges, eye bolts passing through the upper ends of the hinges and through said strips, eye bolts passing through the lower ends of said hinges and the permanent side sections, telescopic bracing members respectively connected to the upper and lower eye bolts, and means for holding the hinged side sections in vertical position.

1,273,363. CARBURETER ACCESSORY. FRED E. HALE, Omaha, Nebr., assignor, by mesne assignments, to United States Carburetor Company, a Corporation of Nebraska. Filed June 1, 1916. Serial No. 101,177. (Cl. 257—241.)

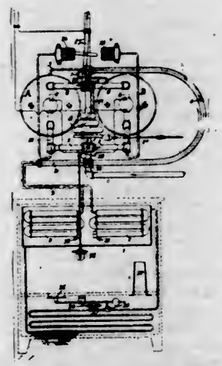
1. A fuel and air heating and humidifying device for carbureters, comprising a plurality of jacketed flue-sections having central longitudinal passages, means for connecting the same serially in the exhaust-line of an engine, means for directing air to a carbureter from the jacket-space of one of the flue-sections, means for supplying water to said jacket-space, means for supplying liquid fuel to the jacket-space of another flue-section, and means for directing the fuel from said jacket-space to the carbureter, said fuel-directing means being arranged to be heated by the air from the first-named jacket-space.



4. In a device of the class described, a flue-section having a longitudinal ribbed passage through it, a jacket inclosing said flue-section and forming a chamber around the same, means for admitting and discharging air from said chamber, a second flue-section having a jacket and inclosed chamber similar to the first, means for admitting and discharging a liquid fuel from the chamber of said second flue-section, and caps removably connected with the ends of the first flue-section, the second flue-section being clamped between the end of the first and one of said caps, and said caps being detachably connected with means for admitting and discharging a heating medium from the longitudinal passage through the flue-sections.

[Claims 2 and 3 not printed in the Gazette.]

1,273,364. AUTOMATIC ABSORBER-REFRIGERATOR. EDWARD S. HALSEY, Albany, N. Y. Filed Apr. 30, 1915. Serial No. 25,026. (Cl. 62—5.)

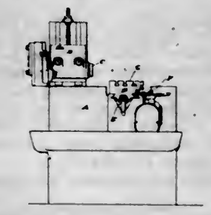


1. In a device of the class described a pair of absorber-generators; a dual looped cooling circuit constituting two equivalent shunt pipe loops branching off respectively through said absorber-generators and joining again into a common water flow pipe with an automatic deflecting valve so located at one of the junctions of said shunts as to alternately deflect the flow through one of said shunts and then through the other; and a heating duct constituting a third shunt connecting between and terminating at the two aforesaid junctions so as to automatically circulate hot water through either of said outside shunts while the other is being cooled.

8. In a device of the class described as an interior skeleton structure for an absorber-generator, a composite thermal cell unit, built up of a large number of punched heat conducting perforated metal disks having a registering series of contact holes by which each disk is respectively pressed down over a common heat conducting pipe making solid metallic contact with each of them for the purpose specified.

[Claims 2 to 7 and 9 to 11 not printed in the Gazette.]

1,273,365. AUTOMATIC TABLE-LOWERER. ROBERT T. HAZELTON and SOL EINSTEIN, Cincinnati, Ohio, assignors to The Cincinnati Milling Machine Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Oct. 12, 1916. Serial No. 125,235. (Cl. 90—58.)

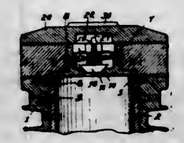


1. A table-lowering mechanism combining a traveler; a table carried thereby; means for raising and lowering the table relatively thereto; and mechanism for releasing the traveler before the operation of said means.

4. A table-lowering mechanism combining a traveler; means for reciprocating said traveler; a table carried by said traveler; mechanism for raising and lowering said table on said traveler; and an escapement-dog inoperative to actuate said mechanism during the advance stroke of said table but operative during its return stroke.

[Claims 2 and 3 not printed in the Gazette.]

1,273,366. COMPRESSOR FOR REFRIGERATING APPARATUS. FRED J. HEIDEMAN, Detroit, Mich., assignor to Kelvinator Corporation, Wilmington, Del., a Corporation of Delaware. Filed Jan. 14, 1918. Serial No. 211,750. (Cl. 230—34.)

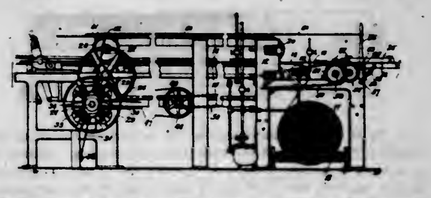


1. In a compressor for refrigerating machinery, the combination with a cast-iron cylinder block having a cylinder-bore and a head member having an aperture smaller than said bore and registering therewith, of a non-corrodible metal sleeve mounted in said bore, a hollow body also of non-corrodible metal inserted in said aperture and having a flange overlapping said sleeve at all points, and a non-corrodible valve member in said hollow body.

8. In a compressor for refrigerating machinery, a cast-iron cylinder block having a plurality of open cylindrical bores therein; each rabbeted at its open end, a non-corrodible metal sleeve in each bore having a flange seated in the corresponding rabbet, a cast iron head member having in alinement with each sleeve a bore smaller than the sleeve and a rabbet overlapping the edge of such sleeve, a non-corrodible metal valve-body located in each of said last bores and having a flange seated in the corresponding rabbet and engaging the sleeve opposite thereto, each of said bodies having a longitudinal chamber formed with a valve seat at the cylinder end and a spider seat at its opposite end, a spider in each spider seat, a valve coöperating with each valve seat and guided by the corresponding spider body, the end of the valve stem projecting beyond said head member, a spring interposed between each spider and its valve, a cover plate superposed upon said head member and engaging all said spiders, said plate having a channel communicating with all said valve-chambers and receiving the projecting valve-stems, and means securing said cover-plate, head member, and cylinder block together whereby said sleeves, valve bodies, and spiders are held in place.

[Claims 2 to 7 not printed in the Gazette.]

1,273,367. MACHINE FOR MAKING CORRUGATED BOARD. BENO HEINRICHS, Anderson, Ind., assignor to Mid-West Box Company, Anderson, Ind., a Corporation of Indiana. Filed Jan. 18, 1915. Serial No. 2,774. (Cl. 154—32.)



1. In a machine for making corrugated board, the combination of feeding mechanism for a corrugated web, a roll for applying agglutinant to the crowns of the corrugations on the web, fixed bearings in which the roll is mounted, means comprising elements adapted to engage the faces of the web respectively for guiding the web adjacent the roll and conjointly movable to positively shift the web away from the roll, means for shifting said guide-means to hold the web away from the roll and means for applying a facing to the web.

2. In a machine for making corrugated board, the combination of corrugated web-feeding mechanism, a roll for applying agglutinant to the crowns of the corrugations on the web, a table for the web adjacent the roll movable away from the roll, a lever for manually shifting the table to hold the web away from the roll when the feed of the web is discontinued, and means for applying a facing to the web.

3. In a machine for making corrugated board, the combination of corrugated web-feeding mechanism, a roll for applying agglutinant to the crowns of the corrugations on the corrugated web, a tilting table for the web adjacent the roll, means for shifting the table to hold the web away from the roll when the feed of the web is discontinued, comprising a lever, a shaft and links, and means for applying a facing to the web.

5. In a machine for making corrugated board, the combination of feeding-mechanism for a corrugated web, a roll for applying agglutinant to the corwns of the corrugations on the web, a table over which the web passes to said roll movable away from the roll, a roller for holding the web in contact with said roll carried by and movable with the table, a lever for shifting the table to hold the web away from the roll when the feed of the web is discontinued, and means for applying a facing to the web.

7. In a machine for making corrugated board, the combination of feeding-mechanism for a corrugated web, driving-mechanism for the feeding mechanism, comprising a clutch, a roll for applying agglutinant to the crowns of the corrugations on the web, a table for guiding the web to said roll, movable to positively shift the web away from said roll, a roller mounted on and movable with the table for pressing the web against the roll, a lever connected to said clutch and to said table to cause the table to move the web away from the roll when the feed-mechanism is idle and to shift the table into position to guide the web on the roll when the clutch is rendered inoperative, mechanism for driving the agglutinant applying roll independently of the clutch so that it will be driven when the feeding mechanism is idle, and mechanism for applying a facing to the web after the agglutinant has been applied thereto.

[Claims 4 and 6 not printed in the Gazette.]

1,273,368. CUTTING MECHANISM. ARTHUR E. HILTON, New York, N. Y., assignor to R. Hoe and Co., New York, N. Y., a Corporation of New York. Filed Nov. 12, 1915. Serial No. 61,089. (Cl. 164—66.)

1. In a cutting mechanism for severing material into lengths, the combination with the coöperating cutting elements, of a brush contacting with the material, the bristles of the brush being compressed during each cut-

the quarter, a plurality of upstanding members mounted in spaced relation upon the quarter adjacent to the edge thereof, a flap on the edge of the closing fly provided with a plurality of openings and folded under and secured



down to the closing fly to present the openings in relation to receive the upstanding members, said upstanding members being protected and covered by the outer or main portion of the fly.

[Claims 2 to 4 not printed in the Gazette.]
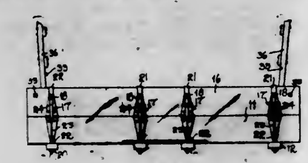
1,273,361. COMPOSITION FOR USE WITH PRINTERS' INK. WILLIAM N. HAAS and HERBERT C. YOUNG, Denver, Colo., assignors, by direct and mesne assignments, to Roko Mfg. Co., Denver, Colo., a Corporation of Colorado. Filed Oct. 5, 1916, Serial No. 123,947. Renewed Jan. 29, 1918. Serial No. 214,416. (Cl. 134—35.)

1. A composition for use with printers' ink embodying a mixture of petrolatum, magnesium carbonate, and sodium silicate.

2. A composition for use with printers' ink embodying a mixture of petrolatum, about one pound, magnesium carbonate, from two to three ounces, and sodium silicate from one-fourth to one full fluid ounce.

3. A composition for use with printers' ink embodying a mixture of petrolatum, one pound, magnesium carbonate, 2.5 ounces, and sodium silicate one-fourth fluid ounce.

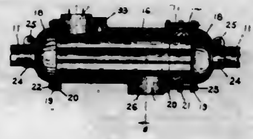
1,273,362. CONVERTIBLE VEHICLE-BODY. JAMES T. HACKNEY, Versailles, Ky. Filed Feb. 25, 1918. Serial No. 219,061. (Cl. 21—74.)



A wagon body of the character described including a floor, permanent side sections attached to the floor and extending upwardly therefrom, side sections superposed upon the first named side sections, hinges connecting the side sections at a plurality of points, each of said hinges being reduced at its lower end to form a screw-threaded bolt shank, beams passing beneath the bottom of the wagon and through which said shanks pass, nuts engaging the bolt shanks and holding the beams in place, strips attached to the inside faces of the swinging side sections extending upward over the outer edges thereof and then downward beneath the upper ends of said hinges, eye bolts passing through the upper ends of the hinges and through said strips, eye bolts passing through the lower ends of said hinges and the permanent side sections, telescopic bracing members respectively connected to the upper and lower eye bolts, and means for holding the hinged side sections in vertical position.

1,273,363. CARBURETER ACCESSORY. FRED E. HALL, Omaha, Nebr., assignor, by mesne assignments, to United States Carburetor Company, a Corporation of Nebraska. Filed June 1, 1916 Serial No. 101,177. (Cl. 257—241.)

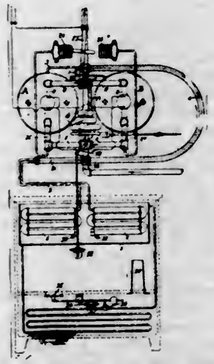
1. A fuel and air heating and humidifying device for carbureters, comprising a plurality of jacketed flue-sections having central longitudinal passages, means for connecting the same serially in the exhaust-line of an engine, means for directing air to a carbureter from the jacket-space of one of the flue-sections, means for supplying water to said jacket-space, means for supplying liquid fuel to the jacket-space of another flue-section, and means for directing the fuel from said jacket-space to the carbureter, said fuel-directing means being arranged to be heated by the air from the first-named jacket-space.



4. In a device of the class described, a flue-section having a longitudinal ribbed passage through it, a jacket inclosing said flue-section and forming a chamber around the same, means for admitting and discharging air from said chamber, a second flue-section having a jacket and inclosed chamber similar to the first, means for admitting and discharging a liquid fuel from the chamber of said second flue-section, and caps removably connected with the ends of the first flue-section, the second flue-section being clamped between the end of the first and one of said caps, and said caps being detachably connected with means for admitting and discharging a heating medium from the longitudinal passage through the flue-sections.

[Claims 2 and 3 not printed in the Gazette.]

1,273,364. AUTOMATIC ABSORBER-REFRIGERATOR. EDWARD S. HALSEY, Albany, N. Y. Filed Apr. 30, 1915. Serial No. 25,026. (Cl. 62—5.)

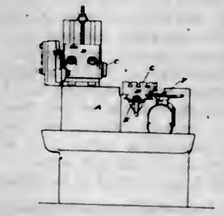


1. In a device of the class described a pair of absorber-generators; a dual looped cooling circuit constituting two equivalent shunt pipe loops branching off respectively through said absorber-generators and joining again into a common water flow pipe with an automatic deflecting valve so located at one of the junctions of said shunts as to alternately deflect the flow through one of said shunts and then through the other; and a heating duct constituting a third shunt connecting between and terminating at the two aforesaid junctions so as to automatically circulate hot water through either of said outside shunts while the other is being cooled.

8. In a device of the class described as an interior skeleton structure for an absorber-generator, a composite thermal cell unit, built up of a large number of punched heat conducting perforated metal disks having a registering series of contact holes by which each disk is respectively pressed down over a common heat conducting pipe making solid metallic contact with each of them for the purpose specified.

[Claims 2 to 7 and 9 to 11 not printed in the Gazette.]

1,273,365. AUTOMATIC TABLE-LOWERER. ROBERT T. HAZELTON and SOL EINSTEIN, Cincinnati, Ohio, assignors to The Cincinnati Milling Machine Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Oct. 12, 1916. Serial No. 125,285. (Cl. 90—58.)



1. A table-lowering mechanism combining a traveler; a table carried thereby; means for raising and lowering the table relatively thereto; and mechanism for releasing the traveler before the operation of said means.

4. A table-lowering mechanism combining a traveler; means for reciprocating said traveler; a table carried by said traveler; mechanism for raising and lowering said table on said traveler; and an escapement-dog inoperative to actuate said mechanism during the advance stroke of said table but operative during its return stroke.

[Claims 2 and 3 not printed in the Gazette.]

1,273,366. COMPRESSOR FOR REFRIGERATING APPARATUS. FRED J. HEIDEMAN, Detroit, Mich., assignor to Kelvinator Corporation, Wilmington, Del., a Corporation of Delaware. Filed Jan. 14, 1918. Serial No. 211,750. (Cl. 230—34.)

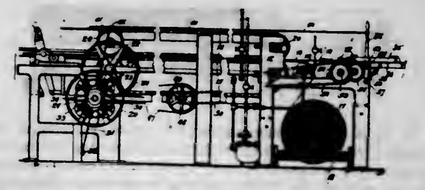


1. In a compressor for refrigerating machinery, the combination with a cast-iron cylinder block having a cylinder-bore and a head member having an aperture smaller than said bore and registering therewith, of a non-corrodible metal sleeve mounted in said bore, a hollow body also of non-corrodible metal inserted in said aperture and having a flange overlapping said sleeve at all points, and a non-corrodible valve member in said hollow body.

8. In a compressor for refrigerating machinery, a cast-iron cylinder block having a plurality of open cylindrical bores therein; each rabbeted at its open end, a non-corrodible metal sleeve in each bore having a flange seated in the corresponding rabbet, a cast iron head member having in alinement with each sleeve a bore smaller than the sleeve and a rabbet overlapping the edge of such sleeve, a non-corrodible metal valve-body located in each of said last bores and having a flange seated in the corresponding rabbet and engaging the sleeve opposite thereto, each of said bodies having a longitudinal chamber formed with a valve seat at the cylinder end and a spider seat at its opposite end, a spider in each spider seat, a valve coöperating with each valve seat and guided by the corresponding spider body, the end of the valve stem projecting beyond said head member, a spring interposed between each spider and its valve, a cover plate superposed upon said head member and engaging all said spiders, said plate having a channel communicating with all said valve-chambers and receiving the projecting valve-stems, and means securing said cover-plate, head member, and cylinder block together whereby said sleeves, valve bodies, and spiders are held in place.

[Claims 2 to 7 not printed in the Gazette.]

1,273,367. MACHINE FOR MAKING CORRUGATED BOARD. BERG HEINRICHS, Anderson, Ind., assignor to Mid-West Box Company, Anderson, Ind., a Corporation of Indiana. Filed Jan. 18, 1915. Serial No. 2,774. (Cl. 154—32.)



1. In a machine for making corrugated board, the combination of feeding mechanism for a corrugated web, a roll for applying agglutinant to the crowns of the corrugations on the web, fixed bearings in which the roll is mounted, means comprising elements adapted to engage the faces of the web respectively for guiding the web adjacent the roll and conjointly movable to positively shift the web away from the roll, means for shifting said guide-means to hold the web away from the roll and means for applying a facing to the web.

2. In a machine for making corrugated board, the combination of corrugated web-feeding mechanism, a roll for applying agglutinant to the crowns of the corrugations on the web, a table for the web adjacent the roll movable away from the roll, a lever for manually shifting the table to hold the web away from the roll when the feed of the web is discontinued, and means for applying a facing to the web.

3. In a machine for making corrugated board, the combination of corrugated web-feeding mechanism, a roll for applying agglutinant to the crowns of the corrugations on the corrugated web, a tilting table for the web adjacent the roll, means for shifting the table to hold the web away from the roll when the feed of the web is discontinued, comprising a lever, a shaft and links, and means for applying a facing to the web.

5. In a machine for making corrugated board, the combination of feeding-mechanism for a corrugated web, a roll for applying agglutinant to the corwns of the corrugations on the web, a table over which the web passes to said roll movable away from the roll, a roller for holding the web in contact with said roll carried by and movable with the table, a lever for shifting the table to hold the web away from the roll when the feed of the web is discontinued, and means for applying a facing to the web.

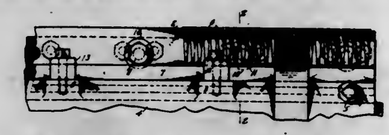
7. In a machine for making corrugated board, the combination of feeding-mechanism for a corrugated web, driving-mechanism for the feeding mechanism, comprising a clutch, a roll for applying agglutinant to the crowns of the corrugations on the web, a table for guiding the web to said roll, movable to positively shift the web away from said roll, a roller mounted on and movable with the table for pressing the web against the roll, a lever connected to said clutch and to said table to cause the table to move the web away from the roll when the feed-mechanism is idle and to shift the table into position to guide the web on the roll when the clutch is rendered inoperative, mechanism for driving the agglutinant applying roll independently of the clutch so that it will be driven when the feeding mechanism is idle, and mechanism for applying a facing to the web after the agglutinant has been applied thereto.

[Claims 4 and 6 not printed in the Gazette.]

1,273,368. CUTTING MECHANISM. ARTHUR E. HILTON, New York, N. Y., assignor to R. Hoe and Co., New York, N. Y., a Corporation of New York. Filed Nov. 12, 1915. Serial No. 61,089. (Cl. 164—66.)

1. In a cutting mechanism for severing material into lengths, the combination with the coöperating cutting elements, of a brush contacting with the material, the bristles of the brush being compressed during each cut-

ting operation and released after each cutting operation and acting to free the severed leading-in end of the material from the cutting elements and to direct such end beyond the cutting elements.

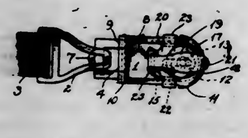


3. In a cutting mechanism for severing material into lengths, the combination with the coöperating cutting elements, of a removable brush carrier and a brush mounted in the carrier, the bristles of the brush being compressed during each cutting operation and released after each cuting operation and acting to free the severed leading-in end of the material from the cutters and direct such end beyond the cutters.

5. In a cutting mechanism for severing web material into sheets, the combination with a pair of rotary carriers, of cutter elements carried thereby coöperating to produce a shear cut, a brush carrier removably mounted behind and closely adjacent to one of the cutters and extending across the path of the web parallel with the line of cut, and brushes mounted in the carrier and in contact with the material during and after the cutting operation and acting to free the severed leading edge of the web from the cutter.

[Claims 2 and 4 not printed in the Gazette.]

1,273,369. SUPPORTER-FASTENER. ELLA M. HITCHCOCK, Los Angeles, Cal. Filed Oct. 8, 1914. Serial No. 865,654. (Cl. 24—246.)



2. A fabric engaging fastener comprising a plate, a stud adjustable longitudinally thereon and having an enlarged fabric engaging head, a loop carried by said plate and adapted to spring over said stud, said loop having a catch engaging flange, and a catch adjustably mounted on said loop and adapted to spring over the said catch engaging flange for locking the parts in fabric holding position.

4. A supporter fastener comprising a plate adapted to be suspended from the supporter, a stud on said plate, a loop hinged on said plate and having reduced side portions and a clasp engaging flange at the end thereof, said loop also having limiting shoulders thereon, a slide adapted to move upon the reduced side portions of the loop and limited thereon by said shoulders, and a stud inclosing catch hinged upon said slide at one end and having a spring hook at the other end adapted to engage the flange at the end of the loop for locking the parts in fabric holding position.

[Claims 1 and 3 not printed in the Gazette.]

1,273,370. PROCESS FOR RECOVERING SULFUR. ADDISON F. HOFFMAN, Pittsburgh, Pa. Filed Apr. 8, 1916. Serial No. 89,967. (Cl. 23—10.)

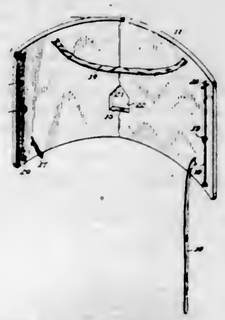
1. The herein described process of recovering sulfur from pyritic material which consists in heating the ore whereby to drive off vapors of sulfur dioxid, passing said vapors through a container, heating said container, and finally introducing a gaseous hydrocarbon into the container whereby combustion may take place with the formation of sulfur, carbon dioxid and water.

3. The herein described process of recovering sulfur from pyritic material which consists in heating the ore to drive off sulfur dioxid, passing said sulfur dioxid through a container, heating said container, and finally passing a gaseous hydrocarbon through said container in the presence of a catalytic agent whereby combustion takes place with the formation of sulfur, carbon dioxid and water.

4. The herein described process of recovering sulfur from pyritic material which consists in heating the ore to drive off sulfur dioxid, passing the sulfur dioxid through a container having therein a mixture of calcium sulfid, and calcium sulfite, heating the interior of the container through the medium of open flame gas jets, and finally passing a gaseous hydrocarbon through said container whereby combustion takes place with the formation of sulfur, carbon dioxid and water.

[Claims 2 and 5 not printed in the Gazette.]

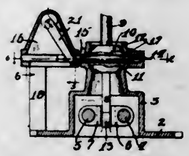
1,273,371. SOLDIER'S PROTECTOR. ALBERT HUDZIAK, Frontier, Wyo. Filed Mar. 22, 1918. Serial No. 223,944. (Cl. 89—36.)



3. A bullet shield including a pair of rectangular plates arcuate in horizontal section and hingedly connected at their adjacent vertical edges, said plates being adapted for arrangement in substantially V-shaped formation when in use and having a firing opening therethrough at the connected edges thereof, a hook member hinged to one of said plates at the upper outer corner thereof, a second hook member hinged to the lower outer corner of the other plate, a keeper carried by the first named plate at the lower outer corner thereof and engageable by the second named hook member when the plates are in operative position, a second keeper carried by the second named plate at the upper outer corner thereof and engageable by the first named hook member when the plates are in operative position, and a clip carried by each of said plates between the outer corners thereof to retain the hook member hinged thereto in substantially vertical position adjacent the inner face of said plate.

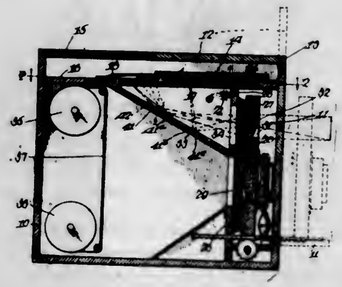
[Claims 1 and 2 not printed in the Gazette.]

1,273,372. GEAR-LOCK. JOHN H. IMHOFF, Chicago, Ill., assignor, by mesne assignments, to Johnson Automobile Lock Co., Chicago, Ill., a Corporation of Illinois. Filed July 16, 1915. Serial No. 40,151. (Cl. 70—128.)



In a device of the class described, the combination with a recessed transmission casing, and a ball and socket gear shift lever therefor, of a slotted bolt adapted to be projected through said casing and the ball of said lever and into the recess in the opposite side of said casing to hold the latter locked in a neutral position, an arm having one end engaged in the slot in said bolt, and a lock to which the other end of said arm is secured, and which operates said arm to move said bolt and to hold the same in either locked or unlocked position.

1,273,373. PHOTO-CAMERA. ECHI R. IWAGAMI, Chicago, Ill. Filed May 2, 1917. Serial No. 165,816. (Cl. 95—44.)



1. In a camera, the combination with a tilted finding lens and a reflector for said lens, of a ground glass positioned to receive the reflected rays from the lens and mounted for adjustment in the beam of light thrown on it.

3. In a camera, the combination with a lens frame carrying a camera lens, of a finding lens mounted in said frame with its upper extremity tilted forwardly with respect to the vertical, a reflector positioned in the camera behind said finding lens, and an adjustable ground glass mounted to receive rays reflected from said lens.

5. In a camera, the combination with a horizontal partition in the camera, of a vertical lens frame, a finding lens mounted in said frame with its upper extremity tilted forwardly and positioned below said partition, a mirror positioned rearwardly of said lens and at an angle of less than forty-five degrees with respect to said partition, a ground glass pivotally mounted at its rear edge, means for adjusting said glass about its pivot, and a finding hood mounted about the edges of said glass and projecting upwardly and rearwardly thereof, the axis of said hood being substantially coincident with the axis of the rays reflected from the mirror.

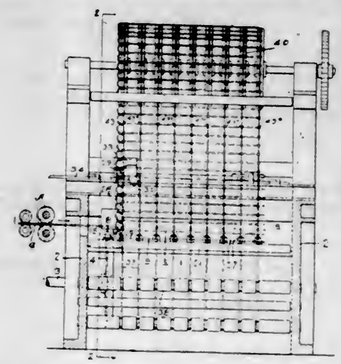
[Claims 2 and 4 to 7 not printed in the Gazette.]

1,273,374. MECHANISM FOR MAKING WIRE FENCES. AUGUST G. JOHNSON, Monessen, Pa., assignor to Pittsburgh Steel Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed July 13, 1914. Serial No. 850,716. (Cl. 140—5.)

1. In a wire-fence machine, the combination of means for feeding the strand-wires and stay-wires, means for uniting the same at points of intersection, an arch-shaped former, a forming pin, means for imparting movement to said forming-pin, the first part of said movement being in a straight line and the latter part on a curved line to bend the outer end of said wire around said former, and means for uniting the overlapping arched portions of said stay-wires at a point above the top strand-wire.

4. In a wire-fence machine, the combination of means for feeding the strand-wires and stay-wires, means for uniting the same at points of intersection, means for arching the upper ends of the stay-wires, means for uniting said stay-wires where the arch portions overlap, an arm, and means for moving said arm into contact with the free ends of said stay-wires to close the same.

8. In a wire-fence machine, the combination of means for feeding the strand-wires and stay-wires, means for uniting the same at points of intersection, means for arching the upper ends of said stay-wires, means for uniting the overlapping arched portions of said stay-wires at points of intersection, a spring-actuated arm, means for moving said arm to engage the free ends of said stay-wires to close the same, and a deflector in the path of movement of the fence whereby said fence is moved out of the path of said arm.



[Claims 2, 3, and 5 to 7 not printed in the Gazette.]

1,273,375. METHOD OF TESTING MILK. HUGO JONE, Brooklyn, N. Y. Filed Dec. 18, 1915. Serial No. 67,564. (Cl. 23—30.)



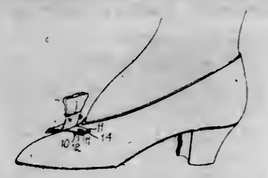
3. The method of excluding, in the course of an operation such as the reductase test, air from a vessel containing milk, mixed with an oxidizable substance, at the same time re-mixing the cream with the rest of the milk, which consists in adding solid insoluble bodies until the vessel is nearly filled to the top, then inserting a stopper of elastic rubber-like material into the mouth of the vessel, said stopper being provided with a capillary passage, capable of permitting the escape of the residual air, and finally inverting the vessel, substantially as set forth.

[Claims 1 and 2 not printed in the Gazette.]

1,273,376. DETACHABLE BOW-SUPPORT FOR SHOES. LE ROY F. JONES, Waiakoa, Hawaii. Filed Jan. 5, 1918. Serial No. 210,544. (Cl. 2—187.)

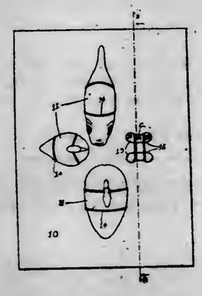
The combination with a shoe, of outwardly projecting headed studs disposed upon the upper of the shoe at the instep thereof, and a bow support comprising a slightly curved metallic plate, said plate having key-hole slots adjacent its ends, the narrow portions of the slots extending

away from each other, said studs being adapted to enter the wide portions of the slots when the leather of the



upper is flexed and to engage in the narrow portions of the slots when the leather of the upper is transversely stretched.

1,273,377. DISPLAY-CARD. ADALBERT JOSEPHSON, New York, N. Y. Filed Mar. 14, 1918. Serial No. 222,297. (Cl. 211—34.)



1. A display device of the character specified, comprising a base card having slotted portions therein, arranged in pairs, the members of each pair being opposite each other, and a separate single elastic band engaging each pair of such slotted portions and extending between the members thereof to receive objects to be displayed on said card.

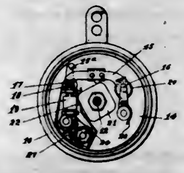
2. A display device of the character specified, comprising a base card having slots cut therein to form oppositely disposed pairs of wings and a separate single elastic member for each pair of wings having portions within the slots and under the wings, and additional portions extending over the face of the card substantially at right angles to the slots in position to receive objects and releasably retain the same on the card.

3. A display device comprising a card having lugs cut from the web of such card, said lugs being arranged in pairs, the members of each pair being opposite each other, each lug comprising an intermediate portion and rearwardly curved side portions, and a separate single elastic band for each pair of lugs having opposite sections thereof retained by the side portion of the lug and strands of the band extending across the face of the card in position to releasably retain the objects on the card.

1,273,378. MEANS FOR CONTROLLING ELECTRIC CIRCUITS. WILLIAM O. KENNINGTON, Detroit, Mich., assignor to Remy Electric Company, Anderson, Ind., a Corporation of Indiana. Filed Apr. 5, 1916. Serial No. 89,043. Renewed Dec. 12, 1917. Serial No. 206,853. (Cl. 123—166.)

1. In an electric circuit adapted to be employed in connection with an internal combustion engine, a switch, and a switch controlling device adapted to be operated by the engine and serving to cause the switch to be operated when the crank shaft of the engine turns backward in coming to rest.

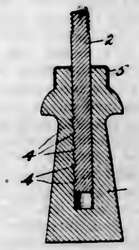
2. In an electric circuit adapted to be employed in connection with an internal combustion engine, a switch, and a switch controlling device operated by the engine and serving to maintain the switch closed when the engine is in normal operation and to be shifted so as to cause the opening of the switch when the crank shaft of the engine turns backward through a portion of the revolution in coming to rest.



3. In an electric circuit adapted to be employed in connection with an internal combustion engine, a switch, and a switch controlling device, said device being operatively connected to the engine and serving to hold the switch closed during normal engine operation and to permit the switch to open when the crank shaft of the engine turns backward through a portion of a revolution in coming to rest.

[Claims 4 to 21 not printed in the Gazette.]

1,273,379. HANDLE. KNUD KNUDSON, Plainville, Conn., assignor to The Trumbull Electric Manufacturing Co., Plainville, Conn., a Corporation of Connecticut. Filed Dec. 21, 1917. Serial No. 208,292. (Cl. 279—104.)



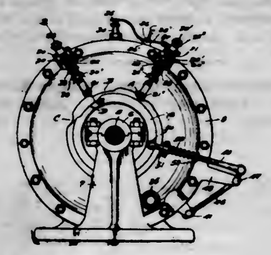
1. In a handle of the character described, a grip having a longitudinal bore therein and a core comprising a metallic bar of a diameter closely fitting said bore and provided with a series of outstanding ribs having abrupt upper faces and sharpened outer cutting edges, said ribs extending on an incline to the axis of the core.

2. In a handle of the character described, a grip having a longitudinal bore therein and a core comprising a metallic bar of a diameter closely fitting said bore and provided with a series of longitudinally separated outstanding ribs extending on an incline to the axis of the core and a second series of longitudinally separated outstanding ribs extending on an incline to the axis of the core and in line with the inclined ribs of the first set to thereby constitute in effect extensions of said first set of inclined ribs.

3. In a handle of the character described, a grip having a longitudinal bore therein and a core comprising a mtallic bar of a diameter closely fitting said bore and provided on one side only thereof, with two series of longitudinally separated outstanding ribs inclined to the axis of the core and having curved sharpened outer cutting edges and abrupt upper faces for holding engagement in the material of the grip.

1,273,380. ROTARY INTERNAL-COMBUSTION ENGINE. WILLIAM O. KUHN, Seattle, Wash. Filed May 14, 1917. Serial No. 168,339. (Cl. 123—11.)

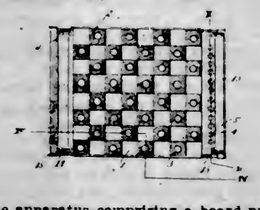
1. In an engine of the class described, a cylinder formed of two non-rotatable members and two independently rotatable members, a piston carried by each of the rotatable members within the cylinder, inlet and exhaust openings provided for said cylinder, a gate interposed between said openings, movable stops provided in the cylinder, ignition



devices, a shaft, a wheel mounted thereon, and means provided to engage the wheel by each of said rotors when the latter is driven in one rotary direction.

[Claims 2 to 5 not printed in the Gazette.]

1,273,381. GAME APPARATUS. JOSEPH A. LACASSE, Detroit, Mich. Filed June 18, 1917. Serial No. 175,290. (Cl. 46—64.)

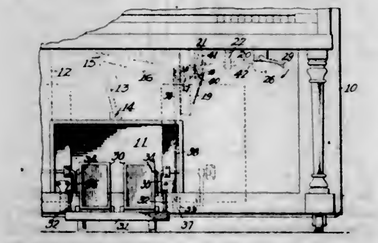


1. A game apparatus comprising a board provided with openings and pawns housed within the openings of said board and adapted to be removed therefrom and used on said board, and means engaging the lower ends of said pawns to elevate said pawns in the openings of said board.

4. A game apparatus comprising a board provided with pockets, and openings, pawns normally in the openings of said board and adapted to be transferred to the pockets thereof, elevating members movable in the lower face of said board adapted for shifting the pawns in the openings of said board, and slides on the upper face of said board adapted to coöperate with said elevating members in retaining said pawns in the openings of said board.

[Claims 2, 3, 5, and 6 not printed in the Gazette.]

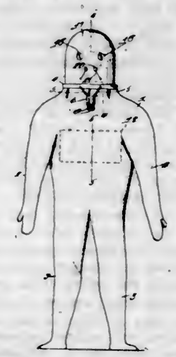
1,273,382. PANEL AND PEDAL OPERATING MECHANISM. HERBERT J. LA JOIE, Orange, N. J., assignor to Autopiano Company, a Corporation of New York. Filed July 14, 1916. Serial No. 109,374. (Cl. 84—169.)



1. In a player piano, in combination, a casing having an opening therein, a panel to close said opening, a pair of pedals, and means to move said panel and pedals, said means including a rotatable double-grooved actuating cam, a separate cam follower for each groove, and connections from one cam follower to said pedals and from the other cam follower to said panel whereby said pedals and panel may be operated in predetermined sequence.

[Claim 2 not printed in the Gazette.]

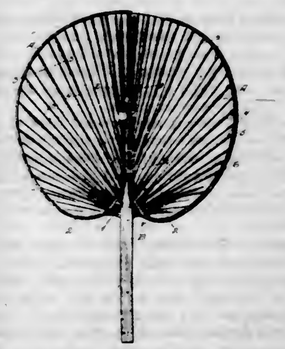
1,273,383. LIFE-SAVING APPARATUS. LEONARD A. LAMAR and PETER BORGAN, Portland, Oreg. Filed July 19, 1917. Serial No. 181,488. (Cl. 9—20.)



1. A life saving suit, of the class described, comprising a body, buoyancy tanks secured to said body upon the back and front thereof, a removable hood coöperating with said body, a drawing string secured to the neck portion of said body, and a string holding block secured to said suit, said drawing string passing through said block, and adapted to be firmly held therein, in a set position, and loops carried by the ends of said string for permitting said string to be drawn tightly around said hood.

2. A life saving suit, of the class described, comprising a body, buoyancy means carried thereby, an inner protective hood, an outer protective hood, means for drawing said suit tightly around said outer hood, said inner hood provided with apertures formed therein, said outer hood also provided with air inlet apertures registering with the apertures of the inner hood, and releasable corks anchored upon said body and adapted to close said apertures of the outer hood.

1,273,384. FAN. ISAAC H. LESEM, St. Louis, Mo. Filed June 13, 1918. Serial No. 239,904. (Cl. 230—33.)



1. As an article of manufacture, a toilet fan simulating a natural palm-leaf fan, the blade of which consists of a plate constructed of a sheet of fabricated compressi-

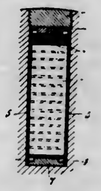
ble material and provided with an integral midrib, and a series of integral diverging substantially straight alternating ribs and creases radiating from successive points along the opposite edges of the midrib and extending toward the margin of the blade.

3. As an article of manufacture, a toilet fan simulating a natural palm-leaf fan, the blade of which consists of a substantially circular plate constructed of a sheet of fabricated compressible material and provided with an integral midrib tapering from its base and merging into the body of the blade toward the center thereof, a series of integral diverging substantially straight alternating ribs and creases radiating from successive points along the opposite edges of the midrib from its base to its point of mergence and extending toward the margin of the blade, and a marginal rib extending around substantially the entire blade.

6. As an article of manufacture, a toilet fan simulating a natural palm-leaf fan, the blade of which consists of a substantially circular plate constructed of a sheet of fabricated compressible material and provided on one of its faces with an integral midrib tapering from its base and merging into the body of the blade toward the center thereof, a series of integral diverging substantially straight alternating ribs and creases radiating from successive points along the opposite sides of the midrib from its base to its point of mergence and extending toward the margin of the blade, an integral marginal rib extending around substantially the entire blade and terminating in the body of the blade upon opposite sides of the midrib and intersecting some of the ribs and creases radiating therefrom, and a series of spaced bosses diagonally arranged across said marginal rib, the opposite face of the blade presenting creases, ribs, and depressions in reverse to the ribs, creases, and bosses, respectively, on the first-mentioned face of the blade.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,273,385. ROTATING FIELD-MAGNET. BIRGER LJUNGSTRÖM, Stockholm, and FREDRIK LJUNGSTRÖM, Brevik, Lidingön, Sweden. Filed Jan. 19, 1918. Serial No. 212,772. (Cl. 151—252.)



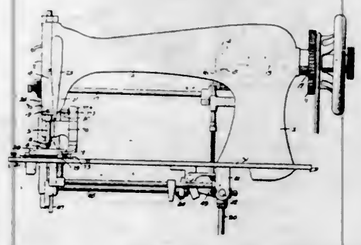
1. A rotating field-magnet provided with slots for containing conductors and insulating linings for such slots, each slot having grooves at its sides under the bottom part of the insulating lining, said grooves being arranged to allow the side walls of the insulating lining to enter them for the purposes set forth.

2. A rotating field-magnet provided with slots for containing conductors, and insulating linings for such slots, each slot having grooves at its sides under the bottom part of the insulating lining, said grooves being arranged to allow the side walls of the insulating lining to enter them and formed in a separate strip located in the bottom of the slot.

3. A rotating field-magnet provided with slots for containing conductors and with insulating linings for said slots, each slot having grooves at its sides under the bottom part of the insulating lining and being closed by a wedge, the said grooves being formed in a separate strip located in the bottom part of the slot and a similar strip similarly grooved being located under the wedge, the grooves of said strips being arranged to allow the side walls of the insulating lining to enter them for the purposes set forth.

4. A rotating field-magnet provided with slots for containing conductors, insulating linings for said slots, each slot having grooves at its sides adapted to receive the side walls of said insulating linings and separate strips at the bottom and top of said slots in which strips said grooves are formed at least one of said strips being partly of magnetic and partly of non-magnetic material.

1,273,386. SEWING-MACHINE. RUDOLF LOEB, Jenkintown, Pa. Filed July 17, 1915. Serial No. 40,411. (Cl. 112—7.)

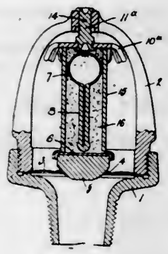


1. In an eyelet-forming machine, the combination of stitch-forming means, a turntable, a presser-foot, rotatable fabric-holding means carried by said presser-foot for coöperation with said turntable, said fabric-holding means being manually movable when the fabric is clamped between the same and the turntable, and means controlled by the rotatable portion of the presser-foot for regulating the position of the stitch-forming means.

8. In an eyelet forming machine, the combination of stitch forming means, a turntable, a presser-foot, rotatable fabric holding means carried by said presser-foot for coöperation with said turntable, said fabric-holding means being manually movable when the fabric is clamped between the same and the turntable, a cam carried by said rotatable member, means for causing said cam to control the position of the stitch forming means, the latter comprising a vibrating needle, and a pair of radially mounted set screws carried by the turntable to indicate the position of the portion of the fabric to be operated upon.

[Claims 2 to 7 not printed in the Gazette.]

1,273,387. AUTOMATIC SPRINKLER. ALBERT J. LOEPSINGER, Providence, R. I., assignor to General Fire Extinguisher Company, New York, N. Y., a Corporation of New York. Filed July 3, 1912. Serial No. 707,467. (Cl. 169—5.)



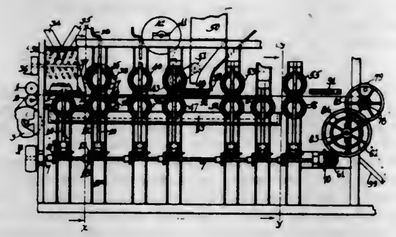
1. An automatic sprinkler embodying a frangible vessel containing a gas in solution which is not under pressure at normal temperature and adapted to effect the release of said sprinkler by the sudden escape of such gas when said vessel is fractured by the expansion of its contents under the action of heat.

2. An automatic sprinkler embodying a frangible vessel containing a liquid having a prescribed quantity of gas in solution which is not under pressure at normal temperature and adapted to effect the release of said sprinkler by the sudden escape of such gas when said vessel is fractured by the expansion of its contents under the action of heat.

3. An automatic sprinkler embodying a frangible vessel containing ammonia gas in solution and adapted to effect the release of said sprinkler by the sudden escape of such gas when said vessel is fractured by the expansion of its contents under the action of heat.

[Claims 4 and 5 not printed in the Gazette.]

1,273,388. MACHINE FOR MAKING COMPOSITION SHINGLES. JOSEPH C. LOYER and OLIVER M. LOYER, Detroit, Mich. Filed Nov. 26, 1917. Serial No. 203,929. (Cl. 91—14.)



1. In a machine for making composition shingles, a traveling belt, forming rollers between which the belt travels adapted to shape the belt into a series of longitudinally extending depressions and elevations providing transverse angularly positioned surfaces, means for feeding strips of asphaltum felt, paper or the like on each of the said inclined surfaces, means for applying a plastic composition to the upper surface of the strips, the forming rollers shaping the material in tapered form transversely of each strip, and means for severing the several strips transversely to form shingles of the desired width.

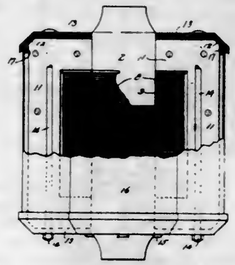
9. The method of making longitudinally tapered composition shingle consisting in coating a continuously moving web of asphaltum felt or paper with a hot plastic composition tapered transversely from one edge of the strip to the other, embedding a strip of asphaltum felt or paper in the upper surface of the composition to cover a portion thereof on the narrow side, and severing the composite strip transversely to form longitudinally tapered shingles.

[Claims 2 to 8 and 10 to 12 not printed in the Gazette.]

1,273,389. ELECTRIC WATER-HEATER. WAYNE D. LUDWICK, near Tacoma, Wash., assignor to Electric Heating Company, a Corporation of Washington. Filed Oct. 21, 1914. Serial No. 867,802. (Cl. 219—47.)

1. In an electric water heater, the combination of a primary coil adapted to conduct an alternating electric current; a non-laminated magnetic core centrally positioned within said coil and adapted to permit the formation of secondary eddy currents therein; passages extending through said core and adapted to hold the water to be heated; magnetic bodies each engaging the core at each end and forming a loop therewith around and through the coil; beveled surfaces formed on the edges of said bodies; a pair of upper and lower plates each provided with beveled surfaces complementary to and engaging the similar surfaces on the magnetic bodies, whereby when said plates are drawn toward each other said magnetic bodies are forced inward against said core; and tension rods joining said plates.

2. In an electric heater, the combination with a duct formed of integral cast magnetizable metal of sufficient cross sectional area to properly conduct all the lines of force generated by the coil with a cavity therein having small cross sectional area in proportion to its walls, a coil surrounding the duct intermediate its ends, and a return for the magnetic circuit in contact with the duct at opposite ends of the coil, said return having less magnetic resistance than the duct and being substantially free from eddy currents, whereby heating is localized in the walls of the duct.



3. In an electric heater, the combination with a core of magnetizable material having a duct extending therethrough for the passage of the material to be heated, said core being surrounded by a magnet coil adapted to conduct an alternating current, and constituting the sole heating unit, and a return for the magnetic circuit in contact with the core at opposite ends of the coil, said return being of less magnetic resistance than the core, whereby heating is localized in the walls of the duct.

4. In an electric heater, the combination with a duct formed of integral cast hysteretic magnetizable metal with a passage extending therethrough, the cross sectional area of the passage being small as compared with the cross sectional area of the metal of the duct, a coil for alternating current surrounding the duct intermediate its ends, and a return for the magnetic circuit in contact with the duct at opposite ends of the coil, said return having less magnetic resistance than the duct and being substantially free from eddy currents, whereby heating is localized in the walls of the duct.

7. In an electric heater for liquids, the combination with a substantially straight duct formed of integral hysteretic magnetizable metal with plane exterior faces at the ends and a passage for the liquid extending through the duct, the cross sectional area of the passage being small as compared with the cross sectional area of the metal of the duct, a coil for alternating current surrounding the duct intermediate its ends, a return for the magnetic circuit formed of a U-shaped laminated metal section having plane faces at the ends, and means for clamping the plane faces of the duct and laminated metal sections permanently together at points above and below the coil.

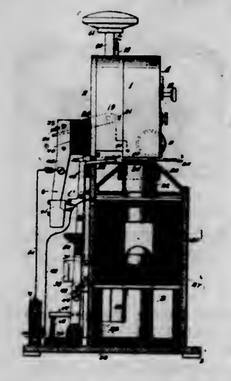
[Claims 5, 6, 8, and 9 not printed in the Gazette.]

1,273,390. TICKET-CANCELING MACHINE. HARRY LUNDGREN and FRANK TEBERG, Oakland, Cal. Filed Feb. 23, 1917. Serial No. 150,454. (Cl. 175—335.)

1. In a machine of the class described, a circuit closer for an electrically operated element, a contact carried element, a second contact normally urged away from the first-mentioned contact, means on the second contact adapted to be engaged by an article to be acted on by the element for moving the second contact into engagement with the first, whereby the said element is actuated and the first contact has a sliding interlocking engagement with the second contact, and means for separating the contacts when the first contact finishes its sliding engagement.

4. In a machine of the class described, an electrically operated device, in combination with a circuit closer therefor, said circuit closer including a contact in circuit

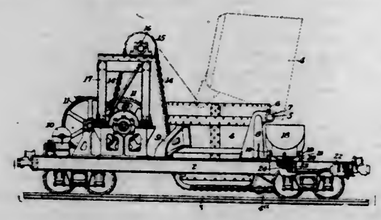
with the device, a spring-pressed member carrying the contact to hold the same in open circuit position and adapted to be moved to closed circuit position by engagement with the article to be acted on by the said device, a second contact in circuit with the said device and including a pair of jaw members between which the first contact engages by a lateral movement, the jaw members being shaped to hold the first contact in the position to



which it is moved by the article acted on by the said device, and a member connected with the device and supporting the second contact to move out of engagement with the first contact in a direction at approximately right-angles to the movement of the first contact, whereby the first contact moves to open circuit position.

[Claims 2 and 3 not printed in the Gazette.]

1,273,391. LIQUID-METAL-CHARGING CAR FOR OPEN-HEARTH FURNACES. CHARLES W. MCCLURE and EDGAR J. REILLY, Youngstown, Ohio, assignors to The William Pollock Company, Youngstown, Ohio, a Corporation of Ohio. Filed Feb. 23, 1918. Serial No. 218,666. (Cl. 105—190.)



1. A liquid metal charging car for open-hearth furnaces, comprising a car adapted to be moved adjacent to the charging door of the furnace, a ladle tiltably mounted on the car, a transversely arranged spout or trough arranged to receive the metal from the ladle, and means for moving said spout or trough transversely of the car to project its delivery end into charging relation to the furnace, substantially as described.

4. A liquid metal charging car for open-hearth furnaces, comprising a movable support, a tiltable ladle mounted on the support, a motor also mounted on the support, and actuating connections between the motor and the ladle for tilting the ladle, said connections including a winding drum, gearing for actuating the drum, and a flexible member connected to the drum and passing downwardly at the rear side of the ladle and underneath and across the bottom of the ladle and connected to the lower forward portion thereof, substantially as described.

6. A liquid metal charging car for open hearth furnaces, comprising a car adapted to be moved adjacent to the charging door of the furnace, a ladle tiltably mounted on the car, a transversely arranged spout or trough arranged to receive the metal from the ladle, a reversible motive device mounted on the car, and connections actuated by said motive device whereby the spout or trough may be moved transversely of the car; substantially as described.

8. A liquid metal charging car for open hearth furnaces, comprising a car adapted to be moved adjacent to the charging door of the furnace, a ladle tiltably mounted on the car, a transversely arranged spout or trough also mounted on the car and arranged to receive the metal from the ladle, a motive device on the car, a winding drum geared to said device, a flexible connection from said drum to the rear portion of the spout or trough, and another flexible connection from said drum to another portion of the spout or trough, said motive device, drum and connections providing means for moving the spout or trough transversely back and forth on the car: substantially as described.

[Claims 2, 3, 5, and 7 not printed in the Gazette.]

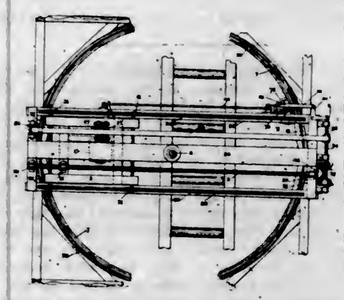
1,273,392. PROCESS OF OBTAINING ALCOHOL FROM SULFITE LIQUORS. RALPH H. MCKEE, Ridgefield Park, N. J. Filed Aug. 27, 1917. Serial No. 188,399. (Cl. 195—20.)

1. In a process of making ethyl alcohol by fermenting sulfite liquors, the steps which consist in adding yeast to sulfite liquor containing an appreciable amount of free sulfurous acid, and supplying sufficient oxygen during the fermentive process to maintain active fermentation.

2. In a process of making ethyl alcohol by fermenting sulfite liquors, the steps which consist in adding yeast to sulfite liquor containing an appreciable amount of free sulfurous acid, and aerating the solution substantially throughout the fermentation, thereby maintaining the fermentive action.

3. In a process of making ethyl alcohol by fermenting sulfite liquors, the steps which consist in adding yeast to sulfite liquor containing an appreciable amount of free sulfurous acid, aerating the solution substantially throughout the fermentation, thereby maintaining the fermentive action, and recovering alcohol vapors from the exit gases by scrubbing the same with unfermented liquor.

1,273,393. BEVEL-CUTTING SAW. GEORGE R. MERKLEY, Seattle, Wash. Filed Nov. 21, 1917. Serial No. 203,072. (Cl. 143—6.)

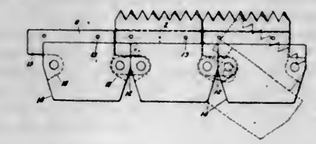


1. A beveling device for timbers comprising an elevated circular trackway, a turntable movable on said circular trackway and having a diametrically positioned trackway thereon, a carriage movable on the turntable trackway, a saw carried upon and depending from said carriage, and a pivot axis for said turntable engaging the same from above.

5. A machine for beveling timber comprising an elevated circular trackway, a turntable rotatably supported on said circular trackway, a pivot shaft positioned axially of the said circular trackway and engaging the turntable from above, a carriage movable on the turntable diametrically of its pivot axis, a saw carried by said carriage to occupy an axial plane of said pivot, and a timber holder having a stop face which is also in an axial plane.

[Claims 2 to 4 not printed in the Gazette.]

1,273,394. CHAIN SAW. GEORGE MEYER, Seattle, Wash. Filed Nov. 30, 1917. Serial No. 204,516. (Cl. 143—32.)



1. The combination with a chain saw of a driving member having two resilient disks adapted to receive the saw between them, two rollers mounted to engage the outer faces of said disks oppositely to each other, and means for yieldingly pressing said rollers upon the disks.

2. The combination with a chain saw of a driving wheel having disk faces adapted to engage opposite side faces of the saw and relatively movable to grip the saw, a pivoted arm carrying a roller engaging the movable gripping member, and means for applying a yielding pressure to said arm to grip the saw.

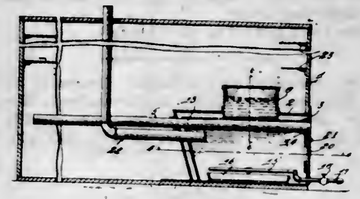
3. The combination with a chain saw of a driving wheel having disk faces adapted to engage opposite side faces of the saw and relatively movable to grip the saw, an arm pivoted at each side of said disks to swing toward and from the disks and extending beyond the saw, rollers carried by these arms and engaging the outer faces of the disks, a rod connecting the outer end of these arms, a nut threading upon said rod and a spring interposed between the rod and an arm to take the clamping strain.

1,273,395. TOBACCO-DRYING SYSTEM AND APPARATUS. JOHN BERT MUSE, Cameron, N. C. Filed Nov. 11, 1915. Serial No. 60,933. (Cl. 237—50.)



In a tobacco drying furnace, the combination with a building, a foundation at one end of said building, said foundation partly within the building and partly on the outside thereof, of an inner and outer wall upon said foundation, said inner and outer walls partly on the outside of said building and partly within said building, a heat-containing space formed between said inner and outer walls, said outer wall being spaced at its lower edge from said foundation for permitting air to pass into the heating space between the inner and outer walls, a heating-tube extending at its ends through the outer wall and opening at one end into the top and at its other end into the rear end of the fire-box constituted by said foundation and the inner wall, said inner wall provided at the end of the heating-tube that opens into the top of fire-box with a depending, inclined deflecting tongue, a plurality of horizontal, straight heating-tubes carried by the sides and rear end of the outer wall and opening at their inner ends into the space between the outer and inner walls and opening at their outer ends into the building, and the fire-box constituted by said foundation and inner wall being open at its outer end, so that fuel can be fed into the fire-box outside of the building, substantially as shown and described.

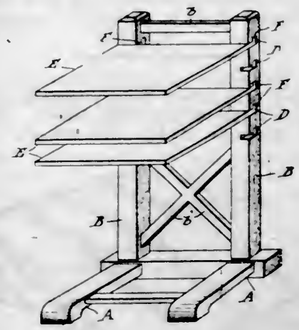
1,273,396. HEATING AND DRYING APPARATUS. JOHN BERT MUSE, Cameron, N. C. Filed May 18, 1917. Serial No. 169,535. (Cl. 237—50.)



1. The combination with a building, of a furnace of the class described therein at one end of the building, said furnace provided with an inner casing and an outer casing, said outer casing provided with a plurality of horizontal heat-distributing tubes extending outwardly from the side walls thereof, a plurality of heat-distributing tubes extending longitudinally the length of and through the rear end of said furnace and engaging the top of said inner casing and also constituting a brace for the top of said inner casing, means for conveying fumes from said inner casing, and means for holding said casings in spaced relation to each other.

[Claims 2 and 3 not printed in the Gazette.]

1,273,397. DISPLAY-RACK. WALTER E. NEILL, Englewood, N. J. Filed Mar. 7, 1917. Serial No. 152,981. (Cl. 211—14.)



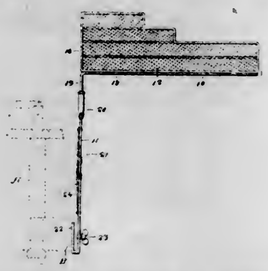
1. A display rack embodying a pair of spaced uprights, female joint elements formed at corresponding spaced distances on each upright with the entrances of all of said elements facing laterally in the same direction, in combination with a plurality of shelves each of which is provided at its back with a pair of male joint elements complementary to the female joint elements, correspondingly horizontally spaced apart and proportioned to freely slide into and out of said female elements, whereby the two male joint elements of any shelf may be simultaneously inserted, by a lateral shifting of the shelf, into two horizontally corresponding female joint elements of the uprights for detachably mounting the shelves in superimposed relation on said uprights, said shelves being supported at their backs only, leaving the side and front edges thereof unobstructed by supporting means.

3. In a display rack, a standard provided with a pair of female joint elements spaced apart with the entrances of said joint elements facing laterally in the same direction, in combination with a shelf provided at its back with a

pair of male joint elements complementary to the female joint elements and correspondingly shaped and proportioned to freely slide into and out of said female joint elements, so that the male joint elements of the shelf may be simultaneously inserted, by the lateral shifting of the shelf, into the female joint elements of the standard for detachably mounting the shelf on the standard, whereby the shelf is supported from its back only, leaving the side and front edges of said shelf unobstructed by shelf supporting means.

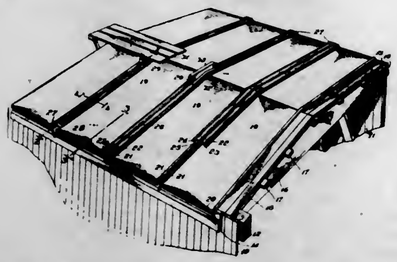
[Claim 2 not printed in the Gazette.]

1,273,398. STATIONERY-HOLDER. FRANK B. NIHART, Bay Minette, Ala., assignor of nine-tenths to Elbert L. Harper and Edward B. Overton, Bay Minette, Ala. Filed Apr. 7, 1917. Serial No. 160,479. (Cl. 248—30.)



A stationery holder comprising in combination a receptacle, said receptacle including a plurality of horizontally disposed compartments arranged one above the other and open at one end, said compartments being of various depths and having their open ends arranged in vertical alinement and a support secured to said receptacle at the open end thereof, so as to dispose the greatest weight near said support.

1,273,399. CAR-ROOF. ARTHUR F. O'CONNOR, Chicago, Ill., assignor to The Union Railway Equipment Co., Chicago, Ill., a Corporation of South Dakota. Filed July 31, 1916. Serial No. 112,312. (Cl. 108—5.)



1. A car roof comprising, in combination, sheet metal plates extending from side to side of the car and having their side margins upturned, adjacent plates being spaced apart, transversely bowed binding strips seated on adjacent plates and loosely covering the margins thereof, saddle blocks seated on the strips at the ridge of the roof, and binding rods anchored in the saddle blocks and in the framing of the car and located on the median line of the binding strips.

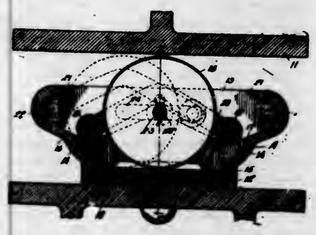
2. A car roof comprising, in combination, sheet metal plates adapted to rest loosely upon the roof framing of the car and having their side margins upturned, adjacent plates being spaced apart, transversely bowed binding strips loosely covering the margins of adjacent plates and adapted to yieldingly bear upon the body portions of such plates, and means extending throughout substantially their entire length for compressing the strips upon the plates.

3. A car roof comprising, in combination, sheet metal plates extending from side to side of the car and having their side margins upturned, adjacent plates being spaced apart, transversely bowed binding strips loosely covering the margins of adjacent plates and each having a channel on its median line, a saddle block seated upon each strip at the ridge of the roof, and binding rods anchored in the saddle block and in the framing of the car and fitting within the channels of the strips.

4. A car roof comprising, in combination, sheet metal plates extending from side to side of the car and having their side margins upturned, adjacent plates being spaced apart, transversely bowed binding strips loosely covering the margins of adjacent plates and each having a longitudinal depression forming a groove on its upper surface adjacent its median line, a saddle block seated upon each strip at the ridge of the roof, binding rods anchored in the saddle block and in the side framing of the car and fitting within the depression of the strips, and said sheet metal plates having downwardly turned margins loosely overhanging the side framing.

[Claims 5 to 8 not printed in the Gazette.]

1,273,400. ROLLER SIDE BEARING. JOHN F. O'CONNOR, Chicago, Ill., assignor to William H. Miner, Chazy, N. Y. Filed June 9, 1917. Serial No. 173,848. (Cl. 64—64.)



1. In a roller side bearing, the combination with a base member having a bearing surface for an anti-friction roller, of an anti-friction roller, inclined guide-ways, and a gravity rod freely mounted on said guide-ways and adapted to tangentially engage said roller, the rod normally resting in its lowermost position on the guide-ways and adapted to be displaceable upwardly thereon when the anti-friction roller is moved from normal position, whereby said gravity rod is adapted to return the anti-friction roller to normal position.

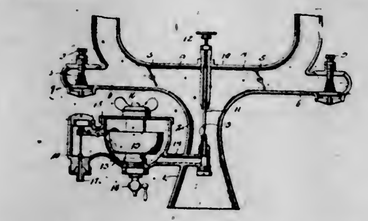
2. In a roller side bearing, the combination with an anti-friction roller, of a housing within which said roller is mounted and freely movable, said housing having sets of inclined guide-ways on both sides of the roller, and gravity rollers on each side of the anti-friction roller riding on said inclined guide-ways and adapted to return the anti-friction roller to normal after each actuation, under the influence of gravity.

3. In a roller side bearing, the combination with a base casting having parallel side walls and end walls, of an anti-friction roller mounted within said base casting, two sets of inclined guide-ways on the inner side of each of said side walls, and transversely extending gravity rods supported at their ends on said guide-ways, said gravity rods being disposed on opposite sides of the anti-friction roller.

[Claim 4 not printed in the Gazette.]

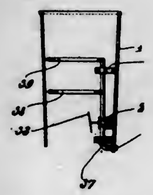
1,273,401. CARBURETER. CYRIL NORTON OUTERBRIDGE, Charlottesville, Va. Filed Sept. 27, 1916. Serial No. 122,513. (Cl. 261—56.)

1. In a carbureter, a Venturi tube having a plurality of branches leading from the discharge end thereof and constituting members of the intake manifold of an internal combustion engine, a fuel spray nozzle discharging within said Venturi tube, an independent auxiliary air valve associated with each branch from the Venturi tube, and an independent throttle valve for each of said branches.



2. In a carbureter, the combination with a Venturi tube the lower end of which forms a primary air inlet, of a fuel spray nozzle discharging within said Venturi tube, a plurality of branches leading from the discharge end of said tube and constituting members of the intake manifold of an internal combustion engine, each of said branches being provided with a tubular extension having an independent auxiliary air inlet, an auxiliary air valve for each of said inlets, and independent tensioning means for said auxiliary air valves.

1,273,402. SMOKE-CONSUMER. THEODORE PAROBI, Dundee Lake, N. J. Filed Apr. 13, 1917. Serial No. 161,697. (Cl. 110—22.)



3. In a device as described, in combination, a smoke-stack, a liquid fuel supply tank, a feed pipe leading from said tank into said smoke stack and formed thereon with burners, said pipe having a normally-restricted passage, and means responsive to the impact of gases passing through said stack for increasing the size of said passage.

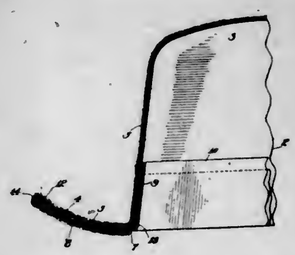
[Claims 1 and 2 not printed in the Gazette.]

1,273,403. FUR-NAPPED FELT-BODIED HAT. JOHN W. PEARL and WILLIAM STARKEY, Beacon, N. Y., assignors to Dutchess Hat Works, Beacon, N. Y., a Corporation of New York. Filed Dec. 8, 1916. Serial No. 135,727. (Cl. 2—108.)

1. A fur-napped hat having its brim edge covered with fur, the same being formed of a main felt hat body covered on one side only with fur and having the margin of its brim portion turned inward and under, a felt underbrim body similarly covered and having its outer margin turned inward and over, the said inturned margins being superposed with the creases in substantial registry, and means concealed within the double brim uniting said inturned margins.

2. A hat having a double brim, the outer margins of the upper and under brim portions being turned in between the layers and united, one of the inturned edge portions extending inward beyond the other, and a covering of fur on the outer surface of one or both of the layers.

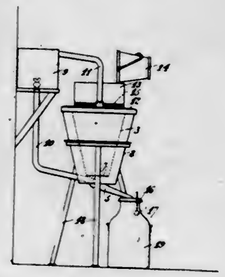
3. A fur-napped hat having a double-layer brim, one or both of the layers of which are provided with fur on their outer sides, and both of said layers having their margins folded inwardly and scarfed at different distances from their respective creases and united to form



a substantially unthickened hat brim edge covered with fur.

[Claim 4 not printed in thte Gazette.]

1,273,404. MILK-COOLING APPARATUS. VIGGO STEPHAN KELLNER PETERSEN, Gentofte, Denmark. Filed Dec. 29, 1914. Serial No. 879,586. (Cl. 257—180.)

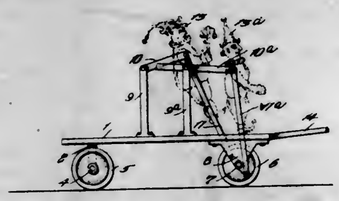


1. In a milk cooling apparatus, the combination of a cooling receptacle, a horizontally corrugated wall therein forming a milk cooling chamber and a compartment for the reception of a cooling liquid, a separate tank arranged above said compartment, a pipe connected to the top of the tank and detachably connected with the top of the compartment, and a pipe connecting the bottom of the compartment with the bottom of the tank whereby milk flowing downward over the wall will automatically cause the cooling liquid to circulate in a counter direction through said compartment and tank by reason of the difference of gravity of the liquid due to the difference of the temperature of said liquid.

3. A milk cooling apparatus, comprising a casing, a horizontally corrugated wall mounted therein and forming a central conduit through the casing for the milk and an annular cooling compartment surrounding the conduit, a flange on the top of the casing covering the annular compartment, a distributing reservoir seated on the flange, a separate cooling liquid tank mounted above the casing, a cooling liquid supply pipe connecting the bottom of the tank with the bottom of the annular compartment, and a return pipe for the cooling liquid projecting through the annular flange and connecting the top of the casing with the top of the tank whereby milk flowing downward over the wall will cause the cooling liquid to automatically circulate in a counter direction through said compartment and tank by reason of the difference of gravity of the liquid due to the difference of the temperature of said liquid.

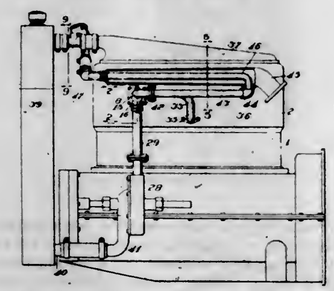
[Claim 2 not printed in the Gazette.]

1,273,405. WAGON. SIMON GUSTAF PETTERSON and BERTILL CARL PETTERSON, Memphis, Tenn. Filed July 26, 1917. Serial No. 182,886. (Cl. 46—45.)



A device of the character specified, comprising a platform, wheels supporting one end of the platform, a wheel supporting the other end, a pair of standards extending upwardly from the platform and spaced apart laterally and longitudinally of the platform, a lever pivoted to each standard and extending forwardly therefrom, a figure pivoted to each lever at its forward end, and a link connecting each lever to the single wheel, the platform having slots through which the links extend and the links being connected eccentrically to the wheel to vibrate the levers when the wheel is rotated whereby to move the figure.

1,273,406. THERMOSTATIC COOLING SYSTEM FOR INTERNAL-COMBUSTION ENGINES. FREDERICK J. RAYFIELD, Chicago, Ill. Filed Apr. 18, 1917. Serial No. 163,059. (Cl. 123—174.)



1. In a cooling system for internal combustion engines equipped with water-jackets, a source of supply of a cooling liquid, means other than the water-jacket of the cylinders for heating the said liquid, means for effecting circulation of the liquid through the water-jacket, and in heat absorbing relation to said heating means, and thermally controlled means for shutting off the circulation of liquid through one or the other of said means or effecting circulation thereof partly through both in accordance with variations in temperature of said liquid.

2. A cooling system for internal combustion engines including water-jackets for the engine cylinders, a water conduit associated with the exhaust manifold for heating water by means of the hot products of combustion, a source of supply of a liquid adapted to circulate through said jackets and said conduit, and thermally controlled means for causing the water to circulate either through said conduit or said jackets or simultaneously through both.

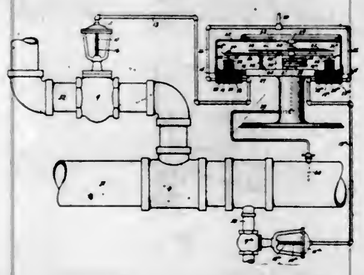
3. A cooling system for internal combustion engines including water-jackets for the engine cylinders, a water conduit associated with the exhaust manifold for heating water by means of the hot products of combustion, a source of supply of a liquid adapted to circulate through said jackets and said conduit, and means controlled by the temperature of the liquid contained in said jackets for causing the water to circulate either through said conduit or said jackets or simultaneously through both.

4. In a cooling system for internal combustion engines, a source of supply of a cooling medium, means for effecting circulation thereof in contact with the cylinders for absorbing heat from the latter, a conduit for said liquid disposed to heat the latter by the products of combustion exhausted from the cylinders, a valve for controlling the circulation of said liquid to confine the same to either of the said two sources of heat, and thermally actuated means for automatically operating said valve.

5. In a cooling system for internal combustion engines, a source of supply of a cooling medium, means for effecting circulation thereof in contact with the cylinders for absorbing heat from the latter, a conduit for said liquid disposed to heat the latter by the products of combustion exhausted from the cylinders, a valve for controlling the circulation of said liquid to confine the same to either of the said two sources of heat, and means actuated by variations in temperature of the liquid for automatically operating said valve.

[Claims 6 to 19 not printed in the Gazette.]

1,273,407. TEMPERATURE-CONTROLLING DEVICE. ALFRED ROESCH, Brooklyn, N. Y., assignor to Charles J. Tagliabue Manufacturing Co., Brooklyn, N. Y., a Corporation of New York. Original application filed May 6, 1913, Serial No. 765,737. Divided and this application filed Mar. 23, 1918. Serial No. 224,155. (Cl. 236—S.)



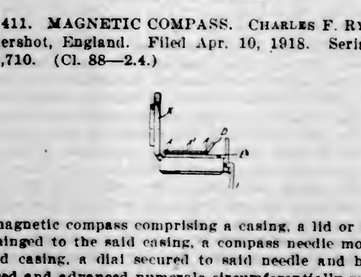
1. In a device of the character described, the combination of a main pipe connected with a source of heat supply, an exhaust pipe connected with said main pipe, an auxiliary pipe connected with said main pipe and with a second source of heat supply, a valve in said exhaust pipe, a valve in said auxiliary pipe, additional valves connected with each of said pipe valves, a single lever adapted to actuate each of said additional valves whereby said pipe valves are operated and a sensitive member adapted to be affected by the temperature in said main pipe and to actuate said lever.

2. In a device of the character described, the combination of an element connected with a plurality of sources of different heating mediums, means for controlling the escape of one medium from said element, means for controlling the entry of another medium to said element, a sensitive member, and actuating mechanism common to both controlling means itself controlled by said sensitive member.

[Claim 3 not printed in the Gazette.]

1,273,408. LIGHTING-FIXTURE. MILTON B. ROLLER, Palo Alto, Cal., assignor to Thomas Day Company, San Francisco, Cal., a Corporation of California. Filed Mar. 19, 1918. Serial No. 223,458. (Cl. 240—78.)

In a lighting-fixture, and in combination with its bowl, canopy and lamp-socket, a holder-ring formed with a top flange on which the lamp-socket rests and is supported, a first step, a succeeding second step on which the canopy is supported, and a foot-flange by which the bowl is suspended, and hanger rods engaging the holder ring through its first step and suspending it from the ceiling.



1,273,409. CONTACT-RING SYSTEM. CHARLES ROULAND, Paris, France. Filed July 7, 1917. Serial No. 179,163. (Cl. 172—120.)

1. A hub keyed to the shaft of the machine, being provided with radial sectors cast with it, to which sectors are secured, with suitable insulation, in the same plane, concentric rings suitably connected to the windings and intended to receive brushes or contacts on their surface facing the exterior of the said machine; the sectors being moreover provided with ribs which strengthen them and act as blades of a centrifugal fan for cooling the main parts of the dynamo or motor.

[Claim 2 not printed in the Gazette.]

1,273,410. SUBSTITUTE FOR FATS AS SHORTENING. SIGMUND ROZYCKI, Seattle, Wash. Filed Jan. 17, 1918. Serial No. 212,244. (Cl. 99—11.)

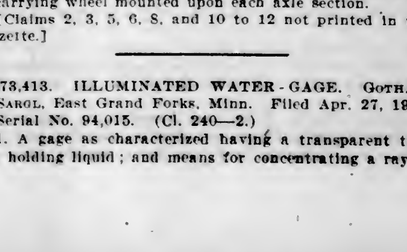
1. A shortening compound consisting of a fruit paste combined with glucose.

[Claims 2 to 5 not printed in the Gazette.]

1,273,411. MAGNETIC COMPASS. CHARLES F. RYLAND, Aldershot, England. Filed Apr. 10, 1918. Serial No. 227,710. (Cl. 88—2.4.)

A magnetic compass comprising a casing, a lid or cover-part hinged to the said casing, a compass needle mounted in said casing, a dial secured to said needle and having reversed and advanced numerals circumferentially marked thereon, a reflecting mirror hingedly mounted on the casing above the dial and between its center and the numerals on its circumference so that the reading can be taken at the edge of the dial nearest to the observer, and the lid or cover can be closed down without detaching the mirror.

1,273,412. MOTOR-VEHICLE. EDWARD SALSBURY, Chicago, Ill. Filed Oct. 25, 1916. Serial No. 127,545. (Cl. 180—73.)



1. In a motor vehicle, in combination, flexible front and rear axles, a rigid frame comprising a cylindrical tube extending in a straight line between the axles and having its opposite ends connected with the two axles at their mid-length, a motor mounted on the said frame, and driving connection between the motor and the parts of one of the axles at each side of the frame.

4. In a motor vehicle, in combination, a frame, a propeller shaft extending centrally through the frame, a pair of axle sections extending laterally outward from the propeller shaft in opposite directions but in a common plane, each axle section being movably connected with the frame to swing in a vertical plane about the center line of the propeller shaft as an axis, a spring resisting the said swinging movement of the axle sections, gear connection between the propeller shaft and each of the said axle sections, a carrying wheel mounted for axial sliding movement upon each of the axle sections, but to rotate with the axle section and springs resisting the said sliding movement of the wheels upon the axle sections.

7. In a vehicle, in combination, a frame, a pair of carrying wheels, a driving shaft on the frame, an axle for each of said wheels, both axle and wheel being movable together angularly in a vertical plane about the axis of the driving shaft as a pivot, and differential gearing between the shaft and the axles.

9. In a vehicle, in combination, a frame, a pair of carrying wheels, an axle for each of said wheels, a driving shaft, a differential having its planetary gears mounted directly on laterally projecting arms on the said driving shaft, the gears meshing with the planetary gears being rotatably mounted on sleeves on said shaft, and a bevel gear on each sleeve in mesh with a bevel gear on each axle thereby allowing each axle to move angularly in a vertical plane with the axis of the driving shaft as a pivot.

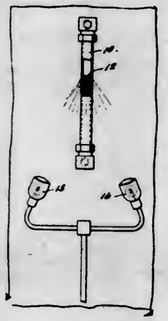
13. In a motor vehicle, in combination, a rigid frame, a motor carried thereby, a longitudinal propeller shaft fixed in position throughout its length centrally in the frame, a pair of axle sections one at each side of the frame and each having elastic angular movement about the axis of the propeller shaft, differential driving connection between the propeller shaft and the two axle sections and a carrying wheel mounted upon each axle section.

[Claims 2, 3, 5, 6, 8, and 10 to 12 not printed in the Gazette.]

1,273,413. ILLUMINATED WATER-GAGE. GOTHARD SARGL, East Grand Forks, Minn. Filed Apr. 27, 1916. Serial No. 94,015. (Cl. 240—2.)

1. A gage as characterized having a transparent tube for holding liquid; and means for concentrating a ray of

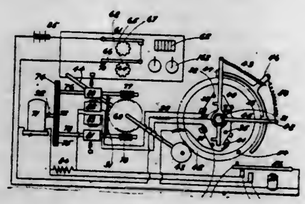
light from a point laterally disposed from the column of liquid in the tube and angularly related to the top sur-



face thereof for producing refraction of said ray from the upper surface of said column.

[Claim 2 not printed in the Gazette.]

1,273,414. COMPUTING-SCALE. EDWIN M. SCHANTZ, Chicago, Ill., assignor to The Computing Scale Company, Dayton, Ohio, a Corporation of Ohio. Filed May 8, 1912. Serial No. 695,879. (Cl. 235—58.)



1. In a device of the class described, in combination; an equilibrium machine; a computing machine adjustable in accordance with two factors, one the price per pound and the other the weight on the equilibrium machine; an auxiliary source of power; and means to apply the power and to control the application thereof to operate the computing machine in either direction to correspond with the weight on the equilibrium machine and the other factor.

9. In a device of the class described, in combination; an equilibrium machine; a computing machine adjustable in accordance with two factors, one price per pound and the other corresponding to the weight on the equilibrium machine, said machine being adapted to multiply the said factors and exhibit the product as computed cost; a source of electric energy; a driving means for the computing machine; electromagnetic mechanism adapted to couple the computing machine with the said driving means; and control means for the said mechanism carried by the equilibrium machine.

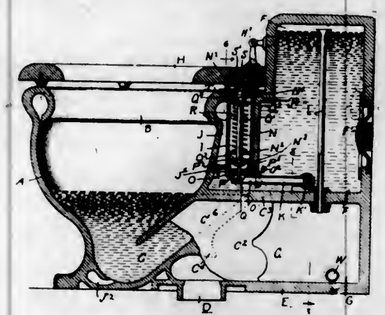
13. In a device of the class described, in combination; an equilibrium machine; a computing machine; movable elements connected with said machines respectively; and means operable upon relative movement of the aforesaid movable elements, to apply an auxiliary source of energy to move one of said elements in either direction and bring said one element into position of registry with the other element, whereby the computing machine is positioned in accordance with the displacement of the equilibrium machine.

18. In a device of the class described, in combination; an equilibrium machine; a computing machine, said machine being adapted to be set for a certain price per pound and to multiply that price per pound by the weight on the scale and obtain the computed cost; an auxiliary source of energy; and means to apply the same to drive the computing machine in either of two directions; and control means therefor actuated by the equilibrium machine.

23. In a device of the class described, in combination; an equilibrium machine; a computing machine; means to apply an auxiliary source of power to operate the computing machine in accordance with the displacement of the equilibrium machine; and means for preventing the operation of the computing machine by the auxiliary source of power until the equilibrium machine moves from no load position of equilibrium.

[Claims 2 to 8, 10 to 12, 14 to 17, 19 to 22, and 24 to 57 not printed in the Gazette.]

1,273,415. WATER-CLOSET. FRANK SCHUH, Trenton, N. J. Filed Aug. 30, 1917. Serial No. 188,987. (Cl. 4—5.)

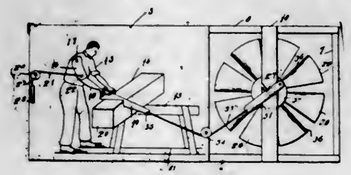


1. A water closet, comprising a bowl having a flushing rim, a closed water tank, a compressed air chamber below the said water tank, a connection between the top of the said water tank and the said air chamber, and a valve mechanism connected with a source of water supply and adapted to connect the said water tank with the said bowl.

2. A water closet, comprising a bowl having a flushing rim, a closed water tank, a compressed air chamber below the said water tank, a connection between the top of the said water tank and the said air chamber, and a spring-pressed valve mechanism having a supply port connected with a source of water supply and having ports, of which one is an open inlet and outlet port and connects with the said water tank, and the other is an outlet port and connects with the flushing rim of the bowl, the said valve mechanism having two valves, of which one controls the said supply port and the other the said outlet port.

3. A water closet, comprising a bowl having a flushing rim, a water tank, an inlet chamber intermediate the said bowl and the said water tank, the said bowl, water tank and inlet chamber being integral and the said inlet chamber having an aperture top and an annular rabbet, and the said inlet chamber having an apertured bottom, and a valve mechanism having a casing within the said inlet chamber and extending through the said apertured top and bottom of the inlet chamber, the upper end of the said casing having a flange seated on the said rabbet, and the said casing having an inlet and an outlet port connecting with the said water tank, and having an outlet port opening into the said inlet chamber, the bottom of the casing having an inlet port, a cap screwing on the lower end of the said casing and against the under side of the said casing bottom, the cap being connected with a source of water supply and two valves having a common spring-pressed valve stem, one of the valves extending into the said cap and controlling the said inlet port and the other valve being within the said casing and controlling the said outlet port.

1,273,416. TOY. GOTTLIEB J. SELM, Seattle, Wash. Filed Jan. 16, 1918. Serial No. 212,083. (Cl. 46—40.)

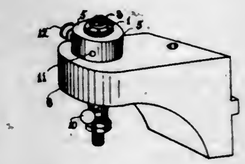


1. A toy comprising a frame having a figure and a piece of work depicted thereon, a member forming a part of said figure pivoted to the frame, a pulley journaled on the frame, a cord connected to said member and passing over the pulley, a weight connected to the cord, a second pulley journaled on the frame, a motor, and a flexible member connected to the motor and said member pivoted to the frame and passing over the second pulley.

2. A toy comprising a base having a part of a figure and a part of a piece of work depicted thereon, a member forming the balance of said figure pivoted to the frame, a second member forming the balance of said piece of work secured to said frame, a tool connected to said first member and located between said second member and the depicted part of the work, a pulley journaled on the frame, a cord connecting one member and passing over the pulley, a weight connected to the cord, a second pulley journaled on the frame, a power source, a flexible member connected to the power source and tool and passing over the second pulley.

3. A toy comprising a frame having depicted thereon a figure, a work support and a piece of wood; an arm pivotally secured to the figure; a weight arranged rearwardly of the figure; a cord extending from the weight to the pivoted arm, said weight being adapted to cause the arm to seek a rearward position, a saw carried by the pivoted arm; a motor; and a cord extending from the motor to the forward end of the saw, said motor being adapted to cause the saw to partake of a reciprocatory movement.

1,273,417. WORK-HOLDER FOR MACHINE-TOOLS AND THE LIKE. ALBERT HENRY SMITH, Birmingham, England. Filed July 21, 1917. Serial No. 182,020. (Cl. 90—60.)



In a work holder for machine tools and the like the combination of a stationary member having an internally tapered hole and having an incline at its one end; a movable gripping member split at one end and having an externally tapered portion engaging with said internally tapered part of the stationary member; an angularly adjustable hand actuated member having inclines co-acting with the aforesaid incline and adapted when moved angularly to displace said gripping member longitudinally and thus grip the work; a bracket having an incline; and a plunger carried by said bracket and radially disposed in relation to the axes of the stationary member adapted to engage with any one of a plurality of recesses therein and provided with an incline co-acting with a corresponding incline on said bracket; for the purpose specified.

1,273,418. METHOD AND APPARATUS FOR CASTING METAL. ALEXANDER STANOWSKY, Rotterdam, Netherlands. Filed Jan. 24, 1918. Serial No. 213,552. (Cl. 22—209.)



1. A metal-casing method of that type in which the molten metal is forced by gas under pressure into a mold located within a flask provided with a perforated lid, such method comprising the successive steps of closing the perforation in the lid by means including a capsule of gas under high pressure, and thereafter puncturing such capsule at that point thereof at which it initially serves to form the closure of the said perforation, whereby the contents of the capsule are admitted through the said perforation into the lid and flask.

2. A metal-casting method of that type in which the molten metal is forced by gas under pressure into a mold located within a flask provided with a perforated lid, such method comprising the successive steps of closing the perforation in the lid by means including a capsule of gas under high pressure, and thereafter puncturing such capsule at that point thereof at which it initially serves to form the closure of the said perforation, whereby the contents of the capsule are admitted through the said perforation into the lid and flask and deflecting the high pressure gas current sufficiently to prevent the same from directly striking the molten metal, whereby the pressure is applied only indirectly on such molten metal.

3. In combination, in a metal casting device, a flask containing a mold, a perforated lid for such flask, an outwardly extending collar surrounding the perforation in such lid, such collar forming a chamber, a piercer located within such chamber and being provided with a longitudinal passage, the bottom of said piercer being located in the perforation in said lid, a baffle plate located within the inclosure formed by the flask and its lid, and being situated between the said perforation and the mold, and adapted to deflect the gas under pressure flowing into such inclosure, in such a way that the strong gas current does not strike the molten metal located on the mold.

4. In a metal casting device, the combination of a flask containing a mold, a lid for said flask, such lid being provided with a hole, a piercer carried by said lid in proximity to said hole, a compressed gas capsule adapted to completely cover said hole and to form a pressure-tight closure therefor, means for pressing such capsule against such piercer, while maintaining the said capsule in position to form a pressure tight closure for such hole, a passage for allowing the compressed gas from said capsule to enter the said flask, and means for deflecting and diffusing the gas current, whereby the gas pressure only, and not the current, comes into direct contact with the metal in the mold.

5. In the art of casting metal in a mold located within a pressure-tight container, the improvement which comprises positioning a capsule containing gas under high pressure, where its interior, when the wall of such capsule is punctured, will be in communication with the interior of such container containing such mold and containing molten metal in communication with such mold, and

then puncturing the wall of such capsule, whereby its high pressure gas contents are allowed to flow into such container, to increase the gas pressure existing therein.

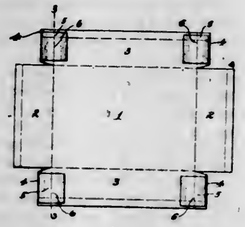
1,273,419. SECURING MEANS FOR WATCHES, KEYS, AND THE LIKE UPON THE PERSON OF THE OWNER. JAMES STEWART, Morningside, New Zealand. Filed Jan. 29, 1918. Serial No. 214,393. (Cl. 2—151.)



1. The herein described securing means, comprising a pocket with a flap having a fastener, a band having a fastener for a watch or the like and passing through a slit in the said flap and passing through a slit in the said garment, and a fastener securing the band to the inner side of the garment, substantially as set forth.

[Claims 2 to 4 not printed in the Gazette.]

1,273,420. STAYED OR TABBED BOX-COVERING BLANK. JOHN STOGDELL STOKES, Moorestown, N. J., assignor to Stokes & Smith Company, Summerdale, Pa., a Corporation of Pennsylvania. Filed Aug. 17, 1917. Serial No. 186,699. (Cl. 229—49.)



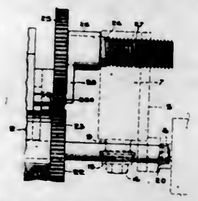
1. As a new article of manufacture, a stayed or tabbed box covering blank of the character described, consisting of a blank proper for application to a box to be covered, said blank having corner staying tabs, consisting of separate pieces of staying material attached thereto and positioned thereon over the corner folding lines to stay the corner joints of the box, said tabs normally lying in substantially the plane of the blank and being attached by separated zones of adhesive, those portions of the tabs that overlie the corner joints being unattached to the blank.

[Claims 2 and 3 not printed in the Gazette.]

1,273,421. THREAD OR WORM CUTTER. CHARLES HAVELOCK TAYLOR, Toronto, Ontario, Canada. Filed Sept. 23, 1916. Serial No. 121,789. (Cl. 10—102.)

1. The combination with a rotary stock holder and a slide movable to and from the stock holder, of an attachment mounted upon said slide, a shaft mounted in said attachment with its ends protruding therefrom, a thread or worm cutting tool mounted upon one of such protruding ends and adapted to intersect the perimeter of the stock when the slide is reciprocated, a worm wheel upon the opposite end of said shaft, a worm in rotative relation with the stock holder and adapted to engage the worm-wheel when the slide is moved toward the stock holder.

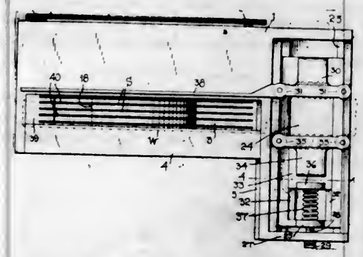
8. The combination with a rotary stock holder; of an attachment movable to and from the stock holder and consisting of a carrier plate having an opening therein, a prism-like member mounted on the said plate, a shaft carried by said member with its ends protruding therefrom, a rotary thread or worm cutting tool mounted upon one of such ends, a worm-wheel mounted upon the opposite end of said shaft, a worm in rotative relation with the stock holder and a guide consisting of a block having a boring intersected by the worm-wheel and located in the axial plane of the worm, said boring being adapted to receive the worm when the tool is moved into engagement



with the stock and maintain such worm in operative engagement with the worm-wheel, said guide having a reduced end journaled in said opening in the carrier plate, and means for adjusting the prism-like member upon the carrier plate for the purpose of varying the depth of the cut in the stock, said last mentioned means consisting of slots in the carrier plate and bolts passed through said slots into the prism-like member, said slots being arranged concentrically to the axis of the boring of the guide for the purpose of enabling the reduced end to be used as a pivot during adjustment.

[Claims 2 to 7 and 9 not printed in the Gazette.]

1,273,422. CIRCULAR-SAW MACHINE. SAMUEL MARTIN TAYLOR and ALBERT DAVID OSBORN, Blairsden, Cal. Filed June 13, 1917. Serial No. 174,565. (Cl. 143—4.)

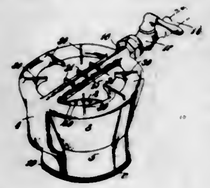


1. A circular saw machine consisting of a bed provided with an opening, a saw supported below the bed and adapted to extend through the opening of the bed, a guideway arranged adjacent one end of the slot and disposed transversely thereof, a slide movable within the guideway, means for imparting movement to the slide longitudinally of the guideway, a second slide movably mounted upon the first named slide, work engaging means carried by adjacent ends of the slides, means for constantly urging one of the slides in one direction independently of the second slide and a guide plate carried by the second slide and extending over the bed.

[Claim 2 not printed in the Gazette.]

1,273,423. BURNER. ARCHIBALD R. THOMPSON, Lakewood, Ohio. Filed Dec. 15, 1915. Serial No. 66,887. (Cl. 158—64.)

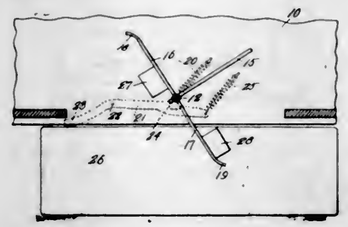
1. In a burner of the character described, the combination of a fuel diffusing and preheating chamber having an inlet and comprising a continuous passageway, a conduit connecting opposed portions of said chamber, a burner chamber located beneath the first mentioned chamber, a conduit communicatively connecting said first mentioned chamber and the burner chamber, a wall extending between the aforesaid chambers and inclosing a combustion chamber, the combustion chamber having an air admitting opening, the burner chamber having apertures, a trough supported adjacent the apertures of the burner chamber and into which the burner chamber may overflow, and means for controlling the supply of air to the combustion chamber.



5. In a burner of the character described, the combination of a fuel diffusing and preheating chamber having an inlet, a burner chamber located therebeneath and having a series of apertures, a conduit communicatively connecting said chambers, a wall extending between said chambers and inclosing a combustion chamber, a wall extending downward from the burner chamber thereby to produce an air inlet passageway, and means for controlling the supply of air through said passageway.

[Claims 2 to 4 and 6 to 10 not printed in the Gazette.]

1,273,424. BAGGAGE-TRANSFER. GERARDO TRAMUTOLO, Newark, N. J. Filed Aug. 30, 1916. Serial No. 117,713. (Cl. 258—7.)



A device of the kind described, a support, a standard journaled in said support, said standard having a polygonal portion at one end thereof, a spring in engagement with said polygonal portion for urging said standard in one position, a pivoted lever on said support having a notch formed therein to receive said polygonal portion of said standard for releasably securing said standard in the position against the tension of said spring.

1,273,425. ARTIFICIAL-MINNOW BAIT. ORLEY C. TUTTLE, Old Forge, N. Y. Filed May 3, 1917. Serial No. 166,072. (Cl. 43—30.)



A fish-lure including an artificial minnow made of thin plate bent into arcuate form and provided at its ends with holes; and a shaft which passes through said holes and with respect to which the minnow is unsymmetrically disposed, whereby the minnow is caused to revolve on the shaft freely when drawn through the water; the shaft being adapted to be attached at one end to a fishline and at its opposite end to the fish-hooks and the minnow being given a minnow shape and made bright to attract the fish while whirling.

1,273,426. PICTURE-HANGER. JOHN P. CLARY VON CARLSBERG, Worcester, Mass. Filed Apr. 4, 1918. Serial No. 226,610. (Cl. 40—145.1.)



2. In combination, a picture frame having a socket formed centrally in the rear side of one portion thereof, the wall of the socket terminating into a concentric recess at the upper edge thereof, a disk-shaped hanger plate secured in said recess and being concentrically related to said socket, said plate being provided with a semi-circular opening, the straight wall of which is provided centrally with a vertical opening adapted to receive the shank of a picture supporting fastener which is driven into a wall whereby said picture may be readily hung thereon.

[Claim 1 not printed in the Gazette.]

1,273,427. NAIL, SPIKE, AND THE LIKE. ARNOLD VON SCHRENK, New York, N. Y. Filed Feb. 1, 1917. Serial No. 145,891. (Cl. 85—21.)



1. A nail, spike or the like comprising a shank having a tapering end and a series of cutting means located in a row substantially within the confines of said tapering end and each having a cutting action effective in the direction in which the nail, spike or the like is driven.

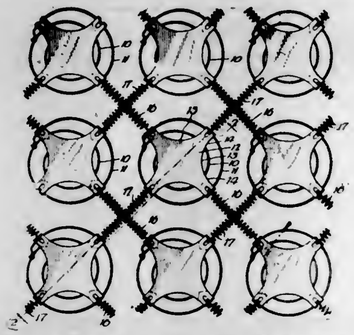
2. A nail, spike or the like comprising a shank, and a plurality of cutting devices located in series both transversely and lengthwise of said shank and forming a plurality of successive cutting edges whereby the fibers of the material into which said nail, spike or the like is driven are cut or crushed.

[Claims 3 to 6 not printed in the Gazette.]

1,273,428. SPRING CONSTRUCTION. WILLIAM W. VINCENT, Kenosha, Wis., assignor to The Vincent Alward Company, Kenosha, Wis., a Corporation of Wisconsin. Filed Mar. 10, 1916. Serial No. 83,226. (Cl. 5—29.)

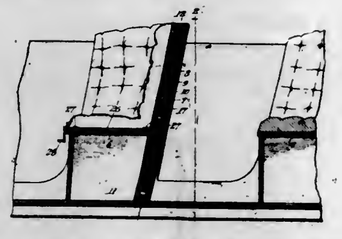
In a spring-structure of the character described, the combination of a plurality of upright spiral-springs, heli-

cal-springs connecting together the top coils of said spiral-springs, and a plate for each spiral-spring overlying the space in such spring, said plate having a plurality of apertured ears bent down over the top coil of said spring,



the hook-ends of said helical-springs which connect them directly with the top coils of the spiral-springs being accommodated in said apertures, substantially as described.

1,273,429. WIND-SHIELD FOR AUTOMOBILES. JOSEPH R. WAGNER, Chicago, Ill. Filed Nov. 17, 1913. Serial No. 801,423. (Cl. 21—148.)

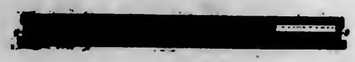


1. A device of the character described comprising in combination a wind shield, a front seat, a back therefor provided with a receptacle for containing and concealing said shield, and a mechanical means connected with the shield projecting through the front side of said seat for elevating the shield to its operative position above the seat back, and lowering it therein when not in use.

2. A device of the character described, comprising in combination a wind shield, a seat, a back therefor provided with a receptacle for containing and concealing said shield, a mechanism having a shaft projecting through and adapted to be operated from the front side of the seat for adjustably elevating the shield above the seat back, and lowering it therein when not in use.

3. In a device of the character described, the combination with a seat back provided internally with a receptacle adapted to conceal a wind shield, a wind shield, a rack bar therefor, a pinion for actuating said rack bar, and means in and projecting through the front seat accessible to the driver of the vehicle for actuating said pinion and thereby raising and lowering the wind shield in the seat back.

1,273,430. COLLAPSIBLE CONTAINER. ALEXANDER L. WARD, New York, N. Y. Filed Apr. 21, 1917. Serial No. 163,542. (Cl. 217—12.)

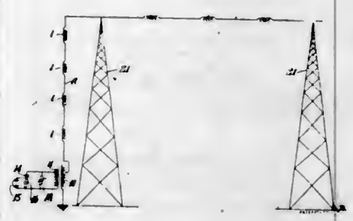


3. In a collapsible container, the combination of a bottom member having upwardly extending flanges and separable flanged members adapted to be assembled therewith in interlocked relation to form a complete container, including side members having side flanges and a top member with a downwardly extending marginal flange spaced therefrom to form a groove between the edges of the member and the flange, said members being adapted to be packed with the top member resting on the flanges of the bottom member with said flanges entering said groove, the other parts within said flanges, said flanges also entering said groove, and the proportions of the parts being so chosen that all of said members will lie in substantially surface contact with each other when so packed, substantially as set forth.

4. In a collapsible container, a top section formed of a body portion of stiff material having a marginal flange formed of sheet-metal secured to its upper and under surfaces and shaped to form an inverted U beyond the edges, and locking bolts carried thereby, each bolt extending lengthwise of one of said flanges adjacent a corner, the bolt having a bearing portion of angular section slidably mounted between the lower surface and edge of said body portion and the adjacent portions of the metal, the upwardly extending flange of said bearing portion of the bolt sliding in alinement with a slot in the metal strip secured to the upper surface of said body portion, and said bolt having an outer end portion adapted, when shot, to extend through an opening in the outer depending flange of the top section at right angles to the bolt, substantially as set forth.

[Claims 1, 2, 5, and 6 not printed in the Gazette.]

1,273,431. METHOD AND APPARATUS FOR RADIO-SIGNALING. ROY ALEXANDER WEAGANT, Roselle, N. J., assignor to Marconi Wireless Telegraph Company of America, New York, N. Y., a Corporation of New Jersey. Filed Jan. 6, 1916. Serial No. 70,571. (Cl. 250—33.)



3. In apparatus of the kind described, an antenna consisting substantially throughout its length of a plurality of sections having distributed capacity and inductance only and connected to each other by inductance coils through which the current passing from one to the other is forced to flow.

5. The method of radio signaling which consists in setting up oscillations in an open antenna, by repeated applications of impulses at a desired frequency, and setting up at points distributed substantially throughout the length of the antenna reactions opposed to oscillations of undesired frequencies.

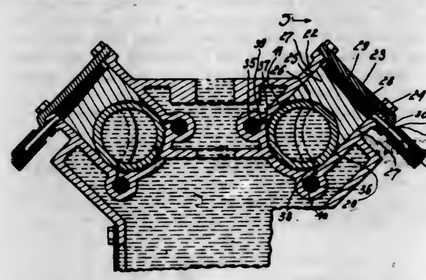
[Claims 1, 2, and 4 not printed in the Gazette.]

1,273,432. COMPOSITION FOR ELECTROLYTES FOR ELECTRICAL ETCHING. JOSEPH HENRY WEEKS, Rutledge, Pa., assignor to Jackson S. Weeks, Delaware county, Pa., and Raymond M. Weeks, Philadelphia, Pa., trustees. Filed Apr. 4, 1917. Serial No. 159,778. (Cl. 204—7.)

6. An electrolyte composed of one or more of the oxalates of ammonium, barium, calcium, cadmium, magnesium, iron, potassium, sodium or strontium, dissolved in water, together with a sulfate, a chlorid and an acid.

[Claims 1 to 5 and 7 to 9 not printed in the Gazette.]

1,273,433. INTERNAL-COMBUSTION ENGINE. RUDOLPH WEHR, New York, N. Y. Filed June 20, 1917. Serial No. 175,847. (Cl. 123—190.)



1. In a multi-cylinder combustion engine, the combination with a cylinder of the engine having a port, of a valve casing thereon provided with a corresponding inlet and an outlet, a rotary valve arranged in said casing having means for periodically opening and closing communications between said port and said inlet and outlet, a packing housing disposed at the side of said port, a packing block shiftably disposed in said housing having a concaved face abutting against said valve and a slanting face opposite to said concaved face, a spring-pressed wedge shiftably disposed in said housing bearing against the slanting face of said block, and means disposed outside of said housing for adjusting the pressure exerted by said wedge upon said block.

[Claims 2 and 3 not printed in the Gazette.]

1,273,434. WIND-SHIELD-TREATING DEVICE. CHARLES WHITE, Baltimore, Md. Filed Jan. 17, 1918. Serial No. 212,307. (Cl. 91—62.5.)



A device for treating wind-shields comprising a portable body adapted to be carried in the hand and having on one face a thin strip of fibrous material with dry alum powder incorporated in the interstices thereof, and exposed on its surface, substantially as described.

1,273,435. METHOD OF TAKING MOTION-PICTURES. FRANK D. WILLIAMS, Los Angeles, Cal. Filed May 22, 1916. Serial No. 99,011. (Cl. 95—5.)



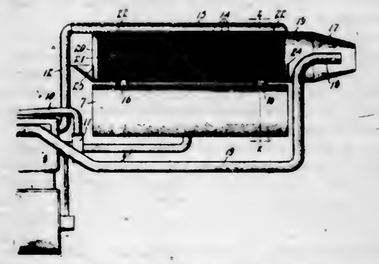
1. The herein described photographic method of producing pictures, which consists in masking a sensitive plate with a silhouette showing the object to be produced thereon, projecting a background on the unmasked portion, masking the exposed portion of the plate and projecting a picture of the object in the unmasked portion.

2. The herein described photographic method of producing pictures, which consists in making a negative of an object prining a positive from said negative, disposing said negative before a sensitive plate to mask a silhouette thereon, projecting thereon a second object, substituting said positive for said negative and exposing to light.

3. The herein described photographic method of producing pictures, which consists in making a negative of the subject before a black background and then developing the same, then making a positive plate from said negative and developing the same, then intensifying the negative to produce a substantially black silhouette of the photographed subject, then superimposing the negative upon an unexposed plate or film and photographing the subject in a position overlapping the subject as first photographed before a suitable background, then removing said negative from said film or plate and substituting therefor the positive plate in exact registration with the silhouette made on the unexposed film or plate and exposing the same, whereby the finally developed film or plate will show the subject or object overlapping itself and in different positions.

[Claims 3 and 4 not printed in the Gazette.]

1,273,436. WATER-COOLING APPARATUS. CHARLES T. WILLSON, Millerton, N. Y. Filed Sept. 1, 1917. Serial No. 189,365. (Cl. 261—11.)



1. In a water cooling apparatus, the combination of a water receiving vessel, means for discharging the water to be cooled, and a cooler interposed between said discharge and the vessel comprising a coiled screen, and spacing means interposed between the convolutions of the screen providing air passage-ways, substantially as set forth.

2. In a water cooling apparatus, the combination of a water receiving vessel, means for discharging the water to be cooled, and a cooler interposed between said discharge and the vessel comprising a coiled screen, and flexible spacing members interposed between the convolutions of the screen providing air passage-ways, substantially as set forth.

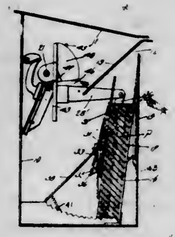
3. In a water cooling apparatus, the combination of a water receiving vessel, means for discharging the water to be cooled, and a cooler interposed between said discharge and the vessel comprising a coiled screen, and chains interposed between and spacing the convolutions of the screen providing air passage-ways, substantially as set forth.

4. In a water cooling apparatus for internal combustion engines, the combination of a water receiving vessel, means for discharging the heated water from the cooling system, and a cylinder interposed between said discharge and the receiving vessel, said cylinder adapted to have an air draft created therethrough by the exhaust gases from the engine, a screen coiled and closely fitting in said cylinder, and chains interposed between and spacing the convolutions of the screen providing air passage-ways, substantially as set forth.

5. In a water cooling apparatus for internal combustion engines, the combination of a water receiving vessel, a pipe having perforations for discharging the heated water from the cooling system, a horizontally and open ended cylinder located between said discharge pipe and the receiving vessel, said cylinder adapted to have an air draft created therethrough by the exhaust gases from the engine, a sheet of screen formed into a cylindrical coil and located in said cylinder, and chains interposed between and spacing the convolutions of the screen coil providing air passage-ways, substantially as set forth.

[Claim 6 not printed in the Gazette.]

1,273,437. VENDING-MACHINE. JOHN T. WILMORE, Seattle, Wash. Filed Apr. 16, 1914. Serial No. 832,145. (Cl. 211—8.)



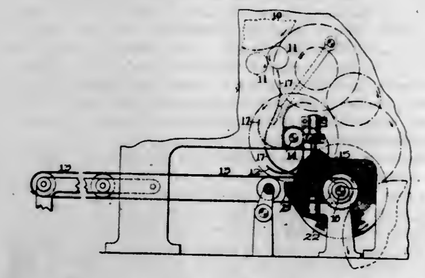
1. In a paper-vending machine, a casing adapted to contain the papers, a plurality of bearing members associated with a wall of the case and spaced apart to afford a vertically arranged channel intermediate the adjacent said members, an ejecting plate arranged for operative movement in vertical directions, means to support a pack of papers upon their edges between said plate and said bearing members, a plurality of needles mounted upon said plate and adapted to protrude forwardly therefrom in register with the respective said channels, and means to actuate said plate.

8. In a paper-vending machine, a casing adapted to contain the papers provided with a delivery aperture in its front wall, means to maintain said papers in inclined relation in pack form against said front wall of the case, a plate arranged for vertical movement in contact with the rearmost of said papers, said plate having a plurality of spaced apertures therein, a resilient strap secured at one end to the rear side of said plate, needles secured to the free end of said strap and protruding through said plate-apertures and adapted to operatively engage the rearmost said paper when said plate is moved upwardly, and means to actuate said plate.

12. In a vending-machine, a casing, a rock-shaft journaled in said casing, a vertically arranged plate arranged for vertical movements in said casing, connective devices between said shaft and said plate whereby the latter may be reciprocatively actuated, and resiliently mounted straps secured at one end in said plate provided with needles at their opposite ends projecting beyond the plane of said plate.

[Claims 2 to 7, 9 to 11, and 13 to 15 not printed in the Gazette.]

1,273,438. SHEET-COUNTING DEVICE. HENRY A. WISE WOOD, New York, N. Y., and CONRAD NORDFORS, Jersey City Heights, N. J., assignors, by mesne assignments, to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Jan. 17, 1914. Serial No. 812,724. (Cl. 93—93.)

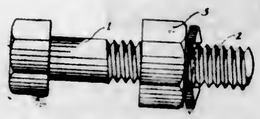


1. The combination with a fan delivering device and belts for receiving sheets therefrom, of a shaft rotatable constantly at a speed proportionate to that of the fan, and circular plates fixed to the shaft and having eccentric projections for shifting a sheet periodically as delivered on the belts.

5. The combination with a rotary sheet delivering fan and belts in position for receiving sheets from the fan, of means for stopping the forward ends of the sheets as they are delivered on the belts and separating them into bundles, of a guide in position for preventing the last sheet of a bundle from moving over said separating means while on the belts.

[Claims 2 to 4 and 6 not printed in the Gazette.]

1,273,439. NUT-LOCK. IRVING C. WOODWARD, Chicago, Ill., assignor to Central West Manufacturing Co., Chicago, Ill., a Corporation of Illinois. Filed Apr. 18, 1917. Serial No. 162,936. (Cl. 151—21.)

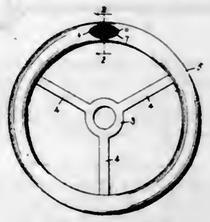


1. A nut-lock, comprising a piece of sheet metal having its outer edge suitably formed to be engaged by a wrench, an elongated aperture in the central portion of the nut-lock, and a pair of oppositely twisted lugs on opposite sides of the nut-lock and in line with the short diameter of said aperture.

3. A nut-lock, comprising a piece of sheet metal having its edges adapted for engaging a wrench and having an aperture adapted for coactive engagement with the thread grooves of a bolt and elongated at one side to straddle the thread, and a resilient inclined lug located in spaced angular relation to the elongated side of said aperture.

[Claim 2 not printed in the Gazette.]

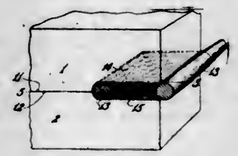
1,273,440. COMBINED STEERING-WHEEL AND INDICATOR. ISABEL G. WOODY, Seattle, Wash. Filed Nov. 13, 1917. Serial No. 201,885. (Cl. 116—31.)



The combination with the steering wheel of an automobile, of an indicator plate having a roughened surface and fastened to the top surface of the rim of said steering wheel in a position thereon to intersect a line radiating from the axis of said steering wheel in a direction toward the course over which said automobile is steered in response to a manipulation of said steering wheel.

1,273,441. METHOD OR PROCESS OF NURLING. EDWIN ALLEN BARDWELL, Shelburne Falls, Mass., assignor to H. H. Mayhew Company, Shelburne Falls, Mass., a Corporation of Massachusetts. Filed June 19, 1917. Serial No. 175,642. (Cl. 76—101.)

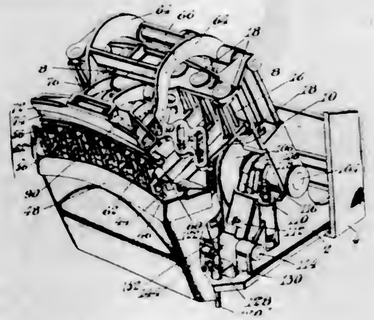
1. The method of nurling or embossing which consists, first, in subjecting the metal to be embossed to a forging process by means of forging dies to reduce the same to substantially the dimensions of the finished article, next, subjecting the metal composing the article while still hot to the action of the forging dies, the dies used in the forging process being formed with cutting ridges that are arranged at an angle to the side edges of the dies, and extending in the same direction, and said article that is being embossed being itself rotated about its axis during



the embossing process to produce a surface on which the embossed or nurling grooves intersect each other at any desired angle.

[Claims 2 to 4 not printed in the Gazette.]

1,273,442. BUTTONING-MACHINE. LEWIS J. BAZZONI, Swampscott, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed May 22, 1916. Serial No. 99,144. (Cl. 12—1.)



1. A buttoning machine having, in combination, button positioning means constructed to provide a guideway for a button, means for positioning a buttonhole fly with portions of the fly at opposite sides of a buttonhole lying in a plane transverse to the path of movement of the button along said guideway, and means for moving the button along the guideway and into said buttonhole.

10. A buttoning machine having, in combination, means for relatively positioning a button and a buttonhole fly with the button in edgewise relation to a buttonhole when the work is initially presented to the machine, and means for performing a buttoning operation with respect to said button and buttonhole.

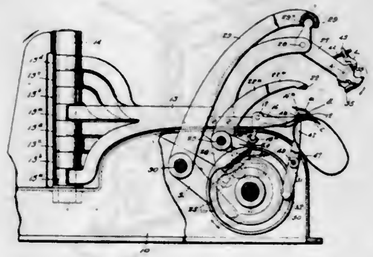
11. A buttoning machine having, in combination, means for relatively positioning a button and a buttonhole fly, a member for engaging the side of the button head remote from said fly, and means for operating said member to push the button into a buttonhole in said fly.

12. A buttoning machine having, in combination, means for relatively positioning a button and a buttonhole fly with the plane of the button head transverse to the lengthwise dimension of a buttonhole in said fly, and means for effecting relative movement of the button and the buttonhole fly to cause the button to enter the buttonhole and to be tipped to an upright buttoned position with reference to said fly.

55. A buttoning machine having, in combination, a plurality of buttoning instrumentalities for buttoning respectively different buttons of a series, and means for operating said instrumentalities in such order as to button a plurality of the buttons simultaneously and adjacent buttons of the series successively.

[Claims 2 to 9, 13 to 54, and 56 to 106 not printed in the Gazette.]

1,273,443. BUTTONING-MACHINE. LEWIS J. BAZZONI, Swampscott, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed June 13, 1916. Serial No. 103,446. Renewed Mar. 26, 1918. Serial No. 224,887. (Cl. 12—1.)



1. A buttoning machine having, in combination, means for positioning a button, and buttonhole fly engaging means movable laterally of the button head and relatively to the fly to dispose the material adjacent to opposite sides of a buttonhole in buttoned relation to the button.

7. In a buttoning machine, coöperating instrumentalities relatively movable to perform a buttoning operation with respect to a button and a buttonhole fly, said instrumentalities comprising means movable longitudinally of a buttonhole to open the buttonhole for the reception of the button.

15. A buttoning machine having, in combination, means for positioning a button, and a buttoning device movable longitudinally of a buttonhole in wiping engagement with the material adjacent to the buttonhole, said device having means for opening the buttonhole and for depressing said material relatively to the button head through said movement.

28. In a buttoning machine, the combination with means for relatively positioning a button and a buttonhole fly, of a buttoning device movable laterally over the button head to perform a buttoning operation, said device comprising two relatively adjustable portions for performing respectively different operations with respect to the button and the buttonhole fly.

78. A buttoning machine having, in combination, means for positioning a row of buttons, buttoning means mounted for movement transversely of the row of buttons in wiping engagement with the buttonhole fly to perform buttoning operations with respect to said buttons, and means for operating said buttoning means.

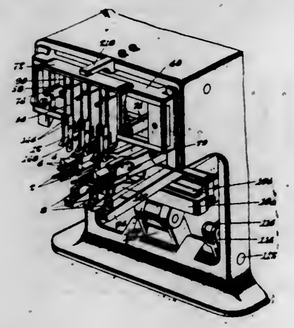
[Claims 2 to 6, 8 to 14, 16 to 27, 29 to 77, and 79 to 86 not printed in the Gazette.]

1,273,444. BUTTONING-MACHINE. HERBERT E. ENSLIN, Malden, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Aug. 22, 1917. Serial No. 187,659. (Cl. 12—1.)

1. A buttoning machine having, in combination, buttoning means movable in engagement with the material adjacent to a buttonhole to force said material over the head of a button, and means for positioning the button for the buttoning operation, said button positioning means being organized to permit the button to be tipped by the action of the buttoning means.

9. A buttoning machine having, in combination, buttonhole fly engaging means, button positioning means, and mechanism for effecting relative movement of said means to cause the buttonhole fly engaging means to force the material adjacent to a buttonhole over the head of a button and to move under the head to dispose said material in buttoned position, said button positioning means being constructed and arranged to support the button by engagement with the button piece under the eye of the

button in such manner as to permit the button to be lifted by the action of the buttonhole fly engaging means as said means moves under the button head.



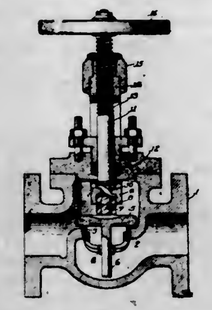
25. A buttoning machine having, in combination, buttonhole fly engaging means, means for positioning a button by pressure applied on the top of the button head, mechanism for relatively moving said buttonhole fly engaging means and button positioning means to perform a buttoning operation, and means for relieving the pressure on the button head before the buttoning operation is completed.

49. A buttoning machine having, in combination, a fork arranged to receive a button attached to a button piece when the work is initially presented to the machine, means for withdrawing said fork subsequently from receiving position, buttoning means arranged to engage a buttonhole fly adjacent to a buttonhole, and mechanism for operating said buttoning means to cause it to force the material partially over the button head while the button is positioned in said fork and to complete the buttoning operation after the fork is withdrawn.

94. In a buttoning machine, a plurality of sets of cooperating instrumentalities for performing buttoning operations with respect to a plurality of buttons, said sets of instrumentalities being adjustable to conform to differences in spacing of the buttons, and power driven means for adjusting said sets.

[Claims 2 to 8, 10 to 24, 26 to 48, 50 to 93, 95, and 96 not printed in the Gazette.]

1,273,445. MEANS TO PREVENT CHATTERING IN VALVES AND THE LIKE. JAMES C. BECKERLEG, Chicago, Ill. Filed Aug. 18, 1917. Serial No. 187,012. (Cl. 137—4.)



3. In a device of the character described, the combination of a member constructed to have an automatic reciprocatory operative movement by fluid-pressure in a right-line direction, and means to give said member during each right-line movement only thereof a positive supplemental movement simultaneously with and in a direction at an angle to said operative movement to prevent a pulsating action of said member, substantially as described.

8. In a valve-construction of the character described, the combination of a member having a valve-port and a valve-seat, a valve automatically operative by reason of pressures on the opposite sides thereof and adapted to cooperate directly with said valve-seat to open and close said port and having a normal right-line opening and closing operative movement, and means to cause said valve to have a simultaneous positive turning movement during its operative movement only to prevent a pulsating action of the valve, said means being constructed to create sufficient friction to cushion the action of said valve, substantially as described.

[Claims 1, 2, and 4 to 7 not printed in the Gazette.]

1,273,446. PROTECTIVE LINER FOR PNEUMATIC TIRES. ROBERT L. BELTON, Dayton, Ohio. Filed Sept. 19, 1917. Serial No. 192,120. (Cl. 152—18.)



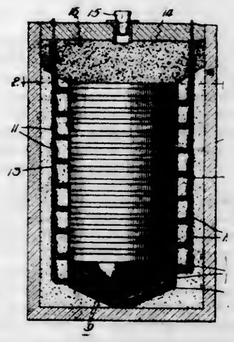
1. As a new article of manufacture, a liner for pneumatic tires having united therewith a continuous elastic tread, said tread forming an elastic connection for the ends of the liner.

3. As a new article of manufacture, an inner liner adapted for removable application to pneumatic tires, said liner having a continuous elastic tread, said tread forming an elastic connection for the ends of the liner whereby to admit of circumferential expansion in tires of different diameters.

5. As a new article of manufacture, a liner for pneumatic tires consisting of a fabric body having its ends overlapping, said ends being coated with friction eliminating material, and a rubber tread permanently adhered to the fabric excepting at the ends thereof but extending over said ends to prevent penetration at said ends and forming a connection therefor.

[Claims 2 and 4 not printed in the Gazette.]

1,273,447. DRY SECONDARY CELL. JULIUS BECKER, Chicago, Ill. Filed Mar. 29, 1917. Serial No. 158,335. (Cl. 204—29.)



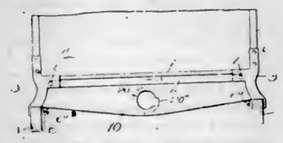
1. In a secondary cell, the combination with a square container, of an active element within the same, said active element comprising a plurality of cone shaped electrodes and intermediate cone shaped separators, all of circular contour and having their concave faces upturned, the electrodes and separators being consecutively in solid contact with each other to provide a solid structure, suitable porous material surrounding the active element and filling the remaining portions of the container, the separators being of acid absorbent but acid resisting material, and electrically insulating, terminal straps in diametrically opposite corners of the container, each strap being connected to all of the electrodes of its polarity, electrolyte in the separators and the porous material, a layer of acid resisting nonconducting material on each terminal strap, and manganese dioxid in the upper portion of the container and above the active element, substantially as and for the purpose set forth.

2. In a secondary cell, the combination with a container of an active element within the same, said active element comprising a plurality of cone shaped electrodes and intermediate cone shaped separators, all of circular contour and having their concave faces upturned, the electrodes and separators being consecutively in solid contact with each other to provide a solid structure, the separators being of acid absorbent but acid resisting material, and electrically insulating, terminal straps connected to the electrodes of similar polarity, electrolyte in the separators, and manganese dioxid in the upper portion of the container, substantially as and for the purpose set forth.

5. In a secondary cell, the combination with a container, of an active element within the same, said active element comprising alternating cone shaped electrodes and cone shaped separators, all having their concave faces upturned, the separators being of electrically insulating, acid absorbing but acid resisting material, and electrolyte permeating the separators, substantially as and for the purpose set forth.

[Claims 3 and 4 not printed in the Gazette.]

1,273,448. INSTRUMENT-BOARD FOR AUTOMOBILES. JOSEPH BERG, Chicago, Ill., assignor to Stewart-Warner Speedometer Corporation, Chicago, Ill., a Corporation of Virginia. Filed Jan. 27, 1917. Serial No. 144,837. (Cl. 180—90.)



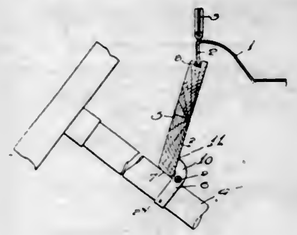
1. In an instrument board of the character described, adapted to extend from side to side of the vehicle body, adjacent to the cowl and wind-shield, lugs or ears projecting from the top near the ends, said lugs or ears being back of the plane of the board, and lugs or ears depending from the board near the ends disposed in planes transverse to that of the aforesaid lugs or ears, each of said ears constituting the means of securing the device in position.

2. In an instrument board of the character described, having perforated lugs adapted for securement to a vehicle body, adjacent to the wind shield, a double reentering-angle bend along the top thereof adapted to engage an associated member, said reëntering-angle bend constituting means for adjusting the said board in the manner and for the purpose set forth and described.

3. In an instrument board of the character described adapted to be secured in position across the vehicle body, adjacent to the wind shield, a ledge or bend along the top thereof, said ledge being bent at an obtuse angle to the board, for the purpose set forth and described.

1,273,449. INSTRUMENT-BOARD. JOSEPH BERG, Chicago, Ill., assignor to Stewart-Warner Speedometer Corporation, Chicago, Ill., a Corporation of Virginia. Filed Apr. 21, 1917. Serial No. 163,569. (Cl. 180—90.)

1. In a vehicle body in combination with an inclined steering column and a cowl overhanging the same, a rigid member dimensioned for insertion between said cowl and column, and positioned to stress the latter away from the cowl, and a stop member adjustably carried on the column for engaging the under side of the rigid member adjacent the column to retain the parts in stressed relation.

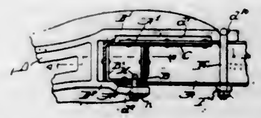


2. In a vehicle body in combination with an inclined steering column and a cowl overhanging the same, a member dimensioned for insertion between said cowl and column, and positioned to form an acute angle between its upper face and the column axis, and a stop member adjustably carried on the column for engaging the under side of the first mentioned member adjacent the column to retain said parts in stressed relation.

3. In a vehicle body in combination with an inclined steering column and a cowl overhanging the same, a member dimensioned for insertion between said cowl and column, and positioned to form an acute angle between its upper face and the column axis, and a band encircling the column and adjustably clamped thereon with a lug projecting transversely to stop the lower part of said inserted member against sliding downwardly along the column.

4. In a vehicle body in combination with an inclined steering column and a cowl overhanging the same having a depending flange, an instrument board provided with a grooved upper edge adapted to engage said upper flange, said board being dimensioned for insertion between said flange and said column, and positioned to form an acute angle between its upper face and the column axis, and a band encircling the column adjustably clamped thereon with a lug projecting transversely to engage the under face of the instrument board to stop the latter against sliding downwardly along the column.

1,273,450. AUTOMOBILE-BUMPER SUPPORT. JOSEPH BERG, Chicago, Ill., assignor to Stewart-Warner Speedometer Corporation, Chicago, Ill., a Corporation of Virginia. Filed Oct. 1, 1917. Serial No. 194,216. (Cl. 293—55.)



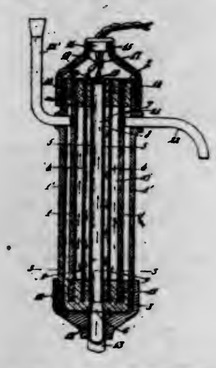
1. In combination with the side bar and cross bar of a vehicle frame, a bumper-supporting bracket forked at the inner end for engaging the cross bar of the frame, the upper fork arm being extended across said cross bar and above the side bar and clamped down to the latter at a considerable distance inward from the cross bar; a bolt securing the upper fork arm to the cross bar to take the thrust of the bumper.

5. In combination with a side bar of a vehicle and a downwardly-open channel cross bar thereof, a bumper-supporting bracket forked at the inner end for engaging the cross bar of the frame, the upper fork arm being extended across the cross bar, and above the side bar and clamped down thereto; a bolt which secures said upper fork arm rigidly to the web of the cross bar for taking the thrust of the bumper, the lower fork arm being ex-

tended under the channel cross bar; an upwardly-open channel filler inserted and secured in the downwardly-open channel of the cross bar, the lower fork arm of the bracket being extended under the cross bar and under said filler, and a U-bolt entered astride the filler and having its both ends projecting down past the filler and engaging said lower fork arm.

[Claims 2 to 4 not printed in the Gazette.]

1,273,451. ELECTRIC HEATING APPARATUS. MANUEL BOUZO, Habana, Cuba. Filed Dec. 13, 1916. Serial No. 136,605. (Cl. 219—40.)



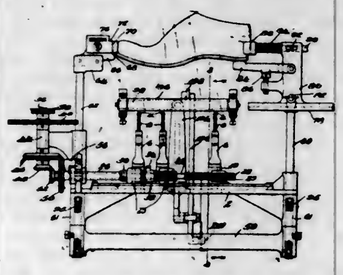
1. An electric liquid heater comprising an outer casing, an inner casing insulated from the outer casing, a cylindrical electrode within said inner casing and spaced and insulated therefrom, a second cylindrical electrode within the first electrode and spaced and insulated therefrom, an inlet pipe communicating directly with the inner electrode, an outlet pipe extending through said outer casing and communicating with the inner casing, the first electrode being formed with opposed openings adjacent its lower end and the second electrode being formed with an opening adjacent its upper end, to permit longitudinal circulation of a liquid from said inlet pipe to and through said electrodes and into said outlet pipe.

2. An electric liquid heater comprising an outer casing, an inner casing insulated from the outer casing, a cylindrical electrode within said inner casing and spaced and insulated therefrom, a second cylindrical electrode within the first electrode and spaced and insulated therefrom, an inlet pipe communicating directly with the inner electrode, an outlet pipe extending through said outer casing and communicating with the inner casing, said electrode being perforated to permit circulation of a liquid from said inlet pipe to and through said electrodes and into said outlet pipe, and a steam outlet pipe communicating with said inner casing at a point adjacent to the upper end thereof.

3. An electric liquid heater comprising a liquid tight casing, a pair of electrodes mounted in said casing and insulated from each other and from said casing, means for circulating a liquid between and exteriorly of said electrodes, and means for preventing back pressure in said casing whereby the circulation of the liquid will be rendered continuous and uninterrupted.

1,273,452. INSOLE-MARKING MACHINE. LOUIS M. BROWN, Beverly, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Nov. 19, 1913. Serial No. 801,807. (Cl. 33—4.)

3. A machine for marking insoles, having in combination, a fixed toe gage for positioning the insole longitudinally, a plurality of markers relatively adjustable to one another and to the toe gage to correspondingly mark the insoles for the different sizes of shoes, and a common actuator for simultaneously adjusting the markers varying amounts with relation to the toe gage.



9. A machine for marking insoles, having in combination, means for supporting and positioning an insole, a plurality of marking devices, a shaft for adjusting one of said marking devices, a sleeve rotatably mounted upon said shaft for adjusting another of said marking devices, a common actuating shaft for said first mentioned shaft and sleeve, and gearing interposed between the actuating shaft and said first mentioned shaft and sleeve to simultaneously adjust the marking devices different amounts.

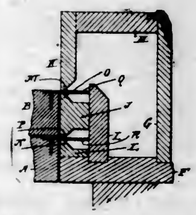
10. A machine for marking insoles, having in combination, means for supporting and positioning the insole, a plurality of marking devices relatively adjustable with respect to one another and to the positioning means, and mechanism for adjusting said devices comprising a hollow shaft, a second shaft rotatably mounted within said hollow shaft, one of said shafts comprising two portions rotatably adjustable with relation to each other, and each provided with screw threads differing in pitch from the other, a common actuator for said shafts, and connections between said actuator and shafts having provision for the actuation of one shaft independently of the other.

17. A machine for marking insoles, having, in combination, a fixed toe gage for positioning a last having an insole attached thereto longitudinally, means for positioning the last laterally, a plurality of marking devices adjustable relative to one another, and means for relatively actuating the marking devices and positioning means to mark the insole.

20. A machine for marking insoles having, in combination, an end gage for positioning the insole longitudinally, a ball line marker, a breast line marker and a tip line marker, said markers being relatively adjustable to the end gage to correspondingly mark insoles for different sizes of shoes, and a common actuator for simultaneously adjusting the markers varying amounts with relation to the end gage.

[Claims 1, 2, 4 to 8, 11 to 16, 18, 19, and 21 to 26 not printed in the Gazette.]

1,273,453. WINDOW FRAME AND SASHES. HARRY E. CAMPBELL, New York, N. Y. Filed Apr. 1, 1918. Serial No. 225,915. (Cl. 20—52.4.)



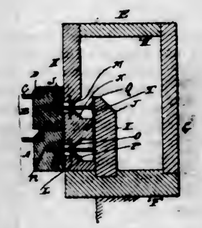
1. A window-frame and sash construction, comprising a hollow jamb of wood having in its inner wall a vertical slot, a sash of wood having a side rail in sliding contact with said wall, and on said rail a laterally extending plate of metal entering said jamb through said slot.

3. A window-frame and sash construction, as in claim 2, the said plate being formed in two parts adjustably connected, one of said parts having a free vertical edge in proximity to a face of said bar and adjustable with respect to said face.

7. A window-frame and sash construction, comprising a hollow jamb of wood having a vertical opening in its inner wall, a fixed bar of wood secured to and projecting into said jamb, a wooden partition secured to the face of said first-named bar and projecting into said wall opening, there being gaps between said partition bar and the edges of said wall opening, two wooden sash frames having their corresponding side rails in sliding contact with said inner wall, and on each side rail a laterally projecting plate of metal, the said plates respectively entering said jamb through said gaps and having their free edges in sliding contact with a face of said bar.

[Claims 2, 4 to 6, and 8 not printed in the Gazette.]

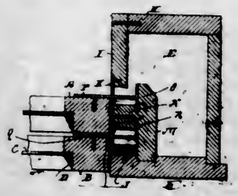
1,273,454. WINDOW FRAME AND SASHES. HARRY E. CAMPBELL, New York, N. Y. Filed Apr. 1, 1918. Serial No. 225,916. (Cl. 20—52.4.)



4. A window-frame and sash, comprising a hollow jamb of wood having in its inner wall two parallel vertical slots, a bar of wood fixed within said jamb and facing said slots, metal angle-strips secured on opposite sides of said slots, with the apexes of their angles approximated, two sliding sashes of wood, and on each sash a laterally extending metal plate, the said plates respectively entering said jamb through said slots and between and in contact with said angle-strips and having their free edges in sliding contact with said bar.

[Claims 1 to 3 not printed in the Gazette.]

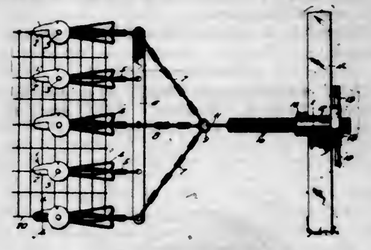
1,273,455. WINDOW FRAME AND SASHES. HARRY E. CAMPBELL, New York, N. Y. Filed Apr. 8, 1918. Serial No. 227,192. (Cl. 20—52.4.)



1. A window-frame and sash construction, comprising a hollow jamb of wood having in its inner wall a vertical opening extending from top to bottom of the jamb, vertical metal plates secured to said wall and extending into said opening on opposite sides thereof, a middle metal plate interposed between said plates, there being gaps between the opposing edges of said first-named plates and the edges of said middle plate, a fixed support for said middle plate, two sashes in sliding contact with said jamb wall, and on each sash a laterally extending plate; the said laterally extending plates respectively entering said hollow jamb through said gaps.

[Claims 2 to 4 not printed in the Gazette.]

1,273,456. WIRE-STRETCHER. WILBER ALLEN CAMPBELL, Flora, Ill. Filed Feb. 21, 1918. Serial No. 218,496. (Cl. 254—67.)



In a device of the character specified, a draw screw and a guide sleeve for the screw having means for connecting the sleeve to a post or other fixed support, said draw screw consisting of four sections arranged about a common axis and externally threaded and connected at their ends to each other, the sleeve having grooves for receiving the sections, and a handled nut threaded on to one end of the draw screw, the other end having means for engaging the objects to be moved.

1,273,457. METHOD OF AND ARTICLE FOR MAKING PHOTOGRAPHS. JOHN G. CAPSTAFF, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Jan. 6, 1917. Serial No. 140,887. (Cl. 95—2.)



1. A method of making photographs which comprises preparing a double gelatin film the two sensitive layers of which are separated by a gelatin screen that owes its light resisting properties to the presence therein of free silver; producing two photographic records by independent exposure on the respective sensitive layers while each is protected by the said screen from the light that exposes the other developing the layers, and treating the silvered portions of the latter and the screen with a bleaching bath and thereby bleaching the intermediate screen.

6. A method of making photographs in color which comprises preparing a transparent film base with an adhering layer of gelatin film containing light sensitive silver salts; exposing the said film to light and developing it to free the silver and produce an opaque screen; coating the screen with a sensitive gelatin film; producing a color sensation record on said sensitive film by exposure to light and subsequent development; hardening the silvered portions of the record film and the screen by means of a bleaching bath; dyeing the softer portions of the exposed film a given color with a dye that will be resisted by the hardened portions and by the hardened screen, and

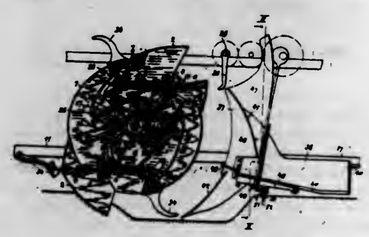
registering with the component thus produced another color sensation record of a complementary color.

7. As an article of manufacture for use in producing photographs, a sensitive film secured to an underlying backing screen containing comminute free silver.

11. As an article of manufacture for use in producing color photographs, a transparent film support, a layer of gelatin thereon containing sufficient free silver to render it light resisting, a sensitive gelatin film adhering to said layer and a sensitive gelatin film adhering to the opposite face of the support.

[Claims 2 to 5, 8 to 10, 12, and 13 not printed in the Gazette.]

1,273,458. DIGGING-MACHINE. HANS ALBERT CHRISTENSEN, Hellerup, Denmark. Filed Sept. 6, 1916. Serial No. 118,655. (Cl. 97—71.)



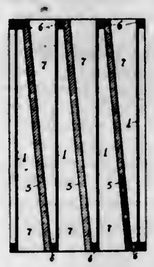
1. In a digging machine the combination with implements adapted to cut into the earth and shovels which dig down into the earth forward from above, of a rotating drum, the shovels being swingably connected with the drum, means for carrying the shovels to the digging position and securing them in the same, the shovels being closed on all sides during the digging except in front, means for swinging the shovels from the digging position to another position, whereby the shovels are automatically opened in the rear, when the earth is to be thrown out, and means for securing the shovels in the opened position.

5. In a digging machine the combination of implements adapted to cut into the earth and shovels which dig down into the earth forward from above, of a rotating drum provided at the circumference with plates pivotally connected with the drum and supported by springs, each shovel being hinged to one of the said plates by means of a hinge bolt provided with an arm extending into the drum and carrying a rod adapted to coöperate with another rod pivotally connected with the drum and carrying a roller adapted to slide during that part of the revolution of the drum in which the shovel is to be held in the digging position on the edge of a segmental cam secured to the nonrotatable shaft of the drum, the said arm being provided with a dog adapted to strike against a roller on the said segmental cam, when, during the revolution of the drum, the shovel is to be swung from the digging to the opened position, and means for securing the shovel in the opened position.

11. In a digging machine the combination with implements adapted to cut into the earth and shovels which dig down into the earth forward from above, of a rotating drum, the shovels being swingably connected with the drum, means for carrying the shovels in the digging position and for securing them in the same, the shovels being closed on all sides during the digging, except in front, means for swinging the shovels from the digging position to another position in which the shovels are automatically opened in the rear when the earth is to be thrown out, means for securing the shovels in the opened position, a cleaner consisting of a U-shaped frame pivotally connected with the drum, rollers disposed on the arms of the cleaner, the said rollers adapted during the revolution of the drum to coöperate with engaging members and pivotally disposed on a cam secured to the shaft of the drum and supported by springs, and means for carrying the cleaner back.

[Claims 2 to 4, 6 to 10, and 12 to 15 not printed in the Gazette.]

1,273,459. SOUNDBOARD. CHARLES CHUDZIKOWSKI, Cambridge, Mass. Filed Dec. 15, 1914. Serial No. 877,438. (Cl. 181—0.5.)



1. In combination with means for producing sound-emitting vibrations, a resonant device comprising a plurality of parallel spaced sound-boards, and a plurality of partitions, each partition being between two adjacent sound boards, but not parallel therewith.

2. In combination with means for producing sound-emitting vibrations, a resonant device comprising a plurality of parallel spaced sound-boards, and a plurality of partitions, each partition being between two adjacent sound boards but out of parallel therewith, with one edge of the partition in close connection with an edge of one of the sound boards, and the other edge of the partition in close connection with an edge of the other sound board.

3. In combination with means for producing sound-emitting vibrations, a resonant device comprising a plurality of parallel spaced sound boards, and a plurality of partitions, each partition being between two adjacent sound boards and composed of a material less resonant than that of the sound boards.

[Claims 4 to 10 not printed in the Gazette.]

1,273,460. BUCKLE OR THE LIKE. CLARK S. COMSTOCK, Sr., East Orange, N. J. Filed Oct. 9, 1917. Serial No. 195,495. (Cl. 24—224.)

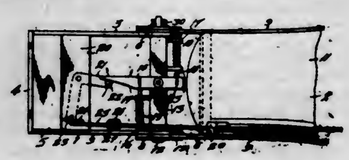


1. A fastener comprising a wire member having a button-receiving portion and a button recess leading thereto, and a looped stop-member extending partially over the top of the button recess and adapted to yield to permit the entrance of the button to such recess, said stop-member formed of the same piece of wire as the portion of the buckle to which it is connected, and being rigidly connected with the wire forming the button recess on the side on which the stop member is located.

[Claims 2 to 4 not printed in the Gazette.]

1,273,461. ELBOW-JOINT FOR ARTIFICIAL ARMS. QUENTIN D. CORLEY, Dallas, Tex. Filed Apr. 9, 1917. Serial No. 160,661. (Cl. 3—12.)

1. In an elbow joint for artificial arms, an upper arm member, a forearm member hinged to the upper arm member, spring actuated means for locking the arm members in adjusted positions, a lever for operating said locking means against the tension of its spring to withdraw said means, and a shoulder controlled flexible connection attached to said lever for swinging the same to withdraw the locking means and to hold the latter in this position while swinging the forearm, said connection by a sudden relaxation thereof releasing the lever and permitting the spring of the locking means to operate the latter.



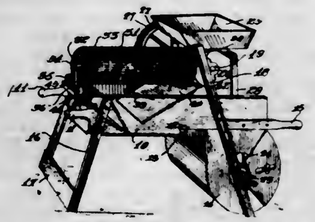
3. In an elbow joint for artificial arms, an upper arm member, a forearm member hinged to the upper arm member, a support at the joint between said arm members, having a plurality of stops, a pair of spring projected pins mounted on said support and engaging the stops, a lever pivoted on the support and engaging said pins on opposite sides of its pivot point, a bell-crank lever carried by the forearm and having one leg engaging the lever, a flexible connection attached to the other end of said bell-crank lever, and guides on the arm members over which the connection passes.

6. In an elbow joint for artificial arms, an upper arm member, a forearm member hinged to the upper arm member, a spring actuated locking device carried by the forearm member and engaging the upper arm member, an operating device carried by the forearm member and engaging the locking device for withdrawing the same, and a flexible connection attached to the operating device and serving to manipulate the same and hold the locking device withdrawn, said flexible connection also serving to swing said forearm member.

7. In an elbow joint for artificial arms; two arm members hinged together; a locking device mounted on one of the members and including oppositely directed spring extended pins engaging the other arm member, a centrally pivoted member engaged by the pins on each side of its pivot point, a bell crank lever having engagement with the pivoted member; and a flexible connection attached to the other end of the lever.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,273,462. GRAIN-SEPARATOR. OSCAR W. CROPLEY, Juniata, Nebr. Filed Nov. 16, 1914. Serial No. 872,448. (Cl. 130—16.)



2. A grain separator including a hopper, a sieve below the hopper, and a fan below the sieve, in combination with a shiftable and adjustable guide board to receive the sifted grain from said sieve and conduct it to a suitable discharge aperture, said fan adapted to force an air blast across the path of the flowing grain as it falls from the guide board to separate the chaff therefrom, and means for deflecting said chaff from the finally discharged grain.

4. A grain separator including a hopper, a sieve below said hopper, grain conducting means between said hopper and said sieve, a reversible guide board beneath said sieve and capable of angular adjustment with relation thereto for suitably conducting the sifted grain to the discharge aperture, a fan operable with said sieve and adapted to generate an air blast for acting upon said grain across its direction of flow and immediately above its discharge to separate the chaff therefrom loosened by said sieve, and means in front of said guide board for deflecting said chaff to a point of discharge.

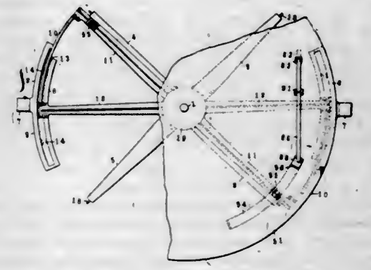
5. The combination in a grain separator, of a hopper, a pair of concentric revolving sieves, an adjustable guide board beneath said sieves to receive grain passing through the inner sieve and conducting the same to a suitable discharge aperture, an angularly slidable and reversible guide board for receiving grain passing through the outer sieve and conducting the same to a second discharge aperture, a fan adapted to drive a blast of air across the flow of both streams of grain immediately before entering the discharge apertures to separate therefrom chaff loosened by said sieves, and means for deflecting said chaff to a point of discharge remote from said apertures.

6. A grain separator including a hopper and a sieve, of supporting side boards, a bottom connecting said side boards and having a grain discharge opening formed therein, an inclined adjustable member mounted upon said side boards below the sieve and terminating at its lower end adjacent said discharge opening, a removable and reversible grain conducting board for operating in one position with said inclined adjustable member for conducting the grain to said discharge opening, means for directing an air current across the stream of grain falling from said adjustable member to the discharge opening, and chaff directing means mounted upon the bottom in front of the adjustable member.

7. In a grain separator, a receiving chute therefor of trough-like shape having discharge openings in the bottom thereof for the passage of grain, and an inlet opening for a current of air across the bottom of said chute and parallel thereto, deflector boards removably mounted in said chute and adjustable to vary the distance between the lower edges thereof and the bottom of the chute for regulating the passage of air thereunder, and its action on the descending grain, and a chaff deflector at the end of the chute opposite the air inlet opening.

[Claims 1 and 3 not printed in the Gazette.]

1,273,463. REVOLVING DOOR. CLAUDE T. DAWES, Johnstown, N. Y. Filed Jan. 11, 1916. Serial No. 71,419. (Cl. 20—18.)



1. In a revolving door, in combination, rotatable wings, fixed arcuate casings therefor, movable arcuate casings associated with said fixed casings, and means whereby said wings in rotating insure alternate predetermined movement of said movable casings therewith and reversely thereto.

6. In a revolving door, in combination, a plurality of rotatable wings, a casing comprising a casing member movable independently of said wings, and means whereby rotation of said wings effects movement of said movable member.

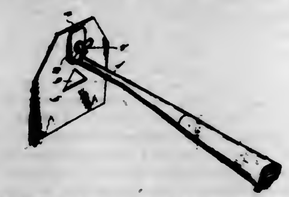
20. In a device of the character described, in combination, a revolving door comprising a plurality of rotatable

wings, movable casings, a support for said casings comprising a fixed member, radiating members rotatably mounted on said fixed member and attached to said casings, and spring means adapted to urge said radiating members and said casings to rotate about said fixed member in a predetermined direction.

27. A revolving door comprising, in combination, a vertical axis, a plurality of rotatable members symmetrically disposed about said axis, a plurality of fixed casings placed concentrically with respect to said axis and adapted to be contacted by the outer edges of said rotatable members, each of said casings subtending an angle less than that between adjacent rotatable members, a slidable member associated with each fixed casing and adapted to add to the angle subtended by the latter, a support for said slidable members, a spring actuated plunger mounted upon said support, means normally holding said plunger in the path of said rotatable members, but containing an aperture through which said plunger may be withdrawn from said path, and means for automatically restoring said plunger to normal position dependent upon the position of said rotatable members.

[Claims 2 to 5, 7 to 19, and 21 to 26 not printed in the Gazette.]

1,273,464. INTERCHANGEABLE GARDEN-TOOL. JOSEPH DE FALCO, Vineland, N. J. Filed Oct. 6, 1917. Serial No. 195,097. (Cl. 287—25.)



1. In a device employing a series of interchangeable tools, the combination of a tool holder, a U-shaped clamp in which the tool holder terminates said clamp being disposed above the main portion of the tool holder, the clamp member having a narrowed spring neck portion, manually adjustable means for clamping the device to a tool, and a tool having a V-shaped slotted portion into which the narrowed neck of the clamp member is insertible, substantially as described.

2. In a device employing a series of interchangeable tools, the combination of a tool holder, a U-shaped resilient clamp member having substantially its entire portion positioned above the tool holder and having a narrowed neck portion, a thumb nut adjusting device mounted in the clamp member, the outer portion of the clamp member being normally sprung apart from the inner portion, and a garden tool member having a V-shaped slotted portion to receive the neck of the clamp member substantially as set forth.

1,273,465. METHOD OF SEPARATING NICKEL FROM NICKEL-COPPER ALLOYS. JOSEPH DHAVERNAS, New Brunswick, N. J., assignor to United States Nickel Company, New Brunswick, N. J., a Corporation of New Jersey. Original application filed July 13, 1916, Serial No. 108,992. Divided and this application filed Sept. 8, 1917. Serial No. 190,308. (Cl. 75—18.)

1. The improvement in the method of extracting nickel from copper-nickel matte which consists in reducing the matte and treating the resulting mass with a neutral or slightly acid solution of copper whereby the copper in solution will be precipitated and the nickel left in solution.

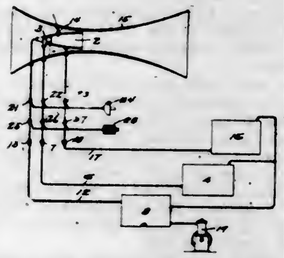
2. The improvement in the method of extracting nickel from copper-nickel matte, which consists in partly oxidizing the matte, reducing the resulting product to a metallic state, and treating the product with a neutral or slightly acid solution of copper.

5. The improvement in methods of extracting nickel from copper-nickel matte containing sulfur which consists in roasting the matte to reduce the sulfur content, then reducing the resulting product, then treating the product with a neutral or slightly acid solution thereby dissolving the nickel, and then adding metallic nickel to the solution for the purpose of precipitating any copper dissolved therein, substantially as described.

7. The improvement in methods of extracting nickel from copper-nickel matte which consists in partly oxidizing the matte by roasting, reducing the resulting matte, treating the resulting mass with a slightly acid copper solution adapted to dissolve the nickel, then treating the solution with metallic nickel, thereby precipitating any small percentages of copper in the solution, then drawing off the nickel salts, and producing metallic nickel therefrom.

[Claims 3, 4, and 6 not printed in the Gazette.]

1,273,466. FUEL-BURNER. WILLIAM A. DOBLE, San Francisco, Cal., assignor to Doble Laboratories, San Francisco, Cal., a Corporation of California. Filed Apr. 28, 1917. Serial No. 165,152. (Cl. 158—28.)

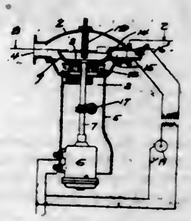


1. The method of burning liquid fuel which consists in producing a continuous spray of light liquid fuel and air, igniting said spray to produce a high velocity flame, employing heat from said flame to volatilize a heavy hydrocarbon, the products of which mix with said flame and increase the velocity of the flame, and causing the kinetic energy of the mixture to induce sufficient air into the flame to complete combustion and further increase the velocity of the gases of combustion.

2. A liquid fuel burner comprising means for projecting a spray of light liquid fuel, means for igniting the spray, means for introducing heavy hydrocarbon fuel into thermal communication with the resultant flame whereby the heavy fuel is vaporized and mixed with the ignited spray, and means for causing the resultant mixture to induce a supply of air into the flame.

[Claims 3 to 7 not printed in the Gazette.]

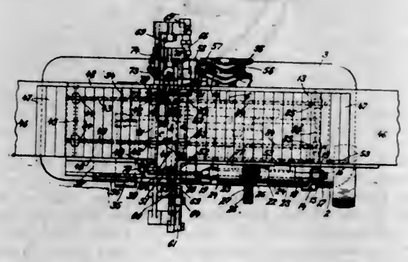
1,273,467. FUEL-BURNER. JOHN A. DOBLE and WILLIAM A. DOBLE, Jr., San Francisco, Cal., assignors to Doble Laboratories, San Francisco, Cal., a Corporation of California. Filed Sept. 4, 1917. Serial No. 189,452. (Cl. 158—77.)



8. In a liquid fuel burner, a rotatable element from which fuel is discharged in a spray, a casing surrounding and spaced from said element, an air blower arranged below said element adapted to blow air upwardly past the periphery of said element, a partly closed chamber having a slot therein into which said periphery extends and having an opening into the casing on that side from which the element rotates, and ignition means in said chamber.

[Claims 1 to 7 and 9 not printed in the Gazette.]

1,273,468. METHOD OF DRILLING BOOKS. GEORGE B. DRACH, Jersey City, N. J., assignor to Jersey City Printing Company, Jersey City, N. J., a Corporation of New Jersey. Filed Jan. 16, 1917. Serial No. 142,627. (Cl. 144—92.)



3. The method of simultaneously drilling a plurality of books consisting in presenting a series of books to a piercing tool, completely piercing all but the last and partly piercing the last, at a single stroke; advancing the partially pierced book next to the tool, and using same as a shield and guide for a second series of books positioned behind it.

[Claims 1, 2, 4, and 5 not printed in the Gazette.]

1,273,469. DOLL OR THE LIKE. WILLIAM P. DUNLANY, Chicago, Ill., assignor to Sears, Roebuck and Company, Chicago, Ill., a Corporation of New York. Filed May 4, 1917. Serial No. 166,314. (Cl. 46—40.)

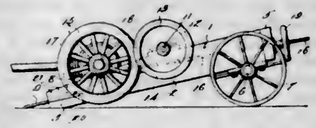


5. A doll or the like comprising, in combination, a torso, a limb, and means for securing them together comprising two elements secured respectively to the limb and the torso, said elements having flat faces arranged to lie alongside each other when associated, one element having a socket at such face terminating in an abutting edge and the other element having a projection adapted to fit in said socket and having a locking shoulder, at least one of said elements being resilient to permit the shoulder to be forced into locking engagement with said abutting edge at the inner end of the socket with the abutting edge and shoulder disposed substantially at right angles with the axes of the socket and projection, the limb being rotatably adjustable with respect to the torso about the axis of said projection and socket.

10. A doll or the like having, in combination, a torso provided with an opening in its upper end and an opening in its side, a head, a rigid anchoring element insertible through the opening in the side of the torso and arranged to extend transversely thereof to be supported at one end in said opening and at its other end by the opposite side wall of the torso, and means insertible through the opening in the upper end of the torso yieldingly engaging with the head and adapted to be detachably connected to the anchoring element.

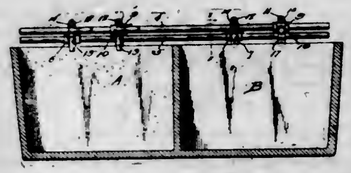
[Claims 1 to 4, 6 to 9, and 11 to 13 not printed in the Gazette.]

1,273,470. POWER-TRANSMISSION ATTACHMENT FOR AUTOMOBILES. HENRY D. ESTES, Hartford, Ky., assignor of one-half to Ulysses S. Carson, Hartford, Ky. Filed Apr. 7, 1917. Serial No. 160,522. (Cl. 74—106.)



A portable power transmission machine for automobiles, comprising a truck frame, wheels supporting one end only of said frame, the other end of the frame being adapted to rest on the ground to dispose the frame in an inclined position, the side bars of said frame being formed with longitudinal channels, rollers journaled in said channels, a power shaft journaled transversely in the frame, friction wheels fast on said power shaft, and means on said frame for pulling the rear axle housing of an automobile toward the power shaft until the driving wheels of the automobile are in frictional engagement with the friction wheels of the power shaft, said rollers being positioned to support said rear axle housing as it is moved toward the power shaft.

1,273,471. PLUMBING-FITTING. THOMAS H. FERRIS, Brooklyn, N. Y. Filed Oct. 19, 1916. Serial No. 126,581. (Cl. 137—75.)



1. In a plumbing fitting, in combination with a plurality of substantially alined supply pipes, outlet means leading from each pipe, a tang on the supply means of the lowermost pipe extending below the lowermost pipe but a greater distance above it, a tang on the uppermost pipe extending above the uppermost pipe but a greater distance below it, and the ends of said tangs lying in parallel lines.

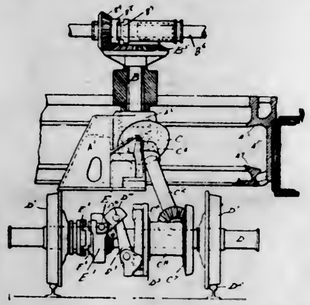
2. In a plumbing fitting, the combination with a receiving member, and a plurality of substantially alined supply pipes therefor, said supply pipes being substantially straight, a coupling for each pipe connected directly thereto, a tang integral with each coupling, the tang of one coupling extending farther above than below its pipe, and the tang of the other coupling extending farther below than above its pipe, the ends of said tangs lying in substantially horizontal parallel lines, a nozzle extending from one of the couplings, a nozzle extending from the other coupling downwardly and forwardly and terminating in the same horizontal plane with the termination of the other nozzle, and faucets extending from said nozzles.

3. In combination with first and second supply pipes, a fitting member for the first pipe, a tang for said fitting member, the second pipe contacting with said fitting member, a strap member extending from the tang and one of said members being provided with a groove to receive the other member.

4. In combination with a supply pipe, a second supply pipe, the second supply pipe being disposed above the first supply pipe, an outlet nozzle extending downwardly from the first supply pipe, a clamping strap to extend across the first supply pipe, a fitting for the first supply pipe, means to secure said strap to the fitting and said strap having a cut out portion to enable it to fit the nozzle and prevent movement relatively to its fastening means.

5. In a plumbing fitting, in combination with a plurality of substantially alined supply pipes, outlet means leading from each pipe, a tang on the supply means of the innermost pipe extending below the lowermost pipe but a greater distance above it, a tang on the uppermost pipe extending above the uppermost pipe but a greater distance below it, the ends of said tangs lying in substantially parallel planes, a clamping strap extending in one of said tangs overlapping one of said pipes, one of said outlet means having abutment means coöperating with said strap, a second strap, said second strap extending from the other tang and overlapping the other pipe and said second strap having a cut out portion to engage the other outlet means for the purpose set forth.

1,273,472. PROPELLING MECHANISM FOR LOCOMOTIVE-CRANES AND THE LIKE. WALTER FERRIS, South Milwaukee, Wis., assignor to Bucyrus Company, South Milwaukee, Wis., a Corporation of Wisconsin. Filed Mar. 1, 1917. Serial No. 151,860. (Cl. 105—227.)



1. A propelling gear comprising a driving sleeve surrounding but not touching a driven axle, a universal joint connecting said driving sleeve with a clutch member revolubly mounted upon said axle and a jaw clutch whereby said sleeve may be connected to or disconnected from the axle.

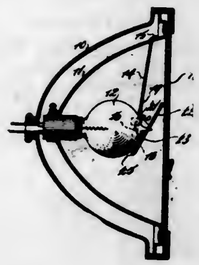
2. A propelling gear for driving an axle comprising a sleeve surrounding but not touching the axle, a clutch member revolubly mounted upon the axle, a disconnectible universal joint whereby the sleeve drives the clutch member and disconnecting means whereby the clutch member drives the axle.

3. In a revolving crane structure which comprises a car body, a revolving frame and an axle, a propelling gear arrangement comprising a source of power mounted on the revolving frame, a bevel pinion shaft concentric with the pivot axis of the revolving mechanism and carrying a pinion at its lower end, a driving sleeve surrounding the axle but mounted upon the car body and an inclined shaft carrying near its two ends bevel gears meshing respectively with the gears on the vertical pinion shaft and on the driving sleeve.

[Claims 4 to 12 not printed in the Gazette.]

1,273,473. LAMP. MEYER N. FINKELSTEIN, Greenwich, Conn. Filed Oct. 11, 1917. Serial No. 195,913. (Cl. 240—48.2.)

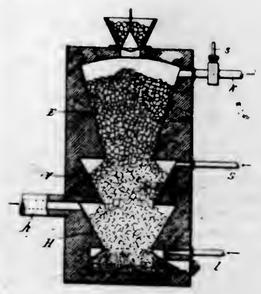
2. A lamp comprising a casing, an opaque light intercepting shield to one side of the front thereof occupying approximately one-half the area of the said front so as to cut off direct light from the lamp and permitting the light within the lamp to be emitted from the other half of said front, and a reflector directly in front of said shield for reflecting the said emitted light from within the lamp rearwardly upon the front surface of said shield.



16. A lamp comprising a casing, a source of light therein, light intercepting means located in the approximate plane of said source of light to one side of the front of said casing, permitting the light within the casing to be emitted from the other side of said front, and a narrow reflecting strip located in the open front of said casing at the approximate diameter thereof and located in front of the edge of said shield and extending approximately parallel with said edge, whereby it is adapted to reflect light from within the lamp rearwardly upon the front surface of said shield, said reflecting strip being inclined from its lower edge away from said intercepting means and being provided at about its mid-length with a shield located in advance of the source of light for preventing direct rays of light being cast forwardly from the lamp.
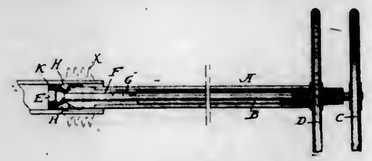
[Claims 1, 3 to 15, 17, and 18 not printed in the Gazette.]

1,273,474. PROCESS OF MANUFACTURING PRODUCER-GAS. EMIL FLEISCHER, Dresden-Altstadt, Germany. Filed May 13, 1914. Serial No. 838,347. (Cl. 48—203.)



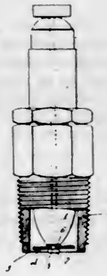
The process of manufacturing from bituminous fuel, producer gas discharged from the producer burning zone at the temperature of the latter, without coming into contact with a superposed layer of cooler fuel, which consists in providing an intermediate heating layer of fuel immediately above the zone from which the producer gas escapes, passing a small portion of the producer gas through the intermediate heating layer, and simultaneously injecting secondary air mixed with steam into said intermediate layer, whereby complete combustion of the small portion of producer gas is secured, and carrying the resulting gases through the superposed layer of cooler fuel in order to distil the latter.

1,273,475. TUBE-EXPANDER. PELL W. FOSTER, New York, N. Y., assignor to Power Specialty Company, New York, N. Y., a Corporation of New York. Filed July 14, 1917. Serial No. 180,498. (Cl. 153—82.)



In a tube expanding machine the combination with a rotary stem of a central adjustable rod carrying one conical member of a ball race, a second conical member secured to the stem, the angle of the rear member, relatively to the direction of movement of the tool through the tube to be expanded, being less than that of the other member of the race, balls adapted to run on the members and a casing with apertures through which the balls project secured to the stem and confining the balls.

1,273,476. SPARK-PLUG. JOHN H. GILL, Yonkers, N. Y. Filed Aug. 2, 1916. Serial No. 112,664. (Cl. 123—169.)



1. As a new article of manufacture, a spark plug comprising a fixed annular electrode, an insulating body mounted within the annular electrode and rigidly connected thereto, a rod mounted centrally and rigidly within the insulating body and a disk-like electrode mounted to rotate freely at the lower end of said rod within the annular electrode, said disk-like electrode presenting a multiplicity of points whereby sparking takes place between said points and the inner wall of the annular electrode, substantially as and for the purposes set forth.

[Claim 2 not printed in the Gazette.]

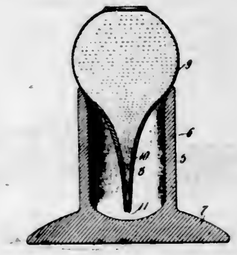
1,273,477. METHOD OF PRODUCING AMMONIUM PERCHLORATE. GUY C. GIVEN, Tamaqua, Pa., assignor to Atlas Powder Company, Wilmington, Del., a Corporation of Delaware. Filed Sept. 10, 1917. Serial No. 190,551. (Cl. 23—13.)

1. The herein described method of producing ammonium perchlorate, which consists in the reacting upon sodium perchlorate with carbon dioxid or carbonic acid in the presence of ammonia.

2. The herein described method of producing ammonium perchlorate which consists in the reacting upon any soluble perchlorate salt, with carbon dioxid or carbonic acid in the presence of ammonia.

3. The herein described method of producing ammonium perchlorate which consists in the reacting upon any soluble perchlorate salt with ammonium bicarbonate.

1,273,478. MUCILAGE-CONTAINER. ROBERT BLYTHE GOODWIN, Memphis, Tenn. Filed Feb. 6, 1918. Serial No. 215,718. (Cl. 91—67.1.)



A mucilage dispenser comprising a spherical and collapsible reservoir having an integral tapering portion tapering to provide an aperture of compartively small cross section whereby to provide a substantially air tight seal to the contents of the reservoir body, and to serve for discharging the mucilage, said tapering extension being flexible and adapted for spreading the mucilage on the surface to be sealed, and a support for the reservoir when not in use, substantially as set forth.

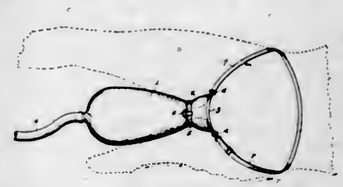
1,273,479. BOTTLE AND LIKE VESSEL. BENOIT JOSEPH XAVIER GOSSELIN, London, England. Filed Sept. 28, 1917. Serial No. 193,682. (Cl. 120—69.)



1. A vessel for containing liquid comprising the combination of a main container for the liquid having a single opening, a dipping well within the container arranged under the opening, and a rigid-walled filling chamber for the dipping well above the open mouth thereof to hold liquid when the vessel is inverted, communicating both with the container and with the mouth of the dipping well.

[Claims 2 and 3 not printed in the Gazette.]

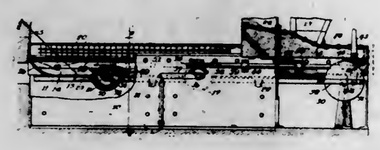
1,273,480. RECEPTACLE. MARGARET E. GRIFFITH, Philadelphia, Pa. Filed Oct. 25, 1915. Serial No. 57,825. (Cl. 128—51.)



In a device of the character described, in combination a flat-sided bag of waterproof material formed at one end with a neck, said neck being substantially round in curvature flaring outwardly from said bag and having its edge cut away so as to provide a pair of opposed concave edges forming a pair of convex edges at right angles to the concave edges, an integral flexible bead extending completely around the convex and concave edges of said neck to reinforce the same, a pair of rings secured at diametrically-opposite points of said neck upon the upper ends of the said convex edges of said neck, a single adjustable belt having its opposite ends secured to said rings so as to permit either of the concave edges of said neck

to be engaged with the body of the wearer and a reinforcing device extending around the bag below the neck, and a supporting device secured thereto.

1,273,481. STOKER. WILLIAM H. HAAS, Detroit, Mich., assignor to Murphy Iron Works, Detroit, Mich., a Corporation of Michigan. Filed Nov. 11, 1914. Serial No. 871,484. (Cl. 110—44.)



1. In an underfeed-furnace stoker construction, the combination of a fuel-retort having a recessed slidable wall, means to reciprocate said wall, a fuel-pusher accommodated in said recess and adapted to travel with said wall and remain fixed in position relative thereto during the movements of the wall, and means to adjust the position of said pusher in said recess to vary the extent of exposure of the wall of the recess to the fuel whereby to regulate the fuel feed without modifying the action of said wall-reciprocating means, substantially as described.

2. In an underfeed-furnace stoker construction, the combination of a fuel-retort having a recessed slidable wall, means to reciprocate said wall, a fuel-pusher adjustably accommodated in said recess, adapted to travel with said wall and remain fixed in position relative thereto during the movements of the wall, and constructed so that adjustment thereof will vary the extent of the projection of the pusher into the retort and will modify the extent of exposure of the recess wall to the fuel, whereby to regulate the fuel feed, and means to adjust said fuel-pusher without modifying the action of said wall-reciprocating means, substantially as described.

3. In an underfeed-furnace stoker construction, the combination of a fuel-retort having a slidable wall, means to reciprocate said wall, a plurality of fuel-pushers carried by said wall and adapted to travel with the wall and remain fixed in position relative thereto during the movements of the wall, and means to adjust said pushers independently to regulate the fuel-feed without modifying the action of said wall-reciprocating means, substantially as described.

4. In an underfeed-furnace stoker construction, the combination of a fuel-retort having a slidable floor provided with a plurality of recesses, means to reciprocate said floor, a fuel-pusher in each of said floor recesses disposed transversely of the direction of the movements of the floor and adapted to remain fixed in position relative to the floor during the movements of the latter, and means to turn said pushers independently about their axes to adjust their positions to regulate the fuel feed, without modifying the action of said floor-reciprocating means, substantially as described.

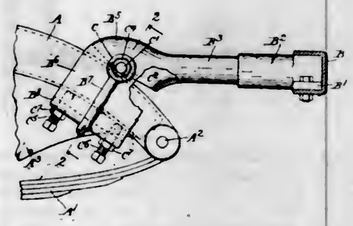
5. In an underfeed-furnace stoker-construction, the combination of a fuel-retort having a slidable floor with a substantially semi-cylindrical transverse cavity, a substantially semi-cylindrical fuel-pusher accommodated in the cavity and adapted to project into the retort, and means to turn said pusher about its axis to adjust its position, whereby to regulate the fuel-feed, substantially as described.

[Claims 6 and 7 not printed in the Gazette.]

1,273,482. BUMPER. LEWIS P. HALLADAY, Streator, Ill. Filed Jan. 22, 1917. Serial No. 143,659. (Cl. 293—55.)

1. A support for automobile bumpers comprising a body adapted partially to inclose one of the automobile frame members and having a fulcrum adapted to contact one side of such member and two adjustable engaging parts adapted to contact the other side of such member.

5. A support for automobile bumpers comprising a body adapted partially to inclose one of the automobile frame members and having a fulcrum adapted to contact one side of such member and two adjustable engaging parts adapted to contact the other side of such member, said fulcrum consisting of a transverse bolt mounted in the body.

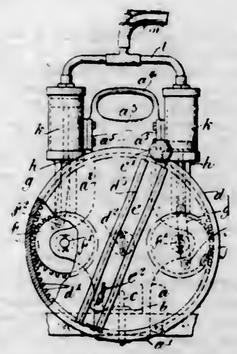


11. A support for automobile bumpers comprising a body adapted partially to inclose one of the automobile frame members and having a fulcrum adapted to contact one side of such member and two adjustable engaging parts adapted to contact the other side of such member the fulcrum being opposite a point which lies between the two adjustable engaging parts, said fulcrum consisting of a transverse bolt mounted in the body adjustably secured at one end to the body and provided with a flange at its other end to overhang the side of the frame.

14. In a support for automobile bumpers, a U-shaped body adapted partially to inclose one of the automobile frame members, a fulcrum at one side of the U, adapted to engage one side of the frame member, and two adjustable engaging parts mounted in the opposite side of the U, adapted to engage the other side of the frame member, the fulcrum being opposite a point which lies between the two adjustable engaging parts.

[Claims 2 to 4, 6 to 10, 12, 13, 15, and 16 not printed in the Gazette.]

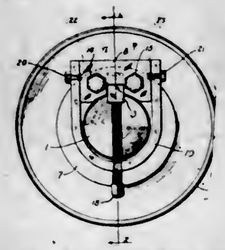
1,273,483. TIRE-PUMP FOR AUTOMOBILES. THOMAS A. HALLERAN, Flushing, N. Y. Filed Oct. 5, 1916. Serial No. 123,814. (Cl. 230—27.)



1. A hand-operated tire pump for automobiles comprising a standard adapted to be secured to the automobile, a pump cylinder mounted on the standard, a crank disk carrying on one side a crank handle and having on the other side an internal gear and also mounted on the standard, a pinion mounted on the standard in engagement with said internal gear and operative connections between the pinion and the pump piston.

2. A hand-operated tire pump for automobiles comprising a standard adapted to be secured to the automobile and having its main portion offset to one side, a pump cylinder mounted on the upper portion of the standard, a flanged or dished crank disk having on one side a crank handle and on the other side an internal gear, said crank gear being mounted on the offset side portion of the standard and overlapping the same, a pinion carried by the standard in mesh with the internal gear and operative connections between the pinion and the pump piston.

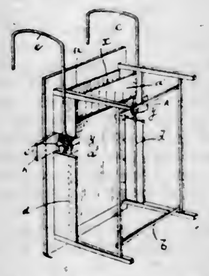
1,273,484. KEY-PULLING DEVICE. CHARLES C. R. HAMMAR, San Francisco, Cal. Filed July 30, 1917. Serial No. 183,645. (Cl. 29—86.1.)



1. A key pulling device comprising a metal block having a hollow portion therein forming a lip portion integral therewith; said lip portion adaptable to engage the headed portion of a key securing two locked members; an adjustable yoke having its ends fulcrumed onto said metal block; said block provided with adjustable jack-screws arranged in the side portions thereof; said jack-screws adaptable to bear upon one of the locked members; said yoke provided with means to hold the device in its operating position during the operation of the jack-screws for the extraction of the key from its secured positions.

[Claims 2 to 4 not printed in the Gazette.]

1,273,485. FIRE-ESCAPE. WILLIAM HENSMAN, Southfields, London, England. Filed Feb. 23, 1916. Serial No. 79,986. (Cl. 227—11.)



1. In a fire escape the combination of a back member, hooks for suspending such member, a substantially rectangular sheet of fireproof material hinged in connection with said backing and adapted in one position to fold against the same, and in another position to turn outward and to form a platform, means for supporting the said platform in the open position when the device is in use, and two fireproof side members hinged to the said backing and adapted when the device is closed to fold over the aforesaid member forming the platform and over one another and when the device is opened to form the sides of a shelter, substantially as described.

4. In a fire escape the combination of a table, a back member attached beneath the top of such table, a substantially rectangular framework composed of metal rods connected to the said back member, links attached to the sides of the said framework carrying large hooks, means for stopping the links of the hooks when the escape is suspended vertically, a substantially rectangular sheet of fireproof material hinged in connection with the said backing, and adapted in one position to fold against the same and in another position to turn outward and to form a platform, a recess in the said platform for the reception of a coil of rope for lowering purposes, means for supporting the said platform in the open position when the device is in use, and two fireproof side members hinged in connection with the sides of the backing and adapted when the device is closed to fold over the aforesaid member forming the platform and over one another and when the device is open to form the sides of a shelter, and means for attaching the lowering rope, substantially as described.

[Claims 2 and 3 not printed in the Gazette.]

1,273,486. EGG-BEATER. SIDNEY C. HILLS, Torrington, Conn., assignor to The Turner & Seymour Manufacturing Co., Torrington, Conn., a Corporation of Connecticut. Continuation in part of application Serial No. 59,561, filed Nov. 4, 1915. This application filed Mar. 28, 1916. Serial No. 87,156. (Cl. 259—131.)



1. An egg beater comprising a handle section, beater floats operatively connected together, supporting wires for said floats, and means for connecting said wires with said handle section, said means exerting a tension on said wires at intermediate points and in a direction transverse to said handle section.

2. An egg beater comprising a handle section having oppositely located indentations, beater floats operatively connected together, supporting wires for said floats having their end portions bridging said indentations and means connected with said wires in registry with said indentations for securing said wires and handle section together, said means exerting a tension tending to draw said wires into said indentations.

4. An egg beater comprising a handle section having oppositely located recesses spaced in a vertical direction and indentations located between said recesses, beater floats operatively connected together, supporting wires for said floats having their end portions located in said recesses and bridging said indentations and a link connecting said wires with said handle section, said link exerting a tension tending to draw said wires into said indentations.

6. An egg beater comprising a handle section having oppositely located recesses spaced in a vertical direction and indentations located between said recesses, said handle section being further provided with a passage extending transversely therethrough between said indentations, beater floats operatively connected together, supporting wires for said floats having the end portions located in said recesses and bridging said indentations and means extending through said passage and connected with said wires whereby the latter are connected with said handle section.

7. An egg beater comprising a handle section having oppositely located recesses spaced in a vertical direction and indentations located between said recesses, said handle section being further provided with a passage extending transversely therethrough between said indentations,

beater floats operatively connected together, supporting wires for said floats having curved end portions located in said recesses and bridging said indentations and a link extending through said passages and connected with the curved portions of said wires, whereby the latter are connected with said handle section, said link exerting a tension tending to draw said wires into said indentations.

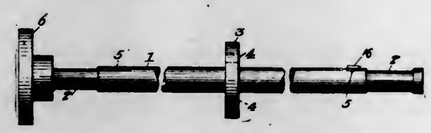
[Claims 3 and 5 not printed in the Gazette.]

1,273,487. BLINDSTITCH-TIP FOR SHOES. LAWSON D. HILTZ, Marysville, New Brunswick, Canada. Filed Aug. 1, 1917. Serial No. 183,863. (Cl. 36—77.)



As a new article of manufacture, a toe boxing comprising a stiffening element, and a cover element attached to the under side of the stiffening element adjacent the inner margin thereof, said stiffening and cover elements being adapted to be stitched to the upper side of the forward margin of a shoe vamp and the cover element folded upon the stiffening element whereby the stiches will be concealed.

1,273,488. ROTARY CUTTER. ROBERT RENTON HIND, Honolulu, Hawaii. Filed Dec. 1, 1917. Serial No. 204,821. (Cl. 146—30.)



1. A rotary cutter comprising a shaft, a fixed collar thereon, a series of knives having central perforations and engaging the shaft on each side of said fixed collar, spacing washers separating the knives, and both passing through registering openings in the fixed collar, the knives and the washers.

2. A rotary cutter comprising a shaft, a fixed collar and end collars thereon, a series of knives having central perforations engaging the shaft on each side of said fixed collar, spacing washers separating the knives, bolts passing through registering openings in the fixed collar, the end collars, the knives and the washers, and means rotatably connecting said shaft and the end collars yet permitting longitudinal movement of said collars on said shaft.

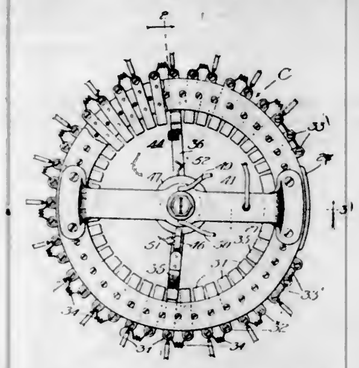
1,273,489. FLOOR-JACK. GEORGE J. HOELZER, Oklahoma, Okla. Filed Mar. 25, 1918. Serial No. 224,579. (Cl. 254—15.)



2. A floor jack, consisting of a movable bar, a shoe therefor, a member provided with a beak, a lever for operating the bar and forcing the shoe against a surface, and means carried by the lever for driving the beak into surfaces.

[Claims 1 and 3 not printed in the Gazette.]

1,273,490. CHARGING-REGULATOR FOR STORAGE BATTERIES. ARTHUR H. HOFFMAN, Ames, Iowa. Filed May 1, 1916. Serial No. 94,704. (Cl. 171—314.)



1. In combination, a variably driven charging generator, a plural unit battery, means for including progressively within the charging circuit unit after unit of the battery in proportion to increase of the charging current, and means for progressively excluding from the charging circuit with decrease in the charging current the unit or units which have been longest in the said circuit.

3. In combination, a variably driven charging generator, a plural unit battery, contacts connected with the units of the said battery, a movable contactor for cooperating therewith, a second movable contactor arranged to follow the first contactor, a current-meter responsive to changes in the charging current, and means controlled by said current-meter for moving said first contactor progressively over the said contacts to include progressively the units of the battery within the charging circuit with increase of charging current, and for causing the said second named contactor to follow said first named contactor to exclude progressively from the charging circuit the units which have been longest in the said circuit, by decrease of the charging current.

9. In combination, a variably driven charging generator, a plural unit battery, contacts connected with the units of the said battery, a movable contactor for cooperating therewith for progressively including within the circuit unit after unit of the battery as the charging current increases, a second movable contactor arranged to follow the first contactor for progressively excluding from the circuit unit after unit as the charging current decreases, and means operable by movement of the first named contactor to its extreme position for interchanging the functions of the two contactors.

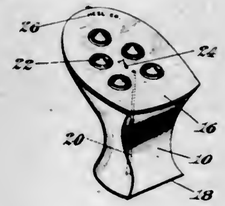
[Claims 2, 4 to 8, and 10 to 13 not printed in the Gazette.]

1,273,491. STUD FOR SNAP-FASTENERS. GEORGE A. HOLMES, Newton Center, Mass., assignor to Fred Joy, Winchester, Mass. Filed Apr. 6, 1918. Serial No. 227,128. (Cl. 24—219.)



A stud member for snap fasteners comprising a main integral core having a convex head and a screw threaded shank; and a stop piece having a tubular portion, which fits snugly on the shank of the core, and a base flange at right angles thereto; and a socket supporting piece composed of a tube reduced or contracted at one end, said tube fitting snugly upon the tubular portion of the stop piece, and the contracted end fitting the shank portion of the core, and said tube being engaged at one end by the head of the core, and at the other end by the flange of the stop piece substantially as and for the purpose described.

1,273,492. HEEL. WILLIAM HUBBARD, Rochester, N. Y., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed July 27, 1916. Serial No. 111,739. (Cl. 36—34.)

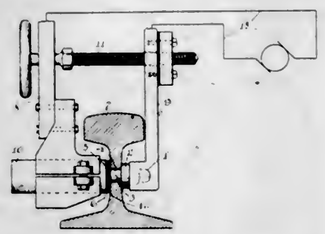


1. A heel having a body portion composed of lifts of fibrous material, and an auxiliary metallic lift soft enough to permit its edge to be trimmed with those of the fibrous lifts, the edges of all of the lifts being exposed in the finished heel and the metallic lift being located next to the top lift.

6. A compressed heel comprising a plurality of superposed lifts including a lift of non-fibrous substantially rigid material that can be trimmed flush with the other lifts in the heel trimming operation.

[Claims 2 to 5 not printed in the Gazette.]

1,273,493. METHOD OF BONDING RAILS. WILLIAM E. HUBER, East Cleveland, Ohio, assignor to The Electric Railway Improvement Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 26, 1914. Serial No. 827,490. (Cl. 219—10.)

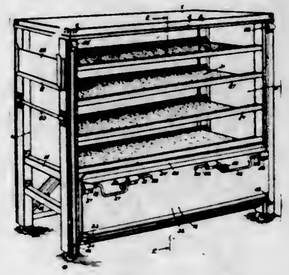


1. The method of homogeneously uniting a plug bond to a rail to which it is mechanically attached by having its terminal portion inserted through an aperture therein, which consists in bringing the end face of the bond terminal into the plane of the adjacent rail surface, pressing a metal plate against such end face of the terminal and adjacent rail surface, and thereupon applying heat from an external source to such plate, whereby the latter is simultaneously welded to such terminal and adjacent rail surface.

4. The method of homogeneously uniting a plug bond to a rail to which it is mechanically attached by having its terminal portion inserted through an aperture therein, which consists in simultaneously heating the end of the terminal and the adjacent rail surface and thereupon homogeneously uniting thereto a metal plate, thereby uniting the terminal, the plate and the rail into an integral structure.

[Claims 2 and 3 not printed in the Gazette.]

1,273,494. SHOE-RACK. RALPH IMBRIANI, Brooklyn, N. Y., assignor of one-half to Newton Cypher, New York, N. Y. Filed Mar. 23, 1917. Serial No. 156,861. (Cl. 211—14.)



1. A rack for shoes comprising a metallic frame work including closed ends, each of said ends being formed from sheet metal bent to form posts having grooves arranged on one edge, said grooves extending from near the top of said posts to near the bottom, trays arranged on said rack, and collapsible sides formed of independent plates with parts extending into said grooves, said plates having overlapping hook members so that each plate may be independent, but connected with the next adjacent plate, so that when the top plate is moved upwardly the other plates will be successively brought into position.

2. A shoe rack of the character described, comprising end members, each of said end members being formed from sheet metal bent so as to form a central body, and a pair of substantially square-shaped posts that act as stiffening members for the body, each of said posts having a bent section forming a guiding groove, means for connecting said end members, a tray arranged on the means for connecting the end members, a top extending from one end member to the other, and sides formed in a plurality of sections adapted to collapse and be nested at the lower part of the rack, said sections having extensions projecting into said grooves.

3. A shoe rack of the character described, comprising a body formed with shelf supporting members and a tray for each of said shelf supporting members, each of said trays comprising sheet metal bent with a reinforcing web centrally thereof on the under face, a pair of upstanding sides and bent-over edges for reinforcing the sides.

4. A shoe rack of the character described comprising end members, each of said end members being formed from sheet metal bent to form a central body, and a pair of posts that act as stiffening members for the body, each of said posts having a bent section forming a guide, means for connecting said end members, a tray arranged on the means for connecting the end members, a top extending from one end member to the other, and side members slidingly positioned in said guides.

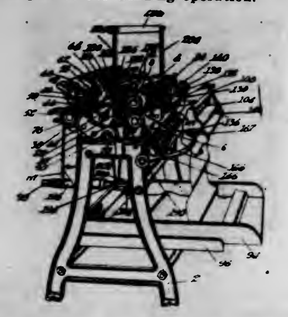
[Claim 5 not printed in the Gazette.]

1,273,495. CUTTING AND FOLDING MACHINE. A BERTSELL IRELAND and FRANK L. IRELAND, Norwich, N. Y. Filed May 23, 1914. Serial No. 840,606. (Cl. 164—65.)

1. In a machine of the class described, means for slitting a web or sheet of fabric into strips, means for folding over the edges of the strips, said last mentioned means being bodily removable from the machine to permit the substitution of means for producing folded strips of different widths and said slitting means being adjustable to produce strips of different widths, and means associated with the folding means for determining the location of the elements of the slitting means to produce strips of widths suitable to be operated upon by said folding means.

5. In a machine of the class described, means for slitting a web or sheet of fabric into strips, means for

winding said strips into rolls, other means for winding the waste edges cut from said web or sheet, and driving means for said last mentioned winding means in operative relation to which said winding means is held by gravity against the pull of the winding operation.

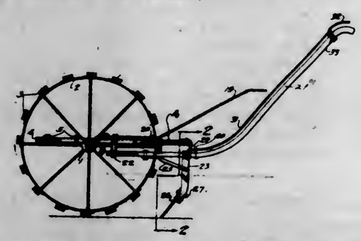


10. A machine of the class described comprising, in combination, means for slitting a web or sheet of fabric into strips, means for winding the strips into rolls, means for effecting and controlling the movement of the fabric through the machine comprising means for tensioning the web or sheet longitudinally before it passes to the slitting means, and in-feeding means between said tensioning means and said slitting means having a surface speed greater than the speed of travel of the web or sheet.

19. In a machine of the class described, in combination, slitting means, means comprising a corrugated roll for drawing the fabric to be slitted through said slitting means at a uniform speed of travel, means for pressing the fabric into engagement with said corrugated roll, means for tensioning the fabric longitudinally, means for tensioning it laterally, and smoothing means for smoothing the fabric before it is acted upon by said tensioning means and for also smoothing said fabric after it is acted upon by said tensioning means and before it enters said slitting means.

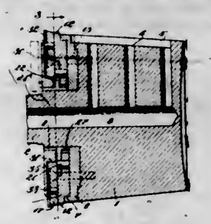
[Claims 2 to 4, 6 to 9, and 11 to 18 not printed in the Gazette.]

1,273,496. AGRICULTURAL IMPLEMENT. GEORGE W. JENKINS, St. Louis, Mo. Filed Feb. 25, 1918. Serial No. 218,942. (Cl. 97—42.)



In an agricultural implement, the combination of an axle, wheels mounted on said axle, a main frame supported by said wheels and adapted to carry suitable wheel-driving means, two handles pivoted at their forward ends to said main frame, a handle-guiding frame having a horizontal slot in which said handles may move laterally, and also having a horizontal series of holes, handle locking-rods extending rearwardly from said guiding frame to a point convenient for the grasp of the operator, and mounted to slide lengthwise upon said handles so that their front ends may be inserted in and withdrawn from said holes in said guide frame, to lock said handles in any desired lateral adjustment, and suitable soil-working devices carried by the said handles.

1,273,497. MANDREL FOR FORMING PAPER RECEPTACLES. DAVID J. JENNINGS, Cleveland, Ohio. Filed May 14, 1917. Serial No. 168,359. (Cl. 93—59.)

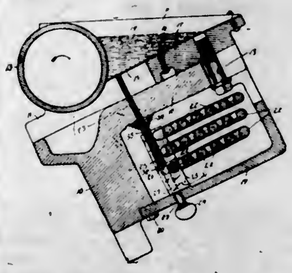


1. A mandrel provided with a bead projecting from the surface thereof, said bead being formed of a series of sections, means for moving said sections toward and away from the axis of said mandrel, said means comprising a revolubly mounted annulus, inwardly extending members rigid with said bead sections, means connecting the annulus and said inwardly extending members for radially moving said sections consequent upon a relative rotation of the annulus and bead sections, said annulus having shoulders, and shoulders on the inwardly extending members coacting therewith to receive the inward thrust on the bead sections.

4. The combination with a mandrel, a bead adapted to project from the surface thereof comprising a series of movable sections, means for moving the sections including a revoluble member connected with said sections, a member connected with the revoluble member and projecting outwardly with relation to the axis of the mandrel and having a cam surface whereby it is adapted to be engaged by a stationary cam to cause relative movement of the revoluble member and mandrel consequent upon the movement of the mandrel past such stationary cam.

[Claims 2 and 3 not printed in the Gazette.]

1,273,498. DUAL ADJUSTING MECHANISM FOR INK-FOUNTAINS, &c. CHRISTEN P. KADDELAND, Shelton, Conn., assignor, by mesne assignments, to Premier Printing Machinery Co., Boston, Mass., a Corporation of Massachusetts. Filed Dec. 3, 1917. Serial No. 205,025. (Cl. 101—365.)

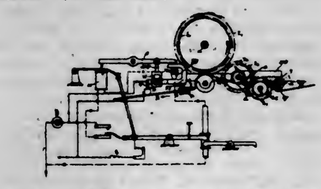


1. In a dual adjusting mechanism, the combination with two interdependent adjusting screws, of connecting means interposed directly between the said screws and constantly having absolute engagement with both of them, and a spring for forcing one of the adjusting screws in one direction, whereby back-lash between them and the said connecting means is eliminated.

12. In an ink fountain, the combination with a primary adjusting screw having rotary movement and also longitudinal nonrotary movement, of a secondary adjusting screw confined to rotary movement, a worm-gear having concurrent absolute engagement with the threads of both of the said screws, a block mounting the said gear and traversed at right angles by both of the said screws, the secondary screw being shouldered to engage with the said block to prevent it from longitudinal movement with respect thereto, and a spring exerting a constant effort to move the primary screw longitudinally.

[Claims 2 to 11 not printed in the Gazette.]

1,273,499. TELEGRAPHIC APPARATUS. PAUL KAEHLER, Berlin, Germany. Filed Apr. 4, 1913. Serial No. 758,961. (Cl. 178—35.)



1. In a type wheel printing telegraph, having a printing lever, the combination of a punching device operated by the movement of the printing lever for receiving the telegraphic message transmitted in form of hole signals in a tape, and a feed device for this tape, which moves in accompaniment to the movement of the type wheel, and of devices for transmitting the telegram recorded on the tape, operated by the movement of the printing lever, substantially as described.

5. In a type wheel printing telegraph having a printing lever, the combination of tape perforating means associated with said printing lever, and transmitting means comprising a plurality of levers carried on said printing lever and arranged transversely of the tape, projections on each of said levers, and a drum provided with a plurality of recesses therein arranged to successively receive the projections on said levers to permit the same to descend into contact with the perforated tape, substantially as described.

[Claims 2 to 4 and 6 to 8 not printed in the Gazette.]

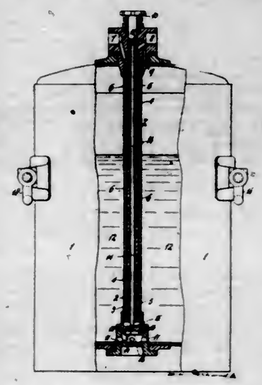
1,273,500. ROOFING-CLEAT. HARRY C. KETTELSON, Milwaukee, Wis. Filed Apr. 20, 1917. Serial No. 163,350. (Cl. 108—7.)



A roofing cleat comprising a flat elongated body plate adapted to lie snugly against an uppermost sheet of roofing material without cutting into the same, said body plate having a nail receiving cup portion struck therefrom whereby to relieve the flat portion of the plate from the driving strains of the nail to prevent it from warping, and a downwardly extending transversely curved flange formed on one longitudinal edge of the body plate, said flange being adapted to have its underside surface yieldingly engaged with an undermost sheet of roofing material.

1,273,501. APPARATUS FOR CHARGING COMPRESSED AIR WITH ATOMIZED LIQUIDS. WALTER EDWARD KIMBER, Harlesden, London, England. Filed Nov. 22, 1916. Serial No. 132,916. (Cl. 37—67.)

1. A compressed air moistening apparatus comprising a closed liquid container provided with a compressed air inlet and a compressed air outlet, an air supply inner tube disposed within said container and connected with said inlet, and an outer tube disposed within said container in communication with the interior thereof and with said outlet, a channel of relatively small area in relation to said inner tube being formed between said inner and outer tubes, said inner tube having a port establishing communication between it and said channel, said apparatus being adapted to supply to the bore hole produced by a rock drill a volume of compressed air containing a small percentage of moisture sufficient to allay the dust therein and to remove same therefrom.



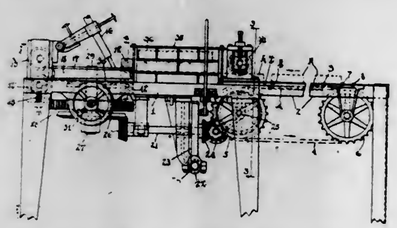
4. A compressed air moistening apparatus comprising a closed liquid container provided with a screw-threaded orifice, a tubular plug adapted to close said orifice and provided with a compressed air inlet, a compressed air outlet and a channel connecting said inlet with the interior of said vessel, an outer tube disposed in said vessel and connected at its upper end with said plug and in communication at its upper end with said outlet and at its lower end with the interior of said vessel, and an inner tube disposed within said outer tube and forming a channel therebetween and having its upper end connected with said plug and in communication with said inlet, said inner tube being closed at its lower end and provided with a passage connecting it with said channel.

6. A compressed air moistening apparatus comprising a closed liquid container provided at its upper end with a screw-threaded orifice and at its lower end with a tapered socket having lateral openings, a tubular plug adapted to close said orifice and provided with a compressed air inlet, a compressed air outlet and a channel connecting said inlet with the interior of said vessel, an outer tube disposed in said vessel and connected at its upper end with said plug and in communication at its upper end with said outlet and provided at its lower end with a tapered cap extending into said socket and provided with a screened orifice, an inner tube disposed within said outer tube and forming a channel therebetween and having its upper end connected with said plug and in communication with said inlet, said inner tube being closed at its lower end and provided with a passage connecting it with said channel, and a valve spindle disposed in said inner tube and provided at its lower end with a valve closing said screened orifice and at its upper end with actuating means.

8. A compressed air moistening apparatus comprising a closed liquid container provided with a compressed air inlet and a compressed air outlet, an air supply channel disposed within said container and connected with said inlet, a channel of relatively small area in relation to said air supply channel, disposed in said container and in communication with the interior thereof and with said outlet, said air supply channel having a port connecting it with said channel of relatively small area above its point of communication with said interior, and means connecting said compressed air inlet with the interior of the vessel outside said channels, said apparatus being adapted to supply to the bore hole produced by a rock drill a volume of compressed air containing a small percentage of moisture sufficient to allay the dust therein and to remove same therefrom.

[Claims 2, 3, 5, and 7 not printed in the Gazette.]

1,273,502. TUBE-WELDING MECHANISM. FRANK KRITZ, Cleveland, Ohio, assignor, by meane assignments, to The Standard Parts Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 3, 1916. Serial No. 123,514. (Cl. 78—83.)



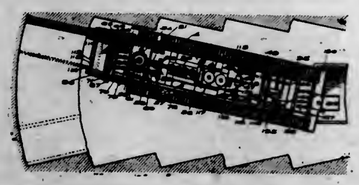
3. In mechanism for welding longitudinal seams on tubes or like articles of varying diameter, the combination with a suitable welding device; of means for feeding the article past said device, said means including a pair of complementary, peripherally grooved rollers, the grooves in the latter being of varying cross-sectional form to correspond with the varying diameter of the article; and a guide roller alined with the direction of movement of such article through said feed rollers, said guide roller being resiliently mounted to accommodate the varying diameter of the article.

15. In mechanism for welding longitudinal seams on tapered tubes or like articles of similarly varying diameter, the combination with a suitable welding device; of an endless chain for conveying the article, said chain being arranged and constructed to support such article with its seam parallel to the direction of travel; and means for feeding the article past said device, said means including a pair of complementary, peripherally grooved rollers, the grooves in the latter being of circular cross-section, but constantly increasing in diameter from the point where the article is initially gripped to the point where it is discharged.

20. Feeding mechanism for tubes or like articles of varying diameter, comprising a pair of complementary, peripherally grooved rollers, the grooves in the latter being of varying cross-sectional form to correspond with the varying diameter of the article; and a guide roller alined with the direction of movement of such article through said feed rollers, said guide roller being resiliently mounted to accommodate the varying diameter of the article.

[Claims 1, 2, 4 to 14, 16 to 19, and 21 to 23 not printed in the Gazette.]

1,273,503. MINING-MACHINE. HARRY A. KUHN and WALTER W. MACFARREN, Pittsburgh, Pa.; said Macfarren assignor to said Kuhn. Filed Jan. 14, 1909. Serial No. 472,304. (Cl. 125—14.)



1. In a mining machine, a frame, a pair of guides one above the other on said frame, an adjustable carriage on each of said guides, a horizontally operating channeler on each of said carriages, and means for setting both of said channelers at either side of the frame.

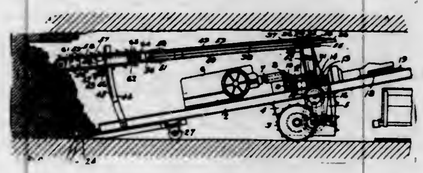
3. In a mining machine, a frame, a pair of wheels at the rear end thereof about which the frame may pivot, a channeler of rectangular section pivoted on a horizontal pivot secured to said frame, means for feeding the cutting end of said channeler bar edgewise to make a deep narrow vertical cut, and means for swinging the frame and the cutting end of said channeler bar sidewise to make a deep wide horizontal cut.

9. In a mining machine, a reciprocating frame, a cutter of elongated, rectangular section mounted on said frame and arranged to make a horizontal cut and a shearing cut, said shearing cut being made independently of said horizontal cut, a motor, a longitudinal shaft, and connections between said motor and said longitudinal shaft, power actuated means to move the frame holding the cutting elements sidewise and power actuated means to move the frame forward and backward, so as to position the horizontal cutter to its work as it moves sidewise.

13. In a mining machine, a reciprocating frame, a cutter of elongated, rectangular section supported on said frame arranged to be positioned at any selected height, power actuated means to position said cutter, power actuated means to swing the frame holding said cutter and said cutter horizontally about a center, power actuated means to move the machine forward and backward.

[Claims 2, 4 to 8, 10 to 12, and 14 to 17 not printed in the Gazette.]

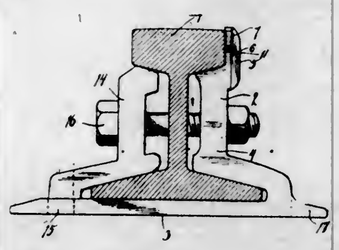
1,273,504. APPARATUS FOR MINING COAL. HARRY A. KUHN, Pittsburgh, Pa. Filed May 18, 1914. Serial No. 839,331. (Cl. 37—11.)



1. In a mining-machine, the combination with a suitable frame, dislodging and conveying means carried thereby, operating along a horizontal plane, a vertically swinging frame, means for raising and lowering the said swinging frame, a sliding frame on said swinging frame, means for advancing and withdrawing said sliding frame, and disrupting devices carried by said sliding frame.

[Claim 2 not printed in the Gazette.]

1,273,505. RAIL-JOINT. GEORGE LANCE, Ponderey, Idaho. Filed Nov. 26, 1917. Serial No. 204,042. (Cl. 239—3.)



1. In a rail joint, a base plate, a fish plate rising from one side thereof and integral therewith, an upwardly extending longitudinal ridge on said fish plate, a shoe removably supported thereon, said shoe being slightly higher than the ball of the rail at its center and inclining downward from the center to each end, the extremities of which are lower than the ball of the rail.

2. In a rail joint, a base plate and a fish plate integral therewith, an upwardly extending web portion formed on said fish plate and a tenon thereon, a shoe with a groove therein forming a dovetail with the tenon, a space between the shoe and the tenon, and a depending tongue engaging the tenon over the central portion thereof.

3. In a rail joint, a base plate and a fish plate integral therewith, a shoe removably engaging with the fish plate and higher than the rail over its central portion and lower than the rail at its extremities, locking means for securing the shoe to the fish plate consisting of a dovetail joint, and means whereby the shoe will engage the tenon of the dovetail on all surfaces except the upper corners of said tenon.

4. In a rail joint, the combination of adjoining rail ends, a fish plate and a combination tie plate and fish plate, said latter fish plate having an upraised edge portion adjusted closely alongside the outer side of the rails and supporting on its upper edge a shoe, said shoe removably attached to said upraised edge portion and having a direct downward bearing surface equal to the cross section of said upraised portion.

1,273,506. PROCESS FOR THE MANUFACTURE OF WIRES FROM REFRACTORY MATERIALS. ANTON LEDERER, Vienna, Austria, assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed May 16, 1914. Serial No. 838,949. (Cl. 205—21.)

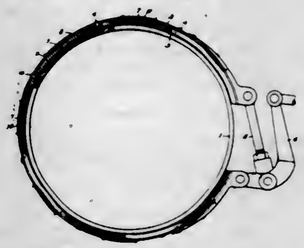
1. The process of manufacturing wire from refractory metallic bodies, consisting in covering such bodies with a non-metallic substance which is readily volatile without a residue, drawing the body while so covered and protected and afterward removing the said substance by heat.

6. In the process of manufacturing wire from tungsten, the step consisting of covering bodies of tungsten with sulfur, the said sulfur serving as a protection against oxidation and also as lubricant.

10. The step in the process of manufacturing wire from tungsten, which consists in covering tungsten bodies with a substance the compounds of which with tungsten are unstable at the volatilization point of said substance, said substance serving to protect said body against oxidation and also as a lubricant.

[Claims 2 to 5 and 7 to 9 not printed in the Gazette.]

1,273,507. BRAKE-BAND. JOSEPH B. LEONARD, Detroit, Mich. Filed Apr. 14, 1917. Serial No. 161,946. (Cl. 74—37.)



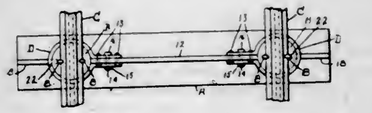
1. In a brake, the combination with a drum and a contractible band therefor, said band having a yieldable lining for engagement with said drum, of a circular series of flat flexible plates interposed between said band and lining in surface contact with said lining and bearing at opposite ends upon the inner arcuate face of said band, and means to retain said plates in fixed spaced relation between said band and lining.

3. In a brake, the combination with a drum and a contractible band therefor, said band carrying a yieldable lining for engagement with said drum, of a plurality of circumferentially spaced flat plates inserted between said band and lining in bearing engagement at opposite ends with the inner arcuate face of said band and yieldably supporting and deflecting contiguous portions of said lining inwardly of the arc of said band, and anchoring members carried by said plates and interlocking with said band for retaining said plates against displacement therewith.

5. In a brake, the combination with a drum and a contractible band having a yieldable lining for engagement with said drum, said band having a circular series of spaced apertures in the wall thereof, of flat flexible plates interposed between said band and lining in bearing contact at opposite ends with the inner arcuate face of said band and yieldably deflecting engaged portions of said lining inwardly of the arc of said band, and lateral tongues on said plates freely engaged in said apertures for loosely retaining said plates engaged with said band.

[Claims 2, 4, and 6 not printed in the Gazette.]

1,273,508. RAIL-SUPPORT. BENNO B. LEUSTIG, Cleveland, Ohio. Filed Apr. 23, 1918. Serial No. 230,232. (Cl. 238—5.)



1. The combination, with the body of a railway tie, said body being adapted to extend below and transversely of the rails of a railway track and having two seats which are formed by the top and spaced longitudinally of the body and being provided between said seats with an upwardly projecting flange extending longitudinally of the body, and two blocks adapted to be employed in supporting said rails and arranged the one over one of said seats and the other over the other of said seats, of a strap for each block for attaching said block to said flange, said strap embracing said block and being secured to said flange.

4. In a rail-support, a body adapted to extend below and transversely of a rail and having two upwardly projecting spaced flanges, and a block occupying the space between said flanges and supported on said body and constituting a support for the aforesaid rail, said block being attached to one of said flanges, and the other of said flanges having a portion extending into said block.

8. In a rail-support, a body adapted to extend below and transversely of a rail and having two upwardly projecting spaced flanges, a block occupying the space between said flanges and supported on said body, said block being circular in plan and constituting a support for the aforesaid rail and being provided, at its external circumferential surface, with a recess, and a metal strap extending circumferentially of the recessed portion of said block and provided with a slot arranged to register with said recess, one of said flanges having a portion thereof extending through said slot and into said recess, and the aforesaid strap being attached to the other of said flanges.

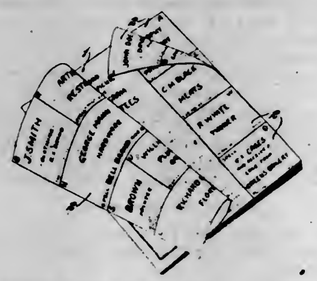
9. In a rail-support, a body adapted to extend below and transversely of a rail and having two upwardly projecting spaced flanges, a block supported on said body between said flanges and constituting a support for said rail, and a strap embracing said block and attached to one of said flanges, the other of said flanges having the lower portion thereof extending, at the lower end of said block, through the adjacent portion of said strap and into said block.

[Claims 2, 3, 5 to 7, 10, and 11 not printed in the Gazette.]

1,273,509. SYSTEM FOR AWARDING ARTICLES OF MANUFACTURE AS PRIZES. HERMAN H. MENSENDICK, St. Louis, Mo. Filed Sept. 10, 1917. Serial No. 190,681. (Cl. 283—56.)

1. A system for awarding prizes comprising a multiplicity of advertising cards, each bearing a letter of the alphabet, the letters on some of said cards being fixed, and the letters on other cards being variable, fixed and variable letters being necessary to spell the name of some

article advertised, and the variations being such that no two names of advertised articles can be spelled with the same letters.

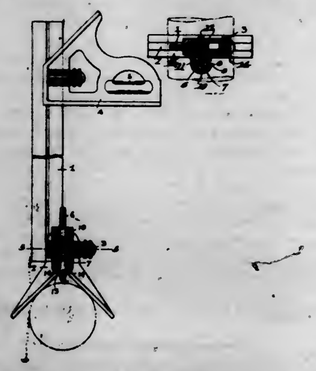


2. A system for awarding prizes comprising a multiplicity of advertising cards, each bearing a letter of the alphabet, the letters on some of said cards being fixed, and the letters on other cards being variable, fixed and variable letters being necessary to spell the name of some article advertised, the variations being such that no two names of advertised articles can be spelled with the same letters, and an index for said system, said index comprising a list of the articles advertised arranged in a column, and a list of the variable letters, said variable letters being arranged opposite the respective article names in the column under headings indicating the particular cards.

3. A system for awarding prizes which comprises a series of groups of advertising cards, each card bearing a letter of the alphabet, and a plurality of the letters in each group of cards spelling the name of an advertised article, the name spelled by each group of cards being different from that spelled by any other group of the series, the name spelled by each group being determined by the location of certain variable letters in specified places, together with an index to said system, said index comprising said variable letters and their different locations, whereby the word spelled by each group can be ascertained.

[Claims 4 to 6 not printed in the Gazette.]

1,273,510. ATTACHMENT FOR COMBINATION-SQUARES. ABEL S. LINDQUIST, Springdale, Pa. Filed Sept. 2, 1914. Serial No. 859,900. (Cl. 33—189.)

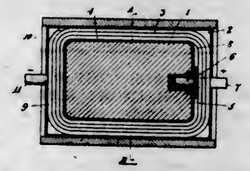


1. In a centering device, the combination with a blade equipped with a centering head and a spirit level located at a substantial distance from said head, of a prick punch slidably mounted in a short sleeve, said sleeve having means to position it accurately in engagement with said centering head.

6. A prick punch comprising a punch proper, having a shoulder near the point thereof, and a weighted sleeve slidably mounted on said punch whereby when said punch point is positioned, said sleeve may be slid quickly against said shoulder to cause said point to produce an impression, said sleeve also having longitudinal grooves of different cross-area whereby said device is adapted to be used in conjunction with centering heads having complemental parts to fit said grooves, said parts also being of different cross-section according to the sizes of the centering heads respectively.

[Claims 2 to 5 not printed in the Gazette.]

1,273,511. ROTATING FIELD-MAGNET. BIRGER LJUNGSTRÖM, Stockholm, and FREDRIK LJUNGSTRÖM, Brevik, Lidingön, Sweden. Filed Jan. 19, 1918. Serial No. 212,771. (Cl. 171—209.)



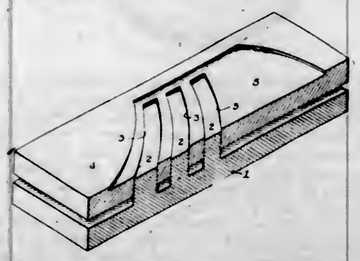
1. A rotating magnet provided with a series of slots, conductors wound in said slots and terminals for each of said conductors, each end of each conductor being extended for some distance in its slot beyond the proximate terminal, such terminal being close to the axis of rotation of the magnet, for the purpose set forth.

2. A rotating magnet provided with a slot and a conductor wound therein forming several convolutions and provided with projecting terminals, the innermost convolution having its ends extended in the slot beyond the proximate terminal, such terminal being close to the axis of rotation of the magnet for the purpose set forth.

3. A rotating magnet provided with a slot having a recess connecting therewith, and a conductor wound in said slot and having terminals, its inner end being extended in the slot beyond the proximate terminal, the inner convolution of said conductor being provided with a part to engage said recess.

4. A rotating magnet having a series of slots, and conductors wound in successive convolutions therein and terminals for said conductors at the axis of rotation, the inner and outer convolutions of each conductor being extended in the slot beyond the proximate terminal and each inner winding being provided with a part arranged to engage a recess in the magnet core near the axis of rotation for the purpose set forth.

1,273,512. DIE FOR SETTING CHEVRON-STRIPES. RUDOLF LOEB, Jenkintown, Pa. Filed Mar. 28, 1918. Serial No. 225,378. (Cl. 223—52.)



1. The combination with a base member having a post, a plate overlying said base member and apertured in registry with and for the passage of said post, article positioning means carried by said plate, and means for yieldingly supporting said plate with respect to the base.

2. The combination with a base member having a post, a plate overlying said base member and having its upper face recessed and the wall thereof apertured in registry with and for the passage of said post, and means for yieldingly supporting said plate with respect to the base.

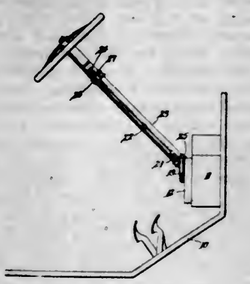
[Claims 3 to 6 not printed in the Gazette.]

1,273,513. STUD FOR SNAP-FASTENERS. GEORGE A. MCCORMACK, Medford, Mass., assignor to Fred Joy, Winchester, Mass. Filed Apr. 6, 1918. Serial No. 227,126. (Cl. 24—219.)



A stud member for snap fasteners comprising a main integral core having a convex head and a screw threaded shank of smaller diameter than the head, and a tubular barrel piece larger than the shank portion, and having one end reduced in diameter to fit the shank portion adjacent to the head, and having an outwardly extending flange at the other end, and an eyelet having its tubular body portion inserted between the shank of the core and the surrounding tubular barrel substantially as and for the purpose described.

1,273,514. SWITCH-OPERATING DEVICE FOR MOTOR-VEHICLES. JOHN N. MCFARLAND and FREDERICK W. LETSCH, Baltimore, Md.; said Letsch assignor to said McFarland. Filed Aug. 16, 1917. Serial No. 186,590. (Cl. 74—39.)

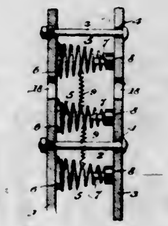


1. In an automobile, a switch box, a removable key therefor having a lateral projection provided with a slot therein, a member having a ball portion thereon, extending through said slot, a spring secured to said key and adapted to engage the ball portion of said member to hold the member within the slot, and means connected to said member and extending upwardly therefrom and adapted to be manually operated to actuate said member and turn the key.

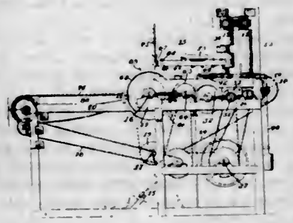
[Claim 2 not printed in the Gazette.]

1,273,515. ARMOR FOR VEHICLES. JOHN E. MAKRENOS, Detroit, Mich. Filed Oct. 24, 1917. Serial No. 198,304. (Cl. 114—9.)

An armor comprising a fixed inner wall, cylindrical bosses carried thereby, an outer movable wall, buffers on the inner face of said wall having shanks in the axes of said cylindrical bosses, coiled compression springs having the inner convolutions surrounding said bosses and engaging said inner wall and the outer convolutions bearing against said buffers and surrounding the shanks thereof, resilient coupling members connecting the intermediate convolutions of said springs and independent of walls, and a plurality of bolts carried by said inner wall and extending through said outer wall with the heads thereof limiting the outward movement of said outer wall relative to said inner wall.



1,273,516. WOODWORKING-MACHINE. JOHN S. MARDON and LOUIS D. FAY, Loyalton, Cal. Filed Sept. 13, 1915. Serial No. 50,366. (Cl. 193—1.)



1. In a machine for bundling, counting and delivering boards, an overturning carrier, means to feed the boards on edge in successive order to the carrier, said boards being received in an edgewise position by the carrier and on a horizontal plane and means operative when a predetermined number of boards have been deposited on the carrier to move the latter to a position where the boards will be dumped on their flat sides.

6. In a machine for stacking boards, the combination of a carrier and feeding mechanism, and means to receive boards delivered by said feeding mechanism and move them laterally into the carrier, said means comprising a reciprocal device intermittently operated and controlled by the passage of boards through said feeding mechanism.

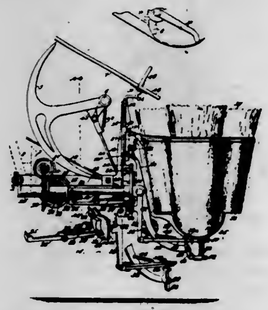
8. In a wood working machine, the combination of a carrier mounted upon an endless conveyer, means to feed boards therein, a locking device for the carrier to retain the boards in position therein, and a trip device to actuate the lock when the carrier is moved to dumping position.

11. In a wood working machine, the combination of a traveling carrier to receive boards and turnable at right angles to dumping position, an arm overlying said boards when the carrier is in receiving position and serving to retain said boards within the carrier when the latter is turned, locking means on said arm, and a trip device to release said locking means, when engaged thereby, to cause the carrier to dump its load.

21. In a machine for receiving, bunching and delivering boards, an endless conveyer having a long horizontal run and a short vertical run, a bucket thereon arranged to be filled with boards, one on the horizontal upper run of the conveyer, means to lock the boards in place within the bucket, and means operative to release the locking means and permit the bucket to dump its contents when the latter is upon the vertical run of the conveyer.

[Claims 2 to 5, 7, 9, 10, 12 to 20, and 22 not printed in the Gazette.]

1,273,517. GRAIN-SHOCKER. FRANK D. MARSHALL, Central City, Iowa. Filed Apr. 8, 1918. Serial No. 227,360. (Cl. 56—122.)



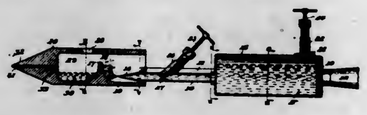
1. Combined with a harvesting machine and its self-binding mechanism, a receptacle to receive the bundles with their butts upstanding, means to shift the receptacle to position to receive each successive bundle, and means adapted to invert the receptacle to deposit the grain shock on the ground.

2. Combined with a self-binder, a receptacle to receive the bound bundles heads down therein, means for intermittently rotating said receptacle, and means to invert the same to dump the collected shock.

14. Combined with a shocker for self-binders, comprising a receptacle to receive the bundles on end, means for turning the same intermittently to receive successive bundles, and means for inverting the collected shock, a knotter carried by said receptacle, and mechanism cooperating therewith to encircle the shock with a tied twine before its inversion.

[Claim 3 to 13 and 15 not printed in the Gazette.]

1,273,518. SOLDERING-IRON. ANDREW MERČAK, East Douglass, Mass. Filed Mar. 25, 1918. Serial No. 224,523. (Cl. 158—27.)

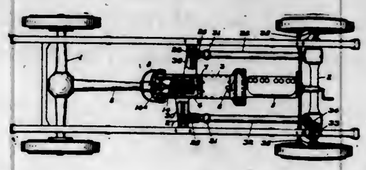


4. A soldering iron comprising a block having a forwardly arranged point and further having an internal chamber provided with a substantially central baffle plate dividing the chamber into an open ended outer portion and an axial outlet in its forward pointed portion and a groove leading from the said outlet into the crucible portion, the said block further having an inlet above the crucible portion and side openings at opposite sides of the baffle plate, a shank carried by the rear end of the block, a holding handle upon the free end of the shank, a gasolene tank arranged upon said shank, a burner tube extending from said tank with a tapered outlet burner end within the block adjacent the outer side of said baffle plate, a controlling needle valve in the said outlet pipe, an air inlet nipple upon the tank, a needle valve for the said nipple and a removable head at the outer end of the tank.

[Claim 1 to 3 and 5 not printed in the Gazette.]

1,273,519. POWER-TRANSMITTING MEANS FOR MOTOR-DRIVEN VEHICLES. THEODORE H. MILLINGTON, Pontiac, Mich. Filed Mar. 22, 1916, Serial No. 86,020. Renewed May 11, 1917. Serial No. 168,060. (Cl. 21—90.)

1. In a motor vehicle, in combination with an engine shaft, a driving shaft in substantial continuation of the engine shaft and with its axis co-incident with the axis of said engine shaft, wheel driving transmission shafts, a differential mechanism operatively intermediate the driving shaft and transmission shafts, said differential having the driving and driven elements thereof arranged concentrically of the axis of the driving shaft.



4. In a motor vehicle, in combination with an engine located substantially midway of the transverse axis of the chassis, a horizontal engine shaft, a horizontal driving shaft extending rearwardly from the engine shaft in axial continuation thereof and a multiple differential having its elements concentric of the driving shaft and operatively connected with the driving wheels.

6. In driving mechanism for motor vehicles, an engine located substantially midway of the transverse axis of the chassis, an engine shaft, power transmitting shafts leading to the front wheels and a single power transmitting shaft leading to the rear axle, all of said shafts extending parallel to the axis of the engine shaft and being symmetrically disposed with relation to the vertical plane passing through the same.

8. In a motor vehicle, a power shaft, a differential mechanism having its elements mounted on said shaft and concentric thereof and having its driving elements operated therefrom, said differential having one side of its driven elements operatively connected to the rear axle, a second differential also having its elements mounted on and concentrically of the said power shaft and having its driven elements operatively connected with the front wheels, a common sleeve for said differentials journaled on said shaft, the other side of said first differential being operatively connected with the driving element of said second differential through said common sleeve.

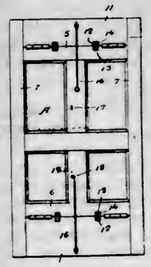
11. In a motor vehicle, in combination with an engine mounted to the rear of the front axle and with its shaft lying in the horizontal plane of the axle and in the midway vertical plane of the vehicle, a multiple differential to the rear of the engine and operable to differentiate between the two front wheels and between the front pair and rear pair and having its driving shaft in substantial rearward continuation of the engine shaft, a pair of separate transmission shafts for the front wheels extending forwardly from the line of the differential and connected to opposite sides thereof, a single transmission shaft for the rear wheels, extending rearwardly from the differential shaft and in substantial continuation thereof, a differential on the rear axle to which said rear transmission shaft connects, all of said transmission shafts being substantially in the horizontal plane of the axles.

[Claims 2, 3, 5, 7, 9, and 10 not printed in the Gazette.]

1,273,520. DOOR. DANIEL W. MILLSAPS, Washington, D. C. Filed Nov. 7, 1917. Serial No. 200,835. (Cl. 20—35.)

A door having its top and bottom rails spaced from the ends of the stiles to provide openings at the top and bottom of the door, said rails having recesses therein opening out through one side edge of the rails, panels in said openings hingedly connected with the rails and having recesses in one side edge thereof coacting with the recesses in the rails in providing pockets extending above and below the hinge connection of the panels with the rails, and springs under tension in said pockets connected with the panels and rails, said recesses opening out at one end through one side of the panels and rails contiguous to the side edge of the panels and rails in

which the recesses are formed, whereby when said panels are in lowered position said springs are disposed to one



side of the hinge connection of the panels with the rails with the tension of said springs relaxed.

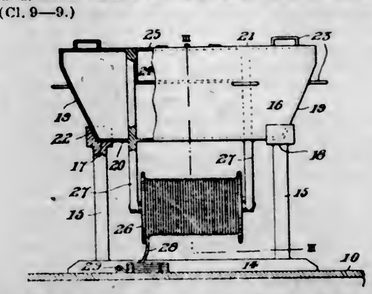
1,273,521. MANUFACTURE OF CHAIRS. HAROLD B. MORRIS, Glendale, Cal. Filed Aug. 15, 1916. Serial No. 114,989. (Cl. 155—3.)



2. In a chair, the combination of a U-shaped blank having bends forming back, seat and front leg portions, the sides of said blank being also laterally deflected to define the outlines of the back, seat and legs, and a correspondingly shaped fabric slidably engaged with the sides of said blank and held taut by the resilience of said blank.

[Claims 1 and 3 to 5 not printed in the Gazette.]

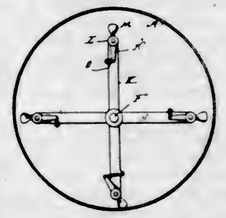
1,273,522. INDICATING-BUOY. JOSEPH MULARZ, Midland, Mich., assignor of one-third to I. Solosky, Midland, Mich. Filed Feb. 26, 1918. Serial No. 219,224. (Cl. 9—9.)



1. A combined indicating float and life raft comprising opposite standards securable to the deck of a boat and having cross pieces formed with inwardly opening sockets, said sockets being provided with upwardly and outwardly diverging inner sides, a float having downwardly converging ends normally seated within said sockets with said ends freely contacting said inner sides of the sockets, and a flexible connector between the float and the deck of the boat.

2. A combined indicating float and life raft comprising opposite standards securable to the deck of a boat and having cross pieces formed with inwardly opening sockets provided with upwardly and outwardly diverging inner sides, a float having downwardly converging ends normally seated within said sockets with said ends freely contacting said inner sides of the sockets, a pair of spaced depending bracket arms carried by the bottom of said float, a reel rotatably supported by the lower ends of said bracket arms, and a line normally wound upon said reel with its free end attached to the deck of the boat.

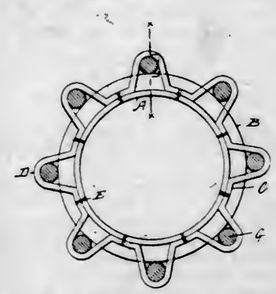
1,273,523. CRUDE-OIL STILL. THOMAS E. MURRAY, New York, N. Y. Filed Dec. 14, 1916. Serial No. 136,863. (Cl. 196—4.)



2. A horizontal cylindrical oil still, heads therefor, one of said heads having a delivery opening, a longitudinal rotary shaft eccentrically disposed in said still and journaled in said heads, radial arms on said shaft, hubs pivoted at the ends of said arms, angularly placed scraping blades carried by said hubs, levers carried by said hubs, and helical springs connecting said levers to said arms; whereby upon the rotation of said shaft, solid material on the bottom of said still engaged by said blades is moved lengthwise the still to said delivery opening.

[Claim 1 not printed in the Gazette.]

1,273,524. COUPLING FOR FLANGED TUBES OR PIPES. THOMAS E. MURRAY, New York, N. Y. Filed Mar. 8, 1917. Serial No. 153,269. (Cl. 285—137.)



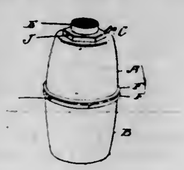
1. A tube, an end flange thereon, and a ring bent in a plurality of places to form a series of loops of greater radial length than said flange and projecting beyond the circumference thereof, the said ring being in contact with said flange.

2. A tube, end flange and ring, as in claim 1, the intermediate portions of said ring between said loops being welded to said tube.

3. A tube, an end flange thereon, and a ring bearing against said flange and having a plurality of radially pro-

jecting loops extending beyond the circumference of said flange the intermediate portions of said ring between said loops being welded to said tube, and the said loops being edge welded to said flange.

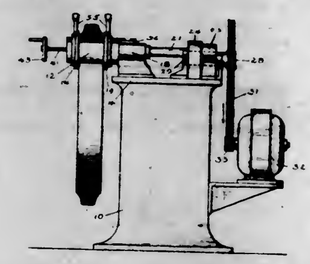
1,273,525. HAND-GRENADE SHELL AND METHOD OF MAKING THE SAME. THOMAS E. MURRAY, Jr., and JOSEPH B. MURRAY, Brooklyn, N. Y. Filed Mar. 28, 1918. Serial No. 225,160. (Cl. 102—26.)



1. A hand grenade shell consisting of two cup-shaped metal portions electrically welded together at their circumferential edges, and, on each portion and near the circumferential edge thereof, an integral raised circumferential bead; whereby the bur of metal extruded at the welded joint is guarded by said beads, substantially as set forth.

2. The method of making a hand grenade shell of thin metal, which consists in electrically welding together at their circumferential edges two cup-shaped portions, each portion having an integral circumferential raised bead near its circumferential edge, and pressing said portions together to produce a bur of metal on the exterior of the joint, the amount of protrusion of which bur shall be less than the protrusion of said beads.

1,273,526. CUTTING OR TRIMMING MACHINE. EDWARD NALL, Akron, Ohio, assignor to The Goodyear Tire and Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed June 17, 1916. Serial No. 104,246. (Cl. 164—61.)



1. A trimming machine including a revoluble support for rotating the article to be trimmed; and knife members loosely mounted upon the support and movable for engagement with the article to be trimmed on opposite sides thereof.

5. A trimming machine of the character described including a supporting structure; a pair of complemental cylinders adapted to loosely receive and to support the base band which is to be trimmed; means for simultaneously rotating the cylinders at equivalent speeds; and a pair of knives longitudinally adjustable upon one of the said cylinders and adapted to act upon opposite edge portions of the base band to be trimmed.

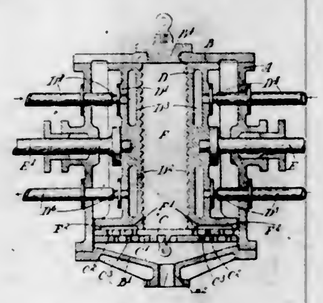
11. A trimming machine of the character described including a supporting structure; a revoluble support adapted to receive and rotate a base band which is to be trimmed; and a set of complemental knives loosely mounted upon the supporting member for circumferential adjustment thereon whereby said knives may be swung into engagement with the opposite-edge portion of the base band for trimming the band when the same is being rotated.

15. A trimming machine of the character described including a supporting structure; a pair of parallel supporting cylinders adapted to loosely receive and support a base band to be trimmed; and a pair of knives adjustable longitudinally and circumferentially upon one of the cylinders for engagement with the side portion of the base band to be trimmed.

21. In a machine for removing the flash from solid tire base bands, means for supporting and rotating a base band; and mechanical means mounted on the first named means for removing the flash from the edge portions thereof, said mechanical means being movable for disposal in active position wherein said means engages the base band and for disposal in inactive position wherein said means is spaced from the base band.

[Claims 2 to 4, 6 to 10, 12 to 14, 16 to 20, and 22 to 29 not printed in the Gazette.]

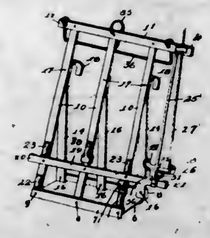
1,273,527. PRESS FOR EXPRESSING LIQUIDS AND FORMING ARTICLES FROM PULP AND OTHER MATERIAL. WILLIAM JAMES NORRIS, London, England. Filed Oct. 16, 1917. Serial No. 196,850. (Cl. 92—61.)



1. In a press for consolidating material containing liquid the combination of, a collapsible press-chamber having drainage-passages in its walls covered with gauze to permit the escape of the liquid but prevent the solid matter from passing, a discharge-conduit from the press communicating with the drainage-passages and a valve for controlling such discharge-conduit flush with the bottom of the press for the purpose of preventing any flow from the material under treatment during the first collapsing movement of the press.

[Claims 2 to 4 not printed in the Gazette.]

1,273,528. TYPE-WRITER'S CABINET. AMBRO J. NORTHCRAFT, St. Louis, Mo. Filed Mar. 4, 1918. Serial No. 220,237. (Cl. 120—33.)



2. A stand for typewriters and the like, formed of open or skeleton construction and substantially A-shaped in end elevation, a base having a solid bottom and provided with upper projecting flanges, spaced strips having their lower ends secured to the flanges projecting upwardly

and inclined, spring clamps carried by certain of the said strips, transverse strips secured to certain of the first mentioned strips and having projecting ends, a guide rod secured to the projecting ends, a spring hook mounted to overlie the upper end of the cabinet, a pivoted loop mounted on the upper end thereof, and an adjustable marking device carried by said guide rod.

[Claims 1 and 3 not printed in the Gazette.]

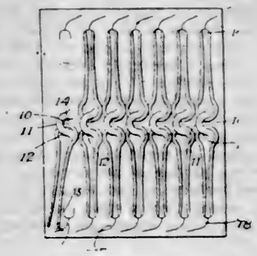
1,273,529. REFRACTORY CERAMIC ARTICLE AND METHOD OF MAKING THE SAME. ALFRED W. OLVER, Niagara Falls, N. Y., assignor to The Carborundum Company, Niagara Falls, N. Y., a Corporation of Pennsylvania. Filed Feb. 16, 1918. Serial No. 217,475. (Cl. 106—10.)

1. The method of making refractory ceramic articles which consists in making a mixture of clay, refractory material, water, and tar, mixing the same thoroughly until high plasticity is developed, and then molding the article into the desired form.

6. The herein described composition consisting of a highly plastic mixture containing plastic clay, corborundum, graphite and tar.

[Claims 2 to 5 not printed in the Gazette.]

1,273,530. MOUNTING FOR HAIR-PINS AND THE LIKE. HARVEY M. OWENS, Leominster, Mass. Filed Oct. 22, 1917. Serial No. 197,815. (Cl. 211—34.)



1. As an article of manufacture, a mounting for hair-pins having means for holding the bow end of a pin, and an opening for receiving the two legs, said opening having a tongue extending into it from the end beyond which said means is located for supporting the rear surfaces of the legs substantially in the plane of the mounting.

3. As an article of manufacture, a sheet for holding hair-pins or the like having means for holding the bow part of each pin, and an individual opening through the sheet for receiving the two legs of each pin and limiting their distance apart.

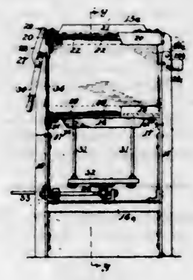
5. As an article of manufacture, a sheet for holding hair-pins or the like having a tab provided with a single perforation therethrough for receiving the extreme bow part of the pin, and a single opening for receiving the two legs.

9. As an article of manufacture, a sheet for holding hair-pins or the like having two concentric perforations forming a substantially semi-circular tab with a tongue between its ends, the tab being adapted to swing away from the plane of the card about a longitudinal axis and providing an opening for receiving the bow part of a hair pin, and the tongue constituting a support for the pin in the plane of the sheet.

10. As an article of manufacture, a sheet for holding a double row of hair-pins or the like having two spaced perforations near the center for receiving the bow parts of two pins, and a single opening at each opposite edge of the sheet for receiving the two legs of one of said pins.

[Claims 2, 4, and 6 to 8 not printed in the Gazette.]

1,273,531. APPARATUS FOR SEALING PACKING-CASES. PHILIP D. PARSONS, Philadelphia, Pa., assignor to Scott Paper Company, a Corporation of Pennsylvania. Filed Feb. 9, 1917. Serial No. 147,664. (Cl. 93—6.)



1. In a device of the character stated, the combination of a bottom structure having a supporting portion capable of exerting a spring action upward, a hinged lid structure having a portion capable of exerting a spring action downward, vertical spring plates suitable for holding the sides of a case to be sealed in fixed relation between the said lid and said bottom structures, and means for clamping the lid structure in the closed position.

2. In a device of the character stated, the combination of a bottom structure having a supporting portion capable of exerting a spring action upward, a lid hinged structure having a portion capable of exerting a spring action downward, and means suitable for holding the sides of a case to be sealed in fixed relation between the said lid and said bottom structures, said bottom structure comprising a rectangular frame, a cross iron securely fastened from the center of one side of said frame to center of opposite side, a plurality of sheet metal springs securely fastened in the middle to said cross iron and extending on either side with their free ends above the plane of said cross iron, and independently operative to press upon the case to be sealed, said lid structure comprising a rectangular frame, a cross iron fastened from the center of one side of said frame to center of opposite side, a plurality of sheet metal springs fastened in the middle to said cross iron and extending on either side with their free ends below the plane of said cross iron, and independently operative to press upon the case to be sealed.

3. In a device of the character stated, a rectangular bottom structure having a fixed floor portion having a plurality of springs each capable of exerting an independent spring action upwardly at a plurality of separate places near each end, combined with a rectangular lid structure also provided with a plurality of springs each capable of exerting an independent spring action downwardly at a plurality of separate places near each end, and suitable means for holding the lid in fixed relation to the bottom for clamping a case to be sealed between them, the said springs each directly pressing upon the case to be sealed and providing independent action.

4. In a device of the character stated, a rectangular bottom structure having a fixed floor portion having a plurality of springs each capable of exerting an independent spring action upwardly at a plurality of separate places near each end, combined with a rectangular lid structure provided with a plurality of springs each capa-

ble of exerting an independent spring action downwardly at a plurality of separate places near each end and said lid structure also having means for adjusting its linear dimensions to suit cases of varying dimensions, and suitable means for holding the lid in fixed relation to the bottom for clamping a case to be sealed between them, the said springs each directly pressing upon the case to be sealed and providing independent action.

5. In a device of the character stated, the combination of a main frame having upright sides at front and back, a bottom frame separate from the main frame for supporting the case to be sealed said bottom adjustably secured to the sides of the main frame so as to permit said sides of the main frames to be adjusted relatively toward or from each other to vary the space for receiving the case, a lid hinged to the main frame and adjustable as to its width in the direction transverse to the hinge axis to correspond to the adjustment of the bottom said lid having spring pressure plates on its under side to directly press upon the case, and means for locking the lid in closed position above the bottom frame.

[Claims 6 to 8 not printed in the Gazette.]

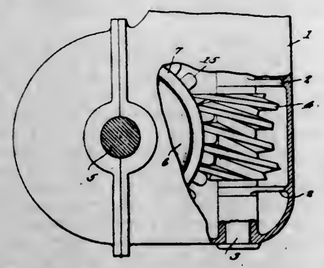
1,273,532. GARMENT. GEORGE W. PEASE, Pittsfield, Mass. Filed Feb. 8, 1916. Serial No. 76,886. (Cl. 2—144.)



1. A garment having in combination a coat and trousers, a back drop on the trousers, and a support carried by the coat and engaging with the back drop, the said support being connected to the coat at points above the upper edge of the back drop at the sides of the center line of the back of the coat, that portion of the support at the center line of the coat being unattached to the coat so that when a strain is put upon the support it will draw the coat from the sides toward the center.

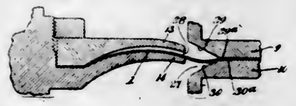
[Claims 2 and 3 not printed in the Gazette.]

1,273,533. WORM-DRIVE. WILLIAM Q. PFAHLER, Toledo, Ohio. Filed Dec. 3, 1917. Serial No. 205,180. (Cl. 74—36.)



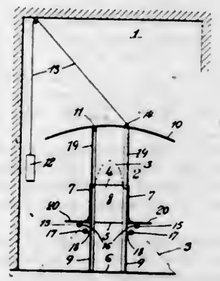
A worm wheel having a peripheral recess and provided with a ball race at the base of the recess; a tubular cage secured in the recess and provided with inner and outer flanges; a cylindrical tooth mounted to rotate in the cage and having a head received for rotation within the inner flange, the head having an end ball race cooperating with the ball race at the base of the recess; balls in the ball races; and cylindrical rollers disposed between the tooth and the side wall of the cage, the rollers being retained by the flanges.

1,273,534. MEANS FOR SUPPORTING DIAPHRAGMS. GUY C. PIERCE, New York, N. Y., assignor, by mesne assignments, to Automatic Straight Air Brake Company, Wilmington, Del., a Corporation of Delaware. Filed Dec. 15, 1916. Serial No. 137,226. (Cl. 50—21.)



In a diaphragm device a metal diaphragm, a support for the margin of said diaphragm, that portion of the diaphragm within the margin of said support being of considerably greater area than the space inclosed by the inner margin of said support, said support having clamping faces to receive the outer margin of the diaphragm and inwardly diverging faces forming a circumferential inwardly widening recess and convex surfaces connecting the said diverging faces to the clamping faces, means for supporting the central portion of said diaphragm said means comprising a pair of disks between which said diaphragm is clamped, said disks having curved surfaces one of said surfaces being concave and the other convex to maintain that portion of the diaphragm between said disks permanently convexed in one direction and diverging outwardly to form a gradually enlarging recess between said disks, that portion of the diaphragm between the margin of the clamping disks and the margin of the clamping surfaces of the support being curved on a line transverse of the support and of a different curvature from that portion of the diaphragm between the disks, whereby the free portion of the diaphragm will conform to the convex surfaces of the support and will have a gradually increasing bearing upon the diverging faces of the support as the said diaphragm is flexed in either direction.

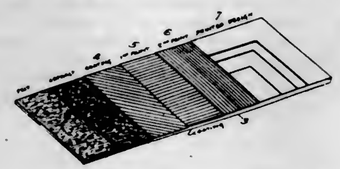
1,273,535. SMOKE-GENERATOR FOR SMOKING MEATS. ISAAC POWERS, Terre Haute, Ind. Filed Nov. 5, 1917. Serial No. 200,275. (Cl. 34—18.)



4. A smoke generator for smoking meats comprising the combination with an inclosure for the meats, of a frame having an open bottom adapted to contain saw dust or the like, means for preliminarily igniting said fuel and means for supplying air to said fuel.

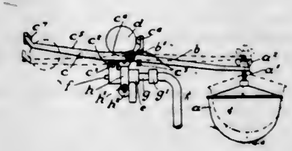
[Claims 1 to 3 and 5 to 10 not printed in the Gazette.]

1,273,536. PROCESS OF MANUFACTURING PRINTED RUGS. GEORGE PRIFOLD, Linwood, Pa., assignor to The Congoleum Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Feb. 18, 1916. Serial No. 79,168. (Cl. 91—67.9.)



The process herein described of making a waterproof floor covering, said process consisting in first making a dry felt, saturating the felt with a semi-solid bituminous material consisting of petroleum flux oil and a residual pitch while the material is at a temperature of about 325 degrees F., then, while the material is still hot, applying a coating at the back thereof consisting of a composition of a vehicle and a pigment, passing the material over a heated surface to evaporate the solvent portion of the vehicle, subjecting the material to a cold blast of air to set and dry the backing and to season the felt, coating the other surface with a composition of a vehicle and a pigment, applying a second coating of a vehicle, a pigment, and a drier so as to provide a printing surface, then printing a design in colors on the prepared surface, and allowing the material to dry.

1,273,537. VALVE FOR FLUID-TANKS AND LIKE STRUCTURES. FRÉDÉRIC RAMPONE, Neuchatel, Switzerland. Filed Dec. 23, 1914. Serial No. 878,682. (Cl. 137—104.)



1. In a valve for flush tanks and similar structures, the combination with a water supply pipe fitting and a piston carrying a valve and a valve seat in said pipe fitting, of a frame pivotally mounted on said pipe fitting, a connection between said frame and piston for operating the latter by the movement of the former, a movable body adapted to travel in said frame, a lever connected to the said frame, and a float connected to the said lever.

5. In a valve for flush tanks and similar structures, the combination with a water supply pipe fitting, a piston carrying a valve and valve seat in said pipe fitting, and a bracket on which the said pipe fitting is adjustably fixed, of a frame comprising oppositely disposed sides, parts of which are parallel and other parts of which are diverging, an arm depending from the said frame and by which the frame is pivotally connected to said pipe fitting, the end of the said arm being adapted to engage with the said piston to move the same by the movements of the frame, a ball adapted to roll between the oppositely disposed side members of the said frame, stops at the ends of the said frame with which the said ball contacts to limit its travel, a lever pivotally connected to the said frame, stops on the frame determining the movement of the said lever, and a float adjustably connected to the said lever.

[Claims 2 to 4 not printed in the Gazette.]

1,273,538. TOY FIGURE. LOULA S. REEVES, Warren, Ohio. Filed Oct. 7, 1915. Serial No. 54,506. (Cl. 46—40.)

3. In a toy figure, the combination of a body provided at the top of the trunk with an internal reinforcing plate of hardened fabric having a circular shallow recess therein, a head provided with a transverse bottom plate of hardened fabric set in such recess, metal washers disposed on opposite sides of said plates, and a bolt passing centrally through said plates and washers and pivotally connecting said head and body.



[Claims 1, 2, and 4 to 9 not printed in the Gazette.]

1,273,539. RETARDING MECHANISM. FRANK C. RINSCHE, Detroit, Mich., assignor to Burroughs Adding Machine Company, Detroit, Mich., a Corporation of Michigan. Filed Dec. 11, 1912. Serial No. 736,109. (Cl. 74—45.)

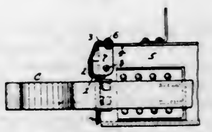


1. In a rotary brake of the character described, a circular chamber, a vertical shaft concentric therewith, a series of radial arms on the shaft within the chamber and a plurality of sector-shaped brake shoes freely movable between said arms and cut away on the curved surface thereof intermediate the ends of said surface.

3. In a rotary brake of the character described a circular chamber, a vertical shaft concentric therewith, a series of radial arms mounted on the shaft within the chamber, a disk mounted on the shaft below the arms and closing the lower end of the chamber and a series of radially movable braking sector blocks intermediate the arms loosely supported on the disk and adapted to engage the annular wall of the chamber.

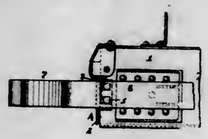
[Claim 2 not printed in the Gazette.]

1,273,540. STRIKING-PLATE. THOMAS RODMAN, Youngstown, Ohio, and FRANK M. STEVENSON, Sharon, Pa., assignors to The Pennsylvania Tank Car Company, Sharon, Pa., a Corporation of Ohio. Filed Jan. 7, 1918. Serial No. 210,629. (Cl. 213—42.)



The combination with a center sill of a car, of a resilient striking plate adapted to be secured to said center sill to receive the thrust of the horn of a coupler, said plate being composed of one piece of metal forged to form a base, a vertical front portion extending at right angles to said base and curved transversely of the device, a top flange, a web portion extending rearwardly upon an angle between said front portion and said top flange, and side cheek plates formed integral with said base, front and web portions and extending rearwardly, the whole device being secured in position by rivets passing through said top flange and said cheek plates.

1,273,541. CARRY-IRON. THOMAS RODMAN, Youngstown, Ohio, and FRANK M. STEVENSON, Sharon, Pa., assignors to The Pennsylvania Tank Car Company, Sharon, Pa., a Corporation of Ohio. Filed Jan. 7, 1918. Serial No. 210,630. (Cl. 213—42.)



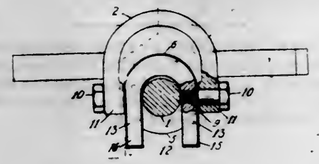
The combination with a center sill for a railway car, of a substantially U-shaped carry iron for couplers composed of forged metal, said carry iron being angle shaped in cross section and having its one flange disposed vertically over the end edge of said center sill and its other flange directed longitudinally along the inner face of said sill so as to support the device, and means for securing said carry iron in position on said center sill.

1,273,542. CATHETER. LEWIS SCHOOLER, Des Moines, Iowa. Filed Aug. 14, 1917. Serial No. 186,191. (Cl. 128—28.)



A catheter including a tubular body portion elliptical or flattened in cross section, and having an elliptical channel extending therethrough, a penetrative formation at one end of the body portion including plane side walls in converging relation forming continuations of the flattened sides of the body portion, and edges curved toward each other to form a point in conjunction with the plane walls, said channel opening outward in one of said edges.

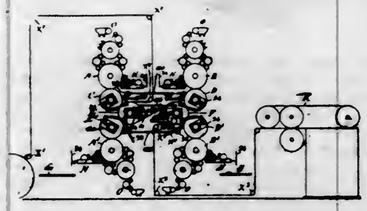
1,273,543. CLUTCH-SHIFTER FOR AUTOMOBILES AND OTHER VEHICLES. OTTO SCHUMANN, Jr., Portland, Oreg., assignor to Otto Schumann, Portland, Oreg. Filed Mar. 7, 1917. Serial No. 153,177. (Cl. 192—1.)



A clutch-shifter of horse-shoe shape, having on its wearing surface a plurality of indentations for the receipt of lubricating material, having disposed, on the outside of the parallel members, opposite each other and with their axis parallel to said wearing surface, suitable supporting pivots to keep the shifter suspended with its arched portion uppermost, having at the ends of the vertical members, opposite to the wearing surface, a preponderance of metal designed to maintain the wearing surface in an essentially vertical position, substantially as set forth.

1,273,544. OFFSET PERFECTING-PRESS. DAVID JOHN SCOTT, Plainfield, N. J., assignor to Isabella Scott and David J. Scott, executors of Walter Scott, deceased. Original application filed Apr. 2, 1915. Serial No. 18,689. Divided and this application filed Sept. 29, 1916. Serial No. 122,884. (Cl. 101—137.)

1. A rotary multi-color offset perfecting machine comprising: a plurality of units printing from positive forms on opposite sides of impression receiving material, each unit consisting of two form-carrying and two transfer cylinders and an impression cylinder all of substantially the same diameter, the form-carrying and transfer cylinders being arranged in a vertical column with one form-carrying cylinder uppermost and the other form-carrying cylinder lowermost, and the impression cylinder being arranged intermediate the transfer cylinders and out of line with the other cylinders to afford an exposed operating side for the unit, the units being grouped with their operating sides outermost and with the impression cylinder innermost.



3. A multi-color offset perfecting machine comprising: two side by side units adapted to print on opposite sides of the impression receiving material, each unit including two form-carrying members, two transfer members and one impression member, the form-carrying members and transfer members of each unit being arranged outermost, and the impression members of the two units being arranged innermost of the machine, the form-carrying and transfer members of each unit being located one above the other with one form-carrying member of each unit uppermost and one form-carrying member of each unit lowermost, dampening mechanism for the uppermost form-carrying member of each unit located intermediate the unit, and dampening mechanism for the lowermost form-carrying member of each unit located adjacent to the outer side of the unit.

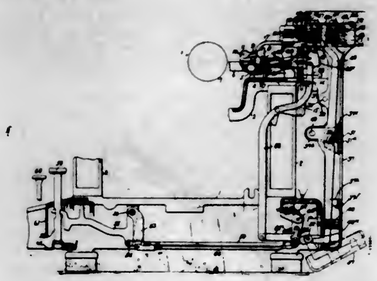
5. A rotary multi-color offset perfecting machine comprising: two side by side units adapted to print on opposite sides of the impression receiving material, each unit including two form-carrying cylinders, two transfer cylinders and one impression cylinder, the form-carrying cylinders and transfer cylinders of each unit being arranged outermost and the impression cylinders of the two units being arranged innermost of the machine, the form-carrying and transfer cylinders of each unit being located one above the other with one form-carrying cylinder of each unit uppermost and one form-carrying cylinder of each unit lowermost, and means for moving the impression cylinders inwardly of the machine toward each other and away from the coöperating transfer cylinders.

[Claims 2 and 4 not printed in the Gazette.]

1,273,545. TYPE-WRITING MACHINE. GEORGE A. SMITH, Ilion, N. Y., assignor to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Filed May 8, 1917. Serial No. 167,313. (Cl. 197—177.)

1. In a typewriting machine and in tabulating mechanism, the combination of a carriage, a plurality of column stops, a plurality of coöperating stops mounted to slide at right angles to the path of movement of the travel of the carriage, each coöperating stop being provided with an engaging notch and being engageable at each side of said notch by one of said column stops to slide said cooperating stop in return direction after it has been actuated, and key operated means for selectively actuating said slidable coöperating stops.

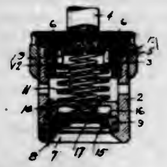
2. In a typewriting machine and in tabulating mechanism, the combination of a carriage, a plurality of column stops, a plurality of coöperating stops mounted to slide at right angles to the path of movement of the travel of the carriage each coöperating stop being provided with an engaging notch and being engageable at each side of said notch by one of said column stops to slide said cooperating stop in return direction after it has been actuated, roller bearings for said slidable stops, stop lugs on said slidable stops coöperative with said roller bearings, and key operated means for selectively actuating said cooperating stops.



36. In tabulating mechanism for typewriting machines, the combination of an upright tabulating frame pivotally mounted between its ends, a set of upright tabulator levers pivotally mounted between their ends in said frame, key actuated means for said levers comprising horizontal links, the rear ends of which are pivotally connected to the lower ends of said levers and in a straight line, whereby when the pivot of the tabulator frame is removed the frame and the levers as a whole may be swung down about the pivotal points of connection of said links.

[Claims 3 to 35 not printed in the Gazette.]

1,273,546. CHUCK. JOHN SHARP, Oakmont, Pa. Filed Mar. 21, 1917. Serial No. 156,346. (Cl. 279—9.)



1. A chuck comprising the combination of a chuck-body having a cylindrical bore, said chuck adapted to receive the work endwise of the bore, a floating jaw disposed within the bore of the body for frictionally holding the work, and flexible means in the bore longitudinally-yieldable therein for effecting yieldable rotary driving connection of the jaw to the body for driving the work.

2. A chuck comprising the combination of a chuck-body having a cylindrical bore, said chuck adapted to receive the work endwise of the bore, a floating jaw disposed within the bore of the body for frictionally holding the work, and flexible friction means disposed within the bore adapted for abutting engagement with the jaw for driving the work.

6. A chuck comprising the combination of a chuck-body having a cylindrical bore, said chuck adapted to receive the work endwise of the bore, a holder for the work disposed within the bore and adapted to have longitudinal and rotary movement therein, ejecting mechanism, and means operative by the holder for effecting yieldable abutting connection between the body and the holder for driving the work.

8. In a chuck, the combination of a chuck-body having a cylindrical bore, a work-holder comprising a ring-like member rotatably fitting the bore of the body and having a bore for centering and for holding the work, an ejector member normally carried by the work-holder and having a plunger projecting into the bore of the holder, a spring interposed between the holder and the end wall of the body for frictionally connecting said holder to the body, and a spring interposed between said wall and the ejector member for actuating said member.

[Claims 3 to 5 and 7 not printed in the Gazette.]

1,273,547. PROCESS OF MAKING ARTIFICIAL STONE. PHILIP M. SHARPLES, West Chester, Pa., assignor to White Heat Products Company, Planebrook, Pa., a Corporation of Pennsylvania. Filed Feb. 2, 1918. Serial No. 215,141. (Cl. 106—24.)

1. The process of making artificial stone which consists in mixing a prefired mineral body and a prefired mineral binder, and forming, pressing and heating the mixture to substantial fusion of the binder.

2. The process of making artificial stone which consists in heating and disintegrating a mineral substance for forming the body thereof, mixing a preheated and disintegrated mineral binding substance therewith, forming and pressing the mixed ingredients, and subjecting the formed and pressed product to heat adapted to fuse the binder.

3. The process of making artificial stone which consists in heating a natural mineral substance so as to drive off gas, disintegrating the prefired substance, mixing said substance with a prefired and disintegrated mineral binder, forming and pressing the mixture, and heating the product to fusion of said binder.

4. The process of making artificial stone which consists in mixing preheated disintegrated silica sand and disintegrated glass, and forming, pressing and heating the mixture, said heating being of such degree as to fuse the glass.

1,273,548. PACKER FOR WELLS. CHARLES H. SHEASLEY, Franklin, Pa., assignor to Producers Supply Co., Franklin, Pa., a Corporation of Pennsylvania. Filed Apr. 14, 1917. Serial No. 162,176. (Cl. 166—10.)

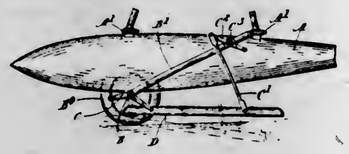


In a packer for wells, the combination comprising the following elements; a pipe section, a flexible sleeve carried by said pipe section and adapted to move longitudinally thereon, said flexible sleeve having as features arranged at the upper end thereof a centrally-disposed, upwardly-projecting nipple positioned adjacent said pipe sections also a seal consisting of an upwardly-projecting, outwardly-extending peripheral, annular lip, a collar or coupling element connected to the upper end of said pipe section, and having as a feature thereof an annular recess adapted for the reception of said nipple, and a pilot-coupling attached to the lower end of said pipe section consisting of a downwardly-converging, frusto-conical collar adapted for the attachment of tubing thereto.

1,273,549. HYDROAEROPLANE. THOMAS SLOPER, Devizes, England. Filed Oct. 25, 1916. Serial No. 127,566. (Cl. 244—2.)

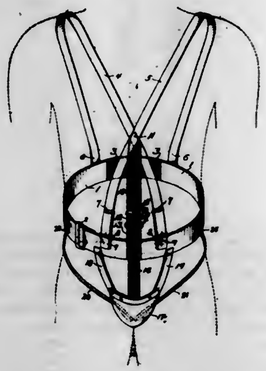
1. In a hydroplane the combination of floats for supporting the machine upon the water, a lifting plane for

contact with the water at a level below that of the floats, means operatively connected to the front of the plane to carry and to raise and lower the forward end of the same, and independently operable means operatively connected to the trailing end of the plane to carry and to raise and lower the trailing end of the same whereby the angle of the plane can be changed as well as the whole plane bodily raised or lowered, substantially as and for the purpose set forth.



2. In a hydroplane the combination of floats for supporting the machine upon the water, landing wheels supported below the floats, a forwardly disposed axle for the landing wheels cushioned against the under side of the floats, rearwardly directed thrust members connected at the forward end to the axle of the landing wheels and hinged at the rear end to the frame of the machine above the floats, a lifting plane for contact with the water at a level below that of the floats, means pivoted on a support which moves as one with the rearwardly directed thrust members aforesaid and operatively connected to the front of the plane to carry and to raise and lower the same and means pivoted on a support which moves as one with the said thrust members and operatively connected to the trailing end of the plane to carry and to raise and lower the same whereby the angle of the plane can be changed as well as the whole plane bodily raised or lowered, substantially as and for the purpose set forth.

1,273,550. SUPPORTING DEVICE. HARLEY STAMP, Philadelphia, Pa. Filed Feb. 26, 1918. Serial No. 219,337. (Cl. 128—38.)

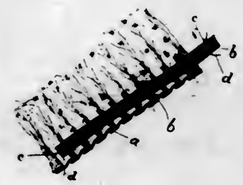


1. A device of the character described including an abdominal band; shoulder straps crossing in the front and attached to the band; and a central elastic member secured to the abdominal band at the front and to the shoulder straps, substantially as described.

5. A device of the character described including an abdominal band; shoulder straps crossing in the front and secured to the band both at the front and rear thereof; a pouch positioned below the abdominal band; and elastic means depending centrally from said shoulder straps at their crossing point, said means at its lower end being secured to said pouch, substantially as described.

[Claims 2 to 4 and 6 to 9 not printed in the Gazette.]

1,273,551. METHOD OF TREATING AND FINISHING FABRICS. WALTER SENIOR STANSFIELD, Wyke, and JOE WILKINSON, Shipley, England, assignors to Bradford Dyers' Association Limited, Bradford, England. Filed Oct. 9, 1915. Serial No. 54,995. (Cl. 26—2.)

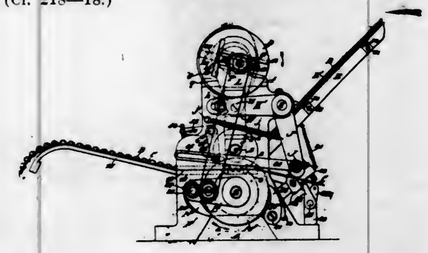


1. The method of treating and finishing fabrics consisting of taking the woven fabric as it leaves the loom, and plaiting or gathering the selvages thereof, passing same through the solution known as craping solution, subjecting it to a process of bleaching then passing same through a process of dyeing, after which it is dried, all the varied features of the process being carried out substantially as herein specified.

3. The method of treating and finishing fabrics consisting of taking the woven fabric as it leaves the loom, plaiting or gathering the selvages thereof, passing same through a solution known as the craping solution and subjecting it to the ordinary processes of finishing substantially as herein specified.

[Claim 2 not printed in the Gazette.]

1,273,552. BUTTON-CARDING MACHINE. GRANVILLE F. THAYER, Providence, R. I., assignor to M and T Button Company, Boston, Mass., a Corporation of Massachusetts. Filed Mar. 6, 1917. Serial No. 152,777. (Cl. 218—18.)



1. In a machine for carding buttons, the combination with a horizontally reciprocating plate provided with a plurality of slots for engaging a series of buttons by their eyes to feed them forward and support them in upright position above the card, of means coördinated therewith for operating on the buttons to press them against the card to insert their eyes therethrough whereby to affix them in place thereon.

5. In a button-carding machine, the combination with means for feeding a card or strip, of means for delivering a plurality of buttons into position above the card, a slotted feed-plate for engaging the buttons by their eyes to support them in a row across the card, means adapted to bear against the sides of the buttons to hold them in the slots in the feed-plate, and means coöperating therewith for forcing the row of buttons against the card to insert their eyes therethrough whereby to affix them in position thereon.

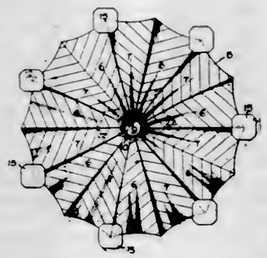
6. In a button-setting machine, the combination with means for feeding a strip or card including a grooved feed-roll, of means for intermittently rotating the feed-roll, means for adjusting the rotation of the feed-roll to regulate the extent of feed of the card, means for feeding buttons into position above the card as it is fed by the feed-roll, and means coöperating therewith for forcing the buttons against the card as it bears on the feed-roll to insert the button-eyes therethrough and into the grooves of the feed-roll.

10. In a button-carding machine, the combination with a plurality of button-raceways, of a reciprocating slotted feed-plate for engaging the buttons by their eyes to project them from the raceways and support them above the card, means to press against the buttons to force their eyes through the card, and means for withdrawing the feed-plate from beneath the buttons as their eyes are forced down through the card, said means being adjustable to vary the timing of movement of the feed-plate to regulate the extent of protrusion of the button-eyes through the card.

21. In a button-setting machine, the combination with setting-means for acting on the buttons to insert their eyes through a card or strip, of a feed-member for projecting the buttons into operative position in relation to the setting-means, a gage-member for maintaining the buttons in erect position in the feed-member, and means for moving the gage-member with the feed-member as the buttons are fed into setting position.

[Claims 2 to 4, 7 to 9, 11 to 20, and 22 to 35 not printed in the Gazette.]

1,273,553. PARACHUTE. RALPH H. UPSON, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Nov. 9, 1916. Serial No. 130,379. (Cl. 244—21.)



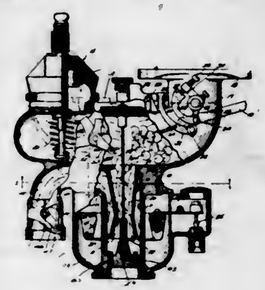
1. In a parachute, triangular panels forming the main supporting surface of the parachute, each panel being constructed from a fabric cut on a bias and making an angle with the bias of the fabric used to construct the adjacent panels.

4. A main parachute provided with a plurality of spaced auxiliary parachute surfaces which are disposed on the upper side of and have connections to, the peripheral portion of the main parachute surface, said auxiliary parachute surfaces being adapted to open automatically and act to open said main parachute surface.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,273,554. CARBURETER. LILBURN HOWARD VAN BRIGGLE, Indianapolis, Ind. Filed Feb. 9, 1916. Serial No. 77,127. (Cl. 261—45.)

2. In a carbureter, the combination of a mixing chamber, a primary air passage leading thereinto, a fuel nozzle discharging within said primary air passage, an automatic secondary air inlet valve opening into said mixing chamber, a control valve in the primary air inlet conduit, and means operated by the closing of said control valve for forcing closed the secondary air valve from any open position and positively blocking the opening of said secondary air valve.



4. In a carbureter, the combination of a Venturi tube, a mixture passage into which said Venturi tube discharges, a fuel nozzle discharging within and between the ends of said Venturi tube, an outer tube surrounding said Venturi tube and spaced from the inlet end of the latter, and a primary air supply conduit discharging into said outer tube tangentially around said Venturi tube at a point removed from the inlet end of the latter, so that the air is given a helical or swirling motion around the Venturi tube before entering it and while traveling up through it.

8. In a carbureter, the combination of a mixing chamber, a primary air passage leading thereinto, a fuel nozzle discharging within said primary air passage, an automatic secondary air inlet valve opening into said mixing chamber, a control valve in the primary air inlet conduit, and means operated by the closing of said control valve for forcing closed the secondary air valve from any open position and positively blocking the opening of said secondary air valve, said control valve being spring-pressed to open position.

15. In a carbureter, the combination of a mixing chamber, a fuel nozzle discharging fuel thereinto, a needle valve controlling the supply of fuel from said fuel nozzle, said mixing chamber being provided with an air inlet opening, a throttle controlling the discharge of the mixture from said mixing chamber, manually operated means for cutting off the supply of air to said air inlet opening, and means for opening said needle valve to increase the supply of fuel independently by the opening of the throttle and by the operation of said manually operated means.

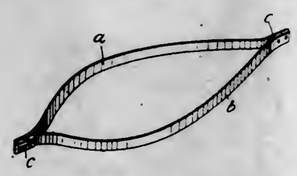
20. In a carbureter, the combination of a mixing chamber having openings for the admission of primary and secondary air, a fuel nozzle for supplying fuel to the primary air admitted to the mixture chamber, a needle valve controlling the outlet from said fuel nozzle, valve means for shutting off the supply of primary and secondary air to said mixture chamber, means operated by the shutting off of both said primary and secondary air to cause the opening of said needle valve, a throttle for controlling the outlet of the mixture from said mixture chamber, and means operated by the opening of said throttle for opening said needle valve.

[Claims 1, 3, 5 to 7, 9 to 14, 16 to 19, 21, and 22 not printed in the Gazette.]

1,273,555. TROUSERS-CREASE MARKER. ANDRÉ VARAUD, Geneva, Switzerland, assignor to Societe pour l'Exploitation d'Articles de Modes Masculines (S. A. M. M. S. A.), Geneva, Switzerland. Filed June 1, 1917. Serial No. 172,141. (Cl. 2—126.)

1. A trousers crease marker comprising a band of resilient material adapted to fit within the upturned lower end of a trouser leg and having a beak or pointed portion formed therein and adapted to mark a crease in the trouser leg.

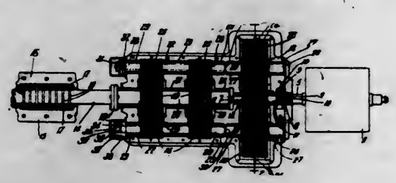
4. A trousers crease marker comprising bands of resilient material, and clips for connecting said bands of resilient material at the respective ends thereof so that these ends form beaks or pointed portions adapted to mark



creases in the trouser leg, the said bands when thus connected being adapted to fit within the upturned end of a trouser leg for the purpose specified.

[Claims 2 and 3 not printed in the Gazette.]

1,273,556. GEARING. ROBERT WARRINER, Quincy, Mass., assignor to Fore River Shipbuilding Corporation, Quincy, Mass., a Corporation of Massachusetts. Filed Nov. 6, 1916. Serial No. 129,663. (Cl. 74—7.)



1. A device of the class described having, in combination, a driving member, a gear coaxially mounted with said driving member and having axial movement relatively thereto, a driven member, a gear fast upon said driven member, an end thrust bearing adapted to prevent endwise movement of said driven member, two sets of gears, each interposed between the gears of said driving and driven members, and means adapted to provide for a relative axial movement between the gears of one of said sets, whereby all of the gears of said device may automatically adjust themselves relatively to the driven member during the operations thereof.

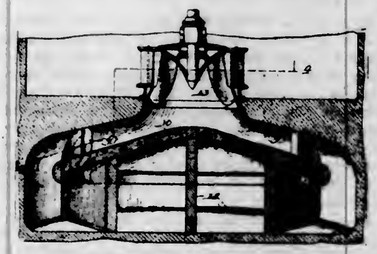
3. A reduction gear having, in combination, a driving member, a helical gear rotatable with said driving member, means adapted to provide for a limited axial movement of said gear, a driven member coaxially disposed with said driving member, a helical gear fast upon said driven member, an end thrust bearing for said driven member, a pair of coaxially disposed helical gears interposed between the gears of said driving and driven members, said last named gears being arranged in fixed relation to each other, a second pair of coaxially disposed helical gears interposed between the gears of said driving and driven members, and a coupling interposed between the gears of said second pair adapted to provide for a limited axial movement of said gears relatively to each other.

[Claim 2 not printed in the Gazette.]

1,273,557. HYDRAULIC REGAINER. WILLIAM M. WHITE, Milwaukee, Wis. Filed May 26, 1913. Serial No. 769,791. (Cl. 253—122.)

1. The combination with an axial discharge water wheel, of an annular passage disposed at the discharge side of the wheel, around the axis thereof, taking a direction having a relatively large component which is at right angles to said axis, and of materially greater diameter than the wheel, whereby the whirling discharged water is permitted to follow the direction of its natural tendency, which is outward from the center of rotation.

3. In a device of the class described, the combination of a water wheel and a water discharge passage, a deflector located in said passage and projected across the axis of said water wheel substantially radially thereof, said deflector and the walls of said passage above said deflector defining a chamber of increasing capacity in the direction of flow of water, said deflector causing divergent flow of water in a space of progressively increasing capacity whereby the velocity head of the water is transferred into pressure head, substantially as described.



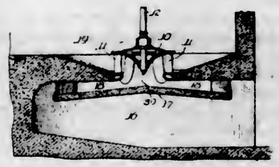
10. In a pressure regainer for water wheels, the combination of a runner having an open space therebeneath, said space being arranged at and about the axis of said runner, and a substantially conical deflector projected across said space whereby water discharged from said runner with a tangential force is permitted to whirl and follow a spiral path within a space of progressively increasing capacity in order that the energy of the water in the form of velocity may be converted into energy in the form of pressure, substantially as described.

14. The combination, with a water wheel, of a regainer comprising a discharge chamber and a deflecting surface disposed therein transversely across the discharge of the wheel and substantially radially thereof to form an inclined annular passage for receiving the water from the wheel, said annular passage communicating directly with the discharge end of the wheel.

15. The combination, with a water wheel, of a discharge conduit therefor including a flared tube, the walls of said tube diverging outwardly in all directions from the runner passage of the wheel and a deflector disposed in said flared tube transversely across the discharge of the wheel and substantially radially thereof to form with the walls of the tube an annular discharge passage communicating directly with the discharge end of the wheel to permit the free discharge of the water coming from the runner.

[Claims 2, 4 to 9, 11 to 13, and 16 to 18 not printed in the Gazette.]

1,273,558. METHOD OF INCREASING HEAD. WILLIAM M. WHITE, Milwaukee, Wis. Filed June 19, 1913. Serial No. 774,528. (Cl. 253—122.)



1. The method of operating water wheels which consists in passing an amount of water through a wheel in excess of the amount required for the maximum efficiency of the wheel under the available fall, and utilizing said excess water to produce an additional head acting on the water wheel.

2. The method of operating water wheels which consists in passing an amount of water through a wheel in excess of the amount required for the maximum efficiency of the wheel under the available fall, leading the discharge water in a direction approximately radial from the point of discharge, and utilizing said excess water to produce an additional head acting on the water wheel.

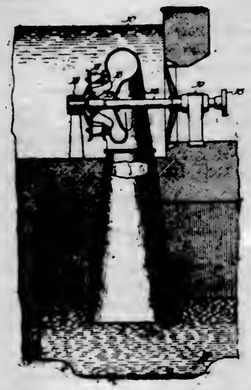
4. The method of operating water wheels which consists in passing water through a wheel, leading the discharge water in a direction approximately radial from the point of the discharge, and permitting said water to expand during its radial discharge.

13. The method of operating axial discharge water wheels which consists in utilizing the energy of whirling discharged water to produce an added head acting on the water wheel.

14. The method of securing an increased effective head on an axial discharge water wheel, which consists in utilizing for such purpose the centrifugal force of a whirling body of water at the discharge of the water wheel, substantially as described.

[Claims 3, 5 to 12, and 15 to 20 not printed in the Gazette.]

1,273,559. SPIRAL REGAINER. WILLIAM M. WHITE, Milwaukee, Wis. Filed Oct. 29, 1913, Serial No. 797,952. Renewed Dec. 3, 1915. Serial No. 64,936. (Cl. 253—122.)



2. In a water power plant, the combination of a water wheel associated with a discharge space, a deflector located in said space, walls surrounding said space, said walls providing a spiral conduit the cross sectional area of said conduit progressively increasing whereby the flow of water from the water wheel may be changed from rotary and axial to radial and tangential, and a conical draft tube communicating with said spiral conduit, substantially as described.

4. In a water wheel construction, the combination of a water wheel runner and a spiral collector located about the axis of said runner and adapted to receive water therefrom, substantially as described.

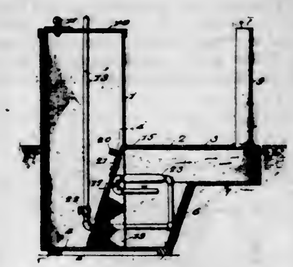
6. In water power apparatus, the combination of a casing and a pair of runners discharging into opposite sides thereof, said casing being formed as a spiral whereby energy in the discharged water in the form of velocity may be changed into pressure, substantially as described.

7. In a device of the class described, the combination of two water wheels mounted in opposed relation, a conical deflector located at the outlet of each water wheel and a single spiral casing into which the water from both said wheels is discharged, substantially as described.

11. The combination with a fluid motor, of a discharge passage or draft tube of spiral form increasing in cross section in the direction of the outflow therethrough terminating in a tangent portion.

[Claims 1, 3, 5, 8 to 10, and 12 to 27 not printed in the Gazette.]

1,273,560. TANK-HEATER. JOSEPH G. WIDHELM, Fremont, Nebr. Filed Nov. 7, 1917. Serial No. 200,767. (Cl. 126—360.)

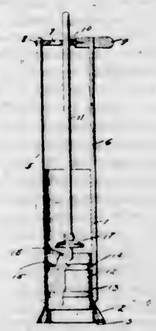


2. A device for the purpose set forth comprising a body having an air supply chamber and a heating chamber extending laterally from one side of the said air supply chamber, a partition between the two chambers having an opening therethrough, and a closure for said opening provided with ribs on one face near its side edges adapted to extend through and frictionally engage the sides of the opening, said closure resting on the bottom of the body and having a notch in its lower end.

3. A device for the purpose set forth comprising a body having an air supply column, a heating chamber on the side of the column at the lower end thereof and a lateral extension at the upper end of the heating chamber, means for admitting air to the air supply column, an escape flue rising from the lateral extension at the free end thereof, an inclined partition between the heating chamber and the column extending downwardly into the column, said partition having an opening therethrough and provided with a notch at one side of the opening, a fuel supply pipe passing downwardly within the column and through the notch in the partition, a burner on said pipe within the heating chamber, and a door adapted to close the opening in the partition and provided with a recess in its lower end and with ribs on one face to extend through the opening in the partition and frictionally engage the sides of said opening and located at opposite sides of the burner.

[Claim 1 not printed in the Gazette.]

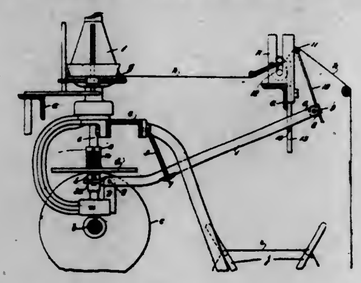
1,273,561. CLOTHES-WASHING APPARATUS. WALTER WILBUR, Lynden, Wash. Filed Feb. 27, 1918. Serial No. 219,480. (Cl. 68—5.)



A washing machine, comprising a cylinder, rods attached to opposite sides of the cylinder and projecting above the upper end thereof, a cross piece secured at one end to one of the rods, a handle attached to the other rod and having connection with the opposite end of the cross

piece, the latter having a centrally disposed opening, a piston in the cylinder, and a shaft projecting from the piston and passing through the opening of the cross piece.

1,273,562. STOP-MOTION FOR MACHINES FOR WINDING YARNS, THREADS, AND THE LIKE. HANS MARIA AUGUST CARL WILDT, Leicester, England, assignor to Wildt & Co., Limited, Leicester, England. Filed Sept. 12, 1914. Serial No. 861,331. (Cl. 242—29.)



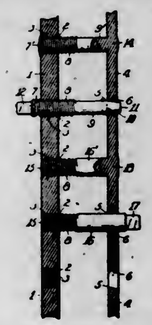
1. In a machine for winding yarns, threads and the like, the combination with a winding spindle, a disk thereon, and a friction wheel for driving said disk, of a stop motion mechanism comprising a lever, a guide at one end thereof to carry the winding thread, the opposite end being adapted to engage the winding spindle disk, means to yieldingly support said lever against the pull of the thread, said lever when actuated in opposition to said means by abnormal tensioning of the winding thread varying the contact between the disk and the friction wheel, and means operating automatically when the lever is moved by the thread to stopping position to hold said lever in said position thereby relieving the thread of this function, substantially as and for the purpose described.

2. In a machine for winding yarns, threads and the like, the combination with a winding spindle, a disk thereon, and a friction wheel for driving said disk, of a stop motion mechanism comprising a lever, a guide at one end thereof to carry the winding thread, the opposite end being adapted to engage the winding spindle disk, means to yieldingly support said lever against the pull of the thread, said lever when actuated in opposition to said means by abnormal tensioning of the winding thread varying the contact between the disk and the friction wheel, and a pivoted weighted locking catch adapted to automatically engage the lever when the latter is moved by the thread to the stopping position said catch holding the lever in said position thereby relieving the thread of this function, substantially as and for the purpose described.

3. In a machine for winding yarns, threads and the like, the combination with a winding spindle, a disk thereon, and a friction wheel for driving said disk, of a stop motion mechanism comprising a lever adapted at one end to carry the thread and at the other end to engage the winding spindle disk, means to yieldingly support said lever against the pull of the thread, said lever when actuated in opposition to said means by abnormal tensioning of the winding thread varying the contact between the disk and the friction wheel, automatically operating means to hold the lever in the stopping position after it has been moved to same by the thread, and a guide adjustably mounted in the thread carrying end of the lever to carry the winding thread, said guide being adjustable to vary the amount of spare thread and the amount of movement permitted the lever in moving to stopping position, substantially as described.

1,273,563. BOILER STAY-BOLT. JOHN A. WOLMER, EDWARD F. HANLON, and GUY L. THOMSON, Indianapolis, Ind. Filed June 19, 1916. Serial No. 104,567. (Cl. 85—1.5.)

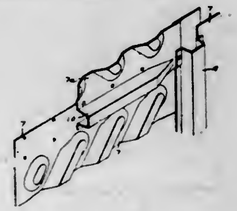
1. A stay-bolt comprising a cylindrical body portion having a plain threadless tapered engagement portion adjacent to one end thereof, a threaded engagement portion on the opposite end of the body portion, and a squared end portion adjacent to the threaded engagement portion.



2. In a boiler-stay structure, the combination with an outer boiler sheet having screw-threaded holes therein, of an inner boiler sheet, and stay-bolts integrally connected to the inner boiler sheet, the stay-bolts extending through the screw-threaded holes and being connected to the outer sheet by means of the screw threads in the holes.

[Claim 3 not printed in the Gazette.]

1,273,564. CAR CONSTRUCTION. JOHN S. WORTH, Coatesville, Pa., assignor to himself and William P. Worth, Coatesville, Pa. Filed Dec. 31, 1915. Serial No. 69,671. (Cl. 105—192.)



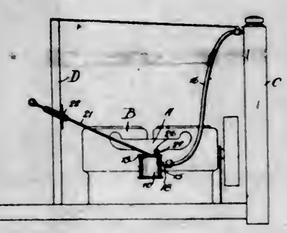
1. The combination in a car structure, of a base frame and a cornice frame; a series of vertical posts connected to the two frames; a series of plates mounted between the posts and secured thereto, the edges of one of the plates of each series being shaped to form a hollow transverse girder, the girders being reduced at each end so that the entire plate can be secured flat against the posts.

3. The combination in a car structure, of a base frame and a cornice frame; vertical posts spaced apart at each side of the car and secured to the base frame and to the cornice frame; a series of vertical posts at the ends of the car arranged closer together than those at the sides and secured to the base frame and to the cornice frame, and two series of corrugated plates, one series located above another, one plate of each series overlapping the other, the overlapping plates being shaped to form a hollow transverse girder, the sides of the plates extending back of the posts and secured thereto.

[Claim 2 not printed in the Gazette.]

1,273,565. AUTOMATIC FUEL-VAPORIZER. LEVI L. YODER and FRANK A. VICKERY, Portland, Oreg. Filed June 28, 1917. Serial No. 177,601. (Cl. 123—25.)

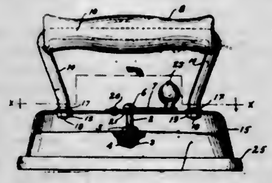
1. A fuel vaporizer for internal combustion engines, comprising a casing adapted to be connected at its upper end to the intake manifold of the engine, and adapted to contain moisture in its lower end, the casing having a horizontal partition dividing the casing into upper and lower compartments, the partition having an opening therethrough intercommunicating the compartments, the suction of the engine being adapted to raise moisture from the lower into the upper compartment, and means opening into the casing near said opening in the partition for admitting air to the moisture as the latter enters the upper compartment.



6. In a fuel vaporizer, the combination of a casing provided with a partition arranged horizontally therein forming upper and lower compartments, bodies of absorbent material arranged in the upper and lower compartments, a pipe leading from the upper end of the lower compartment and adapted for connection with the upper end of the radiator of an internal combustion engine, an outlet nipple leading from the upper compartment and adapted for attachment to the intake manifold of the engine, a valve in said outlet nipple for controlling the suction in the casing, and an air valve opening through the casing between said compartments to admix air with the vapor when the latter is drawn from the upper to the lower compartment, said lower compartment being provided with an opening in the wall thereof or draining water collecting in the bottom of the casing to prevent ingress of water into the intake manifold of the engine.

[Claims 2 to 5 not printed in the Gazette.]

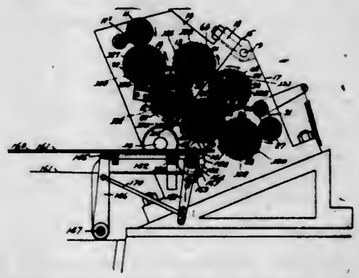
1,273,566. SAD-IRON. EDWARD H. ZOLLAR and CHARLES T. JOHNSON, Canal Dover, Ohio. Filed Oct. 21, 1912. Serial No. 726,878. (Cl. 68—26.)



In a device of the described class, the combination with a smoothing core, an inclosing shell, of a fastening lever pivotally connected at one end with said shell and provided upon one side with an upwardly curved resiliently yielding bearing surface and upon its opposite side with a recess, said recess being formed for the reception of the upper end of a fastening bolt, the lower end of which bolt is rigidly connected with said smoothing core.

1,273,567. MACHINE FOR CUTTING PAPER INTO SHEETS AND INTERFOLDING THE SHEETS. GUSTAV A. AICHER, San Francisco, Cal., assignor to National Paper Products Co., San Francisco, Cal., a Corporation of California. Filed Oct. 2, 1915. Serial No. 53,704. (Cl. 270—39.)

1. A machine of the character disclosed comprising two pairs of rollers, means for feeding a web between each pair of rollers, one of each of said pairs of rollers co-acting with one of the other pair, means on each pair of rollers for cutting the web passing therebetween into definite lengths, and means on each pair of rollers for creasing the web passing therebetween, said co-acting rollers being adapted to carry said webs and the sheets cut from the webs between them, said cutting means and said creasing means being so positioned on the rollers that when said webs and the sheets therefrom pass between said co-acting rollers, the transverse edges of each web will coincide with the creases in the other web, and means for folding the sheets on their creases and interfolding the leaves of the sheets as they pass from between said co-acting rollers and means for ejecting the interfolded sheets from said co-acting rollers, a conveyer, and means for intermittently actuating said conveyer in synchronism with said rollers for conveying the interfolded sheets from said co-acting rollers when the sheets are ejected therefrom.



4. Mechanism for cutting and interfolding sheets, which consists in the combination of two pairs of cylinders arranged in parallel relation, the cylinders of each pair having coöperating cutting means formed thereon, gripper means carried by one cylinder of each pair for alternately folding the web sections detached by said cutting mechanism, creasing means carried by the other cylinder of each pair and arranged to coöperate therewith, and feeding means for engaging the leading ends of the detached sections for causing the cut end of one section to lie within the fold of the other section.

[Claims 2, 3, and 5 to 10 not printed in the Gazette.]

1,273,568. NITRATED PRODUCT AND PROCESS OF MAKING SAME. EDWARD ARTHUR BARNES, Giant, Cal. Filed Oct. 11, 1915. Serial No. 55,329. (Cl. 23—24.)

1. The process which comprises gradually adding a mixture of nitric and sulfuric acids, while stirring and cooling, to petroleum distillates containing a preponderance of saturated hydrocarbons and a smaller amount of benzenoid hydrocarbons, and separating from the oil and waste acid the nitro-derivatives thus formed.

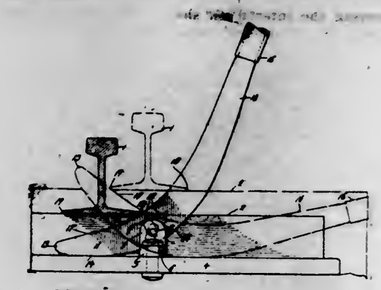
2. The process which comprises converting into their mono-nitro-derivatives the benzenoid hydrocarbons in petroleum distillates containing a preponderance of saturated hydrocarbons and a smaller amount of benzenoid hydrocarbons by treating the oil at a low temperature with suitable proportions of a mixture of nitric and sulfuric acids, and separating the mixture of nitro-derivatives from the remaining oil.

3. The process of treating a partly purified petroleum distillate containing saturated hydrocarbons and a smaller amount of benzenoid hydrocarbons and obtainable by distilling crude petroleum to separate as a residue certain impurities, agitating the distillate with a small proportion of sulfuric acid, allowing the mixture to settle and removing the waste acid with impurities of the distillate contained therein, which comprises gradually adding a mixture of nitric and sulfuric acids containing a small proportion of water to the purified distillate while stirring and cooling the same, allowing the mixture to settle into distinct strata comprising respectively paraffin hydrocarbons, nitro-benzenoid hydrocarbons and waste acids, and separating said nitro-benzenoid hydrocarbons.

4. The process, which comprises treating at a low temperature petroleum oils containing saturated hydrocarbons and a smaller amount of benzenoid hydrocarbons with a mild nitrating agent comprising nitric acid, sulfuric acid and water to convert benzenoid hydrocarbons in the oil

mainly into their mono-nitro-derivatives, separating the nitro-derivatives and treating them with a stronger nitrating agent at a higher temperature to produce polynitro-derivatives of said benzenoid hydrocarbons.

1,273,569. TRACK-LINER. NATHAN BERMAN, Philadelphia, Pa., assignor to Lottie T. Berman, Philadelphia, Pa. Filed Jan. 13, 1917. Serial No. 142,224. (Cl. 254—121.)

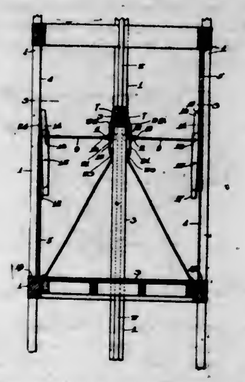


2. A track liner comprising a plate having a plane bottom surface free of projections designed to be inserted under a rail, a shifting bar mounted to rock on the plate, said bar having an end portion designed to extend under the base of the rail from one side thereof and when rocked to engage said rail at the opposite side thereof to laterally shift it, said end portion having a substantially flat lower edge surface adjacent its extreme end and designed to engage the upper surface of said plate, said end portion also having a curved edge blending with said flat edge and designed to rock upon the upper surface of said plate, said portion of the bar having a rail-engaging edge surface, the portion of said latter surface adjacent the extreme lower end being substantially flat and blending with a curved edge surface, said latter curved edge surface being opposite the curved surface which engages said plate during the rocking movement of the bar, said bar having an elongated slot extending between said curved edge surfaces, brackets on said plate and having vertical ears, and a pin supported by said vertical ears of said brackets and extending through said slot, said slot extending in such direction that when the shifting bar is in its raised position the slot will extend at an angle slanting in one direction and when the shifting bar is rocked into its lower position said slot will extend at a slant in the opposite direction whereby the rocking movement of said shifting bar will cause it to move longitudinally in one direction and then during the final rocking movement to move longitudinally in an opposite direction, substantially as described.

[Claim 1 not printed in the Gazette.]

1,273,570. ELEVATOR-GATE-LOCKING APPARATUS. CHARLES A. BLESSING, Jr., Philadelphia, Pa. Filed Apr. 18, 1918. Serial No. 229,226. (Cl. 187—59.)

1. The combination in an elevator construction, of a movable gate; a car; a supporting structure; a plate spring on said supporting structure; a cam shoe on the car; a lever on said supporting structure; a lug on said gate; and means connecting the plate spring with a portion of said lever located at one side of its pivot, said plate spring normally holding another portion of the lever in the path of movement of said lug and thereby preventing the opening of said gate, said plate spring having a portion adapted to be engaged by said cam shoe to move said second portion of the lever away from said lug to permit the gate to be raised and to move said first portion of said lever into the path of movement of said lug, said plate spring being yieldable due to the engagement of said lug with said latter portion of the lever to permit said lug to be raised to a level with the free end of the lever, said plate spring being operative after said lug has reached said level to move the lever under said



lug to hold the gate in a raised position, substantially as described.

[Claims 2 and 3 not printed in the Gazette.]

1,273,571. PROCESS OF MANUFACTURING VEGETABLE GLUE. VICTOR G. BLONDE, Catonsville, Md. Filed Dec. 17, 1917. Serial No. 207,556. (Cl. 87—17.)

1. The process herein described for producing a vegetable glue or adhesive in paste form consisting in, first, treating amylaceous matter with water containing a neutral salt possessing the property of increasing the solubility of the starch granules, but which does not prevent or materially retard the action of starch-reducing enzyms or bacilli; then heating this composition to, or near, the boiling point and continuing the heating until a smooth and homogeneous paste is formed, and after cooling same to the proper temperature, acting upon this composition by a starch reducing enzym or bacilli until the desired consistency, or flow, has been secured, substantially as set forth.

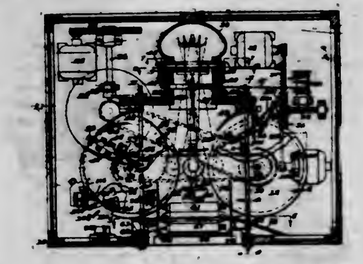
2. The process herein described for producing a vegetable glue or adhesive in solid form consisting in, first, treating amylaceous matter with water containing a neutral salt possessing the property of increasing the solubility of the starch granules, but which does not prevent, or materially retard, the action of starch-reducing enzyms or bacilli; then heating this composition to, or near, the boiling point and continuing the heating until a smooth and homogeneous paste is formed, and after cooling same to the proper temperature acting upon this composition by a starch reducing enzym or bacilli until the desired consistency, or flow, has been secured, then evaporating the vegetable glue so obtained to a solid form at a low temperature, substantially as set forth.

1,273,572. AUTOMATIC PHONOGRAPH. JOHN BRIGGS and JOHN T. JENKINS, San Francisco, Cal., assignors to Russell Berkenkamp, San Francisco, Cal. Filed Feb. 24, 1916. Serial No. 80,160. (Cl. 194—10.)

5. In an automatic phonograph, a plurality of vertical tiers of rotatable disk records spaced edgewise apart, a reproducer between said tiers, and means for shifting said reproducer into and out of playing engagement with any one of said records.

15. In a phonograph, a plurality of rotatable disk records spaced apart and turnable in the same direction, and a reproducing stylus arranged between said records and engageable with either record at adjacent sides thereof.

25. In a phonograph, a plurality of disk records, a reproducer therefor, and rotatable means movable with each record and engageable with the reproducer for shifting the latter from non-playing position outside of the periphery of the record into playing position with the record.



37. In a phonograph, a series of rotatable disk records arranged in vertical spools, a reproducer therefor, automatically operable positioning means for the reproducer and selective setting means for said positioning means.

42. In a phonograph, a vertical spool of rotatable disk records, a reproducer therefor, positioning means for the reproducer, separate electric driving means for the records and positioning means, and a coin controlled circuit for each of said driving means.

[Claims 1 to 4, 6 to 14, 16 to 24, 26 to 36, 38 to 41, and 43 to 54 not printed in the Gazette.]

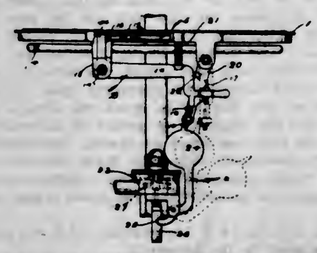
1,273,573. RIMLESS OPTICAL LENS. WILLIAM WORTHINGTON BRILHART, Indiana, Pa. Filed Mar. 21, 1917. Serial No. 156,394. (Cl. 88—54.)



1. An optical glass lens consisting of an integral piece of glass ground with even surfaces in which the rigidity thereof is built up by fusing, to or upon a main piece of glass of ordinary optical material, such as crown glass, smaller pieces of harder material, such as flint glass, at one or both of the respective ends thereof where a set of metal eyeglass or spectacle mountings may be fastened thereto.

[Claims 2 to 4 not printed in the Gazette.]

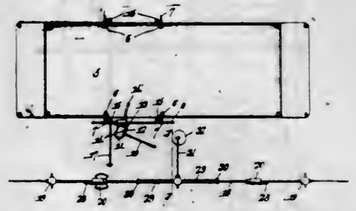
1,273,574. AUTOMATIC GAS CUT-OFF. JULIUS BROMBACHER, Los Angeles, Cal. Filed Apr. 13, 1917. Serial No. 163,070. (Cl. 67—117.)



1. A gas cut-off comprising a valve, a lever in operative relation to said valve, a link against which said lever bears, an adjustable member and a lug on said link, a bell-crank having on one end an adjustable stop and its other end in engagement with a thermostat and arranged to be placed manually on said adjustable member to hold said lever in inoperative position, said bell-crank operable by expansion of said thermostat to lift said bell-crank and allow said link to swing and the lug thereon to engage the stop on said bell-crank, said bell-crank operable by thermostatic contraction to move its stop away from said lug and allow the lever to fall and operate said valve.

[Claims 2 and 3 not printed in the Gazette.]

1,273,575. MAIL-BAG-TRANSFERRING MECHANISM. JOHN T. CAMPBELL, Richmond, Ind. Filed Nov. 3, 1917. Serial No. 200,146. (Cl. 258—22.)



1. In a mail transferring device, a horizontal rod, a sleeve slidably mounted on said rod, a grabber arm secured to said sleeve, a lever pivoted inwardly from its ends to said sleeve, a spring for normally holding one end of said lever between said sleeve and said arm and for holding the opposite end of said lever frictionally engaged with said rod.

2. In a mail transferring device, a horizontal rod, a sleeve slidably mounted on said rod, an arm secured at one end to said sleeve and having a loop portion adjacent its juncture with the said sleeve, a lever pivoted inwardly from one end to said sleeve, a spring on said sleeve yieldably holding one end of said lever disposed across said loop portion, and the other end of said lever being frictionally engaged with said rod.

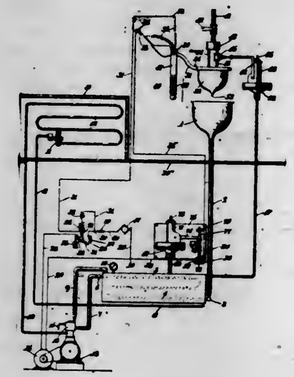
1,273,576. MEANS FOR MAKING TURBINE-ROTORS. AXEL W. CARLSON, Worcester, Mass. Original application filed Feb. 23, 1918, Serial No. 218,860. Divided and this application filed Apr. 20, 1918. Serial No. 229,729. (Cl. 22—13.)



1. In apparatus for the production of turbine rotors, the vane-supporting core-forming means, comprising a circular box, upper and lower clamp-plates concentrically supported therein and affording annular core space, said clamp-plates adapted for supporting a circumferential centrally perforated band, and the inner end shanks of radially disposed vanes inserted therethrough; means for clamping said plates upon the shanks, said plates adapted for removal from the box together with a circular core formed in said core space, and having the projecting vanes and band embedded therein.

2. In apparatus for the production of turbine rotors of the character described, a core-forming means comprising a circular box, a circular clamp-plate adapted for concentric support within said box, an upper clamp-plate superposed thereon, said plates having countermatching surfaces adapted for clamping inwardly projecting shanks of rotor vanes, the peripheral edges of said clamp-plates adapted for supporting a circumferential band with central openings coincident with the shank clamping positions, adjusting screws connecting said plates, the annular space between the periphery of the clamp-plates and rim of the box being greater than the length of the rotor vanes to be used.

1,273,577. SAFETY CONSTRUCTION FOR REFRIGERANT AND OTHER FLUID CIRCULATING APPARATUS. GEORGE P. CARROLL, Hartford, Conn. Filed Oct. 16, 1916. Serial No. 126,019. (Cl. 62—4.)



1. In combination, a condenser including water piping, a reservoir discharging downward into the piping, a regulator for varying the flow through the reservoir and the piping, energy operated forcing means for forcing fluid into the condenser, and means controlled by the head pressure to act upon the regulator to vary such flow according to the variations of such pressure.

15. In combination, a condenser including water piping, a reservoir discharging into the piping, energy operated forcing means for forcing fluid into the condenser, and throttling means controlling the flow through the reservoir and the piping, permitting a constant minimum flow therethrough and controlled by the head pressure to vary such flow between such minimum limit and a maximum according to the variations of such pressure.

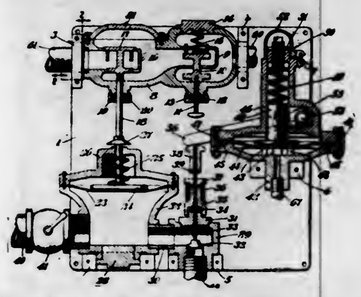
39. In combination, a condenser including water piping, a reservoir discharging downward into the piping, energy operated forcing means for forcing fluid into the condenser, a float in the reservoir, and means interrupting the transmission of operative energy to the forcing means upon a fall of the float and also in case of an excessive head pressure.

55. In combination, a condenser, water supply piping therefor, electrically operated forcing means for forcing fluid into the condenser, an expansion chamber leading from the condenser into the forcing means, a thermostat controlled by the temperature of the expansion chamber, a magnetizable device adapted to close the circuit of the forcing means but tending to open the circuit, a magnet winding operating during the energization thereof to cause the device to close said circuit but upon a cessation of such energization permitting the device to open the circuit, conductors adapted to be connected in series with the winding, and means operating at a high temperature limit of the thermostat and in case of a flow of liquid in the piping under normal conditions of head pressure, to connect the conductors and to disconnect them either at a low temperature limit of the thermostat, or in case of a cessation of such flow, or in case of an excessive head pressure.

60. In combination, a condenser including water piping, energy operated forcing means for forcing fluid into the condenser, and means controlled by the flow and the non-flow of liquid in the piping and by the head pressure to permit recurrent startings and to cause recurrent stoppings of the forcing means and in case of an excessive head pressure to cause a stopping thereof.

[Claims 2 to 14, 16 to 38, 40 to 54, 56 to 59, 61, and 62 not printed in the Gazette.]

1,273,578. SAFETY CONTROLLING MECHANISM FOR COMPRESSING-MACHINES. GEORGE P. CARROLL, Hartford, Conn. Filed Feb. 2, 1917. Serial No. 146,147. (Cl. 62—4.)



1. In combination, a condenser including water piping, a reservoir discharging downward into the piping, a regulator controlling the opening from the reservoir through the piping, energy operated forcing means for forcing fluid into the condenser, and means controlled by the head pressure to act upon the regulator to vary the flow through the piping according to the variations of such pressure.

13. In combination, a condenser, a water supply conduit therefor, energy operated forcing means for forcing fluid into the condenser, means actuated by liquid under pressure flowing in the conduit to permit the transmission of energy to the forcing means, and means controlled by the head pressure for varying the flow through the conduit.

19. In combination, a condenser including water piping, a reservoir discharging downward into the piping, a compressor leading into the condenser, an engine for driving the compressor, a conduit for transmitting fluid to operate the engine, a valve controlling the conduit, means actuated by the pressure of liquid in the reservoir to open the valve, and means closing the valve upon a cessation of such pressure.

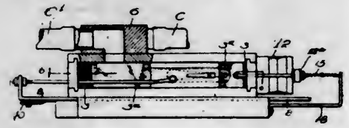
32. In combination, a condenser, energy operated forcing means for forcing fluid into the condenser, an emergency device for decreasing or suspending the transmission of operative energy to the forcing means, a lever device for actuating the emergency device, a diaphragm subject to the head pressure of the forcing means, and a motor member tending to force the diaphragm inward but upon an outward movement of the diaphragm causing the lever device to actuate the emergency device to decrease such transmission and upon a further outward movement to suspend such transmission.

63. In combination, a vessel for containing fluid under pressure and having a movable wall, a pipe for transmitting water to cool the contents of the vessel, a regulator for regulating the flow through the pipe, a lever device for actuating the regulator, a motor member bearing upon said wall and having a transverse recess, a lever extending into said recess, operatively connected with the lever device and operating upon an outward movement of the member to cause the device to move outward and the regulator to permit an increase of flow through the pipe and upon an inward movement of the member to cause the device to move inward and the regulator to decrease such flow, and a spring device tending to cause the member and the lever device to move inward.

[Claims 2 to 12, 14 to 18, 20 to 31, 33 to 62, and 64 to 67 not printed in the Gazette.]

1,273,579. GOVERNOR FOR AIR-MOTORS. MELVILLE CLARK, Chicago, Ill., assignor to Melville Clark Piano Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 13, 1917. Serial No. 191,109. (Cl. 230—36.)

1. A governor for an exhaust-operated air motor comprising a tempo valve which controls the communication of the motor with the exhaust devices, and a seat for the same having a port which the valve controls, the valve and seat being relatively movable for varying the extent to which the valve covers the port; tempo-controlling means for actuating one of said parts,—valve and seat,—a pneumatic and duct connection therefrom to the exhaust devices independent of the exhaust device connection with the motor, the movable wall of the pneumatic being operatively connected with one of said two relatively movable parts,—valve and seat,—for moving the same according to the degree of the collapse of the pneumatic, and a spring which resists such collapse.



2. In a construction such as set out in claim 1, the pneumatic-actuated one of said two relatively movable parts being the valve seat.

3. In a construction such as set out in claim 1, one of said two relatively movable parts being connected for actuation by the tempo-controlling means, and the other being connected for actuation by said pneumatic.

4. A governor for an exhaust-operated air motor comprising a duct or passage for connecting the exhaust devices with the motor and two means for controlling the flow of air through said duct connections; a pneumatic having independent connection with the exhaust devices; mechanical connections from the pneumatic for operating one of said controlling means, and mechanical connections independent of said pneumatic for operating the other of said controlling means.

1,273,580. GLASS FOR HEADLIGHTS. HENRY D. COHEN, Newark, N. J. Filed Nov. 11, 1915. Serial No. 60,836. (Cl. 240—111.)



1. A headlight comprising a frame, a glass in the frame, and a spring placed between the periphery of the glass and the inner face of the frame, and pressing the frame outwardly and the glass inwardly, the glass having a recess into which part of the spring projects.

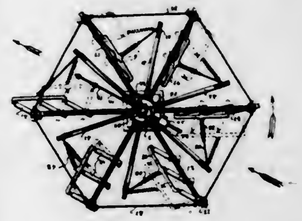
[Claim 2 not printed in the Gazette.]

1,273,581. SHOVEL. DE WITT MORRISON COINER, Statesville, N. C. Filed May 8, 1918. Serial No. 233,333. (Cl. 83—60.)



A shovel comprising a scoop portion and a handle, the scoop portion having a screen bottom, and a false bottom for covering the screen bottom, said false bottom comprising a plate fitting within the scoop over the screen and having an angular shank at the inner end thereof, said shank extending at an obtuse angle with respect to the plate and being pivoted to the shovel at the junction of the scoop and handle well above the level of the screen.

1,273,582. WINDMILL. OSCAR M. COX, Lockney, Tex. Filed Aug. 3, 1914, Serial No. 854,607. Renewed Dec. 18, 1917. Serial No. 207,796. (Cl. 170—26.)



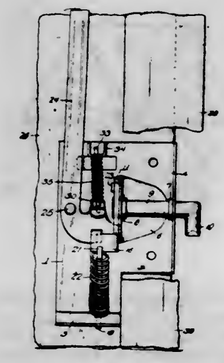
1. A windmill comprising a revoluble shaft, a pair of spiders respectively fast upon the end portions of said shaft, their arms being alined parallel to the shaft, a plurality of vanes interposed between each pair of alined arms, a bar establishing swinging connection between corresponding edges of each set of vanes, a spider intermediately mounted upon the shaft having its arms extending between the set of vanes, pulleys mounted on the extremities of the arms of the last named spider, cords each having connection with one of said swinging bars and each extending toward the shaft along one arm of the last named spider after being carried over the pulley on the outer end thereof, a pulley mounted upon the inner end of each of said spider arms, the cord correlated with said arm being passed through a quarter turn on said pulley, a collar concentric with the shaft, to which each of said cords are secured, a counterbalanced normally upstanding vane, and means actuated by a displacement of said vane from its normal position communicating a displacement to said collar whereby said cords are placed in tension shifting the vanes each to a substantially tangential position.

2. A windmill comprising a vertical shaft, a pair of vertically-spaced spiders revoluble about said shaft, a plurality of vertical vanes revoluble about said shaft, extending between the two spiders, an arm loosely mounted on the upper end of said shaft projecting therefrom, a vertical vane carried by the outer end of said arm, a bell-crank pivoted at its apex upon the inner end of said arm, comprising an upwardly and a horizontally projecting arm, the latter being weighted, a vane surmounting the upwardly projecting arm, a collar vertically adjustable upon the shaft below the bell-crank, a swinging connection between said collar and the horizontally projecting arm of said bell-crank, a brake drum loosely mounted upon the shaft below said collar, brake shoes normally spaced from said collar, and a mechanism actuated by the vertical displacement of the sliding collar for applying the brake shoes to the brake drum, cords adapted to be wound upon the brake drum and adapted to actuate the vanes of a wind wheel to a position which they rigidly maintain.

1,273,583. LATCH. BASIL R. CRAMPTON, Chicago, Ill. Filed Nov. 12, 1917. Serial No. 201,529. (Cl. 70—49.)

1. In a latch comprising a keeper having a curved wall, a base plate formed with a lateral flange, a latch-bolt journaled in said flange and formed with a bent termina-

tion for engagement with the curved wall of the said keeper, a cam fast upon said latch-bolt and formed with a shoulder for engagement with said base plate, a heel integral with said cam, a finger integral with said heel, a tension bar movably carried by said base plate and connected to said heel, a hand lever fulcrumed to said base plate for operative engagement with the said cam, a prong formed upon said lever and normally disposed in the path of movement of the said finger, and means connecting said lever and the said base plate whereby said lever is yieldingly retained in a predetermined or normal position.

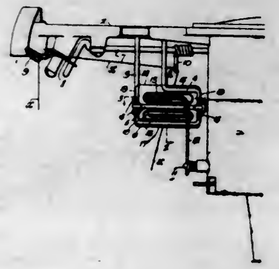


2. In a latch comprising a keeper having a curved wall, a base plate formed with a lateral flange, a tongue bent from said base plate into parallelism with said flange, a latch-bolt journaled in said tongue and flange and formed with a bent termination for engagement with the curved wall of the said keeper, a cam fast upon said latch-bolt and formed with a shoulder for engagement with said base plate, guide means for said cam formed upon said base plate and spaced away from the said tongue, a heel integral with said cam, a finger integral with said heel, a tension bar movably carried by said base plate and operatively connected to said heel, a hand lever fulcrumed to said base plate for operative engagement with said cam, means connecting said lever and the said base plate whereby said lever is yieldingly retained in a predetermined or normal position, and a prong formed upon said lever and disposed in the path of movement of said finger while said cam is in engagement with said base plate and during the normal position of the latter member.

5. In a latch comprising a keeper having a curved wall, a base plate formed with a lateral flange and with a perforated terminal lip, a tongue bent from said base plate into parallelism with said flange, a latch-bolt movably carried by said tongue and flange and formed with a bent termination for engagement with the curved wall of said keeper, a cam fast upon said latch-bolt and formed with a shoulder for engagement with said base plate, a notched heel carried by said cam, a finger integral with said heel, a spring-pressed bar connecting the notched portion of said heel and the perforated portion of said lip, said spring-pressed bar being capable of oscillating movement from side to side of a line-of-centers connecting said latch-bolt and the perforated portion of said lip, a hand lever fulcrumed to said base plate and adapted for actuating engagement with said cam, means connecting said base plate and said lever for yieldingly retaining the latter member in normal position out of engagement with the said cam, and a prong carried by said lever and disposed in the path of movement of said finger while said cam is in engagement with said base plate and said lever is in normal position.

[Claims 3 and 4 not printed in the Gazette.]

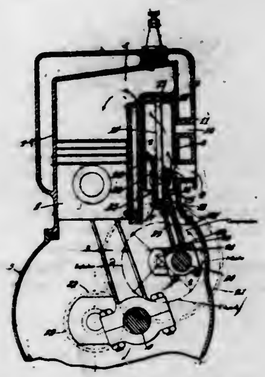
1,273,584. STOP-MOTION THREAD-FRAME. FRANK CRAWFORD, Sr., New Brunswick, N. J., assignor to The Crawford Manufacturing Company, New Brunswick, N. J., a Corporation of New Jersey. Filed Apr. 9, 1917. Serial No. 160,737. (Cl. 66—7.)



5. The combination in a stop motion, of a frame having a series of bars spaced apart; a trip actuating arm having bars alternating with the bars of the frame; and a detachable guide plate secured to one of said elements and having a broad surface at the bars forming extended surfaces for the thread so as to prevent the accidental operation of the stop motion when light yarns are used.

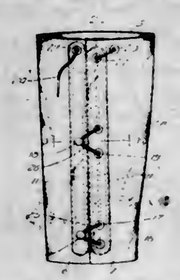
[Claims 1 to 4 not printed in the Gazette.]

1,273,585. ENGINE-VALVE. JESSE TEMPLE CURTIS, Bement, Ill., assignor of one-half to F. Lynn McClure, Sebring, Ohio. Filed Oct. 16, 1917. Serial No. 196,889. (Cl. 123—75.)



An engine valve structure embodying a casing to communicate at one end with a cylinder and having intake and exhaust ports, one near its other end and the other between its ends, a sleeve valve slidable within the casing to control the second mentioned valve to communicate with the other port and having a valve seat near the first mentioned end of the casing, a puppet valve seatable against said seat and having a spring-pressed stem slidable through the sleeve valve, a crank, a connecting rod connecting said crank and sleeve valve, a push rod slidable in the connecting rod to move said stem, and a cam carried by the crank and engageable with said push rod to unseat the puppet valve during one movement of the sleeve valve.

1,273,586. LEGGING. HENRY H. CUTLER, Three Oaks, Mich., assignor to The Warren Featherbone Co., Three Oaks, Mich., a Corporation of Michigan. Filed Apr. 26, 1918. Serial No. 230,955. (Cl. 36—2.)

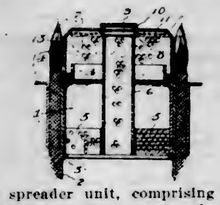


1. In a legging, a pocket extending lengthwise thereof, an elongated elastic wire frame fitting in said pocket, and a strip of flexible material forming a filler for said frame.

3. A stiffening structure or stay for wearing apparel consisting of a rectangular elongated wire frame, and a filler strip of "featherbone" for said frame.

[Claims 2 and 4 to 6 not printed in the Gazette.]

1,273,587. FLAME-SPREADER FOR BURNERS. CORTLAND W. DAVIS and VICTOR S. JOHNSON, Chicago, Ill., assignors to The Mantle Lamp Company of America, Chicago, Ill., a Corporation of Illinois. Filed Aug. 28, 1914. Serial No. 859,074. (Cl. 67—63.)



1. A flame spreader unit, comprising an upper flame member, a lower supporting member for sustaining said flame member, and heat dissipating means in proximity to the flame member for limiting conduction of heat to the supporting member.

2. A flame spreader unit, comprising an upper flame member, a lower tubular supporting member for sustaining said flame member, and a tubular perforated member in proximity to the flame member for limiting conduction of heat from the flame member to the tubular supporting member.

[Claims 3 to 18 not printed in the Gazette.]

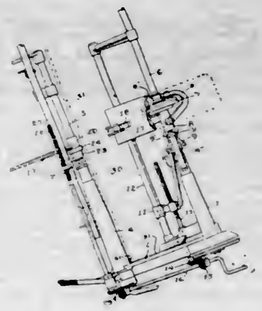
1,273,588. METHOD OF SECURING WOODEN PARTS. WILLIAM T. DONNELLY, Brooklyn, N. Y. Filed Dec. 6, 1917. Serial No. 205,798. (Cl. 29—84.)



1. The method of securing wooden parts by means of drive screw bolts, unthreaded over the portion designed to pass through said parts, which consists in boring through said parts a hole of slightly less diameter than said bolt, placing a cap nut over the threaded end thereof and driving said bolt through until the head end thereof emerges, forming a head on the bolt, removing said cap nut and replacing same with a nut of the usual type, and setting up said nut to secure the members.

[Claim 2 not printed in the Gazette.]

1,273,589. NEEDLE-ADJUSTING MEANS. JOHN H. DOWNING, Minneapolis, Minn., assignor to the State of Minnesota. Filed Oct. 1, 1917. Serial No. 194,281. (Cl. 56—119.)

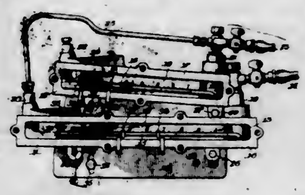


1. In a corn harvester, a needle shaft, a needle and hub slidable thereon, said hub having a groove formed therein, a guide adjacent to said shaft and a carriage slidable on said guide, a clamp having a clutch for engaging said groove for positively moving said hub up and down on said shaft, and means for adjusting said carriage on said guide.

5. In a corn harvester, a knotter shaft, a knotter mechanism mounted to slide vertically thereon, a sleeve wherein said shaft is mounted to revolve, said sleeve having a flanged lower end, a collar mounted to revolve with said shaft and having means for engaging said flange, and mechanism for raising and lowering said collar.

[Claims 2 to 4 and 6 to 8 not printed in the Gazette.]

1,273,590. DRAFT-GAGE. LEWIS M. ELLISON, Chicago, Ill. Filed Oct. 31, 1914. Serial No. 869,613. (Cl. 73—31.)



1. In combination, a pair of pressure indicators, each comprising a cup and a scale tube extending laterally away from the bottom of the cup, a wall plate against which each of the said indicators is pivotally mounted, clamping means for securing each indicator in angularly adjusted position upon the wall plate independently of the other and a flexible tube connecting the outer end of the scale tube of one indicator with the cup of the other.

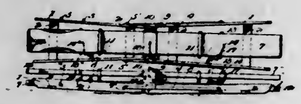
3. In combination, a pair of pressure indicators each comprising a cup and a scale tube extending laterally away from the bottom of the cup, means connecting the two indicators for relative angular adjustment, and a flexible tube connecting the outer end of the scale tube of one indicator with the cup of the other.

[Claim 2 not printed in the Gazette.]

1,273,591. TEETER. EDGAR P. ELZEY, Parkersburg, W. Va., assignor to Edwin L. Davidson, Parkersburg, W. Va. Filed Oct. 13, 1917. Serial No. 196,421. (Cl. 46—22.)

3. A teeter comprising a seesaw beam embodying a longitudinal center supporting and coupling member hav-

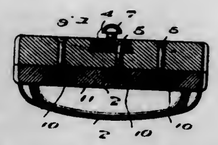
ing upwardly extending loops and a center upwardly extending yoke, and a pair of beam sections arranged on and longitudinally of said member and within said loops and yoke.



6. A teeter comprising a supporting horse having a top cross shaft, and a seesaw beam at the center of its length having ears rigid therewith and depending therefrom and coupled to said shaft to provide a space between the center of the beam and the shaft, said beam embodying removable sections normally arranged in approximate longitudinal alinement with each other, and means whereby said beam can be knocked down and packed with said sections arranged side by side to reduce the length of the beam approximately by half with one of said sections in said space.

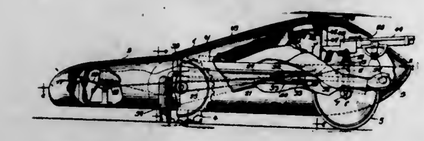
[Claims 1, 2, 4, 5, and 7 to 10 not printed in the Gazette.]

1,273,592. TRUSS-PAD. JAMES W. EMBREE, Manhattan, Kans. Filed Mar. 1, 1917. Serial No. 151,764. (Cl. 128—26.)



A truss pad comprising a body of suitable material, a member of plastic material arranged on the face of the body, wooden anchor blocks embedded in said plastic material, a plate seated in the back of the body and having a plurality of threaded apertures at intervals of its height, a screw removably arranged in one of said apertures, and screws connected with and extending through the body and into the anchor blocks in the plastic member.

1,273,593. MANUALLY-PROPELLED ARMORED VEHICLE. JOHN BAPTISTE FELICETTI, Philadelphia, Pa. Filed June 15, 1917. Serial No. 174,908. (Cl. 115—2.)



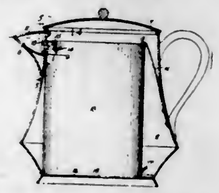
1. A vehicle including a shell forming a complete closure for the operator, wheels supporting said shell, impact members outside of said shell, and means extending from said impact members into said shell and designed to be actuated by the operator to propel the vehicle, substantially as described.

6. A vehicle including a shell forming a complete closure for the operator, wheels supporting said shell, impact members outside of said shell, means extending from said impact members into said shell and designed to be actuated by the operator to propel the vehicle, certain of said wheels having axles pivotally supported on the shell, said shell having a tail portion into which the feet of the operator can be projected, a pivoted steering lever in said tail portion, and means connecting said latter lever with the pivoted axles whereby the latter can be moved on their pivots, substantially as described.

7. A vehicle including a shell having slots therein, impact members on the outside of said shell, levers connected to said impact members and extending through said slots, and means forming a seal for said slots and permitting movement of said levers, substantially as described.

[Claims 2 to 5 and 8 to 12 not printed in the Gazette.]

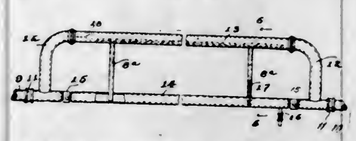
1,273,594. PITCHER FOR CANS OF CONDENSED MILK. CURTIS C. FELTNER, Cerro de Pasco, Peru. Filed June 2, 1917. Serial No. 172,435. (Cl. 65—61.)



2. A pitcher adapted to receive a can so that the upper part thereof is above the lower part of the spout within the pitcher, a gravitationally-operable tongue within the spout, a lip at the lower part of the spout for the tongue to limit its movement into the pitcher, an inwardly directed pin on said tongue, and means in said pitcher for yieldingly engaging a can and retaining the same in the pitcher so that the can contacts with the pitcher at the spout.

[Claim 1 not printed in the Gazette.]

1,273,595. APPARATUS FOR SEPARATING ENTRAINED LIQUIDS FROM GASES. JAMES P. FISHER, Bartlesville, Okla. Filed June 8, 1916. Serial No. 102,517. (Cl. 183—30.)



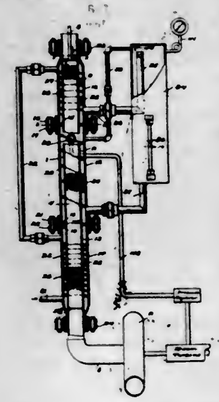
2. In a device for separating liquid from gas passing through a pipe, the combination of a pan curved to approximately conform to the inner surface of the pipe wall, and a series of vanes secured to the concave side of the pan with a liquid flow space between each vane and the pan, the said vanes being in oblique arrangement whereby gas passing through the said pipe is given a spiral motion when the pan and vanes are placed therein.

5. The combination of a substantially horizontal gas-conducting pipe open at both ends and having a substantially uniform diameter, a series of vanes located at the lower side of the pipe which is otherwise substantially unobstructed and which is imperforate at points immediately adjacent the vanes, the said vanes being all similarly arranged in oblique positions whereby gas passing through the pipe is given a spiral motion, and means for draining from the pipe any liquid deposited therein.

13. The combination of a gas main divided into two separated alining parts, a separator pipe parallel with the main but out of alinement therewith, connections between the ends of the separator pipe and the adjacent ends of the parts of the main, means in the separator pipe for separating liquid from the gas passing therethrough, a reservoir for liquid connected with the separator pipe and located in alinement with the said parts of the main, and means interposed between the reservoir and the two parts of the main for holding the said parts separated.

[Claims 1, 3, 4, 6 to 12, and 14 not printed in the Gazette.]

1,273,596. STEAM-GENERATOR. JAMES P. FISHER, Bartlesville, Okla. Filed June 24, 1916. Serial No. 105,589. (Cl. 122—176.)



1. In a steam generator, the combination of a heating chamber, a water container having a section divided from the remainder thereof and positioned adjacent the final or discharge part of the chamber, means for leading water into the said section, means for leading water from the said section first to a part of the container adjacent the initial or combustion part of the chamber and then to a part of the container adjacent the intermediate part of the chamber, the said means including a reservoir separate from the container and interposed between the said section and the said part adjacent the intermediate part of the chamber, and a by-pass pipe connecting the reservoir with the last said part of the container and positioned above the water level.

2. In a steam generator, the combination of a heating chamber, a water container having three separate sections of which one is adjacent the final or discharge part of the chamber, the second adjacent the initial or combustion part of the chamber and the third adjacent the intermediate part of the chamber, a reservoir separate from the container, means for leading water successively through the first section, the second section, the reservoir and the third section, and a by-pass pipe connecting the reservoir with the third section and positioned with its end above the water level in the reservoir.

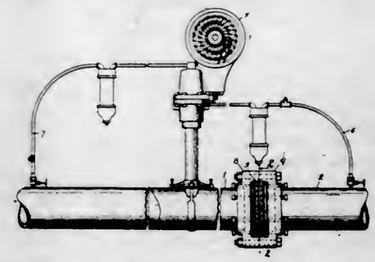
7. In a steam generator, the combination of a vertical heating chamber in which combustion occurs in the upper part the gases of combustion being discharged downward, a vertical tubular water container surrounding the chamber and divided into three sections, a spiral vane in each section providing a spiral path for the water, means for leading water into the lower end of the lower section near the final or discharge part of the chamber, means for leading the water from the upper end of the lower section to the upper end of the upper section adjacent the initial or combustion part of the chamber, means for leading the water from the lower end of the last said section to the lower end of the third or intermediate section, and means for receiving steam from the upper part of the intermediate section.

15. In a steam generator, the combination of a heating chamber consisting of a single metal tube in which combustion occurs near one end the gases of combustion being discharged at the other end, a tubular water container surrounding the chamber and comprising three separate metal tubes, means for closing the ends of the tubes to form three separate sections, means for leading water into the remote end of the tube near the final or discharge part of the heating chamber, means for leading the water from the near end of the said tube to the remote end of the tube adjacent the initial or combustion part of the chamber, and means for leading the water from the near end of the last said tube to the opposite end of the third or intermediate tube.

19. In a steam generator, the combination of a heating chamber consisting of a single metal tube in which combustion occurs near one end the gases of combustion being discharged at the other end, a tubular water container surrounding the chamber and comprising three separate metal tubes, the last said tubes being detachable from each other and from the heating chamber tube, a division plate between each two adjacent tubes, each plate closely engaging the heating chamber tube, means for closing the outer ends of the end tubes, and means for leading water through the said water tubes successively.

[Claims 3 to 6, 8 to 14, and 16 to 18 not printed in the Gazette.]

1,273,597. MULTIPLE ORIFICE-METER. JAMES P. FISHER, Bartlesville, Okla. Filed Mar. 16, 1917. Serial No. 155,145. (Cl. 73—167.)

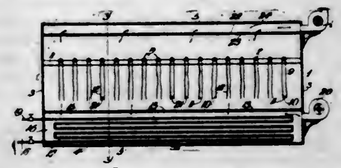


1. In a device of the character described, the combination of a housing adapted to be positioned between and connected with two adjacent pipe sections and having a transverse opening permitting the insertion or removal of an orifice plate between the pipe sections without disturbing the relationship of any of the housing parts, and means for forming fluid tight joints between the plate and the housing.

13. The combination of two adjacent pipe sections, an orifice plate, a housing positioned between and connected with the pipe sections and having a transverse opening permitting the insertion or removal of the orifice plate between the pipe sections without disturbing the relationship of any of the housing parts, a recording gage, and pipe connections between the gage and each of the said pipe sections on opposite sides of the orifice plate.

[Claims 2 to 12 not printed in the Gazette.]

1,273,598. METHOD AND APPARATUS FOR DRYING SKINS. JAMES U. FLANAGAN, Wilmington, Del., assignor to F. F. Slocomb & Co., Incorporated, Wilmington, Del., a Corporation of Delaware. Filed Jan. 13, 1914. Serial No. 811,819. (Cl. 34—19.)

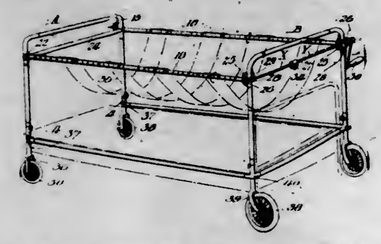


6. An apparatus for drying skins, consisting of a closed compartment, a heating compartment below the same and provided with means for creating air-pressure in the same and with a discharge into said closed compartment, an exhaust chamber above said closed compartment and communicating with the same, and a support in the closed compartment opposite to the inlet in the same and

adapted to have a skin doubled and suspended from it with the open space between its doubled parts registering with the inlet to directly receive the drying agent.

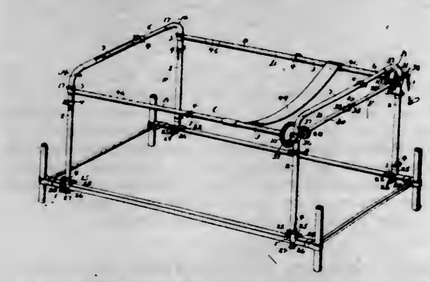
[Claims 1 to 5, 7, and 8 not printed in the Gazette.]

1,273,599. DEVICE FOR LIFTING AND MOVING INVALIDS. ROBERT L. FLOYD, Staunton, Va., assignor to The Floyd Invalid Lifter Company, Staunton, Va., a Corporation of Virginia. Filed Nov. 17, 1914. Serial No. 872,616. (Cl. 5—44.)



In a device of the character described in combination, a horizontal frame, supporting devices carried by said horizontal frame, lifting mechanism upon said supporting means, and means to support said horizontal frame at the proper height to enable said frame to be pushed around a bed, said means comprising detachable castered supports which when removed leave said frame adapted for use directly on a suitable mattress.

1,273,600. MECHANISM FOR LIFTING AND TURNING INVALIDS. ROBERT L. FLOYD, Staunton, Va., assignor to The Floyd Invalid Lifter Company, Staunton, Va., a Corporation of Virginia. Filed Nov. 23, 1914. Serial No. 873,493. (Cl. 5—44.)

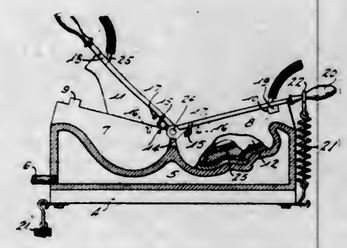


1. An invalid lift comprising in combination a pair of vertical supporting arches, lifting shafts carried by said supporting arches, means for operating said lifting shafts, each of said lifting shafts being provided with a series of equally spaced longitudinally alined openings, and an elongated staple having ends spaced to fit said openings, said staple having a length greater than the distance between an adjacent pair of openings to enable said staple to carry a wide supporting band and to be adjusted at relatively small distances longitudinally of the said lifting shafts.

2. In an invalid lift in combination, supporting arches, lifting shafts carried by said supporting arches, gear mechanism for operating said lifting shafts, and clamp brackets for carrying said vertical arches and securing the same to the rails of a bedstead, said clamp brackets comprising a substantially cylindrical vertical member, a V-shaped supporting shelf extending from said cylindrical member at substantially right angles thereto, a bifurcated arm extending from the side of said supporting shelf at substantially right angles to said cylindrical member, a flat link, a bolt carried by said link and adapted to engage said bifurcated member, and a thumb screw threaded axially alined with said cylindrical member and carrying said link.

3. In an invalid lift in combination, a pair of supporting arches, a pair of lifting shafts carried by said arches, the upper members of said lifting shafts comprising telescoping tubular members adapted to be adjustable longitudinally, means for operating said lifting shafts, said means including a driving shaft formed in two sections, one section telescoping within the other, a relatively large beveled gear carried by each lifting shaft, a beveled pinion carried by each section of the driving shaft, the ends of the driving shaft extending through openings in the vertical members of one of said arches, and an adjustable stop carried by one section of said driving shaft and adapted to be abutted against the end of the other section of the driving shaft to retain said pinions in mesh with said beveled gears when the said arch has been adjusted in an extended position.

1,273,601. APPARATUS FOR MAKING HOLLOW ARTICLES FROM PLASTIC MATERIAL. EUGEN J. FRAENKELL, New York, N. Y. Filed June 5, 1917. Serial No. 172,848. (Cl. 18—34.)



1. In combination, mold sections pivotally connected together, and corresponding forms detachably secured to the respective mold sections, the mold sections and forms having inter-engaging parts, and certain of said parts of the mold sections adapted for inter-engagement when the forms are detached from the mold sections and the sections are swung upon their pivots.

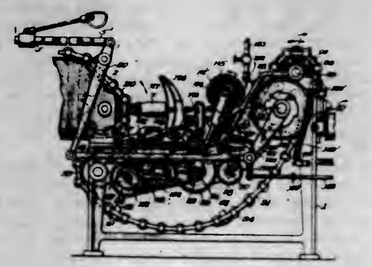
4. In a molding apparatus comprising a mold section, a corresponding core associated therewith and having an interlocking connection at one end with said section and a yieldable connection between the core and the section at its opposite end for holding the core in its proper relation to the molding section.

[Claims 2 and 3 not printed in the Gazette.]

1,273,602. BOTTLE-WASHING MACHINE. ROCKWELL L. GALLUP and WALTER G. WACHS, Chicago, Ill., assignors to Barry-Wehmiller Machinery Company, St. Louis, Mo., a Corporation of Missouri. Filed Sept. 19, 1914. Serial No. 862,476. (Cl. 141—7.)

1. In a bottle washing machine, the combination of a frame, a conveyer mounted on said frame for carrying bottles through the machine, reciprocating means for actuating said conveyer, a pair of swinging arms mounted on said frame, a brush rotatably mounted on said arms and extending transversely of the frame, means for rotating said brush, cam plates pivotally mounted on said frame having means for engaging said arms, and means moving with said reciprocating means to engage and rock said cam plates, thereby automatically lifting said brush from engagement with the bottles on said conveyer before the latter advances and permitting said brush to again engage the bottles when the conveyer is at rest.

2. In a bottle washing machine, the combination of a frame and an endless chain conveyer mounted on said frame, means for intermittently advancing said conveyer, a plurality of spindles rotatably mounted between the opposite sides of said conveyer and carrying brushes adapted to be inserted in the bottles as they are positioned thereover by said conveyer, a plurality of constantly rotating spindles beneath the lower side of said conveyer, and means for intermittently raising said constantly rotating spindles to engage with and rotate said first-mentioned spindles.



3. In a bottle washing machine, the combination of a frame, a conveyer mounted on said frame, a plurality of rotatable spindles carrying brushes and adapted to be inserted in the bottles as they are positioned thereover by said conveyer, ferrules surrounding each of said brushes, resilient means tending to force said ferrules into engagement with the necks of the bottles, and means for tensioning said resilient means and thereby holding said ferrules out of engagement with the necks of the bottles when the spindles are withdrawn therefrom.

4. In a bottle washing machine, the combination of a frame, a conveyer mounted on said frame, a member extending transversely of the machine, a plurality of spindles rotatably supported by said member and carrying brushes adapted to be inserted in the bottles as they are positioned thereover by said conveyer, a ferrule surrounding each of said brushes, a spring adapted to force said ferrules into engagement with the necks of the bottles, and means connecting said ferrules to said member for tensioning said springs and thereby holding said ferrules out of engagement with the necks of the bottles when the spindles are withdrawn therefrom.

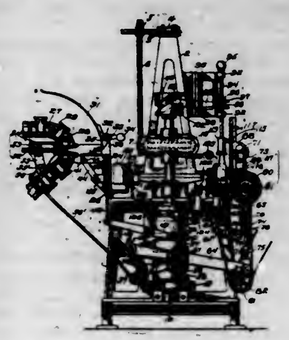
5. In a bottle washing machine, the combination of a frame, an endless chain conveyer mounted on said frame, a plurality of hollow rotatable spindles carrying brushes adapted to be inserted in the bottles when they are positioned thereover by said conveyer, continuously rotated means disposed beneath the lower section of the conveyer and adapted to be raised into contact with said spindles whereby the spindles are rotated, and means for supplying a liquid under pressure to said spindles.

[Claims 6 and 7 not printed in the Gazette.]

1,273,603. BOTTLE-WASHING MACHINE. ROCKWELL L. GALLUP and WALTER G. WACHS, Chicago, Ill., assignors to Barry-Wehmiller Machinery Company, St. Louis, Mo., a Corporation of Missouri. Filed Jan. 2, 1915. Serial No. 131. (Cl. 141—7.)

1. In a machine of the character described, the combination of a rotatable means to support a bottle upon its base in upright position, a constantly rotating means disposed in frictional engagement with said rotatable means, and means to engage the neck of the bottle and cause frictional driving engagement between the bottom of the bottle and said rotatable means and between said rotatable means and said constantly rotating means, whereby the bottle is spun about its vertical axis.

2. In a machine of the character described, the combination of a rotatable means to support a bottle upon its base in upright position, a constantly rotating member disposed in frictional engagement with said rotatable means, means adapted to engage the neck of the bottle and cause frictional driving engagement between the bottom of the bottle and said rotatable means and between said rotatable means and said constantly rotating member, whereby the bottle is spun about its vertical axis, a brush, and automatic means for moving said brush in contact with the bottle.



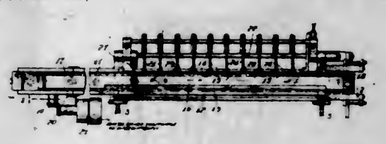
3. In a machine of the character described, the combination of a rotatable means to support a bottle upon its base in upright position, means normally holding said rotatable means against rotation, a constantly rotating member disposed in frictional engagement with said rotatable means, and means adapted to engage the neck of the bottle and cause frictional driving engagement between the bottom of the bottle and said rotatable means and between said rotatable means and said constantly rotating member, whereby the bottle is spun about its vertical axis.

4. In a machine of the character described, the combination of a rotatable means to support a bottle upon its base in upright position, means normally holding said supporting means against rotation, a constantly rotating member disposed in frictional engagement with said rotatable means, means adapted to engage the neck of the bottle and cause frictional driving engagement between the bottom of the bottle and said rotatable means and between said rotatable means and said constantly rotating member, whereby the bottle is spun about its vertical axis, a brush, and automatic means for moving said brush in contact with the bottle.

5. In a machine of the character described, the combination of a rotatable table adapted to support a bottle upon its base in upright position, a constantly driven spindle having means thereon frictionally engaging said table, a brake normally holding said table against rotation, and means adapted to hold a bottle in frictional engagement with said table and to cause frictional driving engagement between said table and said frictional driving means, whereby the bottle is spun about its vertical axis.

[Claims 6 to 23 not printed in the Gazette.]

1,273,604. BOTTLE-WASHING MACHINE. ROCKWELL L. GALLUP and WALTER G. WACHS, Chicago, Ill., assignors to Barry-Wehmiller Machinery Company, St. Louis, Mo., a Corporation of Missouri. Original application filed Sept. 19, 1914, Serial No. 862,476. Divided and this application filed Oct. 27, 1917. Serial No. 198,751. (Cl. 193—24.)



1. In a bottle washing machine, the combination of a conveyer for carrying bottles through the machine, a carrier disposed adjacent the discharge end of said conveyer and extending transversely thereof for automatically removing bottles from the machine, and means adapted to be alternately positioned above said carrier before the

bottles are delivered thereto to form a plurality of compartments arranged longitudinally of said carrier and to prevent the bottles from over-turning as they are discharged thereupon, and withdrawn to permit the bottles to advance with said carrier.

5. In a bottle washing machine, the combination of a conveyer for carrying bottles through the machine, a carrier disposed adjacent the discharge end of said conveyer and extending transversely thereof for automatically removing the bottles from the machine, means for moving said carrier, a plurality of blades pivotally mounted adjacent said carrier, means for normally holding said blades in inoperative position, and means for alternately moving said blades to a position above said carrier before the bottles are delivered thereto to form a plurality of compartments, arranged longitudinally thereof, whereby the bottles are prevented from overturning as they are discharged upon said carrier, and withdrawing said blades to permit the bottles to advance with said carrier.

12. In a bottle washing machine the combination of a trough, a constantly moving carrier in said trough, a plurality of blades mounted for simultaneous movement to and from a position in said trough above said carrier thereby forming a plurality of pockets and means for delivering a plurality of bottles to said pockets.

[Claims 2 to 4 and 6 to 11 not printed in the Gazette.]

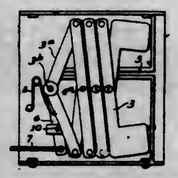
1,273,605. ADVERTISING AND EDUCATIONAL TOY. MATTHEW S. GOLDMAN, Pittsburgh, Pa. Filed Sept. 29, 1917. Serial No. 194,070. (Cl. 46—40.)



3. In a toy, a floor, means for supporting a background, a plurality of backgrounds, a plurality of mats for the floor, a plurality of sets of objects, the backgrounds, mats and sets of objects comprising groups each with a background, a mat and a set of objects having harmonious visual characteristics, means for identifying each group, means for identifying the disposition of the set of correlative objects on the mat of each group, a number of openings in the floor, a small number of openings in each mat arranged to register with certain openings in the floor, and means in the registering openings for supporting the objects.

[Claims 1, 2, 4, and 5 not printed in the Gazette.]

1,273,606. SIGNAL. MARVIN A. GYSEL, Rochester, N. Y. Continuation of application Serial No. 171,943, filed May 31, 1917. This application filed Jan. 5, 1918. Serial No. 210,529. (Cl. 116—31.)



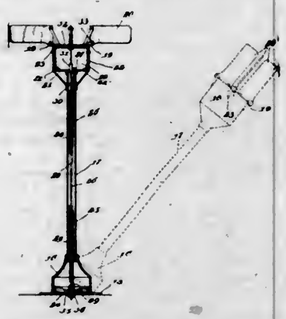
7. A signal comprising a signaling member, a pivoted member connected to the signaling member, an oscillatory operating member, a latch pivoted to the operating member to engage the pivoted member alternately on opposite sides of the pivot to project and retract the signaling member, and interlocking devices on the latch and the pivoted member for holding the pivoted member against movement in both positions.

9. A signal comprising a pivoted member movable in opposite directions, a signaling member connected to said member to move the signaling member to signaling position when the first named member is moved in one direction and away from signaling position when said first named member is moved in the other direction, an operating member, a spring for holding the operating member in normal position, and a latch operated by said operating member to engage the first mentioned member on opposite sides of its pivot, said latch and pivoted member having interlocking portions which hold said pivoted member in its two shifted positions.

12. A signal comprising a pivoted member, a signaling member connected to said pivoted member to move to signaling position when the pivoted member is moved in one direction, and away from signaling position when the pivoted member is moved in the other direction, an operating member, a latch connected to the operating member and adapted to engage the pivoted member alternately on opposite sides of its pivot, interlocking devices between the latch and the pivoted member broken by the movement of the operating member, and a spring acting on the operating member to move it to a normal position and to effect the interlocking connection between the latch and the pivoted member.

[Claims 1 to 6, 8, 10, and 11 not printed in the Gazette.]

1,273,607. TRAFFIC-SIGNAL. GEORGE R. HAWKS, Lodi, Wis. Filed Sept. 20, 1916. Serial No. 121,261. (Cl. 40—125.)



1. In a traffic signal, a tubular post, spring means for maintaining the same in an upright position, collapsible wings connected with the post, and a connection between the spring means and the wings for collapsing and extending the wings.

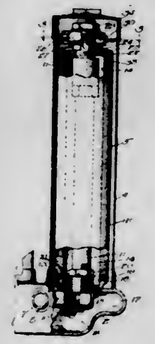
2. In a traffic signal, a tubular post, spring means for maintaining the same in an upright position, collapsible wings connected with the post, and a connection between the spring means and wings for automatically collapsing the wings when the post is tilted from an upright position and for restoring the wings to an extended position when the post assumes an upright position.

3. In a traffic signal, a supporting member, a tubular post having a flaring base resting thereon, a bell-shaped housing at the upper end of the tubular post, wings pivotally supported adjacent to the edge of the housing, a disk slidable within the housing, links connecting the wings with the disk, and a connection between the disk and the supporting member including a spring within the tubular post.

7. A traffic regulator, comprising a semaphore standard, semaphore arms secured upon said standard, means for allowing the standard to swing at an angle to a perpendicular normal position, means whereby the semaphore arms will be swung into a protected position as the standard is swung from the vertical, and into their normal outstretched position as the standard assumes its normal vertical position.

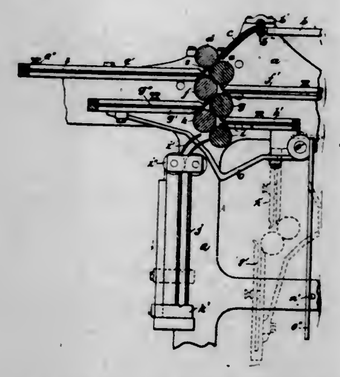
[Claims 4 to 6 not printed in the Gazette.]

1,273,608. FILTER. WILLIAM R. HILDEBRAND, Chicago, Ill. Filed Jan. 27, 1916. Serial No. 74,573. (Cl. 210—11.)



The combination with a filter, of a filtering stone casing and a hollow filtering stone having a space therebetween for the passage of unfiltered water, a pipe for conveying unfiltered water through the hollow space within said stone, a discharge head on and adjustable longitudinally of said pipe, and a series of tangentially and downwardly inclined outlet openings in said head for projecting streams of water in spiral paths around the exterior of said stone.

1,273,609. FOLDING-MACHINE. REUBEN HITCHCOCK, Cleveland, Ohio, assignor to The Cleveland Folding Machine Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 18, 1914. Serial No. 833,001. (Cl. 270—68.)

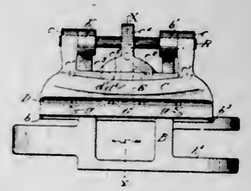


3. In a folding machine, the combination with a vertically disposed bank or series of buckling and creasing rolls, of a plurality of co-acting folding plates respectively associated with different sets of rolls in the series; said plates being positioned substantially horizontal and parallel to each other, whereby the folded sheets are adapted freely to pass into and out of said folding plates, substantially as set forth.

14. In a folding machine, the combination with a plurality of stationary parallel-folding appliances, of an adjustable parallel-folding appliance adapted to be disposed in coöperative relation therewith, transverse folding mechanism and adjustable means for coöperatively associating said transverse folding mechanism alternatively with the stationary or the adjustable parallel-folding appliances, substantially as set forth.

[Claims 1, 2, and 4 to 13 not printed in the Gazette.]

1,273,610. TENTER-CLIP. JOHN J. HOEY, Providence, R. I. Filed Dec. 2, 1915. Serial No. 64,764. (Cl. 26—8.)



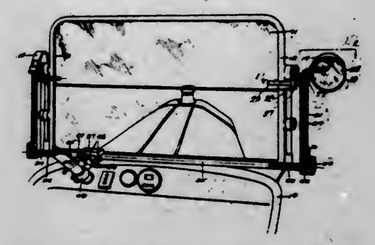
1. In a tenter-clip, the combination with a frame provided with a fixed jaw, of a movable jaw pivoted on the frame in pendant relation to the fixed jaw, a work-blade rockably mounted in a slot on the movable jaw to adapt it to oscillate on a central axis to aline its lower edge with the face of the fixed jaw, said blade formed with a depression coincident with its axis of oscillation, and a detent-clip formed with a projection adapted to engage the depression in the work-blade to hold the latter in position on the movable jaw without restricting its oscillating movement while allowing it to be removed therefrom for repair or replacement.

3. In a tenter-clip, the combination with a frame having a fixed jaw, of a movable jaw hinged on the frame in pendant relation to the fixed jaw and formed with an arched bearing-face, a work-blade formed with a curved edge fitted to the arched bearing-face of the movable jaw to take the thrust of the blade thereagainst, and a detent-clip engaging the blade to maintain it in position on the movable jaw while allowing it to oscillate to aline its edge with the face of the fixed jaw.

5. In a tenter-clip, the combination with a frame having a base and overhanging bearings, of a swinging jaw pivoted to said bearings, a face-plate formed with both of its longitudinal edges reversely beveled on opposite sides, and overhanging beveled shoulders on the base of the frame adapted to engage either set of bevels on the face-plate to secure the latter in position while allowing it to be removed to reverse it in position side for side and top for bottom.

[Claims 2, 4, and 6 not printed in the Gazette.]

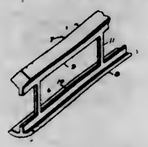
1,273,611. AUTOMOBILE-SIGNAL. JAMES V. HOQUE, Long Beach, Cal. Filed May 31, 1917. Serial No. 172,088. (Cl. 74—7.)



In an automobile signal, a gear box, tubular casings extending from the ends of the gear box, shafts in the tubular casings, bevel gears upon the inner ends of the shafts in the gear box, lever shafts extending horizontally

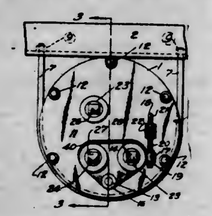
through one side of the gear box, bevel gears upon the ends of the lever shafts in mesh with the first bevel gears, quadrants through which the outer ends of the lever shafts extend, a clamp secured to the quadrants and adapted to engage the lower end of a steering post, and levers connected to the lever shafts in operative position relative to the quadrants; the levers being at the lower end of the steering post.

1,273,612. CORNER REINFORCEMENT AND PROTECTOR. CARL H. JABELONSKY, Spokane, Wash. Filed Feb. 19, 1915. Serial No. 9,392. (Cl. 94—2.)



A corner reinforcement and protector comprising a transversely curved corner bar, a rib formed on the inner concave side and extending longitudinally of the corner bar, an anchoring bar of approximately the same width as the width of said corner bar and arranged in spaced relation to the latter, a rib extending longitudinally of the anchoring bar, and a plurality of connecting members extending transversely between the corner and anchoring bars, integrally connected with the ribs and being spaced apart a distance considerably greater than the distance between the bars.

1,273,613. MECHANICAL MOVEMENT AND POWER-TRANSFORMER. ISIDOR M. JACOBS, Kansas City, and WILLIAM CRAMER, St. Louis, Mo., assignors, by mesne assignments, to Truck, Tractor and Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed Sept. 4, 1917. Serial No. 189,435. (Cl. 74—58.)



1. A power-transformer comprising a central hollow member, a plurality of gears located therein, a plurality of shafts upon which the said gears are respectively mounted, each of the said shafts terminating at each of its ends in means for connection with an engaging member, and means for causing selective engagement of one or the other of the said gears with another.

10. A device of the character described comprising a support, a shaft-supporting member borne thereby, a movable gear-supporting element carried by the said last-mentioned member, a shaft journaled in the said shaft-supporting member, a gear fixed to the said shaft, gears journaled in connection with the said movable member, means for moving the said movable member, and means for holding the same in fixed relation to the said first-mentioned gear, the ends of each of the gear-shafts for the said gears having polygonal ends, and means for connection of the said device with adjoining mechanism, the said connecting means having a universal joint and a cup having a polygonal socket for attachment to one of the said polygonal ends, there being a plurality of the said connecting means.

11. A device of the character described comprising a support, a shaft-supporting member borne thereby, a movable gear-supporting element carried by the said last-mentioned member, a shaft journaled in the said shaft-supporting member, a gear fixed to the said shaft, gears journaled in connection with the said movable member, the said means consisting of a member screw-threaded internally, a member screwthreaded externally and adapted to co-operate with the said internal screw threads, and means of attachment of the one to the other.

[Claims 2 to 9 and 12 to 16 not printed in the Gazette.]

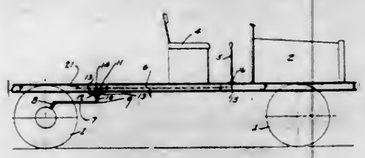
1,273,614. SUPPORT FOR GASOLENE-TANKS IN MOTOR-VEHICLES. ISIDOR M. JACOBS, Kansas City, and WILLIAM CRAMER, St. Louis, Mo., assignors, by mesne assignments, to Truck, Tractor and Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed Oct. 26, 1917. Serial No. 198,641. (Cl. 248—31.)



1. A support for a gasolene tank in a motor vehicle, comprising a pair of straps at each end of the tank, the said straps at one end overlapping each other and having registering holes in each, a bolt and nut for connecting the said overlapping ends through a pair of the said registering holes, and a pair of bolts for connecting the said straps to the vehicle seat.

[Claims 2 to 4 not printed in the Gazette.]

1,273,615. ADJUSTABLE BRAKE-RIGGING FOR MOTOR-VEHICLES. ISIDOR M. JACOBS, Kansas City, and WILLIAM CRAMER, St. Louis, Mo., assignors, by mesne assignments, to Truck, Tractor and Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed Oct. 26, 1917. Serial No. 198,648. (Cl. 74—39.)



1. A brake-operating means comprising a rod, a lever, a pivot for the said lever, a pivotal connection between the said lever and the said rod, a spring adapted to actuate the said lever and rod in one direction, a cable adapted to actuate the same in the opposite direction, and means for pulling the said cable, and means for adjusting the length of the said cable, the same comprising a pair of gripping jaws and means for drawing the said jaws together.

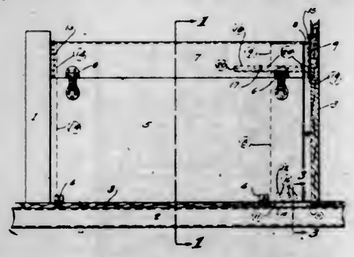
[Claims 2 and 3 not printed in the Gazette.]

1,273,616. ADJUSTABLE HOOD FOR MOTOR-VEHICLES. ISIDOR M. JACOBS, Kansas City, and WILLIAM CRAMER, St. Louis, Mo., assignors, by mesne assignments, to Truck, Tractor and Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed Oct. 26, 1917. Serial No. 198,646. (Cl. 74—56.)

1. A longitudinally adjustable hood for motor vehicles, and means for rigidly securing said hood in any desired longitudinally adjusted position.

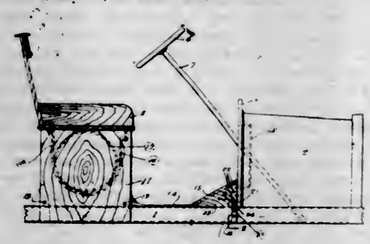
11. A longitudinally adjustable hood for motor vehicles formed of two parts, one adapted to overlap the other, each of the said two parts being composed of three parts,

one of the said three parts being a lid member and the other two side members, and adjustable means for fastening the said lid parts in fixed relation to each other, the said adjustable means consisting of a plate having perforations therethrough and an arm at one end thereof whereby the same is attached to the dash-board and a bolt adapted to pass through both lid members and one of the perforations in the said plate.



[Claims 2 to 10 and 12 not printed in the Gazette.]

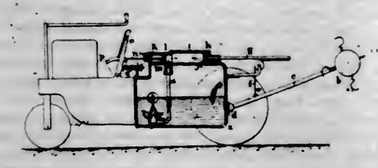
1,273,617. DASHBOARD-ANCHOR FOR MOTOR-VEHICLES. ISIDOR M. JACOBS, Kansas City, and WILLIAM CRAMER, St. Louis, Mo., assignors to Truck, Tractor and Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed Nov. 19, 1917. Serial No. 202,726. (Cl. 180—90.)



1. The combination of a chassis, a dash-board, a floor-board having a side member, a support for the said floor-board and for the said dash-board, an L-shaped bar, a bolt for attaching the same to the said side member, and a set-screw for staying the same relative to the flange of the said chassis.

2. The combination of a flanged chassis member, a dash-board, a member having a side portion, an angle-bar fastened to the said side portion and also to the said dash-board, an L-shaped member, means for fastening the same to the said angle-member, and a set-screw passing through the said L-shaped member and adapted to stay the same relative to the flange of the said chassis.

1,273,618. HYDRAULIC LIFTING DEVICE. CYPRIEN EDOUARD PAUL JULIEN and ROBERT MARGUERAT, Paris, France. Filed Apr. 25, 1918. Serial No. 230,853. (Cl. 138—2.)



1. A device of the character described, comprising two pistons of different areas and operated by fluid pressure, the larger piston being adapted to be connected with the element to be operated, and a tension device for the smaller piston.

[Claims 2 to 6 not printed in the Gazette.]

1,273,619. FUEL-BRIQUET. WILLIAM KENNETT and ERNST T. KREBS, Carson City, Nev. Filed Feb. 13, 1918. Serial No. 216,995. (Cl. 44—1.)

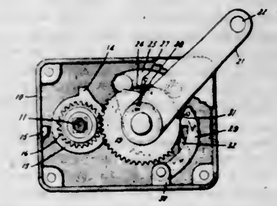
1. A fuel briquet comprising a body portion of comminuted oil shale, and a binder for holding the shale together.

3. A fuel briquet consisting of a body portion of oil shale in powdered form held together by a binder containing carbonaceous matter.

5. A fuel briquet which consists of a body portion of crushed oil shale and a heavy semi-liquid binder of carbonaceous matter in which has been dissolved a resinous material.

[Claims 2 and 4 not printed in the Gazette.]

1,273,620. DEVICE FOR ACTUATING SIGNALS AND THE LIKE. JOHANN KIEFER, Charlottenburg, Germany, assignor to General Electric Company, a Corporation of New York. Filed July 21, 1915. Serial No. 41,206. (Cl. 185—37.)



1. In combination, a movable member, two successively operated energy storing devices of different power connected to said member, means for moving said member against the action of the first energy storing device, and means operative only after the second energy storing device becomes active for locking said movable member against return movement.

4. In a signaling device, a movable member for actuating the signal, two successively operated energy storing devices of different power connected to said movable member for storing energy when said member is moved, means for limiting the energy storing capacity of the first energy storing device which becomes operative when the signal has been operated, means operative after the second energy storing device has become active for locking said movable member, and means actuated in response to a further movement of said second energy storing device for releasing said lock.

6. In a signal setting mechanism, a movable member for actuating the signal, means for moving said member to one position, a tension spring connected to said member for returning the same to its original position, a second spring connected to said member which is put under tension only after a predetermined movement of said member, a lock for securing said member in its moved position and after the second spring has become effective, and means becoming operative after a still further movement of said member for releasing the locking means.

8. In combination, a movable member, means for moving said member in one direction, an energy storing device connected to said member for restoring the same to its original position, a second energy storing device more powerful than the first connected to said member and operative only after a predetermined movement of said member, and means for locking said member in position after said second energy storing device becomes operative.

[Claims 2, 3, 5, and 7 not printed in the Gazette.]

1,273,621. CULTIVATOR. FRANK C. KIRKPATRICK, Tupelo, Miss. Filed Oct. 31, 1917. Serial No. 199,521. (Cl. 97—11.)



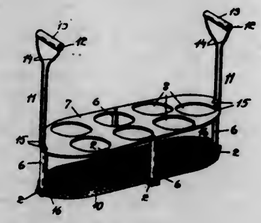
1. In combination with a standard having elongated apertures therein, a blade adapted to slide upon said standard longitudinally of said apertures, lugs carried by said blade engaged in said apertures, the said lugs being adapted when the blade is moved in one direction to lock said blade to said standard, and a lever for sliding said blade in either direction.

3. In combination with a standard having an aperture therein, a blade, an angularly bent lug carried by and projecting from said blade and being adapted to enter said aperture, the angularly bent portion of said lug being adapted to engage behind one of the edges defining said aperture, a lever on said standard, and a cam face on said lever adapted to engage said lug to force the same into binding engagement with said opening edge.

7. In a device of the class described, a standard having longitudinally alined spaced apertures therein, a blade, angularly disposed lugs carried by and projecting rearwardly from the said blade and being adapted to enter said apertures and to engage behind the edges defining the same, a lever pivoted to said standard and being capable of reciprocating said blade on said standard, and means for locking said lever against movement.

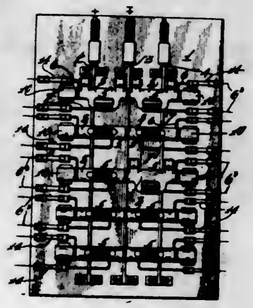
[Claims 2 and 4 to 6 not printed in the Gazette.]

1,273,622. CANNING APPLIANCE. WILLIAM H. KOLLMAN, Belle Plaine, Iowa. Filed Dec. 20, 1917. Serial No. 208,087. (Cl. 53—1.)



A canning appliance consisting of lower foot pieces having horizontal tops, downwardly bent sides and inturned lower portions, a horizontal perforated receptacle support resting upon said foot pieces, vertical standards resting upon said perforated member immediately above said foot pieces, an upper plate located upon and secured to said standards and having openings to receive the canning receptacles and end perforations, and upwardly extending wire handles having each an upper central horizontal portion, downwardly extending branches spaced apart by the diameter of the end standards and engaging the perforations of said plate and coiled at their lower ends around the horizontal tops of said foot pieces.

1,273,623. PANEL-BOARD. HUBERT F. KRANTZ, Brooklyn, N. Y., assignor to Krantz Manufacturing Company, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Jan. 23, 1913. Serial No. 743,699. (Cl. 247—13.)



6. In a panel board, a back plate, bus-bars carried thereby, branch circuit contacts also carried by said back plate, a support carried by said back plate and located transversely of said bus-bars, a frame rotatable about an axis parallel with said back-plate and supported by said support, adapted for movement in parallelism with said bus-bars, and circuit closing elements carried by said frames adapted to close the gap between said bus-bars and said branch circuit contacts.

9. A device of the class described comprising a base board, a bus-bar extending along one side of the base board, said bus-bar having a longitudinally extending contact surface disposed in a plane substantially at right angles to the face of the base board, a plurality of branch-line terminals spaced apart along the length of the bus-bar being insulated therefrom and each having a contact surface portion standing in opposed relation to the mentioned contact surface portion of the bus-bar but being spaced an insulating distance from said surface of the bus-bar, a plurality of connecting members, one for each branch-line terminal, for electrically connecting the bus-bar with said branch-line terminals, and operating means for said connecting members of a character to move the connecting members bodily into and out of position bridging the space between the opposing surfaces of the bus-bar and respective branch-line terminals.

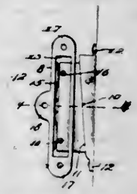
[Claims 1 to 5, 7, and 8 not printed in the Gazette.]

1,273,624. SKATE-SHARPENER. WILLIAM KROLLIUS, San Francisco, Cal. Filed Sept. 29, 1917. Serial No. 193,922. (Cl. 51—1.)



In a skate sharpener, a cylindrical block of abrasive material, a holder therefor of spring metal fitting tightly around said block, and carrying spaced edges extending parallel with the axis of the block, and a guide piece secured around the side of said holder opposite said spaced edges and having parallel sides terminating in inwardly extending flanges, the inner edges of the flanges being spaced from each other to permit a skate blade to pass between them, tongues bent inwardly from said sides, parallel shafts supported at their ends by said flanges and tongues, and anti-friction rollers around said shafts.

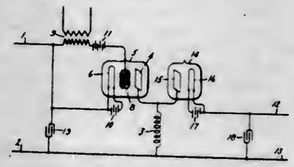
1,273,625. ANTIRATTLER FOR WINDOW-SASHES. CHARLES W. LANE, Atlanta, Ga. Filed May 1, 1918. Serial No. 231,863. (Cl. 16—124.)



1. The combination with a window frame and sash, of an anti-rattler consisting of a wedge component longitudinally disposed on and fixed to one side rail of the sash and having its inner edge inclined, an immovable chambered casing secured to one side of the frame and having a slot in its outer edge adjacent to the sash, a wedge component held in the casing and movable equally its full length through the slot of the casing and provided with means for limiting its movement outwardly from the casing, the movable wedge component held by the casing having its rear edge inclined reversely to and shorter than the edge of the fixed component with which it engages, and a spring within the casing engaging the outer edge of the said movable component.

2. The combination with a window frame and sash, of an anti-rattler, consisting of a wedge component longitudinally disposed on and fixed to one side rail of the sash and having its inner free edge inclined, an immovable chambered casing secured to one side of the frame and having a slot in its rear edge, a wedge component held in the casing and having a restricted movement equally its full length through the slot of said casing, the rear free edge of the wedge component held by the casing being inclined reversely to and shorter than the inclined edge of the component on the sash with which it engages, and a spring intermediately secured in the chamber of the casing and having its free ends bearing on the outer edge of the casing component adjacent to the ends of said component to exert an equal spring pressure on the latter.

1,273,626. MEANS FOR TRANSFORMING DIRECT CURRENT. IRVING LANGMUIR, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Dec. 29, 1913. Serial No. 809,247. (Cl. 171—97.)



1. The method of transforming direct current from one voltage to another which consists in causing unidirectional current of one voltage to flow between electrodes in a vacuum in a circuit containing inductance, interrupting the flow between said electrodes and discharging the stored up energy of the inductance into a second circuit as unidirectional current at a different voltage.

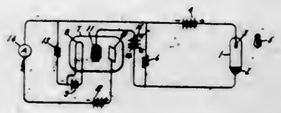
4. Means for transforming direct current from one voltage to another comprising an inductance common to two circuits, an electron discharge tube in one circuit, means for producing a flow of current through said tube and thereby storing up energy in the inductance, means for interrupting the flow of current through said tube, and means for discharging the stored up energy of the inductance into the second circuit.

6. The combination of a source of direct current of a given voltage, an electron discharge tube in circuit with said source and means coöperating with said device for producing a direct current of a voltage different from that of the source.

9. Means for transforming direct current from one voltage to another comprising an inductance common to two circuits, an electron discharge tube in one circuit, means for interrupting the flow of current through said tube and a device in the second circuit having a symmetric conductivity through which stored up energy of the inductance may be discharged into the second circuit.

[Claims 2, 3, 5, 7, 8, and 10 to 14 not printed in the Gazette.]

1,273,627. METHOD OF AND MEANS FOR CONTROLLING ELECTRIC CURRENTS OR POTENTIALS. IRVING LANGMUIR, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Feb. 5, 1914. Serial No. 816,836. (Cl. 250—27.)



1. The combination of an electron discharge tube having therein a cathode, an anode and a conducting grid, two sources of electromotive force connected in opposition to each other in an external circuit between the grid and the cathode, and means coöperating therewith whereby the two forces are maintained substantially equal to each other.

2. The combination of an electron discharge tube having therein a cathode, an anode and a conducting grid, two sources of electromotive force connected in opposition to each other in an external circuit between the grid and the cathode, and means coöperating therewith rendered operative by a change in one of the electromotive forces whereby the two forces maintained substantially equal to each other.

8. Photometric means comprising a photoelectric cell, an electron discharge tube and means electrically associated with and coöperating therewith whereby an increase in current is produced in the tube of an amount equal to a given multiple of the value of the current in the photoelectric cell.

10. Means for amplifying small electric currents comprising an electron discharge device having grid and plate circuits, a resistance which is included in both of said circuits, and a second resistance through which the current to be amplified may be caused to flow, and which is also included in said grid circuit.

[Claims 3 to 7, 9, and 11 to 17 not printed in the Gazette.]

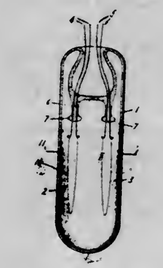
1,273,628. FILM CONDUCTOR AND THE METHOD OF MAKING THE SAME. IRVING LANGMUIR, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed June 6, 1914. Serial No. 843,569. Renewed May 1, 1917. Serial No. 165,796. (Cl. 250—27.)

1. As an article of manufacture, a solid body and an adherent, gas-free film of metal produced by the vaporization of said metal in a vacuum having a residual gas pressure below about one-thousandth of a millimeter of mercury.

2. An electrical discharge apparatus having an anode consisting of a gas-free film of metal produced by vaporization in a vacuum in which the residual gas is at a pressure too low to permit a disruptive discharge therein.

3. An electrical discharge apparatus having an envelop of non-conducting material and a gas-free layer of metal thereon produced by vaporization of said metal in a vacuum having a residual gas pressure below about one-thousandth of a millimeter of mercury.

4. The method of producing a gas-free, adherent metallic film upon a solid body which consists in exposing said body to metal vapor in a vacuum having a residual gas pressure below one-thousandth of a millimeter of mercury.



5. The method of depositing gas-free conductive films upon insulating surfaces which consists in heating a highly refractory metal to a temperature near its melting point in vacuum too high to permit of the passage of a disruptive discharge and exposing the surface upon which a film is desired to said vapors.

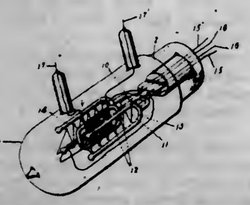
[Claims 6 to 9 not printed in the Gazette.]

1,273,629. METHOD OF EXHAUSTING INCANDESCENT LAMPS. IRVING LANGMUIR, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Dec. 5, 1914. Serial No. 875,725. (Cl. 176—2.)

1. The method of freeing a glass receptacle from occluded or absorbed gases which consists in maintaining it during exhaustion for a time at such a temperature that gas will be continuously liberated from the walls in appreciable quantities irrespective of the length of time the treatment is continued and continuing the exhaustion at a definite lower temperature which is so chosen that the liberation of gas practically ceases after treatment at the lower temperature for a period of not over one-half hour, the lower temperature being at least 100° C. above the normal temperature at which the receptacle is to be operated.

2. The method of freeing a glass vessel from occluded or absorbed gases which consists in maintaining the vessel while being exhausted at a temperature of at least 550° C. for a time and afterward maintaining it at a definite temperature of less than 500° C. as long as gas continues to be liberated from the glass while continuing the exhaustion.

1,273,630. ELECTRON-DISCHARGE APPARATUS. IRVING LANGMUIR, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Continuation in part of application Serial No. 795,609, filed Oct. 16, 1913. This application filed Feb. 20, 1918. Serial No. 218,200. (Cl. 250—27.)

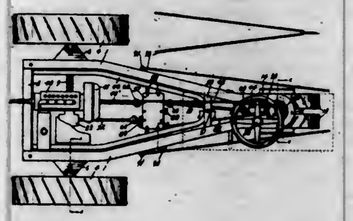


1. An electron discharge device comprising an evacuated receptacle containing a filamentary cathode adapted to be heated to incandescence, a coöperating anode, a grid made up of a plurality of turns of wire surrounding said cathode and terminals for both ends of said grid wire sealed into the wall of said receptacle, whereby current may be passed through the grid wire.

2. An electron discharge device comprising an evacuated receptacle containing a filamentary cathode adapted to be heated to incandescence, a coöperating anode, a grid made up of a plurality of turns of wire surrounding said cathode, and interposed between cathode and anode, terminals for both ends of said grid wire sealed into the walls of said receptacle, and means for heating said anode independently of the current passing between cathode and anode.

[Claims 3 to 8 not printed in the Gazette.]

1,273,631. TRACTOR. HOWARD M. LEONARD, Jackson, Mich. Filed Feb. 2, 1917. Serial No. 146,118. (Cl. 180—49.)



9. In a tractor, the combination of a running gear frame, front and rear traction wheels, axles therefor, front and rear propeller shafts having driving connections with said front and rear traction wheels respectively, a standard for supporting said rear wheels provided with a spindle, a driving transmission for said propeller shafts, means for disengaging said front propeller shaft from said driving transmission when the rear traction wheels are turned to exceed a predetermined degree, and a steering connection for said wheel standard.

10. In a tractor, the combination of a running gear frame, pairs of front and rear traction wheels, means for driving said traction wheels comprising differentials, means for steering said tractor, means for automatically disconnecting one pair of said wheels from said driving means when the other pair of said wheels is turned at a predetermined angle thereto, and means for reëstablishing said driving connection when the pairs of wheels are turned in the opposite direction.

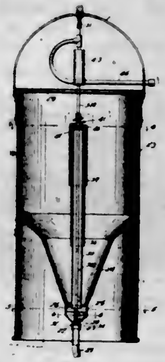
11. In a tractor, the combination of a running gear frame, pairs of front and rear traction wheels, means for driving said traction wheels, means for steering said tractor, means for automatically disconnecting one pair of said wheels from said driving means when the other pair of said wheels is turned at a predetermined angle thereto, and means for reëstablishing said driving connection when the pairs of wheels are turned in the opposite direction.

12. In a tractor, the combination of a running gear frame, front and rear traction wheels, a standard for supporting the rear traction wheels in close relation, driving means for said rear traction wheels comprising a spindle shaft disposed axially of the spindle and having driving connection with said rear traction wheels, driving connections for the front traction wheels, means for disengaging the driving connections of said front traction wheels when the spindle of the rear traction wheels is turned to exceed a predetermined degree, and a steering connection for said spindle.

13. In a tractor, the combination of a running gear frame, front and rear traction wheels, driving connections for said front and rear traction wheels, means whereby the driving connections for the front traction wheels are automatically disengaged when the rear traction wheels are turned to exceed a predetermined degree, and a steering connection for said rear traction wheels.

[Claims 1 to 8 not printed in the Gazette.]

1,273,632. ENAMELING-POWDER DISTRIBUTER. WILLIAM LINDSAY, Chicago, Ill., assignor to L. Wolff Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 12, 1912. Serial No. 714,491. (Cl. 193—10.)



1. In an apparatus of the character described, in combination: a reservoir adapted to hold a quantity of enameling powder and having a discharge outlet; and means for discharging powder from the reservoir through said outlet, said means including a suspended reciprocating member adapted to have a constant oscillating motion about its own longitudinal axis to positively feed said powder toward said outlet.

2. In an apparatus of the character described, in combination: a reservoir adapted to hold a quantity of enameling powder and provided with a chamber at the bottom thereof and having also a passage therebetween, the chamber being provided with a discharge outlet; and means for discharging powder from the reservoir into said chamber and from the chamber through said outlet, said means including a reciprocating sieve member located within the chamber and a suspended member within the reservoir and adapted to have an oscillating motion.

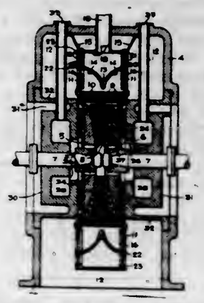
3. In an apparatus of the character described, in combination: a reservoir adapted to hold a quantity of enameling powder and having a discharge outlet; and means for discharging powder from the reservoir through said outlet including a cushion-supported rod having a foraminous member secured thereto and adapted to be reciprocated, and a member secured to said rod above said member and adapted to oscillate relatively to said rod.

4. In an apparatus of the character described, the combination of a reservoir for containing enameling powder provided with a discharge outlet, and means for discharging powder from said reservoir through said outlet, said means including a member of general tapering stepped form, the stepped parts of said member successively engaging the powder to advance it.

5. In an apparatus of the character described, the combination of a reservoir for containing enameling powder and having a discharge outlet, and means for discharging powder from said reservoir through said outlet, said means comprising a vibratory member and a pneumatic hammer acting thereon.

1,273,633. REVERSIBLE RADIAL-FLOW TURBINE. FREDRIK LJUNGSTRÖM, Stockholm, Sweden, assignor to Aktiebolaget Ljungstrom Angturbin, a Corporation of Sweden. Filed Nov. 14, 1917. Serial No. 202,042. (Cl. 253—81.)

1. In an elastic fluid turbine the combination of a rotor having an inner radial flow blade system and two outer concentric axial flow blade systems, said radial flow blade system and one of said outer axial flow blade systems being connected in parallel as regards the flow of elastic fluid for driving the rotor in a forward direction, and the other of said axial flow blade systems being for driving the rotor in a reverse direction.



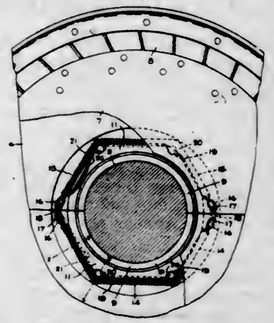
5. In an elastic fluid turbine, the combination of two rotors, a casing therefor, concentric rings of blades arranged to drive the rotors in opposite directions for forward running, an outer axial flow blade system associated with each rotor to assist the radial flow blades, and an axial flow blade system associated with each rotor for reversing its direction of rotation.,

11. In an elastic fluid turbine, the combination of rotor members bladed for radial flow of the fluid, two outer axial flow blade systems, one for each rotor, and a fluid distributing means arranged between the axial flow blade systems and containing two chambers which are connected through one of the axial flow blade systems.

13. In an elastic fluid turbine, the combination of two rotors arranged face to face with concentric rows of axially extending blades carried by the rotors and through which the motive fluid flows radially to drive the rotors in opposite directions, reversing blades located outside of said radial flow blades on both rotors for reversing their direction of rotation, means surrounding the radial flow blades for supplying fluid to the reversing blades, inclosing casing means for the rotors, and inlet and exhaust conduits.

[Claims 2 to 4, 6 to 10, and 12 not printed in the Gazette.]

1,273,634. SHAFT-PACKING. WILLIAM J. A. LONDON, Springfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Sept. 13, 1917. Serial No. 191,145. (Cl. 286—24.)



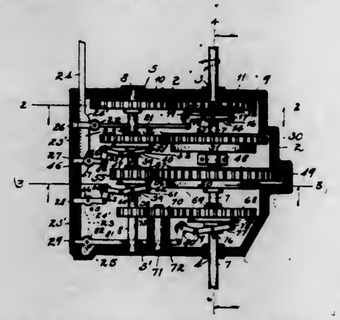
1. The combination with two relatively movable members, of a packing between them comprising a plurality of segments carried by one of the said members, a spring means surrounding said segments, and circumferentially movable means on the segments for supporting the spring means at spaced points.

2. The combination with a shaft, of a packing comprising a plurality of segments which surround the shaft and form a ring, rollers located at spaced points on said segments, and a garter spring which engages the rollers and presses the packing segments toward the shaft.

3. The combination with a shaft and a member having an opening through which the shaft projects, of a packing between the shaft and the member comprising upper and lower packing segments which surround the shaft, rollers carried at spaced points on each packing segment, and a spring for each packing segment which surrounds the same and has its ends connected to said member, said springs engaging said rollers and being held out of direct contact with the packing segments thereby.

4. The combination with a shaft of a packing comprising a plurality of segments, circumferentially movable members located at spaced points on said segments, and spring means which engages said members and presses the packing segments toward the shaft.

1,273,635. TRANSMISSION FOR AUTOMOBILES. IRA L. LONG, Monmouth, Ill. Filed Jan. 14, 1918. Serial No. 211,809. (Cl. 74—58.)



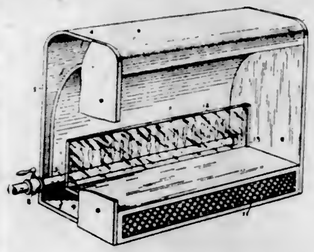
1. Transmission mechanism comprising an engine-shaft, a spur-gear wheel fixed thereon, a transmission-shaft, a gear-wheel fixed thereon and constantly in mesh with the spur-wheel, a wheel-driving-shaft, a gear-wheel rotatable on the transmission-shaft, a clutch splined on the transmission-shaft and adapted to engage and drive the last recited wheel, and a clutch on the wheel-driving shaft, said clutch comprising a gear-wheel rotatably mounted on the wheel driving shaft and constantly in mesh with the clutch-driven wheel on the transmission shaft, and a clutch-member splined on the wheel-driving shaft and adapted to engage and be driven by the last recited gear-wheel.

3. Transmission mechanism comprising an engine-shaft, a transmission-shaft, a wheel-driving shaft, means whereby rotary motion is transmitted from the engine-shaft to the transmission-shaft, a gear-wheel adapted to be driven by the transmission-shaft, a gear-wheel rotatable on the wheel-driving shaft and in mesh with said gear-wheel, and having an annular flange on one of its faces, a disk splined on the wheel-driving shaft and having a cam-face, and a roller interposed between the interior face of said flange and said cam-face and adapted to coact with both to form a clutch whereby the wheel-driving shaft may be rotated.

5. In mechanism of the character described, a housing, an engine-shaft having a bearing therein, a gear-wheel fixed on said shaft, a transmission-shaft having bearings in the housing, a gear-wheel fixed thereon and constantly in mesh with the engine-shaft gear-wheel, a clutch-member adapted to engage and be driven by the engine-shaft gear-wheel, a wheel-driving shaft, a plurality of change-speed gear-wheels mounted in coacting pairs on the transmission-shaft and wheel-driving shaft, clutch-members for engaging said pairs at will, a reverse-gear-wheel rotatably mounted on the wheel-driving shaft, a clutch member on the same shaft with and adapted to engage the reverse-gear-wheel, and a single operating-lever for selectively controlling said clutch-members.

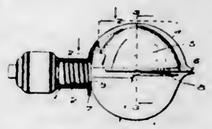
[Claims 2 and 4 not printed in the Gazette.]

1,273,636. GAS OR VAPOR HEATER. LEON P. LOWE, San Francisco, Cal. Filed Mar. 15, 1917. Serial No. 154,961. (Cl. 126—86.)



A gas or vapor consuming heater comprising a burner having a linear series of fuel outlets, an air conduit leading upwardly to said outlets, a continuous vertical sheet of translucent material in front of all fuel outlets of the heater, a wall, of which a lower portion extends upwardly behind said outlets, and an upper portion extends over the top of said translucent sheet and forwardly thereof, said sheet and wall being spaced from the outlets sufficiently to form a flue discharging at its upper portion forwardly into the room, and means for removably supporting said sheet in a position in which its upper edge extends higher than the flames from the fuel burning at all of said outlets and air is prevented from passing around its lower edge and ends.

1,273,637. LIGHT-SHIELD. WILLIAM LUTH, Albion, Nebr. Filed Jan. 8, 1917. Serial No. 141,238. (Cl. 240—48.6.)

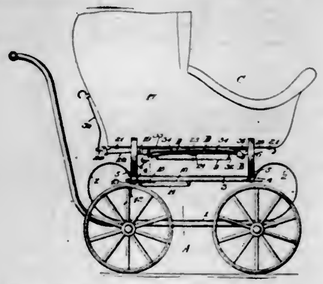


In a device as described, in combination, an electric light bulb having a pointed teat, a threaded shank connected thereto, a sleeve in which said shank is threaded, a shield consisting substantially of a semi-spherical metallic member adapted to overlie one half of said bulb, a lug formed upon said shield and forming a flat projection therefrom, said lug provided with an opening through which said shank projects, said sleeve bearing frictionally against said flat lug, the forward portion of said shield terminating in a tapering portion the extremity of which is curved back to form a protecting lip spaced in back of the mentioned teat of said bulb.

1,273,638. CONVERTIBLE BABY-BED. JOHN S. LYON, Rochester, N. Y., assignor of one-half to Traugot C. Uhlen, Rochester, N. Y. Filed Mar. 30, 1915. Serial No. 18,161. (Cl. 21—12.)

1. In a convertible bed, the combination with a body portion, a running gear including a pair of springs supporting the body and ranging lengthwise one at each side thereof, and a pair of resilient rockers detachably secured to the body springs and disposed at about right angles thereto and forming auxiliary springs during use of the structure as a carriage.

2. In a convertible bed, the combination with a body portion, a running gear including a pair of springs supporting the body and ranging lengthwise one at each side thereof, a pair of transverse concaved cross bars connecting opposite ends of the two body springs, and a pair of transverse resilient rockers detachably secured to the cross bars and disposed at about right angles to the body springs and forming auxiliary springs during use of the structure as a carriage.



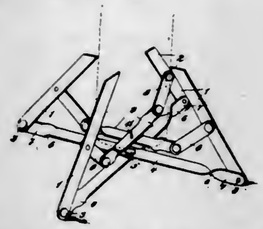
3. In a convertible baby bed, the combination with a running gear having springs, of a rocker section detachably secured to the springs, a body portion detachably secured to the rocker section, and a support for the body portion connected directly to the latter and movable thereon independently of the rocker section.

4. In a convertible bed, the combination with a running gear having springs, and cross bars connecting the springs, of a rocker section embodying a pair of rockers and a body portion carried by the rocker section, the rocker section being secured to the cross bars through the medium of the rockers.

5. In a convertible bed, the combination with a running gear portion having parallel springs connected by cross bars, of a body portion provided with rockers formed of metal strips bent flatwise, the cross bars being bent to conform to the shape of the rockers, and the body portion resting on the running gear portion with the rockers in engagement with the cross bars, and a locking member carried by one portion and coöperating with the other to lock them in engagement.

[Claims 6 to 9 not printed in the Gazette.]

1,273,639. CHRISTMAS-TREE HOLDER. JOHN GEO. LYONS, New York, N. Y. Filed Dec. 1, 1917. Serial No. 204,847. (Cl. 248—38.)

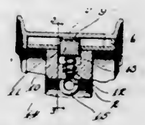


1. A holder of the class described comprising a pair of pivotally connected crossing members which form a supporting base, jaw members pivotally connected at their lower ends to the outer ends of the crossing members respectively, shorter crossing members pivotally connected and arranged above the first-mentioned crossing members, and means connecting the second-mentioned crossing members with the jaw members, whereby the weight of an article supported on the second-mentioned crossing members will cause the jaw members to grip such article.

3. A holder of the class described comprising a pair of lower cross members, a pair of upper cross members shorter than the first-mentioned members, jaws pivotally connected at their lower ends to the outer ends of the first-mentioned members, and links pivotally connected with the jaws at points adjacent the middle, and also connected with the second-mentioned members, whereby the weight of an article on such members causes the jaws to move inwardly at their upper ends to gripping position.

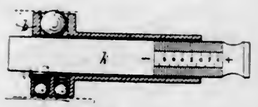
[Claim 2 not printed in the Gazette.]

1,273,640. DEMOUNTABLE RIM. RODERICK MCCLURE, Gilman, Mont., assignor to Harry Glen Baruls, Gilman, Mont. Filed Mar. 1, 1916. Serial No. 81,408. (Cl. 152—21.)



The combination with a permanent rim having an opening, and a demountable rim having a serrated plate on its inner side, of a locking device comprising a serrated block seated in the opening and engaging said plate, a stem on the block and a spring coiled about the stem to hold the block in engagement, and said stem having a threaded end to receive a nut for withdrawing the block to inoperative position against the tension of the spring, said fixed rim and demountable rims having elements that are engaged by relative circumferential movement and said locking device adapted to prevent relative movement in the opposite direction.

1,273,641. INSTRUMENT FOR GAGING INTERNAL DIAMETERS. WILLIAM BRUCE MAIR, Birmingham, England. Filed May 23, 1917. Serial No. 170,447. (Cl. 33—178.)



1. A device for gaging diameters comprising a sleeve in which a gage is inserted, a ball retainer on one end of the sleeve, a plurality of measuring balls of predetermined diameter mounted in the ball retainer and projecting slightly beyond the periphery of same to engage the surface to be gaged, and means movable with respect to and supported in the ball retainer and projecting slightly beyond the periphery thereof to engage the work to be gaged.

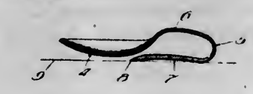
2. A device for gaging diameters comprising a sleeve in which a gage is inserted, a ball retainer on one end of the sleeve, a plurality of measuring balls of predetermined diameter mounted in the ball retainer and projecting slightly beyond the periphery of same to engage the surface to be gaged, a pair of elements on the ball retainer, said elements projecting beyond the periphery of the retainer, and spring actuated members projecting beyond the periphery of the retainer to center a gage in a piece of work.

[Claim 3 not printed in the Gazette.]

1,273,642. SPOON. GEORGE R. MARGETTS, Chicago, Ill., assignor of one-half to John P. Keary, Chicago, Ill. Filed Feb. 13, 1918. Serial No. 216,929. (Cl. 30—22.)

1. As a new article of manufacture, a spoon of the class described, comprising an integral structure including a bowl, a relatively narrow handle rearwardly extending from said bowl and having its rear end turned downwardly, and having a forwardly extending relatively wide base portion terminating in a point of contact beneath the

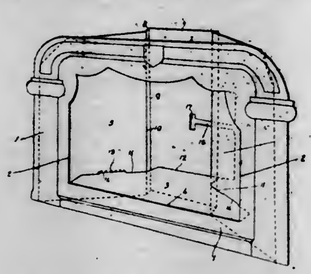
central portion of the bowl, said base portion being in spaced relation with respect to the lower surface of the bowl, and said base portion being relatively heavy as compared to the bowl to thereby produce a self-righting tendency, and the downwardly extending portion of the handle being so formed as to support the bottom of the bowl clear of a surface on which the spoon is supported, substantially as described.



2. As a new article of manufacture, a spoon of the class described, comprising a rigid structure including a bowl, a rearwardly and downwardly extending relatively narrow handle connected to the bowl, a forwardly extending relatively wide base portion connected to said handle, and having a point of support beneath the bowl, said base portion being in spaced relation with respect to the lower surface of the bowl, and the base portion being relatively heavy to thereby produce a self-righting tendency, and the handle portion being so formed as to support the bowl with its lower surface clear of a surface on which the spoon is supported, substantially as described.

3. As a new article of manufacture, a spoon of the class described, comprising a bowl, a rearwardly and downwardly extending handle connected to the same, a forwardly extending relatively wide base portion connected to said handle, and having a point of support beneath the bowl, said base portion being in spaced relation with respect to the bowl, and the handle being so formed that the lower surface of the bowl is supported clear of a surface on which the base portion is resting, substantially as described.

1,273,643. TOY, KINDERGARTEN APPLIANCE, AND THE LIKE. THOMAS MATHEWS, Leicester, England. Filed Mar. 7, 1918. Serial No. 220,985. (Cl. 46—40.)

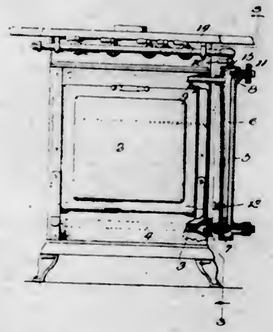


4. A toy comprising, in combination, a collapsible show structure, a figure for use therewith, and a holder for said figure, said collapsible show structure consisting of a proscenium or front member, a stage member hingedly combined therewith, and a slotted back member hingedly connected with said proscenium member, the said stage and back members folding flat up to the proscenium member when the structure is collapsed and the back member being opened to position for use by the stage member when this is pushed down to a horizontal position to erect the structure, said structure having an opening between the back member and the proscenium member through which the entrance and exit of the figure to and from the stage may be effected, and the slot in the back member being shaped and disposed to admit of the passage and movement of the holder therein for the manipulation of the figure, substantially as described.

10. A toy comprising, in combination, a collapsible show structure, consisting of a stage and a slotted background, a figure consisting of a plurality of parts loosely jointed together, a socket on one of said parts, a holder, and an upturned end on said holder adapted to fit into said socket whereby the figure may be supported by the holder and manipulated on the stage through the slot in the background, substantially as described.

[Claims 1 to 3, 5 to 9, and 11 not printed in the Gazette.]

1,273,644. THERMO-CONTROLLED GAS-OVEN. BENJAMIN E. MEACHAM, Lorain, Ohio, assignor to American Stove Company, St. Louis, Mo., a Corporation of New Jersey. Filed Feb. 23, 1916. Serial No. 79,928. (Cl. 236—5.)



1. A gas stove having cooking burners, an oven, a housing communicating with the gas supply for the cooking burners, burners for the oven, the gas supply for the said oven burners communicating with the housing, a valve in said housing for controlling the said gas supply to the oven burners, and a thermo actuated member located in the cool zone of the oven and operatively associated with said valve for controlling it whereby the thermo actuated member quickly responds to the change of temperature in the oven for the purpose of reëstablishing and maintaining a desired predetermined temperature.

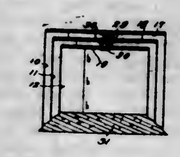
2. In a thermo-controlled gas oven, the combination with an oven, of a burner for heating the oven, a fuel valve for the burner, a thermo-actuated member operatively connected with the fuel valve and extending across the oven in a direction parallel with the oven door opening and thereby wholly located in the cool zone of the oven adjacent the door opening to be quickly affected by the cooling of the oven to turn on the gas and quickly reëstablish and maintain the desired predetermined temperature within the oven chamber.

3. A gas stove having cooking burners, an oven, a housing communicating with the gas supply for the cooking burners, a burner for the oven, the gas supply for the said burner communicating with the housing, a fuel valve for the oven burner, a thermo actuated member extending into the oven, a lever operatively connecting the thermo-member with the fuel valve, and means for limiting the closing movement of the lever and therefore the closing movement of the fuel valve for the purpose described.

4. A gas stove having cooking burners, an oven, a housing communicating with the gas supply for the cooking burners, a burner for the oven, the gas supply for the said oven, the gas supply for the said burner communicating with the housing, a lever within the housing, a fuel valve within the housing and connected to one end of the said lever, a thermo-actuated member extending through the housing engaging the said lever and also extending into the cool zone of the oven for the purpose described.

5. A gas stove having cooking burners, an oven, a housing communicating with the gas supply for the cooking burners, burners for the oven, the gas supply for the said oven burners communicating with the housing, a valve in said housing for controlling the said gas supply to the oven burners, and a thermo actuated member, extending within the oven and operatively associated with said valve for controlling it.

1,273,645. FIRELESS COOKER. HUGO MOCK, New Brighton, N. Y. Filed Jan. 6, 1916. Serial No. 70,604. (Cl. 229—23.)



2. A fireless cooker comprising a series of downwardly opening hoods of varying sizes superimposed upon each other, said hoods being joined to each other by a connecting member at their tops and a dense non-heat conducting base adapted to act as a support for said hoods and for the food containing vessel.

[Claim 1 not printed in the Gazette.]

1,273,646. CONTAINER. HUGO MOCK. New York, N. Y. Filed Jan. 14, 1918. Serial No. 211,740. (Cl. 229—12.)



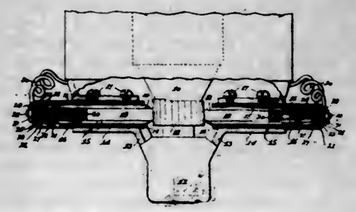
1. A combined container and fireless cooker, the same comprising a body portion of concentric paper cylinders of unequal diameter closed at the top and fitting one within the other to provide a closed air space at the top and around the body of said container, a base for said container serving as the closure therefor and made larger than the body of the container and having a rim encircling said base to loosely inclose the body portion of the container, a rim closing the space between said cylinders at the bottom and resting upon said base, said base being composed of a plurality of layers of paper, and a centrally disposed stand of a plurality of layers of paper mounted on said base and of materially less diameter than that of the inner cylinder.

3. As an improved article of manufacture, a combined container and fireless cooker, the same embodying concentric paper cylinders of unequal diameter and one of greater length than the other, a top resting upon the inner cylinder and closing the space between said cylinders at such end, a top at the end of the outer cylinder, leaving a space between said tops, a circular reinforce in said space between the inner and outer tops, an annular rim closing the lower end of the space between the cylinders, a base formed of a plurality of layers of paper and forming the closure for said container, a circular member embracing said base and extended above said annular rim, and a stand disposed centrally of the inner cylinder and formed of a plurality of layers of paper mounted upon said base and of materially less diameter than that of the inner cylinder.

[Claim 2 not printed in the Gazette.]

1,273,647. BRUSH-HOLDER. ALBERT B. MOORE, Roselle, N. J. Filed July 24, 1915. Serial No. 41,727. (Cl. 200—24.)

1. In a brush-holder, the combination with a brush tube, of an adjustable connecting device to which a lead may be connected on its end, and a cap detachably mounted on the end of said tube and adapted to clamp said device in position thereon, said device and cap being swiveled together whereby the cap may be turned independently of said device in attaching it to the tube.

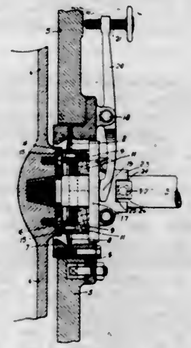


3. In a brush-holder, the combination with a brush tube, of a screw cap fitting the end of said tube, said cap having an opening in one wall thereof, a headed connection member adapted to be clamped in place by said cap, the head of said member being inside said cap and the shank thereof extending out of the cap through said opening, and means at the outer end of said shank for attaching a lead thereto.

8. In a brush-holder, the combination with a yielding insulating tube, of a brush tube fitting inside said insulating tube, a brush in said tube, an independent and swiveled member to which a lead is adapted to be attached and electrically connected with said brush, and a clamping device fitting and removably secured to said brush tube and adapted to surround and clamp said swiveled member to said brush tube, the end of said insulating tube serving as a stop for said brush tube and lock for said clamping device.

[Claims 2 and 4 to 7 not printed in the Gazette.]

1,273,648. PACKING MEANS FOR THE SHAFTS OF CENTRIFUGAL PUMPS. HENRI ARNOLD JOHANNES DE BIJLL NACHENIUS, Haarlem, Netherlands, assignor to Naamlooze Vennootschap "Werf Conrad," Haarlem, Netherlands, a Company of Netherlands. Filed July 14, 1916. Serial No. 109,296. (Cl. 286—11.)



1. Packing means for the shafts of centrifugal pumps, consisting of a shoulder-forming member rotating with but lengthwise slidable on the shaft, a lining on said shoulder-forming member at the bucket wheel side thereof, a ring suspended from the casing of the pump by means of a diaphragm said ring being located opposite said lining and exposed to the delivery pressure of the pump or bucket wheel.

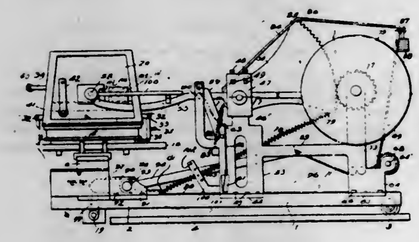
2. Packing means for the shafts of centrifugal pumps, consisting of a shoulder-forming member rotating with but lengthwise slidable on the shaft, a ring suspended from the casing of the pump by means of a diaphragm said ring being located opposite said shoulder-forming member at the bucket wheel side thereof and exposed to the delivery pressure of the pump or bucket wheel, and posi-

tive means for pressing said shoulder-forming member against said ring during the period of filling the pump in vacuum.

3. Packing means for the shafts of centrifugal pumps, consisting of a shoulder-forming member rotating but lengthwise slidable on the shaft, a lining on said shoulder-forming member at the bucket wheel side thereof, a ring suspended from the casing of the pump by means of a diaphragm said ring being located opposite said lining and exposed to the delivery pressure of the pump or bucket wheel, and adjustable means for arresting said shoulder-forming member in its movement away from the bucket wheel through the delivery pressure of the pump, said means consisting of a bolt, with an eccentric, rectangular head and washer plate, passing through the shaft and holding, by means of said head and washer plate, said shoulder-forming member at different positions according to the position of said eccentric head.

4. In a centrifugal pump, the combination of packing means for the shaft, consisting of a shoulder-forming member rotating with the shaft and a ring suspended from the casing of the pump by means of a diaphragm said ring being located opposite said shoulder-forming member at the bucket wheel side thereof and exposed to the delivery pressure of the pump or bucket wheel, with roller bearings arranged adjacent said shoulder-forming member at the outside of the casing.

1,273,649. MOLDING-MACHINE. MEINDERD S. NAP, Holland, Mich. Filed Feb. 2, 1917. Serial No. 146,232. (Cl. 22—32.)



1. In molding apparatus, a supporting table, flask supporting means, means for moving said table, other means for moving said flask supporting means, and means for independently or collectively operating said moving means.

3. In molding apparatus, a supporting table, a flask, means for pivotally supporting and moving said flask vertically, means for moving the supporting table vertically, and other means engaged with said flask and table moving means for operating the same independently or collectively.

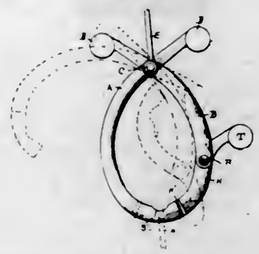
6. In molding apparatus, a supporting frame, standards arranged upon said frame, laterally adjustable carriages supported on portions of the standards, a table removably arranged on said carriages, said table being adjustable vertically with relation to the standards, a flask, means for pivotally supporting and moving said flask vertically, and means on the frame connected to said table and flask moving means for operating the same independently or collectively.

9. In molding apparatus, a supporting frame, standards on said supporting frame, laterally adjustable carriages supported on portions of said standards, a table removably engaged with said carriages, said table being adapted to move vertically with relation to the standards, a rock arm engaged with the table and extending longitudinally of the supporting frame, a flask, means for pivotally supporting and moving said flask vertically, operating means arranged in spaced relation to said standards, flexible connections engaged with the ends of said rock arm and flask moving means and the operating means, said operating means being actuated upon vertical movement of the supporting table to collectively move the flask supporting and moving means vertically.

12. In molding apparatus, a supporting frame, standards arranged on said supporting frame, a plurality of carriages slidably supported by portions of the standards, a supporting table removably arranged upon the slidable carriages, said supporting table being adjustable vertically with relation to the standards, a plurality of pairs of bearing pillars arranged on the supporting frame, journal boxes adjustably mounted upon certain of the pairs on said bearing pillars, a shaft mounted in said journal boxes, power transmitting means mounted on said shaft, flask supporting and moving means engaged and carried by said power transmitting means, a transverse shaft journaled in certain other of the pairs of said bearing pillars, a rock shaft mounted on said transverse shaft, means engaged with one extremity of the rock shaft for connecting the same with said vertically movable table, another shaft mounted between the remaining pairs of bearing pillars, gearing on the said last shaft engaged with the power transmitting means and adapted to move and be moved by the same, means for connecting one end of the rock arm to said gearing, the gearing being rotated upon vertical movement of the movable table whereby to actuate the flask supporting means, and means on the same engageable with said rock arm for limiting movement thereof to permit movement of the flask supporting means independently of the same.

[Claims 2, 4, 5, 7, 8, 10, 11, and 13 not printed in the Gazette.]

1,273,650. RELEASING-HOOK FOR BOATS, &c. RUDOLF NELLES, Baltimore, Md. Filed Apr. 20, 1918. Serial No. 229,727. (Cl. 9—23.)

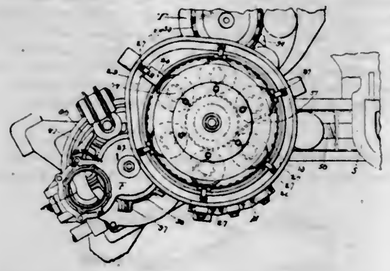


1. A releasing device for life boats, etc., consisting of two sections pivoted together and provided each with a weighted upper end, a weighted hook member pivotally mounted upon one of said sections and adapted to interlock with the other of said sections, and a link for attachment to a weighted object to be lowered, and serving to hold the interlocking parts together when supporting the weighted object.

2. A releasing hook for life boats, consisting of two sections pivoted together and provided with weighted portions at their upper ends, supporting means connected to the pivot between the sections, one of the latter having a slotted end, a hook section provided with a contracted shank portion pivotally mounted in said slot and terminating at its upper end in a weighted portion, the free end of the hook section being contracted and designed to interlock with the slot in the end of the other of said sections, the upper edges of the interlocking parts being transversely grooved, adapted to be engaged by the link for supporting a weighted object.

1,273,651. COMBINED FILLING AND CLOSING MACHINE. EDWIN KENNETH NORTON, Canonsburg, Pa., assignor to Continental Can Company, Incorporated, Syracuse, N. Y., a Corporation of New York. Filed Dec. 5, 1916. Serial No. 135,107. (Cl. 226—28.)

1. The combination of a can support, a chuck coöperating with said can support, means for filling a can while on said support through said chuck, means for placing the can end over the can after it is filled, and means for seating the can end in the can and for securing the can end to the can.



2. The combination with a rotatable can support, a rotatable chuck coöperating with said can support, means for filling a can while on said support through said chuck, means for placing a can end over the can after it is filled, and means for seating the can end in the can and securing the can end thereto.

3. The combination of a rotating carrier, a can support mounted thereon, a chuck over said can support, means for placing an empty can on the can support, means for filling the can through said chuck, means for placing a can end over the can after it is filled, means for raising the can support for seating the can end in the can and clamping the same against the chuck, means for rotating the can-support, and means for securing the can end to the can.

4. The combination of a rotating carrier, a plurality of can supports carried thereby, a filling device associated with each support, a chuck associated with each support and having an opening therethrough through which the can is filled, means for placing the can on each support, means for operating the filling device so as to fill the can during a partial rotation of the carrier, means for placing a can end over the can after it is filled, and means for securing the can end to the can while on said support.

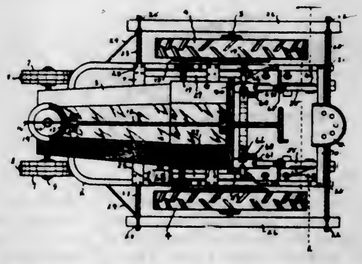
5. The combination of a rotating carrier having a plurality of can supports, a supporting plate above said can supports having tapered openings in line with the can supports and a can end seat at the upper face of each opening, a rotatable chuck above each opening in the plate, filling devices for filling the cans through the chucks, means for placing a can end on its seat after the can is filled, means for raising the can support for causing the can to engage the can end and clamp the same against the chuck, means for rotating the can support and chuck, and devices operating to secure the can end to the can.

[Claims 6 and 7 not printed in the Gazette.]

1,273,652. TRACTOR. HENRY OLERICH, Omaha, Nebr., assignor of one-fifteenth to Viola Olerich, Omaha, Nebr., and Joseph Olerich, H. A. Olerich, Harmon Olerich, Victor Olerich, Robert Olerich, Martha Ricke, Henry Ricke, William Ricke, Ben Ricke, Anton Ricke, Frank Brinker, Earl Olerich, and Frank Van Erdewyk, Breda, Iowa. Filed Mar. 28, 1917. Serial No. 158,089. (Cl. 180—14.)

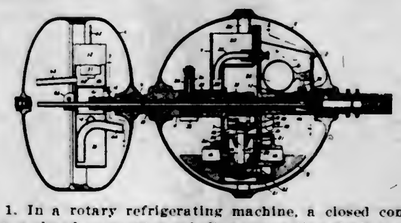
1. In a tractor, a frame having substantially parallel side-bars, an engine-driven axle disposed transversely of the frame and provided with wheels a pair of side-sections traversed by the axle and disposed parallel with and inwardly of the side-bars each being provided with a vertical guide, a pair of L-shaped bars each being provided with a guide, means for removably connecting said L-shaped bars with the side-sections for maintaining their guides parallel with the guides of said sections, grooved bearing-members engaging said guides, and a pair of screws rotatable to adjust said grooved bearing-members for a connection with objects to be drawn.

2. In a tractor, a frame having substantially parallel side-bars, an engine-driven axle disposed transversely of and having bearings in the side-bars, a pair of traction wheels carried by the axle and disposed outwardly of the side-bars, a pair of cross bars secured to the side-bars at longitudinal intervals thereof, a pair of side-sections each having a horizontal part traversed by the axle and secured to the cross bar and having an upright part provided with a ridge, a pair of L-shaped bars each being provided with a ridge, means for removably connecting the L-shaped bars with the side-sections for maintaining their ridges parallel with the ridges of said sections, a pair of grooved members for a connection with objects to be drawn, and means to elevate or lower said grooved members with reference to the side sections.



3. In a tractor, a frame having substantially parallel side-bars, an engine-driven axle disposed transversely of the frame and provided with wheels, a pair of side-sections disposed parallel with and extending below the side-bars each being provided with a vertical guide, a pair of holder-bars each having a vertical part provided with a guide and disposed adjacent to the end of a section with its guide parallel with the guide thereof, a pair of grooved members for a connection with objects to be drawn, each grooved member being in engagement with a guide of a section and a guide of a holder-bar, means to adjust the grooved members longitudinally of the guides, each holder-bar being provided with a horizontal part for a rigid mounting on a section.

1,273,653. ROTARY REFRIGERATING-MACHINE. CLARK ORR, Fort Wayne, Ind., assignor to General Electric Company, a Corporation of New York. Filed Sept. 15, 1916. Serial No. 120,256. (Cl. 62—115.)



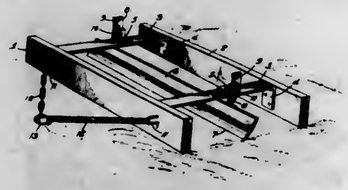
1. In a rotary refrigerating machine, a closed condenser, a closed evaporator, a hollow connecting shaft, a member freely mounted on the shaft in said condenser provided with a reservoir for refrigerating liquid, means for conveying refrigerating liquid to the evaporator, and means operative upon the occurrence of a high pressure in said condenser for stopping the flow of refrigerating liquid to said evaporator.

8. In a rotary refrigerating machine, a closed condenser, a closed evaporator, a hollow connecting shaft, a reservoir for the refrigerating liquid located within said condenser, a pipe communicating therewith for leading the refrigerating liquid to the evaporator and arranged within said hollow shaft, an oil separator hung within said evaporator and fastened to said pipe, said separator having a passage

through which vapor from the evaporator may enter said hollow shaft, said passage being located above said shaft, and an overflow spout mounted in the side of said separator below said hollow shaft, said spout extending upwardly at an acute angle to said separator and in a plane at right angles to the axis of said pipe and hollow shaft so that oil will not flow out of the end thereof if the separator is in its normal position but will flow out of the end thereof if the separator is tilted from its normal position.

[Claims 2 to 7 not printed in the Gazette.]

1,273,654. ROAD-SCRAPER. GEORGE OSBORNE, Cutler, Wis. Filed Apr. 18, 1916. Serial No. 91,966. (Cl. 37—5.)



In a road scraper, the combination of front and rear scraper blades, supporting bars having securing flanges fastened to the proximate surfaces of the said scraper blades, brackets mounted upon the said supporting bars intermediate their ends, an auxiliary scraper blade disposed midway between the said front and rear scrapers, and parallel to the said front and rear scraper blades and having a cutting edge, arcuate supporting arms attached to the said auxiliary blade, and provided with a plurality of equally spaced apertures and engaged with the edges of the said supporting bars and with the said bracket for preventing longitudinal movement of the said auxiliary scraper blade, and a removable fastening element carried by each bracket and adapted for reception in any of the said openings in the adjacent supporting arm for permitting adjustment and swinging movement of the said auxiliary blade.

1,273,655. FLEXIBLE BEARING FOR HIGH-SPEED SPINDLES. GUSTAVE A. OVERSTROM, Pasadena, Cal. Filed May 9, 1916. Serial No. 96,275. (Cl. 64—48.)

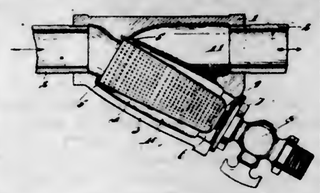


4. A flexible bearing for high speed spindles comprising a fixed member, a floating member, a series of cylindrical supporting devices symmetrically placed around the center of one of said members and attached thereto, a series of bolts extending through said cylindrical supporting devices and attached to the other of said members, and a series of spring devices within said cylindrical supporting devices and around said bolts.

6. The combination of a high speed spindle and a flexible bearing therefor, said spindle being mounted to gyrate about a center below said bearing, and said bearing comprising a fixed supporting member, a bearing member for the spindle, and a series of spiral springs disposed in different angular positions around the spindle and engaging one of said members at their outer portions and engaging the other of said members at their inner portions, and said springs having their axes extending radially with respect to said center about which the spindle gyrates.

[Claims 1 to 3 and 5 not printed in the Gazette.]

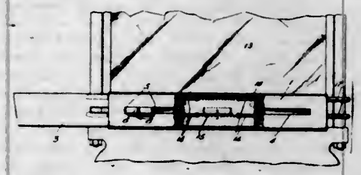
1,273,656. STRAINER. HARRY E. PAGET, Chicago, Ill. Filed July 3, 1915. Serial No. 37,964. (Cl. 210—16.)



1. A strainer comprising a hollow body; a tubular perforated straining element open at both ends mounted in said body through which the fluid is required to pass in its passage through said body, said straining element consisting of a plurality of tubular sections, the adjacent ends of which are overlapped, substantially as described.

[Claim 2 not printed in the Gazette.]

1,273,657. SIGNAL FOR MOTOR-VEHICLES. FLORENCE FERN PARADIS, Idaho Springs, Colo. Filed Dec. 1, 1917. Serial No. 204,848. (Cl. 116—31.)

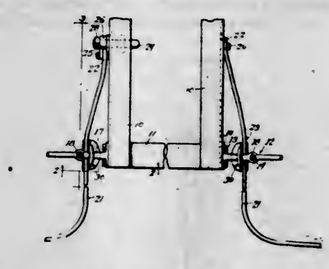


3. A device of the character specified, comprising a tubular casing having means for detachably connecting the same with the wind shield of a motor vehicle transversely of the said shield, a signal plate mounted to slide in the casing and adapted to be extended at either end of the casing, means for moving the plate, and means in connection with the moving means for locking the plate with either end extended or in neutral position, said means comprising a handle connected with the plate, a pin mounted to move in the handle toward and from the plate, said plate having an opening through which the pin extends and the partition having openings for engagement by the pin to hold the plate in adjusted position, and a spring normally pressing the pin toward the partition.

[Claims 1 and 2 not printed in the Gazette.]

1,273,658. CLAMPING DEVICE. EDWARD PARRADEE, Chicago, Ill. Filed Oct. 22, 1917. Serial No. 197,877. (Cl. 293—55.)

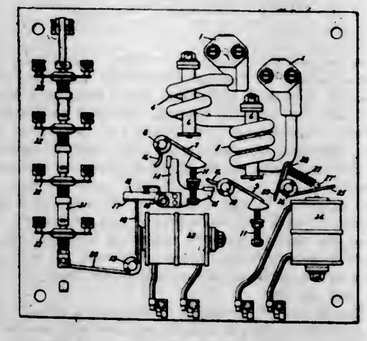
1. The combination with the inclined member of a fender bracket of a motor car, and the rearwardly extending arm of a bumper underlying the bracket; of a clamp comprising a plate underlying the arm, a U bolt extending over the inclined member of the top of the bracket with its legs extending through the plate, and nuts threaded on the ends of the bolt to clamp the arm against the bracket, wedging the clamp against the enlarged part of said member by the effect of said inclined part.



2. The combination with the fender bracket of a motor car having a projection on the lower side thereof, and the rearwardly extending arm of a bumper underlying the bracket with its outer edge abutting against the projection; of a clamp, comprising a plate underlying the arm and having a centrally positioned upwardly extending lug for engagement with the bracket inside the arm, and a U bolt extending over the bracket and through the plate to clamp the arm and bracket in fixed relationship.

3. The combination with the fender bracket of a motor car having a projection on the lower side thereof, and the rearwardly extending arm of a bumper underlying the bracket with its outer edge abutting against the projection; of a clamp, comprising a plate underlying the arm, and having a centrally positioned upwardly extending lug for engagement with the bracket inside the arm, ribs on the outer upper surface of the plate for engagement with each side of the lower edge of the arm, and a U bolt extending over the bracket and through the plate to clamp the arm and bracket in fixed relationship.

1,273,659. DOUBLE-CURRENT OVERLOAD-RELAY. ROBERT J. PARSONS, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Aug. 9, 1915. Serial No. 44,446. (Cl. 175—294.)



1. The combination in a circuit breaker adapted to open at either of two different values of current, of means for tripping the breaker comprising two windings in series and two armatures therefor, one of which is actuated responsively to the lower and the other of which is actuated responsively to the higher value of current, and means for preventing the armature responsive to the lower value of current from operating to trip the breaker when the breaker is connected to be opened responsively to the higher value of current.

3. The combination in a circuit breaker adapted to open at either of two different values of current, of means for tripping the breaker comprising two armatures, one of which is actuated responsively to the lower and the other of which is actuated responsively to the higher value of current, of an electromagnetically actuated locking device for preventing operation of the armature responsive to the lower value of current when the breaker is connected to be opened responsively to the higher value of current.

6. A circuit breaker having two tripping coils in series responsive respectively to different current strengths, an armature for each coil, a single tripping mechanism actuated by either armature, and means for locking the armature responsive to the lesser current strength when the current strength is high.

[Claims 2, 4, 5, and 7 to 11 not printed in the Gazette.]

1,273,660. RAIL-JOINT. JOSEPH A. PATTERSON, Waynesburg, Pa. Filed Mar. 26, 1917, Serial No. 157,437. Renewed Dec. 21, 1917. Serial No. 208,333. (Cl. 239—8.)



1. In a rail joint, the abutting ends of the rails being reduced and adapted to interengage, one of the reduced portions having a dove-tail recess formed therein, the other of the reduced portions having a dove-tail projection, the projection being engageable with the recess of the opposite reduced portion, and a plurality of longitudinally slidable locking bolts arranged in said projection in one portion and engageable with the opposite sides of the recess of the other portion.

3. In a rail joint, the abutting ends of the rails being reduced and adapted to interengage, one of the reduced portions having dove-tailed recesses formed therein and an inclined pocket formed adjacent its inner extremity, the other of the reduced portions having dove-tailed projections and a beveled extension formed thereon, the projections and extension being engageable with the recesses and pocket of the opposite reduced portion respectively, the adjacent ends of the said portions of the abutting rail sections being beveled, and a plurality of longitudinally slidable locking bolts arranged in one of the reduced portions and engageable with the dove-tailed projections of the other portion.

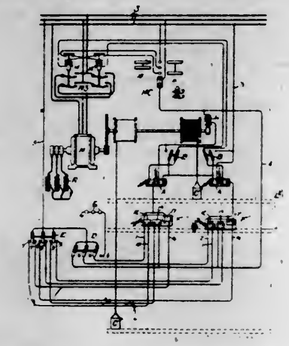
[Claim 2 not printed in the Gazette.]

1,273,661. INTERLOCKING CONTROL FOR MINE-HOISTS. CHARLES L. PERRY, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Mar. 25, 1918. Serial No. 224,618. (Cl. 172—152.)

1. The combination with a motor driven hoist having a loading platform and two unloading platforms, one at a higher elevation than the other, of a limit switch at the lower unloading platform and means controlled jointly from the loading platform and from the vicinity of the lower unloading platform for rendering the limit switch effective to stop the motor.

5. The combination with a motor driven hoist having a loading platform and two unloading platforms, one at a higher elevation than the other, of a limit switch at the lower unloading platform, a switch remote from the loading platform and controlled by the operator for governing the effectiveness of the limit switch to stop the motor, a switch at the loading platform for signaling the operator and also governing the limit switch, and means whereby when the switch at the loading platform is

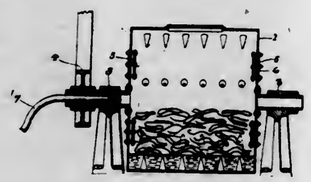
moved to signal the operator and render the limit switch effective, the motor can only be started after the operator's switch has been moved to correspond to the switch



at the loading platform and render the limit switch operative to stop the motor.

[Claims 2 to 4 and 6 to 8 not printed in the Gazette.]

1,273,662. PROCESS OF TANNING. WALTER PETRIE, Endicott, N. Y., assignor to Petrie Process Company, New York, N. Y., a Corporation of New York. Filed Apr. 2, 1917. Serial No. 159,226. (Cl. 149—4.)



2. The process of tanning hides which comprises agitating the hides in the presence of a small quantity of strong liquor in an apparatus permitting circulation of air therethrough and supplying fresh quantities of liquor as the liquor is absorbed.

4. The process of tanning hides which comprises agitating the same in a rotary drum in the presence of an amount of highly concentrated tanning liquor less than that necessary to completely tan the hide, admitting air to the hides during the rotation of the drum to evaporate moisture and cool the hide, and adding further amounts of strong tanning liquor.

5. The process of tanning hides which comprises agitating hides with a small constantly renewed quantity of strong tanning liquor, the amount of such liquor present at any one time being insufficient to prevent free access of air to said hides.

[Claims 1 and 3 not printed in the Gazette.]

1,273,663. DEVICE FOR USE IN OIL AND GAS WELLS. WILLIAM S. PIERCE, Franklin, Pa., assignor to Pierce Packer & Supply Co., Franklin, Pa., a Corporation of Pennsylvania. Filed May 29, 1917. Serial No. 171,658. (Cl. 166—10.)

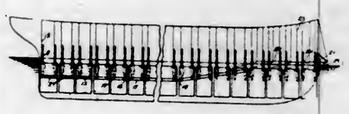
1. In a device of the character described, the combination of a short length of casing adapted to be placed in the lower part of a well and having an open upper end, a packer carried by said casing for preventing foreign matter from upper strata from passing to the oil and gas field, a pumping apparatus adapted to be removably fitted in said casing and being withdrawable from the well independent thereof, said pumping apparatus adapted to divide said casing to provide separate oil and gas chambers, means carried by said pumping apparatus for normally closing the open end of said casing, means for carrying off the gas from said gas chamber separately from the oil, and means for permitting the free entrance of oil and gas from the oil and gas field respectively to said oil and



gas chambers but preventing back flow or the passage of foreign matter from the interior of said casing to said oil and gas field when the pumping apparatus is removed, substantially as described.

[Claims 2 to 9 not printed in the Gazette.]

1,273,664. LOCK-BAR BARRIER FOR PROTECTING SHIPS AGAINST TORPEDO ATTACKS. JOHN POMFRET, Sr., Paterson, N. J. Filed Oct. 15, 1917. Serial No. 196,683. (Cl. 114—240.)



1. A submersible lock-bar barrier, comprising a rectangular shape of vertical ellipsoidal columns, vertical ellipsoidal bars and horizontal bars, forming a mesh or lattice-work of suitable spacing, attached to brackets on the hull of the ship by two upper and two lower pivotal booms, substantially as specified; the vertical bars having slots cut into them, so as to permit them to slide on the horizontal bars, and being locked with fillets; water shears attached to the lower booms; cables and springs attached to each vertical column and connected to the deck of the ship by suitable means; a sectional draw-bar extending horizontally through the unit of barrier and having on the forward end an adjustable hook and on the after end an eye.

3. The means of attaching to the ship a barrier to protect ships from torpedo attack, substantially as specified; comprising a saddle with built-up arms at the bow of the ship; pivotal arms on the starboard and port sides of the bow, connected with the deck by cables; cables connecting with the saddle arms at the bow and the pivotal arms on the contour of the bow and thence to the draw-bar; a continuous sectional draw-bar passing through each unit of barrier between bow and stern, with hook and eye on each unit; cables secured to the pivotal arms on the contour of the bow and to the forward units of barrier; right-angled brackets secured to the starboard and port sides of the bow and stern; cables secured to the after end of the draw-bar and to the stern units.

[Claim 2 not printed in the Gazette.]

1,273,665. VENTILATING-DEFLATOR. ERNEST D. PORTER, Los Angeles, Cal. Filed Oct. 23, 1916. Serial No. 127,139. (Cl. 128—28.)

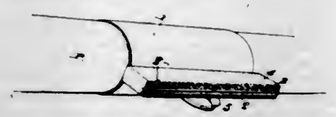


1. In a device of the character described, the combination of a rigid cylindical tube having a perforated head at one end, and an enlarged perforated gas chamber at the other end, said chamber constituting a tube retaining shoulder, and comprising an upper section fast to said tube, and a lower section screw threaded on said upper section, and a lug depending from said lower section whereby said lower section may be operated.

4. In a device of the character described, the combination of a rigid cylindrical tube having a perforated head at one end, said tube being provided with a helical groove on the periphery thereof, and an enlarged perforated gas chamber at the other end, said chamber constituting a tube retaining shoulder, and comprising an upper section fast to said tube, and a lower section screw threaded on said upper section.

[Claims 2 and 3 not printed in the Gazette.]

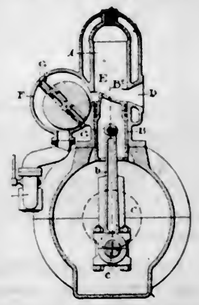
1,273,666. ELECTRICAL HEATER. CHARLES C. POWERS, Williams, Ariz. Filed Jan. 25, 1918. Serial No. 213,656. (Cl. 219—38.)



1. The combination of a body embracing heat-conducting band having ends, said heat conducting band having its ends bent to lie together to form a fin, a heating coil wound on said fin, means to hold said coil on said fin and thereby hold said band ends together.

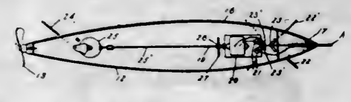
[Claims 2 to 4 not printed in the Gazette.]

1,273,667. MOTOR. JEAN ANDRÉ POYET, Lyon, France. Filed June 2, 1913. Serial No. 771,259. (Cl. 123—65.)



In an internal combustion motor the combination of a cylinder having an inlet and outlet port, a piston therein adapted to unmask said ports at the required times, a pump casing applied directly on the wall of the cylinder, and connected with the carbureter of the motor, a rotatable member eccentrically mounted in said casing, and a vane adapted to slide in a radial groove in said rotatable member and adapted to feed the explosive mixture into said cylinder without compression and proportionally to the degree of opening of said inlet and outlet ports.

1,273,668. TORPEDO. EDWARD D. PRIEST, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 11, 1916. Serial No. 130,891. (Cl. 114—23.)



1. An automobile torpedo provided with means whereby when it is released in the vicinity of an object to be attacked it will cover an area by advancing on substantially parallel lines which are separated by a space not substantially greater than that occupied by the object whereby if the object is within the area covered by the torpedo it will be struck.

6. The combination with a dirigible automobile torpedo having a driving motor, of means operated when the torpedo strikes the water for starting the driving motor, a steering rudder, and connections between the rudder and the driving motor for gradually and uniformly varying the position of the rudder to cause the torpedo to advance in a spiral path to cover a prescribed area.

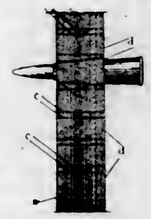
[Claims 2 to 5 not printed in the Gazette.]

1,273,669. COMPOSITION OF MATTER. ROBERT W. PRITTIE, Toronto, Ontario, Canada. Filed Nov. 27, 1916. Serial No. 133,779. (Cl. 167—9.)

1. The hereindescribed cosmetic, the major portion of which comprises oil of olive kernels, the remaining ingredients being oil of peach kernels, oil of almonds and oil of plantain.

2. The hereindescribed cosmetic comprising eight pounds of oil of olive kernels, one pound of oil of almonds, one pound of oil of peach kernels, and one ounce of oil of plantain.

1,273,670. CARTRIDGE-FEEDING BELT FOR MACHINE-GUNS. JULES GILBERT CHARLES QUÉRON and JOANNÈS COURBON, St.-Etienne, France. Filed June 7, 1918. Serial No. 238,680. (Cl. 89—35.)



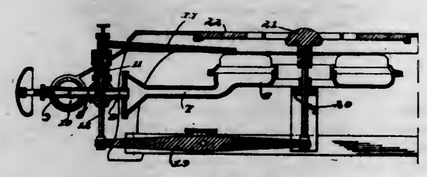
2. In a flexible belt for machine gun cartridges, the combination of two thicknesses of elastic fabric whereof the warp threads consist of rubber threads, stitchings or bindings connecting said two thicknesses of fabric together, whereby clips are formed for holding the cartridges, and means for indicating the exact location of said clips in the belt.

[Claims 1 and 3 not printed in the Gazette.]

1,273,671. GAS-STOVE. EMIL G. RICHTER, Chicago, Ill., assignor to Charles B. Richter, Chicago, Ill. Filed May 31, 1917. Serial No. 171,951. Renewed May 25, 1918. Serial No. 236,647. (Cl. 126—52.)

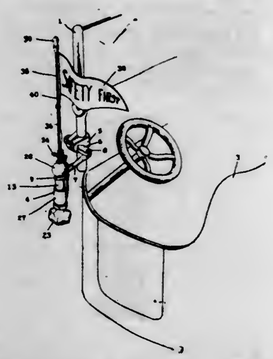
1. The combination with a gas stove burner, of a gas supply pipe leading thereto; a hollow nipple connected with said gas supply pipe; a centrally perforated cap closing the end of said nipple; a pilot light tube extending centrally through said cap and leading to said burner, said pilot light tube being provided with a head swiveled

within said cap; a valve for said supply pipe; a spring in said nipple normally holding said valve closed; a depressible operating member associated with said burner and operated by a utensil thereon; and an operative connection between said depressible member and said valve, substantially as described.



2. The combination with a gas stove burner of a gas supply pipe leading thereto; a hollow nipple connected with said gas supply pipe and projecting upwardly therefrom; a centrally perforated cap on the top of said nipple; a pilot light tube extending centrally through said cap and leading to said burner, said pilot light tube being provided with a head swiveled within said cap; a perforated valve stem traversing said supply pipe; a spring in said nipple normally depressing said valve stem but permitting of elevation thereof to bring the perforation therein in registration with the passage through said supply pipe; a depressible operating member associated with said burner and operable by a utensil thereon; and an operative connection between said member and said valve stem, substantially as described.

1,273,672. VEHICLE-SIGNAL. HENRY ROHRDANTZ, West Orange, N. J., assignor to Unit Signal Co., Plainfield, N. J., a Corporation of New Jersey. Filed Aug. 10, 1916. Serial No. 114,121. (Cl. 116—31.)



3. In a signal, a rotatable body member, a knuckle member with alined sections slidable therein and adapted to flex when slid in one direction and be swung back when slid in the other direction, means for rotating said body member by rotating the knuckle member, and a handle on the knuckle member for sliding and rotating it.

9. In a signal, a body member providing a slideway, a knuckle member in said slideway, and means for sliding said knuckle member so as to project its joint and allow the projected section to swing or to draw its joint into the slideway and hold the sections in alinement, said knuckle member and body member having a coöperating slot and pin to determine their mutual relation.

13. In a signal, a support, means for attaching said support in upright position to a vehicle, a knuckle member slidable longitudinally in said support and having a section adapted to be slid out of the top of said support, and a spring for actuating the upper section out of alinement with the other section whereby it will tilt over by gravity when slid out of said support.

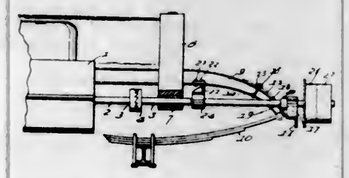
[Claims 1, 2, 4 to 8, and 10 to 12 not printed in the Gazette.]

1,273,673. MANUFACTURE OF IMPREGNATED MATERIAL. JEAN ROSEN, Paris, France, assignor to Société Anonyme des Combustibles Industriels, Paris, France. Filed Jan. 11, 1915, Serial No. 1,707. Renewed May 29, 1918. Serial No. 237,368. (Cl. 91—68.)

1. The herein described process which consists, in dehydrating a base, applying a coating of tar oils thereto, applying a layer of talc to such layer of tar oils, and then successively applying thereto coatings or layers of tar oils having different degrees of oxidation from the first mentioned coating.

[Claims 2 and 3 not printed in the Gazette.]

1,273,674. POWER-TRANSMISSION DEVICE. BEN SCHMIDT, Bigstone City, S. D. Filed Sept. 25, 1917. Serial No. 193,154. (Cl. 180—53.)



In a device of the kind set forth, a shaft, a forward bearing therefor, a support for said bearing consisting of an angle iron for transverse positioning across the forward downwardly curved ends of an auto vehicle frame, curved plates secured to the angle iron near the ends thereof and at right angles thereto, the plates corresponding to the curvature of the curved ends of the vehicle frame, U-bolts straddling the plates and the curved ends of the frame whereby the support as a whole is secured frictionally to the frame to enable its positioning to aline the shaft with the vehicle engine shaft, means for coupling the shaft to the vehicle engine shaft, and tight and loose pulleys carried by the shaft.

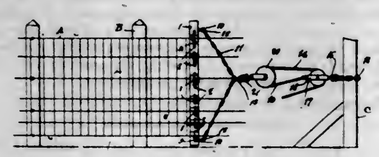
1,273,675. GAME APPARATUS. WILLIAM C. SCHMITT, Portland, Oreg. Filed Sept. 22, 1916. Serial No. 121,675. (Cl. 46—63.)



In a game apparatus of the character described, a selective playing device comprising a base and a pointer rotatable thereon, the base being provided with a series of concentric circles and radii and having symbols in the spaces formed by the intersections of the circles and the radii, and the index end of the pointer being marked with selective characters located with respect to the concentric divisions formed by said circles.

1,273,676. WIRE-STRETCHER. FREDRICK E. SCHNEIDER, Highland, Wis., assignor of one-half to Orren Rossing, Highland, Wis. Filed July 19, 1917. Serial No. 181,650. (Cl. 254—83.)

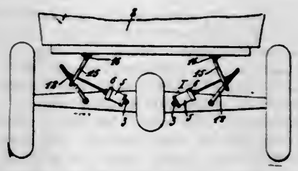
2. A wire stretcher comprising a rectangular supporting member provided with a spaced series of longitudinally extending slots, an adjusting block arranged vertically in each slot, a strip secured transversely to one face of each block and having an abutting engagement with one face of the supporting member to retain the blocks in their respective slots and against movement in one direction, clamping plates secured to the other face of each block and preventing movement of the adjusting blocks in the other direction, a cam lever pivotally secured to one face of each block and located in close proximity to the under side of the clamping plates, said slots permitting of



the vertical adjustment of the blocks to accommodate fencing wires, and a power applying mechanism adapted to be secured to the supporting member, as and for the purpose specified.

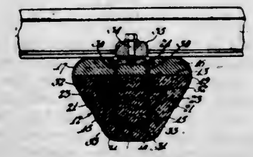
[Claim 1 not printed in the Gazette.]

1,273,677. SHOCK-ABSORBER. OTTO R. SCHWANTES, Clintonville, Wis. Filed Oct. 5, 1916. Serial No. 123,906. (Cl. 21—105.)



A shock absorber including a cylinder, an apertured lug thereon whereby the cylinder may be pivotally connected to the axle of a motor vehicle, a piston movable in said cylinder, a rod connected to the piston, a lever having one end apertured for connection to the axle housing, said lever having a plurality of longitudinally spaced openings, a bolt connecting the outer end of said rod with one of said openings, a link, a bolt inserted in one end of said link and in one of the perforations of the lever for pivotally connecting the parts together, and means for pivotally connecting the opposite end of the link to the vehicle body.

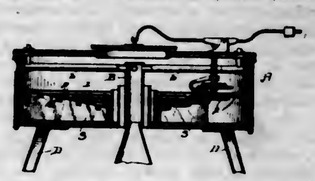
1,273,678. RAILROAD-TIE. HENRY W. SCHLUETER, Los Angeles, Cal. Filed May 31, 1917. Serial No. 172,095. (Cl. 238—3.)



1. In a reinforced concrete railroad tie; a wood block; a sheet metal cover for protecting and anchoring the block to the tie; a pair of straps set into said wood block under said cover; means for securing each of said straps to said tie; and means for securing the railroad rails to said straps.

2. In a reinforced concrete railroad tie; a wood block; a sheet metal cover for protecting and anchoring the block to the tie; a pair of straps set into said wood block under said cover; holding-down spikes passing through said straps and clenched over the reinforcement inside said tie; and means for securing the railroad rails to said straps.

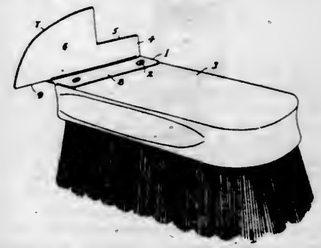
1,273,679. INCUBATOR. HENRY M. SHEER, Quincy, Ill. Filed July 17, 1917. Serial No. 181,032. (Cl. 119—39.)



1. An egg-tray consisting of a plurality of annularly-arranged spaced strips having openings therebetween, radially-arranged supports provided with notches adapted to receive said strips, said supports made higher at their outer edges, whereby the strips are caused to slope toward the center of the tray.

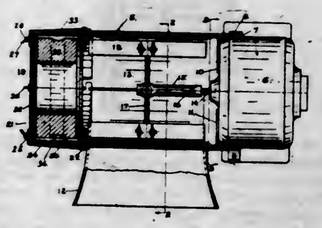
[Claim 2 not printed in the Gazette.]

1,273,680. BOOT AND SHOE CLEANING DEVICE. ROBERT SIMPSON, Otley, England. Filed Sept. 2, 1916. Serial No. 118,202. (Cl. 15—16.)



A boot cleaning device consisting of a flat piece of metal having a rectangular portion bent at a right angle thereto to form an attaching plate for mounting on a support, said flat piece being flush with the attaching plate at one end, the other having a straight lower edge extending beyond the end of the attaching plate and in line with the edge of the angle formed by the attaching plate and flat piece, and having a convex upper scraping edge starting from the straight edge and extending upward and toward the opposite end of the flat piece, whereby a scraping point having a straight side and a convex side is formed at one end of the flat piece, the other end of said flat piece having a right angle notch therein, one side of which extends to the curved edge to form a second scraping point having one straight edge and a convex edge, the other side of the notch being parallel to the straight edge of the flat piece.

1,273,681. FUME-DISSIPATOR. VERN SLATER and TRACY C. STUART, Denver, Colo.; said Stuart assignor to said Slater. Filed Oct. 16, 1915, Serial No. 56,225. Renewed Dec. 15, 1917. Serial No. 207,381. (Cl. 261—24.)



1. In apparatus of the character set forth, the combination of a main casing with a motor mounted at one

end thereof and at its other end providing an air treating chamber, in directly alined open communication therewith, having air inlet means, said main casing embodying a restricted substantially closed suction chamber, having an air discharge outlet through its peripheral wall, intermediate of said motor and air treating chamber; a filling medium contained in said air treating chamber, freely absorptive as to a treating agent adapted to impregnate the incoming air in its flow past the same into said suction chamber; and a rotary suction fan and blower, connected to said motor, independently and snugly incased in said suction chamber, proximately to said discharge outlet, the said several chambers and elements being alined, combined and functioning, substantially as described.

[Claim 2 not printed in the Gazette.]

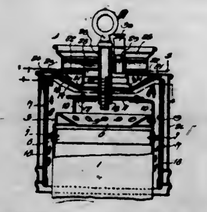
1,273,682. FUME-DISSEMINATOR. VERN SLATER and LEONIDAS D. WEST, Denver, Colo., assignors, by mesne assignments, to Vern Slater, Denver, Colo. Filed June 9, 1916. Serial No. 102,687. (Cl. 261—104.)



3. In appliances of the character set forth, the combination with a portable casing having an air inlet and an air outlet together with an associated rotary blower, of a nozzle, provided with a hollow tapering body portion, adapted to be connected with said air outlet, an air moistening element formed and dimensioned to snugly fit within said nozzle, said element comprising a hollow tapered foraminous support enveloped with a covering of absorbent material, a valve controlled feed conduit leading to said moistening element, through an aperture in said nozzle body, and a reservoir, carried by and communicating with said valved conduit element, for supplying a controlled flow of a suitable liquid to said absorbent material, substantially as described.

[Claims 1 and 2 not printed in the Gazette.]

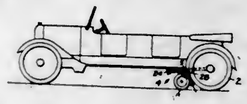
1,273,683. HUMIDIFIER. VERN SLATER and LEONIDAS D. WEST, Denver, Colo., assignors, by mesne assignments, to Vern Slater, Denver, Colo. Filed June 9, 1916. Serial No. 102,689. (Cl. 261—104.)



6. In an appliance of the character set forth, a portable casing, provided with a substantially open top, an air outlet, and means for drawing air in through said open top and positively discharging said indrawn air through said outlet, in combination with a liquid containing pan mounted distantly above said open top; a moistening element enveloping the upper open end of said casing, in substantially spaced relation thereto, said moistening element comprising a cylindrical foraminated body support, a flexible absorbent top covering therefor, adapted to extend over and be supported by said pan, and an absorbent apron, encompassing said foraminous support, providing a depending continuation of said absorbent covering; means for depressing said flexible absorbent covering into the liquid contents of said pan; and a spaced cylindrical envelop for said depending apron and its foraminated support, providing an annular air channel therearound, substantially as described.

[Claims 1 to 5 not printed in the Gazette.]

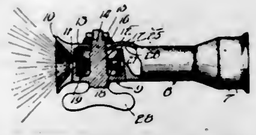
1,273,684. SUPPLEMENTAL DRIVE-WHEEL FOR MOTOR-VEHICLES. EDWARD C. SMALL, Los Angeles, Cal. Filed Apr. 4, 1918. Serial No. 226,717. (Cl. 180—15.)



1. A supplemental drive wheel for motor vehicles, comprising a frame adapted for rigid connection to a rear axle housing, a fork slidingly connected to the frame and extending downwardly, bearings slidingly mounted in the arms of the fork, springs for holding the bearing downwardly, a wheel mounted between the arms of the fork with its spindle in the yielding bearings, and an idler engaging the periphery of the wheel and adapted to engage the periphery of the vehicle drive wheel.

2. A supplemental drive wheel for motor vehicles comprising the combination with the rear axle housing and rear drive wheel of a motor vehicle, of a frame rigidly mounted relative to the axle housing and drive wheel, a fork slidingly mounted in the frame, bearings slidingly mounted in the arms of the fork, a supplemental wheel having a spindle mounted in the sliding bearings, springs for holding the sliding bearings downwardly, idlers fitting the periphery of the drive wheel and the periphery of the supplemental wheel, and means for holding the idler wheels in place.

1,273,685. SPRAYING-NOZZLE. OSCAR SMIEDEL, Chicago, Ill. Filed Mar. 27, 1917. Serial No. 157,762. (Cl. 137—80.)

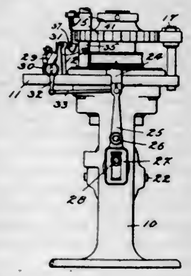


1. In a device of the class described, the combination with a valve socket member having a hose connection at one end and a transverse partition at the other end, there being a rectangular discharge orifice within said partition, of a circular valve member seated within the socket of said socket member, said circular valve member having a plurality of slotted openings in its periphery, said slotted openings being of graduated width, a pair of partitions within the valve member providing therebetween a circular passageway in communication with said slotted openings, the width of said passageway adjacent to each slotted opening being substantially the same as the width of such opening, one of said partitions being provided with an annular central opening for the admission of water into the said circular passageway, and the socket member being suitably formed to permit a free movement of water to said annular opening, substantially as described.

3. In a device of the class described, the combination with a valve socket member having a transverse partition at one end, there being a discharge orifice within said partition, of a circular valve member working within the said member at a point adjacent to said partition, there being a plurality of peripheral slotted openings in the valve member adapted to register successively with the discharge orifice, and a pair of partitions within the valve member serving to provide therebetween a circular passageway in communication with all of the slotted openings, substantially as described.

[Claims 2 and 4 not printed in the Gazette.]

1,273,686. PRESS. OBERLIN SMITH, Bridgeton, N. J. Filed June 25, 1914. Serial No. 847,302. (Cl. 113—80.)



In a press, the combination of a reciprocating ram having a head adapted to carry a circular series of punches, a dial adapted to carry a circular series of disks situated beneath the punch-carrying head, paper feeding means, means for reciprocating the ram situated beneath the dial, a disk reservoir, means for feeding disks delivered to the reservoir actuated by the reciprocation of the ram, a table supporting said dial and said paper feeding means, means for applying a heating medium below a portion of the dial, and means for applying a cooling medium below another portion of the dial.

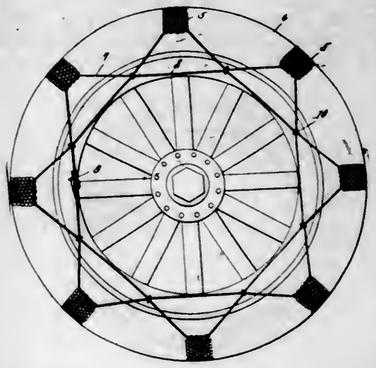
1,273,687. LIFE-PRESERVER. FRANK STEBBING, Washington, D. C. Filed Mar. 29, 1918. Serial No. 225,529. (Cl. 9—17.)



1. A life preserver comprising sacks adapted to be applied to the forward and rear portions of the body of a wearer, shoulder straps connecting the sacks together, tubes connecting the sacks together at points below their upper ends whereby the upper portions of the sacks may bear against the base of the head of the wearer and means for inflating the sacks and tubes.

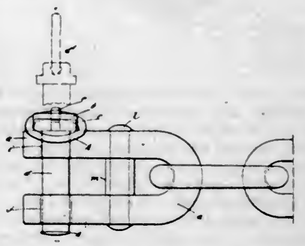
2. A life preserver comprising sacks adapted to be applied to the forward and rear portions of the body of a wearer, shoulder straps connecting the sacks together, tubes connected with the sacks at points below their upper ends whereby the upper ends of the sacks may bear against the base of the head of the wearer, casings surrounding the tubes, means for detachably connecting the sides of the casings together, and means for inflating the sacks and tubes.

1,273,688. NON-SKID ARMOR FOR WHEEL-TIRES. WILLIAM W. TALBOT, New York, N. Y., assignor of one-half to Andrew-Trust Pochlmann, Baltimore, Md. Filed May 12, 1917. Serial No. 168,071. (Cl. 152—14.)



In combination, with a wheel having a tire, a circumferential series of members engaging the tread of said tire, a series of flexible members connected at opposite sides of said tire, to the corners of the several members, and providing endless cables of a greater diameter than said tire, a ring linked upon each of said flexible members, and a cable arranged on each side of said tire and passing through all of said rings on one side of the tire, and adapted to have its opposite ends drawn taut and secured together so as to bow all of said flexible members and provide flexible portions of its own length forming angles with the several pairs of said flexible members whereby it will be adapted to form a polygonal outline.

1,273,689. COUPLING OR SHACKLE FOR COLLIERY AND LIKE WAGONS. JOHN LEWIS THOMAS, Morriston, Swansea, England. Filed Mar. 19, 1918. Serial No. 223,357. (Cl. 97—4.)

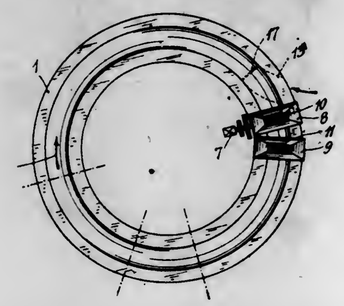


1. A coupling or shackle comprising a D-link formed or provided with projections on each side of the coupling pin hole in one limb of this link, said projections being grooved or channeled, a coupling pin provided with lugs which are adapted to be received in said grooves or channels, and a ring threaded through a hole in the pin and arranged so that it can fall laterally over one of the said projections when the pin has been turned to bring the lugs thereon into the said grooves or channels.

2. A coupling or shackle comprising a D-link formed or provided with projections on each side of the coupling pin hole in one limb of this link, said projections being grooved or channeled, a coupling pin provided with lugs which are adapted to be received in said grooves or channels, and a ring threaded through a hole in the pin and arranged so that it can fall laterally over one of the said

projections when the pin has been turned to bring the lugs thereon into the said grooves or channels, and means to prevent the complete withdrawal of the coupling pin from the D-link.

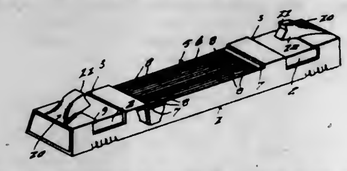
1,273,690. PROCESS FOR THE PRODUCTION OF NITROGEN COMPOUNDS FROM METAL CARBIDS. VICTOR THRANE, Christiania, Norway. Filed Nov. 10, 1916. Serial No. 130,632. (Cl. 23—13.)



2. A process of producing nitrogen compounds which comprises feeding a layer of inert material onto a moving conveyer, feeding a mass of metal carbid onto said layer of inert material, subjecting such moving mass to a counter current of nitrogen, and subjecting such mass, at some part of its path, to a temperature sufficient to initiate a chemical reaction between the said carbid and the said nitrogen, whereby the reaction being exothermic, it propagates itself through the mass.

[Claim 1 not printed in the Gazette.]

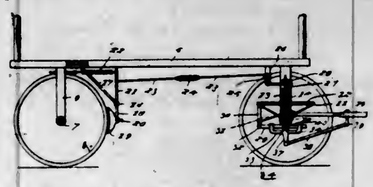
1,273,691. RAIL-TIE. PAUL V. TROUPE, Gary, S. D. Filed Mar. 23, 1917. Serial No. 157,040. (Cl. 238—5.)



A rail tie comprising a hollow body having cut-out portions in the top wall adjacent each end thereof, fibrous blocks positioned in the ends of said body and exposed through the cut-out portions for engagement with the bases of rails, stop plates in said body for limiting the movement of said blocks in the direction of each other, inwardly extending flanges formed on the upper edges of the outer side walls of the cut-out portions and having their upper sides flush with the upper surfaces of the top wall of the body and overlying the edges of the bases of the rails, a pair of bracing elements located on the body and having their inner ends extending inwardly beyond the flanges and provided with straight faces adapted to engage the tread portions of the rails, and substantially triangular shaped extensions formed upon the elements and located beyond the straight faces and in engagement with the bases of the rails.

1,273,692. AUTOMATIC BRAKE FOR TRUCKS. EDWIN W. TUCKER, North Prairie, Wis. Filed July 7, 1916. Serial No. 107,999. (Cl. 21—8.)

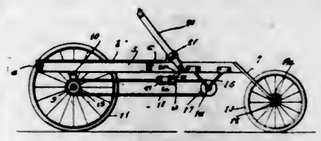
1. In combination, a truck including a platform, front and rear supporting wheels therefor, relatively movable upper and lower bolsters connecting the front wheels with said platform, a tongue connected with the lower bolster, a bar pivotally secured to the lower bolster, means operable by said tongue to depress said bar, brake shoes movable against the rear wheels of the truck, and means connecting said bar with said brake shoes for automatically applying the latter.



2. In combination, a truck including a platform, supporting wheels therefor, brake shoes associated with said supporting wheels, a pivoted bar, means connecting said bar with said brake shoes, a pivoted tongue connected with the truck, means connecting said tongue with said pivoted bar for depressing the latter to automatically apply the brake shoes to the wheels, and means carried by the pivoted bar for engaging the means connecting the tongue and the pivoted bar, when the brake shoes are applied for limiting the downward movement of the tongue.

3. In combination, a truck including a platform, front and rear supporting wheels therefor, relatively movable upper and lower bolsters connecting the front wheels with said platform, a pivoted tongue, a bar pivotally secured to the lower bolster, a stop shoulder on said bar, a U-shaped member pivotally secured to the lower bolster having angular terminals overlying said pivoted bar, and means connecting said U-shaped member with said tongue for depressing the bar during swinging movement of the tongue, said U-shaped member being adapted to engage said shoulder to limit the downward movement of the tongue.

1,273,693. MANUALLY-PROPELLED VEHICLE. LEONARD M. TUCKER, Seattle, Wash. Filed Nov. 23, 1917. Serial No. 203,560. (Cl. 208—36.)



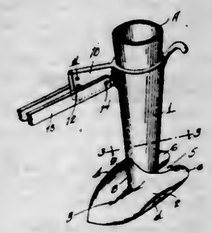
1. A manually-operated vehicle including a frame structure, supporting wheels therefor, a sprocket chain connected with the wheels, a pivoted lever, and a chain grip slidably mounted upon the chain and operable by the lever.

2. A manually propelled vehicle including front and rear wheels, a frame structure supported upon said wheels, a hand lever pivotally secured to the frame structure, a chain operably connected with the rear wheels, a hand lever pivotally secured to the frame, a wheel supporting the front end of the chain, and a chain grip pivotally connected with the lower terminal of the hand lever and operable to pull the chain forwardly during the forward swinging movement of the lower terminal of the hand lever.

6. A manually propelled vehicle including front and rear wheels, a frame structure supported upon said wheels, a pivoted hand lever, a chain adapted to travel upon the rear wheels to propel the latter, a housing pivotally secured to said lever and embracing said chain, a pawl in said housing adapted to coöperate with the chain to move the latter during movement of the housing in one direction, and a stop pin for limiting the movement of said pawl.

[Claims 3 to 5 not printed in the Gazette.]

1,273,694. SUBTERRANEAN BROADCASTER. HOMER N. TYSON, Davenport, Wash. Filed Dec. 21, 1917. Serial No. 208,267. (Cl. 111—86.)



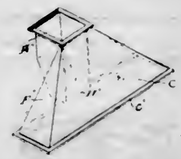
1. A broad caster of the character described comprising a seed tube, a shovel attached to the tube and having an inclined forward portion, the sides of the said shovel being curved upwardly and longitudinally to provide retaining flanges, and extensions formed on the rear of the shovel at opposite sides of the center thereof, the center of the shovel at the rear being bifurcated to provide an open space, and a seed casting element attached to the tube beneath the said open space.

3. A broad caster of the character described comprising a seed tube having its lower end cut diagonally and provided with a recess, a shovel carrying an attaching plate received in the said recess and attached to the tube, the said shovel having its sides curved upwardly to provide curved retaining flanges, and rearward extensions formed on the rear of the shovel and curved upwardly from their proximate edges and disposed in laterally spaced relation.

5. A broad caster of the character described comprising a seed tube, having its lower end cut diagonally and of substantially V-shaped cross section, the said V-shaped portion having a recess, an attaching plate received in the said recess and secured to the said tube, a shovel carried by the attaching plate and including a forwardly inclined portion and having its sides curved upwardly and longitudinaly for forming retaining flanges at opposite sides of the shovel, rearwardly projecting portions disposed rearwardly of the lower open end of the tube and in a plane considerably higher than the forward portion of the shovel, and a seed caster arranged in the open end of the tube and projecting toward and between the said rearwardly projecting portions of the shovel.

[Claims 2 and 4 not printed in the Gazette.]

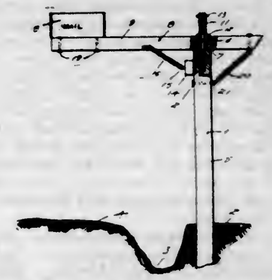
1,273,695. LINING FOR THE THROATS OF FIRE-PLACES. ISAAC UNSWORTH, Cleveland, Ohio. Filed Aug. 14, 1916. Serial No. 114,732. (Cl. 126—120.)



1. An independent lining for the throat of a fire place, comprising a wedge shaped lining member having inclined front and side walls, and a vertical rear wall, said rear wall having a vertical opening, and a vertical flue member having an opening in its front wall communicating with the vertical opening in said rear wall of said lining, said lining and rear flue member mountable upon the walls of the throat of said fire place.

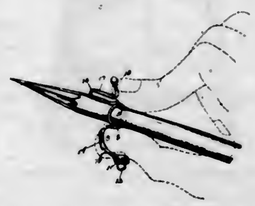
2. A lining for the throat of a fire place, comprising a wedge shaped lining member having inclined front and side walls, and a vertical rear wall, said rear wall having a vertical opening, a vertical flue member having an opening in its front wall communicating with the vertical opening in said rear wall of said lining, said lining and rear flue member mountable upon the walls of the throat of said fire place, and a swinging damper hinged at the rear lower edge of said flue member, and means for alternately engaging the upper end of said damper with the front wall of said lining and the rear wall of said flue member.

1,273,696. AUTOMATIC MAIL-BOX HANGER. LOUIS VANHOOF, Alexandria, La. Filed July 12, 1917. Serial No. 180,215. (Cl. 248—18.)



In a device of the class described, a supporting post embedded at one side of a roadway, a horizontal arm pivotally supported by said post and projecting toward said roadway, spring means normally tending to hold said arm projecting toward said road-way, and spring means for frictionally holding said arm in engagement with said post.

1,273,697. PENCIL ATTACHMENT. JOHN VIDAL, Brooklyn, N. Y. Filed Apr. 6, 1918. Serial No. 227,071. (Cl. 120—1.)



A pencil attachment comprising, a member having a pencil embracing portion, a clip located at one side of said portion and terminally provided with a finger rest, and an eraser support located at the opposite side of said member in line with said terminal rest and serving also as a finger rest as and for the purpose specified.

1,273,698. PLATE-VALVE. CHARLES WAINWRIGHT and FRED J. CARNEY, Erie, Pa. Filed Dec. 1, 1917. Serial No. 204,896. (Cl. 137—32.)



1. A plate valve comprising a head provided with series of ports, the ports having discharge ends located in different planes, valves made up of sectors, the said valves being spaced from each other and lying in different planes and adapted to cover the ports in the head and a buffer plate connected with the head and having portions lying in the paths of movement of the sectors of the respective valves to correspondingly and similarly limit the movement of the sectors.

2. A plate valve comprising a head having series of ports, the discharge ends of which lie in the different planes, valves composed of sectors and connected with the head, and lying in different planes and adapted to close the discharge ends of the ports, a buffer plate connected with the head and provided with openings, the said buffer plate being provided with projections which enter the openings and the buffer plate having portions which lie in the paths of movement of the sectors of the respective valves.

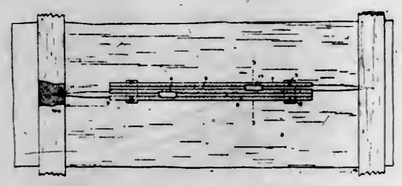
3. A plate valve comprising a head provided with series of ports having their discharge ends located in different planes, a bolt passing centrally through the head, pins eccentrically mounted upon the head, valves composed of sectors, means spacing the valves from each other, said pins passing through the spacing means and the valves, the valves lying in parallel planes and normally closing the said ports, a buffer plate having a boss which receives the pins, the edge portion of the buffer plate being spaced from the valves, the buffer plate being provided with openings and the buffer plate having portions lying in the paths of movement of all the sectors of the valves to correspondingly and similarly limit the movement of the sectors.

4. A plate valve having spaced ports, independent superimposed sectors for closing said ports, and a single means for independently and uniformly limiting the port opening movement of the sectors.

5. A plate valve having spaced ports with relatively offset discharge ends, independent superimposed sections controlling said discharge ends, and a single member for uniformly and similarly limiting the port opening movement of the sectors.

[Claims 6 to 8 not printed in the Gazette.]

1,273,699. CONCRETE-FORM. GUSTAVE F. WALLER, Redwood City, Cal. Filed May 20, 1918. Serial No. 235,622. (Cl. 25—1.)



1. In means for forming a concrete wall, a plate, the terminal portions of which are adapted to contact with sides of posts, bars guided by each having a pointed terminal portion, the terminal portions of the two bars being oppositely directed, means for moving one of said bars longitudinally relatively to the other, means for guiding said bar in its movement, and means for supporting the plate relatively to the guide.

5. In means for forming a concrete wall, a plate, terminal portions of which are adapted to contact with sides of posts, a guide extending substantially parallel with the plate between the posts, means for supporting the plate relatively to the guide, holders guided by said guide and each having a pointed terminal portion, the terminal portions of the two holders being oppositely directed, said holders being provided with heads located outside the guide and of suitable form to receive the impacts of blows of a hammer for moving said holders in said guide.

[Claims 2 to 4 not printed in the Gazette.]

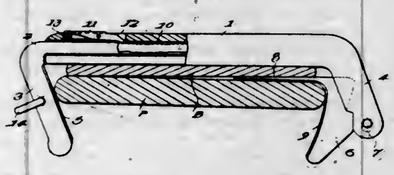
1,273,700. STOVE-COVER. FRANK R. WATSON, Baltimore, Md. Filed Mar. 5, 1918. Serial No. 220,443. (Cl. 126—220.)

A stove lid having a lifter opening extending therethrough, depending ears on the bottom of the lid on opposite sides of the opening, a swinging closure seating in the opening and having its rear end weighted, ears on the closure intermediate the ends thereof and matching the ears on the lid, a pivot pin passing through the



matching ears, and lugs extending inward from the ears on the lid and engageable by the forward portion of the closure to limit the swing thereof.

1,273,701. BELTER. ROBERT R. WAY and THOMAS F. MASON, Webb City, Mo. Filed May 15, 1917. Serial No. 168,836. (Cl. 64—51.)

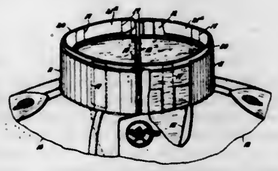


1. A belter including a plurality of telescopic clamping sections having angularly disposed arms formed on their free ends, a pivotal jaw mounted on one of said arms, one of said sections having a rack formed on its telescopic portion, and a pawl arranged on the telescoping portion of the remaining section engageable with said rack.

2. A belter including a plurality of telescopic clamping sections, means for maintaining said sections in adjusted positions, a pivotal jaw having a laterally extending finger formed thereon, one of said sections having a rack formed on its telescoping portion, and a pawl arranged on the telescopic portion of the remaining section engageable with said rack.

3. A belter including a plurality of telescopic clamping sections having angularly disposed arms formed on their free extremities, one of said arms having a serrated portion, a pivotal jaw mounted upon the free end of the remaining arm, a serrated laterally extending finger formed upon the upper portion of said jaw, one of the clamping sections having the telescoping portion thereof provided with a rack, and a spring pressed pawl mounted on the telescoping portion of the remaining clamping section engageable with the rack.

1,273,702. COLLAR. CHARLES WEIS, Lancaster, Pa. Filed May 25, 1918. Serial No. 236,591. (Cl. 2—67.)



1. In a collar device the combination with a collar support and a collar element, means for connecting the free ends of the collar support, a series of spaced upstanding supporting members on the collar members on the collar support and forming a part thereof, said supporting members projecting upwardly a slight distance beyond the upper edge of the collar support, and adapted to have their free ends lie between the sides of the collar element when the collar element is applied to the support.

2. In a collar device the combination with a collar support and a collar element, of a flap depending from the front of the collar support, means for connecting the free ends of the collar support at the rear, and a series of supporting members attached to the collar support and having their upstanding portions projecting up to and slightly beyond the upper edge of the support, with said upstanding portions adapted to fit between the sides of the collar element, said collar element lying wholly inside of said collar support.

1,273,703. CLOSET-SEAT. MICHAEL J. WHELAN, Muskegon, Mich., assignor to Brunswick-Balke-Collender Co., a Corporation of Delaware. Filed Jan. 5, 1914. Serial No. 810,476. (Cl. 4—18.)



A closet seat comprising a wood core consisting of a plurality of thoroughly dried layers of wood veneer arranged one upon the other with the grain of each layer disposed angularly with respect to the grain of the adjacent layer or layers, said layers being cemented together and said core having a rough pubescent surface, and a covering of hard rubber vulcanized on said core and united therewith throughout the entire surface of the core.

1,273,704. APPARATUS FOR INCREASING HEAD. WILLIAM M. WHITE, Milwaukee, Wis. Filed June 19, 1913. Serial No. 774,527. (Cl. 253—122.)



2. In a water power apparatus, the combination of a water wheel provided with a discharge passage therebeneath, said passage having a component radial to the axis of the turbine, and angular deflectors located in said passage and adapted to intercept and direct the discharged water in a direction which has a component tangential to the runner, substantially as described.

5. In water power apparatus, the combination of a water wheel, a substantially conical wall disposed in a space at the discharge end of said water wheel, and deflectors on said wall, said deflectors forming tangential passages from the water wheel outward whereby water may be discharged from the water wheel when operated at excess speed into said passages with slight change in direction, substantially as described.

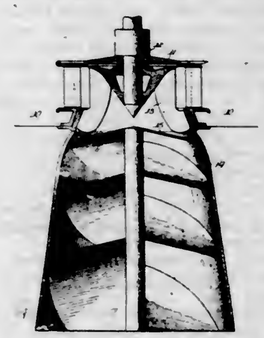
7. In water power apparatus, a water wheel, and walls located at the discharge of the water wheel and providing a plurality of curved passages located substantially tangentially about the periphery of the water wheel whereby water discharged tangentially from the water wheel may enter the passages without material change in direction, said passages increasing in capacity from the water wheel outward to the end that the velocity of the water is changed into pressure, substantially as described.

8. In combination with a water wheel runner having a concentric web dividing the vanes thereof into separate wheel sections, of conical surfaces forming passages therebetween, said passages registering with the sections of the runner, and deflectors located in said passages, said deflectors having their ends next to the runner set tangentially to the runner periphery, whereby water thrown tangentially from the water wheel runner is received without material change in direction, and different velocities from the different sections of the runner may be transformed into pressure in separate passages with greatest effectiveness, substantially as described.

11. The method of increasing the effective head of water for utilization in water wheels, consisting in discharging the water from the water wheel runner with a large tangential component into passages of increasing area, said passages being set at an angle to the line of motion of the runner and thereby changing the kinetic energy in the water which leaves the runner into potential energy at the end of the passages to increase the effective head on the water wheel, substantially as described.

[Claims 1, 3, 4, 6, 9, 10, and 12 to 16 not printed in the Gazette.]

1,273,705. APPARATUS FOR REGAINING HEAD. WILLIAM M. WHITE, Milwaukee, Wis. Filed Dec. 22, 1913. Serial No. 808,161. (Cl. 253—122.)



2. In apparatus of the class described, the combination of a flaring draft tube, and a helical deflecting vane located therein, substantially as described.

4. In apparatus of the class described, the combination of a draft tube, and a helical deflector located therein, the pitch of said helix being gradually increased from the inlet to the end of said helical deflector, substantially as described.

9. The combination of a water wheel having runners provided with webs to divide the wheel into sections, a draft tube communicating with the discharge end of the wheel, and means within said tube for causing the water discharged from each section of the runner to traverse a helical path.

10. The combination with a water wheel, of its draft tube provided with means for causing the water to flow in a helical path after it leaves the runner.

[Claims 1, 3, and 5 to 8 not printed in the Gazette.]

1,273,706. PROCESS OF ANNEALING ALUMINUM. LAURENCE H. WHITNEY, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed May 7, 1917. Serial No. 166,823. (Cl. 148—11.)

2. The process of annealing aluminum containing dissolved silicon and which has been rendered hard by mechanical working, which consists in rapidly carrying the metal to a temperature within the range of about 370° C. and 450° C., maintaining a temperature within said

range until the aluminum is softened and then quickly chilling the metal, thereby preventing the formation of appreciable graphitoidal silicon at temperatures below said range.

[Claim 1 not printed in the Gazette.]

1,273,707. MECHANICAL THERMOMETER. ALBERT E. WHITTIER, Bristol, Conn. Filed Feb. 28, 1918. Serial No. 219,569. (Cl. 73—119.)

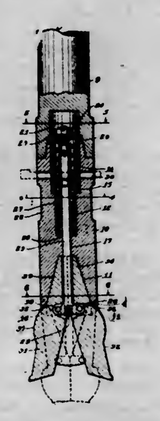


1. A thermometer having a casing, a spindle rotarily mounted in and near one side of the casing, a pointer on the spindle, a part connected to and offset from the spindle, thermo-responsive fingers attached to the casing and having their free ends pressing against opposite sides of said off-set part, and thermo-responsive fingers fastened to the casing and having their free ends pressing against the first mentioned fingers, said fingers being arranged to all warp in the same direction when heated and all straighten in the opposite direction when cooled.

2. A thermometer having a casing, a spindle rotarily mounted in and near one side of the casing, a pointer on the spindle, a stud connected with and extending parallel to and at one side of the axis of the spindle, thermo-responsive fingers attached to the casing and having their freee ends pressing against opposite sides of said stud, and thermo-responsive fingers fastened to the casing and having their free ends pressing against the first mentioned fingers, said fingers being arranged to all warp in the same direction when heated and all straighten in the opposite direction when cooled.

[Claims 3 and 4 not printed in the Gazette.]

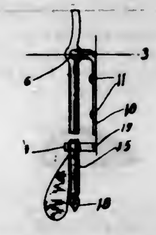
1,273,708. UNDERREAMER. WILSON B. WIGLE, Fullerton, Cal. Filed Feb. 6, 1917. Serial No. 146,992. (Cl. 255—75.)



1. In an underreamer, the combination of a stock having a cavity and recesses in the lower face; a rod slidably mounted in said stock; resilient means tending to retract said rod; cutters pivotally mounted on said rod having shanks disposed to be seated in and filling said cavity when said cutters are expanded, said cutters having shoulders offset therefrom and disposed to engage the lower face of said shell when the cutters are expanded, and a lug on each of said cutters at the contiguous faces thereof so disposed that a pair will be disposed in one of said recesses when the cutters are expanded to prevent further expansion, collapse and rotation of the same.

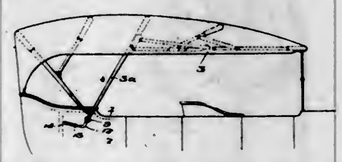
[Claim 2 not printed in the Gazette.]

1,273,709. AUTOMOBILE-SIGNAL. ARTHUR ROY WILLIAMS, Washington, D. C. Filed Apr. 16, 1917. Serial No. 162,433. (Cl. 116—31.)



A signal device for an automobile including a plate having a stem extending outwardly from the upper end and transversely thereof, a vertically disposed arm having a transverse opening formed at a suitable distance from one end thereof and receiving the transverse portion of said stem therein, a nut engaged on the stem outwardly of the arm, means for holding the arm from accidental swinging movement, and an extension on the arm above the pivoted portion for engagement by the arm of the driver of the automobile to swing the arm into horizontal signaling position.

1,273,710. SUPPORT FOR VEHICLE-TOPS. DANIEL M. WINANS, Binghamton, N. Y. Filed Apr. 30, 1917. Serial No. 165,406. (Cl. 21—62.)



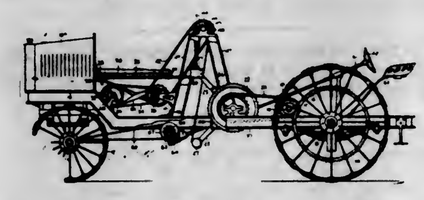
1. In a support for a vehicle top, the combination with the vehicle body, of a fixed stud carried thereby, an oscillatory member rockable thereon, arranged and adapted for the detachable attachment thereto of a vehicle top, and spring means for rocking said oscillatory member.

2. In a support for a vehicle top, the combination with a vehicle frame or body, of oscillatory members carried by and self-contained with the vehicle body and arranged and adapted for the detachable attachment thereto of the standards of a vehicle top, and counterbalancing means for the top coöperating with said oscillatory members.

3. In a support for a vehicle top, the combination with a vehicle frame or body, of spring-actuated oscillatory members for counterbalancing the weight of the top carried by and self-contained with the vehicle body and arranged and adapted for the detachable attachment thereto of the standards of a vehicle top.

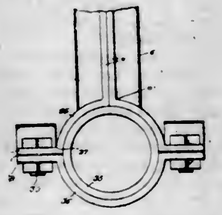
1,273,711. DRIVING MECHANISM FOR TRACTORS. LUTHER MARTIN YAGGY, Bowman, N. D. Filed Aug. 11, 1917. Serial No. 185,751. (Cl. 74—54.)

A drive means including a shaft, a pair of pulleys thereon, a driven belt shiftable to either of said pulleys, a belt shifter to shift said belt, a second shaft having separate fixed pulleys, a straight belt running over one of the pulleys on the first shaft and over one of the pulleys on the second shaft, a cross belt running over the other pulleys on the shafts, a drum shaft, driving connections between the drum shaft and the second shaft to turn the drum shaft alternately in opposite directions with the turning of the second shaft, a flexible element on said drum shaft,



a fourth shaft, ratchet wheels on said fourth shaft, levers loose on the fourth shaft and connected respectively with the opposite end of the flexible element on the drum shaft, pawls on the said levers adapted to engage said ratchet wheels, and means to actuate the belt shifter by the movements of said levers.

1,273,712. CONNECTING-ROD. WILLIAM G. ZEIGLER, Chicago, Ill. Filed Aug. 17, 1917. Serial No. 186,754. (Cl. 74—17.)



1. A connecting rod comprising spaced bearings, and a sheet metal shank connecting them and made up of upper and lower members whereof each consists of two leaves disposed edge to edge and secured to the leaves of the other member, and a rib of double thickness integrally connected with the inner edges of said leaves and projecting outward from their plane.

4. A connecting rod composed of a strip of sheet metal having openings at its center and near its ends, both ends of the central opening and the inner ends of the other openings being formed with reëntrant points whereof each is made up of two curved lines, said strip being folded along its transverse center into a longitudinal rib leaving flat leaves at opposite sides of the rib and extending past all openings, the leaves opposite the central opening being bent into an eye and opposite the other openings into quadrants and the ends of the ribs constituted by said curved lines abutting the walls of the quadrants and eye, means for holding the leaves in contact with each other, and a complementary clip attached to said quadrants and with them making up a second eye.

[Claims 2 and 3 not printed in the Gazette.]

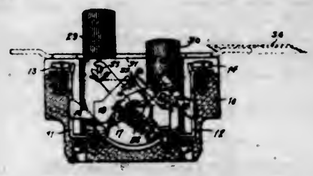
1,273,713. PLIERS. SOLOMON E. AARON, Boston, Mass. Filed Aug. 24, 1917. Serial No. 188,026. (Cl. 81—95.)



1. A pair of splitting and stripping pliers having in combination, jaws with pincer faces, means for controlling the approach of the said faces, and pairs of plates secured to the outer faces of the jaws, each plate having a forwardly extending arm at each end, the ends of the arms having cutting blades bent toward the plane of the respective face of the jaws.

[Claims 2 to 9 not printed in the Gazette.]

1,273,714. ELECTRIC SWITCH. CARL ERIC ANDERSON, Bridgeport, Conn., assignor to The Bryant Electric Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Mar. 28, 1918. Serial No. 225,304. (Cl. 175—293.)



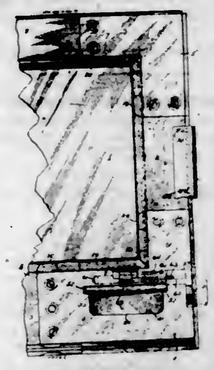
1. In a push button switch, an oscillating switch bar, an oscillating rocker bar, a switch spring operatively interposed between the same, a pair of switch buttons loosely pivoted to said rocker bar on opposite sides of its axis, and auxiliary spring means for holding said push buttons in proper operating position.

3. In a push button switch, an oscillating rocker bar, a pair of push buttons loosely pivoted to said rocker bar, and a spring strap bearing at its opposite ends against the inner ends of the push buttons to maintain the latter in proper operating position.

5. In a push button switch, an oscillating rocker bar, a pair of push buttons loosely pivoted to said rocker bar, and a spring strap pivoted on the axis of the rocker bar and bearing at its opposite ends against the inner ends of the push buttons to maintain the latter in proper operating position.

[Claims 2 and 4 not printed in the Gazette.]

1,273,715. WINDOW-SASH CONSTRUCTION. CHARLES H. ANDERSON, Cincinnati, Ohio. Filed June 28, 1916. Serial No. 106,407. (Cl. 189—76.)



1. A window sash comprising metal corner brackets, and rails connecting said brackets, each of said corner brackets comprising two integral members disposed at right angles to each other and each member having parallel plate extensions receiving the adjacent sash rail between them, each plate extension having an inwardly projecting lug and the rail sections having recesses to receive the lugs of the corner bracket extensions, and fastening devices passing through said corner bracket extensions and the rail sections.

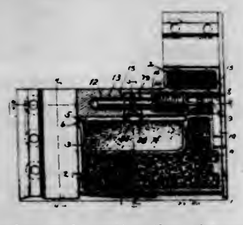
2. In a window sash, the combination of a metal corner bracket and a sash rail provided with recesses having beveled walls, said corner bracket comprising two members disposed at right angles to each other; each member provided with parallel plate extensions receiving the rail between them, beveled lugs projecting inwardly from said plate extensions and entering the recesses in the rail and fastening devices passing through said plate extensions and their lugs and through said rail.

3. In a window sash, the combination of hollow metal corner brackets, each comprising integral members disposed at right angles to each other, and each member having parallel plate extensions, and metal sash rails having their ends disposed between the plate extensions of the corner brackets and secured thereto.

4. In a window sash, the combination of hollow metal corner brackets and hollow metal rails having their ends inserted into said hollow corner brackets and secured thereto.

[Claims 5 and 6 not printed in the Gazette.]

1,273,716. WINDOW-SASH CONSTRUCTION. CHARLES H. ANDERSON, Cincinnati, Ohio. Filed June 28, 1916. Serial No. 106,408. (Cl. 189—76.)



1. In a window sash construction, the combination with rails thereof, of a separate metal corner bracket secured to said rails and constituting a corner portion of the sash, and a sash lock device mounted within and carried by said corner bracket.

2. In a window sash construction, the combination with rails thereof, of a separate corner bracket secured to said rails and constituting a corner portion of the sash, said corner bracket comprising a hollow metal structure having a bore therein, a sash lock having a part mounted in said bore, and thumb lever secured to the part mounted in said bore.

[Claims 3 to 9 not printed in the Gazette.]

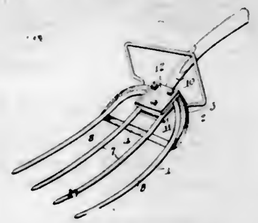
1,273,717. LOGGING-HOOK. CLIFFORD DEWEY ANDERSON, Knox Bay, and EINAR STRENG, Vancouver, British Columbia, Canada. Filed Feb. 13, 1918. Serial No. 216,926. (Cl. 24—234.)



6. A hook having its head formed as a jaw provided with an oval eye and a circular pin passing through the eye, a plate mounted in the jaw provided with an oval eye through which the said pin passes to swingably connect the plate with the hook head, said plate being provided with an extension adapted to normally close the hook entrance and having a slot in its body and a recess in its lower edge, a projection on the hook shank with which the recess coöperates to lock the plate and extension when swung to open the said entrance, a pin carried by the said jaw passing through the said slot at the rear end thereof, and a spring disposed in the said slot extending between the pin and the front end of the slot.

[Claims 1 to 5 not printed in the Gazette.]

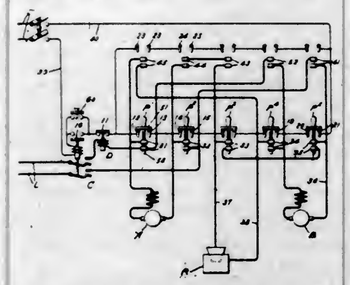
1,273,718. PITCHFORK ATTACHMENT. NEAL ARMSTRONG and ELMER H. GROVES, Adena, Colo. Filed Apr. 3, 1918. Serial No. 226,459. (Cl. 55—2.)



1. In combination with a pitchfork, of a cutting implement arranged on the tines thereof, said implement including an arched frame and an angle cutting blade connecting the arms of the frame, said frame having openings through which the central tines of the fork pass and the outer tines designed to frictionally contact with the outer edges of the frame.

2. In combination with a pitchfork, of a cutting attachment therefor, comprising an arched frame having an angularly disposed cutting blade connecting the ends of the said frame, said frame having openings through which the central tines pass whereby the latter will engage with the cutting blade and extend therebeyond, the outer tines designed to frictionally engage with the outer edges of the sides of the frame, said frame having a depression receiving the socket of the pitchfork, a lug plate closing the socket, and connecting means between the lug plate and the frame.

1,273,719. CONTROL OF ELECTRIC CIRCUITS. BENJAMIN H. ARNOLD, Erie, Pa., assignor to General Electric Company, a Corporation of New York. Filed Nov. 7, 1917. Serial No. 200,717. (Cl. 171—97.)



1. The combination with a circuit to be controlled, of manually operated switches for making the various connections for said circuit, an electromagnetic switch controlling said circuit and in series with said manual switches and means for causing said electromagnetic switch to break said circuit when any of said manual switches are opened but before its contacts are separated.

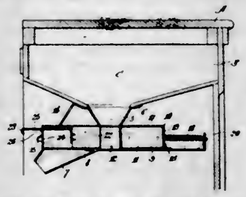
4. The combination with a plurality of circuits to be controlled, of manually operated switches for making the various connections in said circuits, an electromagnetic switch controlling the power supply connected in series with one of said circuits and means for causing said electromagnetic switch to break said circuit when any of said manual switches are opened but before its contacts are separated.

7. The combination with a plurality of circuits, of plug switches for making the various connections in said circuits, an electromagnetic switch controlling the power supply connected by said plugs in one of said circuits and a control circuit for operating said electromagnetic switch having contacts associated with each plug switch, said control circuit having branches so distributed that an operative circuit is completed by said plug switches only when connecting said first mentioned circuits in proper relation.

9. The combination with a plurality of circuits to be controlled, of manually operated switches for making the various connections in said circuits, an electromagnetic switch controlling the power supply connected in series with one of said circuits, a dynamo-electric machine in each circuit, an overload relay having its coil in series with said electromagnetic switch and a control circuit having auxiliary switches in series operated by said electromagnetic switch and said relay, a starting switch in parallel with the auxiliary electromagnetic switch and contacts associated with each manual switch arranged to be bridged thereby.

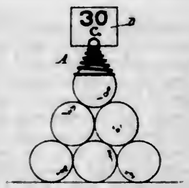
[Claims 2, 3, 5, 6, and 8 not printed in the Gazette.]

1,273,720. MEASURING DEVICE. DELMERY T. BACHAND, Springfield, Mass., assignor of one-half to Joseph Chevalier, Jr., Chicopee, Mass. Filed Sept. 14, 1915. Serial No. 50,699. (Cl. 221—105.)



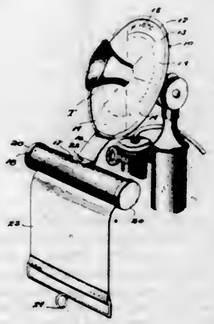
The combination with a bin having a discharge opening in the bottom thereof, of a hopper arranged beneath said opening, a discharge chute projecting forwardly at an angle from said hopper, and formed integrally therewith, one wall of said chute being extended rearwardly and forming a support, a casing slidably mounted upon said support and movable through said chute, said casing having a pocket communicating with the hopper in normal position to receive a predetermined quantity of material from said bin, a block mounted in said casing and provided with an operative handle the latter having an opening therein, said casing having at one end thereof an elongated slot, and a projecting stud in said slot to register with the opening in the handle, which latter moves the block to adjusted and discharged positions, and means for automatically returning the device to normal position subsequent to the discharge thereof.

1,273,721. FRUIT-MARKER. FREDRICK MONROE BENWAY, Montpelier, Vt., assignor to Parker Wire Goods Company, Worcester, Mass., a Corporation of Massachusetts. Filed Feb. 3, 1917. Serial No. 146,447. (Cl. 40—11.)



A fruit marker made of a single piece of wire bent to form concentrically disposed convolutions of pyramidal shape and adapted to engage frictionally with a plurality of its convolutions a spherically outlined object, a portion of the wire bent horizontally against the apex of the cone, thence vertically and formed into a horizontally disposed coil the lower edges of which are slightly above the top of the cone.

1,273,722. ROLLING TELEPHONE-DIRECTORY. MAX BLATT, Detroit, Mich., assignor to Anna Blatt, Detroit, Mich. Filed Oct. 5, 1917. Serial No. 194,848. (Cl. 40—1.)



1. In a device of the kind described, the combination with a bracket adapted for attachment to a telephone stand; of a spring actuated roller having swiveling connection intermediate its ends with the bracket, whereby the roller may be rotated to present the reverse side of a web carried thereon for observation, and a web on said roller having both sides adapted to receive desired data.

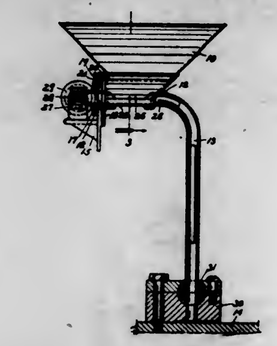
2. In a device of the character set forth, a bracket comprising an arm having an opening to fit closely around a telephone transmitter mouth-piece, said arm extending away from a telephone stand upon application thereto and terminating in a horizontally disposed portion at its lower end, a tubular casing having a slot in its under side, a pivot connecting the tubular casing with the horizontal portion of the arm, a spring actuated roller housed in the casing, a web wound on said roller and having its free end projecting through the slot, said pivot constituting means whereby the roller may be rotated to present either side of the web to observation, said web having both sides arrangerd to receive information, and a finger grip on the free edge of the said web.

1,273,723. FEEDING ATTACHMENT FOR CROWN-CORK-MAKING MACHINES. ALEXANDER BOGDÁNFFY, Brooklyn, N. Y. Filed May 4, 1917. Serial No. 166,809. (Cl. 113—114.)

2. In a device of the character described, the combination with a hopper adapted to receive a mass of sealing disks of cord or the like and open along its lower end; of a curved, vertically disposed tube, having a horizontal portion closing the bottom of the hopper and provided with an elongated receiving opening along its upper portion of sufficient size to receive the disks in any position; and means for oscillating said tube about its lower end to reciprocate its horizontal portion in relation to said hopper.

5. In a device of the character described, the combination with a hopper adapted to receive a mass of sealing disks of cork or the like and open along its lower end; of a curved, vertically disposed tube, having a horizontal portion closing the bottom of the hopper and provided with an elongated receiving opening along its upper portion of sufficient size to receive the disks in any position; a slotted member carried by said tube beyond the hopper; and a rotatable pin eccentrically disposed with respect to

the longitudinal axis of said horizontal portion of the tube and engaging the slot of the said slotted member.



7. In a device of the character described, the combination with a frame, and a hopper pivotally attached thereto, said hopper being adapted to receive a mass of sealing disks of cork or the like and having a discharge opening; of a curved, vertically disposed tube, having a horizontal portion about the longitudinal axis of which said hopper is adapted to swing, and the said horizontal portion being provided with an elongated receiving opening registering with the said discharge opening of the hopper and of sufficient size to receieve the disks in any position; means for oscillating said tube, whereby its horizontal portion reciprocates in relation to the outlet of said hopper; a plate attached to the hopper, having a threaded extension passing through the frame and provided with a bolt extending through an arcuate slot of said frame; a nut about said extension to hold the hopper to the frame; and a winged nut on said bolt of the hopper to lock the hopper to the frame.

[Claims 1, 3, 4, and 6 not printed in the Gazette.]

1,273,724. DRILL-ROD CONNECTION. JOHN D. BOUGHNER, Yorba Linda, Cal. Filed Oct. 29, 1917. Serial No. 199,182. (Cl. 255—28.)



1. The combination with a hollow drill rod, of hollow fittings connected to the upper and lower ends of said hollow drill rod and formed with shoulders, cylinders connected to said fittings, said cylinders being thicker and therefore stronger than said hollow drill rod, a support resting on the shoulder of the upper fitting, and a cable connected to said support and provided with a head disposed in the lower cylinder, said head being normally spaced from the lower fitting and adapted to engage the shoulder of said lower fitting substantially as and for the purpose set forth.

[Claim 2 not printed in the Gazette.]

1,273,725. FASTENER FOR GARMENTS AND THE LIKE. EDWARD SPENCER BRADBURY, Christchurch, New Zealand. Filed Dec. 10, 1915. Serial No. 66,050. (Cl. 24—228.)



1. A fastener of the kind described, consisting of a member having a pair of substantially parallel arms joined at one end by a spring coil and having their other ends bent outwardly away from each other, and another member comprising a substantially straight portion transverse to said arms and an open circular portion, the ends of said straight portion being inwardly curved to partially surround the last mentioned ends of the first member and being joined to the ends of the circular portion by reversely curved portions.

[Claim 2 not printed in the Gazette.]

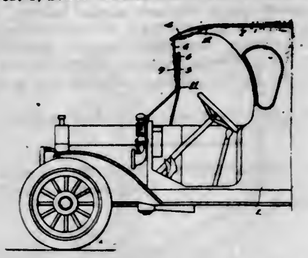
1,273,726. RATCHET-WRENCH. JONAS F. BRIOR, Easton, Pa. Filed June 20, 1917. Serial No. 175,919. (Cl. 81—60.)



1. In a ratchet wrench, the combination of a handle having a casing mounted at one end, a disk rotatably mounted in the casing and provided with teeth at its marginal edge and having a diametrically extending slot opening at one edge of the disk, a pair of jaws mounted for sliding movement in the slot, one end of the slot having a closure mounted therein and provided with teeth to complete an annular series of teeth for the said disk, and means carried by the disk and engageable with the jaws to move the latter toward and away from each other through the said slot.

2. In a ratchet wrench, the combination of a handle having a casing mounted at one end, a disk rotatably mounted in the casing and provided with teeth at its marginal edge and having a diametrically extending slot opening at one edge of the disk, a pair of jaws mounted for sliding movement in the slot, one end of the slot having a closure mounted therein and provided with teeth to complete an annular series of teeth for the said disk, and means carried by the disk and engageable with the jaws to move the latter toward and away from each other through the said slot, the said closure having lugs fixed to the said disk for maintaining the said closure in rigid position at the end of the said slot.

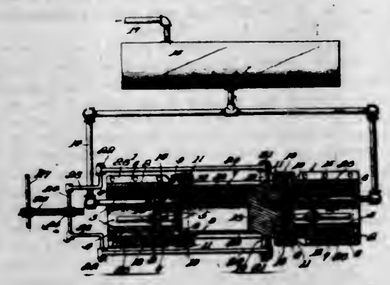
1,273,727. WIND-SHIELD ATTACHMENT FOR AUTOMOBILES. FRED A. BROADGATE, Spokane, Wash. Filed Feb. 5, 1917. Serial No. 146,769. (Cl. 21—148.)



1. The combination with a top of an automobile, and a wind shield having its upper edge spaced slightly below said top; of a protecting apron removably secured at its upper edge to said top and depending therefrom forwardly of the wind shield, said apron being provided adjacent its lower edge with a transversely extending pocket, a member arranged in said pocket and projecting beyond the side edges of the apron, the extreme lower portion of said apron forming a flap adapted to be directed inwardly against the wind shield, and means for yieldingly securing said apron to the wind shield.

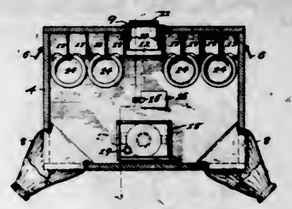
2. The combination with the top of an automobile and a wind shield having its upper edge slightly spaced below the forward edge of said top; of a protecting apron removably secured at its upper edge to the forward edge of said top and depending therefrom forwardly of said wind shield, said apron being provided with a transversely extending pocket adjacent its lower edge, a bar arranged in said pocket and projecting slightly beyond the side edges of the apron, said pocket being constructed smaller toward its central portion, whereby to normally direct the lower portion of the apron inwardly against the wind shield, and spring members engaged with the outer ends of said bar and said wind shield to yieldingly retain the flap in place with respect to the latter.

1,273,728. AIR-COMPRESSOR PUMP. GEORGE BURD and CHARLES BURD, Hazelwood, Pa. Filed Oct. 18, 1917. Serial No. 197,234. (Cl. 230—6.)



An air compressor comprising two separate annular cylinders in a line with each other and having facing open ends, the inner wall of each cylinder having an inwardly projecting head with inlet and outlet openings, two connected hollow pistons coöperating with the hollow cylinders, the walls of the pistons being thinner than the spaces between the walls of the annular cylinders, packings carried by the ends of the outer walls of the cylinders and engaging the outer surfaces of the pistons, the packings supporting the pistons out of contact with the walls of the cylinders and making a tight joint between the outer walls of the cylinders and outer surfaces of the pistons, and means for reciprocating the pistons.

1,273,729. DESK. WILFRED E. BURGETT, Flaxton, N. D. Filed Oct. 10, 1916. Serial No. 124,799. (Cl. 183—1.)

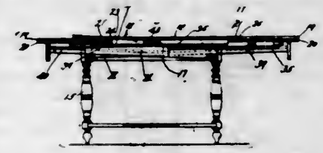


1. A device as characterized consisting of a casing including a front wall provided centrally of the upper portion with a horizontal opening therethrough and arm receiving openings disposed obliquely at each rear corner thereof and in converging relation to each other, said arm openings disposed partly in the rear and end walls of the casing, and a closure for the opening in the front wall, said closure consisting of a semicircular tray rotatably mounted within said opening to receive and deliver coins to and from the casing.

3. A device of the character described consisting of a casing having a front wall provided with an opening through its upper central portion, a series of superposed pigeon holes within the casing, projecting from said front wall at each side of the front opening, and open at their rear ends, coin receptacles carried by the floor of the casing and at each side of the front opening, a closure for the opening in the front wall, said closure consisting of a coin chute rotatably mounted within said opening and adapted to be manually operated from within the casing to receive and deliver coins, and means carried at the rear corners of the casing to receive the arms of the operator to manipulate the coin chute.

[Claim 2 not printed in the Gazette.]

1,273,730. TABLE. JOHANN BUBIC, Cranford, N. J., assignor of one-half to Henry J. Mewes, New York, N. Y. Filed Jan. 17, 1918. Serial No. 212,248. (Cl. 45—113.)



1. A table comprising a plurality of slidably connected extension frames; a plurality of leaves pivotally mounted, each on one of said frames, each of said leaves being adapted to be lifted at the outer edge thereof for the passage thereunder of the outwardly adjacent leaf; and means for locking said leaves together when in their retracted position, said means being operable only when exposed, said means embodying a series of manually operable latches, each mounted in one of said leaves to be covered by the inwardly adjacent leaf and to normally lock the outwardly adjacent leaf.

2. A table comprising a plurality of slidably connected extension frames; a plurality of leaves pivotally mounted, each on one of said frames, each of said leaves being adapted to be lifted at the outer edge thereof for the passage thereunder of the outwardly adjacent leaf; and means for locking said leaves together when in their retracted position, said means being operable only when exposed, said means embodying a plurality of spring latches, one mounted in each of said leaves to extend therethrough for engaging the outwardly adjacent leaf when in retracted position, said latches being exposed for operation only when withdrawn from under the inwardly adjacent leaf with which they are associated.

1,273,731. HOOF-PAD. FRANK R. BUTTON, Scranton, Pa., assignor of one-half to George W. Dunn, Scranton, Pa. Filed Dec. 31, 1917. Serial No. 209,742. (Cl. 168—28.)



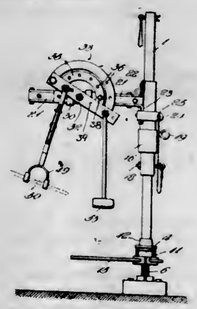
A pad for horses' hoofs and shoes consisting of a lower rubber tread portion substantially co-extensive with the area inscribed by the shoe in plan and having an upper composite rubber and woven fabric top also coextensive with the area of the figure of the shoe, the sides of the pad undercut so that the fabric overhangs the shoe, the pad being concavo-convex and having the medial longitudinal portion of the convex tread surface provided with relatively thick anti-skidding projections.

1,273,732. METHOD OF PRESERVING BEETS. FRANK H. BRYANT, Los Angeles, Cal. Filed Mar. 21, 1918. Serial No. 223,822. (Cl. 99—5.)

4. The process of treating beets, which consists in dividing them, then progressively and slowly moving them through a current of hot air toward the source of air supply.

[Claims 1 to 3 not printed in the Gazette.]

1,273,733. DRILL-HOLDER. JOHN M. CALDERWOOD, Spanish Fork, Utah. Filed Apr. 10, 1918. Serial No. 227,758. (Cl. 255—53.)



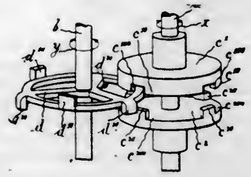
1. In a drill holder, the combination with a support, of an out-rigger arm carried thereby, a carrier slidable along said arm, an adjusting head pivotally mounted on the carrier, a drill support and hammer respectively pivotally suspended from said adjusting head on opposite sides of the pivotal mounting thereof, means for locking the carrier to the arm, and means for locking the adjusting head to the carrier.

3. In a drill holder, the combination with a support, of an out-rigger arm carried thereby, a carrier adjustable along the arm and adapted to be secured where adjusted, an adjusting head pivoted to the carrier to swing in a vertical plane and provided with openings located in the arc of a circle struck from the pivotal point of said head, said carrier having a screw-threaded hole adapted to aline with the openings in the head, a screw adapted to be inserted through any of the openings and engaged with the screw-threaded hole to lock the head in adjusted position, a drill support carried by the head, and a hammer carried by the head.

5. In a drill holder, the combination with a support, of a drill support and a hammer carried thereby the hammer being adapted for striking a drill carried by said support, said support comprising jointed sections one of which may be shifted laterally in relation to the hammer, and means for locking said sections together in rigid relation.

[Claims 2 and 4 not printed in the Gazette.]

1,273,734. ESCAPEMENT DEVICE. ANDRÉ JULIEN CHAINAT, Paris, France. Filed Sept. 14, 1917. Serial No. 191,442. (Cl. 185—46.)



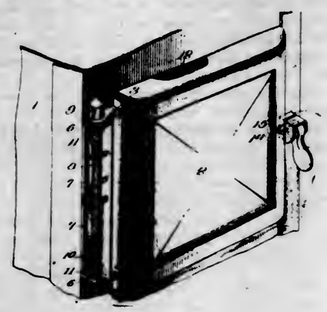
1. An escapement comprising a spindle carrying thereon a cylindrical disk provided on its periphery with an even number of fingers arranged alternately on each of its faces, and another spindle having secured thereto two cylindrical disks comprising on the periphery of their opposite faces, projections, the projections of one disk being arranged opposite to, and having the same width as, the interval separating two projections of the other disk, the said disks being of such dimensions, and so arranged, that the fingers of the disk are adapted to engage respectively and alternately with the intervals between the projections of the corresponding disk.

2. An escapement comprising a spindle carrying a disk having an even number of fingers arranged alternately on its opposite faces, and a second spindle carrying a pair of disks having projections on their opposing faces, the projections on one disk of the pair being opposite to the intervals between the projections on the other disk of the pair, and the diameters of the disks of said pair being the same and the distance between the spindles and the diameters of the disks on the two spindles being so related that the sum of the squares of the radii of the first named disk and one of the disks of said pair is substantially equal to the square of such distance.

3. An escapement comprising a pair of rotatable spindles, a member carried by one of said spindles and having sets of annularly spaced teeth projecting from opposite faces thereof, the spacing of the teeth of one set alternating with the spacing of the teeth of the other set, and a pair of adjacently located members carried by the other spindle and between which the periphery of the member first mentioned projects, the members of said pair having projections on their adjacent faces, the projections on one of the members of said pair being opposite to the intervals between the projections on the other member of said pair, and the projections on the members of said pair being arranged to coöperate respectively with the respective sets of teeth on the member first mentioned.

1,273,735. HINGE FOR STOVE-DOORS. GUY B. CHILD, Chicago, Ill., assignor to American Stove Company, St. Louis, Mo., a Corporation of New Jersey. Filed Dec. 27, 1915. Serial No. 68,702. (Cl. 16—106.)

1. In a door hinge, the combination with a door frame, of a door, a laterally movable hinged connection between one edge of the door and the frame, a yielding means holding the hinged connection normally inward, and means forming a closing connection between the free edge of the door and the door frame and pulling the free edge of the door closed, and forcing the yielding hinged connection outward and holding it under tension to make a tight joint between the door and the door frame irrespective of the wear of the parts.



4. The combination with a frame, of a door hinged thereto, the hinge comprising a vertical housing secured to the wall of the frame, the housing having inner and outer and end walls, the door having hinged ears, the end walls of the housing having outwardly elongated openings, a pintle rod passing through the hinged ears and through the elongated openings of the housing, an outwardly bowed leaf-spring located between the pintle rod and the outer wall of the housing.

6. The combination with a frame, of a door hinged thereto at one edge, the said hinged connection laterally movable with respect to the door frame, yieldable means for normally holding the said connection in its inward position, the said yieldable means engaging the hinged connection at a plurality of points.

[Claims 2, 3, 5, and 7 not printed in the Gazette.]

1,273,736. PISTON-PACKING. GEORGE CHRISTENSON, Jamaica, N. Y., assignor to H. W. Johns-Manville Company, a Corporation of New York. Filed June 8, 1917. Serial No. 173,503. (Cl. 121—108.)



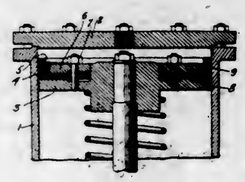
1. A continuous ring-shaped piston cup-packing formed of resilient and slightly compressible material in which the lip of the cup has an outer wall flaring outwardly from the junction of the lip with the inwardly extending radial flange which forms the remainder of the cup, and in which there is an integral head formed on the inside of the cup near the junction of the lip and flange.

3. A packing such as described in claim 1 in which the bead is out of contact with the flange when the packing is free to expand but in which the parts are so proportioned that when the packing is compressed to working position in a cylinder the bead is forced down into contact with the flange.

4. The combination with a cylinder adapted to receive a piston for reciprocation therein, of a continuous ring-shaped piston packing of elastic and slightly compressible material having a normally slightly outwardly flaring body or lip integral with an inwardly extending radial flange adapted to be fastened to a piston head, and an integral bead formed on the inner face of the ring body adjacent to its junction with the flange, the external diameter of the ring at the point of junction of lip and flange being substantially equal to the internal diameter of the cylinder, whereby when the packing is inserted in such cylinder the diameter of the bead and of all portions of the lip except those at the point of junction with the flange are forcibly reduced and the bead distorted so as to exert an outwardly directed elastic reaction on said lip.

[Claim 2 not printed in the Gazette.]

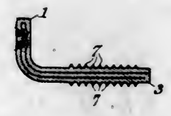
1,273,737. PISTON-PACKING. GEORGE CHRISTENSON, Jamaica, N. Y., assignor to H. W. Johns-Manville Company, a Corporation of New York. Filed Oct. 25, 1917. Serial No. 198,418. (Cl. 121—108.)



1. In a piston packing the combination with the piston of a cup shaped packing ring thickened at the outer edge to form an inwardly projecting lip, an elastic, outwardly pressing expander within said ring and means for holding said expander in operative position within said ring and under said lip.

[Claim 2 not printed in the Gazette.]

1,273,738. PACKING-RING AND PROCESS OF MAKING SAME. GEORGE CHRISTENSON, Jamaica, N. Y., assignor to H. W. Johns-Manville Company, a Corporation of New York. Filed Dec. 14, 1917. Serial No. 207,050. (Cl. 121—108.)



4. A cup-shaped ring of piston packing made of vulcanized rubber and fiber, the radially disposed flange of which has concentric ribs embossed on certain of its surfaces, said ribs being less dense in structure than is the lip of the ring.

9. A piston packing ring formed of vulcanized fiber, the outer cylindrical surface of which has a circumferential groove and a body of dry, solid lubricating material packed in said groove, the material of the walls of said groove being vulcanized to a less degree than are the exterior walls of the ring.

11. The process of forming a self-lubricating piston-packing ring which comprises the following steps: first, molding a ring of fiber and rubber with a circumferential exterior groove in the outer face thereof; second, packing said groove with a lubricating material before the vulcanization of the ring is completed; third, compressing said ring in a die so as to collapse the walls of the groove upon the contained lubricant, and fourth, completing the vulcanization of the ring in that condition.

[Claims 1 to 3, 5 to 8, and 10 not printed in the Gazette.]

1,273,739. CORSET. LORETA ASTARITA CIRILLO, New York, N. Y. Filed Sept. 11, 1917. Serial No. 190,753. (Cl. 2—73.)

2. A corset comprising a plurality of nonelastic stiffened back-covering portions extending the full length of the corset, lacing means for extensibly uniting the same at the middle of the back, a plurality of elastic abdomen-covering portions, each permanently attached at one end thereof to one of said back-covering portions; a plurality of nonelastic bust-covering brassière portions, each permanently attached to said back-covering portions and arranged to overlie the upper edge of said abdomen-covering portions when in service, and means for maintaining the service relation of said brassière por-

tions and abdomen-covering portions, said means embodying a tightening strap infolding said back-covering



and said abdomen-covering portions, and a keeper on said abdomen-covering portion for holding said straps.

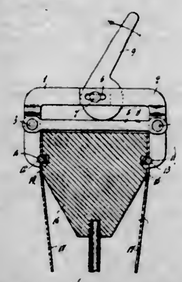
[Claim 1 not printed in the Gazette.]

1,273,740. MANIFOLD VALVE-LOCK. ERNEST P. CLARK, Morriston, Fla. Filed May 11, 1917. Serial No. 168,036. (Cl. 137—7.)



In combination with a manifold pipe, a lock casing mounted thereon at one side, a plate mounted at the opposite side of the pipe, securing devices passing transversely through the casing, pipe and plate, a key for operating the lock, a shaft journaled in the pipe and having one end portion located in the lock casing and which is provided with depressions adapted to receive a part of the key, the other end of the shaft being covered by the plate, and a valve mounted on the shaft and adapted to close transversely across the manifold pipe.

1,273,741. CLAMPING DEVICE. CHARLES EDMUND CLEWS, Paeroa, New Zealand. Filed Aug. 5, 1916. Serial No. 113,306. (Cl. 24—250.)



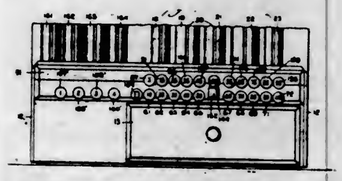
1. A clamping device, comprising in combination, a cross bar, bent levers pivoted on said cross bar and having clamping arms lying opposite to each other and other arms arranged at the opposite side of said cross bar and substantially parallel thereto, with their inner ends adjacent to each other and to the bar, and means carried by the adjacent ends of the last mentioned arms and co-acting with the cross bar to move said ends away from said bar to bring said clamping arms together.

3. A clamping device, comprising in combination, a cross bar, bent levers pivoted on said cross bar and having clamping arms lying opposite to each other and other arms of greater length arranged at the opposite side of said cross bar with their inner ends adjacent to each other and to the bar, and cam means carried by said ends and co-acting with said bar to move said ends away from the bar and to bring said clamping arms together with increased pressure.

5. A clamping device, comprising in combination, a cross bar, bent levers pivoted on said cross bar having oppositely arranged clamping arms and other arms extending toward each other and overlapping at their ends, a pin passing through slots in the overlapping ends of the last mentioned arms, and a cam mounted on said pin and bearing against said cross bar.

[Claims 2, 4, and 6 not printed in the Gazette.]

1,273,742. CHANGE-DELIVERING MACHINE. GEORGE L. COLBORN, New York, N. Y., assignor of one-half to William Gilbert, New York, N. Y. Filed July 12, 1917. Serial No. 180,109. (Cl. 133—4.)



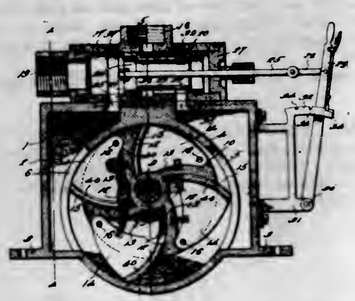
1. In a change delivering machine, the combination of a series of coin magazines, each for holding a supply of coins of a specific denomination, a slidable ejector for each magazine, a plate extending below all of the magazines, each ejector operating over said plate, a rigid finger connected to and slidable with each ejector and operating below said plate and a baffle shoe carried by the outer end of the finger and adapted to coöperate with the outer edge of the coin being delivered to return such coin to normal position at the bottom of the magazine in the event of failure to deliver the same, and means to actuate simultaneously as many different ejectors as will yield the amount of change desired.

3. In a change delivering machine, the combination of a series of magazines each for holding a supply of coins of a certain denomination, an imperforate plate extending along beneath all of said magazines and supporting directly upon its upper surface the coins in the magazines, an ejector for each magazine comprising a flat member adapted to reciprocate across the upper surface of said plate to deliver the lowermost coin from the adjacent magazine, a rigid finger fixed rigidly to the ejector and adapted to be reciprocated therewith, the finger lying and movable below said plate and at one side of the axis of the magazine, a baffle shoe secured rigidly to the outer end of the finger, said shoe coöperating with the outer edge of the coin, and means to automatically return the ejector and parts connected thereto back to normal position after actuation, said shoe serving to return the coin to its normal position in the event of failure to completely deliver it.

[Claim 2 not printed in the Gazette.]

1,273,743. ROTARY ENGINE. FRANK CRAFT, Clinton, Ind., assignor to D. J. Craft, Scottland, Ill. Filed Nov. 17, 1917. Serial No. 202,597. (Cl. 121—90.)

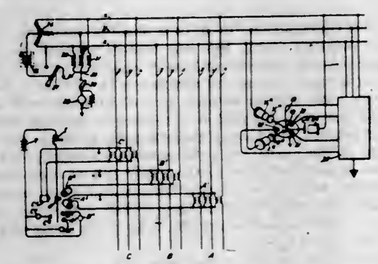
1. In a rotary engine, the combination of a casing inclosing a chamber adapted to receive an expansive agent, a cylindrical wall within said casing formed with diametrically opposite circumferentially elongated ports, a shaft having an eccentric mounting within said cylindrical wall, a rotor fast on said shaft with its periphery eccentric to the inside of said cylindrical wall, said rotor being formed with arcuate guide ways and recesses



intersecting the same, a plurality of abutments of arcuate formation movable into and out of said guide ways, arms extending from said abutments and pivotally mounted in said recesses, and a valve controlling the admission to and exhaust from the chamber between said cylindrical wall and outer casing.

[Claims 2 and 3 not printed in the Gazette.]

1,273,744. MEANS FOR PROTECTING ELECTRIC SYSTEMS. ELMER E. F. CREIGHTON, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Original application filed May 13, 1912, Serial No. 696,930. Divided and this application filed Aug. 15, 1914. Serial No. 856,976. (Cl. 177—311.)



1. The combination with a system of distribution including a plurality of feeders, of solenoids so connected to the feeders as to receive current therefrom only under abnormal conditions on the feeders, means to be actuated on the occurrence of such abnormal conditions, a local circuit for each of said means, and an armature controlled by said solenoids for closing the proper circuit, the solenoids and armature being so constructed and related that similar abnormalities in the feeders produce stresses by the solenoids on the armature inversely proportional to the electrostatic capacities of the feeders.

2. The combination with a system of distribution including three or more feeders, of means to be actuated on the occurrence of abnormal conditions on any of said feeders, an armature for controlling the actuation of said means, and means connected to each of said feeders and energized thereby, said armature being under the joint control of those last mentioned means attached to a sound and a faulty feeder; said means being so constructed and related as to produce equal stresses on the armature on the occurrence of abnormalities in the feeders due to a fault elsewhere than thereon.

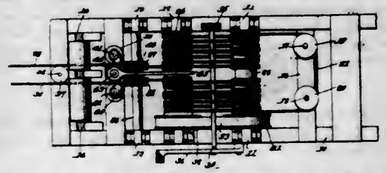
11. The combination with a system of distribution including three or more feeders, of an indicator for each feeder, a differentially operated member controlling the operation of said indicators, and electroresponsive means for each feeder operative in response to the unbalanced current flowing when any one of said feeders is grounded for selectively actuating said member to cause the operation of that indicator corresponding to the feeder having the greatest unbalanced current.

12. The combination with a system of distribution including three or more feeders, of means selectively actuated on the occurrence of a fault, and separate means for each feeder energized in response to charging current flowing when one of said feeders is grounded said separate means all acting on the first mentioned means.

17. A localizer of a ground on a system of distribution having three or more feeders, comprising an electroresponsive device energized in response to the resultant current in each feeder, a member differentially movable by said devices to assume a position corresponding to the feeder having the greatest unbalanced current, and indicators operative in response to the movement of said member to maintain an indication of the position of said member after said member has returned to its initial position.

[Claims 3 to 10 and 13 to 16 not printed in the Gazette.]

1,273,745. SNUBBING-MACHINE. HENRY C. CURRIER, Rumford, Me. Filed Feb. 9, 1918. Serial No. 216,194. (Cl. 254—135.)



1. In a snubbing machine, a frame having an inclined sill near the rear end, inclined pulley supporting members on the sill, pulleys mounted on the inclined members at different heights, a drum, a flexible member operating over the pulleys, the section of the flexible member running from the lowermost pulley being underwound on the drum and the section running from the upper pulley being overwound on the said drum, a second drum around which the flexible member is wound, extensions of said flexible member adapted for attachment to loads, a shaft having pulleys around which the extensions are wound, and means for guiding the extensions.

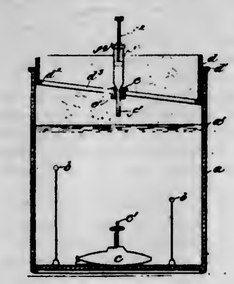
5. In a snubbing machine, a frame having an inclined sill near the rear end, inclined pulley supporting members on the sill, pulleys mounted on the inclined members at different heights, a drum, a flexible member operating over the pulleys, the section of the flexible member running from the lowermost pulley being underwound on the drum and the section running from the upper pulley being overwound on the said drum, a second drum around which the flexible member is wound, extensions of said flexible member adapted for attachment to loads, a shaft having double grooved pulleys around which the extensions are wound, means for guiding the extensions, pulleys having vertical axes with which the flexible extending member coact, a member adapted to engage either of said pulleys for braking the pulleys, and a brake for the drums.

[Claims 2 to 4 not printed in the Gazette.]

1,273,746. TOY. FARRINGTON DANIELS, Worcester, Mass., assignor of one-half to Charles F. MacGill, Cambridge, Mass. Filed July 26, 1917. Serial No. 182,916. (Cl. 46—37.)

1. A game or toy embracing in combination a liquid container having one or more targets submerged therein

below the water level, and a liquid-containing discharging device movable above the surface of the water to form and direct liquid rings at the target, substantially as described.

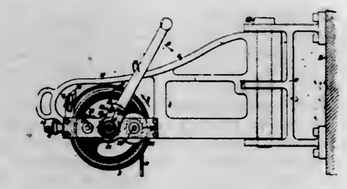


2. A game or toy embracing in combination a liquid container, a submerged target located below the level of the liquid in the container, and a device for expelling drops of colored liquid into the body of liquid from above its surface, said device being movable toward and away from the surface of the water as well as over its surface, substantially as described.

3. A game or toy embracing in combination a glass jar for containing a transparent liquid and a submerged target therein, and a device for expelling in succession small quantities of a colored liquid, said device being located above the surface of the liquid, and guiding means for adjustably supporting said device in different positions above the surface of the liquid, substantially as described.

[Claims 4 to 6 not printed in the Gazette.]

1,273,747. HOIST-GEARING. JOSEPH DAVIDOFF, Brooklyn, N. Y. Filed Oct. 15, 1917. Serial No. 196,692. (Cl. 74—58.)



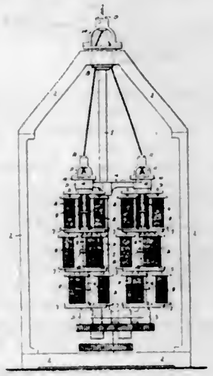
1. A hoisting machine, comprising a frame, a hollow shaft journaled on the said frame, manually controlled turning means for turning the said shaft, a hoisting drum mounted to rotate loosely on the said hollow shaft and provided with an internal gear wheel, a single and a double gear wheel mounted on the said frame and in mesh with the said internal gear wheel, a pinion slidable on the said hollow shaft and turning therewith, and manually controlled shifting means connected with the said pinion to shift the same lengthwise on the said hollow shaft into engagement with either the said single gear wheel or the double gear wheel.

3. A hoisting machine, comprising a frame, a hollow shaft journaled on the said frame, manually controlled turning means for turning the said shaft, a hoisting drum mounted to rotate loosely on the said hollow shaft and provided with an internal gear wheel, a single and a double gear wheel mounted on the said frame and in mesh with the said internal gear wheel, a pinion slidable on the said hollow shaft and turning therewith, a shifting shaft slidable in the said hollow shaft, a pin connecting the said pinion with the said shifting shaft, and a shifting lever fulcrumed on the said frame and pivotally connected with the said shifting shaft to shift the latter and with it the pinion to engage the said pinion with either the said single gear wheel or the double gear wheel, the said hollow shaft having a slot through which extends the said pin.

8. A hoisting machine, comprising a drum, a brake mechanism for the said drum, a gearing for rotating the said drum and having a shiftable member, means for shifting the said shiftable member, and a crank arm for turning the said shiftable member and adapted to engage the said brake mechanism to apply the same for holding the drum against rotation while shifting the said shiftable member.

[Claims 2, 4 to 7, and 9 not printed in the Gazette.]

1,273,748. ROPE-MAKING MACHINE. ROBERT DAWES, Philadelphia, Pa., assignor of one-third to Edward H. Haskell, Newton, Mass., and one-third to Edmund Dawes, Philadelphia, Pa. Filed Dec. 2, 1916. Serial No. 134,626. (Cl. 28—21.)



2. The combination, in a rope making machine, of a central rotating shaft, top and bottom spiders thereon, spindles carried thereby and each provided with a plurality of bobbins, means for rotating each of said spindles about its axis, sleeves secured to and rotating with said spindles and each adapted to a bearing in the top spider, each of said sleeves having therethrough openings for the passage of the yarns from the bobbins carried by its respective spindle, a flange at the upper end of each sleeve, and yokes mounted upon said flanges and each carrying a tubular collecting block having a bore coincident with the axis of its respective spindle, said yokes being located above the upper spider.

[Claim 1 not printed in the Gazette.]

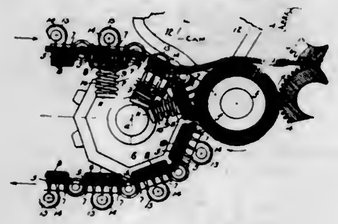
1,273,749. PUSH-BUTTON. THOMAS M. DEMAREST, Dumont, N. J. Filed June 2, 1916. Serial No. 101,346. (Cl. 200—27.)



As an article of manufacture, a push button including a base of insulating material having a reduced rounded threaded extension, a metallic casing screwed on the said extension, said casing having its outer end flared inwardly, spaced contact fingers passing through the center of the base having their ends bent at outward angles from each other, a push button of insulating material in the casing and having a frusto-conical outer end engaging with the flared end of the casing, said button,

having its inner face dished and centrally provided with an integrally extending member having an arrow head, a V-shaped bridging contact on said head and disposed to engage between the angular ends of the contact finger, and a spring in the casing between the base and the button for normally forcing the button outward of the casing to bring the bridging contact thereof away from engagement with the contact fingers.

1,273,750. DECORTICATING-MACHINE. ARTHUR J. DREW, Philadelphia, Pa. Filed Nov. 9, 1917. Serial No. 202,112. (Cl. 13—21.)



1. The combination, in a decorticating machine, of successive sets of rolls with toothed apron mechanism interposed between said successive sets of rolls and serving to receive the material from one set, convey the same forward to the following set and, during such travel, to comb or clear the fibrous strands, said apron mechanism being combined with a rotary brush between the same and the succeeding set of rollers, and said brush serving to support the mass of fibers in its passage from the apron mechanism to the rollers and being so located as to also clean the teeth of the successive bars of the apron mechanism.

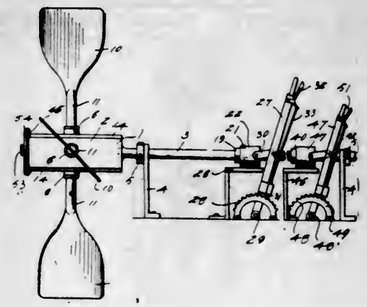
2. The combination, in a combing apron for a decorticating machine, of a series of perforated bars connected to form a chain, and each having yieldingly mounted at the back of the same a bar carrying teeth which normally project through the openings of the perforated bars and beyond the faces of the same.

3. The combination, in a combing apron for a decorticating machine, of a series of perforated bars connected to form a chain and each having at the back of the same a spring-mounted bar with teeth which project through the perforations of the other bar and extend beyond the face of the same, and cam devices for acting upon said tooth-carrying bars and depressing the same when they reach the delivery end of the apron so as to retract the teeth to or below the surface of the perforated bar.

1,273,751. PROPELLER. WINTWORTH W. DUKESHIER, Kansas City, Kans., assignor of twenty-three one-hundredths to John Dukeshier and twenty-three one-hundredths to Fred Clausin, Kansas City, Kans. Filed June 1, 1917. Serial No. 172,302. (Cl. 170—163.)

1. In a device of the class described, a hollow hub, a hollow shaft connected to the hub and extending rearwardly therefrom, stub shafts extending radially from and rotatably mounted in the hollow hub, blades carried by the outer terminals of the stub shafts, pinions mounted on the inner terminals of the stub shafts, means slidably mounted in the hollow shaft for rotating the pinions to vary the angle of the blades, and means for engaging the pinions to prevent rotation thereof.

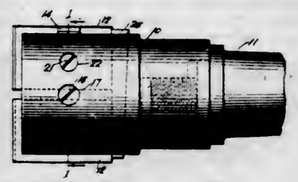
4. In a device of the class described, a hollow hub, a hollow shaft connected to the hub, stub shafts extending radially from and rotatably mounted in the hub, blades carried by the outer terminals of the stub shafts, pinions carried by the inner terminals of the stub shafts, rack bars slidably mounted in the hub and meshing with the pinions, a hollow shifting rod slidably mounted in the hollow shaft and connected to the inner terminals of the rack bars, sliding latches adapted to engage the pinions



to prevent rotation thereof, and independent means for operating the rack bars and the locking latches.

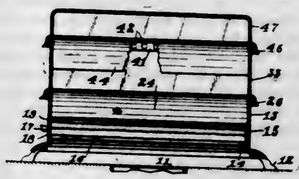
[Claims 2 and 3 not printed in the Gazette.]

1,273,752. REAMER. OTTO EBERT, Cleveland, Ohio. Filed Mar. 14, 1918. Serial No. 222,332. (Cl. 77—75.)



A tool of the class described including a head formed with a transverse slot, there being grooves in said head at opposite sides of the center complementary to the slot, the respective grooves being at opposite sides of the slot, cutters slidable transversely in said slot and formed with ribs on the backs thereof fitting said grooves, an adjusting screw transversely disposed in the head having a wedging portion engageable with the opposed edges of the cutters, and fastening screws in the head at the sides of the adjusting screw and at the opposite sides of the cutters from the said ribs, the forward ends of the fastening screws being conical, and the cutters having corresponding depressions to accommodate the coned ends in any given adjustment of the cutters and the adjusting screw.

1,273,753. HEAT-DISSEMINATOR. BERNARD EELHART, Holland, Mich. Filed Mar. 19, 1918. Serial No. 223,361. (Cl. 98—50.)

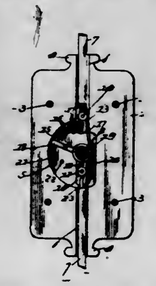


1. A radiator of the class described comprising a plurality of superposed drums, restricted deflecting necks inclosed by each drum, and a non-apertured crown surmounting the top drum.

2. A radiator of the class described comprising a plurality of superposed drums, restricted deflecting necks in-

closed by each drum, downwardly curved guides outside the drums forming a continuation of the deflecting necks, and a non-apertured crown surmounting the top drum.

1,273,754. RHEOSTAT. FERDINAND EMBERGER, Boardman, Oreg. Filed Sept. 6, 1917. Serial No. 190,049. (Cl. 219—48.)



In a rheostat, a cylindrical casing made of insulating material and comprising two sections detachably connected, the said casing having a central interior recess and holes opening from both ends into the recess which holes and recess are formed partly in one section and partly in the other, a resistance device contained within the central recess of the casing and attached to one of the sections thereof, the said resistance device comprising a plurality of arcuate arms concentric with each other but of varying lengths, a switch arm slidably movable over the arcuate arms, so that it may contact with one or several of said arms, a contact member secured to one of the sections of the casing and within the central recess thereof, an angularly movable stem fixed transversely in the casing, and binding posts attached to both the contact member and the resistance device, the switch arm being carried by the stem, the contact member having one end in surrounding relation to the stem and one face in frictional contact with the switch arm.

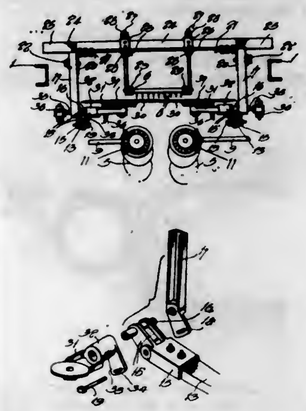
1,273,755. TRUSS-PAD. JAMES W. EMBREE, Manhattan, Kans. Filed Nov. 14, 1917. Serial No. 201,937. (Cl. 128—26.)



A truss pad comprising a metallic body having a marginal flange and cross-bars curved in a direction away from the major portion of the body and extending between the corners formed by said major portion and flange and also having a loop on its back, at its center, and spaced brackets on its back, adjacent to its upper end and above said loop, a dog pivotally mounted between the brackets and movable vertically, and a pad member of plastic material disposed within the flange and against the major portion of the body and receiving the curvilinear cross bars of the body.

1,273,756. BEET-TOPPING MECHANISM. JOSEPH D. FANGER, Toledo, Ohio, assignor to The Fanger Beet Harvester Co., Toledo, Ohio, a Corporation of Ohio. Filed Apr. 5, 1917, Serial No. 159,914. Renewed Jan. 4, 1918. Serial No. 210,405. (Cl. 55—107.)

1. The combination with a beet harvesting machine having means including an endless belt for conveying the beets rearwardly in substantially a vertical position, of guides through which the edges of said belt pass, a beet topping mechanism movable bodily with said guides, and a pair of vertically swinging radius rods extending from said mechanism and mounted pivotally.



4. A structure as specified in claim 2, said frame member having stops on its ends for limiting the downward movement of same.

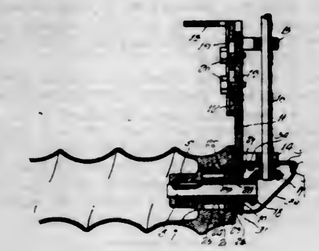
5. The combination with a beet harvesting machine having means including an endless belt for conveying the beets rearwardly in substantially a vertical position, of guides through which the edges of said belt pass, a transverse frame member supported by said guides and disposed above the lower reach of said belt, arms depending from the ends of said frame member, transverse bearings supported by the lower ends of said arms, radius rods extending from said bearings and mounted pivotally, transverse driven shafts mounted in said bearings, and rotary cutters driven from said shafts and disposed below said lower reach of the belt.

6. The combination with a beet harvesting machine having means including an endless belt for conveying the beets rearwardly in substantially a vertical position, of guides through which the edges of said belt pass, a transverse frame member supported by said guides and disposed above the lower reach of said belt, arms depending from the ends of said frame member, transverse bearings to which the lower ends of said frame member are connected for arcuate adjustment forwardly and rearwardly, radius rods extending from said bearings and mounted pivotally, driven shafts mounted in said bearings, rotary cutters driven by said shafts, and brackets secured on said bearings for arcuate adjustment and supporting said cutters.

7. The combination with a beet harvesting machine having means including an endless belt for conveying the beets rearwardly in substantially a vertical position, of guides through which the edges of said belt pass, a transverse frame member supported by said guides and extending above the lower reach of said chain, arms depending from the ends of said frame member and having openings in their lower ends and arcuate slots concentric with said openings, transverse bearings received at their outer ends in said openings, radius rods extending from said bearings and mounted pivotally, cutter supporting brackets having rockers mounted on the inner ends of said bearings and having lateral wings formed with arcuate slots concentric with said bearings, means passing through the several arcuate slots for holding said arms and said brackets in adjusted position, transverse driven shafts mounted in said bearings, and rotary cutters mounted on said brackets and driven by said shafts.

[Claims 2 and 3 not printed in the Gazette.]

1,273,757. REAR AUGER ADJUSTMENT FOR BEET-HARVESTERS. JOSEPH D. FANGER, Toledo, Ohio, assignor to The Fanger Beet Harvester Co., Toledo, Ohio, a Corporation of Ohio. Filed Apr. 5, 1917, Serial No. 159,915. Renewed Jan. 4, 1918. Serial No. 210,406. (Cl. 55—106.)



1. In a beet harvesting machine, the combination of a pair of longitudinally extending beet pulling and conveying augers, bearings supporting the rear ends of said augers, slides carrying said bearings and movable transversely of the machine to vary the distance between the augers, transverse shafts for driving said augers, bearings for said shafts carried by and movable bodily with said slides, and means for securing said slides in adjusted position.

2. A structure as specified in claim, 1 intermeshing beveled gears on said augers and shafts, housings for said gears, one end of said housings extending over and being secured to the inner ends of said slides, and flanges formed integrally with certain of the shaft bearings and closing the other ends of said housings.

3. In a beet harvesting machine, the combination of a portable frame, a pair of longitudinally extending beet pulling and conveying augers beneath the same, means for supporting the front ends of said augers, a pair of arms depending from the frame and having transverse channel-shaped guides adjacent the rear ends of said augers, transversely extending slide plates mounted adjustably in said guides and means for securing them in adjusted position, bearings carried by the inner ends of said slide plates for supporting the rear ends of the augers, a pair of transversely extending driving shafts for rotating said augers, and additional bearings carried by said slide plates for supporting said shafts.

4. In a beet harvesting machine, the combination of a portable frame, a pair of longitudinally extending beet pulling and conveying augers beneath the same, means for supporting the front ends of said augers, a pair of arms depending from the frame and having transverse channel-shaped guides adjacent the rear ends of said augers, transversely extending slide plates mounted adjustably on said guides and means for securing them in adjusted position, bearings carried by the inner ends of said slide plates and including plugs extending into sockets in the rear ends of the augers, shafts extending from said augers through said sockets and bearings, transverse shafts for driving said first named shafts, and bearings for said transverse shafts carried by said slide plates.

1,273,758. LEADING-IN CONDUCTOR. COLIN G. FINK and WALTER E. KOEHNER, East Orange, N. J., assignors to General Electric Company, a Corporation of New York. Filed Sept. 25, 1915. Serial No. 52,624. (Cl. 176—36.)

1. A unitary composite wire suitable for a leading-in conductor for hermetically sealed glass vessels and comprising a thin walled, substantially non-rigid sleeve of a base metal having the property of making a permanent, clinging, hermetical seal to glass, a substantially rigid core of metal having a thermal coefficient of expansion higher than that of the glass, and an intervening layer of non-adherent, heat refractory material normally gripped between said sleeve and said core to prevent relative longitudinal displacement of said core and said sleeve and to impart to said sleeve substantially the rigidity of said core.

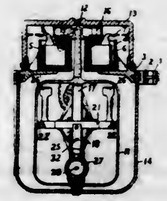


3. A leading-in conductor for evacuated vessels of vitreous material comprising a substantially non-rigid, copper sleeve with walls thin enough to make a permanent, hermetical seal with the material of the vessel, a highly conductive, substantially rigid, metallic core inside said sleeve and an infusible granular filler between said core and sleeve for preventing adhesion or relative longitudinal movement of said core and sleeve and mechanically supporting said sleeve to impart to it substantially the rigidity of said core.

4. A body of glass having sealed therein a unitary composite wire having a surface sheath of base metal capable of making a clinging, hermetical seal with glass and thin enough to prevent rupture of the joint between said sheath and the glass, a substantially rigid metallic core, and a layer of heat refractory material surrounding said core and supporting said sleeve to impart to it the rigidity of the core.

[Claims 2 and 5 to 9 not printed in the Gazette.]

1,273,759. GYROSCOPIC COMPASS FOR SHIPS. HANNIBAL C. FORD, Jamaica, and HARRY L. TANNER, Brooklyn, N. Y., assignors to Sperry Gyroscope Company, Brooklyn, N. Y. Continuation of application Serial No. 823,269, filed Mar. 7, 1914. This application filed June 27, 1916. Serial No. 106,121. (Cl. 74—78.)



1. In a gyro-compass, a rotor bearing frame, means for mounting said frame so as to be free about the vertical axis and for oscillation about a horizontal axis, a pendulum mounted independently of said frame, an auxiliary gyroscope connected to said pendulum, and a coupling between said pendulum and said frame.

3. In a gyro-compass, a universally supported, pendulous support, a rotor bearing member pivotally supported on said support and a yielding, motion resisting, connection between said support and said member.

8. In a gyro-compass, a support, a rotor and rotor bearing casing pivotally mounted thereon on a horizontal axis at an angle to the spinning axis of the rotor, a universally supported pendulum, a coupling between said pendulum and casing, which allows independent oscillation of said parts in planes parallel to the rotor and means for increasing the period of the pendulum in such planes.

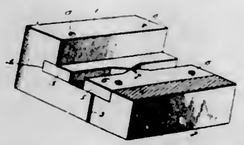
15. In a damping device for slowly oscillating masses, the combination with a principal oscillatory mass, of an auxiliary oscillatory mass having a different natural period, and connections between said masses including a motion resisting medium.

22. In a gyro-compass, a gyro organized for three degrees of freedom, a pendulum mounted for oscillations independent of the gyro, and a dash pot for damping out oscillations connecting said pendulum and gyro organized

for horizontal movement including a piston having a specific gravity of substantially unity referred to the liquid in which piston is submerged.

[Claims 2, 4 to 7, 9 to 14, 16 to 21, and 23 to 25 not printed in the Gazette.]

1,273,760. SPIKE-MAKING DEVICE. WILLIAM OTTO FRAGMEIER and OTTO GUSTAVE MUHLIG, Portland, Oreg. Filed Jan. 8, 1918. Serial No. 210,876. (Cl. 10—61.)



1. A device of the character specified, comprising similar mold sections, said sections being rabbeted on their meeting edges to lap one upon the other, and each being recessed at the angle of the rabbet to receive a die, dies detachably held in the recesses of the rabbeted face, each die having at the center of the edge adjacent to the other die a triangular extension adapted to abut at its apex the apex of the extension of the other die to cut a bar to form two spikes, the space between the dies extending to the ends of the mold sections to permit the bar to extend beyond said sections to permit the formation of a head at each end of the bar.

3. A device of the character specified, comprising similar mold sections, said sections being rabbeted on their meeting edges to lap one upon the other, and each being recessed at the angle of the rabbet to receive a die, dies detachably held in the recesses at the rabbeted face, each die having at the center of the edge adjacent to the other die a triangular extension adapted to abut at its apex the apex of the extension of the other die to cut a bar to form two spikes.

[Claim 2 not printed in the Gazette.]

1,273,761. VEHICLE-SPRING. JOSEPH MARIE ETIENNE FRANC, Lyon, France. Filed Dec. 15, 1916. Serial No. 137,106. (Cl. 267—19.)



1. A vehicle spring comprising in combination a leaf spring, a coupling plate therefor, situated at about one third the length of said leaf spring, means for attaching said coupling plate to said leaf spring, a support for said coupling plate, a depending lever pivoted on said plate, a double armed lever having one end pivoted to the car frame, a pivot for said double armed lever, a lateral arm on said double armed lever, a link connecting the extremity of said lateral arm to the short end of said leaf spring with respect to said coupling plate, the long end of said leaf spring being connected to the vehicle axle and a traction spring connecting the extremity of said depending lever to the free end of said double armed lever.

6. A vehicle spring comprising in combination a leaf spring, an eye block therefor, means for attaching said eye block to said leaf spring, a bolt on which said eye block pivots, a depending arm integral with said eye bolt, a double armed lever, a link connecting the fulcrum of the double arm lever to the car frame, a link connecting the extremity of one of the arms of said lever to the end of said leaf spring, a sleeve slidable on the other arm of said double armed lever, means for sliding and fixing said block longitudinally of said arm, a spiral spring having one extremity connected to said eye bolt arm by a screw threaded rod passing through an eye of the aforesaid depending eye bolt arm, the other extremity of said spiral spring being connected to said sleeve.

[Claims 2 to 5 not printed in the Gazette.]

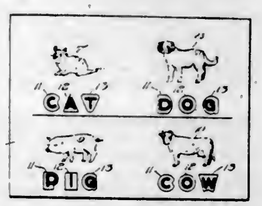
1,273,762. ALLOY. TRUMAN S. FULLER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed May 24, 1917. Serial No. 170,733. (Cl. 75—1.)

1. An alloy containing aluminum, at least several per cent. of zinc, at least about one-half per cent. of magnesium and at least about one per cent. of iron.

2. An alloy containing aluminum, at least several per cent. of zinc, at least about one-half per cent. of magnesium and about one to three per cent. of iron.

3. An alloy consisting of about 6 to 12 per cent. of zinc, about ½ to 2½ per cent. of magnesium, about 1 to 3 per cent. of iron and the balance of aluminum.

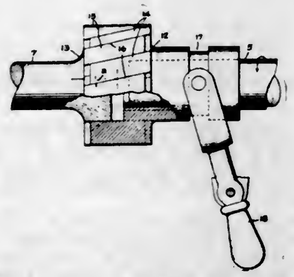
1,273,763. BOOK AND THE LIKE FOR CHILDREN. RAYMOND H. GARMAN, Wilmette, Ill. Filed Feb. 13, 1918. Serial No. 216,950. (Cl. 35—9.)



1. In a device of the class described, the combination of a surface carrying characters or legends, and having outlines adjacent to said characters or legends for the accommodation of cards or blocks, having on their exposed surface characters or legends referring to the characters or legends on the face of the sheet, and cards or blocks for said outlines, the perimeter of each card or block conforming to the overall perimeter of the character or legend thereon, and the perimeter of each card or block having a given legend on its face being the same as the perimeter of other blocks of the same legend but of no other blocks, and the perimeter of each outline being the same as that of the card or block intended to seat thereinto, for the purpose specified.

[Claim 2 not printed in the Gazette.]

1,273,764. COUPLING. BERTON A. GARRETT, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Jan. 5, 1918. Serial No. 210,444. (Cl. 192—9.)



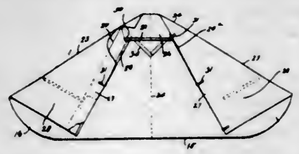
1. A jaw coupling having the engaging surfaces of its interleaving parts extending at an angle which approximates the angle of slip between the materials of said surfaces.

2. A jaw coupling having the engaging surfaces of its interleaving parts cut in the form of spirals the angles of which approximate the angle of slip between the materials of said surfaces.

4. In combination, a driving shaft, a driven shaft, a coupling connecting them together comprising a plurality of interleaving parts having engaging surfaces which are of spiral form, the direction of the spiral being such that the force applied to the driving shaft has a component tending to move the interleaving parts axially toward each other.

[Claim 3 not printed in the Gazette.]

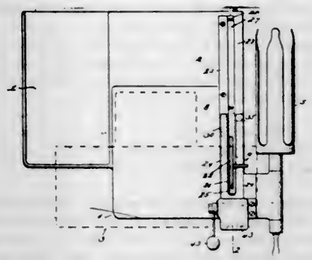
1,273,765. WATERPROOF STORM-SHIELD. JOSEPH A. GAVIN, Brooklyn, N. Y. Filed Nov. 9, 1917. Serial No. 201,126. (Cl. 2—60.)



3. In a waterproof paper storm shield, a substantially rectangular sheet of paper waterproofed by any suitable means and folded as follows: First outwardly along one edge forming a gutter to prevent the rain water from flowing over the fronts thereof, then inwardly around a line parallel to the first folding line, then folded inwardly around diagonal lines forming two front or side wings, then portions of the fronts being folded outwardly nearly parallel to the first mentioned fold, the last mentioned folding lines, however, stopping short in length of the first two folding lines whereby a crown piece is produced, the fullness at each wing portion incident to the last mentioned fold being then folded into a dart closely adjacent to the crown piece and serving as a means to shed the water flowing from the crown piece away from the wearer's face, and hand hold means applied to the inner surface of the shield.

[Claims 1, 2, and 4 not printed in the Gazette.]

1,273,766. APPARATUS FOR MEASURING RIBBON. JOHN C. GEBHART, St. Louis, Mo., assignor to The Econometer Co., St. Louis, Mo., a Corporation of Missouri. Filed Nov. 23, 1917. Serial No. 203,620. (Cl. 164—77.)



1. In an apparatus of the class described, in combination, a table having a transverse slot, a movable blade operating throughout the length of the slot, a leaf located adjacent one end of the slot for coöperation with the table in gripping the fabric to be cut by the blade, stems rigid with the leaf and projecting angularly from its inner end, and a block adjacent the inner end of the leaf in which said stems have a close sliding fit, thereby to direct the leaf, when depressed, rectilineally toward the table.

3. In an apparatus of the class described, in combination, a table having a transverse slot, a movable blade operating throughout the length of the slot, a leaf located adjacent one end of the slot for coöperation with the table in gripping the fabric to be cut by the blade, stems depending from the inner end of the leaf, a block fitted to the table adjacent the inner end of the leaf and having recesses in which the stems have a close sliding fit, said recesses inclosing springs which act on the lower ends of the stems to move them upward, and means acting on the inner portion of the leaf from above to move the leaf against the table.

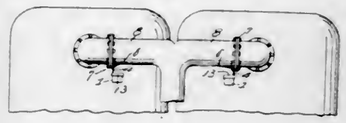
5. In an apparatus of the class described, in combination, a table having a transverse slot, a movable blade operating throughout the length of the slot, a frictional gripping device normally spaced above the table and located adjacent one end of the slot, and means acting on the inner end of said gripping device and operable to cause the same to grip the material during the operation of the blade, said blade and gripping device being separately mounted.

8. In an apparatus of the class described, in combination, a table having a transverse slot, a fixed blade adjoining one edge of said slot, a blade movable lengthwise of the slot and coöperating with the fixed blade, a bracket projecting through the slot and carrying the movable blade, a transverse rod supported below the table and having end bearings about which it may pivot, said bracket having a collar slidable on said rod and non-rotatably associated with said rod, and a spring acting on said rod to hold it in a position wherein said movable blade is pressed laterally against said fixed blade.

10. In an apparatus of the class described, in combination, a table having a transverse slot, a fixed blade adjoining one edge of said slot, a blade movable lengthwise of said slot and coöperating with the fixed blade, a bracket projecting through the slot and carrying the movable blade, and a transverse rod supported below the table and having end bearings about which it may pivot, said bracket having a collar slidable on and non-rotatably associated with said rod.

[Claims 2, 4, 6, 7, and 9 not printed in the Gazette.]

1,273,767. PREHEATER. EDWARD L. GIERSDORF and WILLIAM E. FARMER, Monroe, Nebr. Filed Apr. 19, 1917. Serial No. 163,252. (Cl. 158—96.)

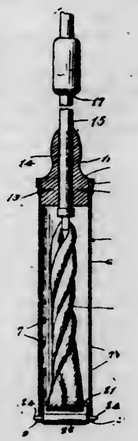


A device of the character described including a fuel receiving receptacle, an attaching arm integral with and continuing upwardly from the upper edge of one side of the receptacle approximately intermediate the ends thereof, the opposite side of the receptacle being provided with a horizontal slot, a cover, a flange depending from and extending entirely about the edge of the cover for telescopic engagement with the receptacle, a hook depending from the flange and engageable in the slot for removably connecting the cover to the receptacle so as to assure of the smothering and extinguishing of the flame when desired, and the flange being cut away at a point opposite the hook to permit of a proper engagement of the flanged cover on the receptacle.

1,273,768. MOP-WRINGER. JOSEPH E. GILLAM, Salt Lake City, Utah. Filed Oct. 19, 1917. Serial No. 197,439. (Cl. 15—12.)

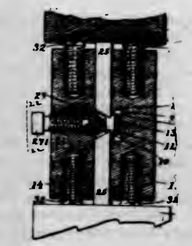
1. A mop wringer comprising a casing having both ends open and provided with openings adjacent one end, and the said perforated end provided with an annular bead having slots at diametrically opposite points, a plug hav-

ing a grip secured in the other end of the casing, a handle slidably mounted through the plug and grip and into the casing, a grip formed integrally with the handle adjacent its outer end and engaging the grip of the casing to limit the sliding movement of the handle relative to the casing, a mop cloth secured to the inner end of the handle, and means carried by the mop cloth and engaging the slots of the casing to permit twisting and wringing of the mop cloth upon relative rotation of the casing and handle in opposite directions.



2. A mop wringer comprising an elongated cylindrical casing, a plug fitted in one end of the casing, a handle movable in the casing and through the plug, a mop cloth secured to the inner end of the handle and adapted to be extended out through the open end of the casing by the handle, and means carried by the free end of the mop and adapted to engage the open edge of the casing when the mop cloth is drawn into the casing to permit the mop cloth to be wrung by the twisting of the handle relative to the casing.

1,273,769. DIE MECHANISM FOR SHAPING GUN-SIGHTS AND OTHER ARTICLES. DAVID GRANT, Middlefield, Conn., assignor to The Lyman Gun Sight Corporation, Middlefield, Conn., a Corporation of Connecticut. Filed Aug. 6, 1914. Serial No. 855,437. (Cl. 78—18.)



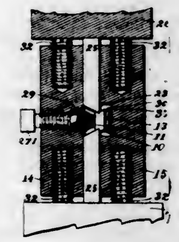
1. As an improvement in dies for die-shaping, the combination of oppositely and simultaneously moving shaping dies, and a seat for the work to be shaped situated between the opposing faces of the dies, said seat permitting movement of the work in the direction of movement of the dies.

4. As an improvement in dies for die-shaping, the combination with the dies of a two-part holder having guideways in which the dies are seated and adapted to travel, and a seat for the work or article to be shaped between the dies, means on opposite sides of the holder that engage and cause movement of the dies toward each other, stopping mechanism for limiting the movement of the dies upon the work acting upon said die-engaging means and clamping means for securing the respective parts of the holder together.

6. As an improvement in dies for die-shaping requiring precise standardizing and centralization, the combination of a die-holder having a guideway throughout its length, forming dies fitting and adapted to slide in the guideway, a guiding seat intermediate of the ends of the holder for receiving the work, having a clearance space for permitting movement of the work in the line of the stroke of the dies, and adjusting stops carried at the ends of the holder to serve as contact abutments, respectively, for the punch and press bed to regulate and determine the length of the stroke of the dies, whereby the work is rendered self-centering in relation to the action of the dies.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,273,770. METHOD OF MAKING GUN-SIGHTS. DAVID GRANT, Middlefield, Conn., assignor to The Lyman Gun Sight Corporation, Middlefield, Conn., a Corporation of Connecticut. Filed Aug. 6, 1914. Serial No. 855,438. (Cl. 29—148.)



1. The method of making gun sights comprising a bead and a dovetail attaching base, which consists in taking a blank that is T-shape in cross section and subjecting it to the action of dies which form the bead and the dovetail attaching base.

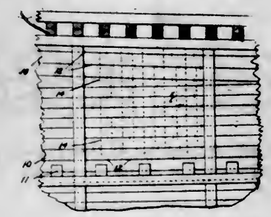
2. The method of making gun sights comprising a bead and a dovetail attaching base, which consists in taking a blank that is T-shape in cross section and subjecting it in successive operations to the action of dies which form the bead and the dovetail attaching base, the bead-forming operation being performed first.

3. The method of making gun sights comprising a bead and a dovetail attaching base, which consists in taking a blank that is T-shape in cross section and subjecting it in successive operations to the action of dies which form the bead and the dovetail attaching base, the bead forming operation being performed first, the blank being supported so that it may move under the action of the dies in a direction at right angles to the length of the dovetail.

4. The method of making gun sights comprising a bead and a dovetail attaching base, which consists in taking a blank that is T-shape in cross section and subjecting it to the action of dies which form the bead and the dovetail attaching base, said dies being in pairs and caused to move upon the part of the blank being acted upon simultaneously from opposite directions.

5. The method of making gun sights comprising a bead and a dovetail attaching base, which consists in taking a blank that is T-shape in cross section and subjecting it in successive operations to the action of dies which form the bead and the dovetail attaching base, the bead-forming operation being performed first, said dies being in pairs and caused to move upon the part of the blank being acted upon simultaneously from opposite directions.

1,273,771. METHOD OF SECURING WOODEN PARTS. WILLIAM T. DONNELLY, Brooklyn, N. Y. Filed Dec. 6, 1917. Serial No. 205,797. (Cl. 144—309.)



1. The method of securing wooden parts together, which consists in providing a groove or kerf in the surface of one of said members, permanently securing said members in position, cutting through said kerf another kerf in the coacting surface to register therewith, and finally driving a suitable shear plate through the double kerfs thus produced.

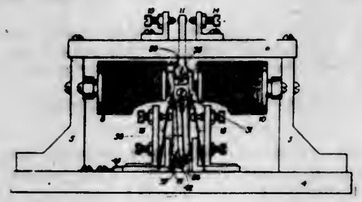
[Claims 2 to 5 not printed in the Gazette.]

1,273,772. PREPARATION OF SYNTHETIC AMMONIA. CARLETON ELLIS, Montclair, N. J., assignor to Clinton S. Lutkins, Rye, N. Y. Filed May 31, 1916. Serial No. 100,835. (Cl. 23—21.)

1. The process of making synthetic ammonia which comprises passing a mixture of hydrogen and nitrogen through a catalytic agent comprising nickel-cobalt carbid.

[Claim 2 not printed in the Gazette.]

1,273,773. POLE-CHANGING APPARATUS. LOUIS M. EVANS, Alexandria, Va., assignor to the Government of the United States. Filed Apr. 11, 1917. Serial No. 161,311. (Cl. 175—352.)



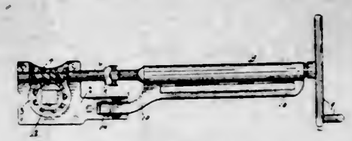
1. In an instrument of the character described, the combination with pole-changing means, of a local circuit, a controller for the local circuit, and devices controlled by similar successive alterations in the condition of the circuit for alternately operating the pole-changing means in opposite directions and also effecting the alternate operation of said devices.

3. In an instrument of the character set forth, the combination with electrical pole-changing means, of mechanism for operating the pole-changing means, said mechanism including a local electric circuit independent of the circuit controlled by the pole-changing means, means for intermittently altering the condition of said local circuit, and means controlled by successive corresponding alternations to intermittently operate the pole-changing means and cause successive change of polarity thereby.

15. In an instrument of the character described, the combination with pole-changing means, of electro-magnets for alternately operating the pole-changing means, a local circuit including said electromagnets, a circuit controller for the local circuit, and means for automatically and alternately short circuiting different of said electromagnets on the successive similar changes in condition of the local circuit by the controller thereof.

[Claims 2 and 4 to 14 not printed in the Gazette.]

1,273,774. MULTIPLE-SOCKET WRENCH. SEBRON W. GOLDING and JOHN W. WITTHAUSE, Price, Utah. Filed May 22, 1918. Serial No. 236,065. (Cl. 81—57.)

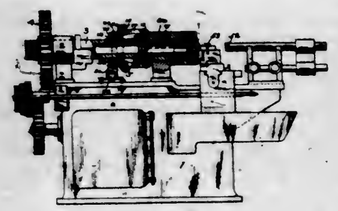


1. In a wrench the combination of a housing; a gear wheel journaled therein; a worm gear the teeth of which mesh with the teeth of said gear wheel; a rotatable shaft; a universal joint connecting said shaft with said worm gear; a handle in which said shaft is journaled and which has another portion pivoted in said housing; and a hand piece secured on said shaft to rotate same.

3. In a wrench the combination of opposed side pieces forming a housing and provided with an open slot in one portion; a gear journaled in said housing having a square hole axially therein; a worm gear meshing with said gear and also journaled in said housing; a handle having one portion pivoted in the slot in said housing and with the other portion acting as a bearing for a shaft; a shaft carried in said handle; a universal joint connecting said shaft with said worm gear; a chuck carried in the square hole in said gear; and a hand piece to rotate said shaft.

[Claim 2 not printed in the Gazette.]

1,273,775. BAR-CUTTING MACHINE. PHILIP M. HAAS, Youngstown, Ohio, and FRANK M. NAIR, Beaver Falls, Pa. Filed Oct. 1, 1917. Serial No. 194,123. (Cl. 29—112.)



1. A bar cutting machine having a rotary sleeve, semi-cylindric jaws in the end of the sleeve having square blocks with beveled flat faces on the sides of their forward ends, springs for normally separating the same ends of the jaws, a head on the forward end of the sleeve having an opening for the jaws and channels with beveled flat bottoms for the beveled blocks, and means for sliding the jaws endwise in the head for clamping together their forward ends by the wedge action of the beveled blocks.

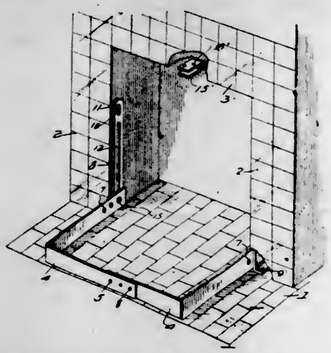
5. A bar cutting machine having a rotary sleeve, semi-cylindric jaws in the end of the sleeve, adapted to be bodily separated throughout their length therein and having square blocks with beveled flat faces on their sides, a head on the forward end of the sleeve having an opening for the jaws and channels with beveled flat bottoms for the beveled blocks, and means for sliding the jaws endwise in the head for clamping them together by the wedge action of the beveled blocks.

[Claims 2 to 4 and 6 not printed in the Gazette.]

1,273,776. FIREPLACE-GUARD. ERNEST T. HALEY, Lufkin, Tex. Filed Apr. 25, 1917. Serial No. 164,509. (Cl. 126—202.)

1. The combination with a fireplace, of a guard including a U-shaped guard member, coöperative means for pivotally and slidably mounting the terminals of the guard member adjacent the opposed inner faces of the side col-

umns of the fireplace to permit of the guard member being slid downwardly and swung outwardly so as to be arranged in an extended position on the hearth of the fire place and also swung inwardly and slid upwardly so as to be arranged in close relation to the side columns and the lintel of the fireplace, and means for removably supporting the guard member in a raised position.



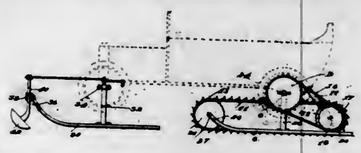
2. The combination with a fireplace, of a guard including a pair of slotted attaching plates, a substantially U-shaped guard member, means adjustably engageable with the terminals of the guard member and operably arranged in the slotted attaching plates for pivotally and slidably connecting the guard member to the slotted attaching plates, and a support connected to the lintel of the fireplace for removably receiving and supporting the guard member.

3. The combination with a fireplace, of a guard comprising a pair of attaching plates having longitudinal slots therein, an anchoring portion formed on the lower end, the upper end of the attaching plates being provided with a slot, fastening devices engageable with the slots for anchoring the upper ends of the plates to the side columns of the fireplace, a substantially U-shaped guard member, fasteners adjustably engageable with the terminal of the guard member, and slidably engaged in the longitudinal slots for pivotally and slidably supporting the guard member, and a hook carried by the lintel of the fireplace for removably and slidably supporting the guard member.

4. The combination with a fireplace, of a guard therefor, comprising a pair of longitudinally slotted attaching plates anchored to the opposed inner faces of the side columns of the fireplace, a guard member embodying a pair of right angled sections, the outer ends of the sections being provided with a longitudinal series of openings, means for adjustably connecting the outer ends of the sections, the inner ends of the sections being also provided with a longitudinal series of openings, fastening devices engageable with any one of the openings in the inner ends and slidably engaged in the slotted attaching plates for pivotally and slidably connecting the guard member to the plates, and means carried by the lintel of the fireplace for removably supporting the guard member in a raised position.

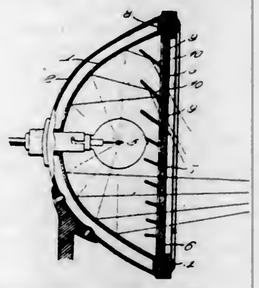
1,273,777. SLED ATTACHMENT AND PROPELLER FOR MOTOR-VEHICLES. HANS N. HANSEN, Westbrook, Minn. Filed May 18, 1916. Serial No. 98,407. (Cl. 180—5.)

The combination with a motor vehicle, including, the chassis and the rear driving axle, of a pair of vertical brackets extending from the rear axle, clamp members retaining said brackets on the axle, runners mounted on the brackets, the forward end of said runners being upturned, a transversely extending shaft mounted in said upturned portions, sprocket wheels loosely mounted on said shaft, bearing members on the rear ends of the runners, a pair of shafts having their ends mounted in the last mentioned bearings, sprocket wheels mounted on the said pair of shafts, a tread element movable over each of



said sprocket wheels, and means for connecting the driving axle to said pairs of shafts, as and for the purpose set forth.

1,273,778. HEADLIGHT-DIMMER. OSCAR WILLIAM HANSON, Salina, Kans. Filed Feb. 8, 1918. Serial No. 215,955. (Cl. 240—48.4.)



1. A head light dimmer comprising a small central ring, a peripheral ring, short vertically spaced horizontal vanes extending between the two rings, and longer vertically spaced horizontal vanes spanning said peripheral ring above and below said central ring, all of said vanes extending rearwardly.

4. A structure as specified in claim 1, said vanes decreasing in width and increasing their angle to the plane of the rings from the upper to the lower portion of the device.

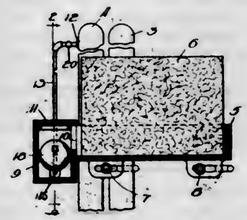
[Claims 2 and 3 not printed in the Gazette.]

1,273,779. COMBINED SALT AND PEPPER HOLDER. EDWARD E. HARRIS, Tulsa, Okla. Filed July 23, 1917. Serial No. 182,350. (Cl. 65—45.)



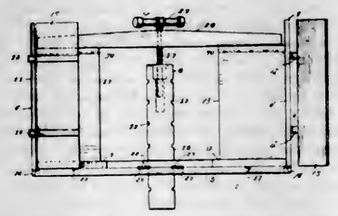
A combination salt and pepper holder, including a hollow body open at one end, a portion of the body adjacent the open end reduced to form an upwardly facing shoulder, a partition wall in the body and forming compartments therein, said wall extending above the open end of the body with the sides of its upwardly extending portion in alinement with the outer surface of the reduced portion, a cap for closing the body adapted to encircle the reduced portion and be seated on the shoulder, said cap having a diametrical groove for the reception of the upper edge of the partition wall, there being openings in the cap, means for placing the openings in communication with the compartments, and means for securing the cap in place upon the body.

1,273,780. HUMIDIFIER FOR RADIATORS AND THE LIKE. JAMES D. HARVEY, Evanston, and JOHN W. TIERNEY, Chicago, Ill. Filed Feb. 21, 1917. Serial No. 150,240. (Cl. 237—78.)



A humidifier for a radiator comprising an elongated trough having its top open, a capillary wick standing in the trough and drawing moisture therefrom, a valve compartment at one end of the trough and in communication therewith by way of a slotted opening, the lower edge of which opening is at such an elevation as to permit the flow of water from the valve compartment into the trough, a valve in the lower portion of the compartment, a float within the compartment and operatively connected to the valve to close the same when the level of the water within the trough reaches the desired point, and a tube connecting the valve with the radiator at a point of higher elevation than the valve, substanitally as and for the purpose described.

1,273,781. PAPER-PADDING APPARATUS. EDGAR B. HELFENSTEIN, Los Angeles, Cal. Filed July 11, 1916. Serial No. 108,589. (Cl. 100—19.)

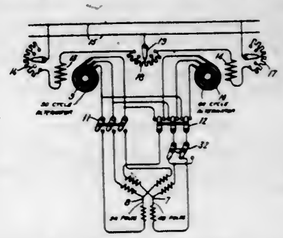


1. The combination of a bed, a stacker mounted on said bed so that it may be swung from an upright to a horizontal position, and means for applying downward pressure to a stack of paper in said stacker, when the latter is disposed in an upright position, said means being secured to said bed.

[Claims 2 to 10 not printed in the Gazette.]

1,273,782. ELECTRIC SHIP PROPULSION. HENRY M. HOBART, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 20, 1914. Serial No. 873,112. (Cl. 172—8.)

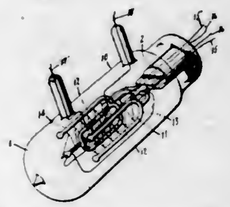
1. In a system of electric ship propulsion, a propeller, means for producing alternating currents of two different frequencies, a propeller-driving induction motor having two primary windings one of which has a greater number of poles than the other, the frequency of said alternating currents and the pole numbers of said primary windings being so related that primary magnetic fields having a substantially common synchronous speed may be produced by supplying alternating current of a particular frequency to a particular corresponding primary winding, a secondary winding having relatively high resistance with a primary magnetic field produced by the primary winding having the greater number of poles and relatively low resistance with a primary magnetic field produced by the primary winding having the smaller number of poles, and means for supplying alternating current to the primary winding having the greater number of poles for navigation of the ship under conditions requiring a relatively high motor torque and for supplying alternating currents to both of said primary windings to produce primary magnetic fields of said common synchronous speed for navigation of the ship at full speed.



3. In a system of electric ship propulsion, a propeller, two electric alternators adapted to generate alternating currents of different frequencies, an induction motor operatively connected to said propeller and having two primary windings one of which has a greater number of poles than the other, the frequencies of the currents generated by said alternators and the pole numbers of said primary windings being so related that primary magnetic fields having a substantially common synchronous speed may be produced by electrically connecting the alternators to particular corresponding primary windings, means for electrically connecting said primary windings to their respective particular corresponding alternators for simultaneously producing primary magnetic fields of said common synchronous speed, a resistance having a portion thereof included in the field circuit of one of said alternators and the remaining portion thereof included in the field circuit of the other of said alternators, and means coöperating with said resistance for varying the relative proportions of said resistance which are included in the field circuits of said two alternators for relatively varying the excitations of said alternators to balance the division of load between the alternators when both primary windings are simultaneously producing primary magnetic fields of said common synchronous speed.

[Claim 2 not printed in the Gazette.]

1,273,783. ELECTRON-DISCHARGE APPARATUS. IRVING LANGMUIR, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 16, 1913. Serial No. 795,609. Renewed Mar. 14, 1916. Serial No. 84,241. (Cl. 250—27.)



1. An electrical vacuum discharge apparatus comprising a highly evacuated envelop, a cathode adapted to be heated, a coöperating anode, a rigid framework, an unheated conductor, constituting a grid, wound back and forth on said frame-work with closely adjacent turns and located between cathode and anode, and external connections for said electrodes and said grid.

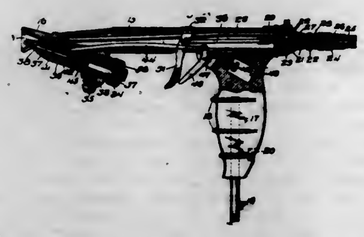
8. An electrical apparatus comprising the combination of a cathode adapted to emit electrons independently of

the operating current, an anode, a supporting framework, a wire mounted on said framework, said wire having too small a cross-section to be self-supporting, constituting a charge-receiving grid, an inclosing evacuated envelop, and electrical connections for said electrodes and grid.

20. An evacuated envelop containing three electrodes one of which is a filament adapted to be heated, another a charge receiving anode, a self-supporting framework spaced about one of said electrodes, and a third electrode consisting of a wire mounted on said framework and located transversely to the space between said electrodes.

[Claims 2 to 7 and 9 to 19 not printed in the Gazette.]

1,273,784. PNEUMATIC PAINT-BRUSH. JENS A. PAASCHE, Chicago, Ill. Filed Jan. 23, 1915. Serial No. 3,863. (Cl. 91—45.)

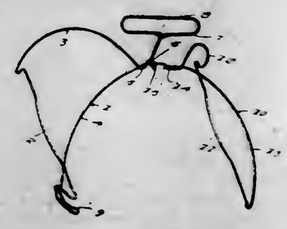


1. A pneumatic paint brush having, in combination, an air nozzle, a paint nozzle located outside of and at an angle to said air nozzle, the discharge orifice at the forward end of said paint nozzle opening toward the side adjacent to the discharge orifice of said air nozzle and being located in the path of the air current, and a member within said paint nozzle for controlling the discharge of paint.

3. A pneumatic paint brush having, in combination, a body having an air nozzle on its forward end, said nozzle being provided with a flared portion extending outwardly from the orifice in the nozzle, said flared portion being recessed to receive a paint nozzle, and a paint-discharge structure comprising a tubular nozzle having its forward or discharge end occupying said recessed portion of the air nozzle, the discharge orifice at the forward end of the paint nozzle being disposed oblique to the axis of said nozzle and in a direction approaching a parallel to the air current issuing from said air nozzle, and means in said paint nozzle to control the discharge of paint.

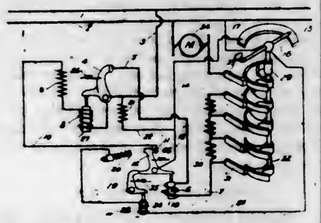
[Claims 2 and 4 to 41 not printed in the Gazette.]

1,273,785. PAN-LIFTER. JOHN PETERSON, Felch, Mich., assignor of one-half to Svan J. Peterson, Foster City, Mich. Filed July 1, 1916. Serial No. 107,051. (Cl. 65—32.)



A pan lifter comprising stationary and movable members, each consisting of a single length of wire being first bent to form a pair of pan engaging members, the ends of said members being bent outwardly and upwardly to form pairs of attaching arms, one end of one of the arms of the stationary member being bent upon the other arm to form an eyelet, the other end of the wire being bent to form a handle, one end of one of the arms of the movable member being twisted about the other arm, the last named arm being bent to form a hook to engage the eyelet to pivot the movable and stationary members together, and one arm of the stationary member being bent upon and about itself adjacent the pan engaging member to form a hook adapted for use as means to disengage the stationary member from a pan and to hook over a pan for withdrawing it from an oven.

1,273,786. AUTOMATICALLY-RECLOSING CIRCUIT-BREAKER. ESTELL C. RANEY, Columbus, Ohio, assignor to The Automatic Reclosing Circuit Breaker Company, Columbus, Ohio, a Corporation of Ohio. Filed Aug. 17, 1916. Serial No. 115,356. (Cl. 172—179.)



1. In combination with a current controlling device adapted to control the flow of current through a circuit, a circuit breaker, reclosing means, mechanism for restraining said reclosing means, means comprising a releasing coil for releasing said restraining means when the current controlling device is made to open the circuit in which it is connected, a limiting resistance in circuit with the releasing coil, and a circuit in parallel with the releasing coil, a part of said parallel circuit being through the controlling device, so that said last named circuit is open when the controller is moved to "off" position.

2. In combination with a circuit controlling device adapted to control the flow of current through a circuit, a circuit breaker, reclosing means, mechanism for restraining said reclosing means, means for releasing said restraining means, said controlling device and said releasing means being in parallel whereby circuit through said device shunts current away from said releasing means which is thus rendered inoperative until the circuit through said controlling device is opened.

[Claims 3 and 4 not printed in the Gazette.]

1,273,787. RACK FOR AUTOMOBILE-STEPS. ELMORE RICE TAYLOR, Ducor, Cal. Filed Nov. 28, 1916. Serial No. 133,893. (Cl. 224—29.)

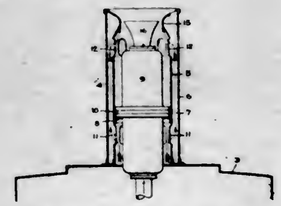


1. A rack for the running board of an automobile comprising the combination therewith of a movable L-shaped rod, a support in which the rod may be turned and in which it is slidable, and a lug carried by the rod to prevent the rod from being turned out of the vertical in one direction, the support having means to hold the rod parallel to the step below the same when not in use.

4. The combination with a tubular member having means to secure it to a fixed support, of an L-shaped arm slidably and partially revolubly supported thereby, a spring adapted to retract the arm into a notch in the tubular member, and a lug on the arm to prevent it from being turned beyond a fixed position in one direction.

[Claims 2 and 3 not printed in the Gazette.]

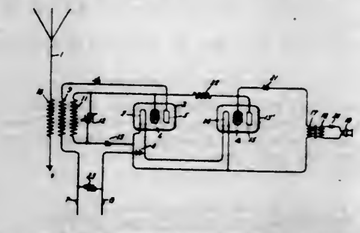
1,273,788. VENTILATING APPARATUS. PAUL WAGNER, Charlottenburg, Germany, assignor to General Electric Company, a Corporation of New York. Filed Apr. 27, 1915. Serial No. 24,373. (Cl. 98—30.)



1. The combination with an inclosure, of a stack thereon comprising two concentric walls spaced apart to form a ventilating passage between them closed at its ends, the inner wall having vertically spaced openings into said passage, an exhaust silencer located in and spaced from the inner wall, means surrounding the exhaust silencer between said openings dividing the space between the muffler and the inner wall into an upper and a lower chamber, which chambers are in communication with the ventilating passage through said vertically spaced openings, means forming a restricted passage at the outer end of the stack, and a nozzle on the end of the silencer which coöperates with the restricted passage to form an ejector.

2. The combination with an inclosure adapted to contain an engine, of a stack thereon comprising two concentric walls spaced apart to form an annular ventilating passage, a ledge in the stack carried by the inner of the two concentric walls, a muffler of lesser diameter than the stack and having a flange which rests on said ledge whereby a chamber surrounding the muffler is formed above and below the flange, said lower chamber being in communication with the inclosure, said inner wall having openings which connect it to said ventilating passage above and below said flange, and a nozzle on the outer end of the muffler arranged to create a suction through the passage.

1,273,789. WIRELESS SIGNALING SYSTEM. WILLIAM C. WHITE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Mar. 2, 1915. Serial No. 11,473. (Cl. 250—6.)

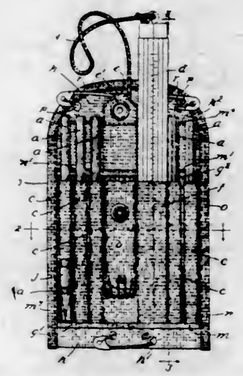


6. The combination in a wireless telephone system of an antenna, an electron discharge device, comprising a cathode, an anode and a controlling grid, operatively related to said antenna and arranged to produce continuous electrical waves therein, a second electron discharge device similar to the first connected to the grid circuit of the first in such a way as to divert energy therefrom and means comprising a telephone transmitter for varying the potential of the controlling grid in said second device.

11. The method of wireless signaling by means of a system in which continuous electrical waves are produced in an antenna by an electron discharge device comprising a cathode, an anode and a controlling grid, which consists in varying the amplitude of the waves thus produced by diverting a variable amount of energy from the grid circuit of the electron discharge device in accordance with signals to be transmitted.

[Claims 1 to 5 and 12 to 16 not printed in the Gazette.]

1,273,790. WOVEN CARRIER. VICTOR H. JENNINGS, Worcester, Mass., assignor to Universal Patents Company, Woonsocket, R. I., a Corporation of Rhode Island. Filed Nov. 6, 1917. Serial No. 200,530. (Cl. 24—12.)



1. A carrier of woven material comprising a flexible body-web having elongated pockets or loops woven upon one surface of said body-web, and a flexible backing upon which the said body-web is mounted with the side-margins of the body-web and those of the backing secured together by applied fastenings, said backing having an extension or flange above said body-web adapted to be engaged by means for connecting the carrier to a place of support.

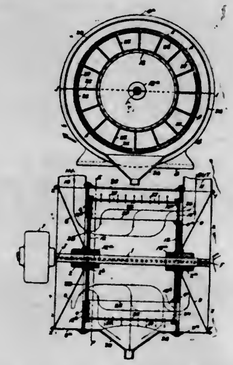
8. A carrier of woven material comprising a flexible body-web, elongated pockets or loops woven upon one surface of said body-web, a plurality of sheaths woven in said body-web paralleling said pockets or loops, a plurality of stiffening strips contained within said sheaths combined with a separately-formed flexible backing to which the said body-web is attached by applied fastenings, said backing consisting of a strip of material doubled upon itself to produce a smooth turned bottom end for the carrier, with its two upwardly-extending portions secured together, the said backing having an upward extension above the body-web adapted to be engaged by means for fastening the carrier to a garment of the user, and a binding-strip finishing-off the upright side-edges and top-edge of the flexible backing.

[Claims 2 to 7 not printed in the Gazette.]

1,273,791. ART OF SEPARATING MATERIALS FROM GASES. EDWARD R. KNOWLES, Brooklyn, N. Y. Filed Feb. 14, 1917. Serial No. 148,612. (Cl. 183—96.)

2. In an apparatus for separating gas and heavier materials, the combination of a stationary chamber, an inlet thereto, an outlet therefrom and a centrifugal fan therein, whose blades are composed of a perforated radial portion and a perforated circumferential portion, the radial portion extending inwardly from the circumferential portion and the circumferential portion having an opening between its edge and the next adjoining portion, substantially as described.

7. In an apparatus for separating gas and heavier materials, the combination of a stationary chamber, an inlet thereto, an outlet therefrom and a centrifugal fan therein whose blades are composed of a solid radial portion and



a perforated circumferential portion with an opening between the edge of each circumferential portion and the next adjoining portion, substantially as described.

[Claims 1, 3 to 6, and 8 not printed in the Gazette.]

1,273,792. PROTECTIVE TREAD-COVERING FOR AUTOMOBILE-TIRES. JOHN LAUBE, Deer Island, Oreg. Filed Mar. 22, 1917. Serial No. 156,785. (Cl. 152—16.)



1. The combination with a sectional protective covering for vehicle tires, of means for fastening adjacent sections end to end comprising a strap underlying said ends, a stud bolt inserted through said strap and also through an end of the protective covering, means for holding the stud bolt against rotation, a nut threaded on the extremity of the stud bolt, and means for holding the nut against rotation on the bolt.

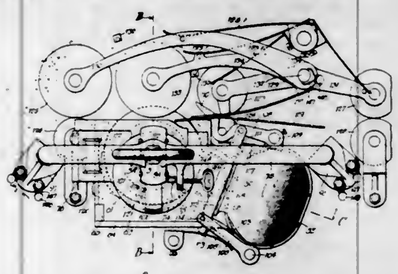
4. The combination with a sectional protective covering for vehicle tires, said covering provided with a reinforced tread, of means for fastening adjacent sections end to end comprising a strap underlying said ends, a stud bolt inserted through said strap and also through an end of the protective covering, means for holding the stud bolt against rotation, a nut threaded on the extremity of the stud bolt, means for holding the nut against rotation on the bolt, said nut being made with convexed ends, and the reinforced tread of the protective covering having a portion cut away to receive said nut.

6. The combination with a sectional protective covering for vehicle tires, of means for fastening adjacent sections end to end comprising a strap underlying said ends and permanently fastened to one thereof, a stud bolt inserted through the free end of said strap and also through an end of the protective covering, means for holding the stud bolt against rotation, and a nut threaded on the extremity of the stud bolt, and means for holding the nut against rotation on the bolt.

11. In a sectional protective covering for tires, of means for fastening adjacent sections end to end comprising a strap underlying the ends and permanently fastened to one thereof, a stud bolt inserted through the free end of said strap and through the other end of the protective covering, a nut threaded on the extremity of said bolt, the bolt being made with an elongated head, a rivet inserted through such head and the strap, said nut being made with convex ends, the protective covering being made with corresponding concave spaced portions to receive said nut, and means for holding the nut against rotation on the bolt.

[Claims 2, 3, 5, 7 to 10, and 12 not printed in the Gazette.]

1,273,793. MAIL-MARKING MACHINE AND POSTAGE-METER. ARTHUR H. PITNEY, Joliet, Ill. Filed Sept. 19, 1912. Serial No. 721,183. (Cl. 101—77.)



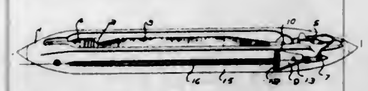
1. In a mail marking machine, the combination of means arranged to feed mail matter along a certain path, a rotary printing drum located adjacent to said path in position to mark said mail matter, said printing drum being adapted to be removed from said position, and a casing mounted adjacent to said drum and adapted to inclose said drum through the act of removing it from said machine.

7. In a mail marking machine, the combination of means arranged to feed mail matter along a certain path, a rotary printing drum located adjacent to said path in position for marking the mail matter, a housing for said drum when in its printing position, said drum being adapted to be removed from said housing, a hood adapted to form a part of said housing when said drum is in its printing position and being also adapted to receive and inclose said drum when it is removed from its printing position, and means movable with said drum and adapted to form a closure for the bottom of said hood when said drum is shifted into said hood.

10. In a mail marking machine, the combination of means arranged to feed mail matter along a certain path, a rotary printing drum located adjacent to said path in position for marking the mail matter, a housing for said drum when in its printing position, said drum being adapted to be removed from said housing, a hood adapted to form a part of said housing when said drum is in its printing position and being also adapted to receive and inclose said drum when it is removed from its printing position, said drum and hood being relatively movable in a transverse direction for the purpose of removing said hood clear of the path of the mail matter, and means adapted to lock said drum within said housing through the relative transverse shifting of said drum and hood.

[Claims 2 to 6, 8, 9, and 11 to 32 not printed in the Gazette.]

1,273,794. SHUTTLE. JOHN SMITH, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Jan. 18, 1918. Serial No. 212,510. (Cl. 139—46.)



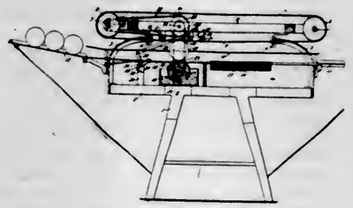
2. A shuttle having a yarn delivery eye leading from the side of the shuttle, a device on the shuttle to engage the yarn between the side of the shuttle and the wall of the shuttle-box as the shuttle enters the box, and means for securing the device to the shuttle that it may act upon the yarn to press it against the inner wall of the shuttle-box.

5. A shuttle having a delivery eye near one end thereof, a support secured to the outer side wall of the shuttle back of the delivery eye, and means sustained by said support to engage the yarn as the shuttle enters the shuttle-box and yieldingly press it against the wall of the shuttle-box to maintain the yarn taut between the shuttle and cloth selvage.

7. A shuttle having a yarn delivery eye near one end and a groove extending longitudinally along the outer side wall of the shuttle for the reception of the yarn as the shuttle enters the shuttle-box, and means located on the exterior side wall of the shuttle to engage the yarn and press it against the side wall of the shuttle-box as the shuttle moves in the box toward the outer end thereof.

[Claims 1, 3, 4, 6, and 8 to 11 not printed in the Gazette.]

1,273,795. CAN-LABELING MACHINE. FREDERICK T. VON WAHLDE and FRANK ARNOLD STIENS, St. Bernard, Ohio, assignor to The J. Henry Koenig Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Mar. 21, 1918. Serial No. 223,827. (Cl. 216—58.)



1. In a can-labeling machine, a track upon which a can to be labeled travels, a roll disposed to engage the can at a point in its travel upon the track for distributing an adhesive upon the can periphery, a conveyer means for engaging the peripheral can edges for revolving and advancing the can upon the track, and stop means for withholding the can travel when the same is engaged with said roll.

3. In a can-labeling machine, a track upon which the can rolls, a rotative adhesive distributing roll disposed at a station to engage with a can traveling upon the track, means for arresting the can travel when engaged with said roll, and means for tripping said can arresting means by a successive can advancing toward said roll.

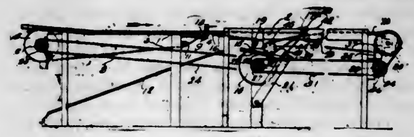
5. In a device of the character described, a rotative roll for applying an adhesive upon a cylindrical can, means for blocking any advance of the can when engaged upon said roll, and a pair of belts respectively engaging opposite peripheral edges of the can for revolving said can upon said roll, whereby the adhesive may be applied upon the can around its entire periphery.

6. In a device of the character described, a rotative roll for applying an adhesive around the periphery of a can, when engaged with the can, means for advancing the can to peripherally engage said roll and revolve the can when engaged with the roll, and means for holding said can against advance when engaged by and sustained upon said roll.

8. In a device of the character described, a track upon which a can is rolled, a rotative adhesive distributing roll having its periphery above the plane of the track to engage the can and sustain the can above the track, can conveyer means for rolling the can upon the track and revolving the can upon said roll, and means for arresting the advance of the can when engaged with said roll.

[Claims 2, 4, 7, and 9 not printed in the Gazette.]

1,273,796. DEVICE FOR REMOVING CAKES FROM CARRIER-SHEETS. ALBERT BLEILE, Dayton, Ohio. Filed Dec. 6, 1917. Serial No. 205,795. (Cl. 107—45.)



1. In a mechanism of the character described, a guide, a conveyer passing about said guide, adapted to receive a sheet containing cakes and to carry said sheet about said guide, a cake receiving structure at that end of said conveyer adjacent to said guide, and a cake engaging device to prevent the cakes from turning about said guide.

10. In a mechanism of the character described, a conveyer adapted to receive a carrier sheet containing cakes, means to remove the cakes from said carrier sheet, another conveyer to receive the cakes after they have been removed from said carrier sheet, a device to deliver cakes to the last-mentioned conveyer, said last-mentioned conveyer having its receiving end arranged beyond and slightly below the level of the discharge end of the delivering device, and means for actuating said last-mentioned conveyer at a speed less than the speed at which the cakes are delivered thereto, whereby the cakes will be discharged onto the last-mentioned conveyer in overlapping positions.

13. In a mechanism of the character described, a conveyer adapted to receive a carrier sheet containing cakes, means to remove the cakes from said carrier sheet, another conveyer arranged beyond and moving at a speed less than the speed of the first-mentioned conveyer, and a pair of rollers interposed between said conveyers and arranged above the last-mentioned conveyer to cause the cakes to be discharged in substantially horizontal positions on said last-mentioned conveyer.

21. In a mechanism of the character described, a conveyer adapted to receive a carrier sheet containing cakes, a guide at one end of said conveyer about which the conveyer and the carrier sheet are moved, means to retain the cakes in substantially horizontal positions while the carrier sheet moves about said guide, another conveyer to receive the cakes after they have been moved from said carrier sheet, devices to cause the cakes to be delivered to the last-mentioned conveyer in substantially horizontal positions, and means for actuating said last-mentioned conveyer at a speed less than the speed at which said cakes are delivered thereto.

23. In a mechanism of the character described, a conveyer for cakes, a conveyer arranged beyond and on a lower level than the first-mentioned conveyer and adapted to receive cakes therefrom, means to cause cakes to be discharged from the first-mentioned conveyer in substantially horizontal positions, and means to actuate the last-mentioned conveyer at a speed less than the speed at which the cakes are delivered thereto.

[Claims 2 to 9, 11, 12, 14 to 20, and 22 not printed in the Gazette.]

1,273,797. TELLURIUM TONING-BATH AND PROCESS OF TONING PHOTOGRAPHIC ELEMENTS. EDMUND R. BULLOCK, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Apr. 5, 1916. Serial No. 89,017. (Cl. 95—88.)

1. A photographic toning bath for silver images comprising a tellurium compound in an acid solution, said bath being capable of converting the silver image into one which is insoluble therein.

8. A photographic toning bath comprising a solution of a tellurium salt and an agent capable of retarding

hydrolysis and precipitation of a tellurium compound upon dilution with water.

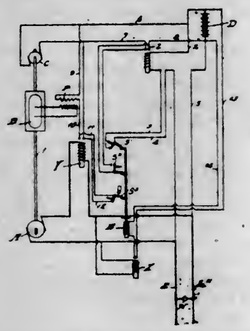
11. A photographic toning bath comprising tellurium chlorid, hydrochloric acid in excess, sodium chlorid and potassium bromid.

12. The process of sepia toning a photographic silver image comprising the step of treating the silver image with an acid solution containing a tellurium salt.

17. The process of toning a photographic silver image comprising the steps of treating said image with an aqueous solution of tellurium chlorid, hydrochloric acid, sodium chlorid and potassium bromid and thereby bleaching and toning the image, and intensifying and modifying the tone of the image by means of an aqueous sodium sulfid solution.

[Claims 2 to 7, 9, 10, and 13 to 16 not printed in the Gazette.]

1,273,798. AUTOMATIC STARTER AND CONTROLLER. RALPH DWIGHT ERNEST, Ann Arbor, Mich. Filed Oct. 19, 1916. Serial No. 126,478. (Cl. 171—315.)

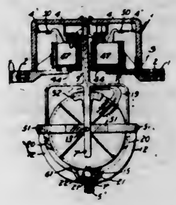


1. The combination of an internal combustion engine, having electric igniters, an electric starter for said engine, a generator driven by the engine, a battery, a main power or lighting circuit, said battery having normal connections with said main circuit, a relay operated by the battery current for controlling the ignition circuit and the electric starter, a relay in the main circuit for opening or closing the ignition circuit, a circuit breaker for opening and closing said main circuit, a switch for controlling the battery circuit, a quick-acting switch and a time retarded switch for partly controlling the ignition circuit, all of said switches being operated by said circuit breaker.

2. The combination of an internal combustion engine, having electric igniters, an electric starter for said engine, a generator driven by the engine, a battery, a main power or lighting circuit, said battery having normal connections with the said main circuit, a relay operated by the battery current for controlling the ignition circuit and the electric starter, a relay in the main circuit for opening and closing said ignition circuit, a switch for controlling the battery circuit, a quick-acting switch and a time retarded switch for partly controlling the ignition, all of said switches being operated by said circuit breaker, and a relay in the main circuit and operated at a predetermined voltage for controlling the circuit breaker of the generator.

1,278,799. GYROSCOPIC COMPASS AND METHOD OF CONTROLLING THE SAME. HANNIBAL C. FORD, Jamaica, and HARRY L. TANNER, Brooklyn, N. Y., assignors to The Sperry Gyroscope Company, Brooklyn, N. Y. Filed Mar. 7, 1914. Serial No. 823,269. (Cl. 33—204.)

1. In a gyro-compass, a rotor bearing frame, means for mounting said frame so as to be free to turn about a vertical axis and for oscillation about a horizontal axis, a pendulum mounted independently of said frame, and a coupling between said pendulum and frame which is movable with respect to said frame in a plane substantially parallel to the plane of rotation of the rotor.



6. In a gyro-compass, a rotor bearing frame, means for mounting said frame so as to be free about the vertical axis and for oscillation about a horizontal axis, and a pendulum connected to said frame so as to increase the ballistic properties thereof about the said horizontal axis of support the point of application of the pendulum being free to remain in the same vertical plane with respect to the spinning axis of the rotor irrespective of oscillations of the gyroscope about said spinning axis.

15. In a gyro-compass, a rotor and a rotor casing pivotally supported about a horizontal axis, a pendulous mass supported adjacent said rotor casing, an auxiliary gyroscope pendulously supported by said casing, said gyroscope serving as a floating connection between said pendulum and said casing, whereby the distance of the point of connection from a vertical plane through the point of support of said member is maintained substantially constant.

22. In a gyro-compass, a rotor bearing frame, means for mounting said frame so as to be free to turn about a vertical axis and for oscillation about a horizontal axis, a pendulum mounted independently of said frame, and a coupling between said pendulum and frame which is movable with respect to said frame in a plane containing said coupling and said horizontal axis.

32. A correction device for gyro-compasses comprising a rotatable card having a plurality of markings thereon, an index adjustable across said card, means for thus adjusting the index with reference to the speed of the ship, said markings being laid out on said card so as to introduce the proper correction for the ship's heading.

[Claims 2 to 5 and 7 to 14, 16 to 21, 23 to 31, and 33 not printed in the Gazette.]

REISSUES.

14,494. VALVE-CONTROLLED CONNECTOR FOR AIR-CONDUITS. FRANK B. CHARBOIN, Seattle, Wash. Filed Mar. 28, 1918. Serial No. 225,326. Original No. 1,189,191, dated June 27, 1916, Serial No. 31,126, filed May 29, 1915. (Cl. 284—17.)



1. In a hose coupling, a casing formed with a chambered recess having cylindrical side walls and a tubular nipple communicating with said recess; a cap secured over said casing to inclose said recess, said cap being provided with an opening axially of said recess; a gasket of flexible material secured between said casing and said cap, said gasket being provided with a concentrically disposed orifice extending therethrough, a valve member disposed within said recess, said valve member being of a smaller diameter and of shorter length than said recess, and being provided with an annular recess and a concentrically disposed recess in one of its end surfaces adjacent to the inner side of said gasket to provide two concentrically disposed walls, the face of the outer wall projecting beyond the plane of the face of the inner wall whereby only said outer wall may engage with said gasket when said gasket is in its normal shape and whereby only said inner wall may engage with said gasket when said gasket is pressed inwardly to form a concavo-convex shape; and a passageway for air disposed to extend through said inner annular wall.

2. In a hose coupling, a casing formed with a chambered recess having cylindrical side walls and a tubular nipple communicating therewith, a cap secured over said casing inclosing said recess and provided with an opening axially of said recess, a gasket secured between said casing and said cap having an opening in the axis of said recess, and a valve member arranged for limited longitudinal movement within said recess, said valve member being of smaller diameter than said recess, to afford a passageway for air, and being chambered on its underside to provide a circular edge engageable with said gasket, the said gasket arranged to be engaged and moved to concavo-convex position to unseat the valve.

3. In a hose coupling, a casing formed with a chambered recess having cylindrical side walls and a tubular nipple communicating therewith, a cap secured over said casing inclosing said recess provided with an opening axially of said recess, a gasket secured between said casing and said cap having an opening in the axis of said recess, and a valve member arranged for limited longitudinal movement within said recess provided with means upon its upper side to prevent the closing of the passage into said nipple, said valve member being of smaller diameter than said recess to afford a passageway for air and being chambered on its underside to provide a circular edge engageable with said gasket, the said gasket arranged to be engaged and moved to concavo-convex position to unseat the valve.

4. In a hose coupling for inflating pneumatic tires or the like, a casing having a passage for compressed air, and a flexible gasket secured marginally to said casing adapted to contact with the end of the nipple of a tire valve or the like and to be flexed inwardly thereby to make a packed joint therewith, and having an orifice too small to permit the passage through it of said nipple, whereby a portion of the gasket overlies the end of the nipple.

5. In a hose coupling for inflating pneumatic tires or the like, a casing having a passage for compressed air, and a flexible gasket secured marginally to said casing adapted to contact with the end of the nipple of a tire valve or the like and to be flexed inwardly thereby to make a packed joint therewith, and having an orifice too small to permit the passage through it of said nipple, and a valve in said casing adapted to be unseated by pressure from said nipple.

6. In a hose coupling for inflating pneumatic tires or the like, a casing having a passage for compressed air, and a flexible gasket secured marginally to said casing adapted to contact with the end of the nipple of a tire valve or the like and to be flexed inwardly thereby to make a packed joint therewith, and having an orifice too small to permit the passage through it of said nipple, and an outwardly seating valve in said casing normally seating against the inner face of said gasket.

7. In a hose coupling for inflating pneumatic tires or the like, a casing having an inlet for compressed air, with a member partly closing the outlet from the casing, a flexible gasket secured marginally to said casing, said closure partly supporting said gasket against internal pressure, and the unsupported portion of said gasket adapted to contact with the end of the nipple of a tire valve or the like and to be flexed inwardly thereby to make a packed joint therewith, and having an orifice too small to permit the passage through it of said nipple.

8. In a hose coupling for inflating pneumatic tires or the like, a casing having an inlet for compressed air, with a member partly closing the outlet from the casing, a flexible gasket secured marginally to said casing, said closure partly supporting said gasket against internal pressure, and the unsupported portion of said gasket adapted to contact with the end of the nipple of a tire valve or the like and to be flexed inwardly thereby to make a packed joint therewith, and having an orifice too small to permit the passage through it of said nipple, and an outwardly seating valve in said casing normally seating against the inner face of said gasket where the latter is supported by said member.

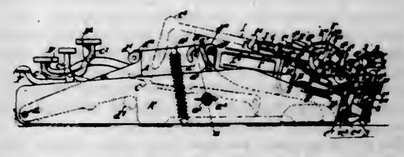
9. In a hose coupling for inflating pneumatic tires or the like, a casing having a passage for compressed air, and a flexible gasket secured marginally to said casing adapted to contact with the end of the nipple of a tire valve or the like and to be flexed inwardly thereby to make a packed joint therewith, and having an orifice too small to permit the passage through it of said nipple, whereby a portion of the gasket overlies the end of the nipple, said casing having at its outlet a partial closure having a hole or opening adapted to guide such nipple.

10. In a hose coupling for inflating pneumatic tires or the like, a casing having a passage for compressed air, and a flexible gasket secured marginally to said casing adapted to contact with the end of the nipple of a tire valve or the like to make a packed joint therewith, and having an orifice so small that a portion of the gasket overlies the end of the nipple when in operative position.

11. In a hose coupling for inflating pneumatic tires or the like, a casing having a passage for compressed air, and a flexible gasket secured marginally to said casing adapted to contact with the end of the nipple of a tire valve or the like to make a packed joint therewith, and having an orifice so small that a portion of the gasket overlies the end of the nipple when in operative position, and a valve in said casing adapted to be unseated by pressure from said nipple.

12. In a hose coupling for inflating pneumatic tires or the like, a casing having a passage for compressed air, and a flexible gasket secured marginally to said casing adapted to contact with the end of the nipple of a tire valve or the like to make a packed joint therewith, and having an orifice so small that a portion of the gasket overlies the end of the nipple when in operative position, and an outwardly seating valve in said casing normally seating against the inner face of said gasket.

14,495. TYPE-WRITING MACHINE. EMMIT G. LATTA, Syracuse, N. Y., assignor to Corona Typewriter Company, Inc., a Corporation of New York. Filed May 24, 1918. Serial No. 236,440. Original application filed Nov. 2, 1911, Serial No. 658,153. Renewed Oct. 14, 1916, Serial No. 125,702. Original No. 1,222,550, dated Apr. 10, 1917. (Cl. 197—186.)



1. In a typewriting machine, the combination with a series of upwardly and rearwardly movable type-bars, a platen, and a carriage therefor, of a stationary frame on which the type bars are mounted, a support for the carriage which is mounted on the stationary frame to move in a substantially upright position substantially directly downward to lower the carriage while retaining it upright from an elevated operative position to an in-

operative position materially below its operative position.

2. In a typewriting machine, the combination with a series of upwardly and rearwardly movable type bars each having a plurality of type, a platen, a carriage therefor, and means for shifting the type bars relative to the platen for printing different case characters, of a stationary frame on which the type bars are mounted, a support by which the carriage is normally supported in a relatively fixed elevated operative position and which is mounted on the stationary frame to move downwardly in a substantially upright position with the carriage upright thereon to lower the carriage to an inoperative position materially below its operative position for collapsing the machine to smaller dimensions.

3. In a typewriting machine, the combination with printing instrumentalities, a platen, and a carriage therefor, of a stationary frame supporting the printing instrumentalities, a support by which the carriage is normally supported in an elevated operative position above and in rear of the printing instrumentalities and which is mounted on the stationary frame to move downwardly while retaining the carriage substantially upright to lower the carriage from its operative position to an inoperative position in rear of the printing instrumentalities for collapsing the machine to smaller dimensions.

4. In a typewriting machine, the combination with printing instrumentalities, a platen, and a carriage therefor, of a stationary frame supporting the printing instrumentalities, a support by which the carriage is normally supported at an elevation above the printing instrumentalities and which is mounted on the stationary frame to move substantially directly downward while retaining the carriage substantially upright to a position to place the carriage in an inoperative position at substantially the same elevation as the printing instrumentalities.

5. In a typewriting machine, the combination with printing instrumentalities, a platen, and a carriage therefor, of a stationary frame on which said printing instrumentalities are shiftably mounted for printing different case characters; and a frame which supports said carriage and is movable relative to said other frame to support the platen in an operative position above said printing instrumentalities and to lower the carriage while retaining it upright to an inoperative position in rear of said printing instrumentalities, substantially as set forth.

6. In a typewriting machine, the combination with printing instrumentalities, a platen and a carriage therefor, of a stationary frame on which said printing instrumentalities are mounted, means for shifting said printing instrumentalities for printing different case characters, and a frame which is pivoted to the stationary frame and is normally held stationary to support the carriage in an elevated operative position but is movable to lower the carriage to an inoperative position in rear of the printing instrumentalities, substantially as set forth.

7. In a typewriting machine, the combination with printing instrumentalities, a platen, and a carriage therefor, of a stationary frame on which said printing instrumentalities are mounted, and a carriage supporting frame which is pivoted to the front portion of said stationary frame and is movable to support the carriage in an elevated operative position and to lower said carriage to an inoperative position, substantially as set forth.

8. In a typewriting machine, the combination with type bars, key actuating mechanism therefor, a platen and a carriage for the platen, of a stationary frame on which said type bars and their key actuating mechanism are mounted, and a carriage supporting frame which is movably connected to said stationary frame and is movable substantially directly up and down in substantially upright position to support the carriage in an elevated operative position and to lower the carriage while retaining it upright to a position in rear of said type bars, substantially as set forth.

9. In a typewriting machine, the combination with type bars, key actuating mechanism therefor, a platen and a platen carriage, of a frame on which said key actuating mechanism is mounted, and a carriage supporting frame which is movable substantially directly up and down in substantially upright position to support the carriage in an elevated operative position and to lower the carriage while retaining it upright to an inoperative position in rear of said key actuating mechanism, substantially as set forth.

10. In a typewriting machine, a two part frame, one of which parts surrounds and is movable up and down relative to the other, and a platen which is supported by said movable frame part and is movable therewith from an elevated operative position to a lower inoperative position, substantially as set forth.

11. In a typewriting machine, a frame comprising a stationary part and a movable part which is connected at its front portion to said stationary part, and a platen which is mounted on the rear portion of said movable part, the rear portion of said movable frame part being movable up and down to support the platen in an elevated operative position and in a lower inoperative position, substantially as set forth.

12. In a typewriting machine, a frame comprising a stationary part and a movable part which is pivoted at its front portion to said stationary part, the rear portion of said movable frame part being movable up and down, and said movable frame part being adapted to surround said stationary part when lowered, and a platen which is supported by the rear portion of said movable frame part, substantially as set forth.

13. In a typewriting machine, a frame comprising two substantially rectangular parts, one of which is pivotally connected at its front portion to the other and is movable up and down relative thereto and is adapted to surround the other frame part when lowered, a platen and a carriage therefor mounted on said movable part, and printing instrumentalities mounted on said other frame part, substanially as set forth.

14. In a typewriting machine, a frame comprising a stationary part and a part which is mounted to move up and down on said stationary part, a platen, and a carriage therefor which are mounted on and movable with said movable frame part while being retained in substantially upright position to and from an elevated operative position for placing the carrage in position for use and for collapsing the machine, and means for rigidly locking said movable frame part from movement with the carriage in its operative position.

15. In a typewriting machine, the combination of a stationary frame and an adjustable normally stationary frame which is adjustable up and down on said stationary frame, type bars and actuating mechanism therefor mounted on said stationary frame, a platen carriage mounted on and movable with said adjustable frame part while being retained substantially upright from an operative relation to the type bars to a lower inoperative relation, a universal bar which is mounted on said adjustable frame and moves therewith into and out of operative relation to the type bars, and means operatively connected with and actuated by the universal bar.

16. In a typewriting machine, the combination of a stationary frame and an adjustable normally stationary frame which is adjustable up and down on said stationary frame, type bars and actuating mechanism therefor mounted on said stationary frame, a platen carriage mounted on and movable with said adjustable frame part while being retained substantially upright from an operative relation to the type bars to a lower inoperative relation, means for shifting the type bars for printing different case characters, a universal bar which is mounted on said adjustable frame and moves therewith into and out of operative relation to the type bars, and means operatively connected with and actuated by the universal bar.

17. In a typewriting machine, the combination of a stationary frame and an adjustable normally stationary frame which is adjustable up and down on said stationary frame, type bars and actuating mechanism therefor mounted on said stationary frame, a platen carriage mounted on and movable with said adjustable frame part while being retained substantially upright from an operative relation to the type bars to a lower inoperative relation, a universal bar which is normally supported in position to be actuated by the type bars and is movable downwardly with said adjustable frame to an inoperative position in rear of the type bars, and means operatively connected with and actuated by the universal bar.

18. In a typewriting machine, the combination of a stationary frame and an adjustable normally stationary frame which is adjustable up and down on said stationary frame, type bars and actuating mechanism therefor mounted on said stationary frame, a platen carriage mounted on and movable with said adjustable frame part while being retained substantially upright from an operative relation to the type bars to a lower inoperative relation, means for shifting the type bars for printing different case characters, a universal bar which is normally supported in position to be actuated by the type bars in the different case printing positions thereof and is movable downwardly with said adjustable frame to an inoperative relation to the type bars, and means operatively connected with and actuated by the universal bar.

19. In a typewriting machine, the combination of a two part frame comprising parts pivotally connected at the front end of the machine, one of said parts being stationary and the other movable thereon in a substantially upright arc, a segment supporting a series of type bars mounted on said stationary frame part, and a pair of ribbon spools mounted on the movable frame part in position to pass directly downward beside the type bars at the ends of the segment when the movable frame part is lowered, substantially as set forth.

20. In a typewriting machine, the combination of a two part frame comprising a stationary part and a movable part which are pivotally connected at their front ends, the rear end of said movable part being movable up and down relative to said stationary part, type bars and actuating mechanism therefor mounted on said stationary frame part, a platen carriage mounted on said movable frame part and movable therewith while being retained in substantially upright position from an elevated operative position substantially directly downward to a position in rear of said type bars, and ribbon spools supported by said movable frame part in front of said carriage and at opposite sides of said type bars, substantially as set forth.

21. In a typewriting machine, the combination of a two part frame comprising a stationary part and a movable part which is movably mounted on said stationary part, type bars and actuating mechanism therefor mounted on said stationary frame part, a platen carriage and ribbon spools and a ribbon vibrator mounted on and movable with said movable frame part, said carriage and ribbon vibrator being movable while being retained substantially upright, to positions in rear of said type bars and said ribbon spools being movable to position at opposite sides of said type bars when said movable frame part is lowered, substantially as set forth.

22. In a typewriting machine, the combination of a two part frame comprising a stationary part and a movable part which are pivotally connected at their front ends, type bars mounted on said stationary frame part, a paper carriage and a ribbon vibrator arranged on said movable frame part to move up and down therewith in rear of said type bars while being retained in substantially upright position, and ribbon spools arranged on said movable frame part to move up and down therewith at opposite sides of said type bars, substantially as set forth.

23. In a type writing machine, the combination of a two part frame comprising a stationary part and a movable part which are pivotally connected at their front ends, said movable part being movable substantially directly up and down on said stationary frame part, and a paper carriage and ribbon feed mechanism arranged on said movable frame part to move up and down therewith in rear of said type bars while being retained in substantially upright position, substantially as set forth.

24. In a typewriting machine, the combination of a frame comprising a stationary part and a part whch is pivotally mounted directly on said stationary part, type bars mounted on said stationary frame part, and a paper carriage and carriage escapement including a universal bar arranged on said pivotally mounted frame part and movable therewith from an elevated operative position to a lower inoperative position relative to said type bars, substantially as set forth.

25. In a typewriting machine, the combination of a frame comprising a stationary part and a movable part pivotally connected at their front ends, type bars mounted on said stationary frame part, and a paper carriage and universal bar mechanism arranged on said movable frame part to move up and down therewith relative to said stationary frame part and said type bars while being retained in substantially upright position, substantially as set forth.

26. In a typewriting machine, the combination of a frame comprising a stationary part and a movable part, a platen and platen carriage mounted on said movable frame part and movable therewith from an operative to an inoperative position, and means for rotating said platen including a jointed line space lever having a part which is movable from an operative position to a position at a lower elevation, substantially as set forth.

27. In a typewriting machine, the combination of a frame comprising a stationary part and a movable part, a keyboard on said stationary frame part, a platen carriage supported by said movable frame part and movable therewith from an operative to an inoperative position, and a jointed line space lever for the platen normally extending forwardly from the carriage toward the keyboard and having a front portion adapted to fold backwardly toward the carriage to a position at a lower elevation, substantially as set forth.

28. In a typewriting machine, the combination of a frame comprising a stationary part and a part which is movable up and down on said stationary part, a platen carriage supported by said movable frame part and movable therewith from an operative to an inoperative position, and spring supporting means for said movable frame part, substantially as set forth.

29. In a typewriting machine, the combination of a frame comprising a stationary part and a movable part, type bars mounted on said stationary part, a platen carriage supported by said movable frame part and movable therewith from an operative to an inoperative position relative to said type bars, a spring acting to raise and support the movable frame part, and means for locking said movable frame part in its elevated position, substantially as set forth.

30. In a typewriting machine, the combination of a frame comprising a stationary part and a movable part, type bars and a space key mounted on said stationary frame part, a platen carriage and carriage escapement including a universal bar mounted on said movable frame part and movable therewith from an operative to an inoperative position relative to said type bars, and connections between said space key and said universal bar which permit the movement of said carriage to said inoperative position, substantially as set forth.

31. In a typewriting machine, the combination of a frame comprising a stationary part and a movable part which is movable on said stationary part substantially directly downward from an elevated to a lower position, a keyboard arranged in banks on said stationary frame part, and a platen carriage which is supported by said movable frame part and is movable therewith while being retained in substantially upright position from an operative position at an elevation above the upper bank of keys to an inoperative position at a lower elevation in rear of said keyboard.

32. In a typewriting machine, a two part frame, comprising a stationary part, and a movable part mounted thereon, a segment supporting a series of type bars mounted on the stationary part, a universal bar mounted on the movable frame part in position to be struck by the type bars and adapted to pass downward in rear of the type bar segment when the movable frame part is lowered to inoperative position.

33. In a typewriting machine, the combination with printing instrumentalities, and a platen, of supports for said printing instrumentalities and for said platen, the latter of which is movable for collapsing the machine, the part that supports the printing instrumentalities occupying a position within the other part when the machine is collapsed.

34. In a typewriting machine, the combination of a two part frame one of which parts is stationary and the other movable thereon for moving the platen to and from an operative position, a series of upwardly and rearwardly swinging type bars each having a plurality of type mounted on the stationary frame part and shiftable thereon, a platen mounted on the movable frame part, and a universal bar in fixed relation with the platen that is adapted to intercept the type bars at different points between their ends when the type bars are in different positions.

35. In a typewriting machine, a two part frame comprising a stationary part and a movable part pivotally connected at their front ends, a series of type bars arranged on the stationary frame part to swing upwardly and rearwardly, a platen and a carriage arranged on the movable frame part to travel transversely thereon, and to drop down in rear of the type bars while being retained in substantially upright position when the movable frame part is moved on its pivot.

36. In a typewriting machine, a rigid stationary frame, and a rigid movable frame pivotally mounted thereon and supported thereby, a segment having a series of type bars arranged on the stationary frame part to swing upwardly and rearwardly, and a transversely movable, platen and carriage mounted on the movable frame part, the plane of the segment being inclined to the rear to permit the carriage to swing downwardly from its operative position to an inoperative position in rear of the segment.

37. In a typewriting machine, the combination of a two-part main frame, each comprising a pair of parallel side plates and a connecting bar, and arranged with the side plates of one part to overlap the side plates of the other part, and said parts being always maintained in an upright position.

38. In a typewriting machine, the combination of a two-part main frame, a space key arranged on one part, and a universal bar on the other part of said frame, and operatve connections between the space key and the universal bar arranged to permit the universal bar to be moved downwardly while maintaining its upright position without interference.

39. In a typewriting machine, the combination of a two-part main frame having one part movable relatively to the other, a platen carriage, escapement mechanism, ribbon mechanism including means for vibrating a ribbon and for feeding the same lengthwise, and a universal bar all mounted upon one part of the frame, a keyboard mounted upon another part of the frame, and type adapted to be moved toward the platen carriage as each key is depressed.

40. In a typewriting machine, the combination of a main frame having relatively movable parts adapted to move one within the other to reduce the cubical dimensions of the machine in one position thereof, a platen carriage, escapement mechanism, ribbon instrumentalities, and a universal bar all mounted upon one part of said frame, and a keyboard mounted on another part of said main frame, said keyboard, carriage, escapement mechanism, ribbon instrumentalities all maintaining upright position while in a normal operative position and while the parts are moved relatively to make the machine compact.

41. In a typewriting machine, the combination of a two part main frame, each part comprising a pair of parallel side plates and a connecting bar, and arranged with the side plates of one part to overlap the side plates of the other part, keys, and printing instrumentalities carried by one of said parts, a platen carriage carried by the other of said parts, and means to permit said parts to have a relative up and down movement to reduce the height of the machine when not in use.

42. In a typewriting machine, the combination of two main frame parts each comprising a pair of parallel side plates and a connecting bar, means for pivoting together the side plates near the front of the machine, keys, and printing instrumentalities carried by one part, a platen carriage carried by the other part in the rear of the printing instrumentalities, whereby the frame parts may have a relative up and down swinging movement to place the platen carriage at the rear of the printing instrumentalities when the machine is in its inoperative position.

43. In a typewriting machine, the combination of a two-part support having one part movable relatively to the other, a platen carriage escapement mechanism, ribbon mechanism, including means for vibrating a ribbon and for feeding the same lengthwise, and a universal bar, all mounted upon one part of the support, a keyboard mounted upon the other part of the support, and type adapted to be moved toward the platen carriage as the keys are depressed.

44. In a typewriting machine, keys, a type bar for each key, a carriage, and means for supporting said carriage at a higher level than the type bars, and means permitting the carriage to move directly downwardly in the rear of type bars.

45. In a typewriting machine, the combination of a two-part support having one part movable relatively to the other, a platen carriage, an escapement mechanism, and a universal bar all mounted upon one part of the support, a keyboard mounted upon the other part of the support, and type adapted to be moved toward the platen carriage as the keys are depressed.

46. A compactible typewriting machine, embodying two supporting-members, one carrying the platen and its associated devices and the other the keys, type bars operable by the keys, said supporting members being so connected as to be relatively movable to thereby compact or extend the machine by bringing the platen and its associated devices closer to or farther from the keys, the two supporting members maintaining the operative elements in their upright positions during the act of compacting as well as extending the machine.

47. A compactible typewriting machine, embodying two supporting members, one carrying the platen and its associated devices and the other the keys and the type bars operable by the keys, said supporting members being so connected as to be relatively movable to thereby compact or extend the machine by bringing the platen and its associated devices closer to or farther from the keys and type bars, the two supporting members maintaining the upright elements in their operative positions during the act of compacting as well as extending the machine.

48. In a compactible typewriting machine, the combina- the combination of a two-part support, one part carrying the platen and its associated devices and the other part the keys and type bars, one of said support parts being movable into the other to thereby reduce the outside dimensions of the machine when compacted, the construction and arrangement of the devices on each support part being such that in thus moving the support parts into and out of each other the groups of devices carried by each support part maintain their operative positions.

49. A compactible typewriting machine embodying two supporting members, one carrying the platen and its associated devices and the other the keys, type bars operable by the keys, the upper one of said supporting members being so connected as to be vertically movable with respect to the lower supporting member to thereby compact or extend the machine by bringing the platen and its associated devices closer to or farther from the keys, the two supporting members maintaining the operative elements in their upright positions during the act of compacting as well as extending the machine.

50. In a typewriting machine, the combination of a two part supporting frame, each of said parts comprising a pair of parallel side plates and a connecting bar, and means for locking the side plates of one frame part to the side plates of the other frame part to form a rigid rectangular frame, substantially as set forth.

51. In a typewriting machine, the combination of type-carriers, a keyboard therefor, a platen, and means which enable the machine to be contracted into a smaller space than that which it occupies when in use, said means comprising a frame having relatively movable sections carrying the working parts of the machine, said sections being adapted to fit one within the other, and means which enable the type-carriers and platen to be adjusted bodily relatively one to the other into and out of cooperative relation.

52. In a collapsible typewriting machine, the combination of a base frame, upwardly and rearwardly movable type bars supported on said base frame, a key action for actuating the type bars, ribbon spools, mechanism for rotating the spools including means adapted to be engaged and actuated by the type bars, means for supporting the spools and spool-rotating mechanism in an elevated operative position relatively to the type bars when the machine is in its normal operative position, said means being shiftable to move the spools and spool-rotating means downwardly while upright to a lower inoperative position relatively to the type bars.

53. In a collapsible typewriting machine, the combination of type bars, a key action for operating the type bars, a ribbon vibrator, ribbon feeding mechanism, means operable by the type bars for actuating the ribbon vibrator and ribbon feeding mechanism, and means whereby the ribbon vibrator and ribbon feeding mechanism together with the actuating means therefor may be shifted bodily relatively to the type bars while upright from an operative position to a more compact inoperative position.

54. In a visible typewriting machine, the combination of upwardly moving type bars, keys operatively connected to the type bars, a platen carriage movable out of the path of the type bars into compact relation to another part of the machine at the rear of the type bars while maintained in an upright position, and ribbon mechanism adapted to be operated by the type bars on the depression of the keys and movable out of the path of the type bars and partaking of the compact movement of the platen carriage.

55. In a collapsible typewriting machine, the combination of type bars, a key action, ribbon vibrating means operable by the type bars when the machine is in its normal extended operative position, and means for shifting the ribbon vibrating means while upright to a compact position out of coöperative relation with the type bars when the machine is collapsed.

56. In a collapsible typewriting machine, the combination of type bars, a key action for operating the type bars, a platen carriage, ribbon mechanism operable by the type bars when the machine is in its normal extended position, and means for shifting the ribbon mechanism and platen carriage while upright to a compact position out of coöperative relation with the type bars when the machine is collapsed.

57. In a collapsible typewriting machine, the combination of a base frame, a key action, type bars mounted on the base frame, a support movable relatively to the base frame to reduce the height of the machine, connections between said support and frame for maintaining the support in an upright position at all times, a platen carriage mounted on the support, and ribbon mechanism operable by the type bars, said ribbon mechanism and platen carriage being maintained in coöperative relation and in an upright position at all times and being movable bodily with the support into and out of coöperative relation with the type bars.

58. In a visible typewriting machine, the combination of a support, upwardly and rearward moving typebars, key-operated levers connected to operate the type-bars, both type bars and levers being mounted on the support, there being one type bar for each key, a second support, connections between said supports whereby the second support may be moved up and down while in an upright position, a carriage adapted to travel along the second support and movable therewith out of the path of the type bars while maintained in an upright position into compact relation to another part of the machine while not in use, and ribbon mechanism mounted on the second support and adapted to be operated by the type bars and completely separated therefrom at all times, said ribbon mechanism partaking of the compact movement of the carriage and including means for vibrating a ribbon and for feeding the same lengthwise.

59. In a visible typewriting machine, the combination of pivotally held type bars, key-operated levers connected to operate the type bars, there being one type bar for each key, a support movable while upright relatively to the type bars, a carriage adapted to travel along the support and movable therewith out of the path of the type bars while maintained in an upright position into compact relation to another part of the machine at the rear of the type bar pivoting means while not in use, and ribbon mechanism mounted on the carriage support and adapted to be operated by the type bars and completely separated therefrom at all times, said ribbon mechanism partaking of the compact movement of the carriage and support and including means for vibrating a ribbon and for feeding the same lengthwise.

60. In a collapsible typewriting machine, the combination of a base, a key action, a type segment supported on the base, upwardly and rearwardly movable type bars held to the type segment, a movable support, connections between the base and support whereby the support may be moved downwardly while upright to reduce the height of the machine, a platen carriage mounted on said support, ribbon spools and a ribbon vibrator supported in coöperative relation with the platen carriage, means mounted on said support and operable by the type bars for operating the ribbon vibrator and spools, said vibrator and the operating means for the vibrator and spools being movable with the platen carriage to a compact position at the rear of the type segment and said spools being movable to a lower position at opposite sides of the type segment when the support is moved downwardly to collapse the machine.

61. In a visible typewriting machine, the combination of type bars, a support for the type bars, a second support pivotally held adjacent its forward end to the type bar support, a platen carriage mounted on said second support at the rear thereof and movable from an elevated position in a substantially vertical direction to a more compact lower position at the rear of said type bars while maintained in an upright position, and ribbon mechanism operated by the type bars and completely separable therefrom and partaking of the compact movement of said platen carriage.

62. In a visible typewriting machine, the combination of type bars, a support for the type bars, a second support, a platen carriage having an up-and-down movement with said support from an elevated position to a lower and more compact position while maintained in an upright position, keys operatively connected to the type bars, a universal bar mounted on the carriage support, a ribbon vibrator operatively connected to the universal bar also mounted on said carriage support, and ribbon spools and means for rotating said spools also mounted on the carriage support, said vibrator, universal bar and ribbon feed means partaking of the compact movement of the carriage.

63. In a collapsible typewriting machine, the combination of a base frame, upwardly and rearwardly movable

type bars, a key action for actuating the type bars, a movable support, connections between said support and frame whereby said support may be moved downwardly while upright from a normal elevated position to a lower position to collapse the machine, a platen carriage mounted on said support, ribbon mechanism supported in coöperative relation with the platen carriage, and a universal bar operatively connected to actuate the ribbon mechanism and mounted on said support in position to be operated by the type bars, said platen carriage and universal bar being movable out of the path of the type bars to a lower position at the rear of the type bars when the machine is collapsed and said carriage and ribbon mechanism being maintained in coöperative relation and in an upright position at all times.

64. In a visible typewriting machine, the combination of a main frame having pivotally held and relatively movable parts to reduce the dimensions thereof when moved from a normal operative elevated position to an abnormal lower position while maintained in an upright position, a platen carriage, ribbon vibrating mechanism, and means for feeding the ribbon lengthwise, all mounted upon one member of the main frame, keys mounted upon another part of the frame, type bars operated by the keys and adapted to actuate the ribbon vibrating mechanism, said ribbon vibrating mechanism and lengthwise feeding mechanism being entirely independent of and separated at a distance from the type bars to adapt said vibrating mechanism and the lengthwise ribbon feed to be moved from a normal operative position to an inoperative position while all the parts are maintained in their upright position.

65. In a visible typewriting machine, the combination of a two-part main frame, ribbon vibrating mechanism mounted on one part and key-levers mounted on the other frame part, a universal bar adapted to be operated as the key-levers are actuated and operatively connected to move the vibrator and mounted on the same part of the frame as said ribbon vibrating mechanism, said key-levers and universal bar being adapted to move relatively to place the key-levers out of operative relation to the universal bar and make the machine compact while not in use.

66. In a collapsible typewriting machine, the combination of a frame comprising a stationary member and a movable member connected adjacent their forward ends and having a relative vertical movement at their rear ends, a type segment supported on the stationary member, type bars having an upward and rearward movement supported in the type segment, a key action for actuating the type bars, a platen carriage supported on the movable member in the rear of the plane of the type segment, ribbon spools supported on the movable member at opposite sides of the type segment, and means supported on the movable member for operating the ribbon spools and movable with the platen carriage to a point in rear of the type segment when the movable member is lowered to collapse the machine.

67. In a collapsible typewriting machine, the combination of a frame comprising a stationary member and a movable member connected adjacent their forward ends and having a relative vertical movement at their rear ends, a type segment supported on the stationary member, type bars having an upward and rearward movement supported in the type segment, a key action for actuating the type bars, a platen carriage supported on the movable member in the rear of the plane of the type segment, ribbon spools supported on the movable member at opposite sides of the type segment, means supported on the movable member for vibrating a ribbon to and from the printing point, and means supported on the movable member for rotating the ribbon spools, said ribbon vibrating means and spool rotating means being movable with the platen carriage to a point in rear of the type segment when the movable member is lowered to collapse the machine.

68. In a collapsible typewriting machine, the combination of a frame comprising a stationary member and a movable member connected adjacent their forward ends and having a relative vertical movement at their rear ends, a type segment supported on the stationary member, type bars having an upward and rearward movement supported in the type segment, a key action for actuating the type bars, a platen carriage supported on the movable member in the rear of the plane of the type segment, ribbon spools supported on the movable member at opposite sides of the type segment, a ribbon vibrator supported on the movable member, a universal bar supported on the movable member and adapted to be actuated by the type bars when the movable member is in elevated position, connections between the universal bar and ribbon vibrator for actuating the vibrator, and means supported on the movable member for operating the ribbon spools, said ribbon vibrating means, spool-operating means, and universal bar being movable to a point in rear of the type segment when the movable frame is lowered to collapse the machine.

69. In a typewriting machine, the combination of a frame comprising a stationary base member, a movable support at the rear of the base member, connections between said support and the base member whereby said support may be moved downwardly at the rear of the type bars while upright from a normal elevated position to a lower position to make the machine more compact, a type segment supported in the stationary base member, type bars, a key action for actuating the type bars, a platen carriage supported on the movable support, ribbon spools supported on the movable support at opposite ends thereof to move downwardly at the sides of the machine, and means on the movable support for operating the ribbon spools and movable with the platen carriage to a point in rear of the type segment when the movable support is lowered to collapse the machine.

70. In a typewriting machine, the combination of a frame comprising a stationary base member, a movable support at the rear of the base member, connections between said support and the base member whereby said support may be moved downwardly at the rear of the type bars while upright from a normal elevated position to a lower position to make the machine more compact, a type segment supported in the stationary base member, type bars, a key action for actuating the type bars, a platen carriage supported on the movable support, ribbon spools supported on the movable support at opposite ends thereof to move downwardly at the sides of the machine, means supported on the movable support for vibrating a ribbon to and from the printing point, and means on the movable support for operating the ribbon spools, said ribbon vibrating means and said spool operating means being movable with the platen carriage to a point in rear of the type segment when the movable support is lowered to collapse the machine.

71. In a visible typewriting machine, the combination of a keyboard, type bars each operated by individual keys of the keyboard, a platen carriage movable from a normal operative position to a more compact and inoperative position with relation to the type bars, an escapement mechanism for said carriage partaking bodily of the compact movement of the carriage, and a universal bar operatively connected to the escapement mechanism and mounted to partake of the compact movement of the carriage.

72. In a typewriting machine, the combination of a keyboard, type bars each operated by individual keys of the keyboard, a platen carriage movable while upright from a normal operative position to a more compact position at the rear of the type bars, an escapement mechanism for said carriage partaking of the compact movement of the carriage, and a universal bar operatively connected to the escapement mechanism and also mounted to partake of the compact movement of the carriage.

73. In a typewriting machine, the combination of a base frame part, a key action and type bars mounted on the base frame part, a movable frame part pivotally held adjacent its front end to the base frame part, a platen carriage supported at the rear of the movable frame part and movable therewith while upright from a normal elevated operative position with relation to the type bars

to a more compact inoperative position at the rear of the type bars, an escapement mechanism for said carriage mounted upon the movable frame part, and a universal bar mounted on the movable frame part and operatively connected with the escapement mechanism, said universal bar being normally supported in position to be actuated by the type bars during the printing movement thereof, and being movable with the carriage from its normal operative position to a lower inoperative position at the rear of the type bars.

74. In a visible typewriting machine, the combination of a base frame part, a movable frame part pivotally held adjacent its forward end to the base frame part, key-operated levers mounted on the base frame part, upwardly and rearwardly movable type bars mounted on the base frame part and operatively connected to the key-operated levers, a platen carriage mounted at the rear of the movable frame part and movable from a normal elevated operative position downwardly to a more compact inoperative position at the rear of the type bars, an escapement mechanism mounted on the movable frame part, a universal bar operatively connected to actuate the escapement mechanism and adapted when in its normal operative position to be engaged by the type bars during the printing movement thereof, said escapement mechanism and universal bar being movable with the platen carriage from their normal operative positions downwardly to a more compact inoperative position at the rear of the type bars.

75. In a visible typewriting machine, the combination of a frame, a key action and type bars mounted on the frame, a platen carriage, a foldable support for the platen carriage held to the frame, an escapement mechanism mounted at the rear of the carriage on said foldable support, a universal bar mounted on said support and adapted to be engaged by the type bars during the printing movement thereof, said escapement mechanism and universal bar being operatively connected at all times and being foldable with the platen carriage from a normal elevated operative position downwardly to a more compact inoperative position at the rear of the type bars.

76. In a visible typewriting machine, the combination of a universal keyboard, a type segment, upwardly and rearwardly movable type bars mounted in said segment and operatively connected with individual keys forming a part of the keyboard, a platen carriage, a foldable support for the platen carriage, an escapement mechanism for the carriage mounted on said foldable support and movable bodily with the platen carriage from a normal operative position to a more compart inoperatve position at the rear of the type segment, and a universal bar mounted on said foldable support and adapted to be operated by the type bars, said universal bar being operatively connected at all times with the escapement mechanism and being movable with the support from a normal operative position above the type segment rearwardly and downwardly to an inoperative position at the rear of the type segment.

77. In a typewriting machine, the combination of a substantially rectangular base frame part, a substantially rectangular movable frame part pivotally held adjacent its forward end to the forward end of the base frame part, a platen carriage supported at the rear of the movable frame part, a key action and type bars mounted on the base frame part, an escapement mechanism mounted in its entirety on the movable frame part, means for supporting the movable frame part with its rear end in an elevated position to support the carriage and escapement mechanism in an operative position with relation to the type bars, said movable frame part being movable downwardly to a more compact position about the base frame part to reduce the height of the machine and to move the carriage and escapement mechanism relatively to the key action and type bars from their normal elevated operative position into a more compart and inoperative position with relation to the type bars.

78. In a visible typewriting machine, the combination of a type action, a support therefor, a second and movable support, a platen carriage mounted upon said second support, escapement mechanism, a universal bar operatively connected to the escapement mechanism and mounted with said mechanism on said movable support, and means that enable said second support to be moved relatively to the other support to place the parts mounted upon one support into an inoperative position relative to the parts mounted upon the other support.

79. In a visible typewriting machine, the combination of a keyboard and type bars operated by individual keys of the keyboard, a platen carriage movable from a normal operative position to a more compact one, escapement mechanism, a universal bar operatively connected to the escapement mechanism and adapted to be moved by the type bars during the printing operation, a vertically arranged space lever adapted also to engage the universal bar, operative connections between the space bar and the space lever, said universal bar being movable with the platen carriage relatively to the space lever from a normal operative position to a more compact one.

80. In a visible typewriting machine, the combination of type bars, a keyboard having keys operating individual type bars, a platen carriage movable from a normal operative position to an abnormi compact and inoperative one, a universal bar partaking of the compact movement of the platen carriage, an escapement mechanism operatively connected to the universal bar and adapted to control the platen carriage, a space lever adapted to operate the universal bar, a link connected to the space lever, a lever connected to the link, a space bar, means for supporting the space bar, and a link connecting the space bar supporting means to said lever to adapt the space bar to operate the space lever at each depression tbereof.

81. In a visible typewriting machine, the combination of type bars, a keyboard having keys operating individual type bars, a platen carriage movable from a normal operative position to an abnormal compact and inoperative one, a universal bar partaking of the compact movement of the platen carriage, an escapement mechanism operatively connected to the universal bar and adapted to control the letter feed movement of the platen carriage, a vertically arranged space lever adapted to operate the universal bar, a link connected to the space lever, a space bar, and operative connections between the space bar and the link.

82. In a visible typewriting machine, the combination of a keyboard having keys, type bars operated by individual keys, a platen carriage, a space lever, a space bar operatively connected to the space lever, an escapement mechanism, and a universal bar adapted to be operated by the space lever and type bars and movable with the carriage and the escapement mechanism relatively to the space lever and type bars from a normal operative position to a more compact one.

83. In a visible typewriting machine, the combination of a keyboard, upwardly and rearwardly movable type bars operatively connected with the keys of the keyboard, a platen carriage movable from a normal elevated operative position to a more compact lower inoperative position, an escapement mechanism, a space lever, a space bar operatively connected with the space lever, and a universal bar adapted to be operated by the space lever and the type bars and movable with the carriage and the escapement mechanism from a normal elevated operative position downwardly to a more compact inoperative position at the rear of the space lever and type bars.

84. In a compactible typewriting machine, the combination of a two-part support, one part constituting a base frame member and the other being pivoted to the base frame member and in operative position extending upwardly above the rear part of the base member, a platen carriage, a platen, an escapement, an operating element connected to said escapement, all of said elements being mounted on the pivoted frame part, key actuated means mounted on the base frame part and adapted to engage the escapement operating element, the pivoted member of the supporting frame being so secured to the base frame part as to be swung in an arc downwardly and rearwardly at the rear of the base frame part to make the machine more compact, and to be swung upwardly and

forwardly to place the platen in printing position and to bring the operating element of the escapement in position to be engaged by the key actuated means on the base frame part, the two supporting members maintaining all of the operative elements in their upright positions during the act of compacting as well as extending the machine.

85. In a compactible typewriting machine, the combination of a two-part support, one part constituting a base frame member and the other being pivoted to the base frame member and in operative position extending upwardly above the rear part of the base member, a platen carriage, a platen, an escapement, all of said elements being mounted on the pivoted frame part, key actuated means mounted on the base frame part and adapted to operate the escapement, the pivoted member of the two-part support being so secured to the base frame part as to be swung in an arc downwardly and rearwardly at the rear of the base frame part to make the machine more compact and to be swung upwardly and forwardly in an arc to place the platen in printing position, and to bring the escapement in position to be operated by the key actuated means on the base frame part, the two supporting members maintaining all of the operative elements in their upright positions during the act of compacting as well as extending the machine.

86. In a compactible typewriting machine, the combination of a two-part support, one part constituting a base frame member and the other part being pivoted to the base frame member and in operative position extending upwardly above the rear of the base member, a platen carriage, a platen, an escapement, and a universal bar connected to the escapement all being mounted on the pivoted frame part, key actuated means mounted on the base frame part and adapted to engage the universal bar, the pivoted member of the two-part support being so secured to the base frame part as to be swung in an arc downwardly and rearwardly at the rear of the base frame part to make the machine more compact and to be swung upwardly and forwardly in an arc to place the platen in printing position and to bring the universal bar in position to be engaged by the key actuated means on the base frame part, the two supporting members maintaining all of the operative elements in their upright positions during the act of compacting as well as extending the machine.

87. In a compactible typewriting machine, the combination of a two-part support, one part constituting a base frame member and the other part being pivoted to the base frame member and in operative position extending upwardly above the rear of the base member, a platen carriage, a platen, an escapement, and a universal bar connected to the escapement, all being mounted on the pivoted frame part, type bars mounted on the base frame part and adapted to engage the universal bar when moved to printing position, the pivoted member of the two-part support being so secured to the base frame part as to be swung in an arc downwardly and rearwardly at the rear of the base frame part to make the machine more compact and to be swung upwardly and forwardly in an arc to place the platen in printing position and to bring the universal bar in position to be engaged by the type bars on the base frame part, the two supporting members maintaining all of the operative elements in their upright positions during the act of compacting as well as extending the machine.

88. In a typewriting machine, the combination of a base frame, type bars mounted on the base frame, a key-operated means for actuating the type bars, a platen, a carriage, a carriage bed, an escapement mechanism supported in fixed relation to the carriage bed, means held to the carriage bed and pivotally connected with the base frame adapted to normally hold the bed in an elevated position to support the platen in the path of the type bars, said means being movable to shift the bed and carriage together with the escapement mechanism rearwardly and downwardly while upright to a lower position at the rear of and out of the path of the type bars, and an actuating device for the escapement mechanism adapted to be engaged by the type bars during the printing movement thereof when the platen is in its elevated position and mounted to move with the platen out of the path of the type bars.

89. In a collapsible typewriting machine, the combination of a base frame, type, key-operated levers mounted on the base frame and operatively connected to move the type, a platen, a platen carriage, a carriage bed, means held to the bed and pivotally connected with the base frame adapted to hold the platen in an elevated position above and at the rear of the keys and shiftable to move the platen and carriage rearwardly and downwardly to a lower position at the rear of the keys, escapement mechanism for the carriage supported to move with the carriage bed, an actuating device operatively connected with the escapement mechanism and supported to move with the carriage bed, and means operated by the key-operated levers and mounted on the base frame adapted to engage and operate the escapement actuating device when the carriage bed is supported in its elevated position.

14,496. CARBURETER. CARL HJALMAR MALSTROM, Brooklyn, N. Y., and WILLIAM K. ANDERSEN, Bethlehem, Pa., assignors to Frederick Purdy, Chicago, Ill. Filed Apr. 16, 1917. Serial No. 162,552. Original No. 1,180,518, dated Apr. 25, 1916, Serial No. 757,424, filed Mar. 28, 1913. (Cl. 261—41.)



1. A carbureter comprising a liquid hydro-carbon chamber, a mixing chamber, a main air inlet, an auxiliary air inlet, its valve, and means controlled by said valve for discharging a supply of liquid hydro-carbon upon the said valve, and an independent means for depositing an additional supply of liquid hydro-carbon upon the said valve.

2. A carbureter comprising a liquid hydro-carbon chamber, a mixing chamber, a main air inlet, an auxiliary air inlet, its valve, and means controlled by said valve for forcing a supply of liquid hydro-carbon upon the said valve.

3. A carbureter comprising a liquid hydro-carbon chamber, a mixing chamber, a main air inlet, an auxiliary air inlet, its valve, and means controlled by said valve for forcing a supply of liquid hydro-carbon upon the said valve, and an independent means for depositing an additional supply of liquid hydro-carbon upon the said valve.

4. A carbureter comprising a mixing chamber, an auxiliary air inlet, its valve, a main air inlet, a liquid hydro-carbon chamber, a passage in the wall of the carbureter communicating with the liquid hydro-carbon chamber, and means controlled by said auxiliary air inlet valve for forcing a supply of liquid hydro-carbon from said passage to the top of the auxiliary valve.

5. A carbureter comprising an upper member having therein a mixing chamber, an auxiliary air inlet and its valve, a lower member having therein a main air inlet and a liquid hydro-carbon chamber, a passage in the wall of the lower member communicating with the liquid hydro-carbon chamber, and means controlled by said auxiliary inlet valve for forcing a supply of liquid hydro-carbon from said passage to the top of the auxiliary valve.

6. A carbureter comprising a mixing chamber, an auxiliary air inlet, its valve, a main air inlet, a liquid hydro-carbon chamber, passages in the wall of the carbureter communicating with the liquid hydro-carbon chamber, means controlled by said auxiliary inlet valve for forcing a supply of liquid hydro-carbon from one passage to the top of said valve and an independent means for depositing a supply of liquid hydro-carbon from another passage to the top of said valve.

7. A carbureter comprising an upper member having therein a mixing chamber, an auxiliary air inlet and its valve, a lower member having therein a main air inlet and a liquid hydro-carbon chamber, passages in the wall of the lower member communicating with the liquid hydro-carbon chamber, means controlled by said auxiliary inlet valve for forcing a supply of liquid hydro-carbon from one passage to the top of said valve, and an independent means for depositing a supply of liquid hydro-carbon from another passage to the top of said valve.

8. A carbureter comprising a mixing chamber, an auxiliary air inlet, its valve, a main air inlet, a liquid hydro-carbon chamber, a pair of passages in the wall of the carbureter having connections leading to the top of said auxiliary inlet valve and communicating with the liquid hydro-carbon chamber, means controlled by said auxiliary inlet valve for forcing a supply of liquid hydro-carbon from one passage to the top of said valve and an independent means for depositing a supply of liquid hydro-carbon to the top of said valve from the other passage.

9. A carbureter comprising an upper member having therein a mixing chamber, an auxiliary air inlet and its valve, a lower member having therein a main air inlet and a liquid hydro-carbon chamber, a pair of passages in the wall of the lower member having connections leading to the top of said valve and communicating with the liquid hydro-carbon chamber, means controlled by said auxiliary inlet valve for forcing a supply of liquid hydro-carbon from one passage to the top of said valve, and an independent means for depositing a supply of liquid hydro-carbon to the top of said valve from the other passage.

10. A carbureter comprising a mixing chamber, a piston chamber, an auxiliary air inlet, its valve having a plunger depending therefrom and fitted to slide in said piston chamber, a main air inlet, a liquid hydro-carbon chamber, a passage in the wall of the liquid hydro-carbon chamber and communicating therewith, said passage having a connection leading therefrom to the top of the auxiliary valve and means controlled by said valve for forcing a supply of liquid hydro-carbon through the passage and its connection to the top of the valve.

11. A carbureter comprising an upper member having therein a mixing chamber, a piston chamber, an auxiliary air inlet, its valve having a plunger depending therefrom and fitted to slide in said piston chamber, a lower member having therein a main air inlet, and a liquid hydro-carbon chamber, a passage in the wall of the liquid hydro-carbon chamber, said passage having a connection leading therefrom to the top of the auxiliary valve, and means controlled by said valve for forcing a supply of liquid hydro-carbon through the passage and its connection to the top of the valve.

12. A carbureter comprising a mixing chamber, a piston chamber, an auxiliary air inlet, its valve having a plunger depending therefrom and fitted to slide in said piston chamber, a main air inlet, a liquid hydrocarbon chamber, a pair of passages in the wall of the liquid hydrocarbon chamber and communicating therewith, said passages having connections leading therefrom to the top of the auxiliary valve, means controlled by said valve for forcing a supply of liquid hydro-carbon through one passage and its connection to the top of the auxiliary valve and an independent means for depositing a supply of liquid hydro-carbon through the other passage and its connection to the top of the valve.

13. A carbureter comprising an upper member having therein a mixing chamber, a piston chamber, an auxiliary air inlet, its valve having a plunger depending therefrom and fitted to slide in said piston chamber, a lower member having therein a main inlet, a liquid hydro-carbon chamber, a pair of passages in the wall of the liquid hydro-carbon chamber and communicating therewith, said passages having connections leading therefrom to the top of the auxiliary valve, and means controlled by said valve for forcing a supply of liquid hydro-carbon through one passage to the top of the valve and means independent of the valve for depositing a supply of liquid hydro-carbon upon the top of the valve from the other passage.

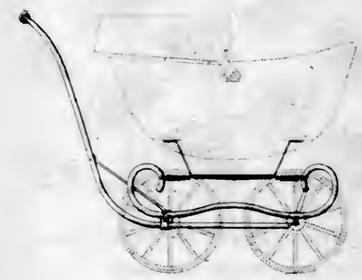
14. In a carbureter, a plurality of air inlets, a fuel inlet for each air inlet adapted to operate by aspiration, a valve normally closing one of said air inlets and adapted to open under increased suction, and a pump operated by increased suction and connected with one of said fuel inlets, whereby the operation of said pump forces fuel through such fuel inlet in excess of that withdrawn by aspiration.

15. In a carbureter, a plurality of air inlets, a fuel inlet for each air inlet adapted to operate by aspiration, a valve normally closing one of said air inlets and adapted to open under increased suction, and a pump operated by increased suction and connected with the fuel inlet of said valved air inlet, whereby the operation of said pump forces fuel through such fuel inlet of said valved air inlet in excess of that withdrawn by aspiration.

16. In a carbureter, means operated by the suction within the carbureter for introducing a supply of fuel into the carbureting chamber by aspiration, a pump for pumping fuel in excess of the fuel supplied by aspiration, and a normally closed air valve adapted to be opened by a reduction in pressure in the carbureting chamber and connected with said pump to operate the same.

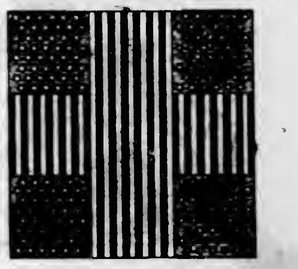
DESIGNS.

52,201. RUNNING-GEAR FRAME FOR PERAMBULATORS. ARTHUR J. ADAMS, Bay City, Mich., assignor, by mesne assignments, to Ferris-Stevenson Corporation, Buffalo, N. Y., a Corporation of New York. Filed May 22, 1917. Serial No. 170,295. Term of patent 14 years.



The ornamental design for a running gear frame for perambulators, as shown.

52,202. FLAG OR EMBLEM. CECIL F. ADAMSON, East Palestine, Ohio, assignor of one-half to Walter Grote, East Palestine, Ohio. Filed Apr. 23, 1918. Serial No. 230,347. Term of patent 7 years.



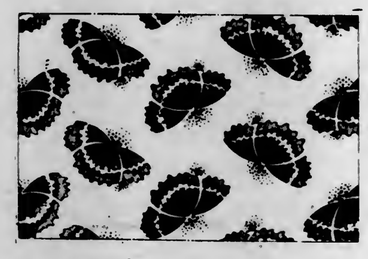
The ornamental design for a flag or emblem, as shown.

52,203. INDIVIDUAL SERVICE-MEDALLION. FREDERICK H. BRONNER, Portland, Oreg., assignor to Irwin-Hodson Company, Portland, Oreg., a Corporation of Oregon. Filed Apr. 17, 1918. Serial No. 229,207. Term of patent 3½ years.



The ornamental design for an individual service medallion as shown.

52,204. BROCADE. JAMES H. BUNTING, New York, N. Y., assignor to Susquehanna Silk Mills, New York, N. Y., a Corporation of New York. Filed Mar. 19, 1918. Serial No. 223,475. Term of patent 3½ years.



The ornamental design for a brocade as shown.

52,205. BROCADE. JAMES H. BUNTING, New York, N. Y., assignor to Susquehanna Silk Mills, New York, N. Y., a Corporation of New York. Filed May 6, 1918. Serial No. 232,953. Term of patent 3½ years.



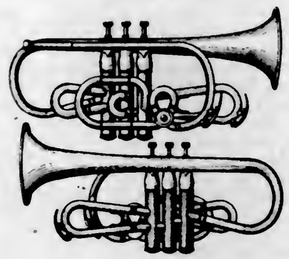
The ornamental design for a brocade as shown.

52,206. EMBLEM, BADGE, OR ARTICLE OF A SIMILAR NATURE. GEORGE T. BYNNER, Chicago, Ill. Filed Feb. 25, 1918. Serial No. 219,142. Term of patent 7 years.



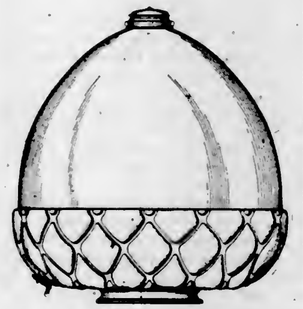
The ornamental design for an emblem, badge or articles of a similar nature, as shown.

52,207. CORNET. ERNST A. COUTURIER, Elkhart, Ind. Filed Apr. 27, 1918. Serial No. 231,255. Term of patent 14 years.



The ornamental design for a cornet as shown.

52,208. LAMP-CASING. JOHN L. DAWES, Pittsburgh, Pa. Filed Feb. 16, 1918. Serial No. 217,705. Term of patent 7 years.



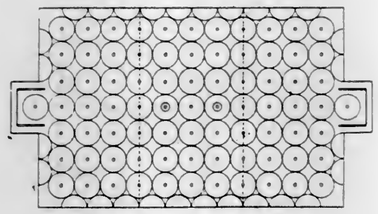
The ornamental design for a lamp casing, as shown.

52,209. THREE-WHEELED CAR FOR CHILDREN. ROBERT KENNEDY DAWSON, Guelph, Ontario, Canada. Filed Jan. 14, 1918. Serial No. 211,897. Term of patent 7 years.



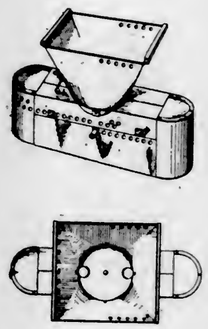
The ornamental design for a three-wheeled car for children, as shown, having a two part body with the parts connected by an inverted arch member to produce an ornamental effect.

52,210. GAME-BOARD. WALTER JAMES DONNE, London, England. Filed Nov. 27, 1916. Serial No. 133,802. Term of patent 7 years.



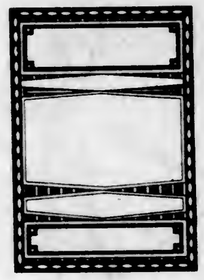
The ornamental design for a game board as shown.

52,211. ARC-LAMP CASING. IREDELL EACHUS, Philadelphia, Pa., assignor to The Macbeth Arc Lamp Company, Inc., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Apr. 28, 1916. Serial No. 94,271. Term of patent 7 years.



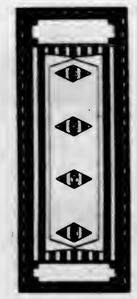
The ornamental design for an arc lamp casing, as shown.

52,212. DISPLAY CARD OR MOUNTING. JOHN L. FLANNERY, Jr., Chicago, Ill., assignor to The Boye Needle Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 4, 1918. Serial No. 226,751. Term of patent 7 years.



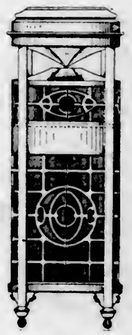
The ornamental design for a display card or mounting, as shown.

52,213. DISPLAY CARD OR MOUNTING. JOHN L. FLANNERY, Jr., Chicago, Ill., assignor to The Boye Needle Company, Chicago, Ill., a Corporation of Illinois. Filed May 2, 1918. Serial No. 232,171. Term of patent 7 years.



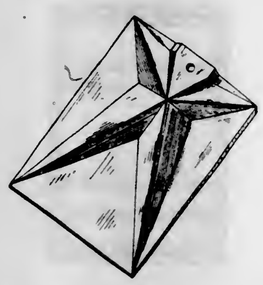
The ornamental design for a display card or mounting, as shown.

52,214. PHONOGRAPH CASE OR CABINET. EDWIN FORREST, New York, N. Y. Filed Jan. 31, 1918. Serial No. 214,782. Term of patent 7 years.



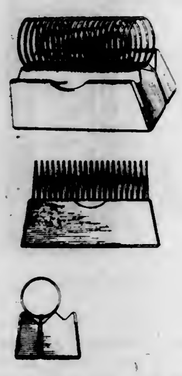
The ornamental design for a phonograph case or cabinet, as shown.

52,215. ELECTRIC-BATTERY ANODE. WALTER GROTHE, Fremont, Ohio, assignor, by mesne assignments, to National Carbon Company, Inc., a Corporation of New York. Filed Apr. 22, 1916. Serial No. 93,027. Term of patent 14 years.



The ornamental design for an electric battery anode as shown.

52,216. PEN-RACK. HARRY HAUPT, Elmsford, N. Y., assignor to Kimpton, Haupt & Co., New York, N. Y., a Firm composed of Charles F. Kimpton, Brooklyn, N. Y., Harry Haupt, Elmsford, N. Y., and Elizabeth H. Harbottle, Garden City, Long Island, N. Y. Filed Mar. 30, 1917. Serial No. 158,757. Term of patent 14 years.



The ornamental design for a pen rack, as shown.

52,217. SOLE. CHARLES R. HAYNES, Naugatuck, Conn., assignor to The Goodyear's Metallic Rubber Shoe Co., a Corporation of Connecticut. Filed Mar. 6, 1916. Serial No. 82,499. Term of patent 7 years.



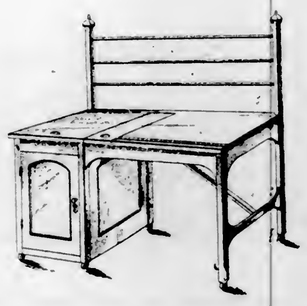
The ornamental design for a sole as shown.

52,218. EMBLEM, BROOCH, RING-TOP, LAVALLIÈRE, BUTTON, OR SIMILAR ARTICLE. EDWIN C. HEATHCOTE, Brooklyn, N. Y. Filed Mar. 4, 1918. Serial No. 220,404. Term of patent 7 years.



The ornamental design for an emblem, brooch, ring-top, lavallière, button, or similar article as shown.

52,219. SEWING-CABINET. ELIZABETH HUMPHREY, Cincinnati, Ohio. Filed Feb. 16, 1918. Serial No. 217,708. Term of patent 14 years.



The ornamental design for a sewing cabinet, as shown.

52,220. WRISTLET-WATCH COVER. LOUIS JACOT, Birmingham, England. Filed Jan. 19, 1918. Serial No. 212,845. Term of patent 14 years.



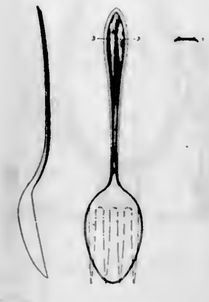
The ornamental design for a wristlet watch cover as shown.

52,221. RING FOR LAMP-BOWL HOLDERS. SAMUEL JANKELSON, Rockaway Beach, N. Y., assignor to Incandescent Supply Company, New York, N. Y. Filed Feb. 9, 1918. Serial No. 216,352. Term of patent 3½ years.



The ornamental design for a ring for lamp bowl holders as shown.

52,222. SPOON, FORK, OR SIMILAR ARTICLE. ALFRED G. KINTZ, Wallingford, Conn., assignor to International Silver Co., Meriden, Conn., a Corporation of New Jersey. Filed Mar. 1, 1918. Serial No. 219,899. Term of patent 7 years.



The ornamental design for a spoon, fork, or similar article, as shown.

52,223. SHOW-CASE FOR SHOULDER-ARMS. FOWLER MANNING, New Haven, Conn., assignor to Winchester Repeating Arms Co., New Haven, Conn., a Corporation. Filed Mar. 23, 1918. Serial No. 224,350. Term of patent 14 years.



The ornamental design for a show-case for shoulder arms, as shown.

52,224. VEHICLE-TIRE. ALVIN J. MUSSELMAN, Chicago, Ill., assignor to Indiana Rubber & Insulated Wire Co., Jonesboro, Ind., a Corporation of Indiana. Filed Apr. 27, 1918. Serial No. 231,262. Term of patent 7 years.



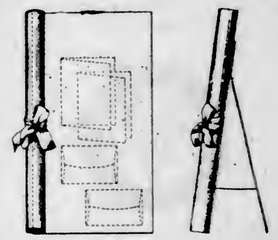
The ornamental design for a vehicle tire substantially as shown.

52,225. DISPLAY-CABINET. FRANK PFOUS, Coshocton, Ohio, assignor to American Safety Razor Co. Inc., Brooklyn, N. Y. Filed Apr. 3, 1918. Serial No. 226,483. Term of patent 14 years.



The ornamental design for a display cabinet, substantially as shown.

52,226. DISPLAY-CARD. WILLIAM A. PIKE, Pittsfield, Mass., assignor to Eaton, Crane & Pike Company, Pittsfield, Mass., a Corporation of Maine. Filed Apr. 24, 1917. Serial No. 164,288. Term of patent 7 years.



The ornamental design for a display card, as shown.

52,227. TIRE. JOHN W. RICHARDSON, Detroit, Mich. Filed May 27, 1916. Serial No. 100,401. Term of patent 3½ years.



The ornamental design for a tire as shown.

52,228. BROOCH-PIN OR SIMILAR ARTICLE OF JEWELRY. FRANK H. SCHAFFER, Providence, R. I., assignor to The Ivoryloid Co., Inc., New York, N. Y., a Corporation of New York. Filed Apr. 17, 1918. Serial No. 229,210. Term of patent 3½ years.



The ornamental design for a brooch pin or similar article of jewelry, substantially as shown.

52,229. FINGER-RING OR SIMILAR ARTICLE OF JEWELRY. CHARLES H. SPENCER, Chicago, Ill. Filed Apr. 6, 1918. Serial No. 227,138. Term of patent 3½ years.



The ornamental design for a finger ring or similar article of jewelry, as shown.

52,230. FINGER-RING OR SIMILAR ARTICLE OF JEWELRY. CHARLES H. SPENCER, Chicago, Ill. Filed Apr. 6, 1918. Serial No. 227,139. Term of patent 3½ years.



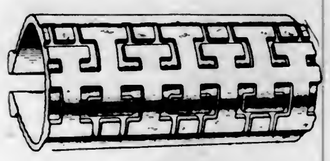
The ornamental design for a finger ring or similar article of jewelry, as shown.

52,231. PICTURE-FRAME. CLIFFORD H. TUTTLE, Englewood, N. J., assignor to Tuttle & Bailey M'f'g. Co., Brooklyn, N. Y., a Corporation of New York. Filed Apr. 12, 1918. Serial No. 228,272. Term of patent 7 years.



The ornamental design for a picture frame, as shown.

52,232. VEHICLE-TIRE. ALBERT E. WING, Cleveland, Ohio. Filed Apr. 22, 1918. Serial No. 230,139. Term of patent 3½ years.



The ornamental design for a vehicle tire as shown.

TRADE-MARKS

OFFICIAL GAZETTE, JULY 23, 1918.

(PUBLISHED AUGUST 13, 1918.)

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 14 of said act, a fee of ten dollars must accompany each notice of opposition.

Ser. No. 78,335. (CLASS 48. MALT BEVERAGES, EXTRACTS, AND LIQUORS.) WILLIAM P. QUENTELL, New York, N. Y. Filed May 16, 1914.

S-C



Particular description of goods.—A Non-Alcoholic Beverage, Scientifically Prepared from Malted Barley and Hops, without Fermentation or Artificial Preservatives, Sold as a Soft Drink and an Extract for Making the Same.

Claims use since Feb. 4, 1914.

Ser. No. 86,173. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) ALEXANDER & LITTLEFIELD COMPANY, New York, N. Y. Filed Apr. 24, 1915.

BILTRITE

Particular description of goods.—Egg-Beaters.

Claims use since Jan. 1, 1915.

Ser. No. 97,202. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) JOHN BRAUN & SONS, Philadelphia, Pa., assignors to Pennsylvania Lawn Mower Works, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 29, 1916. Under ten-year proviso.

PENNSYLVANIA JR.

Particular description of goods.—Lawn-Mowers.

Claims use since the spring of 1886.

Ser. No. 99,194. (CLASS 39. CLOTHING.) THE CHARLES E. LYNCH SHOE MF'G. CO., INC., Poughkeepsie and New York, N. Y. Filed Nov. 9, 1916.

H & L

Particular description of goods.—Leather Boots and Shoes.

Claims use since Oct. 1, 1911.

Ser. No. 100,737. (CLASS 49. DISTILLED ALCOHOLIC LIQUORS.) JACK DANIEL DISTILLING COMPANY, St. Louis, Mo. Filed Jan. 19, 1917.



Particular description of goods.—Whisky.

Claims use since the 15th day of January, 1895.

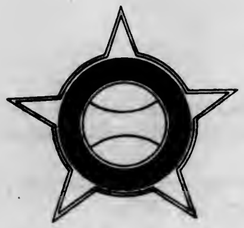
Ser. No. 101,778. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) DONNELL, CARMAN & MUDGE, Boston, Mass. Filed Feb. 28, 1917.



Particular description of goods.—Finished Sheepskins.

Claims use since Mar. 1, 1915.

Ser. No. 101,805. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) JULES STAR & Co., New York, N. Y. Filed Feb. 28, 1917.



Particular description of goods.—Undressed Hides and Skins.
Claims use since January, 1914.

Ser. No. 102,899. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) CHILDS COMPANY, New York, N. Y. Filed Apr. 12, 1917. Under ten-year proviso.



Particular description of goods.—Milk, "Bulgarzoon" (Whole Milk Scientifically Soured) Drink, Chicken Soup, Beef Soup, Clam-Chowder, and Stewed Prunes. Said Goods Are Sold Either Canned or in Bulk.
Claims use since 1891.

Ser. No. 102,958. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) OXFORD BEAR'S FRUIT GROWERS ASSOCIATION, Hebron, Me. Filed Apr. 13, 1917.



Particular description of goods.—Fresh Apples.
Claims use since 1912.

Ser. No. 103,185. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) REINBERGER & COLLIER, Pine Bluff, Ark. Filed Apr. 21, 1917.



Consisting of a diamond-shaped figure inclosing the letters "R & C" printed in a distinctive manner, the diamond being shaded with rough irregular black lines to form a background for the letters.
Particular description of goods.—A Medicine for Catarrh, Rheumatism, Kidney and Bladder Trouble, Piles, Scrofula, Blood Diseases, Chills, Fevers, Ague, Nervousness, and Worms.
Claims use since Feb. 9, 1917.

Ser. No. 103,732. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) DANIEL J. CARROLL, Bay City, Mich. Filed May 12, 1917.



Particular description of goods.—Candy.
Claims use since Oct. 1, 1916.

Ser. No. 103,801. (CLASS 47. WINES.) ALEX D. SHAW & Co., New York, N. Y. Filed May 14, 1917.



Particular description of goods.—Sherry.
Claims use since Nov. 6, 1913.

Ser. No. 104,609. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) CHARLES S. COHEN, Newark, N. J. Filed June 22, 1917.



Particular description of goods.—A Preparation for the Prevention and Treatment of Pyorrhea, for the Correction of Soft Bleeding Spongy Receding Gums, for Promotion and Maintenance of Tooth, Gum, and Mouth Health.
Claims use since June 1, 1906.

Ser. No. 106,439. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) NU-JENE TOILET CO., Minneapolis, Minn. Filed Sept. 26, 1917.



Particular description of goods.—Skin-Whitener, Skin-Cleanser, Hair-Tonic, Nail-Bleach, Hand-Lotion, Hair-Fluff, Face-Powder, Rouge, Nail-Polish, and Liquid Cuticle-Remover.
Claims use since the 1st day of October, 1916.

Ser. No. 106,643. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) LEO E. SCHOENFELD, Chicago, Ill. Filed Oct. 6, 1917.



Particular description of goods.—Olive-Oil.
Claims use since Sept. 28, 1917.

Ser. No. 106,862. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) LIVERADE MEDICINE CO., Fulton, Ky. Filed Oct. 19, 1917.



The picture is a portrait of C. R. Wallace, of Paducah, Ky., whose consent has been obtained.
Particular description of goods.—A Liquid Preparation Designed as a Remedy for Constipation, Sour Stomach, Indigestion, Sick Headache, Dizziness, Biliousness, and Torpid Liver.
Claims use since Jan. 1, 1916.

Ser. No. 107,454. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) AFRICAN ASSOCIATION LIMITED, Liverpool, England. Filed Nov. 19, 1917.



Particular description of goods.—Sheet-Rubber.
Claims use since about the year 1889.

Ser. No. 107,779. (CLASS 17. TOBACCO PRODUCTS.) TOBACCO PRODUCTS CORPORATION, New York, N. Y. Filed Dec. 5, 1917.



Particular description of goods.—Cigars, Cigarettes, Smoking and Chewing Tobacco.
Claims use since about May 1, 1918.

Ser. No. 108,113. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) WILLIAM M. ADRIAN, Quincy, Mass. Filed Dec. 24, 1917.



The trade-mark consists of the letters "P. D. Q."
Particular description of goods.—A Chemical Preparation for Removing Stains from Granite.
Claims use since October, 1915.

Ser. No. 108,172. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) R. E. BRADDY & SONS, Dublin, Ga. Filed Dec. 27, 1917.



Particular description of goods.—Cured Hams and Breakfast-Bacon.
Claims use since Sept. 1, 1914.

Ser. No. 108,298. (CLASS 2. RECEPTACLES.) PAUL FREYGANG, San Francisco, Cal. Filed Jan. 4, 1918.



Particular description of goods.—Cartons and Bags for the Packing and Shipment of Merchandise.
Claims use since June 15, 1917.

Ser. No. 108,365. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) O. T. STACY CO., Rochester, N. Y. Filed Jan. 8, 1918. Under ten-year proviso.

Oriental

Jelly.

Particular description of goods.—Candy.
Claims use since 1894.

Ser. No. 108,492. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) J. LICHTMAN & SON, Newark, N. J. Filed Jan. 16, 1918.

TRUMP

The word "Trump."
Particular description of goods.—That Portion of a Tanned Horse-Hide Known as Cordovan Shells.
Claims use since May, 1916.

Ser. No. 108,633. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) IRON CITY PRODUCTS COMPANY, Pittsburgh, Pa. Filed Jan. 25, 1918.

ICP

Particular description of goods.—Piston-Rings.
Claims use since Nov. 10, 1917.

Ser. No. 108,833. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE LORENZ COMPANY, Everett, Mass., assignor to Mihalovitch Brothers Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Feb. 5, 1918.

TRIUMPH

Particular description of goods.—Flavoring Extracts for Foods.
Claims use since January, 1913.

Ser. No. 108,924. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) NEVER-TEL LABORATORIES COMPANY, Kansas City, Mo. Filed Feb. 9, 1918.

LUCKY TIGER



The picture of a woman which appears in the drawing filed herein is not the portrait of a living individual, but is purely fanciful.
Particular description of goods.—A Dandruff Remedy.
Claims use since Aug. 1, 1917.

Ser. No. 109,051. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ARTHUR BALLARD, New York, N. Y. Filed Feb. 18, 1918.

Ballard's

The word "Ballard's" being shown in the facsimile handwriting of the applicant.
Particular description of goods.—A Preparation for the Treatment of Rheumatism, Neuritis, Eczema, Itch, Poison-Ivy Rash, and Obesity.
Claims use since about the 5th day of February, 1918.

Ser. No. 109,134. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) THE OCEAN LEATHER CO. INC., New York, N. Y., and Newark, N. J. Filed Feb. 20, 1918.

FILEATHER

Particular description of goods.—Tanned Fish and Mammal Skins.
Claims use since Feb. 7, 1918.

Ser. No. 109,148. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) CLARK & MACKUSICK COMPANY, Boston, Mass. Filed Feb. 21, 1918.

GARDEN of ALLAH

Particular description of goods.—Coffee.
Claims use since about Sept. 15, 1917.

Ser. No. 109,322. (CLASS 7. CORDAGE.) GRAND RAPIDS FIBRE CORD CO., Grand Rapids, Mich. Filed Mar. 2, 1918.

UNAFLEX

Particular description of goods.—Paper Twine and Paper Cord.
Claims use since June 1, 1917.

Ser. No. 109,331. (CLASS 19. VEHICLES, NOT INCLUDING ENGINES.) MUDGE & COMPANY, Chicago, Ill. Filed Mar. 2, 1918.

TRADE MARK RAILROAD SUPPLIES CHICAGO MUDGE

The words "Trade Mark, Railroad Supplies, Chicago," appearing on the mark are disclaimed, no claim being made to said words apart from the mark shown in the drawing.
Particular description of goods.—Motor-Cars.
Claims use since September, 1910.

Ser. No. 109,336. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) LAWRENCE MARKOWSKY, Detroit, Mich. Filed Mar. 2, 1918.



The trade-mark consists of my photograph and signature therebelow.
Particular description of goods.—Metal-Plating Solution.
Claims use since Nov. 1, 1917.

Ser. No. 109,421. (CLASS 32. FURNITURE AND UPHOLSTERY.) THE CELLULOID COMPANY, Newark, N. J., and New York, N. Y. Filed Mar. 7, 1918.

IVALEUR

Particular description of goods.—Hand or Small Mirrors, Easel or Small Picture Frames, and Small Flower-Pots Containing Artificial Flowers. The Said Articles are Made of Compounds of Pyroxylin.
Claims use since Oct. 27, 1917, on hand or small mirrors and since Dec. 11, 1917, on the other articles.

Ser. No. 109,609. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) THE ULMER LEATHER CO., Norwich, Conn. Filed Mar. 16, 1918.

PONEMAH

Particular description of goods.—Belt-Dressing.
Claims use since Sept. 21, 1895.

Ser. No. 109,818. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE TROPICAL CO-OPERATIVE COMPANY, Jacksonville, Fla. Filed Mar. 26, 1918.



Which trade-mark consists of the portrait of F. M. Plank.
Particular description of goods.—Chill-Tonic, Liver-Pills, Cold-Tablets, Hair-Tonic, and Conditioning Medicine for Live Stock and Poultry.
Claims use since Feb. 22, 1909.

Ser. No. 109,819. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE TROPICAL CO-OPERATIVE COMPANY, Jacksonville, Fla. Filed Mar. 26, 1918.

F. M. Plank

Which trade-mark consists of the signature of F. M. Plank.

Particular description of goods.—Chill-Tonic, Liver-Pills, Cold-Tablets, and Hair-Tonic.

Claims use since Feb. 22, 1909.

Ser. No. 109,903. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE ELI LILLY AND COMPANY, Indianapolis, Ind. Filed Apr. 1, 1918.

CHLOROXYL

Particular description of goods.—Medicines Consisting of Antirheumatic, Analgesic, and Antipyretic Preparations.

Claims use since Mar. 1, 1918.

Ser. No. 109,936. (CLASS 19. VEHICLES, NOT INCLUDING ENGINES.) PAN-AMERICAN MOTORS CORPORATION, Decatur, Ill. Filed Apr. 2, 1918.

PAN AMERICAN

Particular description of goods.—Automobiles.

Claims use since June 1, 1916.

Ser. No. 110,016. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) SIDNEY BOTTINEAU, Superior, Wis. Filed Apr. 6, 1918.

S B

The portrait shown on the drawing is that of Baby Donald Sicard.

Particular description of goods.—Baby Foods, in Cans and Glass Jars or Bottles.

Claims use since Jan. 2, 1918.

Ser. No. 110,057. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) SHELLOPHONE TALKING MACHINE COMPANY, Wilmington, Del., and Chicago, Ill. Filed Apr. 8, 1918.



Particular description of goods.—Talking-Machines.

Claims use since Nov. 1, 1917.

Ser. No. 110,133. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) STANDARD PNEUMATIC ACTION COMPANY, New York, N. Y. Filed Apr. 11, 1918.

AMPLITONE

Particular description of goods.—Pianos, Organs, Player-Pianos, Player-Actions, and Perforated Music-Sheets.

Claims use since Mar. 1, 1918.

Ser. No. 110,134. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) STANDARD PNEUMATIC ACTION COMPANY, New York, N. Y. Filed Apr. 11, 1918.

AMPLITHEME

Particular description of goods.—Pianos, Organs, Player-Pianos, Player-Actions, and Perforated Music-Sheets.

Claims use since Mar. 1, 1918.

Ser. No. 110,340. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) ANDERSEN-MEYER & CO., LTD., New York, N. Y. Filed Apr. 20, 1918.



"PAGODA"

Particular description of goods.—Bristles, Hair, and Hair Waste.

Claims use since July, 1917.

Ser. No. 110,346. (CLASS 19. VEHICLES, NOT INCLUDING ENGINES.) HEALEY & CO., New York, N. Y. Filed Apr. 20, 1918. Under ten-year proviso.

Healey & Co.

Particular description of goods.—Horse-Drawn and Motor-Driven Land-Vehicles.

Claims use since Jan. 1, 1886.

Ser. No. 110,523. (CLASS 12. CONSTRUCTION MATERIALS.) THE FLINTKOTE COMPANY, Boston, Mass. Filed Apr. 29, 1918.

STEADFAST

Particular description of goods.—Roofing Material Comprising Felts Saturated with Compounds.

Claims use since on or about Dec. 12, 1917.

Ser. No. 110,524. (CLASS 12. CONSTRUCTION MATERIALS.) THE FLINTKOTE COMPANY, Boston, Mass. Filed Apr. 29, 1918.



Particular description of goods.—Roofing Material Comprising Felts Saturated with Compounds.

Claims use since on or about Dec. 12, 1917.

Ser. No. 110,568. (CLASS 3. BAGGAGE, HORSE EQUIPMENTS, PORTFOLIOS, AND POCKET-BOOKS.) VICTOR MINGOT, New York, N. Y. Filed Apr. 30, 1918.



Particular description of goods.—Ladies' Hand-Bags.

Claims use since Apr. 20, 1918.

Ser. No. 110,600. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) THE GRATON AND KNIGHT MANUFACTURING COMPANY, Worcester, Mass. Filed May 2, 1918.

ACORN

Particular description of goods.—Round Leather Belting.

Claims use since Mar. 15, 1918.

Ser. No. 110,648. (CLASS 38. PRINTS AND PUBLICATIONS.) JAMES MCCLATCHY CO., Sacramento, Cal. Filed May 4, 1918.

CALIFORNIA COUNTRY LIFE

Particular description of goods.—A Newspaper-Section Issued Weekly.

Claims use since Feb. 19, 1916.

Ser. No. 110,748. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) KLAMATH RIVER PACKERS ASS'N., Requa, Cal. Filed May 7, 1918.

AH PAH

Particular description of goods.—Canned Salmon.

Claims use since Mar. 2, 1918.

Ser. No. 110,785. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) OVETTE MANUFACTURING CO., Birmingham, Ala. Filed May 9, 1918.

OVETTE

Particular description of goods.—A Prepared Food Product to be Used as a Substitute for Eggs.

Claims use since Apr. 23, 1918.

Ser. No. 110,843. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) MORRIS & COMPANY, Chicago, Ill. Filed May 11, 1918.

DOMINO

Particular description of goods.—Vegetable Shortening.
Claims use since about the 30th of April, 1918.

Ser. No. 110,846. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) POTTER DRUG & CHEMICAL CORPORATION, Portland, Me., and Boston, Mass. Filed May 11, 1918.

Cuticura

Particular description of goods.—Talcum Powder.
Claims use since Apr. 10, 1918.

Ser. No. 110,890. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) SMITH & NESSLE CO., New York, N. Y. Filed May 14, 1918.

SAMMY

Particular description of goods.—Canned Sardines.
Claims use since Mar. 1, 1918.

Ser. No. 110,891. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) SMITH & NESSLE CO., New York, N. Y. Filed May 14, 1918.

Liberty Bell

Particular description of goods.—Canned Sardines.
Claims use since Mar. 1, 1918.

Ser. No. 110,892. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) SMITH & NESSLE CO., New York, N. Y. Filed May 14, 1918.

Gelmano

Particular description of goods.—Canned Sardines.
Claims use since Mar. 1, 1918.

Ser. No. 110,893. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) SMITH & NESSLE CO., New York, N. Y. Filed May 14, 1918.

TROPIC

Particular description of goods.—Canned Sardines.
Claims use since Mar. 1, 1918.

Ser. No. 110,904. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) THE HEWITT BROS. SOAP CO., Dayton, Ohio. Filed May 15, 1918.

THRIFT

Particular description of goods.—Flaked Laundry Soap.
Claims use since Mar. 1, 1918.

Ser. No. 110,905. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) INTERNATIONAL STOCK FOOD CO., Minneapolis, Minn. Filed May 15, 1918.



Particular description of goods.—A Stock-Food Tonic.
Claims use since about the 10th day of March, 1918.

Ser. No. 110,935. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ROBERT C. WHITE, Philadelphia, Pa. Filed May 16, 1918.

Al-o-nets

Particular description of goods.—Chocolate-Coated Compressed Medicinal Tablets for Use as Laxatives, Evacuants, and Cathartics.
Claims use since Feb. 15, 1918.

Ser. No. 110,960. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) BENJAMIN C. MATHES, Rochester, N. Y. Filed May 17, 1918.

MATH-OL

Particular description of goods.—Germicide, Talcum Toilet Powder, Perfume, Toilet Water, Peroxid Cream, Laxative Tonic Tablets, and Corn, Wart, and Callus Remover.
Claims use since Mar. 1, 1913.

Ser. No. 111,033. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) AMERICAN MUSTARD COMPANY, INC., New York, N. Y. Filed May 18, 1918.

NACCO

Comprising the word "Nacco."
Particular description of goods.—American Mustard.
Claims use since May 8, 1918.

Ser. No. 111,057. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) GEORGE E. RINKER & CO., Baltimore, Md. Filed May 18, 1918.

Nox-PEPSIA

Particular description of goods.—A Remedy for Indigestion.
Claims use since April, 1914.

Ser. No. 111,135. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) THE CELLULOID COMPANY, Newark, N. J., and New York, N. Y. Filed May 23, 1918.

IVALEUR

Particular description of goods.—Electric Push-Buttons and the Shells or Holders Containing the Same. The Said Articles are Made of Compounds of Pyroxylin.
Claims use since Jan. 4, 1918.

Ser. No. 111,141. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) THE CELLULOID COMPANY, Newark, N. J., and New York, N. Y. Filed May 23, 1918.

IVALEUR

Particular description of goods.—Register-Wheels Used in Speedometers and in Indicating and Measuring Appliances. The Said Articles are Made of Compounds of Pyroxylin.
Claims use since Jan. 12, 1918.

Ser. No. 111,145. (CLASS 29. BROOMS, BRUSHES, AND DUSTERS.) THE CELLULOID COMPANY, Newark, N. J., and New York, N. Y. Filed May 23, 1918.

IVALEUR

Particular description of goods.—Hair-Brushes, Hat-Brushes, Bonnet-Brushes, Cloth-Brushes, Infant-Brushes, Military Brushes, Complexion-Brushes, Shaving-Brushes, Tooth-Brushes, Nail-Brushes, Bath-Brushes, and Back-Scratchers. The Said Articles, Excepting the Bristles in the Brushes, are Made of Compounds of Pyroxylin.
Claims use since Oct. 11, 1917, on hair-brushes; since Nov. 22, 1917, on hat-brushes, bonnet-brushes, cloth-brushes, infant-brushes, military brushes, nail-brushes, and bath-brushes; since Nov. 23, 1917, on tooth-brushes; since Dec. 3, 1917, on back-scratchers; since Dec. 11, 1917, on complexion-brushes, and since Dec. 20, 1917, on shaving-brushes.

Ser. No. 111,174. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) GUANO & RAGGIO, INC., Philadelphia, Pa. Filed May 24, 1918.

SUMORE

"Sumore."
Particular description of goods.—Macaroni and Fancy Alimentary Pastes.
Claims use since during January, 1918.

Ser. No. 111,186. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) WILLIAM WILLIAMS, Saginaw, Mich. Filed May 24, 1918.

HIGHBALL

Particular description of goods.—Package-Candies.
Claims use since Mar. 1, 1911.

Ser. No. 111,211. (CLASS 28. JEWELRY AND PRECIOUS-METAL WARE.) EISENSTADT MANUFACTURING COMPANY, St. Louis, Mo. Filed May 27, 1918.

Symblem

Particular description of goods.—Charms, Pendants for Neck-Chains and Bracelets, Brooch-Pins, and Finger-Rings.
Claims use since May 15, 1918.

Ser. No. 111,239. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) MAX B. MAYER, San Antonio, Tex. Filed May 28, 1918.

CANDELINE

Particular description of goods.—A Waterproofing Compound for Waterproofing Textile Fabrics.
Claims use since September, 1917.

Ser. No. 111,258. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) SOL BARNET & SON, New York, N. Y. Filed May 31, 1918.

ADMIRATION

The word "Admiration."
Particular description of goods.—Tanned and Finished Sheep, Goat, Calf, Cow, and Horse Skins.
Claims use since Apr. 1, 1918.

Ser. No. 111,264. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE EARLY & DANIEL COMPANY, Cincinnati, Ohio. Filed May 31, 1918.

CE-RE-A-LIA

Particular description of goods.—Balanced-Ration Dairy and Poultry Feed.
Claims use since Mar. 30, 1913.

Ser. No. 111,265. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE EARLY & DANIEL COMPANY, Cincinnati, Ohio. Filed May 31, 1918.

RANGER

Particular description of goods.—Balanced-Ration Horse and Mule Feed.
Claims use since Aug. 1, 1917.

Ser. No. 111,422. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) JOHN A. SALZER SEED CO., La Crosse, Wis. Filed June 7, 1918.

RADIUM

Particular description of goods.—Garden, Field, and Flower Seeds.
Claims use since January, 1918.

Ser. No. 111,423. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) JOHN A. SALZER SEED CO., La Crosse, Wis. Filed June 7, 1918.

BONANZA

Particular description of goods.—Garden, Field, and Flower Seeds.
Claims use since 1903.

Ser. No. 111,433. (CLASS 39. CLOTHING.) FALLS CITY MILLS CO., Louisville, Ky. Filed June 8, 1918.

Thrift

Particular description of goods.—Men's, Women's, and Children's Hosiery.
Claims use since May 1, 1918.

Ser. No. 111,548. (CLASS 37. PAPER AND STATIONERY.) JOSEPH PARKER & SON COMPANY, New Haven, Conn. Filed June 13, 1918. Under ten-year proviso.

Treasury

Particular description of goods.—Blotting-Paper.
Claims use since 1860.

Ser. No. 111,549. (CLASS 37. PAPER AND STATIONERY.) JOSEPH PARKER & SON COMPANY, New Haven, Conn. Filed June 13, 1918. Under ten-year proviso.

COMMERCIAL

Particular description of goods.—Blotting-Paper.
Claims use since 1869.

Ser. No. 111,550. (CLASS 37. PAPER AND STATIONERY.) JOSEPH PARKER & SON COMPANY, New Haven, Conn. Filed June 13, 1918. Under ten-year proviso.

WEST ROCK MILL

Particular description of goods.—Blotting-Paper.
Claims use since 1840.

Ser. No. 111,585. (CLASS 3. BAGGAGE, HORSE EQUIPMENTS, PORTFOLIOS, AND POCKET-BOOKS.) F. H. WHITE COMPANY, Philadelphia, Pa. Filed June 14, 1918.

WHITCO

Particular description of goods.—Suitcases, Traveling-Bags, Brief-Cases, and Portfolios.
Claims use since Jan. 15, 1917.

Ser. No. 111,613. (CLASS 2. RECEPTACLES.) GREAT SOUTHERN LUMBER COMPANY, Bogalusa, La. Filed June 17, 1918.

BOGALUSA

The word "Bogalusa."
Particular description of goods.—Box-Shooks, Barrel Staves and Headings.
Claims use since on or about the 1st day of July, 1914.

Ser. No. 111,644. (CLASS 47. WINES.) CALIFORNIA WINE ASSOCIATION, San Francisco, Cal. Filed June 18, 1918.

PULIANO

Particular description of goods.—Wines.
Claims use since May 1, 1917.

Ser. No. 111,645. (CLASS 47. WINES.) CALIFORNIA WINE ASSOCIATION, San Francisco, Cal. Filed June 18, 1918.

GRAGNANELLO

Particular description of goods.—Wine.
Claims use since Oct. 1, 1912.

Ser. No. 111,718. (CLASS 3. BAGGAGE, HORSE EQUIPMENTS, PORTFOLIOS, AND POCKET-BOOKS.) CHARLES BOND COMPANY, Philadelphia, Pa. Filed June 21, 1918.

FABRITEX

Particular description of goods.—Baggage Straps and Strappings.
Claims use since about July, 1917.

TRADE-MARK REGISTRATIONS GRANTED

JULY 23, 1918.

122,296. TIRE-SEALING COMPOUND. ALCEMO MANUFACTURING COMPANY, Newark, N. J.
Filed November 20, 1917. Serial No. 107,490. PUBLISHED APRIL 30, 1918.

122,297. FURNITURE-POLISH. DAN W. ALLEN, Evanston, Ill.
Filed December 24, 1917. Serial No. 108,115. PUBLISHED APRIL 30, 1918.

122,298. TEA. ARBUCKLE BROTHERS, New York, N. Y., and Chicago, Ill.
Filed May 4, 1917. Serial No. 103,522. PUBLISHED JULY 31, 1917.

122,299. WHEAT-FLOUR. BARBER MILLING COMPANY, Minneapolis, Minn.
Filed March 26, 1918. Serial No. 109,791. PUBLISHED APRIL 30, 1918.

122,300. SHEATHING-PAPER. THE BARRETT COMPANY, New York, N. Y.
Filed December 14, 1917. Serial No. 107,955. PUBLISHED APRIL 30, 1918.

122,301. CERTAIN NAMED FOODS. EDWARD BAXT, Philadelphia, Pa.
Filed April 4, 1917. Serial No. 102,709. PUBLISHED APRIL 30, 1918.

122,302. BREAD. HENRY BLEWETT & SON, INC., Somerville, Mass.
Filed March 23, 1918. Serial No. 109,739. PUBLISHED APRIL 30, 1918.

122,303. CARD GAMES. MILTON BRADLEY CO., Springfield, Mass.
Filed March 11, 1918. Serial No. 109,491. PUBLISHED APRIL 30, 1918.

122,304. PHOTOGRAPHIC DEVELOPERS. PETER C. CHRISTENSEN, West Orange, N. J.
Filed March 11, 1918. Serial No. 109,495. PUBLISHED APRIL 30, 1918.

122,305. SILK, COTTON, AND WOOLEN PIECE GOODS. BENJAMIN M. COHEN, New York, N. Y.
Filed July 21, 1917. Serial No. 105,165. PUBLISHED APRIL 16, 1918.

122,306. SOAP FOR CLEANING AND PRESERVING LEATHER GOODS AND IMITATION-LEATHER GOODS. COLGATE & CO., Jersey City, N. J.
Filed February 6, 1918. Serial No. 108,849. PUBLISHED APRIL 23, 1918.

122,307. FOUNTAIN-PENS. CLEELAND INSHURO PEN COMPANY, Butler, Pa.
Filed January 2, 1918. Serial No. 108,242. PUBLISHED APRIL 30, 1918.

122,308. CERTAIN NAMED FOODS. THE CULLEN BROKERAGE CO., Omaha, Nebr.
Filed August 6, 1917. Serial No. 105,487. PUBLISHED FEBRUARY 5, 1918.

122,309. CERTAIN NAMED ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES. THE CUNO ENGINEERING CORPORATION, Meriden, Conn.
Filed January 10, 1918. Serial No. 108,399. PUBLISHED APRIL 30, 1918.

122,310. SAUCE OR RELISH FOR SEASONING FOODS. THE CURTIS CORPORATION, Bloomington, Cal.
Filed February 11, 1918. Serial No. 108,937. PUBLISHED APRIL 30, 1918.

122,311. VETERINARY MEDICINE. HENRY G. FREUND, Davenport, Iowa.
Filed March 9, 1918. Serial No. 109,462. PUBLISHED APRIL 30, 1918.

122,312. COFFEE. ROBERT L. GERHART, Lancaster, Pa.
Filed March 19, 1918. Serial No. 109,649. PUBLISHED APRIL 30, 1918.

122,313. CANDY. GILLEN & BONEY, INC., Lincoln, Nebr.
Filed March 28, 1918. Serial No. 109,843. PUBLISHED APRIL 30, 1918.

122,314. SCALP REMEDIES, A LIQUID PREPARATION USED IN TREATMENT OF THE HAIR. GINNETTI MANUFACTURING COMPANY, Washington, D. C.
Filed August 21, 1917. Serial No. 105,773. PUBLISHED APRIL 30, 1918.

122,315. COTTON PIECE GOODS. HENRY GLASS & CO., New York, N. Y.
Filed February 1, 1918. Serial No. 108,743. PUBLISHED APRIL 23, 1918.

122,316. COTTON PIECE GOODS. J. W. GODDARD & SONS, INCORPORATED, New York, N. Y.
Filed February 28, 1918. Serial No. 109,271. PUBLISHED APRIL 16, 1918.

122,317. CANNED TOMATO SAUCE. A. GOLDSTEIN & CO., Hoboken, N. J.
Filed December 8, 1917. Serial No. 107,838. PUBLISHED APRIL 30, 1918.

122,318. PREPARATION FOR THE TREATMENT OF PILES. THE GUARANTEED REMEDIES CO., Elyria, Ohio.
Filed March 11, 1918. Serial No. 109,499. PUBLISHED APRIL 30, 1918.

122,319. LAUNDRY SOAP, OIL-SOAP. HARRIS SOAP COMPANY, Buffalo, N. Y.
Filed February 26, 1915. Serial No. 84,801. PUBLISHED DECEMBER 11, 1917.

122,320. FACE-POWDER AND TALCUM POWDER. AURELIUS S. HINDS, Portland, Me.
Filed February 27, 1918. Serial No. 109,242. PUBLISHED APRIL 30, 1918.

122,321. PIANOS AND PLAYER-PIANOS. HOBBIE BROS. COMPANY, INC., Roanoke, Va.
Filed February 21, 1918. Serial No. 109,152. PUBLISHED APRIL 16, 1918.

122,322. TOILET-PAPER. THE JOHN HOBERG CO., Green Bay, Wis.
Filed March 1, 1918. Serial No. 109,294. PUBLISHED APRIL 23, 1918.

122,323. LIQUID GLUE. THE IMPROVED LIQUID GLUES CO., LTD., London, England.
Filed March 25, 1918. Serial No. 109,767. PUBLISHED APRIL 30, 1918.

122,324. SCALP PREPARATION. JULIUS R. JONES, Richmond, Va.
Filed March 11, 1918. Serial No. 109,503. PUBLISHED APRIL 30, 1918.

122,325. MANIFOLDS, MECHANICAL PRIMERS, CARBURETERS, AND PARTS THEREOF. KEROSENE BURNING CARBURETOR COMPANY, Detroit, Mich.
Filed December 28, 1917. Serial No. 108,199. PUBLISHED APRIL 30, 1918.

122,326. MOLASSES AND CHOCOLATE CANDY. LINDEN VALLEY CHOCOLATE CO., Trenton, N. J.
Filed November 17, 1917. Serial No. 107,435. PUBLISHED FEBRUARY 5, 1918.

122,327. PREPARATION FOR THE TREATMENT OF GONORRHEA AND GLEET. JOSEPH LANGERMAN, Chicago, Ill.
Filed August 22, 1917. Serial No. 105,806. PUBLISHED APRIL 30, 1918.

122,328. CRACKERS. LOOSE-WILES BISCUIT COMPANY, Kansas City, Mo.
Filed February 25, 1918. Serial No. 109,202. PUBLISHED APRIL 30, 1918.

122,329. COOKED AND UNCOOKED CANNED FRUIT, BOTTLED AND CANNED PICKLES AND VEGETABLES. LOS ANGELES OLIVE GROWERS ASSOCIATION, Los Angeles, Cal.
Filed November 12, 1917. Serial No. 107,322. PUBLISHED APRIL 30, 1918.

122,330. GENERAL TONIC. LYKO MEDICINE COMPANY, Kansas City, Mo.
Filed February 18, 1918. Serial No. 109,101. PUBLISHED APRIL 30, 1918.

122,331. AUTOMOBILE DOLLY-JACKS. MID-WEST MANUFACTURING COMPANY, Sioux Falls, S. D.
Filed February 28, 1918. Serial No. 109,278. PUBLISHED APRIL 23, 1918.

122,332. BLOOD-TONIC FOR INTERNAL USE. FELIX MILLS, Haskell, Okla.
Filed May 3, 1917. Serial No. 103,508. PUBLISHED APRIL 30, 1918.

122,333. PREPARED PAINTS, GOLD PAINTS, ALUMINUM PAINTS, ENAMEL PAINTS, STOVEPIPE-ENAMELS, SCREEN-ENAMELS, AND VARNISHES. MONTAUK PAINT MANUFACTURING COMPANY, Brooklyn, N. Y.
Filed July 25, 1917. Serial No. 105,267. PUBLISHED NOVEMBER 13, 1917.

122,334. SALVES FOR TREATING CERTAIN NAMED AFFECTIONS OF MAN AND HORSE. DAVID C. MYERS, Hughesville, Pa.
Filed January 22, 1918. Serial No. 108,589. PUBLISHED APRIL 30, 1918.

122,335. ROLLER-BUCKLES. NORTH & JUDD M'F'G CO., New Britain, Conn.
Filed July 31, 1917. Serial No. 105,384. PUBLISHED APRIL 23, 1918.

122,336. PAPER-CLIPS. OWL SUPPLY COMPANY, Boston, Mass.
Filed December 22, 1917. Serial No. 108,106. PUBLISHED APRIL 30, 1918.

122,337. UTERINE TONICS, ANEMIA-TONICS, ECZEMA, SKIN, AND ULCER OINTMENT. OCCIDENTAL MEDICINE CO., Arecibo, Porto Rico.
Filed February 28, 1918. Serial No. 109,280. PUBLISHED APRIL 30, 1918.

122,338. STARCH-GLUE MATERIAL. PERKINS GLUE COMPANY, Lansdale, Pa.
Filed February 20, 1918. Serial No. 109,136. PUBLISHED APRIL 2, 1918.

122,339. LUBRICATING-OIL AND RUST-PREVENTIVE. PETROLEUM PRODUCTS CO., San Francisco, Cal.
Filed February 7, 1918. Serial No. 108,869. PUBLISHED MARCH 26, 1918.

122,340. MEDICINE FOR USE IN THE TREATMENT OF EPILEPSY. PABLO GONZÁLES GARZA, Monterey, Mexico.
Filed December 4, 1917. Serial No. 107,748. PUBLISHED APRIL 30, 1918.

122,341. CHICK FEED. THE PARK & POLLARD COMPANY, Boston, Mass.
Filed March 18, 1918. Serial No. 109,635. PUBLISHED APRIL 30, 1918.

122,342. HAIR-TONIC. ELLEN W. PHEIFFIER, Parkersburg, W. Va.
Filed December 4, 1917. Serial No. 107,755. PUBLISHED APRIL 23, 1918.

122,343. METAL-CUTTING TOOLS USED IN METAL-WORKING MACHINERY, ABRADING-MACHINES, REAMERS, AND FILES. ROLLING FILE TOOL COMPANY, Seattle, Wash.
Filed December 26, 1917. Serial No. 108,163. PUBLISHED APRIL 23, 1918.

122,344. LIQUID PREPARATION FOR THE PRESERVATION OF THE LEATHER IN BOOTS AND SHOES. BENJAMIN L. ROSENBLOOM, Wheeling, W. Va.
Filed February 16, 1918. Serial No. 109,044. PUBLISHED APRIL 23, 1918.

122,345. SUGAR. SAVANNAH SUGAR REFINING CORPORATION, Savannah, Ga.
Filed August 2, 1917. Serial No. 105,441. PUBLISHED DECEMBER 25, 1917.

122,346. HAT-STRAPS. ALLEN SMITH, Jr., Tacoma, Wash.
Filed January 25, 1918. Serial No. 108,639. PUBLISHED APRIL 30, 1918.

122,347. CANDY. SKIBO CONFECTIONERY CO., New York, N. Y.
Filed January 19, 1918. Serial No. 108,553. PUBLISHED APRIL 30, 1918.

122,348. PREPARED FOOD COMPOSED OF CORN-FLOUR AND WHEAT-FLOUR SIMILAR TO CUT SPAGHETTI. SKINNER MFG. CO., Omaha, Nebr.
Filed February 9, 1918. Serial No. 108,929. PUBLISHED APRIL 30, 1918.

122,349. CERTAIN NAMED OILS AND GREASES. STANDARD OIL COMPANY, Bayonne, N. J.
Filed August 4, 1917. Serial No. 105,480. PUBLISHED APRIL 30, 1918.

122,350. PIECE-DYED AND PIECE DYED AND FINISHED SILKS AND SILK AND COTTON GOODS. STANDARD SILK DYEING COMPANY, Paterson, N. J.
Filed February 4, 1918. Serial No. 108,808. PUBLISHED APRIL 16, 1918.

122,351. COFFEE. STILES-PELLENS COFFEE CO., Cincinnati, Ohio.
Filed March 19, 1918. Serial No. 109,659. PUBLISHED APRIL 30, 1918.

122,352. COFFEE. SYMONS BROS. & CO., Saginaw, Mich.
Filed March 19, 1918. Serial No. 109,660. PUBLISHED APRIL 30, 1918.

122,353. OLEOMARGARIN. SWIFT AND COMPANY, Chicago, Ill.
Filed March 25, 1918. Serial No. 109,779. PUBLISHED APRIL 30, 1918.

122,354. OLEOMARGARIN. SWIFT AND COMPANY, Chicago, Ill.
Filed March 25, 1918. Serial No. 109,780. PUBLISHED APRIL 30, 1918.

122,355. CERTAIN NAMED FOODS. UNION PACIFIC TEA COMPANY, New York, N. Y.
Filed February 4, 1916. Serial No. 92,642. PUBLISHED MAY 1, 1917.

122,356. PREPARATION FOR RHEUMATISM. VASILL PEPPAS, Braddock, Pa.
Filed February 1, 1918. Serial No. 108,751. PUBLISHED APRIL 30, 1918.

122,357. ALIMENTARY PASTE PRODUCTS. VINELAND PRESERVING COMPANY, Jersey City, N. J.
Filed April 16, 1917. Serial No. 103,050. PUBLISHED AUGUST 14, 1917.

122,358. CONDENSED MILK. WADDINGTON CONDENSED MILK CO., INC., Waddington, N. Y.
Filed March 15, 1918. Serial No. 109,582. PUBLISHED APRIL 30, 1918.

122,359. CERTAIN GAMES. THE WEINTHROP COMPANY, Chicago, Ill.
Filed February 23, 1918. Serial No. 109,187. PUBLISHED APRIL 30, 1918.

122,360. FRICTION-TAPE USED FOR INSULATION PURPOSES. WESTERN ELECTRIC COMPANY, INCORPORATED, New York, N. Y.
Filed February 25, 1918. Serial No. 109,211. PUBLISHED APRIL 23, 1918.

122,361. FRESH APPLES. WHITE BROS. & CRUM CO., Lewiston, Idaho, and Yakima, Wash.
Filed November 12, 1917. Serial No. 107,344. PUBLISHED JANUARY 15, 1918.

122,362. CERTAIN NAMED PAINTS AND PAINTERS' MATERIALS. HENRY ZIMMERN & COMPANY, INC., New York, N. Y.
Filed January 4, 1918. Serial No. 108,318. PUBLISHED APRIL 23, 1918.

DECISIONS

OF THE

COMMISSIONER OF PATENTS

AND OF

UNITED STATES COURTS IN PATENT CASES.

DECISIONS OF THE U. S. COURTS.

U. S. Circuit Court of Appeals—Sixth Circuit.

GENERAL ELECTRIC CO. *v.* COOPER HEWITT ELECTRIC CO.

Decided January 8, 1918.

249 FED REP., 61.

1. PATENTS—VALIDITY—AMENDMENT OF APPLICATION.
   The rule is that insertions by way of amendment in the description or drawing, or both, of a patent application do not invalidate the patent if they are only in amplification and explanation of what was already reasonably indicated to be within the invention, and this rule applies with special force where the insertion was required by the Patent Office.
2. SAME—SAME—IMPROVEMENT PATENTS.
   A device may be at the same time an infringement upon the relatively generic claim of a prior patent and also be a patentable improvement thereon, and there is no inconsistency, even presumptive, between these conclusions.
3. SAME—LAMP—EFFECT OF INTERFERENCE.
   The Kuch patent, No. 1,090,992, for a mercury-vapor lamp, *Held* not invalidated by interference proceedings with Bastian in the Patent Office, in which priority was awarded to Bastian as to certain claims then included in Kuch's application, but not as to the claims finally allowed.
4. SAME—INVENTION—INFRINGEMENT.
   The patent further *Held* to disclose an improvement which involved patentable invention, also *Held* infringed.
5. SAME—VALIDITY AND INVENTION—IMPROVEMENT PATENTS.
   When a supposed invention is considered with reference to a prior patent to determine whether there was inventive advance, the claims of that prior patent are wholly immaterial, unless in some possible instances where the claims might interpret an obscurity. The question is whether there has been inventive advance upon the structure disclosed by the specification and drawings, and if the claims seem to reveal the later form when the specification and drawings do not it must be because of the generic language of the claims, interpreted in the light of the later device.

APPEAL from the District Court of the United States for the Eastern Division of the Northern District of Ohio; John H. Clarke, judge.

Suit in equity by the General Electric Company against the Cooper Hewitt Electric Company. Decree for defendant, and complainant appeals. Reversed.

Messrs. Squire, Sanders & Dempsey and *Messrs. Pennie, Davis & Marvin* (*Mr. W. B. Morton* and *Mr. Wm. H. Davis* of counsel) for the appellant.

Mr. Parker W. Page and *Mr. Thomas B. Kerr* for the appellee.

Before KNAPPEN, MACK, and DENISON, Circuit Judges,

DENISON, *Cir. J.*:

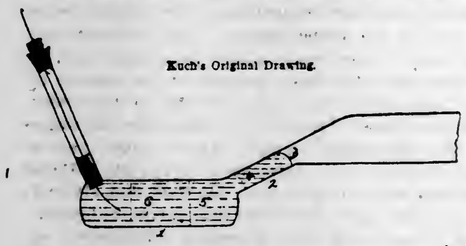
This is the ordinary suit for infringement, based upon Patent No. 1,090,992, issued March 24, 1914, to Kuch for an improved mercury-vapor lamp. Appellant acquired title to the patent and was the plaintiff below. The bill was dismissed because the patent was thought to be invalid, and the plaintiff appeals.

The conclusion of invalidity is rested upon two grounds: first, that new matter was introduced into the application and was not supported by new oath; and, second, that Kuch was anticipated by Bastian, and that this priority had been adjudicated in an interference between them. A due understanding of the questions thus presented requires a brief explanation of the invention. Lamps of this type consist essentially of a sealed glass tube, more or less exhausted, having a mercury electrode at each end. When the tube is filled with the mercury-vapor and the electric current passed through, the vapor becomes luminous or incandescent. One of the recognized difficulties is that, since greater heat develops at the anode than at the cathode, there is at the anode a greater vaporization, and the mercury is distilled over and accumulates at the cathode, so as to destroy the proper balance. This difficulty had been met by devices or constructions which caused or permitted the excess mercury at the cathode to run back occasionally along the tube to the anode; but this remedy brought new operating difficulties in the high-pressure lamps. Kuch's object was to find a better way to preserve an automatic balance between the two electrodes. He took that style of lamp which had a horizontal tube carrying the mercury at each end in a depending enlargement or bulb, and he accomplished a first or general automatic balance by directly attacking the vaporization at the anode. His remedy for the excess was to make the anode-bulb larger than the cathode-bulb. It followed that the outer surface of the former bulb, which would radiate heat, would be larger, and would therefore by radiation subtract heat from that generated inside the bulb, and so diminish what may be called the net heat of the mercury, and the comparative resulting anode vaporization. He knew that the effect of a given

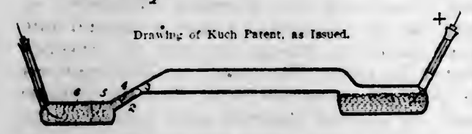
current upon these electrodes and under given conditions could be computed, and his inventive thought was that, if the radiating-surfaces of the two bulbs were proportioned to the amount of the heat to be generated in each, there would be corresponding radiation and the proper vaporization balance would be maintained.[1] He thus brought about a rough and general equalization by attacking the cause of inequality; but changes of external temperature or other conditions would prevent this preliminary regulation from entirely and always stopping the accumulation of excessive mercury at the cathode, and so Kuch provided a further and final automatic regulation. He knew that there occurred at the cathode a phenomenon called the "cathodic aigret." This was an agitation suggestive of boiling, and it extended a certain depth from the surface of the mercury in the cathode. Obviously, the bulb-surface adjacent to the mercury thus agitated would radiate heat much more actively than the remaining and lower part of the bulb-surface. Kuch utilized this effect of this phenomenon by interposing, between his horizontal illuminating-tube and his depending cathode-bulb, an intermediate upwardly-inclined tube of much less diameter than the illuminating-tube. A small excess accumulation of mercury in this intermediate tube would very considerably raise the lowest point of this aigret agitation and so diminish radiation, increase the net heat, and promote vaporization. A slight drop in the mercury in this tube would have the converse magnified effects; and the mercury-level would, automatically, maintain itself substantially constant. We here reproduce Figure 1 of the Kuch patent as originally filed and as amended. Claims 2 and 3 are given in the margin.[2] Claims 1 and 4, also sued upon, do not require separate consideration.

(1) The original drawing did not show any anode-bulb or passage thereto from the illuminating-tube, nor did the specification contain any particular description of either. During the progress of the

Kuch's Original Drawing.



Drawing of Kuch Patent, as Issued.



cathode, and that the passage leading from the application, an amended drawing was filed as above, and the specification was made to say, in so many words, that the anode-bulb was larger than the illuminating-tube to the anode was larger than the passage or intermediate tube leading to the cathode-bulb. The claims, as issued, are made to depend in part upon these things not originally specified. Hence it is plausibly argued that the insertion was of new matter and was vital to the invention as patented; and thereupon it is said that the patent is void. (*Railroad* v. *Sayles*, 97 U. S., 554, 563; 24 L. Ed., 1053; *Railroad* v. *Consolidated Co.*, C. C. A. 6, 67 Fed., 121, 129; 14 C. C. A., 232.) This view overlooks the substance of the invention, as disclosed in the original specification and drawing. The rule is that insertions by way of amendment in the description or drawing, or both, do not hurt the patent, if the insertions are only in amplification and explanation of what was already reasonably indicated to be within the invention for which protection was sought—"something that might be fairly deduced from the original application." (*Hobbs* v. *Beach*, 180 U. S., 383, 395; 21 Sup. Ct., 409; 45 L. Ed., 586; *Cleveland Co.* v. *Detroit Co.*, C. C. A. 6, 131 Fed., 853, 857; 68 C. C. A., 233; *Proudfit Co.* v. *Kalamazoo Co.*, C. C. A. 6, 230 Fed., 120, 123; 144 C. C. A., 418; *Cosper* v. *Gold*, 36 App. D. C., 302; 168 O. G., 787.) When we seek to apply this rule in this case, we first observe that the alleged new matter was not only permitted by the Patent Office, but was required, because an element claimed was not shown or sufficiently described. The Patent Office has a strict rule on this subject. It fully recognizes that new matter must not be permitted, and it is constantly engaged in defining what is and what is not new matter. The application of the rule must, of necessity, be more or less arbitrary, and the presumption of correctness which attends Patent Office rulings must apply with especial force to this class of ruling; and most peculiarly is that true when the applicant has only complied with the demands which the Patent Office made.

It is clear to us that Kuch's original application did cover and include these features sufficiently to justify the later fuller description and drawing. After reciting that the evolution of heat at the anode was greater than at the cathode, so that the vaporization at the latter was less, he said that the first object of his invention was to so determine the sizes of the two electrode vessels that they should be in the same proportion as the heats developed in them, and that the second object was to connect the cathode with the illuminating-tube by means of a narrow intermediate tube. He also says:

> It is easy to so proportion the positive and negative electrode vessels that the proportion of the heats given off at both electrodes is approximately the same as the proportion of heats developed at both electrodes.

He also says:

> "The size of the cathode vessel in proportion to that of the anode vessel is from the beginning so determined that" the desired results are effected.

His first claim was:

> In a gas or vapor electric lamp the combination with an illuminating tube of an anode vessel at the one end of said illuminating tube, a cathode vessel, a narrow intermediate tube between the other end of said illuminating tube and said cathode vessel, and a metal liquid doing work in said anode vessel, said cathode vessel and said narrow intermediate tube.

The second claim specified that the sizes of the anode and the cathode vessels should be in proportion to the developed heats. Later claims had specific reference to the function of the narrow intermediate tube in controlling the cathode heat through the aigret action. Thus we find repeated and direct reference to the fact that the anode-bulb is to be larger than the cathode-bulb, and in the very proportion which has always been specified in the claims. Since Kuch did not illustrate this anode vessel, he must be deemed to have referred to the well-known form in common use. (*Cosper* v. *Gold*, *supra*.) In this form, the illuminating-tube entered the anode-chamber without any constriction, but by an opening which was the full cross-section area of the illuminating-tube. It follows that when Kuch specified that at the cathode end of the illuminating-tube he had a narrower tube entering the cathode-chamber, he naturally implied that this entrance was smaller than the entrance to the anode-chamber at the other end of the illuminating-tube.[3] It surely is not the insertion of new matter to put into express words a structural characteristic already fairly implied. The attack upon the patent on this ground must fail. The situation is closely analogous to that in *Abercrombie Co.* v. *Baldwin*, (245 U. S., 198; 38 Sup. Ct., 104; 62 L. Ed., ——; 246 O. G., 567,) decided by the Supreme Court December 10, 1917.

(2, 3) After most of Kuch's claims, about twenty in number, were allowed, the Office suggested to Bastian sixteen of these claims. Bastian adopted them, and an interference was declared. Since both applicants were foreigners, and Bastian's filing date was earlier, the Office awarded him priority. So far as the inventions pertained to a proportioning of the anode and cathode bulbs, this award of priority is the end of the matter; but at the time of the declaration of interference Kuch's application contained claims identical with 1 and 2 in his issued patent, and these claims were not included in the interference. Like claims 3 and 4, added after the interference, they were characterized and limited by the provision that there should be between the illuminating-tube and the cathode-tube an "intermediate tube" or a "contracted passage" of less diameter than the main part or other end of the illuminating-tube. Count 11 of the interference, which had been one of Kuch's claims and which became claim 11 of the Bastian patent, (1,079,926,) was:

> In a vapor lamp, the combination with the horizontal illuminating tube of an anode, a cathode chamber, a narrow upwardly inclined intermediate tube connecting the illuminating tube and the cathode chamber, an active fluid in the cathode chamber and partly filling the intermediate tube.

Since this count plainly reads upon Kuch's form, and priority was awarded to Bastian, the court took the view that the invalidity of Kuch's patent necessarily followed, and assumed that a decree accordingly was in substantial conformity to the Patent Office decision.

We think this view does not give due force to the rule that a device may be at the same time an infringement upon the relatively generic claim of a prior patent and also be a patentable improvement thereon, and that there is no inconsistency—even presumptive—between these conclusions. (*Herman* v. *Youngstown*, C. C. A. 6, 191 Fed., 579, 584; 112 C. C. A., 185.) The intermediate tube of smaller diameter than the illuminating-tube, or, in other words, the passage to the cathode-chamber constructed so as to be smaller than the illuminating-tube, was a feature certainly not shown by Bastian, and its addition to or substitution in Bastian's structure might well be a patentable improvement upon anything which Bastian had invented. In careful observance of this distinction and purported compliance therewith, the Patent Office reserved out of the declaration of interference two claims which were limited to this additional feature, and later issued to Kuch the patent in suit, based on these and similar claims. To hold these claims invalid on account of the result of the interference is not to affirm but is to reverse the Patent Office conclusions on the subject; and the claims cannot be held invalid for that reason.

(4) This leaves only the question whether this so-called improvement, when considered with Bastian put in the prior art (where, for the fourth defense, he must be placed—*Lemley* v. *Dobson*, C. C. A. 6, 243 Fed., 391, 395; 246 O. G., 1203; —— C. C. A., ——), involved patentable invention. This is the controlling question in the case. It is not free from doubt, and very likely the decree below was intended to rest substantially upon a negative answer thereto.

Here, again, the patentee has the benefit, in rather unusual degree, of that presumption of correctness which attaches to the Patent Office rulings. After the interference was finished, the Examiner rejected two of the remaining claims of Kuch upon the ground that they were identical with the interference issues, but allowed two others of those reserved from the interference (present 1 and 2). He also rejected, on the same ground, two new claims tendered (present 3 and 4). Kuch finally conceded that the interference adjudication covered the first two just mentioned, but argued that it did not reach 3 and 4, for the same reason that 1 and 2 were not included. To these arguments the Patent Office yielded. Its action in this respect was therefore

[1] Theories of heat transmission to the mass of mercury in the bulb are also involved, but do not need statement.

[2] Claim 2. The herein described gas or vapor electric lamp comprising a tube having electrode chambers at its ends, the cathode chamber being connected with the tube by a passage smaller than that connecting the tube and anode chamber, a body of mercury in the cathode chamber and partly filling the passage connecting said chamber with the body of the tube, and a body of mercury in the anode compartment.

Claim 3. A vapor electric device comprising an anode bulb partly filled with mercury, a main illuminating tube communicating with said anode chamber and a tube of lesser diameter than said illuminating tube connecting the latter with the cathode chamber.

[3] When he made his new drawing, he showed a passage to the anode which may be slightly constricted, but his claims do not involve this feature.

most deliberate and considered, and especial deference is given to such rulings. (*Canda* v. *Michigan Co.*, C. C. A. 6, 124 Fed., 486, 493; 61 C. C. A., 194.)

(5) Plainly, when we consider a supposed invention with reference to a prior patent, to determine whether there was inventive advance, the claims of that prior patent are wholly immaterial—unless in some possible instances where the claims might interpret an obscurity. We must look, rather, to the structure disclosed by the specification and drawings, and the question is whether there has been any inventive advance upon that structure. If the claims seem to reveal the later form, when the specification and drawings do not, it must be because of the generic language of the claims, interpreted by our knowledge of the later device. We therefore cannot depend upon the language of Bastian's claim 11 (and similar claims, 10 and 12) in which alone there was any reference to a "narrow intermediate tube" as distinguished from the illuminating-tube and the cathode-chamber, and we refer to the specification and drawings to see whether Bastian has the equivalent of the "tube of lesser diameter than the illuminating tube" upon the presence of which the Kuch patent depends. Bastian's specification does not mention any "narrow" tube or any "intermediate" tube. Since Bastian's claim 11 declares that this "narrow intermediate tube" is found in connection with the horizontal illuminating-tube, we may well look for it in his Fig. 1, showing his horizontal form and here reproduced.

Fig. 1.



Yielding to the Patent Office conclusion that Bastian could make this claim on his disclosure, it follows that this element must be there somewhere. It cannot be a part of the cathode-bulb. It therefore must be that end of the illuminating tube which turns downwardly into the cathode-bulb. It is rather an awkward conception that, of a unitary tube of constant diameter all of which seems to be the illuminating-tube, part is illuminating-tube and part is a "narrow intermediate tube" between the illuminating-tube and the cathode; but there is no other solution. Bastian's "narrow tube" is therefore an extension of the illuminating-tube, and of precisely the same diameter, and is "narrow" only with reference to the greater diameter of part of the cathode-bulb, while Kuch's tube is also narrow with reference to the illuminating-tube. Is Kuch's form only such a variation as any one skilled in the art might naturally make? Defendant insists that the vital relationship is between the size of the intermediate tube and the size of the cathode-bulb, and that, since it was common practice to increase the size of the illuminating-tube proportionately to the increase in the current to be used, there was no invention in maintaining that part of Bastian's tube which served as the cathode extension at the small size shown by Bastian, and then expanding the remainder of the tube into any size which the current required.

We are not convinced that we should accept this conclusion. In the first place, Bastian certainly contemplated nothing of the kind. Not only is it evident that his entire illuminating-tube must be of such very small diameter that superficial tension will prevent the flow of the mercury along the horizontal part, but in another patent, issued upon a divisional application, he expressly claimed this feature. Next, we observe that in Kuch, the mercury arc initially fills the main illuminating-tube and usually extends part of the length of the intermediate tube. So far as shown by the records in this and in the companion case (No. 3,028) relating to the same art (249 Fed., 69; —— C. C. A., ——); there had never been a lamp with mercury electrodes in which the arc or its containing-tube was constricted at or toward the cathode; on the contrary, the area of the active cathode-surface had always been at least as great as the cross-section area of the arc-tube; and we cannot now say that an innovation in this respect presented no new problems as to radiation, amperage or other elements. If the arc has become limited to a central "string," then the constriction would be of the space between the arc and the tube-walls, and there is no presumption that this would be immaterial.[4] The Bastian device was inoperative, except with a small amperage. That its beneficial effects could be retained, and that it could be made to operate with a high amperage, by expanding part of the tube and leaving the remainder untouched, seems now entirely obvious to the defendant's expert; but we think we have no right to say that this was ordinary skill in 1906. Such a change would involve, not only expanding part of the tube, but (probably) changes in the quantity of mercury to be vaporized and readjustment of the anode and cathode sizes—in fact, every factor involved would be disturbed and subject to recomputation if not to experimental research.

When to these considerations we add the fact that defendant, owner of the Bastian patent, has abandoned his specific form and adopted Kuch's, thus paying the "tribute of imitation" (*Diamond Co.* v. *Consolidated Co.*, 220 U. S., 428, 441; 31 Sup Ct., 444; 55 L. Ed., 527), we conclude that the presumption of validity is not sufficiently overcome, and that there must be the usual decree for injunction and accounting.

[4] We do not overlook Fig. 2 of Hewitt Patent No. 682,690 (using one mercury electrode). The inserted guide or collar which produced restriction was for a different purpose, and was of opaque and non-heat-conducting material. It is not more than a suggestion of one element of Kuch's combination. If it were more, it would anticipate Bastian's claim 11.

ADJUDICATED PATENTS.

(U. S. C. C. A. N. Y.) The Bachman design patent, No. 43,513, for a design for a goggle-frame, *Held* void for lack of invention. *T. A. Willson & Co.* v. *Hudson Products Co.*, 249 Fed. Rep., 754.

(U. S. C. C. A. Cal.) The Block patent, No. 1,051,353, for arch-support, claims 1 and 4, which present combination of insole member, insertion, and self-contained means carried by insole member and insertion, whereby insertion may be detachably secured at predetermined points, *Held* not infringed. *Wonder Mfg. Co.* v. *Block*, 249 Fed. Rep., 748.

(U. S. C. C. A. Cal.) The Block patent, No. 1,127,349, for support of anterior metatarsal arch of the foot, *Held*, in view of prior art, to have been anticipated and not to show invention, as to claim 1, for flexible insole having portion located beneath anterior metatarsal arch of the foot of wearer, etc.; claim 2 *Held* limited by the language of the claim, and, as limited, not infringed. *Wonder Mfg. Co.* v. *Block*, 249 Fed. Rep., 748.

(U. S. C. C. A. Cal.) The Double patent, No. 743,833, for an underreamer, construed and *Held* not infringed. *Wilson & Willard Mfg. Co.* v. *Union Tool Co.*, 249 Fed. Rep., 729.

(U. S. C. C. A. Minn.) The Turner patent, No. 985,119, for improvements in reinforced-concrete building construction, claims 1, 2, 4, 6, and 8 *Held* void for lack of invention in view of prior art. *Turner* v. *Deere & Webber Bldg. Co.*, 249 Fed. Rep., 752.

(U. S. C. C. A. Cal.) The Wilson patent, No. 827,595, for an underreamer, *Held* not anticipated and valid and claims 9 and 19 infringed. *Union Tool Co.* v. *Wilson*, 249 Fed. Rep., 736.

(U. S. C. C. A. Mass.) The Gibbs improvement patent, No. 797,054, describing improved assembling of mechanical means for more securely holding in place terminal plates connected with electric-fuse wires, which serve to break circuits under abnormal conditions, *Held* valid and not infringed by defendant's device. *Economy Fuse & Mfg. Co.* v. *Chase-Shawmut Co.*, 249 Fed. Rep., 872.

(U. S. D. C. Ill.) The Guth patent, No. 1,076,416, for an improved electric lamp for semi-indirect illumination, *Held* infringed as to claim 1 by device manufactured under the subsequent Adams patent, No. 1,121,577, device therein described, while differing slightly in means used, accomplishing same result. *Luminous Unit Co.* v. *Freeman-Sweet Co.*, 249 Fed. Rep., 876.

Applications Made to the Federal Trade Commission for Licenses Under Enemy-Controlled Patents and Trade-Marks Pursuant to the "Trading with the Enemy Act."

Patent No. 896,807, dated August 25, 1908, to Karl Dieterich, of Helfenberg, Saxony, Germany, for Improvement in agar-agar-cascara products and processes of making same. License applied for by Reinschild Chemical Company, 47–49 Barclay street, New York, N. Y.

Patent No. 943,163, dated December 14, 1909, to Adolph Schmidt, of Dresden, Germany, assignor to Chemische Fabrik Helfenberg, A. G., formerly Eugen Dieterich, a corporation of Germany, for Improvement in agar-agar-cascara products. License applied for by Reinschild Chemical Company, 47–49 Barclay street, New York, N. Y.

Interference Notice.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., August 2, 1918.

Commercial Wood and Cement Company, its assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of The Great Western Portland Cement Company of Kansas, at Mildred, Kans., for registration of a trade-mark and trade-mark registered April 16, 1895, No. 26,430, to Commercial Wood and Cement Company, of Girard Building, northeast corner of Broad and Chestnut streets, Philadelphia, Pa., and a notice of such declaration sent by registered mail to said Commercial Wood and Cement Company at the said address having been returned by the post-office undeliverable, notice is hereby given that unless said Commercial Wood and Cement Company, its assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

R. F. WHITEHEAD,
First Assistant Commissioner.

THE
OFFICIAL GAZETTE
OF THE
United States Patent Office.

Vol. 252—No. 5. TUESDAY, JULY 30, 1918. Price—$5 per year.
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Printed copies of patents are furnished by the Patent Office at 5 cents each. For the latter, address the Commissioner of Patents, Washington, D. C.

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Issue of July 30, 1918.

Patents	561	No. 1,273,800	to No. 1,274,360	inclusive.
Designs	14	No. 52,233	to No. 52,246	inclusive.
Trade-Marks	43	No. 122,363	to No. 122,405	inclusive.
Labels	16	No. 20,737	to No. 20,752	inclusive.
Prints	3	No. 4,916	to No. 4,918	inclusive.
Reissues	3	No. 14,497	to No. 14,499	inclusive.
Total	640			

Amendment to the Rules of Practice.

(ORDER No. 2,417.)

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., July 31, 1918.

Acting under the provisions of section 483 of the Revised Statutes and with the approval of the Secretary of the Interior, Rule 17 of the Rules of Practice of the United States Patent Office is amended by adding thereto the following:

(*h*) Every attorney registered to practice before the United States Patent Office shall submit to the Commissioner of Patents for approval copies of all proposed advertising matter, circulars, letters, cards, etc., intended to solicit patent business, and if it be not disapproved by him and the attorney so notified within ten days after submission, it may be considered approved.

Any registered attorney sending out or using any such matter, a copy of which has not been submitted to the Commissioner of Patents in accordance with this rule, or which has been disapproved by the Commissioner of Patents, shall be subject to suspension or disbarment,

so that the rule as amended will read as follows:

17. An applicant or an assignee of the entire interest may prosecute his own case, but he is advised, unless familiar with such matters, to employ a competent patent attorney, as the value of patents depends largely upon the skilful preparation of the specification and claims. The office can not aid in the selection of an attorney.

A register of attorneys will be kept in this office, on which will be entered the names of all persons entitled to represent applicants before the Patent Office in the presentation and prosecution of applications for patent. The names of persons in the following classes will, upon their written request, be entered upon this register.

(*a*) Any attorney at law who is in good standing in any court of record in the United States or any of the States or Territories thereof and who shall furnish a certificate of the clerk of such United States, State, or Territorial court, duly authenticated under the seal of the court, that he is an attorney in good standing.

(*b*) Any person not an attorney at law who is a citizen or resident of the United States and who shall file proof to the satisfaction of the Commissioner that he is of good moral character and of good repute and possessed of the necessary legal and technical qualifications to enable him to render applicants for patents valuable service and is otherwise competent to advise and assist them in the presentation and prosecution of their applications before the Patent Office.

(*c*) Any foreign patent attorney not a resident of the United States, who shall file proof to the satisfaction of the Commissioner that he is registered and in good standing before the patent office of the country of which he is a citizen or subject, and is possessed of the qualifications stated in paragraph (*b*).

(*d*) Any firm will be registered which shall show that the individual members composing the firm are each and all registered under the provisions of the preceding sections.

(*e*) The Commissioner may require proof of qualifications other than those specified in paragraph (*d*) and reserves the right to decline to recognize any attorney, agent, or other person applying for registration under this rule.

(*f*) Any person or firm not registered and not entitled to be recognized under this rule as an attorney or agent to represent applicants generally may, upon a showing of circumstances which render it necessary or justifiable, be recognized by the Commissioner to prosecute as attorney or agent certain specified application or applications, but this limited recognition shall not extend further than the application or applications named.

(*g*) No person not registered or entitled to recognition as above provided will be permitted to prosecute applications before the Patent Office.

(*h*) Every attorney registered to practice before the United States Patent Office shall submit to the Commissioner of Patents for approval copies of all proposed advertising matter, circulars, letters, cards, etc., intended to solicit patent business, and if it be not disapproved by him and the attorney so notified within ten days after submission, it may be considered approved.

Any registered attorney sending out or using any such matter, a copy of which has not been submitted to the Commissioner of Patents in accordance with this rule, or which has been disapproved by the Commissioner of Patents, shall be subject to suspension or disbarment.

J. T. NEWTON,
Commissioner.

Interference Notice.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., August 2, 1918.

Commercial Wood and Cement Company, its assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of The Great Western Portland Cement Company of Kansas, at Mildred, Kans., for registration of a trade-mark and trade-mark registered April 16, 1895, No. 26,430, to Commercial Wood and Cement Company, of Girard Building, northeast corner of Broad and Chestnut streets, Philadelphia, Pa., and a notice of such declaration sent by registered mail to said Commercial Wood and Cement Company at the said address having been returned by the post-office undeliverable, notice is hereby given that unless said Commercial Wood and Cement Company, its assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

R. F. WHITEHEAD,
First Assistant Commissioner.

APPLICATIONS UNDER EXAMINATION.

Condition at Close of Business July 26, 1918.

Room No.	Divisions and subjects of invention.	Oldest new application and oldest action by applicant awaiting office action.		No. of applications awaiting action.
		New.	Amended.	
314	1. Closure Operators; Fences; Gates; Harrows and Diggers; Plows; Railway Gates; Planting; Scattering Unloaders; Trees, Plants, and Flowers.	June 15	June 28	145
128	2. Bee Culture; Curtains, Shades, and Screens; Dairy; Paper Files and Binders; Medicines; Pneumatics; Preserving; Presses; Tents, Canopies, Umbrellas, and Canes; Tobacco.	Apr. 22	May 18	358
175	3. Electric Heating and Rheostats; Electrochemistry; Heating; Metal-Founding; Metallurgical Apparatus; Metallurgy; Metal Treatment; Plastic Metal Working.	Apr. 22	May 20	224
234	4. Conveyers; Elevators; Excavating; Hoisting; Material or Article Handling; Pneumatic Despatch; Pushing and Pulling Implements; Railway Mail Delivery; Store-Service; Traversing Hoists.	June 13	July 10	155
167	5. Book-Making; Books, Strips and Leaves; Harvesters Jewelry; Manifolding; Music; Printed Matter.	Apr. 19	June 7	229
318	6. Bleaching and Dyeing; Chemicals; Explosives; Fertilizers; Liquid Coating Compositions; Plastic Compositions; Substance Preparation.	Mar. 22	June 6	364
312	7. Educational Appliances; Games and Toys; Optics; Velocipedes	Mar. 29	June 3	265
131	8. Beds; Chairs; Flexible-Sheet Securing Devices; Furniture; Kitchen and Table Articles; Store Furniture; Supports.	June 6	June 21	236
221	9. Air and Gas Pumps; Hydraulic Motors; Motors, Fluid; Motors, Fluid-Current; Pumps; Marine Propulsion.	Feb. 13	May 25	414
235	10. Carriages and Wagons; Motor Vehicles	Apr. 11	June 18	561
154	11. Boot and Shoe Making; Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Spring Devices; Whips and Whip Apparatus.	June 3	July 5	207
222	12. Journal-Boxes, Pulleys, and Shafting; Machine Elements	Apr. 19	May 23	769
329	13. Ammunition and Explosive Charge Making; Bolt, Nail, Nut, Rivet, and Screw Making; Button Making; Chain, Staple, and Horseshoe Making; Driven, Headed, and Screw-Threaded Fastenings; Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Tools and Implements, Making; Metal Working; Needle and Pin Making; Nut and Bolt Locks; Turning.	Mar. 8	May 4	558
323	14. Compound Tools; Cutting and Punching Sheets and Bars; Farriery; Metal-Bending; Sheet-Metal Ware, Making; Tools; Wire Fabrics and Structure; Wire-Working.	May 20	June 8	155
308	15. Bread, Pastry, and Confection Making; Coating; Fuel; Glass; Laminated Fabrics and Analogous Manufactures; Paper-Making and Fiber Liberation; Plastic Block and Earthenware Apparatus; Plastics.	June 17	June 24	241
112	16. Electric Signaling-A; Radiant Energy; Telegraphy; Telephony	Mar. 21	Apr. 23	516
307	17. Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet Material Associating or Folding; Sheet Feeding or Delivering; Type Setting.	May 18	May 13	119
229	18. Fluid-Pressure Regulators; Injectors and Ejectors; Liquid Heaters and Vaporizers; Power Plants; Speed Responsive Devices; Steam and Vacuum Pumps; Steam-Engines; Steam-Engine Valves.	Apr. 29	May 6	433
236	19. Dampers, Automatic; Furnaces; Heating Systems; Stoves and Furnaces; Domestic Cooking Vessels	Apr. 19	May 29	323
179	20. Artificial Body Members; Builders' Hardware; Cutlery; Dentistry; Locks and Latches; Safes; Undertaking.	June 12	June 20	214
212	21. Brakes and Gins; Carding; Cloth-Finishing; Continuous-Strip Feeding; Cordage; Felt and Fur; Knitting and Netting; Silk; Spinning; Weaving; Winding and Reeling.	Apr. 8	May 4	280
249	22. Aeronautics; Firearms; Ordnance	Apr. 29	June 12	311
217	23. Acoustics; Coin-Handling; Horology; Recorders; Registers; Sound Recording and Reproducing; Time-Controlling Mechanism.	May 8	May 11	246
144	24. Apparel; Apparel Apparatus; Garment Supporters; Sewing-Machines	May 22	July 1	195
315	25. Agitating; Butchering; Centrifugal Bowl Separators; Mills; Threshing; Vegetable Cutters and Crushers; Gas Separation.	June 13	June 14	132
105	26. Electricity, Generation; Motive Power	Jan. 5	Apr. 11	552
214	27. Brushing and Scrubbing; Grinding and Polishing; Laundry; Washing Apparatus	May 13	June 7	272
225	28. Internal-Combustion Engines	Mar. 28	May 3	500
147	29. Boring and Drilling; Chucks or Sockets; Coopering; Fire-Escapes; Ladders; Rod Joints or Couplings; Wheelwright-Machines; Wooden Buildings; Wood-Sawing; Wood-Turning; Woodworking; Wood-working Tools.	Feb. 23	May 1	480
152	30. Illuminating-Burners; Illumination; Liquid and Gaseous Fuel Burners; Type-Writing Machines	May 16	July 11	304
172	31. Alcohol, Ammonia, Water, and Wood Distillation; Charcoal and Coke; Gas, Heating and Illuminating; Hides, Skins, and Leather; Hydraulic Cement and Lime; Mineral Oils; Oils, Fats, and Glue; Sugar and Salt.	Apr. 11	May 16	277
278	32. Gas and Liquid Contact Apparatus; Heat Exchange; Packaging Liquids; Refrigeration	Feb. 2	June 10	638
70	33. Bridges; Hydraulic Engineering; Masonry and Concrete Structures; Metallic Building Structures; Paving; Roofs.	Apr. 23	May 17	222
304	34. Railways; Railway Rails and Joints; Railway Rolling Stock; Railway Ties and Fasteners; Track-Sanders; Vehicle-Fenders.	July 5	May 23	57
57	35. Buckles, Buttons, Clasps, Etc.; Card, Picture, and Sign Exhibiting; Signals; Toilet	Feb. 20	Mar. 2	532
204	36. Driers; Geometrical Instruments; Measuring Instruments; Photography; Force Measuring	May 31	June 17	494
107	37. Electric Lamps; Electricity, Circuit Makers and Breakers; Electricity, Conduits; Electricity, General Applications.	Mar. 18	Apr. 2	684
378	38. Animal Husbandry; Earth Boring; Fishing and Trapping; Stationery; Stone-Working; Wells	June 22	July 1	96
220	39. Joint Packings; Multiple Valves; Packed Shaft or Rod Joints; Pipe Joints or Couplings; Valved Pipe Joints or Couplings; Water Distribution.	Mar. 19	May 14	30
273	40. Baggage; Bottles and Jars; Check-Controlled Apparatus; Cloth, Leather, and Rubber Receptacles; Deposit and Collection Receptacles; Metallic Shipping and Storing Vessels; Package and Article Carriers; Paper Receptacles; Special Receptacles and Packages; Wooden Receptacles.	Apr. 5	May 2	487
125	41. Railway Draft Appliances; Resilient Tires and Wheels	Apr. 16	May 9	263
114	42. Electricity, Conductors; Electricity-Transmission to Vehicles; Electric Signaling	Jan. 23	Jan. 25	613
382	43. Baths and Closets; Dispensing; Dispensing Beverages; Electricity, Medical and Surgical; Fire-Extinguishers; Sewerage; Surgery; Water Purification.	Apr. 2	May 24	223
253	44. Air-Guns, Catapults, and Targets; Ammunition and Explosive Devices; Boats and Buoys; Ships	June 15	June 24	172
379	45. Clutches; Lubrication; Motors; Railway Brakes	Mar. 16	Apr. 11	336

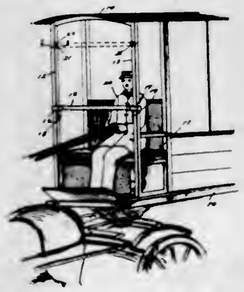
Oldest new case, Jan. 5; oldest amended, Jan. 25.
Total number of applications awaiting action 15,159

168	TRADE-MARKS, DESIGNS, LABELS AND PRINTS.	June 25	July 9	668
	Trade-Marks	Apr. 23	June 12	396
	Designs	June 20	July 9	98
	Labels and Prints			

PATENTS
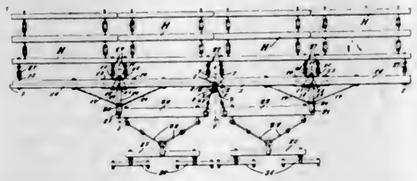
GRANTED JULY 30, 1918.

1,273,800. GUARD FOR DRIVERS' SEATS OF VEHICLES. JACOB AIZENMAN, Brooklyn, N. Y. Filed July 20, 1917. Serial No. 181,729. (Cl. 21—183.)



The combination with a driver's seat of a vehicle, having upright side posts, a guard rail extending between said posts, means on said guard rail slidably engaging said posts, means on said posts adapted to support said guard rail in front of said seat, and spring stops on said respective posts adapted to automatically retain said rail at an elevated position away from in front of said seat upon movement of said rail above said spring stops, said rail adapted to press said stops into non-projecting position into said posts by being moved across said stops.

1,273,801. HARROW. CLAUDE D. ADAIR, Shellrock, Iowa. Filed Apr. 19, 1918. Serial No. 229,559. (Cl. 55—84.)

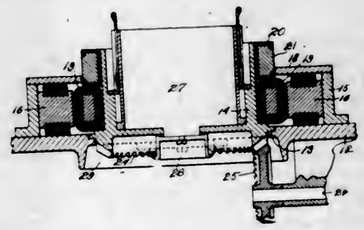


1. A harrow including sections foldable one upon the other, a hinge connecting the sections and including a forwardly extending rod constituting the pintle of the hinge, braces extending from the sections and having lapping ends engaged by the forward portion of the rod, a spacing element upon the rod and between the sections and the lapping ends of the braces, and draft means connected to the forward end of the rod.

2. A harrow including a connecting bar comprising an intermediate section and end sections foldable onto the intermediate section, hinge connections between the sections and each including a forwardly extending rod constituting the pintle of the hinge, levers connected to the outer ends of the respective rods and extending toward each other, a flexible connection between the levers, means for movably attaching said connection to the intermediate section of the bar, and draft means carried by the levers.

1,273,802. ELECTRICALLY-OPERATED KNITTING-MACHINE. HERRICK AIKEN, Franklin, N. H., assignor to Charles L. Aiken, Franklin, N. H. Filed Mar. 14, 1917. Serial No. 154,719. (Cl. 66—21.)

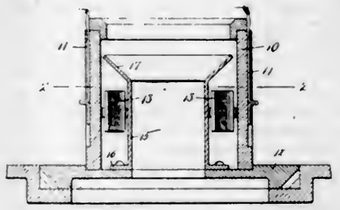
1. A knitting machine having an electric motor for operating it, the rotary element of the motor being carried by a rotary element of the machine itself at its head, means being provided for operating other elements of the



knitting machine below its head by power obtained from the electrically driven element of the knitting machine.

[Claims 2 to 5 not printed in the Gazette.]

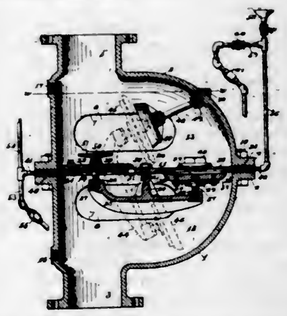
1,273,803. KNITTING-MACHINE. HERRICK AIKEN, Franklin, N. H., assignor to Charles L. Aiken, Franklin, N. H. Filed Apr. 12, 1917. Serial No. 161,480. (Cl. 66—21.)



5. A knitting machine needle cylinder having external grooves for the needles, a shell having a flaring upper end inside the cylinder, and a series of electro-magnets supported by said shell in position to magnetize the cylinder.

[Claims 1 to 4 not printed in the Gazette.]

1,273,804. BALANCED VALVE. DAVID A. ALEXANDER, Rochester, N. Y. Filed May 23, 1917. Serial No. 170,538. (Cl. 169—23.)



1. A valve of the character described comprising a casing having two chambers into one of which is the inlet and from the other the outlet of the valve; a partition

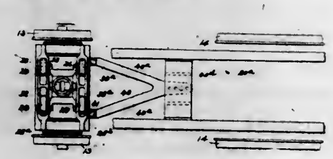
having a port opening affording communication between the two chambers and an opening to the exterior of the casing; valve plates seated on opposite sides of said partition, one of said plates closing the said port opening and the other the said opening to the exterior of the casing and both being exposed to the water pressure; and a pivotally supported arm connecting said valve plates, whereby they oppose each other with a counterbalancing effect.

2. A valve of the character described comprising a casing having a straight waterway and two chambers into one of which is the inlet and from the other the outlet of the valve; a partition having a port opening alined with the waterway affording communication between the two chambers and an opening to the exterior of the casing; valve plates seated on opposite sides of said partition, one of said plates closing the said port opening and the other the said opening to the exterior of the casing and both being exposed to the water pressure; and a pivotally supported arm connecting said valve plates, whereby they are opposed to each other with a counterbalancing effect, and adapted upon rotation to carry the said port closing plate to one side of the waterway.

3. A valve of the character described comprising a casing having a straight waterway and two chambers into one of which is the inlet and from the other the outlet of the valve; a partition having a port opening alined with the waterway affording communication between the two chambers and an opening to the exterior of the casing; valve plates seated on opposite sides of said partition, one of said plates closing the said port opening and the other the said opening to the exterior of the casing and both being exposed to the water pressure; bearing members carried by said partition; studs adjustable in said bearing members; and a connecting arm for said valve plates pivotally supported on said studs, whereby the plates are opposed to each other with a counterbalancing effect, and adapted upon rotation to carry the said port closing plate to one side of the waterway.

[Claims 4 to 19 not printed in the Gazette.]

1,273,805. LOCOMOTIVE CONSTRUCTION. EMIL C. ANDERSON, Denver, Colo. Filed Jan. 18, 1918. Serial No. 212,450. (Cl. 105—226.)



1. In a locomotive, a guiding truck having a radius bar, and means for connecting said radius bar to the body of said locomotive, the operative position of said connecting means being adjustable.

2. The combination in a locomotive having two wheeled truck frames, of means for pivotally connecting said truck frames together, and means for varying the position of the pivotal connection longitudinally of the locomotive.

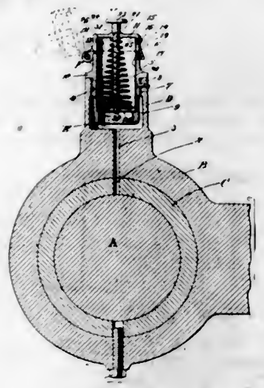
3. The combination in a locomotive having driving wheels, of a guiding truck having movement about a pivotal axis with respect to the body of the locomotive, and means for varying the position of said pivotal axis.

4. In a locomotive, a frame, driving wheels supporting said frame, a guiding truck operatively connected to said frame, and means for adjusting the operative connection of said truck and said frame to vary the action of said truck in driving said guiding wheels.

5. The combination in a locomotive having driving wheels, of a guiding truck having movement with respect to the body of the locomotive about a pivotal axis displaced longitudinally of the locomotive from the body of said truck, and means for varying the position of said pivotal axis.

[Claims 6 to 9 not printed in the Gazette.]

1,273,806. GREASE-CUP. GEORGE E. BALDWIN, Branford, Conn. Filed Oct. 20, 1917. Serial No. 197,537. (Cl. 184—45.)



1. In a grease-cup, an open ended cylinder having a piston-stop near one end; a piston working in said cylinder; a guide stem for said piston; a cap hinged to said cylinder and having a guide-way for said stem; a latch for securing said cap in closed position; and a spring interposed between the top of said cap and said piston and about said stem and tending to press said piston through said cylinder down to said piston-stop.

2. In combination in a journal and connecting rod bearing, an upstanding boss formed in said bearing having a cup-shaped chamber internally threaded at the top and communicating at the bottom with said journal; a cylinder having threaded engagement with said boss and extending into said chamber; a piston working in said cylinder; a cap hinged and latchable to said cylinder and having a central guide-hole; a spring between said cap and said piston; a guide stem for said piston passing through said guide-hole and serving as a visible tell-tale for the position of said piston; and means for limiting the thrust of said piston by said spring to insure the maintenance of a material remaining space between the walls of said cup-shaped chamber and said piston after the full advance of said piston has been accomplished.

4. A grease-cup comprising a cap providing an internal pocket and having a central guide-hole; a piston having a stem working through said guide-hole; a compression spring between said piston and cap; and a latch for releasably holding said piston when forced into said pocket against the compression of said spring.

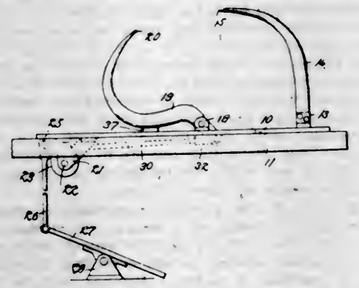
[Claim 3 not printed in the Gazette.]

1,273,807. COLLAR-TURNING MACHINE. WILLIAM A. BARNETT, Lincoln, Nebr. Filed May 9, 1917. Serial No. 167,568. (Cl. 223—20.)

1. A garment turning machine, the combination with a garment supporting member, of a member movable into and out of position to receive the garment from the supporting member and a combined moving, locking and unlocking means operably connected with the movable member.

2. A garment turning machine including a base, a stationary and curved garment supporting arm having one end secured to said base, an adjustable curved garment supporting arm pivoted to said base and having one end arranged in close proximity to the free end of the stationary arm when said adjustable arm is in operative position, and means connected to said adjustable arm for adjusting the same to inoperative position.

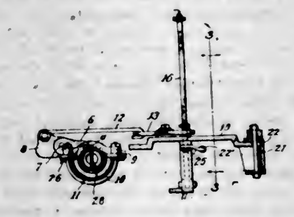
5. In a garment turning machine, the combination with a garment supporting member, of a member movable into and out of position to receive a garment from the supporting member, and means connected with the movable member for initially moving the movable member into position to receive a garment from the supporting member and for locking the movable member in such position



subsequent to the movement of the movable means through dead center relative to the resistance of the movable member.

[Claims 3, 4, and 6 to 10 not printed in the Gazette.]

1,273,808. STARTING MECHANISM FOR ENGINES. ERNEST D. BARRETT, New York, N. Y. Filed Oct. 27, 1916. Serial No. 127,974. (Cl. 74—54.)

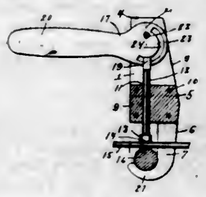


In a mechanical starter for automobile engines of the compression type, the combination comprising an engine shaft, a rotatable collar mounted thereon, said collar having an integral arm projecting substantially radially therefrom, a ratchet wheel fixed to said shaft adjacent to said collar, a pawl-member the front end of which is adapted to optionally engage with said ratchet wheel and actuate the same, said pawl-member being secured at a point adjacent its geometric center to the outer end of said radial arm of said collar, and the center of gravity of said pawl-member lying between its rear end and its point of connection with said radial arm, a pivotally mounted bell-crank lever, means connecting one arm of said lever with said pawl-member, the point of connection of said pawl-member being adapted to lie above the geometric center of said pawl-member when the front end of said pawl-member is disengaged from said ratchet, means for limiting the extent of movement of the front end of said pawl-member away from said ratchet, and elongated means connected to said bell crank lever whereby the same may be actuated from a distance.

1,273,809. WIRE-CLAMP. FRANK E. BEAZELL, Speers, Pa. Filed Mar. 2, 1917. Serial No. 152,025. (Cl. 144—303.)

1. In a wire clamp, the combination with spaced plates having twin hooks at their lower ends and one of them having an upright slot, and a longitudinal guide between said plates and interposed between the hooks and the slot; of a plunger slidably mounted in said guide and having a gripping block at its lower end and its upper end extended laterally into said slot and thence upward therein and thence again inward, a pin through the plates above said slot, and a lever whose head is pivotally mounted on said pin and slotted to produce an eccentric working edge standing between the lateral portions of said plunger, as described.

2. In a wire clamp, the combination with spaced plates having twin hooks at their lower ends and one of them having an upright slot, a block between said plates having a guide, and a cam journaled between the upper ends of said plates; of a plunger movable in said guide and having a gripping block above said twin hooks, the upper end of the plunger having a lateral extension movably mounted in said slot and a hook engaging said cam.



3. In a wire clamp, the combination with spaced plates having twin hooks at their lower ends and one of them having an upright slot, a block between said plates having a guide, and a cam journaled between the upper ends of said plates and having a working edge; of a plunger movable in said guide and having a gripping block above said twin hooks, its upper end having a lateral extension underlying said working edge and projecting into and movable within said slot, and an upstanding hook at the outer end of said extension and provided with a bill overlying said working edge.

1,273,810. PROCESS OF MAKING CHAIN. CHARLES A. BECKER, Newark, N. J. Filed Oct. 16, 1915. Serial No. 56,231. (Cl. 113—112.)

1. A process of making chain from solder wire, consisting in annealing the wire, cutting the wire as tarnished by annealing into lengths and forming them into connected links with their bright cut ends in position for soldering, coating said links with soldering salt or flux, removing said salt or flux from the outer surfaces of the links and leaving said surfaces in substantially the same condition as after annealing, and closing the joints with a soldering heat.

5. A process of making chain, consisting in producing a series of links of solder wire with bright cut ends in position for soldering and side surfaces covered with an anti-soldering coat, covering said links with a soldering salt or flux, removing said salt or flux from the anti-soldering coat, and closing the joints by heat.

[Claims 2 to 4 and 6 not printed in the Gazette.]

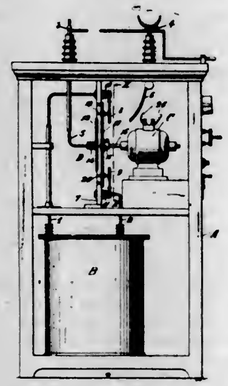
1,273,811. SELF-LOCKING ADJUSTABLE SHORE. EARL R. BELL, Covington, Ky., assignor of one-half to Joseph Neyer, Jr., Cincinnati, Ohio. Filed Jan. 17, 1917. Serial No. 142,851. (Cl. 72—79.)



A self locking shore of the class set forth including a rectangular base, a pair of spaced standards secured to

and rising vertically from the upper side of the base, a spacing block and cap secured to and connecting the upper ends of the standards, a tube slidably arranged between the standards and centrally through the spacing block or cap, a cap on the upper end of the tube, a supporting block located between the standards and removably secured to the lower inner end of the tube, guides carried by the block and engaging the sides of the standards to prevent it from shifting laterally during upward and downward movement, blocks secured to the opposite sides of the standards, a fish plate surrounding the tube having one edge resting upon the upper edges of the straps to hold the tube in its adjusted position when moved within the standard.

1,273,812. CROSS-BRIDGE X-RAY MACHINE. PAUL BERLIN, Hoboken, N. J., assignor to The Kny-Scheerer Corporation, a Corporation of New York. Filed July 14, 1916. Serial No. 109,251. (Cl. 175—364.)



1. In a high potential converting mechanism, a motor-element having alternating current windings; a pair of insulated diametrically opposed revoluble cross-conductors extensive in a direction parallel to their axis of revolution and of limited extent in their path of revolution; a pair of diametrically opposed insulated receiving arcs each spanning approximately at least 90 mechanical degrees and coöperable with the receiving ends of said cross-conductors; means for revolving said cross-conductors synchronously with said motor element comprising a plate of insulating material extending cross-wise to each conductor, in extent approximating at least one-half the length of said cross-conductor; a step-up transformer having a primary coil adapted to be connected in circuit with the alternating current windings of said motor-element and having a high-potential secondary coil in circuit with said receiving arcs; and a pair of diametrically opposed insulated delivery arcs intermediate and axially spaced out of the plane of said receiving arcs each spanning approximately at least 90 mechanical degrees and in coöperable relation with the delivery ends of said cross-conductors, whereby said cross-conductors operatively cross-connect said receiving arcs with said delivery arcs synchronously with the alternating wave in a manner to cause a non-alternating current to be available from said delivery arcs when the apparatus is energized from a suitable source of electric energy.

2. In a high-potential converting mechanism, a motor-element having alternating current windings; a pair of insulated diametrically opposed revoluble cross-conductors extensive in a direction parallel to their axis of revolution and of limited extent in their path of revolution; means for revolving said cross-conductors synchronously with said motor-element, comprising an extensive insulating plate extending radially beyond said cross-conductors an amount approximating at least one-half of the length of a cross-conductor; a pair of diametrically opposed insulated receiving arcs coöperable with the receiving ends of said cross-conductors; a step-up transformer having a primary coil adapted to be connected in circuit with the alternating current windings of said motor-element and having a high-potential secondary coil in circuit with said receiving arcs; and a pair of diametrically opposed insulated delivery arcs intermediate and axially spaced out of the plane of said receiving arcs and in coöperable relation with the delivery ends of said cross-conductors, whereby said cross-conductors operatively cross-connect said receiving arcs with said delivery arcs synchronously with the alternating wave in a manner to cause a non-alternating current to be available from said delivery arcs when the apparatus is energized from a suitable source of electric energy.

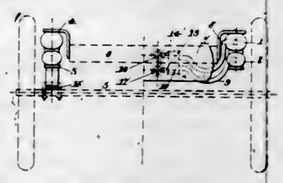
3. A high-potential rectifier comprising an insulating plate mounted to rotate on a central axis at right angles to the plane of said plate; a pair of diametrically opposed cross-conductors secured to and extending through said plate at positions a material distance radially inward from the rim of said plate approximating at least one-half of the length of a cross-conductor; a pair of diametrically opposed insulated receiving arcs mounted opposite one face of said plate adjacent to the path of travel of the receiving ends of said cross-conductors; and a pair of diametrically opposed insulated delivery arcs mounted opposite the other face of said plate intermediate the position of said receiving arcs and adjacent the path of travel of the delivery ends of said cross-conductors.

4. A high-potential rectifier comprising an insulating disk mounted to rotate on a central axis at right angles to the plane of said disk; a pair of diametrically opposed cross-conductors secured to and extending through said disk; a pair of diametrically opposed insulated receiving arcs mounted opposite one face of said disk adjacent to the path of travel of the receiving ends of said cross-conductors; and a pair of diametrically opposed insulated delivery arcs mounted opposite the other face of said disk intermediate the position of said receiving arcs and adjacent the path of travel of the delivery ends of said cross-conductors, said arcs being located a material distance approximating at least one-half of the length of a cross-conductor toward the center from the periphery of said disk.

6. In a high-potential rectifier for X-ray machines, two sets of conducting arcs occupying respectively displaced parallel planes; a rotatable member the rim portion of which, extending radially both outwardly and inwardly a material distance approximating at least one-half of the length of a cross-conductor beyond the radial position of said conducting arcs, is formed of sheet insulating material; and cross conductors extending through said rim of sheet insulating material, and mechanically attached thereto in coöperable relation with said conducting arcs, but out of alinement with said conducting arcs, whereby warping of said sheet material cannot cause a collision between a cross conductor and a conducting arc.

[Claims 5 and 7 to 9 not printed in the Gazette.]

1,273,813. PNEUMATIC SPRING SYSTEM. RAOUL BERNAT, Bordeaux, France. Filed July 29, 1913. Serial No. 781,801. (Cl. 267—50.)

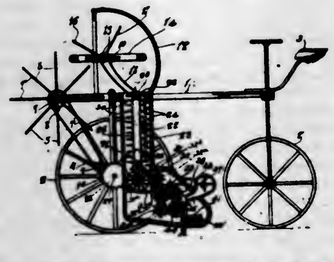


1. In a pneumatic spring system, the combination of a pair of yieldably-connected relatively-movable elements to be braked; a pair of sack-like containers disposed, one above the other, between said elements; a reservoir; a distributing device communicating with said reservoir and separately with said containers; and valve means for permitting free passage of air in one direction and retarded passage of air in the other direction, said valve means comprising a double valve having a large opening directed toward one of the containers and another opening directed toward the reservoir.

4. In a pneumatic spring system, the combination of a pair of yieldably connected relatively movable elements to be braked; a reservoir; a pair of superposed deformable containers containing air under pressure and disposed between said elements; a distributing device communicating with said reservoir and containers; check valves in said device and permitting free passage of air from the lower container to the reservoir and from the reservoir to the upper container; and adjustable means for permitting retarded passage of air from the upper container to the reservoir and the reservoir to the lower container.

[Claims 2 and 3 not printed in the Gazette.]

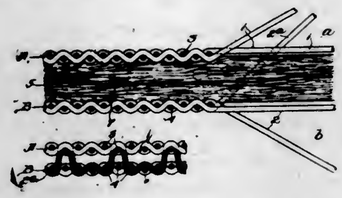
1,273,814. COTTON-HARVESTER. LOUIS J. BERRY, Forney, Tex. Filed Aug. 12, 1914. Serial No. 856,419. (Cl. 13—12.)



3. In a cotton harvester structure, a portable supporting structure, a cotton and boll receiving cowl carried by said supporting structure, a vertical downwardly extending plate positioned beneath said cowl, a plurality of horizontal fingers carried by said plate, a vertical conveyer running parallel to said plate, a plurality of horizontal fingers carried by said conveyer and disposed staggerly to the fingers carried by said plate, means for operating said conveyer to move the run of the conveyer facing said plate downwardly for conveying and crushing cotton bolls, and means positioned beneath said conveyer for separating the crushed bolls from the cotton lint.

[Claims 1 and 2 not printed in the Gazette.]

1,273,815. FABRIC AND METHOD OF MAKING THE SAME. GEORGE J. BICKNELL, Boston, Mass. Filed Mar. 14, 1914. Serial No. 824,806. Renewed Dec. 14, 1916. Serial No. 137,055. (Cl. 139—9.)

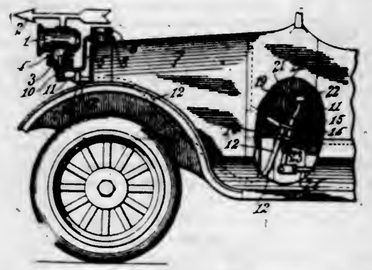


1. Sheet material formed of two fabrics woven simultaneously and having parallel strips of soft, fluffy material incorporated therein during the process of weaving and having binding warps uniting the fabrics between the said strips.

2. Sheet material formed of two fabrics woven simultaneously and having parallel strips of soft, fluffy material incorporated therein during the process of weaving and having binding warps uniting the fabrics between the said strips and reinforcing threads extending longitudinally of the strips of soft, fluffy material.

[Claim 3 not printed in the Gazette.]

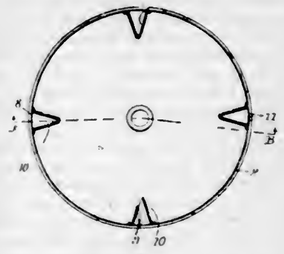
1,273,816. SIGNAL DEVICE FOR AUTOMOBILES. ARCHIBALD T. BOLSER, Dayton, Ohio. Filed June 22, 1917. Serial No. 176,281. (Cl. 116—31.)



2. The combination with a motor vehicle having a foot treadle and a signal device, of a turn-table supporting said signal device, a flexible connection extending from said turntable, a shiftable foot plate mounted on said foot treadle, and a bell crank lever having a pivotal connection with said slidable plate and a connection with the flexible connection of the turn-table.

[Claim 1 not printed in the Gazette.]

1,273,817. CENTRIFUGAL DRYING-MACHINE. TANDY A. BRYSON, Troy, N. Y., assignor to Tolhurst Machine Works, a Corporation of New York. Filed Nov. 28, 1914. Serial No. 874,487. (Cl. 233—2.)



1. A hydro-extracting machine including in combination a rotating bowl having an outer cylindrical wall for holding a relatively dense and impervious layer separated by the centrifugal action, and a plurality of walls, each joining with said cylindrical wall at both ends to form an inclosed recess, said walls extending through the layer of impervious material and having minute openings therethrough to convey a liquid from within the impervious layer into the inclosed recesses, and draining means communicating from said recesses.

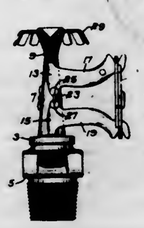
2. A hydro-extracting machine including in combination a rotating bowl having an outer cylindrical wall for holding a relatively dense and impervious layer separated by the centrifugal action, and a plurality of walls, each joining with said cylindrical wall at both ends to form an inclosed recess, said walls extending through the layer of impervious material and having minute openings therethrough to convey a liquid from within the impervious layer into the inclosed recesses, and perforations from said chamber through the wall of the bowl for draining the liquid from said chamber.

3. A hydro-extracting machine including in combination a rotating bowl having an outer cylindrical wall

for holding a relatively dense and impervious layer separated by the centrifugal action, a perforate chamber extending inwardly from said wall through said layer of impervious material and inclosing a space therefrom, the perforations draining a liquid from within the relatively impervious layer into said chamber, and draining means for said chamber.

4. A hydro-extracting machine including in combination a rotating bowl having an outer cylindrical wall for holding a relatively dense and impervious layer separated by the centrifugal action, a perforate chamber extending inwardly from said wall through said layer of impervious material and inclosing a space therefrom, the perforations draining a liquid from within the relatively impervious layer into said chamber, and perforations from said chamber through the wall of the bowl for draining the liquid from said chamber.

1,273,818. SPRINKLER-HEAD. HERBERT H. BUFFUM, Laconia, N. H. Filed Feb. 1, 1918. Serial No. 214,818. (Cl. 169—5.)



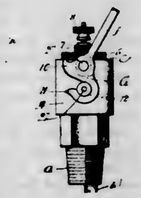
1. A sprinkler head comprising a valve, an opposed resiliently yieldable abutment, an interposed strut comprising a pair of toggle members having extending arms, a thermally releasable connection between said arms and a key between said members having pivotal engagement with one and wedging engagement with the other.

2. A sprinkler head having a valve retaining strut comprising two members arranged for relative pivoting on the release of the head and means to tension the strut comprising a key interposed between said members having pivotal engagement with one and wedging engagement with the other.

3. A sprinkler head having a valve retaining strut comprising a member normally held in retaining position by a thermally releasable retaining device and arranged to rock free on release thereof and a strut tensioning means comprising an element engaging said member and having a straight edge providing a rocking bearing and an opposed inclined edge.

[Claims 4 to 8 not printed in the Gazette.]

1,273,819. SPARK-PLUG. MORTON G. BUNNELL, Champaign, Ill. Filed Apr. 4, 1917. Serial No. 159,650. (Cl. 123—169.)



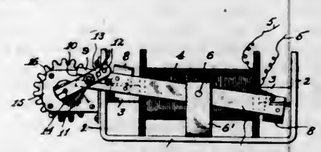
3. A spark plug comprising a metal socket-member adapted to be attached to the cylinder of an internal-combustion-engine, an insulator adapted to enter said socket-member, a metal jacket inclosing the outer portion of said insulator and adapted to enter the socket-member, a bail provided with hub-portions, means to pivot said hub-portions upon the opposite sides of said jacket, said jacket having lateral projections to engage said socket-member and prevent rotation of the jacket therein, whereby the jacket is locked against rotation, lateral projections on the socket-member, means carried by said hub-portions to engage said projections and thereby hold said insulator and jacket tightly within the socket-member when said bail is moved in one direction, and means to secure said jacket on said insulator, so that said jacket is rendered removable from the socket-member by a single movement of said bail.

8. A spark plug comprising a metal socket-member adapted to be attached to the cylinder of an internal-combustion-engine, an insulator adapted to enter said socket-member, a metal jacket inclosing the outer portion of said insulator and adapted to enter the socket-member, a bail provided with hub-portions, means to pivot said hub-portions upon the opposite sides of said jacket, lateral projections on the socket-member, means carried by said hub-portiona to engage said projections and thereby hold said insulator and jacket tightly within the socket-member when said bail is moved in one direction, having depressions on the hubs to permit slight outward movement of said jacket after the bail is fully adjusted, and devices to removably secure said jacket on said insulator, said bail having a lever handle for the operation thereof and by which to lift said jacket and insulator out of the socket-member, one of said devices comprising a resilient cushion to produce said outward movement of the jacket, and said socket-member having a shoulder to support said cushion.

15. A structure as specified in claim 13, in which said spring is directly subject to the action of said devices, so that the pressure exerted by said devices against said spring is not communicated thereto through said insulator.

[Claims 1, 2, 4 to 7, and 9 to 14 not printed in the Gazette.]

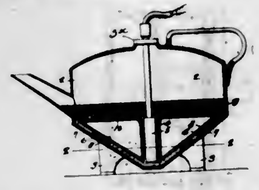
1,273,820. ELECTRIC COUNTER. CLARENCE N. CAHUSAC, Jersey City, N. J., assignor to Slocum, Avram & Slocum, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 7, 1917, Serial No. 153,159. Renewed Dec. 20, 1917. Serial No. 208,147. (Cl. 175—345.)



In a device of the class described, a magnet having a pole at each end of its winding, an armature frame comprising longitudinal bars and pivoted intermediate its length and inclosing said magnet, and an armature at each end of said bars adapted to be attracted by one of said magnet poles, one of said bars being formed into a slotted extension at one end, in combination with mechanism to be operated, and a lever connected with said mechanism to operate the same and also connected with the slotted extension of said armature frame to be vibrated thereby.

1,273,821. ELECTRICALLY-HEATED COOKING VESSEL. HOWARD C. CAUSTON, Vancouver, British Columbia, Canada. Filed May 4, 1917. Serial No. 166,422. (Cl. 219—44.)

1. A cooking vessel for electrical heating, comprising a vessel having a relatively small heating chamber below the bottom of the vessel, said chamber adapted to removably receive an electrical heating unit, one end of said heating chamber being in direct communication with the volume of the vessel and the other end having separate communication therewith.



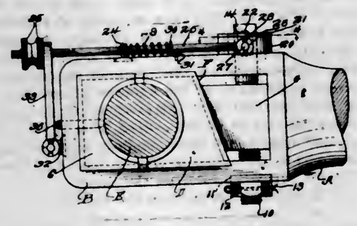
5. An electrical liquid heater, comprising a vessel having a tubular heating chamber of relatively small size downwardly projecting from the bottom of the vessel at the center, said chamber adapted to removably receive an electrical heating unit, the upper end of said chamber being in direct communication with the main body of the vessel and the lower end of the same in communication with the vessel from adjacent the walls of the same.

6. An electrical liquid heater, comprising a vessel having a tubular chamber of relatively small dimensions downwardly projecting from the center of its bottom and in direct communication with the vessel, said chamber adapted to receive a removable heating unit, the bottom of the vessel being formed with a substantially conical interspace delivering from the outer zone of the vessel to the lower end of the heating chamber.

8. A cooking vessel having a flat bottom, a tubular projection beneath the bottom of relatively small diameter and having one end in direct communication with the interior of the vessel through the bottom, a duct connected with the other end of said tubular projection and communicating with the interior of the vessel through the bottom at a place remote from the tubular projection, a removable electric heater projected into and held in said tubular projection, said vessel having an opening through which said heater is adapted to be introduced, said heater having a cap for closing said opening when the heater is in place.

[Claims 2 to 4 and 7 not printed in the Gazette.]

1,273,822. AUTOMATIC WEAR TAKE-UP FOR JOURNAL-BOXES. JOHN M. CHRISTINE, Ford City, Pa. Filed July 14, 1917. Serial No. 180,543. (Cl. 64—55.)

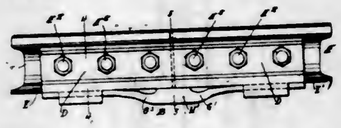


1. In combination with a journal box having a movable element therein adapted to engage a shaft, of advancing means carried by the journal box to move the element against the shaft, and operating means connected to the advancing means and including a part independent of said element projecting into the journal box into contact with the shaft therein and adapted to be actuated upon vibration of the shaft for advancing the element thereagainst.

9. The combination with a journal box having a movable member therein, of a spring pressed rod, means including an oscillatable element pivoted to the rod for advancing the movable member and urged in one direction by the rod, a lever pivoted at one end to the end of the journal box and slidably receiving said rod through its other end, a pin slidably mounted in the journal box between the shaft and the lever, and adjustable lock nuts mounted on the rod beyond the lever adapted to be turned up against the lever for tensioning the pin against the shaft.

[Claims 2 to 8 not printed in the Gazette.]

1,273,823. RAIL-SPLICING. JOHN W. CLARK, Philadelphia, Pa. Filed Nov. 22, 1917. Serial No. 203,404. (Cl. 239—6.)



1. A splice bar and support for railway rails comprising side members adapted to be secured to the rails and a supporting member having a portion thereof adapted to bear against the bases of the rails at their meeting point, the supporting member having openings therein near its ends and the side members being provided with means for engaging said openings to lock the side members and supporting member against relative movement.

2. A splice bar and support for railway rails comprising side members adapted to be secured to the rails, and a supporting member having its central portion adapted to support the meeting ends of the rails, said supporting member decreasing in thickness from its central portion toward its ends, the side members being provided, at points distant from and not extending to the meeting ends of the rails, with means for supporting the end portions of the supporting member to sustain and distribute the strain on the central portion.

3. A splice bar and support for railway rails comprising side members secured to the rails having portions thereof extending inward beneath the rail bases near their ends only, and a supporting member beneath the rail bases having its ends resting on the inwardly extending portions of the side members between said inwardly extending portions and the rail bases and having its central portion adapted to support the rail bases at their meeting point, the upper face of the supporting member being concaved between its ends and central portion so as to provide a relatively short central portion opposite the meeting ends of the rails.

4. A splice bar and support for railway rails comprising side members secured to the rails having portions thereof extending inward beneath the rail bases near their ends only, and a supporting member beneath the rail bases having its ends resting on the inwardly extending portions of the side members between said inwardly extending portions and the rail bases and having its central portion adapted to support the rail bases at their meeting point, said inwardly extending portions of the side members being provided with upwardly extending lugs and the supporting member being provided with openings to receive said lugs to lock the supporting member against movement relative to the side members.

1,273,824. MANUFACTURE OF PEROXID OF HYDROGEN AND BARIUM NITRATE. FABRICIUS COBELLIS, Philadelphia, Pa. Filed Jan. 18, 1917. Serial No. 143,016. (Cl. 23—13.)

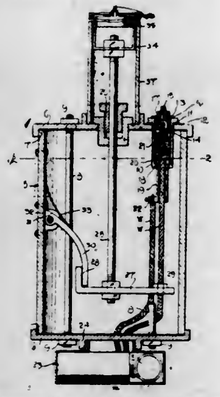
1. The process of obtaining barium nitrate in conjunction with the manufacture of hydrogen peroxid, which consists in treating barium dioxid with phosphoric acid, with production of hydrogen peroxid and a barium phosphate, and then converting the barium phosphate into a nitrate.

5. The method of producing hydrogen peroxid which consists in acting upon barium dioxid by an acid, with formation of hydrogen peroxid, and a barium salt; subjecting the barium salt to the action of nitrate, with formation of barium nitrate; converting into barium

dioxid and nitric acid the barium nitrate, and utilizing the barium dioxid and nitric acid thus obtained for the further repetition of the process.

[Claims 2 to 4 and 6 not printed in the Gazette.]

1,273,825. WELL-TORPEDO. WILLIAM A. CORY and FRANK E. DAVIDSON, Tulsa, Okla. Filed Sept. 26, 1917. Serial No. 193,329. (Cl. 102—4.)



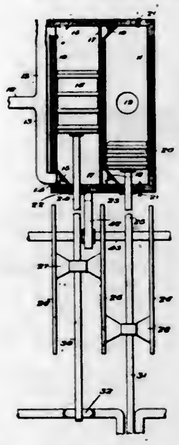
2. A well torpedo including a water-tight casing provided with electrical charge exploding means and circuit therefor, of movable and stationary contacts located in the circuit, a manually controllable movable member within the casing to co-act with the movable contact and close the circuit for the igniting means, means within the casing to prevent an operative movement of said member when the torpedo is being lowered into the well, and a manually controllable element to disengage said member from the holding means whereby said member may be operatively engaged with the movable contact.

5. A well torpedo including a casing provided with electrically ignited charge exploding means and a circuit therefor, a stationary contact in the circuit, a movable contact within said casing, a spring yieldingly holding the movable contact out of engagement with the stationary contact, a rod extending axially through one end of the casing, a plate fixed to the inner end of said rod and adapted for engagement at one of its ends with the movable contact, a frame on the other end of said rod, a weight within said frame, a lowering cable connected to said weight, and a movable element within the casing to co-act with the other end of said plate and prevent an operative movement of the latter while the torpedo is lowered into the well, said weight upon the release of the cable, shifting the rod axially and disengaging the plate from said movable element, whereby said plate may be moved to shift the movable contact into engagement with the stationary contact and close the circuit.

[Claims 1, 3, and 4 not printed in the Gazette.]

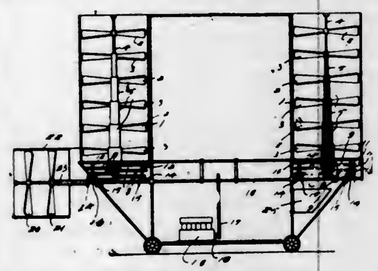
1,273,826. TWO-CYCLE EXPLOSION-ENGINE. HENRY P. CONN and DAVID G. CONN, Roseburg, Oreg. Filed Sept. 27, 1916. Serial No. 122,490. (Cl. 123—61.)

In a device of the class described in combination a pair of cylinders having a common dividing wall, a water jacket formed around and between said cylinders, two cap pieces secured so as to close the opposite ends of said cylinders, an intake pipe extending longitudinally of one cylinder and having rightangular ends connected to said respective caps, both cylinders at their dividing wall being formed at opposite ends with ports, a pair of diagonally-disposed valve seats formed upon each cap piece at the upper and lower corners of said respective cylinders, one pair of said valve seats being opposite the ends of said intake pipe and the other pair of said valve seats being opposite said ports, the valve seats at the lower end of said cylinders inclining in an opposite direction relatively to those at the upper end thereof, and check valves associated with said seats and adapted to



open outwardly in projecting relation from said valve seats.

1,273,827. AIRSHIP. GUY M. COOK, Goiconda, Nev. Filed July 13, 1917. Serial No. 180,892. (Cl. 244—19.)



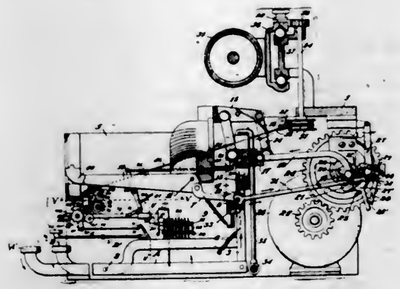
1. An airship including a cylinder open at the end for the passage of air through it, a plurality of telescopically arranged shafts rotating in the cylinder, reversely rotating propellers mounted on the said shafts and adapted to operate successively on the air, said shafts projecting successively in advance of one another at one end of the cylinder and provided with gears successively increasing in diameter, and short shafts spaced from the said shafts and provided with gears corresponding with the gears of the telescopically arranged shafts in size and connected therewith for reversely rotating the same.

[Claims 2 and 3 not printed in the Gazette.]

1,273,828. TYPE-WRITER AND COMPUTING MACHINE. MANSFIELD C. CRAWLEY, Los Angeles, Cal., assignor to Addograph Company, a Corporation of California. Filed Oct. 28, 1911. Serial No. 657,311. (Cl. 235—62.)

1. The combination in a typewriting machine having a series of type and digit bars, an actuating bar for operating the type and digit bars, a rotary motor, means by which the motor will move the actuating bar in a backward direction, spring means for moving the actuating bar in the forward direction, and key bars for causing the actuating bar to operate the type and digit bars, of a series of toothed computing disks, and means for rotating said disks controlled by the forward movement of said actuating bar.

3. In a typewriter, the combination with the printing mechanism, a power bar for operating the printing mechanism, a bank of digit key bars, a series of count wheels denominationally arranged in train, a shiftable actuating gear for said wheels, means including a single rack and pinion for rotating the gear a fraction of a revolution corresponding to the key bar depressed, spring means tending to move the rack in one direction, means controlled by the key bars to govern the movement in that direction of the rack, and means controlled by the power bar to move the rack in the opposite direction.



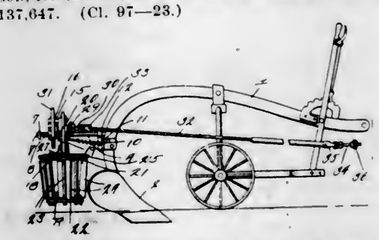
9. In a computing mechanism, the combination of a denominational series of count wheels rotatable in opposite directions for the processes of subtraction and multiplication, a spring actuated lever for each count wheel except the one of highest denomination, a spring actuated and balanced dog on each lever, means by which a count wheel on the completion of a full revolution in either direction will operate a respective dog to cause said dog to move a succeeding count wheel one step, and a lock on the lever carrying said dog engaging and temporarily limiting the further movement of the last named count wheel beyond its one step.

12. In a typewriting and computing machine, a computing mechanism, a spring for automatically actuating the mechanism, type-digital bars with return springs, an actuator for and common to all said bars connected to said mechanism, a spring for automatically actuating the actuator, and a motor operatively connected to said actuator for setting the same against its spring, and providing power to tension the computing mechanism spring.

15. In a typewriting and computing machine, the combination of a series of digit bars, a bank of corresponding computing disks, a continuously operating power shaft, a reciprocating rack having a connection with said disks for rotating the same, a common actuator connectible with said power shaft to receive a fixed degree of movement for operating said digit bars and reciprocating rack, and a bank of digit key levers controlling the connections between the actuator and power device and determining the degree of movement of said rack.

[Claims 2, 4 to 8, 10, 11, 13, and 14 not printed in the Gazette.]

1,273,829. ATTACHMENT FOR PLOWS. EMIL DAVIDSON, Northwood, N. D. Filed Dec. 18, 1916. Serial No. 137,647. (Cl. 97—23.)



1. A plow attachment comprising a bracket adapted for attachment to the plow beam and having a stop thereon, an arm rotatably mounted in said bracket, a spring for normally maintaining said arm in contact with said stop, a bracket adjustably secured to said arm, a roller carried by said bracket, which roller comprises a pair of plates and a plurality of knife carrying rollers extending between said plates and means for rotating the first mentioned roller.

3. In an attachment for plows, a turning roller including a plurality of spaced converging rollers having knives thereon and means for adjusting the knives to extend at various angles from the turning roller.

[Claims 2 and 4 not printed in the Gazette.]

1,273,830. LENS-FRAME. GEORGE H. DAY, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Dec. 26, 1917. Serial No. 208,940. (Cl. 88—47.)



3. A frame member for an eye protector or the like, comprising a strip of material having a lens engaging groove at one edge thereof, the other edge of said strip being bent upon itself to form a reinforcing bead, the central portion of which is rounded and slightly curved and its ends flattened and disposed substantially parallel with the lens groove.

[Claims 1 and 2 not printed in the Gazette.]

1,273,831. BOILER-TUBE EXTRACTOR. GARRETT C. DEE, Hartford City, Ind. Filed Apr. 19, 1916. Serial No. 92,206. (Cl. 81—15.)



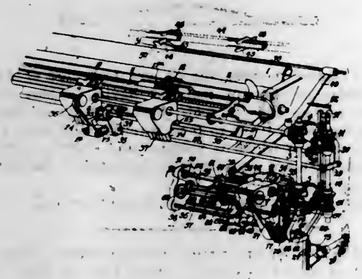
1. In a boiler-tube extracting tool, a body bar, one end of said body bar shaped to form a hand grip, a head formed upon the other end of said body bar, said head being curved for snugly fitting the interior of a boiler tube and acting as a fulcrum for pivotal movement of the tool, said body bar being provided with concave portions immediately in the rear of said head, said body bar provided with an opening extending therethrough, a boiler tube engaging jaw having a shank, said shank extending through said opening and being pivotally connected to said body bar, said jaw provided with an inserting edge, and a wedge for driving into said opening against the rear edge of said jaw for forcing said inserting edge between a boiler tube bead and a boiler plate.

2. In a boiler tube extracting tool, a body bar having one end rounded to form a handle and the other end shaped for fitting against the interior of a boiler tube to act as a fulcrum for the tool, said body provided with a vertical opening, a jaw having a shank, said shank extending through said opening and pivotally connected to said body, and a wedge for insertion into said opening against the rear edge of said jaw for driving the jaw between a boiler head and a tube bead, the forward wall of said recesses limiting the pivotal movement of said jaw by said wedge.

3. In a boiler tube extractor, a body bar having the fulcrum head formed upon one end and provided with the vertical opening, a jaw including a shank, said shank extending through said opening and pivotally connected to said body bar, a head formed upon the upper end of said shank and including a downwardly extending portion having its lower end sharpened transversely to the length of the body for insertion between the bead of the boiler tube and a boiler head.

4. In a boiler tube extractor, a body bar having a fulcrum head formed upon one end and provided with a vertical opening, a jaw including a shank, said shank extending through said opening and pivotally connected to said body bar, a head formed upon the upper end of said shank and including a downwardly extending portion having its lower end sharpened transversely to the length of the body for insertion between the bead of a boiler tube and a boiler head and means for engagement with said shank for pivotally moving said jaw to drive said sharpened edge between a tube bead and boiler head, the forward wall of said opening limiting the pivotal movement of said jaw.

1,273,832. COMBINED TYPE-WRITING AND COMPUTING MACHINE. GUSTAVE O. DEGENER, Bronxville, N. Y., assignor to Underwood Computing Machine Company, New York, N. Y., a Corporation of New York. Filed Oct. 25, 1913. Serial No. 797,150. (Cl. 235—59.)



1. In a computing machine, the combination with a master wheel and a totalizer comprising computing wheels, of a traveling carriage for causing *seriatim* engagement of said master wheel and computing wheels, a shaft for said master wheel extending through said totalizer, a latch holding one end of said shaft, and a guide for said carriage along which the carriage is slidable, to free the totalizer from the shaft after the latch is released.

6. In a computing machine, the combination with a totalizer and a computing carriage, of a master wheel forming part of said carriage, computing and carry-over wheels in said totalizer, and a carry-over booster forming part of said carriage and carried thereby into position to be effective on only the carry-over wheels at least as high in denomination as said master wheel.

9. The combination with a traveling carriage, of a single cross-totalizer master wheel having a given length of travel and capable of traveling in step with the carriage, a plurality of alternative totalizers which may have different capacities, to coöperate with said master wheel, and a support for said totalizers of such length as to permit the use of totalizers having different capacities with said master wheel and to afford adjustment of all of the totalizers along said support; the range of travel of said master wheel being sufficient to enable it to operate any of said totalizers wherever adjusted.

12. The combination with a typewriter carriage, of a series of column-totalizers, a master wheel for said totalizers, said carriage being connected to effect relative movement between said master wheel and said column-totalizers, a cross-totalizer, a master wheel for said cross-totalizer, and means operating intermittently during a single run of said carriage for effecting relative reciprocation between the cross-totalizer and its master wheel, said cross-totalizer being interchangeable with any of said column-totalizers, and being also adjustable, the range of reciprocation of the cross-computing element being such as to deal with toalizers of different sizes, to permit the cross-computing master wheel to operate the cross-totalizer wherever the latter may be adjusted.

[Claims 2 to 5, 7, 8, 10, 11, and 13 not printed in the Gazette.]

1,273,833. AUTOMOBILE-JACK. ANNA E. DEWEY, Akron, Ohio. Filed Nov. 22, 1917. Serial No. 203,391. (Cl. 254—86.)



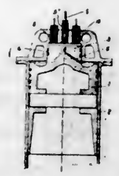
1. A device of the character described comprising a trough-shaped fixed upper member, a rotatable shaft mounted therein, said shaft provided with two screw threaded portions, the inclinations of the threads of one portion reversely disposed with respect to the threads of the other portion, a nut mounted on each threaded portion, a link pivotally attached to each nut, a movable trough-shaped member pivotally attached to the opposite ends of said links and arranged when said nuts are shifted away from the central portion of said shaft to move said movable member downwardly and when moved in a reverse direction to raise said movable member into coöperation with said first member to form a box-like structure.

4. A device of the character described comprising a trough-shaped upper member having means for securing it to a vehicle, the side walls of said member provided with longitudinally-extending slots, a rotatable shaft mounted in said member, said shaft provided with two threaded portions with the threads of two portions reversely disposed, a nut mounted in each portion, a link attached to each nut, pins projecting laterally from each nut, the pins on each nut arranged to travel in one pair of slots in said member, a movable trough-shaped member pivotally attached to the opposite ends of said links and arranged to be vertically shifted when the position of said nuts is shifted, said movable member arranged when moved to its upper position to coöperate with said first member to form a box-like structure.

8. A device of the character described comprising a pair of trough-shaped members adapted to be arranged in spaced relation and secured to a vehicle, a rotatable shaft mounted in each member, said shafts each provided with two screw threaded portions the inclinations of the threads of the two portions being reversely disposed, a nut mounted on each threaded portion of each shaft, a link pivotally attached to each nut, a movable trough-shaped member pivotally attached to the outer ends of the links attached to each upper fixed member, each of said movable trough-shaped members adapted to be shifted vertically by the movement of the nuts on each shaft, each movable member arranged when shifted to its upper or inoperative position to coöperate with one of the fixed members to form a box-like structure, sprocket wheels mounted on each of said shafts, a sprocket chain extending between the sprocket wheels on different shafts whereby simultaneous rotation of the two shafts may be induced.

[Claims 2, 3, and 5 to 7 not printed in the Gazette.]

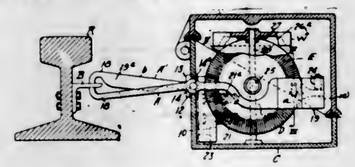
1,273,834. INTERNAL-COMBUSTION ENGINE. EMILE PAUL DUMANOIS, Paris, France. Filed Mar. 18, 1914. Serial No. 825,656. (Cl. 123—1.)



1. In an internal combustion engine, the combination with the working cylinder and its piston, of an auxiliary chamber, an atomizer for beginning the injection of at least a part of the fuel in the auxiliary chamber during the compression period and continuing such injection after the piston reaches the end of its upward stroke, a passage placing the auxiliary chamber in communication with the working cylinder, and a valve positioned in said passage, and operable to open said passage when a predetermined pressure is reached in the auxiliary chamber.

[Claim 2 not printed in the Gazette.]

1,273,835. TRACK INSTRUMENT. CHARLES W. DUNHAM, Edgewood borough, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Dec. 14, 1916. Serial No. 136,952. (Cl. 246—35.)



1. In a track instrument, two fulcrumed members arranged adjacent a track and biased to engaging position therewith to cause movement of one of the members when the track is depressed and of the other member when the track is raised by the passing of a train, means for controlling the return movement of each of said members independently of said track, and a contact controlled by said members.

6. A track instrument comprising a support mounted independently of the track rails, two members pivotally mounted in said support and biased to swing in opposite directions, one of said members being swung in opposition to its bias by upward movement of a track rail and the other member being swung in opposition to its bias by downward movement of the track rails, means for retarding the return movement of each member in response to its biasing force, and a contact controlled by relative movements of said members.

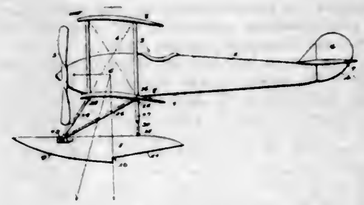
11. A track instrument comprising two movable members biased in opposite directions and held in normal relative positions by a track rail when the rail is at rest, each member being movable in opposition to its bias by movement of the track rail, means for retarding the movement of each member in response to its bias, and a contact controlled jointly by said members and arranged to assume one condition or another according as said members do or do not occupy their said normal relative positions.

14. A track instrument comprising two movable members biased in opposite directions and each moved in opposition to its bias by a track rail, two rotatable disks one for each member, means interposed between each member and the corresponding disk for rotating the disk when the member moves in response to its bias but not when the member moves in the other direction, a wheel resting on said disks, whereby rotation of either disk causes rotation of said wheel and the other disk, and a contact controlled jointly by said two members.

[Claims 2 to 5, 7 to 10, 12, 13, and 15 not printed in the Gazette.]

1,273,836. HYDROAEROPLANE. WARREN S. EATON, Plainfield, N. J. Filed July 20, 1917. Serial No. 181,819. (Cl. 244—2.)

1. In a hydroaeroplane, a pontoon of the hydroplane type, an aeroplane structure complete in itself, a strut rigidly secured to the under plane of the aeroplane structure and extending forwardly and downwardly to the pontoon, a second strut rigidly secured beneath the aeroplane structure near the rear of the lower plane and extending downwardly and forwardly and joining with the fore strut, said fore strut and said second strut being pivotally connected to the pontoon, and aft shock absorbing connections between the pontoon and the aeroplane structure.



5. In a hydroaeroplane, a pontoon, an aeroplane structure, means including shock absorbing elements for connecting said aeroplane structure with said pontoon, said means comprising fore supports and aft supports, means pivotally connecting the fore supports to the pontoon, means for pivotally connecting the aft supports to both the pontoon and aeroplane structures, and lateral bracing connections between the aeroplane structure and the front pivots of the fore supports with the pontoon.

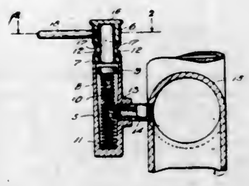
10. In a hydroaeroplane, a pontoon, an aeroplane structure, each of said parts being complete in itself, fore supports rigidly carried by the aeroplane structure and pivotally and yieldably connected to the pontoon, vertically and transversely yieldable shock absorbing aft supports connecting the pontoon with the aeroplane structure, and lateral bracing connections between the aeroplane structure and the front pivots of the fore supports with the pontoon.

12. In a hydroaeroplane, a pontoon, an aeroplane structure complete in itself, fore and aft supports connecting the aeroplane structure with the pontoon, said aeroplane structure including a vertical rudder, an auxiliary pontoon carried by the vertical rudder to move with the vertical rudder, said fore supports connecting the pontoon and aeroplane structure with the points of connection lying in advance of the center of gravity, and said aft support connecting the pontoon and aeroplane structure with the points of connection lying aft of the center of gravity, the connection between said fore and aft supports and said pontoon being pivotal and yieldable in the longitudinal direction of the pontoon.

14. In a hydroaeroplane, a pontoon, an aeroplane structure, means including shock absorbing elements for connecting said aeroplane structure with said pontoon, said means comprising fore supports rigidly secured to the aeroplane structure and pivotally and yieldably connected to the pontoon in advance of the center of gravity of the machine, and shock absorbing aft supports with universal joints connecting the same to the pontoon and the aeroplane structure, said universal joints lying aft of the center of gravity.

[Claims 2 to 4, 6 to 9, 11, and 13 not printed in the Gazette.]

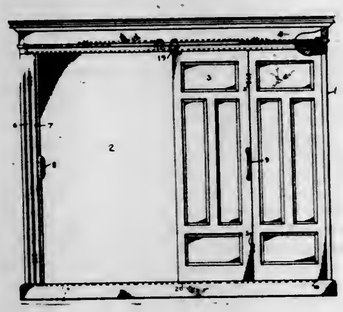
1,273,837. AIR-SUPPLY DEVICE FOR EXPLOSIVE-ENGINES. RICHARD EHLERS, Seattle, Wash., assignor to Arnold A. Barkey, Seattle, Wash. Filed Aug. 15, 1916. Serial No. 114,976. (Cl. 137—32.)



A device of the class described including a hollow casing having one end opened, the interior of said casing having an upper cylindrical chamber and a conical chamber which

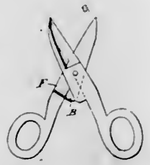
tapers downwardly and inwardly from a point adjacent the open end to the closed end thereof, said casing provided adjacent its open end with opposed inlet openings, a hollow plug rotatably mounted in the open end of said casing and provided with opposed openings adapted when rotated to be moved into and out of registration with the openings in the casing, means fastened to said plug and extending exteriorly of the said casing whereby said plug may be rotated, a spring located in said casing and having one end bearing against the closed end thereof, a disk valve connected to the other end of said spring and adapted to normally remain unseated, the diameter of the disk being greater than the interior diameter of the lower part of the conical chamber and said casing having an outlet opening located between the closed end thereof, and the valve, whereby upon a vacuum or suction being created in said casing through the last named opening the valve will be drawn downwardly against the wall of the casing to close communication between the inlet and outlet openings.

1,273,838. CABINET. JOHN THOS. FAIRHURST, Brooklyn, N. Y. Filed Sept. 28, 1916. Serial No. 122,761. (Cl. 45—1.)



In combination with a chamber of the class described, a closure comprising foldable sections, a guide at the top and bottom along the front of said chamber and guides at the side of said chamber, a rod pivotally secured to said chamber at one end and pivotally secured to said sections at the other end said last mentioned pivot being adapted to slide within said guides at the side of said chamber.

1,273,839. SHEARS AND SIMILAR TOOL. WILLIAM CHARLES FARRER and GEORGE GLOSSOP, Sheffield, England. Filed Mar. 15, 1916. Serial No. 84,413. (Cl. 30—13.)

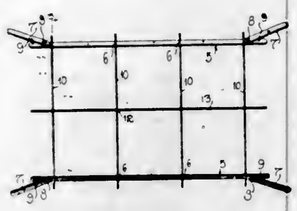


1. A tool of the character described comprising two pivotally connected members each including a handle section and a blade, the inner face of the back of each blade on the handle side of the pivot being provided with a lengthwise extending taper B that gradually and smoothly merges into the full thickness of the blade adjacent the pivot, substantially as and for the purpose set forth.

2. A tool of the character described comprising two pivotally connected members each including a handle section and a blade, the inner face of the back of each blade on the handle side of the pivot being provided with lengthwise extending tapered surfaces B, F, oppositely inclined to the body of the blade, substantially as and for the purpose described.

[Claims 3 and 4 not printed in the Gazette.]

1,273,840. CAMP-STOVE. WILLARD O. FASSETT, Alderpoint, Cal. Filed Mar. 23, 1918. Serial No. 224,339. (Cl. 126—30.)

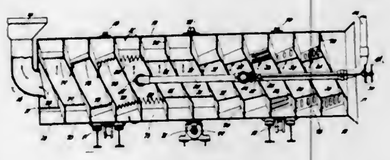


1. A device of the character described including a series of spaced longitudinal bars, means detachably connecting the bars to each other and locking them against relative longitudinal or lateral movement, said means coacting with the outer longitudinal side bars to maintain the same in oppositely disposed, obliquely inclined planes, and means for supporting said bars in an elevated position.

2. A device of the character described including longitudinal side bars, a plurality of cross bars having means on their opposite ends for detachable engagement with the respective side bars to position the latter in vertically inclined planes, an intermediate longitudinal bar, said intermediate bar and the cross bars having coacting means to detachably retain the intermediate longitudinal bar in connection with the cross bars, and supporting means connected to the ends of said longitudinal side bars.

[Claims 3 and 4 not printed in the Gazette.]

1,273,841. APPARATUS FOR THE TREATMENT OF PAPER-STOCK. WILLIAM GRANT FISKE, Purfleet, England. Filed Feb. 24, 1917. Serial No. 150,645. (Cl. 92—20.)



1. The method of treating paper stock by a continuous soaking and disintegrative process without the employment of positively-acting mechanical tearing devices, which consists in causing the material, along with liquid, to pass in a stream through a confined channel of such length as to afford time for thorough soaking of the permeable portions of the material, said channel receiving motion of such character as to impart to the material a tumbling movement adapted, in coöperation with the soaking process, to bring about disintegration and partial reduction to a pulpy consistency of all but the more resistant portions of the material.

5. An apparatus for treating paper stock comprising a rotatable drum, an inwardly open helical channel located upon the interior surface of said drum and baffles located in said channel at spaced intervals and having their inner edges serrated, the serrations increasing progressively in depth in successive baffles.

[Claims 2 to 4 and 6 to 15 not printed in the Gazette.]

1,273,842. SAFETY-RAZOR. OSWALD T. FLEURY, Boston, Mass. Filed Dec. 18, 1917. Serial No. 207,702. (Cl. 30—12.)



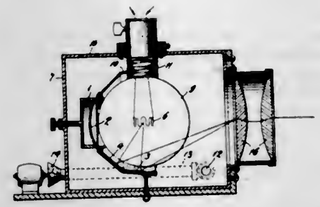
1. A razor including a blade, a guard associated with said blade, a holder for the blade and guard including separable clamping members each of which is provided at one end with an extension engaging said blade and a tongue projecting from the extension and through said blade and guard and engaging the latter, and means for retaining said clamping members in operative position.

2. A razor including a blade, a guard associated with said blade, a holder for the blade and guard including separable clamping members each of which is provided at one end with an extension engaging over the end of said blade and a tongue projecting from the extension and passing downwardly and through said blade and guard and engaging the latter, the other end of each clamping member being formed to provide a handle portion which coöperates with the similar portion of the other clamping member, and means for detachably securing said handle portions in coöperating relation.

3. A razor including a blade, a guard associated with said blade, a holder for the blade and guard including complemental clamping members each of which is provided at one end with an extension engaging said blade and a tongue projecting from the extension and through said blade and guard and engaging the latter, the other end of each clamping member being formed to provide a handle portion which coöperates with the similar portion of the other clamping member, and a cap threaded upon said handle portions for retaining the same in coöperating relation.

4. A razor including a blade bent longitudinally and having a cutting edge curved about an axis intersecting a plane of the blade, a guard associated with said blade, a holder for the blade and guard including separable clamping members detachably connected to the blade and guard and each of which is provided at one end with an extension engaging said blade and a tongue projecting from the extension and through said blade and guard and engaging the latter, the other ends of said clamping members being adjustable away from each other whereby to detach the clamping members from the blade and guard, and means for retaining said clamping members in operative position.

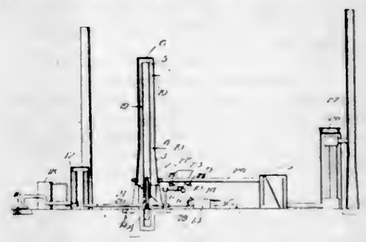
1,273,843. PICTURE-PROJECTING APPARATUS. WILLIAM VINCENT FOLEY, New Brunswick, N. J. Filed Sept. 18, 1917. Serial No. 191,926. (Cl. 240—41.)



1. In a picture-projecting machine, the combination of an incandescent electric light bulb, with a condenser lens and a mirror, the bulb being intermediate the lens and mirror, and the mirror comprising a bottom-forming concave mirror and an outwardly flaring mirror having a plurality of sets of plane mirrors which in each set are angularly disposed one to another.

[Claims 2 and 3 not printed in the Gazette.]

1,273,844. PROCESS FOR ROASTING ORE. CHARLES H. FULTON, Cleveland, Ohio, assignor, by mesne assignments, to Metallurgical Laboratories, Incorporated, Chicago, Ill., a Corporation of Illinois. Filed Aug. 19, 1916. Serial No. 115,904. (Cl. 75—17.)



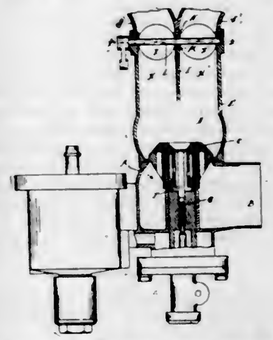
1. A process of roasting finely divided sulfid ores comprising forming a mixture of pulverized ore and preheated air thereby raising the temperature of the ore to the ignition point, conveying such mixture of air and ore together slowly while maintaining the suspension and temperature of the ore until the required degree of desulfurization is attained and then separating the ore from the gases and air.

3. A process of roasting finely divided sulfid ores comprising forming a mixture of pulverized ore and preheated air free from products of combustion thereby raising the temperature of the ore to the ignition point, conveying such mixture of air and ore together slowly while maintaining the suspension and temperature of the ore until the required degree of desulfurization is attained and then separating the ore from the gases and air.

11. A process for roasting which consists in forming a suspension of finely divided ore in air at a temperature slightly below the ignition point of the ore, then introducing the mixture of ore and air into a heated space at a temperature sufficient to cause practically immediate ignition of the ore particles, and maintaining the ore particles in suspension a sufficient period to obtain the required degree of desulfurization.

[Claims 2 and 4 to 10 not printed in the Gazette.]

1,273,845. CARBURETER. OTIS C. FUNDERBURK, Detroit, Mich., assignor to Detroit Lubricator Company, Detroit, Mich., a Corporation of Michigan. Filed July 29, 1916. Serial No. 112,046. (Cl. 261—65.)



1. In a carbureter, the combination with a single mixing chamber and means for supplying air and liquid fuel

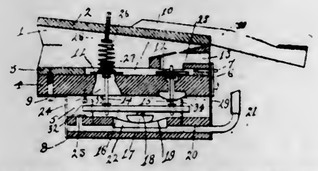
thereto, of separate discharge conduits connected with said mixing chamber, and a throttle for each of said separate conduits beyond their point of communication with said chamber.

2. In a carbureter, the combination with a casing having a single mixing chamber therein with an air inlet thereto and parallel discharge conduits separated from each other by an intermediate partition, means for supplying liquid fuel to said mixing chamber, throttle valves in the separate conduits, a common actuating stem therefor, a restricted equalizing passage extending through the intermediate partition, and liquid fuel and air inlet passages communicating with said equalizing passage, for the purpose described.

4. In a carbureter, the combination with a single mixing chamber and means for supplying air and liquid fuel thereto, of separate discharge conduits connected with said mixing chamber, a throttle for each of said separate conduits beyond their point of communication with said chamber and a common actuating means for said throttles.

[Claim 3 not printed in the Gazette.]

1,273,846. **MUSIC-PLAYER VALVE-ACTION.** ROBERT A. GALLY, Cincinnati, Ohio, assignor to The Baldwin Company, Cincinnati, Ohio. Filed Sept. 28, 1917. Serial No. 193,681. (Cl. 84—178.)



1. Two valves distant from each other and adapted to be moved in similar directions but not being in the same line of motion; a floating lever and connections extended from one of the said valves to the other of the said valves; and a pneumatic means connected to the said lever means intermediate the said two valves.

2. Two valves distant from each other and adapted to be moved in similar directions but not being in the same line of motion; a floating lever and connections extended from one of the said valves to the other of the said valves; and a pneumatic means connected to the said lever means intermediate the said two valves, to operate one of the said valves in advance of the time of motion of the other said valve.

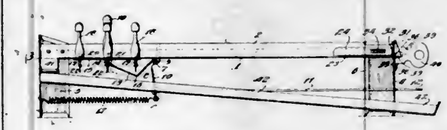
5. A valve board; two valves disposed adjacent one face of the said board and at a distance from each other; a floating lever disposed beyond the opposite face of the said valve-board; a rod extended from each said valve-board through the said valve board, and each said rod connected to a part of the said lever distant from the other said rod; and a pneumatic means connected to the said lever intermediate the two said rods to move the said lever and the two said rods and the two said valves in similar directions.

52. A pneumatic motor having a fixed board, an action member on a face of which said motor is positioned, a plate attached to an edge of said member and extended beyond said face and opposite one end of the said fixed board of said motor, a hole in the said extended part of said plate, and a pin fastened in the fixed board of said motor and freely engaged in said hole of said plates, and additional means removably securing to said member a part of the fixed board of said motor distant from said pin but opposite said face of said member.

[Claims 3, 4, 6 to 51, and 53 to 57 not printed in the Gazette.]

1,273,847. **GAME APPARATUS.** FREDERICK SAMUEL GICHNER, Washington, D. C. Filed Feb. 15, 1917. Serial No. 148,765. (Cl. 46—54.)

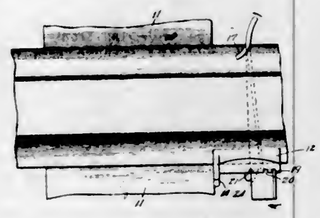
2. In a bowling game apparatus, in combination, an alley having apertures at the pin-spots, pins to be seated at said spots, a vertically movable pin-resetting member having perforations, strings attached to the bottoms of the pins and extending down loosely through the perforations of the alley and of the resetting member, weights



attached to said strings at a distance below said resetting member, and means for moving said member toward and from the pin-spots, and a ball propelling device.

[Claims 1 and 3 not printed in the Gazette.]

1,273,848. **RAIL-ANCHOR.** HARVEY M. GILLESPIE, Chicago, Ill., assignor to The P & M Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 13, 1917. Serial No. 196,387. (Cl. 238—4.)



1. A rail anchor comprising rail engaging jaw members, one being a spring, which are capable of different interlocking engagements with each other whereby the distance between the jaws of said members may be varied.

3. A rail anchor comprising a shoe engaging one edge of the rail base and a spring member formed with a jaw adapted to engage the opposite edge of said base, said spring and shoe being adapted to have different interlocking engagements whereby the distance between said jaw and shoe may be varied.
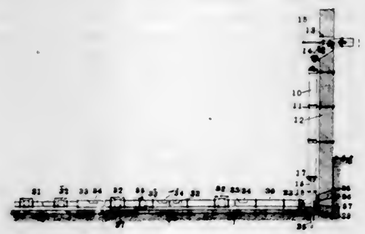
7. A rail anchor comprising a shoe element engaging one edge of the base flange and a spring element extending around said shoe and formed with a jaw engaging the opposite edge of the rail base and adapted to be subjected to a torsional strain, said elements being provided with means whereby different interlocking engagements with each other may be affected, each of which subjects said spring to torsional strains of different degree and varies the distance between said shoe and jaw.

14. A rail anchor comprising a shoe having a jaw adapted to fit over one edge of the base flange of a rail, and a flat spring having an angularly disposed hook adapted to engage the opposite edge of the rail base so as to bear with spring pressure on the top of the flange, and provided at its opposite end with an enlargement; said shoe being formed with a plurality of steps adapted to be engaged by the enlargement of said spring so as to subject said spring to a torsional strain, and provided with a cam surface adapted to be engaged by said enlargement to increase the grip of the device transversely of the rail.

[Claims 2, 4 to 6, 8 to 13, and 15 to 17 not printed in the Gazette.]

1,273,849. **ASH-CONVEYER SYSTEM.** ALEXANDER GIRTANNER and ROBERT H. MILLER, St. Louis, Mo., assignors, by mesne assignments, to American Steam Conveyor Corporation, Chicago, Ill., a Corporation of New York. Filed Apr. 29, 1915. Serial No. 24,628. (Cl. 193—10.)

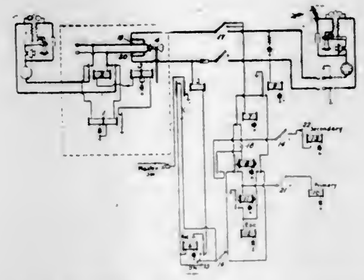
4. In an ash conveyer system the combination with a horizontally arranged conduit provided with spaced inlet openings, of means for creating a flow of fluid therethrough, and means arranged in said conduit at a position between said inlet openings where the flow of fluid through said conduit would otherwise be substantially uniform for deflecting the fluid toward the bottom of said conduit.



5. In an ash conveyer system the combination with a horizontally arranged conduit, of means for creating a flow of fluid therethrough, means arranged in said conduit at a position where the flow of fluid through said conduit would otherwise be substantially uniform for deflecting the fluid toward the bottom of said conduit comprising a baffle plate, and means co-acting with said baffle plate comprising an injector nozzle extending through the bottom of said conduit and discharging against the inclined face of said baffle.

[Claims 1 to 3 not printed in the Gazette.]

1,273,850. **SELECTOR-CIRCUIT FOR AUTOMATIC AND SEMI-AUTOMATIC TELEPHONE SYSTEMS.** CHARLES L. GOODRUM, New York, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 27, 1916. Serial No. 93,869. (Cl. 179—18.)



1. In a telephone exchange system, telephone lines, automatic switching means for completing connection between said lines, means for selecting said automatic switching means, an impulse sending device for directively controlling the movement of said automatic switching means, and means for preventing any actuation of said automatic switching means for a predetermined interval after the mentioned switching means has been selected for use.

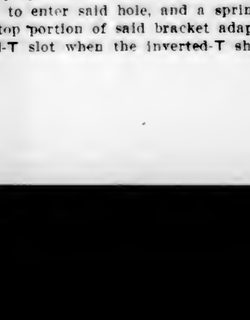
2. In a telephone exchange system, telephone lines, automatic switching means for completing connection between said lines, means for selecting said automatic switching means, an impulse sending device for directively controlling the movement of said automatic switching means, electromagnetic means for actuating said automatic switching means, and means for preventing any energization of said electromagnetic means for a predetermined interval after the mentioned switching means has been selected for use.

6. In an automatic telephone system, groups of telephone lines, automatic switching means for completing a connection between lines of each of said groups, means for selecting said automatic switching means, a combination of fast and slow relays for controlling the actuation of said automatic switching means, and a resistance inserted in the circuit of one of said relays to prevent the actuation of said switching means for a predetermined interval after the said switching means has been selected for use.

8. A circuit including a switch, an operating magnet for selectively operating said switch, a pair of relays for jointly controlling said magnet, a resistance in the circuit of one of said relays, and a shunt circuit completed about said resistance on its energization.

[Claims 3 to 5 and 7 not printed in the Gazette.]

1,273,851. **PORTABLE ELECTRIC LANTERN.** WILLIAM GRETHER, Dayton, Ohio. Filed Jan. 26, 1918. Serial No. 213,867. (Cl. 240—8.5.)



1. A portable electric lantern comprising a main casing, a reflector casing secured thereto, a lamp within the latter, a reflector behind said lamp in the reflector casing, a focusing clamp secured to said socket, a hollow externally threaded boss extending outwardly from the rear portion of the main casing, a screw extending from said boss into the focusing clamp, the head of said screw adapted to engage the wall of the casing around a hole therein through which its shank extends, an operating key having a flat portion rotatable within said boss, adapted to enter the slotted head of the screw, an annular flange on said key of greater diameter than the end of said boss, and an internally threaded cap on said boss, having an opening in its head of less diameter than said flange but large enough to readily receive the outer end of said key.

2. A portable electric lantern comprising a main casing having two vertical cell receiving portions in horizontal alinement and spaced a short distance apart, a dry cell in each of said receiving portions, a reflector casing secured to the main casing in front of its cell receiving portions, a cover for the main casing above the cells, and a handle extending from the top of the reflector casing, above said cover, to the rear of the main casing, through the space between the cells in their raised positions, whereby the latter may be removed from the lantern, one on each side of said handle, without the necessity of detaching the latter.

4. In a portable electric lantern, the combination with a handle extending from its front to its rear portion, of a lug on the upper rear portion of the lantern to receive the rear end of said handle, an inverted-T slot in the rear portion of said handle above the lug, a bracket having an inverted-T shaped extension on its upper end adapted to enter said slot, a lug on the lower rear portion of said lantern having a vertical hole therein, an upturned projection on the lower end of said bracket adapted to enter said hole, and a spring-pressed plunger in the top portion of said bracket adapted to enter said inverted-T slot when the inverted-T shaped extension is

in the upper end thereof, to coöperate with the latter and the lower upturned projection in locking the lantern on said bracket.

[Claims 3 and 5 not printed in the Gazette.]

1,273,852. FULLING-MILL. CARL CHESTER HARRIS, Orange, Mass. Filed Dec. 14, 1917. Serial No. 207,097. (Cl. 38—11.)



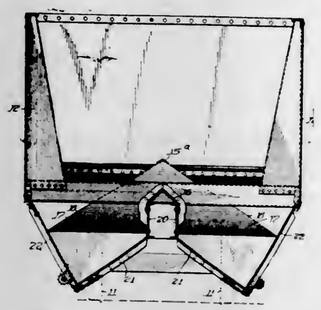
5. In a fulling mill, the combination with a pair of press rolls and a packing box, of a pair of stationary wear strips extending past the ends of the rolls, a pivoted cover in said packing box, and an adjustably weighted lever for controlling the pressure on said cover.

6. In a fulling mill, the combination with a packing box, of an adjustable bottom therefor, a pair of press rolls, a shoe on said bottom located at the lower roll, stationary side plates located at the opposite edges of said shoe for preventing the stock from spreading out under the upper roll, a cover pivotally mounted in the box over said bottom, and an adjustably weighted member for holding the cover down and regulating the pressure thereon.

7. In a fulling mill, the combination of a packing box having a pivoted cover, a horizontal rod above having two arms of different lengths fixed thereto, a link arranged in substantially vertical position connecting the end of the shorter arm with the cover to force it down, a second vertical link connected with the end of the longer arm, a lever to which the second link is connected, and weights readily adjustable along said lever for controlling the pressure on said cover.

[Claims 1 to 4 not printed in the Gazette.]

1,273,853. DUMP-CAR CONSTRUCTION. HARRY S. HART, Chicago, Ill. Filed May 24, 1918. Serial No. 236,275. (Cl. 105—185.)



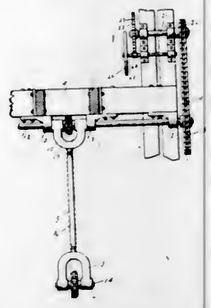
1. A car having side and end portions, a center sill, a stationary floor extending from end to end of the car and composed of fixed portions sloping downwardly and outwardly from the center sill toward the sides of the car, the floor portions over the trucks being at a higher level than the floor portions between the trucks, the car sides comprising upper stationary portions, and doors extending between the stationary portion of the sides and the outer edges of the floor.

3. A car of the class described having sides, ends, and a stationary floor extending from end to end of the car, the floor comprising end portions and intermediate portions, the intermediate portions extending between the trucks only and being at a lower level than the end portions, the end portions and intermediate portions being composed of fixed sections sloping downwardly and outwardly toward the sides of the car.

4. A car of the class described, having a center sill, a stationary floor extending from end to end of the car, said floor being composed of members sloping downwardly and outwardly from the center sill toward the sides of the car, the portion of the floor between the trucks being at a lower level than the portion over the trucks, and downwardly sloping members connecting the floor portions over the trucks with the floor portions between the trucks.

[Claim 2 not printed in the Gazette.]

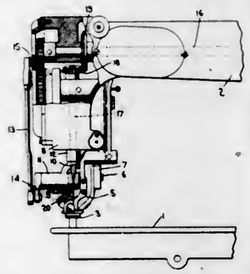
1,273,854. GRAIN-DUMP. WILLIAM B. HAUTER, Morton, Ill., assignor to A. F. Meyer Mfg. Co., Morton, Ill, a Corporation of Illinois. Filed Mar. 20, 1916. Serial No. 85,308. (Cl. 214—49.)



1. In a grain dump, in combination, a plurality of dump-logs pivoted between their ends, an operating shaft, a plurality of hangers each swingingly mounted at one end on the shaft and having its outer opposite end free, wheels journaled at the opposite ends of the hangers, endless members supported by the wheels, and means connecting each endless member to the adjacent end of the respective dump-log, said hangers freely swinging at their outer ends to permit easy operation of said dump-logs.

[Claim 2 not printed in the Gazette.]

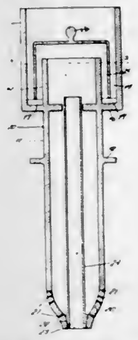
1,273,855. BLINDSTITCH SEWING-MACHINE. THOMAS J. HAYES, Roslindale, and HARLEY C. MOULTON, Dorchester, Mass., assignors to Arbetter Felling Machine Company, Boston, Mass., a Corporation of Maine. Filed May 2, 1916. Serial No. 94,986. (Cl. 112—24.)



1. A sewing machine comprising in combination a curved needle, means for oscillating it about its axis of curvature, a rotary hook having its axis located substantially normal to a tangent to the path of the needle at the loop-taking point, and a bobbin case inclosed in said hook and provided with an aperture in its wall to receive the end of the needle upon its forward oscillation.

[Claims 2 to 11 not printed in the Gazette.]

1,273,856. APPARATUS FOR SPRAYING LIQUIDS. INGENUIN HECHENBLEIKNER, Charlotte, N. C., assignor to Chemical Construction Company, Charlotte, N. C., a Corporation of North Carolina. Filed Feb. 14, 1918. Serial No. 217,273. (Cl. 137—80.)



1. In apparatus of the character described, a tubular body portion provided at its lower end with a main discharge opening and a plurality of permanently open discharge apertures disposed above the main discharge opening, and a tubular over-flow pipe having both ends open and provided at its lower end with a valve adapted to cover and uncover the main discharge opening and incapable of closing the permanently open discharge apertures and having its upper end projecting into the upper portion of the tubular body portion.

5. In apparatus of the character described, a chamber for receiving a liquid, a tubular body portion connected with the lower portion of the chamber, a flange disposed within the chamber near the upper end of the tubular body portion, a transparent cover disposed within the chamber and extending downwardly between the flange and the side wall of the chamber, means for supporting the transparent cover in spaced relation to the bottom of the chamber, a tapered extension carried by the lower end of the tubular body portion and provided with a main discharge opening and discharge apertures disposed near the same, and a longitudinally movable over-flow conduit extending longitudinally of the tubular body portion and provided at its lower end with a valve to cover and uncover the main discharge opening.

[Claims 2 to 4 not printed in the Gazette.]

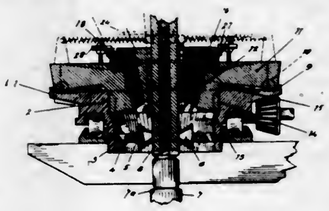
1,273,857. PROCESS OF SOFTENING WATER. HUGO HELLER, Cologne, Germany, assignor to Oelwerke Stern Sonneborn Akt. Ges., Cologne, Germany. Filed Nov. 13, 1914. Serial No. 872,031. (Cl. 210—1.)

1. The herein described process of softening water for use in steam boilers comprising treating the water with di-sodium phosphate and heating it.

[Claims 2 and 3 not printed in the Gazette.]

1,273,858. INTERNAL ROTARY SPIDER. BENJAMIN FRANKLIN HINIKER, Taft, Cal. Filed Sept. 4, 1917. Serial No. 189,474. (Cl. 255—23.)

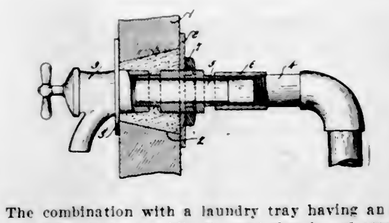
1. A device of the character described comprising the combination with an apertured rotating table and a drill stem and pipe projecting therethrough, of a driving bushing and pipe clamps carried by the table, the bushing being normally held in engagement with the table by the clamps when the drill is in operation, and means whereby when the drill stem is lifted the bushing will



be freed from the clamps, and means for then moving the clamps into engagement with the pipe.

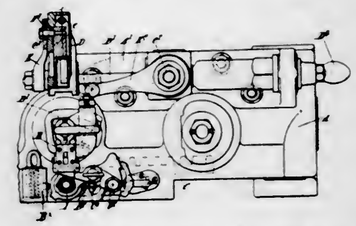
[Claims 2 to 5 not printed in the Gazette.]

1,273,859. ATTACHING MEANS FOR BIBS. JOHN HOCHBERGER, Chicago, Ill., assignor to Lillian J. Hochberger, Chicago, Ill. Filed June 8, 1917. Serial No. 173,609. (Cl. 285—46.)



The combination with a laundry tray having an opening in its wall and a bib disposed therein, of attaching means for said bib comprising a coupling member reduced at either end and threaded for connection with the bib and water supply line, the relatively large central portion of said coupling member being also threaded, a plastic filler disposed in the tray opening surrounding the connection of the coupling and the bib, a washer mounted upon said coupling and constituting a mold form for one side of the plastic material, and means on said coupling member for holding the washer in position retaining the plastic material in the opening.

1,273,860. BREECH-LOADING ORDNANCE. CARL HOLMSTRÖM, Westminster, London, England; Katherine Annette Holström executrix of said Carl Albert Holström, deceased. Filed Nov. 3, 1914. Serial No. 870,003. (Cl. 89—27.)



1. In breech loading ordnance, the combination with the breech screw carrier, of a primer carrier and a primer actuating member, both movable in the same direction and in a curvilinear path relatively to the breech screw carrier, and means for moving said member to effect the movement of the carrier into a position opposite the primer chamber of the axial vent and to

then insert a primer from the carrier into the primer chamber.

5. In breech loading ordnance, the combination with the lock frame of a device movable independently of the lock frame for inserting primers into the primer chamber of the axial vent, and means also movable independently of the lock frame for extracting the primer from this chamber in the event of its not having been fully inserted therein.

8. In breech loading ordnance, the combination with the lock frame, of a movable device for inserting a primer into its chamber in the axial vent, means for leaving the lock frame in the partly open position when the breech mechanism is locked and means, dependent upon the displacement of the said device to its inoperative position, for shifting the lock frame to its closed position.

14. In breech loading ordnance, the combination with the lock frame, of means for causing the latter to overlap the primer chamber of the axial vent and for positively preventing it from moving from this position when the breech mechanism is fully open, the lock frame thus preventing a primer from being inserted at this time.

[Claims 2 to 4, 6, 7, 9 to 13, and 15 not printed in the Gazette.]

1,273,861. UMBRELLA. FRANK W. HOWARD, New York, N. Y. Filed Aug. 3, 1914. Serial No. 854,703. (Cl. 135—28.)



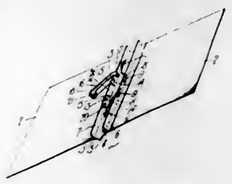
1. In an umbrella, the combination of a crown sleeve, a stick receiving the same, a plurality of ribs having flexible coils adjacent one end of said sleeve to permit the outward and inward movement of the ribs in opening and closing the umbrella, said ribs having integral extensions beyond said coils for engaging and crushing the side of the stick to fix said sleeve and ribs thereupon, a cap mounted on said stick enveloping said sleeve and having an expanded end receiving said coils and a cover attached to said ribs having an opening at the center thereof, the edge of said opening being secured in the lower end of said cap.

2. An umbrella cover of water-proof paper having an integral fold forming a hemmed edge to reinforce said cover at the outer edge thereof, and eyelets mounted in said hemmed edge for engaging the umbrella ribs, and a cord in said folded hemmed edge for reinforcing the same, said cord having a loose end extending out of said hemmed edge, and a button attached to said cover cooperating with said cord to form a tie for encircling the umbrella when closed.

4. In an umbrella, the combination of a stick, a plurality of ribs having flexible portions adjacent the stick to permit the opening and closing movements of the umbrella, and having round extensions beyond said flexible portions lying against the side of the stick, a sleeve fitting tightly over said extensions and said stick for crushing said extensions into the material of the stick to clamp said extensions and the sleeve rigidly on the stick, and thereby preventing longitudinal movement of the sleeve and ribs along the stick, said ribs and said sleeve having interlocking means for preventing swinging movement of said ribs on the axes of said extensions in a circumferential direction around the stick.

[Claims 3, 5, and 6 not printed in the Gazette.]

1,273,862. FILE FOR CORRESPONDENCE AND THE LIKE. ERNEST JACOBSEN, Melbourne, Victoria, Australia. Filed Jan. 16, 1918. Serial No. 212,038. (Cl. 129—25.)



1. A file for correspondence and the like comprising a cover having opposite leaves or wings, a binding tape attached to one leaf, and a metal reinforcement attached to the other leaf and having incuts therein to receive the binding tape, in combination with a substantially U-shaped locking plate pivoted at one end thereof to one of the leaves for swinging movement into position to straddle the reinforcement and lock the ends of the binding tape in position.

2. A file for correspondence and the like comprising a cover having opposite leaves or wings, a binding tape attached to one leaf, and a metal reinforcement attached to the other leaf and having incuts therein to receive the binding tape, in combination with a substantially U-shaped locking plate pivoted at one end thereof to the reinforcement for swinging movement into position to straddle the reinforcement and lock the ends of the binding tape in position.

4. A file for correspondence and the like comprising a cover having opposite leaves or wings, a binding tape, and a metal reinforcement having incuts therein to receive the binding tape, in combination with a substantially U-shaped locking plate pivotally secured at one end to one of the leaves, said locking plate having converging sides or legs adapted to engage the reinforcement and lock the ends of the binding tape in position, said sides or legs having finred edges to facilitate the entrance of the reinforcement.

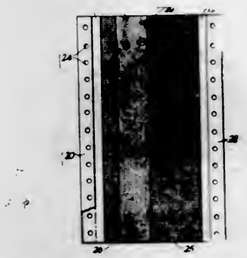
5. A file for correspondence and the like comprising a cover having opposite leaves or wings, a binding tape, and a metal reinforcement having incuts therein to receive the binding tape, in combination with a substantially U-shaped locking plate pivotally secured at one end to one of the leaves, said locking plate being adapted to engage the reinforcement and lock the ends of the binding tape in position, and said reinforcement having catches to fasten the locking plate to the reinforcement when engaged therewith.

7. A file for correspondence and the like comprising a cover having opposite leaves or wings, binding tape and a metal reinforcement having incuts therein to receive the binding tape, in combination with a substantially U-shaped locking plate pivotally secured at one end to one of the leaves, said locking plate being adapted to engage the reinforcement and lock the ends of the binding tape in position, said reinforcement and said locking plate being provided with coöperating means which interengage and fasten the two elements together.

[Claims 3 and 6 not printed in the Gazette.]

1,273,863. MANIFOLDING. ARTHUR A. JOHNSON, New York, N. Y., assignor to Underwood Typewriter Company, New York, N. Y., a Corporation of Delaware. Filed Feb. 26, 1918. Serial No. 219,184. (Cl. 282—28.)

1. A carbon-paper sheet adapted to coöperate with an original sheet on which typewriting is done in black in a plurality of columns, and in a less number of columns in red, said carbon sheet comprising a narrow red stripe to correspond to a red original column, and a wide black stripe to correspond to a plurality of black columns.



2. A carbon-paper sheet adapted to coöperate with an original sheet on which typewriting is done in black in a plurality of columns, and in a less number of columns in red, said carbon-sheet comprising a narrow red stripe to correspond to a red original column, and a wide black stripe to correspond to a plurality of black columns, and another black stripe corresponding to a non-adjacent column, said stripe so arranged that the two black stripes lie on the opposite sides of the red stripe.

4. The combination with an original sheet adapted to be written upon in several columns in more than one color, of a carbon-sheet having a black stripe thereon adapted to coincide with a plurality of columns in the original sheet, a narrower red stripe thereon adapted to fit over another column, a plurality of perforations in said original sheet adapted to fit studs to aline the original sheet, a reinforcement for the edge of the carbon-sheet, and a plurality of perforations on said edge of said carbon-sheet adapted to fit over said studs to cause a certain column on the original sheet to coincide with the red column on the carbon-sheet, each sheet also comprising a plurality of perforations at the opposite edge thereof adapted to fit over another set of alining studs.

6. A carbon-paper sheet adapted to coöperate with an original sheet on which typewriting is done in black in a plurality of columns, and in a less number of columns in red at one side of the black columns, and also in black on the opposite side of the red, said original sheet comprising perforations adapted to fit over alining studs, said carbon-sheet comprising a narrow red stripe to correspond to a red original column, a black wide stripe to correspond to a plurality of black columns, a narrow black stripe to correspond to the other black columns, and a reinforcing edge for said carbon-sheet comprising perforations adapted to fit over the same alining studs.

8. A carbon-paper sheet adapted to coöperate with an original sheet on which typewriting is done in black in a plurality of columns, and in a less number of columns in red at one side of the black columns, said original sheet comprising perforations adapted to fit over alining studs, said carbon-sheet comprising a narrow red stripe to correspond to a red original column, a black wide stripe to correspond to a plurality of black columns, a reinforcing edge for said carbon-sheet comprising perforations adapted to fit over the same alining studs, and a sign imprinted on said carbon-sheet, at one end thereof, adapted to indicate which end is adapted to be first inserted into the typewriting machine.

[Claims 3, 5, and 7 not printed in the Gazette.]

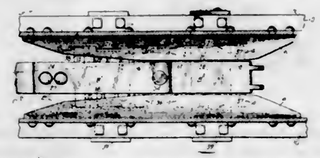
1,273,864. PLAYING-CARDS. FRANCES O. JOHNSON, Paducah, Ky. Filed Mar. 15, 1917. Serial No. 154,994. (Cl. 46—25.)

A pack of playing cards comprising a plurality of sets or books, each set including cards having a plurality of representations of paintings of note, with each painting accompanied by its name or title and each card containing in addition the titles of the other paintings appearing on the other cards of that set, and each set also including one card containing the picture and name of



the artist of the paintings of that set as well as the titles of all the paintings of the artist whose paintings are represented in the cards of the set.

1,273,865. DRAFT-RIGGING. GEORGE A. JOHNSON, Chicago, Ill., assignor to William H. Miner, Chazy, N. Y. Filed Sept. 20, 1916. Serial No. 121,125. (Cl. 213—42.)

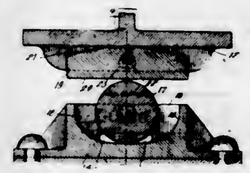


1. In a draft rigging, the combination with tandem stop castings, said castings being deeper at the centers than at the forward ends thereof, of a yoke articulated at a point normally substantially opposite the centers of said castings, and means on said castings at the rear of the centers thereof adapted to confine the rear portion of the articulated yoke to substantially straight line movements parallel to the axis of the gear, the front portion of the articulated yoke being adapted to have radial movement.

2. As an article of manufacture, a stop casting for draft riggings, said casting being provided with front, rear, and intermediate main stops for coöperation with followers of a tandem gear, said casting having an upper flange tapered from the center stop to the front main stop and of substantially uniform width from the center stop to the rear stop.

[Claims 3 and 4 not printed in the Gazette.]

1,273,866. SIDE BEARING FOR CARS. GEORGE A. JOHNSON, Chicago, Ill., assignor to William H. Miner, Chazy, N. Y. Filed Nov. 20, 1916. Serial No. 132,312. (Cl. 64—64.)



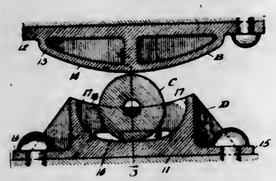
1. In a side bearing, the combination with members having upper and lower bearing surfaces, of a roller mounted on the lower bearing surface and adapted to be returned to normal position by gravity, and a rocker in engagement with said upper bearing surface and against which the roller bears during operation.

4. In a side bearing for cars, the combination with a base casting adapted to be secured to a truck bolster, said

base casting having a concave bearing surface in its upper face, of a roller mounted on said surface and adapted to be returned thereby to normal position under the influence of gravity, a rocker disposed above said roller, said rocker having a lower horizontal surface over the roller and a convex upper surface, and spring controlled means for supporting said rocker from a truck bolster, the curvature of said concave and convex surfaces being such that the distance between the line of contact of the roller with the concave surface and the convex surface of the rocker with the body bolster remains uniform during the actuation of the side bearing.

[Claims 2 and 3 not printed in the Gazette.]

1,273,867. GRAVITY-ROLLER SIDE BEARING. GEORGE A. JOHNSON, Chicago, Ill., assignor to William H. Miner, Chazy, N. Y. Filed Nov. 24, 1916. Serial No. 133,101. (Cl. 64—64.)



1. In a roller side bearing, the combination with an upper plate having a convex bearing surface on its underside of a lower bearing plate having a concave surface on its upper side, and a roller mounted on said concave surface and adapted to engage also the convex surface, said surfaces being so designed that, as the parts are shifted relatively to each other, the distance between the lines of contact of the roller with the respective surfaces will remain constant.

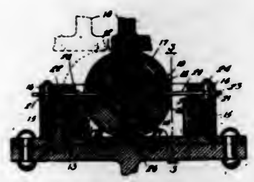
2. In a side bearing for railway cars, the combination with an upper bearing plate adapted to be secured to a body bolster, of a lower bearing plate adapted to be secured to a truck bolster, said bearing plates having opposed convex and concave bearing surfaces, and a roller interposed between said surfaces whereby, upon actuation of the side bearing the distance between the bolsters will be maintained uniform and upon release of pressure on the roller, the latter will return to normal under the influence of gravity.

3. In a side bearing for railway cars, the combination with an upper bearing plate adapted to be secured to a body bolster, of a lower bearing plate adapted to be secured to a truck bolster, said upper bearing plate having the underside thereof inclined upwardly from each side of the center thereof, the lower bearing plate having its upper surface inclined upwardly from the center thereof on each side, and a roller interposed between said surfaces, said surfaces being so related that the distance between the bolsters will be maintained uniform during actuation of the side bearing, and, upon release of pressure on the roller, the latter will return to normal under the influence of gravity.

1,273,868. ROLLER SIDE BEARING. GEORGE A. JOHNSON, Chicago, Ill., assignor to William H. Miner, Chazy, N. Y. Filed Dec. 6, 1916. Serial No. 135,318. (Cl. 64—64.)

1. In a side bearing, the combination with a hollow base casting adapted to be secured to a bolster, of a rolling member mounted therein, and means for returning said member to normal after actuation including, a spring element extending through said member at right angles to the axis of said member.

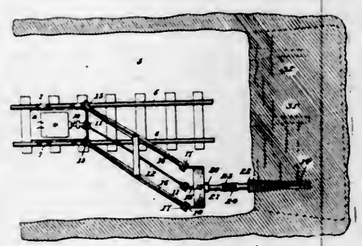
4. In a roller side bearing, the combination with a hollow base casting having upstanding end walls, of a roller mounted within said base casting, said roller having a recess extending transversely therethrough, the ends of said recess being flared, and a plate spring extending



through said recess and slidably connected at each end thereof with the end walls of the casting.

[Claims 2 and 3 not printed in the Gazette.]

1,273,869. COAL-WINNING DEVICE. JOSEPH F. JOY, Belle Vernon, Pa. Filed Sept. 22, 1917. Serial No. 192,773. (Cl. 125—14.)



8. A coal winning device including a shaft having a threaded substantially cone shaped wedging element upon one end adapted to be screwed into coal with its small end in advance, a drill operating in advance of said element to form a hole in the coal of a smaller diameter than that of the large end of said element, and means for rotating said element and said drill respectively at differing speeds.

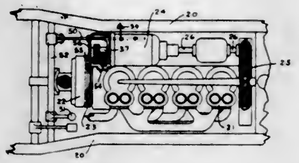
18. A coal winning device including a support, a planetary gearing having a casing, a flexible connection between said support and said casing to hold the latter from turning, a threaded substantially cone-shaped wedging element connected to the spider of said gearing, a drill carried by the shaft of said gearing and extending through and beyond the small end of said element, a motor mounted on said support, and a flexible driving connection between said drill carrying shaft and said motor.

19. A coal winning device including a planetary gearing having a casing, means to hold said casing from rotation, a threaded substantially cone-shaped wedging element having a shank connected to the spider of said gearing, a drill carried by the shaft of said gearing and extending through and beyond the small end of said element, an opening in the shank of said element forming an exit for the material removed by said drill, and means to rotate the drill carrying shaft.

24. A wedging member for coal winning devices comprising a threaded substantially cone-shaped rotatable element having an operating shank, said shank and said element being provided with an axial longitudinal bore adapted to receive a drill, and said shank being provided with a transverse slot to form a drillings exit.

[Claims 1 to 7, 9 to 17, and 20 to 23 not printed in the Gazette.]

1,273,870. ENGINE STARTING DEVICE. CHARLES F. KETTERING and WILLIAM A. CHRYST, Dayton, Ohio, assignors to The Dayton Engineering Laboratories Company, a Corporation of Ohio. Original application filed July 14, 1913, Serial No. 778,934. Divided and this application filed Feb. 9, 1916. Serial No. 77,346. (Cl. 172—239.)



1. In a starting device, the combination with an engine and a motor adapted to be used for starting purposes, said motor having a set of commutator brushes and brush-holders, one of said brush-holders comprising two independent elements insulated from each other; of a resistance unit electrically connecting the independent elements of said brush-holder; and means for operating one of said elements to cut out the effect of the resistance unit.

2. In a starting device for internal combustion engines, the combination with an engine and a motor, having a commutator and set of commutator brushes, one of said brushes having a brush-holder, comprising two independent elements insulated from each other; of an accumulator electrically connected with said motor; a resistance unit electrically connecting the independent elements of said brush-holder; and means for moving both of said elements of the brush-holder to close the circuit connections initially through said resistance and by continued movement to short-circuit the said resistance element.

4. In electric machines, the combination with a commutator brush and brush-holder comprising separate insulated elements; of a resistance unit electrically connecting said elements of the brush-holder; and means for moving one element of said brush-holder to cut out said resistance.

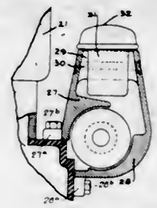
6. In a starting device for engines, the combination with an engine of an electric motor; shiftable mechanical connections between said engine and motor; a storage battery having circuit connections adapted to be connected with said motor; a commutator brush included in said circuit connections, but normally maintained in position to break one of said connections, said commutator brush comprising a plurality of elements and a resistance associated therewith; and a common operating member capable of an initial movement to actuate said commutator brush to close one of said circuit connections through the resistance to effect the operation of the motor at a slow initial speed, and capable of a second movement to shift the mechanical connections to couple up the motor and engine.

[Claims 3, 5, 7, and 8 not printed in the Gazette.]

1,273,871. ENGINE STARTING SYSTEM. CHARLES F. KETTERING and WILLIAM A. CHRYST, Dayton, Ohio, assignors to The Dayton Engineering Laboratories Company, a Corporation of Ohio. Original application filed Sept. 13, 1913, Serial No. 789,641. Divided and this application filed Mar. 1, 1916. Serial No. 81,410. (Cl. 171—209.)

1. In an electric machine, the combination with an armature and field windings; of a frame of magnetic material comprising an intermediate portion which constitutes a core for the field winding, and side portions which terminate in pole pieces between which the armature is mounted; lugs extending in different planes from the pole pieces and adapted to mount the frame astraddle a corner portion of a non-magnetic support with the lowest point of the armature located below the plane of the top of the support.

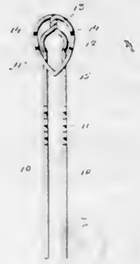
3. In an electric machine, the combination with an armature and field windings; of a frame of magnetic material supporting the field windings and the armature, said frame having portions thereof spaced apart to provide a gap there-between and provided with lugs having surfaces at an angle with one another and adapted to coöperate with corresponding surfaces formed on a support of non-magnetic material and to locate the frame in two directions with respect to the support with a portion of the support located in the gap.



5. In an electric machine, the combination with an armature; of a frame of magnetic material in relation to which the armature is mounted for movement, said frame having provisions adapting it to support the machine upon a corner portion of a support with the support in close proximity to the armature and occupying a gap between certain portions of the said frame.

[Claims 2 and 4 not printed in the Gazette.]

1,273,872. HAIR-PIN. JOHN GEORGE KLEE, Boston, Mass. Filed Nov. 10, 1917. Serial No. 201,324. (Cl. 132—22.)

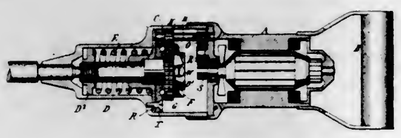


A hair pin constructed from a single length of material and formed intermediate its ends to provide a substantially heart shaped portion, said pin including spaced parallel limbs disposed at one side of the heart shaped portion, said heart shaped portion being curved longitudinally, bulged portions formed on said limbs, and oppositely curved with respect to the curvature of the heart shaped portion, said bulged portions projecting through the heart shaped design, and the pointed extremity of the heart shaped design defining with said limbs a flared entrance passage for the hair.

1,273,873. AUTOMATIC HAMMER. GEORGE L. KOLLOCK and ROBERT P. MARTIN, Seattle, Wash., assignors to Universal Hammer Company, Seattle, Wash., a Corporation of Washington. Filed Nov. 9, 1917. Serial No. 201,149. (Cl. 78—27.)

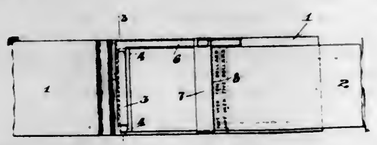
1. An automatic hammer comprising a reciprocating striker, an actuating spring therefor, a motor having its shaft in line with the striker but separated therefrom by a distance equal to the range of reciprocation of the striker an annular ratchet cam surrounding the striker and engaged thereby and a gearing connection between the cam and motor including a counter-shaft at one side of the cam and suitable pinions.

2. An automatic hammer comprising a reciprocating striker, an actuating spring therefor, an annular ratchet-cam surrounding the upper part of the striker and having its working surface on its upper side, a cam roller mounted on the striker above the cam and engaging the



said working surface, a gear wheel concentric with the cam outside of the said working surface, an operating motor having its shaft in line with the striker and a driving connection between the said cam gear and the motor shaft.

1,273,874. CHECK-BOOK. CASPAR J. KORNDORFER, Richmond borough, N. Y. Filed Sept. 10, 1917. Serial No. 190,464. (Cl. 283—12.)



The combination, in a check book having a cover and checks therein whose stub portions bear transversely reading lines of progressive valuation, of a rail mounted on the cover and extending alongside of and transverse to the reading lines, and a check-stub severing cutter slidably carried by said rail, said cutter lying lengthwise of said reading lines.

1,273,875. FLEXIBLE OR RIGID HAND-BAG. EMANUEL KOSTA, Monticello, Wis. Filed Sept. 22, 1916. Serial No. 121,606. (Cl. 190—43.)

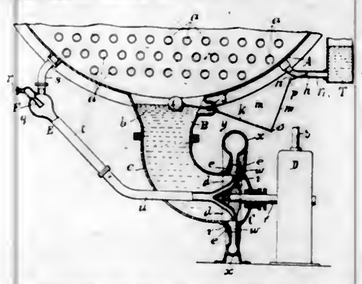


2. In an interchangeable bag of the class described having one rigid wall, a flexible structure secured to the said rigid wall constituting the front, sides and bottom of the bag, in combination with collapsible side and bottom members removably associated with certain walls of the flexible structure to sustain the same in a rigid state, said side and bottom members when collapsed providing a flexible structure, and means for locking the collapsible members in their extended position.

5. In an interchangeable bag of the class described having a rigid back member, a flexible structure secured to the rigid back constituting the front, sides and bottom of the bag, in combination with side and bottom members hingedly secured to said back member and adapted to be folded over each other to provide space for articles to be placed therein, and means secured to the free ends of the flexible structure for drawing said ends together whereby the size of the bag may be diminished and articles placed therein may be prevented from relative movement.

[Claims 1 and 4 not printed in the Gazette.]

1,273,876. EJECTOR CONDENSATE-PUMP. GOTTDANK L. KOTHNY and ROBERT SUCZEK, Philadelphia, Pa., assignors to C. H. Wheeler Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 23, 1916. Serial No. 86,074. (Cl. 230—13.)



2. The combination with a condenser, of a condensate receiver in communication with the vacuum space of said condenser whereby the condensate is under vacuum pressure, a submerged centrifugal pump for delivering the condensate at higher pressure, means for maintaining a vacuum in said condenser comprising an ejector extracting fluid from said condenser and raising its pressure, means for delivering said fluid into said condensate within the pump impeller, a motor for driving said pump, and means for maintaining the level of said condensate substantially constant.

4. The combination with an ejector, of a centrifugal pump impeller, fluid conducting means connecting with said ejector and terminating in the suction of said impeller, an eccelerating nozzle located within said fluid conducting means near its discharge end in the suction of said impeller, and means for conducting motive fluid to said nozzle.

20. The combination with a condenser, of a centrifugal pump for removing water therefrom, said pump having an impeller submerged by the water, said impeller having vanes, and a duct for delivering elastic fluid from said condenser from the space above the water level and delivering said elastic fluid adjacent the inner ends of said vanes into the water prior to action thereon by said impeller, whereby the water and said elastic fluid in mixture are simultaneously acted upon by said impeller.

[Claims 1, 3, 5 to 19, and 21 not printed in the Gazette.]

1,273,877. ALLOY. PAUL RICHARD KUEHNRICH, Sheffield, England. Filed June 17, 1916. Serial No. 104,212. (Cl. 75—1.)

1. A metal alloy composed of nickel, approximately 10% to 35% of chromium, approximately 3% to 7% of silicon, and from 3% to 20% of aluminium.

3. A metal alloy composed of nickel, approximately 10% to 35% of iron and chromium, approximately 3% to 7% of silicon, and from 3% to 20% of aluminium.

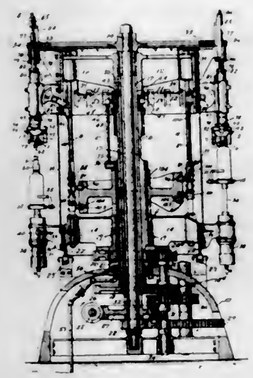
4. A metal alloy having the following approximate analysis:

Nickel	63.26%
Iron	5.77%
Chromium	16.83%
Carbon	1.44%
Silicon	5.10%
Aluminium	7.60%
	100.00%

[Claim 2 not printed in the Gazette.]

1,273,878. SPINNING-MACHINE FOR BOTTLES. JOSEPH D. LACROIX, Baltimore, Md., assignor to The Wilson Distilling Company, Jersey City, N. J., a Corporation of New Jersey. Filed Oct. 24, 1912. Serial No. 727,492. (Cl. 113—5.)

1. In an apparatus for uniting a bottle neck to a bottle by a connecting sleeve, the combination, with means for centering the neck upon the bottle, and means for clamping the sleeve in position, of a spinning tool, means for revolving said tool about an axis substantially parallel to the axis of the neck, means for moving the tool longitudinally in relation to said axis, and means for pressing the tool against the sleeve with a progressively increasing pressure.

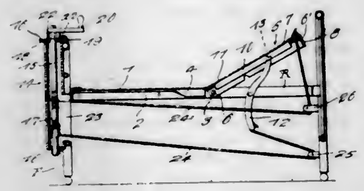


3. In an apparatus for uniting a bottle neck to a bottle by a connecting sleeve, the combination, with a centering device arranged to engage the end of the bottle neck to center the same and press it against the bottle, and a clamping device arranged to clamp the sleeve against the bottle neck, of a spinning tool, means for revolving said tool about an axis substantially parallel to the axis of the neck, means for moving the tool substantially in relation to the axis, and means for pressing the tool against the sleeve with a progressively increasing pressure.

5. In an apparatus for uniting a bottle neck to a bottle by a connecting sleeve, the combination, with a centering device arranged to engage the end of the bottle neck to center the same and press it against the bottle, and a clamping device arranged to clamp the sleeve against the bottle neck, of a resilient spinning tool, means for revolving said tool about an axis substantially parallel to the axis of the neck, means for moving the tool longitudinally in relation to the axis, and means for pressing the tool against the sleeve with a progressively increasing pressure.

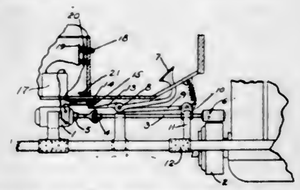
[Claims 2 and 4 not printed in the Gazette.]

1,273,879. BED. NILS M. LAGERGREN, Portland, Oreg. Filed Oct. 8, 1917. Serial No. 195,385. (Cl. 5—43.)



A bed having head and foot sections and an adjustable head rest; in combination with means for operating said rest including a vertical windlass and cables wound thereon and a vertical casing for said windlass formed of a single length of tube having bearings for said windlass and mounted on the foot section, the lower end portion of said casing having a vertical slit and a pair of horizontal slits intersecting the upper and lower ends of said vertical slit, the metal on the opposite sides of said vertical slit being bent laterally outward to form spaced flanges between which said cables pass, an operating crank on the upper end of said windlass and a pawl and ratchet mechanism therefor.

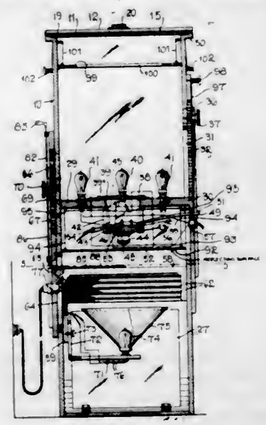
1,273,880. ENGINE STARTING DEVICE. LAWRENCE LANGNER, Whitestone Landing, N. Y., assignor to The Dayton Engineering Laboratories Company, a Corporation of Ohio. Filed July 21, 1913. Serial No. 780,256. (Cl. 172—239.)



1. An engine starting system comprising in combination with an engine, a starting device, a normally dis-established connection between the starting device and the engine, a manually actuated controlling member operative solely for controlling the rotation of the starting device, a separate manually actuated controlling member adapted to establish or dis-establish said connection, and means for rendering the first named controlling member ineffective until said second named controlling member has been actuated.

2. An engine starting system comprising in combination with an engine, an electric motor, a battery, normally open electrical connections between said motor and battery, normally dis-established mechanical connection between said motor and engine, an operating member for establishing said mechanical connection and closing part of said electrical connections, and a circuit controlling member operative solely for completing the closing of said electric connections.

1,273,881. COMBINED CONTACT AND ENLARGING PRINTER. CHARLES A. LARE, Eugene, Oreg. Filed May 31, 1917. Serial No. 172,028. (Cl. 88—24.)



1. A photographic printing machine including a vertically disposed casing, ground glass disposed in the upper portion of the casing, a lens support and a negative support disposed within the casing below the ground glass, the lower end of the casing being formed with a section formed with a reflecting surface and adapted to be disposed within the lower part of the casing at an angle whereby light may be reflected through the opening in the casing and upward through the negative in the lens, said section forming one wall of the casing when in a closed position.

6. A photographic printing machine including a casing, a sheet of ground glass disposed in the casing and forming a support for a sheet of sensitized paper, a negative support mounted within the casing, means for directing rays of light through the negative mounted on said support and toward the ground glass, and means for reflecting rays of light downward around the margin of the negative.

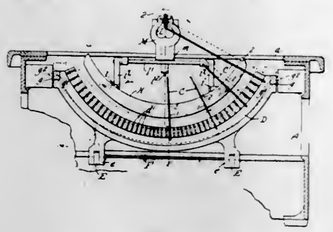
9. In a photographic printing machine, a casing, a sheet of ground glass at one end of the casing and adapted to support a sheet of sensitized paper, a lens disposed within the casing, means for directing light through the casing toward the ground glass, a mask carrier disposed within the casing between the lens and the ground glass, and means for independently adjusting each corner of the carrier toward or from the ground glass.

12. In a photographic printing machine, a casing having a sheet of ground glass at one end to support a sheet of sensitized paper, a source of light at the other end of the casing, a lens supported within the casing, and a negative carrier disposed between the source of light and the lens, said carrier having a central opening, a frame mounted in said central opening and movable in one direction across said opening, a second frame slidably mounted upon the first named frame for movement at right angles to the movement of the first named frame, and manually operable means extending out of the casing for independently shifting said frames.

21. A photographic printing machine including a casing, a sheet of ground glass supported thereon and forming a support for a sheet of sensitized paper, a negative carrier mounted in said casing for adjustment toward or from the sheet of ground glass, a lens carrier mounted in the casing between the negative carrier and the ground glass and independently adjustable toward or from the ground glass and toward or from the negative carrier, a lens mounted upon said carrier, a non-actinic shutter mounted in the lens carrier and normally disposed between the lens and the ground glass, a cover adapted to be disposed over the ground glass to hold the sensitive paper thereon, and means actuated by the closing of the cover shifting said non-actinic shutter to an inoperative position.

[Claims 2 to 5, 7, 8, 10, 11, 13 to 20, and 22 not printed in the Gazette.]

1,273,882. TYPE-WRITING MACHINE. EMMIT G. LATTA, Syracuse, N. Y. Filed Aug. 18, 1915. Serial No. 46,063. (Cl. 197—97.)

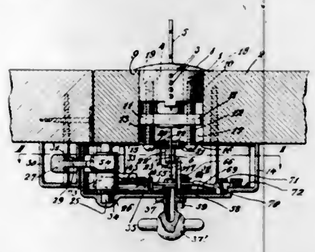


1. In a typewriting machine, the combination with a series of upwardly and rearwardly swinging type-bars pivotally mounted in an arc, and a common shiftable support for placing the type-bars in different case printing positions, of an arc-shaped universal bar of smaller radius than the arc of the type-bar pivots mounted on a stationary part of the machine in position to intercept the type bars substantially in the plane of their pivots in both their normal and shifted positions.

14. In a typewriting machine, the combination with a series of type-bars, and a segment on which the type-bars are pivoted in an arc and which is shiftable in a direction substantially parallel with the plane of the type-bar pivots for placing the type-bars in different case printing positions, of a universal bar which is supported independently of said segment between the type-bar pivots and the printing point in position to be struck and moved by the type-bars in a direction substantially perpendicularly to said plane, said type-bars having parts arranged to strike said universal bar at points disposed in different arcs when the type-bars are in different case printing positions, each of which arcs is substantially parallel with the arc of the type-bar pivots in one position of the segment.

[Claims 2 to 13 not printed in the Gazette.]

1,273,883. LOCK. PLATON LAZARIDES, New York, N. Y. Filed Dec. 31, 1917. Serial No. 209,615. (Cl. 70—46.)



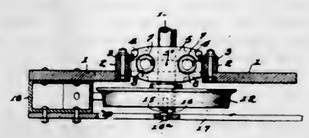
1. A lock comprising a casing adapted to be secured to a door, a keeper adapted to be secured to the frame, a pivotally mounted arc shaped bolt mounted within the casing, and adapted to engage with the keeper, a gear wheel operably connected with said bolt, a driving gear wheel meshing with said first named gear wheel, an actuating member for said last named gear wheel having a loose connection therewith, key controlled means for operating said actuating member, and a spring interposed between a fixed support within the casing, and said actuating member adapted through the latter normally to urge said bolt into engagement with its keeper.

2. A lock comprising a casing adapted to be secured to a door, a keeper adapted to be secured to the frame, a pivotally mounted arc shaped bolt mounted within the casing and adapted to engage with the keeper, a gear wheel mounted upon the shaft of said bolt, a driving gear wheel meshing with said first named gear wheel, an actuating member for said second named gear wheel mounted concentrically therewith, said actuating member having a limited independent movement relative to the second named gear wheel, and said gear wheel and said actuating member having means which engage after such limited relative movement between the aforesaid parts, whereby thereafter they move in unison, means extending into said casing from opposite directions, each of which is adapted independently to operate said actuating member, and spring means extending between a fixed point in the casing and said actuating member, which is adapted to hold the latter in normal position, and through the latter and the connections between said bolt to urge said bolt into locking engagement with its keeper.

3. A lock comprising a casing adapted to be secured to a door, a keeper adapted to be secured to the frame, a pivotally mounted arc shaped bolt mounted within the casing and adapted to be rotated into engagement with the keeper, a gear wheel mounted upon the shaft of said bolt, a second gear wheel journaled within said casing, which meshes with said first named gear wheel and drives the same, a plate mounted concentrically of said second named gear wheel, said plate and said second named gear wheel being so mounted with respect to each other that they have a limited independent relative movement, means upon said second named gear wheel and said plate adapted to engage with each other after such relative movement, whereby thereafter said plate will drive said gear wheel, and actuating means extending into said casing from opposite directions which are adapted independently to operate said plate.

[Claims 4 to 19 not printed in the Gazette.]

1,273,884. AXLE JOURNAL-BOX FOR OUTSIDE-WHEEL LOCOMOTIVES. NILS D. LEVIN, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed Feb. 20, 1915. Serial No. 9,744. Renewed Oct. 27, 1917. Serial No. 198,883. (Cl. 105—17.)



1. In a mechanism for mounting and holding a car axle, the combination of a journal box engaging with the journal part of the axle, a frame element carried by the journal box, a track wheel rigidly secured to the axle outside of the journal box, a thrust element removably connected to the axle at its end, a second thrust element positioned outside of the said wheel, the said thrust elements being arranged to contact with each other at points which are proximate to the axis of the axle, and means supplemental to the axle and to the first said thrust element for holding the second said thrust element against movement longitudinally of the axis of the axle.

2. In a mechanism for mounting and holding a car axle, the combination of a journal box engaging with the journal part of the axle, a frame element carried by the journal box, a track wheel rigidly secured to the axle outside of the journal box, a thrust element removably connected to the axle at its end, a second thrust element positioned outside of the said wheel, the said thrust elements being arranged to contact with each other at points which are proximate to the axis of the axle, and means supplemental to the axle and to the first said thrust element for connecting the second said thrust element rigidly to the said frame element.

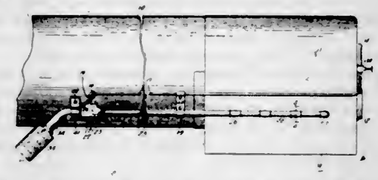
3. In a mechanism for mounting and holding a car axle, the combination of a journal box engaging with the journal part of the axle, a frame element resiliently carried by the journal box and vertically movable relatively thereto, a track wheel rigidly secured to the axle outside of the journal box, a thrust element removably connected to the axle at its end, a second thrust element positioned outside of the said wheels, the said thrust elements being arranged to contact with each other at points which are proximate to the axis of the axle, and means supplemental to the axle and to the first said thrust element for connecting the second said thrust element rigidly to the said frame element.

4. In a mechanism for mounting and holding a car axle, the combination of a journal box engaging with the journal part of the axle, a frame element carried by the journal box, a track wheel secured to the axle outside of the journal box, a thrust element removably connected to the axle at its end, a second thrust element positioned outside of the said wheel, the said thrust elements being arranged to contact with each other at points which are proximate to the axis of the axle and the space below the said elements being unobstructed to permit the free discharge of foreign material, and means supplemental to the axle and to the first said thrust element for connecting the second said thrust element rigidly to the said frame element.

5. The combination of a car frame, two axles extending transversely of the frame, track wheels rigidly secured to the axles outside of the frame, journal boxes engaging with the journal parts of the axles inside of the wheels, longitudinal bars secured to the frame outside of the wheels adjacent the ends of the axles and means serving to hold the axles against longitudinal movement.

[Claims 6 and 7 not printed in the Gazette.]

1,273,885. LOCOMOTIVE NOISELESS SMOKE-CONSUMER. JOHN H. LEWIS, Chicago, Ill., assignor of one-half to Louis G. Kunzer, Oak Park, Ill. Filed July 25, 1914. Serial No. 853,006. (Cl. 110—60.)



In a locomotive having the usual fire box and boiler, the combination with an air pipe line extending along the outside of the fire box and boiler, of a muffler at the intake end of said air pipe line, the muffler being located well forward of the fire box, a steam nozzle extended into said air pipe line adjacent said muffler, and a plurality of branch inlet pipes extending from said air pipe line through the side of the fire box and to the interior of the latter, the passage ways provided for said branch pipes through the side wall being sealed, whereby air is drawn in entirely by and mixed with the steam in the air pipe near the intake end of the latter and remote from the rear end of the fire box and the mixed air and steam is injected into the fire box with a minimum of noise at the rear end of the fire box.

1,273,886. PORTABLE CONVEYER. ERICH H. LICHTENBERG, Milwaukee, Wis., assignor to Koehring Machine Company, Milwaukee, Wis., a Corporation. Filed Mar. 28, 1918. Serial No. 225,254. (Cl. 193—4.)



1. In a portable loader, the combination of a long low supporting frame, a conveyer mounted to operate lengthwise of said frame, wheels for the frame enabling the same to advance with the work with which the loader is used, a plurality of hoppers on the frame adapted to receive and hold measured quantities of different materials comprising an aggregate to be mixed, said hoppers being so arranged that the materials may be readily shoveled into the same from piles alongside the loader, means associated with the hoppers to discharge materials therefrom into the conveyer to be carried off by the latter, and power means to move the loader and operate the conveyer thereof.

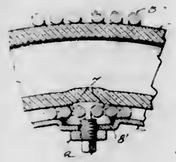
2. In a portable loader, the combination of a long low supporting frame, a conveyer mounted to operate lengthwise of said frame, wheels for the frame enabling the same to advance with the work with which the loader is used, a plurality of hoppers on the frame adapted to receive and hold measured quantities of different materials comprising an aggregate to be mixed, said hoppers being so arranged that the materials may be readily shoveled into the same from piles alongside the loader, means associated with the hoppers to discharge materials therefrom into the conveyer to be carried off by the latter, power means to move the loader and operate the conveyer thereof, one end of the frame with the portion of the conveyer mounted thereon being adjustable to facilitate delivering conveyed materials to variable delivery points, and means for actuating said adjustable frame and conveyer parts.

3. In a loading machine of the class described, a long supporting frame or body, an endless conveyer belt mounted upon said frame, means for driving said belt, a hopper movable along said frame over the belt, and means whereby the contents of the hopper may be discharged on to the belt to be carried off thereby, said discharging means being so constructed that the materials discharged from the hopper on to the belt will be distributed over the belt in a substantially flat pile.

13. A portable loading machine comprising a long low shallow wheeled supporting frame, a conveyer belt operating longitudinally of said frame, measuring hoppers supported on the frame over the belt so constructed that materials may be shoveled readily from the ground supporting the machine directly into said hoppers, means whereby the hoppers may discharge their contents on to the belt, the machine embodying a self contained power plant, and operative connections intermediate the belt and said power plant for driving the belt and intermediate the plant and wheels of the frame for advancing the machine over the ground.

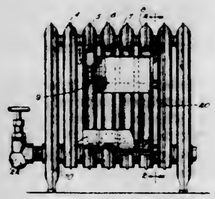
[Claims 4 to 12 and 14 not printed in the Gazette.]

1,273,887. CUSHION-TIRE. WILLIAM G. LINDEMANN, Milwaukee, Wis. Filed Nov. 17, 1917. Serial No. 202,495. (Cl. 152—8.)



A device of the class described comprising a sheet metal rim having a longitudinal row of circular flattened, nut engaging portions pressed therein, each being provided with a central bolt receiving hole, a coiled spring formed from a single piece of wire and disposed around said rim, a plurality of T-shaped anchoring bolts having their shanks threaded, each being disposed through one of said holes, their heads being engaged with the convolutions of the coiled spring, and nuts on the threaded shanks of the anchoring bolts and engaged with said flattened portions of the rim to draw the heads of said bolts theretoward.

1,273,888. HUMIDIFIER. FREDERICK LINDMEIER and JUSTUS LINDMEIER, Oak Park, Ill. Filed Feb. 11, 1918. Serial No. 216,459. (Cl. 237—78.)



1. A combined radiator and humidifier comprising a plurality of vertically arranged radiator sections, each section including a plurality of spaced heating conduits, coöperating flanges on certain of said sections forming upper and lower water receiving reservoirs, and absorbent material for conducting water from the upper receptacle, a portion of said absorbent material extending over said lower receptacle, the lower reservoir being wider than the upper.

4. A combined radiator and humidifier comprising a plurality of vertically arranged radiator sections, each section including three or more spaced heating conduits, a flange carried by an inner conduit and extending upwardly between the inner and the adjacent conduits, said flanges on adjacent sections uniting to form a water receiving chamber wholly within the radiator, a sheet of absorbent material having one end within the chamber and the other end hanging downwardly outside the chamber and between the heating conduits of the radiator sections, and means supported by said sections for receiving drip from said absorbent material.

[Claims 2 and 3 not printed in the Gazette.]

1,273,889. WIRE-STRETCHER. CHARLES H. LOGAN, Sedalia, Mo., assignor of one-half to Eugene H. Bennett, Sedalia, Mo. Filed Oct. 25, 1916. Serial No. 127,668. (Cl. 254—51.)



In a device of the character described, a post engaging means including a fixed jaw having an opening therethrough, a movable jaw including a shank, said shank being slidable through said opening of the fixed jaw, means for adjusting the movable jaw toward and away from the fixed jaw, said fixed jaw having a socket, a pipe having a reduced extremity rotatably fitted within the socket, a set screw carried by said fixed jaw for holding said pipe fixed relatively thereto in a given position, and a wire stretching means supported upon the opposite extremity of said pipe.

1,273,890. DRIVE-ANCHOR. CHRISTOPHER LOSETH, Council Bluffs, Iowa. Filed May 13, 1916. Serial No. 97,434. (Cl. 189—92.)

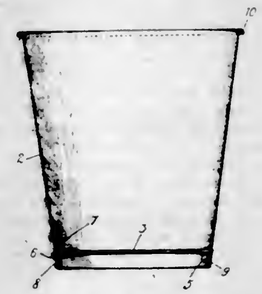


A drive anchor comprising a body provided with an arrow shaped head and having an opening thereat, said body being also provided at opposite sides with depressed portions or recesses and having longitudinal grooves extending from the same to the said opening, arms pivoted within the said opening and extending along the grooves and provided with curved terminal portions located within said recesses or depressed portions and terminating short of the inner ends of the same to expose the ends of the arms which are deflected laterally and offset from the walls of the recesses or depressions to facilitate their engagement and springs arranged to urge the arms outwardly.

1,273,891. RECEPTACLE. LAWRENCE W. LUELLEN, Mountain Lakes, N. J., assignor to Individual Drinking Cup Company, New York, N. Y., a Corporation of Maine. Filed July 16, 1913. Serial No. 779,231. (Cl. 229—3.)

1. As a new article of manufacture a paper cup having a rim comprising an outwardly rolled portion, the edge of which is bent up within said roll and into engagement with the underside of the top thereof.

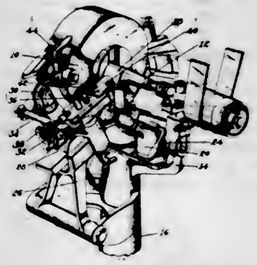
5. A receptacle comprising a body portion having a turned over edge, said edge having a transversely loop shaped formation, one side of said loop being substantially straight, while the opposite side is bowed inwardly, with



the edge turned outwardly, whereby a yieldable supporting rim is formed at the point of closure of said loop capable of sustaining a considerable downward pressure.

[Claims 2 to 4 not printed in the Gazette.]

1,273,892. GRINDING-MACHINE. THOMAS LUND, Beverly, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Dec. 5, 1916. Serial No. 135,188. (Cl. 51—7.)



1. In a machine of the type described, the combination with a support, a rotary grinding element mounted thereon, and a former adjustably mounted upon said support and movable radially of said grinding element, of a member attached to said support and relatively fixed in direction but adjustable in position, adapted to be brought into operative relation to said grinding member and said former to determine the adjustment of said former.

2. In a machine of the type described, the combination with a support, a rotary grinding element mounted thereon, and a former adjustably mounted on said support and movable radially of the grinding element, of a gage member adapted to be detachably connected to the shaft of said grinding member and movable parallel to said shaft to aid in determining the proper position of said former.

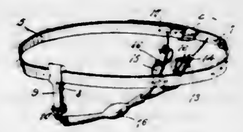
3. In a machine of the type described, the combination with a support, a rotary grinding element mounted on a shaft journaled in said support, and a former adjustably mounted on said support for movement radially of the grinding element, of a gage for determining the desired position of said former comprising a hook-shaped member adapted to be engaged with the shaft and having an arm perpendicular thereto, a rod slidably connected with said arm and a bar attached to said rod and perpendicular thereto.

4. In a machine of the type described, a support, a rotary grinding element whose shaft is journaled in said support, a former adjustably mounted on the support and movable radially of the grinding element, a carriage pivotally mounted for movement toward and away from the grinding element, a knife holder and a templet holder pivotally mounted upon said carriage and connected for simultaneous movement, an adjustable gage supported parallel to said shaft, a knife in said knife holder, a templet in said templet holder, and means for adjusting the relative positions of said templet and said knife in accordance with the indication of said gage.

5. In a machine of the type described, a rotary grinding element, a former representing a portion of the grinding surface of said element, simultaneously movable knife and templet holders adapted to be brought into operative relation with the grinding element and said former respectively, a gage adjustably mounted on and arranged to be maintained parallel to said shaft, means for adjusting said former in accordance with the indication of the gage, and means for adjusting the relative positions of said templet holder and said knife holder to accord with the indication of the same gage whereby movement of the templet against said former will cause the knife to be ground so as to duplicate the templet.

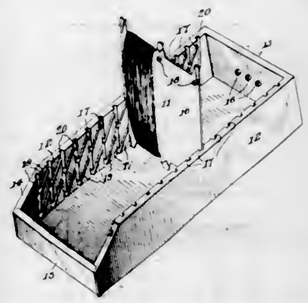
[Claims 6 to 12 not printed in the Gazette.]

1,273,893. TRUSS. JAMES MCINTYRE, Jersey City, N. J. Filed May 25, 1917. Serial No. 170,946. (Cl. 128—26.)



In a truss, a yieldable pad or bulb having a longitudinal bore, tubular extensions connected to the opposite ends of the bulb or pad and communicating with the bore thereof, and a fabric lining secured in the bulb or pad and the extensions.

1,273,894. LACE AND EMBROIDERY DISPLAY DRAWER. OSCAR M. MADISON, Osborne, Kans. Filed Feb. 13, 1918. Serial No. 216,851. (Cl. 211—28.)

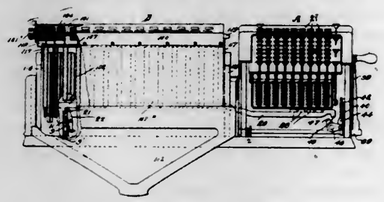


1. A display drawer having its opposite sides arranged with pairs of inclined receiving slots, the said sides also having opposite pairs of additional grooves connecting the tops and bottoms of alternate ones of said first mentioned grooves and substantially centrally traversing intermediately positioned ones of said first mentioned grooves, the upper ends of the sets of grooves of different inclinations forming mouths in the upper edges of the sides of the drawer.

2. A display drawer having ends and sides, the said sides being arranged with interiorly positioned X-shaped grooves connected together at their upper and lower ends,

forming receiving mouths at the upper edges of the said sides and with the grooves extending downwardly at different angles of inclination from the said mouths, and adapted for the reception of the holders.

1,273,895. REGISTER ATTACHMENT. MILES H. MANN, Terre Haute, Ind., assignor to International Money Machine Company, Terre Haute, Ind. Filed May 20, 1915. Serial No. 29,354. (Cl. 133—4.)

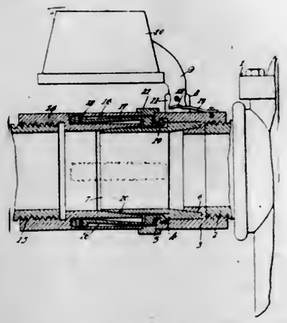


1. In combination, a money paying machine comprising a coin magazine including a plurality of coin holders, ejecting mechanism including ejectors associated with said coin holders for discharging money therefrom, a register attachment embodying a series of registers one for each of said coin holders, operating means for the registers, and means detachably securing the said register attachment to the coin magazine in such a position that the operating means for the registers are operable by the ejectors associated with the coin holders.

5. In combination, a money paying machine embodying a coin magazine comprising a plurality of coin holders, ejector mechanism including ejectors associated with the holders to discharge money therefrom, a register attachment comprising a register casing disposed above said coin magazine, casing extensions carried by said casing and projecting into the coin holders, registers arranged in the register casing, register operating instrumentalities disposed in the casing extensions, means removably supporting the register attachment upon the coin magazine, said last named means including devices to interlock the lower portion of the register attachment with said coin magazine, and pivoted locking devices at the upper portion of the register attachment having detachable engagement with the upper portion of the coin magazine.

[Claims 2 to 4 not printed in the Gazette.]

1,273,896. QUICK PLUG ATTACHMENT. RICHARD H. MARTIN, Toccoa, Ga. Filed Feb. 19, 1918. Serial No. 218,124. (Cl. 285—168.)



1. A quick coupling, comprising a tubular member provided with an annular groove, a shoulder formed in said member, a flexible nipple resting against the shoulder, a second tubular member coöperating with the first member, said second member provided with longitudinal slots, resilient latches held in the slots with their hooked ends projecting from the member, and means for drawing the latches to releasing position.

2. A quick coupling, comprising a tubular member provided with an annular groove, an annular shoulder formed in said member, a flexible nipple resting against the shoulder and extending from the member, a second tubular member coöperating with the first member, said second member provided with longitudinal slots, resilient latches in said slots, the hooked ends of the latches extending from said latter member, a ring secured to the member, and cam faces on the ring and contacting the latches to draw the latches to unlatched position when the ring is revolved in one direction.

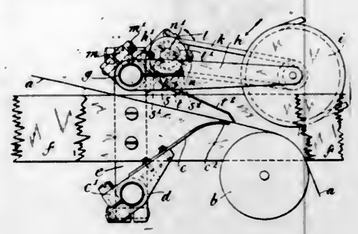
3. A quick coupling, comprising a tubular member provided with an annular groove, an annular shoulder formed in said member, a flexible nipple resting against the shoulder, a yieldingly held cap pivotally secured to the member, a second tubular member coöperating with the first member, and resilient latches secured to said second member and adapted to engage the annular groove to lock the members together.

4. A quick coupling, comprising a tubular member provided with an annular groove formed interiorly thereof, a shoulder formed in said member, a flexible nipple resting against the shoulder, a second tubular member coöperating with the first member, and resilient latches secured to said second member and adapted to engage the annular groove to lock the members together.

5. A quick coupling, comprising a tubular member provided with an annular groove formed interiorly thereof, a shoulder formed in said member, a flexible nipple resting against the shoulder, a second tubular member coöperating with the first member, latches secured to said second member and adapted to engage the annular groove to lock the members together, and means for releasing the latches from the groove.

[Claim 6 not printed in the Gazette.]

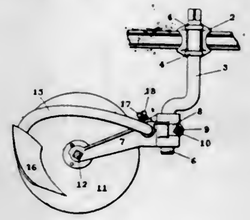
1,273,897. COUNTER FOR MOVING OBJECTS. GEORGE FRANKLYN MATTESON, Ridley Park, Pa., assignor to The Veeder Manufacturing Company, Hartford, Conn., a Corporation of Connecticut. Filed Dec. 11, 1915. Serial No. 66,261. (Cl. 235—98.)



1. The combination of means for effecting movement of a succession of objects, a supporting device over which the objects move, a controlling arm pivotally mounted above the path of travel of the objects and adapted to rest at its free end lightly on the moving objects in proximity to the supporting device, a counter, continuously acting driving means for the counter, a slipping friction clutch interposed between the driving means and the counter, and an escapement coöperating with the slipping friction clutch and controlled by said controlling arm.

2. The combination of means for effecting movement of a succession of objects, a supporting device over which the objects move, a shaft mounted above the path of travel of the objects, and transverse thereto, a controlling arm carried by the shaft and resting at its free end lightly on the moving objects in proximity to the supporting device, a counter, continuously acting driving means for the counter, a slipping friction clutch interposed between the driving means and the counter, and an escapment cooperating with the slipping friction clutch and controlled by said shaft.

1,273,898. ROLLING COLTER AND JOINTER. CHARLES H. MELVIN and JOHN P. SEAHOLM, Moline, Ill., assignors to Deere and Company, Moline, Ill., a Corporation of Illinois. Filed Nov. 6, 1916. Serial No. 129,788. (Cl. 97—43.)



1. A combined rolling colter and jointer including a support for the colter, a laterally extending bearing in said support, an arm on which the jointer is mounted, said arm extending rearwardly and having its forward portion bent laterally and pivotally supported in said bearing, a flattened surface on said forward portion within the bearing, and a plurality of set screws operating on said flattened surface, whereby the jointer arm can be adjusted vertically to carrying positions.

3. A combined rolling colter and jointer including a support for the colter, a laterally extending bearing in said support, an arm on which the jointer is mounted, said arm extending rearwardly and having its forward portion bent laterally and pivotally supported in said bearing, a flattened surface on said forward portion within the bearing, a set screw in the colter support and contacting with said flattened surface forward of the axis of said forward portion, and a second set screw in the colter support and contacting with said flattened surface rearward of said axis, said set screws adapted to be operated to adjust the jointer arm vertically and to retain it in an adjusted position.

[Claim 2 not printed in the Gazette.]

1,273,899. THERMOSTATIC VALVE. JOSEPH MESSMER, Kirkwood, Mo., assignor to Continental Brass & Foundries Company, St. Louis, Mo., a Corporation of Missouri. Filed Sept. 26, 1917. Serial No. 193,268. (Cl. 137—122.)



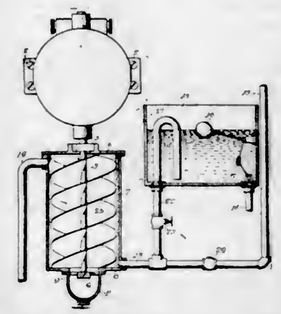
1. A valve for heating systems, comprising a tube connected with the air-exhaust line of the system having a port for the escape of air, a plunger disposed within said tube opposite said port, a thermally sensitive element mounted upon the stem of said plunger, a member adapted to prevent the admission of air through said port, and a baffle-plate disposed between said line and tube.

2. A valve for heating systems, comprising a tube connected with the air-exhaust line of the system having a port for the escape of air, a plunger disposed within said tube opposite said port, a thermally sensitive element mounted upon the stem of said plunger, a member positioned exteriorly of said tube adapted to prevent the admission of air through said port, and a baffle-plate disposed between said line and tube.

3. A valve for heating systems, comprising a tube connected with the air-exhaust line of the system having a port for the escape of air, a plunger disposed within said tube opposite said port, a thermally sensitive element mounted upon the stem of said plunger, a member adapted to prevent the admission of air through said port, a baffle-plate disposed between said line and tube, and means for preventing the passage of water from said line into said tube.

4. A valve for heating systems, comprising a pipe projecting from the air-exhaust line of the system, a tube connected with said pipe having a port for the escape of air, a restricted opening between said tube and pipe, a baffle-plate disposed above said opening, a float within said pipe adapted to close said opening, a plunger disposed within said tube opposite said port, a thermally sensitive element mounted upon the stem of said plunger, and a member adapted to prevent the admission of air through said port.

1,273,900. VACUUM SYSTEM. FRANK W. MILLER, Chicago, Ill. Filed July 12, 1916. Serial No. 108,797. (Cl. 230—6.)



1. A vacuum system comprising a casing, a rotatable spiral conveyer disposed vertically therein, a sediment collecting receptacle connected with the bottom of said casing, an air inlet pipe connected to one end of said casing, a discharge pipe connected to the opposite end of said casing, and means for delivering water or other liquid in regulated quantities to said air supply pipe.

4. A vacuum system comprising a stationary cylindrical casing, a spiral rotary conveyer mounted concentrically within said casing and having its periphery spaced a substantial distance from the casing, an outlet pipe connected to said casing adjacent one end thereof, and means for delivering air and a liquid to the other end of said casing, said liquid being delivered in sufficient quantities to maintain a liquid seal around the conveyer and to be discharged together with the air through said outlet pipe.

5. A vacuum system comprising a stationary casing, a spiral suction creating device mounted therein and spaced equally from the surrounding casing throughout its periphery, means for supplying air and a liquid to the intake end of said casing, and means for delivering air and liquid from the other end of said casing, a portion of the liquid being maintained by gravity and centrifugal force in the casing to form a liquid seal around said suction creating device.

[Claims 2 and 3 not printed in the Gazette.]

1,278,901. PROCESS FOR THE MANUFACTURE OF PARA-AMINO-N-METHYLFORMANILID. GILBERT THOMAS MORGAN, London, England. Filed Jan. 31, 1917. Serial No. 145,644. (Cl. 23—24.)

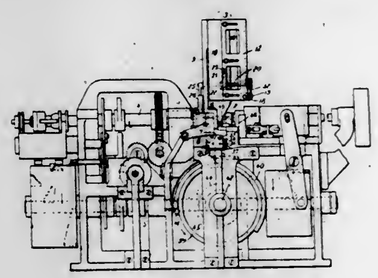
1. Process for the manufacture of para-nitro-N-methyl formanilid comprising nitrating N-methyl formanilid, substantially as described.

2. Process for the manufacture of para amino-N-methyl formanilid, comprising nitrating N-methyl formanilid and reducing the resulting para-nitro-N-methyl formanilid in such manner as not to eliminate the formyl group, substantially as described.

3. Process for the manufacture of para-amino-N-methyl formanilid, comprising reducing para-nitro-N-methyl formanilid in such manner as not to eliminate the formyl group, substantially as described.

4. As a new product, para amino-N-methyl formanilid, soluble in water, alcohol or benzene and melting at 115° to 116° C.

1,278,902. MAGAZINE MECHANISM. FRIEDRICH MÜLLER, Hartford, Conn., assignor to Pratt & Whitney Company, New York, N. Y., a Corporation of New Jersey. Original application filed Feb. 8, 1911, Serial No. 607,420. Divided and this application filed Oct. 23, 1917. Serial No. 198,056. (Cl. 10—162.)



1. In a magazine mechanism, the combination of a transversely reciprocable runway for blanks, fingers adapted to be moved into the runway to support the blanks or out of the runway to release a blank, and means dependent on the reciprocation of the runway for operating the fingers.

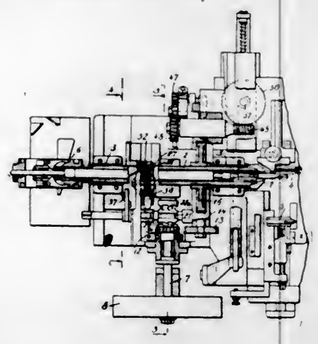
5. In a magazine mechanism, the combination of a reciprocable slide, a runway for blanks carried by the slide, a pivotally mounted transferring device, and means coöperating with the slide to operate the transferring device, the said device serving to receive blanks successively from the runway and to transfer them to a position of supply.

9. In a magazine mechanism, the combination of a runway for longitudinally grooved approximately cylindrical blanks, and means for delivering blanks from the runway to a position of supply with the grooves of each blank in predetermined positions.

12. In a magazine mechanism, the combination of a runway for longitudinally grooved blanks, a device for receiving blanks successively from the runway and transferring them to a position of supply, means carried by the transferring device for holding each blank with its grooves in predetermined relation to the device, the said means comprising a clip and a lever for moving the clip into engagement with a blank, and means for relatively moving the lever to release the clip when the transferring device is in blank receiving position.

[Claims 2 to 4, 6 to 8, 10, and 11 not printed in the Gazette.]

1,273,903. DRIVING MECHANISM. FRIEDRICH MÜLLER, Hartford, Conn., assignor to Pratt & Whitney Company, New York, N. Y., a Corporation of New Jersey. Original application filed Oct. 23, 1917, Serial No. 198,185. Divided and this application filed Oct. 23, 1917. Serial No. 198,058. (Cl. 74—59.)



1. The combination of a driving element, two independent driven elements, power transmitting connections interposed between the driving element and the respective drivn elements, each serving to automatically stop the corresponding driven element after movement thereof to a predeterminel extent, and means operated by each driven element after movement to a predetermined extent for automatically connecting the other driven element with the driving element.

3. The combination of a driving element, two independent driven elements, and means operated by each driven element after movement to a predetermined extent for automatically disconnecting the said element from the driving element and connecting the other driven element with the driving element.

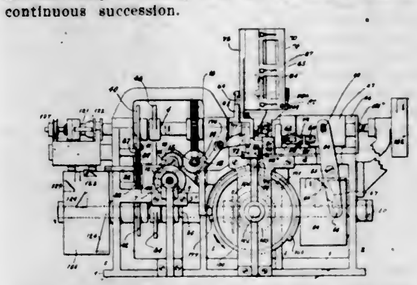
10. The combination of a driving element, two independent driven elements, means operated by each driven element after movement to a predetermined extent for automatically disconnecting it from the driving element and for connecting the other driven element with the driving element, and means whereby the speed of one driven element may be changed independently of the driving element and without changing the extent of the aforesaid predetermined movement.

12. The combination of a driving element, two independent driven elements, means including a rock shaft and an actuator carried thereby for connecting either driven element with the driving element and for simultaneously disconnecting the other driven element from the driving element, a rocker member carrying a spring-plunger adapted to engage the actuator and rock the shaft in either direction according to the position of the member, and devices actuated by the driven elements respectively for alternately engaging the rocker member to move it first in one direction and then in the other.

[Claims 2, 4 to 9, 11, and 13 to 17 not printed in the Gazette.]

1,273,904. TAP-MAKING MACHINE. FRIEDRICH MÜLLER, Hartford, Conn., assignor to Pratt & Whitney Company, Hartford, Conn., a Corporation of New Jersey. Filed Feb. 8, 1911, Serial No. 607,420. Renewed Oct. 23, 1917. Serial No. 198,185. (Cl. 10—154.)

1. The combination of means for supporting a blank, means for cutting the blank, mechanism for rotating the blank during the cutting operation and for simultaneously causing relative movement between the cutting means and the blank support, mechanism for successively supplying blanks to the blank support, and means for automatically actuating said mechanisms alternately in continuous succession.



15. The combination of means for supporting and rotating a longitudinally grooved blank, a rotating cutter, means whereby the blank may be positioned with one of the grooves opposite the cutter, means for bringing the cutter and the blank into predetermined coöperative relation prior to the rotation of the blank, means for effecting a reciprocatory relieving movement between the cutter and the blank for each groove of the blank as the blank is rotated, and means for stopping the rotative blank movement with the blank approximately in its initial angular position.

21. A machine for threading taps and the like including in combination, means for supporting and rotating a blank, a rotating cutter for simultaneously cutting a plurality of thread convolutions on the blank as it rotates, means for bringing the blank and the cutter into predetermined coöperative relation prior to the rotation of the blank, means for effecting during a single revolution a relative endwise movement between the blank and the cutter equal to the pitch of the thread, means for effecting reciprocatory relieving movements between the cutter and the blank in timed relation to the rotation of the blank, and means for stopping the rotative blank movement with the blank approximately in its initial angular position.

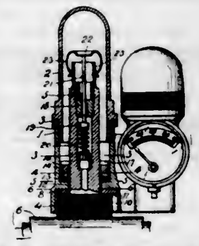
35. A machine for milling taps and the like including in combination, means for supporting a blank, means for rotating the blank through a single revolution, a milling tool for milling the blank during its rotation, means for supplying blanks to the blank support, means for securing the blank in the blank support, means for bringing the milling tool and the blank into predetermined coöperative relation subsequently to the blank-securing operation and prior to the rotation of the blank, means for effecting a predetermined number of reciprocatory movements between the milling tool and the blank during the rotation of the blank, and means for releasing the blank from the blank support.

45. A machine for threading taps and the like including in combination, means for supporting a blank, means for simultaneously cutting a plurality of thread convolutions on said blank, a support for said cutting means, a slide for effecting relative movement between the supports, said slide being arranged to move transversely to said relative movement and having a surface slightly inclined to the path of said movement, means for actuating said slide through a relatively great distance to produce a relatively small movement of one of the supports with relation to the other, and independent means for returning said slide to starting position.

[Claims 2 to 14, 16 to 20, 22 to 34, 36 to 44, and 46 to 69 not printed in the Gazette.]

1,273,905. PRESSURE-REGULATOR FOR PNEUMATIC TIRES. WILLIAM M. MYERS, St. Joseph, Mo. Filed May 15, 1916. Serial No. 97,572. (Cl. 152—12.)

1. In a pressure regulator for pneumatic tires, a casing adapted to be slipped over the filling tube of a tire, and means engaging the casing and adapted to interlock with and non-rotatably engage said filling tube for locking the casing to the filling tube and for holding it from rotation thereupon.

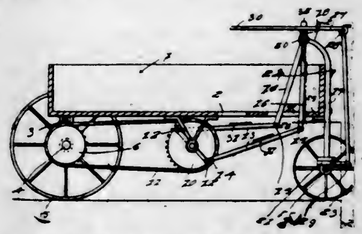


3. In a pressure regulator for pneumatic tires, a casing adapted to be slipped over the filling tube of a tire, the filling tube being non-circular in cross section, and means including a washer for engaging the casing and adapted to engage the filling tube, to prevent rotation of the casing on the filling tube, the washer having means for engaging the casing and filling tube in a manner such that the washer will be held from rotation relative to the casing and the filling tube.

9. In a pressure regulator for pneumatic tires, a casing having a base provided with an annular internal flange adapted to slip over the filling tube of a tire and having below the flange a longitudinal groove, a washer having means for non-rotatably engaging the filling tube and having a projection fitted in said groove and adapted to bear against the under side of said flange, packing means encircling the filling tube and bearing against the upper side of said washer, and releasable means for holding the packing means against said flange and having means adapted to engage the filling tube.

[Claims 2, 4 to 8, and 10 to 14 not printed in the Gazette.]

1,273,906. WAGON. HARRISON C. NICKEY, Hartford City, Ind. Filed May 11, 1917. Serial No. 167,946. (Cl. 208—33.)

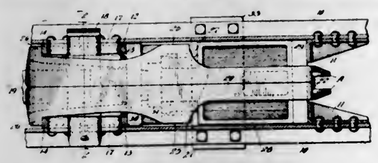


A wagon including a body, rear wheels journaled to the body, a sprocket wheel keyed to and depending from the under side of the wagon intermediate the ends thereof, cranks secured to the sprocket wheel, treadles pivotally secured by one end to the cranks, links pivotally secured to the forward ends of the treadles and extending up through the body of the wagon at the forward end thereof, a standard secured to the forward end of the body, wheels secured to the lower end of the standard, a bearing at the upper ends of the standard, said links being pivotally secured to the bearing, means for steering the forward wheels, and said body provided with openings to permit of the movement of the links and treadles to be propelled, as and for the purpose specified.

1,273,907. RAILWAY-CAR DRAFT-RIGGING. JOHN F. O'CONNOR, Chicago, Ill., assignor to William H. Miner, Chazy, N. Y. Filed Nov. 20, 1916. Serial No. 132,300. (Cl. 213—42.)

1. As an article of manufacture, a two-part yoke, each part being provided with a laterally extending shoulder at

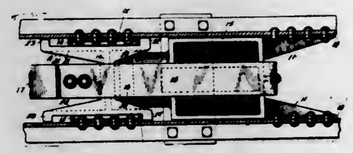
its front end, and a vertical post intermediate its ends, said posts being located in the rear of the front follower of a gear when the yoke is in service to thereby limit the movement of the follower rearwardly with respect thereto.



2. In a draft rigging, the combination with draft sills having front and rear stops secured thereto, of cushioning means including a front follower, a draw bar, and a yoke connected to said draw bar, said yoke having means coöperable with the front stops to prevent rearward movement of the yoke and provided also with posts intermediate its ends to limit the inward movement of the front follower.

[Claim 3 not printed in the Gazette.]

1,273,908. DRAFT-RIGGING FOR CARS. JOHN F. O'CONNOR, Chicago, Ill., assignor to William H. Miner, Chazy, N. Y. Filed Nov. 23, 1916. Serial No. 132,957. (Cl. 213—64.)



1. In a draft rigging, the combination with draft sills having main front stops thereon, of cushioning means, a front follower, and integral means on said follower coöperable with said stops to limit the rearward movement of the follower.

2. In a draft rigging, the combination with draft sills having front stop members secured thereto, of cushioning means, a draw bar, a yoke, and a front follower, said follower having forwardly extended side arms, the latter having shoulders adapted to coöperate with said stop members to limit the inward movement of the follower.

[Claim 3 not printed in the Gazette.]

1,273,909. ANTIFRICTION-ROLLER AND PROCESS OF MAKING SAME. JOHN F. O'CONNOR, Chicago, Ill., assignor to William H. Miner, Chazy, N. Y. Filed Jan. 2, 1917. Serial No. 140,036. (Cl. 22—206.)



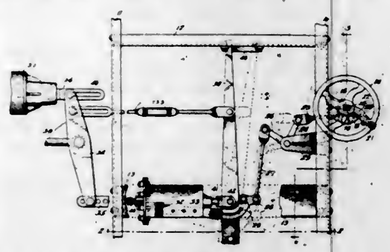
1. As an article of manufacture, an anti-friction roller adapted for use in side bearings and the like, said roller comprising a central hollow bushing of malleable iron, an outer surrounding portion of white iron, and means disposed around the circumference of said bushing and embedded in said white iron adapted to act as chills for the white iron during the casting of the latter.

2. The herein described process for making an anti-friction roller adapted for use in side bearings and the like which consists, in providing a hollow bushing of malleable iron, providing means disposed around said bushing adapted to act as chills, and casting the outer portion of the roller of white iron around said bushing and with said means embedded therein.

3. As an article of manufacture, an anti-friction roller adapted for use in side bearings and the like, said roller comprising an inner bushing centrally and axially recessed, said bushing being formed of malleable iron and having a plurality of circumferentially extending integral flanges, and an outer section of white iron cast around the bushing with said flanges embedded therein.

4. The herein described process of making an anti-friction roller adapted for use in side bearings and the like which consists, in first providing a malleable iron bushing having an axially extending recess and a plurality of integral, circumferentially extending flanges, and then casting about said bushing a section of white iron with said flanges embedded therein.

1,273,910. HAND-BRAKE. JOHN F. O'CONNOR, Chicago, Ill., assignor to William H. Miner, Chazy, N. Y. Filed Mar. 30, 1917. Serial No. 158,493. (Cl. 188—24.)



2. In a brake rigging, the combination with the cylinder lever, of an auxiliary lever, a connection between said levers, and manually controlled means for exerting different and predetermined forces on said auxiliary lever to thereby correspondingly actuate the brakes, said means including a source of stored energy and an adjustable element for varying the lever arm ratios of said auxiliary lever.

3. In a brake rigging having power controlled brakes, the combination therewith of auxiliary, manually controlled, adjustable means for applying variable predetermined braking forces.

5. In a brake riggings, the combination with a cylinder lever and a hand brake lever, of an adjustable fulcrum for the hand brake lever whereby the braking forces applied through the hand brake lever can be varied, a connection between the hand brake lever and the cylinder lever, and means permitting the cylinder lever to move independently of the hand brake lever and said connection when the cylinder lever is actuated from the cylinder.

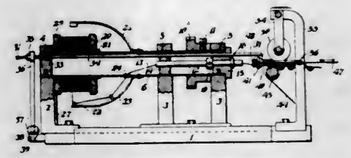
7. In a brake rigging, the combination with the cylinder lever, of a source of stored energy, means interposed between said source and the cylinder lever for thereby actuating the latter, and manually adjustable means for varying the effective force of said energy while actuating said cylinder lever.

14. In a brake rigging, the combination with a hand brake lever, of a spring arranged to exert pressure on said lever, a movably mounted fulcrum for said lever, a brake staff, connections extending between said brake staff and fulcrum member for shifting the position of the latter upon movement of the brake staff, means for turning the brake staff, and means for indicating predetermined positions of said brake staff.

[Claims 1, 4, 6, and 8 to 13 not printed in the Gazette.]

1,273,911. MACHINE FOR MAKING ORNAMENTAL ROPE OR CORD. FRANKLIN W. OEHRLE, Philadelphia, Pa., assignor to Oehrle Brothers Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 1, 1911. Serial No. 636,402. Renewed Dec. 7, 1915. Serial No. 65,638. (Cl. 139—40.)

1. In a machine for making ornamental rope or cord, the combination of a stationary former, means for supporting and guiding inner and outer binding threads in operative relation to said former, a revoluble member spaced from the said former, a revoluble carrier for said inner binding thread supported coaxially with said revoluble member, the said inner binding thread extending from its carrier into the interior of said revoluble member and thence into operative relation to the said former, a support and guiding member for the ornamental threads or strands, which member is supported interiorly of the said first-mentioned revoluble member and in parallel relation to the axis thereof, means for holding the said supporting and guiding member against revolution about its own axis, and revolution of the first-named member causing revolution of the said supporting and guiding member around the portion of the said inner binding thread within the first-named revoluble member, such revolution causing the winding or coiling of the said loop threads or strands around the said former and the said inner binding threads, and means for drawing the thread from the inner binding thread carrier and thereby causing revolution of the same in the same direction as the said first-named revoluble member, and the said inner binding thread at its point of unwinding from the said carrier being held in constant relation to the said supporting and guiding means for the loop threads or strands.



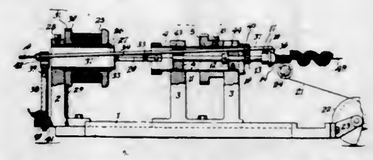
2. In a machine for making ornamental rope or cord, the combination of a revoluble member, a loop thread or strand guiding device supported upon and extending through the said revoluble member, a stationary former supported independently of the said revoluble member, means for supporting and guiding inner and outer binding threads in operative relation to said former, which binding threads are adapted to be twisted together and the revolution of said revoluble member causing the coiling or winding of the said loop strands or threads around the said former and around the said inner binding thread, and a severing device in operative relation to the said fomer for severing the said loop threads or strands.

3. In a machine for making ornamental rope or cord, the combination of a revoluble member, a loop thread or strand supporting and guiding device supported upon and extending through the said revoluble member eccentrically thereof, a stationary former, means independent of said revoluble member for supporting said former, means for supporting and guiding inner and outer binding threads in operative relation to said former, which binding threads are adapted to be twisted together, and the revolution of said revoluble member causing the coiling or winding of the loop threads or strands around the said former and around the said inner binding thread, an adjustable severing device in operative relation with said former for severing the said loop strands or threads after they are coiled or wound around the said former, and the said inner binding thread, and means for moving the said loop strands or threads on the said former against the said severing device for severing the same.

4. In a machine for making ornamental rope or cord, the combination of a revoluble member, a stationary former, means independent of said revoluble member for supporting the said former, means for supporting and guiding an outer binding thread in operative relation to said former, means coaxial with the said revoluble member for supporting and guiding the inner binding thread into operative relation with said former, a device for supporting and guiding loop threads or strands into operative relation to said former, the said device extending through the said revoluble member and being located a distance from the center thereof, means for holding the said device against revolution on its own axis and the revolution of the said member causing the coiling or winding of the said loop strands or threads around the said former and around the inner binding thread, and a severing device in operative relation to said former for severing the said loop theads or strands.

[Claims 5 to 12 not printed in the Gazette.]

1,273,912. MACHINE FOR MAKING ORNAMENTAL ROPE OR CORD. FRANKLIN W. OEHRLE, Philadelphia, Pa., assignor to Oehrle Brothers Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 1, 1911. Serial No. 636,401. Renewed Dec. 14, 1917. Serial No. 207,201. (Cl. 139—40.)



1. In a machine of the character described, the combination of a revoluble support, a former, means whereby said former is loosely supported by said support, and a thread or strand guiding means a portion of which revolves around said former.

2. In a machine of the character described, the combination of a revoluble support, a former having connection with said support, a thread or strand guiding member supported upon said support, a portion of which member revolves around said former to wind or coil the said threads or strands thereon, means for holding the said thread or strand guiding member against revolution on its own axis, and means for permitting a change of position of said support with respect to said member.

3. In a machine for making ornamental rope or cord, means for supporting and supplying to the proper points inner and outer binding threads, means for supporting and guiding the loop threads or strands of the rope or cord, means for causing revolution of the said supporting and guiding means, a portion of which revolves around a portion of the inner binding thread to coil the loop threads or strands around the inner binding thread, and means for causing a portion of the inner binding thread to revolve around and in the same direction as the said supporting and guiding means.

4. In a machine of the character described, the combination of a former, a revoluble carrier for an inner binding thread which carrier is coaxial with said former, a revoluble supporting and guiding member for the loop strands of said rope or cord, and means for causing revolution of the said supporting and guiding member around said former and simultaneously around the said inner binding thread which extends through said former.

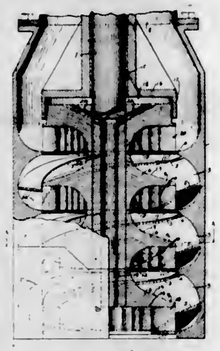
5. In a machine for making ornamental rope or cord, the combination of means for guiding and supporting an inner binding thread, a revoluble carrier for said binding thread coaxial with the said inner thread supporting and guiding means, a revoluble guiding member for the loop strands of the said cord one end of which is situated laterally of the said inner binding thread supporting and guiding means, and means for causing revolution of the said loop thread or strand guiding means around the said inner binding thread supporting and guiding means.

[Claims 5 to 43 not printed in the Gazette.]

1,273,913. CENTRIFUGAL PUMP. PONTUS OSTENBERG, San Jose, Cal. Filed Mar. 15, 1917. Serial No. 155,020. (Cl. 103—43.)

1. In a centrifugal pump, a casing provided with a cylindrical central chamber having a plurality of rotors operatively and removably insertible therein in a unitary structure, and having inlet and outlet openings, and an annular chamber formed in the wall thereof in operative relation to each rotor.

5. In a centrifugal pump, a casing provided with a cylindrical central chamber having a plurality of rotors operatively insertible therein in a unitary structure, and having inlet and outlet openings, and an annular chamber formed in the wall thereof in operative relation to each rotor, each annular chamber curving sharply inwardly at the bottom and more gradually outwardly at the top and having one or more upwardly inclined vanes positioned therein, each vane forming a continuous surface with its respective chamber at its lower end.

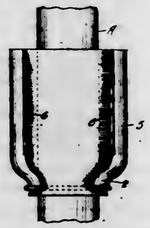


10. In a centrifugal pump, a casing provided with a cylindrical central chamber having a plurality of rotors operatively insertible therein in a unitary structure, and having inlet and outlet openings, and an annular chamber formed in the wall thereof in operative relation to each rotor, each annular chamber having one or more upwardly inclined vanes positioned therein, each vane forming a continuous surface with its respective chamber at its lower end and gradually becoming narrower as it approaches the upper edge of said chamber.

18. In a centrifugal pump, a casing provided with a cylindrical central chamber having a plurality of rotors operatively inserted therein in a unitary structure, and having inlet and outlet openings, and an annular chamber formed in the wall thereof in operative relation to each rotor, the upper and lower surfaces of said rotors forming a continuous surface with the abutting surfaces of the contiguous members.

[Claims 2 to 4, 6 to 9, and 11 to 17 not printed in the Gazette.]

1,273,914. TUBE-TESTER. PATRICK J. O'SULLIVAN, Kanturk, Ireland. Filed Oct. 20, 1917. Serial No. 197,748. (Cl. 73—51.)



1. A tube tester comprising a container embracing the tube and having one end opened and including a neck in contact with the tube, the body of the container being spaced from the tube to receive a quantity of water.

2. In a tube tester, a rubber container formed from a single strip of material having its edges in contact to provide a water container, one end of the container having a restricted neck adapted to engage the tube, and means engaging the exterior of the container to hold the edges of the strip in close contact.

3. A tube tester comprising a flexible rubber container formed from a strip of material having its longitudinal edges in close contact, the lower portion of the said container being shaped to provide a restricted neck, adapted to have its inner surface engage the approximate surface of the inner tube, the latter providing a water tight joint at this point, whereby a quantity of water may be maintained within the container, and means to hold the said contacting edges of the said rubber material in close contact to prevent leaking of the water from the said container.

4. A tube tester comprising a container formed from a strip of water tight material shaped to form a cylinder having one end provided with a restricted neck and a diameter equal to the diameter of the inflated pneumatic tube, the interior of the said neck being curved to provide a curved surface for engaging the said tube, and means mounted on the container to hold the said material in the form of a cylinder for containing a quantity of water.

5. A tube tester comprising a container formed from a strip of water tight material shaped to form a cylinder having one end provided with a restricted neck and a diameter equal to the diameter of the inflated pneumatic tube, the interior of the said neck being curved to provide a curved surface for engaging the said tube, and means mounted on the container to hold the said material in the form of a cylinder for containing a quantity of water, the said means including a clamp plate embracing a portion of the said container and provided with a bead on each of its longitudinal edges.

1,273,915. ELECTRODE-HOLDER FOR ELECTRIC-ARC LAMPS. HARVEY N. OTT, Buffalo, N. Y., assignor to Spencer Lens Company, Buffalo, N. Y. Filed Sept. 15, 1915. Serial No. 50,892. (Cl. 176—119.)

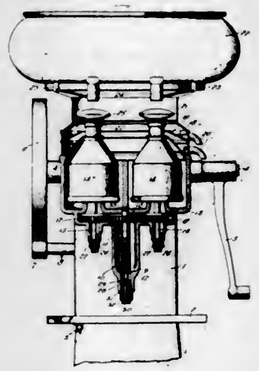


1. In an electrode holder adapted to hold electrodes of different sizes, the combination of a stationary jaw and a movable jaw between which the electrode is held, said stationary jaw having a post provided with fulcrum projections at different distances from the body of said jaw, said movable jaw having a slotted end adapted to straddle said post and to engage with one or another of said projections, and means for pressing said movable jaw against an electrode.

2. In an electrode holder adapted to hold electrodes of different sizes, the combination of a stationary jaw and a movable jaw between which the electrode is held, said stationary jaw having a plurality of fulcrum projections arranged at different distances from the body of said jaw, said movable jaw having one end which is adapted to be inserted into engagement with one or another of said projections, and a screw extending through the other end of said movable jaw and adapted to move said movable jaw to clamp said electrode.

3. In an electrode holder adapted to hold electrodes of different sizes, the combination of a stationary jaw and a movable jaw between which the electrode is held, said stationary jaw having a plurality of fulcrum projections arranged at different distances from the body of said jaw, said movable jaw having one end which is adapted to be inserted into engagement with one or another of said projections, said movable jaw having sides of different formation and being adapted to be reversed to have either of said sides face said stationary jaw, and means for pressing said movable jaw against said electrode.

1,273,916. CREAM-SEPARATOR. BERNARD PAPKE, Lincoln, Nebr. Filed Dec. 15, 1917. Serial No. 207,245. (Cl. 233—23.)



A cream separator comprising a base, a vertical spindle journaled in the base, vertical spindles arranged about the central spindle in a circle whose center is the central spindle and spaced apart from each other at equal distances, a separator bowl connected to the top of each of the last named spindles to rotate therewith, a driving connection between the central spindle and the bowl spindles for rotating said bowl spindles at the same speed, means for driving the central spindle, a common vessel for receiving the milk from all of the bowls, a common vessel for receiving the cream from all of the bowls, said vessels being arranged one above the other, a common means for delivering the milk and the cream to the bowls and arranged above the bowls and above the vessels, a driving shaft arranged transversely of the central spindle, and a connection between the said shaft and the said spindle for rotating the same.

1,273,917. [WITHDRAWN.]

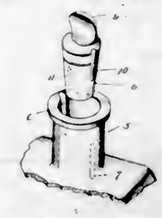
1,273,918. GREASE-CATCHING DEVICE FOR AUTOMOBILES. COLEMAN FERRELL PEARSON, Montgomery, Ala. Filed Feb. 19, 1917. Serial No. 149,703. (Cl. 74—56.)



A box for catching and retaining the drippings of grease from the brake-drum of an automobile, said box being adapted by its formation to retain the grease, thereby keeping it away from the wheel and tire adjacent to the brake-drum from which it is applied, and also provided with an opening adapted to be attached to a bolt present on the brake-drum of a Ford automobile, and also provided with a blade for engaging grease accumulating on the periphery of the drum and directing it into the box.

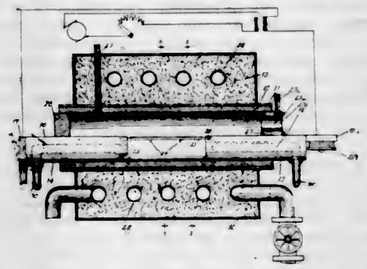
1,273,919. MEDICINE-DROPPING BOTTLE. JAMES RILEY PEED, Jersey City, N. J. Filed Jan. 30, 1917. Serial No. 145,497. (Cl. 215—16.)

The combination with a bottle having a neck provided with an inwardly tapered mouth opening having diametrically opposite longitudinal channels in its walls, one of the channels extending through the outer end of the neck to a point remote from its inner end, the other channels extending through the inner end of the neck to a point remote from its outer end, a stopper within the mouth opening and correspondingly tapered thereto and



having diametrically opposite longitudinal channels in its outer face inversely arranged to the first named channels, of corresponding length thereto and normally out of alinement therewith but adapted to register with the first named channels on the turning of the stopper, whereby continuous passages will be formed between said stopper and neck.

1,273,920. ELECTRIC FURNACE. CARL A. PFANSTIEHL, Waukegan, Ill., assignor to Pfanstiehl Company, Inc., North Chicago, Ill., a Corporation of New York. Filed Nov. 19, 1914. Serial No. 872,953. (Cl. 204—64.)



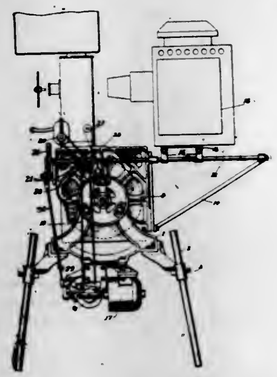
1. An electric furnace for sintering ingots of compressed metallic tungsten powder at or near its fusing temperature comprising in combination a heating chamber of refractory material, a pair of terminal blocks, one at either end of said chamber, a cradle of ductile metallic tungsten of fibrous structure extending horizontally from one terminal block to the other and adapted to support an ingot of compressed tungsten powder in intimate contact with the cradle throughout the length of the ingot, and means for passing through said cradle from terminal block to terminal block a current of electricity sufficient to raise the temperature of the cradle substantially to the fusing point of metallic tungsten.

6. A furnace of the class described comprising a heating chamber, a cradle within the heating chamber, said cradle comprising a pair of parallel rods arranged to support a conducting ingot to be sintered, and means for connecting said rods with a source of electric energy supply.

11. A furnace of the class described comprising in combination a refractory tube constituting a heating chamber, a pair of terminals one at each end of the refractory tube, means for passing cooling water through each of said terminals, a pair of rods of ductile metallic tungsten of fibrous structure interposed between said terminals, said rods constituting a cradle to support an ingot to be sintered, means for maintaining an atmosphere of hydrogen within the heating chamber during the sintering operation, and means for connecting said terminals with a source of electricity supply.

[Claims 2 to 5 and 7 to 10 not printed in the Gazette.]

1,273,921. SUPPORTING-FRAME FOR MOTION-PICTURE MACHINES. NICHOLAS POWER, Brooklyn, N. Y., assignor to Nicholas Power Company, New York, N. Y., a Corporation of Delaware. Filed July 14, 1914. Serial No. 850,871. (Cl. 88—17.)

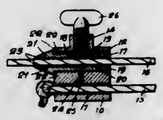


1. In a motion picture projecting apparatus, a supporting frame comprising a stationary base portion, a driving motor mounted on the base portion, an upper portion supporting the projecting mechanism, a pivotal connection between the two parts permitting relative angular adjustment, said connections comprising a hub and bearing on said two parts respectively, flanges on said hub and bearing and clamping bolts for clamping said flanges together to lock said parts together in adjusted relation, and a power transmitting connection between said motor and said mechanism.

5. In a motion picture apparatus, the combination of a frame or stand having a base, means for adjustably supporting said base at different angular positions, an upper frame part mounted on said base for angular movement in a vertical plane, said upper frame part comprising an angular frame having on its upper surface a seat for the projecting apparatus and downwardly projecting arms to embrace and support a reel inclosing magazine, and a lateral extension from said upper frame part for supporting the projecting lamp.

[Claims 2 to 4, 6, and 7 not printed in the Gazette.]

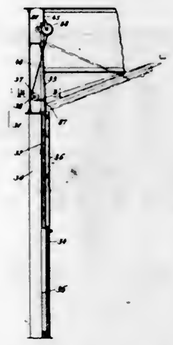
1,273,922. LINE-CLUTCH. ALEXANDER J. PRATTINGER, New York, N. Y. Filed Oct. 17, 1916. Serial No. 126,183. (Cl. 24—135.)



2. The combination with a block adapted to be fixed to a line, the said body having a passage for reception of a second line, and having communicating threaded opening angularly disposed relative to the passage, of two complemental toothed jaws adjustable toward and from each other transversely of the passage and each jaw having on one of its corresponding ends a head protruding exteriorly of the block to prevent the jaws from being forced out of the passage of the block in a direction opposite to the heads, and a set screw in the threaded opening for permitting one of the jaws to be adjusted toward the second jaw.

[Claim 1 not printed in the Gazette.]

1,273,923. DOOR AND OPERATING MECHANISM THEREFOR. ARTHUR T. PRESCOTT, East Orange, N. J., assignor to George H. Frothingham Company, New York, N. Y., a Corporation of New York. Filed Apr. 10, 1916. Serial No. 90,046. (Cl. 20—19.)



1. The combination of a door casing comprising side posts and a lintel defining the door-opening, of a door comprising an upper section, a lower section adapted to slide thereon, means for suspending the door to permit it to swing out of a vertical position away from the door-opening, stationary guide means back of the plane of the door, a drum above the door-opening, a cable thereon extending around said guide means, and connected to the upper door section, hoisting means for the door operatively connected to the drum, said drum comprising a section of relatively small diameter upon which the cable is wound, when the lower door section is being closed.

3. A door comprising an upper section, a lower section adapted to slide upon the upper section, means for suspending the door to permit it to swing out of a vertical position away from the door opening, hoisting means connected to the lower section and adapted to first slide the lower section upon the upper section and then swing the upper end of the two sections inwardly, and a drum operatively connected to the hoisting mechanism and having a section of relatively small diameter, a cable wound on the drum and connected to the upper section to produce an inward pull thereon, said cable being wound upon the small diameter drum section while the lower door section is being closed.

5. The combination of a door casing comprising side posts and a lintel defining the door-opening, of a door comprising an upper section, a lower section adapted to slide thereon, means for suspending the door to permit it to swing out of a vertical position above the door-opening, a fixed guide pulley back of the plane of the door, a hoisting mechanism connected to the lower door section, a drum operatively connected to the hoisting mechanism and provided with a section of relatively small diameter, and a frusto-conical section of relatively large diameter, a cable wound successively on the frusto-conical section and on the section of small diameter and connected to the upper section near the top whereby the cable is paid out slowly as the lower section slides upwardly on the upper section, and is paid out with variable rapidity while the door sections are swung open.

7. A door comprising an upper section, a lower section adapted to slide upon the upper section, means for suspending the door to permit it to swing out of a vertical position away from the door opening, hoisting means connected to the lower section and adapted to first slide the lower section upon the upper section and then swing the upper end of the two sections inwardly, and a drum operatively connected to the hoisting mechanism, and having a section of small diameter, and a cable wound on the drum and connected to the upper section near the top whereby the lowering of the lower section in closing the door puts a tension on the cable and pulls the top of the door against the casing, and whereby the cable is paid out slowly as the lower section is sliding upwardly upon the upper section to provide slack to facilitate the breaking in of the door at the top.

[Claims 2, 4, and 6 not printed in the Gazette.]

1,273,924. VEHICLE-WHEEL. ELZA RHODY, Farmland, Ind., assignor of one-half to Edgar T. Botkin, Farmland, Ind. Filed Feb. 3, 1917. Serial No. 146,499. (Cl. 152—30.)

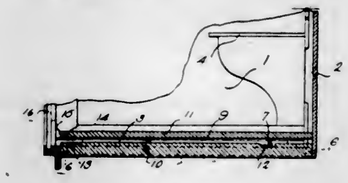


1. A vehicle wheel comprising a hub, a sectional rim and a series of spokes connected at one end to the hub and to the respective rim sections, each spoke comprising a tubular member, a plunger operable therein, cup members connected to the inner end of the plunger, a spring seated within the tubular member, means connecting the spring and cup members to the plunger to provide a detachable spoke unit, and a valve for said tubular member.

2. A vehicle wheel comprising a hub, a sectional rim and a series of spokes connected at one end to the hub and to the respective rim sections at the other end, each spoke comprising a relatively stationary section and a spring actuated section, one of said sections having a projection, and means engageable with said projection and the other spoke section for holding the latter against spring action whereby to permit of removal of a rim section.

[Claims 3 not printed in the Gazette.]

1,273,925. KITCHEN-CABINET. HENRY J. RITTER, Tippecanoe City, Ohio. Filed Dec. 6, 1917. Serial No. 205,783. (Cl. 45—16.)



1. A structure comprising a compartment having vertical walls, and a drawer slidably mounted in said compartment, said structure having ledges coöperating with said drawer, when the latter is in its closed position, to form a dust proof partition extending across said compartment, said structure and said drawer also having coöperating parts to support said drawer out of engagement with said ledges during its movement toward and from its closed position.

2. A structure comprising a compartment having vertical walls, and a drawer slidably mounted in said compartment, said structure having ledges coöperating with said drawer, when the latter is in its closed position, to form a dust proof partition extending across said compartment, said structure and said drawer having coöperating parts controlled by the sliding movement of said drawer toward and from its closed position to cause the same to be moved into and out of engagement with said ledges.

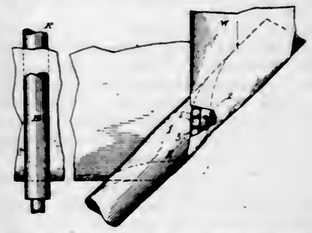
3. A structure comprising a compartment having vertical walls, and a drawer slidably mounted in said compartment, said structure having ledges coöperating with said drawer, when the latter is in its closed position, to form a dust proof partition extending across the compartment, said structure also having parts extending along the lateral edges of said drawer to form tracks, each of said parts having a recess therein, and track engaging parts projecting beyond the latter edges of said drawer to engage the respective tracks, said engaging parts being so arranged that they will be in the respective recesses when said drawer is in its closed position and will support said drawer out of engagement with said ledges when they have been moved out of said recess.

5. In a structure having a compartment, a drawer slidably mounted in said compartment, said structure having ledges, extending along the walls of said compartment, upon which said drawer rests when in its closed position, and also having parts extending along the lateral edges of said drawer to form tracks, each of said parts having a recess therein, said structure also having inwardly extending projections arranged adjacent to the lateral edges of said drawer and spaced away from said recesses, said drawer having track engaging parts projecting beyond the lateral edges thereof and arranged to enter said recesses when said drawer is in its closed position, and also having parts adapted to rest upon and move over the projections carried by said structure, said parts having recesses in the lower portions thereof to receive the respective projections when said drawer is in its closed position.

6. In a structure having a compartment a drawer slidably mounted in said compartment, said structure having ledges extending along the walls of said compartment upon which said drawer rests when in its closed position, guide-ways formed on the walls of said compartment along the lateral edges of said drawer and having recesses near the rear ends thereof, studs carried by said structure and projecting inwardly beyond said guide-ways and spaced away from said recesses, studs carried by said drawer, projecting beyond the lateral edges thereof and adapted to travel in the respective guideways and to enter said recesses when the drawer is in its closed position, said drawer being arranged to rest upon and travel over the studs carried by said structure, and having recesses formed in the underside thereof to receive said studs when the drawer is in its closed position.

[Claim 4 not printed in the Gazette.]

1,273,926. WEB-FEEDING MECHANISM. OSCAR ROESEN, New York, N. Y., assignor to R. Hoe & Co., New York, N. Y., a Corporation of New York. Filed Nov. 17, 1915. Serial No. 61,898. (Cl. 101—420.)



1. In a web feeding device, the combination with means for forwarding a web of material, of a roll or bar over

which the web is led, and devices carried by the roll over which the web passes, said devices forming an antifriction surface conforming to the position of the edges or other unprinted portions of the web in its traveling movement.

4. In a web feeding device, the combination with web forwarding means, of a turner bar over which the web is led, and a plurality of balls on the roll arranged spirally of the roll and projecting above the surface thereof, said balls forming an antifriction surface over which the paper travels on its unprinted margins.

8. In a web feeding mechanism, a roll or bar over which the web travels provided with a slot, balls in the slot, and ball retainers allowing the balls to have free turning movemnts in the slots, the balls projecting above the surface of the rolls and into the path of the web.

[Claims 2, 3, and 5 to 7 not printed in the Gazette.]

1,273,927. PROCESS OF MANUFACTURE OF AN AGGLUTINANT FOR COATINGS. JEAN ROSEN, Paris, France. Filed July 30, 1914, Serial No. 854,161. Renewed May 29, 1918. Serial No. 237,367. (Cl. 196—25.)

1. The process of manufacturing an agglutinant from hydrocarbon oils, which consists in heating the oils to distil off some of the light hydrocarbon oils and ammonia, then subjecting the mass being distilled to a further distillation at a higher temperature in the presence of an agitating current of gas or vapors to remove the naphthalene and other light oils, then reintroducting some of the distillate oils from the second distillate into the mass being distilled, and then polymerizing and oxidizing the resultant mass to the desired viscosity by causing an oxidizing agent to bubble up through the mass.

2. The process of manufacturing an agglutinant from hydrocarbon oils, which consists in heating the oils to distil off some of the light hydrocarbon oils and ammonia, then subjecting the mass being distilled to a further distillation at a higher temperature in the presence of an agitating current of gas or vapors to remove the naphthalene and other light oils, then reintroducing some of the distillate oils from the second distillate into the mass being distilled and redistilling and reintroducing until a heavy oil is obtained, and then polymerizing the resultant mass to the desired viscosity by causing an oxidizing agent to bubble up through the mass.

1,273,928. METHOD OF CLEANING FILMS. MAURICE S. ROSENFELD, New York, N. Y. Filed Sept. 6, 1916. Serial No. 118,770. (Cl. 15—8.)



1. A method of cleaning photographic films, which consists in applying wax to the surface of the film, dissolving the wax, and then removing the wax.

3. A method of cleaning photographic films, which consists in applying wax to the surface of the film, dissolving the wax, and then removing the wax, in the presence of an absorbent substance.

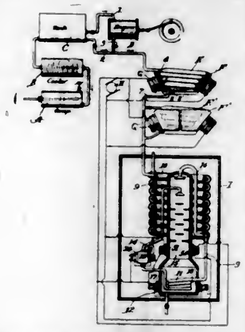
9. A method of cleaning photographic films, which consists in applying wax to the surface of the film, dissolving the wax, removing the wax and polishing the surface of the film, and then removing the polishing material.

10. A method of cleaning photographic films, which consists in applying wax to the surface of the film, dissolving the wax, removing the wax, and polishing the surface of the film with an absorbent material.

14. A method of cleaning photographic films, which consists in applying a plastic material to the surface of the film, dissolving the same, and then removing said plastic material.

[Claims 2, 4 to 8, and 11 to 13 not printed in the Gazette.]

1,273,929. METHOD OF TREATING GASES. ABRAHAM CRESSY MORRISON, Essex Fells, N. J. Filed Apr. 4, 1914. Serial No. 829,630. (Cl. 183—115.)



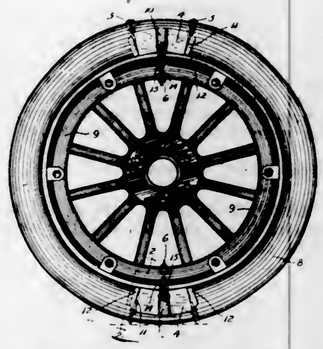
1. The method of treating mixtures of oxygen and other gases, which consists in subjecting the mixture simultaneously to centrifugal and magnetic forces.

7. The method of treating air, which consists in causing the air to flow at high velocity through a spiral tube located in a strong magnetic field, and separately removing gases from the outer and inner portions of the tube.

14. The method of liquefying a para-magnetic gas at a temperature slightly above the normal boiling-point, which consists in subjecting the gas to the action of a powerful magnetic field, thereby causing liquefaction to occur above the normal boiling point.

[Claims 2 to 6 and 8 to 13 not printed in the Gazette.]

1,273,930. TRACTION DEVICE FOR AUTOMOBILE-WHEELS. JOHN F. SCHERER and FREDERICK J. GEORGE, Minneapolis, Minn. Filed Oct. 22, 1917. Serial No. 197,828. (Cl. 152—14.)



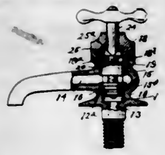
1. A traction device of the kind described comprising a pair of side plates having integral hooks at their ends, a pair of circumferentially spaced tread chains secured to and connecting the side plates by interlocking certain of their links with said hooks, said hooks having their ends bent in the plane of the side plates to prevent the tread chains from becoming detached therefrom, and means for securing the side plates in position on the sides of a tire.

3. A traction device of the kind described comprising a flat side plate adapted to engage one side of a tire, said of a tire, each of said side plates being bent outwardly, at its intermediate portion, to form a radially projecting U-shaped traction lug, a tread chain connecting the side plates, and flexible means attached to said traction lugs for securing the side plates in position on the tire.

6. A traction device of the kind described including a flat side plates adapted to engage one side of a tire, said side plate being bent outward, at its intermediate portion, to form a radially projecting traction lug, a cross tread chain attached to the side plate, and means for securing the side pinte in position on the tire.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,273,931. SELF-CLOSING FAUCET. JOHN P. SCHILD, Cleveland, Ohio. Filed July 2, 1917. Serial No. 178,112. (Cl. 137—4.)



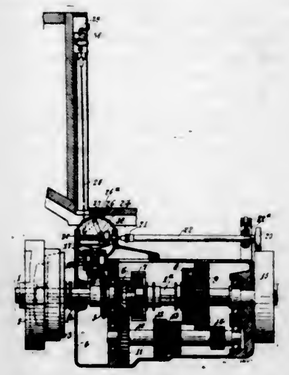
1. A self-closing faucet having a vertical chamber which is provided with an inlet adjacent its lower end and a laterally extended outlet between its ends, a plug fitted within said chamber and extending both above and below the water outlet, said plug having a vertical cylindrical hole through it from top to bottom and having a laterally extended passageway from said hole to said chamber in the plane of the water outlet therefrom, and said plug having an annular valve seat on its lower end, a vertical valve stem which is nicely fitted to and is slidable within the vertical hole in said plug and extending both above and below the same, and having on its lower end a valve for engagement with said valve seat,—and said stem being provided with a water passage which at its upper end is in communication with the lateral water passage in the plug and which at its lower end terminates in a part of the surface of said valve stem, which is such a distance above the valve that it may be uncovered by the downward movement of the valve from its seat, but which will pass wholly within said hole and be entirely covered so as to stop the entry of water into the same before the valve in closing comes in contact with its seat, and means for pushing said valve stem downward.

3. A self-closing faucet having a vertical chamber which is provided with an inlet near its lower end and a lateral outlet between its ends, a water distributing plug fitted in said chamber and extending both above and below the outlet therefrom and having a valve seat at its lower end, a vertical hole through it from top to bottom which hole is enlarged at its upper end for the reception of packing, and said plug also having a lateral water passage leading from said hole to said chamber adjacent the outlet therefrom, a valve stem slidably fitted in the hole in said plug and having on its lower end a valve for the engagement of said valve seat and said stem being provided with a water passage which terminates at its lower end a slight distance above the valve and at its upper end at a point where it will communicate with the lateral water passage in the plug when the valve stem has been pushed downward far enough to uncover the lower end of said water passage, packing in the enlarged recess in the upper end of said plug, a metal packing ring on top of said plug and extending over said packing, a cap which screws into the upper end of said chamber and bears upon the packing ring, and means carried by said cap to force said valve stem downward.

[Claim 2 not printed in the Gazette.]

1,273,932. INDICATOR FOR MULTIPLE-SPEED-TRANSMISSION GEARING. GUSTAV SCHLATTER, Steinach, Switzerland, assignor to Firma Adolphe Saurer, Arbon, Switzerland. Filed Jan. 21, 1918. Serial No. 212,903. (Cl. 235—103.5.)

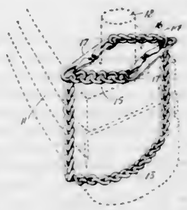
1. In an apparatus of the character described, the combination with a driving element, a driven element and means for varying the relative speeds of the driving element and the driven element, of a single indicator, movable in either direction to different positions to indicate speed relations of such elements, means to actuate the indicator, connections whereby the direction of movement of the indicator is influenced by the speed of the driving element, and connections whereby the direction of movement of the indicator is influenced by the speed of the driven element.



5. In an apparatus of the character described, the combination with a driving element, a driven element and means for varying the relative speeds of the driving element and the driven element, of a driving disk, means to drive the same from one of said first named elements, a rotatable spindle, means to drive the same from the other of said first named elements, a wheel mounted on said spindle in driving engagement with said disk and shiftable longitudinally on the spindle toward and from the axis of the disk, devices whereby said wheel is shifted on said spindle through a difference in the speed of rotation of the wheel and the spindle, and an indicator operatively connected with said shiftable wheel.

[Claims 2 to 7, 9, and 10 not printed in the Gazette.]

1,273,933. ANTISKID DEVICE FOR VEHICLE-WHEELS. CHARLES D. SCHMIDT, Woodhaven, N. Y. Filed Nov. 24, 1917. Serial No. 203,650. (Cl. 152—14.)



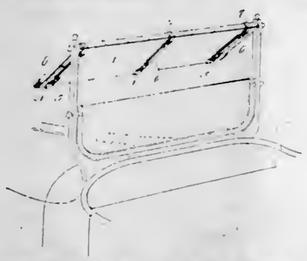
1. In combination, a wheel rim, a spoke, a length of chain and two hooks at the respective ends of the chain, the chain being wrapped one and a fraction times around the rim with its intermediate part lying across the wheel tread and with its end portions lapping past each other and with the spoke between them, and each hook engaging an adjacent intermediate link of the chain.

3. In combination, a wheel rim, a spoke, a tire chain and two hooks attached to said chain and hooked into certain links thereof, said chain comprising one loop extending around said rim and another loop around said spoke, each loop being adapted to maintain its integrity if the other loop breaks, and the complete removal of

the chain from the wheel being effected by the disengagement of both said hooks from said links of the chain into which they are hooked.

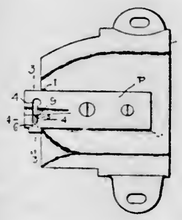
[Claim 2 not printed in the Gazette.]

1,273,934. GLARE-DEFLECTOR. CHARLES S. HORTON, Huntley, Mont. Filed Nov. 16, 1917. Serial No. 202,378. (Cl. 21—148.)



A light deflector adapted to be applied to the wind shield of an automobile comprising a strip of cloth having at one edge a pocket adapted to receive one edge portion of the wind shield whereby the body of the strip of cloth may extend along the underside of the shield, and means applied to the cloth and adapted to engage around the shield at one edge and the pocket at the opposite edge of the shield whereby the body of the strip of cloth is held in close contact with the underside of the shield.

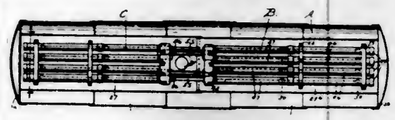
1,273,935. SEWING-MACHINE. GEORGE W. SCHRADER, Utica, N. Y. Filed Oct. 6, 1917. Serial No. 195,104. (Cl. 112—20.)



In a sewing machine, a work support provided with a needle slot, said member being provided with an open groove in its outer face in communication with the end portion of the slot in advance of the portion of the slot through which the needle of the sewing machine passes, said groove being in longitudinal alinement with said slot, an arm snugly fitting within the groove and having its inner end substantially flush with the adjacent end of the needle slot, the inner end portion of the arm being provided with an upstanding cutting member, the opposite end portion of the arm being provided with a lug disposed in a direction opposite to the cutting member, the opposed faces of the lug and the working support being correspondingly beveled and in contact one with the other, the bevel of the work support being disposed downwardly and inwardly so that the lug of the arm underlies the support, and a clamping member threaded through the work support and engaging the side face of the arm.

1,273,936. HEATING APPARATUS FOR TANK-CARS. EDWARD A. SCHREIBER, Chicago, Ill.; assignor, by mesne assignments, to Vapor Car Heating Company, Inc., a Corporation of New York. Filed Mar. 27, 1916. Serial No. 86,923. (Cl. 257—207.)

1. The combination with a tank car, of a heating element within the same comprising two pipes arranged one within the other so as to be free to expand and contract independently of each other; said pipes communicating with each other so as to provide a continuous conduit for circulation of heating medium, the outer pipe being supported on the wall of said car so as to be free to expand and contract longitudinally, said inner pipe consisting of a plurality of pipe sections, and unions joining the same provided with lugs adapted to bear against the outer pipe to provide guiding means between the inner and outer pipes.



3. The combination with a tank car, of a header therein formed with an inlet chamber and an outlet chamber, a plurality of pipes connected with said header at one end and communicating with the inlet chamber, a set of pipes connected with the header at one end, communicating with the outlet chamber and inclosing said first named pipes respectively, each such pair of inner and outer pipes communicating with each other at the ends remote from the header so as to provide a plurality of continuous conduits for the circulation of heating medium, said inner pipes being free to expand and contract independently of the outer pipes and the outer pipes being free to expand and contract with relation to the tank, the inner pipes being composed of a plurality of sections, and unions joining said sections provided with lugs bearing against the outer pipes.

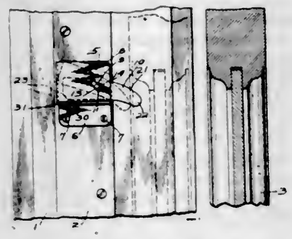
4. The combination with a tank car, of a pair of headers arranged within said car near the middle thereof, formed, in each case, with an inlet chamber and a discharge chamber, a steam supply pipe having branches leading to said inlet chambers respectively, a discharge pipe having branches communicating with the discharge chambers respectively, and heating units consisting, in each case, of a pair of pipes one within the other, secured at one end to one of said headers with the inner pipes communicating with the inlet chamber and the outer pipe with a discharge chamber, means for supporting the outer pipes on the car which permits expansion and contraction of the same with respect to the car, and means for supporting the inner pipes within the outer pipes which permits contraction and expansion of the former with respect to the latter.

7. The combination with a tank car, the tank of which is formed in the bottom with a discharge opening of a heating apparatus in the tank, comprising a pair of headers located on opposite sides of said opening, a plurality of heating units extending from the headers toward the ends of the car, which consist of a pair of pipes, one within the other, communicating with each other to form a continuous conduit and free to expand and contract independently of each other, and pipes connected with the header on the sides adjacent said opening which lie along and heat the region adjacent said opening.

8. The combination with a tank car, the tank of which is formed in the bottom with a discharge opening of a heating apparatus in the tank, comprising a pair of headers located on opposite sides of said opening, a plurality of heating units extending from the headers toward the ends of the car, which consist, in each instance, of a pair of pipes, one within the other, communicating with each other to form a continuous conduit, and free to expand and contract independently of each other, and pipes for conducting heating medium to and for discharging the same from the headers, which are connected with the headers on the sides adjacent said opening and lie along and heat the region adjacent said opening.

[Claims 2, 5, and 6 not printed in the Gazette.]

1,273,937. DOOR-CHECK. JOSIAH SCOTT, Toledo, Ohio. Filed June 30, 1916. Serial No. 106,798. (Cl. 16—77.)



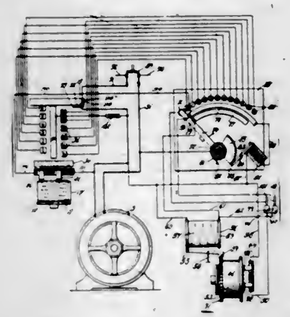
1. In a door check, a casing having an angular slot, one portion of the slot extending substantially vertical and the other portion of the slot inclined away from the door, a door engaging member having a pivot pin located in the slot, the vertical portion of the slot adapted to permit rotary movement of the door engaging member when the door is closed slowly and to shift to the inclined portion of the slot to permit engagement with the wall of the casing and the door when the door is closed quickly and to cause the return of the pin to the vertical portion of the slot.

2. In a door check, a casing having an angular slot, an engaging member having a transverse pivot pin supported in the slot at the end thereof, the vertex of the angle of the edge of the slot being located on the side of the pin away from the door to yieldingly resist the movement of the pin from one part of the slot to the other part of the slot.

3. In a door check, a casing having an angular slot, one portion of the slot being substantially vertical and the other portion of the slot extending rearwardly away from the door, and from the upper end of the other portion of the slot, an engaging member, a pivot pin for supporting the engaging member and extending through the slot, the movements of the pin and member being resisted by the angular edge of the slot away from the door.

4. In a door check, a casing having an angular slot, a door engaging member extending from the casing, a pin for supporting the door engaging member and extending through the slot and adapted to rotate in one portion of the angular slot when the door is slowly closed and to engage the rear wall of the casing and the door when the pin is moved into the other portion of the slot by the rapid movement of the door, the movements of the pin in the slot being resisted by the angular edge of the slot.

1,273,938. ELECTRICALLY-CONTROLLED MECHANISM. CHARLES H. SHUTT, Philadelphia, Pa. Filed May 16, 1916. Serial No. 97,878. (Cl. 161—16.)



1. The combination of a main drive member, a winding drum, means controlled electrically for coupling the drive member to said drum, electrically connected means, a member movable into engagement with said means to cause the operation of said first means to couple the drive member and the drum to cause said drum to be turned, a plurality of electrically connected contacts, an indicator including means movable into engagement with said contacts to electrically control the movement of said latter member, said latter member being operative after a lapse of time pre-determined by the setting of said indicator to complete an electric circuit with said first means to cause the drum to rotate with said first drive member, and electrically controlled means automatically operative through the medium of said second mentioned member during said operative movement thereof, to return the indicator to its initial position, substantially as described.

9. The combination of a main driving member, a winding drum including an electro-magnet operative when energized to magnetically connect the drum to be rotated by the main shaft, a second electro-magnet when energized being operative through the medium of magnetism to receive motion from said main driving member, a series of contacting plates, an indicator including contact members in electric connection with said contacting plates, means operated by said second electro-magnet and movable into contact with said plates to form a connection with certain of said plates, said indicator including an arm movable to close a circuit between said latter plates and certain of the first-mentioned contact members of the indicator whereby a current is set up in said electro-magnet of the drum to turn the drum, an electro-magnet, means for electrically connecting said electro-magnet with certain of the members of said indicator whereby the latter magnet is energized, and a pawl operated by said latter magnet for engagement with the drum to prevent rotation thereof, said latter electro-magnet when energized acting to release the pawl from the drum, substantially as described.

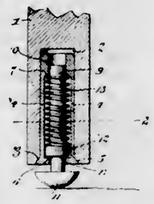
14. The combination of a main driving member, a winding drum including an electro-magnet, locking means for the drum including an electro-magnet, an indicator initially movable to effect the movement of said locking means to permit the drum to be freely turned, means including an electro-magnet and movable to effect passage of current through the first electro-magnet to magnetically connect said drum with the main driving member, means operative by the free turning of the drum to effect the operation of said movable means to cause the passage of electric current through the first-mentioned magnet to rotate the drum, said operation of the movable means also effecting the automatic return of the indicator to its initial position thereby deënergizing the magnet of said movable means, said operative means being automatically operated by said latter turning of the drum to break the electric circuit, substantially as described.

17. The combination of a supporting structure, a shaft having an electro-magnet thereon operative to effect the rotation of said shaft, said shaft having a screw-threaded portion, a series of contacting plates adjustably mounted on said supporting structure, an arm having a threaded opening in engagement with said threaded portion of the shaft, a contacting shoe on said arm for engagement with said contacting plates, guide rods on said supporting structure, and means on said guide rods forming an adjustable stop for said arm, substantially as described.

21. The combination of a supporting structure, a shaft having an electro-magnet thereon operative to effect the rotation of said shaft, said shaft having a screw-threaded portion, a series of contact plates adjustably mounted on said supporting structure, an arm having a threaded opening in engagement with said threaded portion of the shaft, a contacting shoe on said arm for engagement with said contact plates, guide rods on said supporting structure, means on said guide rods forming a stop for said arm, and a spring for rotating said shaft to move said arm into contact with said stop, substantially as described.

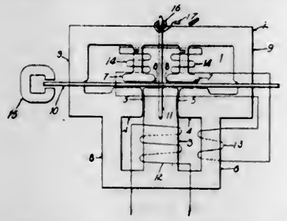
[Claims 2 to 8, 10 to 13, 15, 16, and 18 to 20 not printed in the Gazette.]

1,273,939. YIELDING FURNITURE-SUPPORT. OSCAR SIDEL, Colden, N. Y. Filed Apr. 27, 1917. Serial No. 164,948. (Cl. 155—33.)



A furniture support comprising a guide adapted to be inserted in a socket in a furniture member and consisting of two like sections each of which comprises a semi-cylindrical body, a lower upwardly facing shoulder arranged on the interior of the lower part of said body and an upper downwardly facing shoulder arranged on the interior of the upper part of said body, each section having its body and upper and lower shoulders formed integrally, a supporting rod arranged between said sections and provided between the upper and lower shoulders thereof with an integral stop collar which engages with said lower shoulder, a spring surrounding said rod and engaging its lower end with said collar and its upper end with said upper shoulder, and a dome shaped shoe arranged on the lower end of said rod.

1,273,940. RELAY. BENJAMIN H. SMITH, Turtle Creek, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 29, 1914, Serial No. 879,496. Renewed Sept. 16, 1916. Serial No. 120,583. (Cl. 175—338.)



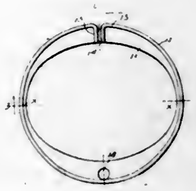
1. A relay comprising a magnetizable core having a central member, two side members joined to one end of the central member and separated therefrom at its other end by small air gaps and downwardly projecting members separated from the central member and the side members at one end by small air gaps and joined thereto at their other end, a winding disposed on the central member and windings on the downwardly projecting members inductively connected to the winding on the central member, said windings disposed on the downwardly projecting members being so proportioned and the downwardly projecting members having such cross-sectional area that they are magnetically saturated at predetermined values of current traversing their windings.

2. A relay comprising a movable armature, a magnetizable core member, a main winding upon the core member, and an auxiliary winding upon the core member that is inductively related to the main winding, the portion of the core member surrounded by the auxiliary winding becoming saturated under usual conditions of use of the relay at a predetermined value of current traversing the winding, whereby a substantially uniform force is caused to be exerted upon the armature for all currents in excess of the said predetermined value.

3. A relay comprising a movable armature, a magnetizable core member, a main winding upon the core member, and an auxiliary winding upon the core member that is inductively related to the main winding, the portion of the core member surrounded by the auxiliary winding becoming saturated under usual conditions of use of the relay at a predetermined value of current traversing the winding, whereby the force exerted upon the armature varies with the current traversing the said windings up to the said predetermined value, and a substantially uniform force is caused to be exerted upon the armature for all currents in excess of said predetermined value.

[Claims 4 to 6 not printed in the Gazette.]

1,273,941. BRAKE-BAND. JOHN F. SMITH, Seattle, Wash., assignor of fifty-five one-hundredths to Henry B. Burkhart, Seattle, Wash. Filed Dec. 20, 1917. Serial No. 208,026. (Cl. 74—13.)

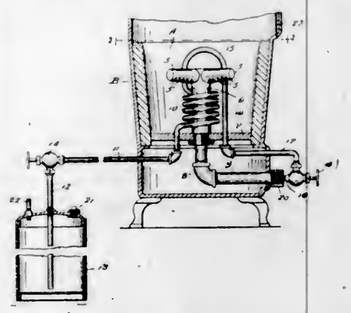


1. The process of making an expansible brake band from an angle bar, consisting in cutting the web element thereof to be of less length than the flange element and to have a sinusoidal outer edge, punching a hole in the web at its midlength, bending the protruding portions of the flange at substantially right angles and against the respective ends of said flange, and then bending the bar thus formed into a substantially circular shape.

3. As a new article of manufacture, a brake band consisting of an angle bar formed into a circular shape to provide a web element extending inwardly from one edge of a peripheral flange, the latter having its extremities bent to extend in a direction radially of the band and against the ends of said web, said web being wider at the aforesaid ends and at the part of the band diametrically opposite thereto, whence the web is tapered to relatively narrow portions at diametrically opposite sides of the band.

[Claim 2 not printed in the Gazette.]

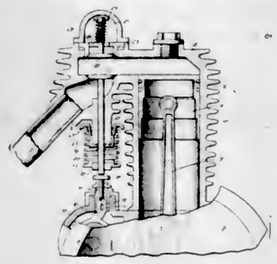
1,273,942. OIL-BURNER. JOHN F. SMITH, Seattle, Wash., assignor of fifty-five one-hundredths to Henry B. Burkhart, Seattle, Wash. Filed Dec. 26, 1917. Serial No. 208,741. (Cl. 158—53.)



4. In combination, a gas burner having an upright tubular post, a head provided with a plurality of arms provided on the upper end of said post, said arms being provided with orifices in their undersides, a gas and air mixing pipe connected to the lower end of said post, an oil vaporizing coil provided below said head, means to supply oil under pressure to said coil, and manually regulated means to discharge the gas generated in said coil into said pipe.

[Claims 1 to 3 not printed in the Gazette.]

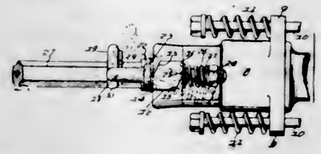
1,273,943. INTERNAL-COMBUSTION ENGINE. REUBEN STANLEY SMITH, Milwaukee, Wis., assignor to A. O. Smith Corporation, Eddyville, N. Y., a Corporation of New York. Original application filed Aug. 20, 1914, Serial No. 857,692. Divided and this application filed Feb. 8, 1917. Serial No. 147,377. (Cl. 123—188.)



1. An internal combustion engine comprising a cylinder, an exhaust valve, a hollow boss carried by the cylinder, a stem for said exhaust valve passing through said boss, a shoulder at the free end of said stem, a spring disposed around said stem and having one end resting against said shoulder, a forked spacer disposed against said boss, the arms of said forked spacer serving as an abutment for the other end of said spring and spacing the spring from the boss, and means for operating said stem to open the valve against the tension of said spring.

[Claims 2 to 4 not printed in the Gazette.]

1,273,944. TOOL-RETAINER. WILLIAM A. SMITH, Denver, Colo., assignor to The Denver Rock Drill Manufacturing Company, Denver, Colo., a Corporation of Delaware. Filed Oct. 18, 1917. Serial No. 197,262. (Cl. 121—20.)



1. In apparatus of the character set forth, the combination with a tool holder, of a swinging tool retainer movable into and out of a position to engage a tool to prevent detachment of the same from the holder, said retainer having means that detachably and automatically interlocks with the tool on the rearward movement of the tool retainer with respect to the tool to prevent the swinging movement of the retainer to an inoperative position.

5. In apparatus of the character set forth, the combination with a tool holder having a socket and spaced ears projecting on opposite sides of the socket, of a swinging tool retaining yoke having a drill shank-embracing loop and side arms that are slidably mounted in the ears, springs for yieldingly resisting the forward movement of the arms with respect to the tool holder, and a drill shank-collar receiving socket in the rear side of the loop, said socket having an open side that is narrower than the diameter of the collar of a drill shank placed in the tool holder.

[Claims 2 to 4 not printed in the Gazette.]

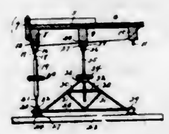
1,273,945. PAPER DOLL. FRANKLIN W. SOOY, Asbury Park, N. J. Filed Sept. 5, 1917. Serial No. 189,781. (Cl. 46—40.)



4. As an article of manufacture, the combination with a blank having an outline of a figure thereon and slitted at certain points, and a scrap of fabric passed through the said slits so as to serve as an article of apparel or adornment on one side of the blank while the ends thereof are concealed on the opposite side.

[Claims 1 to 3 not printed in the Gazette.]

1,273,946. CONCENTRATING-TABLE. EARNEST L. STANDLEY, Rush, Ark. Filed Apr. 9, 1918. Serial No. 227,451. (Cl. 83—88.)



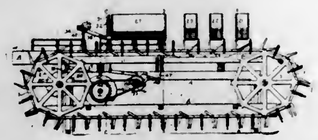
1. The combination with a concentrating table, of means for supporting the same for shaking movement, comprising a pair of rocking supports having universal connection with said table at points adjacent the opposite ends thereof and substantially in the transverse center of said table, and a pair of adjusting members the upper ends of which have universal connection with said table at one edge thereof, and the lower ends of which are pivoted concentrically to the lower ends of the rocking support, and manually operable means for adjusting the length of said adjusting members.

2. The combination with a concentrating table, a means for supporting the same for shaking movement, comprising a pair of transversely disposed rocking trusses, pivotal mounting for the lower ends of said trusses, manually operable nuts supported upon said trusses, threaded stems passing through said nuts, universal connections between the upper ends of said stems and the under side of the table at a point substantially in the transverse center of said table and vertically disposed adjusting elements comprising manually operable turn buckles, threaded stems engaged therewith, universal connections between the upper ends of said threaded stems and the lower side of the table at the rear edge of the table, and a pivotal mounting for the lower ends of said stems in concentric relation to the pivotal mounting of said trusses.

3. The combination with a concentrating table, of means for supporting the same for shaking movement, comprising a pair of transversely disposed rocking trusses, manually operable nuts supported upon said trusses, stems passing through said nuts, a universal connection between the upper ends of said stems and the under side of the table at a point substantially in the transverse center of said table, the bottoms of said trusses comprising transverse rods, bearings in which the said rods are pivoted, and vertically disposed adjust-

ing elements comprising manually operable turn buckles, and upper and lower threaded stems engaged with said turn buckles, a universal connection between each of the upper stems and the rear edge of the table and a universal connection between each of the lower stems and the transverse rods of the corresponding rocking truss.

1,273,947. CRATE-MAKING MACHINE. CHARLES W. STEVENSON, Puyallup, Wash. Filed Sept. 7, 1915. Serial No. 49,364. (Cl. 1—14.)



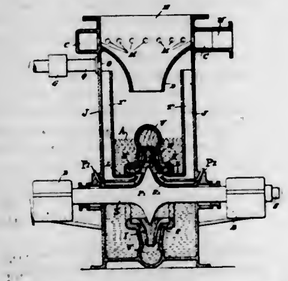
1. A box-making machine comprising a plurality of hoppers containing the stock for the various parts of a crate or box, an endless traveling carrier chain having means for detaching the various parts of the box from their respective hoppers and assembling them in the form of a box, holding them in their proper relative positions and carrying them forward through the machine, and means for fastening the various parts of the box together.

5. A box machine comprising an endless traveling carrier chain composed of a plurality of links, substantially alike, each link having hooks or claws, operable in a vertical direction, to detach the lowest pieces of material in the hoppers, transverse hoppers to contain the material, and clamping arms adapted to receive the detached pieces.

9. In a machine of the class specified, the combination with an endless traveling carrier chain and a plurality of transversely disposed hoppers containing stock for the transverse pieces of the box, of a plurality of longitudinally disposed hoppers grouped over and on either side of the carrier chain and containing stock for the bottom and side pieces of the box, the hoppers which contain side pieces having a downward slope toward the chain.

[Claims 2 to 4 and 6 to 8 not printed in the Gazette.]

1,273,948. CONDENSING APPARATUS. ROBERT SUCZEK, Philadelphia, Pa., assignor to C. H. Wheeler Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Original application filed Mar. 8, 1917, Serial No. 153,454. Divided and this application filed Oct. 11, 1917. Serial No. 195,904. (Cl. 230—14.)



1. The combination with a jet condenser, of a centrifugal pump impeller submerged by the water therein for removing said water, means for removing elastic fluid from said condenser, and auxiliary means for removing elastic fluid comprising a duct for conducting elastic fluid from the space above the level of said water to the suction of said impeller.

5. The combination with a jet condenser, of a centrifugal pump impeller submerged by the water therein, means for removing elastic fluid from said condenser, auxiliary elastic fluid removing means comprising a duct for conducting the elastic fluid from the space above the level of said water to the suction of said impeller, and means delivering motive fluid into said passage near its delivery into said impeller.

9. The combination with a jet condenser, of a centrifugal pump having an impeller, the suction of said impeller receiving the water from said condenser for removing the same, means wholly within the body of said condenser forming a duct delivering into said suction of said impeller and communicating with the space above the level of the water within said condenser, and a motive fluid nozzle discharging adjacent the discharge of said duct in the suction of said impeller.

[Claims 2 to 4 and 6 to 8 not printed in the Gazette.]

1,273,949. DEVICE FOR CONTROLLING THE FLOW OF FLUID FROM WELLS. EDWARD D. SUMMERROW, Cedar Bayou, Tex. Filed Aug. 7, 1917. Serial No. 184,916. (Cl. 166—1.)



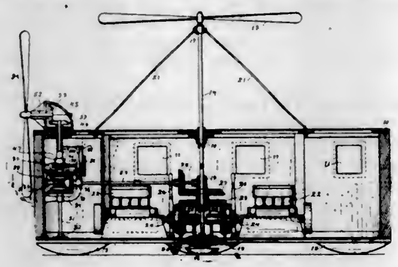
1. A device of the character described including a fluid conduit, means for securing the same in a well, the lower end of said conduit being open to admit fluid, and the conduit being restricted above said open end, and means for varying the amount of fluid flowing through said conduit.

5. A device of the character described including a pipe forming a fluid conduit and adapted to be let down into a well bore, the lower end of said pipe being provided with a fluid inlet to admit fluid from the surrounding reservoir, a section of said conduit above said reservoir being formed into a plurality of restricted fluid passageways, means for independently opening and closing said passageways, and means for securing said device in the well bore, said means including gripping members carried by said pipe, and means for forcing said gripping members into engagement with the walls of the bore.

[Claims 2 to 4 not printed in the Gazette.]

1,273,950. FLYING-MACHINE. ROBERT F. J. TELTZROW, Beaver Dam, Wis. Filed June 22, 1917. Serial No. 176,433. (Cl. 244—25.)

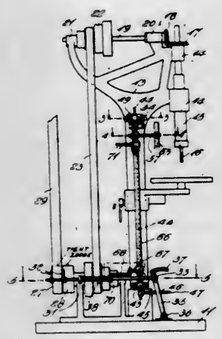
1. A flying machine, comprising a frame in the form of a cabin, an engine within the cabin, a shaft extending upwardly through the cabin and having a propeller mounted on its upper end, a bevel gear and clutch driving connection between the engine and the upwardly extending shaft, another shaft located adjacent one end of the cabin and extending upwardly through the cabin, a counter shaft having a geared connection with the first mentioned upwardly extending shaft and a clutch and geared connection with the shaft adjacent the end of the cabin, said last mentioned clutch and geared connection provding for rotating the shaft adjacent the end of the cabin in opposite directions, a casing journaled



on the last mentioned shaft and having a depending sleeve which surrounds the same, a horizontally extending shaft journaled in the casing and having a geared connection with the adjacent shaft, a propeller mounted on the horizontally extending shaft, and a worm and worm wheel means mounted within the cabin for turning the sleeve.

[Claim 2 not printed in the Gazette.]

1,273,951. SAFETY-STOP APPARATUS. PAUL THEADORE, Lansing, Mich. Filed May 7, 1918. Serial No. 233,063. (Cl. 64—4.)



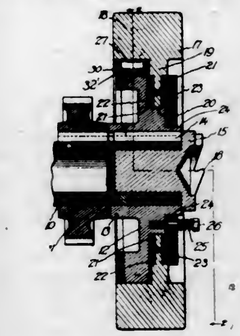
1. Apparatus of the character described, comprising a reciprocatory rod, power shifting mechanism connected with the rod to be moved thereby, a spring adapted to move the rod in one direction, a lever connected with the rod, a shaft arranged near the lever, a dog connected with the shaft to be shifted thereby and adapted to engage with the lever for holding it against movement in one direction, a manually operated device connected with the shaft to turn it in one direction, a sleeve pivoted upon the shaft, a manually operated device to turn the sleeve in one direction, and means arranged between the sleeve and reciprocatory rod whereby the sleeve may move the rod in opposition to the spring.

2. Apparatus of the character described, comprising a reciprocatory rod, power shifting mechanism connected with the rod to be moved thereby, a spring adapted to move the rod in one direction, a lever pivoted with the reciprocatory rod to move with it, a shaft arranged near the lever, a dog connected with the shaft to be shifted thereby and adapted to engage the lever for holding it against movement in one direction, a manually operated device connected with the shaft to turn it in one direction, a sleeve pivoted upon the shaft, a manually operated device to turn the sleeve in one direction, a crank secured to the sleeve, and a link pivotally connected with the crank and adapted to engage with the rod to move the same in one direction in opposition to the spring.

6. Apparatus of the character described, comprising power shifting mechanism, spring means adapted to move the power shifting mechanism in one direction, a lock device adapted to hold the mechanism against movement in one direction, a shaft connected with the lock device to actuate the same, means to turn the shaft, a sleeve pivoted upon the shaft and having connection with the shifting mechanism to reset the same, and means to turn the sleeve.

[Claims 3 to 5 not printed in the Gazette.]

1,273,952. VIBRATION-DAMPING DEVICE. MILTON TIBBETTS, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Oct. 7, 1915. Serial No. 54,544. (Cl. 74—6.)

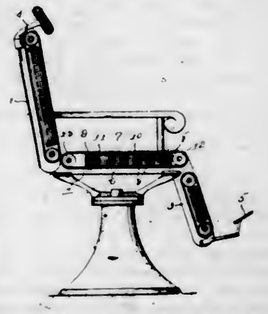


1. The combination with the crank shaft of a hydrocarbon motor, of a flywheel having a rim and an inwardly extending flange, a friction clutch between said flange and said shaft, and a roller clutch coöperating with the rim of said flywheel and said shaft.

7. The combination with a crankshaft having a flange piece keyed thereon, and a disk on said shaft, bolts holding said disk against rotary movement independently of said flange piece, and spring means surrounding said bolts urging said disk toward said flange piece, or a flywheel adapted to rotate on said shaft and provided with a flange extending between said crankshaft flange piece and said disk and having a yielding connection therewith for permitting yielding rotation in one direction, and roller clutch connection mounted in said crankshaft flange piece and bearing against said flywheel for providing positive rotation in the other direction.

[Claims 2 to 6 not printed in the Gazette.]

1,273,953. CHAIR. JOSE A. TORANO, Key West, Fla. Filed Aug. 31, 1914. Serial No. 859,532. (Cl. 155—4.)



In a chair, a seat portion including side frame members, a roller journaled in each end therof, an endless

band of wire mesh passing around said rollers to form a horizontal interchangeable seat surface, a plurality of strips disposed in horizontal spaced relation between the stretches of the endless element, a frame disposed over said strips and between the stretches of said endless element, a strip of wire mesh covering said frame, and engaging the under side of the upper stretch of the endless element, and a plurality of springs supported on the strips and bearing against the said strip of wire mesh to form a seat cushion.

1,273,954. COATING COMPOSITION. CLINTON P. TOWNSEND, Washington, D. C., assignor to General Bakelite Company, New York, N. Y., a Corporation of New York. Original application filed Nov. 30, 1909, Serial No. 530,644. Divided and this application filed Dec. 18, 1914. Serial No. 877,874. (Cl. 134—41.)

1. As a coating composition, a phenolic condensation product combined with a toxic body, and constituting a vehicle therefor.

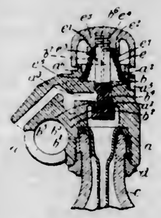
3. As a coating composition, a phenolic condensation product combined with a salt of copper, and constituting a vehicle therefor.

6. As a coating composition, a phenolic condensation product transformable by heat into an infusible and insoluble body, combined with a salt of copper.

9. As a new article of manufacture, a base for anti-fouling varnish and paints comprising the product of condensation of a phenol and formaldehyde, with which is combined chemically a poisonous metallic substance.

[Claims 2, 4, 5, 7, and 8 not printed in the Gazette.]

1,273,955. HEAD FOR SIPHON-BOTTLES AND OTHER VESSELS. JAMES RICHARD TRIGWELL, Norbury, England. Filed Dec. 18, 1914, Serial No. 877,893. Renewed June 15, 1918. Serial No. 240,247. (Cl. 215—115.)

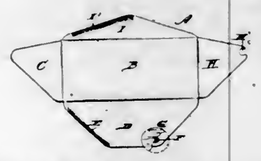


1. A head for siphon bottles and other vessels comprising a body adapted to be connected therewith, said body having a discharge way adapted to communicate with the interior of the vessel and leading to the exterior thereof, the said way being provided with a valve seat, a valve member associated with the said seat and having a stem projecting outwardly from the body, an adjustable cap connected with the onter end of the valve stem, a hollow member of elastic material having imperforate side walls interposed between the body and cap with its ends in contact therewith and surrounding the valve stem, and means provided within the cap for retaining the adjacent end of the said hollow member to prevent lateral expansion of the same.

[Claims 2 to 6 not printed in the Gazette.]

1,273,956. ENVELOP. CHESTER W. TULLAR, Detroit, Mich. Filed Feb. 28, 1918. Serial No. 219,571. (Cl. 229—76.)

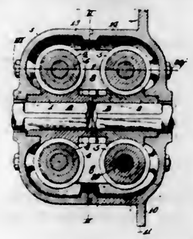
1. An envelop having a sealing flap, a side flap, and a bottom flap having overlapping portions, means for fixedly uniting parts of said overlapping portions, a loose side flap opposite the fixed side flap having hooks formed by cutting away a portion of said loose flap, a disk, and means for securing said disk to one of the fixed portions of the envelop, said means being adapted to coöperate



with the hooks of the loose side flap to secure the latter in its closed position.

[Claims 2 to 4 not printed in the Gazette.]

1,273,957. DIFFERENTIAL. GUSTAV A. UNGAR, Hartford, Conn. Filed July 27, 1917. Serial No. 183,052. (Cl. 74—99.)

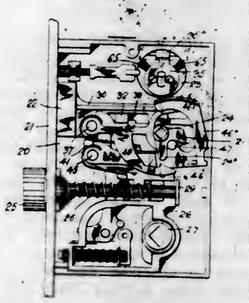


3. A device of the character described comprising, in combination, two screw gears, a worm meshing with each of said gears, an eccentric on each of said worms and a link connecting said eccentrics for coördinating the movement of said worms.

4. A device of the character described comprising, in combination, two screw gears of opposite pitch, a worm meshing with each of said gears, eccentrics on the opposite ends of said worms, and links connecting said eccentrics for coördinating the action of said worms.

[Claims 1, 2, and 5 to 8 not printed in the Gazette.]

1,273,958. LOCK. HENRY G. VOIGHT, New Britain, Conn., assignor to Sargent & Company, New Haven, Conn., a Corporation of Connecticut. Filed Jan. 26, 1916. Serial No. 74,460. (Cl. 70—93.)



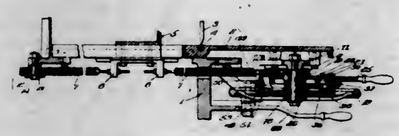
1. In a lock, a dead bolt, a slide, a common tumbler mechanism for said dead bolt and slide, and a cylinder lock having a single cam or rollback movable bodily relatively to said lock for protracting the bolt with or independently of the slide; substantially as described.

2. In a lock, a dead bolt, a slide, interengaging tumblers mounted on the dead bolt and slide respectively, a cylinder lock, and a rollback carried by said cylinder lock and movable bodily relatively to said tumblers for engaging and operating either of said tumblers; substantially as described.

3. In a lock, a dead bolt, a slide, a tumbler carried by the dead bolt, a tumbler carried by the slide, means of engagement between said tumblers, a cylinder lock, a rollback on said cylinder lock, a key for moving said rollback into operating engagement with one of said tumblers, and another key for moving said rollback axially into operating engagement with the other tumbler; substantially as described.

[Claims 4 to 29 not printed in the Gazette.]

1,273,959. FEEDING AND SPACING MECHANISM FOR CUTTING-MACHINES. DARIUS T. WADHAMS, Oswego, N. Y., assignor to Niel Gray, Jr., Oswego, N. Y. Filed Jan. 20, 1916. Serial No. 73,115. (Cl. 164—59.)



1. In a cutting machine, the combination with the frame and a table for the work thereon, of work advancing mechanism, an actuating member therefor, a spacing lever suitably journaled, coupling means interposed between the spacing lever and the actuating member and adapted to couple said lever and member to move together in one direction and adapted to permit an independent return movement of the lever, stops suitably arranged to limit the movement of the spacing lever and said means being operative to release the spacing lever from coupling engagement when in initial position.

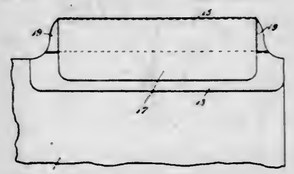
5. In a cutting machine, the combination with the frame and a table for the work thereon, of work advancing mechanism, a hand actuated member therefor, a spacing lever suitably journaled, a coupling means interposed between the spacing lever and the actuating member and adapted to couple said lever and member to move together in one direction and to permit an independent return movement of the lever, means to engage and release the coupling member when the lever is in initial position, and a yielding catch element arranged normally to retain said lever in initial position and adapted to be moved to an inoperative position when desired substantially as described.

9. In a cutting machine, the combination with the frame and a table for the work thereon, of work advancing mechanism, a spacing lever suitably journaled, coupling means adapted to couple the lever and connections to move together in one direction and adapted to permit of an independent return movement of the spacing lever, a stop supporting member connected to be movable with the lever and arranged to be adjustable with relation thereto, a fixed stop thereon adapted to be adjusted with the support and a second stop thereon adapted to be adjustable with relation to the support and fixed stop means adapted to coact with the movable stops for determining the extent of movement imparted to the connections substantially as described.

12. In a cutting machine, the combination with the frame and a table for the work thereon, of work advancing mechanism, a spacing lever suitably journaled, coupling means adapted to couple the lever and connections to move together in one direction and adapted to permit of an independent return movement of the spacing lever, a stop supporting member connected to be movable with the lever and arranged to be adjustable with relation thereto, a stop detachably carried by the stop supporting member and adjustable therewith and a second stop thereon adapted to be adjustable with relation to the support and fixed stop means adapted to coact with the movable stops for determining the extent of movement imparted to the connections substantially as described.

[Claims 2 to 4, 6 to 8, 10, and 11 not printed in the Gazette.]

1,273,960. TAB CONSTRUCTION FOR INDEX-CARD GUIDES. ISAAC WAGEMAKER, Grand Rapids, Mich. Filed Sept. 7, 1917. Serial No. 190,236. (Cl. 129—16.8.)



1. In combination, an index guide card, a tab extending therefrom at one edge, said tab being formed so that its front face lies back of the front face of the card, and a transparent cover for the tab having front and rear sides, the rear side being secured to the back of the tab and adjacent portions of the card and the front side extending over and spaced from the front face of the tab and secured to the card below said tab, substantially as and for the purpose described.

2. A construction containing the elements in combination as claimed in claim 1, with that part of the front of the cover which is located over and spaced from the tab being shorter than the length of the tab, substantially as and for the purpose described.

3. In combination, an index guide card, a tab extending therefrom at one edge of the card, the front face of the tab being located back of the front face of the card, a transparent member covering the tab and adjacent portions of the card and securely cemented thereto on both the front and rear sides of the tab and card, and a second transparent member placed over the first transparent member, said second member comprising front and rear sides, said rear side lying against and cemented to the rear side of the first covering member, and said front side being spaced from the front side of the first transparent member where it lies against the tab but lying against and cemented thereto below said tub, substantially as and for the purpose described.

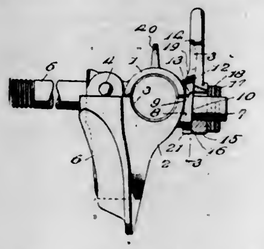
4. In combination, an index guide card, a tab projecting from the upper edge of the card with the front face of the tab located back of the front face of the card, a transparent cover comprising front and rear sides placed over the tab and adjacent portions of the card, said rear side of the cover being secured to the rear face of the tab and adjacent portions of the card, and said front side of the cover being free and spaced from the front face of the tab and lying against and secured to the adjacent portions of the card, with the distance between the front side of the cover and the front face of the tab the same as the distance of the front face of the tab back of the front face of the card, substantially as described.

1,273,961. BOXING FOR DRILLS. ALEXANDER WALKER, What Cheer, Iowa. Filed Nov. 7, 1917. Serial No. 200,810. (Cl. 255—46.)

1. The combination of boxing sections provided with coacting projections, a fulcrum projecting from the lower section concentric with the projection thereon, and a locking lever rotatably mounted upon said fulcrum adapted to bear eccentrically upon the projection on the upper boxing section, the locking lever and the projection on the lower boxing section having coacting stop shoulders whereby to limit the releasing movement of the lever.

4. The combination of boxing sections, a fulcrum projecting from one of the sections at the free edge thereof,

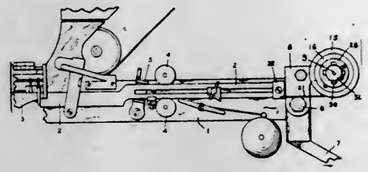
an enlargement around the base of said fulcrum, a lug on the other boxing section adapted to bear upon said enlargement, a retaining washer secured upon the fulcrum, and a locking lever rotatably fitted upon the fulcrum between said washer and the enlargement at the base of



the fulcrum, said lever having an overhanging eccentric rib adapted to bear upon the lug coacting with said enlargement, and one face of said lever being disposed obliquely with respect to the longitudinal axis of the fulcrum.

[Claims 2 and 3 not printed in the Gazette.]

1,273,962. ASSEMBLER-SLIDE-CONTROLLING DEVICE FOR TYPE-BAR-CASTING MACHINES. EDWARD T. WATERS, Omaha, Nebr. Filed Sept. 5, 1916. Serial No. 118,581. (Cl. 199—30.)



1. In a type-bar casting machine, the combination with an assembler-slide, of yielding means arranged to resist movement of the slide away from normal position and to actuate the slide toward normal position, and a drag-device arranged to resist movement of the slide away from normal position only.

2. In a type-bar casting machine having a longitudinally moving assembler-slide, frictional means connected with the slide and adapted to resist movement of the same only in a direction away from normal position.

6. In a type-bar casting machine, the combination with an assembler-slide, of a rotary drum, means tending to revolve the same in one direction, a drag-device clutch-connected with the drum for resisting movement thereof in one direction, and a flexible tensioned connecting element between the drum and slide.

8. Assembler-slide controlling means for type-bar casting machines, comprising means constantly tending to actuate the assembler-slide in one direction, means for frictionally retarding movement of the slide in the other direction only, and independent adjusting means for varying the actuating and retarding means.

11. In a type-bar casting machine, a return-spring device for the assembler-slide, comprising a spiral spring, a drum inclosing the spring and connected to one end thereof, a part on which the drum is revolubly mounted and to which the other end of the spring is connected, means for retaining said part in varying relations to the machine-frame to hold the spring at varying tensions, and a flexible tape connected with the drum and assembler-slide, said tape extending tangentially of the drum and parallel to the path of the slide, whereby the slide may be actuated by the spring and the pull thereof exerted constantly in alinement with the slide.

[Claims 3 to 5, 7, 9, and 10 not printed in the Gazette.]

1,273,963. UNIVERSAL-JOINT ASSEMBLY. FRANK E. WATTS, Detroit, Mich., assignor to Hupp Motor Car Corporation, Richmond, Va., a Corporation of Virginia. Filed May 4, 1918. Serial No. 232,466. (Cl. 64—30.)



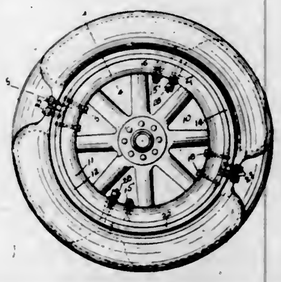
1. In a universal joint assembly, the combination with universal joints, of a propeller shaft therefor comprising a shaft proper formed of small diameter, and a stiffening tube surrounding said shaft and having spacer members interposed between said tube and shaft.

2. In a universal joint assembly, the combination with universal joints, of a propeller shaft therefor comprising a shaft proper formed of small diameter, and a stiffening tube surrounding said shaft and having spacer members interposed between said tube and shaft, one of said spacer members being secured to said tube and said shaft.

3. In a universal joint assembly, the combination with universal joints, of a propeller shaft therefor comprising a shaft proper formed of small diameter, and a stiffening tube surrounding said shaft and having spacer members interposed between said tube and shaft, one of said spacer members being secured to said tube and said shaft and another of said spacer members being secured to said tube but independently rotatable on said shaft.

[Claims 4 to 6 not printed in the Gazette.]

1,273,964. PNEUMATIC AUTOMOBILE-TIRE. HARRY A. WEBB, Hamden, Conn. Filed Jan. 26, 1918. Serial No. 213,898. (Cl. 152—22.)



2. In combination with an automobile wheel, a demountable rim for said wheel consisting of a plurality of separately removable rim sections positioned end to end about said wheel and secured thereto, said sections having formed upon their opposite edges inwardly directed tire-receiving flanges, each removable section being provided with an inflatable section of a tire comprising an outer casing or shoe having beads engaging said flanges and having flattened ends by means of which said ends may be clamped to the rim sections, and inflatable inner tubes mounted in said casings, whereby each section of a tire is removably secured to its rim section.

3. In combination with an automobile wheel, a tire band upon said wheel having spaced rim-retaining means secured to the periphery of said band, a demountable rim for said wheel consisting of a plurality of independently removable rim sections mounted upon said band end to end and held against lateral movement in either direction by said retaining means, means for securing said removable sections upon said band, each section being provided with an inflatable section of a pneumatic tire having flattened ends formed thereupon, and means for clamping the flattened ends of said tire sections to said rim sections, whereby the tire section is removably secured to its rim section and is removable from the wheel therewith.

6. An automobile tire section, comprising a longitudinally curved inflatable member having closed ends and

flattened projecting end portions, said section having a pair of rim engaging beads formed thereupon, means for reinforcing said beads and the projecting end portions formed upon the ends of the tire section, comprising strips of flexible material positioned within said beads and extending longitudinally thereof throughout said beads and into said projecting end portions, the adjacent ends of the strips being joined together within said projecting end portions, whereby a U-shaped reinforcing element is formed within each projecting end portion.

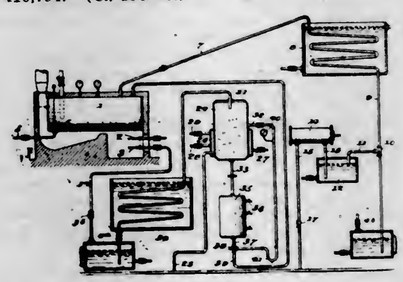
[Claims 1, 4, 5, and 7 to 12 not printed in the Gazette.]

1,273,965. VENTILATING WIND-SHIELD FOR MOTOR-VEHICLES. LAURENCE HARRISON WEHRLE, Murfreesboro, Tenn. Filed July 30, 1917. Serial No. 183,457. (Cl. 21—148.)



In a motor vehicle, brackets secured to the body at the end of the dashboard and provided with bearings for the pivotal supporting of the wind shield sections for permitting the lower section to be swung inwardly, a resilient arm secured to the dashboard and extending rearwardly and upwardly and having transverse grooves for engagement by the lower edge of the wind shield section to hold the said section in adjusted position, the dashboard having openings at the hood, and a screen over the openings.

1,273,966. OIL-REFINING APPARATUS. FRANK E. WELLMAN, Kansas City, Kans., assignor to The Kansas City Gasoling Company, Kansas City, Kans., a Corporation of Kansas. Filed July 22, 1916. Serial No. 110,794. (Cl. 196—3.)



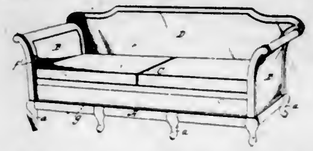
A system for treating liquid hydrocarbons comprising the following instrumentalities: a vaporizer or boiler, a vapor line leading to a point elevated above the vaporizer, a condenser connected to said vapor line, a discharge pipe for said condenser, means in said discharge pipe for effecting a cut between the hydrocarbons of different series in the condensed product, a pump connected with said means and adapted to receive the heavier hydrocarbons therefrom, a superheater coil connected to the pump, means for heating said coil, a dephlegmator or fractional separator receiving the hydrocarbons of mixed series from the superheater coil, after cracking therein, a condenser to condense said hydrocarbons having a low specific gravity, a receiving tank connected to said condenser, and a back trap or return pipe line connected to the dephlegmator, extending to the primary source of supply, and adapted to receive only the heavier uncracked hydrocarbons from the dephlegmator.

1,273,967. PHENOL-ALDEHYDE CONDENSATION PRODUCT. THEODOR SETH WENNAGEL, Alt-Rahlstedt, near Hamburg, Germany, assignor to the Firm of Naamlooze Vennootschap Hollandsche Proteine Maatschappij, Amsterdam, Netherlands. Filed Jan. 22, 1917. Serial No. 143,853. (Cl. 106—22.)

2. The process of obtaining phenol aldehyde condensation products, which consists in using the neutral alkali salts of the aromatic oxyacids which are not hydrolytically disassociated as condensing means.

[Claim 1 not printed in the Gazette.]

1,273,968. SOFA-BED. LE GRAND S. WHEDON, Medina, N. Y. Filed Aug. 1, 1916. Serial No. 112,502. (Cl. 155—20.)

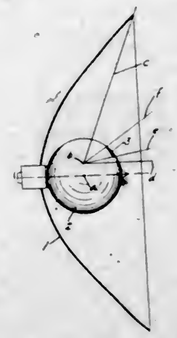


1. In a sofa bed, the combination of end frames, horizontal front and back rails rigidly connecting said end frames, a removable back, tongue and groove sliding connections between said back and said end frames which hold the ends of the back in connection with said end frames to permit the removal of the back, and a tongue and groove connection between the lower portion of said back and one of said bottom rails whereby said back is held rigid with said rail between said end frames.

2. In a sofa bed, the combination of end frames, horizontal front and back rails rigidly connecting said end frames, said end frames having upright grooves, and one of said bottom rails having a longitudinal tongue, and a removable back having tongues at its ends which slidably fit said grooves to removably connect said back with said end frames, and a groove in the lower portion of said back which receives said tongue on said rail to hold said back rigid with said rail between said end frames.

3. In a sofa bed, the combination of end frames, horizontal front and back rails rigidly connecting said end frames, and a removable back, said end frames having at the front and rear portions thereof integral parts which cooperate with integral parts at the ends of said back to form interlocking connections to hold said back in connection with said end frames either at the front or back of the sofa, and said front and back rails having integral parts adapted to interlock with the lower portion of said back to hold the back rigid between said end frames.

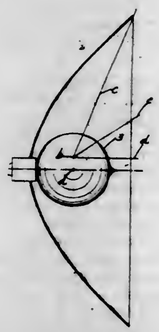
1,273,969. HEADLIGHT. OVERTON WINSTON, Minneapolis, Minn. Filed Oct. 5, 1916. Serial No. 123,847. (Cl. 240—48.6.)



In a headlight, the combination with a reflector, of a light bulb therein, said bulb having two filaments, one at

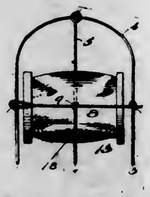
the axis and the other above the axis of said reflector, and the globe of said bulb having a frosting or light dimming surface on its upper front portion terminated at its lower edge above a line that is parallel to the axis of the reflector and intersects said vertically offset filament, and the upper edge of which terminates below a line that radiates from said offset filament and touches the rim of said reflector at its upper edge, the said frosting being approximately semicircular with its approximately straight edge at the bottom thereof, the curved upper edge of said frosting following a line intersected by an imaginary line oscillated from the hot spot of said offset filament and maintained always at a constant angle to another line drawn from said offset filament and intersecting the rim of said reflector.

1,273,970. HEADLIGHT. OVERTON WINSTON, Minneapolis, Minn. Filed Oct. 5, 1916. Serial No. 123,848. (Cl. 240—48.6.)



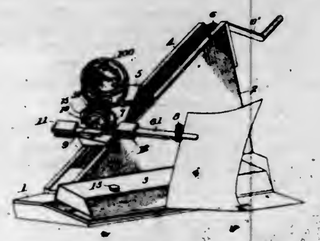
In a headlight, the combination with a reflector, of a two-filament light bulb therein, said bulb having two filaments, one at the axis and the other above the axis of said reflector, and the globe of said bulb having an approximately circular frosting or light dimming surface on its upper front portion, the upper edge of said frosting being terminated materially below a line that radiates from said upper filament and intersects the upper portion of the rim of said reflector, and the lower portion of said frosting being extended down to a line that radiates from said upper filament horizontally or parallel to the axis of said reflector.

1,273,971. SPOOL-HOLDER. CLINTON M. WOLFE, Coeburn, Va., assignor of one-half to Charles O. Ramsey, Coeburn, Va. Filed Mar. 30, 1918. Serial No. 225,616. (Cl. 242—136.)



A spool holder of a single piece of wire comprising three curved body bars one of which is formed with an eyelet, a front bar, the two outside bars merging into a rear arch bar, the intermediate curved bar secured to the arch bar and a pin projecting from the junction of these parts, said body having a rigid side bar, a resilient spool supporting bar projecting therefrom, and a second side bar fashioned with a slot for the spool supporting bar and formed with a resilient tongue, as described.

1,273,972. DEVICE FOR TESTING THE TEARING STRENGTH OF PAPER. ROBERT ODIORNE WOOD, Brookline, Mass., assignor to Arthur D. Little, Incorporated, Boston, Mass., a Corporation of Massachusetts. Filed May 5, 1917. Serial No. 166,512. (Cl. 265—19.)



1. The combination with means defining an edge of means for holding a sheet of fibrous material along said edge, means for tearing the material against the edge and means for indicating the force necessary to tear the material.

9. The combination with means defining an edge of means for holding a sheet of fibrous material along said edge, an arm positioned adjacent said means, means on said arm for gripping the material, means for moving the arm in the general direction of the edge, yielding-means associated with the lever adapted to yield under the force required to tear the material against the edge and means for indicating the amount of yielding when the material is torn.

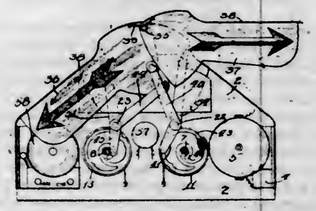
15. The combination with means defining an edge of means for holding a sheet of fibrous material along said edge, means for gripping the material, means for moving the gripping means at an angle to the edge and to the base-plane thereof and means for indicating the force required to tear the material against the edge.

20. The combination of a straight-edge, means cooperating therewith to hold a sheet of fibrous material along its edge, means for defining an inclined plane, at an angle to the base-plane of the straight-edge, a lever adapted to be moved up the inclined plane, means on this lever for gripping the sheet and a pressure gage connected with the lever to indicate the force required to move the lever in tearing the sheet against the edge.

27. The combination with means defining an edge, of means for holding a sheet of fibrous material along the said edge, means for pulling the said sheet against the edge to tear it, said last named means being adapted to keep the angle of pull on the paper constant.

[Claims 2 to 8, 10 to 14, 16 to 19, 21 to 26, 28, and 29 not printed in the Gazette.]

1,273,973. AUTOMOBILE REAR SIGNAL. RICHARD N. WOODMAN, Chicago, Ill. Filed July 15, 1916. Serial No. 109,484. (Cl. 40—53.)



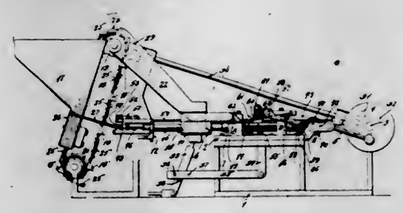
1. In an automobile signal device of the class described, a casing, signal plates and signal arms concealed therewithin, and cam controlled means for swinging the same into visible position outwardly from said casing and for imparting a waving motion thereto.

5. In an automobile signal device of the class described, a casing, a pair of signal plates and a pair of signal arms concealed therewithin, and clutch controlled cam means for swinging the same into visible position outwardly from said casing and to impart a waving motion thereto.

7. In a mechanism of the class described a casing having a plurality of independent signaling devices concealed therein, electric motor driven means for swinging one of the same positively into visible position, a cam mechanism for imparting a continuous waving movement to said signaling device, and selective means to control the electric circuits to move and operate any one of the signaling devices.

[Claims 2 to 4, 6, and 8 not printed in the Gazette.]

1,273,974. NUT-CRACKING MACHINE. ROBERT E. WOODSON, St. Louis, Mo. Filed June 22, 1916. Serial No. 105,159. (Cl. 146—3.)



1. In a nut cracking machine, an anvil, a follower alined therewith and normally spaced therefrom, means for moving the follower toward the anvil, a segmental block carried by the follower at the end remote from the anvil, a rotatable member in line with the segmental block, and a spring engaging the segmental block and constraining it toward angular relation to the rotatable member.

2. A nut cracking machine comprising a plurality of associated anvils, a corresponding plurality of followers alined with the anvils and normally spaced therefrom, a slide carrying the followers, means for moving the slide and followers bodily toward the anvils, elastic means between the followers and slide for permitting movements of the followers irrespective of the slide, a segmental block carried by each follower at the end remote from the anvil, a rotatable member in line with each segmental block, a spring engaging each segmental block and constraining it to angular relation to the respective rotatable member, a common carrier for the springs mounted on the slide, and means for causing rotation of the rotatable members by movements of the slide.

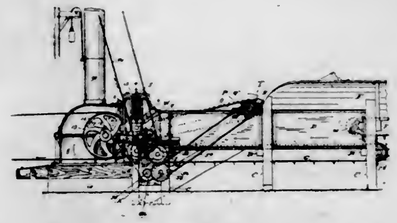
3. In a nut cracking machine, a plurality of associated anvils, a corresponding plurality of followers alined with the anvils and movable toward and from the latter, a segmental block carried by and pivoted to each follower at the end remote from the respective anvil, a rotatable member in line with each segmental block and adapted to engage the block and move it about its pivotal connection with the follower, a spring engaging each segmental block and constraining it to angular relation to the respective rotatable member, a common carrier for the springs, and means for causing rotation of the rotatable members.

7. In a nut cracking machine, a cracking device, a receptacle for the nuts to be cracked and means for feeding the nuts from said receptacle to said cracking device, said means including a nut carrier provided with a nut holder, a nut ejector secured to said carrier and provided with a free portion which lies adjacent to said nut holder, and means for actuating said carrier and nut ejector to locate the free portion of said ejector in the path of said nut holder, thereby discharging the excess nuts from said nut holder.

8. In a nut cracking machine, a cracking device, a receptacle for the nuts to be cracked, and means for feeding the nuts one at a time from said receptacle to said cracking device, said means including a nut carrier arranged to move upwardly from the nuts in said receptacle, said nut carrier having a nut holder whereby the nuts are picked from said receptacle, a nut ejector carried by said carrier at a point above said nut holder, and means for moving said nut ejector relative to said nut holder to discharge the excess nuts from said nut holder.

[Claims 4 to 6 and 9 to 15 not printed in the Gazette.]

1,273,975. HAY-CUTTER. EDWARD J. WOOLWORTH, Kearney, Nebr. Filed Jan. 21, 1916. Serial No. 73,464. (Cl. 146—29.)



1. In a machine of the character described, the combination with a rectangular base portion, a cover having a flat top and a quadrant back and hinged to said base portion, of a shaft mounted in said casing, cutting blades mounted on said shaft, a cutter therefor, a catcher consisting of a curved plate pocket, secured to the upper rear portion of said cover and provided with a curved front support concentric with said shaft, and a grinding cage below the hinge concentric with said shaft, substantially as and for the purpose described.

2. A machine of the character described, comprising a rectangular base portion, a hinged cover, a curved pocket located within said cover and at one side thereof, a return air pipe in the top of the cover projecting partly over said pocket, whereby said pocket is cleared for the reception of metal that may enter the machine.

3. A mill of the character described comprising a casing, a shaft mounted therein, a cutter bar, and a cutter thereon inclined to the axis of said shaft, a plurality of blade supports fixed on said shaft, a plurality of series of straight cutting blades mounted on said blade supports parallel to said shaft, and arranged in short sections horizontally and by steps circumferentially in adjacent series, and means to adjust said blades, substantially as described.

4. The conbination with a mill of the character described having a discharge outlet, an exhaust fan adapted to draw by suction the discharge from said mill, and pipes leading from the center of said fan to the mill outlet and from the discharge of said fan to the packing floor, of an auxiliary pipe leading from the packing floor, having a covered hopper at one end to maintain the suction effect and connected with said discharge pipe from the mill on the suction side of said fan, substantially as shown and described.

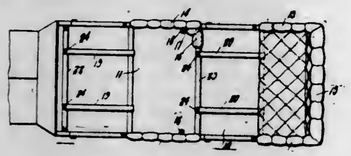
5. In a mill of the character described, the combination with a feed table having holes transversely located near the mill, and a traveling feed device arranged to pass along above said table and down through the holes therein, whereby the smaller particles of feed are likewise carried down through said holes, of a transverse conveyer located below the holes in said table to catch the feed particles, and an elevator located at the side of said table with its boot below the said conveyer, and provided with a delivery spout near the upper end extending over said table, substantially as shown and described.

1,273,976. CRUDE-OIL BURNER. ERNEST T. WORLEY, Port Houston, Tex., assignor to H. H. Hoffman & Company, Houston, Tex. Filed Aug. 17, 1917. Serial No. 186,685. (Cl. 158—75.)



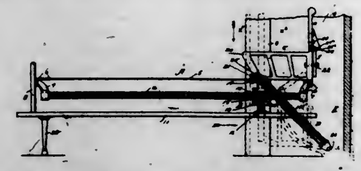
An oil burner including a steam pipe, a T-connection secured upon one end thereof, removable plugs closing the ends of said connection, said connection being provided with a central transverse slit, a perforated baffle plate secured in said end of said steam pipe, means through which steam is introduced into the steam pipe, an adjustable fuel nozzle concentrically arranged within said pipe through which fuel is discharged into said pipe, a fuel pipe through which fuel is delivered into said nozzle and means for controlling the fuel and steam, respectively, through said steam and fuel pipes.

1,273,977. AUTOMOBILE-BODY. ERNEST WYNN, Laona, Wis. Filed Dec. 7, 1916. Serial No. 135,660. (Cl. 21—43.)



A vehicle body provided with a forward and a rearward seat, a supporting bar extending transversely across said body in spaced relation to the forward end thereof and in spaced relation to said forward seat, said bar being provided with openings formed therein, a pair of removable bars extending longitudinally of said body and provided at their forward ends with pins adapted to be removably disposed in said openings and having their opposite ends resting upon one edge of said forward seat, a second supporting bar provided with openings and extending across the opposite edge of said forward seat, and a plurality of longitudinally extending bars equipped at their forward ends with pins adapted to be disposed in the apertures of said last mentioned supporting bar and having their opposite ends resting upon the forward edge of the rear seat.

1,273,978. FOLDING BED. JOHN SIMON YOUNG and EDWARD W. YOUNG, Los Angeles, Cal., assignors of one-half to John L. Schecher, Los Angeles, Cal. Filed Dec. 26, 1914. Serial No. 879,152. (Cl. 5—37.)

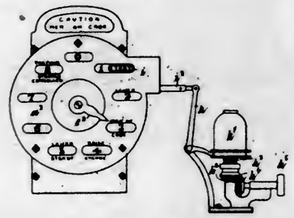


1. A bed frame provided with side rails and a wire mattress above the same, and means applied to the side rails whereby the bed frame may be pivotally supported at its sides; said means being provided with projecting portions with which a panel or the like may be connected, together with said panel so applied; further means connected with said first named means adjacent to the spring mattress, and a spring or the like connected with said latter means and likewise with a fixed support; said last named means consisting of side frames extending above the wire mattress and carrying a head board and being clamped to said first named means with the edges of the wire mattress between the same.

2. In a bed device of the character disclosed, members attachable to the sides of the bed frame, and other members attachable to supports and adapted to receive said first named members in pivotal relation whereby the bed may be swung upon such members; said first named members likewise being provided with portions to which a panel or the like may be attached beneath the bed frame and with further members attachable to said first named members and adapted to clamp between said first named members and the last named members a wire mattress attached to the bed frame.

[Claims 3 to 5 not printed in the Gazette.]

1,273,979. SIGNALING APPARATUS. ROBERT GEORGE YOUNG, Bream, England. Filed July 21, 1917. Serial No. 181,985. (Cl. 116—63.)



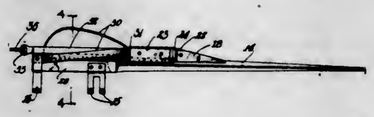
1. A signaling apparatus winding engine and the like comprising in combination, a dial bearing signaling designations, a movable member to which a signaling cord or equivalent is attached, a dog pivoted on said member, a ratchet wheel urged in one direction adapted to be driven by said dog, a retaining detent on a fixed pivot co-acting with said ratchet wheel, a timing device reinforced at each movement of the movable member adapted to release the detent from the said ratchet wheel, a second ratchet wheel co-axially mounted with and adapted to be unidirectionally driven by the first ratchet wheel, a signaling pointer carried by said second ratchet wheel and located in relation to said dial, a retaining detent for said second ratchet wheel, means carried by said movable member for releasing said detent at each stroke, a cautionary signal independent of said dial signals normally not exhibited adapted to be put into normal position by said second ratchet wheel when a predetermined signal, say 8, is given, automatic retaining means for same and releasing means for said signal adapted to be operated by the said first ratchet wheel when another predetermined signal, say 3, is given, substantially as described.

2. A signaling apparatus as claimed in claim 1 in combination with a motor, a device operable by said motor, said device being capable of occupying two positions indicating "Stop" and "Start" respectively, and means operatively connecting the movable member to said device whereby the latter will occupy one position or the other according as said motor is active or inactive.

3. An apparatus as claimed in claim 1 in combination with a control device operated by the engine or cage at a predetermined point in its travel adapted to cancel the order just before the completion thereof, substantially as described.

1,273,980. WIRE-CUTTING ATTACHMENT. JOHN ZUKOWSKI, Detroit, Mich. Filed Apr. 8, 1918. Serial No. 227,177. (Cl. 42—90.)
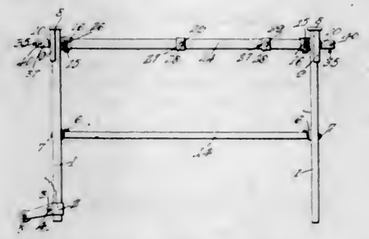
1. In a wire cutting attachment for bayonets, the combination with a fixed blade secured to the bayonet, a slidable blade coöperative therewith, means for guiding said slidable blade, means normally projecting said sliding blade forward, and means for retracting said slidable blade.



2. In a wire cutting attachment, the combination with a cutter blade rigidly engaged with the bayonet, a sliding blade coöperative therewith, means for guiding said sliding blade, a plurality of springs adapted to project said sliding blade forward, and means for retracting said sliding blade so as to present an opening between said cutter-blades for the entrance of the article to be cut.

[Claims 3 and 4 not printed in the Gazette.]

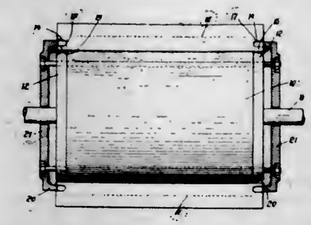
1,273,981. MOTOR-STAND. WILLIAM JAMES ADAMS, Cochranton, Pa., assignor to Nonpareil Manufacturing Company, Cochranton, Pa. Filed July 7, 1917. Serial No. 179,226. (Cl. 29—89.)



1. In a motor stand, a frame comprising tubular side bars provided with a notch in each end, adjustable end bars, a boss on each end of the end bars and adapted to enter the bore of the side bars, a rib extending longitudinally of each end bar and adapted to enter the notch, and means for clamping the side bars between the end bars, means for securing a motor within the frame, a support, and means for adjustably securing the frame to the support.

[Claims 2 and 3 not printed in the Gazette.]

1,273,982. ROLL FOR BEATING-ENGINES. ALBERT J. ALLISON, Dayton, Ohio, assignor to The A. A. Simonds Sons Company, Dayton, Ohio, a Corporation of Ohio. Filed May 3, 1917. Serial No. 166,102. (Cl. 92—22.)



1. A beater roll, comprising a cylindrical core, the end of which is slightly tapered, a plurality of fly bars arranged around the core, each bar having a tongue which extends over the tapered portion of the core, a ring adapted to encircle the tongues, said ring having a tapered interior whereby when it is forced axially with reference to the core the tongues are drawn toward the axis of the core, the space beneath the tongues afforded by the taper of the core permitting more or less deflection of the tongues, so that each bar is clamped against the core by the tension of its own tongue; and means for forcing the ring axially.

[Claims 2 to 6 not printed in the Gazette.]

1,273,983. RAILWAY-FROG. JOHN ALONZO, Deborgia, Mont. Filed Oct. 31, 1917. Serial No. 199,532. (Cl. 104—5.)

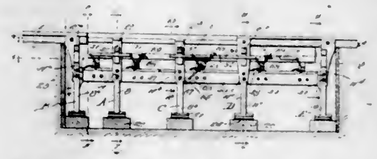


3. A structure as specified in claim 2, together with spacers interposed between said terminals at the ends of said bridging blocks, said first named bolts passing through said spacers.

4. A railway frog comprising a V rail, a pair of diverging rail terminals on opposite sides thereof, the widely spaced ends of said terminals being curved outwardly and beveled downwardly, and a pair of filler bars between said terminals and said V rail and having their outer ends beveled downwardly adjacent the bevels of said terminals.

[Claims 1 and 2 not printed in the Gazette.]

1,273,984. RAILWAY-SWITCH. JOHN ALONZO, Deborgia, Mont. Filed Oct. 31, 1917. Serial No. 199,533. (Cl. 104—12.)



1. In combination with a railway, a rail tongue movable vertically, vertical supports below the rails, a sill secured to said supports and extending longitudinally beneath said tongue, a cam resting rockably on said sill and supporting said tongue, and means for rocking said cam to operate said tongue.

2. In a railway switch, the combination of two parallel series of posts whose upper ends support the rails, said posts having vertical guideways, a pair of vertically movable switch tongues mounted in said guideways, means for raising and lowering said tongues, and tie members extending between the two series of posts.

8. A structure as specified in claim 7, together with a guard carried by said cam to overlie the sill when said cam is in inoperative position to prevent accumulation of foreign matter on the portion of said sill which supports said cam when operative.

13. In combination, a vertically movable tongue, a rocking cam for raising said tongue, means for rocking said cam, and a flexible connection between said cam and said tongue for pulling the latter downwardly when said cam is lowered.

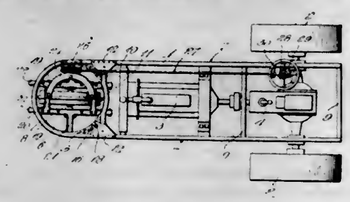
14. A structure as specified in claim 13, said connection comprising a link pivoted to said cam and having a loop, said tongue having a slot with which said loop registers, and a pin passing loosely through said loop and slot.

[Claims 3 to 7, 9 to 12, and 15 to 22 not printed in the Gazette.]

1,273,985. WHEELED MACHINE. ALFONS ALTENBERG, Racine, Wis. Filed Feb. 2, 1918. Serial No. 215,107. (Cl. 21—202.)

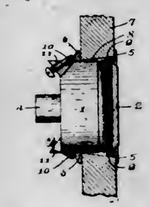
1. In a wheeled machine, the combination of a horizontal frame whose front end is formed of a channel metal

bar of substantially semi-circular shape with its channel disposed inwardly, a wheel supported turntable having substantially half of its circumference positioned in the channel of said frame end and having vertical and horizontal rollers engaging the vertical and horizontal portions thereof, and a transverse bar rigidly carried by the frame in rear of said turntable and engaging the rollers thereof, said bar forming a continuation of the semi-circular track of said rollers.



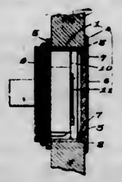
2. A structure as specified in claim 1, said transverse bar being formed of channel metal with its channel disposed forwardly and receiving said rollers therein, the intermediate portion of said bar being bowed rearwardly on the radius of said frame end.

1,273,986. GAGE. HARUTUN B. AZADIAN, Syracuse, N. Y. Filed Dec. 7, 1914. Serial No. 875,797. (Cl. 73—31.)



A gage comprising a cup-shaped body open at its front end and closed at its rear end, gage mechanism movable in the body through the open front end, a crystal at the front end of the body, a peripheral collar threading on the front end of the body and having means for engaging the crystal to hold the same in position, the rear end of the body being closed, a collar slidable on the rear end of the body and coöperating with the former collar to clamp the body in position in the opening of a support, and means at the rear end of the body and coacting with the slidable collar, said means being movable from below the peripheral surfaces of the body and having a portion movable above said surface to engage the slidable collar and force the same axially into clamping position, substantially as and for the purpose described.

1,273,987. GAGE. HARUTUN B. AZADIAN, Syracuse, N. Y. Filed Dec. 7, 1914. Serial No. 875,798. (Cl. 73—31.)



1. A gage comprising a cylindrical casing open at its rear end and having an opening at its front end, a body movable in the casing through the rear end thereof and having a cylindrical portion fitting and closing the rear end of the casing, gage mechanism supported by the body, and a cylindrical dial plate carried by the body and substantially fitting the interior of the casing and being located near the open end of the casing, substantially as and for the purpose specified.

2. Gage mechanism comprising a casing open at its ends and having opposing peripheral flanges, one being fixed and the other threading on the casing, a crystal at the front end of the casing, means for holding the crystal in the casing, a body threading into the casing through the rear end thereof, said body closing the rear end of the casing and being located entirely within the same and gage mechanism carried by the body, substantially as and for the purpose described.

3. A gage comprising a cylindrical casing open at its rear end and having front and rear opposing peripheral flanges, the flanges being located on the periphery of the body in position to clamp the body to a support or wall, the front flange being fixed and the rear flange threading on the casing, the casing also having an interior annular shoulder at its front end, a crystal movable in the casing through said rear end and against the shoulder, means for holding the crystal against said shoulder, and a cup shaped body supported by the body and movable in the body through said rear end and having threaded connection therewith, substantially as and for the purpose described.

1,273,988. FEEDING MECHANISM FOR DEPOSITORS. ALONZO LINTON BAUSMAN, Chicopee, Mass., assignor to National Equipment Company, Springfield, Mass., a Corporation of Massachusetts. Filed Oct. 16, 1916. Serial No. 125,969. (Cl. 107—7.)

1. The combination in a confectionery depositing machine, of a tray conveyer, means to move the conveyer step by step by uniform increments, and a device operable periodically to move the trays relatively to the conveyer to secure an additional increment of movement of the trays.

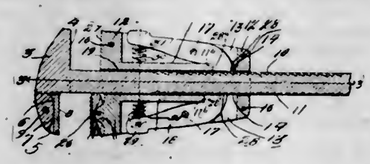
3. The combination in a confectionery depositing machine, of a conveyer adapted to propel trays therethrough, means to move the conveyer step by step by uniform increments and a continuously reciprocable device arranged periodically to engage and move the trays relatively to the conveyer whereby an additional increment of movement is imparted to the trays.

6. The combination in a depositor, of a conveyer arranged to transport trays in spaced relation to the depositor, a second conveyer arranged to carry trays through the depositor in abutting relation, and a supplementary feeding device arranged to periodically move a tray upon the second conveyer a distance equal to the difference between the spacing of the trays on the two conveyers, to insure an equal travel of the trays in an equal time by both conveyers.

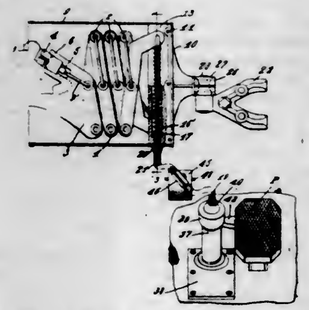
[Claims 2, 4, and 5 not printed in the Gazette.]

1,273,989. WRENCH. ALEXANDER C. BEADLE, Calumet, La. Filed June 15, 1915. Serial No. 34,245. (Cl. 81—140.)

The combination with a wrench shank having ratchet teeth on its opposite faces and provided at one end with double wrench jaws, of a double jawed body comprising a pair of opposed central sections spaced to receive the shank therebetween, whereby the sections are arranged adjacent and parallel with the faces of the shank having the ratchet teeth, a pair of outer plates secured to the sections holding them rigid and parallel to each other, whereby the shank may pass through the space, each of said sections being channeled longitudinally, said channel comprising opposite end walls, side walls, and an inner wall adjacent one of the toothed faces of the shank, the end of the channel remote from the jaws of said body having an opening adjacent the toothed face of the shank, said opening being formed through the inner wall, whereby one end edge of the inner wall forms an abutment shoulder, spring tensioned dogs pivoted in said channels, the noses of the dogs remote from the jaws of the body extending laterally toward each other and through said openings and having shoulders engaging the shoulder walls of the openings to relieve the shearing action on the pivots of the dogs, said noses being in staggered relation and having teeth staggeredly coöperating with the teeth of the shank to hold the body in different adjusted positions.



1,273,990. VEHICLE-SIGNAL. FELIX J. BENITOA, Tampa, Fla., assignor to New York Signal Co., Inc., New York, N. Y. Filed June 27, 1917. Serial No. 177,316. (Cl. 116—31.)



3. A device of the character described, embodying a head, a movable signal member carried thereby, a tubular member, a tube connected to said member and extending to the head, a flexible wire extending through said tube and connected to the signal member, an actuating member movable within the tubular member and extending therefrom, and an elastic spring within the tubular member connecting the actuating member and wire.

5. A device of the character described, embodying a head, a movable signal member carried thereby, a tube extending to the head, actuating means to which the tube is connected and including a flexible wire extending through the tube and connected to the signal member, a U-shaped member, a clamp for the tube, means for securing said clamp to said member, and a clamping screw carried by said member opposite to the last mentioned means.

[Claims 1, 2, and 4 not printed in the Gazette.]

1,273,991. PROCESS OF THE MANUFACTURE OF NITRIC ACID. EINAR BERGVE, Notodden, Norway, assignor to Norsk Hydro-Elektrisk Kvaelstofaktieselskab, Christiania, Norway. Filed May 18, 1918. Serial No. 235,410. (Cl. 23—1.)

1. A process for the manufacture of highly concentrated nitric acid which comprises causing nitrogen tetroxid, oxygen and water to react at a temperature about 70° C. and at a pressure above the vapor pressure of the tetroxid at the temperature used.

2. A process for the manufacture of highly concentrated nitric acid which comprises causing nitrogen tetroxid, oxygen and dilute nitric acid to react upon one another under pressure of about 20 atmospheres and at a temperature of about 70° C.

3. A process for the manufacture of highly concentrated nitric acid which comprises causing nitrogen tetroxid, oxygen and water to react upon one another under a pressure of about 20 atmospheres and at a temperature of about 70° C.

1,273,992. DIAMOND-MOUNTING. CONRAD BIRGBAUER, Detroit, Mich. Filed Mar. 16, 1916. Serial No. 84,574. (Cl. 125—20.)



2. A diamond mounting comprising a holder body, a socket member screwed therein, prongs forming part of said socket member and adapted to retain a diamond in said socket member, a cap screwed in said holder body on said prongs, and a filler adapted to permanently anchor said socket member, said cap and the diamond held by said socket member and cap within said holder body.

3. A method of making a diamond tool, consisting first in providing a holder body with a cavity, then a socket member in which a diamond is mounted, placing the socket member within the cavity of the holder body, and then securing the socket member in the holder body by a sealing material.

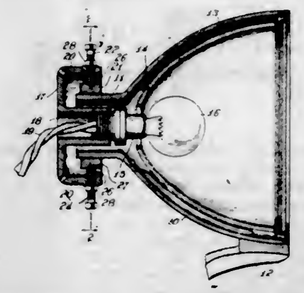
[Claim 1 not printed in the Gazette.]

1,273,993. PRINTING-PLATE FOR MULTICOLOR PHOTO-ENGRAVING. CARL BLECHER, Berlin-Dahlem, Germany, assignor to Rotophot Akt. Ges. für Graphische Industrie, Berlin, Germany. Filed Dec. 4, 1914. Serial No. 875,550. (Cl. 101—401.)

1. A printing plate for use in three or multicolor photo-engraving printing having the areas thereof requiring etching to different depths to produce the several tones in a print distinguished from one another by the representation thereon of different screens.

2. A printing plate for use in three or multicolor photo-engraving printing having the areas thereof corresponding to the several tones in a print distinguished from one another by the dots and lines arranged in different relations.

1,273,994. LAMP. WILLIAM J. BOHAN, St. Paul, Minn. Filed Oct. 5, 1917. Serial No. 194,925. (Cl. 240—44.)



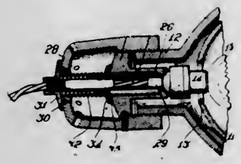
1. In a projecting lamp, in combination, a shell having an externally threaded tubular stem, a reflector housed within the shell and having an aperture in its inner end,

an incandescent bulb located within the reflector, the base of the bulb extending through the aperture thereof, a collar in threaded engagement with the stem of the shell, a cap attached to the base of the bulb and having a flange surrounding the collar and spaced apart therefrom, and adjusting screws in threaded engagement with the flange and bearing upon the collar.

5. In a lamp support, in combination, a tubular stem, a collar threaded upon the stem, and a cap having a socket for receiving a lamp base and being secured to the collar and laterally adjustable with reference thereto.

[Claims 2 to 4 not printed in the Gazette.]

1,273,995. LAMP. WILLIAM J. BOHAN, St. Paul, Minn. Filed Oct. 5, 1917. Serial No. 194,926. (Cl. 240—44.)

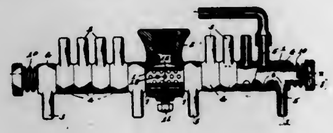


2. In a lamp, in combination, a shell having a tubular stem, an incandescent bulb within the shell, the base of the bulb projecting into the stem and being rounded at its rearward end to the section of a sphere, a cap longitudinally adjustable on the stem and having an internal seat for the bulb base complementary in form to the rear end thereof, a threaded rod projecting backwardly from the bulb base through the cap and being capable of lateral movement with reference thereto, a nut on the outer end of the rod and adapted to bear upon the rearward face of the cap, a transverse apertured partition in the cap, a block slidable on the side and engageable with the partition, and a spring encircling the rod and reacting between the nut and the block, the rearward face of the cap and the surface of the partition being concentric with the rear end of the bulb base.

3 In a lamp, in combination, a tubular support, a cap threaded upon the support and having concentric inner and outer curved seats, a lamp base complementary to and engaging the inner seat and having a stem extending laterally through both seats, a member fitting upon the stem and being complementary to and engaging the outer seat, and means for binding such member to said seat.

[Claim 1 not printed in the Gazette.]

1,273,996. LUBRICATING ATTACHMENT FOR METAL-WORKING MACHINES. CHARLES J. B. BORGESON, Syracuse, N. Y. Filed Mar. 8, 1917. Serial No. 153,258. (Cl. 184—6.)



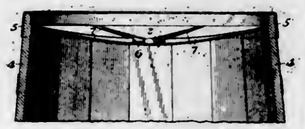
1. A lubricator for metal working machines comprising a feed pipe having an elongated circumferentially extending slot, a nozzle mounted on the feed pipe and having a discharge opening of smaller diameter than the length of the slot and movable about the pipe to different radial angles thereto with its discharge opening in full registration with the slot at different angles of said nozzle and being movable completely out of registration with the slot to close the slot, substantially as and for the purpose described.

2. A lubricator for metal working machines comprising a feed pipe, nozzles mounted on the feed pipe and having a discharge opening, the nozzle being movable about the pipe and having a discharge opening arranged to receive the full amount of lubricant therefrom when arranged at various angles relatively to the pipe and being additionally movable relatively to the pipe to cut off the communication between the pipe and the nozzle, substantially as and for the purpose specified.

8. A lubricator for metal working machines comprising a feed pipe, a support for the feed pipe, the feed pipe having its outlets along one side thereof, nozzles mounted on the pipe and adjustable about the same, each nozzle being movable independently of the others about the pipe to carry its opening into and out of registration with an outlet of the feed pipe, the feed pipe being rotatably mounted in its support to change the position of the outlets thereof, and means for holding the pipe in its adjusted position, substantially as and for the purpose described.

[Claims 3 to 7 not printed in the Gazette.]

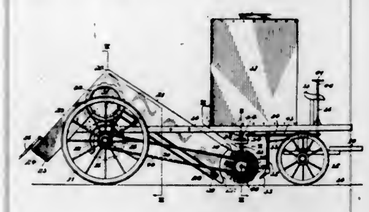
1,273,997. METAL HEAD FOR BARRELS OR KEGS. JAMES W. BRAINARD, Pittsburgh, Pa. Filed Mar. 8, 1916. Serial No. 82,853. (Cl. 217—76.)



3. A metallic head for staved barrels, kegs and the like, said head being formed from a sheet metal blank dished inwardly over the full diameter of the barrel and having an outwardly flared flange rising from the edge of the dished portion and adapted to fit closely within the chime of the barrel, said flange being bent horizontally outwardly at its outer edge and thence backwardly to form a chime hoop portion, said flange and hoop portion forming a wedging seat for the chime and said flange also forming an abutment to resist outward flexure of the head, substantially as described.

[Claims 1 and 2 not printed in the Gazette.]

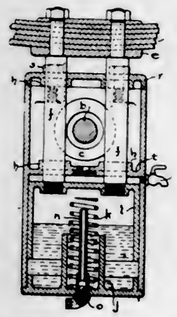
1,273,998. STREET-CLEANER. WILLIAM BRAJDOVICS, Sharpsville, Pa. Filed Mar. 18, 1918. Serial No. 223,152. (Cl. 15—17.)



1. A street-cleaning device comprising a vehicle, a refuse-collecting casing carried by the vehicle, oppositely positioned brackets carried by the vehicle, a sprocket-wheel in each of said brackets, an upright screw in threaded engagement with each of said wheels, a brush journaled between the lower ends of said screws, operating means for the brush, a sprocket-chain arranged over the said wheels, a post forwardly positioned upon the vehicle, a stub-shaft positioned centrally of the vehicle between the plies of said sprocket-chain, operating connections between the said chain and stub-shaft, operating connections between the said stub-shaft and post, and a hand-wheel upon the top of said post.

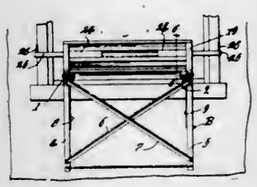
[Claim 1 not printed in the Gazette.]

1,273,999. SPRING SUSPENSION. ELLSWORTH S. BRYANT and GEORGE R. COULS, Detroit, Mich. Filed Sept. 11, 1913. Serial No. 789,227. (Cl. 267—49.)



The combination with a vehicle, of a vertical cylinder supported by the axle of said vehicle, said cylinder having its upper and lower ends closed, a hollow piston opening downward, fitting and adapted to reciprocate in said cylinder, a rod extending from said piston through the upper end of said cylinder, a fluid seal for the lower end of said piston, and an inwardly opening check valve in the upper end of said cylinder, the port of said valve opening through the upper end of said cylinder and being adapted to permit the passage therethrough of air or liquid, a casing surrounding the outer end of the port of said valve and movable parts journaled in said casing.

1,274,000. WINDOW-SEAT. JOHN E. BURNS, Northport, N. Y. Filed Dec. 10, 1917. Serial No. 206,510. (Cl. 20—87.)

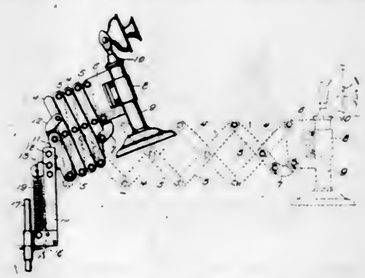


In a device of the character described, a main supporting frame, a bracing frame having its end bars pivotally secured intermediate their ends to the outer ends of the end bars of the main frame, the end bars of the bracing frame having their upper end portions angularly disposed so as to provide vertical supporting arms when the bracing frame is in operative position, foldable braces connecting the two said frames, slats secured to the said vertical supporting arms of the end bars of the bracing frame so as to form therewith a guard at the outer end of said main supporting frame, and members slidably mounted between said slats adapted, when in extended position, to support cloths hung thereon so as to be readily accessible to a person using the device.

1,274,001. EXTENSIBLE BRACKET. PETER C. BURNS, Chicago, Ill. Filed Sept. 29, 1916. Serial No. 122,806. (Cl. 248—1.)

2. In a device of the class described, a support consisting of two arms suitably spaced apart, an extensible bracket pivotally mounted between said arms, means for drawing said arms together so as to frictionally engage said bracket and thereby dampen the movement thereof, a member carried by the outer end of said bracket, and spring means secured to the inner end of said bracket operating to substantially counter-balance said member carried by the outer end of said bracket.

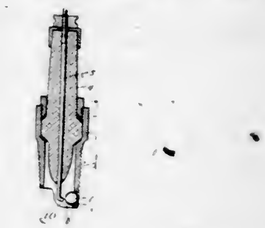
5. In a device of the class described, an extensible bracket pivotally mounted at its inner end, said bracket consisting of two series of links, one series being pivotally connected at its outer end to a supporting member, the other series being pivotally connected at its outer



end to a swinging link, the opposite end of which link is pivotally connected to said supporting member, and a spring secured to the inner end of said bracket and operating to counter-balance the force exerted on said bracket by said supporting member.

[Claims 1, 3, 4, and 6 not printed in the Gazette.]

1,274,002. SPARK-PLUG. RAYMOND CHAMPLIN, Bremerton, Wash., assignor of one-fourth to Herman A. Todd and one-fourth to Richard G. Cook, Bremerton, Wash. Filed June 20, 1917. Serial No. 175,918. (Cl. 123—169.)



1. A spark plug comprising a shell part having a projection at one side thereof provided with a transverse opening therein, a spherical member in said opening, and means for holding the member in said opening while allowing the same to have rotary movement therein.

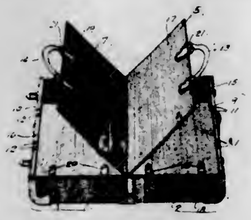
2. A spark plug comprising a shell having one side provided with an extension at its lower end having an opening therein, a spherical member in said opening, pins located in said extension on each side of the opening and loosely engaging the member to hold the same in place, and a central electrode having its lower end bent toward the spherical member.

1,274,003. BAG AND SUITCASE. ATHELSTAN H. CHRISTIE, St. Louis, Mo. Filed Aug. 13, 1917. Serial No. 185,827. (Cl. 190—41.)

1. A suit case comprising two compartments, the backs whereof are formed of a continuous piece of material, a partition for each compartment hinged to the material out of which the backs are formed and adapted to lie wholly within the walls of the compartment, a ledge secured on the inside of each compartment against which the partition is adapted to be positioned when the same is closed, and a handle secured to each partition and adapted to project between the walls of the compartments whereby the entire weight of the case is supported by the partitions.

3. A suit case comprising two compartments, the backs whereof are formed of a continuous piece of flexible mate-

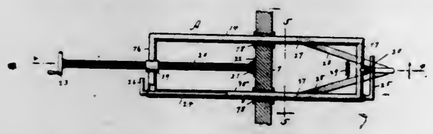
rial, a partition for each compartment hinged to the material out of which the backs are formed and adapted to lie wholly within the walls of the compartment, the ends of the partitions and top edges thereof fitting against the contiguous faces of the walls of the compartment and the top edge of each compartment being provided with notches,



a ledge secured on the inside of each compartment against which the partition is adapted to be positioned when the same is closed, a handle secured to each partition and adapted to project through the recesses formed in the walls of the compartments whereby the entire weight of the case is supported by the partitions.

[Claim 2 not printed in the Gazette.]

1,274,004. APPARATUS FOR RAISING SUNKEN VESSELS. CHARLES CHRISTIE, Fords, N. J. Filed Apr. 17, 1918. Serial No. 228,996. (Cl. 61—7.)



1. A device of the character described, comprising a submergible casing, a slidable frame carried thereby, and a finger rotatably secured to said frame.

2. A device of the character described, comprising a submergible casing, a slidable frame carried thereby, a finger rotatably mounted on the frame, and a pair of jaws pivoted to the frame.

3. A device of the character described, comprising a submergible casing, a slidable frame carried thereby, said frame being composed of a pair of side bars, a front bar, and a rear bar, one of the side bars being hollow, a rock shaft housed within said hollow side bar, a finger carried by the rock shaft, a pair of jaws pivoted to the side bars, and a lag screw threaded to the rear bar.

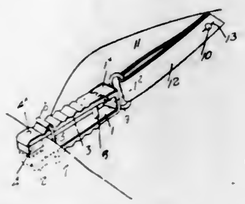
1,274,005. PROCESS FOR MAKING MODELS IN PLASTER, &c. ANGELICA SCHUYLER CHURCH, New York, N. Y. Filed June 26, 1915. Serial No. 36,449. (Cl. 41—10.)

1. The process of forming ornamental and structural bodies of plaster, cement, stucco and other similar compounds of lime, which consists in bringing a moisture impregnated carrier into contact with a mass of powdered, unslaked lime compound, then applying the portion of the lime compound adhering to said carrier, while in a plastic state, to the body being formed.

8. The process of forming ornamental and structural bodies of plaster, cement, stucco and other similar compounds of lime which consists, in bringing a capillaceous surface saturated with water into contact with a mass of dry, powdered and unslaked compound of lime, then immediately applying the portion of the lime compound thus adhering to said surface, while in a plastic state, to the body being formed, repeating said operation as often as desired to build up the requisite form of said body, and rinsing said capillaceous surface in water after each application to said body to free it from the residue of said previous application before again bringing it into contact with said dry powder for a succeeding application.

[Claims 2 to 7 not printed in the Gazette.]

1,274,006. RUG-HOLDER. ALBERT WILLIAM CLARKE and GEORGE JACKSON, Cobourg, Ontario, Canada. Filed Apr. 5, 1918. Serial No. 226,904. (Cl. 24—260.)



A rug gripping device comprising a J-shaped member having cross corrugations formed on the outer face of the long arm of the J and an opposing member hingedly connected to the short arm of the J and also provided with cross corrugations on its outer face, a stem 8 to support the hinge, an elastic wire loop member engaging the aforesaid corrugated portions, rollers carried by such loop members to engage each corrugated portion, and stop projections preventing the loop passing off the free ends of the members.

1,274,007. SIGNAL-DISPLAY. ELNATHAN COLE, Los Angeles, Cal. Filed Jan. 17, 1917. Serial No. 143,191. (Cl. 116—31.)



3. A display device comprising a case formed of front and rear walls, said rear wall having a tail light opening and direction light openings formed therein, a casing secured to said rear wall spaced apart therefrom and extending over said respective openings, a lamp mounted on said casing in the tail light opening of said case, a circular flange formed on the rear wall of said case about the tail light opening therein and extending through the front wall thereof, a box mounted on the front end of said flange, said box having an opening in the bottom portion thereof, a glass in said opening, a lens mounted in the front of said box, the front wall of said case having openings therein in alinement with the openings in the rear wall, a glass in each opening in the front wall, an arm for each direction opening pivotally mounted in the case, means for operating either of said arms to display said arm, an extension on each of said arms adapted to close its respective opening in the rear wall of the case, means for operating either of said arms to display the arm and uncover its respective direction light opening in the rear wall of the case, and a number plate on said case below the opening in said box.

5. A signal display comprising a case having a tail light opening and a direction light opening at each side of the tail light opening, a single source of illumination in said case for said openings, a display arm covering each direction light opening to prevent the passage of light through its associated opening, and operating means whereby either of said arms may be moved to uncover its associated direction light opening and extend a portion of the arm beyond the case.

[Claims 1, 2, and 4 not printed in the Gazette.]

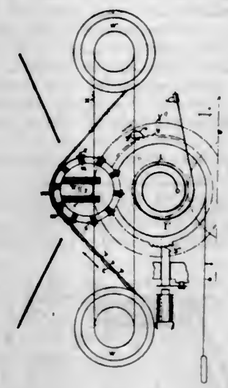
1,274,008. CORK-EXTRACTOR. RALPH CONWELL, Big Piney, Wyo. Filed Apr. 19, 1918. Serial No. 229,571. (Cl. 65—47.)



2. In a cork extractor, a pair of members pivotally united, each member being constructed from a single length of steel wire material, said steel wire members adjacent where they are pivotally united being flattened and drawn to points, thereby providing cork extracting jaws, said jaws having outwardly and laterally extending lips on their outer edges against which the other edges of the jaws contact to limit the jaws in their closing actions, the other ends of the members being extended and curved to form handle loops, having their extremities offset laterally in opposite directions providing abutment means against which the handle members contact to limit the handle members in their closing actions, the cork extracting jaws extending at obtuse angles to the shanks of the handle members whereby the jaws may separate when the handle members are closed.

[Claim 1 not printed in the Gazette.]

1,274,009. APPARATUS FOR PRODUCING FLASHES BY THE ELECTRIC VOLATILIZATION OF FUSIBLE WIRES. JULES COURTIER and PIERRE COURTIER, Paris, France. Filed Feb. 16, 1918. Serial No. 217,639. (Cl. 67—31.)



1. An apparatus for producing flashes by electric volatilization of fusible wires, comprising fusible wires mounted by means of eyelets on any desired insulating support, a second support comprising conductor plugs for receiving the eyelets, a current distributer with contacts connected to the plugs, brushes collecting the current and a device for limiting the number of wires volatilized at each operation.

2. An apparatus for producing flashes by electric volatilization of fusible wires, comprising fusible wires mounted by means of eyelets on a disk of insulating material, each wire connecting an eyelet at the circumference to a single central eyelet, a second support comprising conducting plugs for receiving the eyelets, a current distributer with contacts connected to the plugs, current-collecting brushes and a device for limiting the number of wires volatilized at each operation.

[Claims 3 to 6 not printed in the Gazette.]

1,274,010. TOY BANK. WILLIAM A. COVENTRY, Lancaster, Pa., assignor to Grey Iron Casting Company, Mount Joy, Pa., a Corporation of Pennsylvania. Filed Feb. 21, 1918. Serial No. 218,455. (Cl. 46—36.)



1. A device of the character described comprising a body portion, a cover member for one end of said body portion, a base plate covering the other end of said body portion, a screw bolt passing through said base plate and threaded into said cover member to maintain the parts in assembled relation, said base plate being provided with a coin slot, in combination with a yielding cover for a portion of said coin slot and comprising a coin slot protector.

2. In a toy bank of the character described, a plurality of members adapted to be interlocked to form the casing of the bank, a screw bolt operatively connecting the terminal members whereby tension on the screw bolt places the members of said housing under compression to maintain the parts in assembled relation, one of said members connected with said screw bolt being provided with a coin slot, in combination with a coin slot protector comprising a washer carried by said screw bolt and partially covering said coin slot, and spring means permitting said washer to yield and normally maintaining said washer in position to cover a portion of the said coin slot.

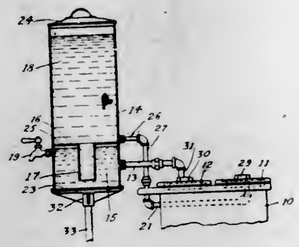
3. In a toy bank of the character described, a plurality of members adapted to be interlocked to form the housing of the bank, a screw bolt connector operatively connected with the terminal housing members so that tension on said screw bolt produces compression on said housing members to maintain the parts in assembled relation, the housing member adjacent one end of said screw bolt being provided with a coin slot, a washer slidably mounted on said screw bolt and covering a portion of said coin slot, a coiled spring around a portion of said screw bolt and normally holding said washer pressed against the housing member to cover a portion of said coin slot, a second washer mounted on said screw bolt, and means carried by said screw bolt to prevent a longitudinal movement of said second washer on said screw bolt whereby said spring is normally maintained under compression.

[Claims 4 to 7 not printed in the Gazette.]

1,274,011. OPEN-TANK HEATING SYSTEM. IRVIN W. CUMMINGS, Minneapolis, Minn. Filed June 29, 1917. Serial No. 177,737. (Cl. 126—362.)

1. A hot water heating system comprising an open tank for receiving a supply of water, provided with a partition dividing the tank into a relatively small lower and large upper compartment, said partition having a central opening, a depending member placing the bottom of the small compartment in communication with the bottom of the large compartment through said central opening, a hot water circulating system comprising water heating members and outflow and inflow pipes in communication, respectively, with the lower and upper compartments, and a faucet adapted to draw water from the top of said lower compartment.
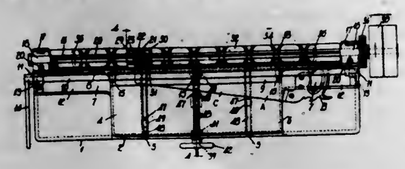
2. A hot water heating system comprising an open tank for containing a supply of water, a partition in said tank dividing the same into an upper and lower compartment, means connecting the lower portion of the upper compartment with the lower portion of the lower compartment for permitting flow of water, said means comprising a tubular member attached to said partition and extending downwardly, the passageway in said tubular member registering with a central opening in said partition, a hot water circulating system comprising water heating members and outflow and inflow pipes in communication, respectively, with the lower and upper compartments, and means for withdrawing water from the top of the lower compartment.



3. A hot water heating system comprising an open tank for receiving a supply of water, a partition dividing the tank into upper and lower compartments, means permitting flow of water from the bottom of the lower compartment through a central opening in said partition to the bottom of the upper compartment, a hot water circulating system comprising water heating members and outflow and inflow pipes in communication, respectively, with the lower and upper compartments, and a faucet adapted to draw water from said lower compartment, said faucet being located a predetermined distance below the partition so as to provide an insulating layer of air between the surface of the water in the lower compartment and said partition.

4. A hot water heating system comprising an open tank for receiving a supply of water, means separating said tank into relatively a small lower and a large upper compartment, means for temporarily holding the hot water in the lower compartment until it may be withdrawn, means for permitting the hot water in the bottom of the lower compartment, when not being withdrawn, to ascend into the bottom of the upper compartment, a hot water circulating system comprising water-heating members and outflow and inflow pipes in communication, respectively, with the upper and the lower compartments, and means for drawing water from near the top of the lower compartment.

1,274,012. SAW-SHARPENING MACHINE. WILLIAM J. DAYS, Boston, Mass. Filed July 23, 1917. Serial No. 182,108. (Cl. 76—38.)

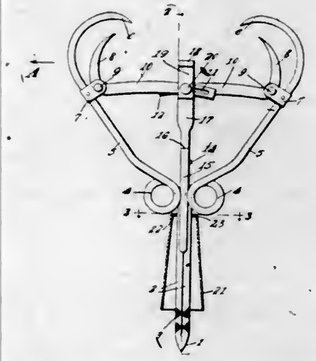


1. A saw sharpening machine having, in combination, a saw holder, a helical work member adapted to engage the edge of said saw, means for rotating said helical work member, and means adapted to move said work member longitudinally of the axis thereof.

12. A saw sharpening machine having, in combination, a saw holder, a shaft, a helical grinding member slidably mounted upon said shaft to rotate therewith, a slide adapted to engage opposite ends of said grinding member, a cross threaded shaft arranged substantially parallel with said shaft, a follower on said slide adapted to engage the threads of said cross threaded shaft, and means for rotating said shafts, whereby said grinding member may be reciprocated in opposite directions and rotated against the edge of the saw on said saw holder.

[Claims 2 to 11 not printed in the Gazette.]

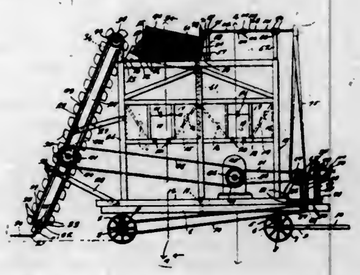
1,274,013. GAFF-HOOK. PHILETUS BOONE DEAN, Fredonia, N. Y. Filed Dec. 6, 1917. Serial No. 205,838. (Cl. 43—6.)



1. A gaff hook comprising a support; a shank in the support and provided with main jaws, the shank having a cam; auxiliary members pivoted to the main jaws; and a spreader pivoted to the inner ends of the auxiliary members, the spreader being slidable longitudinally in the support, the spreader coöperating with the cam when the spreader moves inwardly, thereby to move the spreader transversely against the support and to hold the jaws against opening.

[Claims 2 to 4 not printed in the Gazette.]

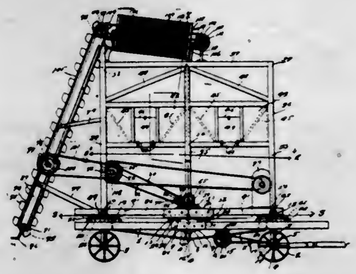
1,274,014. SCREENING OR SEPARATING MACHINE. ITALO ALFRED DE POLO, Connellsville, Pa. Filed Aug. 28, 1917. Serial No. 188,641. (Cl. 83—56.)



1. In a material handling apparatus, a supporting frame movable to swing about a vertical axis, storage and delivering bins mounted upon and movable with said frame, an agitator and separator mounted upon said frame and adapted to deliver separately graded materials to said bins respectively, means movable with said frame to collect and deliver material to be separated to said agitator and separator, and means mounted upon and movable with said frame to actuate said delivering and separating means.

2. In a material handling apparatus, the combination with a wheeled frame, of a second frame movably mounted upon the first frame to swing about a vertical axis, storage and delivering bins mounted upon and movable with the swinging frame, a combined agitator and separator mounted upon said swinging frame and designed to deliver separately graded materials to said bins respectively, the mechanism movable with the swinging frame to gather and deliver material to be separated to said agitator and separator, means mounted upon and movable with the swinging frame to actuate said delivering and separating means, and manually operated means on said wheeled frame and having connections with the swinging frame, whereby said mechanism may gather material from different places of a dump.

1,274,015. SCREENING AND SEPARATING MACHINE. ITALO ALFRED DE POLO, Connellsville, Pa. Filed Feb. 21, 1918. Serial No. 218,528. (Cl. 83—56.)

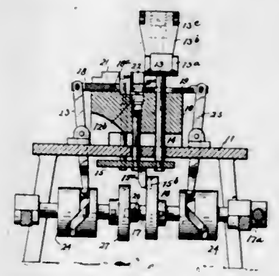


1. In a material handling apparatus, a portable supporting frame, a movable frame, a pivot shaft connecting the two frames, and about the vertical axis of which the movable frame may rotate, storage and delivering bins mounted upon and movable with said rotating frame, an agitator and separator mounted upon said rotating frame and designed to deliver separately graded materials to said bins respectively, means movable with said rotating frame to collect and deliver material to be separated to said agitator and separator, operating means mounted upon and movable with the rotating frame to actuate said delivering and separating means, and a mechanism geared with the operating means and said rotating frame for revolving said rotating frame, whereby said collecting means may be directed toward different points or places of a dump.

2. In a material handling apparatus, the combination with a portable frame, of a movable frame to rotate on a vertical axis, means connecting the two frames whereby said movable frame may rotate on said axis storage and delivering bins mounted upon and movable with said rotating frame, combined agitator and separator mounted upon the rotating frame and designed to deliver separately graded materials to said bins respectively, a mechanism movable with said rotating frame and adapted to collect and deliver material to be separated to said agitator and separator, driving means mounted upon and movable with the rotating frame to actuate said mechanism and said separator, operative connections between the rotating frame and said driving means, whereby said rotating frame may be automatically revolved to direct said mechanism to different places of a dump, and means for controlling said operative connections.

1,274,016. MACHINE FOR CASTING STRAPS TO BATTERY-PLATES. ERNEST DISINGER, Cleveland, Ohio, assignor to Willard Storage Battery Company, Cleveland, Ohio, a Corporation of West Virginia. Filed Jan. 14, 1914. Serial No. 812,033. Renewed Nov. 7, 1917. Serial No. 200,844. (Cl. 22—58.)

1. In a machine for casting straps to groups of battery plates, a mold comprising a base having a cavity in which metal is to be poured, means for supporting a plurality of battery plates in spaced relationship and so that portions of the plates will extend into the cavity, means for closing the mold comprising a plurality of members movable toward and from each other, one of the members being provided with teeth which extend between the portions of the battery plates extending into the cavity.



2. In a machine for casting straps to groups of battery plates, a mold comprising a base having a cavity in which metal is to be poured, means for supporting a plurality of battery plates in spaced relationship and so that portions of the plates will extend into the cavity, means for closing the mold comprising a pair of members movable toward and from each other, and an endwise movable member movable between said pair of members.

3. In a machine for casting straps to groups of battery plates, a mold comprising a base having a cavity in which metal is adapted to be poured, a magazine for a group of battery plates adapted to be moved toward and from the mold cavity, means for closing the mold comprising a plurality of members movable toward and from each other, and means operable from a single point for shifting the magazine and for operating the mold closing means.

4. In a machine for casting straps to groups of battery plates, a mold having a cavity in which metal is adapted to be poured, a holder adapted to receive a group of plates so that portions thereof may be extended into the cavity, said magazine having yieldable means engaged by the plates along one edge and a clamp for holding the plates against said yieldable means.

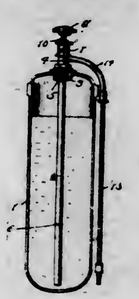
5. In a machine for casting straps to groups of battery plates, a mold having a cavity in which metal is adapted to be poured and adapted to receive portions of the plates to which the strap is to be cast, a holder for supporting the plates in spaced relationship and in alinement, said holder having along its base, yieldable plate engaging means and having at the top a movable plate clamping member.

1,274,017. FIRE-EXTINGUISHER. EMILE DRAPEAU, Montreal, Quebec, Canada. Filed Nov. 19, 1917. Serial No. 202,752. (Cl. 169—12.)

1. A fire extinguisher of the character described comprising a casing, a support detachably connected to said casing, said support having a channelway formed therein; means of communication between said channelway and the interior of said casing, an outlet pipe communicating with said channelway, a spring actuated valve arranged within said channelway, a valve stem carried by said valve, said valve stem having a channelway extending therethrough and communicating with the interior of said casing and a spring actuated valve arranged within said valve stem substantially as and for the purpose specified.

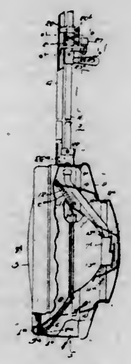
2. In a fire extinguisher of the character described the combination with a casing, of a support detachably connected to said casing, a tube connected to said support and extending down within said casing, said support having a channelway therein communicating with the

upper end of said support, an outlet pipe communicating with said channelway, a valve arranged within said channelway to close the communication between said tube and said outlet pipe, a valve stem carried by said valve and extending up through said support, a detachable cap se-



cured to the upper end of said valve stem, a pair of laterally extending arms formed with said support and said valve stem having a valve controlled passageway therein adapted to communicate with the interior of the casing substantially as and for the purpose specified.

1,274,018. AUTOMOBILE-HEADLIGHT. THOMAS I. DUFFY, Chicago, Ill., assignor to Benjamin Electric Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed June 16, 1917. Serial No. 175,229. (Cl. 240—41.)



1. In combination with a main shell having at its forward edge a crystal-stopping flange, a bezel adapted to be entered at the back of the shell and stopped by the flange, said bezel having a spheroidal surface adjacent to its inner circumference; a forwardly-concave reflector, having its forward edge seated upon said spheroidal surface, and a detachable back member having spring fingers bearing upon the back of the reflector.

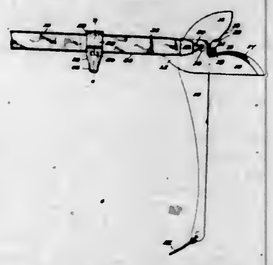
3. In combination with a main shell having at its forward edge a crystal-stopping flange; a bezel adapted to be entered through the back of the shell and stopped by the flange, a forwardly-concave reflector having its forward edge stopped upon the bezel; a rear closure for the main shell detachably engaged therewith, and spring fingers carried by said rear closure bearing upon the rear side of the reflector.

4. In combination with a main shell, open at the rear and having at its forward edge a crystal-stopping flange; a bezel adapted to be entered at the rear of the shell and astopped against the flange; a rear closure for the shell comprising an annular member detachably engaged with the main shell and having spring fingers which project forwardly and bear upon the bezel; a concave reflector adapted to be entered through the central opening of said annular back member, and a cap member for the rear closure detachably engaged with the same annular member and having spring fingers which bear upon the rear of the reflector.

5. In combination with a main shell, open at the rear and having at its forward edge a crystal-stopping flange; a bezel adapted to be entered through the back of the shell and stopped against said flange, and having a spheroidal surface adjacent to its central opening; a closure for the shell comprising an annular back member detachably engaged with the shell and having spring fingers projecting forwardly and bearing upon the bezel; a forwardly-concave reflector adapted to be entered through the central opening of said annular back member, and having its forward edge bearing upon said spheroidal surface of the bezel; means carried by said annular back member for yieldingly holding the reflector pressed against the bezel; and means extending into the shell engaging the reflector to slide it at its forward edge bearing on said spheroidal surface.

[Claims 2 and 6 to 8 not printed in the Gazette.]

1,274,019. WIRE-ENTANGLEMENT CUTTER FOR BAYONETS. WILLIAM DZIEZYC, Middletown, N. J. Filed Nov. 22, 1917. Serial No. 203,364. (Cl. 42—86.)



1. In combination with a wire cutting shears having a handle adapted for attachment to a bayonet, a clamp formed of resilient sheet metal comprising a substantially V-shaped base secured to the handle and arranged with struck-out lugs adjacent the handle, an inturned lip upon one side of the base forming a V-shaped receiving space for one side of the bayonet, an outwardly projecting flange at the free end of the lip, a cover plate of resilient metal hinged to the other side of the base having a bent hooked portion intermediate its ends adapted for springing over the said flange in retaining engagement therewith when the base lip and plate are resiliently engaged with the bayonet when the clamp is closed thereon, the said plate having a resilient end portion outwardly of said hook, a swinging link carried by the free end of the cover plate and a keeper upon the handle adapted for receiving the said link when the clamp is closed.

[Claims 2 to 4 not printed in the Gazette.]

1,274,020. BODY SUPPORT OR REST AND HEAD-REST THEREFOR. ALBERT EBBECKE, Newark, N. J. Filed Aug. 19, 1916. Serial No. 115,844. (Cl. 5—43.)

2. In an apparatus of the character specified, a main supporting frame angularly adjustable with relation to the plane of support, a supporting element providing a body-rest mounted upon said supporting frame, an adjusting means extending from one end-portion of said supporting frame comprising a plurality of sliding elements adjustable longitudinally with relation to said body-rest and adapted to be slid beneath the corresponding end of the body-rest, an adjusting mechanism connected with said sliding elements, said adjusting mechanism being movable in directions toward or away from said sliding elements, and a head-rest mounted upon said adjusting mechanism, all arranged so that the head-rest can be moved beneath the end-portion of said body-rest, or may be moved in an upward direction above the end-portion of the body-rest and toward the body-rest, so that a portion of said head-rest will extend over a portion of the body-rest.



7. In an apparatus of the character specified, a main body-rest or support comprising a pair of side-frames, a fabric-support stretched between said side-frames, a means of angular adjustment connected with said side-frames, duct-like elements connected with said side-frames, and a head-rest comprising side-frames, a fabric-support stretched between said side-frames, guide-rods extending into said duct-like elements and slidably disposed within said duct-like elements, means between the side-frames of said head-rest and the said guide-rods for vertical adjustment of said head-rest, the said duct-like elements being provided with pin-receiving perforations, and the said guide-rods being provided with a series of pin-receiving retaining depressions, a spring-like plate mounted upon each duct-like element, retaining pins extending from said spring-like plates into the perforations of said duct-like elements and adapted to be sprung into retaining engagement with the depressions of said guide-rods, and a flexible connection between said spring-plates for simultaneously disengaging said retaining pins from said retaining depressions.

10. In an apparatus of the character specified, a main body-rest or support comprising a pair of side-frames, a fabric-support stretched between said side-frames, stretching elements pivotally connected with said side-frames, said stretching elements being also pivotally connected with each other, means connected with said stretching elements for retaining said elements in their stretched relation, a means of angular adjustment connected with said side-frames, duct-like elements connected with said side-frames, and a head-rest comprising side-frames, a fabric-support stretched between said side-frames, stretching elements pivotally connected with said last-mentioned side-frames, said stretching elements being also pivotally connected with each other, means connected with said last-mentioned stretching elements for retaining said elements in their stretched relation, guide-rods extending into said duct-like elements and slidably disposed within said duct-like elements, means connected with said guide-rods for vertical adjustment of the said head-rest, and means of pivotal adjustment between said means of vertical adjustment and the side-frames of said head-rest.

12. A body-support or head-rest comprising a pair of side-frames, a fabric-support stretched between said side-frames, stretching-elements pivotally connected with said side-frames, said stretching elements being pivotally connected with each other, and means connected with said stretching elements for retaining the same and said fabric-support in their stretched relation, combined with a means of vertical adjustment in the form of "lazy-tongs" pivotally connected with said side-frames, and a supporting means carrying a ratchet-element, the end-

portions of the arms of said "lazy-tongs" being respectively pivoted to said support and coöperating with said ratchet-element for the adjustment of said body-support or head-rest.

[Claims 1, 3 to 6, 8, 9, and 11 not printed in the Gazette.]

1,274,021. DOMESTIC CHURN. CHARLES W. EBELING, Elm Grove, W. Va., assignor of one-half to Harrison W. Rogers, New York, N. Y., and one-half to George E. House, Wheeling, W. Va. Filed Mar. 9, 1918. Serial No. 221,440. (Cl. 259—124.)



1. A churn dasher including a handle operated stem, a dasher member carried thereby, said dasher member being composed of a plurality of segments one of said segments being fixedly connected to the lower end of the stem and the remainder being mounted for independent rotary movement, coöperative means carried by the segments whereby when either the lower or upper one is moved in an opposite direction to the other, the respective segments are moved in succession into or out of alinement, and coöperative means mounted upon the stem and engaging the upper segment for permitting such action.

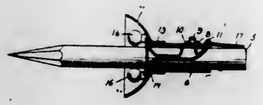
2. A churn dasher including a handle operated stem, a tube mounted upon the stem for sliding and rotary movement, a cover carried by said tube, and a dasher member mounted upon the lower end of the stem and including a plurality of segments, the lowermost of said segments being mounted fixedly to the stem and the others being mounted for independent rotary movement, coöperative means carried by the segments whereby when the upper segment is held fixed and the stem is rotated the segments are caused to be moved into alinement or engaged to form a disk.

3. A churn dasher including a handle operated stem, a tube mounted upon the stem for sliding and rotary movement, a cover carried by said tube, a dasher member mounted upon the lower end of the stem and including a plurality of segments, the lowermost of said segments being mounted fixedly to the stem and the others being mounted for independent rotary movement, coöperative means carried by the segments whereby when the upper segment is held fixed and the stem is rotated the segments are caused to be moved into alinement or engaged to form a disk, and coöperative means carried by the upper segment and the tube whereby the upper segment is held stationary while the stem is being rotated.

4. A churn dasher including a handle operated stem, three perforated segmental members mounted upon the lower end of said stem, the lowermost being fixedly connected to stem and the other two being mounted for independent rotary movement upon the stem, coöperative means carried by the segments whereby successive movement is imparted to each due to the rotation of either the stem or the uppermost segment, a sleeve surrounding the stem and fixedly connected to the uppermost disk, a second sleeve mounted for rotary and sliding movement upon the stem, and coöperative means carried by the adjacent ends of the tube and sleeve whereby when the same are in engagement the uppermost disk is held against rotation during the movement of the stem to permit of the extension or collapsing of the segments.

5. A churn dasher including a handle operated stem, three perforated segmental members mounted upon the lower end of said stem, the lowermost being fixedly connected to stem and the other two being mounted for independent rotary movement upon the stem, coöperative means carried by the segments whereby successive movement is imparted to each due to the rotation of either the stem or the uppermost segment, a sleeve surrounding the stem and fixedly connected to the uppermost disk, a second sleeve mounted for rotary and sliding movement upon the stem, coöperative means carried by the adjacent ends of the tube and sleeve whereby when the same are in engagement the uppermost disk is held against rotation during the movement of the stem to permit of the extension or collapsing of the segments, and a closure member carried by said sleeve.

1,274,022. ELECTRIC-LIGHT ATTACHMENT FOR PENS OR PENCILS. CHRISTIAN EDMUNDSON, Tientsin, China. Filed May 28, 1917. Serial No. 171,514. (Cl. 240—2.)

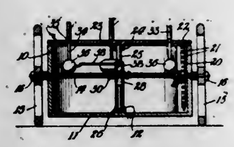


1. The combination with a pen or pencil, a sleeve longitudinally adjustable thereon, an electrical switch mounted on the sleeve, a reflector formed with a collar accommodated on the sleeve and further provided with a shoulder which abuts one end of the sleeve, electrical bulbs carried by the reflector and arranged at diametrically opposite points of the pens or pencils, an extension formed with the reflector and overlying the bulbs, and a source of electrical energy in circuit with the bulbs and switch.

2. The combination with a pencil or like marking implement, of a sleeve encircling the same, a reflector surrounding and removably engaged with one end of said sleeve, electric bulbs carried by said reflector, and a switch carried by said sleeve and electrically connected with said bulbs.

[Claim 3 not printed in the Gazette.]

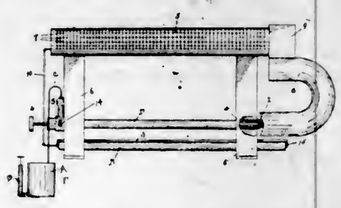
1,274,023. TOY. JOSEPH G. EHRLICH, Cleveland, Ohio. Filed Mar. 9, 1918. Serial No. 221,374. (Cl. 46—45.)



3. In a toy, the combination with a cylindrical casing, a pair of wheels disposed at the sides thereof and a shaft extending through said casing, upon which said wheels are mounted, of a disk rotatably mounted over said casing, said disk having a plurality of spaced openings arranged adjacent to its periphery, a sprocket wheel engaged on said shaft, the teeth of said sprocket wheel engaging with the mentioned openings whereby said disk is rotated, a spindle journaled vertically in said casing upon which said disk is mounted, a plurality of figural objects on said disk, stems engaged at the lower ends of said objects, said stems passing through openings formed in said disk, weights engaged at the lower ends of said stems, a sleeve mounted upon said spindle, means for rotating said sleeve formed with said shaft, and spring arms extending outward from said spindle, said arms being adapted to make contact with said weights whereby said objects are caused to move.

[Claims 1 and 2 not printed in the Gazette.]

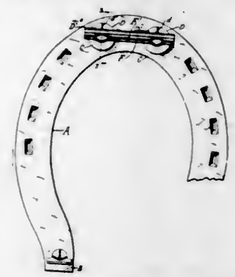
1,274,024. GAS GENERATOR AND BURNER. JAMES E. EVANS, Los Angeles, Cal. Filed Mar. 12, 1918. Serial No. 222,033. (Cl. 158—61.)



1. In a gas generator and burner the combination of a cylindrical generator; a needle valve to regulate the flow of gas therefrom; a generator burner below said generator; two spaced apart main burners above said generator; a conduit to direct the gas from said generator into said main burners; a mat below said generator on which to burn liquid fuel to provide the initial gas; a pipe from one of said spaced apart main burners to said generator burner; and means to supply a limited amount of water into said generator.

[Claim 2 not printed in the Gazette.]

1,274,025. DRIVE-CALK FOR HORSESHOES. GEORGE S. EVERHART, Oshkosh, Wis. Filed Apr. 8, 1916. Serial No. 89,765. (Cl. 168—43.)



4. A horseshoe provided with a calk-receiving socket, a calk having a shank seated in said socket, and a split bushing interposed between the calk shank and the wall of the socket, said bushing being thicker upon one side than upon the other.

7. A horseshoe provided with a set of toe sockets, in combination with a toe calk having a plurality of shanks adapted to enter said sockets respectively, and means for anchoring the shanks in the sockets with the axes of the shanks eccentric to the axes of the sockets.

[Claims 1 to 3, 5, and 6 not printed in the Gazette.]

1,274,026. RADIATOR UNIT. JOHN M. FEDDERS, Buffalo, N. Y., assignor to Fedders Manufacturing Company, Inc., Buffalo, N. Y., a Corporation of New York. Filed Oct. 5, 1917. Serial No. 194,963. (Cl. 257—130.)

1. A radiator unit comprising two outer corrugated walls each of which is of zig-zag form, and an intermediate radiating member arranged between said outer walls and comprising a plurality of transverse plates arranged in a longitudinal row between said outer walls and each engaging its opposite side edges with the bottoms of corresponding corrugations on the opposing sides of said outer walls, a plurality of longitudinal plates arranged between said outer walls and alternating with said transverse plates, and a plurality of coupling straps connecting opposite side edges of each longitudinal plate with the adjacent transverse plates at a distance from the side edges of the latter.

2. A radiator unit comprising two outer corrugated walls each of which is of zig-zag form, and an intermediate radiating member arranged between said outer walls and comprising a plurality of transverse plates arranged in a longitudinal row between said outer walls and each engaging its opposite side edges with the bottoms of corresponding corrugations on the opposing sides of said outer walls, a plurality of longitudinal plates arranged between said outer walls and alternating with said transverse plates, and a plurality of coupling straps connecting opposite side edges of each longitudinal plate with the adjacent transverse plates at a distance from the side edges of the latter, said transverse and longitudinal plates and straps being constructed from a single strip of sheet metal which is slitted transversely for dividing the same into the several transverse and longitudinal plates and each transverse plate being provided with pairs of slits extending inwardly from its side edges to form said coupling straps.



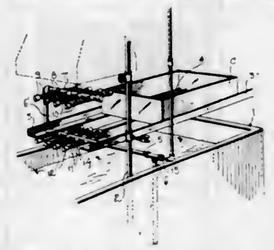
3. A radiating member for radiator units comprising a plurality of transverse plates arranged in a longitudinal row, a plurality of longitudinal plates alternating with said transverse plates and arranged midway between opposite side edges of the latter, and a plurality of coupling straps connecting opposite side edges of each longitudinal plate with the adjacent transverse plates at a distance from the side edges of the latter.

4. A radiating member for radiator units comprising a plurality of transverse plates arranged in a longitudinal row, a plurality of longitudinal plates alternating with said transverse plates and arranged midway between opposite side edges of the latter, and a plurality of coupling straps connecting opposite side edges of each longitudinal plate with the adjacent transverse plates at a distance from the side edges of the latter, said transverse and longitudinal plates and straps being constructed from a single strip of sheet metal which is slitted transversely for dividing the same into the several transverse and longitudinal plates and each transverse plate being provided with pairs of slits extending inwardly from its side edges to form said coupling straps.

5. A radiating member for radiator units comprising a plurality of transverse plates arranged in a longitudinal row, a plurality of longitudinal plates alternating with said transverse plates and arranged midway between opposite side edges of the latter, and a plurality of coupling straps connecting opposite side edges of each longitudinal plate with the adjacent transverse plates at a distance from the side edges of the latter, said transverse and longitudinal plates and straps being formed integrally from a sheet of metal and said coupling straps being formed by stock cut out of said side edge portions of said transverse plates and folded inwardly on the same forming notches in said side edge portions of the transverse plates.

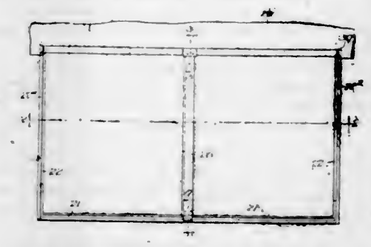
1,274,027. WASHING APPARATUS. ALBERT R. FLOYD, Huntington, W. Va. Filed Feb. 9, 1918. Serial No. 216,296. (Cl. 141—3.)

A washing apparatus comprising a tank adapted to contain a supply of water, a pipe extending across the tank and provided with an upstanding portion continued by a substantially horizontal extension disposed inwardly of the tank and substantially in vertical alinement with the pipe, the vertically alined portions of the pipe and inwardly directed extension being provided with oppositely directed branch pipes, the branch pipes of the first named pipe and of the inwardly directed extension having their opposed faces provided with restricted openings, an extension depending from the first named pipe adjacent the



end thereof remote from the upstanding portion of the pipe, said extension being of a length to terminate below the level of the fluid within the tank, a nozzle in communication with a fluid under pressure and extending within the pipe through the end thereof adjacent the depending extension, and an article carrying container movable between the first named pipe and the inwardly directed extension in communication with said pipe.

1,274,028. CAR-WINDOW CONSTRUCTION. GEORGE H. FORSYTH, Chicago, Ill. Filed May 17, 1915. Serial No. 28,546. (Cl. 105—201.)



1. In car window construction, a frame comprising integral sill and side members, and a non-integral connection between the upper ends of the vertical members and the car letter-board.

4. In car window construction, a frame comprising integral sill and side members, and a separate member connecting the upper ends of the side members, the sill having a forward extension beyond the side members and the side members angularly bent outwardly in opposite directions beyond the ends of the sill.

8. In car window construction, the combination with a sliding sash, of a frame therefor comprising integral sill and side members and flanges formed integral with said side members and serving as stop members for guiding the sash.

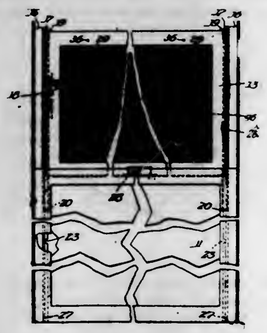
11. In car window contruction, a frame comprising integral sill and end members, and a vertical central member secured to said sill and providing a pair of window openings.

[Claims 2 to 4, 5 to 7, 9, and 10 not printed in the Gazette.]

1,274,029. WINDOW-SCREEN. GEORGE H. FORSYTH, Chicago, Ill. Filed Aug. 9, 1916. Serial No. 113,873. (Cl. 156—14.)

1. The combination of a window casing, spaced members providing a pocket therebetween, guides disposed in

line with and entering said pocket, shoes sliding on said guides and having a range of movement less than the length of the guides, a frame member riding on the shoes and also slidable thereon, the shoes having terminal portions forming stops for the frame member, and releasable means to lock the frame to the shoes and the shoes to the guides.

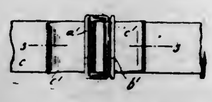


7. The combination of a window casing, horizontally spaced sash members providing a vertical pocket therebetween, vertical guides disposed in line with and entering said pockets, shoes sliding on said guides and having a length greater than the depth of the pocket and a range of movement on the guides less than the length of the guides, a screen frame member riding on the shoes and also slidable thereon, the shoes having terminal laterally extending flanges forming stops for the frame member and handles for manual engagement, means to frictionally lock the shoes to the guides in their lowermost position, and manually releasable means to frictionally lock the frame to the shoes and the shoes to the guides in the upper position of the shoes and frame and to positively lock the frame to the shoes and the shoes to the guides in the lowered position of the shoes and frame.

8. A metal frame for screens having continuous walls provided in one side face with a channel adapted to receive the marginal portion of the screen cloth and a cloth-clamping rod, one wall of the channel being so formed as to increase its flexibility.

[Claims 2 to 6, 9, and 10 not printed in the Gazette.]

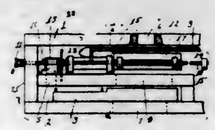
1,274,030. BUCKLE OR FASTENING DEVICE FOR STRAPS, BANDS, AND THE LIKE. ARTHUR GRAHAM FRANCE, London, England. Filed June 27, 1917. Serial No. 177,417. (Cl. 24—74.)



1. Improved buckle or fastening device comprising two simple rectangular frames connected one within and across the other so that each may hinge and slide upon the other, each frame having two parallel, but separated side bars and two connecting end bars between said parallel side bars, said connecting end bars of one frame, which is the inner frame, being spaced slightly closer together than the corresponding bars of the other frame and said end bars of said inner frame having a projecting horn at each end thereof, said frame with the horned end bars being passed into the other frame, said horns at the ends of each end bar of the inner frame serving to link the two frames together.

[Claims 2 and 3 not printed in the Gazette.]

1,274,031. VALVE WITH DOUBLE THROW. ROBERT A. GALLY, Cincinnati, Ohio, assignor to The Baldwin Company, Cincinnati, Ohio. Filed Oct. 8, 1917. Serial No. 195,398. (Cl. 84—168.)



1. A seat having a port therein, a valve normally resting on the said seat over the said port, and means adapted to raise the said valve from the said seat and port in one direction at one time, and to raise the said valve from the said seat and port in another direction at another time.

4. A seat having a port therein, a valve normally resting on the said seat over the said port; a means adapted to raise the said valve from the said seat and port in one manner at one time and another means adapted to raise the said valve from the said seat and port in another manner at another time.

18. A seat having two ports therein; a slidable valve adapted to slide over and regulate to various degrees the opening of one of the two said ports; a second valve normally seated over the other said port, and means adapted to slide the said slidable valve and to open the said second valve when the said slidable valve is at a position of great opening of the said port which it controls.

[Claims 2, 3, 5 to 17, and 19 to 23 not printed in the Gazette.]

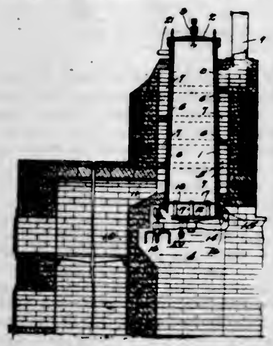
1,274,032. RAILWAY-PASS. JAMES D. GIBBS, Louisville, Ky., assignor to Gibbs-Inman Company, Louisville, Ky. Filed July 19, 1917. Serial No. 181,503. (Cl. 283—23.)



1. A railway pass form comprising a plurality of superposed sheets of paper detachably connected together at one extremity, the overlying sheet being of less width than the underlying sheets, said sheets bearing in superposed alinement suitable data and blanks, whereby the detachable overlying sheet constitutes a pass form and the underlying sheets constitute record forms, the extended parts of the record forms bearing record matter and blanks, not embraced in the pass proper and adapted to have simultaneously impressed thereon additional pass record matter.

2. A railway pass form comprising a plurality of superposed sheets of paper detachably connected together at one extremity, the overlying sheet being of less width than the underlying sheets, each of said sheets being divided by lateral weakened lines into a plurality of transverse separable strips, said strips bearing in superposed alinement suitable data and blanks whereby the separable strips of the overlying sheet constitute pass forms and the separable strips of the underlying sheets constitute record forms, the extended parts of the record forms bearing record matter and blanks, not embraced in the pass proper and adapted to have simultaneously impressed thereon additional pass record matter.

1,274,033. APPARATUS FOR DISTILLATION OF COAL. JOHN LEWIS GRAFFLIN, Astoria, N. Y. Filed Nov. 20, 1917. Serial No. 203,011. (Cl. 196—19.)

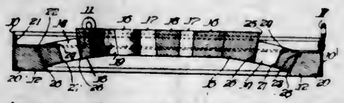


1. In apparatus for distilling coal the combination of a retort and means for heating the retort arranged to act thereon from a level substantially above the bottom upward, means for protecting the lower portion of the retort from direct action of the heating means, a dumping bottom for the retort, and a false bottom carried by the retort bottom within the portion of the retort protected from direct action of heating means.

2. In apparatus for distilling coal the combination of a retort and means for heating the retort arranged to act thereon from a level substantially above the bottom upward, means for protecting the lower portion of the retort from direct action of the heating means, a dumping bottom for the retort, a false bottom carried by the retort bottom within the portion of a retort protected from direct action of heating means and means for drawing off liquid from the space between the bottom and the false bottom.

[Claim 3 not printed in the Gazette.]

1,274,034. FURNACE-ROOF. PATRICK JOSEPH GRIFFIN, Anniston, Ala. Filed Feb. 24, 1917. Serial No. 150,695. (Cl. 263—46.)



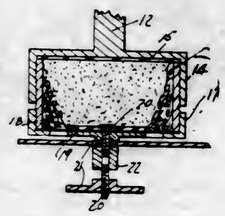
1. A furnace roof comprising abutments, a central roof portion, and expansion joint roof portions including destructible spacing members between the central roof portion and the abutments.

2. A furnace roof comprising a central roof portion, an abutment surrounding said central roof portion, and an expansion joint portion including destructible spacing material between the abutment and the central roof portion.

3. A furnace roof comprising opposite abutments, a central flat roof portion having openings therethrough for the introduction of electrodes, and expansion joint roof portions interposed between the respective abutments and the central roof portion, each expansion joint roof portion including two rows of bricks, adjacent bricks of the rows having a socket and projection supporting interengagement, and a compressible filler between said bricks.

[Claims 4 to 7 not printed in the Gazette.]

1,274,035. DIFFERENTIAL MICROPHONE. PAUL J. HACKETT, Seattle, Wash., assignor to Universal High Power Telephone Company, King county, Wash. Filed Oct. 23, 1916. Serial No. 127,109. (Cl. 179—135.)



1. The combination in a microphone which includes a diaphragm with a resilient insulating ring about its periphery and carbon cups disposed on opposite sides thereof, the movable electrodes of which are fixed to said diaphragm, of means for holding said diaphragm and cups in an operative position, said means including a face plate threaded to receive a mouth piece, said face plate supporting the said diaphragm at its periphery, a conical shaped piece recessed to receive one of said cups disposed at the center of said face plate, there being apertures through said face plate disposed about the base of said conical shaped piece, said apertures communicating with the said mouth piece and being adjacent the diaphragm, and a bridge attached to the back of said face plate with an insulating lug thereon and bored out to receive another of said cups.

2. In a microphone having a pair of similar cups containing granules of conductive material, a movable diaphragm attached to said cups in common, the combination in each of said cups of an internally threaded main cup having a stem, a polished carbon disk within the bottom of said internally threaded main cup, a threaded nipple within said main cup and extending beyond the end thereof, a mica diaphragm adjacent the outer end of said nipple, said mica diaphragm supporting a movable electrode, said movable electrode including a carbon disk polished on its face and bored through the center to receive a stud whose head is countersunk into the polished surface of the last mentioned disk, said stud passing through the said mica diaphragm and screwing through a back plate forming a support for the last mentioned carbon disk, and the other surfaces of said carbon disk being electro-plated, a threaded flange screwed on the outer end of said nipple and against said mica diaphragm, and a fluffy asbestos packing ring within said nipple and adjacent said mica diaphragm, whereby the granular conductive material contained within the cup is allowed to expand and packing is prevented.

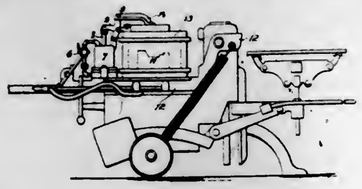
1,274,036. AIR-OPERATED CLAMPING DEVICE. MERRITT R. HANSEN and ALFRED C. HOUSER, Columbus, Ohio, assignors to The Buckeye Steel Castings Company, Columbus, Ohio. Filed Apr. 13, 1918. Serial No. 228,403. (Cl. 22—33.)

1. In molding apparatus, the combination of a turn over support for a core box or flask, a cylinder movable with said support and having a piston, a clamp actuated by the piston for clamping a plate or board to the box or flask, pipe connections with the cylinder at both sides of the piston and a valve for regulating the admission and exhaust of pressure medium to the cylinder.

2. In molding apparatus, the combination of a turn over support for a core box or flask, a cylinder carried by said support, pipe connections with the opposite ends of said cylinder, a four way valve for regulating the supply and discharge to said cylinder, a piston and piston rod, a clamp having pivotal connection with the piston rod and a rocking support for the clamp.

3. In molding apparatus, the combination of a turn over support, a cylinder secured thereto, a piston in said cylin-

der, pipe connections with both ends of the cylinder, a four way valve included in said pipe connections and a clamp having connection with the piston rod.

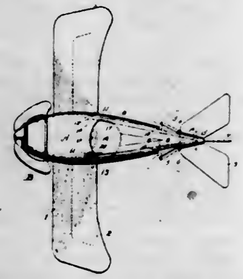


4. The combination of a cylinder and piston and piston rod, pipe connections with both ends of the cylinder, a four way valve included in said pipe connections, a swinging link and a clamp pivoted to the piston rod and also to the swinging link.

6. The combination of a cylinder, a piston and piston rod, pipes for supplying pressure medium to and for exhausting it from said cylinder, a four way valve included in said pipe connection, a swinging link pivoted to a lug on the cylinder and a clamp having pivotal connection with said link and also with the piston rod.

[Claim 5 not printed in the Gazette.]

1,274,037. FLIGHT-RETARDER OR BRAKE FOR AIRSHIPS. JOHN C. HASBROUCK, Jr., New York, N. Y. Filed July 6, 1917. Serial No. 178,912. (Cl. 244—29.)



1. An airship including a body, means for propelling and sustaining the same, brake elements arranged at opposite sides of the body with the rear edges hinged thereto and the front edges free to move outwardly from and inwardly to a position flush with the sides of the body, and vent means located between the brake elements.

5. A flying machine including a shell-like body, means for propelling the same, sustaining planes, said body having lateral openings and top and bottom openings, manually controlled brake elements projectable from the lateral openings for retarding the flight of the flying machine, and manually controlled vent valves for the top and bottom openings, whereby the air pressure on the braking members is relieved though the said top and bottom openings.

7. An air ship including a closed body having sets of oppositely disposed openings arranged one set behind the other, brake elements having their rear ends hinged to the rear edges of the front set of openings and their front ends movable outwardly, means for operating the brake elements, vent valves having their front edges hinged to the front edges of the rear openings, with their rear ends movable outwardly, and means for operating the vent valves.

[Claims 2 to 4 and 6 not printed in the Gazette.]

1,274,038. PISTON-RING. ALEXANDER W. HILKER, Chicago, Ill. Filed Nov. 1, 1917. Serial No. 199,623. (Cl. 121—108.)

1. A resilient metal piston ring for explosion engines, having one end portion thereof provided with an outer recess having a horizontal top wall and an inner vertical wall, said walls extending to the end of the ring, the top wall having an under surface which curves downward to form the end of said recess, and the other end of the ring being provided with a tongue which is rounded to fit said recess, so that the joint line curves upwardly from the bottom of the ring until it extends horizontally a distance and then extends a short distance upward vertically to the top of the ring, the distance from the bottom of said tongue to the top thereof being substantially greater than the remaining distance to the top of the ring.

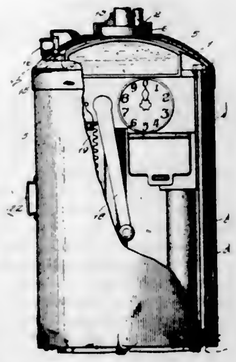


3. A piston ring as specified in claim 1, the two adjacent ends of the ring being sprung out of line with each other, and the rounded portion of said tongue being adapted to engage the end of said top wall, and to slide thereon, whereby the ring is flexed to bring said tongue into alinement with said recess, and whereby the ring is placed under tension to keep the top of said tongue pressed tightly against the bottom of said top wall.

5. In combination with the piston of an internal combustion engine, a resilient metal ring for said piston, said ring having a thick end portion (14) provided with a recess having an inner wall and another wall extending outward to overhang said recess, this overhanging wall being of less width than said recess, said outwardly extending wall being formed at the side of the ring which is toward the pressure side of the piston, said recess having an open side which faces toward the lubrication side of the piston, and the other end portion (12) of said ring being thinner and formed with a tongue to enter said recess, and with a shoulder (5) which opposes the end (6) of said outwardly extending wall of the recess, forming a small opening extending straight through in the plane of said overhanging wall to the piston, with space behind the thinner end portion and with the shoulder (7) thereof at the inner end of said small opening, and a corner (17) on the thick end portion which bears against the piston, so that pressure may enter behind the ring, as and for the purpose set forth.

[Claims 2 and 4 not printed in the Gazette.]

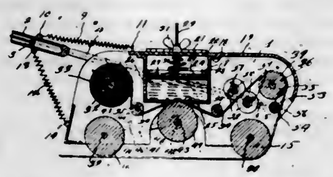
1,274,039. PUMP-INCLOSING CASING. SHERWOOD HINDS, Fort Wayne, Ind. Filed July 9, 1917. Serial No. 179,546. (Cl. 221—103.)



1. An inclosing casing comprising relatively fixed and movable segmental parts vertically divided and one rotatable about the other and overlapping it when closed both at the edges of the top and of the sides.

[Claims 2 to 15 not printed in the Gazette.]

1,274,040. WALL-PAPER MACHINE. LEWIS H. HITCHCOCK, Knoxville, Tenn. Filed Aug. 7, 1917. Serial No. 184,972. (Cl. 216—6.)



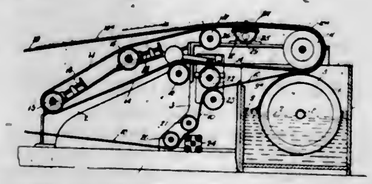
1. In a wall paper hanging machine, a casing, wall papering rollers journaled therein, said casing having means to support a roll of wall paper and provided with a paste receptacle having a paste outlet opening over which said paper passes, a spring tensioned roller bearing on the paper and holding it over said opening, whereby the paste may adhere thereto.

2. In a wall paper hanging machine, a casing, wall papering rollers journaled therein, said casing having means to support a roll of wall paper and provided with a paste receptacle having a paste outlet opening over which said paper passes, a spring tensioned roller bearing on the paper and holding it over said opening, whereby the paste may adhere thereto, and means for feeding the paste toward and through the outlet opening on to the paper.

3. In a wall paper hanging machine, a casing, wall papering rollers journaled therein, said casing having means to support a roll of wall paper and provided with a paste receptacle having a paste outlet opening over which said paper passes, a spring tensioned roller bearing on the paper and holding it over said opening, whereby the paste may adhere thereto, and means for feeding the paste toward and through the outlet opening on the paper, said feeding means comprising a follower in said receptacle provided with a gasket riveted to its face, said gasket having its marginal portions bent over the edges of the follower and engaging the inner faces of the sides of the receptacle, threaded guide rods on the follower penetrating through and guided in the cover of the receptacle, a cover for said receptacle, springs upon the rod between said cover and the follower, and thumb nuts threaded on the rods and adapted to be adjusted, whereby the expansion of the springs will act to feed the paste toward and through the opening.

4. In combination with a wall paper hanging machine, a casing, a hollow handle having hollow forks pivoted to said casing, said casing having a transverse tubular guide provided with guide slots, a carrier in said tubular guide and provided with a double edged knife extending through and guided in the slot, a pair of cords connected to opposite ends of the carrier and passing through the tubular forks and brought together and passed through the hollow handle, whereby, as one or the other of said cords is pulled, the currier is moved in one direction or the other.

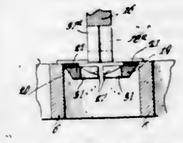
1,274,041. PAPER-PULP MACHINE. FRANK H. HOBERG, Green Bay, Wis. Filed Dec. 1, 1916. Serial No. 134,361. (Cl. 92—43.)



2. In a machine of the character described, a receptacle containing pulp, a drum journaled in said receptacle and partly immersed in the pulp, a felt belt trained to contact with the periphery of said drum, means for rotating said belt, means arranged within said belt for increasing the thickness of portions thereof to cushion pressure exerted between said drum and said felt belt, and means for removing moisture through said increased portion of the belt.

[Claims 1 and 3 to 6 not printed in the Gazette.]

1,274,042. POTATO-CUTTING MACHINE. OSCAR HOLT, Rothsay, Minn. Filed Nov. 1, 1917. Serial No. 199,699. (Cl. 146—7.)



1. In potato cutting machines, a receiving hopper provided with a plurality of closure members movable downwardly so as to open the hopper, means for normally holding said members in raised position, and a cutting device movable toward and away from the hopper so as to cut potatoes placed in the same, said cutting device being movable into engagement with the closure members so as to open the hopper and discharge the cut potatoes therefrom.

2. In potato cutting machines, two rockably mounted leaves having their inner edges adjacent so as to form a receiving hopper, said leaves being provided in their upper faces with recesses for receiving potatoes to be cut, means for normally holding the leaves in raised position, a block mounted above said leaves and movable toward and away from the same, a cutting device carried by the block and projecting from the lower face thereof for cutting potatoes placed within the recesses of the leaves, and means for actuating said block, the block being movable into engagement with said leaves so as to depress the same and discharge the cut potatoes.

3. In potato cutting machines, two leaves rockably mounted at their outer edges and having their inner edges adjacent, said leaves being provided in their upper faces with recesses for receiving potatoes, means for normally holding the leaves in raised position, a block mounted above said leaves and movable toward and away from the same, and a cutting member carried by said block and positioned to pass between the two leaves when the block is depressed so as to cut potatoes placed in the recesses of the leaves and permit the block to engage said leaves so as to rock the same downward and outward and discharge the cut potatoes therefrom, said blocks being movable into engagement with the leaves so as to depress the same.

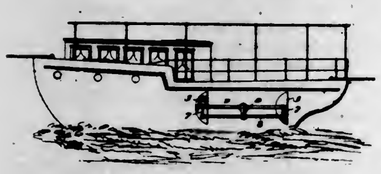
4. In potato cutting machines, two leaves rockably mounted at their outer edges and having their inner edges disposed in parallel spaced relation, said leaves being provided in their upper faces with recesses of different sizes for receiving potatoes to be cut, the leaves being further provided with transverse slots extending from the inner edges thereof across the recesses, the number of slots for the recesses varying, means for normally holding the leaves in substantially horizontal position, a block mounted above said leaves and movable toward and away from the same, the center of said block being positioned in alinement with the space between the inner edge of the leaves, a cutting device carried by the block and projecting beyond the lower face thereof consisting of a longitudinally extending cutting member positioned at the center of the block, and transversely extending cutting members spaced to correspond with the transverse slots of the leaves, and means for actuating said block.

5. In potato cutting machines, a supporting frame, spaced transverse shafts rockably mounted therein and provided at one end with oppositely directed cranks, a tension spring secured to the free ends of said cranks,

supporting leaves secured at their outer edge to said shafts and having their inner edges disposed in spaced relation, said leaves being provided in their upper faces with coöperating recesses which form recesses of different sizes for receiving potatoes to be cut, said leaves being further provided with transverse slots extending from the inner edges thereof crossing the recesses, a block mounted above the leaves and movable toward and away from the same, a cutting device carried by said block and projecting beyond the lower face thereof consisting of longitudinally and transversely disposed cutting elements so arranged as to be operated through the space between the leaves and the transverse slots in the leaves, and means for actuating said block.

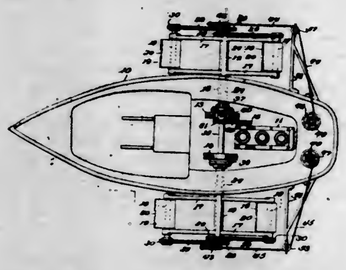
[Claim 6 not printed in the Gazette.]

1,274,043. PROPELLING MECHANISM. JAMES A. HORNE, Denver, Colo., assignor, by mesne assignments, to Edward L. Clover. Filed Sept. 13, 1915. Serial No. 50,418. Renewed Feb. 9, 1918. Serial No. 216,401. (Cl. 170—148.)



In a propelling mechanism, a hollow shaft, radial arms carried by said shaft and spaced apart, pivot shafts mounted for rotation in said arms and each having a crank, a bucket fixed to each of said pivot shafts between said arms, a rock shaft extending through said hollow shaft and having a crank, a link connected to the cranks of said rock shaft and of said pivot shafts, means for holding said rock shaft and reversing its position, and means for rotating said hollow shaft.

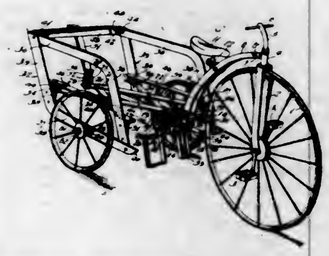
1,274,044. PROPELLING MECHANISM. JAMES A. HORNE, Denver, Colo. Filed Oct. 3, 1916. Serial No. 123,553. Renewed Feb. 9, 1918. Serial No. 216,402. (Cl. 115—49.)



1. In a propelling mechanism, a supporting body, hollow shafts mounted upon said body and extending from opposite sides thereof and each having radially directed arms, buckets mounted for oscillation relatively to said arms, a rock shaft extending through each of said hollow shafts, means for rotating said hollow shafts, means operative by said rock shafts for maintaining said buckets with their open sides in constant vertical position, a crank arm carried by each of said rock shafts, means for independently operating said crank arms to cause the oscillation of said rock shafts to reverse the position of said brackets.

2. In a propelling mechanism, a supporting body, hollow shafts mounted upon said body and extending from opposite sides thereof and each having radially directed arms, buckets mounted for oscillation relative to said arms, a rock shaft extending through each of said hollow shafts, means for rotating said hollow shafts, means operative by said rock shaft for maintaining said buckets with their open sides in constant vertical position, a crank arm carried by each of said rock shafts, a pull cable connected to each of said crank arms, and means for applying strain independently to said pull cables.

1,274,045. COMBINED VELOCIPEDE, GO-CART, AND SLED. JOHN HUDRY, Hazleton, Pa. Filed Mar. 18, 1918. Serial No. 223,132. (Cl. 208—33.)



1. A combined velocipede and go-cart, comprising a front fork and a driving and steering wheel mounted therein, a steering head on said fork, a go-cart body and wheels for supporting the same, a backbone hingedly connected to said go-cart body and adapted to be detachably connected with the steering head on said fork, whereby the fork and its attached wheel may be disconnected from the backbone and the rear part of the vehicle used as a go-cart, the backbone serving as a handle for the same.

6. A combined velocipede and go-cart, comprising a front fork and a driving and steering wheel mounted therein, a steering head on said fork having a rearwardly extending projection, a handle bar detachably mounted in said steering head, a go-cart frame and wheels for supporting the same, a backbone having its rear end hingedly connected to the go-cart frame and terminating at its forward end in a tubular portion adapted to be detachably connected with the rearwardly extending projection on the steering head, whereby the front fork and its attached wheel may be disconnected from the backbone and the handle bar removed from the steering head and inserted in the tubular portion of the backbone, and the rear part of the vehicle used as a go-cart, a backstop pivoted to the rear of the go-cart frame and adapted to be turned in an up or down position, and means for locking the back-stop in either its up or down position.

15. A combined velocipede and go-cart, comprising a front fork and a driving and steering wheel mounted therein, a handle bar fitted in said fork, a go-cart frame comprising a central bar and side frames, lazy-tongs members connecting said central bar and side frames, whereby said go-cart frame may be collapsed laterally, a back-rail pivoted to one of the side frames and detachably engaging the other side frame to hold the side frames in their extended position, an arched brace pivoted to the central bar and adapted to engage the bottom rails of the side frames to aid in holding the frames in their extended position, and a backbone detachably connecting the go-cart frame and the front fork.

[Claims 2 to 5 and 7 to 14 not printed in the Gazette.]

1,274,046. UNIVERSAL BLUE DYE AND METHOD OF PRODUCING THE SAME. CHARLES C. HUFFMAN, Chicago, Ill., assignor to Sunbeam Chemical Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 24, 1917. Serial No. 192,871. (Cl. 8—6.)

2. A blue dye soap composed of the reaction products of a vegetable oil, an excess of a saponifying agent, and a methylene blue, combined as set forth, substantially as described.

3. The method of producing a universal, alkali proof blue dye combined with soap which consists in combining a vegetable oil and a quantity of sodium hydroxid in excess of that required for saponification, then dissolving methylene blue in hot water and adding the dye solution to the saponified solution just before saponification is completed, then thoroughly mixing and then molding the soap, substantially as described.

6. A dye soap formed by combining approximately four hundred and twenty-six parts of a vegetable oil and one hundred and fifty-two parts of sodium hydroxid of a specific gravity of 1.40 at 65° F., then adding to the compound just prior to complete saponification, one hundred and twenty-eight parts of hot water in which substantially six ounces of methylene blue has been dissolved, substantially as described.

[Claims 1, 4, and 5 not printed in the Gazette.]

1,274,047. UNIVERSAL YELLOW DYE AND METHOD OF PRODUCING THE SAME. CHARLES C. HUFFMAN, Chicago, Ill., assignor to Sunbeam Chemical Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 24, 1917. Serial No. 192,872. (Cl. 8—6.)

1. The herein described dyestuff composed of the reaction products of a vegetable oil, an excess of a saponifying agent over that required for complete saponification of the oil and chrysoidin, as set forth.

4. The method of producing a universal, alkali proof dye combined with a cold process soap, which consists in combining a vegetable oil and an excess of sodium hydroxid, then before saponification is complete adding thereto an anilin dye dissolved in hot water, substantially as described.

[Claims 2 and 3 not printed in the Gazette.]

1,274,048. UNIVERSAL BROWN DYE AND METHOD OF PRODUCING THE SAME. CHARLES C. HUFFMAN, Chicago, Ill., assignor to Sunbeam Chemical Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 24, 1917. Serial No. 192,873. (Cl. 8—6.)

1. The method of producing a mixed dye soap which consists in preparing a solution of vegetable oil and an excess of a saponifying agent, then singly adding thereto just prior to complete saponification such anilin dyes as are necessary for producing the desired color and allowing the reaction following the addition of each color to be substantially complete before the addition of another color, substantially as described.

3. A universal brown dye soap composed of the reaction products of substantially four hundred and twenty-six fluid ounces of a vegetable oil, substantially one hundred and fifty-two fluid ounces of sodium hydroxid of a specific gravity of 1.40 at 65° F., substantially seven and one-half ounces avoirdupois of anilin acid red, substantially seven and one-half ounces of chrysoidin yellow, substantially five ounces direct black, and substantially one-half ounce of methylene blue, the colors being singly dissolved in substantially thirty-two fluid ounces of hot water and added singly to the soap compound before saponification is complete.

6. The new dye soap composed of the reaction products of a vegetable oil, a quantity of a saponifying agent in excess of the theoretical quantity required to saponify the oil, and a plurality of anilin dyes of different degrees of acidity or alkalinity, the dyes being separately dissolved and singly added to the mass before the oil is completely saponified.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,274,049. UNIVERSAL RED DYE AND METHOD OF PRODUCING THE SAME. CHARLES C. HUFFMAN, Chicago, Ill., assignor to Sunbeam Chemical Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 24, 1917. Serial No. 192,874. (Cl. 8—6.)

1. A universal, alkali proof red dye combined with soap which consists of the reaction products of an anilin acid red which has been added to a soap solution containing an excess of sodium hydroxid, substantially as described.

2. The method of producing a universal, alkali proof anilin acid red dye combined with soap which consists in combining a vegetable oil and a quantity of sodium hydroxid in excess of that required for saponification, then dissolving anilin acid red in hot water and adding the dye solution to the saponified solution just before saponification is completed, then thoroughly mixing, and then molding the soap, substantially as described.

3. The method of producing an alkali proof, universal anilin acid red dye combined with soap, which consists in saponifying a vegetable oil with a substantial excess of the saponifying agent, then dissolving anilin acid red in water and adding the same to the soap solution prior to the complete saponification and without removal of glycerol from the soap, the temperature of the compound after the addition of the dye being raised to substantially 122° F., then allowing the reaction to be completed and finally allowing solidification, substantially as described.

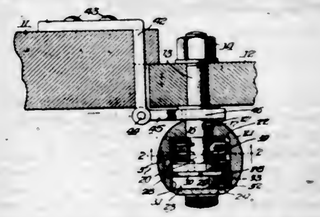
[Claim 4 not printed in the Gazette.]

1,274,050. RAILWAY-FROG. GEORGE FERRIS JACKSON, Mount Pleasant, Tex. Filed Feb. 8, 1917. Serial No. 147,416. (Cl. 104—5.)



A railway frog comprising in one integral structure, a body portion, a frog point, divergent bifurcations extending from the body portion, rail ribs formed upon the bifurcations and upon the body portion, and guiding members also upon the bifurcations disposed adjacent to the rail ribs and adapted to prevent a lateral shift of train wheels traveling upon the rail ribs, the rail ribs converging to a point in advance of the frog point, and diverging from this point parallel with the sides of the frog point, and the guiding members converging to a point opposite the point of the frog point, and diverging from said point parallel with the sides of the frog point, both the rail ribs and guiding members being curved outwardly to a common point at their forward ends.

1,274,051. PERMUTATION-PADLOCK. ARTHUR G. JACOBSON and ARTHUR J. BROWN, Chicago, Ill. Filed Dec. 12, 1916. Serial No. 136,518. (Cl. 70—19.)



1. In a permutation lock, the combination of a case having an interior chamber, a series of tumblers therein of less diameter than said chamber, interposed spring washers each connected with one of the tumblers and arranged to press the tumbler against the chamber wall, the case and tumblers having an axial bore, a bolt adapted to enter the bore, the tumblers and bolt having coöperating ribs and grooves, and exteriorly arranged means to manipulate the tumblers.

2. In a permutation lock, the combination of a case having an interior chamber, a series of tumblers therein of less diameter than said chamber, interposed U-shaped spring washers each connected at their ends with one of the tumblers and bearing at the bend on the chamber wall to press the tumbler against the opposite wall, the case and tumblers having an axial bore, a bolt adapted to enter the bore, the tumblers and bolt having cooperating ribs and grooves, and exteriorly arranged means to manipulate the tumblers.

3. In a permutation pad lock, the combination of a case having an interior chamber, a series of disk tumblers therein of less diameter than said chamber, interposed U-shaped spring washers each connected at their ends with one of the tumblers and bearing at the bend on the chamber wall to press the tumbler frictionally against the opposite wall, the case and tumbler having an axial bore, a bolt adapted to enter the bore, the tumblers and bolt having coöperating ribs and grooves, and exteriorly arranged means to manipulate the tumblers.

4. In a permutation lock, the combination of a case having an interior chamber, a series of disk tumblers therein of less diameter than said chamber, interposed U-shaped spring washers each connected at its end with one of the tumblers and bearing at the bend on the chamber wall to press the tumbler against the opposite wall, the case and tumbler having an axial bore, a bolt adapted to enter the bore, each of the tumblers having an inwardly projecting tongue, the bolt having ribs and grooves for coöperation with the tongues of the tumblers, exteriorly arranged means to manipulate the tumblers.

5. In a permutation lock, the combination of a case having an interior chamber, a series of disk tumblers therein of less diameter than said chamber, interposed U-shaped spring washers each connected at its end with one of the tumblers and bearing at the bend on the chamber wall to press the tumbler against the opposite wall, the case and tumbler having an axial bore, a bolt adapted to enter the bore, each of the tumblers having an inwardly projecting tongue, the bolt having ribs and grooves for coöperation with the tongues of the tumblers, exteriorly arranged means to manipulate the tumblers comprising an obturator for one end of the bore having a scale coöperating with a mark on the case.

[Claims 6 to 10 not printed in the Gazette.]

1,274,052. CUTTING AND WELDING TORCH. ALEXANDER F. JENKINS, Baltimore, Md., assignor to The Alexander Milburn Company, Baltimore, Md., a Corporation of Maryland. Filed Aug. 10, 1916. Serial No. 114,214. (Cl. 158—27.4.)



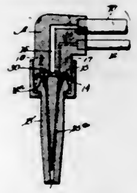
1. In a combined cutting and welding torch, the combination with a torch head having passages therein for cutting oxygen and for preheating gas or gases, of means whereby said torch is readily changeable from a welding torch to a cutting torch or vice versa, said means including a tip attachable to said head in any one of a plurality of different positions, the cutting oxygen passage in the head being closable by said tip in one of said positions and open in another of said positions which renders the device either a welding torch, or a cutting torch, as desired.

5. In a welding and cutting torch, the combination of a head having passages therein for oxygen and for a mixture of oxygen and acetylene, a tip having two or more passages therein, one of which is disposed centrally of the tip throughout most of its length and at its outlet, and means whereby the tip may be clamped to said head so as to connect said central passage to either of the passages in the head.

23. In a combined cutting and welding torch, the combination with a torch head having passages therein for cutting oxygen and preheating gas or gases, of means whereby said torch is readily changeable from a welding torch to a cutting torch or vice versa, said means including a tip attachable to said head in any one of a plurality of different positions, said tip constituting a cutting up when in one position, and a welding tip when in another position.

[Claims 2 to 4 and 6 to 22 not printed in the Gazette.]

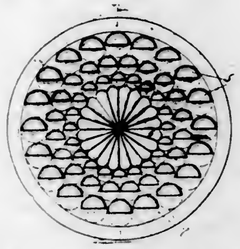
1,274,053. CUTTING AND WELDING TORCH. ALEXANDER F. JENKINS, Baltimore, Md. Continuation in part of application Serial No. 114,214, filed Aug. 10, 1916. This application filed Feb. 21, 1918. Serial No. 218,489. (Cl. 158—27.4.)



2. In combination in an acetylene welding and cutting torch, with a head having a passage for cutting oxygen and passages for welding gases, of a removable tip, and means for connecting the same to the head, said tip having a solid portion to block off the cutting oxygen, and passages to receive the welding gases and convey them to the extremity of the tip.

[Claims 1, 3, and 4 not printed in the Gazette.]

1,274,054. TRANSLUCENT GLASS. EMIL G. JOHANSON, Chicago, Ill. Filed June 11, 1917. Serial No. 174,042. (Cl. 240—48.4.)

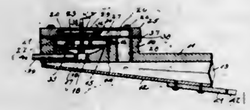


1. A glass having its surface formed with lens units, each composed of conjugate semicircular protuberances and recesses which are vertically spaced, the protuberances being on one side of the glass and the recesses on the other side.

[Claims 2 and 3 not printed in the Gazette.]

1,274,055. PNEUMATIC ACTION. ALFRED JOHNSON, ARTHUR C. SWANSON, and ALFRED H. UTTERBERG, Chicago, Ill. Filed Oct. 23, 1916. Serial No. 127,066. (Cl. 84—178.)

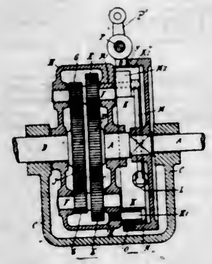
1. In pneumatic action mechanism of the class described, the combination of a block having a diaphragm chamber, a diaphragm mounted in said chamber, an annular seat formed in said block above the diaphragm chamber, a metallic plate mounted on said seat and having a port above the diaphragm, a cover for the block having a valve chamber over said port and having an atmosphere passageway leading thereto, a sheet of flexible material clamped between said cover and block and having an opening in register with said port, and a valve in said valve chamber seating on said sheet and having guide legs extending through said port toward the diaphragm, said valve being actuated by the diaphragm to control said port and atmosphere inlet.



2. In pneumatic controlling mechanism of the class described, the combination of a block having a diaphragm chamber, a diaphragm mounted in said chamber, a cover on said block having a valve chamber therein and having an atmosphere inlet to said chamber, a sheet of flexible material clamped between the block and cover, a stiff plate secured to the under side of said sheet to fit over the diaphragm chamber, said sheet and plate having a port therethrough between the valve chamber and the diaphragm chamber, and a valve in said valve chamber having legs extending downwardly through said port to the diaphragm, said sheet forming a flexible sealing seat for the lower face of said valve.

[Claim 3 not printed in the Gazette.]

1,274,056. DIFFERENTIAL GEARING. ADRIAN DENMAN-JONES, Holloway, London, England, assignor to The Jandus Arc Lamp & Electric Company, Limited, Holloway, England. Filed Aug. 20, 1917. Serial No. 187,221. (Cl. 74—34.)

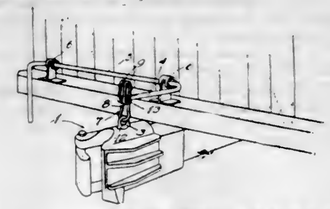


2. In differential gearing, two main shafts, a planet cage mounted on the main shafts, other shafts carried by the planet cage, planet pinions mounted on the last-mentioned shafts, a toothed wheel on each main shaft in gear with the planet pinions, a brake secured to the planet cage, a brake drum on one of the main shafts, a pivotally mounted cam between the ends of the brake, an arm, one end of the arm being secured to the cam, a spring attached to the other end of the arm, a second brake encircling the brake secured to the planet cage, and means for actuating the second brake.

[Claims 1 and 3 not printed in the Gazette.]

1,274,057. RELEASE-CLEVIS FOR CAR-COUPLINGS. EDWIN JONES, Cleveland, Ohio. Filed Sept. 13, 1917. Serial No. 191,214. (Cl. 213—59.)

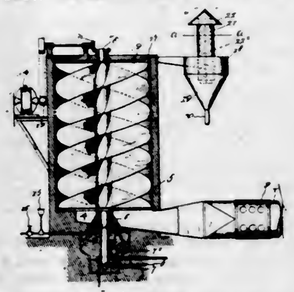
1. The combination of a railway car, a coupler head having a release pin provided with a horizontal eye, a release arm extending longitudinally above the coupler head and having a horizontal eye, means for raising said arm, and a connecting link between sail pin and arm, said link comprising a one piece metal rod bent into the form of a U whose base passes loosely through the eye of said pin, the arms of said U being bent downwardly substantially upon themselves to form a pair of vertically elongated loops, the sides of said loops being located on opposite sides of said release arm and on opposite sides of said eye thereof, and a pin passing through this eye and projecting in opposite directions from said release arm, one of said loops being open at its lower end to permit passage of the link through the release pin eye.



2. A coupler release clevis formed of a single metal rod bent into the form of a vertically elongated U adapted for passage through an eye on the upper end of the release pin, the arms of the U being formed with vertically elongated loops positioned in spaced parallel planes parallel with that of the U, said loops being adapted to receive the coupler release arm, and the lower end of one of said loops being open.

[Claim 3 not printed in the Gazette.]

1,274,058. AIR-CLEANER AND PROCESS OF CLEANING AIR. OSWALD KUTSCHE, Pittsburgh, Pa. Filed Mar. 1, 1917. Serial No. 151,752. (Cl. 183—77.)



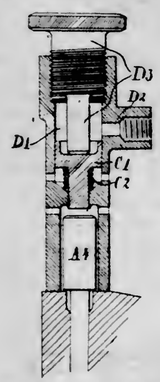
1. The process of cleaning and purifying air which consists in passing warm dust laden air in a continuous column, introducing clean cold air directly into the passing column around its periphery only, whereby the said column is surrounded at its introducing zone by a belt of clean cold air, and thus separated somewhat from the walls of the conduit whereby the formation of charged particles is avoided and coalescence induced, changing the direction of said stream, then imparting to said stream a whirling action, whereby particles of agglomerated coalesced dust are thrown out, continuing said column in a tangential direction in a plane parallel to its first direction, settling, and skimming.

2. The process of cleaning and purifying air which consists in passing warm dust laden air in a continuous column, introducing clean cold air directly into the passing column around its periphery only, whereby the said column is surrounded at its introducing zone by a belt of clean cold air, and thus separated somewhat from the walls of the conduit whereby the formation of charged particles is avoided and coalescence induced, changing the direction of said stream, then imparting to said stream a whirling action in several steeply pitched, substantially parallel spiral columns, whereby particles of agglomerated coalesced dust are thrown out, continuing said column in a tangential direction in a plane parallel to its first direction, settling, and skimming.

3. In a device for removing dust from air, a cylinder, an admission conduit arranged to discharge tangentially into the upper part of the cylinder, a settling and collect-

ing cone connected to the lower part of said cylinder, a discharge cylindrical conduit for cleaner air, leading from the upper part of said cone through said cylinder axially of said cylinder, means in the upper part of said conduit for giving a spiral swirl to the ascending column of air, and vertically arranged skimming devices in the walls of said conduit for skimming off or removing any final air carried dust particles.

1,274,059. FUEL-FEED VALVE AND VALVE-OPERATING MECHANISM FOR INTERNAL-COMBUSTION ENGINES. FREDERICK WILLIAM LANCHESTER, London, England. Filed Oct. 30, 1917. Serial No. 199,390. (Cl. 123—32.)



1. An internal engine of the type described comprising an engine cylinder having an inlet port, and a fuel supply passage leading thereto, a normally closed valve controlling said inlet port having a valve stem, a hammer normally retracted from said stem and arranged to operate on said valve stem, and means for actuating said hammer at the proper times to deliver a percussive blow to said stem.

7. An internal engine of the type described comprising an engine cylinder having an inlet port, and a fuel supply passage leading thereto, a normally closed valve controlling said inlet port having a valve stem, a pneumatic percussive hammer arranged to operate on said valve stem, and means for actuating said hammer at the proper times.

[Claims 2 to 6 not printed in the Gazette.]

1,274,060. COLLAR-BUTTON. EDWARD M. LANG, Jr., Portland, Me. Filed May 5, 1917. Serial No. 166,736. (Cl. 24—101.)

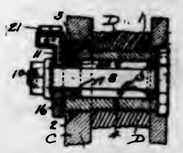


A collar button consisting of a base, a shank terminating in a cup, having an inwardly projecting edge, a ball in said cup, retained by said edge and a helical spring in said shank impinging on the under surface of said ball to form a single yielding support for said ball.

1,274,061. CROSS-HEAD PIN. WILLIAM L. LEONARD and JOHN E. MYERS, Altoona, Pa. Filed Dec. 7, 1917. Serial No. 206,041. (Cl. 64—27.)

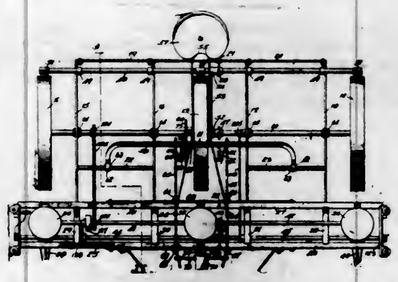
1. A device of the class described including an apertured tubular casing member, a filler plug detachably fitted in one end of said casing, and an assembling bolt for holding said filler plug in position with reference to the casing.

9. A device of the class described including an apertured tubular casing, a filler plug detachably interlocked with one end of said casing and having a lubricant cup and feeding channel adapted to communicate with the interior of the casing, a T-head assembling bolt having a shank portion of less diameter than the interior of the casing and disposed longitudinally therein so as to provide an annular lubricant chamber, and said bolt being detachably interlocked with the end of the casing opposite the filler plug and also adapted to receive a nut to lock said filler plug in position, and means for preventing the escape of lubricant from the chamber at the end where the head of the bolt interlocks with the casing.



[Claims 2 to 8 not printed in the Gazette.]

1,274,062. CORN-PLANTER. WILLIAM HOLLAND-LETZ, Crown Point, Ind., assignor to The Letz Manufacturing Company, Crown Point, Ind., a Corporation of Indiana. Filed Aug. 20, 1914, Serial No. 857,624. Renewed Dec. 26, 1917. Serial No. 208,980. (Cl. 111—54.)



1. In a three-row corn-planter, the combination with an axle, of three covering wheels secured thereto at its ends and center, a runner-frame having three seed-boxes in front of the covering wheels, a main frame journaled on the axle and pivotally connected to the runner-frame, a seed-shaft journaled in the runner-frame, connections for driving the seed-shaft from the axle, a parallel trip shaft also journaled in the frame, connections from the trip shaft to the seed-shaft for controlling the operation of the latter, universal joints in the axle and the two shafts in alinement with each other and near the middle thereof, and joints in the main frame and the runner frame in alinement with the universal joints.

4. In a three-row corn-planter, the combination with an axle, of three covering wheels mounted on the ends and at the center thereof, a main frame pivoted on the axle, a runner-frame pivoted on the forward end of the main frame having three seed-boxes and three runners in alinement with the covering wheels, joints in the axles and frames in alinement with each other and near the center of the machine, a compensating yoke mounted on the main frame and spanning the joint, compensating yokes mounted on the runner-frame and spanning the joints, a tongue-frame secured to the runner-frame yokes, a seat-frame secured to the main-frame yoke and pivotally connected to the tongue-frame, and means for tilting the main frame on the axle and the runner-frame on its joint with the main frame to raise and lower the runners.

9. In a three-row planter, the combination with an axle, of three covering wheels mounted at its ends and center, a main frame pivotally mounted on the axle, a runner-frame having three seed-boxes and runners in alinement with the covering wheels, pivotal connections at several points between the forward end of the main frame and the runner-frame, joints in the axle and the frames in alinement with each other and near the center of the machine, a compensating yoke movably mounted at its ends on the main frame on the opposite sides of the joints, and a seat-frame supported on the top of the yoke.

[Claims 2, 3, 5 to 8, and 10 not printed in the Gazette.]

1,274,063. HANDHOLD FOR CARS. WILLIAM LINN, Philadelphia, Pa. Filed May 3, 1918. Serial No. 232,237. (Cl. 105—35.)



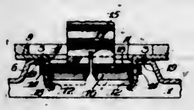
1. A flexible hand hold for street cars or the like, embodying a sheath, a flexible member continued throughout the length of the hand hold with portions at each end thereof protruding through the ends of the sheath for holding the same supported longitudinally of the car.

2. A flexible hand hold for street cars or the like, embodying a spirally wound flexible sheath and a flexible member contained within the same with its end portions extended beyond each end of the sheath for supporting the hand hold in a horizontal direction at opposite ends of a car.

3. A flexible hand hold for street cars or the like, comprising a spirally wound metal sheath, a flexible tube within the same, and a flexible ligament within the tube with both end portions extended.

[Claims 4 and 5 not printed in the Gazette.]

1,274,064. FASTENING DEVICE. EMIL LUDEKE, Rochester, N. Y. Filed June 7, 1917. Serial No. 173,280. (Cl. 24—211.)



1. A fastening device comprising a pair of separable members, one of which is recessed and provided with a plurality of locking shoulders and the other of which carries a plurality of retaining members engageable in said recess, and a pivoted actuating lever controlling said retaining members and acting when turned about its axis to move them into engagement with the locking shoulders.

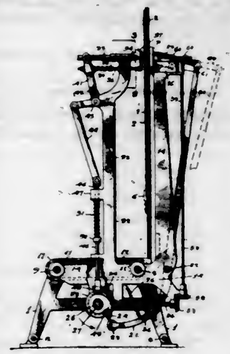
14. A fastening device comprising a pair of separable members, one of which is recessed and provided with a plurality of locking shoulders and the other of which carries a plurality of resilient retaining members, cam faces on the retaining members, and a pivoted actuating lever having cam surfaces arranged to engage the cam faces on the retaining members and spread the latter so as to engage said shoulders.

[Claims 2 to 13 not printed in the Gazette.]

1,274,065. PAPER-BOX-TAPING MACHINE. JULIAN J. MCMURTRY and EARL V. MCMURTRY, San Francisco, Cal. Filed Nov. 21, 1917. Serial No. 202,280. (Cl. 93—36.)

1. A taping machine comprising a suitable frame; adjustable means secured to the frame to retain a paper box blank to be taped; means for applying adhesive at two points on the blank; means for inserting the ends of two separate tapes through the blank adjacent the applied adhesives; and means for pressing the ends of the tapes onto their respective adhesives; and means for varying the space between the adhesive, tape inserting and tape pressing means.

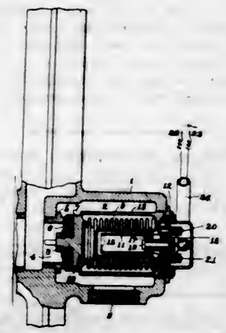
5. A taping machine comprising a suitable main frame; a vertically disposed plate secured to the main frame and having a longitudinally disposed slot therein; adjustable means for holding a paper box blank on the plate and over the slot; a power shaft rotatably mounted within the main frame; a pair of shafts rotatably mounted in the main frame and threaded in opposite directions from the center toward the ends of said shafts; a pair of subframes mounted upon the threaded shafts, one on each side of the center of said shafts; means mounted upon each subframe for applying an adhesive onto the blank and through the



slot in the plate; means mounted upon each subframe for inserting the end of a tape through the blank at a point adjacent one of the applied adhesives; means mounted upon each subframe for pressing the respective tape end onto the respective adhesive; means slidably mounted upon the power shaft for operating the adhesive applying means, the tape inserting means and the tape pressing means; and means for moving the operating means on the power shaft with the subframes.

[Claims 2 to 4 not printed in the Gazette.]

1,274,066. HEAT-REGULATOR. HARRY C. MALLORY, Bellport, N. Y. Filed Mar. 4, 1915. Serial No. 12,000. (Cl. 236—4.)



1. The combination with a primary circuit controller, of an electric circuit, a secondary heat actuated controller, means for maintaining said secondary heat actuated controller at a normal elevated temperature, a heater in said electric circuit for raising the normal temperature of said secondary heat controller to a higher degree and a device adapted to be moved to one position when said secondary controller is normally heated and to another position when abnormally heated.

5 The combination with a source of fluid supply, of a radiator or the like to be supplied thereby, a controlling

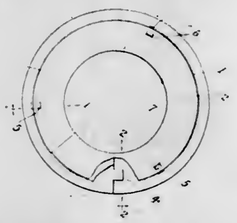
valve for the fluid supply thereto, a thermostat on the supply side and subject to the fluid temperature, for operating said valve in one direction, and means for additionally heating said thermostat to move said valve in the opposite direction.

14. The combination with a fluid pressure operated bellows type thermostat closed at one end, of a shell within said thermostat closing the other end thereof, and adjusting means within said shell for controlling the movement of said thermostat.

17. A fluid pressure actuated thermostat comprising concentric flexible and rigid walls, and an electric heater near said rigid wall for operating said thermostat in one direction.

[Claims 2 to 4, 6 to 13, 15, and 16 not printed in the Gazette.]

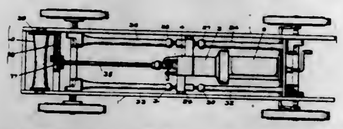
1,274,067. NECK-PROTECTOR. NATALE MARTINO, New York, N. Y. Filed May 23, 1916. Serial No. 99,301. (Cl. 2—54.)



1. A neck protector for the purpose described, comprising two flat annular layers or flaps arranged concentrically one on the other with their inner edges united, forming a ring capable of being opened upon said inner edge as a hinge, and a plurality of struts, carried by one of said flaps to bear on the other flap and thereby hold said flaps apart and displaceable to permit the flaps to come together; said ring being split to permit circumferential adjustment by inserting one end into the other when the ring is placed around the neck.

2. A neck protector for the purpose described, comprising two flat annular layers or flaps arranged concentrically one on the other with their inner edges united, forming a ring capable of being opened on said inner edge as a hinge; said ring being split to permit circumferential adjustment by inserting one end into the other when the ring is placed around the neck, and one end being provided with a gummed portion which can be stuck to the other end to hold the two ends in adjusted position with the inner edge of the ring in close contact with the neck of the wearer.

1,274,068. POWER-TRANSMITTING MEANS FOR MOTOR-VEHICLES. THEODORE H. MILLINGTON, Winnetka, Ill. Filed May 17, 1916. Serial No. 98,099. (Cl. 180—49.)



1. In power transmitting means for motor vehicles in combination with a differential mechanism, a power driving shaft therefor, and transmission shafts parallel with said power shaft at the sides of the chassis driving the four wheels of the vehicle, said differential having its driving and driven elements arranged concentric of said power driving shaft, and driving connections between said differential and the transmission shafts.

3. In power transmitting means for motor vehicles in combination with a differential mechanism having a horizontal power driving shaft and having its driving and driven elements mounted concentrically of said power driving shaft, interchangeable homologous transmission shafts on each side of the power driving shaft and parallel therewith leading separately to different wheels of the vehicle at the front and rear thereof, and means of driving connection between the differential and said side transmission shafts.

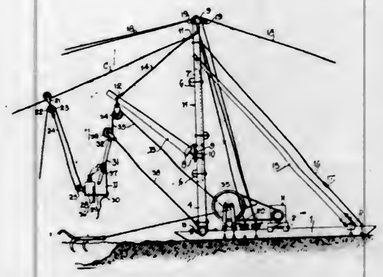
5. In power transmitting means for motor vehicles, in combination with a driving shaft parallel with the longitudinal axis of the chassis, a main differential mechanism, said differential having the driving and driven elements thereof arranged concentrically of said shaft, interchangeable transmission shafts parallel with the driving shaft and corresponding to the front and rear wheels of the vehicle and adapted to drive the same and differential mechanisms between the front and rear shafts on each side and means of connection between the main differential and said shaft differentials.

7. In power transmitting means for motor vehicles in combination with an engine, a horizontal power shaft, a main differential operable by said power shaft and having its driving and driven means arranged concentric therewith, said shaft extending in the central longitudinal line of the chassis, four homologous transmission shafts parallel with the power shaft and operatively connected to the front and rear wheels of the vehicle and disposed symmetrically on opposite sides of said power shaft and a differential for the pair of transmission shafts on each side of the vehicle operatively connected with said main differential and an engine mounted substantially in the central longitudinal line of the chassis.

9. In a motor vehicle, a differential mechanism having a horizontal power shaft, a sleeve thereof, a differential mechanism having its driving and driven elements mounted on said sleeve concentrically of said power shaft and having its driven elements operatively connected with driving wheels, an extension of said power shaft arranged horizontally beyond the differential, a clutch connecting the power shaft proper and said extension, a clutch between said sleeve and said power shaft proper, a winch and driving connections between said extension and said winch.

[Claims 2, 4, 6, and 8 not printed in the Gazette.]

1,274,069. EXCAVATING APPARATUS. ARTHUR A. MITCHELL, Coleraine, Minn. Filed Feb. 20, 1918. Serial No. 218,190. (Cl. 37—19.)

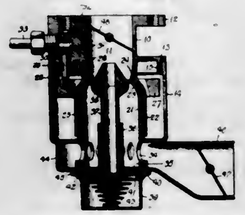


1. An excavating apparatus comprising, in combination, an upstanding mast, a boom carried thereby, a track inclined upwardly toward the mast and secured to the upper portion of the mast, a hanger traveling upon said track, a digging implement adjustably engaged with said hanger, and a flexible pulling element secured to the digging implement and engaged with the outer portion of the boom.

4. An excavating apparatus comprising an upstanding mast, a boom carried thereby, a track-way inclined upwardly toward the mast and secured to the upper portion of the mast, a digging implement, means coacting with the implement and the track-way whereby said implement may be moved along the track-way, a flexible pulling element secured to the digging implement and engaged with the outer portion of the boom, and a guiding member coacting with the flexible pulling element at a point below the boom.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,274,070. CARBURETER. WALTER MORTON, Windsor, Ontario, Canada. Filed Aug. 20, 1915. Serial No. 46,408. (Cl. 261—62.)



1. In a carbureter, the combination of an air passage having an annular fuel inlet, a fuel chamber concentric with said air passage and communicating with said annular inlet, and a member within said air passage opposite said fuel inlet and adapted to be moved by engine inspiration in a direction opposite to the flow of the ingoing air in said air passage.

7. In a carbureter, the combination of a body forming a mixing chamber, a cup member forming a fuel chamber concentric with said mixing chamber, and an axial tubular member in the cup coöperating with the mixing chamber to form an air passage through the carbureter and with its end adjacent the body at the lower end of the mixing chamber to form an annular fuel inlet from the fuel chamber into the air passage, said body and cup member being relatively adjustable to vary the fuel inlet.

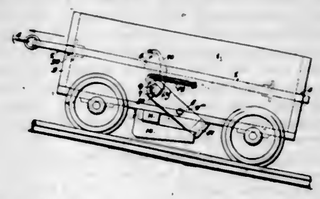
9. In a carbureter, the combination of a body forming a mixing chamber, a cup member having screw-threaded engagement with the body, an axial tubular member in the cup forming together with said chamber an air passage through the carbureter, the space between the end of said tubular member and body forming a fuel inlet into said air passage which inlet is adjustable by turning the cup relative to the body, and a member within said air passage adjacent said fuel inlet for regulating the flow of air.

12. A carbureter comprising a fuel reservoir having an integrally-formed hollow upwardly-extending nozzle through which air to be carbureted may pass, and a cover having an opening and an integrally-formed depending sleeve surrounding said opening and adapted to telescope over said nozzle to form an annular space through which the fuel from the reservoir may pass, the said sleeve having an interiorly-formed shoulder constituting a valve seat with which the extremity of the nozzle coöperates to control the supply of fuel from said annular space to the space above the nozzle, and said cover having a threaded connection with the reservoir serving as adjusting means for regulating the distance between the extremity of the nozzle and said seat.

[Claims 2 to 6, 9 to 11, and 13 not printed in the Gazette.]

1,274,071. BRAKE FOR UPHAULS FOR MINES. WILLIAM J. MOW, Grass Valley, Cal. Filed May 18, 1917. Serial No. 169,555. Renewed Jan. 15, 1918. Serial No. 211,997. (Cl. 188—74.)

1. A brake device for uphaul cars comprising a pivoted rail gripper, a draw bar controlled means for holding the gripper inactive when the draw bar is under a pull strain, means tending to move said gripper into the rail gripping position, and a device coöperating with the gripper when in the gripping position to cause the said gripper to effectually grip the rail.



2. A brake device for uphaul cars comprising a pivoted rail gripper, a draw bar controlled means for holding the gripper inactive when the draw bar is under a pull strain, means tending to move said gripper into the rail gripping position, and a device coöperating with the gripper when in the gripping position to cause the said gripper to effectually grip the rail, said gripper comprising a bifurcated member and a spreader normally holding the said member apart, the said device being designed to close the gripper members together.

3. A brake device for uphaul cars comprising a pivoted rail gripper, a draw bar controlled means for holding the gripper inactive when the draw bar is under a pull strain, means tending to move said gripper into the rail gripping position, and a device coöperating with the gripper when in the gripping position to cause the said gripper to effectually grip the rail, said gripper comprising a bifurcated member and a spreader normally holding the said member apart, the said device being designed to close the gripper member together, said gripper members having rail head engaging grooves.

4. A brake device for uphaul cars, comprising an axle rockably mounted on and transversely of the car, a rail clutch dog mounted on the axle, means tending to normally move the dog to engage with the rail, a draw bar mounted on and having a limited pull movement relative to the axle, a connection between the draw bar and the axle that holds the axle and the clutch dog out of engagement with the rail.

5. A brake device for uphaul cars, comprising an axle rockably mounted on and transversely of the car, a rail clutch dog mounted on the axle, means tending to normally move the dog to engage with the rail, a draw bar mounted on and having a limited pull movement relative to the axle, a connection between the draw bar and the axle that holds the axle and the clutch dog out of engagement with the rail, said clutch dog including opposing jaws, means tending to hold the jaws apart and other means coöperating with the said jaws when the dog is moved to its rail clutching position for clamping the jaws on the rail.

[Claims 6 and 7 not printed in the Gazette.]

1,274,072. SIGNAL FOR MINE-RAILWAYS. JOSEPH A. MUIR, Smithboro, Ill. Filed Mar. 23, 1916. Serial No. 86,129. (Cl. 246—48.)

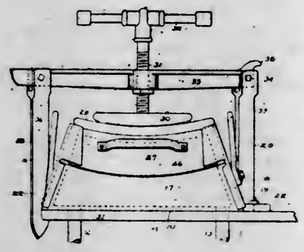


1. In a railway signal system, a main track; first, second, third and fourth car actuated members on the main

track; a first siding branching from the main track between the first and third car actuating members; a second siding branching from the main track between the second and fourth car actuated members; a signal on the first siding; a first screen and a second screen movable with respect to said signal; a signal on the second siding; a third screen and a fourth screen movable with respect to the last specified signal; a mechanical means connecting the first car actuated member with the second screen and with the third screen to advance the same; a mechanical means connecting the third car actuated member with the second screen to retract the latter; a mechanical means connecting the second car actuated member with the third screen to retract the same; a mechanical means connecting the second car actuated member with the fourth screen to advance the same; a mechanical means connecting the fourth car actuated member with the fourth screen to retract the latter; a mechanical means connecting the third car actuated member with the first screen to advance the latter; a mechanical means connecting the first car actuated member with the first screen to retract the latter; a fifth car actuated member on the first siding; a sixth car actuated member on the second siding; mechanical connections between the fifth car actuated member and the second and third screens to retract the same; and a mechanical connection between the sixth car actuated member and the third screen to retract the same.

[Claim 2 not printed in the Gazette.]

1,274,073. DEVICE FOR SHAPING AND VULCANIZING AUTOMOBILE-TIRE PATCHES. ALBERT L. MURRAY, Auburn, Ind., assignor to The Double Fabric Tire Company, Auburn, Ind., a Corporation. Filed Mar. 15, 1918. Serial No. 222,615. (Cl. 18—18.)



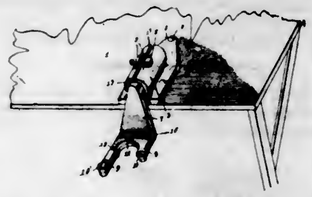
1. In a device of the class described the combination of a body having a cavity therein, the bottom wall of the cavity being concave longitudinally and transversely, means to heat the body, two spring plates adapted to be engaged on opposite sides of the body and means to force the spring plates toward the said opposite sides of the body.

4. In a device of the class described the combination of a body having a cavity therein, the bottom wall of the cavity being concave longitudinally and transversely, a steam jacket within the body adapted to heat the same, the upper portion of two opposite side walls of the body being inclined inwardly toward the upper edges thereof, two members adapted to be engaged on said inclined portions of said walls and means to force the said members toward the said inclined portions for the purposes described.

[Claims 2 and 3 not printed in the Gazette.]

1,274,074. ENGINE-SUPPORTING BRACKET. JOSEPH O'BRIEN, Lucas, Kans. Filed Aug. 22, 1917. Serial No. 187,610. (Cl. 29—89.)

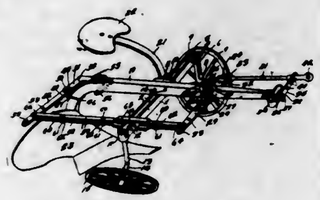
1. In a device of the character set forth, the combination with a support comprising a base, means for securing the same in place, a split clamping sleeve on the base, and means for contracting the sleeve, of a work holder comprising a spindle journaled in the sleeve and adapted to be clamped thereby upon its contraction, said holder having outwardly extending arms sufficiently spaced apart



to straddle the bore of an engine cylinder and having bolt receiving openings adapted to aline with the bolt openings of such engine cylinder.

[Claims 2 to 5 not printed in the Gazette.]

1,274,075. DRAFT-WHEEL CONNECTION FOR WHEEL AND GANG PLOWS. WILLIAM O'CONNOR, Boulder, Colo. Filed Apr. 5, 1916. Serial No. 89,100. (Cl. 97—36.)



The combination with a plow beam, of a transverse supporting beam provided with supporting wheels, means for mounting the plow beam on the supporting beam, a transverse lever bar pivoted to the plow beam in advance of the supporting beam and having a short arm and a long arm, a lever pivotally mounted on the plow beam at its extreme rear end thereof and transversely of the plow beam, said last named lever having a long arm and a short right angle arm, a member connected to the extremity of the short right angle arm and having forks laterally straddling the plow beam, an elongated link having its opposite ends adjustably connected to the long arms of said levers respectively, said link having a guide opening through which the supporting beam extends, whereby the plow beam is braced relative to the support-beam and vice versa, and whereby the link is allowed to move transversely of the supporting beams, and a draft rod connected to the short arm of the first lever, whereby the levers and the link may be moved to become fixed, to exert a bracing action on the plow beam.

1,274,076. ELECTRIC-RAILWAY SYSTEM. ERICH J. PATELSKI, Chicago, Ill. Filed Mar. 8, 1915. Serial No. 12,783. Renewed Aug. 23, 1916. Serial No. 116,560. (Cl. 191—15.)

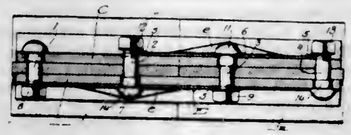


1. An electric railway system comprising a housing carried by the rolling stock and constructed of reticulated sections to permit lateral flexing thereof when the trucks travel around curves in the track, said housing being open along one side thereof, members disposed along the track to enter the front end of said housing and leave at the rear end thereof, a contact strip extending

longitudinally within said housing, insulated contacts fixed on said members, the arrangement being such that the upper surface of said contact strip engages the under sides of said contacts by upward pressure, springs disposed in a plane below said strip to yield under said pressure, said members being such a distance apart that said strip is always in engagement with at least one of said contacts, and means to connect said contacts with a source of current, said members being held in fixed position, and said springs being covered by said housing.

[Claims 2 to 5 not printed in the Gazette.]

1,274,077. NUT-LOCK. ANDREW ROY PEFFERS, Aurora, Ill., assignor of one-half to Frederick C. Schnitz, Congress Park, Ill. Filed May 21, 1917. Serial No. 169,816. (Cl. 151—38.)

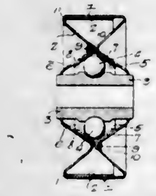


1. A nut-lock for rail-joints, comprising a leaf-spring having out-turned ends to engage and be flexed inward by the nuts, when the bolts of the rail-joint are tightened, and having means including a stiffening formation to prevent the middle portion of said spring from bowing outward.

10. The combination of rails and a splice-bar at each side thereof, bolts extending through said rails and bars, a leaf-spring at one side held in place against one bar by the head of one bolt and having its ends pressed inward by nuts on other bolts, and a similar leaf-spring at the other side held in place by the head of one bolt and having its ends pressed inward by nuts on other bolts, so that some of said bolts are each engaged at one end by the middle portion of one spring and at the opposite end by the end of another spring.

[Claims 2 to 9 not printed in the Gazette.]

1,274,078. SKATE-ROLLER. DANIEL F. PRINTZ, Reading, Pa., assignor to American Skate & Manufacturing Company, Reading, Pa., a Corporation of Pennsylvania. Filed July 30, 1915. Serial No. 42,821. (Cl. 46—52.)



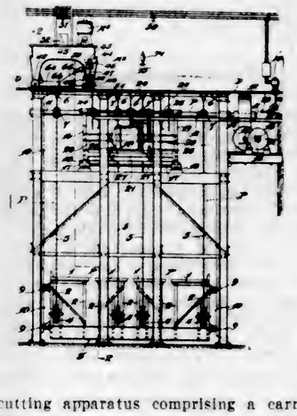
1. A skate roller including a body having two dished portions of angular section; conical bearing rings respectively parallel to and engaging the inner conical surface of said dished portions; an axle member extending through said body; with antifriction elements mounted between the bearing rings and said member; each of said rings having lugs rigidly holding it to at least one of said dished portions.

2. A skate roller consisting of two members constituting a body and oppositely dished to form relatively deep annular depressions of V-shaped section in the sides of said body; two bearing rings having lugs extending through openings in the deepest parts of the depressions in the body; an axle member; and antifriction elements mounted between said axle member and the bearing rings.

3. A skate roller consisting of two dished members constituting a body; two conical bearing rings respectively parallel to and lying in engagement with the inner surface of the dished portions of said members; means for holding said bearing rings from rotation relatively to the dished members; an axle member; and antifriction elements mounted between the axle member and the bearing rings.

4. A skate roller consisting of two dished members constituting the body of a roller; two conical bearing rings parallel to and lying in engagement with the inner surface of the dished portions of said members respectively; an axle member; antifriction elements mounted between the axle member and the bearing rings; with lugs projecting from the base portions of said bearing rings and riveted to the dished members.

1,274,079. APPARATUS FOR HARVESTING ICE. GEORGE L. REUSCHLINE, Philadelphia, Pa., assignor to American Ice Company, a Corporation of New Jersey. Filed July 8, 1916. Serial No. 108,180. (Cl. 143—47.)



2. Ice cutting apparatus comprising a carriage movable with respect to a mass of ice, a saw carried by said carriage for sawing the ice, a member carried by said carriage and engaged by the ice due to movement of said carriage with respect to said ice, and a member hinged upon said carriage and actuated by said first named member to displace a block of ice when severed.

5. Ice cutting apparatus comprising means for supporting an ice plate in vertical position, a vertical saw, means for elevating said ice plate with respect to said saw whereby said plate is sawed vertically, a horizontal saw, and means for moving said horizontal saw horizontally with respect to said plate.

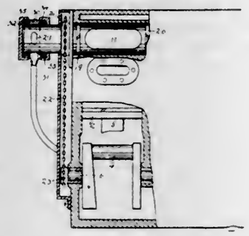
8. Ice cutting apparatus comprising means for supporting an ice plate in vertical position, a vertical cutter, means for causing upward movement of said ice plate with respect to said cutter whereby said plate is cut vertically, a gage determining the vertical movement of said plate with respect to said cutter, means controlled by said gage controlling said second named means, and a saw movable horizontally to sever ice blocks whose height has been predetermined by said gage.

[Claims 1, 3, 4, 6, and 7 not printed in the Gazette.]

1,274,080. VALVE MECHANISM FOR INTERNAL-COMBUSTION ENGINES. HERMANN ERNST RICHTER, Tuckahoe, N. Y., assignor to Charles F. Cassens, Yonkers, N. Y. Filed Jan. 9, 1917. Serial No. 141,475. (Cl. 123—59.)

1. A valve for engines comprising a plurality of rods each provided with apertures and adapted to control the intake and exhaust ports of said engine; sprockets and

chain for continuously rotating said rods, and means surrounding one end of said rods and a tapered plug



entering one end of each of said rods for passing a cooling medium through said rods as herein set forth.

[Claim 2 not printed in the Gazette.]

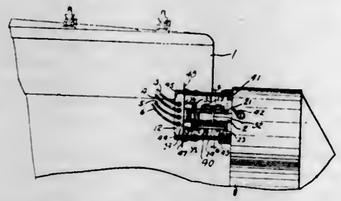
1,274,081. HYPODERMIC NEEDLE. RICHARD H. RIETHMUELLER, Montclair, N. J., assignor to Herman A. Metz, New York, N. Y. Filed May 10, 1917. Serial No. 167,785. (Cl. 128—25.)



1. As an article of manufacture, a needle for hypodermic syringes, comprising a hub provided at one end with means for attachment to a syringe and having its other end tapering and provided with a bore, a needle having its butt end permanently secured in the said bore, and a guard permanently attached to the needle a distance in front of the tapering end of the said hub.

2. As an article of manufacture, a needle for hypodermic syringes, comprising a hub provided at one end with screw thread for attachment to a syringe and having its other end tapering and provided with a bore, a needle having its butt end permanently secured in the said bore, and a guard in the form of a disk having a rounded off edge and permanently attached to the needle a distance in front of the tapering end of the said hub.

1,274,082. AUTOMATIC SPARK-ADVANCING MECHANISM. HARRY T. ROBERTS, Oakland, Cal. Filed Aug. 22, 1916. Serial No. 116,376. (Cl. 123—117.)



1. A spark advancing mechanism for explosion engines comprising a suitably timed shaft, a revoluble shell connected with said shaft, a contact supporting disk carried by said shell and movable with respect to the same, a series of weights surrounding said shell, springs to hold said weights normally in engagement with the shell, means to rotate the weights with the shell, a link connecting said weights with the disk whereby the disk will be advanced as the weights move outwardly from the shell under the influence of rotation, and a series of contact segments over which the contact travels.

2. A spark advancing mechanism for explosion engines comprising a suitably timed shaft, a shell rigidly connected therewith, a series of weights surrounding said shell, springs adapted to hold said weights normally against the shell, means connected with one end of the springs to rotate the weights with said shell while permitting the other end of said springs to move outwardly under the influence of rotation, a contact disk movably supported on the shell, a link connecting said disk and one of said weights whereby the contact disk will be advanced as the shell is rotated, a series of contact segments, and a brush carried by the disk and adapted to travel over said contact segments.

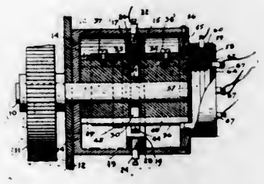
3. A spark advancing mechanism for explosion engines comprising a suitably timed shaft, a shell rigidly connected therewith, a set of weights surrounding said shell, springs holding the weights normally in contact with the shell and pivoted thereto at one end of the springs, a contact disk carried by the shell and movable with respect thereto, a link connecting one of the weights with said disk and adapted to shift the position of said disk with respect to the shell, a series of contact segments, and a brush carried by the contact disk adapted to pass over said contact segments.

4. A spark advancing mechanism for explosion engines comprising a timed shaft, a shell carried thereby, a contact supporting disk movable on the shell, a set of weights around the shell, a pair of springs adapted to hold the weights in contact with the shell, a pin to which one end of the springs are hinged, the other ends being movable outwardly when rotated, a link connecting the weights and contact disk, an insulating cover for the shell, a disk secured to said cover and having a plurality of contact segments over which the contact travels.

5. A spark advancing mechanism comprising a timed shaft, a shell carried thereby, a series of weights around the shell, a pair of circular springs inclosing the weights and holding them in contact with the shell, a pin carried by the shell and to which said springs are pivoted at one end, a contact supporting disk movable on the shell, a link connecting the weights and disk to advance the latter, and a series of contact segments over which the contact travels.

[Claims 6 to 14 not printed in the Gazette.]

1,274,083. SPARK-TIMING MECHANISM. HARRY T. ROBERTS, San Francisco, Cal. Filed Nov. 16, 1916. Serial No. 131,775. (Cl. 128—117.)



1. An automatic spark producing apparatus for explosion engines comprising a revoluble member timed to the engine, a series of primary contact segments, a brush carried by the timed member to contact with said segments, a weighted curved spring arranged substantially concentric with the revoluble member and secured at one end thereto and having its other end free and connected with said brush to automatically advance or retard the spark, a high tension ring, a series of high tension segments, and a connection between the ring and segments carried by the revoluble member, whereby the high tension current is delivered to the spark plugs at the proper times.

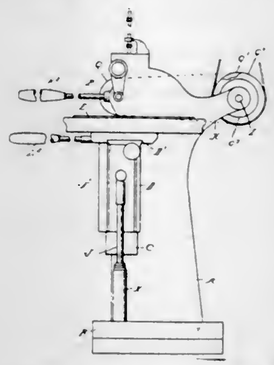
6. An automatic spark producing and advancing mechanism comprising a revoluble member, a spring secured thereto and encircling it, means to prevent the spring from expanding too far, a series of contact segments, a brush holder, a brush therein, a connection between the brush holder and spring whereby the brush is advanced as the spring expands, and a series of weights encircled by said spring, the weights being symmetrically positioned around the revoluble member.

9. An automatic spark producing apparatus for explosive engines comprising a revoluble member timed to the engine, a cylindrical casing, a series of primary contacts mounted on the casing, a substantially flat ring secured within the casing, an insulated cover cap mounted on the said ring and having a high tension ring and provided with high tension contacts, a brush carried by the revoluble member, a weighted curved spring arranged substantially concentric with the revoluble member and connected at one end to the same and also connected with the brush, and separate brushes carried by the revoluble member and arranged to contact with the tension ring and the high tension contacts.

10. An automatic spark producing apparatus for explosive engines comprising a shaft timed to the engine, a boss mounted on the shaft and provided with an annular groove, a brush holder having a brush and provided with a spring encircling the boss in the groove thereof, a series of contacts arranged in the path of the brush, and a weighted curved spring mounted on the boss and arranged substantially concentric with the shaft and connected with the brush holder.

[Claims 2 to 5, 7, 8, and 11 not printed in the Gazette.]

1,274,084. MILLING-MACHINE. HUGH C. ROSS, Toledo, Ohio, assignor to The Kent-Owens Machine Company, Toledo, Ohio, a Corporation of Ohio. Filed Apr. 6, 1917. Serial No. 160,134. (Cl. 90—16.)



1. In a machine tool, the combination with a revoluble spindle, of a hollow bifurcated supporting member through which said spindle passes, roller bearing units mounted in said hollow supporting member at opposite ends thereof and engaging said spindle to take care of both radial and end-thurst, a bushing insertible in said hollow member to bridge the space between the furcations thereof and surrounding and spaced from said spindle, a guide on which said hollow supporting member is adjustably mounted, and adjusting means for said hollow member on said guide including a lever fulcrumed upon said bushing between said furcations.

3. A machine tool, comprising a frame or standard, a vertical guideway on the upper portion of said standard, a head adjustable on said guideway and provided with a hollow bifurcated projection, a rotary spindle passing through said hollow bifurcated projection, roller bearing units mounted in opposite ends of the furcations and engaging said spindle to take care of both radial and end-thrust, a bushing insertible through one of said hollow members to bridge the space between the furcations and surrounding and spaced from said spindle, a gear-segment journaled on said bushing, a rack on said standard in mesh with said segment, and a lever for rocking said segment to adjust said head upon said standard.

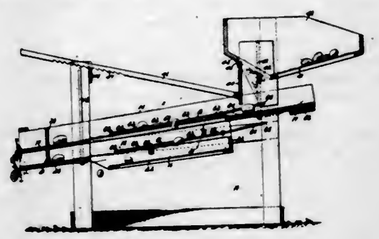
4. In a machine tool, the combination with a frame or standard, of a head vertically adjustable upon the upper portion of said standard, hollow bifurcated bearings on said head, a spindle passing through said hollow bifurcated bearings, roller bearing units mounted in said furcations and engaging said spindle to take care of both radial and end-thrust, a bushing insertible through one of said furcations and bridging the space between the same, said bushing surrounding and spaced from said spindle, a gear-segment journaled on said bushing, a lever for rocking said segment, a rack on said standard in mesh with said segment and coöperating therewith and said lever for the adjustment of said head, a hollow bearing on said head parallel to said spindle, a rod adjustably clamped in said hollow bearing, an arm carried by the outer end of said rod, and a center mounted in said arm in axial alinement with said spindle.

5. The combination with a frame or standard, of vertical guide bearings on said standard on sides thereof at right angles to each other, a head adjustably secured to one of said guide bearings and provided with a bifurcated hollow bearing, a spindle passing through said bifurcated hollow bearing, roller bearing units mounted in the furcations and engaging said spindle to take care of both radial and end thrust, a gear-segment journaled between said furcations and provided with an operating lever for rocking the same, a rack on said standard coöperating with said gear-segment for the vertical adjustment of said head, a bracket member vertically adjustable on the guide on said frame at right angles to the first-mentioned guide, a work-table supported on said bracket, means for vertically adjusting said bracket, and means for adjusting said work-table in transverse directions.

6. In a machine tool, the combination with a revoluble spindle, of a hollow bifurcated supporting member through which said spindle passes and in which said spindle is rotatably mounted, a bushing insertible in said hollow member to bridge the space between the furcations thereof and surrounding and spaced from said spindle, a guide on which said hollow supporting member is adjustably mounted, and adjusting means for said hollow member on said guide including a lever fulcrumed upon said bushing between said furcations.

[Claim 2 not printed in the Gazette.]

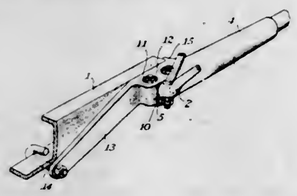
1,274,085. POTATO-SORTER. WARREN T. ROUTSONG, Traverse City, Mich. Filed May 26, 1916. Serial No. 99,973. (Cl. 130—30.)



1. A potato sorter provided with an inclined shaker having in its bottom a screen, means for supporting the shaker to allow of swinging the same in the direction of its length, an open mesh agitator overlying the screen and having guides at the sides in sliding contact with the sides of the shaker, and a link fixed at one end and pivotally connected with the end of the said agitator, said agitator held against longitudinal movement within the shaker and with respect to the same.

2. In a potato sorter, a main frame, an inclined shaker having in its bottom a screen, means for supporting the shaker in the frame to allow it to swing in the direction of its length, an agitator formed of side bars and cross bars and overlying the screen of the shaker, said agitator being provided with guide members projecting from its side bars and engaging the sides of the shaker, and links having one end pivoted to the side bars of the agitator and their other ends pivoted to the frame, said agitator being held against longitudinal movement within the shaker and with respect to the same, by said links.

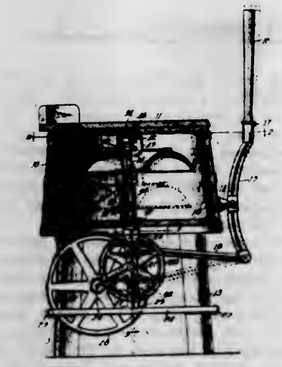
1,274,086. CONNECTION BETWEEN AUTOMOBILE-BUMPERS AND VEHICLE-FRAMES. CLINTON M. SAGER, Rochester, N. Y., assignor to J. H. Sager Company, Rochester, N. Y., a Corporation. Original application filed Apr. 13, 1917, Serial No. 161,694. Divided and this application filed May 21, 1917. Serial No. 170,047. (Cl. 293—55.)



1. The combination with a vehicle frame bar; and a bracket secured to said bar and projecting laterally therefrom; of a bumper supporting arm having a lateral projection engaging the forward end of said vehicle frame bar, said bumper supporting arm lying above the bracket in contact with the vertical side face of the vehicle frame bar and having a recess on its under side forming a seat resting against said bracket and also having a portion extending rearwardly from said seat in contact with the side face of the vehicle frame bar; a clip carried by the bumper supporting arm and engaging said bracket, and a clip carried by said rearwardly-extending portion of the bumper supporting arm and engaging with the vehicle frame bar.

2. The combination with a vehicle frame bar of channel form with the channel facing inwardly; and a bracket secured thereto and extending outwardly therefrom; of a bumper supporting arm having an abutment for coöperating with the forward end of the vehicle frame bar, said bumper supporting arm lying above the bracket in contact with the side face of the vehicle frame bar having a recess in its under side forming a seat resting against said bracket and having also a portion extending rearwardly from the bracket and contacting with the side face of the vehicle frame bar; means utilizing said bracket as an anchor for securing the seat of the arm against the bracket; and means carried by said rearwardly-extending portion, extending laterally from said portion under the vehicle frame bar in engagement with the lowermost flange of said bar.

1,274,087. GEARING FOR WASHING-MACHINES. WILLIAM JACKSON SCHOONOVER, Belvidere, Ill. Filed June 28, 1916. Serial No. 106,308. (Cl. 74—14.)



1. In a gearing, the combination with a support adapted to hold water and having a vertical bearing sleeve extending through the central portion of the bottom thereof, of a shaft mounted to reciprocate lengthwise in said bearing, a horizontally-slotted cross-head secured on the lower end of the shaft, a gear wheel journaled beneath said support adjacent the cross head, an eccentric pin thereon extending into and coöperating with the cross head to reciprocate the shaft, a fly-wheel journaled beneath the support, a gear pinion connected to the hub of the fly-wheel and meshing with the gear wheel, and means for rotating said gear wheel.

3. In a gearing, the combination with a support adapted to hold water and having a vertical bearing sleeve extending through the central portion of the bottom thereof, of a shaft mounted to reciprocate lengthwise in said bearing, means located beneath the support and connected to the lower end of the shaft to reciprocate it lengthwise, a spider mounted to rotate on the upper end of the shaft, and connections between the spider and the shaft actuated by the movement of the latter to rotate the spider step by step.

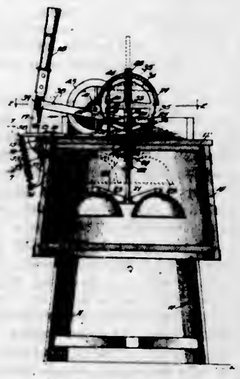
4. In a gearing, the combination with a support adapted to hold water and having a vertical bearing sleeve extending through the central portion of the bottom thereof, of a shaft mounted to reciprocate lengthwise in said bearing, means connected to the lower end of the shaft to reciprocate it lengthwise, a spider mounted to rotate on the upper end of the shaft, a ratchet mounted on the spider, a dog coöperating with the ratchet, and other connections between the spider and the shaft actuated by the movement of the latter to reciprocate the dog to rotate the spider.

5. In a gearing, the combination with a support having a vertical bearing-sleeve extending therethrough, of a shaft mounted to reciprocate lengthwise in said bearing, means connected at one end of the shaft to reciprocate it lengthwise, a spider mounted to rotate on the other end of the shaft, and connections between the spider and the shaft actuated by the movement of the latter to rotate the spider step by step.

11. In a gearing, the combination with a support having a vertical bearing-sleeve extending therethrough, of a shaft mounted to reciprocate lengthwise in said bearing, means connected with one end of the shaft to reciprocate it lengthwise, a spider mounted to rotate on the other end of the shaft, a ratchet mounted on the spider, a lever fulcrumed on the upper end of the shaft, a dog pivoted on one end of the lever, a rod depending alongside the shaft from the other end of the lever, said sleeve having an elongated pocket therein to receive the rod, and connections between the rod and pocket to move the rod to actuate the dog.

[Claims 2, 6 to 10, and 12 not printed in the Gazette.]

1,274,088. GEARING FOR WASHING-MACHINES. WILLIAM J. SCHOONOVER, Belvidere, Ill. Filed Sept. 15, 1917. Serial No. 191,508. (Cl. 74—14.)



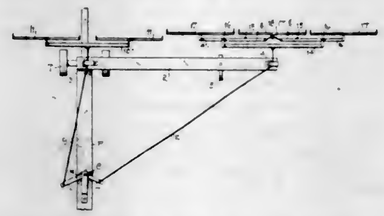
1. In a gearing, the combination with a support having bearing ears at one end thereof, of a hand lever of the second class fulcrumed between said ears, a bearing for a reciprocating rod in the other end of the support, a rod in said bearing, a cross-head carried by said rod, a gear wheel journaled on an axle carried by the support in the plane in which the rod reciprocates, an eccentric bearing pin projecting from the wheel into the cross-head, and a pitman connecting the hand lever and the eccentric bearing-pin.

4. In a gearing, the combination with a support, of a shaft reciprocating to and fro in said support having a helical spline groove therein, a ratchet disk mounted in the support and through which the shaft reciprocates having a spline lug entering the groove, a detent lug on the support coöperating with the ratchet disk to prevent its rotation in one direction, and a helically-coiled expanding spring interposed between the support and the ratchet disk to hold the latter yieldingly in engagement with the detent tag.

8. In a washing machine, the combination with a tub, of a cover therefor, operating mechanism on said cover depending into the tub, and a hinge secured to said tub and cover with its pivot below the top of the tub, for the purpose described.

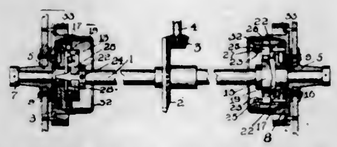
[Claims 2, 3, 5 to 7, and 9 to 11 not printed in the Gazette.]

1,274,089. DRAFT-EQUALIZER. JOHN E. SEDLACEK, Howells, Nebr. Filed Sept. 17, 1917. Serial No. 191,823. (Cl. 21—76.)



In combination with a draft pole of a vehicle, a beam having an end portion overlying the pole and extending laterally therefrom, a truck, an upstanding member carried by the truck and disposed through the draft pole and the beam for pivotal connection with said pole and beam, said upstanding member being provided with an annular flange upon which the pole rests, a member comprising a pair of angularly related arms pivotally engaged with the pole at a point inwardly of the beam, a pulley rotatably supported by the upstanding member of the truck at a point above the beam, a guide member carried by the outer end portion of the beam, flexible members secured to the free ends of the arms of the first named member, one of said members coacting with the pulley and the second of said flexible members with the guide member carried by the beam, and trees to which the forward end portions of the flexible members are connected.

1,274,090. CLUTCH DEVICE FOR AUTOMOBILES AND THE LIKE. BERNHARD SETTERGREN, Chicago, Ill., assignor, by mesne assignments, to John F. Gubbins, Chicago, Ill. Filed Jan. 24, 1913. Serial No. 743,893. (Cl. 192—8.)



1. The combination with an axle and a wheel rotatable thereon, of a clutch member on said wheel, a second clutch member journaled on said axle adjacent the wheel clutch member, and adapted to positively engage the wheel clutch member when the axle tends to rotate at the same rate as the wheel, levers on said second clutch member engaging said wheel clutch member acting to release said clutch members when there is a differential rotation between the wheel and axle, and means associated with the axle and with said second clutch member acting to shift the second clutch member into engagement with the wheel clutch member when the axle tends to rotate at a higher rate than the wheel.

2. The combination with an axle and a wheel journaled thereon, of a clutch adapted to automatically connect the wheel and axle when both rotate at an equal speed, and pivotally mounted levers adapted to automatically release the wheel from the axle by positive disengagement of the clutch when there is a differential rotation between the wheel and axle.

7. In a device of the class described, an axle, a wheel journaled on the end thereof, a clutch member connected to the wheel, a complemental clutch member journaled on the axle, a friction member rigidly connected to the last named clutch member, a friction member rigidly secured on the axle, adapted by rotation of the axle to engage the first named friction member and shift the clutch member journaled on the axle into engagement with the clutch member connected to the wheel, mechanism movably connected to said clutch member journaled on the axle and operated by the wheel to throw the clutch members out of engagement when said wheel clutch member rotates at a greater speed than the axle, a brake flange integral with the clutch member connected to the wheel, and means secured thereto inclosing the operating parts of the device.

9. In a device of the class described, an axle, a wheel journaled on the end thereof, a clutch member rigidly secured to the wheel, a friction member rigidly secured to the axle, a combined friction member and clutch member journaled on the axle adapted to be actuated by rotation of the friction member rigid on the axle to couple the wheel to the axle, and levers pivotally connected to the combined friction member and clutch member journaled on the axle, said levers extending through slots into the combined friction member and clutch member adapted to be actuated by differential movement of the wheel and axle.

[Claims 3 to 6 and 8 not printed in the Gazette.]

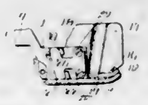
1,274,091. MANUFACTURE OF SHEET-RUBBER. WILLIAM SEWARD, Toronto, Ontario, Canada. Filed Feb. 27, 1918. Serial No. 219,395. (Cl. 154—2.)

2. A composite sheet of rubber comprising a sheet of washed and dried pure "crape" rubber united to a sheet of washed, dried and broken down rubber.

6. A process of forming sheet rubber which consists in applying to a sheet of washed and dried pure "crape" rubber a sheet of washed, dried and broken down rubber, rolling the same together to integrally unite them and finally vulcanizing the composite sheet so formed.

[Claims 1 and 3 to 5 not printed in the Gazette.]

1,274,092. PRESSER-FOOT FOR SEWING-MACHINES. DUDLEY S. SEYMOUR, Oak Park, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed July 20, 1915. Serial No. 40,883. (Cl. 112—13.)



1. A presser foot for sewing machines including a shank, a foot carried thereby and having a guiding slot for the upturned edges of fabric sections to be trimmed,

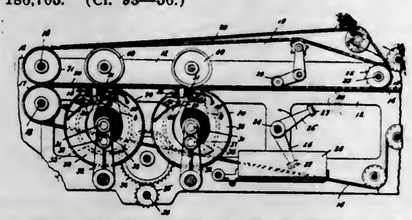
a strip deflector extending across said slot with its lower edge adjacent the upper surface of the foot, and means for supporting said strip deflector, whereby the same may be moved laterally and upwardly to inoperative position.

5. A presser foot for sewing machines including a shank, a foot carried thereby having a guiding slot for the upturned edges of the fabric sections to be trimmed, a removable plate carried by said presser foot and having a needle opening therein, and a stitch tongue carried by said removable plate and extending into said needle opening, said stitch tongue being disposed in the plane of said removable plate.

7. A presser foot for sewing machines including a shank, a foot carried thereby having a guiding slot for the upturned edges of the fabric sections to be trimmed, a removable plate detachably secured to the under face of said presser foot and having needle openings therein, one in rear of the other, said stitch tongues extending respectively into the needle openings, said guiding slot being located in advance of said plate and in line with said needle openings, a strip deflector normally extending across said guiding slot, and means for supporting said strip deflector, whereby the same may be moved laterally and upwardly to inoperative position.

[Claims 2 to 4, 6, 8, and 9 not printed in the Gazette.]

1,274,093. TABBING-MACHINE. MELVIN H. SIDEBOTHAM, Nashua, N. H., assignor to Elie W. Labombarde, Nashua, N. H. Filed Aug. 17, 1917. Serial No. 186,705. (Cl. 93—56.)



1. In a machine for affixing reinforcements to sheet material, a rotary member carrying a supply of reinforcing material and having means for severing sections of said material and ejecting them, means for causing the sheet material to travel in a plane tangential to the path of movement of said rotary member, and means for pressing the sheet material and said sections together.

3. A machine of the character described, comprising a plurality of rotary members each having feeding and cutting devices for gummed strips, means for carrying blanks past said devices, means for moistening predetermined areas of the blanks, and means for automatically insuring accurate spacing of the traveling blanks to cause sections of the strips to be applied to said moistened areas.

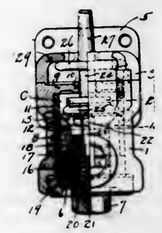
5. A machine of the character described, comprising four rotary disks, each having strip-feeding and cutting devices, four moistening pads for moistening separate areas of blanks, and means for causing blanks to travel singly in a plane to be first moistened and then receive sections of strip material.

7. In a machine of the character described, a plurality of rotary disks each having means for supporting and feeding a strip of gummed material and severing means for such strip, an equal number of rotary moisteners, and means for carrying blanks in a plane to be first moistened and then have strip sections applied thereto.

10. A machine of the character described having four rotary disks relatively positioned at the corners of an imaginary rectangle, each disk carrying strip-feeding and cutting devices, and means for causing blanks to travel past said disks and adjacent thereto to receive strip sections supplied by said disks.

[Claims 2, 4, 6, 8, and 9 not printed in the Gazette.]

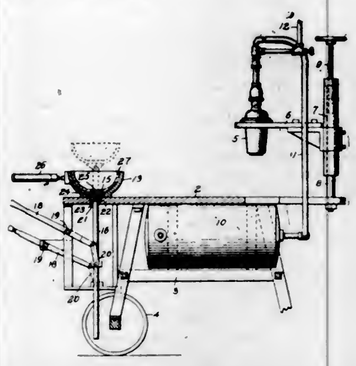
1,274,094. ELECTRIC SWITCH. JAMES RICHARD SLOAN and GEORGE H. LIEBEGOTT, Altoona, Pa. Filed July 18, 1916. Serial No. 110,001. (Cl. 200—27.)



4. An electric switch device including a casing having a guide opening, arc shaped line wire terminal plates arranged within the casing and insulated therefrom and also insulated from each other, a screw plug detachably fitted within one end of said casing and having a hollow sleeve portion insulated from said line wire terminal plates, a circuit closer having a disk body and opposite axial stem portions, one of which is guided in the hollow sleeve portion of the plug and the other of which slidably engages in the guide opening of the casing, a spring housed in the hollow sleeve of the plug and engaging the stem of the circuit closer disposed therein, a cap member fitted to the casing, and an operating member having a flat head portion interposed between one end of the circuit closing member and the interior base of the cap.

[Claims 1 to 3 not printed in the Gazette.]

1,274,095. FIRE-POLISHING APPARATUS. MAURICE A. SMITH, Jeannette, Pa. Filed Aug. 17, 1916, Serial No. 115,413. Renewed June 17, 1918. Serial No. 240,523. (Cl. 49—58.)

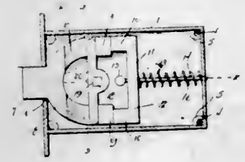


1. In fire-polishing apparatus, the combination of a suitable frame, a table, a hot blast device supported above said table, a former carried by said table and movable thereon, a movable central portion in said former, and lifting means detached from and adapted to register with said movable portion.

[Claims 2 to 4 not printed in the Gazette.]

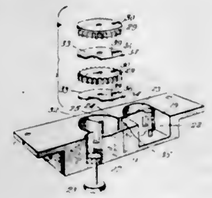
1,274,096. DOOR-LATCH. WILLIAM SMITH, Reading, Pa. Filed Nov. 26, 1917. Serial No. 204,030. (Cl. 70—42.)

1. A door latch comprising a casing having a sliding bolt mounted therein, curved arms formed on the bolt and having their terminals disposed in spaced relation and provided with right angularly disposed lugs, a yoke member comprising a spacing bar having fingers formed at the ends thereof engageable with the said ends of the curved arm, a rod fixed to one end of the casing and projecting centrally therethrough and slidably supporting the said spacing bar, resilient means interposed between the end of the casing and the said spacing bar, for urging the said fingers into engagement with the terminals of the arm, and actuating levers rotatably mounted within the casing and provided with oppositely extending arms engageable with the said lugs on the faces thereof opposite to the faces engaged by the ends of the said fingers.



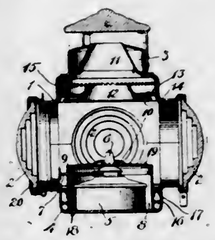
2. A door latch comprising a casing having a sliding bolt mounted therein, curved arms formed on the bolt and having their terminals disposed in spaced relation and provided with right angularly disposed lugs, a yoke member comprising a spacing bar having fingers formed at the ends thereof engageable with the said ends of the curved arm, a rod fixed to one end of the casing and projecting centrally therethrough and slidably supporting the said spacing bar, resilient means interposed between the end of the casing and the said spacing bar for urging the said fingers into engagement with the terminals of the arm, and actuating levers rotatably mounted within the casing and provided with oppositely extending arms engageable with the said lugs on the faces thereof opposite to the faces engaged by the ends of the said fingers, the said yoke and curved arms being centrally mounted in the casing the said arms having depressions for providing a central space to receive the central actuating lever, the said arms of the actuating lever being movable in the said depression for engagement with the said lug to move the said locking bolt centrally against the pressure of the fingers exerted by the said spring.

1,274,097. PERMUTATION-LOCK. HERBERT G. SOULE, Hinton, Iowa. Filed Aug. 17, 1917. Serial No. 186,734. (Cl. 70—53.)



In a permutation lock, a series of separately rotatable tumblers, having slots and grooves therein, obstructions in said grooves, stationary disks disposed between said tumblers, means on said disks projecting into the grooves on said tumblers adapted to engage said obstructions, slots in said disks arranged directly beneath each other, means for rotating each tumbler separately to bring the slots in the tumblers into and out of alinement with those in the disks, a dog adapted to enter said slots when in alinement, and locking means controlled by said dog.

1,274,098. SIGNAL-LANTERN. FURMAN D. SPEAR, New York, N. Y., assignor to Armspear Manufacturing Company, New York, N. Y., a Corporation of New York. Filed Feb. 10, 1917. Serial No. 147,798. (Cl. 240—50.)

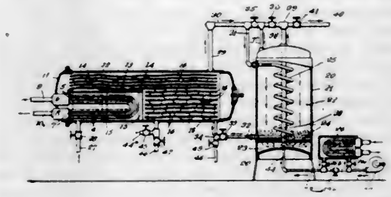


1. In a lantern, a body portion having an air admission port for normally supplying air to support combustion, an oil font and burner within said casing, a partition forming an air cushioning chamber around said burner and below the upper part thereof, a vent from said chamber to the interior of the lamp body and a vent from said chamber to the atmosphere, the latter vent being more restricted than the former.

6. In a lantern, a lantern body, an oil font therein, a burner carried thereby, a partition around said font forming an air cushioning chamber with air communicating passages leading from said chamber into the interior of the lamp and also to atmosphere, said passages being constructed to afford freer communication between said cushioning chamber and the interior of the lamp than between said cushioning chamber and the atmosphere.

[Claims 2 to 5, 7, and 8 not printed in the Gazette.]

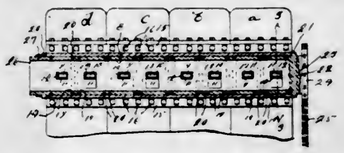
1,274,099. APPARATUS FOR HEATING AND DEOXIDIZING WATER. FRANK N. SPELLER, Pittsburgh, Pa. Filed Apr. 29, 1918. Serial No. 231,428. (Cl. 210—1.)



1. A water heater including a heating unit and a plurality of thin sheet steel or iron plates for deoxidizing the water as it passes through the heater.

[Claims 2 to 8 not printed in the Gazette.]

1,274,100. REVOLUBLE VALVE FOR INTERNAL-COMBUSTION MOTORS. MARTIN M. HANSON, Clearwater, Nebr. Filed Sept. 22, 1917. Serial No. 192,711. (Cl. 123—59.)

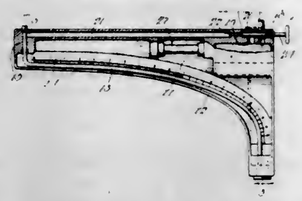


1. In an internal combustion motor, a casing having a multiple of combustion chambers, the end an cylindrical walls of each chamber comprising inner and outer thick-

nesses and a water space between said thicknesses, the outer thicknesses of said walls of the chambers having an elongated bearing semi-cylindrical in cross section extending transversely of the casing and off-set to one side of the chambers, the inner part of said semi-cylindrical bearing having at intervals integral connections with the respective inner thicknesses of the walls of said multiple of chambers, a semi-cylindrical cover plate arching said bearing and being secured to the onter thicknesses of said multiple chamber walls, thereby forming an elongated transversely disposed cylindrical bearing, said semi-cylindrical bearing having intake and exhaust ports with said chambers formed through said integral connection with the inner walls of said chambers, said cover plate having intake and exhaust ports diametrically opposed to the first intake and exhaust ports and adapted for communication to the intake and exhaust manifolds, a cylindrical tubular valve closed at one end and open at the other mounted in said cylindrical bearing, said valve being provided with transversely disposed intake and exhaust passages at angles to each other and having their opposite ends adapted to register with the diametrically opposed intake and exhaust ports of the semi-cylindrical bearings and said cover plate on every half revolution of said valve, means to rotate the valve a complete revolution to every four complete revolutions of the engine crank shaft, and means at the opposite ends of said valves to prevent axial movement of the same.

2. In an internal combustion motor, a multiple cylinder casing having a multiple of combustion chambers, the cylindrical walls of said chambers comprising inner and outer thicknesses, a valve bearing comprising a semi-cylindrical wall connecting the outer thicknesses of the walls of said chambers at corresponding points, said semi-cylindrical wall of the valve bearing at corresponding points integrally connecting the inner thicknesses of the walls of said chambers, said integral connections with the inner thicknesses having intake and exhaust ports therethrough and in communication with said chambers, a cover plate arching a valve in said bearing to retain the valve in place, said cover plate having intake and exhaust ports diametrically opposed to the intake and exhaust ports of said integral connections, a cylindrical valve in said bearing and provided with intake and exhaust ports at angles to each other and having their opposite ends adapted to register with the diametrically opposed intake and exhaust ports of the bearing and the cover plate on every half revolution of the valve, said valve being tubular and provided with a flanged closed portion at one end to engage one end of the bearing, and a removable ring removably secured to the other end of the valve to coöperate with the other end of the bearing, whereby axial movement of the valve may be avoided, said other end of the valve being open, whereby exterior air may enter the valve to assist in cooling the same.

1,274,101. GAGE. JACOB M. SPITZGLASS, Chicago, Ill. Filed Jan. 3, 1916. Serial No. 69,770. (Cl. 73—31.)

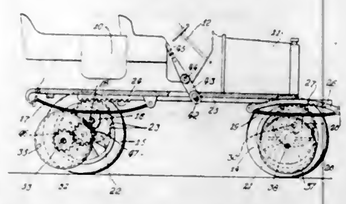


1. In a differential pressure gage, a tube having a liquid column therein subjected to differential pressure at its ends and curved downwardly from a vertical axis in the form of a parabolic arc.

5. In a gage of the class described, a member formed with a well and a passage connected thereto, a passage in the member connected with the well by a valved bypass and a gage glass extending downwardly in a parabolic curve which has a vertical axis and is concave downwardly from the end of said passage to the passage directly connected with the well, and means for introducing differential pressure at the ends of the gage so that with equal pressure at the ends the glass will be substantially full but under differential pressure the liquid will be forced from the upper end of the glass against the head formed by the well.

[Claims 2 to 4 and 6 not printed in the Gazette.]

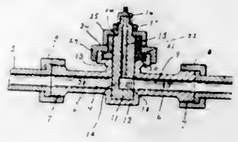
1,274,102. INTERCHANGEABLE WHEEL FOR VEHICLES. JOSEPH SRAKULA, Lugerville, Wis. Filed Mar. 23, 1918. Serial No. 224,273. (Cl. 21—154.)



1. In a vehicle, the combination with a front and rear pair of track wheels rigidly engaged with the frame of the vehicle, disks rotatably mounted at the sides of said frame, spindles extending outwardly from the sides of said disks, said spindles being eccentrically mounted therein, a plurality of teeth formed in the periphery of said disks, racks engaging with said teeth, means for moving said racks longitudinally whereby said disks are rotated, resilient wheels mounted upon said spindles, and means for driving said resilient wheels.

2. In a vehicle, the combination with a front and rear pair of flanged wheels adapted to make contact with the surface of a track rail, said wheels being rotatably mounted below the body of said vehicle, of opposed pairs of outwardly extending supports secured to the body of said vehicle, disks rotatably mounted in the said supports, said disks having teeth on a portion of the periphery thereof, eccentrically mounted studs in said disk extending outwardly, resilient wheels revolubly mounted upon said studs, a pair of racks engageable with the teeth of said disks, a lever for moving said racks rectilinearly of said vehicle whereby said resilient wheels are raised or lowered relatively to said track wheels, means for driving said track wheels, and means for transmitting power to said resilient wheels.

1,274,103. DEVICE FOR CLEANING PIPES. FRANK STORY, Seattle, Wash. Filed Nov. 26, 1917. Serial No. 204,094. (Cl. 137—70.)



1. A device of the class described comprising a valve body having an axial passageway and provided with a cylindrical valve chamber of larger diameter than said passageway and arranged at right angles thereto; and a cylindrical valve rotatably disposed in said valve chamber, said valve having a recess in alinement with said pasageway, said recess being equal to the diameter of said passageway and leaving a segment that is entirely out of alinement with said pasasageway when said valve is opened and which entirely closes said passageway when said valve is closed.

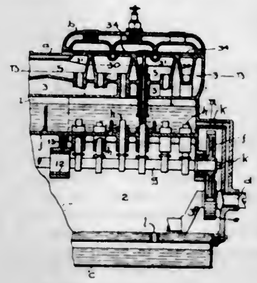
2. A device of the class described comprising a valve casing having an axial passageway, a cylindrical valve chamber arranged at right angles to and intersecting said passageway said valve chamber being of larger diameter than said passageway, a cylindrical valve disposed in said chamber said valve having a recess in alinement with said passageway and being provided with an axial bore that intersects said passageway, means for turning said valve to open or close said passageway, a cap for the end of said valve to close said bore and packing devices encircling said valve.

1,274,104. DEVICE TO PREVENT HENS FROM SETTING. WILLIAM E. SWIFT, Waverly, Ill. Filed Jan. 17, 1917. Serial No. 142,847. (Cl. 119—97.)



A device to prevent hens from setting comprising an upper and lower member, the lower member being constructed of flat elastic metal looped at its medial portion to provide spaced diverging arms, the upper terminals of said arms curved upwardly and outwardly to permit the device to be positioned and adjusted about the breast of a hen, the terminals of the arms bent outwardly and downwardly to provide attaching portions, the upper member being formed of flat metal and being substantially semi-circular and provided adjacent each end with slots to receive the attaching portion of the lower member for detachably securing the members together, and said arms extending downwardly so as to prevent the hen from setting.

1,274,105. CASTING FOR INTERNAL-COMBUSTION ENGINES. CECIL HAMELIN TAYLOR and BOUDEWIJN B. NEUTEBOOM, Detroit, Mich. Filed Nov. 25, 1912. Serial No. 733,291. (Cl. 184—6.)



1. In an internal combustion engine, a crank case, a reservoir located above said crank case, a reservoir located at the lower portion of said crank case, a main shaft located within said crank case and having bearings in the walls thereof, a cam shaft located in bearings in said crank case, gear wheels connecting said shafts, push rods adapted to actuate the valves extending through the bottom of said upper reservoir in position to be actuated by the cams on the cam shaft, and conduits for oil leading from said upper reservoir to the parts of said mechanism requiring lubrication.

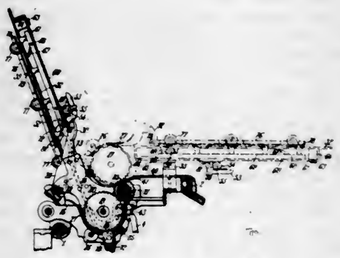
2. In an internal combustion engine, a valve a reservoir for lubricating oil located below said valve, said valve having a stem extending into said reservoir beneath the level of oil therein, and a push rod extending through the wall of said reservoir beneath the level of the oil therein, and adapted to actuate said valve stem.

5. In an internal combustion engine of the puppet valve type, the combination with a valve stem, of a relatively reciprocable valve operating member, and an oil containing casing surrounding the joint between said stem and member, whereby said joint may be submerged in liquid, the contacting surfaces of said steam and valve operating member permitting free movement of the oil between the contacting surfaces except for the adhesion of the oil thereto.

6. In an internal combustion engine, the combination, with cylinders and reciprocable valves for said cylinders, said valves having stems, of reciprocable valve operating members supported in alinement with the valve stems independently thereof, cams for operating said members, and containers surrounding the point of contact between each operating member and its valve stem, whereby the ends of said members may be kept submerged in liquid.

[Claims 3, 4, and 7 not printed in the Gazette.]

1,274,106. TYPE-WRITING MACHINE. EDWARD THOMAS, New York, N. Y., assignor to Underwood Typewriter Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 4, 1917. Serial No. 140,488. (Cl. 197—127.)



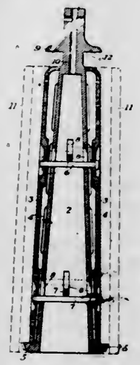
1. In a typewriting machine, the combination with a revoluble platen, of a carriage in which said platen is mounted, feeding devices for advancing a work-sheet around the platen and from the rear of the machine to the front thereof, devices for supporting the work-sheets at the rear of the platen, a collating table, a swing frame in which said collating table and said platen are both mounted, and a mounting for said platen and said collating table to enable them to be swung to a position where work-sheets may be adjusted face side up and bottom to the operator to be later automatically delivered by said table to said platen.

2. In a typewriting machine, the combination with a revoluble platen, of a carriage in which said platen is mounted, devices for supporting the work-sheets at the rear of the platen, a collating table, a swing frame in which said collating table and said platen are both mounted, a mounting for said platen and said collating table to enable them to be swung to a position where work-sheets may be adjusted, face side up and bottom to the operator to be later automatically delivered by said table to said platen, and feed-rolls normally coöperating with said platen and swinging therewith and adapted to clamp the work-sheets against the platen when adjusted on said table.

48. In a typewriting machine, the combination with a traveling carriage and a revoluble platen therein, of a paper-table rising rearwardly from behind the platen and adapted to deliver sheets to the platen, feed-rolls behind said table adapted to hold work-sheets against the back of said table while being fed upon the platen, and wings in which said feed-rolls are journaled, said wings pivoted on said table and adapted to be swung to and from said paper-table.

[Claims 3 to 47 not printed in the Gazette.]

1,274,107. MOLDING APPARATUS. FRANK W. TICKNER, Sharpsville, Pa., assignor of one-half to Frank J. Leuthner, Buffalo, N. Y. Filed Apr. 23, 1918. Serial No. 230,366. (Cl. 22—173.)



1. A collapsible core barrel having a central column with a plate system movable thereon, and a shedding device on the upwardly projecting stem of the column arranged to protect the air spaces of the core from entering sand, substantially as described.

2. A collapsible core barrel having a central column with a plate system movable thereon, and a shedding device on the upwardly projecting stem of the column arranged to protect the air spaces of the core from entering sand, said shedding device also coacting with the plate side structure to limit its upward movement in extraction, substantially as described.

3. A collapsible core barrel having a central stem or column, and movable plate sides, the upwardly projecting stem of the column having a shedding flange arranged to be above the level of the core box and shed the entering sand away from the air spaces, substantially as described.

1,274,108. BARREL. BENJAMIN W. TUCKER, South Orange, N. J., assignor to George E. Herrmann, Morristown, N. J. Filed Dec. 8, 1913. Serial No. 805,319. (Cl. 220—64.)



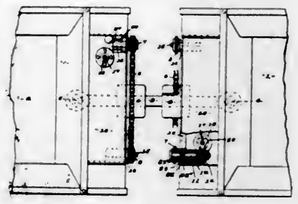
1. A metallic barrel or container having a body comprising a plurality of staves each having an offset portion forming an annular grooved rib, a band resting upon said rib within the end of the barrel body, a divided member having grooved projections spaced apart and arranged within the groove of the annular rib, a head fitting over the ring and the ends of the staves, a retaining hoop member having grooved projecting portions fitting the spaces of the divided member and provided with an overhanging part forming a chimb for the barrel and resting against the outer surface of the barrel head to hold the same against removal, and a wire band for holding the divided grooved member and the hoop member interlocked.

5. A metallic container comprising a body having an offset portion forming an annular grooved rib, a solid annular band resting upon said rib within the end of the container body, a divided member having grooved projections spaced apart and located on the outside of the container, a head fitting over the ring and the end of the body, a retaining hoop member having grooved projecting portions fitting the spaces of the divided member and provided with an overhanging edge resting against the outer surface of the head to hold the same against removal, and a wire band for holding the divided grooved member and the hoop member interlocked.

15. A metal barrel or container comprising a body having an offset portion forming an annular shoulder on the interior and exterior of the body, an annular reinforcing member resting upon the internal annular shoulder within the end of the body, a head fitting over the end of the body and having a depending annular flange embracing the exterior of the body opposite said reinforcing member, and annular interlocked fastening devices for detachably locking the head to the body, one of said devices engaging the outer surface of the head and embracing head flange and the other of said devices engaging the under side of the external shoulder on the body.

[Claims 2 to 4 and 6 to 14 not printed in the Gazette.]

1,274,109. STEERING MECHANISM FOR WAGON-TRAINS. WALTER A. UNDERHILL and COURTNEY C. AVERY, Auburn, N. Y., assignors to The Eagle Wagon Works, Auburn, N. Y., a Corporation of New York. Filed Dec. 3, 1913. Serial No. 804,470. (Cl. 21—137.)



1. The combination of a pair of two-wheeled carts, a tongue connecting the same and pivotally connected to both carts, means for rigidly connecting the tongue to one cart to render the pivotal movement of said cart and the tongue ineffective, the other cart being formed with a guide extending transversely of the tongue, a slide mounted on the tongue and movable along the guide, and steering mechanism on the latter cart and including wheels carried thereby on opposite sides of the tongue, a belt running over the wheels and secured to the slide, and means for actuating the belt, substantially as and for the purpose described.

2. The combination with a pair of carts having a tongue coupling the same together and pivotally connected to both carts and serving to transmit pushing and pulling force from one cart to the other, means on one cart for rendering the pivotal connection between the tongue and said cart ineffective and thereby rigidly connecting the tongue and said cart; of steering mechanism carried by the other cart including an actuator carried by the latter cart, power transmitting means between the actuator and the tongue, the actuator being self-locking in order to hold the latter cart in any position it is shifted relatively to the tongue, and means for disconnecting the actuator from the power transmitting means, substantially as and for the purpose specified.

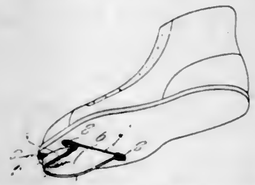
3. The combination with a pair of carts having means coupling the same together and pivotally connected to both carts, of steering mechanisms carried by the carts on the opposing end thereof, each steering mechanism being connected to the coupling means and being self-locking in any position to which it is shifted, and each steering mechanism including means operable to render the steering means ineffective for permitting free pivotal movement of either cart relatively to the coupling means, substantially as and for the purpose described.

4. The combination of a pair of two-wheeled carts, a tongue coupling the same and being pivotally connected to both carts, of steering mechanisms carried by the carts on the opposing ends thereof, each steering mechanism including a belt secured to the coupling means and extending in opposite directions therefrom and having running connection with its cart on opposite sides of the tongue, means for actuating the belt in opposite directions, the actuating means being self-locking to hold the belts in any position to which they are moved, and means for disconnecting the actuating means from the belts for rendering the belts free running, substantially as and for the purpose specified.

5. The combination of a pair of two-wheeled carts and a tongue connecting the same, the tongue being pivotally connected to both carts and both carts being formed with guides on their opposing ends extending transversely of the tongue, slides mounted on the tongue and movable along the guides respectively, steering mechanisms mounted on the carts, the steering mechanism of each cart including wheels carried thereby on opposite sides of the tongue, a belt running over the wheels and secured to the slide, and means for actuating one of the wheels, substantially as and for the purpose set forth.

[Claim 6 not printed in the Gazette.]

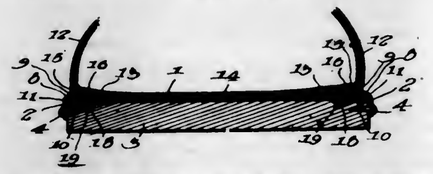
1,274,110. ANTI-SLIPPING DEVICE FOR SHOES. ALBERT A. UNRUH, Portland, Oreg., assignor of one-third to Raymond W. Fairfoull, Portland, Oreg., and one-third to Michael T. Snyder, New Orleans, La. Filed Mar. 1, 1918. Serial No. 219,849. (Cl. 36—59.)



3. An anti-slipping device for shoes comprising a U-shaped calk, means for securing said calk to the shoe sole, a rod extending transversely between the ends of said calk and secured thereto, a pair of internal lugs extending from said calk ends and spaced inwardly from said rod, a spring metal calk cleaning tongue between the arms of said calk and having one end bent upwardly around said rod and forming a releasable spring catch, said catch engaging said lugs to anchor one end of said tongue, and means for preventing outward movement of the other end of said tongue beyond said calk.

[Claims 1, 2, and 4 not printed in the Gazette.]

1,274,111. SHOE. CLAYTON VON CULIN, New York, N. Y., and GEORGE WATSON BEACH, Saybrook, Conn. Filed Mar. 22, 1918. Serial No. 224,055. (Cl. 36—15.)

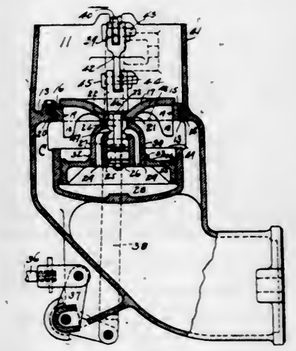


1. A shoe comprising a sole, a metal sole attaching plate resting on said sole and having a downturned flange surrounding the same, said sole attaching plate being provided with spaced slots around its edge portion, means for securing said sole attaching plate and sole together, an upper having its edge turned inwardly upon said sole attaching plate, a metal insole resting on said inturned edges of the upper, and prongs stamped downwardly from said insole, said prongs passing through said slots and said edge of the upper and being clenched against the lower side of said sole attaching plate.

4. A shoe comprising a sheet metal base plate having its edge turned downwardly to surround the shoe sole, the portion of said plate adjacent said flange being stamped to form a groove in each of the upper and lower sides of said plate, said plate also having spaced slots adjacent said grooves, a sole contacting with the lower side of said sole attaching plate and having a groove registering with the lower groove thereof, a packing in said registering grooves to prevent the entrance of moisture, means for securing said sole in place, an upper having its edge turned inwardly onto the upper side of said sole attaching plate, a sheet metal insole resting on said inwardly turned edge of the upper and having its edge turned downwardly to form a bead which forces said edge of the upper into the upper groove of said sole attaching plate, and prongs extending downwardly from said insole, said prongs passing through said edge of the upper and through said slots and being clenched against the bottom of said sole attaching plate.

[Claims 2 and 3 not printed in the Gazette.]

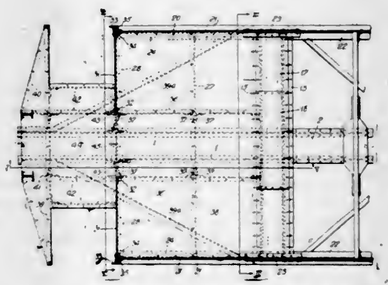
1,274,112. THROTTLE-VALVE. WILLIAM H. WALTERS, Altoona, Pa. Filed Jan. 17, 1918. Serial No. 212,306. (Cl. 137—4.)



1. In a throttle valve, in combination, a throttle chamber open at its upper end and having its lower end connected to the dry pipe, a removable valve seat positioned within the throttle chamber adjacent the upper end opening, a valve adapted to coöperate with the seat, a pendent bell shaped portion for the valve, a central opening in the valve and a piston adapted to operate in the opening and have a vertical movement therein.

[Claims 2 to 4 not printed in the Gazette.]

1,274,113. CAR CONSTRUCTION. AARON N. WARFIELD, London, Ontario, Canada. Filed June 7, 1917. Serial No. 173,297. (Cl. 105—76.)



1. An underframing for cars, comprising a box girder, side web plate girders, a bolster straddling said box girder and connected to said side girders, transverse members on said box girder connecting said side girders,

and an impact plate connecting said side plate girders, said transverse members and said bolster.

2. An underframing for cars, comprising a box girder, side web plate girders, a bolster straddling said box girder and connected to said side girders, transverse members on said box girder connecting said side girders, a bulk head carried by said box girder and one of said transverse members and connected to said side girders, and a horizontal disposed impact plate connecting said side girders, said transverse members and said bolster.

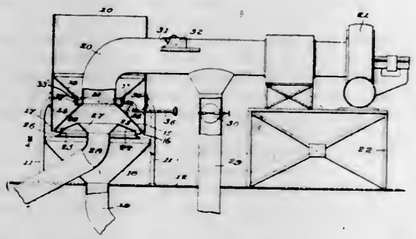
3. An underframing for cars, comprising a box girder, side web plate girders, a bolster on said box girder and connected to said side girders, transverse members on said box girder connected to said side girders, transverse platform members on said box girder, a horizontal impact plate connecting said side girders, said transverse members and said bolster, and horizontal platform plate connecting said transverse platform members and in a plane with said impact plate.

4. An underframing for cars, comprising a box girder, side web plate girders, a bolster on said box girder and connected to said side girders, transverse members on said box girder connecting said side girders, a bulk head carried by said box girder and one of said transverse members and connected to said side girders, transverse platform members on said box girder, a horizontal platform plate connecting said transverse platform members to said bulk head, and an impact plate connecting said side girders, said transverse members and said bolster.

5. In car construction, a box girder, a bottom bulk head plate thereon, a transverse member on said box girder connected to said bottom bulk head plate, side bulk head plates connected to said bottom bulk head plate and said transverse member, a platform plate at one side of said bulk head, and an impact plate at the other side of said bulk head.

[Claims 6 and 7 not printed in the Gazette.]

1,274,114. APPARATUS FOR SEPARATING MATERIALS. JAMES H. WARREN, Baltimore, Md. Filed Apr. 6, 1917. Serial No. 160,219. (Cl. 130—17.)



1. Apparatus of the class described having a chamber through which the material to be treated flows, means for diminishing the pressure of the air after passing through the flowing material, means for subjecting the flowing material to the action of a current of air, and several independent outlets for the separated materials, one of which receives material released by the drop in air pressure.

2. Apparatus of the class described having a chamber through which the material to be treated flows, said chamber having an air inlet, means for diminishing the pressure of the air after passing through the flowing material comprising plates leading inward from said air inlet and diverging from each other inwardly, means for subjecting the flowing material to the action of a current of air, and several independent outlets for the separated materials, one of which is in communication with the space between said plates at the point of greatest divergence thereof.

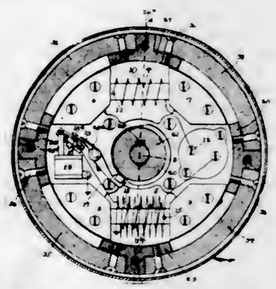
4. Apparatus of the class described having a chamber through which the material to be treated flows, an air nozzle situated adjacent the path of flowing material, means for causing the passage of air through said nozzle, a downwardly extending material-receiving pipe leading from such nozzle and adapted to receive material passing with the air through the nozzle, an air pipe leading away from said material-receiving pipe into which the air passing through the nozzle enters, a valve controlled opening in said air pipe, and a branch outlet from the side of said air pipe opposite said valve controlled opening.

5. Apparatus of the class described having a chamber through which the material to be treated flows, having a contracted outlet for the material, an air nozzle within the chamber adjacent said outlet, an outlet for the discharge of material in communication with the inner end of said nozzle, an air pipe leading from the inner end of said nozzle away from said outlet and being distinct from said outlet, so that air flows therethrough separate from the material flowing through said outlet, and means for causing the flow of air through said nozzle and through said air pipe.

6. Apparatus of the class described having a chamber through which the material to be treated flows, a funnel within such chamber, a downwardly and outwardly inclined baffle leading from the discharge end of the funnel, a space being left between such baffle and the interior of the chamber for the passage from the chamber of material therein, there being a surface leading from such space inward and diverging from the adjacent sides of the baffle to form an inwardly flaring passage, a gravity outlet leading from such surface, an air pipe opposite such outlet and in communication with said flaring passage at its larger end, and means for causing a flow of air through said pipe.

[Claims 3 and 7 not printed in the Gazette.]

1,274,115. ELECTRIC GENERATOR. ROBERT MACK WARREN, Sumter, S. C., assignor to Splitdorf Electrical Company, Newark, N. J., a Corporation of New Jersey. Filed Apr. 21, 1917. Serial No. 163,584. (Cl. 171—252.)



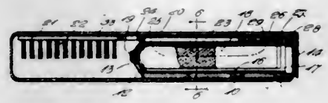
1. An electric generator comprising a rotating shaft, a circular magnet carried thereby and disposed concentric to the axis of said shaft, said magnet having an even number of equally spaced pole pieces, two stationary parallel flux receiving members arranged at opposite sides of the center of rotation of said circular magnet, each of which is provided with pole shoes the centers of which are spaced substantially the same distance apart as the centers of the adjacent pole pieces of the magnet, said flux receiving members being symmetrically disposed relative to the axis of the shaft and simultaneously coöperating with the magnet pole pieces, a winding for one of said flux receiving members for generating a lighting current, primary and secondary windings for the other flux receiving member for generating ignition current and an interrupter coöperating with the last named windings.

2. An electric generator comprising a rotating shaft, a circular magnet carried thereby and concentric to the axis of said shaft, said magnet having equally spaced pole pieces, with their centers arranged at 90° apart, two stationary parallel flux receiving cores arranged at opposite sides of the center of rotation of the circular magnet and each of which is provided with pole shoes, the centers of which are spaced substantially 90° apart, said cores being symmetrically disposed relative to the axis of the shaft and simultaneously coöperating with the pole pieces of the magnet, a winding for one of said cores for producing lighting current, primary and secondary windings for the other core for producing ignition current and an interrupter for the primary winding.

3. An electric generator including, in combination, a fixed flux receiving member, a generating coil carried thereby, a rotatable hub, a non-magnetic plate secured to said hub, spaced pole pieces secured to said non-magnetic plate, and segmental magnets extending between adjacent pole pieces and connected thereto whereby a circular magnet is formed, each pole piece having an outwardly projecting portion extending into and filling the space between the ends of the magnet section to which it is secured.

4. An electric generator including, in combination, a relatively stationary flux receiving member having a generating winding thereon, a rotatable hub, a non-magnetic plate carried by the hub, pole pieces secured to said non-magnetic plate, magnet sections arranged end to end with their ends spaced and overlapping and secured to the pole pieces, said pole pieces having outwardly projecting portions extending between and filling the space between the ends of the sections of the magnets.

1,274,116. TOOTH COMFORT KIT. AUGUST WEBER, Jersey City, N. J. Filed Apr. 11, 1918. Serial No. 227,948. (Cl. 132—32.)



2. In a kit of the character described, an inner tubular casing adapted for the reception of a tooth paste tube, a cap having screw-threaded engagement with one end of the inner tubular casing and provided with a recess, a tooth brush having a handle extending longitudinally of the inner tubular casing with a portion of the handle projecting into the recess of the cap, and an outer tubular casing to receive the brush and inner tubular casing.

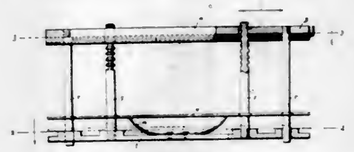
4. In a kit of the character described, a tubular casing adapted for the reception of a tube of tooth paste, a tooth brush having a handle extending longitudinally of the tubular casing, means for effecting a locking engagement between the handle and the tubular casing, a cap having screw-threaded engagement with one end of the tubular casing, and means for effecting a locking engagement between the cap and handle whereby the cap cannot rotate with respect to the tubular casing when the handle is in the active position.

[Claims 1 and 3 not printed in the Gazette.]

1,274,117. BOOK. BRADFORD WEBSTER, Louisville, Ky., assignor, by mesne assignments, to Paragon Binder Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 22, 1909, Serial No. 485,008. Renewed Dec. 13, 1916. Serial No. 136,823. (Cl. 129—12.)

1. In a filing device, a lockable leaf-retaining member, locking means therefor, a supporting member upon which said locking means is slidably mounted, and leaf-retaining means for holding said locking means slidably associated with said supporting member.

6. In combination, a post of varying diameter near one end, and a slide having inside means for admitting said post and, upon motion transverse the post, followed by motion lengthwise the post, for creating an engagement between the post and slide whereby the slide is held by the post against all transverse motion and the post is held by the slide against longitudinal motion in one direction.



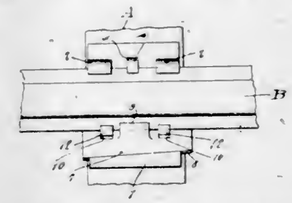
9. In combination; a post adapted near one end for admitting at a point of small cross-section and for engaging at a point of larger cross-section a locking element; a locking element having inside means for admitting said post and for creating an engagement between the post and the locking element whereby the locking element is held by the post against all transverse motion and the post is held by the locking element against longitudinal motion in one direction; and spring-expansive means for pushing said locking element toward the engaging portion of said post and there holding it under pressure.

12. In a binder, an elastic dummy pad, adjustable on the binder, having a strip of elastic material in its binding edge.

15. In a filing device, in combination, a pair of bases, each having one or more leaf-retaining members and means for admitting freely the leaf-retaining means of the other base to any extent; and post-engaging means for holding said bases at variable distances from one another against elements filed.

[Claims 2 to 5, 7, 8, 10, 11, 13, 14, and 16 not printed in the Gazette.]

1,274,118. TIE-PLATE. JOHN F. WEDGEWORTH, Sarepta, La. Filed Nov. 21, 1917. Serial No. 203,194. (Cl. 238—2.)

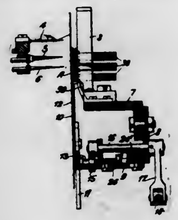


A rail tie plate consisting of a rectangular body having one end thereof provided with a pair of spaced rail base flange-engaging elements and having a spike-receiving opening located between the rail base flange-engaging elements, the said plate having the other end thereof provided with a groove having one side wall thereof extending diagonally, the lower wall of the groove having spaced spike-receiving openings therein, an elongated plate removably fitted within the groove in the last-mentioned end of the body and having one side wall thereof extending diagonally and opposing the diagonally extending wall of the groove in the body, the said plate having a pair of spike-receiving openings therein registering with the spike-receiving openings in the lower wall of the groove, and a rail base flange-engaging element carried by the plate and located between the spike-receiving openings in the plate.

1,274,119. EMBROIDERING-MACHINE. CHARLES WILLIAM WETTER, St. Gallen, Switzerland. Filed Dec. 28, 1917. Serial No. 209,291. (Cl. 112—7.)

1. A device of the character described for transferring colors, comprising ribbons carrying colors, a carrier for

the ribbons provided with holes, piercing means; means for moving the piercing means through a framed fabric, the holes in the carrier and the ribbons; and means for imparting to said carrier a rectilinear horizontal as well as a rectilinear vertical movement.



2. A device of the character described for transferring colors, comprising ribbons carrying colors, a carrier for the ribbons provided with holes, piercing means; means for moving the piercing means through a framed fabric, the holes in the carrier and the ribbons; means for imparting to said carrier a rectilinear horizontal movement and means independent of the last mentioned means for imparting to said carrier a rectilinear vertical movement.

3. In an embroidering machine having a driving shaft and shuttle tracks and a bar carrying the latter; holders distributed over the whole length of said bar and fixed thereto, a flat bar extending over the whole length of the machine and provided with a plurality of holes, said flat bar being supported by said holders, color ribbons carried and guided by said flat bar, piercing means, means actuated by the driving shaft of the embroidering machine for moving the piercing means through a framed fabric, the holes provided in the flat bar and the ribbons; means for imparting to said flat bar a rectilinear horizontal movement, means independent of the last mentioned means for imparting to said flat bar a rectilinear vertical movement, and means adapted to impart to the color ribbons a feed movement upon an actuation of the piercing means by the driving shaft of the embroidering machine.

4. A device for transferring colors of the character described, comprising ribbons carrying colors, a flat carrier consisting of a plurality of superposed casings, the carrier acting as a guide for the ribbons and being provided with holes, piercing means, means for moving the piercing means through a framed fabric, the holes provided in the carrier and the ribbons, and means for adjusting the carrier.

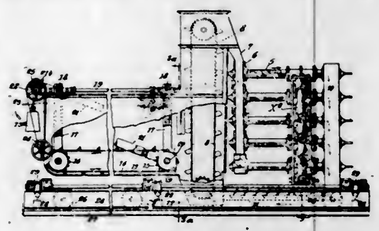
5. A device for transferring colors of the character described, comprising ribbons carrying colors, a flat carrier acting as a guide for the ribbons and provided with holes arranged at a distance from one another corresponding to the repeat, piercing means, means for moving the piercing means through a framed fabric, the holes provided in the carrier and the ribbons, and hand levers for adjusting the flat carrier as well in a vertical as horizontal direction.

[Claims 6 to 14 not printed in the Gazette.]

1,274,120. RETORT-CHARGING MACHINE. GEORGE W. WHIPPLE and CLOISE H. BALDWIN, Cherryvale, Kans., assignors to Edgar Zinc Company, a Corporation of Missouri. Filed June 7, 1917. Serial No. 173,356. (Cl. 214—29.)

1. A machine of the class described including in combination a charging cylinder, means for supplying material to said cylinder and a charging plunger operating within the cylinder to push the material therefrom into the retort and means for automatically retracting and advancing said plunger repeatedly and shortening the stroke thereof as the quantity of ore charged into the retort increases.

3. A machine of the class described including in combination a feeding device and means controlled by the density of the material already fed into the retort for controlling the further operation of said feeding device.

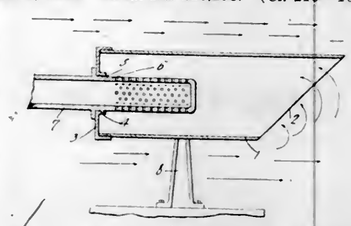


10. A machine of the class described including in combination charging devices, a bin, means for transferring material from the bin to said charging devices and means for maintaining a substantially uniform level of material in the pocket of the bin in order to facilitate such transfer, said leveling means comprising chain sweeps adapted to be operated at different levels in the bin.

11. A machine of the class described including in combination devices for charging a substantially horizontal retort with ore, and means connected with said charging devices for making a longitudinal passageway in the upper part of the charge.

[Claims 2 and 4 to 9 not printed in the Gazette.]

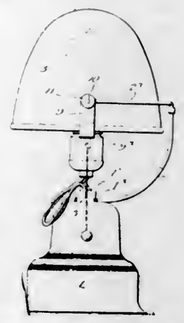
1,274,121. WATER-STRAINER FOR PUMPS AND THE LIKE. GEORGE T. WHITE, Portsmouth, Ohio, assignor of one-half to John N. Ellison, Portsmouth, Ohio. Filed Jan. 3, 1918. Serial No. 210,195. (Cl. 210—16.)



1. The combination with a strainer, of a hood housing the strainer and adapted to be submerged, said hood having an undercut open end adapted to be placed downstream within a current.

[Claim 2 not printed in the Gazette.]

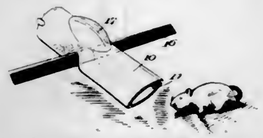
1,274,122. SHADE-HOLDER. HERBERT WIDSTRAND, Chicago, Ill. Filed Nov 17, 1917. Serial No. 202,602. (Cl. 240—111.)



1. A shade holder comprising a supporting frame including horizontal arms and a curved part extending downwardly from said arms, a pair of shade supporting members, each having a semi-circular central part and curved ends, means for removably holding said members together and pivots carried by said members for engaging the horizontal arms.

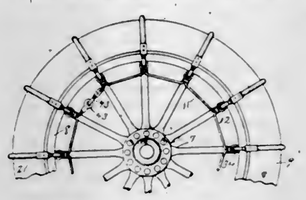
[Claims 2 to 4 not printed in the Gazette.]

1,274,123. ANIMAL-EXTERMINATOR. NEWTON J. WIGGINTON, Opequon, Va. Filed Sept. 20, 1917. Serial No. 192,330. (Cl. 43—22.)



An animal exterminator consisting of a cylindrical transparent bait holder open at one end and closed at its opposite end, and having a portion of its wall indented at a point intermediate its ends to form an inner partition projecting diametrically across the same, said indentation forming an outer groove the base of which extends across the holder parallel to its transverse axis, in order to engage a support, and said holder also having a section of its wall opposite to said partition swelled outwardly to provide space for an animal to turn.

1,274,124. ANTISKIDDING DEVICE. JOSEPH WILDE and JOSEPH CARTER, Pawtucket, R. I. Filed Dec. 1, 1917. Serial No. 204,955. (Cl. 152—14.)

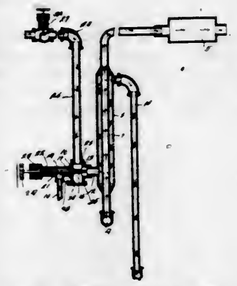


1. In an antiskidding device, the combination of flexible retaining cables, spaced loops integral with the cable comprising parallel contacting portions, rings received within said loops, clamping devices embracing the contacting portions and clamping them about said rings, traction members, and coupling elements on the traction members interengaging the loops.

[Claims 2 and 3 not printed in the Gazette.]

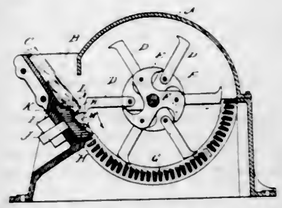
1,274,125. DEVICE FOR UTILIZING KEROSENE FOR GASOLENE-ENGINES. JOHN WILLENBRING, Richmond, Minn. Filed July 21, 1916. Serial No. 110,547. (Cl. 261—13.)

1. In a device for utilizing kerosene for internal combustion engines, the combination of the exhaust manifold and a casing surrounding the same, of a mixing and volatilizing chamber in the casing, a carbureter, means of communication between the upper part of the chamber and the carbureting chamber of the carbureter, and means for projecting steam, air and kerosene into said chamber, said last named means comprising a casing having a chamber for the mixture of steam and air and having communication with the mixing and volatilizing chamber, and provided with a nozzle for injecting kerosene into the mixing and volatilizing chamber, said nozzle having a valve seat, said nozzle having means of communication with the kerosene supply, a needle valve coöperating with the seat to control the kerosene, said last named casing having a valve controlled air intake and provided with a pipe including a valve adapted to be connected to the water jacket of the engine for conveying steam into said last named casing.



2. In a device for utilizing kerosene for internal combustion engines, the combination with an exhaust manifold, of an elongated tubular casing surrounding and integral with the same and having a mixing and volatilizing chamber extending longitudinally thereof, a carbureter, a pipe of coinmunication between the upper part of said chamber and the carbureting chamber of the carbureter, a second casing provided with a chamber for the mixture of air and steam therein, means for introducing kerosene into the mixture of air and steam, a passage of communication between the volatilizing chamber and the air and steam mixing chamber at a point very close to the lower end of the volatilizing chamber, whereby the kerosene is drawn into the volatilizing chamber by the steam and air so that the heat from the exhaust manifold will act to volatilize the mixture of kerosene, steam and air by the time it reaches the pipe of communication with the carbureter, the second casing having a nozzle extending across the air and steam mixing chamber for injecting kerosene into the passage between the two chambers, the second casing having diametrically oppositely disposed steam passage and air intake port on opposite sides of said nozzle, whereby the mixture of air and steam may be drawn into the volatilizing chamber by the injection of kerosene to said passage, a valve to control the steam passage, a pivoted plate valve to control the air through said port, spring means to hold the plate valve closely to its seat, and a needle valve for controlling kerosene through said nozzle.

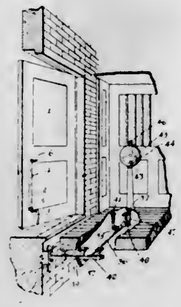
1,274,126. BREAKER-PLATE FOR GRINDERS. MILTON F. WILLIAMS, St. Louis, Mo., assignor to Williams Patent Crusher and Pulverizer Co., St. Louis, Mo., a Corporation of Missouri. Filed Feb. 12, 1918. Serial No. 216,681. (Cl. 83—11.)



A machine of the character described, comprising a suitable housing having a feed hopper with a slant bottom, an arcuate cage and rotary hammers mounted in said housing, a breaker plate located between the end of said bottom and the adjacent end of said cage,—the front of said plate consisting of a smooth upper face forming a continuation of said slant bottom and flush therewith to form a smooth passageway for the feed, a lower corrugated face to grind the material in conjunction with said hammers and an intermediate step between said faces serv-

ing as a fulcrum for preliminary breaking of the feed by said hammers prior to second reduction on the lower face before final reduction on said cage, substantially as described.

1,274,127. SAFETY SYSTEM FOR SWINGING ELEVATOR-DOORS. GLENN S. WILLIAMSON, New York, N. Y., assignor to Shurloc Elevator Safety Company, Inc., New York, N. Y., a Corporation of New York. Filed Dec. 21, 1917. Serial No. 208,284. (Cl. 187—49.)



1. In an elevator safety system, a swinging landing door, a member projectable beyond the edge of the door and withdrawable within the confines thereof, and locking means in the shaft for preventing such withdrawals of the door member, in combination with operator-actuated door-unlocking and controller-locking mechanism on the car terminating in a contact shoe coöperative with said locking means in the shaft, and means associated with said locking means for holding the car mechanism in actuated condition.

6. In an elevator safety system, the combination of a swinging landing door, operator-actuated means on the car including a contact shoe and therewith coördinated means for rendering the car controller inoperative, mechanism on the face of the shaft below the floor level cooperative with said shoe and including door-locking and car-mechanism-retaining instrumentalities, and a member mounted on the door for vertical sliding and lateral turning movements and having an offset lower portion to cooperate with the shaft mechanism.

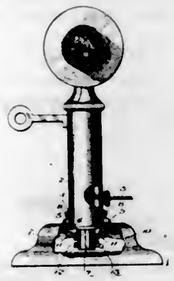
13. In an elevator safety system, the combination with a swinging landing door, a vertically-sliding bolt thereon, its lower portion adapted to project downward into the shaft and provided with an upward-facing locking shoulder, and operator-actuated door-unlocking and controller-locking mechanism on the car, terminating in a contact shoe, of means on the face of the shaft below the floor level coöperative on the one hand with the car shoe and on the other hand with the door bolt, said means comprising a locking member mounted on a horizontal pivot parallel with the face of the shaft and thence extending upward with its upper portion constructed to engage the locking shoulder of the door bolt, a vertical spring-pressed plunger normally depressed by the door bolt, and a pivoted detent member connected with said plunger and adapted to engage and hold the car shoe when the bolt is raised.

[Claims 2 to 5, 7 to 12, and 14 not printed in the Gazette.]

1,274,128. TELEPHONE ATTACHMENT. JOEL EWING WILLIAMSON, Evansville, Ind. Filed Oct. 8, 1917. Serial No. 195,375. (Cl. 179—147.)

1. A subscriber's telephone comprising a base and standard which are relatively rotatable, and a cord wholly carried by the standard and entering the side thereof.

3. A subscriber's telephone comprising a base, a standard, an anti-friction joint between the two, whereby they are relatively rotatable, and a cord wholly carried by the standard.



5. A subscriber's telephone comprising a base, a standard, and a coupling between the two which has a flange resting on the base, a hub rotatable in the base, a shank, a ball cage or race, balls in said cage, and a spring interposed between the cage and shank.

[Claims 2 and 4 not printed in the Gazette.]

1,274,129. ATTACHMENT FOR COLLAPSIBLE TUBES. RUSSELL LEO WILLIS, Manchester, N. H. Filed Mar. 6, 1917. Serial No. 152,806. (Cl. 221—60.)



1. The combination with a collapsible tube having a discharge orifice, of resilient means within the tube for restoring the same from a collapsed condition, said means pressing outwardly against the interior of the tube and adapted to be optionally compressed by external pressure on the tube to collapse the latter at the said resilient means, said means having a portion thereof positioned relatively to the discharge orifice of the tube to uncover the said orifice by compression of said means, and to close said orifice and simultaneously restore the tube from the collapsed form by the expansion of said resilient means.

[Claims 2 and 3 not printed in the Gazette.]

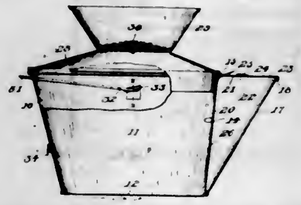
1,274,130. AUTOMOBILE-SIGNAL. FRED G. WINKELMAN, Quarry, Wis. Filed Sept. 7, 1917. Serial No. 190,269. (Cl. 116—31.)



In a signal of the class described, the combination with a pair of like hollow pipe sections having their inner ends longitudinally slotted, of a coupling for joining the inner ends of said sections, a centrally apertured plug closing the outer ends of each section, a centrally apertured partition secured in each section intermediate the ends thereof, a signal rod slidably mounted in each section and engaging the apertures of said partitions and plugs, said rods having their outer ends outward of said plugs and their inner ends inward of said partitions, an indicator carried by the outer end of each signal rod, an operating handle carried by the inner end of each signal rod and projecting outwardly of the sections through the longitudinal slot there adjacent, casings each having one end open and secured to said sections at the outer ends thereof to receive the indicators when in retracted position, an expansile

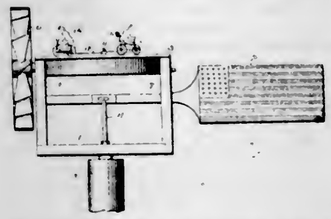
spring surrounding each signal rod intermediate the handle and partition whereby to normally urge said signal rod to retracted position, said longitudinal slots having each a key hole slot communicating therewith to receive said handle when the signal rod is in retracted position to hold the same against the tension of the spring thereof, and a cushioning pad carried by a socket formed on each end of said coupling whereby to cushion the return of the signal rod by said spring substantially as described.

1,274,131. MILK-PAIL. LOUISE E. ALEXANDER, Southport, N. Y. Filed June 21, 1917. Serial No. 176,058. (Cl. 31—14.)



A milk pail having a V-shaped opening in its side wall extending the full length thereof, a reinforcing member secured in the upper edge of said pail and bridging said opening to prevent the collapsing of the walls of the latter, a V-shaped spout secured to said pail and surrounding the opening, the depth of said spout being as great as the length of said opening, a removable strainer including a V-shaped plate having parallel side flanges, said plate fitted in said spout bridging the opening of said pail and the flanges of said plate engaging the opposing sides of said spout retaining the plate against lateral movements therein, said plate having an opening registering with the opening of the pail, and a sectional cover hinged to the upper edge of said plate and having its opposite side edges bent downwardly to provide flanges which engage the opposite sides of the spout at the upper edge thereof thereby preventing the movements of said cover with relation thereto during the tilting of the pail.

1,274,132. WINDMILL TOY. JUDSON F. AMEND, Portland, Oreg. Filed Apr. 10, 1918. Serial No. 227,721. (Cl. 46—14.)

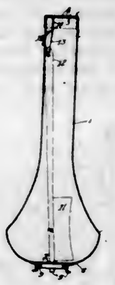


1. A top comprising a frame provided with a rudder and mounted so that it can turn in the wind, a platform on the upper part of said frame, a shaft projecting upwardly through said platform, a radial arm loosely mounted at one end on said shaft, a top figure attached to the other end of said arm, a fan wheel rotatably mounted on said frame, and connection between said wheel and said shaft.

[Claims 2 to 5 not printed in the Gazette.]

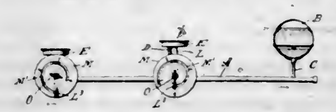
1,274,133. TOOTH-BRUSH HOLDER. HERMAN AUSUBEL, New York, N. Y. Filed Nov. 5, 1917. Serial No. 200,231. (Cl. 206—15.1.)

1. A tooth brush holder having the combination of a receptacle for the tooth brush, self righting means to retain said receptacle in upright position and to restore it to upright position when caused to fall, the underside of said receptacle being perforated for passage of air therethrough, the upper side of the receptacle being perforated to permit passage of the air through said receptacle in a vertical direction, and said underside having legs to permit passage of the air through said former perforations while the receptacle is in upright position.



[Claims 2 and 3 not printed in the Gazette.]

1,274,134. LIQUID-FUEL STOVE. JOHN S. BRENNAN and ALBERT J. LINDEMANN, Milwaukee, Wis., assignors to A. J. Lindemann & Hoverson Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Apr. 18, 1918. Serial No. 229,254. (Cl. 158—42.)



1. The combination with a reservoir having a maintained oil level and a burner trough, and an oil supply conduit communicating between said reservoir and trough, of means for raising and lowering the trough with respect to the said oil level comprising a flexible pipe at the end of the conduit nearest the burner, a sliding support connected with said trough and a rotary member with which said support is movably connected.

[Claims 2 to 18 not printed in the Gazette.]

1,274,135. GAME APPARATUS. WILLIAM T. BROOKS, Wilmington, Del. Filed Oct. 12, 1917. Serial No. 196,250. (Cl. 46—61.)



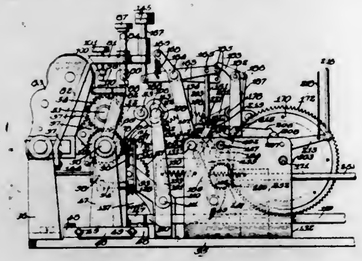
1. A game apparatus comprising a hollow casing closed at its ends and provided in its top with a longitudinal slot and indicia, and a carriage movable longitudinally within said casing and having an indicator portion projecting through said slot, said casing being formed of hinged sections swingable one upon the other whereby said carriage may be inserted within or withdrawn from the resultant open end.

[Claim 2 not printed in the Gazette.]

1,274,136. CALCULATING-MACHINE. SAMUEL E. CARLIN, Chicago, Ill., assignor, by mesne assignments, to Underwood Computing Machine Company, New York, N. Y., a Corporation of New York. Filed Mar. 4, 1910. Serial No. 547,300. (Cl. 235—60.)

4. In a calculating device adapted for attachment to a typewriting machine having type-keys, the combination of

a totalizer embodying a plurality of number bearing wheels, selector mechanisms individual to said wheels, said selector mechanisms each embodying engaging and disengaging fixed and adjustable rotatable elements, keys individual to said selector mechanisms for causing the elements to engage, means for rotating said elements, and means individual to said selector mechanisms for actuating the respective typewriter keys when said selector mechanisms are active, and for permitting an independent actuation of the typewriter keys.



6. In combination, a register comprising alined number bearing members, actuating mechanism for the register normally disengaged from said members, means for advancing the actuating mechanism to successive number bearing members, while the said actuating mechanism is disengaged from said members, and means for moving said actuating mechanism laterally into engagement with said members.

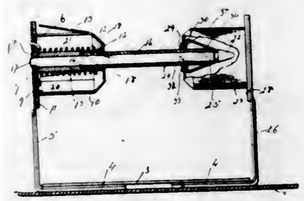
19. The combination of a plurality of registers, each comprising number bearing members, traveling actuating mechanisms individual to the registers, said mechanisms being adapted for advancing movement successively to the number bearing members and also for lateral movement away from the registers to permit the mechanisms to advance, means for displacing the actuating mechanisms relatively to respective registers, means for locking the mechanisms in the last said position, means individual to the said mechanisms for unlocking the latter, and selector mechanisms individual to the mechanisms for positioning the latter to be presented in active positions to the respective registers.

34. The combination of a plurality of registers, a traveling carriage movable relatively to the registers, actuating mechanisms individual to the registers and mounted upon the carriage for movement therewith, said actuating mechanisms having a plurality of movements relative to the carriage and being normally out of operating relation with their respective registers, means individual to the actuating mechanisms for moving the actuating mechanisms relatively to the carriage for positioning the mechanisms to be presented in operating position to the respective registers and with relation to which means the actuating means is also relatively movable, means also mounted on the carriage and common to said actuating mechanisms fo moving the latter out of operating positions, an actuator for the last said means to which the said means and carriage are relatively movable and additional means with relation to which the actuating mechanisms and carriage are relatively movable for imparting another movement of the actuating mechanisms relative to the carriage.

94. In a calculating machine, in combination, a totalizer having a plurality of gear wheels corresponding to the different denominations, a rocking frame disposed opposite thereto, a master wheel mounted on said rocking frame, means for advancing said master wheel longitudinally of said totalizer, a segment pivotally mounted adjacent to said master wheel and adapted to mesh with the gear of next higher denomination when said master wheel is in engagement with one of said gears, arms pivotally mounted on said rocking frame and having a pin-and-slot connection with said segment, a bar engaging said arms, said arms having a limited swinging movement with respect to said bar, means for swinging said arm laterally so as to rock said rocking frame, and means for rotating said master wheel to actuate said totalizer.

[Claims 1 to 3, 5, 7 to 18, 20 to 33, 35 to 93, and 95 to 123 not printed in the Gazette.]

1,274,137. LOCKING DEVICE. THOMAS H. CARROLL, Philadelphia, Pa. Filed Aug. 21, 1917. Serial No. 187,388. (Cl. 211—31.)



1. A locking device comprising a locking member having resilient, converging fingers, a locking rod having a head, a portion of which is larger than the rod, and means slidable on said rod for moving the fingers apart whereby the locking member may be disengaged from the locking rod.

2. A locking device comprising a locking rod having a head of larger diameter than the rod, a locking member provided with resilient, converging fingers adapted to engage the inner end of the head and means on the rod whereby the fingers may be disengaged from the head.

4. In a locking device, a rod provided with an enlargement, separable means carrying converging fingers to engage the enlargement for locking the rod and separable means together and means on the rod to disengage the fingers from the enlargement whereby the separable means may be unlocked from the rod.

6. In a device of the character stated, a stationary supporting member, a locking rod having one end attached thereto, a conical head at the other end of the rod, the base or inner end of said head being of greater diameter than the body of the rod, a separable supporting member, locking fingers carried thereby adapted to pass over the head and engage the larger or base portion thereof to lock the supporting members together and means on the rod to disengage the fingers from the head for unlocking the supporting members.

8. In a device of the character stated, a base plate having trackways, a stationary bracket carried thereby at one end thereof, a barrel provided with resilient gripping devices supported by said bracket, a locking rod carried by said bracket and passing through the barrel, a head on the free end of said rod, a separable bracket engaging the trackways for attaching said bracket to the base plate, a barrel supported by the last named bracket and having a hole therein for registration with the locking rod, a locking member within the last named barrel, said locking member having converging fingers for engagement with the rear end of the head and a key sleeve slidable on the rod for disengaging the fingers from the head to permit the removal of the separable bracket.

[Claims 3, 5, and 7 not printed in the Gazette.]

1,274,138. PROCESS OF MANUFACTURING CLOSURES FOR RECEPTACLES. LESLIE R. N. CARVALHO, Brooklyn, N. Y., assignor, by direct and mesne assignments, to Paragon Metal Cap Company, Brooklyn, N. Y., a Corporation of New York. Filed Aug. 29, 1913. Serial No. 787,311. (Cl. 113—116.)

1. The process of producing a receptacle closure, which consists in providing a sheet of metal, coating said metal with a suitable lacquer, separating a portion of said metal from said sheet to form a blank, forming said blank into a cylinder, bending the material of said cylinder at one end thereof inwardly to form a flange, inserting a cover member within said cylinder to engage said flange, and then pressing inwardly the material of said cylinder between said cover member and the opposite end of the cylinder so as to retain said cover member fixed between said flange and the inwardly pressed portions of the cylinder.



2. The process of producing a receptacle closure, which consists in providing a suitable blank of metal, forming said blank into a cylinder, forming an inwardly projecting flange at one end of said cylinder, inserting a cover member within said cylinder into engagement with said flange, and then pressing inwardly portions of the material of said cylinder to simultaneously lock the cover member against said flange and form threads adjacent the open end of the cylinder.

9. The herein described process of producing a receptacle closure, which consists in providing a cylinder of sheet-metal, forming a flange at one end of said cylinder, positioning a cover member into engagement with said flange, and then in a single operation locking together portions of said cylinder and cover member and forming threads upon said cylinder.

14. The process of producing a receptacle closure, which consists in providing a cylinder having an inturned flange at one end, inserting a cover member within the cylinder to engage the flange of the cylinder, and then pressing inwardly a portion of the material of the cylinder between said cover member and the opposite end of the cylinder so as to form inwardly projecting parts engaging the cover member and forcing the cover member against the flange of the cylinder.

20. The herein-described process of making a receptacle closure, which consists in bending a strip of sheet-metal into cylindrical form, bending the meeting edges of said strip to form an interfolded seam, arranging a cover part at one end of the cylinder, and then forming threads upon the cylinder which serve to lock the interfolding portions of the seam against relative longitudinal movement.

[Claims 3 to 8, 10 to 13, 15 to 19, 21, and 22 not printed in the Gazette.]

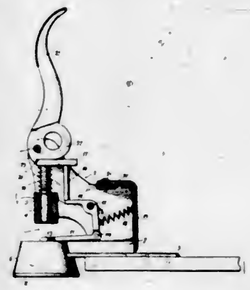
1,274,139. RAZOR. OSROE A. CLARK, Newark, N. J. Filed Oct. 26, 1916. Serial No. 127,818. (Cl. 30—25.)



1. A razor comprising a blade of the wafer type, a holder into which the blade slides longitudinally, the holder having spring jaws extending so as to grasp the blade well toward its cutting edge, the jaws having their outer ends bent toward each other so that the distance between them is less than the thickness of the blade, and a stop for the inner end of the blade disposed so that the blade is halted when its outer end is within the bent ends of the jaws whereby the blade is firmly held between said jaws, said jaws being separated from one another a substantial distance back of said bent end portions, whereby the insertion of the end of the blade between said jaws moves said bent portions of the jaws apart and permits the insertion of the wafer portion of the blade therebetween.

2. A razor comprising a blade of the wafer type, a holder into which the blade slides longitudinally, the holder having spring jaws extending so as to grasp the blade well toward its cutting edge, the jaws having their outer ends bent toward each other so that the ends abut, and a stop for the bade disposed so that the blade is halted when its outer end is within and in contact with the bent ends of the jaws, the ends of the jaws being cut away between the bent ends and the back of the holder to form curved converging front ends to the jaws, whereby an upward initial insertion of the inner end of the blade parts said bent ends.

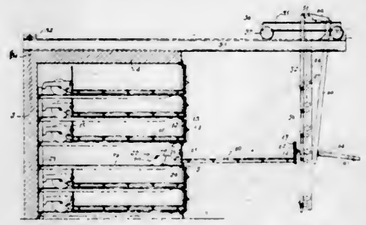
1,274,140. BOTTLE-OPENER. ROBERT B. COCHRANE, Charlotte, N. C., assignor to Perfect Bottle Opener Company, Charlotte, N. C., a Corporation of North Carolina. Filed Nov. 8, 1917. Serial No. 200,966. (Cl. 65—46).



9. In a bottle opener, the combination with a plunger operative to release the cap from the bottle of an ejector for the released cap comprising a slidable cap pusher and a bell crank lever to one arm of which said pusher is pivoted, a second plunger co-acting with the other arm of said bell crank lever to control the operation of said ejector, a common operating head for both of said plungers, a spring for resetting both plungers and their operating head and a second spring for actuating said ejector as the plungers are reset.

[Claims 1 to 8 not printed in the Gazette.]

1,274,141. DRAWER-OPERATING MECHANISM. FREDERICK A. COLEMAN, Cleveland Heights, Ohio, assignor to The Foundry Equipment Company, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 31, 1915. Serial No. 69,704. (Cl. 214—18.)



2. The combination of a plurality of superimposed drawers, a trolley trackway extending longitudinally of the drawers, a trolley on the trackway, a pair of upright supporting bars carried by the trolley, means for engaging the various drawers carried by said supporting bars whereby said devices are in pairs for the various drawers, and a series of cross rods carried by said supporting bars, each cross rod being provided with means for operating both drawer engaging members appertaining thereto.

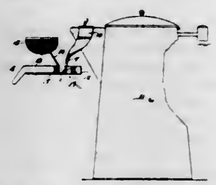
4. In a device of the character described, the combination with a series of superimposed drawers, a trackway extending forwardly from the drawers, a car movable on the trackway, an upright carried by the car in front of the drawers, selective devices carried by the upright and adapted to engage the series of drawers respectively, each selective device comprising a hook and means adapted to hold it in engaging position, and connected lever and link mechanism carried by the car for raising any active hook.

7. The combination, with a plurality of superimposed drawers, of a withdrawing device having a support, a series of hooks pivoted thereto, a series of devices adapted to hold the hooks respectively in engagement with corresponding drawers, an upright member adapted to act simultaneously on the various devices mentioned, and means for moving the upright member vertically.

14. In a device of the character described, the combination with a plurality of superimposed drawers, of a trackway running parallel with the direction of movement of said drawers, a car moveable on said trackway, upright members carried by the car, hooks pivoted on said members for engaging each of the drawers, and longitudinally movable upright members carrying means for raising said hooks, the latter means comprising a pivoted distance block for each hook and a manually operable means for raising each block to bring the hook into engaging position, whereby such drawer may be supported by the car and moved therewith.

[Claims 1, 3, 5, 6, and 8 to 13 not printed in the Gazette.]

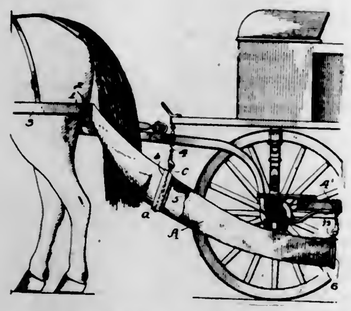
1,274,142. ATTACHMENT FOR TEA AND COFFEE POTS. FREDERICK T. CONLEY, Boston, Mass. Filed July 9, 1917. Serial No. 179,489. (Cl. 210—16.)



1. A device of the class described comprising a plate, an open topped receptacle on said plate having a pocket at one end thereof, a yoke extending above the top of said receptacle, a weighted strainer swingingly mounted on said yoke, and spout engaging members on said plate.

[Claim 2 not printed in the Gazette.]

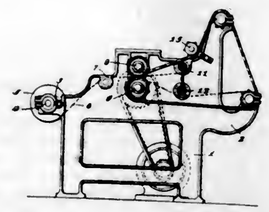
1,274,143. HARNESS ATTACHMENT. HENRY E. COOK, Baltimore, Md., assignor to Emma M. Cook, Baltimore, Md. Filed Sept. 6, 1917. Serial No. 190,007. (Cl. 119—95.)



1. A harness attachment made of flexible material in tubular form, and having an open surrounding frame secured thereto for holding the tubular portion of the attachment in corresponding shape, the ends of the frame terminating in overlapping loops, and means attached to these loops for suspending the harness attachment.

[Claims 2 and 3 not printed in the Gazette.]

1,274,144. PROCESS OF PRODUCING WOUND STRIPS OR TAPE OF VARNISHED FABRIC. OSWALD DALE, Irvington, N. J. Filed Aug. 8, 1917. Serial No. 185,167. (Cl. 154—2.)



The herein described process, which consists in unwinding from one roll a web of fibrous material having a coating adapted to be softened by heat, cutting said web into strips, winding said strips on to a roll, and in heating the material between the rolls to soften the coating and thus cause the successive layers of the second roll to slightly adhere to each other, but permit of their ready detachability.

1,274,145. PROCESS FOR RECOVERING THE CONSTITUENTS OF ALUNITE IN TECHNICALLY USEFUL FORMS. HENRY J. DETWILLER, Allentown, Pa. Filed Oct. 9, 1917. Serial No. 195,552. (Cl. 23—13.)

1. The process of obtaining potassium nitrate from alunite, which comprises digesting the powdered mineral in boiling nitric acid, removing the residual silica from the resultant solution and also successively removing by precipitation and filtration aluminum hydroxid and all sulfates, again adding nitric acid and crystallizing out the potassium nitrate from the mother liquor thus produced.

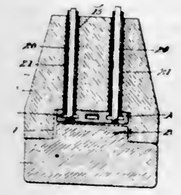
4. The process of treating alunite, which comprises digesting the mineral in nitric acid, removing from the resultant solution the residual silica, adding an alkali and then removing the precipitated aluminum hydroxid, adding barium carbonate and then removing the precipitated barium sulfate, adding nitric acid to remove the carbonic acid and then crystallizing out the potassium nitrate.

6. The process of treating alunite to recover therefrom its constituents in technically useful forms, which consists in digesting the powdered mineral in boiling nitric acid under constant agitation, recovering the residual silica from the resultant solution by filtration, treating this filtrate with an alkali under constant agitation, and recovering therefrom by filtration the precipitated aluminum hydroxid, treating the last-mentioned filtrate with powdered barium carbonate under constant agitation and boiling, and recovering therefrom by filtration the precipitated barium sulfate, treating the filtrate thus obtained with nitric acid, and crystallizing out the potassium nitrate.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,274,146. GLASS-FURNACE. HARRY E. DE VAUGHN, Morgantown, W. Va., assignor to Walter A. Jones, Morgantown, W. Va. Filed Oct. 6, 1916. Serial No. 124,091. (Cl. 122—6.)

1. A suspension device of the character described comprising a flat supporting device provided with a closed chamber, suspending means rigidly secured to said supporting device, and means for guiding a cooling medium into and out of said chamber and in contact with said suspending means.



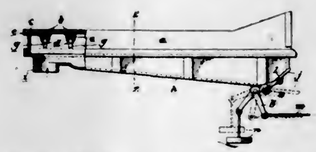
4. The combination with a body of refractory material having a recess in its underside, a supporting member located within and substantially filling said recess, suspension means for said supporting member extending through said body, and means for cooling said supporting member and its suspension means.

5. The combination with a body of refractory material having a recess in its underside, a supporting member located within said recess, suspension means for said supporting member, and a refractory member for closing said recess.

8. The combination with a body of refractory material having a channel in its under side and a recess leading upwardly from said channel, of a flat supporting device located within and substantially filling said recess, said supporting device being provided with a closed chamber, suspension means rigidly secured to said supporting device, means for guiding a cooling medium into and out of said chamber and in contact with said suspension means, and a protector block located in said channel and covering said supporting member.

[Claims 2, 3, 6, and 7 not printed in the Gazette.]

1,274,147. FURNACE-GRATE. HARRY O. DORSEY, Atlanta, Ga. Filed Nov. 14, 1917. Serial No. 201,965. (Cl. 110—74.)



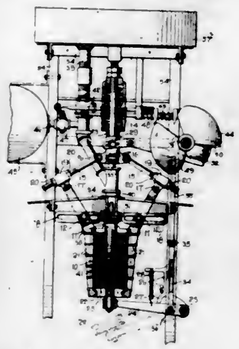
1. A channel grate-bar provided with holes at intervals in its top surface and also a pair of inwardly-extending lugs at a distance below the top surface of the bar, one pair of oppositely-extending lugs being arranged under each opening, each nozzle plate being provided with two pairs of depending fingers, each pair being adapted to embrace one of said lugs and thus prevent the nozzle plates from rotating.

3. A hollow grate bar or section provided with air-escape openings in its top surface, an inlet at one end to admit air under pressure, and an ash-exit at its other end, this exit being formed at the junction of the bottom-wall and the adjacent end-wall of the section to thereby form an unobstructed opening at this end of the bar, the bottom-wall being inclined from said air-inlet to said ash-exit to thereby permit the air supply to assist in discharging the ashes, a pivoted closure-plate for the ash-exit, devices for normally closing this plate against air-pressure in the section, and means for opening said closure-plate.

5. A hollow grate bar or section provided with air-escape openings in its top surface, an air-inlet at one end, an ash-exit at its other end, this exit being formed at the juncture of the bottom-wall and the adjacent end-wall of the bar, to thereby form an unobstructed opening at this end of the bar, a pivoted closure-plate for this opening, and means for operating this closure-plate, said means consisting of an angle-lever pivotally mounted on the bar and having one end in pivotal engagement with the closure-plate, an operating rod connected to the other arm of the angle-lever, and a weight connected to the angle-lever tending to normally close the closure-plate.

[Claims 2 and 4 not printed in the Gazette.]

1,274,148. APPARATUS FOR PRODUCING ARTICLES FROM PULP. WALTER H. DRAKE, San Francisco, Cal. Filed Jan. 9, 1918. Serial No. 211,076. (Cl. 92—64.)



1. An apparatus for the production of articles from pulp, comprising a separable foraminous mold, means to open and close the sections of the separable mold, a source of pulp supply, means to control the flow of pulp from the supply into the mold, a source of anhydrous fluid supply, means to control the introduction of the anhydrous fluid into the mold following the introduction of the pulpy material, and means whereby the introduction of the anhydrous fluid causes an agitation of the pulpy material contained in the mold.

9. An apparatus for producing articles from pulp comprising a foraminous mold, a pipe extending into the mold and terminating at a point short of the opposite wall of the mold, a telescopic section carried by the pipe, adapted to vary the distance between the extremity and the opposite wall, means to introduce pulp into the mold, and means to simultaneously exert agitation and pressure upon the pulpy content.

[Claims 2 to 8 not printed in the Gazette.]

1,274,149. BED-SPRING. JAMES H. DYETT, Buffalo, N. Y., assignor to Hard Manufacturing Company, Buffalo, N. Y. Filed June 12, 1915. Serial No. 33,714. (Cl. 5—39.)

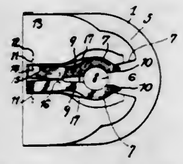


The combination of a frame, an elastic metallic bed bottom fabric attached at its ends to said frame and having a pocket extending longitudinally between the side edges of the bottom fabric and having upper and lower walls at the upper and under sides of the bed bottom, and an elastic extensible rope extending through said pocket and attached at its ends to said frame, said rope holding the walls of said pocket apart and causing said pocket to bulge upwardly thereby forming a longitudinal upwardly projecting rib on the bed bottom.

1,274,150. TELEPHONE-SUPPORT. FRANK J. EISENHUT, Woodhaven, N. Y. Filed Jan. 15, 1917. Serial No. 142,380. (Cl. 248—20.)

2. A holder for telephones and the like, comprising a base, means in stationary relation to said base for receiv-

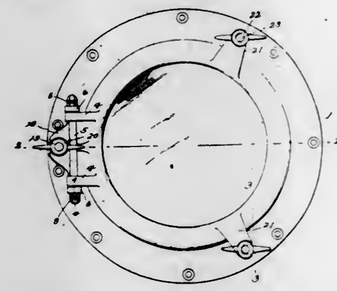
ing a portion of the article, said means including fixed arms having their free ends spaced one from another to form an open sided receiving aperture, and means for yieldingly engaging a portion of the article, said yielding



means including movable arms having their free ends normally extending within the contour of said receiving aperture and lost motion mounting means normally holding the free ends of said arms in spaced relation.

[Claim 1 not printed in the Gazette.]

1,274,151. AIR-PORT CLOSURE. EDWARD H. ELLISON, Jamestown, N. Y., assignor to International Casement Company, Jamestown, N. Y., a Corporation of New York. Filed July 18, 1917. Serial No. 181,213. (Cl. 114—173.)

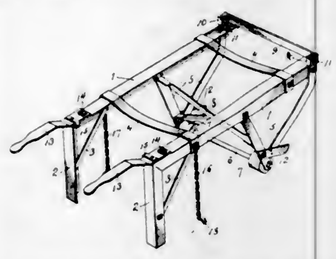


1. An air port closure comprising a supporting frame having an opening, a door for closing the opening and means for supporting said door including a bolt carried by the door, spaced brackets having elongated slots for said bolt, sliding members having sockets in their outer ends adapted to engage said bolt, means independent of the brackets for supporting and guiding the sliding members and springs for forcing said sliding members outwardly for holding the bolt yieldingly against the outer ends of said slots, and means for moving the door bodily against its seat for closing the same.

2. An air port closure comprising a supporting frame having an opening, a door for closing the opening, means for supporting the door including lugs carried by the door, a vertically disposed bolt mounted in said lugs, brackets carried by the frame and having elongated slots for the bolt, a sliding member adjacent each bracket, means independent of the brackets for supporting and guiding said sliding members, said sliding members having sockets in the outer ends, sleeves carried by the frame for said sliding members, a spring for forcing each sliding member outwardly to cause its outer end to engage the bolt, and clamping means for moving the door bodily against its seat for closing the same.

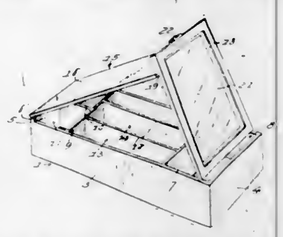
3. An air port closure comprising a supporting frame having an opening and a seating rib for the door, a door for closing the opening, a gasket carried by the door and adapted to engage said rib, lugs projecting horizontally from the door, a bolt mounted in said lugs, spaced brackets carried by the frame and having elongated slots through which said bolt passes, said slots being elongated in a direction perpendicular to the plane of the frame, a sleeve adjacent each bracket, a sliding member in each sleeve, a spring in the sleeve for forcing the sliding member outwardly, each sliding member having a socket in its outer end adapted to engage the bolt, said bolt being cut away to receive the socketed end, spaced lugs projecting from the door between the brackets when the door is closed, a bolt fixed to the frame and having a winged nut adapted to engage said spaced lugs, a lug on the opposite side of the door from the spaced lug and having a forked end, a swinging bolt carried by the frame adapted to engage said forked end and a winged nut for said bolt, said winged nuts serving as a means for shifting the door bodily to engage the rib on the frame, and said sliding members yielding to permit the bodily movement of the door.

1,274,152. TRUCK. HALLETT D. ELLS, Kansas City, Mo. Filed Oct. 18, 1915. Serial No. 56,440. (Cl. 21—65.)



In a truck, a frame having two supporting arms adapted to support the truck in a substantially upright position, a roller support mounted in said arms for supporting the frame in a horizontal position, and two plates secured respectively to said arms and extending forwardly beyond the roller support and beyond the forward edges of said arms and coöperating with the arms and with said roller support for supporting the frame in two positions of rest respectively intermediate of the upright and of the horizontal positions.

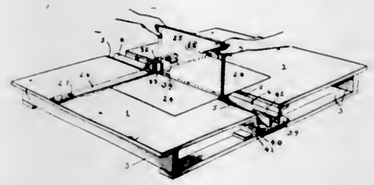
1,274,153. SHAVING KIT. WILLIAM F. ERICKSON and HANS D. BOLSTAD, Starbuck, Minn. Filed Sept. 6, 1917. Serial No. 190,070. (Cl. 132—32.)



2. A device of the character described including a receptacle provided with a plurality of compartments adapted to receive articles, an extension formed on the rear wall of the receptacle, a foldable sectional cover composed of two sections, one of the sections being pivotally connected to the extension and terminating short of the front wall of the receptacle, the other section being reduced on one surface adjacent one end to provide a transverse shoulder, means for pivotally connecting the second section at a point adjacent the shoulder to the outer end of the first section to permit of the arrangement of the sections in superposed relation on the upper edge of the receptacle to completely close the receptacle and to permit of the swinging of the second section outwardly so as to be supported at various inclinations on the upper edge of the receptacle by the first section, and a mirror carried by the opposite face of the second section.

[Claim 1 not printed in the Gazette.]

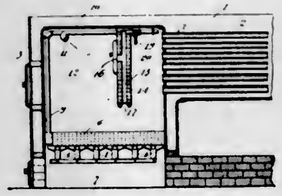
1,274,154. PAMPHLET-COVERING MACHINE. THEODORE S. ETHERIDGE, Grand Rapids, Mich. Filed Mar. 31, 1917. Serial No. 158,986. (Cl. 11—4.)



1. A book covering appliance comprising a horizontal cover support, a die beneath the cover support to receive the back of the book and the cover and a roller extending transversely of the die and having the upper part of its periphery substantially in the plane of the die bottom and adapted to engage the back of the covered book as it is moved longitudinally in the die.

[Claims 2 to 9 not printed in the Gazette.]

1,274,155. FURNACE. IRA W. FOLTZ, Chicago, Ill. Filed Mar. 6, 1916. Serial No. 82,414. (Cl. 110—65.)



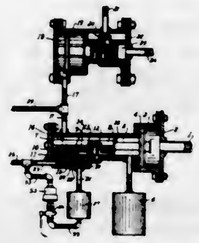
1. In a furnace, a furnace chamber comprising surrounding walls and a grate, a transversely extending wall separating said furnace compartment into two divisions, said wall being located approximately one-fourth the distance from the rear of said furnace chamber and arranged to close the upper part of said furnace chamber while providing communication between the two divisions of said chamber at the lower end of said wall, said wall being provided with a vertically extending passage open at its lower end and communicating above said lower end with the larger of said divisions of the furnace chamber, a conduit extending upwardly from the ash-pit and extending into the smaller of said divisions and from there leading into the larger of said divisions and having an outlet for air in the larger of said divisions.

8. A furnace comprising surrounding walls, a grate, an ashpit and a boiler, a transverse wall depending from the roof of the furnace and dividing it into two compartments, said transverse wall being arranged to provide restricted communication between said compartments and a conduit having an inlet in the ashpit, said conduit having a portion of its length located in the rear compartment and being provided with an outlet in the forward compartment.

[Claims 2 to 7 not printed in the Gazette.]

1,274,156. AIR-BRAKE MECHANISM. DAVID J. FRANKLIN, Columbia, S. C. Filed Feb. 2, 1917. Serial No. 146,097. (Cl. 188—1.)

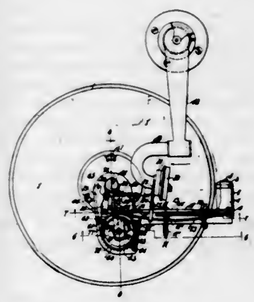
1. In an air brake mechanism, a distributing valve arrangement adapted to control the application of locomotive driver brakes and embodying a casing, a movable piston therein, a feed groove around said piston, a reservoir adapted to be charged through said feed groove, a chamber adapted to be charged from said reservoir for effecting movement of the application valve, a valve actuated by the movements of said piston and controlling the admission of air to said chamber, and a leak-off valve connected to said chamber and adapted to allow the escape of air so long as it is admitted in small quantities,



and to prevent the escape of air when admitted in larger quantities.

[Claims 2 and 3 not printed in the Gazette.]

1,274,157. REPEATING DEVICE FOR TALKING-MACHINES. CHARLES H. FRINK, Northampton, Mass. Filed Nov. 13, 1917. Serial No. 201,862. (Cl. 274—15.)



1. A device for attachment to a phonograph for continuously and automatically repeating the playing of the record and comprising, in combination, a base-piece, a member connected to the needle carrying part of the instrument, a rack-bar, a pawl operated by the instrument during its usual travel for moving the pawl into engagement with the rack bar, a needle elevating mechanism, means operated by the rack bar for effecting the operation of the needle elevating mechanism, means for returning the needle to its initial position in contact with the record and means for rendering the elevating mechanism inoperative after the needle has been returned to its initial position.

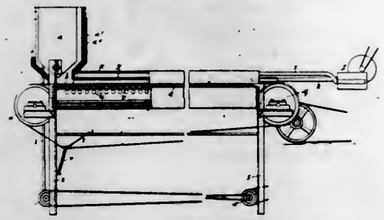
10. In a repeating device of the kind described, a disk having finger elements, a rubber or elastic member looped over the finger elements and passed below the disk for engaging the record to cause the operation of the disk from the record.

14. A repeat playing device for talking machines, comprising in combination, a needle carrying member, a base piece, an adjustable track for playing records of different sizes, a pivotally mounted part carried by the needle carrying member and engaging the track, an arm for elevating the needle, an intermittently operated arm elevating and lowering member comprising a cam barrel for returning the needle to its initial position, operative means between the motor of the machine and the arm elevating and lowering cam barrel member for setting of said member into operation when the needle reaches a predetermined point on the record depending upon the adjustment of the track, and means for automatically rendering the

arm elevating cam barrel member inoperative after the needle has been returned to its initial position on the record.

[Claims 2 to 9, 11 to 13, 15, and 16 not printed in the Gazette.]

1,274,158. METHOD OF AND APPARATUS FOR DRYING CHINA OR OTHER CLAY, FULLERS' EARTH, PIGMENTS, WHITING, AND THE LIKE. WILLIAM JOHN GEE, Tulse Hill, London, England. Filed Apr. 6, 1915. Serial No. 19,599. (Cl. 34—12.)

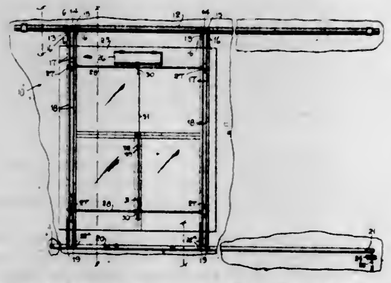


1. The method of drying china clay, fullers' earth, pigments, whiting, and material of like character, comprising the steps of continuously sliding the material in a thin sheet in plastic form through a heating device over a heated surface and in contact therewith to evaporate the moisture therefrom, substantially as described.

9. A drier comprising a heated surface, means for heating said surface, a conveyer arranged to move over said heated surface, means for moving said conveyer, a hood for said heated surface having a chamber therein arranged to be heated by the radiant heat from the heated surface, a hopper having means for feeding a film of plastic material to be dried on said conveyer, said conveyer being arranged to move said film in a continuous manner over the heated surface, there being an air inlet to said heated chamber in the hood, means for passing said heated air over the film during its passage over the heated surface to carry off the moisture, and a jacket surrounding the hopper and arranged to receive the heated air and steam passing over the film to preheat the clay within the hopper, substantially as described.

[Claims 2 to 8 not printed in the Gazette.]

1,274,159. GRAIN-CAR DOOR. FRED THEODOR GERDES, Rochester, Ind. Filed Dec. 12, 1917. Serial No. 206,804. (Cl. 20—23.)



1. In a door construction, a wall having a doorway, a rail disposed above the doorway, hangers slidably mounted upon the rail and swingingly mounted thereon for movement away from or toward the wall, a door carried by said hangers, and a locking rail extending longitudinally below the door opening and shiftable into or out of interlocking sliding engagement with the hangers.

4. A door construction including a wall having a door opening, a longitudinally extending rail mounted above the door opening, hangers having sliding engagement with the rail and rotative engagement therewith and extending below the door opening, a lower rotatably mounted rail disposed below the door opening, said lower rail being hollow and longitudinally slotted, the lower ends of said hangers being provided with hooks adapted to engage within said slot, means for rotating the lower rail to engage it or disengage it from the lower ends of the hangers, and a door carried by said hangers.

8. A door construction including a wall having an opening, a longitudinally extending rail mounted above the door, hangers mounted upon the rail and extending below the door opening, a lower longitudinally extending rail with which the hangers have sliding engagement, said hangers comprising two pairs of angle irons, the angle irons of each pair being spaced from each other and arranged with certain of the flanges projecting outward, upper and lower shafts rotatably mounted in said flanges, gear wheels mounted on the shaft between the angle irons of each pair of angle irons, a door, U-shaped members mounted upon the face of the door and extending between the angle irons of each pair of angle irons and around said gear wheels, the U-shaped members being interiorly toothed to engage therewith, a lever mounted on the door, arms extending from the shafts, and means operatively connecting the lever to the arms to cause a rotation of the shaft upon the shifting of the lever.

10. In a door construction a wall having a doorway, a rail disposed above the doorway, hangers slidably mounted upon the rail, a lower rail extending longitudinally below the door opening and with which said hangers engage, a door carried by the hangers, and means for urging the door toward or away from the hangers, and means for disengaging the lower rail from its engagement with the hangers.

[Claims 2, 3, 5 to 7, and 9 not printed in the Gazette.]

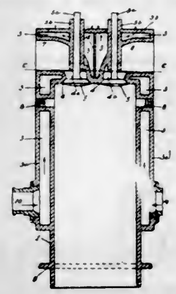
1,274,160. CLASP. ANTHONY GIARDINO, Brockton, Mass. Filed Oct. 23, 1916. Serial No. 127,204. (Cl. 24—73.)



A device of the class described consisting in combination, of a pair of wire members, each provided with an intermediate integral eye, the two wire members extending longitudinally of each other and being curved in opposing directions on opposite sides of said eyes, a pivot disposed at right angles to the plane of said members and passing through said eyes to pivotally connect them together, the outer portion of one of said members being bent to provide a keeper arm extending across toward the other wire member which is provided with a forwardly curving hook, the outer end of said keeper arm being provided with a right angularly disposed loop adapted to engage said hook so as to separate said members at one end and bring them together at another end.

1,274,161. CYLINDER FOR INTERNAL-COMBUSTION ENGINES. HAROLD A. HALL, San Jose, Cal. Filed Feb. 9, 1918, Serial No. 216,324. (Cl. 123—173.)

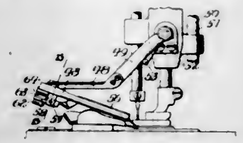
1. In an improvement in cylinders for internal combustion engines of the class described comprising a cylinder, a plurality of cooling water compartments adjacent the walls and ends of said cylinder, said compartments being intercommunicating, a plurality of openings at the lower end of said compartments, adapted to admit water to said compartments, a plurality of cooling water outlets at the top of the compartments, a centrally located cooling water outlet at the top of the cylinder head, a



web or partition, adapted to divide the water compartments into separate water circulating channels, substantially as shown and described.

[Claim 2 not printed in the Gazette.]

1,274,162. SEWING-MACHINE. JESSE J. HEAP, New York, N. Y., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed June 9, 1914. Serial No. 843,960. (Cl. 112—9.)



1. The combination with stitch forming mechanism including spaced needles, and means for guiding the edges of two fabrics to said needles with a space between the edges, of an insertion guide including a supporting plate, spaced guiding devices for holding the insertion on said plate, and an independent rib extending between said devices and above the same for folding and bending the insertion longitudinally between its side edges.

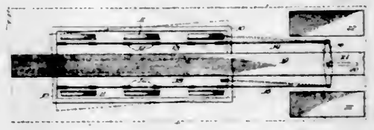
3. The combination with stitching mechanism, including spaced needles, and means for guiding the edges of two fabrics to said needles with a space between the edges, of an insertion guide including a supporting plate, guiding fingers for holding the insertion on said plate, said plate having a slot extending longitudinally thereof, and said fingers being spaced from each other, a rib extending through said slot and between said fingers and above the same for folding or bending the insertion longitudinally between its side edges, and means for adjusting said rib and holding the same in adjusted position.

7. The combination with stitch forming mechanism, including spaced needles, means for guiding the edges of two fabrics to said needles with a spaced between the edges, of an insertion guide includnig a supporting plate, a bridging portion spanning the receiving end of the guide, flat yielding fingers carried by said bridging portion and adapted to hold the insertion on said plate, said flat fingers being spaced from each other and a folding rib extending through the space between the fingers and having an inclined edge for gradually folding or bending the insertion between its side edges as it passes through the guide.

9. The combination of stitch forming mechanism, including spaced needles and means for guiding the edges of two fabrics to two needles with a space between the edges, of an insertion guide including a supporting plate, devices for holding the insertion on said plate, said plate having a slot extending longitudinally thereof, a folding rib pivotally supported at a point below the supporting plate and extending through said slot above the holding devices for folding and bending the insertion longitudinally between its side edges and means for adjusting said rib on said pivotal support and for maintaining said rib in an adjusted position.

[Claims 2, 4 to 6, and 8 not printed in the Gazette.]

1,274,163. BEAM FOR BRAKES. WILLIAM C. HEDGCOCK, Chicago, Ill., assignor to American Steel Foundries, Chicago, Ill., a Corporation of New Jersey. Filed July 5, 1917. Serial No. 178,583. (Cl. 188—22.)



1. A brake beam, comprising a bar having spaced members and terminating in mountings at its ends for brake heads or hangers, and a pair of lever fulcrums extending between said spaced members.

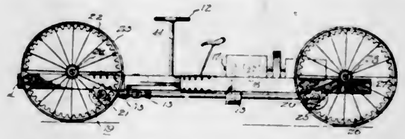
2. A brake beam, comprising a bar having spaced members and terminating in trunnions for brake heads or hangers, and a pair of angularly arranged lever fulcrums extending between said spaced members.

6. A brake beam, comprising a bar having spaced members, intermediate portions of which are parallel and the outer portions of which converge outwardly and terminate in trunnions for the reception of brake heads or hangers, and angularly arranged lever-fulcrums extending between said spaced members.

7. A brake beam, comprising a bar having spaced members, intermediate portions of which are parallel, the outer portions of which converge and terminate in mountings for brake heads or hangers, lever fulcrums extending between the parallel portions of the spaced members, and a lug carried by one of the parallel arranged members provided for the attachment of a supporting device.

[Claims 3 to 5 not printed in the Gazette.]

1,274,164. MOTOR-VEHICLE. OTTO HENRIKSON, Minneapolis, Minn., and Gustaf Henrikson, Chicago, Ill. Filed Dec. 20, 1916. Serial No. 138,049. (Cl. 21—201.)

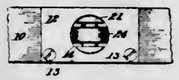


1. In a four wheel drive motor vehicle frame, comprising a forward, an intermediate, and a rear section, the forward and intermediate sections being formed with vertical abutting walls, the walls of the forward section having arcuate slots, bolts sliding in these slots and fixed in the wall of the intermediate section, serving as connection between said walls a pivot bolt connecting the intermediate and rear sections of said frame to permit, by manually operable steering mechanism, the lateral adjustment of said sections.

2. In a four wheel drive-motor vehicle frame, comprising a forward, an intermediate, and a rear section, the intermediate section terminating in a toothed segment projected between spaced portions of the rear section, the forward and intermediate sections being formed with vertical abutting walls, the forward section having arcuate slots, bolts sliding in these slots and fixed in the wall of the intermediate section, serving as connection between said walls; a pivot bolt connecting the in-

termediate and rear section of said frame to permit the lateral movement of said sections, a pinion in mesh with the toothed segment of the intermediate section, said pinion fast upon a vertical shaft, carried by the rear section, and manually operated, serving as the steering mechanism.

1,274,165. CASTER. WILLIAM T. HORMES, Govans, Md., assignor to Solomon Himmel, Baltimore, Md. Filed Oct. 5, 1916. Serial No. 123,975. (Cl. 16—164.)



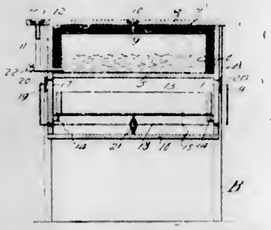
2. An improved caster comprising a face plate provided with an internally threaded supporting member projecting from one face thereof, an externally threaded carrier member adjustably engaging the threaded portion of said supporting member, a caster member having a swiveled engagement with said carrier member, and means for normally preventing relative rotation of said supporting member and said carrier member.

5. An improved caster comprising an attaching device formed with a plate portion for engaging one edge of a door and having an angularly disposed member provided with a threaded portion and a slot contiguous to said threaded supporting portion, a threaded carrier member adjustably engaging said threaded supporting portion and having notches contiguous to said slot, a caster member having a swiveled engagement with said carrier member, and means for normally preventing relative rotation of said carrier member and said supporting portion.

8. As an improvement in casters, the combination with a door having a recess therein, of a supporting member attached to said door, said supporting member having a portion projecting into the recess, a carrier member having a threaded engagement with said projecting portion, and a caster member having a swiveled connection with said carrier member.

[Claims 1, 3, 4, 6, 7, 9, and 10 not printed in the Gazette.]

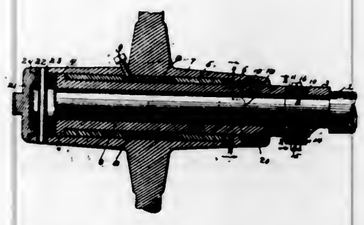
1,274,166. INCUBATOR. ROBERT F. HUME, Lima, Ohio. Filed Jan. 18, 1917. Serial No. 143,120. (Cl. 119—38.)



1. In a device of the class described in combination a rectangular receptacle, means for supporting said receptacle, a series of horizontally disposed strips mounted in said receptacle, a flat top secured upon said receptacle and having its marginal portion projecting around the same, a sheet metal tank mounted upon said strips and having its sides spaced apart from the sides of the top of said receptacle, an asbestos packing mounted between the walls of said tank and of said receptacle, an air pipe extending upwardly from the upper portion of said tank, said top having a countersunk recess, a dish-shaped portion formed upon said air pipe disposed within said recess, a plug consisting of a disk fitting said dish-shaped portion flush with the outer face of said top and having a portion projecting into the air pipe, an L shaped water inlet pipe having a drain valve at the outer end of its horizontal portion, the inner end of which horizontal portion is connected to the lower end of said tank, the upper end of the vertical portion of said L-shaped pipe having a flaring portion terminating in an enlarged dish-shaped portion both of which portions are countersunk within the projecting portion of said top.

[Claim 2 not printed in the Gazette.]

1,274,167. HUB-ATTACHING DEVICE. JOHN D. JONES, Walla Walla, Wash., assignor to The Self-Oiling Wheel & Bearing Co., Walla Walla, Wash. Filed Dec. 5, 1916. Serial No. 135,162. (Cl. 21—30.)



1. A hub having an inwardly extended flange, a boxing within the hub engaging said flange at one end, a skein within the boxing having a flange engaging the other end of the boxing and means for securing the hub and boxing together.

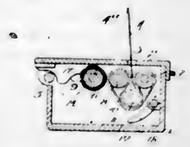
2. A hub having an inwardly extended flange, a boxing within the hub engaging said flange at one end, a skein within the boxing having a a flange engaging the other end of the boxing, means for securing the hub and boxing together, and means engaging the skein to secure it to the spindle of an axle.

3. A hub having an inwardly extended flange with notches, a chambered boxing having extensions received in said notches, a skein flanged at its outer end to engage the box, means for securing the skein to a spindle and means securing the hub to the boxing and controlling the supply opening of the chamber of the boxing.

4. A hub having an inwardly extended flange with notches, a chambered boxing having extensions received in said notches, a skein within the boxing and flanged at one end to engage said boxing, means for securing the skein to a spindle, means securing the hub to the boxing and controlling the supply opening of the chamber of the boxing, a cap nut received within the outer end of the hub, and means passed transversely through the hub and the cap nut.

5. A spindle, a skein having a cut-away portion, a member having a transversely extending portion received in said cut-away portion bearing against the spindle, said means having legs, a cross bar engaging the skein, the ends of the legs passing through the cross bar, and means on the ends of said legs engaging said cross bar to hold the parts in position.

1,274,168. CIGARETTE-MAKING MACHINE. LEOPOLD KEHLMANN, New York, N. Y. Filed Mar. 19, 1918. Serial No. 223,282. (Cl. 131—5.)



1. A cigarette rolling machine comprising a frame, a pair of spaced rollers journaled therein, an endless belt upon said rollers, means for movably guiding one of said rollers for movement toward and from the other, an operating roller laterally movably supported by the frame to move toward and from and for coöperation with the other laterally movable roller for operating the belt, and means to retain said last named rollers in coöperation for operation of the belt.

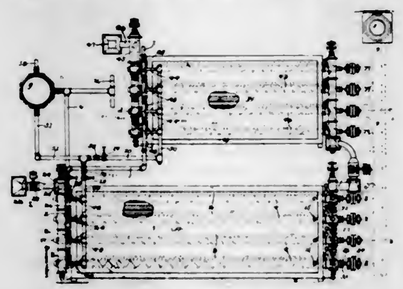
4. A cigarette rolling machine comprising a frame, a pair of rollers journaled therein and spaced apart, an endless belt on said rollers, said frame having slots supporting one of said rollers for lateral movement, an operating roller supported in said slots for lateral movement to coöperate with the last named roller for operation of the belt, and one or more projections movably supported and coöperative with the operating roller to retain it in coöperation with said laterally movable roller.

5. A cigarette rolling machine comprising a frame, a pair of spaced rollers journaled therein, an endless belt upon said rollers, means for movably guiding one of said rollers for movement toward and from the other, an operating roller movably supported by the frame for cooperation with the other laterally movable roller for operating the belt, and a cover upon the frame having a slot for the passage of cigarette papers, said slot being in position when the cover is closed to guide the paper between the first named rollers.

8. A cigarette rolling machine comprising a frame, a pair of spaced rollers journaled therein, an endless belt upon said rollers, means for movably guiding one of said rollers for movement toward and from the other, an operating roller movably supported by the frame for coöperation with the other laterally movable roller for operating the belt, and means movably carried by said frame for coöperation with said movable roller for moving it and the corresponding portion of the belt away from the companion roller.

[Claims 2, 3, 6, 7, and 9 not printed in the Gazette.]

1,274,169. MANUFACTURE OF FORMATES AND OXALATES. ALEXANDER LACKMAN, Bradford, Pa. Filed July 24, 1917. Serial No. 182,534. (Cl. 23—24.)



1. The process of making sodium formate which comprises passing granular caustic soda through a tubular heated conduit in countercurrent against preheated gas containing CO.

2. The process of making sodium oxalate which comprises transmitting granular sodium hydrate through a heated conduit in countercurrent to preheated gas rich in CO and transmitting the sodium formate produced through an externally heated tubular conduit in the presence of a flowing preheated gas containing CO.

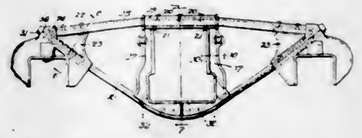
3. The process of making sodium oxalate which comprises passing granular sodium formate through an externally heated conduit as a traveling stream in the presence of a flow of preheated gas rich in CO.

4. In the manufacture of formates and oxalates the process which comprises passing a traveling layer of granular caustic soda against a current of hot gases containing CO until the greater part of said soda is converted into formate, and converting the so-treated material into oxalate in the presence of sufficient CO to convert residual soda into formate.

6. In the manufacture of formates and oxalates, the process which comprises transmitting sodium hydrate continuously through tubular fire-heated conduits in the presence of gas currents containing CO, such transmission first being under formate producing conditions and second under oxalate producing conditions and the waste gases from both operations being used for heating said conduits.

[Claim 5 not printed in the Gazette.]

1,274,170. TRUCK SIDE FRAME. JOHN A. LAMONT, Chicago, Ill., assignor to American Steel Foundries, Chicago, Ill., a Corporation of New Jersey. Filed June 21, 1917. Serial No. 176,032. (Cl. 105—243.)



1. In a side frame, the combination of a compression member, a tension member, a strut extending therebetween, and a member to which one end of the compression member is connected, the end of the tension member being upset and engaging a portion of said member to form a rigid connection therebetween.

2. In a side frame, the combination of a strut having a grooved bottom portion, a compression member engaging the top of the strut, a tension member occupying the grooved portion of said strut, and an apertured member through which the tension member extends and to which the compression member is secured, the end of the tension member being upset to form a rigid connection between the apertured member and tension member.

3. In a side frame, the combination of a strut having an aperture, a compression member extending through said aperture, a tension member connected to said strut, and a pedestal member to which said tension and compression members are connected.

4. In a side frame, the combination of a strut having apertured and grooved portions, tension and compression members, one of which passes through the aperture in said strut, and the other of which is located in a groove of said strut, and a pedestal to which the tension and compression members are connected.

5. In a side frame, the combination of a strut having an aperture in its upper portion and a grooved bottom, a compression member extending through said aperture, a tension member located in the groove of the strut, and a pedestal member to which the ends of said tension and compression members are connected.

[Claims 6 to 8 not printed in the Gazette.]

1,274,171. PROCESS OF PRESERVING WOOD. MAX LANDAU, Berlin, Germany. Filed Jan. 25, 1916. Serial No. 74,074. (Cl. 99—12.)

1. The process for preserving wood which consists in introducing aqueous solutions of trioxymethylene and water soluble salts into the wood.

3. The process for preserving wood which consists in introducing aqueous solutions of trioxymethylene and water soluble salts of inorganic bases with inorganic acids into the wood.

4. The process for preserving wood which consists in introducing aqueous solutions of trioxymethylene and alkalifluorids into the wood.

[Claim 2 not printed in the Gazette.]

1,274,172. TOILET-ARTICLE HOLDER OR CABINET. ELMO W. LEE, Tamaroa, Ill. Filed Mar. 8, 1918. Serial No. 221,134. (Cl. 45—135.)

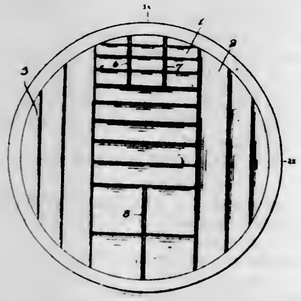
1. In a toilet fixture, a skeleton frame constructed of wire and having at its top suspension means, said frame having a rectangular portion to engage the marginal edge

of the frame of a mirror, said fixture frame having diagonally arranged portions, a U-shaped frame suspended downwardly from the diagonal portions, and towel racks, each constructed from a single length of wire and being pivotally mounted, one on each end of said U-shaped frame.



2. In a toilet fixture, a skeleton frame constructed of wire and having a mirror frame supporting portion, said fixture frame having a depending part from the mirror supporting portion, said depending part terminating at its lower end in circular laterally extending concentric rings of different diameters, the larger being super-imposed and both designed to be engaged by a wash basin, said depending part having diagonal portions, a U-shaped frame depending from said diagonal portions, and towel racks, one pivoted on each end of said U-shaped frame, said U-shaped frame being interposed between the depending part and the wall from which the fixture frame may be suspended, thereby preventing displacement of the U-shaped frame.

1,274,173. HEADLIGHT-LENS. FREDERICK G. LEE, Rochester, N. Y. Filed July 30, 1917. Serial No. 183,601. (Cl. 240—48.4.)

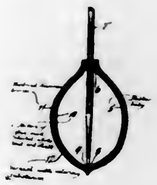


1. A lens having one of its surfaces formed with a central zone and a zone at each side thereof, said central zone being composed of prisms which successively increase in width and decrease in refractive power from top to bottom of the lens, and said side zones being formed of prisms extending longitudinally at right angles to the prisms of the central zone and decreasing in width and increasing in refractive power from the central zone toward the side of the lens.

3. A lens, a face of which is formed of prisms, the prisms at the central portion of said face being at right angles to those at the other side thereof, the prisms at the central and side portions of the lens increasing in width and decreasing in refractive power, and decreasing in width and increasing in refractive power, respectively, from the circumference toward the center of the lens, said lens having its opposite face concaved.

[Claim 2 not printed in the Gazette.]

1,274,174. HOLLOW BODY AND METHOD OF MAKING SAME. JOHN J. LEE, Brooklyn, N. Y., assignor to Albert Behrend and Joseph Rothschild, doing business as copartners under the firm-name of Behrend & Rothschild, New York, N. Y. Filed Oct. 16, 1917. Serial No. 196,787. (Cl. 91—68.)



2. The method of making a hollow homogeneous body which consists in inserting within an elastic rubber body and along its longitudinal axis an elongated tool, then inflating the rubber body to the desired size, whereby the tool serves to maintain the rubber body inflated and in its longitudinally expanded contour, thereafter dipping the inflated body and tool in a thereto adhering coating solution and drying same to form an indivisible shell body self-maintainable at its predetermined inflated size and finally withdrawing the tool from the hollow body so formed.

5. As a new article of manufacture, a hollow homogeneous body comprising an inner expanded elastic rubber body, a thereto adhering coating shell indivisibly compounded with said body made by mixing glue, wood alcohol, white lead and chalk in substantially the proportions described, self-maintainable at any predetermined size.

9. As a new article of manufacture, a homogeneous hollow body comprising an inner expanded elastic rubber body, a thereto adhering coating homogeneously compounded with said body made by mixing glue, wood alcohol, white lead and chalk in substantially the proportions and manner described, whereby an indivisible shell body is formed self-maintainable in its expanded size, an aluminum bronze reflecting coating embodied in the outer surface of said coating, and a superimposed translucent outer varnish coating combined with coloring substances.

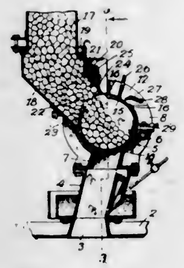
[Claims 1, 3, 4, and 6 to 8 not printed in the Gazette.]

1,274,175. STEAMING OF OILS, &c. ARTHUR LOWENSTEIN, Chicago, Ill. Filed Aug. 28, 1916. Serial No. 117,288. (Cl. 87—12.)

1. The steps in the process of heat-treating oils, fats, waxes, fatty acids and like products at pressures not substantially exceeding atmospheric which consists in superheating steam while at a relatively low pressure to a temperature sufficient to maintain the steam in a superheated condition after its expansion, and subjecting such products to the direct heating effect of such low-pressure superheated steam, whereby the expansion of the steam during the treatment is relatively small.

2. The steps in the process of distilling fatty acids or deodorizing glycerids thereof at pressures not substantially exceeding atmospheric which consist in superheating steam to a temperature not substantially below 500° F. while at a pressure not substantially exceeding six pounds per square inch, and subjecting the said materials in the liquid state to the direct action of a current of such superheated steam.

1,274,176. FEEDING MECHANISM FOR GAS-PRODUCERS. CHARLES W. LUMMIS, Worcester, Mass., assignor to Morgan Construction Company, a Corporation of Massachusetts. Filed June 28, 1915. Serial No. 36,626. (Cl. 48—86.)



1. In a fuel feeding mechanism, a rotatable ported charging member having its axis free to shift radially, and a supporting means for said member providing a concave seat whose effective surface embraces not more than one half the circumference of said member, whereby said radial shifting movement of the axis of said member is permitted.

2. In a fuel feeding mechanism for gas producers, a rotatable charging member having an opening, a supporting means for said member providing a concave seat whose effective surface embraces not more than one half the circumference of said member, said seat providing a passage to the producer chamber for registration with said opening, a sealing surface on each side of said passage, the width of each sealing surface being greater than the width of said opening, and means for removing tar and dirt from the surface of said rotatable member.

3. In a fuel feeding mechanism for gas producers, a rotatable ported charging member having its axis free to shift radially, and a supporting means for said member providing a concave seat whose effective surface embraces not more than one half the circumference of said member, whereby said radial shifting movement of the axis of said member is permitted, said seat providing a passage to the producer chamber for registration with the port of said member, and a sealing surface on each side of said passage, the width of each sealing surface being greater than the width of said port.

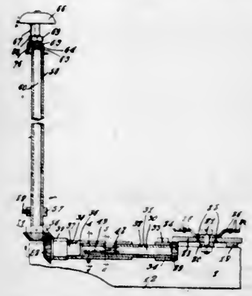
4. In a fuel feeding mechanism for gas producers, a rotatable charging member having an opening, a supporting means for said member providing a concave seat whose effective surface embraces not more than one half the circumference of said member, said seat providing a passage to the producer chamber for registration with said opening, said seat and said member coöperating to form a substantially gas tight seal against the escape of gas from the producer chamber in every position of said member, and means for limiting the charge received by said member to a volume less than the capacity of said member.

5. In a fuel feeding mechanism for gas producers, a rotatable charging member having an opening, a supporting means for said member providing a concave seat having a passage to the producer chamber for registration with said opening, and means for segregating a charge of fuel in said member, of such a size as to prevent the lodgment of fuel between the edge of said seat and the rear edge of said opening, in the rotation of said member.

[Claims 6 to 26 not printed in the Gazette.]

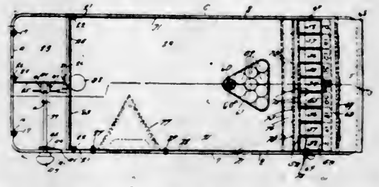
1,274,177. RAILROAD-CROSSING SIGNAL. JACOB LUX, Edgeley, N. D. Filed Nov. 26, 1917. Serial No. 204,021. (Cl. 246—48.)

1. In a device of the class described, a lever having a cam and a rack; car actuated means for swinging the lever in one direction; yieldable means for swinging the lever in an opposite direction; an outer shaft supported for rotation and having a ratchet and seats; a signal connected with the outer shaft; an inner shaft journaled in the outer shaft; a pinion on the inner shaft and coöperating with the rack; a pawl carried by the inner shaft and coacting with the ratchet; a pivotally mounted dog coöperating with the seats; and a second lever fulcrumed intermediate its ends, one end of the second lever being pivotally connected with the dog, and the other end of the second lever coacting with the cam.



2. In a device of the class described, a tubular standard; a shaft journaled in the standard; a resonant member secured to the shaft; a striker coacting with the resonant member and fulcrumed on the shaft; a projection on the standard, wherewith the striker engages when the shaft is rotated; and means actuated by a passing car, for rotating the shaft.

1,274,178. GAME APPARATUS. MICHAEL FRANCIS MCGOWAN, Bremerton, Wash. Filed Feb. 6, 1918. Serial No. 215,609. (Cl. 46—62.)



1. In a game apparatus, a game-board on which at one end a plurality of counting balls may be racked, a master ball to be placed at the other end of the game-board, an oscillatory master ball firing member at one end of the board, a plurality of pockets extending transversely of the board at the other end having members of various denominations employed in counting the game according to the balls entering the pockets, and a reflecting member in which the numbers of the pockets are reflected.

7. In a game apparatus, a game-board, a trough member extending transversely of the board at one end and having a plurality of pockets provided with counting numbers of various denominations, means for mounting said member whereby the same may be tilted to discharge the balls back upon the game board, and an oscillatory master ball firing member at the other end of the game-board for shooting a master ball at a plurality of balls racked in advance of said pockets.

[Claims 2 to 6 and 8 not printed in the Gazette.]

1,274,179. MECHANICAL-INSCRIPTION CAMERA. HYLA F. MAYNES, Gaines, Pa. Filed Oct. 25, 1917. Serial No. 198,376. (Cl. 197—1.)

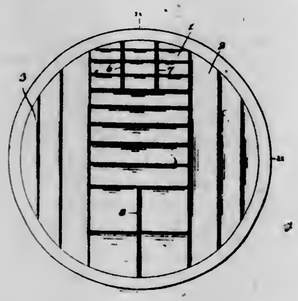
1. A camera adapted to hold photographic film and having a substantially flat removable back, a plurality

of the frame of a mirror, said fixture frame having diagonally arranged portions, a U-shaped frame suspended downwardly from the diagonal portions, and towel racks, each constructed from a single length of wire and being pivotally mounted, one on each end of said U-shaped frame.



2. In a toilet fixture, a skeleton frame constructed of wire and having a mirror frame supporting portion, said fixture frame having a depending part from the mirror supporting portion, said depending part terminating at its lower end in circular laterally extending concentric rings of different diameters, the larger being super-imposed and both designed to be engaged by a wash basin, said depending part having diagonal portions, a U-shaped frame depending from said diagonal portions, and towel racks, one pivoted on each end of said U-shaped frame, said U-shaped frame being interposed between the depending part and the wall from which the fixture frame may be suspended, thereby preventing displacement of the U-shaped frame.

1,274,173. HEADLIGHT-LENS. FREDERICK G. LEE, Rochester, N. Y. Filed July 30, 1917. Serial No. 183,601. (Cl. 240—48.4.)

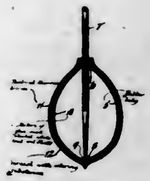


1. A lens having one of its surfaces formed with a central zone and a zone at each side thereof, said central zone being composed of prisms which successively increase in width and decrease in refractive power from top to bottom of the lens, and said side zones being formed of prisms extending longitudinally at right angles to the prisms of the central zone and decreasing in width and increasing in refractive power from the central zone toward the side of the lens.

3. A lens, a face of which is formed of prisms, the prisms at the central portion of said face being at right angles to those at the other side thereof, the prisms at the central and side portions of the lens increasing in width and decreasing in refractive power, and decreasing in width and increasing in refractive power, respectively, from the circumference toward the center of the lens, said lens having its opposite face concaved.

[Claim 2 not printed in the Gazette.]

1,274,174. HOLLOW BODY AND METHOD OF MAKING SAME. JOHN J. LEE, Brooklyn, N. Y., assignor to Albert Behrend and Joseph Rothschild, doing business as copartners under the firm-name of Behrend & Rothschild, New York, N. Y. Filed Oct. 16, 1917. Serial No. 196,787. (Cl. 91—68.)



2. The method of making a hollow homogeneous body which consists in inserting within an elastic rubber body and along its longitudinal axis an elongated tool, then inflating the rubber body to the desired size, whereby the tool serves to maintain the rubber body inflated and in its longitudinally expanded contour, thereafter dipping the inflated body and tool in a thereto adhering coating solution and drying same to form an indivisible shell body self-maintainable at its predetermined inflated size and finally withdrawing the tool from the hollow body so formed.

5. As a new article of manufacture, a hollow homogeneous body comprising an inner expanded elastic rubber body, a thereto adhering coating shell indivisibly compounded with said body made by mixing glue, wood alcohol, white lead and chalk in substantially the proportions described, self-maintainable at any predetermined size.

9. As a new article of manufacture, a homogeneous hollow body comprising an inner expanded elastic rubber body, a thereto adhering coating homogeneously compounded with said body made by mixing glue, wood alcohol, white lead and chalk in substantially the proportions and manner described, whereby an indivisible shell body is formed self-maintainable in its expanded size, an aluminum bronze reflecting coating embodied in the outer surface of said coating, and a superimposed translucent outer varnish coating combined with coloring substances.

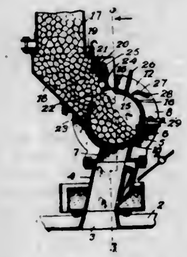
[Claims 1, 3, 4, and 6 to 8 not printed in the Gazette.]

1,274,175. STEAMING OF OILS, &c. ARTHUR LOWENSTEIN, Chicago, Ill. Filed Aug. 28, 1916. Serial No. 117,288. (Cl. 87—12.)

1. The steps in the process of heat-treating oils, fats, waxes, fatty acids and like products at pressures not substantially exceeding atmospheric which consists in superheating steam while at a relatively low pressure to a temperature sufficient to maintain the steam in a superheated condition after its expansion, and subjecting such products to the direct heating effect of such low-pressure superheated steam, whereby the expansion of the steam during the treatment is relatively small.

2. The steps in the process of distilling fatty acids or deodorizing glycerids thereof at pressures not substantially exceeding atmospheric which consist in superheating steam to a temperature not substantially below 500° F. while at a pressure not substantially exceeding six pounds per square inch, and subjecting the said materials in the liquid state to the direct action of a current of such superheated steam.

1,274,176. FEEDING MECHANISM FOR GAS-PRODUCERS. CHARLES W. LUMMIS, Worcester, Mass., assignor to Morgan Construction Company, a Corporation of Massachusetts. Filed June 28, 1915. Serial No. 36,626. (Cl. 48—86.)



1. In a fuel feeding mechanism, a rotatable ported charging member having its axis free to shift radially, and a supporting means for said member providing a concave seat whose effective surface embraces not more than one half the circumference of said member, whereby said radial shifting movement of the axis of said member is permitted.

2. In a fuel feeding mechanism for gas producers, a rotatable charging member having an opening, a supporting means for said member providing a concave seat whose effective surface embraces not more than one half the circumference of said member, said seat providing a passage to the producer chamber for registration with said opening, a sealing surface on each side of said passage, the width of each sealing surface being greater than the width of said opening, and means for removing tar and dirt from the surface of said rotatable member.

3. In a fuel feeding mechanism for gas producers, a rotatable ported charging member having its axis free to shift radially, and a supporting means for said member providing a concave seat whose effective surface embraces not more than one half the circumference of said member, whereby said radial shifting movement of the axis of said member is permitted, said seat providing a passage to the producer chamber for registration with the port of said member, and a sealing surface on each side of said passage, the width of each sealing surface being greater than the width of said port.

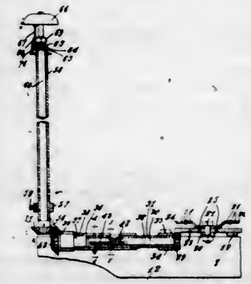
4. In a fuel feeding mechanism for gas producers, a rotatable charging member having an opening, a supporting means for said member providing a concave seat whose effective surface embraces not more than one half the circumference of said member, said seat providing a passage to the producer chamber for registration with said opening, said seat and said member coöperating to form a substantially gas tight seal against the escape of gas from the producer chamber in every position of said member, and means for limiting the charge received by said member to a volume less than the capacity of said member.

5. In a fuel feeding mechanism for gas producers, a rotatable charging member having an opening, a supporting means for said member providing a concave seat having a passage to the producer chamber for registration with said opening, and means for segregating a charge of fuel in said member, of such a size as to prevent the lodgment of fuel between the edge of said seat and the rear edge of said opening, in the rotation of said member.

[Claims 6 to 26 not printed in the Gazette.]

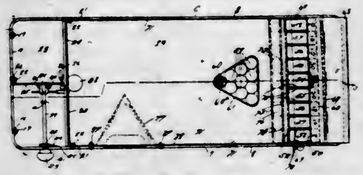
1,274,177. RAILROAD-CROSSING SIGNAL. JACOB LUX, Edgeley, N. D. Filed Nov. 26, 1917. Serial No. 204,021. (Cl. 246—48.)

1. In a device of the class described, a lever having a cam and a rack; car actuated means for swinging the lever in one direction; yieldable means for swinging the lever in an opposite direction; an outer shaft supported for rotation and having a ratchet and seats; a signal connected with the outer shaft; an inner shaft journaled in the outer shaft; a pinion on the inner shaft and cooperating with the rack; a pawl carried by the inner shaft and coacting with the ratchet; a pivotally mounted dog coöperating with the seats; and a second lever fulcrumed intermediate its ends, one end of the second lever being pivotally connected with the dog, and the other end of the second lever coacting with the cam.



2. In a device of the class described, a tubular standard; a shaft journaled in the standard; a resonant member secured to the shaft; a striker coacting with the resonant member and fulcrumed on the shaft; a projection on the standard, wherewith the striker engages when the shaft is rotated; and means actuated by a passing car, for rotating the shaft.

1,274,178. GAME APPARATUS. MICHAEL FRANCIS McGOWAN, Bremerton, Wash. Filed Feb. 6, 1918. Serial No. 215,609. (Cl. 46—62.)



1. In a game apparatus, a game-board on which at one end a plurality of counting balls may be racked, a master ball to be placed at the other end of the game-board, an oscillatory master ball firing member at one end of the board, a plurality of pockets extending transversely of the board at the other end having members of various denominations employed in counting the game according to the balls entering the pockets, and a reflecting member in which the numbers of the pockets are reflected.
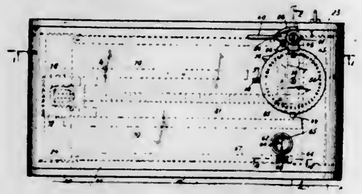
7. In a game apparatus, a game-board, a trough member extending transversely of the board at one end and having a plurality of pockets provided with counting numbers of various denominations, means for mounting said member whereby the same may be tilted to discharge the balls back upon the game board, and an oscillatory master ball firing member at the other end of the game-board for shooting a master ball at a plurality of balls racked in advance of said pockets.

[Claims 2 to 6 and 8 not printed in the Gazette.]

1,274,179. MECHANICAL-INSCRIPTION CAMERA. HYLA F. MAYNES, Gaines, Pa. Filed Oct. 25, 1917. Serial No. 198,376. (Cl. 197—1.)

1. A camera adapted to hold photographic film and having a substantially flat removable back, a plurality

of perforating devices associated with and extending through the back, mechanism mounted flat upon the outside of the back for actuating the perforating devices, a film gripping device slidably mounted on the inside of the inner face of the back and a mechanical connection mounted flat upon the inside and transmitting the movement of the actuating mechanism to the film-gripping device to bring successive portions of film into position to be perforated by the perforating devices.



3. A camera adapted to hold photographic film and having a substantially flat removable back formed with curved ends, a plurality of perforating devices associated with and extending through the back, mechanism mounted flat upon the outside of the back for actuating the perforating devices, a substantially flat guideway fixed on the inside of said back, a film-gripping device formed with a curvature substantially equal to that of the ends of the back so that it may fit closely adjacent the ends and slidably mounted in said guideway, and a flat connecting member slidably mounted on the inside of the camera back and operated by said actuating mechanism to move the film-gripping device to bring successive portions of film into position to be perforated by the perforating devices.

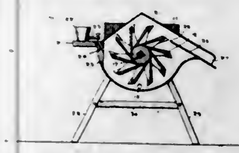
15. A camera adapted to hold photographic film having mechanism for selectively perforating sections of the film, and means for indicating when the film is in position for successive perforations, said means comprising a series of equidistant marks designated by alternate numbers and so arranged that when the edge of the film is placed at the mark corresponding to the zero point of said series, the center to the film section will be beneath the perforating mechanism.

18. A camera adapted to hold photographic film having mechanism mounted on a removable part of the camera for selectively perforating sections of the film, a plurality of independent means for positioning the film in such a relation to the perforating mechanism that the inscription applied to the film section may be symmetrically disposed thereon, one of said means being associated with the removable part of the camera for use when the said part is removed and film sections are being perforated, and another of said means being associated with the film and adapted for use when film sections are being perforated with the removable part of the camera in place.

19. A camera adapted to hold photographic film having mechanism mounted on a removable part of the camera for selectively perforating sections of the film, means associated with said camera for feeding the film sections into position to be perforated when said removable part is in place on the camera, mechanism movably mounted on the removable part of the camera for feeding the film sections into position to be perforated when said part of the camera is removed, said mechanism being so formed and mounted on the removable part of the camera that it may be disposed thereon in non-interfering relation with the film and other parts of the camera when the removable part is in place on the camera.

[Claims 2, 4 to 14, 16, 17, and 20 not printed in the Gazette.]

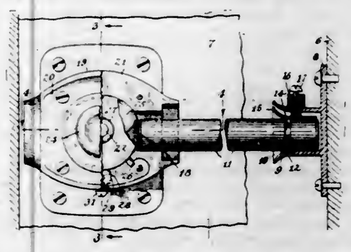
1,274,180. GRAIN-TREATING MACHINE. WILHELM MAUCH, Jr., Zeeland, N. D. Filed Oct. 9, 1917. Serial No. 195,559. (Cl. 83—28.)



1. A machine for treating grain with a liquid, comprising a main body having a curved liquid retaining bottom, means for feeding the grain to be treated upon said bottom, a centrally pivoted feed wheel mounted in said body and provided with scoop-like blades directed toward a point of delivery and adapted to carry grain over the axis of said wheel, and a delivery board disposed upon one side of the body at the upper portion thereof and projected toward the path of travel of said blades.

2. A machine for treating grain with a chemical solution comprising a main body with a curved liquid retaining bottom, a grain inlet hopper secured upon the outside of one side of the body and communicating with an opening in the side of the body, means for feeding the chemical solution into the body on one side and downwardly therein, a feed wheel centrally mounted in the body and provided with forwardly inclined tangential scoop-like blades for taking the grain from the bottom of the body and carrying it in the opposite direction to the entering solution, and a delivery board on the opposite side of the machine from said liquid feed for receiving the grain discharged from said blades.

1,274,181. LOCK. LOUIS MEYERS, Brooklyn, N. Y. Filed Apr. 23, 1915. Serial No. 23,307. (Cl. 70—102.)



1. A closure of the kind described, comprising a fixed socket member, a rod having one end detachably connected with the socket member, and a casing provided with a bore throughout its length, said casing having a rotatable member arranged therein and provided with a bore which when turned to one position provides a passage through said bores through which the rod is adapted to slide and which when turned to another position blocks such movement of the rod.

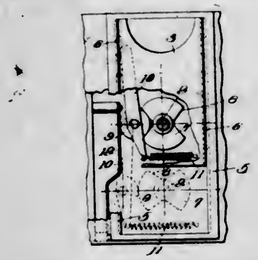
3. In a device of the kind described, a casing having alined openings in its walls, a cylinder bodily movable and rotatably mounted within the casing and having a diametrical bore adapted when moved in one position to be brought into alinement with said openings and when moved in another position to block said openings, and pinion means engageable with the cylinder for rotating the cylinder.

6. In a device of the kind described, a casing having alined openings in its walls, a rod adapted to pass through said openings, and bodily and rotatably movable means within said casing adapted to prevent or permit as desired the passage of such rod through the openings.

8. In a device of the kind described, a casing, a bodily and rotatably movable cylindrical locking member within the casing, and a pinion, said cylindrical member and the pinion having interengaging portions whereby they may be engaged or disengaged with each other.

[Claims 2, 4, 5, and 7 not printed in the Gazette.]

1,274,182. DISPLAY-RACK. ANDREW E. MILLER, Baltimore, Md., assignor to Solomon Himmel, Baltimore, Md. Filed Apr. 21, 1914. Serial No. 833,457. (Cl. 211—16.)

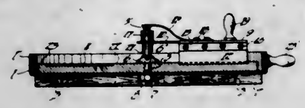


1. In a display rack, a case, a carriage reciprocatable therein, a rotatable shaft thereon normally supporting article carrying arms parallel to the sides of the case, a positioning member upon the shaft, an active pressure member upon the carriage, a restraining member adjacent the path of the pressure member adapted to be engaged thereby upon a partial rotation of the shaft during travel and spaced apart from the pressure member at the outer end of travel to allow of the rotation of the shaft and provide an abutment for the pressure member against inward movement during such rotation.

4. In a display rack, a case, a carriage reciprocatable therein, a rotatable shaft thereon normally supporting article carrying arms parallel to the sides of the case, a positioning member upon the shaft, an active pressure member upon the carriage, a resilient restraining member adjacent the path of the pressure member adapted to be engaged thereby upon a partial rotation of the shaft during travel and spaced apart from the pressure member at the outer end of travel to allow of the rotation of the shaft and provide an abutment for the pressure member against inward movement during such rotation and means to reverse the position of the rack from rear to front upon a slight rotation of the rack in its outermost position.

[Claims 2 and 3 not printed in the Gazette.]

1,274,183. DEVICE FOR SHAVING PHONOGRAPH RECORDS OR BLANKS. WALTER H. MILLER, Orange, N. J. Filed Feb. 26, 1918. Serial No. 219,325. (Cl. 82—1.1.)



1. A shaving device for phonograph records, comprising a knife support having means whereby it is adapted to be mounted on a phonograph disk record support for movement about the axis of said support.

10. An attachment for shaving phonograph records, comprising a knife support, said support having applied thereto a member whereby such support is adapted to be mounted for rotary movement, and a plurality of shaving knives spaced apart and carried by said support.

20. In a device of the class described, a phonograph record support and a shaving knife support arranged for relative movement, said knife support carrying two shaving knives which extend transversely of the record support and which are so arranged that they will, in the shaving operation, occupy different angular positions relative to the record support in shaving at any given point.

[Claims 2 to 9, 11 to 19, and 21 not printed in the Gazette.]

1,274,184. PROCESS OF RECOVERING WASTE PRODUCTS. JACOB M. MONESS, Long Island City, N. Y. Filed Mar. 31, 1917. Serial No. 158,943. (Cl. 87—5.)

1. The process of recovering in a substantially unaltered conditon the textile base of the class of materials called oil cloth which comprises the step of treating such cloth with a cold dilute solution of a caustic alkali.

2. The process of recovering in a substantially unaltered condition the textile base of the class of materials called oil cloth which comprises the step of treating such cloth with a cold solution of from 1 to 5% of caustic soda.

3. The process of recovering in a substantially unaltered condition the textile base of the class of materials called oil cloth which comprises the steps of treating such cloth with a cold dilute solution of caustic alkali, washing the textile material recovered in an uncoated condition, bleaching the same, and finally drying the same.

4. The process of recovering in a substantially unaltered condition the textile base of the class of materials called oil cloth which comprises the steps of treating the cloth with a cold solution containing from 1 to 5% of caustic soda, washing the textile material recovered in an uncoated condition, bleaching the same, and finally drying the same.

1,274,185. BRAKE-DRUM FOR WHEELS. WILLIAM J. P. MOORE, New York, N. Y. Filed Sept. 21, 1916. Serial No. 121,360. (Cl. 21—8.)



1. In a brake device for wheels and the like, the combination of an axle having a boss thereon affording a bearing, a disk having a central flange keyed to said boss, a hub revolving on the axle and having a sleeve-like extension, a brake device consisting of a disk with a central flange keyed to said extension, and also with an outer concentric flange loosely surrounding the disk which is keyed to the aforesaid boss, an outer wheel member, and connections between it and the hub, against which connections on one side of the wheel the brake device securely fits.

2. In a brake device for wheels and the like, the combination of an annular disk having a central flange and an outer concentric flange, a disk fitting loosely as a cover within the outer flange and having a central flange, a hub having a sleeve-like extension on which the brake drum is mounted, a plurality of splining devices for hold-

ing said brake in position, all arranged so that the cover can remain relatively stationary with the axle while the brake device revolves.

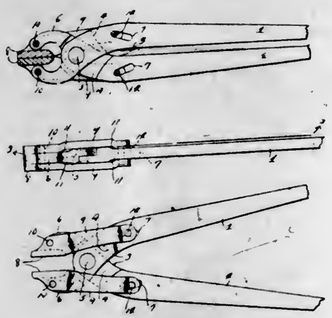
1,274,186. METHOD OF CLEANING METAL ARTICLES. CHARLES BURROWS MOREY and CHARLES JOSEPH HUBER, Buffalo, N. Y., assignors to Larkin Co., Buffalo, N. Y. Filed June 23, 1917. Serial No. 176,601. (Cl. 204—7.)

2. The herein described method of cleaning metal articles consisting in immersing the articles in an electrolyte consisting of water, a salt and an acid, in bringing the articles in contact while in said electrolyte with a metal of greater electro-positive character than the articles to be cleaned.

5. The herein described method of cleaning articles of silver, gold or the like, consisting in immersing the articles in an electrolyte consisting of water containing salt and vinegar in approximately the proportion of one-half cup of salt and one-third cup of vinegar to a gallon of water, immersing the articles in the electrolyte and bringing the same while immersed into contact with a body of zinc.

[Claims 1, 3, 4, 6, and 7 not printed in the Gazette.]

1,274,187. TONGS. AUGUST P. NELSON, Oberon, N. D. Filed Mar. 8, 1918. Serial No. 221,149. (Cl. 81—50.)



The combination with a pair of opposing flat parallel jaws, of a pair of handle members having their corresponding ends crossed and pivoted together, said pivoted ends being curved outwardly in opposite directions beyond the pivot and having their extremities terminating adjacent the outer faces of the jaws, the outer faces of said jaws being each provided with a pair of arms extending rearwardly in the direction of the handle member, said arms being in spaced parallelism for the reception of the curved end parts of the handle member, whereby the jaws are guided in registration and in parallelism with each other, means for pivoting the extremities of the curved end parts between the arms adjacent the outer faces of the jaws, the rear ends of the arms having slot and pin connections with said handle members.

1,274,188. BOBBIN-CASE LATCH FOR SEWING-MACHINES. GEORGE W. NELSON, Cleveland, Ohio, assignor to The Standard Sewing Machine Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 1, 1916. Serial No. 75,498. (Cl. 112—38.)

1. In a sewing machine, the combination with a rotary hook having an open chamber in its face side, and a non-rotary bobbin-case adapted to be loosely seated in said chamber, of a bobboin-case latch pivotally supported to open outwardly at its top from the hook chamber, and means for holding the latch in an inclined position opposite said chamber when in open position, said latch having means adapted, when the latch is open, to support the bobbin-case with its lower edge entered into the chamber of the hook, for the purpose set forth.

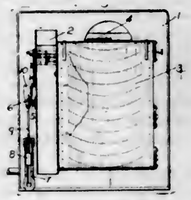


6. In a sewing machine, the combination with a rotary hook having an open chamber in its face side, and a non-rotary bobbin-case adapted to be loosely seated in said chamber, of a pivoted bobbin-case latch located in front of the chamber and having an inwardly projecting arm adapted, when the latch is open, to support the bobbin-case with its lower edge entered into the chamber of the hook, and when the latch is closed, to loosely engage the bobbin-case and retain the same within said chamber, and means for adjusting said arm on the latch toward and from the bobbin-case.

8. In a sewing machine, the combination with a rotary hook having an open chamber in its face side, of a non-rotary bobbin-case adapted to be loosely seated in said chamber, and a pivoted latch device for removably holding the bobbin-case in said chamber, the bobbin-case and latch being provided with coöperating means at the top of the bobbin-case for holding the latter against rotation in one direction and with coöperating means at the side of the bobbin-case for holding the latter against rotation in the opposite direction, the last named means comprising an arm on one part engaging a notch in the other and being also operative to position the bobbin-case on the latch prior to the closing of the latter.

[Claims 2 to 5, 7, and 9 not printed in the Gazette.]

1,274,189. FLUID-PRESSURE RECORDER. THEODORE W. NEWBURN, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Mar. 20, 1915. Serial No. 15,683. (Cl. 234—17.)



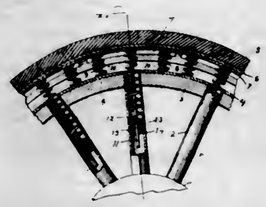
2. The combination with a mechanism for operating a record sheet and a recording arm operated by variations in fluid under pressure for recording said variations on the record sheet, of a piston subject to fluid, the pressure of which is to be recorded, for controlling the operation of said mechanism.

3. The combination with a mechanism for moving a record sheet at different speeds and means for recording variations in fluid pressure on the record sheet, of means operated by fluid, the pressure of which is to be recorded, for determining the running speed of said mechanism.

[Claims 1, 4, and 5 not printed in the Gazette.]

1,274,190. SPRING-WHEEL. WILLIAM J. NIST and WILLIAM G. EATEL, Pittsburgh, Pa. Filed Aug. 18, 1917. Serial No. 186,850. (Cl. 152—29.)

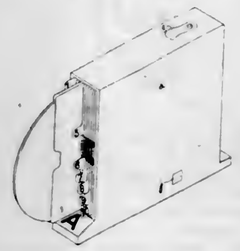
1. In a spring wheel comprising relatively inner and outer members having cushioning elements between them, tubular members extending radially inward from the inner member and having lateral openings, and members extending inward from the outer member and telescoping with the said tubular members and having openings to register with the lateral openings thereof to receive pins to hold the cushioning elements compressed, substantially as and for the purpose specified.



3. In a spring wheel, an annular member, hollow spokes extending inwardly from the annular member, an outer annular member, a plurality of plates disposed against the inner side of the outer annular member, rods projecting inwardly from the plates and telescoping with the spokes, cushioning means between the plates and inner annular member, and other cushioning means mounted upon the rods and confined between the plates and spokes, there being openings in the rods and spokes in position to register for receiving pins to hold the cushioning means compressed.

[Claim 2 not printed in the Gazette.]

1,274,191. FILING-CASE FOR DISK RECORDS. MILES G. NIXON, Chicago, Ill., and OBERLIN SMITH, Bridgeton, N. J. Filed July 22, 1916. Serial No. 110,730. (Cl. 129—16.)



1. A disk-record holder, consisting of a containing box, folded record-receiving leaves sliding therein, each pair of leaves equipped with a symboled tab, and having a cut-out notch in both leaves for removing records, one notch being larger than the other for separating the leaves.

3. A disk-record holder consisting of a containing box and folded leaves sliding therein, the amount of sliding motion limited by a male or female projection coming in contact with a female or male member on the other, and a reinforcing member of about the thickness of a record properly secured between the leaves of the sliding record container and shaped to conform to its shape in the neighborhood of its contact part, substantially as described.

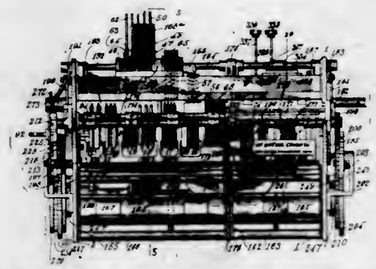
4. A disk-record holder consisting of a box, and folded record holders sliding therein and restrained to their direct outward motion by the inside surface of the top and bottom pieces of said box, some of the corners of said record holders being reinforced and stiffened by paper or cardboard attached to said corners by proper adhesive, substantially as described.

5. A disk-record holder consisting of a box and folded record containers sliding therein, said containers being adapted to be drawn out by means of ears or tabs on their forward edges, and pushed back by a backward thrust of the record, said record holder being designed for a large record, and a flat filler about the thickness of a record and secured between the leaves of the container, the back edge of which is in contact with the fold of the leaves of said container, the width of the said filler being about the difference between the diameters of the large record and small one, with the object as set forth of bringing the forward edge of the small record about as far forward as that of a large record would be were it inserted in a folder unprovided with said filler, all substantially as described and depicted.

6. A disk holder comprising a box, a record-container slidable back and forth within the box, comprising spaced leaves connected at one edge and disconnected at the front and top and bottom edges, whereby the record may be inserted and withdrawn from between said leaves, said leaves being foldable and openable at the edge where they are connected, one of said leaves at the front where they are disconnected having a portion projecting beyond the other leaf, and a tab, or projection to constitute a handle attached to said leaves.

[Claims 2 and 7 not printed in the Gazette.]

1,274,192. TICKET ISSUING AND AUDITING MACHINE. JOHN F. OHMER, Dayton, Ohio. Filed Mar. 23, 1916. Serial No. 86,192. (Cl. 235—31.)



1. In a machine of the character specified, a station printing drum, actuating and resetting shafts mounted on said drum, counters mounted on said shafts, actuating members mounted on the actuating shafts, resetting members mounted on the resetting shafts, means for actuating said actuating members individually, and common resetting means in engagement with said resetting members.

5. In a machine of the character specified, a wheel having a slot in an edge thereof, counters mounted on said wheel, a paper clamp mounted on said wheel and adapted to hold the ends of a strip of paper around said wheel in engagement with said counters, an eccentrically mounted inking roller for said counters, a pressure roller for said counters coöperating therewith to press said paper against said counters, actuating and resetting shafts for said counters, ratchets mounted on said actuating shafts, a pawl adapted to individually actuate said ratchets, pinions mounted on said resetting shafts, and an oscillating continuous rack in mesh with said pinions and adapted to return said counters to zero.

13. In a machine of the character specified, a shiftable printing member, a serrated knife, a spring adapted to move said knife in one direction, a cam adapted to move said knife in the opposite direction, a bolt adapted to limit the movement of said knife, setting means for said bolt, a segment gear connecting said printing member and said setting means, a latch adapted to hold said setting means in a set position, a bar adapted to manually release said latch, actuating means for said cam, and a second cam carried by said actuating means and adapted to release said latch.

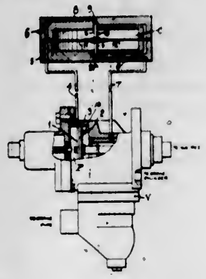
21. In a machine of the character specified, the combination of a rotatable drum having a plurality of longitudinal grooves in the periphery thereof, and a corresponding number of type carrying bars mounted in said grooves and from which impressions are taken designating the stations to which tickets are sold, impression devices coöperating with said type, means for projecting each type bar beyond the adjacent type bars when selected for an

impression, a counter for each type bar upon which is accumulated the number of tickets printed from each type bar, an actuator in operative relation with said counter when its respective type bar is projected, and said actuator being movable in unison with said impression devices comprising an annular rack carried upon the wheel upon which said counters are mounted and engaging the pinions of said counters, and a finger piece on said rack whereby it is operated to set the counters to zero.

22. In a machine of the character specified, the combination of a rotatable drum having a plurality of longitudinal grooves in the periphery thereof, and a corresponding number of type carrying bars mounted in said grooves and from which impressions are taken designating the stations to which tickets are sold, impression devices cooperating with said type, means for projecting each type bar beyond the adjacent type bars when selected for an impression, a counter for each type bar upon which is accumulated the number of tickets printed from each type bar, an actuator in operative relation with said counter when its respective type bar is projected, said actuator being movable in unison with said impression devices, and common resetting means for resetting said counters collectively.

[Claims 2 to 4, 6 to 12, 14 to 20, and 23 to 32 not printed in the Gazette.]

1,274,193. AIR-BRAKE SYSTEM. GEORGE J. PILGER, Scranton, Pa. Filed July 10, 1916. Serial No. 108,401. (Cl. 188—1.)



1. In combination with the piston chamber and piston of a triple valve, a valve chamber in communication with the piston chamber at two points spaced longitudinally of the piston chamber, said piston partially closing the point of communication remote from the auxiliary side of the piston when the piston is on service lap position, a vibratory partition intersecting the valve chamber and provided with a restricted opening, and valve members carried by the partition for alternately opening and closing the points of communication between the valve chamber and piston chamber.

[Claim 2 not printed in the Gazette.]

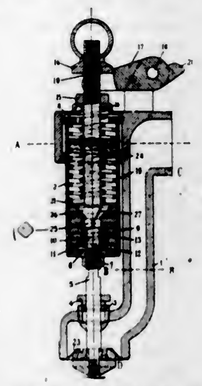
1,274,194. WIRE-CUTTING BAYONET. JAN PIRÓG, Passaic, N. J. Filed May 3, 1918. Serial No. 232,322. (Cl. 42—90.)



3. A wire cutter for rifle barrels comprising a bayonet adapted for attachment to the muzzle portion of a barrel and having a shank positioned in contact beneath the barrel, a pivot bolt through the said shank, a blade swingingly mounted on said bolt having a curved cutting edge adapted for shearing movement relatively of the adjacent edge of the bayonet, a takeup spring mounted upon said bolt engaging the blade, a laterally projecting slotted arm carried by the blade, an operating rod having its forward end detachably connected to the said slotted arm, a radially projecting handle recured to the rear free end of the rod, mounting loops for the rod adapted for positioning upon a rifle barrel, and resilient clip means attached to one of said loops adapted for resiliently holding the said blade when in its folded inoperative position with the rod detached from the said arm.

[Claims 1 and 2 not printed in the Gazette.]

1,274,195. AUTOMATIC FLUSHING DEVICE. BENJAMIN PURNELL, Benton Harbor, Mich. Filed Dec. 24, 1917. Serial No. 208,642. (Cl. 137—93.)



1. A valve controlling mechanism for flushing water closets comprising a body, a barrel adapted to contain a fluid axially guided by said body and rigidly fixed to a flush control valve stem, a single piston having a check valve and by-pass fitted within said barrel and operably movable relative to said barrel and body, a rod adjusting nut and lever which may connect said piston to a bowl-seat, a spring adapted to react between said piston and said barrel and a spring adapted to react between said piston and said body.

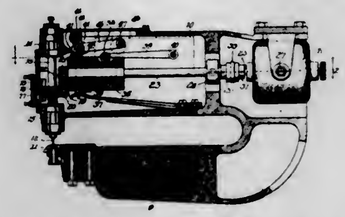
2. In a valve controlling mechanism for flushing water closets, having a body, a barrel adapted to contain a fluid axially guided by said body and rigidly fixed to a flush control valve stem, a single piston having a check valve fitted within said barrel and operably movable relative to said barrel and body, a rod adjusting nut and lever connecting said piston to a bowl-seat, a spring adapted to react between said piston and said barrel, and a spring adapted to react between said piston and said body; a by-pass in said piston obtained by slotting said check valve's face or seat.

[Claims 3 to 6 not printed in the Gazette.]

1,274,196. PATTERN-CUTTING MACHINE. CHARLES E. REED, Chicago, Ill. Filed Mar. 14, 1918. Serial No. 222,382. (Cl. 164—75.)

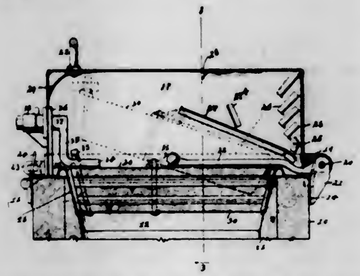
1. In a machine of the character set forth, the combination of a drive-shaft, a driven shaft, a flexible connection between said shafts, a punch element operated by said driven shaft, means supporting said driven shaft adjacent said punch element and adjustable to position said driven shaft and punch element into and out of a position in which said punch element performs the punching operation, without arresting operation of said driven shaft, and means between said first-named means and said flexible connection for supporting said driven shaft and permitting the latter to rock.

2. In a machine of the character set forth, the combination of a pivotally supported power device, a driven shaft, a flexible connection between said power device and shaft, a punch element operated by said shaft, means supporting said shaft adjacent said punch element and



adjustable to position said shaft and punch element into and out of a position in which said punch element performs the punching operation, without arresting operation of said shaft, and means between said first-named means and said flexible connection for supporting said shaft and permitting the latter to rock.

1,274,197. HATCH-VENTILATOR AND ICE-PLUG. MORLEY PUNSHON REYNOLDS, Cleveland, Ohio, assignor to The W. S. Tyler Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 25, 1916. Serial No. 93,418. Renewed June 8, 1918. Serial No. 238,960. (Cl. 98—22.)



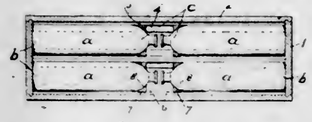
1. The combination with a car having a hatch-opening in the roof thereof, of a ventilator associated with said hatch-opening and covering the same, said ventilator including a hood portion having an opening at the forward end thereof, a plurality of downwardly and rearwardly inclined baffles in said opening, a downwardly and forwardly inclined baffle mounted in said hood portion directed toward the opening, and a downwardly and rearwardly inclined baffle at the end of said hood remote from said opening, thereby to deflect the air currents downward through said hatch-opening.

4. The combination with a car having a hatch-opening in the roof toward one end thereof, of a ventilator associated with said hatch-opening and including a hood hingedly mounted with respect to the roof of the car and having an opening directed away from the end of the latter, a plurality of downwardly and rearwardly inclined baffles mounted in said hood adjacent said opening, and a downwardly and forwardly inclined baffle below said plurality of baffles for collecting moisture from said first-named baffles and directing it to said hood-opening.

[Claim 2 and 3 not printed in the Gazette.]

1,274,198. PACKAGE. THOMAS B. RICE, Philadelphia, Pa. Filed Mar. 23, 1918. Serial No. 224,098. (Cl. 217—25.5.)

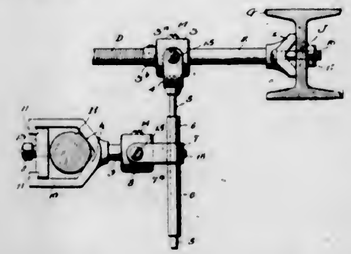
2. In a carrier the combination of parallel strips of which some are rectangular with two hollow edges extending throughout the length thereof and of which others are sections of the first with one hollow edge extending throughout the length thereof, and cross-pieces having



hollow faces, there being grooved relation between the cross-pieces and strips to permit the hollow edges and hollow faces to coöperate, substantially as described.

[Claim 1 not printed in the Gazette.]

1,274,199. OPERATING MECHANISM FOR STEERING-APPARATUS INDICATORS. GEORGE S. RODD, Houghton, Mich. Filed Oct. 25, 1916. Serial No. 127,723. (Cl. 116—31.)



5. In a device of the character described, the combination with means for supporting a rotatable head, means for connecting said supporting means to an axle, an actuating part connected with said rotatable head, a depending member pivotally supported by the head, a pivotal member having means for connecting the same to a steering bar, and a slidable connection between said depending member and said pivotal member.

8. In a device of the character described the combination with a stem member having means for connection to the axle of an automobile, a pivoted head on the stem, a rod pivotally connected to the head, a member for embracing the rod and having sliding connection with relation thereto, and means for connecting said embracing member flexibly to a steering bar for the purpose specified.

9. The combination with a stem member having means for connecting the same to the axle of an automobile, of a pivoted member carried by the stem, an actuating part connected with the pivoted member, a depending rod pivotally supported on the pivot member, a pivotally supported member embracing the rod, means for connecting the last named member to a part of the steering mechanism, and means for adjusting said embracing member and maintaining it in its adjusted position.

[Claims 1 to 4, 6, and 7 not printed in the Gazette.]

1,274,200. TANK-SUPPORT FOR TANK-CARS. THOMAS RODMAN, Youngstown, Ohio, and FRANK M. STEVENSON, Sharon, Pa., assignors to the Pennsylvania Tank Car Co., of Sharon, Pa., a Corporation of Ohio. Filed Jan. 28, 1918. Serial No. 214,194. (Cl. 105—264.)

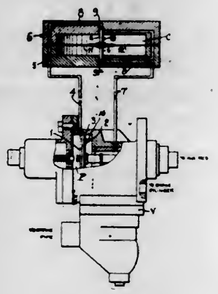
1. The combination with a car having a tank supported thereon, of a forged metal support for said tank comprising side members bent to form front and back portions which project away from each other from the point of bend at oppositely directed angles, said front portions be-

impression, a counter for each type bar upon which is accumulated the number of tickets printed from each type bar, an actuator in operative relation with said counter when its respective type bar is projected, and said actuator being movable in unison with said impression devices comprising an annular rack carried upon the wheel upon which said counters are mounted and engaging the pinions of said counters, and a finger piece on said rack whereby it is operated to set the counters to zero.

22. In a machine of the character specified, the combination of a rotatable drum having a plurality of longitudinal grooves in the periphery thereof, and a corresponding number of type carrying bars mounted in said grooves and from which impressions are taken designating the stations to which tickets are sold, impression devices cooperating with said type, means for projecting each type bar beyond the adjacent type bars when selected for an impression, a counter for each type bar upon which is accumulated the number of tickets printed from each type bar, an actuator in operative relation with said counter when its respective type bar is projected, said actuator being movable in unison with said impression devices, and common resetting means for resetting said counters collectively.

[Claims 2 to 4, 6 to 12, 14 to 20, and 23 to 32 not printed in the Gazette.]

1,274,193. AIR-BRAKE SYSTEM. GEORGE J. PILGER, Scranton, Pa. Filed July 10, 1916. Serial No. 108,401. (Cl. 188—1.)



1. In combination with the piston chamber and piston of a triple valve, a valve chamber in communication with the piston chamber at two points spaced longitudinally of the piston chamber, said piston partially closing the point of communication remote from the auxiliary side of the piston when the piston is on service lap position, a vibratory partition intersecting the valve chamber and provided with a restricted opening, and valve members carried by the partition for alternately opening and closing the points of communication between the valve chamber and piston chamber.

[Claim 2 not printed in the Gazette.]

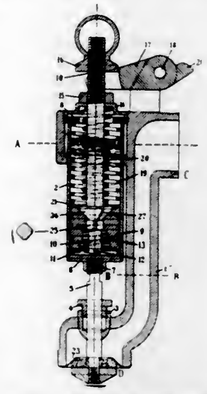
1,274,194. WIRE-CUTTING BAYONET. JAN PIRÓG, Passaic, N. J. Filed May 3, 1918. Serial No. 232,322 (Cl. 42—90.)



3. A wire cutter for rifle barrels comprising a bayonet adapted for attachment to the muzzle portion of a barrel and having a shank positioned in contact beneath the barrel, a pivot bolt through the said shank, a blade swingingly mounted on said bolt having a curved cutting edge adapted for shearing movement relatively of the adjacent edge of the bayonet, a takeup spring mounted upon said bolt engaging the blade, a laterally projecting slotted arm carried by the blade, an operating rod having its forward end detachably connected to the said slotted arm, a radially projecting handle recured to the rear free end of the rod, mounting loops for the rod adapted for positioning upon a rifle barrel, and resilient clip means attached to one of said loops adapted for resiliently holding the said blade when in its folded inoperative position with the rod detached from the said arm.

[Claims 1 and 2 not printed in the Gazette.]

1,274,195. AUTOMATIC FLUSHING DEVICE. BENJAMIN PURNELL, Benton Harbor, Mich. Filed Dec. 24, 1917. Serial No. 208,642. (Cl. 137—93.)



1. A valve controlling mechanism for flushing water closets comprising a body, a barrel adapted to contain a fluid axially guided by said body and rigidly fixed to a flush control valve stem, a single piston having a check valve and by-pass fitted within said barrel and operably movable relative to said barrel and body, a rod adjusting nut and lever which may connect said piston to a bowl-seat, a spring adapted to react between said piston and said barrel and a spring adapted to react between said piston and said body.

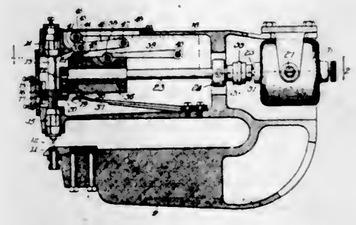
2. In a valve controlling mechanism for flushing water closets, having a body, a barrel adapted to contain a fluid axially guided by said body and rigidly fixed to a flush control valve stem, a single piston having a check valve fitted within said barrel and operably movable relative to said barrel and body, a rod adjusting nut and lever connecting said piston to a bowl-seat, a spring adapted to react between said piston and said barrel, and a spring adapted to react between said piston and said body; a by-pass in said piston obtained by slotting said check valve's face or seat.

[Claims 3 to 6 not printed in the Gazette.]

1,274,196. PATTERN-CUTTING MACHINE. CHARLES E. REED, Chicago, Ill. Filed Mar. 14, 1918. Serial No. 222,382. (Cl. 164—75.)

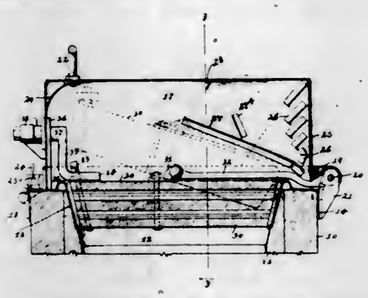
1. In a machine of the character set forth, the combination of a drive-shaft, a driven shaft, a flexible connection between said shafts, a punch element operated by said driven shaft, means supporting said driven shaft adjacent said punch element and adjustable to position said driven shaft and punch element into and out of a position in which said punch element performs the punching operation, without arresting operation of said driven shaft, and means between said first-named means and said flexible connection for supporting said driven shaft and permitting the latter to rock.

2. In a machine of the character set forth, the combination of a pivotally supported power device, a driven shaft, a flexible connection between said power device and shaft, a punch element operated by said shaft, means supporting said shaft adjacent said punch element and



adjustable to position said shaft and punch element into and out of a position in which said punch element performs the punching operation, without arresting operation of said shaft, and means between said first-named means and said flexible connection for supporting said shaft and permitting the latter to rock.

1,274,197. HATCH-VENTILATOR AND ICE-PLUG. MORLEY PUNSHON REYNOLDS, Cleveland, Ohio, assignor to The W. S. Tyler Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 25, 1916. Serial No. 93,418. Renewed June 8, 1918. Serial No. 238,960½. (Cl. 98—22.)



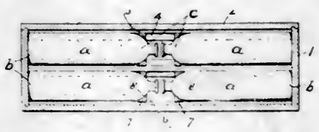
1. The combination with a car having a hatch-opening in the roof thereof, of a ventilator associated with said hatch-opening and covering the same, said ventilator including a hood portion having an opening at the forward end thereof, a plurality of downwardly and rearwardly inclined baffles in said opening, a downwardly and forwardly inclined baffle mounted in said hood portion directed toward the opening, and a downwardly and rearwardly inclined baffle at the end of said hood remote from said opening, thereby to deflect the air currents downward through said hatch-opening.

4. The combination with a car having a hatch-opening in the roof toward one end thereof, of a ventilator associated with said hatch-opening and including a hood hingedly mounted with respect to the roof of the car and having an opening directed away from the end of the latter, a plurality of downwardly and rearwardly inclined baffles mounted in said hood adjacent said opening, and a downwardly and forwardly inclined baffle below said plurality of baffles for collecting moisture from said first-named baffles and directing it to said hood-opening.

[Claim 2 and 3 not printed in the Gazette.]

1,274,198. PACKAGE. THOMAS B. RICE, Philadelphia, Pa. Filed Mar. 23, 1918. Serial No. 224,098. (Cl. 217—25.5.)

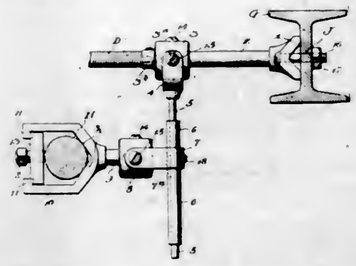
2. In a carrier the combination of parallel strips of which some are rectangular with two hollow edges extending throughout the length thereof and of which others are sections of the first with one hollow edge extending throughout the length thereof, and cross-pieces having



hollow faces, there being grooved relation between the cross-pieces and strips to permit the hollow edges and hollow faces to coöperate, substantially as described.

[Claim 1 not printed in the Gazette.]

1,274,199. OPERATING MECHANISM FOR STEERING-APPARATUS INDICATORS. GEORGE S. RODD, Houghton, Mich. Filed Oct. 25, 1916. Serial No. 127,723. (Cl. 116—31.)



5. In a device of the character described, the combination with means for supporting a rotatable head, means for connecting said supporting means to an axle, an actuating part connected with said rotatable head a depending member pivotally supported by the head, a pivotal member having means for connecting the same to a steering bar, and a slidable connection between said depending member and said pivotal member.

8. In a device of the character described the combination with a stem member having means for connection to the axle of an automobile, a pivoted head on the stem, a rod pivotally connected to the head, a member for embracing the rod and having sliding connection with relation thereto, and means for connecting said embracing member flexibly to a steering bar for the purpose specified.

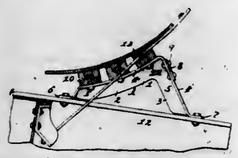
9. The combination with a stem member having means for connecting the same to the axle of an automobile, of a pivoted member carried by the stem, an actuating part connected with the pivoted member, a depending rod pivotally supported on the pivot member, a pivotally supported member embracing the rod, means for connecting the last named member to a part of the steering mechanism, and means for adjusting said embracing member and maintaining it in its adjusted position.

[Claims 1 to 4, 6, and 7 not printed in the Gazette.]

1,274,200. TANK-SUPPORT FOR TANK-CARS. THOMAS RODMAN, Youngstown, Ohio, and FRANK M. STEVENSON, Sharon, Pa., assignors to the Pennsylvania Tank Car Co., of Sharon, Pa., a Corporation of Ohio. Filed Jan. 28, 1918. Serial No. 214,194. (Cl. 105—264.)

1. The combination with a car having a tank supported thereon, of a forged metal support for said tank comprising side members bent to form front and back portions which project away from each other from the point of bend at oppositely directed angles, said front portions be-

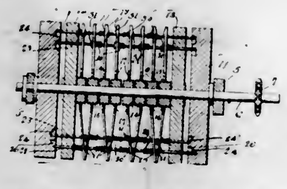
ing formed concave to correspond with the curve of said tank, said side members being angle shaped in cross section, a tie plate rigidly secured across said members,



cushion members secured across the front portions of said side members, and means for securing said support to said car.

[Claim 2 not printed in the Gazette.]

1,274,201. WEED-PULLER. ALFREDO L. ROMERO, Jersey, Cal. Filed July 13, 1917. Serial No. 180,425. (Cl. 55—66.)



1. In a weed puller, the combination of a shaft, a plurality of collars mounted upon said shaft, a plurality of weed pulling plates connected to said collars, cam members loosely mounted upon said shaft, a plurality of rods extending through said plates and engaging said cam members, whereby said plates will be moved into and out of weed gripping position during the movement of said rods about the cam surfaces of said cam members.

3. In a weed puller, a shaft, a plurality of weed pulling plates pivotally carried by said shaft and arranged in opposed coacting pairs, said plates mounted for movement about said shaft, a pair of rollers carried by said shaft for rotation therewith, rods extending through said rollers for rotating said plates with the rollers, channeled cams mounted upon said shaft, the ends of said rods traveling in the channels of said cams, and means carried by said rods for moving said plates into weed gripping position and weed releasing position upon movement of said rods by engagement with said cams.

4. In a weed puller, a shaft, a plurality of weed pulling plates pivotally carried by said shaft and arranged in opposed coacting pairs, said plates mounted for movement about said shafts, a pair of rollers carried by said shaft for rotating therewith, rods extending through said rollers for rotating said plates with the rollers, channeled cams mounted upon said shaft, the ends of said rods traveling in the channels of said cams, means carried by said rods for moving said plates into weed gripping position and weed releasing position upon movement of said rods by engagement with said cams, and means carried by said rods for yieldably holding said plates in weed gripping position.

7. In a weed puller, a shaft, a plurality of weed pulling plates carried by said shaft for movement about the shaft, said plates arranged in opposed coacting pairs, said pairs of plates arranged in groups extending radially from said shafts, a pair of rods extending through each group of plates, yieldable means carried by one of each of said pair of rods for moving certain of said plates inwardly toward the transverse center of the shaft upon longitudinal movement of the rods in one direction, yieldable means carried by the second rods of each pair for moving the remaining plates of each group toward the first moved plates upon longitudinal movement of the second rods, for moving all of said plates into weed gripping position, and means for moving said rods longitudinally.

11. In a weed puller, a shaft, a plurality of weed pulling plates pivotally carried by said shaft and arranged in opposed coacting pairs, said pairs of plates arranged in groups extending radially from said shaft, a pair of rods extending through each group of plates, yieldable means carried by one of each of said pair of rods for moving certain of said plates inwardly toward the transverse center of the shaft upon longitudinal movement of the rods in one direction, yieldable means carried by the second rods of each pair for moving the remaining plates of each group toward the first moved plates upon longitudinal movement of the second rods, for moving said plates into weed gripping position, a pair of channeled cams, the ends of said rods riding in said channels, said channels being provided with raised and depressed portions for moving said rods longitudinally, and means carried by said rods for moving said plates away from each other when the rods are moved by said channels in a reversed direction to the movement for moving said plates into weed gripping position, and means engaging said rods for rotating the plates with the rotation of said shaft.

[Claims 2, 5, 6, and 8 to 10 not printed in the Gazette.]

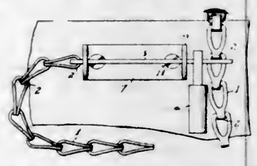
1,274,202. ELECTRIC-LAMP-SUPPORTING DEVICE. ROBERT H. RUTH, New York, N. Y., assignor to Benjamin Electric Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 24, 1913. Serial No. 802,826. (Cl. 173—356.)

2. An extension socket including a socket portion and a plug portion, means for releasably locking said plug portion in a receptacle, and means, operable from within the socket portion, for operating said first named means, compressing a screw carried by said extension socket.

5. An electric lamp supporting device comprising a portion for insertion into a lamp socket, means for locking said portion in said socket, and means for operating said locking means including a screw which also forms a central contact for engagement with a lamp contact.

[Claims 1, 3, 4, and 6 not printed in the Gazette.]

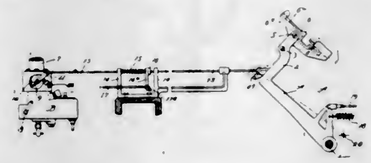
1,274,203. ARTICLE-SECURING MEANS. JAMES H. SAGER and CLINTON M. SAGER, Rochester, N. Y. Filed May 4, 1918. Serial No. 232,610. (Cl. 45—13.)



2. An article securing means comprising an attaching bracket having an opening and screw holes by which the bracket is secured to a suitable support, a member adapted to pass through the opening in said attaching bracket and to cover said screw holes, said member having an opening with a reduced portion, and a flexible connection formed with a plurality of spaced shoulders secured to said member at one end and adapted to pass through said opening to enter the reduced portion in order to interlock with said member and to hold said member interlocked with the bracket.

[Claims 1 and 3 not printed in the Gazette.]

1,274,204. MOTOR-VEHICLE CONTROL. WENDELIN P. SENG, Chicago, Ill. Filed Nov. 24, 1917. Serial No. 203,693. (Cl. 74—46.)



1. Motor-vehicle-controlling mechanism, comprising brake-actuating mechanism, including a lever, a pedal mounted on and adapted to actuate said lever, a lever mounted on said first-named lever and adapted to be actuated by said pedal, said second-named lever being provided with a cam, and a motor-controlling member having an extremity adjacent to and adapted to be actuated by said cam, said cam being adapted to clear said member in the operation of applying the brakes.

4. In means of the character set forth, brake-applying mechanism, including an actuating lever having a forked extremity, a pedal pivotally mounted in the forked extremity of said lever and equipped below its pivot portion with a lever-actuating member, and a motor-controlling lever mounted in the forked portion of said first-named lever and engaged by said lever actuating member and adapted to be actuated by said pedal in the pivotal movement thereof.

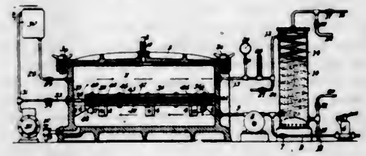
11. Motor-vehicle-controlling mechanism, comprising a carbureter equipped with a throttle valve, a rod controlling said throttle valve, a spring tending to throw the throttle valve to low-throttle position, brake mechanism including an actuating lever, a pedal mounted on and adapted to actuate said lever, and a lever mounted on said first-named lever and adapted to be actuated by said pedal, said second-named lever having a cam surface engaging said rod, said cam surface corresponding approximately with an arc having as its center the axis of said first-named lever when said second-named lever is in position corresponding with the partially open position of the throttle valve.

[Claims 2, 3, and 5 to 10 not printed in the Gazette.]

1,274,205. REINFORCED SHEET-GLASS AND METHOD OF MAKING SAME. CONSTANTINE SHUMAN and VICTOR SHUMAN, Philadelphia, Pa. Original application filed Apr. 20, 1916, Serial No. 92,355. Divided and this application filed Nov. 22, 1916. Serial No. 132,732. (Cl. 49—81.)

1. As a new article of manufacture, a composite sheet through which light may pass to a greater or less extent, consisting of two sheets of glass united by a compound sheet composed of a relatively thick sheet of pure celluloid and two relatively thin layers of celluloid respectively welded upon the opposite surfaces of the pure celluloid sheet to the exclusion of all air and said relatively thin layers of celluloid having their other surfaces thoroughly welded to the respective opposing surfaces of the two sheets of glass and to the entire exclusion of air.

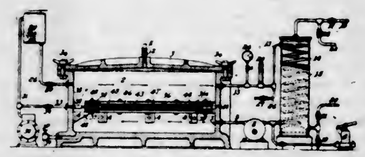
2. The herein described method of producing composite sheets through which light rays may pass to a greater or less extent, which consists in assembling two sheets of glass each having a thin coating of tightly adhering celluloid, upon an interposed separate sheet of celluloid, said celluloid in direct contact with the celluloid coatings of the glass sheets, and welding the celluloid sheet to the celluloid coated glass sheets by the application of heat and pressure.



3. The herein described method of producing composite sheets through which light rays may pass to a greater or less extent, which consists in assembling two sheets of glass each having a thin coating of tightly adhering celluloid, upon an interposed separate sheet of celluloid, said celluloid in direct contact with the celluloid coatings of the glass sheets, and welding the celluloid sheet to the celluloid coated glass sheets by the application of heat and pressure, and during the said application of pressure maintaining the edges of all of the sheets under the influence of a vacuum.

4. The herein described method of producing composite sheets through which light rays may pass to a greater or less extent, which consists in first coating two glass sheets with a thin layer of pure celluloid and after the said celluloid coating is in dry condition, assembling said glass sheets with their coated surfaces upon opposite sides of a sheet of celluloid, and welding the celluloid coatings and celluloid sheet together by the application of heat and pressure, and during said operation maintaining the edges of all of the sheets under the influence of a vacuum.

1,274,206. MEANS FOR MAKING REINFORCED SHEET-GLASS. CONSTANTINE SHUMAN and VICTOR SHUMAN, Philadelphia, Pa. Original application filed Apr. 20, 1916, Serial No. 92,355. Divided and this application filed Nov. 22, 1916. Serial No. 132,733. (Cl. 18—17.)



1. In apparatus of the character stated, the combination of a hollow frame providing a sealed compartment with opposite metallic sides relatively flexible and providing a shallow compartment of relatively small depth and large area, said compartment having means for permitting the insertion and sealing within the same of the articles to be treated, an inclosing pot in which the hollow frame is arranged so as to expose both of its metallic sides, means for supplying the pot with fluid, means for alternately heating and cooling the fluid, and means for varying the pressure of the fluid.

3. In apparatus of the character stated, the combination of a hollow frame providing a sealed compartment with opposite sides relatively flexible and providing a

shallow compartment of relatively small depth and large area, said compartment having means for permitting the insertion and sealing within the same of the articles to be treated, an inclosing pot in which the hollow frame is arranged, means for supplying the pot with fluid, means for alternately heating and cooling the fluid, means for varying the pressure of the fluid, and means to circulate the fluid about the hollow frame to insure the same being heated and cooled uniformly.

5. In apparatus of the character stated, the combination of a hollow frame providing a sealed compartment with opposite metallic sides relatively flexible and providing a shallow compartment of relatively small depth and large area, said compartment having means for permitting the insertion and sealing within the same of the articles to be treated, an inclosing pot in which the hollow frame is suspended, means for supplying the pot with fluid to surround the hollow frame, means for circulating the fluid, means for alternately heating and cooling the same circulating fluid, means for varying the pressure of the fluid independently of its heating means, and means to produce a vacuum within the hollow frame while being subjected to the action of the fluid outside of the frame consisting of a vacuum pump, a pipe from the vacuum pump extending into the pot, and a tubular connection between the vacuum pump and the interior of the hollow frame.

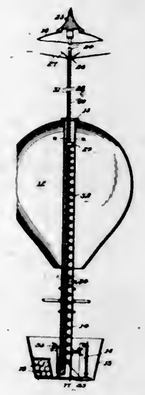
7. In apparatus of the character stated, the combination of a hollow frame providing a sealed compartment with opposite sides relatively flexible and providing a shallow compartment of relatively small depth and large area, said compartment having means for permitting the insertion and sealing within the same of the articles to be treated, an inclosing pot in which the hollow frame is arranged, means for supplying the pot with fluid, means for alternately heating and cooling the fluid, means for varying the pressure of the fluid, and means to remove the atmospheric pressure both from the pot and from the interior chamber of the hollow frame consisting of a vacuum pump, pipes leading from the vacuum pump and communicating with the interior of the pot and with the interior of the hollow frame, and a valve device for controlling the pipe leading from the vacuum pump to the pot whereby it may be closed when the pressure is applied to the pot.

10. In apparatus of the character stated, the combination of a closed pot, means for introducing and removing a fluid into the closed pot, means for varying the temperature of the fluid, means for varying the pressure of the fluid, and a removable hollow frame arranged to be loosely held within the pot above its bottom and consisting of three annular frames having arranged between them metallic sheets of flexible material, and clamping bolts for clamping the several annular frames together and upon the metallic sheets to provide a hollow chamber between the flexible sheets of relatively small depth and large area and into which the material to be subjected to treatment is placed, the intermediate annular frame provided with an exhausting tubular passage, a vacuum creating device having a vacuum passage extending through the wall of the pot, and a detachable tubular connection between the vacuum passage and the exhausting tubular passage of the hollow frame.

[Claims 2, 4, 6, 8, and 9 not printed in the Gazette.]

1,274,207. BALLOON CONSTRUCTION. JOZEF SORDYKA, Grand Rapids, Mich. Filed Dec. 5, 1917. Serial No. 205,536. (Cl. 244—3.)

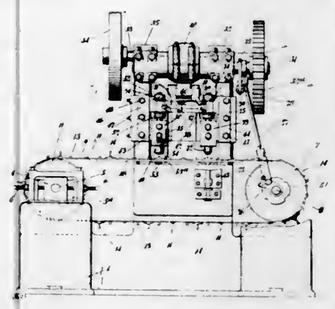
4. A device of the class described comprising an elevating bag for a balloon, a tubular post positioned therethrough attached to the top of the bag, a basket upon the lower end of the post beneath the bag, a block slidably arranged within the post, a mounting spring within the post beneath the block, lowering means for the block and tensioning means for the spring arranged within the basket, a parachute including a pole mounted upon the block axially of the post, a ring upon the pole adapted for opening and closing the parachute, an opening spring for the parachute tensioned between the said block and



ring and a pull cord attached to the ring and extending to a point within the basket.

[Claims 1 to 3 and 5 not printed in the Gazette.]

1,274,208. BUNG-PRESS. FLOYD D. STOWE, Wilmington, Del., assignor to E. I. du Pont de Nemours Powder Company, Wilmington, Del., a Corporation of New Jersey. Filed Apr. 24, 1914. Serial No. 834,064. (Cl. 113—38.)



1. In a press, means for feeding heads, devices for making bung-holes, and means for producing bosses thereon.

2. In a press, means for feeding heads, devices for making bung-holes, means for producing bosses thereon and for providing ears on the bosses.

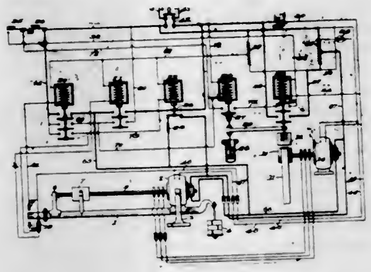
6. In a head press, means for providing ears on bosses comprising a punch and die and means for feeding ears on the heads comprising a hopper for ears, a primary ear-feeding device and a secondary ear-feeding device.

10. In a head press, means for providing ears on bosses comprising a punch and die and means for feeding ears on the heads comprising a hopper for ears, a primary ear-feeding device engaging the holes in the ears, and a secondary ear-feeding device engaging the edges of the ears.

30. In a press, means for feeding heads, devices for making bung-holes and producing bosses thereon, devices for fastening ears on the bosses, and a sliding carriage on which the moving parts of both said devices are carried.

[Claims 3 to 5, 7 to 9, 11 to 29, and 31 not printed in the Gazette.]

1,274,209. AUTOMATIC WEIGHING DEVICE. LEWIS L. TATUM, Milwaukee, Wis., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Dec. 2, 1909. Serial No. 530,950. (Cl. 265—7.)



1. The combination of a scale beam, a counterpoise thereon and a motor fixed to said beam for operating said counterpoise, said motor being pivotally supported and its pivot forming the fulcrum of said beam.

4. In combination, a scale beam, a counterpoise thereon, a recording device, separate means for operating said counterpoise and said recording device, means insuring synchronous operation of said operating means and means for automatically making a permanent record from said recording device when said beam is balanced.

6. In combination, a scale balancing mechanism, an electric motor for operating the same, a recording device, an electric motor for operating said recording device and electrical connections insuring operation of said motors in synchronism.

11. In combination, a scale beam, a counterpoise thereon, a direct current motor mounted upon said beam for operating said counterpoise, a recording mechanism, a direct current motor for operating the same, said motors being connected in parallel and each having slip rings for supplying alternating current, electrical connections between the slip rings of said motors for maintaining said motors in step, and means for automatically stopping said motors when said scale beam is balanced.

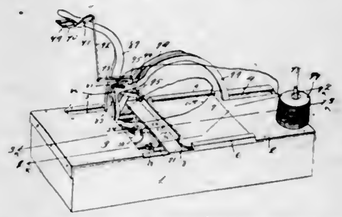
16. In combination, a scale beam, a counterpoise thereon, a motor mounted upon said scale beam for operating said counterpoise, a recording device, an electric motor for operating said recording device, means for maintaining said motors in step, circuit connections established when said beam is in one extreme position for insuring operation of both of said motors until said beam moves into its other extreme position, circuit connections established, upon said beam reaching the latter position, for reversing both motors, circuit connections established upon said beam leaving the latter position for slowing down both motors and stopping the same when said beam reaches balanced position, automatic means for taking a permanent record from said recording device, and means for preventing operation of said last mentioned means for a temporary period after said scale beam assumes balanced position.

[Claims 2, 3, 5, 7 to 10, and 12 to 15 not printed in the Gazette.]

1,274,210. HAND BUNDLE-TIE. HARRY S. TERRY, Courtland, Kans. Filed Feb. 21, 1918. Serial No. 218,476. (Cl. 100—31.)

1. In a machine as set forth, a frame, a pair of oscillatory bundle compacting members, one having connections with and operating the other, a knotting mechanism having a knotting horn, and means carried by one of the members engaging an element of the knotting mechanism for imparting a complete revolution to the knotting horn.

6. In a machine as set forth, a frame, a pair of oscillatory bundle compacting members, one having connections with and operating the other, and a slide mounted in guides of said frame and having an extension flange connected to one of said members, whereby the bundle may be additionally compacted.



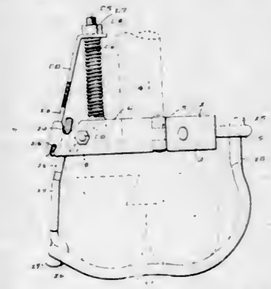
7. In a machine as set forth, a frame, bundle compacting means thereon, a knotting mechanism having a major operating element therefor and a knotting horn, and a device carried by the compacting means and engaging said element for operating said mechanism, whereby a complete revolution may be imparted to the knotting horn.

10. In a machine as set forth, a frame, bundle compacting means thereon, a knotting mechanism having a major element therefor and a knotting horn, and a device carried by the compacting means and engaging said element for operating said mechanism, whereby a complete revolution may be imparted to the knotting horn, a lever carried by the knotting horn between which and the horn the cord may be gripped, the roller carried by said lever, and a pair of camming devices with first one and then the other of which the roller engages for opening and closing said lever during the revolution of the knotting horn.

13. In combination with a device for knotting a thread, a spring tensioned thread severing member, a lever for oscillating said member, means geared to and oscillated by the knotting device for carrying the thread toward the severing member, and means coöperating with the carrying means for guarding and holding the thread in position to be severed.

[Claims 2 to 5, 8, 9, 11, and 12 not printed in the Gazette.]

1,274,211. TIRE-CLEAT. JOSEPH H. THESIER, Syracuse, N. Y. Filed Oct. 21, 1914. Serial No. 867,728. (Cl. 152—14.)

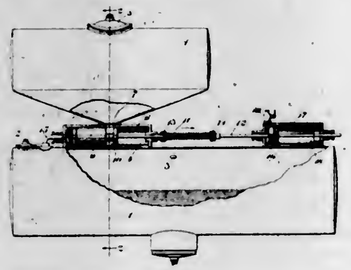


1. A tire cleat comprising a body for attachment to the body of the wheel, the cleat body having means at one end formed with a non-circular passage, a cross piece having an angular arm at one end, the free end of the arm being movable through the passage and provided with a non-circular head for moving through the passage and for interlocking with the contiguous part of the body when passed entirely through the passage, and means connecting the other end of the cross piece to the cleat body, substantially as and for the purpose specified.

5. A tire cleat comprising a body for attachment to the body of a wheel, a cross piece for extending across the tire, the cross piece having an angular arm at one end, the arm being connected at its free end to the cleat body, a link hinged to the other end of the cross piece and movable into interlocking engagement with the cleat body, the link being in the form of a hasp hinged at one end to the cross piece, and having its other end provided with a slot for receiving the cleat body, and locking means for holding the hasp engaged with the cleat body, and comprising a spring pressed latch carried by the body and having a slot for receiving the cleat body, one end of the latch overlying the hasp link, substantially as and for the purpose described.

[Claims 2 to 4, and 6 to 8 not printed in the Gazette.]

1,274,212. ACETYLENE-GAS GENERATOR. GEORGE W. THOMPSON, Springfield, Mo., assignor of thirty-two one-hundred-and-twenty-eighths to William B. Sanford, twenty-four one-hundred-and-twenty-eighths to Douglas J. Landers, twenty-one one-hundred-and-twenty-eighths to William A. McAtee, twelve one-hundred-and-twenty-eighths to Alphonso B. Lovan, twelve one-hundred-and-twenty-eighths to George W. Young, and three one-hundred-and-twenty-eighths to William T. Shores, Springfield, Mo., and six one-hundred-and-twenty-eighths to Clarence H. Nichols, New York, N. Y. Filed Dec. 8, 1917. Serial No. 206,165. (Cl. 48—51.)

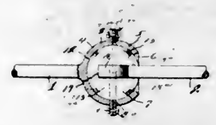


1. An acetylene gas generator, comprising a generating tank arranged to contain one of the gas forming materials, a separate receptacle arranged to contain another gas forming material, a chamber, a carrier in said chamber movable to one position to receive the gas forming material from said receptacle and movable to another position to discharge the gas forming material into the generating tank, passages from said generating tank for admitting gas into said chamber at opposite ends of said carrier, whereby said carrier is maintained in a balanced position as to the pressure in the generating tank, a cylinder, a rod in connection with said carrier extending into said cylinder, a piston attached to said rod in said cylinder, a passage from said generating tank for admitting pressure into said cylinder at one end of said piston to actuate said carrier to position to receive gas forming material from said receptacle and a spring coöperating with said rod for moving said piston to position to discharge the gas forming material into the generating tank.

9. An acetylene gas generator, comprising a generating tank arranged to contain a gas forming material, a separate receptacle arranged to contain another gas forming material, a chamber, a carrier in said chamber, passages from said generating tank into said chamber at opposite ends of said carrier whereby said carrier is maintained in a balanced position as to the pressure in the generating tank, a passage from said receptacle into said chamber, a cylinder, a piston in said cylinder, a rod connecting said piston and said carrier, a passage for admitting gas from said generating tank into said cylinder at one end of said piston whereby said piston is actuated to move said carrier to position to receive gas forming material from said receptacle, a valve in connection with said cylinder for varying the resistance to the movement of said piston, and a spring in connection with said rod compressed by the movement of said rod by said piston as aforesaid, and arranged to actuate said rod and thereby said carrier to position to discharge gas forming material into the generating tank when the pressure of the gas against the piston becomes less than the power of the spring.

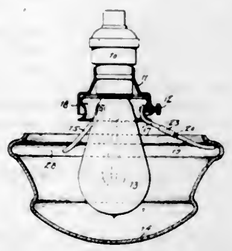
[Claims 2 to 8 not printed in the Gazette.]

1,274,213. POWER-TRANSMISSION UNIVERSAL JOINT. MARTIN J. TILLER, Wanamingo, Minn. Filed Jan. 25, 1918. Serial No. 213,678. (Cl. 64—91.)



In a universal joint for positive power transmission, a pair of shaft sections, inner and outer spherical members, one engaging within the other, the outer spherical member being integrally connected to one of the shaft sections and consisting of two semispherical parts having their adjacent engaging edges concentric with the shaft section which is integrally connected to the outer spherical member, means for securing the two parts together, the interior wall of the outer spherical member having an annular recess at right angles to the joint between the two parts, one of said parts having an opening for the other shaft section, the inner spherical member consisting of two parts, the two parts of the inner spherical member where they adjoin having flanges forming a rib to engage said annular recess, the two parts of the inner spherical member having semi-circular recesses, which, when said parts of the inner spherical member are brought together, form a circular cavity, said inner spherical member having an opening adjacent the first opening the other shaft section extending through said openings and having an integral circular disk head egaging said circular cavity.

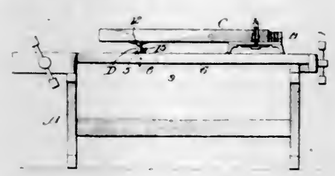
1,274,214. SHADE-HOLDER. ARTHUR J. TIZLEY, New York, N. Y., assignor to Edward F. Caldwell and Company, New York, N. Y., a Corporation of New York. Filed Mar. 9, 1918. Serial No. 221,483. (Cl. 240—114.)



4. In a shade holder an arm having a shade-engaging finger pivoted thereto, in combination with a spring pressed locking sleeve mounted on said arm and engaging said finger to hold the latter in normal position with relation to the arm, together with a cam lug on said finger automatically displacing said sleeve out of obstructing position as the finger is moved into its normal shade-engaging position.

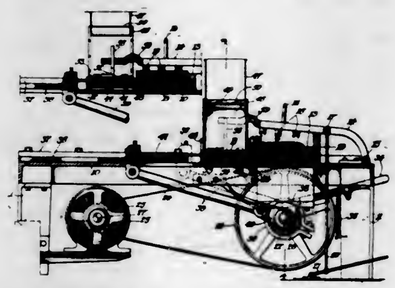
[Claims 1 to 3 not printed in the Gazette.]

1,274,215. AUXILIARY WORK-REST. EVERETT L. TOWNSEND, La Crosse, Wis. Filed Feb. 2, 1918. Serial No. 215,144. (Cl. 144—287.)



An auxiliary work rest having a table member, a conical shaped base member, a rod extending from the table member through the base member, said rod being slidable through and extending below said base member whereby it may function as an anchor, means to secure said rod against sliding movement in the base member, and said base member having a flange provided with a plurality of openings so that the same may be held against movement.

1,274,216. MACHINE FOR UNITING SECTIONS OF CORK AND THE LIKE. ANGELO M. TOZZI, Bayonne, N. J., assignor to Tozzi Manufacturing Company, New York, N. Y., a Corporation of New York. Filed June 27, 1917. Serial No. 177,240. (Cl. 144—31.)



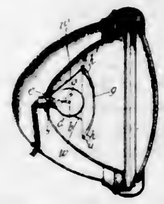
1. In a machine of the character described, the combination with a skewer-containing hopper and means for supporting a row of skewers in parallel relation to each other, of a movable element for receiving consecutive rows of skewers from the hopper and transferring them to said supporting means, means for supporting a plurality of juxtaposed sections of material transversely of and beyond the end of the skewers in said supporting means, means for clamping the positioned sections, coacting means between said movable element and the clamping means whereby said element and clamping means are simultaneously operated, and means for effecting between each supported row of skewers and the positioned sections a relative movement longitudinally of the skewers.

5. In a machine of the character described, the combination of a skewer-containing hopper, a series of skewer-feeding chutes depending therefrom, an element having a row of parallel guide channels corresponding to but out of vertical alinement with said chutes, a transfer member having a series of transverse slots corresponding to the chutes, means for reciprocating said transfer member so as to move its slots from the chute to the guide channels and back again, and thereby transfer succeeding rows of skewers from the chutes to the guide channels, means for longitudinally moving each row of skewers along the channels, a support for a plurality of juxtaposed sections of material transversely of the path of the skewers in their longitudinal movement, and means for clamping said sections on the support.

10. In a machine of the character described, a skewer-containing hopper and a series of spaced skewer-feeding chutes depending therefrom, each of said chutes being internally proportioned to permit the descent therethrough of a single row of skewers in horizontal parallel relation to each other, and being laterally curved above the delivery end of the chute to present curved walls to the longitudinal sides of each of the descending skewers and thus prevent the tipping of the skewers.

[Claims 2 to 4 and 6 to 9 not printed in the Gazette.]

1,274,217. GLARE-SUBDUING AND LIGHT CONSERVING AND DISTRIBUTING DEVICE FOR HEADLIGHTS OF AUTOMOBILES, &c. SIMEON TRENNER, Chicago, Ill. Filed Oct. 9, 1916. Serial No. 124,658. (Cl. 240—41.)



1. In a vehicle headlight the combination of a reflector having a focal center, an incandescent electric lamp bulb in the reflector, a means located wholly at the rear of the focal center of the reflector for supporting the bulb, said bulb being provided with two filaments, with the heated portion of each greater from front to rear, one of which is positioned with its heated portion at or near the focal center, and on the principal axis of the reflector, and the other filament is positioned with its heated portion substantially vertically above the principal axis of the reflector and at the rear of the focal center of the reflector, and electric circuits whereby either or both of the filaments may be heated at will, and an annular, convex, lenticular, glass canopy, with a fluted surface, positioned between the principal focus and the front glass of the headlight, and with its convexity outward, and with the aperture in the medial portion of the canopy substantially in the principal axis of the reflector, a means of support for the canopy, and a means by which the canopy may be attached to and detached from the means of support.

2. In a vehicle headlight, the combination of a reflector having a focal center and a means of illumination located at or back of the focal center of the reflector and a means of support for the means of illumination, a detachable, annular, lenticular, convex, and fluted glass canopy, positioned between the principal focus and the front glass of the headlight, and with its convexity outward, and with the center of the aperture in the medial portion of the canopy, substantially in the principal axis of the reflector, a means of support for the canopy, and a means whereby the canopy may be attached to and detached from the means of support.

3. In a vehicle headlight, the combination of a reflector having a focal center and a means of illumination located at or back of the focal center of the reflector, and a means of support for the means of illumination, a detachable, annular canopy, made of translucent material, provided with light modifying and distributing surfaces, said canopy being positioned with the plane of its smaller aperture outward, and between the means of illumination of the headlight reflector, and the front glass of the headlight; a means of support for the canopy, and a means whereby the canopy may be attached to and detached from the means of support.

4. In a vehicle headlight, the combination of a reflector having a focal center, a means of illumination located at or back of the focal center of the reflector, and a means of support for the means of illumination, a detachable,

annular canopy, frusto-conical in shape, made of translucent material, provided with light modifying and distributing surfaces; said canopy being positioned with the plane of its smaller aperture outward, and between the means of illumination of the headlight reflector, and the front glass of the headlight; a means of support for the canopy, and a means whereby the canopy may be attached to and detached from the means of support.

5. In a vehicle headlight, the combination of a reflector, having a focal center, and a means of illumination located at or back of the focal center of the reflector, and a means of support for the means of illumination, a detachable, annular, glass canopy, with alternate fluted and plain surfaces, positioned between the principal focus and the front glass of the headlight and with its convexity outward, and with the center of the aperture in the medial portion of the canopy, substantially in the principal axis of the reflector, a means of support for the canopy, and a means whereby the canopy may be attached to and detached from the means of support.

[Claims 6, 7, and 8 not printed in the Gazette.]

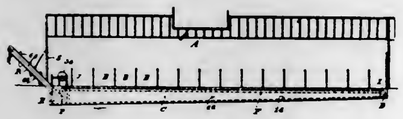
1,274,218. PROCESS OF MAKING AND NEW FOOD PRODUCT OF MILK. PAUL W. TURNEY, Portland, Oreg. Filed Mar. 22, 1917. Serial No. 156,783. (Cl. 99—11.)

1. The process for making the described food product, of milk consisting in taking fresh milk, inducing curdling therein by the agency of an enzym, permitting the curdling to develop until the curd particles attain a tendency to adhere, then arresting further coagulation by a rapid reduction of the milk to that temperature rendering the enzym inactive, and maintaining the mass at said low temperature until used.

4. A milk food product comprising a flocculent slightly adherent fresh-milk casein precipitate induced by an enzym, the action of which was arrested, upon the precipitate becoming flocculent, by an immediate reduction in temperature, said precipitate being partially separated from the milk stock and inhibited from further change by being maintained at a low temperature.

[Claims 2 and 3 not printed in the Gazette.]

1,274,219. APPARATUS FOR REMOVING EXCREMENTA, &c., FROM DAIRY-BARNS. ROBERT ULBRECHT, Chicago, Ill. Filed Apr. 27, 1918. Serial No. 231,193. (Cl. 193—2.)



1. In a structure of the nature described, a trench, a pit at one end of said trench, a catch basin at the other end of said trench, a removable floor or false bottom in said trench to afford a comparatively shallow gutter, mechanism mounted in said pit and in said catch basin, an endless conveyer band in said gutter, scrapers on said conveyer band constructed to sweep over the upper surface of said false bottom, said mechanism in said pit and said catch basin being constructed to operate said endless conveyer band, the bottom of said trench inclining toward said catch basin.

6. In a structure of the nature described, a trench, a pit at one end of said trench, a catch basin at the other end of said trench, a floor in said trench, said floor comprising separate slabs, said separate slabs being supported in said trench below the upper margins thereof to afford a shallow gutter, said slabs having longitudinal grooves in their upper surface medially of their width, mechanism mounted in said pit and in said catch basin, an endless conveyer band in said gutter, the upper stretch of said endless conveyer band being movable in said groove and prevented from lateral swinging therein, scrapers on said conveyer band constructed to sweep over the upper surface of said floor, said mechanism in said pit and in said catch basin being constructed to operate said endless conveyer band, an elevator mounted in said catch basin and extending upwardly and angularly therefrom, an endless belt mounted on said elevator, a series of scrapers on said endless belt, a series of buckets on said endless belt intermediate of said scrapers, the lower end of said elevator extending below the discharge end of said endless conveyer band and beyond the same, the mechanism for operating the endless belt on the elevator being connected to, and operating simultaneously with, the mechanism which operates said conveying band.

8. In a structure of the nature described, a trench, a false floor in said trench, an endless conveyer band movable on said floor, there being on said endless conveyer band a series of a multiplicity of scrapers, said scrapers being attached to said band and of successively longer length.

10. In a structure of the nature described, a trench, said trench having parallel spaced vertical walls, an inclined bottom in said trench, said walls and said bottom being formed of concrete, a false bottom in said trench below the upper margins of said walls to afford a shallow gutter in said trench, said false bottom being comprised of concrete slabs, said slabs being narrower than the width of said trench to afford narrow passages between said walls and the longitudinal margins of said slabs, there being in the upper part of said walls and opposed to each other vertical recesses, bars in said recesses upon which said slabs are carried, and blocks in said recesses bearing upon said bars.

[Claims 2 to 5, 7, and 9 not printed in the Gazette.]

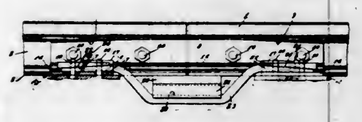
1,274,220. SHOE-LACE FASTENER. FRANK H. ULREY, Chicago, Ill. Filed Aug. 17, 1916. Serial No. 115,360. (Cl. 24—120.)



3. A shoe lace fastener consisting of a length of thin sheet steel to present itself in the form of parallel intermediate and base portions each being formed with axially apertured frusto-conical portions registering with each other and having positioned therebetween a yielding snap member and a top portion having a male member of a snap fastening for engagement with the yielding snap member.

[Claims 1 and 2 not printed in the Gazette.]

1,274,221. RAIL-JOINT AND TRACK-FASTENER. MAHLON W. WAMBAUGH, St. Louis, Mo. Filed May 28, 1918. Serial No. 237,119. (Cl. 239—12.)



1. In a device of the class described, a base having elongated slots; a rail on the base; means for retaining one side of the rail on the base; a retainer coöperating with the other side of the rail and supported on the base; superposed wedges mounted on the retainer; and keepers on opposite sides of the wedges, the keepers being journaled in the retainer and overhanging the wedges, the keepers including heads retained in the slots of the base and adjustable therein toward and away from the rail.

2. In a device of the class described, bases; rails thereon; fish plates connecting the rails; means for supporting the rails at one side; retainers on the bases and engaging the other side of each rail; means for attaching the retainers to the bases; a truss rod having its ends engaged with the retainers, independently of the fish plates; and a strut interposed between the intermediate portion of the truss rod and the rails.

3. A device of the class described, constructed as set forth in claim 2, and further characterized by the fact that the strut comprises superposed upper and lower wedges, the upper wedge having right-line movement with respect to the lower wedge, the lower wedge having means for engaging the truss rod to hold the lower wedge against longitudinal movement.

4. A device constructed as set forth in claim 2 and further characterized by the fact that the means for attaching the retainers to the bases comprises keepers journaled in the retainers and held in the bases; and a wedge interposed between the upper ends of the keepers and the retainers.

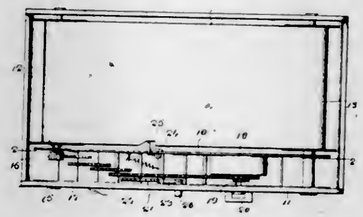
5. In a device of the class described, a base having elongated slots; a rail on the base; means for retaining one side of the rail; a retainer coöperating with the other side of the rail and supported on the base; keepers journaled in the retainers; and a wedge interposed between the upper ends of the keepers and the retainer, the keepers lying on opposite sides of the wedge.

1,274,222. COMBINED TAG AND FASTENING-CLIP. JAMES V. WASHBURNE, Syracuse, N. Y. Filed Nov. 7, 1913. Serial No. 799,668. (Cl. 40—25.)



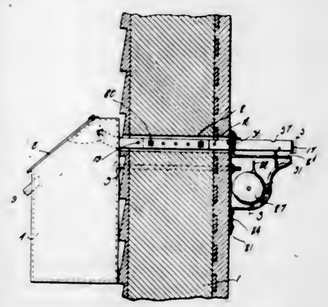
The combination of a clip folded upon itself to form opposing portions or wings, one of said portions being formed with an external outwardly projecting tubular eye and the other being formed with an angular prong for entering the eye, the prong being located in the space between the wings and the eye outside of such space, and a tag mounted on the eye, the eye being of greater diameter than the prong and adapted to retain the tag, substantially as and for the purpose described.

1,274,223. FILM-SHIFTING MECHANISM FOR CAMERAS. ORVILLE WEIS, Thayer, Kans. Filed Aug. 28, 1916. Serial No. 117,344. (Cl. 95—31.)



In a camera, a film moving mechanism adapted to cooperate with a film notched at intervals along one of its edges, said mechanism including a ratchet wheel, a pawl pivoted in the camera and having the general form of a bell crank, one arm of the pawl being adapted to engage the ratchet wheel, a spring for normally holding the said arm in engagement with the wheel, said arm having an angularly disposed extremity, a button pivoted to said extremity, the other arm of the pawl having a laterally disposed portion and said portion having an angularly disposed extremity adapted to ride upon the edge of the film and enter the notches thereof.

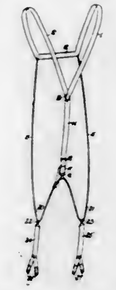
1,274,224. MILK AND MAIL RECEPTACLE. NOAH R. WHITE, Delta, Colo. Filed July 10, 1917. Serial No. 179,713. (Cl. 232—41.)



1. A milk and paper receptacle including a receiving receptacle to be mounted on the outer side of a wall having an opening formed transversely therethrough, said receiving receptacle having an opening through the rear wall thereof in line with the opening of the wall, a base plate mounted on the inner side of the wall bent to form a supporting bracket for the alarm, and provided with an opening lined up with the opening of the wall and that of the receiving receptacle, a cover for said receiving receptacle, a bracket carried by said cover, a locking lever carried by the base plate adjacent the opening thereof, a locking bar provided with a notch for reception of the locking lever slidably mounted through the opening of the base plate and having its end bent to support a spring finger adapted to operate said alarm, and an extension bar adjustably connected with said locking bar and connected with the bracket of the cover.

[Claim 2 not printed in the Gazette.]

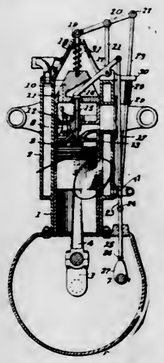
1,274,225. HOSE-SUPPORTER. ALBERT MONROE WILSON, Cherokee, Iowa. Filed Oct. 17, 1917. Serial No. 197,025. (Cl. 241—4.)



4. A hose supporter, comprising shoulder straps terminating at the back in a connecting strap to form a square back yoke, the said shoulder straps being connected with each other at the front, a front strap depending from the front terminal of the shoulder straps, a supporting guide attached to the lower end of the said front strap, a cord rigidly connected at its spaced ends with the said back yoke and running freely in the said supporting guide to form the cord into side loops, and hose straps provided with strap guides running freely in the loops.

[Claims 1 to 3 and 5 not printed in the Gazette.]

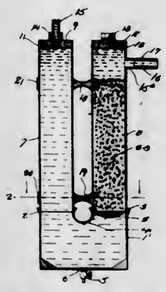
1,274,226. INTERNAL-COMBUSTION ENGINE. CLARENCE E. WOLFRAM, Belleplaine, Minn. Filed Mar. 29, 1916. Serial No. 87,529. (Cl. 123—78.)



3. The combination with an engine cylinder, piston, and cam shaft, of a sleeve slidably mounted in said cylinder and closed at its upper end, spaced partitions formed in said sleeve and having exhaust and inlet ports provided therebetween for engagement with similar ports formed in the cylinder, valves mounted in said partitions and controlling the ports therebetween, actuating members engageable with said valves and adapted to be operated to open and close the same at proper intervals, a rod operatively connected with the upper closed end of said sleeve and extending through the closed end of said cylinder, a standard supported on said cylinder, a rocker arm having the intermediate portion thereof pivotally secured to said standard and one end thereof operatively connected with said rod, an actuating rod connected with the opposite end of said rocker arm, a roller carried by the lower end of said actuating arm and operatively engaged with said cam shaft, a collar encircling said actuating rod, and a spring confined between said collar and a portion of the engine cylinder.

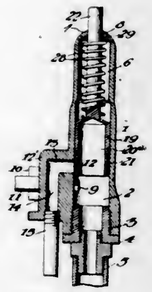
[Claims 1 and 2 not printed in the Gazette.]

1,274,227. LIQUID-FILTER. JOHN M. WOODSON and JOE H. WILDER, Lafollette, Tenn., assignors, by direct and mesne assignments, of two-fifths to said Wilder and three-fifths to said Woodson. Filed Apr. 6, 1916. Serial No. 89,420. (Cl. 210—5.)



A liquid filter, including a receiver having companion openings with shouldered filter pipe recesses, the top of the receiver being depressed to form a deflector between the companion openings, an inlet filter tube disposed in one of the shouldered recesses, a filtering screen supported in the other of the shouldered recesses, an outlet filter tube arranged in said shouldered recess whereby the screen is clamped in position, bracket arms formed on the outlet filter tube, said bracket arms having yoke members for encircling the inlet filter tube and mutually supporting both filter tubes, and a filtering substance supported by the filtering screen.

1,274,228. FLUID CIRCULATION INDICATOR AND DISTRIBUTER. JOSEPH ZAGORA, Racine, Wis. Filed July 9, 1914. Serial No. 850,062. (Cl. 184—27.)



1. An oil distributer comprising a hollow body having respectively near its two ends a plurality of oil distributing openings of predetermined size and a vent, an inlet into the end of the body adjacent the distributing openings, a piston slidable in the body between the inlet and the vent, and means for preventing movement of said piston beyond the vent.

2. An oil distributer comprising a hollow body having respectively near its two ends a plurality of oil distributing openings of predetermined size and a vent, and having between the vent and the openings an excessive pressure outlet, an inlet into the end of the body adjacent the distributing openings, a piston slidable in said body between the inlet and the vent, and means for preventing movement of said piston beyond the vent.

3. In combination, a hollow body having near one end a pressure outlet, an inlet into such end of the body, and a piston in said body for controlling the outlet, said piston bearing normally on said end of the body and being reduced in diameter from such end to an intermediate point spaced from the latter a distance approximately equal to the distance between the same and the oil distributing openings, the piston being adapted to actuate an indicator.

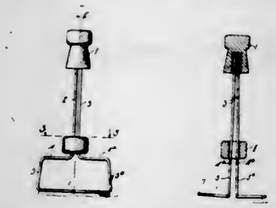
4. In combination, a hollow body having in its wall at a point spaced from one end, an excessive pressure outlet and having between said outlet and the other end of the body a normal pressure outlet, a pressure inlet into the last named end of the body, and a piston for controlling said outlets, said piston bearing normally on the last named end of the body and being reduced in size for a distance to permit fluid trapped between the piston and the last named end of the body to escape to the normal pressure outlet.

5. In combination, a hollow body having in its lower end a pressure inlet and having in its wall a pressure outlet, and a vertically disposed automatically controlled tubular piston in the body and contacting therewith, said piston having its lower end open and having its upper end tightly closed, whereby a body of air may be trapped in said piston to serve as a cushion, thereby compensating for a fluctuating pressure without continually jarring the piston, the latter being therefore well adapted for operating an indicator.

[Claims 6 to 12 not printed in the Gazette.]

1,274,229. JAR-LIFTER. JOHN EDWARD ALDRIDGE, Huntington, W. Va. Filed Jan. 15, 1918. Serial No. 211,973. (Cl. 65—26.)

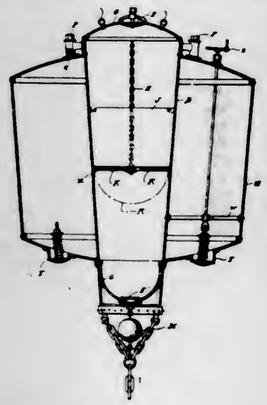
2. In a device of the character described, a handle, and two opposed gripping members secured in said handle in downwardly divergent relation, each of said gripping members being formed from a length of wire bent to provide two substantially parallel shanks having their upper ends secured in the handle, the lower portion of each of these shanks being turned outwardly and downwardly to form a substantially rectangular vertically disposed frame, the portion of the wire intermediate the ends of this frame being then bent to provide a substantially semi-



circular gripping element, the gripping elements of the two said gripping members being opposed and adapted to fit about the neck of a jar or similar container.

[Claim 1 not printed in the Gazette.]

1,274,230. MEANS FOR RAISING SUNKEN VESSELS. RAFAEL DE ARAZOZA, Habana, Cuba. Filed Sept. 27, 1917. Serial No. 193,516. (Cl. 114—52.)



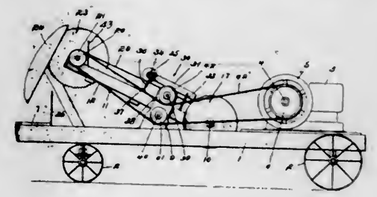
1. In a device of the character described, a vessel, a gas generator in said vessel, a means for dividing said generator into two charge chambers, means turning around a common pivot and constituting the movable bottom for said chambers, and chains secured to one end of each of said means constituting said bottom and with their other ends to the top of said vessel for alternately operating one or the other bottom of said chambers for allowing one or the other part of the charge to be deposited into the bottom of the generator, trigger devices near the top of the vessel, extending through the sides thereof for operating said chains to actuate said bottom constituting means, and a seal between the water contained in the vessel and the gas generated within the generator, substantially as described.

2. In a device of the character described, a vessel, a cylindrical gas generator concentrically arranged within said vessel, a partition wall centrally disposed within said generator for dividing the same into two chambers, a movable bottom plate for each of said chambers, pivotally secured to a common center and adapted to support the charge, chains secured to one end of each of said bottom plates and with their other ends to the top of said vessel for alternately releasing one or the other of said plates for dropping the charge contained in one or the other of said chambers into the generator, trigger devices near the top of the vessel extending through the side walls thereof operating said chains, and means for regulating the air and water supply and exhaust, substantially as described.

4. In a device of the character described, a vessel, a gas generator arranged within said vessel, means for dividing the generator into a plurality of chambers, a movable bottom plate for each of said chambers pivotally secured to a common center and supporting the charge, chains secured with one end to the bottom and the other to the top of the generator, and a plurality of T-pieces secured to and connecting both vessels, valves attached inside of said T-pieces, and plugs entering said T-pieces for controlling said valves for avoiding air pockets and allowing the entrance of water into the generator, and a ball float for counterbalancing the weight of the attaching means for allowing a ready handling of the apparatus.

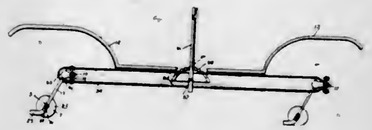
[Claim 3 not printed in the Gazette.]

1,274,231. SAW. JOHN BAIRS, Argenta, Ark. Filed Jan. 26, 1916. Serial No. 74,481. (Cl. 143—46.)



A device of the class described comprising a platform, a transverse shaft mounted thereon, a longitudinally arranged saw frame pivoted on said shaft intermediate its ends, a saw shaft carried by the outer end of said frame, a shaft carried at the inner end of said frame, belt pulleys on said shafts, a belt connecting said pulleys, fly wheels on the shaft at the inner end of the frame, serving as a counter-balancing means for the frame, a belt pulley on the outer end of the saw shaft, a motor on the platform, a pulley on the motor shaft, a belt connecting the last mentioned pulleys together and a guide pulley on the projecting end of the transverse shaft and engaging with said belt.

1,274,232. NON-SKID DEVICE. NEWTON S. BEALE, Tama, Iowa. Filed Dec. 12, 1917. Serial No. 206,841. (Cl. 21—8.)



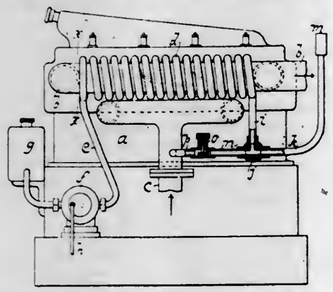
1. In a device of the class described, a frame designed to be pivotally mounted on a motor vehicle, a rotary member adjustably mounted near one end of said frame for permitting the rotary member to be secured on said frame at different distances from the motor vehicle frame, and means for swinging said frame on its pivot and for securing it in its raised position.

[Claims 2 to 5 not printed in the Gazette.]

1,274,233. STEAM-GENERATOR. WILLIAM E. BELLION, Brooklyn, N. Y., assignor of one-half to Henry W. Christman, Jamaica, N. Y. Filed Mar. 19, 1917. Serial No. 155,725. (Cl. 123—25.)

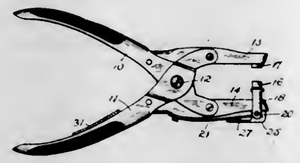
In a steam generator the combination with an internal combustion engine having an intake and exhaust manifold, of a steam generating coil arranged on the exhaust manifold, a water tank connected to the coil, a pump for forcing the water through the coil, a pipe connected to one end of the coil and leading to the intake manifold,

a three way valve for shutting off or opening the coil from the intake pipe, a gage leading from the valve for



denoting the pressure in the coil, and a safety valve for controlling the pressure at which the steam will flow from the coil to the intake pipe.

1,274,234. MEANS FOR APPLYING FASTENERS. WILLIAM A. BERNARD, New Haven, Conn., assignor to The William Schollhorn Company, New Haven, Conn., a Corporation of Connecticut. Filed May 26, 1915. Serial No. 30,599. (Cl. 1—50.)



1. In a stapling tool, the combination of a pair of jaws, a pair of lever handles for moving said jaws toward each other, a driver of rectangular cross-section fixed on one of said jaws, a holder sleeve having a rectangular opening conforming to said driver and slidable thereon, said holder sleeve having cheeks straddling the jaw on which the driver is secured, a spring acting on said sleeve to normally project it beyond the end of said driver so as to form a staple-receiving pocket, and an anvil on the other jaw to coöperate with said driver and said sleeve; substantially as described.

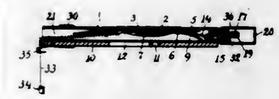
7. In a stapling device, the combination of a driving member, a staple holding sleeve slidable thereon, a spring normally projecting said sleeve beyond the end of said driving member to form a staple holding pocket, and a cam for limiting the action of said spring and decreasing the depth of such pocket; substantially as described.

10. In a portable hand tool of the lever-handle type for applying staples to shoes and other articles, the combination of a pair of movable jaws, a pair of lever handles for moving said jaws toward and away from each other, a driver of substantially square cross-section fixed on one of said jaws, a holder sleeve slidably mounted on the driver and having a staple-receiving pocket with one staple seat directed longitudinally of the tool and another staple seat of the same size directed at right angles to the longitudinal axis of the tool, and an anvil fixed on the other jaw and having a cross-shaped depressed portion in the face thereof in register with the intersecting staple-receiving seats of the staple pocket, whereby said anvil will effectively clench the ends of a staple traversing said pocket longitudinally of the tool or transversely thereof.

[Claims 2 to 6, 8, and 9 not printed in the Gazette.]

1,274,235. FIRE-LIGHTER. CHARLES BLAMFIELD, Boston, Mass. Filed Jan. 29, 1918. Serial No. 214,387. (Cl. 44—6.)

1. An igniting device comprising means for supporting a match or the like, a movable friction device, means for forcibly moving the latter, means including a soluble tablet holding the friction device from movement, and means for holding a liquid in contact with the tablet.



2. An igniting device comprising a tubular body having a lateral opening, a friction device slidable within the body, elastic means acting on said friction device in one direction, means for supporting a match or the like in the path of the friction device, means temporarily holding the friction device inactive, and a fabric saturated with a combustible solution disposed on said lateral opening.

5. An igniting device comprising a tubular body having a lateral opening, a carrier slidable within said body, a friction device attached to the carrier, elastic means acting upon said carrier in one direction, means for supporting a match or the like in the path of the friction device, a plug in the end of said tubular body opposed to said elastic means, a thread having its ends attached to said plug and its looped portion passing through the plug to the exterior, a soluble tablet in said loop, and a cap adapted to contain a liquid, fitting the outer end of the said plug, the liquid acting to dissolve said tablet.

10. An igniting device comprising a tubular body, a slidable friction device therein, elastic means acting on the friction device in one direction, means for holding a match or the like in the path of said friction device, a plug at the end of the tubular body opposed to said elastic means, a looped thread attached at its ends to the plug and passing through the latter, a soluble tablet in said loop exterior to the said body, a bead on said thread between the tablet and plug, and a cap for liquid fitted to said plug and having a small vent through its upper wall.

[Claims 3, 4, and 6 to 9 not printed in the Gazette.]

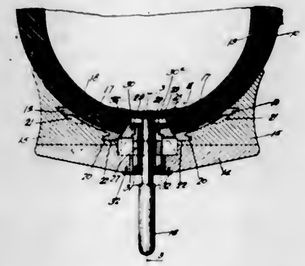
1,274,236. CLOTHES-PIN. CHRISTIAN BODRI, New York, N. Y., assignor of one-half to Henry J. Kahrs, New York, N. Y. Filed Apr. 6, 1918. Serial No. 227,044. (Cl. 24—138.)



1. A clothespin comprising a body having a straight saw-cut for part of its length merging into flaring portions, and a straight slot in each side of the saw-cut, said slots intersecting and merging into the saw-cut at the end thereof nearest the head of the pin.

2. A clothespin comprising a round body having a substantially round head, a principal saw-cut at the end opposite the head for receiving a clothesline, and a pair of auxiliary saw-cuts at the sides of said straight saw-cut, said auxiliary saw-cuts being positioned at an angle to the principal saw-cut so as to intersect and merge into the principal saw-cut at the end of the principal saw-cut near said head.

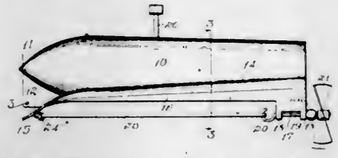
1,274,237. TIRE AND FASTENING MEANS THEREFOR. JOSEPH BORYSZEWSKI, Forks, N. Y. Filed Mar. 12, 1918. Serial No. 221,910. (Cl. 152—22.)



2. A tire slotted at the rim side presenting flaps at opposite sides of the median line of the section, the free edges of the flaps being disposed toward each other, fastener elements on said flaps, rings adapted to extend about the tire at each side and adapted to be secured to a wheel rim, rigid fastener strips secured to said flaps, mating fastener members on said strips and on said rings, a wedge disposed between the flaps, a nut swiveled to the wedge of each section and extending radially inward, and a bushing in which the nut is adapted to move, said bushing having means to secure it to a wheel rim.

[Claim 1 not printed in the Gazette.]

1,274,238. TOY SUBMARINE. WENDELL H. CALDBECK, Des Moines, Iowa. Filed Oct. 10, 1917. Serial No. 195,725. (Cl. 46—37.)



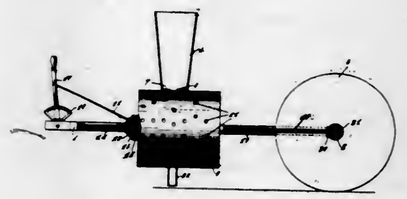
1. In a toy submarine, a body adapted to float in water, having a tapered front end, a plate secured to said body at the forward part thereof, and extending from the lower end thereof rearwardly, side wings extending from the forward portion of said body at the lower part thereof rearwardly and slightly upwardly, said side wings being also curved from the lower central portion of said body upwardly and laterally, a downwardly inclined member at the forward end of said side wings forming a diving plane, a keel below said side wings and below the center of said body, a shaft at the lower portion of said device, a propeller thereon, a hook member on said diving plane, and a resilient device connected with said hook member and with said shaft.

2. In a toy submarine, a body adapted to float in water, having a tapered front end, side wings extending laterally and upwardly from the central lower part of said body, and inclined from their forward ends upwardly and rearwardly, a central, vertical plate extending downwardly from the forward portion of said body, a diving plane curved downwardly from the forward ends of said side wings, and tapered toward its forward end, said diving plane having a central opening.

3. In a toy submarine, a body adapted to float in water, having a tapered front end, side wings extending laterally and upwardly from the central lower part of said body, and inclined from their forward ends upwardly and rearwardly, a central, vertical plate extending downwardly from the forward portion of said body, a diving plane curved downwardly from the forward ends of said side wings, and tapered toward its forward end, said diving plane having a central opening, a downwardly extending member at the rear end of said device, a shaft rotatably mounted therein, a resilient member secured to said shaft and connected with said diving plane, and a propeller on said shaft.

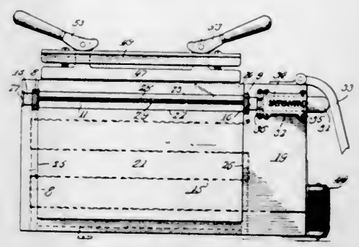
4. In a toy submarine, a boat adapted to float in water having a tapered front end, side wings extending laterally from the lower portion of said boat, said side wings being curved downwardly and forwardly at their forward ends, and tapered toward a central point in front, the forward ends of said wings being slightly curved.

1,274,239. CORN-PLANTER. LEWIS R. BRANTLEY, Marietta, Ga. Filed July 19, 1917. Serial No. 181,593. (Cl. 221—137.)



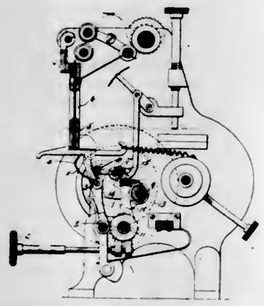
In a planter a frame, a hopper carried thereby, a hopper shaped boot secured to and depending from the bottom of the hopper, said hopper opening thereinto, a shaft extending rearwardly through the hopper, a drum feathered on the shaft and mounted for rotation and for sliding movement in the walls of the hopper, said drum having separate annular series of recesses, a member secured at its ends to the bottom of the hopper and fitting snugly upon and arched over the drum, said member extending from one wall to the other of the hopper and having a longitudinal slot, and means for shifting the drum upon the shaft to bring any one of the series of recesses into register with the slot.

1,274,240. DEVICE FOR ASSEMBLING BROOD-FRAMES. CHARLES O. BRUNO, Rockford, Ill. Filed Apr. 23, 1917. Serial No. 164,046. (Cl. 1—47.)



In a device of the character described for assembling brood frames, a frame for supporting the brood-frame parts, a nail driving device on said frame including a nail driving element, a nail supporting and positioning means interposed between the nail driving element and the work comprising a horizontally disposed member having spaced nail-receiving grooves in its upper surface whereby a plurality of nails may be supported in a horizontal position intermediate and in alinement with the nail-driving element and the work, and means yieldingly supporting the nail carrying member at each end thereof so that said member may be yieldingly depressed when the nail driver is operated to drive the nail.

1,274,241. MOVING-PICTURE MACHINE. JAMES A. CAMERON, Brooklyn, N. Y. Filed May 3, 1911, Serial No. 624,818. Renewed Dec. 17, 1917. Serial No. 207,626. (Cl. 88—18.6.)



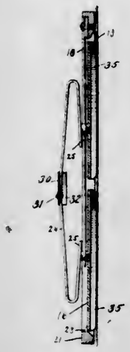
1. In a moving picture machine, an oscillatory film advancing member pivotally supported at one end, said member having an angular projection therein near the point of pivotal support, and a film guide disposed in rear of the angular projection in the film advancing member.

4. In a moving picture machine, film advancing means comprising a pivot, a member carried by said pivot, embodying a portion extending downward from the pivot a short distance and thence laterally away from the pivot a greater distance, and means for oscillating the pivot and the member carried thereby.

7. Film advancing means consisting of an oscillating film advancing member having an angularly extending film engaging portion disposed between the ends of said member, means for oscillating the film advancing member, and a film guide disposed in rear of and higher than the angularly extending portion of the film advancing member.

[Claims 2, 3, 5, 6, and 8 to 21 not printed in the Gazette.]

1,274,242. MOVING-PICTURE MACHINE. JAMES A. CAMERON, Brooklyn, N. Y., assignor to Cameron Picture Machine Co., a Corporation of New York. Filed Sept. 24, 1912, Serial No. 722,010. Renewed Dec. 17, 1917. Serial No. 207,627. (Cl. 88—17.)



1. A moving picture machine comprising: a film support, and means for holding the film in engagement with the support including a plurality of longitudinally alined clamping members, yielding supporting means for said clamping members to permit independent yielding of said clamping members to the variation in the surface of the film, and tension means interconnecting said clamping members to maintain a substantially uniform tension regardless of the independent yielding of said members.

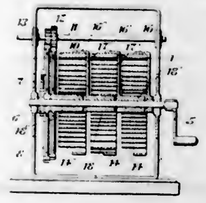
3. The combination with a film support, of means for holding the film in engagement with the same comprising two independently movable clamping members arranged in longitudinal alinement, and a double-ended spring having its opposite ends bearing upon the intermediate portion of the respective clamping members and permitting the same to yield independently under its tension.

6. The combination with a film support provided with an exposure opening therein, of parallel clamping shoes arranged to engage the film on opposite sides of the exposure opening, the said shoes having longitudinal grooves in the contact faces thereof, and means for forcing the shoes toward the film support with a yielding pressure.

14. A tension device for moving picture machines, comprising, a backing over which the film passes, longitudinal clamping members arranged to press the edges of the film against said backing, tension means acting on the clamping members, a movable support for the tension means, and means for shifting the said support to vary the pressure exerted by the tension means.

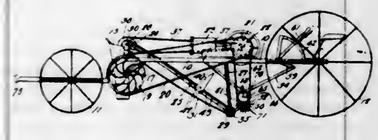
[Claims 2, 4, 5, 7 to 13, and 15 to 21 not printed in the Gazette.]

1,274,243. SPRING-MOTOR. GEORGE W. CHAMBERLAIN, Atlanta, Ga. Filed Sept. 24, 1915. Serial No. 52,436. (Cl. 185—37.)



In a spring motor, the combination of a spring winding shaft, a convolute spring encircling said shaft, an arm fastened to said shaft and the outer extremity of said spring attached thereto, a circular spring housing carried by said arm and open at both sides, a spring actuated gear loose on said shaft and having a tubular hub encircled by said spring and having the inner extremity of said spring secured thereto, a spring rewinding gear having a pawl and ratchet engagement with said shaft and of greater diameter than the spring actuated gear, a countershaft parallel to the winding shaft, and a pinion on the last named shaft having two faces of different diameters meshing with said spring actuated gear and rewinding gear.

1,274,244. STONE-GATHERER. CYRUS C. COREY, Canadensis, Pa. Filed Mar. 28, 1917. Serial No. 158,017. (Cl. 55—17.)



1. In a device of the class described, a vehicle, a conveyer on said vehicle, wheels supporting one end of said conveyer, a picker member adjacent the wheeled end of said conveyer, the said picker member being capable of being adjusted toward or away from said conveyer, and means for adjusting said picker member.

2. In a device of the class described, a vehicle, a conveyer on said vehicle, supporting bars pivoted at one end to said vehicle and being disposed at their medial portions adjacent said conveyer, a lever for adjusting said bars, straps adjustably mounted upon the medial portions of said bars, a shaft rotatably mounted in said straps, a picker roller rotatably supported in said straps, means for transmitting power from said shaft to said roller, and means for driving said shaft.

3. In a device of the class described, a vehicle, a conveyer on said vehicle, a guard adjustably mounted over said conveyer, a picker member for delivering matter to said conveyer, and means for driving said picker member.

4. In a device of the class described, a vehicle, a conveyer frame on said vehicle, a conveyer on said frame, a guard adjustably mounted on said frame, and a picker member for delivering matter to said conveyer.

1,274,245. METHOD OF PRODUCING PIG-IRON. FRANK H. CROCKARD, Birmingham, Ala. Filed Apr. 2, 1917. Serial No. 159,262. (Cl. 75—50.)

1. The process of producing large quantities of iron low in phosphorus which consists in smelting with carbonaceous and fluxing materials in a blast furnace a predominating quantity of steel suitable for the purpose.

4. The process of producing an iron of high carbon content and low phosphorus content for utilization in the manufacture of steel which consists in smelting in a blast furnace a predominating quantity of steel scrap, with the necessary quantity of fluxing material and coke to melt the charge and recarburize the molten metal in the charge.

[Claims 2 and 3 not printed in the Gazette.]

1,274,246. INK-WELL COVER. MICHAEL A. CHOZIER, New York, N. Y., assignor to Frank A. Weeks Mfg. Co., New York, N. Y., a Corporation of New York. Filed Jan. 4, 1918. Serial No. 210,333. (Cl. 120—68.)



An article as characterized comprising a body having a top-opening well receptacle; a plurality of separable dome sections for partly covering said well receptacle; a plurality of pivotally mounted pendent cover sections; and means for pivotally mounting said cover sections on said dome sections, said means embodying a plurality of pivot pins and pivot sockets therefor formed in said dome and cover sections for swinging said cover sections on said dome sections.

1,274,247. PROCESS FOR OXIDIZING AMMONIUM SULFITE TO AMMONIUM SULFATE. HEINRICH DANNEEL and EMIL KUHN, Basel, Switzerland, assignors to Elektrizitätswerk Lonza, Gampel, Switzerland. Filed July 21, 1917. Serial No. 182,040½. (Cl. 23—21.)

1. A process for oxidizing ammonium sulfite to ammonium sulfate by air, wherein the oxidation is conducted in presence of a sparingly soluble sulfate.

2. A process for oxidizing ammonium sulfite to ammonium sulfate by air, wherein the oxidation is conducted in presence of calcium sulfate.

1,274,248. THERMOSTATIC CIRCUIT-CONTROLLING DEVICE. JOHN H. DERBY and ERNEST S. CLAYTON, New York, N. Y., assignors to American Fire Prevention Bureau, Inc., New York, N. Y., a Corporation of New York. Continuation in part of application Serial No. 114,203, filed Aug. 10, 1916, and application Serial No. 205,083, filed Dec. 3, 1917. This application filed Feb. 8, 1918. Serial No. 215,987. (Cl. 200—33.)

6. In a device of the class described, the combination with a thin disk of fusible conducting material and a thin perforated insulating disk upon one side thereof, of a casing comprising opposed thin, substantially flat circuit terminals between the opposed faces of which said first-mentioned disks are confined and pressed together, said terminals being interlocked at their edges and having surface dimensions relatively great compared with the thickness of the casing thus formed, and being provided with registering corrugations to increase both the strength and the heat-collecting surfaces of the structure.



10. An electric circuit thermostat comprising opposed thin flat circuit terminals interlocked at their peripheral portions to form a closed casing, the opposed faces of said terminals being normally insulated from one another by a thin flexible sheet of insulating material having perforations therethrough, one of said terminals being formed with a centrally located recess, a thin layer of easily fusible conducting material in said recess in contact with said recessed terminal, said fusible material being separated from the other circuit terminal by the perforated portion of said insulating material, said latter circuit terminal having a central portion projecting toward the recessed portion of the opposed terminal, said terminals being so connected by their interlocking peripheral engagement that the central projecting portion of one terminal is tensioned to press toward the recessed portion of the opposed terminal upon the interposed fusible conducting material, whereby said easily fusible material when fused, will spread through the perforations of said insulating sheet to form an electrical connection between said circuit terminals.

17. In a device of the class described, the combination with a disk of fusible conducting material and a perforated insulating disk upon one side thereof, of a casing comprising opposed circuit terminal disks confining said first mentioned disks between the opposed faces, one of said disks having a centering projection and a centering and spacing insulating ring cooperating with said projection and over the edge of which the other disk is turned.

21. In a device of the class described, the combination with a disk of fusible conducting material and a perforated insulating disk upon one side thereof, of a casing comprising opposed circuit terminal disks confining said first mentioned disks between the opposed faces and interlocked at their edges to inclose said fusible disk, one of said disks being provided with an opening of such size that a small portion of the fusible conductor can flow to the exterior of said casing and form an indicating bead when said device operates.

[Claims 1 to 5, 7 to 9, 11 to 16, 18 to 20, and 22 not printed in the Gazette.]

1,274,249. PROCESS OF TREATING ZINC. CHARLES A. H. DE SAULLES, New York, N. Y. Filed Nov. 3, 1915. Serial No. 59,353. (Cl. 75—153.)

1. The process of treating metallic zinc consisting in first melting zinc containing lead, and eliminating by gravity therefrom a large amount of the lead; then heating to volatilization the zinc thus treated, and thereby eliminating therefrom most of the lead which remains; then condensing to a molten condition the zinc thus volatilized; and then collecting the zinc thus condensed and retaining it in a molten condition until a relatively large body thereof has been amassed.

3. The process consisting in charging a retort with melted zinc containing lead; then volatilizing the zinc, and thereby eliminating therefrom most of the lead contained in the charge; then condensing to a molten condition the zinc thus volatilized; and then collecting the zinc produced by the foregoing steps and retaining it in a molten condition until a relatively large body thereof has been amassed.

9. The process consisting in melting metallic zinc containing lead and eliminating therefrom by gravity a large amount of the lead, then eliminating from the zinc most of the lead retained therein by redistillation of the zinc.

[Claims 2 and 4 to 8 not printed in the Gazette.]

1,274,250. ALLOY FOR RESISTANCE ELEMENTS, &c. WILBUR B. DRIVER, East Orange, N. J. Filed Jan. 2, 1914. Serial No. 810,012. (Cl. 75—1.)

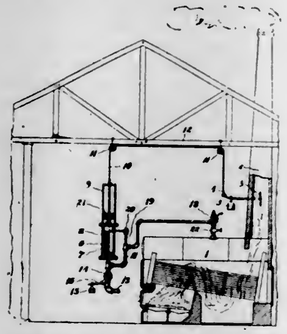
1. A ductile and malleable alloy of high specific electrical resistance containing as a constituent at least one per cent. of titanium and over twenty per cent. of nickel, substantially as described.

5. A ductile and malleable alloy of high specific electrical resistance containing titanium as a constituent and over twenty per cent. of nickel, the titanium being sufficient in amount to produce high electrical resistance and greatly retard oxidation at high temperatures.

6. An electrical resistance element comprising a ductile and malleable alloy containing as constituents over twenty per cent. of nickel and at least one per cent. of titanium, substantially as described.

[Claims 2 to 4 not printed in the Gazette.]

1,274,251. DAMPER-OPERATING DEVICE. WILLIAM M. DUNN, Shelbyville, Ind., assignor of one-half to Emanuel Hendricks, Shelbyville, Ind. Filed Nov. 25, 1916. Serial No. 133,463. (Cl. 236—6.)

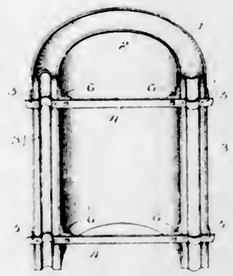


1. In a damper operating device, in combination, a steam generating device having a flue associated therewith, a damper mounted to turn in said flue to control the draft of air therethrough, an operating arm on said damper arranged exteriorly of said flue, a steam cylinder, a piston mounted to slide in said steam cylinder and having connection with said operating arm, a weight adjustably mounted on said operating arm to serve as a balance weight for said piston, a weight on said piston for normally holding the same in lowered position within said steam cylinder, a steam supply pipe having connection with the steam generating device and the interior of the steam cylinder below said piston, means for controlling the admission of steam from said steam generating device to said cylinder to raise the piston thereon against the influence of the weight thereon, a steam exhaust pipe having communication with the interior of said cylinder and the steam supply pipe, and a normally open weight controlled valve in said steam exhaust pipe to be moved to a closed position by steam admitted to said cylinder, said valve having a bleed port therein.

2. In a damper operating device, in combination, a steam generating device having a flue associated therewith, a damper mounted to turn in said flue to control the passage of the air therethrough, an operating arm on said damper arranged exteriorly of said flue, a weight adjustably mounted on said operating arm, a steam cylinder, a piston mounted to slide in said steam cylinder and having connection with said operating arm to serve as a balance weight for the weight on the operating arm, a counter-balance weight on said piston normally holding the same in lowered position within said cylinder, a steam supply pipe having connection with the steam generating device and the interior of the steam cylinder below said piston, means for controlling the passage of steam from said steam generating device through the supply pipe to raise said piston within said cylinder, a steam exhaust pipe having connection with the interior of said cylinder below said piston and the steam supply pipe, means in said exhaust pipe for controlling the escape of steam from said supply pipe and the interior of said cylinder, a branch pipe having connection with the interior of said cylinder above said piston and with the steam supply pipe, and a steam operated check valve within said branch pipe controlling the passage of steam therethrough.

3. In a damper operating device, in combination, a steam generating device having a flue associated therewith, a damper mounted to turn in said flue to control the passage of air therethrough, an operating arm on said damper arranged exteriorly of said flue, a steam cylinder, a piston mounted to slide in said cylinder and having flexible connection with said operating arm, a weight on said piston normally holding the same in lowered position within said cylinder, a steam supply pipe having connection with the steam generating device and the interior of the steam cylinder below said piston, automatic pressure operated means for controlling the passage of steam from said steam generating device through the supply pipe to raise said piston within said cylinder, a steam exhaust pipe having connection with the interior of said cylinder at the bottom thereof, a normally open weight controlled valve in said steam exhaust pipe to be moved to a closed position by steam admitted to sa cylinder, said valve having a bleed port therein, a branch pipe having connection with said steam supply pipe and communicating with the interior of said cylinder above said piston, and a steam operated check valve within said branch pipe controlling the passage of steam therethrough.

1,274,252. CONCRETE-MOLD. JACOB E. END. Flaming, Minn. Filed Aug. 29, 1916. Serial No. 117,479. (Cl. 25—121.)



A mold composed of two shells fashioned into form, cross bars secured to the inner shell of greater length than the space to be left between the shells, face plates secured to these cross bars and hooks pivoted to the edges of the outer shell in position to engage the protruding ends of the cross bars whereby to lock the inner and outer shells and face plates together.

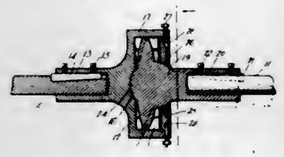
1,274,253. BELT-LOOP AND BUTTON FOR TROUSERS. ROBERT J. EWIG, Brooklyn, N. Y. Filed Sept. 26, 1917. Serial No. 193,354. (Cl. 241—11.)

1. In a device of the character set forth, a blank for the frame of flat material and comprising a rectangular head having pairs of holes therethrough, a base remote from the head and having a hole therethrough, a shank extending between the base and the center of one end of the head, and a button lug having a hole therethrough extending from the center of the end of the head opposite the shank.



2. In a device of the character set forth, a frame having a head of U-shape and having two pairs of registering holes therethrough for securing the same upon opposite sides of the fabric, a shank extending laterally from the head and thence parallel thereto, and a base secured to the other end of the shank and parallel to the head and having a hole therethrough for fastening means.
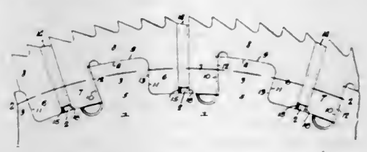
1,274,254. SHAFT-COUPLING. WILLIAM ALFRED FLEEK, Douglas, Alaska. Filed Feb. 18, 1918. Serial No. 217,916. (Cl. 64—91.)



1. A shaft coupling including a box-like member adapted to be secured to the drive shaft and presenting an annular flange having internal teeth thereon, a mating coupling section adapted to be secured to the driven shaft and presenting a ball head, the first coupling section having a central concave depression to rockably accommodate the end of the ball head, to permit the driven shaft to vary its angular position, said head having an annular series of teeth thereon mating the teeth on the first coupling section, and means to prevent displacement of the coupling sections.

2. A shaft coupling including a box-like element having an annular series of internal teeth, a mating element having an end thrust bearing centrally against the first element and formed with an annular series of teeth mating the teeth on the first element, a ring threaded in the first element and adapted to bear against the second element to retain the same in position, said ring having an annular series of notches in the front face thereof, and screws extending radially through the first element into said notches.

1,274,255. DETACHABLE-SEGMENT SAW. SAMUEL T. FREAS, Trenton, N. J., assignor to Henry Disston & Sons, Incorporated, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 3, 1917. Serial No. 194,513. (Cl. 29—105.)

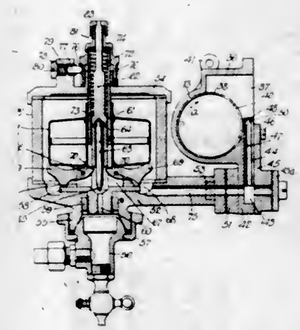


1. The combination in a saw, of a blade having a series of undercut beveled projections; toothed segmental sections having extensions, the adjoining extensions of each section being located in the space between two of the projections of the blade; and a long wedge extending from a point near the periphery of the saw to the base of the space between the two projections of the blade so as to lock the sections firmly together and to the blade.

2. The combination in a saw, of a blade having undercut projections spaced apart, one wall of each projection being beveled laterally, the other wall having a rib thereon; a series of sections, each section having a series of teeth thereon; and long wedges driven between the toothed sections and of such a width that the teeth are substantially continuous throughout the full diameter of the saw.

[Claims 3 and 4 not printed in the Gazette.]

1,274,256. CARBURETER. HERBERT H. FREY, Chicago, Ill., assignor to Stromberg Motor Devices Company, Chicago, Ill., a Corporation of Illinois. Filed June 16, 1911. Serial No. 633,492. (Cl. 261—41.)



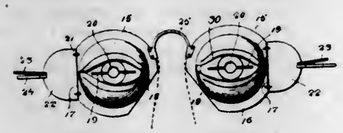
1. In a carbureter, in combination, a chamber having an air inlet, a plurality of fuel inlets disposed in said air inlet, a valve in said chamber for increasing or decreasing the size of said air inlet and simultaneously progressively respectively uncovering or covering said fuel inlets, and an angularly movable valve member for varying the size of the air inlet.

2. In a carbureter, in combination, a cylinder having a wall at each end, a bearing carried by one of said walls, a rod slidably mounted in said bearing, a piston carried by said rod in said cylinder, resilient means tending to maintain said piston at one extremity of its movement, one of said walls having openings pneumatically exposing one side of the piston to suction and the other wall having a restricted opening exposing the other side of the piston to the atmosphere so as to secure a dash pot action, a second chamber in axial alinement with said first named chamber, said second chamber having an air inlet and a plurality of fuel inlets connected therewith, and a valve carried by said rod for simultaneously varying the size of said air inlet and the number of active fuel inlets.

3. In a carbureter, in combination, a cylindrical chamber having an air inlet and a plurality of fuel inlets, a shell fitting snugly in said chamber, said shell having an opening for communication with said air inlet and being arranged to be turned angularly and manually in said chamber so as to form a valve for varying the effective size of the air inlet, and a sliding valve within the shell for varying the size of the air inlet and simultaneously varying the number of active fuel inlets, said valves being moved by a difference in pressures.

4. In a carbureter, in combination, a cylindrical chamber having an air inlet and a plurality of fuel inlets, a tube carried in said chamber, said tube having an opening for communication with said air inlet and being arranged to be moved angularly and manually in said chamber so as to form a valve for increasing or decreasing the effective size of the air inlet, and a reciprocating valve within the tube for varying the size of the air inlet and to determine the number of active fuel inlets.

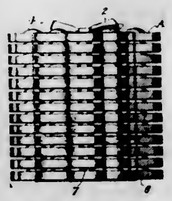
1,274,257. EYE-SHIELD. JAMES J. FURLONG, Tacoma, Wash. Filed Jan. 23, 1918. Serial No. 213,396. (Cl. 2—149.)



1. An eye protecter comprising a pair of connected concavo-convex disks formed of translucent material and provided centrally with vision permitting openings, and said disks having the representation of human eyes painted externally thereupon.

2. An eye protector comprising a pair of connected disks, each being concavo-convex in form and provided with vision permitting openings, a peripherally extending flat face engaging flange on each disk formed to accommodate the wearer's nose and having its outer portion cut away on a vertical line, and a side guard member hinged upon said vertical edge.

1,274,258. SMOKELESS-POWDER CHARGE. CLARENCE GERDOM, Fort Hancock, N. J., assignor to Ordnance Improvement Company, New York, N. Y., a Corporation of New York. Filed Jan. 27, 1915. Serial No. 4,615. Renewed Sept. 5, 1917. Serial No. 189,883. (Cl. 102—13.)



1. A gun charge of smokeless powder comprising a series of unit grains assembled and detachably bound together in collective form to fit the gun chamber, having continuous longitudinal and lateral gas passages therethrough, and provided with an ignition powder element extending longitudinally therethrough.

3. A smokeless powder charge, comprising similar interlocked grains, tying devices confining them in assembled position, and an ignition charge removably arranged therein.

5. A smokeless powder charge comprising, a series of interlocking disk-like grains, tying devices confining them in assembled position and an ignition charge removably arranged therein.

7. A powder charge comprising two elements, viz: a propulsive element made up of smokeless powder grains confined in a homogeneous mass to fit the gun chamber and an ignition element arranged as a core therein and extending longitudinally substantially therethrough.

10. A two part powder charge comprising a propulsive element of smokeless powder grains confined in a mass adapted to fit a gun-chamber and an independent ignition charge extending longitudinally substantially therethrough and itself having a free air passage extending longitudinally therethrough.

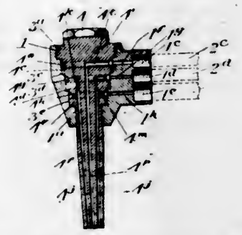
[Claims 2, 4, 6, 8, and 9 not printed in the Gazette.]

1,274,259. AUTOMOBILE-SIGNAL. JAMES M. GILCHREEST and ELLIS F. GRAHAM, Denver, Colo. Filed Nov. 17, 1914. Serial No. 872,587. (Cl. 116—31.)

An automobile signal adapted to be secured to the wind shield of an automobile, said signal comprising a bar having a perforation in its upper extremity and secured to the said shield in an upright position, a second bar pivoted at one extremity and adapted to occupy an upright position in coöperative proximity to the stationary bar, a flexible flag mounted upon said second bar, a flexible device connected with the free extremity of the second bar and passing through the perforation in the upper extremity of the first bar, permitting the second bar to swing about its pivot to a position at right angles to the first bar and at right angles to the direction of travel of the automobile, and means mounted upon the flexible device and adapted to engage said first bar adjacent the perforation to maintain the second bar at the position perpendicular to the first bar substantially as described.



1,274,260. BLOW-TORCH. ANGUS R. GROSS, Baltimore, Md. Filed Mar. 17, 1917, Serial No. 155,576. Renewed Dec. 24, 1917. Serial No. 208,700. (Cl. 158—27.4.)



1. In a blow torch, the combination of a head having a bore extending therethrough, and a plurality of gas supply passages connected with said bore; of a removable nozzle extending entirely through the bore of the head and having a portion fitting the bore, and a stem projecting out of the head at one end of the bore, said stem having a longitudinal passage communicating with one of the said gas supply passages in the head and also having a passage extending through the stem beside the first passage and communicating with the other gas passages, substantially as described.

2. In a blow torch, the combination of a head having a bore extending therethrough and provided with a threaded portion, and a plurality of gas supplying passages connected with said bore; of a removable nozzle extending entirely through the bore of the head and having a portion fitting the bore of the head and provided with a threaded portion engaging the internally threaded portion of the bore to fasten the nozzle therein; said nozzle also having a stem projecting out of the head at one end of the bore and a longitudinal passage extending through the stem and communicating with one of the gas supply passages, and also having other passages extending through the stem beside the first passage and communicating with the other gas supply passages, said nozzle being removable and replaceable, substantially as described.

3. In a blow torch, the combination of a head having a bore extending therethrough provided with a threaded portion at its larger end and a shank provided with a plurality of passages for connection with heating gas supplies; with a removable nozzle having a portion adapted to fit the opening of the head and provided with a threaded portion engaging the threaded portion of said bore to secure the nozzle therein; said nozzle also having a reduced stem portion extending through the smaller end of the bore and projecting out of and from the head, said stem having an axially disposed passage extending therethrough and communicating with the uppermost gas channel, and said stem also having another passage extending therethrough communicating with both the other gas channels, substantially as described.

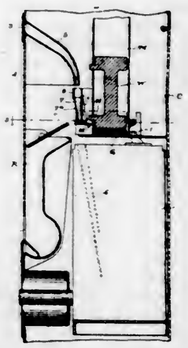
4. In a blow torch, the combination of a head having a bore extending therethrough and provided with a threaded portion at its larger end, and a shank provided with three passages for connection with gas supplies communicating with the bore; with a removable nozzle having a portion adapted to fit in the opening of the head and provided with a threaded portion engaging the threaded portion of said opening to secure the nozzle therein, and also having annular channels respectively communicating with the adjacent gas supply passages, said nozzle also having a reduced stem portion extending through the reduced end of the bore and projecting from the head, said stem having a bore extending therethrough and communicating with one annular channel and also having another bore or passage extending therethrough communicating with both the other annular channels, substantially as described.

5. A blow torch, comprising a body having an axially disposed bore having three annular steps between its upper and lower ends, said steps successively increasing in diameter, said body also having three passages respectively leading from said steps and adapted to be respectively connected to gas supplies; with a removable interchangeable nozzle having a body portion fitted within the bore of the head and provided with three step-portions respectively engaging the step-portions of the bore, each step-portion of the nozzle having an annular channel communicating with the adjacent gas passage in the head; said nozzle also having a reduced stem portion extending out of the body when the nozzle is engaged therewith, said stem having a passage extending to and communicating with the annular channel in one step of the nozzle and having another passage extending to and communicating with the annular channel in another step of the nozzle, the latter passage also communicating with the channel in the third step of the nozzle, substantially as described.

[Claims 6 and 7 not printed in the Gazette.]

1,274,261. COIN-REFUNDING DEVICE FOR COIN-CONTROLLED MACHINES. ALBERT D. GROVER, New York, N. Y., and EARL E. BARBER, Malden, Mass., assignors, by mesne assignments, to Autosales Corporation, a Corporation of New York. Original application filed July 27, 1912, Serial No. 711,797. Divided and this application filed Oct. 12, 1915. Serial No. 55,372. (Cl. 194—1.)

1. In a coin-controlled vending machine, a casing having a coin-entrance slot and a delivery opening below said slot, a magazine for holding the vendible articles, mechanism below said magazine for ejecting the articles through the medium of the deposited coin, a coin-chute leading from said slot to said mechanism to guide the deposited coin into proper position, a delivery chute in front of said mechanism for receiving the ejected articles, said delivery chute terminating in said delivery opening, a pivoted switch forming part of said coin-chute and arranged in front of the lower end of said magazine, said switch being normally in a position to direct the deposited coin through said coin-chute to said mechanism, a weight or follower in said magazine, and means on said weight for automatically swinging said switch into alinement with said delivery-chute after the last article has been ejected, whereby the coins deposited when the magazine is empty are refunded through said delivery chute without reaching said mechanism.



5. In a coin-controlled vending machine having a casing provided with a magazine, a weight adapted to rest in said magazine on top of the goods, a coin-chute carried by the front wall or panel of said casing in front of said magazine, a delivery chute secured to said front wall below said coin-chute and said magazine for receiving the goods from said magazine, a pivoted switch associated with said coin-chute near the lower end of said magazine and provided with an extension, and a lug on said weight adapted to engage said extension when the magazine is empty and thereby rock said switch into position to divert the coins into said delivery chute.

[Claims 2 to 4 not printed in the Gazette.]

1,274,262. PHOTOGRAPHIC SHUTTER. OTTO H. GRUSS, Jamaica, N. Y., assignor to Simplex Photo Products Company, Morris Park, N. Y., a Corporation of New York. Filed Aug. 20, 1914, Serial No. 857,685. Renewed Dec. 26, 1917. Serial No. 208,983. (Cl. 95—63.)



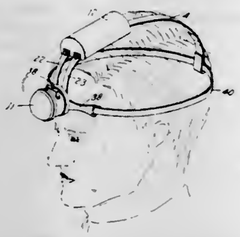
1. In a photographic shutter, the combination with the casing, shutter flies suitably supported and a driving member therefor, of a driving spring for the driving member operatively connected therewith, an adjustable member for energizing the driving spring comprising a screw-barrel having a ratchet and an external setting lever connected therewith, and said adjustable member being connected to the driving spring, an indicator collar threaded to the screw barrel, a pointer on the indicator collar extended through a slot to the exterior of the casing, a stationary holding detent on the casing to be engaged by the ratchet and suitable marking to co-act with the pointer for indicating the interval of exposure for which the driving element is set.

5. In a photographic shutter, the combination with the shutter flies, a driving member therefor and a driving element operatively connected with said member, of an air-check device suitably arranged, means for effecting engagement of the air-check device with the driving member to act as a buffer therefor at the end of its movement, connections for effecting retarding engagement between the air-check device and the driving member when the flies are in exposing position, a valve member for regulating the resistance of the air-check device and a single adjusting member connected to both said connections and to said valve member whereby it will operate to effect engagement and disengagement of the connections for retarded and unretarded exposures and to regulate the interval of retarded exposure.

10. In a photographic shutter, the combination with the flies, a driving member therefor and a driving element operatively connected with said member, of an air-check device suitably arranged, a retard contact arm suitably fulcrumed to be rocked into position of engagement with the drive-member provided with an inclined engaging surface, a shoulder on the drive-member opposed to the inclined surface to engage said surface and produce an outwardly directed thrust thereon, connections interposed between the contact arm and the air check whereby withdrawal of the contact arm from engaging position is retarded by the latter, said connections comprising a shifting member, a cam lever suitably fulcrumed thereon to engage the contact arm for retarding its movement and pivotal connections from the cam-lever to the air check, a spring connected to the pivotal connections and to the contact arm to supplement the inclined surface of the latter in effecting its movement and operative to shift the cam lever to permit the withdrawal of the contact-arm, engaging means initially to retain the contact arm in engaging position and for the setting thereof, an adjusting member having a cam groove and a projection provided on the shifting member to enter the groove whereby the retarding parts are adjusted to operate for making retarded exposures or to be inoperative for making rapid exposures.

[Claims 2 to 4, 6 to 9, and 11 to 13 not printed in the Gazette.]

1,274,263. COMBINATION HEAD-LAMP AND FLASH-LIGHT. CAMERON G. HAMILTON, Seattle, Wash., assignor of one-half to Cullen K. Sturtevant, Seattle, Wash. Filed June 7, 1917. Serial No. 173,378. (Cl. 240—8.5.)



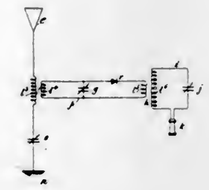
1. Apparatus of the class described, embodying a lamp, means to support said lamp upon the forehead of the user, including a battery and electrical circuit connections between the battery and said lamp, and a container having an open end adapted to receive said supporting means, said lamp forming the closure to said open end of the container.

4. Apparatus of the class described, embodying a lamp, a battery, electrical circuit connections therebetween a cylindrical container having an open end, said lamp forming a closure for said open end and provided with screw-thread on its exterior, and a screw-threaded nut rotatably secured about the open end of the container and arranged to engage said lamp to secure the same to the container without relative rotation of the secured elements.

6. Apparatus of the class described, embodying a lamp adapted to be worn upon the forehead, straps for securing said lamp in said position, a battery, and electrical circuit connections between said battery and the lamp and a cylindrical casing having an open end of which said lamp provides a closure, the compartment within said casing arranged to receive said battery, straps and connections.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,274,264. METHOD OF SELECTIVE ELECTRIC-WAVE SIGNALING. JOHN HAYS HAMMOND, Jr., Gloucester, Mass. Filed Apr. 27, 1912, Serial No. 693,765. Renewed Dec. 28, 1917. Serial No. 209,377. (Cl. 250—8.)



1. The method of receiving continuous waves of radiant energy having a given wave frequency and a regular periodic variation in amplitude, which consists in first causing said radiant energy to produce a unidirectional pulsating current having a wave frequency determined by the wave frequency of the received radiant energy and having a regular periodic variation in amplitude having a frequency determined by the frequency of the periodic variation of the received radiant energy, and then producing from said pulsating current an electric current having an amplitude variation of a frequency determined by the frequency of said periodic variations.

2. The method of receiving continuous waves of radiant energy having a given wave frequency and a regular periodic variation in amplitude, which consists in first causing said radiant energy to produce a unidirectional pulsating current having a wave frequency determined by the wave frequency of the received radiant energy and having a regular periodic variation in amplitude having a frequency determined by the frequency of the periodic variation of the received radiant energy, and then inductively producing from said pulsating current an electric current having an amplitude variation of a frequency determined by the frequency of said periodic variations.

1,274,265. AUTOMATIC GUIDE-LIGHT FOR VESSELS. JOHN HAYS HAMMOND, Jr., Gloucester, Mass. Filed Aug. 14, 1913, Serial No. 784,689. Renewed Nov. 17, 1916. Serial No. 131,958. (Cl. 114—21.)



1. A system of guides for a vessel and a float or floats towed thereby, comprising a guide on the vessel, means to direct the guide in a fixed direction, a guide on each float, and means to control said float guide or guides to allow the same to act as guides only when the float carrying such guide is pointed in a predetermined direction.

26. A system of control comprising a main dirigible marine vessel, a subsidiary dirigible marine vessel movable with respect to said main vessel, a gyroscope carried by said main vessel and movable with respect thereto, and a subsidiary element carried by said subsidiary vessel and controlled by said gyroscope.

35. A system for revealing the position of a plurality of separately movable bodies, comprising a position revealing lamp mounted on each of said bodies, and stabilizing means carried by one of said bodies and arranged to control the functioning of said position revealing lamps and to cause one of said lights to be illuminated only when the corresponding body is directed along a predetermined line.

[Claims 2 to 25 and 27 to 34 not printed in the Gazette.]

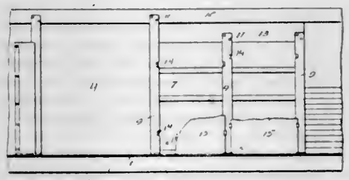
1,274,266. DEVICE FOR PREVENTING HENS FROM SETTING. HATTIE ROSSIE HAYES, Salix, Iowa. Filed Dec. 29, 1917. Serial No. 209,527. (Cl. 119—97.)



2. A device as described comprising a body portion formed from a single piece of wire and having a forward loop adapted to pass over the anterior portion of the body of a fowl and being open at its lower side, legs depending from the said loop, side portions extending rearwardly from the said legs, other legs depending from the rear ends of the side portions, a loop provided at the upper ends of the last mentioned legs and and adapted to pass over the posterior portion of the body of the fowl and a spring connected with one of the loops and detachably connected with the other and adapted to lie along the back of the fowl.

[Claim 1 not printed in the Gazette.]

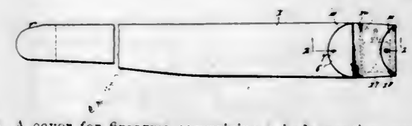
1,274,267. SLIDING DOOR. ALFRED A. HEBERT, Chippewa Falls, Wis. Filed Aug. 16, 1916. Serial No. 115,305. (Cl. 20—31.)



In combination with a sliding door comprising superposed slidably related sections, fixed supporting tracks for the several sections, and arranged between said sections, said tracks being of inverted V-shape cross sectionally and the opposing edges of the door sections being shaped to correspond with the tracks.

1,274,268. COVER FOR FIREARMS. CARL S. HERMANN, Newark, Ohio. Filed Nov. 6, 1917. Serial No. 200,554. (Cl. 224—2.)

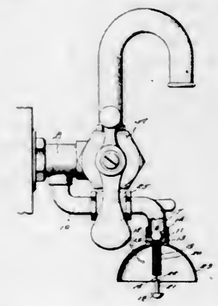
1. A cover made from a blank having a pocket laid on one half portion thereof and stitched thereto along one edge, said pocket being folded over on the stitched edge to the opposite side of the blank, the body of the blank being folded over at substantially right angles and secured together along its edges, and a suitable closure being provided for said cover, substantially as described.



5. A cover for firearms comprising a body portion made of suitable flexible material, a pocket also made of suitable flexible material secured to the open end of said cover and adapted to fold within same, a closure secured to the open end of the cover and adapted to close same when said pocket is folded therein, the joint between the cover, pocket and closure presenting inwardly extending raw edges, and a binding and strengthening strip passing about on the interior of the mouth of said cover and concealing the joint therewith made by said closure and pocket, substantially as described.

[Claims 2 to 4 not printed in the Gazette.]

1,274,269. SANITARY HAND-SPRAY. SIMON HUFFER, Decatur, Ill. Filed May 22, 1917. Serial No. 170,285. (Cl. 137—80.)



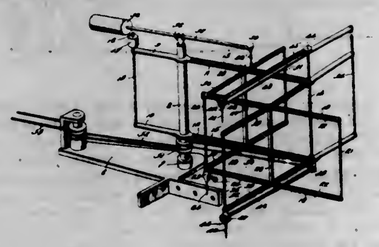
1. A hand spray comprising a member formed to provide a bell-shaped element, a bushing rising therefrom and threaded for engagement with a supply pipe, a series of passages formed in the bushing and directed downwardly and toward the element, a valve for closing the ends of said passages remote from the element, and means extending centrally of the element and depending below the lower edge thereof for operating the valve.

2. A hand spray, comprising a bell-shaped element having an integral bushing rising therefrom, said bushing being formed with a series of passages directed downwardly and toward the element, a valve closing the ends of all such passages remote from the element, and means extending centrally of the element and within the discharge ends of said passages for operating the valve.

1,274,270. GEOMETRIC WOOD-CARVER. ALBERT INGLESE, San Francisco, Cal. Filed Jan. 12, 1917. Serial No. 142,068. (Cl. 90—13.1.)

1. In a device of the class described, a supporting device, a vertical column rigidly mounted thereon, a frame pivotally mounted on the column and comprising upper and lower slotted arms, a rod connecting certain of the ends of the arms, a second rod connecting the opposite ends of the arms and extending above the upper slotted arm, a second frame parallel with that first named and pivotally connected therewith, means for mounting the second frame for movement about a central axis, a third frame including a plurality of slotted arms pivotally connected with the arms first named and with the second frame, an engraving tool carried by the third frame, a

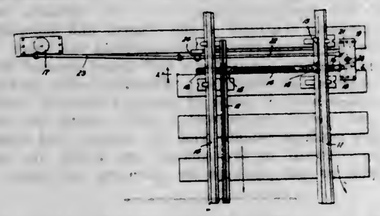
guiding tool carried at the end of the second frame, an upper arm carried by the third frame and extending longitudinally thereof, and an engraving tool carried by the upper arm and in substantial alinement with the engraving tool first named.



2. In a device of the class described, a supporting device, a column rigidly mounted thereon, a frame pivotally mounted on the column, means for counter-balancing the frame, said frame including upper and lower slotted arms, a rod connecting certain of the ends of the arms and extending above the upper arm, a frame mounted parallelly with reference to the frame first named and having pivotal movement corresponding with the movement of the frame first named, a third frame connected with said rod forming a part of the first frame and rigidly connected with the central portion of the second frame, an engraving tool mounted at one end of the third frame, said third frame including an upper longitudinal bar, an engraving tool carried at one end of the upper bar and in substantial alinement with the tool first named, means for imparting rotation to the engraving tools, and a guiding tool carried by the second frame.

3. In a device of the class described, a supporting column, a frame pivotally mounted with reference thereto, a second frame operating with the first frame, a third frame connected with the first and second frames and controlled thereby, said third frame carrying a plurality of engraving tools one of which is located above the frame proper and in substantial alinement with the other of said tools, and work supporting devices mounted below said tools.

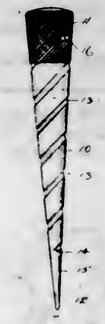
1,274,271. RAILWAY-SWITCH MECHANISM. JOHN D. ISAACS, New York, and CARROLL R. HARDING, Brooklyn, N. Y. Filed Mar. 28, 1918. Serial No. 225,284. (Cl. 104—12.)



1. The combination with the movable switch points of a railway switch and a rigid head rod connected directly to both of them, of a switch stand located on the main line side of the switch, and connections between the switch stand and said head rod serving to prevent the buckling of the head rod from separating the normally closed switch point from its rail.

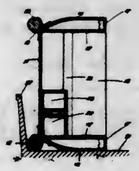
2. The combination with the movable switch points of a railway switch and a head rod connected directly to both of them, of a switch stand located on the main line side of the switch, and connections between the switch stand and the end of the head rod on the turnout side of the switch serving to positively hold the switch point on the turnout side against the stock rail while the switch stand is set for a closed switch, said connections including a lever pivoted on the turnout side, means connecting one end of the lever to the adjacent end of the head rod, and a switch rod connected to the other end of the lever.

1,274,272. MARLINESPIKE. JOHAN E. JOHANNESSEN, Brooklyn, and OSBORNE A. WAAGE, New York, N. Y. Filed Feb. 3, 1917. Serial No. 146,505. Renewed June 21, 1918. Serial No. 241,291. (Cl. 114—225.)



A marline spike having a handle portion and a tapering working portion substantially cylindrical in cross-section throughout its length, said working portion having on its exterior surface a plurality of longitudinally-disposed channels adapted to carry lubricant, the edges of said channels being rounded to prevent abrading the work.

1,274,273. CONVERTIBLE RAFT AND THE LIKE. SAMUEL MATHEW JOHNSON, Cardiff, Wales, assignor to Johnson's Convertible Boats and Rafts Limited, Cardiff, Wales. Filed Mar. 4, 1918. Serial No. 220,208. (Cl. 9—3.)



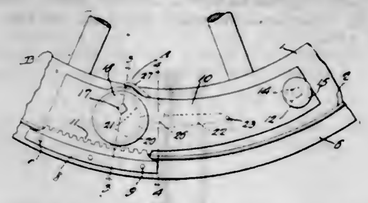
1. A structure adapted to serve as a raft or a covered deck seat, comprising a boat-like body having water-tight compartments in its sides closed by doors, and provided with pontoons secured thereto at the junction of its bottom and sides, and with two longitudinally extending seat-lockers, one of which is transversely slidable to permit it to rest on the other when the structure is used as a covered seat.

2. A structure adapted to serve as a raft or a covered deck seat, consisting of an oblong and substantially rectangular body having approximately flat sides and ends, the structure being closed at the bottom and open at the top so as to form a well, pontoons secured to the body at the junction of its bottom and sides, and a seat locker at each side of the body and extending the length thereof, one of the lockers being mounted to slide transversely to rest upon the other locker when the structure is placed on its side and used as a covered seat.

[Claims 3 and 4 not printed in the Gazette.]

1,274,274. SECTIONAL WHEEL-RIM. CLARENCE S. JOHNSTON, Glendive, Mont. Filed May 24, 1917. Serial No. 170,747. (Cl. 152—21.)

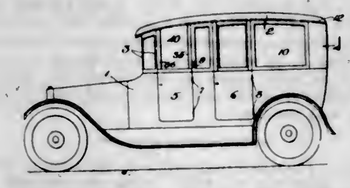
1. In a device of the class described, a wheel body; a rim circumscribing the body; the rim and the body having circumferentially inclined parts which coact when the rim is moved circumferentially of the body; a plate pivoted to the body for movement circumferentially of the body and radially of the body in a direction parallel to the median plane of the body, the plate and the rim having



interengaging elements; and an eccentric journaled on the body and journaled in the plate, the eccentric constituting means for moving the plate radially of the body to bring said elements into engagement, and constituting means for moving the rim circumferentially of the body.

[Claims 2 and 3 not printed in the Gazette.]

1,274,275. CONVERTIBLE AUTOMOBILE-TOP. MINAS H. KASHIAN, Amesbury, Mass. Filed July 24, 1916. Serial No. 110,838. (Cl. 21—62.)



1. A door for automobile bodies having a lower portion hinged to the body and removable top portion adapted to be housed within said lower portion, guides in which the top portion slides when in raised position, and means connecting said guides with the door portion, said means acting to move said guides laterally away from the door edges, upon the housing of the top within the lower portion.

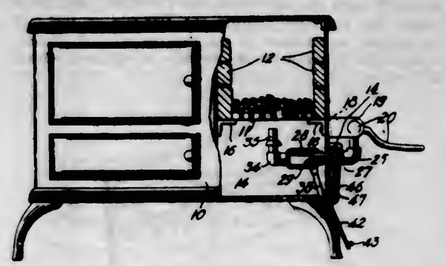
2. A door for automobile bodies having a lower portion hinged to the body and removable top portion adapted to be housed within said lower portion, guides in which the top portion slides when in raised position, and hinges connecting said guides to the body portion permitting them to be folded downwardly against said door portion in combination with automatic means to move the guides laterally and inwardly as they are folded downwardly.

3. A door for automobile bodies having a lower portion hinged to the body and removable top portion adapted to be housed within said lower portion, guides in which the top portion slides when in raised position, and beveled faces coöperating with said hinges to move the guides laterally and inwardly as they are folded downwardly against the door.

4. A door for automobile bodies having a lower portion hinged to the body and removable top portion adapted to be housed within said lower portion, guides in which the top portion slides when in raised position, and beveled faces coöperating with said hinges to move the guides laterally and inwardly as they are folded downwardly against the door, said beveled faces terminating in shoulders acting to lock the guides either in folded position or in raised position and yielding means to hold said parts in said locked position.

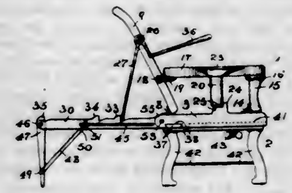
1,274,276. FUEL-IGNITER. ANTHONI KASLAITIS, New Haven, Conn. Filed Mar. 21, 1918. Serial No. 223,737. (Cl. 158—10.)

2. In a fuel igniter, the combination with a fire-box containing a grate, and a source of gas supply, of a bracket exterior of said fire-box, a tubular element rotatably supported in said bracket, said tubular element being connected with said source of gas supply, angular connections engaged with said tubular element, a telescopic casing slidably connected with said angular connections, a pair of burners attached to said telescopic casing, means for the inlet or outlet of said telescopic casing from said fire-box, a supporting arm pivotally engaged with said telescopic casing, and means for holding said supporting arm in either of two adjusted positions.



[Claims 1, 3, and 4 not printed in the Gazette.]

1,274,277. INVALID'S BACK-REST OR SUPPORT. JOHN A. KIESELE, Maplewood, N. J. Filed Nov. 28, 1917. Serial No. 204,301. (Cl. 155—22.)



6. In a device of the character specified, a main seat-member, sustaining members projecting rearwardly from said seat-member, a back-rest pivotally connected with said seat-member, a sustaining means coöperating with said rearwardly projecting sustaining members and with said back-rest for adjusting said back-rest with relation to said seat-member, arm-rests movably disposed with relation to both said back-rest and said seat-member, stop-lugs connected with said seat-member, said stop-lugs being provided with steps, and posts depending from said arm-rests, said posts being adapted to be brought into retaining engagement with the steps of said stop-lugs, combined with steadying supports projecting laterally from said seat-member to prevent tilting sidewise.

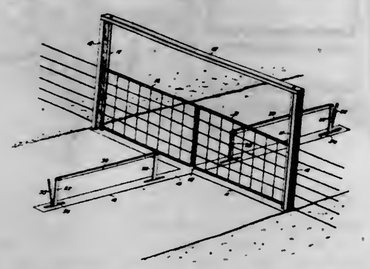
11. In a device of the character specified, a main seat-member, sustaining members projecting rearwardly from said seat-member, upwardly projecting retaining lugs upon said sustaining members, a back-rest pivotally connected with said seat-member, a sustaining brace consisting of a pair of side-arms pivotally connected with said back-rest, and a connecting bar between said side-arms, said connecting bar being adapted to be brought into holding engagement with said retaining lugs for adjustment of said back-rest with relation to said seat-member, and means between said rearwardly projecting sustaining members and said seat-member for separably connecting said sustaining members with said seat-member, combined with a chair-like support or base detachably connected with said seat-member, and sustaining braces connected with said rearwardly projecting sustaining members.

[Claims 1 to 5 and 7 to 10 not printed in the Gazette.]

1,274,278. AUTOMATIC GATE. ROBERT M. KING, Wauneta, Nebr. Filed Aug. 25, 1917. Serial No. 188,103. (Cl. 39—29.)

1. The combination with a pair of swinging gates, of a mechanism disposed beneath the ground for moving said

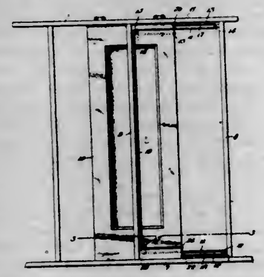
gates to an open position, said mechanism including a vehicle actuated element projecting above the ground, means for locking said gates in closed position and said means including a vehicle actuated element pivotally mounted upon the afore-mentioned element and yieldable means for normally holding the element of the locking mechanism in advance of the first mentioned element to be initially engaged by the vehicle to effect a release of said gates.



3. The combination with a pair of swinging gates, of a mechanism for controlling the movement of said gates, and including a pair of spaced vertically disposed elements pivoted at a point between their ends, a rod connecting the lower extremities of said elements, a bar connecting the upper extremities of said elements, a connection between said rod and gates whereby the latter are moved to open position upon moving of said rod in one direction, one of said elements being disposed in the path of travel of the vehicle to be engaged by the latter whereby said elements and rod are actuated to open said gates, a spring encircling said rod and operable to automatically return the gates to their normal positions subsequent to the passing of the vehicle through the gateway, and means for locking said gates in closed positions.

[Claims 2 and 4 not printed in the Gazette.]

1,274,279. EQUALIZER FOR SLIDING DOORS, DRAWERS, OR THE LIKE. FREDRICK A. KINGHAN, Renwick, Iowa, assignor of one-third to William Black, Renwick, Iowa. Filed May 22, 1917. Serial No. 170,335. (Cl. 20—19.)



The combination with a frame including a rear rail and spaced forward rails and a member slidable in the frame and between the forward rails, of pulleys secured to the upper and lower ends of each forward rail, a pulley secured to the upper end of the rear rail on one side of the plane of movement of the member, another pulley secured to the lower end of the rear rail on the opposite side of the plane of movement of the member, a flexible connector terminally secured to the member near the lower end and on one side thereof, passed over the lower rear rail pulley, then forwardly and over the lower and upper forward rail pulleys on the same side, and then secured to the rear edge of the member, and a second flexible connection secured to the member near the upper end and on one side thereof and trained over the respective pulleys on that side of the member and terminally secured to the lower edge of the member.

1,274,280. CLOTHES-PIN. JOHN P. KOOB, Sunapee, N. H. Filed Sept. 11, 1917. Serial No. 190,797. (Cl. 24—138.)



A single piece clothespin comprising a body round in cross section, formed with a head, a flaring cut extending from the end opposite said head, facing notches at the inner end of said flaring cut, a straight saw cut uniform in width extending from said facing notches toward said head acting as an elongation of said flaring cut, and a third cut at right angles to said flaring cut, said third cut extending from the end opposite said head to a point opposite said notches.

1,274,281. PROJECTILE. GUS J. KOWALSKI, Detroit, Mich. Filed Feb. 16, 1918. Serial No. 217,562. (Cl. 102—26.)



1. An aerial projectile having a squared rear end or base and provided with means normally collapsed adjacent to said base for forming a cone shaped extension covering the base, and a normally inactive member for guiding said sections into extended operative position.

3. An aerial projectile having an axial bore extending therein from its rear end, a plunger movable in the bore, a spring engaging the inner ends of the plunger to normally force the latter rearwardly, a radially extending locking pin normally engaging the plunger to hold the latter in inner retracted position, a shiftable latch member normally holding the lock pin in engaged position, a conical head carried by the outer rear end of the plunger, a series of frusto conical rings of varying diameters telescoped within one another at the base of the projectile and including an outer ring secured to the projectile, and an inner ring engageable by the said conical head of the plunger for the purpose described.

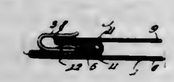
5. A projectile having a sectional cone shaped extension at the rear end thereof, the sections of which are engageable and disengageable by movement in a direction parallel to the longitudinal axis of the projectile, means for normally supporting the said sections in detached relation at the rear end of the projectile, and means releasable when the projectile is propelled from a gun for shifting the said sections into active relation forming the cone.

7. A projectile provided with a collapsible cone shaped projection at its rear end normally held in collapsed position, means for extending the same to active position, and latch controlled means engaging said first named means to normally hold the same inactive including a latch member automatically shiftable to released position in the bore of a gun.

8. A projectile having an extensible and collapsible cone shaped extension at its rear end normally held in collapsed position, and automatically controlled means for guiding the same to active position when the projectile is discharged from the gun, said means being normally locked within the rear portion of the projectile.

[Claims 2, 4, and 6 not printed in the Gazette.]

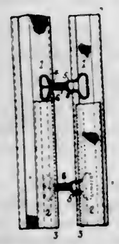
1,274,282. GARMENT-FASTENER HOLDER. ERWIN KRAMER, Carlstadt, N. J. Filed Nov. 17, 1916. Serial No. 131,889. (Cl. 2—58.)



1. In a garment fastener holder the combination of a strip of material folded on itself to form a base fabric, fastening members secured to the upper fold of the base fabric, the strip then being reversely folded and doubled and extended partially over the fastening members to form a facing fabric and stitching extending through the folded strip to hold the parts together.

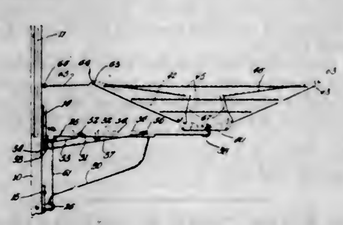
[Claims 2 and 3 not printed in the Gazette.]

1,274,283. HOOK-AND-EYE TAPE. ERWIN KRAMER, Carlstadt, N. J. Filed Mar. 22, 1917. Serial No. 156,711. (Cl. 2—57.)



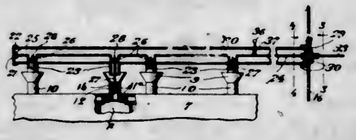
A hook or eye tape consisting of a base fabric, a facing fabric, stitching securing the latter fabric to the former at a point back from the edge thereof to provide a continuous marginal pocket, and perforations formed in the base directly in the line of stitching.

1,274,284. CLOTHES-DRIER. FRANK KRAVIECZ, Hartford, Conn. Filed Apr. 11, 1918. Serial No. 227,868. (Cl. 68—3.)



In a clothes drier, the combination with a pair of brackets, one arranged vertically in alinement with the other, supports movable in said brackets, an arm pivoted on said supports, braces for said arm extending to the lower of said supports, a second arm pivoted on the first named arm, means for limiting the action of said second arm, a turn-table pivoted at the extremity of said second arm, a frame fixed on said turn-table, said frame carrying a plurality of cords, means for locking said frame against rotation and means for holding said arms rigidly when fully extended.

1,274,285. PRIMING MECHANISM FOR INTERNAL-COMBUSTION ENGINES. ELMER P. KRAY, North Yakima, Wash. Filed May 17, 1916. Serial No. 98,168. (Cl. 123—187.5.)



1. Priming mechanism including a priming cup, an outlet valve for said cup, a conduit for the supply of fuel, an outlet member leading from said conduit to said cup, a rod within the conduit provided with a crank, a valve actuating member pivoted to said crank and extending through said outlet member and engageable with the valve to shift the same, and means to turn said rod.

4. Priming mechanism including a priming cup having a valve, a fuel supply tank, a conduit leading from said tank, means to fasten the conduit to said tank, a closure cap for one end of said conduit having a bearing, said conduit having an outlet member leading to said cup, a rod within the conduit journaled in said bearing, a valve movable with said rod, said valve and tank having coöperating ports, means to turn said rod comprising a crank, said conduit having an elongated slot through and in which said crank extends and moves, said rod having a second crank, and a valve shifting member pivoted on said second crank, and extending through said outlet member and engageable with the valve of the priming cup.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,274,286. CLOTHES-PIN. EDWARD KUTIN, Harrah, Okla. Filed Mar. 5, 1918. Serial No. 220,575. (Cl. 24—253.)



A clothes pin comprising a pair of substantially U-shaped frames forming jaws, each frame having a pair of coils bent therefrom, a sleeve engaged in the coils transversely of the frames, a coiled spring within the sleeve, eyes formed on the frames, arms formed at the ends of the spring and engaged in the eyes, a pivot passed through the coils of the spring, and handles active upon the frames for permitting the opening of the jaws against the resistance of the spring.

1,274,287. [WITHDRAWN.]

1,274,288. KNIFE. HALSEY M. LARTER, Newark, N. J., assignor to Larter & Sons, Newark, N. J., a Firm composed of Frederick H. Larter, Harry C. Larter, and Halsey M. Larter. Filed Oct. 22, 1915. Serial No. 57,242. (Cl. 30—10.)

1. In a knife, the combination of opposite case sections or leaves adapted to fold together and provide an interior chamber, said sections or leaves being hinged at one longitudinal edge and adapted to close together at the opposite edge, a blade-carrying portion between said sections

or leaves and pivoted thereto adjacent their hinged edges, and a blade mounted in said blade-carrying portion to swing in the plane of the sections or leaves when closed.

2. In a knife, the combination of opposite case sections or leaves adapted to fold together and provide an interior chamber, said sections or leaves being hinged at one longitudinal edge and adapted to close together at the opposite edge, a blade-carrying portion between said sections or leaves and pivoted thereto adjacent their hinged edges, and a blade mounted in said blade-carrying portion to swing in the plane of the sections or leaves when closed.



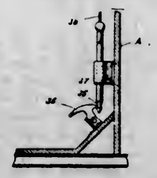
3. In a knife, the combination of opposite case sections or leaves adapted to fold together and provide an interior chamber, said sections or leaves being hinged at one longitudinal edge and adapted to close together at the opposite edge, a blade-carrying portion between said sections or leaves and pivoted upon the same hinge pin therewith, and a blade mounted in said blade-carrying portion to swing in the plane of the sections or leaves when closed.

4. In a knife, the combination of opposite case sections or leaves adapted to fold together and form an interior chamber, said case sections or leaves being hinged together at one longitudinal edge and adapted to close together at the other edge, a blade-carrying portion open at one edge between said sections or leaves and pivoted thereto by its closed edge adjacent their hinged edges, and a blade mounted in said blade-carrying portion to swing into and out of the same through its said open edge.

5. In a knife, the combination of opposite case sections or leaves adapted to fold together and provide an interior chamber, said sections or leaves being hinged at one longitudinal edge and adapted to close together at the opposite edge, means for normally holding said sections or leaves either closed or wide open, a blade-carrying portion between said sections or leaves and pivoted thereto, and a blade in said blade-carrying portion adapted to swing in the plane of the sections or leaves when closed.

[Claims 6 to 11 not printed in the Gazette.]

1,274,289. AUTOMOBILE-SIGNAL. ANTONE J. LEWIS, Irvington, Cal. Filed July 9, 1917. Serial No. 179,448. (Cl. 116—31.)



2. The combination with a spring actuated signal arm, of a slidably mounted element, a pedal located in the path of movement of said element, means carried by the latter for detachable engagement with the pedal and an annular shoulder formed on the slidably mounted element for engagement with the pedal, whereby the signal arm will be held against movement.

3. The combination with a spring actuated signal arm, of a slidably mounted bolt, a flexible element connecting said bolt with the signal arm, a spring actuated pedal mounted in the path of movement of the bolt and an annular shoulder formed on said bolt for engagement with said pedal, whereby the latter will hold the signal arm against movement.

[Claim 1 not printed in the Gazette.]

1,274,290. REPEATING ACCELERATOR FOR COMPRESSED-AIR BRAKES. JOSEPH DE LIPKOWSKI, Paris, France. Filed Jan. 5, 1918. Serial No. 210,508. (Cl. 188—14.)

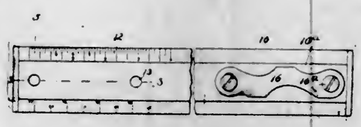


2. In an accelerator for compressed air-brakes, means for repeating the working of said accelerator at each partial successive application of the brakes and means for producing always the same relative fall of pressure in the train-pipe at each successive partial application.

3. In an accelerator for compressed air-brakes, means for repeating the working of said accelerator at each partial successive application of the brakes, means for affording automatically, for the first application of the brakes, a fall of pressure in the train pipe greater than for the following complementary applications which progressively diminish in intensity, and means for accelerating the release of the brakes by causing to pass, at this moment, into the train pipe, compressed air contained in a separate reservoir, arranged under each vehicle and which had retained the whole of its pressure while the air in the train pipe has undergone the decrease of pressure necessary to insure the application of the brakes.

[Claim 1 not printed in the Gazette.]

1,274,291. RULER. CHARLES H. LITTLE, East Cleveland, Ohio. Filed Oct. 5, 1911. Serial No. 652,918. (Cl. 33—107.)



1. A ruler comprising a hollow body formed from a strip of thin sheet metal and having a top portion which is beveled or inclined downwardly to both edges, and a bottom portion formed by bending lateral portions of the strip inwardly at an acute angle to the beveled portions, thereby providing finished parallel ruling edges.

8. A ruler comprising a metal body provided with a coating adhering thereto and with a strip cemented to the coating.

10. A ruler comprising a metal body provided with a coating adhering thereto and with a celluloid strip cemented to the coating.

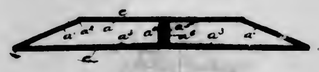
14. A ruler comprising a hollow body formed from a strip of thin sheet metal and having a substantially flat top portion which is beveled or inclined downwardly to both edges, and a bottom portion formed by bending the lateral portions of the strip inwardly at an acute angle to the beveled portions.

20. A ruler comprising a hollow body formed from sheet metal and provided with top and bottom walls, a bushing between said walls having portions of one of the walls bent therein and a threaded bushing forced into said bent portions.

[Claims 2 to 7, 9, 11 to 13, 15 to 19, and 21 to 28 not printed in the Gazette.]

1,274,292. RULER. CHARLES H. LITTLE, East Cleveland, Ohio. Filed May 26, 1913. Serial No. 769,781. (Cl. 33—107.)

1. A tubular ruler body formed from a strip of sheet metal and having top and bottom walls and one or more ruling edges formed by bending side portions of the strip inwardly with respect to an intermediate portion, the edge portions of the strip being bent inwardly to form an internal rib and being interlocked.



4. In combination in a ruler, a tubular ruler body formed from a strip of sheet metal and comprising a top wall and a bottom wall, the latter being formed by bending the side portions of the strip inwardly with respect to the part forming the top wall, the ends of said inwardly bent portions forming the bottom wall being bent upwardly to the top wall, the latter having at its end an extension which is folded downwardly and inwardly over said upwardly bent parts so as to lock the same in place.

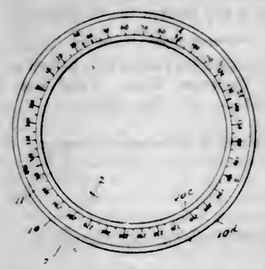
6. A ruler comprising a metal body having a strong adhering celluloidal coating in which graduations are cut.

12. A ruler, comprising a metal ruler body completely enveloped in a hard closely adhering medium bearing cut graduations, said medium having cohesive characteristics such that fine graduations and characters may be cut therein.

14. A ruler comprising a metal body entirely surrounded by a covering of pyroxylin bearing cut graduations, said covering being held by the body against substantial shrinkage in any direction.

[Claims 2, 3, 5, 7 to 11, and 13 not printed in the Gazette.]

1,274,293. SCALE. CHARLES H. LITTLE, East Cleveland, Ohio. Filed Feb. 21, 1916. Serial No. 79,493. (Cl. 33—1.)



1. In a device of the character described, a metal body having a circular groove and a shoulder at the inner periphery of the groove, and a non-metallic strip bearing graduations seated in said groove and having its inner edge bearing against said shoulder.

5. In a device of the character described, a metal body provided with a circular shoulder, a circular celluloid strip bearing graduations carried by said body and having its inner edge bearing against said shoulder.

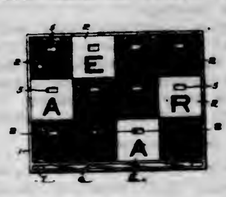
7. In a scale or ruler, a celluloid strip bearing graduations, and a metal base to which the strip is attached, the base being provided with perforations filled with celluloid.

10. In a scale or ruler, a metal body having a circular shoulder, a graduated celluloid strip attached to said body and having an inner circular edge bearing against the shoulder, the strip and metal body being fastened together at numerous closely spaced points by one part having sockets or perforations filled by the material of the other member.

13. In a protractor, a metal body having an annular graduated celluloid strip and having means for mechanically holding the strip against independent shrinkage, said strip having the graduations provided along its inner periphery.

[Claims 2 to 4, 6, 8, 9, 11, and 12 not printed in the Gazette.]

1,274,294. GAME. FREDERICK LOBL, Middleboro, Mass. Filed June 21, 1917, Serial No. 176,077. Renewed June 24, 1918. Serial No. 241,691. (Cl. 46—41.)

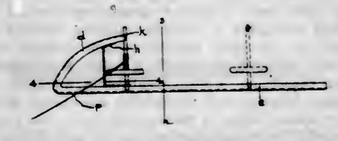


1. A game comprising a receptacle, a plurality of edible blocks therein having apertures for receiving a positioning rod end.

2. A game comprising a receptacle, a plurality of blocks of confectionery therein, insignia on the blocks, and apertures in the blocks for receiving a positioning rod end for arranging the blocks and insignia in a desired order.

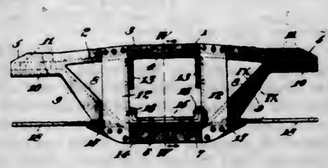
3. A game comprising a receptacle 1 having the legend bearing confectionery blocks 2 therefore, each block having a rod receiving aperture 5, a manipulating rod 6 therefor, and a pocket 7 in the receptacle.

1,274,295. TOY. ROBERT JOHN LOGAN, St. John, New Brunswick, Canada. Filed Oct. 21, 1916. Serial No. 126,951. (Cl. 46—32.)



A toy consisting of a two-piece sword and a top constructed and arranged to be spun along the blade of the same, said sword consisting of a single strip of metal of substantially V-cross-section having one end bent back upon itself to constitute a handle and a brace consisting of a flat metal strip the ends of which are bent at substantially right angles to the main length thereof and being secured respectively to the handle and blade, the free end of the handle and the lower end of the brace being in vertical alinement with each other and notched to receive the top in one position.

1,274,296. CAR-TRUCK FRAME. EDWARD C. LONG, Westmont borough, Pa. Filed May 2, 1918. Serial No. 232,024. (Cl. 105—243.)



1. In a truck frame, upper and lower arch bars of channel section with their flanges projecting outwardly and the webs integrally united at their end portions.

2. In a truck frame, upper and lower arch bars of channel section with their flanges projecting outwardly, inclined members connecting the same, the webs being integrally united at their end portions.

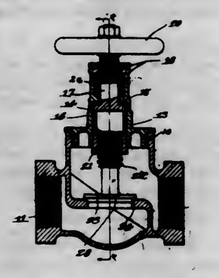
3. A truck frame comprising an upper arch bar of channel section with flanges projecting upwardly, a lower arch bar of channel section with flanges projecting downwardly, inclined members connecting the same, integrally united at their end portions.

4. In a truck frame, upper and lower arch bars of channel section, the webs of which are integral at their end portions, the flanges of the end portions being turned inwardly forming bearings.

5. A truck frame comprising upper and lower arch bars and inclined members connecting the same, all of channel section, the webs of which are integral at their end portions, the lower portions of the flanges of the end and side members being turned inwardly.

[Claims 6 to 10 not printed in the Gazette.]

1,274,297. VALVE. EDWARD B. LORENZEN and CHARLES LORENZEN, Lorain, Ohio. Filed Nov. 14, 1916. Serial No. 131,298. (Cl. 137—4.)

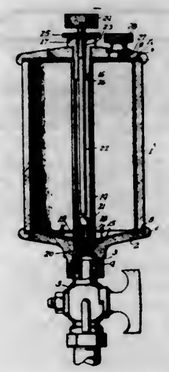


A valve comprising a casing having an inlet and an outlet, a valve seat, a bonnet detachably secured to the casing and including a tubular member beveled at its inner end, an internal annular flange formed on said member at a point in its length, a valve, a threaded stem projecting therefrom, a sleeve rotatably mounted within said tubular member and threadedly associated with said stem, said sleeve being of uniform diameter for a portion of its length, the remaining portion of said sleeve being flared and projecting a considerable distance beyond inner beveled end of said tubular member, said beveled end and flared portion of the sleeve coöperating to provide a fluid-tight joint between the parts, said sleeve being spaced from said flange, a stem projecting from said sleeve through said annular flange and having a threaded portion, nuts adjustably associated with said threaded portion of the stem and with the bonnet, whereby said sleeve may be moved closer to said flange to compensate for wear between the flared portion of said sleeve and the adjacent extremity of said tubular member, and a spring encircling said stem and bearing against said flange and nuts to hold said sleeve against longitudinal movement within the tubular member.

1,274,298. AUTOMATIC LUBRICATOR. ROBERT M. LUCAS, Chicago, Ill. Filed Nov. 13, 1916. Serial No. 130,998. (Cl. 184—69.)

1. In a device of the kind described, a fluid tight receptacle having an outlet in its bottom, a tubular part within said receptacle inclosing said outlet and extending longitudinally of said receptacle and provided with a port near its lower end, in combination with a tubular member rigidly secured in position in said outlet and extending into said tubular part beyond said port, means for controlling the opening through said member and means extending through the wall of said receptacle for controlling the operation of said controlling means.

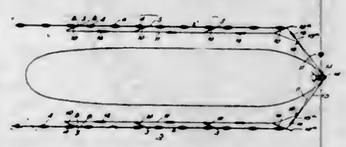
2. In a device of the kind described, a fluid tight receptacle having an outlet in its bottom, a tubular part within said receptacle rigidly connecting the top and bottom of said receptacle inclosing said outlet and extending longitudinally of said receptacle and provided with a port near its lower end, in combination with a tubular member rigidly secured in position in said outlet and extending into said tubular part beyond said port, a movable member within said tubular part coöperating with the end of said tubular member for controlling the opening through said member and means extending through the wall of said receptacle for controlling the operation of movable member.



5. In a device of the kind described, a fluid tight receptacle having an outlet in its bottom, a tubular part within said receptacle inclosing said outlet and extending longitudinally of said receptacle and provided with a port in its lower end, in combination with a tubular member threadedly secured in position within the outlet opening and extending into said tubular part beyond said port, the outer wall of the upper portion of said tubular member being gradually tapered from a point slightly below the port within the tubular part and means for controlling the opening through said member.

[Claims 3 and 4 not printed in the Gazette.]

1,274,299. RUDDER-CONTROLLED SHIELD. HENRY S. MCGOWAN, McGowan, Wash. Filed Mar. 14, 1918. Serial No. 222,441. (Cl. 114—240.)



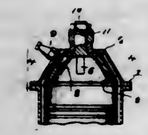
3. The combination with a marine vessel of a pair of flexible torpedo barriers with floats and sinkers at the upper and lower edges respectively for maintaining the barriers in vertical position in the water, series of rudders carried by the barriers for regulating the lateral positions of barriers during travel of the ship or relative movement of the water, tow lines for connecting the fore ends of the barriers to the bow of the vessel and control means extending from the bow, and connected to the lines and thence to said series of rudders.

6. A mine, torpedo or other explosive barrier for vessels or other objects to be protected, comprising a shield having a series of vertically joined sections, a series of rudders adjustably attached to the shield, and a resilient connection adjusted from aboard ship extending from rubber to rudder for setting them, said rudders adapted to yield and automatically resume a given position while subjected to shock or wave pressure.

[Claims 1, 2, 4, 5, and 7 to 9 not printed in the Gazette.]

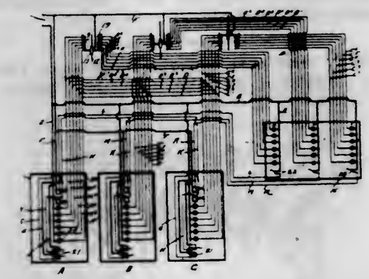
1,274,300. OSCILLATING ENGINE-VALVE. ERNEST R. MCINTURFF, Bealeton, Va. Filed Mar. 19, 1918. Serial No. 223,446. (Cl. 123—81.)

A valve comprising a casing which is approximately cone shaped, said casing having an intake and an exhaust port, a truncated cone shaped valve member fitted snugly in the casing and having ports adapted to register at different times with the intake and exhaust ports of the casing, said member having at its side a spark



opening located at a point between the intake and exhaust ports of the valve member and a stem connected with the smaller end of the valve member.

1,274,301. ELEVATOR SIGNAL SYSTEM. ALVIN C. MCNABB, Dallas, Tex., assignor of one-half to Charles L. Wakefield, Dallas county, Tex. Filed Jan. 10, 1917. Serial No. 141,535. (Cl. 177—336).



1. In an elevator signaling system, the combination with two or more elevator cars, of a plurality of indicators each located in a different car, each indicator having a plurality of individual floor-number signal devices, corresponding signal devices in all the cars having a common circuit connection, separate circuit connections extending from each signal device, a set of contacts for each car, corresponding contacts having a common connection with one of the separate circuits, whereby the closing of the circuit through any one of a series of commonly connected contacts operates corresponding signal devices in all the cars thus duplicating the signal in each car.

4. The combination with two or more elevator cars, of an indicator located in each car constructed to indicate the floor positions of all the cars, a movable contact member operated by each car, a plurality of individual floor signals disposed on each indicator, each signal having common circuit connection with said movable contact member, and a plurality of contacts successively engaged by said movable contact member and each contact having separate circuit connection with an individual floor signal at each indicator, whereby the floor signal on each indicator is operated by closing a separate circuit connected therewith only, the other signals not energized remaining dormant whereby said operated signal is differentiated.

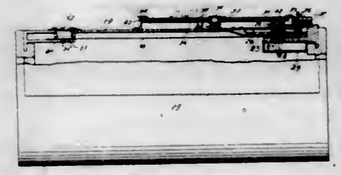
7. In an elevator signaling system, the combination of an indicator located in an elevator car and having a plurality of floor signals successively operated as the car moves up and down the elevator shaft, whereby the floor positions of the car are indicated, an auxiliary signal device in the car, a monitoring cabinet located outside the elevator shaft and having signals in duplicate of those of the indicator simultaneously operated therewith, and an auxiliary circuit connection from the location of the monitoring cabinet including a switch and in which the auxiliary signal is included, whereby the auxiliary signal may be operated in harmony with the monitoring cabinet.

9. In an elevator signaling system, the combination with two or more elevator cars, of a plurality of indicators, one located in each elevator car, floor signals on the indicators, contacts having separate circuit connection with the signals, and an auxiliary signal carried by each car and having circuit connection with the other cars whereby it may be operated from each of the other cars.

11. In an elevator signaling system, a plurality of floor indicators one carried by each elevator car, a plurality of contacts electrically connected with the indicators, a second set of contacts, a monitoring cabinet having signals correlated with the indicators, separate circuit connections from the second set of contacts to the monitoring cabinet, and a circuit closing device for each car operated thereby, said device engaging both sets of contacts.

[Claims 2, 3, 5, 6, 8, and 10 not printed in the Gazette.]

1,274,302. MECHANICAL-INSCRIPTION CAMERA. HYLA FREDERICK MAYNES, Gaines, Pa. Filed Apr. 26, 1917. Serial No. 164,715. (Cl. 95—1.1.)



1. A camera adapted to hold a photographic film, including means for causing forward travel of said film, and means for perforating successive portions of said film with identification marks of selective character.

6. A camera, including means for holding a photographic film, a removable member attached to the camera, guiding members associated with said movable member, a plurality of punches mounted in said guiding members, means for selectively operating said punches to perforate the film, and an anvil adjacent one of said guiding members and forming therewith a channel adapted to receive the film, said anvil being provided with apertures into which said punches enter after having perforated the film.

9. A camera adapted to hold a photographic film, including means for perforating said film with identification marks of any selected character and means for determining when successive portions of said film are brought into position to be perforated.

11. In a camera adapted to receive a photographic film, a removable cover attached to said camera, an anvil attached to said cover and extending under the film, a plurality of perforating punches mounted on said cover, an index plate for selectively controlling the operation of said punches, means for actuating said plate to cause said punches to perforate said film, a transparent window in said cover, an index on the window and a roller mounted beneath said window and provided with an index adapted to coöperate with the index on the window to show when the film is in position to have characters perforated therein.

15. A camera adapted to have a photographic film drawn therethrough, including means mounted on said camera by which any one of a number of identification marks may be impressed on said film by perforation thereof and a receptacle below the perforating means for retaining the excised portions of the film.

[Claims 2 to 5, 7, 8, 10, and 12 to 14 not printed in the Gazette.]

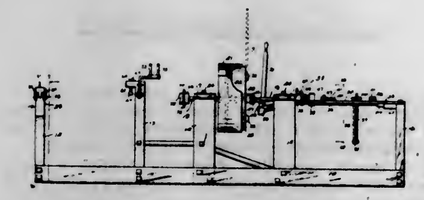
1,274,303. WRITING IMPLEMENT. HENRY J. MEIER, New York, N. Y. Filed Mar. 15, 1918. Serial No. 222,701. (Cl. 120—43.)



1. A writing implement, comprising a funnel having a spout and provided with a handle, a handled flow regulating pin within the funnel and having its lower portion fitting the spout of the funnel, means for slidably securing the pin to the funnel and a flow retarding means within the funnel.

[Claims 2 to 4 not printed in the Gazette.]

1,274,304. ENGINE-BEARING BURNING-IN AND OIL-BURNISHING MACHINE. EDWARD J. MILES, Newton, Iowa. Filed Sept. 24, 1917. Serial No. 193,025. (Cl. 29—89.)



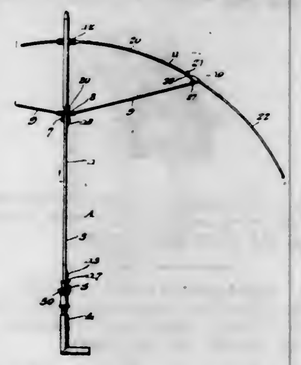
1. In a device of the class described, a frame, a shaft journaled therein intermediate of the ends of the frame, a pulley wheel journaled to the shaft, means for operatively connecting and for disconnecting the pulley wheel from the shaft, a support at either end of the frame, a journal mounted in each of said supports, the axes of said journals being alined with the axis of said shaft, and a clutch member secured to either end of said shaft.

2. In a device of the class described, a frame, a shaft journaled intermediate of the ends of the frame, means for operatively connecting the crank shaft of an automobile engine with one end of said shaft, means adapted to receive and hold the block of an automobile engine in position where the crank shaft may be alined with said shaft, a support mounted adjacent to one end of the frame, means for securing the supporting cars of an automobile engine to said support in such position that the crank shaft of the engine may be alined with said shaft, and means for operatively connecting the second end of said shaft with the crank shaft of an automobile engine, which is supported by said support.

[Claims 3 to 13 not printed in the Gazette.]

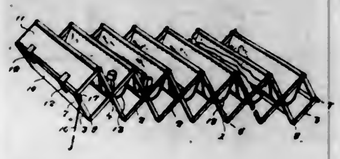
1,274,305. UMBRELLA. WILLIS K. MILLER, Carlisle, Pa. Filed June 20, 1917. Serial No. 175,884. (Cl. 135—28.)

In an umbrella, a staff section, resilient catches located at spaced points thereon, a runner slidably mounted on the staff section between the catches, said runner being cone shaped at its opposite ends, one cone shaped portion being provided at one end with an inturned shoulder and adapted to receive one catch and the other cone shaped



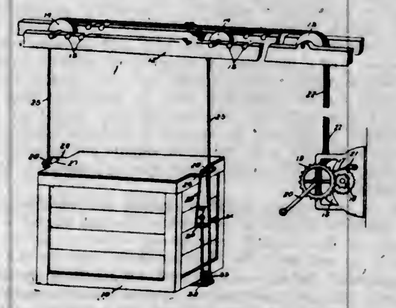
portion adapted to move the other catch when brought in contact with the same.

1,274,306. TOOL KIT. GEORGE M. MOISSON, Beaufort, S. C. Filed Mar. 20, 1918. Serial No. 223,636. (Cl. 211—14.)



The herein described foldable tool kit comprising a pair of lazy-tongs members each lazy-tongs member comprising intermediate cross bars and end bars, said intermediate cross bars being pivotally connected together at their centers and said end bars being pivotally connected together and also being connected to the ends of the intermediate cross bars, the pivots at one end of the intermediate and end cross bars comprising rods which connect said lazy tongs members together, and pockets of flexible material attached and depending from said pivot rods and arranged between said lazy tongs members.

1,274,307. ELEVATING AND DUMPING APPARATUS. CLARENCE C. MOLLER, Bronx, N. Y. Filed Dec. 5, 1917. Serial No. 205,619. (Cl. 214—121.)



1. An apparatus for dumping the contents of open end containers, comprising, means for elevating the container

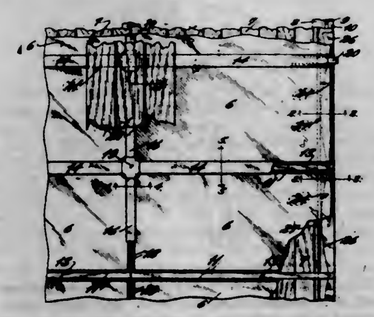
with its open end upper-most, means to allow the same to be inverted and means serving to close the open end thereof during the inverting operation and acting as a receiving table for the contents of the container when inverted.

8. An apparatus for dumping the contents of open end containers, comprising, a closure and receiving table adapted to close the open end, means for lifting the container and means co-acting with the closure and receiving table and lifting means to retain the closure in position relative of the same and operatively associate the lifting means with the container.

7. An apparatus for dumping the contents of open end containers, comprising, a harness consisting of a closure and receiving table, adapted to close the open end thereof, slotted lugs provided at the opposite extremities of the closure, an attaching plate having hooked terminals engaging the slotted portions of the lugs, a bar arranged beneath the container and lifting means coacting with the attaching plate and the bar to retain the bar and the closure in clamped position on the container.

[Claims 2 to 4 and 6 not printed in the Gazette.]

1,274,308. CAR-ROOF. CLINTON C. MURPHY, Chicago, Ill., assignor to P. H. Murphy Company, Parnassus, Pa., a Corporation of Pennsylvania. Filed May 25, 1918. Serial No. 236,491. (Cl. 108—5.)



1. A car roof comprising roof sheets movably mounted on the substructure, said sheets having grooves formed in their eaves ends, and a strip secured to the eaves of the car and arranged to project into said grooves, the edge portion of the strip which projects into the grooves formed in the roof sheet being spaced from the bottoms of said grooves at different distances.

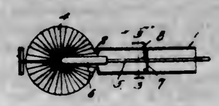
2. A car roof comprising roof sheets movably mounted on the substructure, said sheets having grooves formed in their eaves ends, and means engaging said grooves for loosely securing the eaves ends of the roof sheets to the car substructure, said means approaching the bottom of said grooves more closely at the center of the sheets than at their side margins.

3. A car roof comprising roof sheets extending from eaves to ridge on each side of the car, said sheets having grooves in the eaves ends and being connected to each other by loose joints at the side and ridge margins, and a continuous angle strip located at the eaves of the car, one of the legs of said angle strip being secured to the side of the car and the other of said legs being arranged to project into the grooves of a number of roof sheets, the edge of said last mentioned leg of the angle strip being scalloped, whereby the lobes formed by the scallops are closest to the bottom of the grooves formed in the sheets midway between the side margins of the sheets.

[Claims 4 and 5 not printed in the Gazette.]

1,274,309. AUTOMOBILE-SIGNAL. DE WITTE T. NEIL, Homer, La. Filed Jan. 31, 1918. Serial No. 214,676. (Cl. 116—31.)

In an automobile signal, the combination with a tube adapted to be fixed forward of the steering mechanism, interrupted in its length by an opening, and having its end reduced in size, and a guide within said tube; of a rod movable longitudinally along the axis of the tube and through said guide and having an enlargement moving within the reduced portion of the tube, a folding signal



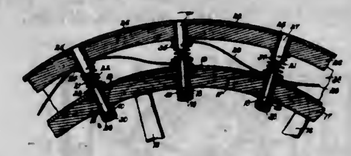
carried by the enlargement and attached to the end of the tube, a closure for the end of the tube carried by the rod beyond said enlargement, and a manual actuating device on the rod and operable within said opening, for the purpose set forth.

1,274,310. PROCESS FOR INCREASING THE SOLUBILITY OF THE POTASSIUM CONTENT OF CEMENT-KILN DUST. RAYMOND J. NESTELL, Los Angeles, Cal., assignor to International Precipitation Company, Los Angeles, Cal., a Corporation of California. Filed Jan. 15, 1917. Serial No. 142,551. (Cl. 23—22.)

3. The process of recovering from coal-fired cement kiln dust potassium compound present therein in difficultly soluble form, which consists in subjecting such dust to the action of water at approximately 100° C. for a sufficient time to effect substantial conversion of such compound to a form which is readily soluble in water, removing the resulting solution from the undissolved residue and evaporating said solution to dryness.

[Claims 1, 2, and 4 not printed in the Gazette.]

1,274,311. RESILIENT WHEEL. FRANKLIN H. D. NEWHARD, Catasauqua, Pa. Filed Feb. 23, 1917. Serial No. 150,407. (Cl. 152—38.)

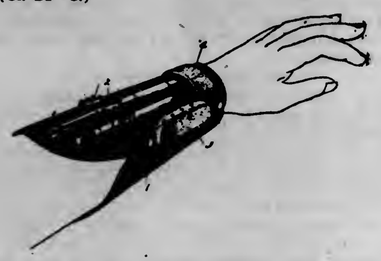


1. A wheel as characterized comprising a central member having a rigid rim; a second rigid rim disposed in annular spaced relation to said first-mentioned rim; cushion means operatively connecting said rims for normally maintaining the spaced relation thereof, said means embodying a plurality of leaf springs disposed between said rims to normally maintain the spaced relation thereof, said springs being alternately reversed and the ends of the adjacent springs overlapping, and a plurality of guiding members operatively engaging said rims to prevent relative rotary movement thereof, said members embodying a plurality of articulated plungers, said plungers being reciprocatively mounted in said rims; a plurality of spiral springs disposed between said rims in guided relation to said plungers, said spiral springs operating to normally maintain the spaced relation of said rims; and means for projecting said plungers beyond the perimeter of the outermost of said rims for preventing skidding of said wheel.

2. A wheel as characterized comprising a central member having a rigid rim; a second rigid rim disposed in annular spaced relation to said first-mentioned rim; cushion means operatively connecting said rims for normally maintaining the spaced relation thereof, said means embodying a plurality of leaf springs disposed between said rims to normally maintain the spaced relation thereof, said springs being alternately reversed and the ends of the adjacent springs overlapping, and a plurality of guiding members operatively engaging said rims to prevent relative rotary movement thereof, said members embodying a plurality of articulated plungers, said plungers being reciprocatively mounted in said rims; a plurality of helical

springs disposed between said rims in guided relation to said plungers, said spiral springs operating to normally maintain the spaced relation of said rims; means for projecting said plungers beyond the perimeter of the outer jecting said plungers beyond the perimeter of the outermost of said rims for preventing skidding of said wheel; and yielding means for normally maintaining said plungers in retracted relation to said outermost rim.

1,274,312. ARTICLE-HOLDING ATTACHMENT FOR THE ARM. WILLIAM B. NICOLL, Fort William, Ontario, Canada. Filed Dec. 27, 1917. Serial No. 209,159. (Cl. 24—3.)



A device of the class described comprising a body curved transversely and straight longitudinally to fit the curvature of the arm, means for holding the said body on the arm, clips mounted on the body and having jaws disposed to hold pencils and the like parallel with the arm, and a transverse member at one end of the body to form a protector for the points of the pens or pencils held by the clips.

1,274,313. LOCK. CHARLES EDGAR NORTHROP, Dayton, Ohio. Filed Feb. 15, 1918. Serial No. 217,294. (Cl. 70—75.)



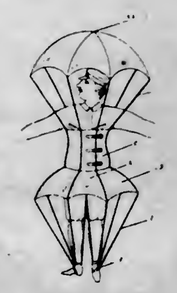
1. A lock comprising a casing, a tubular member arranged in said casing having a tapering tubular member, and an opening in one side, a locking bolt formed with a notch, and a key having a pivotally mounted tumbler formed substantially arc-shaped so as to engage the walls of said tapering tubular member as it is inserted whereby the pivotally mounted tumbler is forced through the opening in said tubular member to a position whereby it may be forced into said notch when the key is turned in order to shift the position of said bolt.

2. A lock of the character described comprising a base plate; a covering therefor, a tubular member extending through said cover and said base plate, said base plate having an opening, a bolt formed with a plate rotatably mounted on said tubular member so that the bolt will be capable of movement past said opening, a projecting plate rotatably mounted on said tubular member on top of said first mentioned plate, said first mentioned plate being formed with a notch and said second mentioned plate being provided with a slot, and a key formed with a movable tumbler member for engaging said slot and said notch after movement of the plate so as to shift the position of said bolt to and from the position over the opening in said base.

3. A lock comprising a casing having an opening for receiving a staple structure, a tubular member extending through the casing, said tubular member being tapered interiorly and provided with a slot opening into the casing, a bolt adapted to be moved across the opening in the casing so as to be thrust through said staple, a plate connected with said bolt, said plate being rotatably mounted on said tubular member, said plate also being formed with a key receiving notch, a second plate rotatably mounted on said tubular member above the first mentioned plate, said second mentioned plate having a slot, and a key provided with a pivotally mounted pawl adapted to fit into the slot in said second plate and when the second mentioned plate has been moved a predetermined distance to fit into said notch in the first mentioned plate for moving said bolt, said key having a tubular body provided with slots in opposite sides, said pawl being substantially arc-shaped and pivotally mounted in the tubular portion of the key so that the back of the pawl will strike against the tapering walls of the tubular member as the key is inserted so that the free end of the pawl will pass through the opening in the tubular member and into the slot in said plate.

[Claims 4 to 6 not printed in the Gazette.]

1,274,314. AVIATOR'S SAVER. LUCJA OGRODNICZEK, Scranton, Pa. Filed July 27, 1917. Serial No. 183,038. (Cl. 244—21.)



1. A life saving garment for aviators, comprising a body band of a length extending from the chest down to the hips and open from top to bottom, means for fastening the band about the body, a pliant skirt like extension secured at its upper edge to the lower part of the band, a series of tension cords attached to the bottom of the extension and having ankle straps for attachment to the wearer's ankles, and tension cords attached to the upper part of the band and secured to a parachute.

[Claim 2 not printed in the Gazette.]

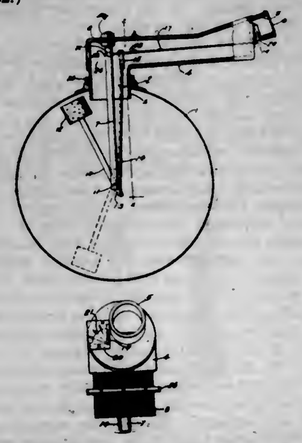
1,274,315. TREE-MEASURING DEVICE. GILES A. OLIN, Siletz, Oreg. Filed Aug. 20, 1917. Serial No. 187,315. (Cl. 33—70.)



1. In an instrument for determining the number of logs in a tree and measuring the diameter of the same, the combination of a bar, a slide mounted on said bar and having a sight opening through which the user sights at the upper portion of the tree, means on said slide operable by tilting of said bar for showing the number of logs in the tree, and means on said bar for coaction with said slide in showing the diameter of such logs when said slide is shifted along the bar, without varying the inclination of the latter, until the entire width of said log is visible through said sight opening.

2. A tree measuring device comprising a bar, a slide mounted thereon and having a sight opening through which the user sights at an elevated point on the tree, and means on said bar for coacting with said slide in showing the diameter of the tree at the elevation of said point, when said slide is moved along the bar, without moving the latter, until the entire width of the tree is visible through said sight opening.

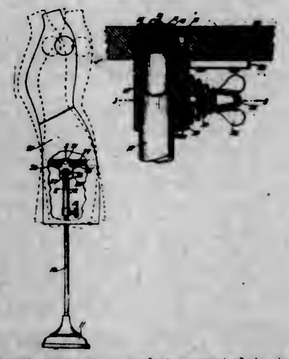
1,274,316. TANK-FILLER. GEORGE F. OTTO, Detroit, Mich. Filed Nov. 9, 1917. Serial No. 201,092. (Cl. 73—82.)



2. The combination with a tank of a filling and indicating device, said filling device comprising a tube having a vertical section and a horisontal section merging into a filling opening, and an indicating means comprising a dial on one end of said tube, a finger for moving over said dial, a shaft connected with said finger and extending longitudinally of said tube, a rod extending through the top wall of said tube, clamping means for clamping said rod rigidly in position so as to extend downwardly from said tube into said tank, a pin extending through said rod at substantially right angles thereto and acting as a supporting bracket, said pin having an aperture in which the shaft connected with the indicating finger is journaled, an arm rigidly secured to said last mentioned rod, a float pivotally mounted on the rod extending into the tank, and a link connected with said float and with said arm whereby as the float moves up and down the arm is moved and the shaft connected thereto is rocked for moving said indicating finger.

[Claim 1 not printed in the Gazette.]

1,274,317. DISPLAY-FORM. EMIL THEO. PALMENBERG, New York, N. Y., assignor to J. R. Palmenberg's Sons, Inc., New York, N. Y., a Corporation of New York. Filed Apr. 6, 1918. Serial No. 227,129. (Cl. 211—13.)



2. In a display form, a socket mounted to turn on the stand of the display form and flattened at one side, a boss on the flattened side of the socket a distance below the said pivot, a bracket mounted to swing on the said pivot and to which the body of the display form is secured, the bracket having an elongated opening through which extends the said boss, a bolt attached to the said boss and provided with a nut, a washer on the bolt engaging the said bracket, and a spring interposed between the washer and the nut to hold the bracket in frictional contact with the flattened side of the socket.

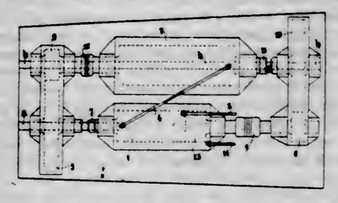
[Claim 1 not printed in the Gazette.]

1,274,318. ILLUMINATED AUTOMOBILE-TAG. GEORGE F. PANZER, Jr., Baltimore, Md. Filed Apr. 20, 1918. Serial No. 229,789. (Cl. 40—130.)



A tag comprising a body having an opening and provided at its opposite sides with identification data, a light located in the opening and arranged to cast its rays over the data at the opposite sides of the body, shields located over the light and having openings through which the rays may pass to the data, the said shields also being provided with portions impervious to light which will cut off the rays from the light to those portions of the tag which are plain.

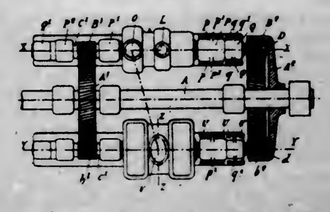
1,274,319. SHIP-PROPULSION INSTALLATION. CHARLES ALGERNON PARSONS, Newcastle-upon-Tyne, and ROBERT JOHN WALKER, STANLEY SMITH COOK, and LOUIS MORTIMER DOUGLAS, Wallsend, England; said Walker, said Cook, and said Douglas assignors to said Parsons. Filed July 6, 1916. Serial No. 107,833. (Cl. 121—58.)



1. A ship propulsion installation comprising a motor, a propeller adapted to be driven by the motor at low powers, and another propeller adapted to be driven by the motor at full power, the ratio of the revolutions of the motor to the revolutions of the propeller it drives differing at low powers from the ratio at full power.

[Claims 2 to 7 not printed in the Gazette.]

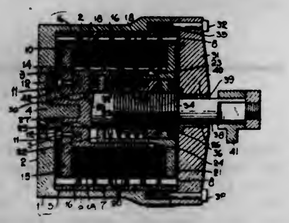
1,274,320. TURBINE SET. PAUL PAVLIDÈS, Paris, France. Filed Sept. 12, 1916. Serial No. 119,784. (Cl. 60—103.)



The combination with a single driven shaft, such as a propeller shaft, of two similar turbines of the axial type,

a high-pressure and a low-pressure turbine, having each an external and an internal rotor, revolving in opposite directions, the turbine shafts being arranged parallel to and symmetrically on either side of the said driven shaft, two helicoidal speed-reducing gear wheels one with external and the other with internal gearing mounted on the said driven shaft, and two corresponding helicoidal toothed wheels respectively mounted on the shafts of the two external rotors and on the shafts of the internal rotors in mesh with said speed reducing gear wheels.

1,274,321. SHOCK-ABSORBER. ANDREA PETITO, Trenton, N. J. Filed Dec. 5, 1917. Serial No. 205,642. (Cl. 21—105.)



1. A shock absorber comprising a hollow body having one end closed and provided with securing means, a shaft disposed axially of the body and mounted for rotary movement, said shaft being provided with means for rocking the same, a cup-like member within the body and secured to the shaft, the closed end portion of said member being provided with an annular extension, an annular member surrounding the cup like member and keyed to the hollow member, said annular member being capable of movement longitudinally of the hollow member, a second annular member keyed to the cup like member, said second annular member being capable of movement longitudinally of the cup like member, and means within the cup-like member for constantly urging the annular members in a direction toward the annular extension of the cup like member and maintaining the annular member in frictional contact, the annular extension of the cup-like member being in frictional contact with the closed end of the hollow body.

2. A shock absorber comprising a hollow body provided with securing means, a shaft disposed axially of the body and mounted for rotary movement, said shaft being provided with means for rocking the same, a cup like member within the body and secured to the shaft, the closed end portion of said member being provided with an annular extension, an annular member surrounding the cup like member and keyed to the hollow member, said annular member being capable of movement longitudinally of the hollow member, a second annular member keyed to the cup like member, said second annular member being capable of movement longitudinally of the cup like member, a second cup like member telescopically engaged with the first cup like member and provided with an annular flange overlying and contacting with the first named annular member, an enlargement carried by the shaft, and an expansible member interposed between the enlargement of the shaft and the base portion of the second named cup like member.

3. A shock absorber comprising a hollow body provided with securing means, a shaft disposed axially of the body and mounted for rotary movement, said shaft being provided with means for rocking the same, a cup like member within the body and secured to the shaft, the closed end portion of said member being provided with an annular extension, an annular member surrounding the cup like member and keyed to the hollow member, said annular member being capable of movement longitudinally of the hollow member, a second annular member keyed to the cup like member, said second annular member being capable of movement longitudinally of the cup like member, a second cup like member telescopically engaged with the first cup like member and provided with an annular flange overlying and contacting with the first named annular member, an enlargement carried by the shaft, an expansible member interposed between the enlargement of the shaft and the base portion of the second named cup like member, said second named cup like member being keyed to the first named cup like member but capable of limited movement longitudinally of the shaft and independently of the first named cup like member.

4. A shock absorber comprising a hollow body provided with securing means, a shaft disposed axially of the body and mounted for rotary movement, said shaft being provided with means for rocking the same, a cup-like member within the body and secured to the shaft, the closed end of said member being provided with an annular extension, an annular member surrounding the cup-like member and keyed to the hollow member, said annular member being capable of movement longitudinally of the hollow member, a second annular member keyed to the cup-like member and capable of movement longitudinally thereof, a second cup-like member telescopically engaged with the first cup-like member and provided with an annular flange overlying the annular members, an enlargement arranged within the second named cup-like member and threaded upon the shaft, and an expansible member arranged within the second cup-like member and interposed between the base portion of the second cup-like member and the enlargement on the shaft whereby the annular flange of the second cup-like member urges the annular members in a direction toward the annular extension of the first cup-like member and maintains the annular members in contact one with the other and with the annular extension of the first named cup-like member.

1,274,322. PATTERN FOR DENTAL PLATES. JACOB PETRY, Pittsburgh, Pa. Filed Nov. 8, 1915. Serial No. 60,351. (Cl. 22—161.)



1. A molding pattern for articles having an undercut cavity therein, comprising a layer of more or less readily fusible material, having an opening therein conforming to the opening of the cavity, a second layer of similar material having a recess therein of an area equal to the greatest area of the cavity, said layers being superposed one upon the other.

3. A molding pattern for articles having an undercut cavity therein, comprising a layer of more or less readily fusible material, having an opening therein conforming to the opening of the cavity, a second layer of similar material having a recess therein of an area equal to the greatest area of the cavity, said layers being superposed one upon the other, the exposed face of the first layer being shaped to conform exactly to one face of the articles, the portion of the other layer forming the cavity shaped to parallel in all its contours a predetermined shape of the article which said exposed face of the first layer is intended to fit.

4. A molding pattern for articles having an undercut cavity therein, comprising a layer of more or less readily fusible material, having an opening therein conforming to the opening of the cavity, a second layer of similar material having a recess therein of an area equal to the greatest area of the cavity, said layers being superposed one upon the other, the exposed face of the first layer being shaped to conform exactly to one face of the article, the portion of the other layer forming the cavity shaped to parallel in all its contours, a predetermined shape of the article which said exposed face of the first layer is intended to fit, the exposed face of the second layer being shaped to predetermined form.

7. A pattern for a dental plate composed of separable layers, of plastic, easily fusible material, superposed one upon the other, one having an opening therein, and the other a recess opposite and of greater area than said opening, to form an undercut suction retainer cavity within said pattern, the bottom of said cavity paralleling in all its contours that portion of the roof of the mouth opposite which it is intended to lie.

8. A pattern for a dental plate composed of separable layers, of plastic, easily fusible material, superposed one upon the other, one having an opening therein, and the other a recess opposite and of greater area than said opening, to form an undercut suction retainer cavity within said pattern, means interposed between said layers, whereby they may be easily separated.

[Claims 2, 5, and 6 not printed in the Gazette.]

1,274,323. REINFORCED-PAPER ARTICLE. PAUL POETSCHKE, Milford, Del. Filed Nov. 5, 1917. Serial No. 200,445. (Cl. 154—52.)



1. An article of manufacture comprising paper having a neutral, mineral, water-proofing reinforce consisting of magnesium oxid and silex mixed with magnesium chlorid.

5. An article of manufacture composed of paper having an intermediate layer of magnesium oxid and silex reduced to plastic state by magnesium chlorid.

6. An article of manufacture composed of laminated, perforate and imperforate sheets with an associated body of cementitious material consisting of magnesium oxychlorid.

7. An article of manufacture of paper having included therein a cementitious, mineral material, and an external application of waxy resinous water-repellent.

[Claims 2 to 4 not printed in the Gazette.]

1,274,324. PHONOGRAPH-RECORD AND METHOD OF MAKING THE SAME. PAUL POETSCHKE, Milford, Del. Filed Nov. 12, 1917. Serial No. 201,580. (Cl. 18—48.4.)

1. A sound record having a laminated body including a mineral cementitious binder having the properties of artificial stone, and an impression surface.

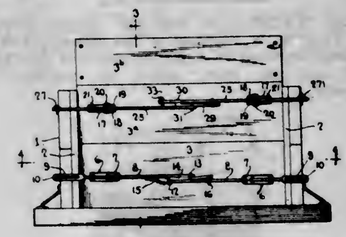
14. The method of making a sound record which consists of making a cement of magnesium oxy-chlorid and a filler, building a body of layers of fiber sheets and said cement, subjecting the body to pressure, allowing the body to harden, and then applying a record receiving facing.

[Claims 2 to 13 and 15 to 17 not printed in the Gazette.]

1,274,325. END-GATE FOR WAGONS. CARL POLSON, Vermillion, Kans. Filed Nov. 10, 1917. Serial No. 201,318. (Cl. 21—21.)

1. In combination with a wagon body having vertical strips on the inner sides of the side portions thereof, an end gate having pivotally mounted strips provided with means to engage the first-named strips to secure the end gate in closed position, handles attached to the strips of the end gate, extending through openings in the end gate and rearwardly and outwardly therefrom, said handles being provided with slots, and rods connected to the sides of the wagon body, extending through and movable in said slots and provided with means to engage and hold the handles in gate locking position when the rods are arranged transversely of the gate, said rods coacting with said handles to support the gate when the latter is in inclined scoop board forming position.

3. In combination with a wagon body having vertical strips on the inner sides of its side portions, an end gate having pivotally mounted strips on its inner side provided with means to engage the first-named strips and secure the end gate in closed position, a supplemental end gate section for arrangement on the end gate and having side walls arranged in line with said strips of the end gate, and means to detachably secure the side walls of said supplemental end gate section to the said strips of the end gate.



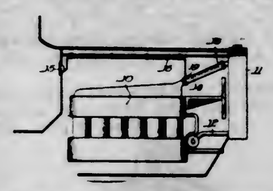
5. An end gate comprising separable sections each provided at the ends with pivotally mounted angle strips adapted to engage in the sides of a wagon body, the upper section having hinge plates for the said strips thereof, said hinge plates extending below said section and to bear against the lower section.

7. An end gate comprising separable sections each provided at the ends with pivotally mounted angle strips adapted to engage in the sides of a wagon body, the upper section having hinge plates for the said strips thereof, said hinge plates extending below said section and to bear against the lower section, the strips of said section extending below said hinge plates, and being arranged in the angles of the pivoted strips of the lower section when said strips are in engaged position.

8. In combination with a wagon body having side walls, an end gate comprising separable sections each provided at the ends with pivotally mounted angle strips adapted to engage in the sides of the wagon body, the upper section having hinge plates for the said strips thereof, said hinge plates extending below said upper section and to bear against said lower section, the strips of said upper section extending below said hinge plates and being arranged in the angles of the pivoted strips of the lower section when said strips are in engaged position and being also provided with curved open slots, and headed studs projecting from the side walls of the wagon body and arranged to engage in said slots.

[Claims 2, 4, and 6 not printed in the Gazette.]

1,274,326. HEAT-INDICATING DEVICE. FRED W. POWERS, Chicago, Ill. Filed Feb. 2, 1917. Serial No. 146,068. (Cl. 73—52.)



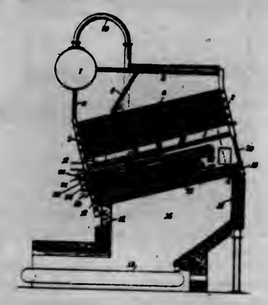
1. A heat indicating device for attachment to the hose connecting an automobile engine radiator with the water jacket of the engine, including a gage, a conduit connected thereto, a hollow needle containing an expansible fluid and in connection with the conduit, one end of the needle having a penetrating point and the opposite end having an elbow to which the conduit is connected, and a holder associated with the elbow for holding said needle to the hose in proper position.

3. A temperature indicating device for attachment to the hose connecting an automobile engine radiator with the water jacket of the engine, comprising a temperature

indicating gage, a tubular needle having an expansible fluid therein and provided at one end with a penetrating point and at its opposite end with an elbow, a conduit communicating between the elbow and the gage, and a holder strap attached to the elbow of the needle to attach said needle to the said first named conduit.

[Claim 2 not printed in the Gazette.]

1,274,327. WATER-TUBE BOILER. ARTHUR D. PRATT, New York, N. Y., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed June 16, 1916. Serial No. 103,954. (Cl. 122—478.)



1. A water tube boiler having horizontally extending tubes connected to upper and lower headers, said tubes being divided into separated groups, vertically extending nipples connecting the headers of the groups of tubes, and a superheater having horizontal headers at different levels in front of the lower boiler headers and U-shaped tubes extending from the headers into the space between the groups of water tubes, said U-shaped tubes embracing the nipples between which they extend and causing a parallel flow of the steam through the tubes from the header box at one level to the header box at another level.

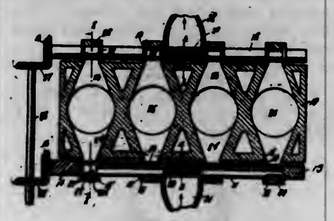
2. A water tube boiler having horizontally extending tubes connected to upper and lower headers, said tubes being divided into separated groups, nipples connecting the headers of the groups of tubes, a superheater in the space between said groups, said superheater comprising U-shaped tubes arranged with their legs extended between and beyond the front of the lower nipples, external cross boxes to which the superheater tubes are connected, the flow of the gases being substantially unobstructed through the lower water tubes and superheater tubes, and the upper group of tubes having baffling arranged to direct the gases in back and forth passes thereover.

1,274,328. DOLL. LENORA PRICE, Davenport, Okla. Filed Apr. 4, 1917. Serial No. 159,706. (Cl. 46—40.)



A doll head comprising a back piece composed of sections, a front piece cut at one edge on the bias, a gore cut on the bias and connected at opposite edges with the back and front pieces, a chin piece connected with the back and front pieces below the gore and means for retaining the head in shape.

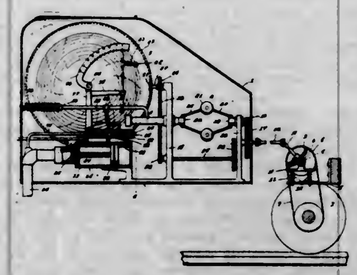
1,274,329. INTERNAL-COMBUSTION ENGINE. ANTON RAIA, Garfield, N. J. Filed June 25, 1917. Serial No. 176,830. (Cl. 123—59.)



1. An internal combustion engine, comprising a main casing in which is formed a plurality of cylinders, a cap closing the cylinders, there being oppositely flared intake and exhaust ports between the cap and casing formed partly in each and connecting with the respective cylinders, said ports having their larger ends in communication with the cylinders and their smaller ends facing outward, hollow rotary valves closed at their ends and having a middle and side ports, the latter disposed to successively register with the outer ends of the respective ports of the cylinders, each of the valves having annular ribs at the ends of the several ports, and the middle port provided with spaced blades extending around the sides of the valve and being relatively inclined.

2. An internal combustion engine, comprising a main casing having a plurality of cylinders therein, a cap closing the cylinders, there being ports leading outwardly from the cylinders and valve seats at the outer ends of the ports, both the ports and valve seats being partly formed in the casing and cap, rotary valves mounted in the said valve seats and caps closing the valve seats and holding the valves in place and secured at their ends to the main casing and the cap thereof closing the cylinders.

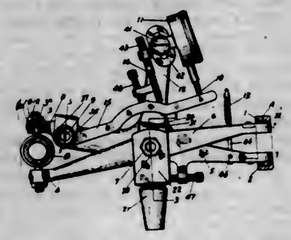
1,274,330. TRAIN-SPEED CONTROL. JULIUS ROBBE, Memphis, Tenn. Filed Oct. 13, 1917. Serial No. 196,532. (Cl. 188—72.)



2. A device of the class described comprising a centrifugal governor, means for connecting the same with one of the train wheels, a disk, means for rotating the same by the train wheel, a rod adapted to be moved longitudinally by the governor, an indicating hand connected with the rod and moved thereby, a dial coöperating with said hand, a pencil connected with the hand and engaging with the disk, an adjustable finger on the rod, a slide valve having a projection adapted to engage with said finger, alarm and brake applying mechanisms actuated by said valve, and a spring connected with said rod for returning the parts to normal position.

[Claim 1 not printed in the Gazette.]

1,274,331. COMPARATOR-GAGE. ALBERT F. ROCKWELL, Bristol, Conn., assignor to The New Departure Manufacturing Company, Bristol, Conn., a Corporation of Connecticut. Filed Nov. 26, 1913. Serial No. 803,313. (Cl. 33—148.)



1. In a measuring instrument, two sets of relatively movable contacts, and means whereby the distance between the contacts of one set is determined by the movement between the contacts of the other set, one of said contacts of said first mentioned set being also free to move with respect to its fellow contact under the influence of the article being measured and independently of the other set of contacts; substantially as described.

3. In a device for the comparative gaging of the matched race members of a cup and cone pair, each member of such a pair having a raceway of a contour adapting it for coöperation with the raceway of the other to provide a race for antifriction members, in combination, two pairs of contact elements, one pair consisting of tips of a contour and character adapting them to fit into the raceway of one of the members of said matched pair in gaging relation therewith, and the other pair of elements consisting of tips of a contour and character adapting them to fit into the matching raceway of the other member of said matched pair in gaging relation therewith, and means for connecting said two pairs of tips and moving the tips of one pair with respect to each other proportionally to the movements of the tips of the other pair with respect to each other; substantially as described.

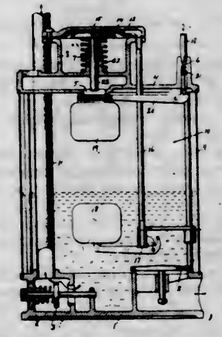
5. In a device of the character indicated, in combination, a plurality of sets of contact elements, means for moving units of one set with respect to each other proportionally to the movements of units of another set with respect to each other, indicating means so related to said first named means as to be unactuated during the movements of said means, means for pivoting one of said elements to an element of said first named means and comprising a lever carrying said element upon one arm and having its other arm operatively connected to said indicating means to actuate the same during said lever's movement; substantially as described.

7. In a device of the character indicated, in combination, a pair of arms movably mounted with respect to each other, a plurality of contact elements carried by each said arm, one of said arms being provided with a projection, a lever fulcrumed upon such arm and carrying upon one of its arms one of said contact elements, and indicating means carried by said projection, the other arm of said lever being in operative connection with said indicating means; substantially as described.

9. In a gage, in combination, a support for gaging arms in the character of a stem with a bifurcated portion, a pair of gaging arms to be mounted for pivotal movement with respect to each other and to said support and between the arms provided by said portion, the one gaging arm having a part in the character of a box received between the arms of said portion and having an aperture, and the other gaging arm being passed through said aperture, and means for pivotally connecting the sides of said aperture with the arms of said bifurcated portion and for pivotally connecting said sides with the other gaging arm; substantially as described.

[Claims 2, 4, 6, and 8 not printed in the Gazette.]

1,274,332. PNEUMATIC PUMP. HOMER S. ROOMES, Milwaukee, Wis., assignor to John R. Ball, Milwaukee, Wis. Filed Dec. 1, 1916. Serial No. 134,226. (Cl. 103—8.)



1. In a pneumatic pump, the combination with a pump chamber, provided with water inlet and outlet valves and an air exhaust port, of an air exhaust valve adapted to close the exhaust port when water has filled the pump chamber and adapted to be retained closed by the difference between the pressures in the pump chamber and outside thereof, a compressed air valve, a fluid actuated motor for opening the exhaust valve, and means for causing the motor to open the exhaust valve when the water in the pump chamber has been lowered to a predetermined level.

2. In a pneumatic pump, the combination with a pump chamber, provided with water inlet and outlet valves and an air exhaust port, of a valve for controlling said air exhaust port adapted to be raised toward its seat by the water and adapted to be retained on its seat by the difference between the pressure of the air on opposite sides thereof, a plunger for forcing said valve from its seat, a fluid actuated motor for operating said plunger, a pipe in communication with said motor and extending below the low water level in the pump chamber so that it will be water sealed at all times, a valve for controlling the flow of water through said pipe, and a float adapted to close said valve by buoyancy and open it by gravity.

[Claim 3 not printed in the Gazette.]

1,274,333. AERO-ANGLEMETER. THEODORE ROLAND, Menomonie, Wis. Filed Sept. 24, 1917. Serial No. 192,922. (Cl. 33—206.)



1. An aero-anglemeter consisting of an inner globe and an outer transparent globe, spacing members between

the globes, and a plurality of encircling scales on the surface of the outer globe, the scales being disposed in intersecting planes and a heavy liquid contained within the outer globe to indicate changes in the position of the instrument from the horizontal.

3. In a device of the type described, the combination of a transparent globe, the globe being formed of hemispherical sections and having a horizontal median rib, a heavy liquid contained within the globe, the surface of which is normally in alinement with the horizontal rib when the instrument is in upright position, and scales on the globe disposed in vertically intersecting planes at right angles to each other, and means for attaching the instrument.

[Claims 2 and 4 not printed in the Gazette.]

1,274,334. BAKING PREPARATION. ROBERT EVSTAFIEFF ROSE, Wilmington, Del. Filed Feb. 19, 1918. Serial No. 218,157. (Cl. 99—10.)

1. A baking powder containing sodium bicarbonate, calcium chlorid and a filler.

2. A baking powder containing sodium bicarbonate, a filler and a neutral chlorid capable of reacting with such bicarbonate to set free carbon dioxid and form an insoluble carbonate.

3. A baking powder containing sodium bicarbonate, a filler and a substantially neutral calcium salt capable of reacting with said bicarbonate.

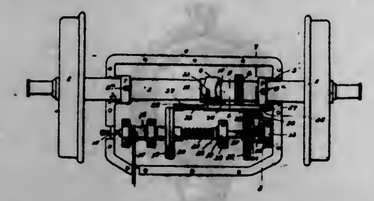
4. A baking powder containing sodium bicarbonate, a filler, calcium chlorid, and acid calcium phosphate.

1,274,335. COTTON-PICKER. WILHELM F. ROSE, La Moure, N. D. Filed Jan. 15, 1915. Serial No. 2,480. (Cl. 56—6.)



In a cotton picker structure a supporting frame including a plurality of depending plates provided with vertical recesses extending upwardly from their lower ends, bearing blocks slidably mounted in said recesses, guiding flanges formed upon said bearing blocks, a pair of vertical cotton picking conveyers carried by said frame, operating rollers for said conveyers, means for operating said operating rollers, guiding rollers for said conveyers, said guiding rollers having their ends reduced and mounted in said bearing blocks, and helical springs seated in said recesses and engaging said blocks to yieldably hold said conveyers taut under expansion and contraction of the conveyers.

1,274,336. BRAKE-OPERATING APPARATUS. EMILIO R. SALAZAR, Habana, Cuba. Filed Sept. 28, 1917. Serial No. 193,762. (Cl. 188—68.)



1. In combination with a train axle, a gear thereon, a cam also on the axle, a shaft, brake actuating means on the shaft, a gear mounted for rotation with said shaft and also for movement thereon so that said gear may be shifted into or out of engagement with the axle gear, and shifting means for said shiftable gear, said shifting means being actuated by said cam.

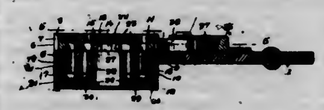
4. In combination with a train axle, a shaft, gears on said axle and shaft, one of said gears being shiftable into and out of engagement with the other, shifting means for said shiftable gear, means on the axle for operating said shifting means, and controlling means for said shifting means.

5. In brake apparatus of the class described, brake operating means including a shiftable gear, an axle, a cam on the axle, a rack shaft, controlling means for the rock shaft, a carriage, connections between the carriage and the gear to enable the carriage to shift the gear and a tappet arm with which the carriage is provided and arranged for engagement with the cam to cause the cam to longitudinally shift the carriage when the tappet arm is engaged with the cam.

7. In brake apparatus of the class described, brake operating means including a shiftable gear, an axle having a cam, a rock shaft, controlling means to partly turn the rock shaft, a carriage to shift the gear and mounted for longitudinal movement on the rock shaft and for turning movement therewith, said carriage having tappet arms alternately engageable with the cam to enable the cam to move the carriage in either direction.

[Claims 2, 3, and 6 not printed in the Gazette.]

1,274,337. WRENCH. JACOB G. SCHWARTZ, Davenport, Iowa. Filed Dec. 29, 1917. Serial No. 209,496. (Cl. 81—62.)



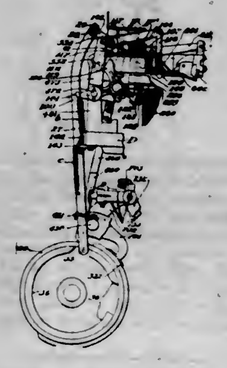
1. A wrench including a head comprising two tubular members each revoluble on and independent of the other, slidable jaws carried by one of the members, a handle loosely positioned between the members and having means for connecting the same with the jaw-carrying member and for frictionally engaging with the second member of the head to also connect said second member with the handle, and means associated with the jaws actuated by the second member when the said second member is turned around the first jaw carrying member.

2. A wrench including a head comprising two loosely associated tubular members, one revoluble on the other, slidable jaws carried by one of the members, a loosely positioned handle between the members and having means for locking the same to either side of the jaw carrying member, said handle having a roughened surface designed, when moved toward the second member of the head to frictionally engage therewith without releasing the jaw-carrying member, and means co-acting between the jaws and the second mentioned member for sliding the jaws when the said second mentioned member is turned on the jaw carrying member.

3. A wrench including a head comprising two tubular members, one of said members having a toothed periphery, a barrel extending therefrom, and an outstanding continuous flange on the end of the barrel, the second member designed to be arranged over the flange, removable segments secured in the second member and received around the barrel and resting on the flange, slidable jaws carried by the first mentioned member, a handle loosely arranged between the members whereby the same may be moved to frictionally engage with the edge of the second mentioned member, said handle having dogs to engage with the teeth of the jaw carrying member, and means revoluble through the jaws and actuated on the turning of the second mentioned member of the head for sliding the jaws.

[Claims 4 to 6 not printed in the Gazette.]

1,274,338. YARN-SEVERING MECHANISM FOR KNITTING-MACHINES. ROBERT W. SCOTT, Boston, Mass., assignor, by mesne assignments, to Scott & Williams, Incorporated, a Corporation of Massachusetts. Filed Jan. 6, 1915. Serial No. 756. (Cl. 66—12.)

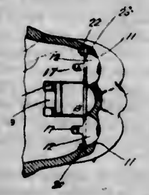


1. A knitting machine having means for feeding and withdrawing a plurality of yarns in combination with common means for severing each yarn when withdrawn, and means for actuating said severing device when yarn-changing at comparatively long intervals, and another severing device adapted to sever said yarns successively when said yarns are withdrawn at frequent intervals.

16. In a knitting machine, a pivoted latch-ring, a yarn-manipulating device on said latch-ring for operation at short intervals comprising an operating member terminating near the latch-ring pivot, and actuating means therefor comprising a lever pivoted on a fixed part having an arm for free contact with said operating member to move it in an arc near the pivoted center of said latch ring.

[Claims 2 to 15 and 17 to 19 not printed in the Gazette.]

1,274,339. MOVABLE-EYE DOLL. HENRY SHAGULL and OSCAR H. WECHSLER, New York, N. Y. Filed Mar. 7, 1918. Serial No. 220,980. (Cl. 46—40.)

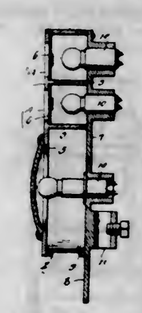


4. In a doll, the combination with a hollow head having a pair of eye sockets formed therein and having pivot engaging means in the opposite side walls beyond the eye sockets, of a pivot bar having its ends held in said engaging means and being unsupported intermediate of its ends, a pair of eyes supported upon the pivot bar and fitted for relative rotation in said eye sockets around the axis of the bar, each eye having a rearwardly and downwardly extending arm terminating in gripping means, and a single weight for both eyes and arms gripped by said gripping means, substantially as set forth.

[Claims 1 to 3 not printed in the Gazette.]

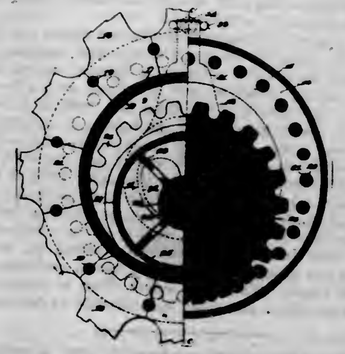
1,274,340. SIGNAL. JAMES SHANLEY, Detroit, Mich. Filed Feb. 16, 1918. Serial No. 217,613. (Cl. 40—132.)

A device of the class described comprising a rectangular casing having a semi-circular lower end, a back plate removably secured to said casing and having its lower end extending below the same and provided with slotted side wings for receiving the license plate, partitions in said casing dividing the same into two rectangular compartments at the top of the casing and a larger compartment at the lower end of the casing, the outer face of the casing having a pair of rectangular openings therein, each opening communicating with one of the



rectangular compartments, and a circular opening in the said front face communicating with the lower compartment, transparent plates covering said rectangular openings and carrying signal words, a lens covering the circular opening, an electric light socket, in each compartment, carried by the back plate and the circular end of the casing having an opening therein and a transparent member covering the same.

1,274,341. TRACTION-WHEEL. DANIEL C. SLAGHT, Easton, Pa., assignor of one-half to Philip S. Dyer, Phillipsburg, N. J. Filed Oct. 18, 1916. Serial No. 126,254. (Cl. 74—7.)



1. A device of the character described having an axle shaft, a toothed wheel carried by the shaft, a casing inclosing the wheel, an internal gear carried in the casing and in mesh with the toothed wheel, and a circular member on the axle shaft concentric with the toothed wheel and bearing on the casing.

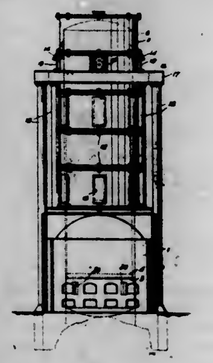
2. A device of the character described, having an axle shaft, a toothed wheel carried on the shaft, a casing inclosing the wheel, there being a circular recess within the casing, an internal gear within the recess and in mesh with the toothed wheel, and a circular member concentric with and carried by the axle shaft, said member being eccentric with and bearing on the casing.

3. A device of the character described, having an axle shaft, a toothed wheel carried by the shaft, a two part

casing inclosing the wheel, there being a circular recess in one part of the casing, a circular series of teeth within the recess and in mesh with the toothed wheel, and a circular member concentric with and carried by the axle shaft, said member being eccentric with and bearing on the interior of the casing.

[Claims 4 to 32 not printed in the Gazette.]

1,274,342. BOILER-SETTING. THOMAS SMITH, Birmingham, Ala. Filed Nov. 6, 1917. Serial No. 200,546. (Cl. 122—332.)



1. In a vertical tubular boiler, upper and lower drums, vertical tubes connecting the drums, a brick work setting for the drums, the setting for the lower drum comprising vertical guides, co-acting guides on the lower drum to permit a free movement only in a vertical direction, external columns free of the brick work setting, horizontal tie members connecting the upper ends of said columns, and brackets mounted on said tie members and penetrating the setting for the upper drum and made fast to said upper drum for supporting both drums from said external frame work, substantially as described.

2. In a vertical tubular boiler having upper and lower cylindrical vertically disposed drums and vertical tubes connecting them, of a brick work setting for the lower drum, co-acting guides on said drum and setting for confining the movements of the drum in a vertical direction, a metallic casing surrounding the tubes and inclosing the upper drum, a thin brick work lining within said casing, a baffle tied into said brick work setting and extending from the lower drum to a point near the upper drum, a transverse flange forming an expansion joint between the lower drum and the lower end of said baffle, external columns standing clear of said casing, horizontal tie members connecting said columns, and brackets resting on said tie members and extending through the casing and upper setting and rigidly tied to the upper drum to support the load of both drums and tubes, substantially as described.

1,274,343. FERTILIZING METHOD AND MATERIAL. WALTER O. SNELLING, Pittsburgh, Pa. Filed Apr. 17, 1915. Serial No. 22,005. (Cl. 52—1.)

1. The method of fertilizing soils that comprises distributing fertilizing material therein by explosive means.

4. The method of fertilizing soil that comprises exploding in the soil a charge of an explosive material associated with a body of solid, finely-divided and relatively insoluble fertilizing material.

6. An explosive for agricultural use comprising explosive material and a calcium phosphate.

9. An explosive cartridge for agricultural use comprising a body of explosive surrounded by a solid, finely divided fertilizing material, and an outer envelop surrounding the said fertilizing material.

[Claims 2, 3, 5, 7, and 8 not printed in the Gazette.]

1,274,344. UNBREAKABLE CLOTHES-PIN. CLARENCE ELMER STAUB, Mascoutah, Ill. Filed Feb. 16, 1918. Serial No. 217,664. (Cl. 24—259.)



The herein described clothes pin, consisting essentially of a narrow elongated strip of resilient metal shaped to form an approximately circular head and a longitudinally extending channel-like rib projecting exteriorly on said head and limbs extending from the head at points opposite the center of the said rib, the inner faces of said limbs contacting with each other except at an intermediate point where outward bulges are formed that coöperate to form an elongated eye, and at their lower extremities where said limbs are bent outward to form a throat or inlet.

1,274,345. PLUG-VALVE. WILLIAM W. STERLING, Ruth, Nev. Filed Jan. 19, 1918. Serial No. 212,724. (Cl. 277—69.)



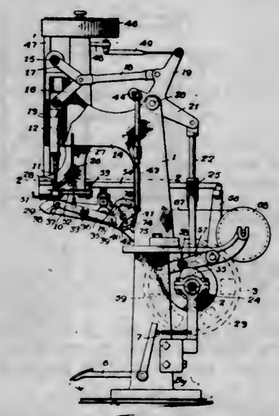
1. A valve embodying a casing provided with a plurality of diametrically disposed ports communicating with a central bore, a hollow plug rotatably mounted within said central bore, a diametrically arranged port within the hollow plug, circumferentially arranged passages formed in the hollow plug, said passages communicating with and disposed upon each side of each end of the diametrically arranged port, said passages being adapted to establish communication between certain of the ports of the casing, a plug disposed within the hollow plug and having a transverse port to register with the transverse port of the hollow plug and means for holding the second mentioned plug against movement with respect to the casing.

3. A valve embodying a casing provided with a plurality of diametrically and right angularly disposed ports communicating with a central bore, a plurality of concentrically arranged plugs mounted within said casing, each of said plugs being provided with a transverse port adapted to be brought into registry with each other to provide a continuous passage transversely of the plugs and circumferential passages formed in the outermost plug, whereby communication may be established between the ports.

[Claim 2 not printed in the Gazette.]

1,274,346. MACHINE FOR ATTACHING FLAP-SECURING MEANS TO ENVELOPS. WILLARD E. SWIFT, Worcester, Mass., assignor to United States Envelope Company, Springfield, Mass., a Corporation of Maine. Filed July 9, 1918. Serial No. 777,998. (Cl. 93—61.)

1. In a fastener setting machine, fastener setting mechanism, means for feeding a button into fastener receiving position, means for feeding a reinforcing member into fastener receiving position, and means for actuating the setting mechanism to secure the button and the reinforcing member to an envelop by a fastener.



26. A frame supporting a plunger with means for operating it, means for supplying eyelets in a position in the path of movement of said plunger, a magazine containing a quantity of disks, a carrier to convey the disks from said magazine to a position to receive said eyelets that are passed through said disks by said plunger, said carrier acting as a support for the disks as the eyelets are passed through them, means for removing the carrier from underneath the plunger after the eyelets have been forced through the disks, and means to support an article beneath said disk position while being acted upon by said plunger to affix a disk to said article by means of an eyelet.

[Claims 2 to 25, 27, and 28 not printed in the Gazette.]

1,274,347. DIRECTION-SIGNAL FOR AUTOMOBILES. WILLIAM ADOLPH TAYC, Cincinnati, Ohio. Filed Mar. 9, 1918. Serial No. 221,457. (Cl. 40—132.)



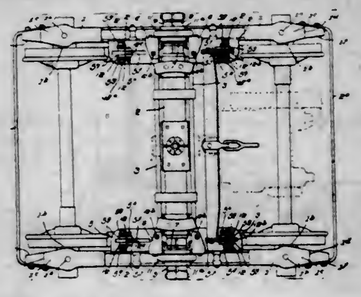
3. In an automobile, the combination of a mud guard at each corner thereof having an arrow-shaped opening therein, the arrow openings on one side pointing away from the automobile and the arrow openings on the opposite side pointing in the opposite direction away from the automobile, light diffusing material located back of each opening, a casing located back of each opening, a lamp located within each casing, and means adapted to control the illumination of the lamps independently of each other.

[Claims 1 and 2 not printed in the Gazette.]

1,274,348. CAR-TRUCK. JOHN TAYLOR, Albany, N. Y., assignor to Taylor Electric Truck Co., Troy, N. Y., a Corporation of New York. Filed Jan. 23, 1918. Serial No. 213,291. (Cl. 105—239.)

1. In a truck frame the combination of pedestals, side bars connecting said pedestals, cross center bars interposed between the top bars, gusset brackets connecting the cross center and side bars, and binding brackets applied to the gusset brackets and binding same to the side bars.

2. In a truck frame the combination of pedestals, side bars connecting said pedestals, cross center bars interposed between the top bars, angle brackets connecting the cross center and side bars, gusset brackets over the angle brackets; and binding brackets applied over the gusset brackets and side bars.



3. In a truck frame the combination of pedestals, side bars connecting said pedestals, cross center bars interposed between the top bars, angle brackets connecting the cross center and side bars, gusset brackets over the angle brackets, binding brackets applied over the gusset brackets and side bars, and thrust brackets intermediate the cross center bars and connecting the same to the side bars.

4. For a car truck, an angle bracket adapted to connect a cross center bar to a side bar, and having a U-recess or bend in one of its legs.

33. A spring plank consisting of side bars set edgewise; castings having sockets in which are fitted the ends of said side bars; a flat thrust bar lying flatwise intermediate the side bars and below the plane thereof; the ends of said thrust bar being rounded and bent upwardly and extending through said castings; nuts threaded on the rounded ends of said thrust bar exterior to the castings; and saddles underlying the side bars and overlying the thrust bar adjacent the upwardly bent ends thereof.

[Claims 5 to 32 not printed in the Gazette.]

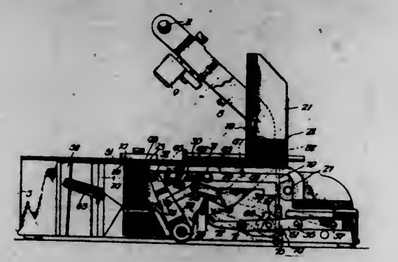
1,274,349. MEANS FOR PRODUCING EDIBLE CONTAINERS. PIERRE LAMOUREUX BATESON, Brooklyn, N. Y., assignor to The American Ingenuities Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 10, 1916. Serial No. 90,089. (Cl. 107—66.)



1. Means for producing an edible cup, consisting of a plurality of forming members spaced apart, one said member having an overhanging peripheral flange, the other said member having a straight portion slidably fitting within said flange, said flange and said straight portion being adapted to produce a sharp edge upon a cup.

2. Means for producing an edible cup comprising a forming member having a tapered exterior to assist in forming said cup, a hollowed interior to allow said member to be uniformly heated, and an overhanging peripheral flange providing a recess for shaping the edge of said cup in combination with a second forming member having a tapered hollow interior and a generally tapered exterior, the smaller ends of both said members being flattened, a straight portion formed upon said exterior and adapted to coöperate with the inner surface of said overhanging flange.

1,274,350. HAND ADDRESSING-MACHINE. JOSEPH S. DUNCAN, Chicago, Ill., assignor to Addressograph Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 17, 1913. Serial No. 801,327. (Cl. 101—65.)



2. In an addressing machine, the combination of a magazine adapted to contain a supply of printing devices, a bed, a platen movable toward and from the bed, a reciprocating slide and means coöperating therewith to transfer printing devices from the magazine to the bed with a step by step movement, connecting means for reciprocating said slide from said platen, and manually operable mechanism for controlling said connecting means whereby said slide may be actuated at each operation of the platen or at alternate operations of the platen or may be rendered totally inoperative.

6. In an addressing machine, the combination of a pivotally mounted platen arm, reciprocatory mechanism and means coöperating therewith for transferring printing devices to printing position, a link connecting said arm with said mechanism, a rotatable cam provided with a ratchet wheel, a tripper lever engaged with said cam and adapted to release said link to break the connection between said platen arm and said reciprocatory mechanism, a dog carried by said platen arm in position to actuate said ratchet wheel, and means for moving said ratchet wheel and tripper arm laterally into and out of alinement with said dog and link respectively.

[Claims 1, 3 to 5, and 7 to 10 not printed in the Gazette.]

1,274,351. NAPHTHOL DYE AND PROCESS OF MAKING SAME. CARLETON ELLIS, Montclair, N. J., assignor to Ellis-Foster Company, a Corporation of New Jersey. Filed Jan. 2, 1917. Serial No. 140,116. (Cl. 8—1.)

1. The process of making a coloring agent which comprises heating naphthol, sulfur and alkali to a temperature of at least 160° C.

3. The process of making a coloring matter which comprises fusing beta naphthol and dinitrophenol with sodium sulfid and sulfur.

4. The process of making a coloring agent which comprises heating beta naphthol, sulfur and alkali to a temperature of at least 160° C., but not exceeding 180° C.

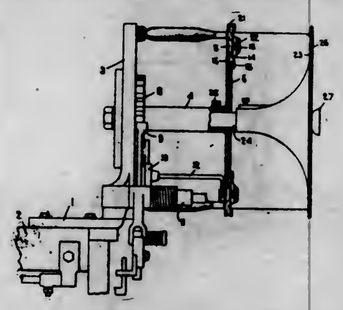
5. The process of making a black coloring matter which comprises heating beta naphthol with an alkaline sulfid to about 160—180° C. for about 5 hours.

6. The process of making dark coloring matter which comprises heating naphthol with sodium sulfid and sulfur to a temperature of approximately 160–180° C.

[Claim 2 not printed in the Gazette.]

1,274,352. AUTOMATIC FILLING-REPLENISHING LOOM. JOHN MILLS, Brookline, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed June 18, 1917. Serial No. 175,288. (Cl. 139—85.)

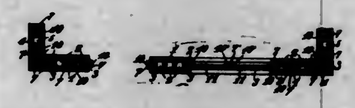
3. A tip holder for filling carriers for automatic filling replenishing looms comprising a rectangular member having at one end a flange adapted when positioned in a filling feeder to form a pivot for said tip holder and at its opposite end laterally extending arms to limit the movement of said tip holder, the said tip holder being provided with a groove adapted to receive and guide the tip of a



filling carrier, the bottom of said groove being slotted longitudinally to form a guide for the filling end.

[Claims 1 and 2 not printed in the Gazette.]

1,274,353. TOY BUILDING-BLOCKS. HARMON S. PALMER, Washington, D. C., assignor of one-half to Clyde Palmer, Washington, D. C. Filed June 8, 1916. Serial No. 102,529. (Cl. 72—41.)



1. A toy building wall composed of superposed courses of blocks having registering openings, and pins inserted in and removable from said openings to lock the blocks of the various courses together when inserted and to enable the blocks to be separated when said pins are withdrawn, said pins being insertible in different positions about their axes, said wall having an opening therein, one of said pins being located at the side of the wall opening and engaging the ends of the corresponding blocks to hold them in place, said pin extending beyond the wall opening into other blocks to be held in place thereby, and having a groove in one side.

2. A toy building wall composed of superposed courses of blocks having square openings between their ends and half-openings at their ends, said openings being in registration and spaced according to a standard unit of measurement for the blocks, and pins inserted through said openings to lock the blocks of the various courses together and adapted to be withdrawn from said blocks to enable the wall to be knocked down and the blocks separated for rebuilding, said pins having grooves in one side and being insertible in different positions about their axes, said wall having an opening, two of said pins being disposed at the side of said wall opening, those blocks at the side of the wall opening having their respective half-openings engaging said pin to hold said blocks in place, and said pin entering other blocks beyond the wall opening to be held in place thereby.

1,274,354. UNDERWEAR. ROBERT A. SCOTT, Boston, Mass., assignor to The Peerless Knitting Mills Company, Boston, Mass., a Corporation of Maine. Filed Nov. 18, 1913. Serial No. 801,613. (Cl. 2—144.)

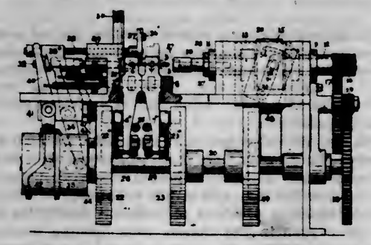
5. An undergarment having a body with a posterior opening, one side of which is formed by the free edge of a gore, the upper end of which is formed by the free edge of another gore, and the other side of which is bounded by the edge of a back flap secured to the body of the garment, said back flap at its lower end forming with the body a permanently closed crotch and having its upper



and outside edges free, and a fastening device between the upper outside corner of the back flap and the body.

[Claims 1 to 4 not printed in the Gazette.]

1,274,355. AUTOMATIC NUT-TAPPING MACHINE. CARL G. TIDEMAN, Worcester, Mass.; ROSE M. TIDEMAN, executrix of said Carl G. Tideman, deceased, assignor to Charles T. Burlin, Northbridge Center, Mass. Filed Aug. 26, 1915. Serial No. 47,459. (Cl. 10—133.)



1. In a mechanism of the class described, the combination, of a horizontally arranged stationary supported tap, means for supporting the same, a reciprocatory movable rotatable hollow nut-holding device having a nut-receiving matrix and in axial alinement with said tap, a nut-delivery chute having an exit opening in alinement with the tap, reciprocating means movable through said exit opening for projecting nuts singly from said chute onto the tap, alternatively operative gripping devices, coöperating with said tap to permit nuts to be moved lengthwise of the tap, means for passing the nut to a position for engagement with the rotating matrix, and means within the hollow nut-holding device for releasing the nut from the matrix after the tap leaves the threaded eye of the nut.

5. In a nut-tapping machine, in combination, a horizontally arranged stationary supported tap, a tap-supporting means comprising a plurality of pairs of vertically arranged swinging jaw-bars carrying jaw-members that grip the shank of the tap, a jack-lever for each pair of jaw-bars provided with means for forcing apart the opposite ends of said jaw-bars and releasing the same, a rotatable cam-shaft arranged substantially parallel with the said tap, cams fixed thereon and engaging with said jack-levers for controlling the respective tap-supporting jaws.

12. In a machine of the class described, in combination with a non-rotating tap, retractable tap-holding members, and means for delivering unthreaded nuts onto said tap, and means for sliding the same to the thread-cutting head; of a rotating endwise reciprocating spindle having a tubular part with an end cavity or chuck for receiving and rotating the nut upon the threading tap, an endwise slidable ejector within said tubular part, an exterior contact collar joined to said ejector by a transversely arranged pin passed through a slot in the spindle, means for rotating the spindle, and means for imparting endwise movement thereto.

[Claims 2 to 4 and 6 to 11 not printed in the Gazette.]

1,274,356. COW-TAIL HOLDER. PETER H. ALBERT, Vulcan, Mich. Filed May 2, 1918. Serial No. 232,059. (Cl. 119—105.)

1. A device of the character described including a pair of complemental relatively movable sections, opposed tail clamping jaws formed at the adjacent terminals of the sections and normally held in close relation with each other, and oppositely extending leg engaging arms continuing from the opposite terminals of the sections and



also serving as handles for facilitating the spreading of the jaws when desired.

[Claim 2 not printed in the Gazette.]

1,274,357. AUTOMATIC TELEPHONE-EXCHANGE SYSTEM. HERBERT L. FISH, Bakersfield, Cal., assignor, by mesne assignments, to Automatic Electric Company, a Corporation of Illinois. Filed May 19, 1906, Serial No. 317,697. Renewed Dec. 31, 1917. Serial No. 209,796. (Cl. 179—18.)



1. In a telephone exchange system, the combination of a calling telephone line, a called telephone line, automatic switching machinery for connecting the two lines, means for grounding a telephone line to release the switching machinery before the called subscriber answers, and means for opening a telephone line circuit to release the switching machinery after the called subscriber answers.

2. In a telephone exchange system, the combination of a calling telephone line, a called telephone line, automatic switching machinery for connecting the two lines together, means for grounding the calling line to release the switching machinery before the called subscriber answers, and means for opening the circuit of either telephone line to release the switching machinery after the called subscriber answers.

24. In a telephone system, an automatic switching apparatus for connecting one talking circuit with another, a release circuit associated with said talking circuit, said switching apparatus provided with line relays having windings in the release circuit and windings connected to the talking circuit, the windings in the release circuit being in series.

25. In a telephone system, an automatic switching apparatus for connecting one talking circuit with another, a release circuit associated with said talking circuit, said switching apparatus provided with line relays having windings in the release circuit and windings connected to the talking circuit, said automatic switching apparatus comprising a connector switch and said line relays being located in said connector, the windings in the release circuit being in series.

[Claims 3 to 23 not printed in the Gazette.]

1,274,358. FORK. JOHN HOTHAM, Fort Pierce, Fla. Filed Jan. 11, 1918. Serial No. 211,877. (Cl. 30—5.)

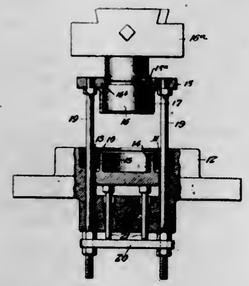
1. A fork comprising a body having a handle, said body having a tine extending from one edge thereof and formed integral therewith, and a plurality of tines pivotally mounted on said body, said tines having squared portions for causing the same to line up in parallelism, and also in parallelism with said first mentioned tine, one of said

pivotally mounted tines having a notch, and a pivotally mounted locking member mounted on said body formed with a projection fitting into said notch for locking said tines against movement when in a parallel position.



2. A fork of the character described comprising a body having a fixed tine, a plurality of pivotally mounted tines normally arranged parallel with the fixed tine, one of the pivotally mounted tines having a notch, and a locking member pivotally mounted on said body formed with a projection fitting into said notch when the tines are parallel, a stop engaging said body, and a thumb member arranged adjacent the end opposite said projection whereby a locking member may be moved freely in either direction for permitting a separation of said tines or for locking the tines in a parallel position.

1,274,359. METHOD OF MAKING PROJECTILE-BANDS. ALEXANDER W. LIMONT, Bridgeport, Conn., assignor to Bridgeport Brass Company, Bridgeport, Conn., a Corporation of Connecticut. Original application filed Nov. 5, 1915, Serial No. 59,840. Divided and this application filed Feb. 20, 1917. Serial No. 149,875. (Cl. 29—156.)

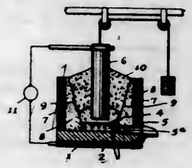


5. The method of making a projectile band or the like, which comprises forming a flat washer-like blank of ductile metal in which the radial distance between the inner and outer peripheries is approximately three times the thickness of the metal, and drawing such washer through a conical shape to a cylindrical shape by the application of pressure from one side only of the blank.

7. The method of making a projectile band or the like, which comprises drawing a flat washer in a cylindrical die into cylindrical shape through a conical shape by the continuous application of pressure from one side only of the blank, and then exerting pressure on opposite edges of the roughly finished band while said band remains in the same die in which it is so continuously drawn, for perfecting the band and bringing it accurately to size.

[Claims 1 to 4 and 8 to 10 not printed in the Gazette.]

1,274,360. MANUFACTURE OF SHAPED CASTINGS OF FERROSILICID. NAPOLEON G. PETINOT, New York, N. Y., assignor to United States Alloys Corporation, New York, N. Y., a Corporation of New York. Continuation in part of application Serial No. 110,038, filed July 19, 1916. This application filed Dec. 19, 1917. Serial No. 207,829. (Cl. 204—64.)



1. In the manufacture of acid resisting shaped castings the method which comprises the making in an electric furnace of an iron silicid solution containing ten per cent. (10%) to sixteen per cent. (16%) silicon and pouring said iron silicid solution while still in a molten condition into a shaped mold.

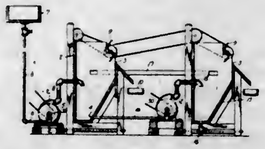
5. In the manufacture of castings the method which comprises charging an electric arc furnace with a mixture of ferrous base material, silicious material, as quartz, silica sand or the like, and carbon supplying material, the latter of which is provided in sufficient quantities to reduce the oxygen in the charge, thus forming heated CO which passes through the charge, supplying sufficient heat from the arc of the electric furnace to effect the reduction just referred to and also to melt the metals in the charge, the proportion of the silicious material employed being such that the resulting composition will contain from ten per cent. (10%) to sixteen per cent. (16%) of silica and pouring the composition while still in a molten condition into a shaped mold, there being maintained in the heating zone during the normal operation, of the furnace, a reducing atmosphere.

11. The method which comprises forming in an electric melting furnace iron silicid having a composition comprising approximately ten per cent. (10%) to sixteen per cent. (16%) of silicon, collecting from the electric furnace the iron silicid and storing it in a mixer until the stored material in the mixer surpasses the capacity of the furnace and until enough stored material is provided from which to make a desired shaped casting, and finally pouring said stored material in a shaped mold to form the desired casting.

[Claims 2 to 4 and 6 to 10 not printed in the Gazette.]

REISSUES.

14,497. ORE-FLOTATION PROCESS. HERBERT C. COLBURN, Colorado Springs, and ERNEST A. COLBURN, Denver, Colo.; said Herbert C. Colburn assignor to said Ernest A. Colburn. Filed Jan. 19, 1918. Serial No. 212,797. Original No. 1,226,062, dated May 15, 1917, Serial No. 100,947, filed May 31, 1916. (Cl. 83—85.)



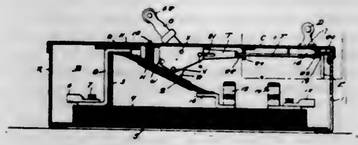
1. The process of separating ores by flotation consisting in emulsifying and scouring ore-pulp containing a selective substance and an added gas, while it is maintained under a pressure less than atmospheric, and admitting the product to a liquid-body under higher pressure, so as to permit of an upward movement of buoyant particles to the surface thereof.

2. The process of separating ores by flotation consisting in emulsifying and scouring ore-pulp containing an oil and added gas, while it is maintained under a pressure less than atmospheric, and admitting the product to a liquid under higher pressure, so as to permit of an upward movement of buoyant particles to the surface thereof.

3. The process of separating ores by flotation consisting in emulsifying and scouring ore-pulp containing air and a selective substance, while it is maintained under a pressure less than atmospheric, and admitting the product to a liquid under higher pressure, so as to permit of an upward movement of buoyant particles to the surface thereof.

4. The process of separating ores by flotation consisting in emulsifying and scouring ore-pulp containing air and oil, while it is maintained under a pressure less than atmospheric, and admitting the product to a liquid under higher pressure, so as to permit of an upward movement of buoyant particles to the surface thereof.

14,498. SELF-ACTUATING SAFETY-PANEL. HUBERT F. KRANTZ, Brooklyn, N. Y., assignor to Krantz Manufacturing Company, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Apr. 16, 1918. Serial No. 228,981. Original No. 1,248,431, dated Nov. 27, 1917, Serial No. 79,094, filed Feb. 18, 1916. (Cl. 175—282.)



1. A switch mechanism combining a casing having an opening thereinto, a switch blade, manual control means for the switch blade, a displaceable closure member for said opening, a manually operable lock operable independently of the manual control means for the switch blade for preventing displacement of said closure member, and means for causing said switch blade to assume open circuit position as said lock is manually moved into unlocking position.

2. A switch mechanism combining a casing having an opening thereinto, a switch blade, manual control means for the switch blade, a displaceable closure member for said opening, a manually operable lock operable independently of the manual control means for the switch blade for preventing displacement of said closure member, and connections between said switch blade control means and said lock for moving said lock into locking position when said switch blade is thrown into closed circuit position.

3. A switch mechanism combining a casing having an opening thereinto, a switch blade, manual control means for the switch blade, a displaceable closure member for said opening, an element operable to displace the closure member, a part movable by said element to lock the closure member against displacement, and connections between said part and said switch blade whereby to constitute an auxiliary control means for the switch blade.

4. A switch mechanism combining a casing having an opening thereinto, a switch blade, manual control means for the switch blade, a displaceable closure member for said opening, a handle mounted on said closure member having a part to lock said closure member, said handle being adapted to be actuated first to unlock the closure member and then to displace it, and means whereby the handle constitutes part of an auxiliary control means for the switch blade operable to cause the switch blade to assume an open circuit position when said closure member has been unlocked.

5. A switch mechanism combining a casing having an opening thereinto, a switch blade, manual control means for the switch blade, a displaceable closure member for said opening, a manually operable lock operable independently of the manual control means for the switch blade for preventing displacement of said closure member, and means whereby said lock constitutes an auxiliary manual control means for the switch blade.

6. A switch mechanism combining a casing having an opening thereinto, a switch blade, manual control means for the switch blade, a displaceable closure member for said opening, means independent of said switch blade control means effective to prevent closure of the closure member when said switch blade is in closed circuit position, and said last means comprising an auxiliary manual control medium for the switch blade.

7. A switch mechanism combining a casing having an opening thereinto, a switch blade, manual control means for the switch blade, a displaceable closure member for said opening, means independent of the switch blade control means for preventing said closure member from being opened when said blade is in closed circuit position, and said last means comprising an auxiliary manual control medium for the switch blade.

8. A switch mechanism combining a casing, a pair of contacts fixed within said casing spaced apart, the casing having an opening thereinto, a door for said opening movable into two positions, a conductor member mounted upon the door adapted to be shifted bodily by movement of the door into and out of position intermediate said pair of contacts, manual control means for shifting said conductor member operable when the conductor member is in position intermediate said contacts to move the conductor member into and out of engagement with both of said contacts, and means independent of said manual control means for preventing movement of the conductor member into position intermediate said contacts except when the conductor member has been operated by said manual control into its non-engaging position.

9. A switch mechanism combining a casing having an opening thereinto, a door displaceable to open and close said opening, a switch blade connected to be shifted into functioning position by closing said door, manual control means for the switch blade, and means independent of said switch blade control means for causing said switch blade to assume its open circuit position whenever said door is either opened or closed.

10. A switch mechanism combining a casing having an opening thereinto, a switch blade, manual control means for the switch blade, a displaceable closure member for said opening, auxiliary control means for the switch blade, and means whereby the effectiveness of the auxiliary control means is determined by the position of the closure member.

11. A switch mechanism comprising a movable contact part, control means therefor, auxiliary control means for said movable contact part, a protecting member for the switch mechanism, said protecting member having a movable part, and means whereby the effectiveness of the auxiliary control means is determined by the position of the movable part of the protecting member.

12. A switch mechanism having a movable blade, an operating handle for moving said blade, a protecting member for protecting said blade, said protecting member having a displaceable part displaceable to give access to said blade, auxiliary control means for the blade, and means whereby the effectiveness of said auxiliary control means is determined by the position of said displaceable part.

13. A switch mechanism combining a casing having an opening thereinto, a door for the opening pivotally mounted to swing into and out of closing position, a switch mechanism carried by the door to swing therewith and comprising a double-ended switch blade pivoted intermediate its length to swing its opposite ends into and out of functioning position, and a pair of contacts for the respective ends of the switch blades arranged with respect to the door hinge so that when the door is swung

open the ends of the switch blade will move in opposite directions away from their respective contacts.

14. A switch mechanism combining a casing having an opening thereinto, a door for the opening hinged to swing into and out of closing position, a contact member arranged within the casing, a switch mechanism carried by the door to swing therewith, a barrier arranged within the casing between said contact member and said opening to render the contact member practically inaccessible from said opening when the door is open, and the switch mechanism comprising a contact part which swings about said barrier into and out of position for functioning with said contact member when the door is closed or opened.

15. A switch mechanism comprising a casing having an opening thereinto, a closure part for said opening, said casing providing a compartment having an overhanging cover ledge adjacent the opening, a contact member terminating at the under face of said ledge, a switch device for coöperating with said contact member, and a barrier arranged within the compartment between said contact member and said opening to render said contact member practically inaccessible from said opening when said closure part is removed.

16. A switch mechanism combining a casing having an opening thereinto, a displaceable closure member for the opening, a latch for the closure member adjacent one edge thereof, a switch mechanism adjacent the opposite edge of the closure member, and connections extending from the latch across the closure member to the switch mechanism operative to cause the switch mechanism to assume open circuit position when the latch is operated to release the closure member.

17. A switch mechanism combining a casing having an opening thereinto, a closure member, for the opening movable into and out of closing position, a latch for retaining the closure member closed, a switch device movable into "on" and "off" positions, the latch comprising a handle part and a locking plate rotatable by the handle part into and out of locking position, a member connected with the locking plate and extending therefrom into operative relation with the switch device adapted to insure an off position of the switch device when the locking plate is in unlocking position, and an extension formed upon the locking plate operable when the closure member is being closed to constitute a stop for engaging against an opposing surface portion of the casing to prevent movement of the closure member into near closing position except when the locking plate is in unlocking position.

18. A switch mechanism combining a casing having an opening thereinto, a door for said opening movable into two positions, a switch mechanism including a switch blade, manual control means for said switch blade, and means operable independently of said mentioned manual control means for causing the switch blade to assume its open circuit position whenever the door is in one of its positions.

19. A switch mechanism comprising a pair of contacts fixed in spaced relation to each other, a pair of movable contacts for coöperating with the fixed contacts, operating means to cause the movable contacts to move in opposite directions away from the fixed contacts respectively, and other means selectively operable also to cause the movable contacts to move in opposite directions away from the fixed contacts.

20. A switch mechanism combining a casing having an opening therein, a door for said opening movable into two positions, a pair of contacts fixed within said casing spaced apart, a pair of movable contacts for coöperating with the fixed contacts, operating means to move the movable contacts in opposite directions away from the fixed contacts respectively, other operating means selectively operable also to move the movable contacts in opposite directions away from the fixed contacts, and the structure being of a character such that movement of the door in one direction also will effect movement of the movable contacts in opposite directions away from the fixed contacts.

21. A switch mechanism combining a casing having an opening thereinto, a door for the opening movable into two positions, a pair of contacts arranged within the casing spaced apart, a switch blade adapted to be moved into and out of position engaging said contacts, means whereby to cause the parts of the switch blade which are adapted to engage said contacts to move in opposite directions away from the respective contacts, and the structure being of a character such that movement of the door into one of its positions will cause the mentioned portions of the switch blade to move farther away from the respective contacts.

22. A switch mechanism combining a casing having an opening thereinto, a door for the opening movable into two positions, releasable retaining means for the door, a pair of contacts arranged within the casing spaced apart, a switch blade adapted to be moved into and out of position engaging said contacts, connections between said door retaining means and said switch blade whereby to cause the parts of the switch blade which are adapted to engage said contacts to move in opposite directions away from the respective contacts by movement of said retaining means into non-retaining position, and means whereby subsequent movement of the door will cause the mentioned portions of the switch blade to move farther away from the respective contacts.

23. A panel box comprising a relatively stationary part and a relatively movable part, the latter being movable into an open position to give access into the former, a pair of contacts fixed within the relatively stationary part spaced away from each other, a conductor member arranged within the relatively stationary part in a position between said fixed contacts adapted for electrically connecting said fixed contacts together, and means connecting said conductor member with said relatively movable part whereby to bodily shift the conductor member out from between said fixed contacts and into a position affording ready inspection of the conductor member upon opening movement of said movable part, together with means operable to move the conductor member into and out of engagement with said fixed contacts at will while said conductor member is in position between said fixed contacts.

24. A switch mechanism combining a casing having an opening thereinto, a switch blade, manual control means for the switch blade, a displaceable closure member for said opening, a manually operable lock operable independently of the manual control means for the switch blade for preventing displacement of the closure, and the structure being of a character such that an "off" movement of the switch blade preceding a releasing operation of the lock will permit displacement of the closure member.

25. A switch mechanism combining a casing having an opening thereinto, a switch blade, manual control means for the switch blade, a displaceable closure member for said opening, a latch device for the closure member manually operable independently of the manual control means for the switch blade, and connections between the switch blade control means and said latch device of a character to cause the latch device to operate so as to assume a position latching the closure member closed whenever the switch blade is in "on" position.

26. A switch mechanism combining a casing having an opning thereinto, a switch blade, manual control means for the switch blade, a displaceable closure member for said opening, a latch device for the closure member manually operable independently of the manual control means for the switch blade, and said latch device being of a character such that it may be operated to unlatch the closure member at any time, together with means in combination, however, requiring an "off" position of the switch blade prior to any opening movement of the closure member.

27. A switch mechanism combining a casing having an opening thereinto, a switch blade, manual control means for the switch blade, a displaceable closure member for said opening, a manually operable lock operable independently of the manual control means for the switch blade for preventing displacement of the closure member, means for causing the switch blade to assume open-circuit position as said lock is manually moved to unlocking position, and said last mentioned means including a part for retaining the switch blade in open-circuit position while the lock remains in unlocking position.

14,499. WRITING-PAPER AND METHOD OF MAKING THE SAME. SHINGO KUROKI, Tokyo, Japan, assignor to Kimpitsu Seishi Kabushiki Kaisha, Ltd., Tokyo, Japan. Filed Dec. 7, 1917. Serial No. 206,101. Original No. 1,234,045, dated July 17, 1917, Serial No. 144,074, filed Jan. 23, 1917. (Cl. 91—68.)

1. The herein described process of manufacturing writing paper for metallic styli, which consists in treating paper material with powdered clay; and thereafter coating it with a mixture composed of a non-drying oil, a volatile oil, and vaseline.

2. The herein described process of manufacturing writing paper for metallic styli, which consists in treating paper material with powdered clay; and thereafter coating it with a mixture composed of a non-drying oil, benzene and vaseline.

3. The herein described process of manufacturing writing paper for metallic styli, which consists in treating paper material with powdered clay; and thereafter coating it with a mixture composed of castor oil, a volatile oil, and vaseline.

4. The herein described process of manufacturing writing paper for metallic styli, which consists in treating paper material with powdered clay; and thereafter coating it with a mixture composed of castor oil, benzene, and vaseline.

5. The herein described process of manufacturing writing paper for metallic styli, which consists in treating paper material with powdered clay; and thereafter coating it with a mixture composed of a non-drying oil, a volatile oil, vaseline, and a deodorizing substance.

6. The herein described process of manufacturing writing paper for metallic styli, which consists in treating paper material with powdered clay; and thereafter coating it with a mixture composed of a non-drying oil, a volatile oil, vaseline, and camphor oil.

7. The herein described process of manufacturing writing paper for metallic styli, which consists in treating paper material with a mixture of powdered clay and zinc oxid; and thereafter coating it with a mixture composed of a non-drying oil, a volatile oil, and vaseline.

8. The herein described process of manufacturing writing paper for metallic styli, which consists in treating paper material with a mixture of powdered clay and zinc oxid; and thereafter coating it with a mixture composed of a non-drying oil, a volatile oil, vaseline, and a deodorizing substance.

9. The herein described process of manufacturing writing paper for metallic styli, which consists in treating paper material with a mixture of powdered clay and zinc oxid; and thereafter coating it with a mixture composed of castor oil, benzene, and vaseline.

10. The herein described process of manufacturing writing paper for metallic styli, which consists in treating paper material with a mixture of powdered clay and zinc oxid; and thereafter coating it with a mixture composed of castor oil, benzene, vaseline, and a deodorizing substance.

11. The method of making a writing paper adapted to be written upon by a soft pointed metallic stylus, which comprises treating paper material with powdered clay and then adding a non-drying unguent.

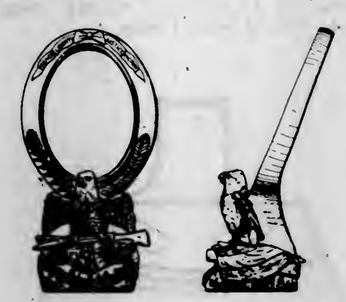
12. A writing paper having a writing surface comprising powdered clay tempered by a non-drying unguent.

13. A writing paper having a coating of powdered clay made adherent thereto by an adhesive and tempered with a non-drying unguent.

14. A writing paper having a coating of powdered clay made adherent thereto by gum arabic, and tempered with a non-drying oil.

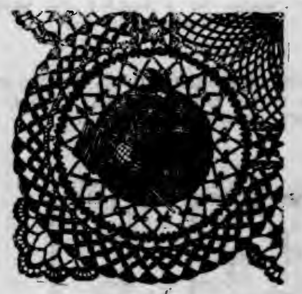
DESIGNS.

52,233. ORNAMENTAL PICTURE-FRAME. PHILIPP BALISTRERI, Milwaukee, Wis. Filed Apr. 20, 1918. Serial No. 229,863. Term of patent 3½ years.



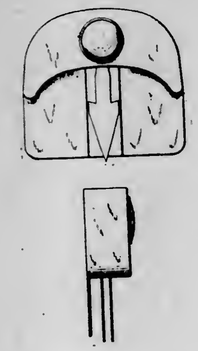
The ornamental design for an ornamental picture frame, as shown.

52,234. PAPER DOILY. FRED CONRAD, Milwaukee, Wis., assignor to American Lace Paper Company, a Corporation of Wisconsin. Filed Feb. 27, 1918. Serial No. 219,516. Term of patent 3½ years.



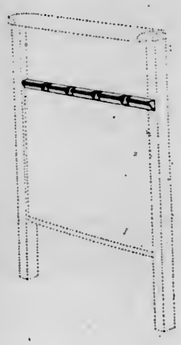
The ornamental design for a paper doily, as shown.

52,235. SIGNAL HOUSING AND SUPPORT. JACK R. DUNLAP, Dallas, Tex. Filed Mar. 15, 1918. Serial No. 222,754. Term of patent 14 years.



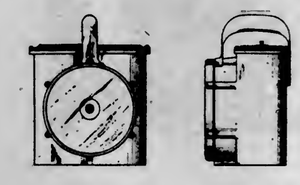
The ornamental design for a signal housing and support, as shown.

52,236. SOAP-REST FOR WASHBOARDS. HENRY J. GILBERT, Saginaw, Mich. Filed Jan. 15, 1916. Serial No. 72,351. Term of patent 14 years.



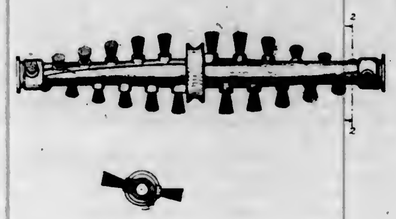
The novel design for a soap-rest for washboards illustrated in the accompanying drawing.

52,237. PORTABLE ELECTRIC LANTERN. WILLIAM GRETHER, Dayton, Ohio. Filed May 3, 1918. Serial No. 232,408. Term of patent 14 years.



The ornamental design for a portable electric lantern, as shown.

52,238. BRUSH FOR SUCTION-CLEANERS AND THE LIKE. HOWARD EARL HOOVER, Chicago, Ill., assignor to The Hoover Suction Sweeper Company, New Berlin, Ohio, a Corporation of Ohio. Filed Jan. 18, 1918. Serial No. 212,403. Term of patent 14 years.



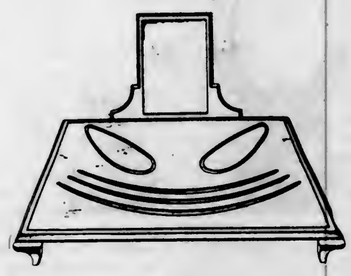
The ornamental design for a brush for suction cleaners and the like as shown.

52,239. TOY HEAD-BLOCK. RICHARD E. HUMBERT, Montclair, N. J. Filed Apr. 18, 1918. Serial No. 229,450. Term of patent 14 years.



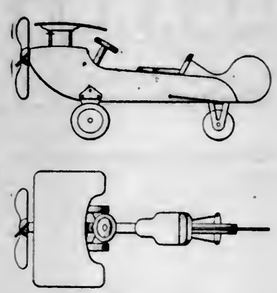
The ornamental design for a toy head block, as shown.

52,240. DISPLAY-STAND. MAURICE J. KARPELES, Providence, R. I. Filed Apr. 20, 1918. Serial No. 229,864. Term of patent 7 years.



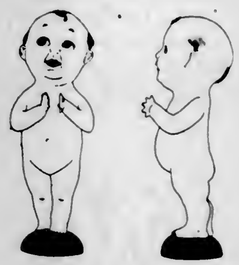
The ornamental design for a display stand, as shown.

52,241. CHILD'S VEHICLE. HENRY W. LONGFELLOW, Boston, Mass. Filed Apr. 8, 1918. Serial No. 227,886. Term of patent 8½ years.



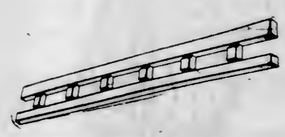
The ornamental design for a child's vehicle, as shown.

52,242. STATUE-DOLL. RALPH MANCUSO, Brooklyn, N. Y. Filed Dec. 15, 1917. Serial No. 207,875. Term of patent 7 years.



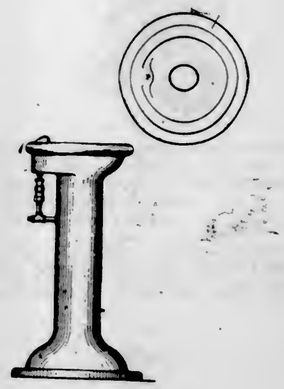
The ornamental design for a statue doll as shown.

52,243. JEWELRY-GALLERY. THOMAS MOUNTFORD, Newark, N. J. Filed Jan. 9, 1918. Serial No. 211,054. Term of patent 14 years.



The ornamental design for a jewelry gallery, as shown.

52,244. DRINKING-FOUNTAIN. JAMES W. RAMSDELL, Highland Park, Mich. Filed Nov. 19, 1917. Serial No. 202,884. Term of patent 14 years.



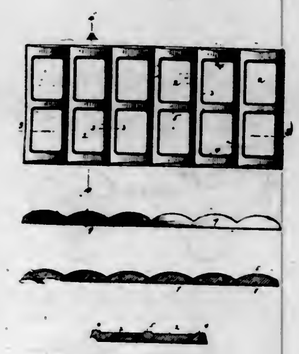
The ornamental design for a drinking fountain, as shown.

52,245. SKIRT-TROUSERS. WILMA SANDA, New York, N. Y. Filed Feb. 18, 1918. Serial No. 218,009. Term of patent 14 years.



The ornamental design for skirt trousers as shown.

52,246. CHOCOLATE CAKE. ALBERT N. STOLLWERCK, Jersey City, N. J. Filed Feb. 2, 1918. Serial No. 215,212. Term of patent 7 years.



The ornamental design for a chocolate cake, substantially as shown and described.

TRADE-MARKS

OFFICIAL GAZETTE, JULY 30, 1918.

(PUBLISHED AUGUST 17, 1918.)

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 14 of said act, a fee of ten dollars must accompany each notice of opposition.

Ser. No. 94,765. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) THE COTEX COMPANY, Newark, N. J. Filed Apr. 28, 1916.

COTEX

Particular description of goods.—Coated Textile Fabrics.

Claims use since September, 1915.

Ser. No. 94,966. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) POTTER & WRIGHTINGTON, Boston, Mass. Filed May 6, 1916.

"DIET-EASE"

Particular description of goods.—Gluten-Flour.

Claims use since Oct. 1, 1915.

Ser. No. 95,846. (CLASS 14. METALS AND METAL CASTINGS AND FORGINGS.) LJUSNE-WOXNA AKTIEBOLAG, Ljusne, Sweden. Filed June 13, 1916. Under ten-year proviso.

LW

Particular description of goods.—Bar-Iron, Pig-Iron, and Castings and Forgings of Pig-Iron, Forge-Iron, and Steel.

Claims use since the end of the year 1883.

Ser. No. 96,121. (CLASS 28. JEWELRY AND PRECIOUS-METAL WARE.) AMERICAN OPTICAL COMPANY, Southbridge, Mass. Filed June 26, 1916.

WELLSWORTH

Particular description of goods.—Hair-Pins, Eyeglass Hooks and Chains, Spectacle and Eyeglass Case Ornaments, Lorgnettes, Eyeglass-Reel Covers and Backs, Ornamental Edge Plates, Name-Plates, Letters for Use on Eyeglass-Cases or the Like, Safety-Pins, and Stick-Pins, All Formed from Precious Metals.

Claims use since about January, 1916.

Ser. No. 96,222. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS, NOT INCLUDING ELECTRICAL APPARATUS.) BRITE-LITE COMPANY, Albert Lea, Minn. Filed June 29, 1916.



Particular description of goods.—Gasolene-Stoves, Gasolene-Ovens, Gasolene Urn-Heaters, Gasolene Wire-Heating Systems, Gasolene Tube-Heating Systems, and Cold-Process Gasolene-Heating Systems.

Claims use since Jan. 1, 1910.

Ser. No. 97,871. (CLASS 18. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) HAINES, JONES & CADBURY CO., Philadelphia, Pa. Filed Sept. 9, 1916.



Particular description of goods.—Plumbing Fixtures and Supplies Comprising: Bath-Tubs—Regular Styles, Sitz, Foot, Infants', and Hospital; Bath-Tub Attachments or

Fixtures—Wastes and Overflows, Plugs and Stoppers, Water-Supply Fixtures, Faucets and Valves, Supply-Pipes and Bath-Traps; Shower and Needle Baths; Shower and Needle Bath Parts—Shower-Valves, Stop and Control Fixtures, Supply-Pipes, Sprays and Needle-Pipes, Shower-Heads, Shampoo and Bidet Attachments; Shower and Needle Bath Accessories—Shower-Receptors and Shower Inclosures or Stalls and Parts, Waste Connections, Floor Drains and Traps; Lavatories; Lavatory Accessories—Basins, Washsinks and Supports Therefor; Lavatory Attachments or Fixtures—Wastes and Overflows, Plugs and Stoppers, Water-Supply Fixtures, Faucets and Valves, Water Supply and Waste Pipes, Traps; Drinking-Fountains of the Pedesta. and Wall Type; Drinking-Fountain Fixtures of the Pedes'al and Wall Type and Accessories—Receptacles or Basins and Supports for Same, Fountain-Heads, Faucets, Operating Devices, Control-Valves, Supply and Waste Pipes and Connections, Waste Fixtures and Traps; Bidets; Bidet Parts—Receptacles, Supply and Waste Fittings, Control-Valves, Supply and Waste Pipes and Traps; Bidet Attachments; Water-Closets; Water-Closet Parts—Flushing or Storage Tanks and Equipment Thereof, Flushing Valves and Devices, Control-Valves, Sets, Venting Connections and Attachments, Floor-Plates, Tank-Operating Attachments, Flush and Supply Valves, Levers, Supply and Flush Pipes, Hopper-Closets, Range-Closets, Closet Inclosures or Stalls with Their Parts; Urinals—Stall, Pedestal, Wall, Trough, and Range Urinals; Urinal Parts—Flushing Tanks and Equipment, Flushing Valves and Devices, Control-Valves, Venting Connections and Attachments, Waste Strainers and Traps, Supply and Flush Pipes, and Inlet-Fittings, Urinal-Stalls and Parts Thereof; Sinks—Chemical, Kitchen, Pantry, Scullery, Sectional, Slop, Vegetable, Hospital; Sink and Laundry Tray Combinations and Accessories Therefor; Sink Parts—Legs or Supports, Faucets, Supply-Fittings, Control-Valves, Wastes, Plugs, Traps, Supply and Waste Pipes, Drain-Boards, Strainers; Flushing Cuspidors and Parts for Attaching to the Supply or Waste or Both; Bracket-Holders—Soap, Sponge, Toilet-Paper, Tooth-Brush, Tumbler, and Towel; Miscellaneous Plumbing Goods—Faucets, Valves, Stops and Parts of Same, Fittings, Ferrules, Thimbles, Couplings, Unions, Nipples, Nozzles, Flanges, Hangers, Floor-Drains, Grates, Cesspools, Vent-Fittings, Traps, Hydrants, Pipe and Pipe-Fittings, Soil and Drainage Pipes and Fittings Therefor.

Claims use since June, 1911.

Ser. No. 100,419. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) JOHN W. BAYANT, Laporte, Ind. Filed Jan. 8, 1917.

ACME

Particular description of goods.—Blackboards.
Claims use since Jan. 1, 1909.

Ser. No. 100,750. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) PAGANINI, VILLANI & C., Milan, Italy. Filed Jan. 19, 1917.



The child's picture thereon being fanciful.
Particular description of goods.—Prepared Powdered Milk Food.
Claims use since Feb. 12, 1916.

Ser. No. 107,047. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) INTERSTATE IRON & STEEL CO., Chicago, Ill. Filed Oct. 31, 1917.



Particular description of goods.—Wire Nails, Wire Rods, Small Cut Nails, Barb-Wire, Bale-Ties, Cut Tacks, Metal Washers, Metal Fence, Burs Consisting of Washers Used on Rivets, Wire Hoops, Woven Wire, Wire Rivets, Wire Staples.
Claims use since Sept. 19, 1917.

Ser. No. 107,812. (CLASS 4. ABRASIVE, DETERGENT AND POLISHING MATERIALS.) GERHARD MENNEN CHEMICAL CO., Newark, N. J. Filed Dec. 7, 1917.



MENNEN'S

The picture being the portrait of Gerhard Mennen, deceased, the founder of applicant's business.
Particular description of goods.—Soaps, Shaving-Cream.
Claims use since the year 1893 on soap, and since May, 1912, on shaving-cream.

Ser. No. 108,324. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE HALEY-HAMMOND CO. INC., Jersey City, N. J., and New York, N. Y. Filed Jan. 5, 1918.

LEAPOL

Particular description of goods.—Greases Used for Tanning Leather.
Claims use since Feb. 15, 1917.

Ser. No. 108,800. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) MCCORD-BRADY CO., Omaha, Nebr. Filed Feb. 4, 1918.

WHITE HOUSE

Particular description of goods.—Canned Tomatoes, Asparagus, Sweet Potatoes, Pork and Beans in Tomato Sauce, Pumpkin, Salmon, Spinach, Lima Beans, Small Peas, Early June Peas, Wax-Beans, Stringless Beans, Succotash, Beets, Corn, Red Kidney Beans, Extra Tiny Peas and Asparagus-Tips, Canned Peaches, Pears, White Cherries, Green-Gage Plums, Black Cherries, Apricots, Pineapples, Blueberries, Red Raspberries, Egg-Plums, Canned Preserved Blackberries, Loganberries, Black Raspberries, Red Cherries, and Strawberries.
Claims use since May 1, 1906.

Ser. No. 108,880. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) BASIC PRODUCTS CORPORATION, New York, N. Y. Filed Feb. 8, 1918.

Theroz

Particular description of goods.—Mess Kits Consisting of a Series of Nested Metal Cooking-Receptacles and a Strap Handle for Carrying the Same When Nested.
Claims use since on or about the 2d day of January, 1918.

Ser. No. 108,938. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) THE CELLULOID COMPANY, Newark, N. J., and New York, N. Y. Filed Feb. 11, 1918.

C C
IVALEUR

Particular description of goods.—Art Panels or Placques Having Embossed or Raised Designs Impressed on Them, Plain Tablets with Beveled Edge for Engraving Upon, and Small Half-Spheres (Solid and Hollow) and Small Solid Whole Spheres Used for Ornamental Purposes. The Said Articles are Made of Compounds of Pyroxylin.
Claims use since Dec. 11, 1917.

Ser. No. 109,255. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) HARRY H. WISE & CO., Chicago, Ill. Filed Feb. 27, 1918.

LIBERTY



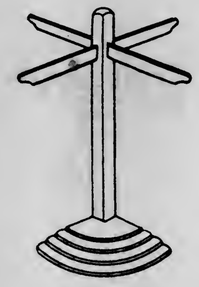
Said trade-mark consists of the word "Liberty" in capital letters, as shown in drawing. The approximate upper half of each letter of said word is printed in solid blue, the lower half of each letter consisting of parallel perpendicular alternating equidistant lines printed in red and white, said word "Liberty" being printed in combination and directly above a pictorial representation of a draped standing female figure holding a lighted torch aloft in her right hand, the flame of said torch showing above the word and said torch and a part of the forearm being between the letters "B" and "E" of said word, said forearm slightly covering a portion of the rear part of said letter "E," said figure holding a tablet to her side in the left hand and representing the Statue of Liberty, said figure being printed in blue except the face, raised arm, and flame of torch, which are printed in red.
Particular description of goods.—Salad-Oil.
Claims use since Feb. 15, 1918.

Ser. No. 109,697. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) Mrs. EDWIN J. JENNINGS, Pine Lodge Farm, Oakland county, Mich. Filed Mar. 21, 1918.



Particular description of goods.—Cough-Syrup.
Claims use since Oct. 1, 1917.

Ser. No. 109,776. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) WILLIAM SUCKLING & SONS, Birmingham, England. Filed Mar. 25, 1918.



Particular description of goods.—Dynamos, Magnetos, Electric Batteries, Electric Switchboards, Electric Lamps, Pendants for Electric Pendant Lights, Spark-Plugs, Electric-Lighting Sets and Electric Starting Mechanism for Motor-Vehicles, Electric Switches, Electric Contacts, Electric Terminals, Electric Cut-Outs, Electric Brushes and Brush-Holders for Dynamos, Electric Couplings, Electric Bells, Electric-Circuit Breakers, Electric Toasters, Electric Hot-Plates, Electric Heaters, and Electric Cookers.
Claims use since March, 1914.

Ser. No. 109,839. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) CHASE & SANBORN, Boston, Mass. Filed Mar. 28, 1918. Under ten-year proviso.

CRUSADE BRAND

Particular description of goods.—Coffee.
Claims use since Sept. 10, 1888.

Ser. No. 110,104. (CLASS 19. VEHICLES, NOT INCLUDING ENGINES.) LYON METALLIC MANUFACTURING COMPANY, Montgomery, Ill. Filed Apr. 10, 1918.

LYON

Particular description of goods.—Hand-Drawn Trucks for Use in Shops, Warehouses, &c.
Claims use since about the 1st day of December, 1918.

Ser. No. 110,118. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) INDIANA RUBBER & INSULATED WIRE CO., Jonesboro, Ind. Filed Apr. 11, 1918.

PYE-MUCCLEMAN

Particular description of goods.—Rubber or Rubber and Fabric Pneumatic Vehicle-Tires.
Claims use since August, 1917.

Ser. No. 110,241. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS, NOT INCLUDING ELECTRICAL APPARATUS.) HARRY T. HALL, Ashtabula, Ohio. Filed Apr. 16, 1918.

Airrite

Particular description of goods.—Ventilator Attachment for Windows.
Claims use since June 30, 1917.

Ser. No. 110,434. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) JOHNSON EDUCATOR FOOD CO., Boston, Mass. Filed Apr. 25, 1918.

BUTTERETTE

The word "Butterette."
Particular description of goods.—Crackers, Cakes, and Biscuits.
Claims use since Jan. 28, 1913.

Ser. No. 110,443. (CLASS 38. PRINTS AND PUBLICATIONS.) MORRIS ACKERMAN, Cleveland, Ohio. Filed Apr. 26, 1918.

SPORTSMEN'S GUIDE

Particular description of goods.—A Publication Issued Annually.
Claims use since May, 1916.

Ser. No. 110,462. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) AMERICAN LA FRANCE FIRE ENGINE CO., INC., Elmira, N. Y. Filed Apr. 27, 1918.

ALFCO

Particular description of goods.—Rubber-Lined-Cotton-Fabric Hose.
Claims use since July 1, 1915.

Ser. No. 110,597. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) CENTIPEDE BELT LACE CO., New York, N. Y. Filed May 2, 1918.

CENTIPEDE

Particular description of goods.—Wire Belt-Lace for Power-Belts.
Claims use since Jan. 30, 1918.

Ser. No. 110,793. (CLASS 37. PAPER AND STATIONERY.) THE WHITAKER PAPER COMPANY, Cincinnati, Ohio. Filed May 9, 1918.

AVIATION

Particular description of goods.—Bond-Paper for Writing Purposes.
Claims use since Jan. 3, 1918.

Ser. No. 110,962. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) RINEAR MILLER, Compton, Ill. Filed May 17, 1918.



Particular description of goods.—A Compound for Use in Treating Tuberculosis.
Claims use since May, 1912.

Ser. No. 111,070. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) SCHOENHOFEN COMPANY, Chicago, Ill. Filed May 20, 1918.

SPLASH

Particular description of goods.—Non-Alcoholic Malt-less Beverages, Sold as Soft Drinks, and Syrups and Extracts Used in the Manufacture Thereof, Still and Carbonated Waters, and Mineral Waters.
Claims use since May 1, 1918.

Ser. No. 111,072. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) SUNSHINE SODA COMPANY, New York, N. Y. Filed May 20, 1918.

SUNSHINE

Particular description of goods.—Cleaning-Soda.
Claims use since Apr. 28, 1918.

Ser. No. 111,089. (CLASS 39. CLOTHING.) ANKER GLOVE CO., INC., New York, N. Y. Filed May 22, 1918.



Particular description of goods.—Leather and Fabric Gloves.
Claims use since July 15, 1917.

Ser. No. 111,137. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) THE CELLULOID COMPANY, Newark, N. J., and New York, N. Y. Filed May 23, 1918.

IVALEUR

Particular description of goods.—Art Panels or Plaques Having Embossed or Raised Designs Impressed on Them, Plain Tablets with Beveled Edges for Engraving Upon; Checks with Numbers on Them to Indicate the Amount of Purchase of Soda-Water, Refreshments, &c., and to Identify the Holder by Number, and Small Half-Spheres (Solid and Hollow) and Small solid Whole Spheres Used for Ornamental Purposes. The Said Articles are Made of Compounds of Pyroxylin.
Claims use since Dec. 11, 1917, on the art panels or plaques and engraving-tablets; since Dec. 20, 1917, on the checks with numbers on them, and since Jan. 4, 1918, on the small half and whole spheres.

Ser. No. 111,140. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS AND PARTS THEREOF.) THE CELLULOID COMPANY, Newark, N. J., and New York, N. Y. Filed May 23, 1918.

IVALEUR

Particular description of goods.—Razor-Handles, Thin Plates Forming Ornamental Sides of Pocket-Knife Handles, Type-Writer Key-Caps, Type-Writer Key-Buttons, and Knobs (as Parts of Machines.) The Said Articles are Made of Compounds of Pyroxylin.
Claims use since Dec. 11, 1917, on razor-handles and since Jan. 4, 1918, on the other articles.

Ser. No. 111,148. (CLASS 19. VEHICLES, NOT INCLUDING ENGINES.) THE CELLULOID COMPANY, Newark, N. J., and New York, N. Y. Filed May 23, 1918.



Particular description of goods.—Strap Handles (Used in Railway-Cars) and Bicycle-Grips. The Said Articles are Made of Compounds of Pyroxylin.
Claims use since Dec. 11, 1917, on strap handles and since Jan. 12, 1918, on bicycle-grips.

Ser. No. 111,157. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) IROGEN CHEMICAL CO. INC., New York, N. Y. Filed May 23, 1918.

IROGEN

Particular description of goods.—A Medicine to be Used as a Tonic in the Treatment of Anemia, Faulty Digestion, Subnormal Nutrition, and Conditions Arising Therefrom.
Claims use since Apr. 12, 1918.

Ser. No. 111,171. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) EXPRESS SPARK PLUG COMPANY, Washington, D. C. Filed May 24, 1918.

EXPRESS

Particular description of goods.—Spark-Plugs.
Claims use since Apr. 3, 1913.

Ser. No. 111,191. (CLASS 38. PRINTS AND PUBLICATIONS.) THOMAS SCOTT BUHRMAN, New York, N. Y. Filed May 25, 1918.

The AMERICAN ORGANIST

Particular description of goods.—A Monthly Magazine Devoted to Music in General and the Organ Profession in Particular.
Claims use since Jan. 1, 1918.

Ser. No. 111,241. (CLASS 37. PAPER AND STATIONERY.) LOUIS K. MALLINCKRODT, Baltimore, Md. Filed May 28, 1918.

LIBERTY

Particular description of goods.—Wrapping-Paper.
Claims use since June 27, 1917.

Ser. No. 111,316. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) ROGERS, HENNESSEY & JENKINS, Boston, Mass. Filed June 1, 1918.

TRITEX

The word "Tritex."
Particular description of goods.—Quilts.
Claims use since Jan. 2, 1918.

Ser. No. 111,317. (CLASS 42. KNITTED NETTED, AND TEXTILE FABRICS.) ROGERS, HENNESSEY & JENKINS, Boston, Mass. Filed June 1, 1918.

COLONIAL

The word "Colonial."
Particular description of goods.—Quilts.
Claims use since Jan. 2, 1918.

Ser. No. 111,326. (CLASS 27. HOROLOGICAL INSTRUMENTS.) WESTERN CLOCK CO., Peru, Ill. Filed June 1, 1918.

MOON-BEAM

Particular description of goods.—Clocks and Watches.
Claims use since Apr. 16, 1918.

Ser. No. 111,343. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) T. J. MITCHELL & Co., INC., New York, N. Y. Filed June 3, 1918.

Chamirose

Particular description of goods.—Broad Silk in the Piece and Crape in the Piece.
Claims use since Jan. 22, 1918.

Ser. No. 111,405. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE BROOKE BUTTERINE CO., Jersey City, N. J. Filed June 7, 1918.

A. B. C.

Particular description of goods.—Oleomargarin.
Claims use since the fall of 1917.

Ser. No. 111,438. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) MARGUERITE HILGERS, Binghamton, N. Y. Filed June 8, 1918.



Particular description of goods.—A Depilatory Powder.
Claims use since Apr. 1, 1916.

Ser. No. 111,478. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) AMAESSA PRODUCTS CO., INC., New York, N. Y. Filed June 11, 1918.

AMAESSA

Particular description of goods.—Baking-Powder and Salt.
Claims use since July, 1917.

Ser. No. 111,501. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE HOLLEY MILLING COMPANY, Laramie, Wyo., and Ogden, Utah. Filed June 11, 1918.

PRIDE OF WYOMING

Particular description of goods.—Wheat-Flour.
Claims use since Oct. 19, 1917.

Ser. No. 111,709. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) OMAHA FLOUR MILLS CO., Omaha, Nebr. Filed June 20, 1918.



Particular description of goods.—Wheat-Flour.
Claims use since June 5, 1918.

TRADE-MARK REGISTRATIONS GRANTED

JULY 30, 1918.

122,363. FERTILIZERS. THE AMERICAN AGRICULTURAL CHEMICAL COMPANY, New York, N. Y.
Filed March 2, 1918. Serial No. 109,310. PUBLISHED MAY 7, 1918.

122,364. COTTON BLANKETS. AMERICAN TEXTILES EXPORT CORPORATION, Jersey City, N. J., and New York, N. Y.
Filed March 22, 1918. Serial No. 109,707. PUBLISHED APRIL 30, 1918.

122,365. MINERAL WATER. ANDOVER LAXINE WATER COMPANY, Andover, Ohio.
Filed February 27, 1918. Serial No. 109,234. PUBLISHED MAY 7, 1918.

122,366. WIRE BRUSHES FOR RAISING A SOFT WARMTH-RETAINING SURFACE ON KNITTED WOOLEN FABRICS. J. AND J. BALDWIN AND PARTNERS, LIMITED, Halifax, England.
Filed December 13, 1916. Serial No. 99,886. PUBLISHED MAY 7, 1918.

122,367. HEALING PROPHYLACTIC POWDER USED EXTERNALLY IN TREATING CERTAIN NAMED DISEASES AND CONDITIONS. JOSEPH BIER, M. D., New York, N. Y.
Filed March 7, 1918. Serial No. 109,410. PUBLISHED MAY 7, 1918.

122,368. BUTTER. ISAAC BAER, Meeker, Colo.
Filed April 23, 1917. Serial No. 103,200. PUBLISHED JULY 17, 1917.

122,369. COAL-TAR PRODUCTS—VIZ., ANILIN DYES AND ANILIN COLORS KNOWN AS DIRECT COLORS. JOHN CAMPBELL & Co., New York, N. Y.
Filed March 9, 1918. Serial No. 109,453. PUBLISHED MAY 7, 1918.

122,370. COAL-TAR PRODUCTS—VIZ., ANILIN DYES AND ANILIN COLORS KNOWN AS DIRECT COLORS. JOHN CAMPBELL & Co., New York, N. Y.
Filed March 9, 1918. Serial No. 109,454. PUBLISHED MAY 7, 1918.

122,371. MEDICINE FOR STOMACH AND BOWEL DISORDERS. CAPDAU AND BRESLIN, New Orleans, La.
Filed September 30, 1915. Serial No. 89,534. PUBLISHED MAY 7, 1918.

122,372. CERTAIN NAMED ARTICLES MADE OF COMPOUNDS OF PYROXYLIN. THE CELLULOID COMPANY, Newark, N. J., and New York, N. Y.
Filed March 7, 1918. Serial No. 109,414. PUBLISHED APRIL 23, 1918.

122,373. PIPE-BITS AND CIGAR-HOLDERS. THE SAID ARTICLES ARE MADE OF COMPOUNDS OF PYROXYLIN. THE CELLULOID COMPANY, Newark, N. J., and New York, N. Y.
Filed March 7, 1918. Serial No. 109,415. PUBLISHED MAY 7, 1918.

122,374. CERTAIN NAMED ARTICLES MADE OF COMPOUNDS OF PYROXYLIN. THE CELLULOID COMPANY, Newark, N. J., and New York, N. Y.
Filed March 7, 1918. Serial No. 109,417. PUBLISHED MAY 7, 1918.

122,375. CANNED SARDINES PACKED IN COTTONSEED OIL AND SPICED TOMATO SAUCE. COAST FISHING CO. INC., Wilmington, Cal.
Filed January 4, 1918. Serial No. 108,294. PUBLISHED MAY 7, 1918.

122,376. CLOTHES-BASKETS. COLES & COMPANY, New York, N. Y.
Filed March 6, 1918. Serial No. 109,397. PUBLISHED APRIL 30, 1918.

122,377. CERTAIN NAMED CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS. THE COOLRITE CO., INC., Ithaca, N. Y.
Filed January 15, 1918. Serial No. 108,473. PUBLISHED MAY 7, 1918.

122,378. COTTON AND LINEN PIECE GOODS. ESTEBAN HERMANOS, Barcelona, Spain.
Filed April 19, 1917. Serial No. 103,194. PUBLISHED APRIL 30, 1918.

122,379. FLUID EYE-TONIC. GUSTAV C. HOENCKE, Houston, Tex.
Filed July 26, 1917. Serial No. 105,295. PUBLISHED MAY 7, 1918.

122,380. PHARMACEUTICAL PREPARATION FOR USE IN DENTAL WORK. ROLLO H. FERRY, Spokane, Wash.
Filed December 12, 1917. Serial No. 107,909. PUBLISHED MAY 7, 1918.

122,381. UMBRELLAS, PARASOLS, AND FRAMES AND TRIMMINGS THEREOF. FRETZ, GROSS & Co., Philadelphia, Pa.
Filed February 26, 1918. Serial No. 109,218. PUBLISHED APRIL 16, 1918.

122,382. WOOLEN PIECE GOODS. FORSTMANN & HUFFMANN CO., Passaic, N. J.
Filed March 5, 1918. Serial No. 109,385. PUBLISHED APRIL 30, 1918.

122,383. OIL FOR USE IN THE SOFTENING, STRENGTHENING, AND DYEING OF TEXTILES. E. F. HOUGHTON & Co., Philadelphia, Pa.
Filed January 22, 1918. Serial No. 108,587. PUBLISHED MAY 7, 1918.

122,384. HAIR-POMADE. MARY L. LEWIS, Americus, Ga.
Filed May 19, 1917. Serial No. 103,959. PUBLISHED MAY 7, 1918.

122,385. TOILET PREPARATIONS AND COSMETICS—VIZ., COMPLEXION-POWDER AND ROUGES. JAMES MACDONALD, New York, N. Y.
Filed January 19, 1918. Serial No. 108,543. PUBLISHED MAY 7, 1918.

122,386. MOUTH-WASH AND TOOTH-PASTE. MENTHO-LISTINE CHEMICAL CO., Houston, Tex.
Filed June 7, 1915. Serial No. 87,171. PUBLISHED MAY 7, 1918.

122,387. SILK PIECE GOODS. NEREIM, SOMMER & MILKES, INC., Chicago, Ill.
Filed January 8, 1918. Serial No. 108,362. PUBLISHED APRIL 30, 1918.

122,388. SOOT DESTROYER AND REMOVER. NORTHERN CHEMICAL CO. OF MICHIGAN, Detroit, Mich.
Filed January 30, 1918. Serial No. 108,699. PUBLISHED MAY 7, 1918.

122,389. WHEAT-FLOUR. OKLAHOMA CITY MILL & ELEVATOR CO., Oklahoma, Okla.
Filed October 25, 1917. Serial No. 106,958. PUBLISHED MAY 7, 1918.

122,390. COTTON PIECE GOODS. PACIFIC MILLS, Lawrence and Boston, Mass.
Filed October 31, 1917. Serial No. 107,067. PUBLISHED APRIL 30, 1918.

122,391. COTTON AND WOOLEN PIECE GOODS. PACIFIC MILLS, Lawrence and Boston, Mass.
Filed March 14, 1918. Serial No. 109,567. PUBLISHED APRIL 30, 1918.

122,392. TOWEL-CABINETS. PULLCLEAN MANUFACTURING CO., INC., New York, N. Y.
Filed December 24, 1915. Serial No. 91,750. PUBLISHED APRIL 30, 1918.

122,393. MANICURE AND TOILET TOOLS AND HAND-FORCEPS AND SURGICAL SCISSORS. JOSEPH ROSS & COMPANY, Irvington, N. J.
Filed January 10, 1918. Serial No. 108,407. PUBLISHED MARCH 5, 1918.

122,394. BUTTER AND EGGS. SAAL BROTHERS, New York, N. Y.
Filed October 28, 1916. Serial No. 98,957. PUBLISHED JANUARY 22, 1918.

122,395. VEILS AND HAIR-NETS. SILVERBERG IMPORT CO., INC., New York, N. Y.
Filed March 4, 1918. Serial No. 109,371. PUBLISHED APRIL 30, 1918.

122,396. SELF-RISING WHEAT-FLOUR. STEELEVILLE MILLING COMPANY, Steeleville, Ill.
Filed May 12, 1917. Serial No. 103,754. PUBLISHED MAY 7, 1918.

122,397. WHEAT-FLOUR. THE REA-PATTERSON MILLING COMPANY, Coffeyville, Kans.
Filed August 6, 1917. Serial No. 105,503. PUBLISHED JANUARY 22, 1918.

122,398. INSECTICIDE. SMITH, KLINE & FRENCH CO., Philadelphia, Pa.
Filed March 16, 1918. Serial No. 109,606. PUBLISHED MAY 7, 1918.

122,399. CERTAIN NAMED PHARMACEUTICAL PREPARATIONS FOR TOILET PURPOSES. HELENA J. TITUS, New York, N. Y.
Filed March 10, 1917. Serial No. 102,058. PUBLISHED MAY 7, 1918.

122,400. VEILS. E. & Z. VAN RAALTE, New York, N. Y.
Filed March 20, 1918. Serial No. 109,680. PUBLISHED APRIL 30, 1918.

122,401. FOUNTAIN-PENS, PEN-POINTS FOR FOUNTAIN-PENS, MAGAZINE LEAD-PENCILS, AND THE HOLDERS AND LEADS CONSTITUTING SUCH PENCILS. WAHL ADDING MACHINE COMPANY, Chicago, Ill.
Filed December 17, 1917. Serial No. 108,028. PUBLISHED APRIL 23, 1918.

122,402. TOOTH, NAIL, HAIR, MUSTACHE, ARTISTS', CLOTHES, AND BATHING BRUSHES. GEORGE WINCKLER, New York, N. Y.
Filed April 4, 1918. Serial No. 109,997. PUBLISHED MAY 7, 1918.

122,403. CARBON-ELIMINATOR. THOMAS S. WITHERSPOON, Denver, Colo.
Filed March 17, 1917. Serial No. 102,233. PUBLISHED FEBRUARY 5, 1918.

122,404. COFFEE. YOUNG & GRIFFIN COFFEE CO. INC., New York, N. Y.
Filed September 14, 1916. Serial No. 97,996. PUBLISHED JANUARY 30, 1917.

122,405. LUNG-TESTING TOYS. WILLIAM ZOLPER, Wilmington, Del.
Filed December 24, 1917. Serial No. 108,186. PUBLISHED MAY 7, 1918.

TRADE-MARK REGISTRATIONS RENEWED.

15,094. PAINTS AND PIGMENTS. THOMAS HUBBUCK & SON, London, England; Thomas Hubbuck & Son, Limited, assignee.
Registered July 17, 1888. Renewed July 17, 1918.

LABELS

REGISTERED JULY 30, 1918.

20,737.—*Title:* "LOCK BRAND." (For Crates Containing Fresh Grapes.) CALIFORNIA FRUIT EXCHANGE, Sacramento, Cal. Filed June 11, 1918.

20,738.—*Title:* "CLOVER COMPOUND." (For Abrasive Materials.) CLOVER MANUFACTURING CO., Norwalk, Conn. Filed November 12, 1915.

20,739.—*Title:* "CREAMETTE CEREAL." (For Cereal Breakfast Food.) THE CREAMETTE COMPANY, Minneapolis, Minn. Filed March 7, 1918.

20,740.—*Title:* "AUTOMOONSHINE." (For Polish.) WILLIAM SINCLAIR DUNCAN, Springfield, Mass. Filed April 11, 1918.

20,741.—*Title:* "A SUR SHOT." (For a Bot and Worm Remover.) FAIRVIEW CHEMICAL CO., Fairview, Mont. Filed June 8, 1918.

20,742.—*Title:* "HICKS SEMINOLE LINIMENT." (For Liniment.) FISCHER DRUG COMPANY, Savannah, Ga. Filed June 8, 1918.

20,743.—*Title:* "V FORMUSA." (For Alimentary Paste.) V. FORMUSA, Chicago, Ill. Filed June 8, 1918.

20,744.—*Title:* "OLEAQUA." (For Hair-Tonic.) JACK HONORE, Princeton, N. J. Filed September 6, 1917.

20,745.—*Title:* "HORSMAN'S BOY MAGICIAN OUTFIT." (For Magician Outfits or Magic Sets.) E. I. HORSMAN CO., New York, N. Y. Filed May 31, 1918.

20,746.—*Title:* "COOL-FLOW." (For Non-Alcoholic Beverages.) OSCAR KORN, Detroit, Mich. Filed March 2, 1918.

20,747.—*Title:* "TEA ROSE." (For Condensed Milk.) MERTON DAIRY PRODUCTS CO., Merton, Wis. Filed June 8, 1918.

20,748.—*Title:* "EDELWEISS." (For Cheese.) THE PURITY CREAM CHEESE CO., Cleveland, Ohio. Filed June 3, 1918.

20,749.—*Title:* "McQUAY-NORRIS SUPEROYL RING." (For Rings.) McQUAY-NORRIS MFG. CO., St. Louis, Mo. Filed June 7, 1918.

20,750.—*Title:* "AMERICA'S GUIDE TO ECONOMY." (For Catalogues.) THE RILEY-SCHUBERT-GROSSMAN CO., Chicago, Ill. Filed April 29, 1918.

20,751.—*Title:* "THE LIBERTY," (For Snap-Fasteners.) SNAP-FASTENER SALES CO., CORP., New York, N. Y. Filed June 10, 1918.

20,752.—*Title:* "DE LUXE." (For Canned Sardines.) THE STAFFORD PACKING CO., Wilmington, Cal. Filed June 8, 1918.

PRINTS

REGISTERED JULY 30, 1918.

4,916.—*Title:* "DEPOSITING ALL OF HIS FIRST MONTH'S EARNINGS IN THE BANK." (For Shoes.) W. L. DOUGLAS SHOE CO., Brockton and Boston, Mass.; Portland, Me.; New York, N. Y.; Denver, Colo.; Buffalo, N. Y., and Philadelphia, Pa. Filed May 31, 1918.

4,917.—*Title:* "BE GOOD TO YOUR MOTOR." (For Spark-Plugs.) EXPRESS SPARK PLUG COMPANY, Washington, D. C. Filed May 25, 1918.

4,918.—*Title:* "TRY ONE OF OUR CIGARS—THE BEST SMOKE." (For Cigars.) KAUFMANN & STRAUSS COMPANY, New York, N. Y. Filed June 3, 1918.

DECISIONS

OF THE

COMMISSIONER OF PATENTS

AND OF

UNITED STATES COURTS IN PATENT CASES.

DECISIONS OF THE U. S. COURTS.

Court of Appeals of the District of Columbia.

IN RE PALMER, JR.

Decided April 1, 1918.

PATENTABILITY—HANDLE-ATTACHING MEANS.

Attaching handles to storage-battery cases by securing the handles in place by means of a plug of lead which is run, while in a molten state, into a cavity extending transversely of a channel in which the shank of the handle is located *Held* to be the exercise of mere mechanical skill in view of the art of record.

Mr. A. B. Stoughton for the appellant.

Mr. T. A. Hostetler for the Commissioner of Patents.

VAN ORSDEL, *J.*:

This appeal is from the decision of the Commissioner of Patents refusing appellant a patent for means for attaching handles to storage-battery cases. The application for patent contained the following claims:

1. Means for attaching handles to storage battery cases which comprise the combination of a case wall having a channel extending in the direction of its plane and located inside of its inner and outer faces and having a transverse cavity intersecting the channel and extending through the outer face and terminating short of the inner face, a round handle shank filling the channel and extending across the cavity and having a roughened portion opposite the cavity, and a plug arranged in and confined to the cavity and completely encircling and cast onto the shank for immovably holding it.

2. Means for attaching handles to storage battery cases which comprise the combination of a case wall having a channel extending in the direction of its plane and located inside of its inner and outer faces and having a larger transverse cavity intersecting the channel and extending through one face and terminating short of the other face, a handle shank in the first channel and across the cavity, and a plug immovably holding the shank and arranged in the cavity and cast onto the shank and completely encircling it.

The structure is described by the Primary Examiner as consisting—

of a case wall having a channel extending in the direction of its plane and located inside of its inner and outer faces, and having a transverse cavity intersecting the channel and extending through the outer face and terminating short of the inner face, a handle shank filling the channel and extending across the cavity and having a roughened portion opposite the cavity, and a plug arranged in and confined in the cavity and completely encircling and cast onto the shank for immovably holding it.

Two references are cited against appellant,—a patent to one Curtiss, (115,582,) dated June 6, 1871, and a patent to one Bryant, (468,639,) dated February 9, 1892.

The patent to Bryant discloses a loop-handle adapted for use on brooms, umbrellas, etc. The loop is inserted into the end of the handle for the purpose of suspending the article from a hook or other device. It shows loop-shaped handles in slots or cavities to be old in the art. Although Bryant retains the loop in the cavity by a wooden plug held in place by a screw, it readily suggests the substitution of lead run into the cavity in a molten state, thus filling the cavity and gripping the shanks of the loop.

While the Bryant patent only suggests the broad issue set forth in the claims, the Curtiss patent completes the anticipation of appellant's alleged invention. The Curtiss device consists of means for securing the blade of a screw-driver in the handle. This is accomplished by a longitudinal hole in the end of the handle for receiving the shank of the blade and a transverse intersecting opening for receiving the molten metal. The shank of the blade is roughened with notches to receive the molten metal, which grips the shank and prevents it from pulling out of or turning in the handle. This almost completely answers appellant's description of means for retaining the shanks of the handle-loop in the walls or sides of the battery-case.

With the devices of Bryant and Curtiss before him, appellant, by the exercise of mere mechanical skill, could readily accomplish the result here disclosed. The decision of the Commissioner of Patents is affirmed, and the clerk is directed to certify these proceedings as by law required.

Affirmed.

U. S. Circuit Court of Appeals—Seventh Circuit.

SCHRAM GLASS MFG. CO. *v.* HOMER BROOKE GLASS CO.

Decided January 25, 1918; rehearing denied April 5, 1918.

249 FED. REP., 228.

1. PATENTS—VALIDITY AND INFRINGEMENT.

The Brooke patent, No. 723,983, for an apparatus for cutting and distributing molten materials, which automatically cuts an uninterrupted flow of molten glass into a mold when the mold is filled and supports the severed stream until another mold is brought into place, was not anticipated, discloses patentable invention of a highly-meritorious character, and is valid; also *Held* infringed.

2. SAME—CONSTRUCTION OF CLAIMS—QUALIFYING CLAUSE.

A clause at the beginning of the claims of a mechanical patent, stating the purpose of the device, is not to be ignored as not describing any element, but is a modifying clause, to be read upon every element thereafter described.

2. SAME—VALIDITY—ABANDONMENT OF APPLICATION.

The failure of an applicant for a patent to prosecute his application within two years after it was filed does not invalidate a patent afterward granted thereon, such allowance being within the jurisdiction given the Commissioner by Revised Statutes, section 4894. (Comp. St., 1916, sec. 9438.)

APPEAL from the District Court of the United States for the Southern Division of the Southern District of Illinois.

Suit in equity by the Homer Brooke Glass Company against the Schram Glass Manufacturing Company. Decree for complainant, and defendant appeals. Affirmed.

Mr. Russell Wiles for the appellant.

Mr. Frederick P. Fish and *Mr. Charles Neave* for the appellee.

Before BAKER, ALSCHULER, and EVANS, Circuit Judges.

EVANS, *Cir. J.*:

From a decree sustaining Patent No. 723,983, granted to Homer Brooke, March 31, 1903, holding appellant had infringed it, and enjoining further infringement, this appeal is taken. The defenses are invalidity and non-infringement.

The patent to Brooke relates to an apparatus for cutting and distributing molten materials, particularly glass, and is of particular value to the manufacturer of fruit-jars, bottles, and other similar glass objects used by the public in large quantities, the cost of which constitutes an important factor in their successful manufacture. While the art of making glass articles is old, it was, prior to Brooke's device, deficient in a particular, an understanding of which is better obtained by a brief general description of the art to which it relates.

In making articles of molten glass prior to this discovery, a considerable quantity of the molten material was taken from a furnace to a mold by a workman, called a gatherer, who, by the use of a "punty-rod," injected into and twisted around in the molten mass in the furnace, first collected and then transferred it to a position over a mold of predetermined size into which the glass ran from the rod. Another workman stood by, and with shears cut this string or stream of flowing glass when directed. The gatherer then twisted his rod, so as temporarily to prevent glass falling off and until another empty mold was supplied, and then the operation was repeated. Machines for receiving this product, containing molds of predetermined capacity, were in common use, and, not infrequently, easy and ready method of substitution of one mold for another was provided. Some devices for receiving the molten mass in the mold, and for the prompt exchange of the molds, were patented, and at least one must be especially considered—the patent to Steimer, No. 549,404, issued November 5, 1895.

(1) Brooke's contribution to the art consisted in producing an apparatus that would better, more rapidly, and more economically convey the molten mass from the furnace to the mold. Instead of the interrupted flow of glass, and the delayed method of transferring with a punty-rod this substance from the large reservoir to the mold, in use prior to this discovery, appellee's device permitted the glass to flow continuously from the furnace, and the severing-knives were made to act automatically, and means for supporting the severed stream were provided; the accumulated flow being poured into the opening of the next-presented mold. The characteristic claims are as follows:

Claim 1. An automatic device for cutting or separating an unsupported freely flowing stream of molten material into unformed molten masses, the same comprising a cutting knife and means for moving the same and means for supporting the severed stream of continuously flowing material.

Claim 3. An automatic device for cutting or separating a flowing stream of molten material into unformed molten masses, the same comprising a cutting knife and the means for moving the same, and means for discharging the said molten masses into suitable receptacles.

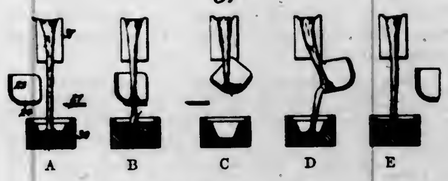
Claim 4. An automatic device for cutting or separating a flowing stream of molten material into unformed molten masses of predetermined quantity, the same comprising a knife and means for moving the same, a plurality of receptacles, and means for discharging the said molten masses into said receptacles.

Claim 5. An automatic device for cutting or separating a flowing stream of molten material into unformed molten masses, the same comprising a knife and means for moving the same, a plurality of receptacles, *means for discharging the said molten masses into said receptacles*, and means for intermittently moving said receptacles into position to receive cut-off masses.

Claim 6. An automatic device for cutting or separating a flowing stream of molten material into unformed molten masses, the same comprising a knife and means for moving the same, and means for causing the said cutting device to temporarily support the molten stream.

The device is herewith shown in Figure 5, the sequence of position of cutting-knife and receptacles in the operation of severing the molten-glass stream being illustrated.

Fig. 1.



37 is a conduit which aids in conducting the glass from the furnace to the receptacle 30. The cutting-knife 23 is cup-shaped, one side of which is provided with a cutting edge 24. Another knife which moves in the opposite direction, consists of blade 27, carried on the end of an arm, extending from the hub (the arm and hub not being shown in the figure), all working automatically. When the constantly-flowing stream of glass has filled the mold, the two blades come together as shown in B, the stream is cut, and the knife passes to the position C. While the glass is momentarily supported in the cup-shaped receptacle, as shown in figure C, an empty mold is being brought into position underneath. In D, the tilting operation has been completed and the molten glass has been discharged from the receptacle into the mold underneath. The knife and the cup-shaped receptacle then resume their normal position by the action of gravity. The molten mass proceeds to flow into the mold next succeeding. While this is not all of the machine, it describes the mechanism of its more important parts.

The distinct contribution to the art was so obvious that appellant concedes patentability to Brooke's discovery, but claims that a process and not an apparatus discovery is disclosed. It contends that, an apparatus patent having been issued, it was invalid in view of the prior art, which contention calls for a consideration of the Steimer patent, designated by its patentee as a "glass measuring apparatus," but claimed by the appellant to be capable of being used so as to meet all of the specifications and claims found in the Brooke patent.

Figs. 3 and 4 appearing below describe the material part of the Steimer apparatus, which, appellant claims, is capable of performing the same function described in Brooke's patent, and is anticipatory of the claims therein set forth.

Fig. 3.

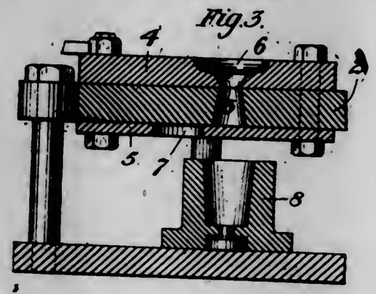
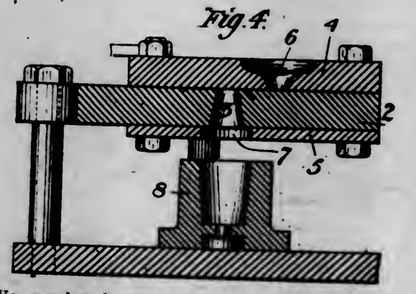


Fig. 4.



We employ language from appellant's brief to describe the Steimer apparatus:

In the Steimer machine there is a plate 2, with a central measuring opening 3 precisely like the corresponding opening in defendant's liner machine. In the normal position of the parts shown in Fig. 3, of the Steimer patent a plate 5 lies beneath the hole 3 in the plate 2 and a funnel or cup-shaped opening 6 in an upper plate 4 registers with the opening 3. Glass is flowed into the measuring receptacle 3 with the parts as shown in Fig. 3. The upper and lower plates are then moved by the operator to sever the glass in the measuring opening 3 from the stream above it, and immediately thereafter the hole 7 in the lower plate 5 registers with the measuring opening 3, so that the cut-off mass falls into the mold beneath (Fig. 4). This is precisely what happens in the defendant's liner machine. Now it is quite true that Steimer contemplated completely filling the opening 3, while defendant does not do so, and it is quite true that Steimer contemplated an intermittent stream from a punty rod instead of the continuous stream; but it is equally true that if a continuous stream were supplied to the Steimer machine, it would do exactly what defendant's liner machine does. *If a continuous stream were fed into the cup-shaped receptacle 6 in the upper plate 4 of Steimer, it would flow into the measuring receptacle when the parts were in the position shown in Fig. 3, and immediately they move to the position shown in Fig. 4 the stream would be cut off and husbanded on the upper surface of the plate 2 precisely as in defendant's liner machine,* and on the return of the parts to the position shown in Fig. 3 the accumulated gob would drop into the measuring opening 3.

Whether Brooke's apparatus patent is valid, in view of the prior art as disclosed in the Steimer patent, is the chief question for consideration on this appeal. Appellant rests its case on these two propositions: (*a*) If the prior art disclosed a device of like construction, capable of performing the same function as the patent in suit, even though the inventor had no idea of making use of his apparatus for such a purpose, the patent is anticipated. (*Carnegie* v. *Cambria*, 185 U. S., 403; 22 Sup. Ct., 698; 46 L. Ed., 968; 99 O. G., 1866.) (*b*) Steimer's device will do the very things claimed for Brooke's apparatus. In other words, appellant admits that Steimer's "orifice" was for a measuring device, and admits that Steimer had no idea of using a "continuous flowing stream of glass, cutting and temporarily supporting it," but that, because Steimer's machine was capable of being so used, it anticipated Brooke's structure, and the latter's patent cannot be saved by reason of the fact that a process was disclosed which was patentable.

Would Steimer's apparatus do the things which can be done by a device embodying the claims of the Brooke apparatus? The pith of appellant's contention lies in the italicized portion of the foregoing quotation. Unfortunately for appellant, Steimer described the operation of his machine (and we believe the only possible operation) specifically in the specifications to his patent. He said:

The operation is as follows: The mold 8 to be charged with glass is placed under the plate 2, beneath the position of the hole 3, and the plates 4, 5, are moved, so as to bring the holes 6, 3, into register. The gathering boy then introduces into the hole 6 with his punty enough molten glass to fill the cavity 3, and by means of the operating lever 6 the plates 4, 5, are moved so as to bring the holes 3, 7, into register and to move the hole 6 away from the hole 3. The movement of the hole 6 away from register with the hole 3 shears off the glass in hole 3 from the glass on the workman's punty, leaving in the hole 3, enough glass to fill the same accurately, and the movement of the hole 7 into register with the hole 3 causes the glass to drop from the latter into the mold 8 below.

Describing his drawings he said:

In the drawings, 2 represents a plate having formed there through a measuring cavity 3, downwardly flaring in form. 4 and 5 are two plates, mounted, respectively, on the top and bottom of the plate 2, and connected so that they may be moved simultaneously back and forth in contact with the plate 2. The top plate is formed with a hole 6 and the bottom plate with a hole 7, said holes being situate so that they shall register with the hole 3 at respectively opposite ends of the travel of the plates 4 and 5—*i. e.*, when the hole 6 is in register with the hole 3, Fig. 3, the hole 7 shall be out of register, and that when the holes 7 and 3 are in register the hole 6 shall be out of register, Fig. 4. The hole 3 is made of proper size to contain the amount of glass required to be delivered to the mold.

This construction renders impossible the operation described by appellant in case a continuous stream were fed into the cup-shaped receptacle 6. The cup-shaped receptacle 6 is not stationary, and the successful operation of this glass-measuring apparatus is made to depend upon the movability of plates 4 and 5. Under such a structure a continuous stream could be fed into the cup-shaped receptacle 6 only in case the stream itself moved similarly to plate 4, and even then it is doubtful whether the stream of molten glass would follow the movement of the receptacle 6 so as to prevent any portion of the glass falling on the surface of plate 4, instead of in the receptacle 6.

Appellant's expert witnesses have suggested, by drawing and otherwise, that the opening 6 in plate 4 might be so enlarged that, notwithstanding the movement of this plate 4, a portion of the opening 6 would be always under the continuously-flowing stream. The suggestion comes as a result of the Brooke patent. The structure shown in Figs. 3 and 4 does not warrant any such suggestion. Referring to such drawings it will be observed that the opening 3 is under the flowing stream. When the opening 6 is moved to position shown in Fig. 4, the stream of molten material, if uninterrupted, would fall, not in opening 6, but upon the plate 4. Neither the drawings nor the method of operation described in the specifications of the Steimer patent, permit of, or suggest, a use of the opening 6 in plate 4 for receiving "an unsupported freely flowing stream of molten material."

We conclude the Steimer apparatus is not capable of being so used as to take care of a continuously-flowing stream.

(2) It is further contended that Brooke's discovery, if patentable, was not covered by the claims in question. To reach this conclusion appellant asks us to ignore the first clause of the claim, which is as follows:

> An automatic device for cutting or separating an unsupported freely flowing stream of molten material into unformed molten mass.

Appellant contends that this is a mere statement of a process, and has no place in a mechanical apparatus, and should be entirely disregarded when appearing in a claim of an apparatus patent. With this conclusion we cannot agree. While it is true that this clause of itself does not describe an element in the combination, it should not for that reason be ignored. Each of the elements of the combination should be read in the light of this clause and should be modified by it. Such a clause of itself may entirely fail to supply a necessary element in a combination (*Morgan Envelope Co.* v. *A. W. P. Co.*, 152 U. S., 425; 14 Sup. Ct., 627; 38 L. Ed., 500; 67 O. G., 271) yet it may so affect the enumerated elements as to give life and meaning and vitality to them, as they appear in the combination. So, in this case, the legitimate and fair construction of the claims, particularly in view of the specifications and drawings, requires us to read on each element of this claim the clause which appellant insists is a superfluity. In so doing we are not substituting an operation for an element, nor including as an element the particular article upon which the apparatus is to work. We are merely giving to the modifying clause the same effect that would be given to an adjective or adverb that limits, enlarges, or qualifies the word it modifies.

Whether Brooke, at the time he made his discovery, was not also entitled to a process patent, we need not consider, for it is not before us. Nor are we required to devote time to the question of the patentability of Brooke's discovery, for in appellant's brief we find the following language:

> This use of the knife blades for the dual purpose of severing the stream and husbanding it while the molds are changed was new with Brooke, or at least Brooke increased the husbanding to a very material extent; that is, from the slight husbanding of Picard, Schulze-Berge, to a substantial amount—great enough to absorb all glass flowing during the relatively long period of mold shift.

Such a concession (justified by the record) clearly and justly credits to Brooke the discovery of an apparatus that would take care of "an unsupported freely flowing stream of molten material," which is the essence of the value of this discovery.

(3) Appellant further urges that the application for a patent was abandoned in the Patent Office, and this contention is based on plaintiff's failure to prosecute his application within the period fixed in the statute. This contention must be rejected in view of the decision in *Western Glass Co.* v. *Schmertz Glass Co.*, (185 Fed., 791; 109 C. C. A., 1.) Appellant cites *Steward* v. *American Lava Co.* (215 U. S., 162; 149 O. G., 602; 30 Sup. Ct., 46; 54 L. Ed., 139) to the contrary, but the cases are distinguishable and are not in conflict. Section 4892, Revised Statutes, (sec. 9436, Comp. Stat., 1916,) under consideration in *Steward* v. *American Lava Co.*, *supra*, requires an amended application for the patent to be verified, and makes no exception, and grants to the Commissioner no discretion. The Commissioner of Patents in the present case was not outside of his jurisdiction when he acted on appellee's application, filed more than two years prior thereto, for section 4894, Revised Statutes, (sec. 9438, Comp. Stat., 1916,) expressly reserves to the Commissioner the right to issue patents after such period.

Claims 3, 4, and 5 are especially attacked, because no basis for them is disclosed in the specifications or drawings. It would serve no useful purpose to reproduce here the drawings or to quote at length from the specifications. We have carefully read the specifications and examined the drawings with the criticism in mind, and find ample support for the claims in both the drawings and specifications.

Appellant's device so clearly infringes appellee's patent that no discussion of this phase of the case will be indulged in.

The decree is affirmed.

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TO THE

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JULY, 1918.

[Decisions of the Court of Appeals of the District of Columbia are indicated by a star (*) and of the United States Circuit Court of Appeals by the letter d.]

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DIGEST

OF THE

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JULY, 1918.

[Decisions of the Court of Appeals of the District of Columbia are indicated by a star (*) and of the United States Circuit Court of Appeals by the letter [d].]

ABANDONED EXPERIMENTS.

See Priority of Invention, 1.

ABANDONMENT OF APPLICATIONS.

CONSTRUCTION OF STATUTES—VALIDITY.

The failure of an applicant for a patent to prosecute his application within two years after it was filed does not invalidate a patent afterward granted thereon, such allowance being within the jurisdiction given the Commissioner by Revised Statutes, section 4894. (Comp. St., 1916, sec. 9438.)

[dSchram Glass Mfg. Co. *v.* Homer Brooke Glass Co., 1143.

AMENDMENT OF APPLICATIONS.

VALIDITY—REQUIREMENTS OF THE OFFICE.

The rule is that insertions by way of amendment in the description or drawing, or both, of a patent application do not invalidate the patent if they are only in amplification and explanation of what was already reasonably indicated to be within the invention, and this rule applies with special force where the insertion was required by the Patent Office.

[dGeneral Electric Co. *v.* Cooper Hewitt Electric Co., 961.

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See Construction of Claims; Construction of Specifications and Patents, 2; Infringement; Particular Patents, 2; Priority of Invention, 3.

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CONSTRUCTION OF CLAIMS.

1. PATENTABILITY—PRINTING-PRESS-INK-FOUNTAIN CONTROL.

In an application for an ink-fountain having regulating devices, individual operating means therefor, and electric controlling devices located at a point remote from the fountain *Held* that a claim was patentable over the prior art, although not limited to electric controlling devices. [**In re* Bechman, 503.

2. SAME—SAME.

Certain claims not limited to centrally-located controlling devices for adjusting the individual regulating devices of printing-press ink-fountains *Held* to be too broad in view of the art of record. [*Id.

3. ISSUE CONSTRUED—LAMPLIGHTERS.

Where the issue in an interference recites igniting mechanism that is operable by a sweep of the palm of the hand, *Held* that a device in which a corresponding mechanism is arranged to be operated by the thumb or finger, although it may be operated by a sweep of the hand, comes within the terms of the issue. [*Hendler *v.* Hansen, 504.

4. RIGHT TO MAKE THE CLAIMS.

In the pavement disclosed by B.'s application, where reinforcing-plates of expansion-joints for concrete sections rest upon the prepared foundation and the application contains a statement that the plates may be of less width, *Held* that this forms no basis for incorporating an additional figure in a substitute application showing the plates out of contact with the foundation, for the purpose of contesting an interference with a patent, the counts of the issue being construed as limited to reinforcing means "supported by the concrete out of engagement with the earth road-bed." [*Ficklen *v.* Baker, 743.

5. QUALIFYING CLAUSE.

A clause at the beginning of the claims of a mechanical patent, stating the purpose of the device, is not to be ignored as not describing any element, but is a modifying clause, to be read upon every element thereafter described. [dSchram Glass Mfg. Co. *v.* Homer Brooke Glass Co., 1143.

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1. INVENTION—INFRINGEMENT.

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2. VALIDITY AND INVENTION—IMPROVEMENT PATENTS.

When a supposed invention is considered with reference to a prior patent to determine whether there was inventive advance, the claims of that prior patent are wholly immaterial, unless in some possible instances where the claims might interpret an obscurity. The question is whether there has been inventive advance upon the structure disclosed by the specification and drawings, and if the claims seem to reveal the later form when the specification and drawings do not it must be because of the generic language of the claims, interpreted in the light of the later device. [dId.

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Where an inventor at the same time devises a container for electric lights of pleasing design and a mechanical contrivance conveniently united with an esthetic cover, he has made two inventions, and though he at first secures only a mechanical patent he may within the two-year period procure a design patent without violating the rule against double patenting.
[d Bayley & Sons, Inc., *v.* Standart Art Glass Co. *et al.*, 504.

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EARLIER AND LATER PATENTS.

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ELEMENT.

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GRANT OF PATENT.

See Abandonment of Applications.

INFRINGEMENT.

See Construction of Specifications and Patents, 1; Particular Patents, 3.

IMPROVEMENT PATENTS.
A device may be at the same time an infringement upon the relatively generic claim of a prior patent and also be a patentable improvement thereon, and there is no inconsistency, even presumptive, between these conclusions.
[d General Electric Co. *v.* Cooper Hewitt Electric Co., 961.]

INTERFERENCE.

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INVENTION.

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PATENTABILITY—HANDLE-ATTACHING MEANS.
Attaching handles to storage-battery cases by securing the handles in place by means of a plug of lead which is run, while in a molten state, into a cavity extending transversely of a channel in which the shank of the handle is located *Held* to be the exercise of mere mechanical skill in view of the art of record.
[* *In re* Palmer, Jr., 1143.]

JURISDICTION OF THE COMMISSIONER OF PATENTS.

See Abandonment of Applications.

LIMITATION OF CLAIMS.

See Construction of Claims, 1, 2, 4, 5.

MECHANICAL PATENTS.

See Designs; Double Patenting.

MECHANICAL SKILL.

See Invention.

MODIFYING CLAUSE.

See Construction of Claims, 5.

MONOPOLY.

See Registration of Trade-Marks, 3.

PARTICULAR PATENTS.

1. No. 49,593—DESIGN—ELECTRIC-LIGHTING FIXTURE—VALIDITY—ANTICIPATION.
Design Patent No. 49,593, for an ornamental electric-lighting fixture comprising a bell-shaped canopy having a straight lower edge, below which is suspended in close proximity a hemispherical bowl having a straight upper edge, *Held* invalid for lack of invention.
[d Bayley & Sons, Inc., *v.* Standart Art Glass Co. *et al.*, 504.]

2. KUCH—No. 1,090,992—LAMP—EFFECT OF INTERFERENCE.
The Kuch patent, No. 1,090,992, for a mercury-vapor lamp, *Held* not invalidated by interference proceedings with Bastian in the Patent Office, in which priority was awarded to Bastian as to certain claims then included in Kuch's application, but not as to the claims finally allowed.
[d General Electric Co. *v.* Cooper Hewitt Electric Co., 961.]

3. BROOKE—No. 723,983—APPARATUS FOR CUTTING AND DISTRIBUTING MOLTEN MATERIAL—VALIDITY AND INFRINGEMENT.
The Brooke patent, No. 723,983, for an apparatus for cutting and distributing molten materials, which automatically cuts an uninterrupted flow of molten glass into a mold when the mold is filled and supports the severed stream until another mold is brought into place, was not anticipated, discloses patentable invention of a highly-meritorious character, and is valid; also *Held* infringed.
[d Schram Glass Mfg. Co. *v.* Homer Brooke Glass Co., 1143.]

PATENTABILITY.

See Construction of Claims; Construction of Specifications and Patents; Infringement; Invention.

PRESUMPTION.

See Infringement.

PRIOR PATENTS.

See Construction of Specifications and Patents; Infringement.

PRIORITY OF INVENTION.

See Construction of Claims, 1, 2, 3; Particular Patents, 2.

1. CONCURRENT DECISIONS—ABANDONED EXPERIMENTS.
Concurrent decisions of the Patent Office tribunals affirmed and *Held* that priority was properly awarded to W., as the early experiments of R. constituted merely an "abandoned experiment," and, besides, any rights he may have had thereby were lost by concealment and suppression. [*Rees *v.* White, 247.

2. EVIDENCE—AWARD.
Record reviewed and priority awarded to Hendler, the senior party. [*Hendler *v.* Hansen, 504.

3. AWARD.
Held that B.'s application, containing the counts of the issue, cannot be sustained on the specification and claims as originally filed, and priority is awarded to F., the senior party.
[*Ficklen *v.* Baker, 743.

REGISTRATION OF TRADE-MARKS.

1. DESCRIPTIVE.
Where a trade-mark contains as its dominant features words aptly descriptive of the goods to which it is applied, *Held* that registration should be refused.
[**In re* Estate of P. D. Beckwith, Inc., 245.

2. SAME—MOIST-AIR HEATING SYSTEM.
The words "Moistair Heating System" as applied to hot-air and combined hot-air and hot-water heaters and furnaces *Held* descriptive, and therefore unregistrable. [*Id.

3. CONFUSION IN TRADE.
In order to protect the public against confusion in trade, *Held* that the Commissioner of Patents may anticipate inevitable confusion and refuse to grant a monopoly in a mark which is not only descriptive, but contains the common trade-name of similar commodities in a general class of merchandise. [*Id.

4. ELIMINATION OF DESCRIPTIVE MATTER.
Held that the objection to descriptive matter in a trade-mark cannot be overcome merely by a disclaimer, but must be eliminated from the mark. [*Id.

REQUIREMENTS OF PATENT OFFICE.

See Amendment of Applications.

RIGHT TO MAKE CLAIMS.

See Construction of Claims, 4.

RIGHT TO PATENT.

See Priority of Invention, 1.

SPECIFICATIONS.

See Construction of Specifications and Patents, 2; Priority of Invention, 3.

STATE OF THE ART.

See Construction of Claims, 1, 2; Invention.

SUBSTITUTE APPLICATIONS.

See Construction of Claims, 4.

VALID PATENTS.

See Particular Patents, 2, 3.

VALIDITY OF PATENTS.

See Abandonment of Applications; Amendment of Applications; Construction of Specifications and Patents, 2; Particular Patents, 1, 3.

VOID PATENTS.

See Particular Patents, 1.

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ALPHABETICAL LIST OF PATENTEES

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PATENTS WERE ISSUED DURING THE MONTH OF JULY, 1918.

[Abbreviations: "v."—Official Gazette.]

A. A. Simonds Sons Company, The. (See Allison, Albert J., assignor.)
A. C. Gilbert Company, The. (See Euwer, James E., assignor.)
A. C. Gilbert Company, The. (See Gilbert, Alfred C., assignor.)
A. F. Meyer Mfg. Co. (See Hauter, William B., assignor.)
A. J. Lindemann & Hoverson Company. (See Brennan and Lindemann, assignors.)
A. O. Smith Corporation. (See Smith, Reuben S., assignor.)
A. T. S. D. Manufacturing Company. (See Allen, Claude N., assignor.)
Aaron, Solomon E., Boston, Mass. Pliers. No. 1,273,713; July 23; v. 252; p. 907.
Abbott, Adrian O., Jr., assignor of one-half to W. B. Norton, Detroit, Mich. Tire. No. 1,271,985; July 9; v. 252; p. 379.
Abbott, Augustus, Denver, Colo. Coin-controlled vending-machine. No. 1,273,116; July 23; v. 252; p. 749.
Abbott Laboratories, The. (See Burdick and Nielsen, assignors.)
Abercrombie, Charles M., Bridgeport, Conn., assignor to The Singer Manufacturing Company. Hemstitch sewing-machine. No. 1,271,256; July 2; v. 252; p. 142.
Abrahams, Edgar E., Dorchester, Mass. Folding displaying-easel. No. 1,272,349; July 16; v. 252; p. 509.
Abramowitz, Joseph, North Venice, Ill. Boot, shoe, or the like. No. 1,272,172; July 9; v. 252; p. 432.
Ackerman, William. (See Nicholas and Ackerman.)
Ackley & Co., G. S. (See Ackley, Griffin S., assignor.)
Ackley, Griffin S., Brooklyn, assignor to G. S. Ackley & Co., New York, N. Y. Brake mechanism. No. 1,270,762; July 2; v. 252; p. 3.
Acme Shear Company, The. (See Conway, John J., assignor.)
Acuña, Amando P., Oakland, Cal. Window-jack. No. 1,272,173; July 9; v. 252; p. 432.
Adair, Claude D., Shellrock, Iowa. Harrow. No. 1,273,801; July 30; v. 252; p. 969.
Adamek, Antone J., Orient, S. D. Belt-tightener. No. 1,272,350; July 16; v. 252; p. 509.
Adams, Arthur J., Bay City, Mich., assignor, by mesne assignments, to Ferris-Stevenson Corporation, Buffalo, N. Y. Perambulator or baby-carriage. No. 1,271,986; July 9; v. 252; p. 379.
Adams, Arthur J., Bay City, Mich., assignor, by mesne assignments, to Ferris-Stevenson Corporation, Buffalo, N. Y. Baby-carriage or perambulator. No. 1,271,987; July 9; v. 252; p. 380.
Adams, Arthur J., Bay City, Mich., assignor, by mesne assignments, to Ferris-Stevenson Corporation, Buffalo, N. Y. Perambulator. No. 1,272,881; July 16; v. 252; p. 660.
Adams, George W. (See Hoefle and Adams.)
Adams, Lucius G., *et al.* (See Jones, Edward S., assignor.)
Adams, Soren S., Plainfield, N. J. Sound-emitting means for toys. No. 1,273,122; July 23; v. 252; p. 750.
Adams, William J., assignor to Nonpareil Manufacturing Company, Cochranton, Pa. Motor-stand. No. 1,273,981; July 30; v. 252; p. 1021.
Adams, William S., Riverton, Wyo., assignor of one-half to C. M. Cole, Chicago, Ill. Float-indicating device. No. 1,272,882; July 16; v. 252; p. 660.
Adamson, Frank M. (See Miller and Adamson.)
Addograph Company. (See Crawley, Mansfield C., assignor.)
Addressograph Company. (See Duncan, Joseph S., assignor.)
Addressograph Company. (See Duncan and Lee, assignors.)
Adelmann, Hans, assignor to Ham Boiler Corporation, New York, N. Y. Ham-boiler. No. 1,272,883; July 16; v. 252; p. 660.
Adlerblum, Israel S., Edgemere, N. Y. Yardage-controlling device for pieces of fabric. No. 1,273,123; July 23; v. 252; p. 750.
Agasote, Millboard Co., The. (See Sutherland, Daniel M., Jr., assignor.)
Agner, Raymond C., Burlington, Wis. Combination tire-holder license and lamp bracket. No. 1,273,117; July 23; v. 252; p. 749.

Aicher, Gustav A., assignor to National Paper Products Co., San Francisco, Cal. Machine for cutting paper into sheets and interfolding the sheets. No. 1,273,567; July 23; v. 252; p. 869.
Aiken, Charles L. (See Aiken, Herrick, assignor.)
Aiken, Edward L., Orange, assignor, by mesne assignments, to New Jersey Patent Company, West Orange, N. J. Motion-picture-projecting apparatus. No. 1,272,174; July 9; v. 252; p. 432.
Aiken, Herrick, assignor to C. L. Aiken, Franklin, N. H. Electrically-operated knitting-machine. No. 1,273,802; July 30; v. 252; p. 969.
Aiken, Herrick, assignor to C. L. Aiken, Franklin, N. H. Knitting-machine. No. 1,273,803; July 30; v. 252; p. 969.
Aizenman, Jacob, Brooklyn, N. Y. Guard for drivers' seats of vehicles. No. 1,273,800; July 30; v. 252; p. 969.
Ajax Forge Company. (See Bender, William, assignor.)
Akins, Samuel W., Denver, Colo. Refrigerator display-case. No. 1,271,823; July 9; v. 252; p. 331.
Akron Tire and Rubber Company. (See Talbot, William W., assignor.)
Aktiebolaget Ljungstrom Angturbin. (See Ljungström, Fredrik, assignor.)
Aktiebolaget Ljungströms Ångturbin. (See Wiberg, Oskar A., assignor.)
Alberger Pump and Condenser Company. (See Symonds, George P., assignor.)
Albert, Peter H., Vulcan, Mich. Cow-tail holder. No. 1,274,356; July 30; v. 252; p. 1123.
Alberti, Emilio, New York, assignor to International Cork Company, Brooklyn, N. Y. Wood-top cork. No. 1,273,118; July 23; v. 252; p. 749.
Albrecht, Charles W., Jr., Schleisingerville, Wis. Emergency auto-tire. No. 1,272,351; July 16; v. 252; p. 509.
Albright, Edward, Menominee, Mich. Pan-rack. No. 1,272,175; July 9; v. 252; p. 432.
Aldrich, Thomas B., assignor to Parke, Davis & Company, Detroit, Mich. Glandular extractive product and manufacturing same. No. 1,271,111; July 2; v. 252; p. 101.
Aldridge, John E., Huntington, W. Va. Jar-lifter. No. 1,274,229; July 30; v. 252; p. 1090.
Alexander, David A., Rochester, N. Y. Balanced valve. No. 1,273,804; July 30; v. 252; p. 969.
Alexander, Louis A., assignor to The Toledo Commutator Co., Toledo, Ohio. Commutator-assembling device. No. 1,272,176; July 9; v. 252; p. 433.
Alexander, Louise E., Southport, N. Y. Milk-pail. No. 1,274,131; July 30; v. 252; p. 1063.
Alexander Milburn Company, The. (See Jenkins, Alexander F., assignor.)
Allen, Bessie M., Kingston, N. Y. Garment-hanger. No. 1,272,884; July 16; v. 252; p. 661.
Allen, Claude N., assignor to A. T. S. D. Manufacturing Company, Michigan City, Ind. Tire-cleaning brush. No. 1,272,352; July 16; v. 252; p. 509.
Allen S. Davison Co. (See Handy and Isham, assignors.)
Allen, William H., Detroit, Mich. Producing ferric phosphates. No. 1,271,002; July 2; v. 252; p. 72.
Allen, William H., Momence, assignor of one-third to E. A. Kramer, Grant Park, Ill. Deck for brick-cars. No. 1,271,413; July 2; v. 252; p. 184.
Allender, Charles H., New York, N. Y. Cloche useful for horticultural and agricultural purposes. No. 1,272,760; July 16; v. 252; p. 624.
Allerding, Cletus N., Mansfield, Ohio. Steering-wheel. No. 1,271,257; July 2; v. 252; p. 143.
Allingham, Elliott, Toronto, Ontario, Canada. Slip connection for dental bridgework. No. 1,271,531; July 9; v. 252; p. 251.
Allis, Burton W., Garnett, Kans. Cooking utensil. No. 1,273,119; July 23; v. 252; p. 749.
Allis-Chalmers Manufacturing Company. (See Cheney, Herbert W., assignor.) (Reissue.)
Allison, Albert J., assignor to The A. A. Simonds Sons Company, Dayton, Ohio. Roll for beating-engines. No. 1,273,982; July 30; v. 252; p. 1021.
Almquist, John, and F. Burton, Petaluma, Cal. Illuminating sidewalk-sign. No. 1,272,177; July 9; v. 252; p. 433.
Alonzo, John, Deborgia, Mont. Railway-switch. No. 1,273,984; July 30; v. 252; p. 1021.

Alonzo, John, Deborgia, Mont. Railway-frog. No. 1,273,983; July 30; v. 252; p. 1021.
Alpern, Maxwell, assignor to American Engineering Company, Philadelphia, Pa. Stoker-driving mechanism. No. 1,271,649; July 9; v. 252; p. 285.
Alpha Manufacturing Company. (See Hirsch, Alcan and M., assignors.)
Altenberg, Alfons, Racine, Wis. Wheeled machine. No. 1,273,985; July 30; v. 252; p. 1021.
Alter, Cecil W. and W. J., Hagerman, N. Mex. Tire-vulcanizer. No. 1,273,124; July 23; v. 252; p. 751.
Alter, Wilton J. (See Alter, Cecil W. and W. J.)
Ambler, Paul C. (See Tharp and Ambler.)
Amend, Judson F., Portland, Oreg. Windmill toy. No. 1,274,132; July 30; v. 252; p. 1063.
American Assembling Machine Company. (See Juengst, Charles A., assignor.)
American B. H. P. Aero Engine Corporation. (See Pullinger, Thomas C. W., assignor.)
American Beet Harvester Company. (See Beale and Knight, assignors.)
American Brake Company, The. (See Burton and Wahlert, assignors.)
American Brake Company, The. (See Schwentler, Francis E., assignor.)
American Can Company. (See Ford, Ben K., assignor.)
American Circular Loom Company. (See Lutz, George A., assignor.)
American Engineering Company. (See Alpern, Maxwell, assignor.)
American Fire Prevention Bureau. (See Derby and Clayton, assignors.)
American Hardware Corporation, The. (See Stone, Elmer B., assignor.)
American Hoist & Derrick Co. (See Crosby, Oliver, assignor.)
American Ice Company. (See Reuschline, George L., assignor.)
American Ingenuities Corporation, The. (See Bateson, Pierre L., assignor.)
American Laundry Machinery Company, The. (See Braley, Charles L., assignor.)
American Model and Instrument Company. (See Emmerling, Wheelock, and Rohland, assignors.)
American Morgan Company. (See Morgan, Edmund C., assignor.)
American Optical Company. (See Day, George H., assignor.)
American Pad and Textile Company, The. (See Edmonson, Ellis G., assignor.)
American Products Company. (See Ruggles, Henry B., assignor.)
American Skate & Manufacturing Company. (See Printz, Daniel F., assignor.)
American Steam Conveyor Corporation. (See Girtanner, Alexander, assignor.)
American Steam Conveyor Corporation. (See Girtanner and Miller, assignors.)
American Steam Conveyor Corporation. (See Griffin and Vanderlip, assignors.)
American Steel Foundries. (See Hedgcock, William C., assignor.)
American Steel Foundries. (See Lamont, John A., assignor.)
American Steel Window Company. (See Johnson, Allan W., assignor.)
American Stove Company. (See Child, Guy B., assignor.)
American Stove Company. (See Meacham, Benjamin E., assignor.)
American Sugar Refining Company. (See Drury and Folsom, assignors.)
American Tar Company. (See Price, Charles P., assignor.)
American Telephone and Telegraph Company. (See Demarest, Charles, assignor.)
American Textile Manufacturing Company, The. (See Knapp, Howard H., assignor.)
American Type Founders Company. (See Benton, Morris F., assignor.)
American Type Founders Company. (See Bullen, Henry L., assignor.)
Anderegg, Gustavus A., Oak Park, and W. E. Mougey, Chicago, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y. Telephone and telegraph cable. No. 1,271,824; July 9; v. 252; p. 331.
Andersen, William K. (See Malstrom and Andersen.) (Reissue.)
Anderson, Adolph, assignor to Aurora Automatic Machinery Co., Chicago, Ill. Governor mechanism for spring-motors. No. 1,272,595; July 16; v. 252; p. 576.
Anderson, Albert D., *et al.* (See Anderson, Frank B., assignor.)
Anderson, Arnold S., Batavia, Ill. Liquid-container. No. 1,271,988; July 9; v. 252; p. 380.
Anderson, Axel E. (See Myers, Melvin A., assignor.)
Anderson, Carl E., assignor to The Bryant Electric Company, Bridgeport, Conn. Electric switch. No. 1,273,714; July 23; v. 252; p. 907.
Anderson, Charles. (See Otto, Watson, Anderson, and Underwood.)
Anderson, Charles H., Cincinnati, Ohio. Window-sash construction. No. 1,273,715; July 23; v. 252; p. 907.
Anderson, Charles H., Cincinnati, Ohio. Window-sash construction. No. 1,273,716; July 23; v. 252; p. 908.
Anderson, Charles O., *et al.* (See Anderson, Frank B., assignor.)
Anderson, Clifford D., Knox Bay, and E. Streng, Vancouver, British Columbia, Canada. Logging-hook. No. 1,273,717; July 23; v. 252; p. 908.
Anderson, Emil, New York, N. Y., assignor to The Universal Turbine Company, Jersey City, N. J. Turbine or impact engine. No. 1,271,825; July 9; v. 252; p. 332.
Anderson, Emil C., Denver, Colo. Locomotive construction. No. 1,273,805; July 30; v. 252; p. 970.
Anderson, Frank B., assignor of one-third to C. O. Anderson and one-third to A. D. Anderson, Cleveland, Ohio. Centrifugal drier. No. 1,271,112; July 2; v. 252; p. 101.
Anderson, Frank E., Brooklyn, N. Y. Stamping device. No. 1,271,826; July 9; v. 252; p. 332.
Anderson, George A., assignor of one-fourth to D. P. Thomas, Worcester, and one-fourth to E. B. Renblom, Springfield, Mass. Labeling-machine. No. 1,271,989; July 9; v. 252; p. 381.
Anderson, Gustaf A., Waynesboro, Pa. Shock-absorber. No. 1,272,178; July 9; v. 252; p. 333.
Anderson, Harold N., assignor to The Anderson Rolled Gear Company, Cleveland, Ohio. Making gears. No. 1,273,125; July 23; v. 252; p. 751.
Anderson, John G., Wheat Ridge, Colo. Rotary transmission. No. 1,271,827; July 9; v. 252; p. 332.
Anderson, Martin E., assignor to Jacob Haish Company, De Kalb, Ill. Feed-grinder. No. 1,271,258; July 2; v. 252; p. 143.
Anderson, Oscar D., Conway, S. C. Dumping-wagon. No. 1,272,596; July 16; v. 252; p. 576.
Anderson Rolled Gear Company, The. (See Anderson, Harold N., assignor.)
Anderson, Vincent G., Thief River Falls, Minn., assignor to P. C. Austin, Chicago, Ill. Propelling apparatus. No. 1,270,763; July 2; v. 252; p. 3.
Anderson, William P., N. C. Clarke, Birmingham, and J. F. Whitelaw, Erdington, England. Artificial arm. No. 1,272,179; July 9; v. 252; p. 434.
Andes Exploration & Smelting Corporation. (See Morrill, Edmund N., assignor.)
Andreas, John L., Pierceton, Ind. Hemp-drying rack. No. 1,273,120; July 23; v. 252; p. 750.
Andresen, Halvor, New York, N. Y., assignor to The Vacuum Muffler Corporation. Muffler. No. 1,272,180; July 9; v. 252; p. 434.
Andreucci, Carlo, Rome, Italy. Production of nitrogen from the air. No. 1,272,181; July 9; v. 252; p. 434.
Andrews, Charles B. (See Apgar and Andrews.)
Anthony, William, Clyde, Ohio. Electrical measuring instrument. No. 1,273,126; July 23; v. 252; p. 751.
Apgar, Marshall F., and C. B. Andrews, assignors to Taylor-Wharton Iron & Steel Co., High Bridge, N. J. Dredge-tumbler. No. 1,271,990; July 9; v. 252; p. 381.
Appell, Martin P., near Galva, Ill. Automatic toy pistol. No. 1,272,353; July 16; v. 252; p. 510.
Appleby, Orville, San Francisco, Cal. Transmission-hub. No. 1,272,182; July 9; v. 252; p. 435.
Appleton Wire Works. (See Weissenborn, Albert B., assignor.)
Arbetter Felling Machine Company. (See Hayes and Moulton, assignors.)
Arbter, Frank, Chicago Heights, Ill. Window construction. No. 1,273,309; July 23; v. 252; p. 790.
Arce, Santiago, Buenos Aires, Argentina. Speed-transformer. No. 1,271,828; July 9; v. 252; p. 333.
Arden Manufacturing Corporation. (See Arden, Thomas R., assignor.)
Arden, Thomas R., assignor to T. R. Arden Co., Inc., New York, N. Y. Toy cannon. No. 1,270,764; July 2; v. 252; p. 3.
Arden, Thomas R., assignor to Arden Manufacturing Corporation, Guttenberg, N. J. Toy cannon. No. 1,270,765; July 2; v. 252; p. 3.
Argo, Alfred G., Kenesaw, Nebr. Attachment for hay-rakes. No. 1,272,885; July 16; v. 252; p. 661.
Arkin, Louis, Boston, Mass. Fastener. No. 1,271,650; July 9; v. 252; p. 285
Armband, Abraham, assignor to M. L. Farber, New York, N. Y. Roller-bearing caster. No. 1,271,113; July 2; v. 252; p. 101.
Armspear Manufacturing Company. (See Spear, Furman D., assignor.)
Armstrong, George D., Guthrie Center, Iowa. Nut and bolt holding wrench. No. 1,270,766; July 2; v. 252; p. 4.
Armstrong, Neal, and E. H. Groves, Aldena, Colo. Pitch-fork attachment. No. 1,273,718; July 23; v. 252; p. 908.
Armstrong, Vesper I., Carterville, Mo. Music-holder. No. 1,270,767; July 2; v. 252; p. 4.
Arnavas, Mario, San Francisco, Cal. Vehicle-wheel. No. 1,271,414; July 2; v. 252; p. 184.
Arnold, Benjamin H., Erie, Pa., assignor to General Electric Company. Control of electric circuits. No. 1,273,719; July 23; v. 252; p. 908.
Arnold, Sigel, Kansas City, Mo. Artificial fish-bait. No. 1,272,183; July 9; v. 252; p. 435.
Arsneau, Thomas P., Portland, Oreg. Music-leaf turner. No. 1,271,829; July 9; v. 252; p. 333.
Art in Buttons, Inc. (See Hastings, Herbert, assignor.)
Arthur D. Little, Incorporated. (See Wood, Robert O., assignor.)

Arthur, John E., Lanes, Ill. Rail-joint. No. 1,271,532; July 9; v. 252; p. 251.
Arvidson, Clarence G. (See Ebelhare and Arvidson.)
Aschman, Frederick T., *et al.* (See Collins, James F., assignor.)
Ash, Charles S., assignor to Gould & Ash, San Francisco, Cal. Stabilizing temperance cereal beverages. No. 1,271,991; July 9; v. 252; p. 381.
Ashenfarb, Samuel L. (See Oppenheimer and Ashenfarb.)
Ashmore, Walter L., and W. T. Morgan, Jr., Macon; said Morgan assignor of two-sixths of the whole right to H. R. Powell, Bibb county, Ga. Process and device for finishing concrete pavements. No. 1,273,022; July 16; v. 252; p. 698.
Atkins, Earl F. (See Atkins, Frank K. and E. F.)
Atkins, Frank K., New York, N. Y., and E. F. Atkins, Arlington, N. J. Filter. No. 1,273,127; July 23; v. 252; p. 751.
Atkins, Thomas B., Canutillo, Tex. Apparatus for molding silos and the like. No. 1,272,886; July 16; v. 252; p. 661.
Atlantic Refining Company, The. (See Taveau, René D., assignor.)
Atlas Powder Company. (See Given, Guy C., assignor.)
Auerbach, Julia H., Los Angeles, Cal. Detachable self-adjusting corset-strap. No. 1,271,259; July 2; v. 252; p. 143.
Aurora Automatic Machinery Co. (See Anderson, Adolph, assignor.)
Austin, Frederick C. (See French, James C., assignor.)
Austin, Frederick C. (See Houghton, Orley C., assignor.)
Austin, Harry S., Rome, N. Y. Combination seat and table. No. 1,271,830; July 9; v. 252; p. 333.
Ausubel, Herman, New York, N. Y. Toot-brush holder. No. 1,274,133; July 30; v. 252; p. 1063.
Automatic Bookkeeping Register Company. (See Hayes, Benjamin P., assignor.)
Automatic Controller and Manufacturing Company. (See Redfield, Cleveland, assignor.)
Automatic Electric Company. (See Fish, Herbert L., assignor.)
Automatic Electric Company. (See Groh, Bernard C., assignor.)
Automatic Irrigating Machinery Corporation. (See Elder, Donald, assignor.)
Automatic Reclosing Circuit Breaker Company, The. (See Raney, Estell C., assignor.)
Automatic Straight Air Brake Company. (See Pierce, Guy C., assignor.)
Automatic Transportation Company, The. (See Carr, William C., assignor.)
Autoplano Company. (See La Joie, Herbert J., assignor.)
Autosales Corporation. (See Grover and Barber, assignors.)
Avery, Courtney C. (See Underhill and Avery.)
Avery, John M., Dallas, Tex. Resilient wheel. No. 1,273,121; July 23; v. 252; p. 750.
Avis, William C., North Kansas City, assignor of one-fourth to C. F. Schooling and one-fourth to E. R. Bell, Kansas City, Mo. Rail-joint. No. 1,270,768; July 2; v. 252; p. 4.
Axelson, Delbert F., Los Angeles, Cal., assignor to Axelson Machine Co. Pump-cylinder. No. 1,271,260; July 2; v. 252; p. 143.
Axelson Machine Co. (See Axelson, Delbert F., assignor.)
Ayers, Frank W., assignor of one-half to C. C. Felt, Portland, Oreg. Metallic-letter-casting machine. No. 1,272,887; July 16; v. 252; p. 661.
Azadian, Harutun B., Syracuse, N. Y. Gage. No. 1,273,986; July 30; v. 252; p. 1022.
Azadian, Harutun B., Syracuse, N. Y. Gage. No. 1,273,987; July 30; v. 252; p. 1022.
B. F. Goodrich Company, The. (See Gammeter, John R., assignor.)
Baán, Johann, Verbó, Hungary. Liquid-meter. No. 1,271,261; July 2; v. 252; p. 144.
Baash, Lawrence F., Fillmore, Cal. Casing-perforator. No. 1,272,597; July 16; v. 252; p. 576.
Babcock, Wade H., assignor of one-half to H. E. Whittle, Cleveland, Ohio. Advertising device. No. 1,272,184; July 9; v. 252; p. 435.
Babcock & Wilcox Company, The. (See Jacobus, David S., assignor.)
Bachand, Delmery T., Springfield, assignor of one-half to J. Chevalier, Jr., Chicopee, Mass. Measuring device. No. 1,273,720; July 23; v. 252; p. 909.
Bachman, Robert A., East Orange, N. J., assignor, by mesne assignments, to Industrial Poured Concrete House Co. Concrete-house mold. No. 1,271,262; July 2; v. 252; p. 144.
Backhaus, Arthur A., Baltimore, Md., assignor to U. S. Industrial Alcohol Co. Liquid fuel. No. 1,271,114; July 2; v. 252; p. 101.
Backhaus, Arthur A., Baltimore, Md., assignor to U. S. Industrial Alcohol Co. Liquid fuel. No. 1,271,115; July 2; v. 252; p. 102.
Bacon, Charles F., Brookline, Mass. Torpedo-protector for boats. No. 1,271,415; July 2; v. 252; p. 184.
Baden, Fredrick W., Sr., Newark, N. J. Box. No. 1,272,185; July 9; v. 252; p. 435.
Badische Anilin & Soda Fabrik. (See Bosch, Mittasch, and Krauch, assignors.)
Bailer, Otto P., Memphis, Tenn. Link for watch-chains, bracelets, &c. No. 1,270,916; July 2; v. 252; p. 47.
Bailey, Bertram. (See Mather and Bailey.)
Bailey, Walter F., assignor of one-half to G. A. Cadwallader, Los Angeles, Cal. Coaster. No. 1,272,761; July 16; v. 252; p. 624.
Baily, Thaddeus F., and F. T. Cope, assignors to The Electric Furnace Company, Alliance, Ohio. Melting-furnace. No. 1,272,186; July 9; v. 252; p. 435.
Baird Machine Company, The. (See Lewis, Arthur J., assignor.)
Bairs, John, Argenta, Ark. Saw. No. 1,274,231; July 30; v. 252; p. 1091.
Baker, A. (See Myers, Melvin A., assignor.)
Baker, Almie M., Chicago, Ill. Savings-bank. No. 1,271,416; July 2; v. 252; p. 184.
Baker Ice Machine Company. (See Coesfeld, John H., assignor.)
Baker R & L Company, The. (See Cookingham and Hertner, assignors.)
Baker, R & L Company, The. (See Gruenfeldt, Emil, assignor.)
Baker, Stephen D., New York, N. Y. Paper-holder. No. 1,272,598; July 16; v. 252; p. 577.
Baker, Thomas W., Vancouver, British Columbia, Canada. Shifting hopper for concrete work. No. 1,272,354; July 16; v. 252; p. 510.
Baker, Ulysses G., Indianapolis, Ind. Bending-roll for sheet-glass apparatus. No. 1,273,310; July 23; v. 252; p. 799.
Baker-Vawter Company. (See Hanna, Walter H., assignor.)
Baker, Walter J., Chicago, Ill. Savings-bank. No. 1,271,417; July 2; v. 252; p. 185.
Balch, Charles H., Boston, Mass. Safety necklace-clasp. No. 1,270,769; July 2; v. 252; p. 5.
Baldoser, John P. (See Hanna, Leon C., assignor.)
Baldwin, Charles F., Montclair, N. J., assignor, by mesne assignments, to Western Electric Company, Incorporated, Electromagnet. No. 1,271,263; July 2; v. 252; p. 144.
Baldwin, Cloise H. (See Whipple and Baldwin.)
Baldwin Company, The. (See Gilly, Robert A., assignor.)
Baldwin, Eugene D., East Orange, N. J. Mechanical tally. No. 1,271,992; July 9; v. 252; p. 381.
Baldwin, George E., Branford, Conn. Grease-cup. No. 1,273,806; July 30; v. 252; p. 970.
Baldwin Locomotive Works, The. (See Rushton, Kenneth, assignor.)
Ball and Ball Carburetor Company. (See Ball, Frederick O., assignor.)
Ball, Frederick O., assignor to Ball and Ball Carburetor Company, Detroit, Mich. Dashboard-controlling mechanism for carbureters. No. 1,271,003; July 2; v. 252; p. 72.
Ball, John R. (See Rogers, Homer S., assignor.)
Ballenberg, Adolph, New York, N. Y. Combined corner-plate and spring-support for beds. No. 1,271,116; July 2; v. 252; p. 102.
Ballou, Eugene H., Pawtucket, R. I., assignor to Draper Corporation, Hopedale, Mass. Weft-thread catcher and holder for automatic weft-replenishing looms. No. 1,272,599; July 16; v. 252; p. 577.
Ballou, Eugene H., Pawtucket, R. I., assignor to Draper Corporation, Hopedale, Mass. Spent-weft cutter. No. 1,272,600; July 16; v. 252; p. 577.
Ballou, Eugene H., Pawtucket, R. I., assignor to Draper Corporation, Hopedale, Mass. Automatic weft-replenishing loom. No. 1,272,601; July 16; v. 252; p. 578.
Baluss, Hamilton, Kennett Square, Pa. Electric regulator. No. 1,270,917; July 2; v. 252; p. 47.
Baluta, Leonard S., Keiser, Pa. Oil-can indicator. No. 1,272,888; July 16; v. 252; p. 662.
Bamberg, Joseph H., Toledo, Ohio, and H. H. Doehler, assignors to Doehler Die-Casting Company, Brooklyn, N. Y. Casting apparatus. No. 1,271,993; July 9; v. 252; p. 382.
Banschbach, John A., Shelbyville, Ind. Automatic tape-sealing machine. No. 1,273,128; July 23; v. 252; p. 752.
Barber, Earl E. (See Grover and Barber.)
Bardill, Oscar H., Minneapolis, Minn. Storm-sash fastener. No. 1,273,129; July 23; v. 252; p. 752.
Bardwell, Edwin A., assignor to H. H. Mayhew Company, Shelburne Falls, Mass. Method or process of nurling. No. 1,273,441; July 23; v. 252; p. 834.
Barkey, Arnold A. (See Ehlers, Richard, assignor.)
Barks, Frank S., St. Louis, Mo. Draft-alli. No. 1,272,355; July 16; v. 252; p. 510.
Barlow, Arthur, assignor of one-half to W. McDougall, Brooklyn, N. Y. Suppporting device for nursing-bottles. No. 1,271,994; July 9; v. 252; p. 382.
Barnard, Charles S., assignor to The Bassick Company, Bridgeport, Conn. Latch. No. 1,271,117; July 2; v. 252; p. 102.
Barnard, Thomas H., Hamilton, Ontario, Canada. Cable-clamp. No. 1,271,264; July 2; v. 252; p. 145.
Barnard, William L., St. Louis, Mo. Incandescent electric lamp. No. 1,273,130; July 23; v. 252; p. 752.
Barnes, Edward A., Giant, Cal. Nitrated product and making same. No. 1,273,568; July 23; v. 252; p. 869.
Barnes, Eugene K., Marietta, Ga. Spraying apparatus. No. 1,273,311; July 23; v. 252; p. 799.

Barnes, Frederick W., assignor to Eastman Kodak Company, Rochester, N. Y. Lens-grinding machine. No. 1,270,770; July 2; v. 252; p. 5.

Barnes, Tomie F., Hugo, Okla. Skin-stretcher. No. 1,271,418; July 2; v. 252; p. 185.

Barnett, Stewart R., Belleville, Wis. Superrefining fats. No. 1,271,118; July 2; v. 252; p. 102.

Barnett, William A., Lincoln, Nebr. Collar-turning machine. No. 1,273,807; July 30; v. 252; p. 970.

Barney, Edwin E., assignor to Remington Typewriter Company, Ilion, N. Y. Type-writing machine. No. 1,270,918; July 2; v. 252; p. 47.

Barr, Archibald, and W. Stroud, assignors to Barr and Stroud, Limited, Glasgow, Scotland. Optical adjuster for range-finders. No. 1,272,326; July 9; v. 252; p. 475.

Barr, Mark, London, and R. A. Bell, Wimbledon, assignors of one-third to H. R. Beeton, London, England. Calculating-machine. No. 1,272,889; July 16; v. 252; p. 662.

Barr, Samuel C., Chillicothe, Ohio. Resilient wheel. No. 1,272,602; July 16; v. 252; p. 578.

Barr and Stroud. (See Barr and Stroud, assignors.)

Barrett, Arthur M., and W. F. Stone, Chicago, Ill.; said Stone assignor to said Barrett. Time-stamp. No. 1,271,004; July 2; v. 252; p. 72.

Barrett, Arthur M., Winnetka, Ill. Copying device. No. 1,273,181; July 23; v. 252; p. 752.

Barrett, Ernest D., New York, N. Y. Starting mechanism for engines. 1,273,808; July 30; v. 252; p. 971.

Barrett, Homer L., Cyril, Okla. Knee-protector. No. 1,271,119; July 2; v. 252; p. 102.

Barry-Wehmiller Machinery Company. (See Gallup and Wachs, assignors.)

Bartels, Henry, Coleman, Wis. Nail-puller. No. 1,271,832; July 9; v. 252; p. 334.

Bartlett, Charles A., Edwardsville, Ill. Floor-covering. No. 1,271,005; July 2; v. 252; p. 72.

Barula, Harry G. (See McClure, Roderick, assignor.)

Basford, Harold R., San Francisco, Cal. Folding camp-table. No. 1,272,187; July 9; v. 252; p. 436.

Bassett, Linton T., Carthage, Mo. Internal-combustion engine. No. 1,271,833; July 9; v. 252; p. 334.

Bassick Company, The. (See Barnard, Charles S., assignor.)

Batchell, George W., Cincinnati, Ohio, and R. C. Schwenck, Huntington, W. Va. Headlight for automobiles. No. 1,271,265; July 2; v. 252; p. 145.

Bates, Adelmer M., assignor to Bates Valve Bag Company, Chicago, Ill. Bag-tying machine. No. 1,272,603; July 16; v. 252; p. 579.

Bates, Albert J., Chicago, Ill., assignor to Bates Expanded Steel Truss Co., Wilmington, Del. Shearing metals. No. 1,272,890; July 16; v. 252; p. 662.

Bates, Albert J., Chicago, Ill., assignor to Bates Expanded Steel Truss Co., Wilmington, Del. Rotary shears. No. 1,272,891; July 16; v. 252; p. 662.

Bates Expanded Steel Truss Co. (See Bates, Albert J., assignor.)

Bates, Joseph W., Minneapolis, Minn. Coin-controlled mechanism for turnstiles. No. 1,271,651; July 9; v. 252; p. 285.

Bates Valve Bag Company. (See Bates, Adelmer M., assignor.)

Bateson, Pierre L., Brooklyn, assignor to The American Ingenuities Corporation, New York, N. Y. Producing edible containers. No. 1,274,349; July 30; v. 252; p. 1121.

Bauer & Black. (See Doran, Charles A., assignor.)

Baughman, William H., Bay City, Mich. Receptacle. No. 1,272,762; July 16; v. 252; p. 625.

Baugha, Samuel C., assignor of one-half to J. M. Jones, Canalou, Mo. Nut-lock. No. 1,272,763; July 16; v. 252; p. 625.

Baum, Benjamin J., and C. W. Odermatt, San Francisco, Cal. Nested-paper-cup separator. No. 1,271,834; July 9; v. 252; p. 334.

Baum, Frank G., Piedmont, Cal. Portable loader and elevator. No. 1,273,312; July 23; v. 252; p. 799.

Baumgartner, Charles B., Manchester, Iowa. Gate. No. 1,273,132; July 23; v. 252; p. 753.

Baur, Phillip J., Philadelphia, Pa. Confectionery machinery. No. 1,272,892; July 16; v. 252; p. 663.

Bausch, Edward, assignor to Bausch & Lomb Optical Company, Rochester, N. Y. Telescope. No. 1,270,771; July 2; v. 252; p. 5.

Bausch, John J., assignor to Bausch & Lomb Optical Company, Rochester, N. Y. Reinforced eyepiece cap and similar article. No. 1,270,772; July 2; v. 252; p. 5.

Bausch & Lomb Optical Company. (See Bausch, Edward, assignor.)

Bausch & Lomb Optical Company. (See Bausch, John J., assignor.)

Bausch & Lomb Optical Company. (See Ives, Herbert E., assignor.)

Bausch & Lomb Optical Company. (See Kandler and Sachse, assignors.)

Bausch & Lomb Optical Company. (See Saegmuller and Kellner, assignors.)

Bausch & Lomb Optical Company. (See Simpson, Leon G., assignor.)

Baush Machine Tool Company. (See Cannell, William, assignor.)

Bausman, Alonzo L., Chicopee, assignor to National Equipment Company, Springfield, Mass. Feeding mechanism for depositors. No. 1,273,988; July 30; v. 252; p. 1022.

Bawden, Fred M., Toronto, Ontario, Canada. Turret. No. 1,272,188; July 9; v. 252; p. 436.

Bawtinheimer, Harvey E., Red Deer, Alberta, Canada. Headlight-switch for automobiles. No. 1,272,893; July 16; v. 252; p. 663.

Bay City, Mich., Dredge Works. (See Billington and Burnett, assignors.)

Bayley, William, Springfield, Ohio. Window-screen for swinging sashes. No. 1,273,133; July 23; v. 252; p. 753.

Bazzoni, Lewis J., Swampscott, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Buttoning-machine. No. 1,273,442; July 23; v. 252; p. 835.

Bazzoni, Lewis J., Swampscott, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Buttoning-machine. No. 1,273,443; July 23; v. 252; p. 835.

Beach, Chester H., assignor to Wisconsin Electric Company, Racine, Wis. Supporting-clamp for sewing-machine motors. No. 1,272,189; July 9; v. 252; p. 436.

Beach, George W. (See Von Culin and Beach.)

Beadle, Alexander C., Calumet, La. Wrench. No. 1,273,989; July 30; v. 252; p. 1022.

Beale, Newton S., Tama, Iowa. Non-skid device. No. 1,274,232; July 30; v. 252; p. 1091.

Beale, Samuel C., and A. B. Knight, Los Angeles, assignors to American Beet Harvester Company, Santa Ana, Cal. Beet-harvester. No. 1,272,604; July 16; v. 252; p. 579.

Bean, Edgar V., Danville, Ill., assignor of one-half to J. Peery, Guymon, Okla. Vending-machine. No. 1,272,894; July 16; v. 252; p. 663.

Bearkle, Henry. (See Myers, Melvin A., assignor.)

Bearmore, Albert D., Providence, R. I., assignor to The National Marking Machine Company, Cincinnati, Ohio. Device for shaking out laundry articles. No. 1,271,266; July 2; v. 252; p. 145.

Beattey, Earle J. R., assignor to Universal Optical Corporation, Providence, R. I. Eyeglass-mounting. No. 1,272,356; July 16; v. 252; p. 511.

Beatty, Thomas W., Carey, Ohio. Insulator. No. 1,273,313; July 23; v. 252; p. 800.

Beauchemin, Arthur J., and A. J. Laroche, Hartford, Conn. Latch. No. 1,273,314; July 23; v. 252; p. 800.

Beaudry, Joseph, Waterville, Me. Drilling-machine. No. 1,272,345; July 9; v. 252; p. 480.

Beazell, Frank E., Speers, Pa. Wire-clamp. No. 1,273,809; July 30; v. 252; p. 971.

Beck Company, Charles. (See Boessling, Otto H., assignor.)

Beck, John C., assignor to The Diddridge-Beck Co., Milton, Ind. Canopy device for burial-caskets. No. 1,270,773; July 2; v. 252; p. 6.

Becker, Albert S., Jersey City, N. J., assignor to The Palm Brothers Company, New York, N. Y. Printing and transferring decalcomanias to china, metal, wood, &c. No. 1,271,006; July 2; v. 252; p. 73.

Becker, Charles A., Newark, N. J. Making chain. No. 1,273,810; July 30; v. 252; p. 971.

Becker, Christopher A., West Nutley, N. J., assignor to The Torsion Balance Company, New York, N. Y. Specific-gravity scale. No. 1,272,605; July 16; v. 252; p. 579.

Becker, Julius, Chicago, Ill. Dry secondary cell. No. 1,273,447; July 23; v. 252; p. 836.

Beckerleg, James C., Chicago, Ill. Means to prevent chattering in valves and the like. No. 1,273,445; July 23; v. 252; p. 836.

Beede, Theodatus G., Youngstown, Ohio. Carbureter for gas-engines. No. 1,272,895; July 16; v. 252; p. 664.

Beedy, Daniel, Colby, Kans. Deep-well pump. No. 1,271,995; July 9; v. 252; p. 383.

Beer, Owen F., St. Johnsbury, Vt. Stringed musical instrument. No. 1,272,257; July 16; v. 252; p. 511.

Beeton, Henry R. (See Barr and Bell, assignors.)

Beezley, Ernest L., and F. Lane, Mount Pleasant, Iowa. Fertilizer-distributing machine. No. 1,271,007; July 2; v. 252; p. 73.

Behrend & Rothschild. (See Lee, John J., assignor.)

Beidler, George C., Rochester, N. Y. Photographing apparatus. No. 1,272,190; July 9; v. 252; p. 437.

Belerschmitt, John A., Fairbank, Iowa. Automobile-rest. No. 1,271,421; July 2; v. 252; p. 186.

Belcher, Leon K., New York, N. Y. Oil-burner. No. 1,272,896; July 16; v. 252; p. 664.

Belcher, Leon K., New York, N. Y. Oil-burner. No. 1,272,897; July 16; v. 252; p. 664.

Belden, Edward H., assignor to Packard Motor Car Company, Detroit, Mich. Motor-vehicle. No. 1,270,774; July 2; v. 252; p. 6.

Belden, George B., Spokane, Wash. Float-operated indicator. No. 1,271,008; July 2; v. 252; p. 73.

Beldon, Ralph B., Jefferson, Ohio. Vaporizer and mixer for internal-combustion engines. No. 1,272,898; July 16; v. 252; p. 664.

Bell, Earl R., Covington, Ky., assignor of one-half to J. Neyer, Jr., Cincinnati, Ohio. Self-locking adjustable shore. No. 1,273,811; July 30; v. 252; p. 971.

Bell, Edward R., *et al.* (See Avis, William C., assignor.)

Bell, James D., Seattle, Wash. Centrifugal pump. No. 1,272,606; July 16; v. 252; p. 580.

Bell, John H., East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Telegraph system. No. 1,272,191; July 9; v. 252; p. 437.

Bell, John M., Chester, S. C. Portable soldering device. No. 1,272,358; July 16; v. 252; p. 511.

Bell, John M., Portsmouth, Ohio. Crane-hook. No. 1,272,359; July 16; v. 252; p. 511.

Bell, John T., deceased, J. T. Bell administratrix, San Francisco, Cal. Davit tackle-block. No. 1,273,315; July 23; v. 252; p. 800.

Bell, Josephine T., administratrix. (See Bell, John T.)

Bell, Robert A. (See Barr and Bell.)

Bell, William M., Charlotte, N. C. Lock for motor-vehicles. No. 1,272,192; July 9; v. 252; p. 437.

Bellamy, Harry T., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Making colored glass. No. 1,271,652; July 9; v. 252; p. 286.

Bellion, William E., Brooklyn, assignor of one-half to H. W. Christman, Jamaica, N. Y. Steam-generator. No. 1,274,233; July 30; v. 252; p. 1091.

Belmont, Ralph A. (See Schoenberg, Ralph A.)

Belton, Robert L., Dayton, Ohio. Protective liner for pneumatic tires. No. 1,273,446; July 23; v. 252; p. 836.

Bemis, Thomas, Sr. (See Bright, Martin C., assignor.)

Bencze, Joseph, and J. Romberger, Detroit, Mich. Ball-joint. No. 1,272,607; July 16; v. 252; p. 580.

Bender, William, assignor to Ajax Forge Company, Chicago, Ill. Switch-stand. No. 1,273,134; July 23; v. 252; p. 753.

Benedict, William L., New York, N. Y. Puzzle. No. 1,271,997; July 9; v. 252; p. 383.

Benitoa, Felix J., Tampa, Fla., assignor to New York Signal Co., Inc., New York, N. Y. Vehicle-signal. 1,273,990; July 30; v. 252; p. 1023.

Benjamin, Bert R. (See Raney and Benjamin.)

Benjamin, Bert R., Oak Park, Ill., assignor to International Harvester Company of New Jersey. Automatic trip for shocking-machines. No. 1,272,360; July 16; v. 252; p. 512.

Benjamin Electric Manufacturing Company. (See Benjamin, Reuben B., assignor.)

Benjamin Electric Manufacturing Company. (See Duffy, Thomas I., assignor.

Benjamin Electric Manufacturing Company. (See Harlow, Clarence B., assignor.)

Benjamin Electric Manufacturing Company. (See Ruth, Robert H., assignor.)

Benjamin, Reuben B., assignor to Benjamin Electric Manufacturing Company, Chicago, Ill. Lamp-socket. No. 1,271,835; July 9; v. 252; p. 335.

Benner, Samuel A., Pittsburgh, Pa. Truck side pedestal. No. 1,271,120; July 2; v. 252; p. 103.

Bennett, Erastus S. (See Jarmuth, Adolph J., assignor.)

Bennett, Erastus S., New York, N. Y. Screw-pump. No. 1,271,836; July 9; v. 252; p. 335.

Bennett, Eugene H. (See Logan, Charles H., assignor.)

Bensinger, Norman E., Chicago, Ill. Spark-plug. No. 1,273,816; July 23; v. 252; p. 800.

Benson, Edwin P., New York, N. Y. Combined blank-check and paid-voucher holder. No. 1,271,998; July 9; v. 252; p. 383.

Bentley, James W., Wise, Va. Bottle-neck. No. 1,271,996; July 9; v. 252; p. 383.

Benton, Morris F., Plainfield, assignor to American Type Founders Company, Jersey City, N. J. Automatic metal-feed for type-casting machines. No. 1,272,193; July 9; v. 252; p. 437.

Benway, Fredrick M., Montpelier, Vt., assignor to Parker Wire Goods Company, Worcester, Mass. Fruit-marker. No. 1,273,721; July 23; v. 252; p. 909.

Berg, Frederick O., Spokane, Wash. Tent. No. 1,270,919; July 2; v. 252; p. 48.

Berg, John, assignor to Metal Specialties Manufacturing Company, Chicago, Ill. Electric connector. No. 1,271,999; July 9; v. 252; p. 384.

Berg, Joseph, assignor to Stewart-Warner Speedometer Corporation, Chicago, Ill. Instrument-board for automobiles. No. 1,273,448; July 23; v. 252; p. 837.

Berg, Joseph, assignor to Stewart-Warner Speedometer Corporation, Chicago, Ill. Instrument-board. No. 1,273,449; July 23; v. 252; p. 837.

Berg, Joseph, assignor to Stewart-Warner Speedometer Corporation, Chicago, Ill. Automobile-bumper support. No. 1,273,450; July 23; v. 252; p. 837.

Bergdoll, Louis J., Philadelphia, Pa. Internal-combustion engine. No. 1,271,419; July 2; v. 252; p. 185.

Berger, Frederick J. (See Ketch and Berger.)

Bergeron, Jasmin P., Pasadena, Cal. Rotary internal-combustion engine. No. 1,272,698; July 16; v. 252; p. 607.

Bergevin, George P., Utica, N. Y. Line-reel. No. 1,272,361; July 16; v. 252; p. 512.

Bergkvist, Gustaf, Mosquero, N. Mex. Tire-shoe. No. 1,273,135; July 23; v. 252; p. 754.

Berglund, Edward S., Trollhättan, Sweden. Electrothermic extraction of zinc. No. 1,271,267; July 2; v. 252; p. 145.

Bergman, John, Des Moines, Iowa. Gasolene-stove shield attachment. No. 1,273,317; July 23; v. 252; p. 801.

Bergstrom, Carl G. G., St. Paul, Minn. Bag-holder. No. 1,271,653; July 9; v. 252; p. 286.

Bergström, Hilding O. V., Stockholm, Sweden. Distilling liquid mixtures or solutions. No. 1,271,654; July 9; v. 252; p. 286.

Bergstrom, Oscar, assignor to Handy Manufacturing Company, Chicago, Ill. Clamping-machine. No. 1,273,136; July 23; v. 252; p. 754.

Bergve, Einar, Notodden, assignor to Norsk Hydro-elektrisk Kvaelstofaktieselskab, Christiania, Norway. Manufacture of nitric acid. No. 1,273,991; July 30; v. 252; p. 1023.

Berkenkamp, Russell. (See Briggs and Jenkins, assignors.)

Berkner, Edward F. (See Mangel, Wallie C., assignor.)

Berko, Emile, assignor to C. Jaeger, Brooklyn, N. Y. Bath-room fixture. No. 1,272,899; July 16; v. 252; p. 664.

Berlin Mills Company. (See Parker, Howard, assignor.)

Berlin, Paul, Hoboken, N. J., assignor to The Knyscheerer Corporation. Cross-bridge X-ray machine. No. 1,273,812; July 30; v. 252; p. 972.

Berman, Harry, Brooklyn, N. Y. Automatic sash-lock. No. 1,272,900; July 16; v. 252; p. 665.

Berman, Lottie T. (See Berman, Nathan, assignor.)

Berman, Nathan, assignor to L. T. Berman, Philadelphia, Pa. Track-liner. No. 1,273,569; July 23; v. 252; p. 870.

Bernard, Joseph, *et al.* (See Bisaillon, Zenophile, assignor.)

Bernard, William A., assignor to The William Schollhorn Company, New Haven, Conn. Mears for applying fasteners. No. 1,274,234; July 30; v. 252; p. 1092.

Bernat, Raoul, Bordeaux, France. Pneumatic spring system. No. 1,273,813; July 30; v. 252; p. 972.

Berold, Frederick H., Wyoming, Ohio. Sheet-delivery mechanism. No. 1,272,362; July 16; v. 252; p. 512.

Berry, George W., Lorna Doone, New South Wales, Australia. Opener and closure for cans. No. 1,271,533; July 9; v. 252; p. 251.

Berry, Louis J., Forney, Tex. Cotton-harvester. No. 1,273,814; July 30; v. 252; p. 973.

Bertrand, Frederic E., Swampscott, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Machine for operating on insoles. No. 1,272,901; July 16; v. 252; p. 665.

Bertrand, Frederic E., Lynn, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Making reinforced insoles. No. 1,272,902; July 16; v. 252; p. 665.

Bethenod, Joseph. (See Latour and Bethenod.)

Bethke, Leo, assignor to Luther Grinder Manufacturing Company, Milwaukee, Wis. Clamping-vise. No. 1,271,009; July 2; v. 252; p. 73.

Bethlehem Steel Company. (See Fleckenstein, Joseph P., assignor.)

Bettger, Carl J., Gravelbourg, Saskatchewan, Canada. Gate-latch. No. 1,271,655; July 9; v. 252; p. 286.

Bevan, John T. (See Bevan, Thomas C. and J. T.)

Bevan, Thomas C. and J. T., Utica, N. Y. Gage. No. 1,272,363; July 16; v. 252; p. 513.

Bewan, James O., Onley, Va. Carbid-feed for acetylene-generators. No. 1,271,420; July 2; v. 252; p. 186.

Bewyer, Frank E. (See Orvold, Oluf L., assignor.)

Bianchi, Zaverio C., San Jose, Cal. Chalking device for billiard-tables. No. 1,270,775; July 2; v. 252; p. 6.

Bianco, Guy M. A., Denver, Colo. Hood-holder. No. 1,271,121; July 2; v. 252; p. 103.

Bickerton, Spencer, Honolulu, Hawaii. Soapsuds-mixer. No. 1,272,194; July 9; v. 252; p. 438.

Bickford, Charles A., Chicago, Ill. Elevator. No. 1,271,534; July 9; v. 252; p. 251.

Bicknell, George J., Boston, Mass. Fabric and making the same. No. 1,273,815; July 30; v. 252; p. 973.

Bijur, Joseph, New York, N. Y., assignor to Bijur Motor Lighting Company, Hoboken, N. J. Electric-circuit-changing apparatus. No. 1,271,535; July 9; v. 252; p. 252.

Bijur Motor Lighting Company. (See Bijur, Joseph, assignor.)

Billé, Léon, Nogent-sur-Marne, France. Machine for grinding the interiors of hollow bodies. No. 1,271,837; July 9; v. 252; p. 335.

Billings, William R., Brooklyn, N. Y. Measuring-faucet. No. 1,271,838; July 9; v. 252; p. 336.

Billings, William R., Brooklyn, N. Y. Measuring-faucet. No. 1,271,839; July 9; v. 252; p. 336.

Billings, William R., Brooklyn, N. Y. Measuring-faucet. No. 1,271,840; July 9; v. 252; p. 336.

Billington, William W., and W. Burnett, assignors to Bay City, Mich., Dredge Works. Ditch-dredging machine. No. 1,271,010; July 2; v. 252; p. 74.

Bingham, Robert O., assignor to The Wagner Manufacturing Company, Sidney, Ohio. Percolator. No. 1,271,011; July 2; v. 252; p. 74.

Binkle, Peter. (See Heiser and Binkle.)

Bircher, Eugene A., assignor to The Bircher Co. Inc., Rochester, N. Y. Machine for opening envelops. No. 1,273,318; July 23; v. 252; p. 801.

Bircher Co., The. (See Bircher, Eugene A., assignor.)

Birgbauer, Conrad, Detroit, Mich. Diamond-mounting. No. 1,273,992; July 30; v. 252; p. 1023.

Bisaillon, Zenophile, assignor to himself, J. M. and H. A. Longtin, J. Bernard, and J. A. Dulude, Laprairie, Quebec, Canada. Keyless lock. No. 1,272,327; July 9; v. 252; p. 475.

Black, Charles F., assignor to D. P. Clark, Dayton, Ohio. Toy. No. 1,272,195; July 9; v. 252; p. 438.
Black, William. (See Kinghan, Fredrick A., assignor.)
Blackburn, Jasper, Webster Groves, Mo. Earth-anchor. No. 1,272,364; July 16; v. 252; p. 513.
Blackmer Rotary Pump Co. (See Klise, Albert B., assignor.)
Blackmore, Bernard J. D., Oconomowoc, Wis., assignor of one-third to P. S. Brukaker, Chicago, Ill. Metallic joint. No. 1,272,000; July 9; v. 252; p. 384.
Blair, Frank R., Glen Ridge, N. J., assignor to F. R. Blair & Co., Inc., New York, N. Y. Flexible coupling. No. 1,271,122; July 2; v. 252; p. 103.
Blake William H., Boston, Mass. Condenser-pump. No. 1,271,841; July 8; v. 252; p. 337.
Blake, William H., Jersey City, N. J. Razor. No. 1,273,137; July 23; v. 252; p. 754.
Blakely, Charles A., Piano, Ill. Vise. No. 1,273,319; July 23; v. 252; p. 801.
Blamfield, Charles, Boston, Mass. Fire-lighter. No. 1,274,235; July 30; v. 252; p. 1092.
Blanc, Aimé, Aspen, Colo. Breathing and face-protecting apparatus for rock-drills. No. 1,271,012; July 2; v. 252; p. 74.
Blanchard, George L., Pomona, Cal. Blue-flame gas or oil burner. No. 1,271,498; July 2; v. 252; p. 208.
Blankenhorn, George W., and T. Castberg, San Francisco, Cal. Can-end separator and feeder. No. 1,272,764; July 16; v. 252; p. 625.
Blatt, Anna. (See Blatt, Max, assignor.)
Blatt, Max, assignor to A. Blatt, Detroit, Mich. Rolling telephone-directory. No. 1,273,722; July 23; v. 252; p. 909.
Blauvelt, Thomas E., and J. J. Fooshee, Hurley, N. Mex. Flue-cleaner. No. 1,271,656; July 9; v. 252; p. 287.
Blaw-Knox Company. (See Knox, Luther L., assignor.)
Blaw Steel Construction Company. (See Loxterman, Howard B., assignor.)
Blecher, Carl, Berlin-Dahlem, Germany, assignor to Rotophot Akt. Ges. für Graphische Industrie, Berlin, Germany. Printing-plate for multicolor photo-engraving. No. 1,273,993; July 30; v. 252; p. 1023.
Bleile, Albert, Dayton, Ohio. Device for feeding cakes and the like. No. 1,272,608; July 16; v. 252; p. 580.
Bleile, Albert, Dayton, Ohio. Device for removing cakes from carrier-sheets. No. 1,273,796; July 23; v. 252; p. 929.
Blessing, Charles A., Jr., Philadelphia, Pa. Elevator-gate-locking apparatus. No. 1,273,570; July 23; v. 252; p. 870.
Bliss, William L., New York, assignor, by mesne assignments, to U. S. Light & Heat Corporation, Niagara Falls, N. Y. System of electrical distribution. No. 1,272,328; July 9; v. 252; p. 476.
Block, John. (See Myers, Melvin A., assignor.)
Block, Louis, Mamaroneck, N. Y. Condenser. No. 1,271,268; July 2; v. 252; p. 146.
Block, Louis, Mamaroneck, N. Y. Manufacture of non-alcoholic malt beer. No. 1,271,269; July 2; v. 252; p. 146.
Bloede, Victor G., Catonsville, Md. Manufacturing vegetable glue. No. 1,273,571; July 23; v. 252; p. 870.
Bloodgood, James H., South Jacksonville, assignor of one-half to E. C. Broward, Jacksonville, Fla. Portable hand-planer. No. 1,272,196; July 9; v. 252; p. 438.
Boardman, Robert O., Springfield, Ill., assignor to Mergenthaler Linotype Company, a Typographical machine. No. 1,271,123; July 2; v. 252; p. 104.
Bock, Henry L. (See Bock, William E. and H. L.)
Bock, Joseph, Sr., Cincinnati, Ohio. Soap cooler and compressor. No. 1,271,657; July 8; v. 252; p. 287.
Bock, William E. and H. L., Toledo, Ohio, said H. L. Bock assignor to said William E. Bock. Running-gear for vehicles. No. 1,272,765; July 16; v. 252; p. 625.
Bodkin, Irving S. (See Haigh and Bodkin.)
Bodri, Christian, assignor of one-half to H. J. Kahrs, New York, N. Y. Clothes-pin. No. 1,274,236; July 30; v. 252; p. 1092.
Boeck, Percy A., New York, N. Y., assignor to Celite Products Company, Los Angeles, Cal. Decolorizer. No. 1,272,197; July 9; v. 252; p. 439.
Boelio, Louis N., Chicago, assignor of one-half to L. Johns, Oak Park, Ill. Treating hams to prevent souring. No. 1,271,501; July 2; v. 252; p. 208.
Bogard, John H. (See Shannon and Bogard.)
Bogdánffy, Alexander, Brooklyn, N. Y. Feeding attachment for crown-cork-making machines. No. 1,273,723; July 23; v. 252; p. 909.
Bohan, William J., St. Paul, Minn. Lamp. No. 1,273,994; July 30; v. 252; p. 1023.
Bohan, William J., St. Paul, Minn. Lamp. No. 1,273,995; July 30; v. 252; p. 1024.
Bohnenkemper, George C., Denver, Colo. Lawn-sprinkler. No. 1,272,609; July 16; v. 252; p. 581.
Bohnstengel, Arthur H. (See Ralya, William S., assignor.)
Bolens, Harry W., Port Washington, Wis. Chair-iron. No. 1,272,365; July 16; v. 252; p. 513.
Bölling, Georg H. H., Christiania, Norway. Apparatus for burning pitch. No. 1,272,198; July 9; v. 252; p. 439.
Bolser, Archibald T., Dayton, Ohio. Signal device for automobiles. No. 1,273,816; July 30; v. 252; p. 973.
Bolstad, Hans D. (See Erickson and Bolstad.)
Boltz, Solomon H., assignor of one-fourth to G. H. Smith, Philadelphia, Pa. Container for cakes, crackers, &c. No. 1,272,903; July 16; v. 252; p. 665.
Bond, Austin, New York, N. Y. Slicing-machine. No. 1,273,138; July 23; v. 252; p. 755.
Bongartz, Benno J., Brooklyn, assignor to United States Air Craft Corporation Inc., New York, N. Y. Aviator's instruction-machine. No. 1,272,766; July 16; v. 252; p. 626.
Bonney-Floyd Company, The. (See Dorsey, Walter A., assignor.)
Boomershine, Adam, Dayton, Ohio. Oil-protector for brake-drums. No. 1,270,776; July 2; v. 252; p. 6.
Booth, Clement, Narberth, Pa. Locking device for demountable wheels. No. 1,273,320; July 23; v. 252; p. 802.
Booth, William T., East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Switching device. No. 1,271,124; July 2; v. 252; p. 104.
Borbley, John, Athens, Ohio. Wire-twisting tool. No. 1,272,904; July 16; v. 252; p. 666.
Bordeleau, Donat. (See McLaughlin and Bordeleau.)
Borgan, Peter. (See Lamar and Borgan.)
Borgeson, Charles J. B., Syracuse, N. Y. Lubricating attachment for metal-working machines. No. 1,273,996; July 30; v. 252; p. 1024.
Borghesani, Guido, and G. Stampa, Rome, Italy. Preparation of new fertilizer. No. 1,272,001; July 9; v. 252; p. 384.
Bortman, Emanuel W., assignor to Wildman Mfg. Co., Norristown, Pa. Cloth-cutting machine. No. 1,271,522; July 2; v. 252; p. 214.
Boryszewski, Joseph, Forks, N. Y. Tire and fastening means therefor. No. 1,274,237; July 30; v. 252; p. 1093.
Bosch, Carl, A. Mittasch, and C. Krauch, assignors to Badische Anilin & Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany. Hydrogenization and dehydrogenization of carbon compounds. No. 1,271,013; July 2; v. 252; p. 74.
Bosler, George A., Chicago, Ill. Folding car-step. No. 1,273,321; July 23; v. 252; p. 802.
Bossu, Pierre, Paris, France. Explosion-engine with dynamomagnetic ignition. No. 1,272,199; July 9; v. 252; p. 439.
Boston Wire Stitcher Company. (See Maynard, Arthur H., assignor.)
Boswell, George G. F., assignor to Universal Coin Lock Company, Indianapolis, Ind. Reversible lock-casing and keeper for coin-controlled locks. No. 1,271,536; July 9; v. 252; p. 252.
Botkin, Edgar T. (See Rhody, Elza, assignor.)
Bottger, Lorenzo. (See Tombyll and Bottger.)
Botz, Konrad, New York, N. Y. Transmitter or receiver. No. 1,270,920; July 2; v. 252; p. 48.
Boughner, John D., Yorba Linda, Cal. Drill-rod connection. No. 1,273,724; July 23; v. 252; p. 910.
Bouzo, Manuel, Habana, Cuba. Electric heating apparatus. No. 1,273,451; July 23; v. 252; p. 838.
Bowell, Francis M., Laporte, Ind. Tractor-plow. No. 1,272,905; July 16; v. 252; p. 666.
Bowen, Eugene F. (See Reid, Allan E., assignor.)
Bower, Amelia J. F., Breckenridge, Minn. Sewing-machine belt. No. 1,271,014; July 2; v. 252; p. 75.
Bowers, Robert R., assignor to The Dain Manufacturing Company of Iowa, Ottumwa, Iowa. Keying device. No. 1,272,200; July 9; v. 252; p. 439.
Bowman, Charles F., assignor to Kalamazoo Corset Company, Kalamazoo, Mich. Legging. No. 1,272,366; July 16; v. 252; p. 513.
Bowman, Levi M., assignor of one-half to W. A. Smith, Tulsa, Okla. Hydrocarbon-burner. No. 1,272,201; July 9; v. 252; p. 439.
Bowman, Newton K., Canton, Ohio. Cable-splice. No. 1,271,842; July 9; v. 252; p. 337.
Boyce, Harrison H., Forest Hills, N. Y. Indicating device for automobiles. No. 1,272,002; July 9; v. 252; p. 384.
Boyce, Harrison H., Forest Hills, N. Y. Indicating instrument for automobile-radiators. No. 1,272,367; July 16; v. 252; p. 514.
Boykin, Ranzy. (See Lewis, James W., assignor.)
Boyle Manufacturing Company. (See Merritt, James M., assignor.)
Brack, Jacob, trustee. (See Rogers, Orvid H., assignor.)
Brackenbury, Edward W., assignor to The T. L. Smith Company, Milwaukee, Wis. Automatic water-weighing device. No. 1,272,368; July 16; v. 252; p. 514.
Bracy, Edward L., Baltimore, Md., assignor to R. H. Wright, Durham, N. C. Paper-receptacle-making machine. No. 1,271,422; July 2; v. 252; p. 186.
Bradburn, Pleasant, and W. Chambers, Muncie, Ind. Rail-clamp. No. 1,272,767; July 16; v. 252; p. 626.
Bradbury, Edward S., Christchurch, New Zealand. Fastener for garments and the like. No. 1,273,725; July 23; v. 252; p. 910.
Bradford Dyers Association Limited. (See Stansfield and Wilkinson, assignors.)
Bradley, Arthur J., San Francisco, Cal. Ventilator. No. 1,272,202; July 9; v. 252; p. 440.
Bradley, Charles E., Mishawaka, Ind., assignor to Mishawaka Woolen Manufacturing Company. Manufacturing rubber footwear. No. 1,271,843; July 9; v. 252; p. 337.

Bradley, Orson U., North Adams, Mass. Spinning-frame roll. No. 1,270,777; July 2; v. 252; p. 7.
Braf, Gustave, Brooklyn, N. Y. Machine for marking the position of buttons and buttonholes in garments. No. 1,272,610; July 16; v. 252; p. 581.
Bragdon, Charles M., assignor of one-half to L. W. Davis, Bangor, Me. Pickax. No. 1,273,023; July 16; v. 252; p. 698.
Brainard, James W., Pittsburgh, Pa. Manufacture of hoops. No. 1,273,139; July 23; v. 252; p. 755.
Brainard, James W., Pittsburgh, Pa. Metal head for barrels or kegs. No. 1,273,997; July 30; v. 252; p. 1024.
Brajdovics, William, Sharpsville, Pa. Street-cleaner. No. 1,273,998; July 30; v. 252; p. 1024.
Braley, Charles L., assignor to The American Laundry Machinery Company, Cincinnati, Ohio. Air-compressor. No. 1,272,611; July 16; v. 252; p. 581.
Branch, Thomas W., Columbus, Ga. Game apparatus. No. 1,273,024; July 16; v. 252; p. 698.
Brant, Henry M. (See Gordon, Samuel W., assignor.)
Brantley, Lewis R., Marietta, Ga. Corn-planter. No. 1,274,239; July 30; v. 252; p. 1093.
Brauer, Arthur J., St. Louis, Mo. Strap-working machine. No. 1,272,612; July 16; v. 252; p. 581.
Braund, Frederick G., and L. J. Vargo, Cleveland, Ohio. Welding compound. No. 1,271,125; July 2; v. 252; p. 104.
Brawner, Charles R., Los Angeles, Cal. Luggage-fastener. No. 1,270,921; July 2; v. 252; p. 48.
Brazil, Antonio C., Rio de Janeiro, Brazil, assignor to Companhia Grelhas Economicas Brasil Corporation. Grate and grate-bar. No. 1,272,906; July 16; v. 252; p. 666.
Bremer & Bruckmann. (See Bubles, William C., assignor.)
Brenkert, Joseph W., San Diego, Cal. Drinking-fountain. No. 1,273,322; July 23; v. 252; p. 802.
Brennan, John S., Milwaukee, Wis. Vapor-heating system. No. 1,271,658; July 8; v. 252; p. 287.
Brennan, John S., and A. J. Lindemann, assignors to A. J. Lindemann & Hoverson Company, Milwaukee, Wis. Liquid-fuel stove. No. 1,274,134; July 30; v. 252; p. 1063.
Brenzinger, Julius, Mount Vernon, N. Y. Can-testing machine. No. 1,270,922; July 2; v. 252; p. 48.
Brenzinger, Julius, Fairfield, Conn., assignor to Sanitary Can Machinery Company, Ellsworth, Me. Can-cover-feeding device. No. 1,270,923; July 2; v. 252; p. 49.
Bretz, Don C., Fort Worth, Tex. Swing. No. 1,271,126; July 2; v. 252; p. 104.
Bridgeport Brass Company. (See Limont, Alexander W., assignor.)
Bridges, William H., Grand Rapids, Mich., assignor to B. Feld, Fulton county, Ga. Toilet-brush. No. 1,272,907; July 16; v. 252; p. 667.
Bridges, William H., Grand Rapids, Mich., assignor to B. Feld, Fulton county, Ga. Toilet-brush. No. 1,272,908; July 16; v. 252; p. 667.
Brienza, Angelo, assignor of one-half to C. N. Gregg, New York, N. Y. Washtub-cover. No. 1,272,203; July 9; v. 252; p. 440.
Briggs, John F., Gays Mills, assignor of one-half to S. C. Martner, Prairie du Chien, Wis. Convertible folding go-cart. No. 1,271,270; July 2; v. 252; p. 146.
Briggs, John, and J. T. Jenkins, assignors to R. Berkenkamp, San Francisco, Cal. Automatic phonograph. No. 1,273,572; July 23; v. 252; p. 870.
Bright, Martin C., assignor of one-half to T. Bemis, Sr., Indianapolis, Ind. Steering-gear attachment. No. 1,271,537; July 9; v. 252; p. 252.
Brilhart, William W., Indiana, Pa. Rimless optical lens. No. 1,273,573; July 23; v. 252; p. 871.
Brinker, Frank, *et al.* (See Olerich, Henry, assignor.)
Brinkhaus, Hugo, Brooklyn, N. Y. Boat. No. 1,271,499; July 2; v. 252; p. 208.
Brior, Jonas F., Easton, Pa. Ratchet-wrench. No. 1,273,726; July 23; v. 252; p. 910.
Brisbine, Charles, Lisbon, N. D. Fusible link. No. 1,272,369; July 16; v. 252; p. 515.
Bristol, Edgar H., assignor to The Foxboro Company, Foxboro, Mass. Measuring instrument. No. 1,272,344; July 9; v. 252; p. 480.
Britten, William G., Fanwood, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone system. No. 1,271,127; July 2; v. 252; p. 104.
Brixey, Austin D., New York, N. Y. Moving-picture film and making. No. 1,270,778; July 2; v. 252; p. 7.
Brizendine, Charles, Stockton, Cal. Plumb and level gage. No. 1,271,128; July 2; v. 252; p. 105.
Broadgate, Fred A., Spokane, Wash. Wind-shield attachment for automobiles. No. 1,273,727; July 23; v. 252; p. 911.
Brock, Matthias, Boston, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Lasting apparatus. No. 1,271,659; July 9; v. 252; p. 287.
Brock, Matthias, Boston, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Making shoes. No. 1,273,323; July 23; v. 252; p. 802.
Brock, Matthias, Boston, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Machine for operating upon boots or shoes. No. 1,273,324; July 23; v. 252; p. 803.
Broderick, George H., assignor to I. Hill, Lawrence, Kans. Machine for taping box-blanks and the like. No. 1,270,924; July 2; v. 252; p. 49.
Broemel, Louis, assignor to The Peck, Stow & Wilcox Company, Southington, Conn. Machine-stand. No. 1,272,613; July 16; v. 252; p. 582.
Brombacher, Julius, Los Angeles, Cal. Automatic gas cut-off. No. 1,273,574; July 23; v. 252; p. 871.
Brongel, Walter, Chicago, Ill. Sword and pistol. No. 1,273,025; July 16; v. 252; p. 698.
Brooks, Bernie, St. Louis, Mo. Collar-fastener. No. 1,273,325; July 23; v. 252; p. 803.
Brooks, David W., assignor to Concrete Steel Company, New York, N. Y. Concrete-insert. No. 1,272,909; July 16; v. 252; p. 668.
Brooks, Howard, El Paso, Tex. Priming device. No. 1,272,204; July 9; v. 252; p. 440.
Brooks Manufacturing Company, The. (See Brooks, Robert A., assignor.)
Brooks, Robert A., assignor to The Brooks Manufacturing Company, Chicago, Ill. Flushing-valve. No. 1,273,140; July 23; v. 252; p. 755.
Brooks, William T., Wilmington, Del. Game apparatus. No. 1,274,135; July 30; v. 252; p. 1063.
Brooks, Winfred M., East Orange, N. J., assignor to E. J. Brooks & Co., New York, N. Y. Box-strap seal. No. 1,271,129; July 2; v. 252; p. 105.
Brooks, Winfred M., East Orange, N. J., assignor to E. J. Brooks & Co., New York, N. Y. Tightener and seal for box-straps. No. 1,273,115; July 16; v. 252; p. 722.
Brosius, Edgar E., Pittsburgh, Pa. Furnace-charging device. No. 1,273,141; July 23; v. 252; p. 756.
Brosius, Edgar E., Pittsburgh, Pa. Controller. No. 1,273,142; July 23; v. 252; p. 756.
Brosnan, John J., Worcester, Mass. Portable boring-machine. No. 1,272,370; July 16; v. 252; p. 515.
Broward, Edward C. (See Bloodgood, James H., assignor.)
Brower, Abraham T. H., Chicago, Ill. Printing-press. No. 1,270,779; July 2; v. 252; p. 7.
Brower, Abraham T. H., Chicago, Ill. Roller-bearing for printing-presses. No. 1,271,423; July 2; v. 252; p. 187.
Brown, Arthur J. (See Jacobson and Brown.)
Brown, Firmin C., Chicago, Ill. Food-warmer. No. 1,272,205; July 9; v. 252; p. 440.
Brown, Frank E., San Francisco, Cal. Shoe-stitching-machine attachment. No. 1,272,910; July 16; v. 252; p. 668.
Brown, George H. (See Robinson, William H., assignor.)
Brown, Gordon, Chicago, Ill. Corkscrew and bottle-opener. No. 1,273,026; July 16; v. 252; p. 699.
Brown, Gouverneur G. (See Schuchart and Brown.)
Brown, Haydn, Chislehurst, England. Apparatus for measuring the quantity of expired air. No. 1,271,523; July 2; v. 252; p. 214.
Brown, Henry F., Sheffield, England. Apparatus for cooling, humidifying, and filtering air or the like. No. 1,271,271; July 2; v. 252; p. 147.
Brown, Julius N., Chicago, Ill. Flange for piano-actions. No. 1,271,130; July 2; v. 252; p. 105.
Brown, Louis M. (See Macleod and Brown.)
Brown, Louis M., Beverly, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Insole-marking machine. No. 1,273,452; July 23; v. 252; p. 838.
Brown, Marshall A., Eureka, Kans. Kafir-corn header. No. 1,272,371; July 16; v. 252; p. 515.
Brown, Paul J. (See Minter, Maurice M., assignor.)
Brown, Robert A. (See Chaplin, Manley J., assignor.)
Brown, Robert S., assignor to The New Britain Machine Company, New Britain, Conn. Chuck. No. 1,272,614; July 16; v. 252; p. 582.
Brown, Robson D. (See Miller and Brown.)
Brown, Thomas E., New York, N. Y. Drawbridge. No. 1,270,925; July 2; v. 252; p. 50.
Bruckman, Frederick A., Portland, Oreg. Trimming and delivering mechanism for pastry-making machines. No. 1,271,844; July 9; v. 252; p. 337.
Bruhn, Max C., and G. F. McGill, Chicago, Ill. Change-maker. No. 1,272,372; July 16; v. 252; p. 515.
Brukaker, Percy S. (See Blackmore, Bernard J. D., assignor.)
Brunner, Albert, Männedorf, Switzerland. Balance for determining the titer of silk. No. 1,271,660; July 9; v. 252; p. 288.
Bruno, Charles O., Rockford, Ill. Device for assembling brood-frames. No. 1,274,240; July 30; v. 252; p. 1093.
Brunson, Randolph, East Orange, N. J. Aircraft construction. No. 1,272,373; July 16; v. 252; p. 515.
Brunst, William M., assignor to The Kinnear Manufacturing Company, Columbus, Ohio. Fire-shutter. No. 1,272,347; July 9; v. 252; p. 481.
Brunswick-Balke-Collender Co. (See Whelan, Michael J., assignor.)
Brush, Alanson P., Detroit Mich. Friction-clutch. No. 1,271,424; July 2; v. 252; p. 187.
Bryan, Cecil E., Chicago, Ill. Coffin-elevator for mausoleums. No. 1,273,143; July 23; v. 252; p. 756.
Bryant, Bertain Y., Haviland, Kans. Header attachment for tractors. No. 1,271,845; July 9; v. 252; p. 338.
Bryant Electric Company, The. (See Anderson, Carl E., assignor.)
Bryant Electric Company, The. (See Thomas, George B., assignor.)

Bryant, Ellsworth S., and G. R. Couls, Detroit, Mich. Spring suspension. No. 1,273,999; July 30; v. 252; p. 1025.
Bryant, Frank H., Los Angeles, Cal. Preserving beets. No. 1,273,732; July 23; v. 252; p. 912.
Bryson, Tandy A., Troy, N. Y., assignor to Tolhurst Machine Works. Centrifugal drying-machine. No. 1,273,817; July 30; v. 252; p. 973.
Buchsbaum, Samuel, Chicago, Ill. Belt-buckle. No. 1,272,206; July 9; v. 252; p. 441.
Buchtala, Hans, Gratz, Austria, assignor to B. Es Tarsa, Budapest, Hungary. Producing mercury preparations for therapeutic purposes. No. 1,271,846; July 9; v. 252; p. 338.
Buckeye Steel Casting Company, The. (See Hansen and Houser, assignors.)
Buckham, George T. (See Dawson and Buckham.)
Buckley, Oliver E., East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Preparing vacuum-tubes. No. 1,272,374; July 16; v. 252; p. 516.
Buckley, William, Chicago, Ill. Apparatus for pressing activated sludge. No. 1,271,425; July 2; v. 252; p. 187.
Buckman, Ignatus, assignor to L. V. Howard, New York, N. Y. Horn. No. 1,272,615; July 16; v. 252; p. 582.
Buckminster, Frank S., Waterbury, Conn. Watchmaker's magnifying-glass. No. 1,272,911; July 16; v. 252; p. 668.
Bucyrus Company. (See Ferris, Walter, assignor.)
Budde, Paul, Bethalto, Ill. Level. No. 1,273,027; July 16; v. 252; p. 699.
Buechc, Joseph, Gray, Saskatchewan, Canada. Tractor attachment for farm implements. No. 1,271,661; July 9; v. 252; p. 288.
Buehler, Brownell, Philadelphia, Pa. Beating-engine. No. 1,271,426; July 2; v. 252; p. 187.
Buffalo Scale Company. (See Devitt, George C., assignor.)
Buffum, Herbert H., Laconia, N. H. Sprinkler-head. No. 1,273,818; July 30; v. 252; p. 974.
Bugbee and Niles Co., (See King, Rufus, assignor.)
Bugenhagen, George H., Minot, N. D. Transmission mechanism. No. 1,273,326; July 23; v. 252; p. 803.
Bugg, Owen T., Rutherford, N. J. Mattress. No. 1,270,780; July 2; v. 252; p. 7.
Buhles, William C., San Francisco, Cal., assignor to Bremer & Bruckmann, Braunschweig, Germany. Canning fruit. No. 1,271,847; July 9; v. 252; p. 338.
Bujold, Joseph B., Granite Falls, Wash. Saw-sharpening device. No. 1,272,616; July 16; v. 252; p. 583.
Bulatovich, Peter M., Sesser, Ill. War-machine. No. 1,273,028; July 16; v. 252; p. 699.
Bull, Charles A., Albion, Nebr. Pin-holder. No. 1,272,768; July 16; v. 252; p. 626.
Bullen, Henry L., Newark, assignor to American Type Founders Company, Jersey City, N. J. Chase-rack for printers' use. No. 1,272,207; July 9; v. 252; p. 441.
Bullock, Arthur R., Cleveland, Ohio. Picture-projecting and photographing device. No. 1,273,327; July 23; v. 252; p. 803.
Bullock, Edmund R., assignor to Eastman Kodak Company, Rochester, N. Y. Tellurium toning-bath and process of toning photographic elements. No. 1,273,797; July 23; v. 252; p. 929.
Bunkley, Joel W., Washington, D. C., assignor to R. Seidl, Minneapolis, Minn. Toy submarine. No. 1,271,272; July 2; v. 252; p. 147.
Bunnell, Morton G., Champaign, Ill. Spark-plug. No. 1,273,819; July 30; v. 252; p. 974.
Burd, Charles. (See Burd, George and C.)
Burd, George and C., Hazelwood, Pa. Air-compressor pump. No. 1,273,728; July 23; v. 252; p. 911.
Burdick, Alfred S., and C. Nielsen, assignors to The Abbott Laboratories, Chicago, Ill. Prepared food. No. 1,273,144; July 23; v. 252; p. 756.
Burdick, Alfred S., and C. Nielsen, assignors to The Abbott Laboratories, Chicago, Ill. Vegetable milk. No. 1,273,145; July 23; v. 252; p. 757.
Burgert, Willard C. (See Ender, Crompton, and Burgert.)
Burgess, Edward W., Chicago, Ill., assignor to International Harvester Company of New Jersey. Hay-rake. No. 1,272,617; July 16; v. 252; p. 583.
Burgess, Frederick G., Brooklyn, N. Y., assignor to J. F. Sturdy's Sons Co., Attleboro Falls, Mass. Display-case. No. 1,272,618; July 16; v. 252; p. 584.
Burgess, Joseph E., assignor to More-Jones Brass & Metal Company, St. Louis, Mo. Combination strain-plate and removable trolley-frog. No. 1,272,208; July 9; v. 252; p. 441.
Burgett, Wilfred E., Flaxton, N. D. Desk. No. 1,273,729; July 23; v. 252; p. 911.
Buric, Johann, Cranford, N. J., assignor of one-half to H. J. Mewes, New York, N. Y. Table. No. 1,273,730; July 23; v. 252; p. 911.
Burke Electric Company. (See Faure, Elie F. G. H., assignor.)
Burke Electric Company. (See Hansen, Hjalmar J., assignor.)
Burke, James, Erie, Pa., assignor to General Railway Signal Company. Selective motor. No. 1,271,524; July 2; v. 252; p. 215.
Burke, James P., Struthers, Ohio. Locking hair-pin. No. 1,272,209; July 9; v. 252; p. 441.
Burke, John F., Philadelphia, Pa. Bathing-suit. No. 1,272,769; July 16; v. 252; p. 627.
Burke, John M., Alma, Mont. Header attachment for binders. No. 1,271,427; July 2; v. 252; p. 187.
Burkhart, Henry B. (See Smith, John F., assignor.)
Burks, Arthur W., assignor to Decatur Pump & Mfg. Co., Decatur, Ill. Air-valve for pumps. No. 1,272,770; July 16; v. 252; p. 627.
Burks, Arthur W., assignor to Decatur Pump & Mfg. Co., Decatur, Ill. Pump. No. 1,272,771; July 16; v. 252; p. 627.
Burlin, Charles T. (See Tideman, Carl G., assignor.)
Burnett, William. (See Billington and Burnett.)
Burns, Deane, Lakewood, Ohio, assignor, by mesne assignments, to National Carbon Company, Inc. Purification of precipitates. No. 1,272,375; July 16; v. 252; p. 516.
Burns, John, Kenosha, Wis. Electrical welding and apparatus used in connection therewith. No. 1,271,428; July 2; v. 252; p. 188.
Burns, John E., Flushing, N. Y. Dental casting-machine. No. 1,272,912; July 16; v. 252; p. 668.
Burns, John E., Northport, N. Y. Window-seat. No. 1,274,000; July 30; v. 252; p. 1025.
Burns, Joseph E., Canastota, N. Y. Article-supporting device. No. 1,272,772; July 16; v. 252; p. 627.
Burns, Peter C., Chicago, Ill. Extensible bracket. No. 1,274,001; July 30; v. 252; p. 1025.
Burns, Ray E., Syracuse, N. Y. Non-refillable bottle. No. 1,272,376; July 16; v. 252; p. 516.
Burr, Thomas W., Stoneham, Mass. Vacuum-feed carbureter. No. 1,271,848; July 9; v. 252; p. 338.
Burroughs Adding Machine Company. (See Raber, Joseph, assignor.)
Burroughs Adding Machine Company. (See Rinsche, Frank C., assignor.)
Burrows, Jameson M., and H. F. Trenary, Newkirk, Okla. Valve. No. 1,272,913; July 16; v. 252; p. 668.
Burt, James H., assignor of one-half to C. H. Leer, Kokomo, Ind. Fishing-reel. No. 1,271,429; July 2; v. 252; p. 188.
Burton, Fred. (See Almquist and Burton.)
Burton, Thomas L., and H. A. Wahlert, assignors to The American Brake Company, St. Louis, Mo. Brake-rigging for articulated trucks. No. 1,271,538; July 9; v. 252; p. 253.
Burton, William. (See Myers, Melvin A., assignor.)
Busch-Sulzer Bros.-Diesel Engine Company. (See Dietze, Carl, assignor.)
Bush, Alfred W., Coronado, Cal. Fountain-pen cap. No. 1,271,430; July 2; v. 252; p. 188.
Butler, David H., assignor to The Inlaid Company, Inc., Providence, R. I. Tatting-shuttle. No. 1,272,210; July 9; v. 252; p. 442.
Butler, William P. (See Johnson, Jay M., assignor.)
Button, Frank R., assignor of one-half to G. W. Dunn, Scranton, Pa. Hoof-pad. No. 1,273,731; July 23; v. 252; p. 912.
C. G. Sargent's Sons Corporation. (See Furbush and Cilley, assignors.)
C. H. Wheeler Manufacturing Company. (See Kothny and Suczek, assignors.)
C. H. Wheeler Manufacturing Company. (See Suczek, Robert, assignor.)
C. W. H. Moulton Company. (See Goldthwait, Carl E., assignor.)
Cabana, Charles, Buffalo, N. Y. Ball-and-socket joint for toys. No. 1,270,781; July 2; v. 252; p. 7.
Cabot, Godfrey L., Boston, Mass. Launching mechanism for aircraft. No. 1,272,211; July 9; v. 252; p. 442.
Cadet, Georges, Paris, and F. C. L. Delattre, Parc de St. Maur, France. Rotary printing-machine. No. 1,271,525; July 2; v. 252; p. 215.
Cadigan, John E., New York, N. Y. Safety attachment for gas-stoves. No. 1,271,539; July 9; v. 252; p. 253.
Cadillac Motor Car Company. (See Kiehler, Frederick, assignor.)
Cadwallader, George A. (See Bailey, Walter F., assignor.)
Cahusac, Clarence N., Jersey City, N. J., assignor to Slocum, Avram & Slocum, New York, N. Y. Electric counter. No. 1,273,820; July 30; v. 252; p. 974.
Calabro, Peter, Arlington, N. J. Gas-engine. No. 1,271,431; July 2; v. 252; p. 189.
Calahan, John F., assignor of one-half to H. B. Perdew, Los Angeles, Cal. Stay-machine. No. 1,272,773; July 16; v. 252; p. 628.
Caldbeck, Wendell H., Des Moines, Iowa. Toy submarine. No. 1,274,238; July 30; v. 252; p. 1093.
Calderwood, John M., Spanish Fork, Utah. Drill-holder. No. 1,273,733; July 23; v. 252; p. 912.
California Walnut Growers Association. (See Hayes and Rupp, assignors.)
Calkins, Almon B., assignor of one-third to D. H. McFalls and one-third to T. E. Iredale, White Plains, N. Y. Internal-combustion engine. No. 1,273,029; July 16; v. 252; p. 699.
Callan, John G., Madison, Wis., assignor, by mesne assignments, to C. Hutchins, D. R. Sortwell, and E. Farley, trustees, Boston, Mass. Flow-controlling apparatus. No. 1,272,212; July 9; v. 252; p. 442.
Calvin, Elmer P., Sardinia, O. Demountable rim. No. 1,272,213; July 9; v. 252; p. 442.
Cambridge Reversible Life Float. (See Flynn, Edmund T., assignor.)

Cameron, James A., Brooklyn, N. Y., assignor to Cameron Picture Machine Co. Moving-picture machine. No. 1,273,328; July 23; v. 252; p. 804.
Cameron, James A., Brooklyn, N. Y. Moving-picture machine. No. 1,274,241; July 30; v. 252; p. 1094.
Cameron, James A., Brooklyn, N. Y., assignor to Cameron Picture Machine Co. Moving-picture machine. No. 1,274,242; July 30; v. 252; p. 1094.
Cameron, Lowrie W., Vancouver, British Columbia, Canada. Artificial fish-bait. No. 1,272,003; July 9; v. 252; p. 384.
Cameron Picture Machine Co. (See Cameron, James A., assignor.)
Campau, Julian G., assignor of one-fourth to C. C. Grodl, Monroe, Mich. Yieldable tire-filling. No. 1,272,619; July 16; v. 252; p. 584.
Campbell, Callie S., New London, Ohio. Mold. No. 1,271,849; July 9; v. 252; p. 339.
Campbell, David M., Brooklyn, N. Y. Aluminum-solder. No. 1,273,146; July 23; v. 252; p. 757.
Campbell, Donald J., Muskegon Heights, Mich. Carbureter. No. 1,273,030; July 16; v. 252; p. 700.
Campbell, Ernest, assignor of one-half to T. F. Cashman, Calgary, Alberta, Canada. Tire-sealing composition. No. 1,271,015; July 2; v. 252; p. 75.
Campbell, Harry E., New York, N. Y. Window frame and sashes. No. 1,273,453; July 23; v. 252; p. 838.
Campbell, Harry E., New York, N. Y. Window frame and sashes. No. 1,273,454; July 23; v. 252; p. 839.
Campbell, Harry E., New York, N. Y. Window frame and sashes. No. 1,273,455; July 23; v. 252; p. 839.
Campbell, John S., Owatonna, Minn. Gum-wrapper. No. 1,272,004; July 9; v. 252; p. 385.
Campbell, John T., Richmond, Ind. Mail-bag-transferring mechanism. No. 1,273,575; July 23; v. 252; p. 871.
Campbell, Leslie E. (See Folkers, Folkert, assignor.)
Campbell, Wilber A., Flora, Ill. Wire-stretcher. No. 1,273,456; July 23; v. 252; p. 839.
Camus, Eugene P., Brooklyn, N. Y. Field-glass for firearms. No. 1,272,214; July 9; v. 252; p. 443.
Cannell, William, Springfield, Mass., assignor to Baush Machine Tool Company. Machine and process for cutting hobs, worms, and the like. No. 1,271,662; July 9; v. 252; p. 288.
Canning, John E., Denver, Colo. Tooth-regulator. No. 1,271,850; July 9; v. 252; p. 339.
Canton Foundry and Machine Company, The. (See Gossett and Hewitt, assignors.)
Capstaff, John G., assignor to Eastman Kodak Company, Rochester, N. Y. Method of and article for making photographs. No. 1,273,457; July 23; v. 252; p. 839.
Carborundum Company, The. (See Hutchins, Otis, assignor.)
Carborundum Company, The. (See Olver, Alfred W., assignor.)
Carhart, Herbert A., Syracuse, assignor to Remington Typewriter Company, Ilion, N. Y. Type-writing machine. No. 1,271,663; July 9; v. 252; p. 289.
Carl, James, Wheeling, W. Va. Self feeding and heating grease-box for tin-mills. No. 1,272,914; July 16; v. 252; p. 669.
Carland, Frank B., Nutley, N. J., and R. L. Morgan, Worcester, Mass. Collar-button. No. 1,271,664; July 9; v. 252; p. 289.
Carlin, Samuel E., Chicago, Ill., assignor, by mesne assignments, to Underwood Computing Machine Company, New York, N. Y. Calculating-machine. No. 1,274,136; July 30; v. 252; p. 1063.
Carling, Rose S., Los Angeles, Cal. Pneumatic abdominal support. No. 1,272,329; July 9; v. 252; p. 476.
Carlson, Andrew, Mullen, Nebr. Chicken-beheader. No. 1,271,016; July 2; v. 252; p. 75.
Carlson, Axel W., Worcester, Mass. Making turbine-rotors. No. 1,273,576; July 23; v. 252; p. 871.
Carlson, Charles J., Helena, Mont. Convertible automobile-body. No. 1,272,620; July 16; v. 252; p. 584.
Carlson, John M., Sheyenne, N. D. Direction-indicator for traction-engines. No. 1,271,851; July 9; v. 252; p. 339.
Carmichael, Oral, assignor to Gendron Wheel Company, Toledo, Ohio. Wagon. No. 1,272,330; July 9; v. 252; p. 476.
Carnahan, C. R. (See Myers, Melvin A., assignor.)
Carney, Fred J. (See Wainwright and Carney.)
Carney, James A., Aurora, Ill. Brake-operating mechanism. No. 1,273,147; July 23; v. 252; p. 757.
Carney, James A., Aurora, Ill. Headlight construction. No. 1,273,148; July 23; v. 252; p. 757.
Carns, George W. (See Rabenold and Carns.)
Caron, John V., Haverhill, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Apparatus for use in the manufacture of boots and shoes. No. 1,271,665; July 9; v. 252; p. 289.
Caron, Louis G., Toronto, Ontario, Canada. Artificial hand and arm. No. 1,272,006; July 9; v. 252; p. 385.
Carper, Albert A., assignor to The Crown Cork and Seal Company of Baltimore City, Baltimore, Md. Packaging apparatus. No. 1,271,432; July 2; v. 252; p. 189.
Carr, Allie O., Alzada, Mont., and H. R. Mills, Bellefourche, S. D. Sheep-shelter. No. 1,270,782; July 2; v. 252; p. 8.
Carr Fastener Company. (See Carr, Fred S., assignor.) (Reissue.)
Carr, Fred S., Newton, assignor to Carr Fastener Company, Cambridge, Mass. Stud-and-socket fastener. (Reissue.) No. 14,492; July 9; v. 252; p. 482.
Carr, George T., Owen, Wis. Step-ladder. No. 1,273,031; July 16; v. 252; p. 700.
Carr, William C., assignor to the Automatic Transportation Company, Buffalo, N. Y. Truck. No. 1,271,273; July 2; v. 252; p. 147.
Carroll, George P., Hartford, Conn. Safety construction for refrigerant and other fluid circulating apparatus. No. 1,273,577; July 23; v. 252; p. 872.
Carroll, George P., Hartford, Conn. Safety controlling mechanism for compressing-machines. No. 1,273,578; July 23; v. 252; p. 872.
Carroll, Thomas H., Philadelphia, Pa. Locking device. No. 1,274,137; July 30; v. 252; p. 1064.
Carson, Ulysses S. (See Estes, Henry D., assignor.)
Carter, Clarence W. (See Talbert and Carter.)
Carter, Daniel, assignor of one-half to J. D. B. McNeice, Toronto, Ontario, Canada. Gas lighting and extinguishing apparatus. No. 1,271,274; July 2; v. 252; p. 148.
Carter, Daniel, assignor of one-half to J. D. B. McNeice, Toronto, Ontario, Canada. Gas lighting and extinguishing apparatus. No. 1,272,331; July 9; v. 252; p. 477.
Carter, Frank W. (See Connor, Maurice N., assignor.)
Carter, James F., Houston, Va. Plow attachment. No. 1,270,926; July 2; v. 252; p. 50.
Carter, Joseph. (See Wilde and Carter.)
Carter, Oscar M., Houston, Tex. Expansive and contractive well-drill. No. 1,271,275; July 2; v. 252; p. 148.
Carter, Russell S., Hewlitt, N. Y. Shock-absorber. No. 1,273,320; July 23; v. 252; p. 804.
Cartlidge, Oscar, Gillespie, Ill. Safety-razor. No. 1,270,783; July 2; v. 252; p. 8.
Carvalho, Leslie R. N., assignor to Paragon Metal Cap Company, Brooklyn, N. Y. Manufacturing closures for receptacles. No. 1,274,138; July 30; v. 252; p. 1064.
Case, Henry J., Poughkeepsie, N. Y., assignor to Moline Plow Company. Bundle-carrier for grain-binders. No. 1,272,007; July 9; v. 252; p. 385.
Cashman, Thomas F. (See Campbell, Ernest, assignor.)
Cason, Charles W., Sr., Camden, N. J. Railway-tie. No. 1,272,008; July 9; v. 252; p. 386.
Cassel, Elmer F., New York, N. Y. Washing-machine. No. 1,271,433; July 2; v. 252; p. 189.
Cassens, Charles F. (See Richter, Hermann E., assignor.)
Cassidy, John H., Montreal, Quebec, Canada. Life-saving suit. No. 1,271,017; July 2; v. 252; p. 75.
Castberg, Thomas. (See Blankenhorn and Castberg.)
Castner-Kellner Alkali Company Limited. (See Moore, Joseph W., assignor.)
Catlin, Robert M., Franklin, N. J., assignor to Catlin Shale Products Company, Wilmington, Del. Apparatus for the treatment of shale or the like. No. 1,272,377; July 16; v. 252; p. 516.
Catlin Shale Products Company. (See Catlin, Robert M., assignor.)
Cauley, William F., Wade, Miss. Washing implement. No. 1,271,852; July 9; v. 252; p. 339.
Causton, Howard C., Vancouver, British Columbia, Canada. Electrically-heated cooking vessel. No. 1,273,821; July 30; v. 252; p. 974.
Caverley, William W., Vancouver, British Columbia, Canada. Sink-pipe-cleaning device. No. 1,271,853; July 9; v. 252; p. 339.
Cayo, Julius N., assignor to the Red-Devil-Speed Hammer Company, Gary, Ind. Riveting-machine. No. 1,271,276; July 2; v. 252; p. 148.
Celite Products Company. (See Boeck, Percy A., assignor.)
Central Oil & Gas Stove Company. (See White and Hooper, assignors.)
Central West Manufacturing Co. (See Woodward, Irving C., assignor.)
Cerpial, Ignacy, South Bend, Ind. Vegetable-boiler. No. 1,271,530; July 2; v. 252; p. 216.
Chabala, John, Cuddy, Pa. Mine apparatus. No. 1,271,277; July 2; v. 252; p. 149.
Chadwick, Lee S., East Cleveland, assignor to The Cleveland Metal Products Company, Cleveland, Ohio. Latch. No. 1,271,131; July 2; v. 252; p. 105.
Chainat, André J., Paris, France. Escapement device. No. 1,273,734; July 23; v. 252; p. 912.
Chalone, Charles A., Aberdeen, Md. Spring-tire. No. 1,272,215; July 9; v. 252; p. 443.
Chamberlain, George W., Atlanta, Ga. Spring-motor. No. 1,274,243; July 30; v. 252; p. 1094.
Chamberland, William D., assignor of one-half to T. J. Pagel, Minneapolis, Minn. Connecting-rod jig. No. 1,271,018; July 2; v. 252; p. 76.
Chambers, Walter. (See Bradburn and Chambers.)
Champion Ignition Company. (See Schmidt, Albert, assignor.)
Champlin, Raymond, assignor of one-fourth to H. A. Todd and one-fourth to R. G. Cook, Bremerton, Wash. Spark-plug. No. 1,274,002; July 30; v. 252; p. 1025.
Chaplin, Manley J., Seattle, Wash., assignor to R. A. Brown, New York, N. Y. Oxidizing apparatus. No. 1,272,009; July 9; v. 252; p. 386.
Charles, Burton R. and P. E., Victorville, Cal. Garment. No. 1,272,332; July 9; v. 252; p. 477.

Charles H. Besly & Company. (See Miller, John, Jr., assignor.)
Charles J. Tagliabue Manufacturing Co. (See Roesch, Alfred, assignor.)
Charles, Phyllis E. (See Charles, Burton R. and P. E.)
Charroin, Frank B., Seattle, Wash. Valve-controlled connector for air-conduits. (Reissue.) No. 14,494; July 23; v. 252; p. 930.
Charters, Ernest D., Turlock, Cal. Incubator. No. 1,271,666; July 9; v. 252; p. 289.
Chase, Irwin, Bayonne, N. J. Pleasure-cruiser. No. 1,273,149; July 23; v. 252; p. 757.
Check, Joseph, Wilkes-Barre, Pa. Scrubbing-brush. No. 1,272,216; July 9; v. 252; p. 443.
Cheeseman, Eugene H., Seattle, Wash. Sewing-machine attachment. No. 1,272,774; July 16; v. 252; p. 628.
Chemical Construction Company. (See Hechenbleikner, Ingenuin, assignor.)
Chemical Construction Company. (See Monteith, Dickson S., assignor.
Chemical Process Company, The. (See Moore, George, assignor.)
Chenette, Frank A., assignor of one-half to C. J. McDonald, Worcester, Mass. Light-dimmer. No. 1,271,278; July 2; v. 252; p. 149.
Cheney, Herbert W., Milwaukee, Wis., assignor, by mesne assignments, to Allis-Chalmers Manufacturing Company. Switch. (Reissue.) No. 14,493; July 16; v. 252; p. 722.
Chesney, John, Paulsboro, N. J., assignor to E. I. du Pont de Nemours Powder Company, Wilmington, Del. Paper-shell machine and mandrel for same. No. 1,271,132; July 2; v. 252; p. 106.
Chevalier, Joseph, Jr. (See Bachand, Delmery T., assignor.)
Chicago-Cleveland Car Roofing Company. (See Russell, Thomas N., assignor.)
Chicago Steel and Wire Company. (See Green, J. Birchard, assignor.)
Child, Guy B., Chicago, Ill., assignor to American Stove Company, St. Louis, Mo. Hinge for stove-doors. No. 1,273,735; July 23; v. 252; p. 912.
Childs, James R. (See Stewart and Childs.)
Christensen, Howard H., assignor to C. A. Dreier, Chicago, Ill. Tool for recutting valve-seats. No. 1,271,854; July 9; v. 252; p. 340.
Christensen, Hans A., Hellerup, Denmark. Digging-machine. No. 1,273,458; July 23; v. 252; p. 840.
Christenson, George, Jamaica, N. Y., assignor to H. W. Johns-Manville Company. Piston-packing. No. 1,273,736; July 23; v. 252; p. 913.
Christenson, George, Jamaica, N. Y., assignor to H. W. Johns-Manville Company. Piston-packing. No. 1,273,737; July 23; v. 252; p. 913.
Christenson, George, Jamaica, N. Y., assignor to H. W. Johns-Manville Company. Packing-ring and making same. No. 1,273,738; July 23; v. 252; p. 913.
Christiansen, Charles J., *et al.* (See Johannessen, Johan E., assignor.)
Christiansen, Christian, Sioux Falls, S. D. Radius-rod brace and self-steering device. No. 1,272,217; July 9; v. 252; p. 443.
Christie, Athelstan H., St. Louis, Mo. Bag and suitcase. No. 1,274,003; July 30; v. 252; p. 1025.
Christie, Charles, Fords, N. J. Apparatus for raising sunken vessels. No. 1,274,004; July 30; v. 252; p. 1026.
Christine, John M., Ford City, Pa. Automatic wear take-up for journal-boxes. No. 1,273,822; July 30; v. 252; p. 975.
Christman, Henry W. (See Bellion, William E., assignor.)
Christoph, Edward A. (See Mueller, Edward T., assignor.)
Chryst, William A. (See Kettering and Chryst.)
Chubb, Lewis W., Edgewood Park, Pa., assignor to Westinghouse Electric and Manufacturing Company. Electrolyte for electrolytic cells, such as lightning-arresters, condensers, and the like. No. 1,270,784; July 2; v. 252; p. 8.
Chubb, Lewis W., Edgewood Park, Pa., assignor to Westinghouse Electric and Manufacturing Company. Circuit-interrupting system. No. 1,270,785; July 2; v. 252; p. 8.
Chubb, Lewis W., Edgewood Park, Pa., assignor to Westinghouse Electric and Manufacturing Company. Shielding system for vapor-converters. No. 1,272,621; July 16; v. 252; p. 584.
Chubb, Lewis W., Edgewood Park, Pa., assignor to Westinghouse Electric and Manufacturing Company. Measuring instrument. No. 1,272,775; July 16; v. 252; p. 628.
Chudzikowski, Charles, Cambridge, Mass. Soundboard. No. 1,273,459; July 23; v. 252; p. 840.
Church, Angelica S., New York, N. Y. Making models in plaster, &c. No. 1,274,005; July 30; v. 252; p. 1026.
Churchill, James R., Sheffield, England. Chassis for chain-driven motor-vehicles. No. 1,273,150; July 23; v. 252; p. 758.
Ciganenko, Michele, Pittsburgh, Pa. Torpedo-repelling device. No. 1,273,330; July 23; v. 252; p. 805.
Cigila, Ernest F., assignor to Sanit-Air Company, Inc., New York, N. Y. Casing for toilet articles. No. 1,272,010; July 9; v. 252; p. 386.
Cilley, Osborn H. (See Furbush and Cilley.)
Cincinnati Ball Crank Company, The. (See Greene, Clifford, assignor.)
Cincinnati Milling Machine Company, The. (See Hazelton and Einstein, assignors.)
Cirillo, Loreta A., New York, N. Y. Corset. No. 1,273,739; July 23; v. 252; p. 913.
Clancy, John R., Syracuse, N. Y. Hose-clamp. No. 1,270,927; July 2; v. 252; p. 50.
Clapper, Joseph B., Lakewood, assignor, by mesne assignments, to The Standard Parts Company, Cleveland, Ohio. Apparatus for electric welding. No. 1,270,786; July 2; v. 252; p. 8.
Clark, David P. (See Black, Charles F., assignor.)
Clark, Don A., Willoughby, and C. E. Lowe, East Cleveland, assignors to The Clyde E. Lowe Company, Cleveland, Ohio. Tire-core. No. 1,273,032; July 16; v. 252; p. 701.
Clark, Ernest P., Morriston, Fla. Manifold valve-lock. No. 1,273,740; July 23; v. 252; p. 914.
Clark, Frederick J., assignor to Eastman Machine Co., Buffalo, N. Y. Cloth-cutting machine. No. 1,271,279; July 2; v. 252; p. 149.
Clark, John W., Philadelphia, Pa. Rail-splicing. No. 1,273,823; July 30; v. 252; p. 975
Clark, Melville, assignor to Melville Clark Piano Company, Chicago, Ill. Governor for air-motors. No. 1,273,579; July 23; v. 252; p. 872.
Clark, Osroe A., Newark, N. J. Razor. No. 1,274,139; July 30; v. 252; p. 1065.
Clark, Prentice E., Elkins, W. Va. Transmission-gearing. No. 1,272,218; July 9; v. 252; p. 444.
Clark, Sealy E., Gage, Okla. Tire-protector. No. 1,271,019; July 2; v. 252; p. 76.
Clark, Walter L., Springfield, Mass. Drilling-machine. No. 1,272,219; July 9; v. 252; p. 444.
Clarke, Albert W., and G. Jackson, Cobourg, Ontario, Canada. Rug-holder. No. 1,274,006; July 30; v. 252; p. 1026.
Clarke, Joseph M., Shreveport, La. Making leavened bread from wheat-flour and cornmeal. No. 1,272,220; July 9; v. 252; p. 444.
Clarke, Norman C. (See Anderson, Clarke, and White (aw.)
Clary Von Carlsberg, John P., Worcester, Mass. Picture-hanger. No. 1,273,426; July 23; v. 252; p. 831.
Claudel, Charles H., Levallois-Perret, France. Carburetors for liquid fuel. No. 1,271,434; July 2; v. 252; p. 190.
Clausen, Henry P., Mount Vernon, assignor to Western Electric Company, New York, N. Y. Telephone system. No. 1,271,133; July 2; v. 252; p. 106.
Clausen, Henry P., Mount Vernon, N. Y., assignor, by mesne assignments, to Western Electric Company, Incorporated. Trunking system. No. 1,271,855; July 9; v. 252; p. 340.
Clausen, Henry P., Mount Vernon, assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone-exchange system. No. 1,272,221; July 9; v. 252; p. 444.
Clausin, Fred, *et al.* (See Dukeshier, Wintworth W., assignor.)
Clay, William E., Nantasket Beach, Mass. Label or stamp affixing device. No. 1,273,331; July 23; v. 252; p. 805.
Clayton, Charlotte E., Foreston, Minn. Cooking vessel. No. 1,272,222; July 9; v. 252; p. 445.
Clayton, Ernest S. (See Derby and Clayton.)
Cleaver, George E., Reading, Pa., assignor to Penn Hardware Company. Lock. No. 1,272,915; July 16; v. 252; p. 669.
Clemenger, Harry G. (See Frick and Clemenger.)
Cleveland Folding Machine Company, The. (See Hitchcock, Reuben, assignor.)
Cleveland Metal Products Company, The. (See Chadwick, Lee S., assignor.)
Cleveland, Rufus G. (See Thompson, John H., assignor.)
Clews, Charles E., Paeroa, New Zealand. Clamping device. No. 1,273,741; July 23; v. 252; p. 914.
Clifford, Irwin S., and F. C. Tompkins, Miami, Ariz. Tailings-disposal apparatus. No. 1,271,134; July 2; v. 252; p. 106.
Clifford, Victor, assignor to Donnell Tank Protector Company, Tulsa, Okla. Oil-storage tank. No. 1,273,033; July 16; v. 252; p. 701.
Cline, Benjamin F., Orange, N. J. Fastener for automobile-hoods. No. 1,273,332; July 23; v. 252; p. 805.
Cline, Gertrude, and A. Horton, Coleman, Mich.; said Cline assignor of one-third to said Horton. Washboard. No. 1,272,776; July 16; v. 252; p. 628.
Clipper Belt Lacer Company. (See Diamond, James K., assignor.)
Clopton, William C., St. Louis, Mo. Violin, mandolin, and other stringed musical instrument. No. 1,272,011; July 9; v. 252; p. 386.
Clough, E. J., *et al.* (See Groves, Ray H., assignor.)
Cloutier, Louis P., Montreal, Quebec, Canada. Clothes-hook. No. 1,271,435; July 2; v. 252; p. 190.
Clover, Edward L. (See Horne, James A., assignor.)
Clyde E. Lowe Company, The. (See Clark and Lowe, assignors.)
Coad, Henry, Ainsworth, Nebr. Wheel weeder-hoe. No. 1,270,787; July 2; v. 252; p. 9.
Cobb, Edwin F., assignor of forty-five one-hundredths to Walter East, trustee, Denver, Colo. Package-tie. No. 1,271,436; July 2; v. 252; p. 190.

Cobelli, Fabricius, Philadelphia, Pa. Manufacture of peroxid of hydrogen and barium nitrate. No. 1,273,824; July 30; v. 252; p. 975.
Cobwell Corporation. (See Wells, Raymond, assignor.)
Coby, William A., and F. E. Davidson, Tulsa, Okla. Well-torpedo. No. 1,273,825; July 30; v. 252; p. 976.
Cochrane, Robert B., assignor to Perfect Bottle Opener Company, Charlotte, N. C. Bottle-opener. No. 1,274,140; July 30; v. 252; p. 1065.
Coesfeld, John H., assignor to Baker Ice Machine Company, Omaha, Nebr. Controlling means for refrigerating apparatus. No. 1,270,928; July 2; v. 252; p. 50.
Coffey, Thomas, West Tulsa, Okla. Arch-supporting shoe. No. 1,272,223; July 9; v. 252; p. 445.
Cohen, Henry D., Newark, N. J. Glass for headlights. No. 1,273,580; July 23; v. 252; p. 873.
Cohoes Envelope Co. (See Kleebauer, Charles P., assignor.)
Coiner, De Witt M., Statesville, N. C. Shovel. No. 1,273,581; July 23; v. 252; p. 873.
Colbert, Bradford, Pine Bluff, Ark. Multiphase spring-motor. No. 1,271,437; July 2; v. 252; p. 190.
Colborn, George L., assignor of one-half to W. Gilbert, New York, N. Y. Change-delivering machine. No. 1,273,742; July 23; v. 252; p. 914.
Colburn, Ernest A. (See Colburn, Herbert C. and E. A.) (Reissue.)
Colburn, Herbert C., Colorado Springs, and E. A. Colburn, Denver, Colo.; said Herbert C. Colburn assignor to said E. A. Colburn. Ore-flotation process. (Reissue.) No. 14,497; July 30; v. 252; p. 1124.
Cole, Clifford M. (See Adams, William S., assignor.)
Cole, Elnathan, Los Angeles, Cal. Signal-display. No. 1,274,007; July 30; v. 252; p. 1026.
Cole, George H., Wenona, Ill. Perforating and scoring attachment for printing-presses. No. 1,270,788; July 2; v. 252; p. 9.
Cole, Robert C., assignor to The Johns-Pratt Company, Hartford, Conn. Electrical cut-out. No. 1,273,151; July 23; v. 252; p. 758.
Colegrove, Charles B., East Cleveland, assignor to The White Sewing Machine Company, Cleveland, Ohio. Drop-head mechanism for sewing-machines. No. 1,279,916; July 16; v. 252; p. 669.
Coleman, Clyde J., New York, N. Y. Moving-picture apparatus. No. 1,271,667; July 9; v. 252; p. 290.
Coleman, Cylde J., New York, N. Y. Colored moving picture. No. 1,271,668; July 9; v. 252; p. 290.
Coleman, Frederick A., Cleveland Heights, assignor to The Foundry Equipment Company, Cleveland, Ohio. Drawer-operating mechanism. No. 1,274,141; July 30; v. 252; p. 1065.
Coleman, Willis P., U. S. Army. Apparatus for use in instruction with small-arms. No. 1,273,034; July 16; v. 252; p. 701.
Collier, Harley J., Deshler, Ohio. Traction and power attachment. No. 1,273,035; July 16; v. 252; p. 701.
Collinge, E. R. (See Myers, Melvin A., assignor.)
Collings, Harry H., West End, Cowbridge, Wales. Means for attaching the side arms to spectacle-frames. No. 1,271,669; July 9; v. 252; p. 290.
Collins, Arthur, Weybridge, England. Staircase for scenic effects. No. 1,273,333; July 23; v. 252; p. 805.
Collins, Edgar F., Schenectady, N. Y., assignor to General Electric Company. Electric furnace. No. 1,271,280; July 2; v. 252; p. 149.
Collins, Elbridge C., Detroit, Mich. Power-generating apparatus. No. 1,272,378; July 16; v. 252; p. 516.
Collins, Frank W., Manistee, Mich. Air and liquid supplying device. No. 1,272,379; July 16; v. 252; p. 517.
Collins, James F., assignor of one-third to F. T. Aschman and fifty-one one-hundredths to W. F. Phillips, Pittsburgh, Pa. Nut-lock. No. 1,272,380; July 16; v. 252; p. 517.
Collins, William P., Los Angeles, Cal. Tire-iron. No. 1,272,622; July 16; v. 252; p. 585.
Coltrin, John C., Lucas, Kans. Radiator. No. 1,271,135; July 2; v. 252; p. 107.
Columbian Enameling & Stamping Company. (See Cooke, Raymond D., assignor.)
Combs, James R., New York, N. Y. Change-making machine. No. 1,272,224; July 9; v. 252; p. 445.
Combs, James R., New York, N. Y. Salary-computer. No. 1,272,225; July 9; v. 252; p. 446.
Commercial Truck Company of America. (See Whitney and Edwards, assignors.)
Compagnie Des Forges Et Acieries De La Marine Et D'Homecourt. (See Rimailho, Emile, assignor.)
Companhia Grelhas Economicas Brasil. (See Brazil, Antonio C., assignor.)
Computing Scale Company, The. (See Schantz, Edwin M., assignor.)
Comstock, Clark S., Sr., East Orange, N. J. Buckle or the like. No. 1,273,460; July 23; v. 252; p. 840.
Comstock, Daniel F., Brookline, assignor, by mesne assignments, to Technicolor Motion Picture Corporation, Boston, Mass. Method of and apparatus for neutralizing distortions of optical projections. No. 1,272,623; July 16; v. 252; p. 585.
Concrete Steel Company. (See Brooks, David W., assignor.)
Cone, Frank L., Windsor Vt. Automatic screw-machine. No. 1,271,540; July 9; v. 252; p. 253.
Congoleum Company, The. (See Jackson, Ralph G., assignor.)
Congoleum Company, The. (See Prifold, George, assignor.)
Conklin Pen Manufacturing Company, The. (See Mooney, Frank H., assignor.)
Conlan, George A., assignor of one-half to A. C. Thompson, Toronto, Ontario, Canada. Mattress. No. 1,272,381; July 16; v. 252; p. 518.
Conley, Frederick T., Boston, Mass. Attachment for tea and coffee pots. No. 1,274,142; July 30; v. 252; p. 1066.
Conley, Joseph, Anadarko, Okla. Army kitchen. No. 1,272,382; July 16; v. 252; p. 518.
Conley, Joseph, Anadarko, Okla. Incinerator. No. 1,272,383; July 16; v. 252; p. 518.
Conn, David, G. (See Conn, Henry P. and D. G.)
Conn, Henry P. and D. G., Roseburg, Oreg. Two-cycle explosion-engine. No. 1,273,826; July 30; v. 252; p. 976.
Connor, John G., Byers, Kans. Chicken-house and brooder. No. 1,272,226; July 9; v. 252; p. 446.
Connor, Maurice N., assignor to F. W. Carter, Buffalo, N. Y. Fire-extinguishing apparatus. No. 1,272,012; July 9; v. 252; p. 387.
Conrad, Frank, Swissvale, Pa., assignor to Westinghouse Electric and Manufacturing Company. Priming device for internal-combustion engines. No. 1,271,670; July 9; v. 252; p. 290.
Conrader, Rudolph, Erie, Pa. Governor. No. 1,272,384; July 16; v. 252; p. 518.
Consolidated Car-Heating Company. (See McElroy, James F., assignor.)
Continental Brass & Foundries Company. (See Messmer, Joseph, assignor.)
Continental Can Company. (See Norton, Edwin K., assignor.)
Conway, John J., assignor to The Acme Shear Company, Bridgeport, Conn. Pivot for scissors and shears. No. 1,272,385; July 16; v. 252; p. 519.
Conway, Roy D., Chatham, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone-exchange system. No. 1,272,624; July 16; v. 252; p. 585.
Conwell, Ralph, Big Piney, Wyo. Cork-extractor. No. 1,274,008; July 30; v. 252; p. 1027.
Cook, Charles S., Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company. Dynamo-electric machine. No. 1,271,438; July 2; v. 252; p. 191.
Cook, Edward G., Long Island City, N. Y., assignor by mesne assignments, to Copper Products Company. Process and apparatus for electrodeposition under compression. No. 1,271,136; July 2; v. 252; p. 107.
Cook, Emma M. (See Cook, Henry E. and E. M.)
Cook, Guy M., Golconda, Nev. Airship. No. 1,273,827; July 30; v. 252; p. 976.
Cook, Henry E., assignor to E. M. Cook, Baltimore, Md. Harness attachment. No. 1,274,143; July 30; v. 252; p. 1066.
Cook, Henry W., Syracuse, N. Y. Legging. No. 1,272,386; July 16; v. 252; p. 519.
Cook, Richard G., *et al.* (See Champlin, Raymond, assignor.)
Cook, Stanley S. (See Parsons, Walker, Cook, and Douglas.)
Cook, Willard E., Philadelphia, Pa. Card-game means. No. 1,271,856; July 9; v. 252; p. 341.
Cooke, Raymond D., assignor to Columbian Enameling & Stamping Company, Terre Haute, Ind. Removing enamel from enameled metal articles. No. 1,272,917; July 16; v. 252; p. 670.
Cookingham, DeWitt C., Lakewood, and J. H. Hertner, assignors to The Baker R & L Company, Cleveland, Ohio. Controller for electric vehicles. No. 1,270,789; July 2; v. 252; p. 9.
Cooley, Proctor P., assignor to Culter & Proctor Stove Co., Peoria, Ill. Stove. No. 1,272,387; July 16; v. 252; p. 519.
Cooper, Daniel W., Los Angeles, Cal. Pipe-tongs. No. 1,271,671; July 9; v. 252; p. 291.
Cooper Hewitt Electric Company. (See Keyes, Frederick G., assignor.)
Cooper Hewitt Electric Company. (See Malley, Roy D., assignor.)
Cooper Hewitt Electric Company. (See Recklinghausen, Max von, assignor.)
Cooper, James J. G., Jacksonville, Fla. Blotter-holder. No. 1,272,388; July 16; v. 252; p. 519.
Cooper, James S., Naugatuck, Conn. Smoker's pipe. No. 1,272,389; July 16; v. 252; p. 520.
Cooper, Waldren H., Sistersville, W. Va. Oil-well apparatus. No. 1,272,625; July 16; v. 252; p. 586.
Coopersmith, Rudolph, St. Louis, Mo. Folding cot. No. 1,270,790; July 2; v. 252; p. 9.
Coopersmith, Rudolph, Toronto, Ontario, Canada. Sofa-bed. No. 1,272,626; July 16; v. 252; p. 586.
Cope, Frank T. (See Baily and Cope.)
Copper Products Company. (See Cook, Edward G., assignor.)
Coppler, Charles A., Paris, France. Treating fiduciary papers for the purpose of preventing fraud. No. 1,271,857; July 9; v. 252; p. 341.

Copping, John L., New Orleans, La. Burglar-proof bolt attachment. No. 1,272,627; July 16; v. 252; p. 586.
Core, Wayne W., and A. P. Wehner, Pittsburgh, Pa. Fuel-mixer. No. 1,271,541; July 9; v. 252; p. 254.
Corey, Cyrus C., Canadensis, Pa. Stone-gatherer. No. 1,274,244; July 30; v. 252; p. 1094.
Corley, Quentin D., Dallas, Tex. Elbow-joint for artificial arms. No. 1,273,461; July 23; v. 252; p. 840.
Corn Products Refining Company. (See Jefferies and Spain, assignors.)
Corona Typewriter Company. (See Latta, Emmit G., assignor.) (Reissue.)
Couden, Albert R., trustee. (See Keithley, Herbert R., assignor.)
Couls, George R. (See Bryant and Couls.)
Courbon, Joannés. (See Quéron and Courbon.)
Courtier, Jules and P., Paris, France. Apparatus for producing flashes by the electric volatilization of fusible wires. No. 1,274,009; July 30; v. 252; p. 1027.
Courtier, Pierre. (See Courtier, Jules and P.)
Contant, George E., Peru, Ind., and A. E. Lehmann, St. Charles, Mo. Railway-car-buffer construction. No. 1,270,791; July 2; v. 252; p. 10.
Coventry, William A., Lancaster, assignor to Grey Iron Casting Company, Mount Joy, Pa. Toy bank. No. 1,274,010; July 30; v. 252; p. 1027.
Cowen, Joshua L., New York, N. Y. Toy car. No. 1,272,390; July 16; v. 252; p. 520.
Cowen, Joshua L., New York, N. Y. Toy car. No. 1,272,391; July 16; v. 252; p. 520.
Cox, Abraham B., New York, N. Y. Range-finder. No. 1,273,152; July 23; v. 252; p. 759.
Cox, Oscar M., Lockney, Tex. Windmill. No. 1,273,582; July 23; v. 252; p. 873.
Craft, D. J. (See Craft, Frank, assignor.)
Craft, Frank, Clinton, Ind., assignor to D. J. Craft, Scottland, Ill. Rotary engine. No. 1,273,743; July 23; v. 252; p. 914.
Cram, Tim B., assignor to The Railway Materials Company, Chicago, Ill. Material-conveyer for furnaces. No. 1,272,918; July 16; v. 252; p. 670.
Cramer, William (See Jacobs and Cramer.)
Crampton, Basil R., Chicago, Ill. Latch. No. 1,273,583; July 23; v. 252; p. 873.
Crandall, Jay E. (See Gossard and Crandall.)
Crane, Henry H., Floral Park, assignor to Huber Mfg. Co., New York, N. Y. Lock. No. 1,273,086; July 16; v. 252; p. 702.
Crane, John, Maywood, and F. E. Payne, Glencoe, assignors to Crane Packing Company, Chicago, Ill. Metallic packing and making same. No. 1,271,526; July 2, v. 252; p. 215.
Crane Packing Company. (See Crane and Payne, assignors.)
Cranzler, Jacob, New York, N. Y. Spring-fastener. No. 1,273,037; July 16; v. 252; p. 702.
Craven, Thomas J., and D. J. Crilly, Detroit, Mich. Cable-grip. No. 1,272,392; July 16; v. 252; p. 520.
Crawford, Frank, Sr., assignor to The Crawford Manufacturing Company, New Brunswick, N. J. Stop-motion for knitting-machines. No. 1,272,777; July 16; v. 252; p. 628.
Crawford, Frank, Sr., assignor to The Crawford Manufacturing Company, New Brunswick, N. J. Stop-motion thread-frame. No. 1,273,584; July 23; v. 252; p. 874.
Crawford, Fred. Prosser, Wash. Mower and harvester attachment. No. 1,272,628; July 16; v. 252; p. 587.
Crawford, James, New York, N. Y. Nut or rivet holder for sheet metal. No. 1,272,919; July 16; v. 252; p. 670.
Crawford Manufacturing Company, The. (See Crawford, Frank, Sr., assignor.)
Crawford, Neil D., Elizabeth, N. J., assignor to Rubber Regenerating Company. Apparatus for manufacturing articles from liquid material. No. 1,272,348; July 9; v. 252; p. 481.
Crawley, Mansfield C., Los Angeles, Cal., assignor to Addograph Company. Type-writer and computing machine. No. 1,273,828; July 30; v. 252; p. 976.
Creahan, Michael F., Brooklyn, assignor to Underwood Typewriter Company, New York, N. Y. Sheet-collating device, &c. No. 1,271,281; July 2; v. 252; p. 150.
Creamer, John F., executor. (See Van Syckle, Leonidas H.)
Creighton, Elmer E. F., Schenectady, N. Y., assignor to General Electric Company. Means for protecting electric systems. No. 1,273,744; July 23; v. 252; p. 915.
Crenshaw, William B., Watson, W. Va. Hat-box. No. 1,271,542; July 9; v. 252; p. 254.
Criest, Frank, Sharpesville, Pa. Walking toy. No. 1,272,629; July 16; v. 252; p. 587.
Crilly, Daniel J. (See Craven and Crilly.)
Crockard, Frank H., Birmingham, Ala. Producing pig-iron. No. 1,274,245; July 30; v. 252; p. 1095.
Crockett, Frank L., North Uxbridge, assignor to The Whitin Machine Works, Whitinsville, Mass. Comber-casing. No. 1,272,013; July 9; v. 252; p. 387.
Crompton & Knowles Loom Works. (See Pfeiffer, George, assignor.)
Crompton, Lionel W. (See Ender, Crompton, and Burgert.)
Crone, Seth A., East Orange, N. J. Brake-beam. No. 1,272,778; July 16; v. 252; p. 629.
Crone, Seth A., East Orange, N. J. Railway-brake. No. 1,272,779; July 16; v. 252; p. 629.
Cronk, Edwin S., Sauk Rapids, Minn. Work-handling device and support. No. 1,271,500; July 2; v. 252; p. 208.
Cropley, Oscar W., Juniata, Nebr. Grain-separator. No. 1,273,462; July 23; v. 252; p. 841.
Crosby, Dell S., Chicago, Ill. Cheese-mold. No. 1,273,334; July 23; v. 252; p. 806.
Crosby, Dell S., Chicago, Ill. Cheese-mold. No. 1,273,335; July 23; v. 252; p. 806.
Crosby, Oliver, assignor to American Hoist & Derrick Co., St. Paul, Minn. Rope-clip. No. 1,271,282; July 2; v. 252; p. 150.
Crosby, Oliver, assignor to American Hoist & Derrick Co., St. Paul, Minn. Rope-clip. No. 1,271,283; July 2; v. 252; p. 150.
Crosby, Oliver, St. Paul, Minn., assignor to American Hoist & Derrick Co. Rope-clamp. No. 1,271,284; July 2; v. 252; p. 150.
Crosley, Powel, Jr., Cincinnati, Ohio. Lamp-heater. No. 1,271,439; July 2; v. 252; p. 191.
Crothers, William J., Toronto, Ontario, Canada. Camera. No. 1,272,227; July 9; v. 252; p. 446.
Crowell, William L., Danielson, Conn. Place-holder for books. No. 1,273,038; July 16; v. 252; p. 702.
Crowley, Harold M., Tuckerton, N. J. Vehicle-wheel. No. 1,272,920; July 16; v. 252; p. 670.
Crowley, James J., and U. I. Rosenthal, Montreal, Quebec, Canada. Mattress. No. 1,271,672; July 9; v. 252; p. 291.
Crown Cork and Seal Company of Baltimore City, The. (See Carper, Albert A., assignor.)
Crowther, Henry M., Kingman, Ariz. Rotary-valve gas-engine. No. 1,272,630; July 16; v. 252; p. 587.
Crozier, Michael A., assignor to Frank A. Weeks Mfg. Co., New York, N. Y. Ink-well cover. No. 1,274,246; July 30; v. 252; p. 1095.
Crump, Armistead C., New York, N. Y. Transparent collapsible bottle or other container. No. 1,272,921; July 16; v. 252; p. 671.
Cuddigan, Bartholomew O., Wadena, Minn. Potato-cutting machine. No. 1,273,039; July 16; v. 252; p. 702.
Cuddigan, Bartholomew O., Wadena, Minn. Potato-loader. No. 1,273,040; July 16; v. 252; p. 703.
Culter & Proctor Stove Co. (See Cooley, Proctor P., assignor.)
Cummings, Irvin W., Minneapolis, Minn. Open-tank-heating system. No. 1,274,011; July 30; v. 252; p. 1027.
Cummings, Willard N., Los Angeles, Cal. Rotary pump. No. 1,273,041; July 16; v. 252; p. 703.
Curle, Charles W., San Francisco, Cal. Type-line stick. No. 1,272,631; July 16; v. 252; p. 588.
Currier, Henry C., Rumford, Me. Snubbing-machine. No. 1,273,745; July 23; v. 252; p. 915.
Curtis, Jesse T., Bement, Ill., assignor of one-half to F. L. McClure, Sebring, Ohio. Engine-valve. No. 1,273,585; July 23; v. 252; p. 874.
Curtiss Aeroplane and Motor Corporation. (See Tarbox, John P., assignor.)
Cutler-Hammer Mfg. Co., The. (See Evans, Clarence T., assignor.)
Cutler-Hammer Mfg. Company, The. (See Parker, Frank I., assignor.)
Cutler-Hammer Mfg. Co., The. (See Tatum, Lewis L., assignor.)
Cutler-Hammer Mfg. Co., The. (See Walkup, Samuel T., assignor.)
Cutler-Hammer Mfg. Co., The. (See Zimmer, Paul H., assignor.)
Cutler, Henry H., assignor to The Warren Featherbone Co., Three Oaks, Mich. Legging. No. 1,273,586; July 23; v. 252; p. 875.
Cypher, Newton. (See Imbriani, Ralph, assignor.)
D. & W. Fuse Company. (See Downes and Mayer, assignors.)
D'Oller, Henry D., Jr., assignor to Harvey Hubbell, Incorporated, Bridgeport, Conn. Light-distribution chart. No. 1,272,021; July 9; v. 252; p. 389.
Da Silveira, Duarte, Maria, Brookline, Mass. Dish-washer. No. 1,271,450; July 2; v. 252; p. 194.
Dacy, Michael J., assignor of one-third to C. B. Davis and one-third to J. T. Palmatary, Richmond, Va. Shipping-crate. No. 1,271,285; July 2; v. 252; p. 150.
Dahl, John L., Teaneck, N. J. Combination-tool. No. 1,272,228; July 9; v. 252; p. 447.
Dahl, Knut M., San Francisco, Cal. Oil-burning furnace. No. 1,271,286; July 2; v. 252; p. 151.
Dahlen, C. G. (See Myers, Melvin A., assignor.)
Dain Manufacturing Company of Iowa, The. (See Bowers, Robert R., assignor.)
Dale, John H., New York, N. Y., assignor to Dale Lighting Fixture Co., Inc. Electric incandescent lamp. No. 1,271,858; July 9; v. 252; p. 341.
Dale Lighting Fixture Co. (See Dale, John H., assignor.)
Dale, Oswald, Irvington, N. J. Producing wound strips or tape of varnished fabric. No. 1,274,144; July 30; v. 252; p. 1066.
Dalton Adding Machine Company, The. (See Landsiedel, Harry, assignor.)
Dalton Adding Machine Company, The. (See Magnus, John, assignor.)
Dalton, Thomas A., Hazleton, Pa. Ship-protector. No. 1,270,792; July 2; v. 252; p. 10.
Daly, Edmund, New Monterey, Cal. Digging-tool. No. 1,271,287; July 2; v. 252; p. 151.

Daly, Mark, Moncton, New Brunswick, Canada. Grease-cup-plug lock. No. 1,272,229; July 9; v. 252; p. 447.
Daly, Ralph J., Philadelphia, Pa. Aerial mine. No. 1,272,333; July 9; v. 252; p. 477.
Danforth, George L., Jr., Chicago, Ill. Water-cooled buck-stay. No. 1,271,543; July 9; v. 252; p. 254.
Daniels, Farrington, Worcester, assignor of one-half to C. F. MacGill, Cambridge, Mass. Toy. No. 1,273,746; July 23; v. 252; p. 915.
Danks, H. (See Myers, Melvin A., assignor.)
Dann, Walter M., Wilkinsburg, and H. H. Rudd, Edgewood, Pa., assignors to Westinghouse Electric and Manufacturing Company. Starting three-phase, three-wire rotary converters. No. 1,272,632; July 16; v. 252; p. 588.
Danneel, Heinrich, and E. Kuhn, Basel, assignors to Elektrizitätswerk Lonza, Gampel, Switzerland. Oxidizing ammonium sulfite to ammonium sulfate. No. 1,274,247; July 30; v. 252; p. 1095.
Darby, Jesse W., assignor of one-half to J. L. Witter, Laporte, Ind. Game apparatus. No. 1,272,014; July 9; v. 252; p. 387.
Daroowalla, Eruchshaw B., Bombay, India. Lock. No. 1,272,230; July 9; v. 252; p. 447.
Davidoff, Joseph, Brooklyn, N. Y. Hoist-gearing. No. 1,273,747; July 23; v. 252; p. 916.
Davidson, Edwin L. (See Elzey, Edgar P., assignor.)
Davidson, Emil, Northwood, N. D. Attachment for plows. No. 1,273,829; July 30; v. 252; p. 977.
Davidson, Frank E. (See Coby and Davidson.)
Davidson, Harry O., Cleveland Heights, assignor to The Hydraulic Pressed Steel Company, Cleveland, Ohio. Concrete-molding form. No. 1,270,793; July 2; v. 252; p. 10.
Davis, Claude B., *et al.* (See Dacy, Michael J., assignor.)
Davis, Claude H., Wanganui, New Zealand. Vacuum milking-machine. No. 1,271,544; July 9; v. 252; p. 255.
Davis, Cortland W., and V. S. Johnson, assignors to The Mantle Lamp Company of America, Chicago, Ill. Flame-spreader for burners. No. 1,273,587; July 23; v. 252; p. 875.
Davis, Harold S. and M. D., Winnipeg, Manitoba, Canada. Process for the quantitative estimation of vapors in gases. No. 1,272,922; July 16; v. 252; p. 671.
Davis, Lemuel R., Hopkinsville, and D. F. Gates, Fruithill, Ky. Spading and digging plow. No. 1,272,231; July 9; v. 252; p. 448.
Davis, Leslie W. (See Bragdon, Charles M., assignor.)
Davis, Mary D. (See Davis, Harold S. and M. D.)
Davis, Monroe, Enid, Okla. Grain-cleaner. No. 1,271,545; July 9; v. 252; p. 255.
Davis, Samuel, New York, N. Y. Film for kinetoscopes or moving-picture machines. No. 1,271,673; July 9; v. 252; p. 291.
Davis, William H., trustee. (See Snyder, George C., assignor.)
Davis, William J., Chicago, Ill. Temperature-changing apparatus. No. 1,272,232; July 9; v. 252; p. 448.
Davis, William L. (See Guettler and Davis.)
Davis, Willis M., Concord, Mass. Tray-support. No. 1,272,015; July 9; v. 252; p. 387.
Davison, Dorsett A., Richmond, Va. Internal-combustion engine. No. 1,271,137; July 2; v. 252; p. 108.
Davison, George E., Silsbee, Tex. Car-loading device. No. 1,272,633; July 16; v. 252; p. 588.
Davison, William E., Hammer, Wash. Tractor. No. 1,271,546; July 9; v. 252; p. 255.
Dawes, Claude T., Johnstown, N. Y. Revolving door. No. 1,273,463; July 23; v. 252; p. 841.
Dawes, Edmund, *et al.* (See Dawes, Robert, assignor.)
Dawes, Robert, Philadelphia, Pa., assignor of one-third to E. H. Haskell, Newton, Mass., and one-third to E. Dawes, Philadelphia, Pa. Rope-making machine. No. 1,273,748; July 23; v. 252; p. 916.
Dawson, Arthur T., Westminster, and J. Horne, Barrow-in-Furness, assignors to Vickers Limited, Westminster, England. Controlling apparatus for use in connection with hydraulic pumps. No. 1,270,794; July 2; v. 252; p. 10.
Dawson, Arthur T., and G. T. Buckham, assignors to Vickers Limited, Westminster, England. Mounting for automatic guns. No. 1,272,393; July 16; v. 252; p. 521.
Dawson, Frank G., Scottsville, Va. Spring-wheel. No. 1,271,138; July 2; v. 252; p. 108.
Day, George H., Rochester, N. Y., assignor to American Optical Company, Southbridge, Mass. Temple. No. 1,271,020; July 2; v. 252; p. 76.
Day, George H., assignor to American Optical Company, Southbridge, Mass. Ophthalmic mounting. No. 1,271,859; July 9; v. 252; p. 341.
Day, George H., assignor to American Optical Company, Southbridge, Mass. Lens-frames. No. 1,273,830; July 30; v. 252; p. 977.
Days, William J., Boston, Mass. Saw-sharpening machine. No. 1,274,012; July 30; v. 252; p. 1028.
Dayton Adding Machine and Time Lock Co., The. (See Keefer, Thomas A., assignor.)
Dayton Engineering Laboratories Company, The. (See Kettering, Charles F., assignor.)
Dayton Engineering Laboratories Company, The. (See Kettering and Chryst, assignors.)
Dayton Engineering Laboratories Company, The. (See Langner, Lawrence, assignor.)
De Aguiar, Abelardo, Habana, Cuba. Platform-scale. No. 1,271,440; July 2; v. 252; p. 191.
De Arazoza, Rafael, Habana, Cuba. Means for raising sunken vessels. No. 1,274,230; July 30; v. 252; p. 1091.
De Bijll Nachenius, Henri A. J., assignor to Naamlooze Vennootschap "Werf Conrad," Haarlem, Netherlands. Packing means for the shafts of centrifugal pumps. No. 1,273,648; July 23; v. 252; p. 891.
De Carmona, Manuel S., Mexico, Mexico. Elastic wheel. No. 1,272,923; July 16; v. 252; p. 671.
De Escobales, Hilarion, Tompkinsville, N. Y. Nail-capping machine. No. 1,272,634; July 16; v. 252; p. 588.
De Falco, Joseph, Vineland, N. J. Interchangeable garden-tool. No. 1,273,464; July 23; v. 252; p. 842.
De Kleris, Andreas, Visalia, Cal. Meat-cutting machine. No. 1,272,233; July 9; v. 252; p. 448.
De La Matyr, Elias B., Los Angeles, Cal. Double-acting-diaphragm rotary gas-meter. No. 1,273,042; July 16; v. 252; p. 703.
De Marco, Charles, Rochester, N. Y. Combination illuminating-light and camera. No. 1,272,635; July 16; v. 252; p. 589.
De Polo, Italo A., Connellsville, Pa. Screening or separating machine. No. 1,274,015; July 30; v. 252; p. 1028.
De Polo, Italo A., Connellsville, Pa. Screening and separating machine. No. 1,274,014; July 30; v. 252; p. 1029.
De Saulles, Charles A., New York, N. Y. Treating zinc. No. 1,274,249; July 30; v. 252; p. 1095.
De Vaughn, Harry E., assignor to W. A. Jones, Morgantown, W. Va. Glass-furnace. No. 1,274,146; July 30; v. 252; p. 1066.
De Voe, Albert H., Westfield, N. J., assignor to The Singer Manufacturing Company. Presser-foot mechanism for sewing-machines. No. 1,270,929; July 2; v. 252; p. 50.
De Voe, Albert H., Westfield, N. J., assignor to The Singer Manufacturing Company. Hemming attachment for sewing-machines. No. 1,271,291; July 2; v. 252; p. 152.
De Voe, Albert H., Westfield, N. J., assignor to The Singer Manufacturing Company. Ruffling mechanism for sewing-machines. No. 1,273,156; July 23; v. 252; p. 760.
De Voe, Albert H., Westfield, N. J., assignor to The Singer Manufacturing Company. Lower-thread control for chain-stitch machines. No. 1,273,157; July 23; v. 252; p. 760.
De Wendt, Wilhelm C., New Orleans, La. Combined writing-sheet and envelop. No. 1,271,862; July 9; v. 252; p. 342.
De Wilton, Edward W., New York, N. Y. Combination hose-coupling and air-valve plug. No. 1,272,234; July 9; v. 252; p. 449.
Dean, Philetus B., Fredonia, N. Y. Gaff-hook. No. 1,274,013; July 30; v. 252; p. 1028.
Dean, Wilburt B., Grand Rapids, Mich. Electric-spark timer for gasolene-engines. No. 1,272,334; July 9; v. 252; p. 478.
Dean, William W., Stamford, Conn., assignor to Splitdorf Electrical Company, Newark, N. J. Magneto. No. 1,271,441; July 2; v. 252; p. 191.
Dearborn Truck Company. (See Melton and Whomes, assignors.)
Deats, William, Yonkers, assignor to McLoughlin Bros., Inc., New York, N. Y. Magnetic fish and making the same. No. 1,271,021; July 2; v. 252; p. 76.
Decatur Pump & Mfg. Co. (See Burke, Arthur W., assignor.)
Decatur Pump & Manufacturing Co. (See Shorb, William A., assignor.)
Dedrick, Benjamin W., State College, Pa. Cigar-protector and ash-retainer. No. 1,273,153; July 23; v. 252; p. 759.
Dee, Garrett C., Hartford City, Ind. Boiler-tube extractor. No. 1,273,831; July 30; v. 252; p. 977.
Deere and Company. (See Melvin and Seaholm, assignors.)
Degener, Gustave O., assignor to Underwood Computing Machine Company, New York, N. Y. Combined type-writing and computing machine. No. 1,271,288; July 2; v. 252; p. 151.
Degener, Gustave O., assignor to Underwood Computing Machine Company, New York, N. Y. Combined type-writing and computing machine. No. 1,271,289; July 2; v. 252; p. 151.
Degener, Gustave O., assignor to Underwood Computing Machine Company, New York, N. Y. Combined type-writing and computing machine. No. 1,271,290; July 2; v. 252; p. 152.
Degener, Gustave O., Bronxville, assignor to Underwood Computing Machine Company, New York, N. Y. Combined type-writing and computing machine. No. 1,273,832; July 30; v. 252; p. 978.
Del Cioppo, Michele, New York, N. Y. Ironing-board. No. 1,271,674; July 9; v. 252; p. 291.
Del Fungo-Giera, Philippo L. E., New York, N. Y. Anchor. No. 1,271,442; July 2; v. 252; p. 192.
Del Nore, John L., San Francisco, Cal. Bronzing-machine. No. 1,271,443; July 2; v. 252; p. 192.
Delaney, Frank X., Philadelphia, Pa. Shoe-tree. No. 1,271,547; July 9; v. 252; p. 255.
Delattre, Fernand C. L. (See Cadet and Delattre.)
Demarest, Charles S., Flatbush, N. Y., assignor to American Telephone and Telegraph Company. Relay-selecting circuit for artificial lines. No. 1,273,164; July 23; v. 252; p. 759.

Demarest, Thomas M., Dumont, N. J. Push-button. No. 1,273,749; July 23; v. 252; p. 916.
Denison, Julian F., New Haven, Conn., assignor to G. Piel, New York, N. Y. Fuel-tank. No. 1,271,675; July 9; v. 252; p. 292.
Denman, Earl W., Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company. Revolving fan. No. 1,270,795; July 2; v. 252; p. 11.
Denman, Elmer L., Charleston, Ill. Locking device. No. 1,271,676; July 9; v. 252; p. 292.
Denman-Jones, Adrian, assignor to The Jandus Arc Lamp & Electric Company, Limited, Holloway, London, England. Differential gearing. No. 1,274,056; July 30; v. 252; p. 1041.
Denne, Mark T., Rushden, England. Driving and stopping mechanism. No. 1,272,016; July 9; v. 252; p. 388.
Dennis, Adolphus S., Lakewood, Ohio. Combined typewriting and computing machine. No. 1,271,677; July 9; v. 252; p. 292.
Dennison Manufacturing Company. (See Morse, Andrew D., assignor.)
Densmore, Joseph M. and W. H., Ashland, Oreg. Meat-block surfacer. No. 1,273,043; July 16; v. 252; p. 704.
Densmore, William H. (See Densmore, Joseph M. and W. H.)
Denver Rock Drill Manufacturing Company, The. (See Smith, William A., assignor.)
Derby, John H., and E. S. Clayton, assignor to American Fire Prevention Bureau, Inc., New York, N. Y. Thermostatic circuit-controlling device. No. 1,274,248; July 30; v. 252; p. 1095.
Des Jardins, Benjamin M., West Hartford, Conn., assignor to J. T. Underwood, Brooklyn, N. Y. Computing attachment for type-writers. No. 1,271,860; July 9; v. 252; p. 341.
Detroit Fuse & Mfg. Company. (See Horton and Zenker, assignors.)
Detroit Lubrication Company. (See Funderburk, Otis C., assignor.)
Detweiller, Henry J., Allentown, Pa. Process for recovering the constituents of alunite in technically useful forms. No. 1,274,145; July 30; v. 252; p. 1066.
Deutscher, William, New York, N. Y. Electric protective device. No. 1,271,861; July 9; v. 252; p. 342.
Devitt, George C., assignor to Buffalo Scale Company, Buffalo, N. Y. Bearing for scales. No. 1,273,155; July 23; v. 252; p. 760.
Devney, Richard E., Cleveland, Ohio. Advertising-sign hanger. No. 1,272,394; July 16; v. 252; p. 521.
Dewey, Anna E., Akron, Ohio. Automobile-jack. No. 1,273,833; July 30; v. 252; p. 978.
Dewey, Haywood G. (See Knapp and Dewey.)
Dewey, Mark B., Sidney Center, N. Y. Toy cart. No. 1,272,395; July 16; v. 252; p. 521.
Dhavernas, Joseph, assignor to United States Nickel Company, New Brunswick, N. J. Separating nickel from nickel-copper alloys. No. 1,273,465; July 23; v. 252; p. 842.
Diamond, James K., assignor to Clipper Belt Lacer Company, Grand Rapids, Mich. Coupling-pin for belt-lacings. No. 1,271,444; July 2; v. 252; p. 192.
Diamond Match Company, The. (See Paridon, Michael, assignor.)
Diamond, Moses S., New York, N. Y. Humidor. No. 1,272,017; July 9; v. 252; p. 388.
Dickenson, Richard W., Jr., Sioux Falls, S. D. Composition of matter to be used as a flour. No. 1,271,139; July 2; v. 252; p. 108.
Dickey, Ernest, Dayton, Ohio, assignor to The Domestic Engineering Company. Oiling system. No. 1,271,140; July 2; v. 252; p. 109.
Dickinson, Harry S., Moline, Ill., assignor to Moline Plow Company. Lister-cultivator. No. 1,271,292; July 2; v. 252; p. 152.
Dickinson, Lewis E., Boonton, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Heat-coil protective device for electric circuits. No. 1,273,158; July 23; v. 252; p. 760.
Diddridge-Beck Co., The. (See Beck, John C., assignor.)
Diehl, Hermann, Frankfort-on-the-Main-Bockenheim, assignor to Mufam Motor-Apparate G. m. b. H., Frankfort-on-the-Main, Germany. Automatic timing mechanism for magnetos. No. 1,273,044; July 16; v. 252; p. 704.
Diehl Manufacturing Company. (See Zabriskie and Marx, assignors.)
Diehm, Lucius N., West Hartford, Conn. Firearm. No. 1,271,678; July 9; v. 252; p. 293.
Dietze, Carl, Winterthur, Switzerland, assignor to Busch-Sulzer Bros.-Diesel Engine Company, St. Louis, Mo. Valve-gearing for internal-combustion engines. No. 1,272,018; July 9; v. 252; p. 388.
Diggs, Welford H., Emporia, Kans. Door-opener. No. 1,271,445; July 2; v. 252; p. 192.
Digney, Thomas J., Bridgeport, Conn. Submarine barrier. No. 1,271,864; July 9; v. 252; p. 343.
Dihlmann, Eugen G., Leipsig-Reudnitz, Germany. Shoe-press. No. 1,272,019; July 9; v. 252; p. 388.
Dilg, Charles H. J., New York, N. Y. Brush-holder for dynamo-electric machines. No. 1,271,863; July 9; v. 252; p. 342.
Dillon, Sidney O. (See Oakes and Dillon.)
Diluchio, Michael M., Wilmington, Del. Pilot for gas-burners. No. 1,272,780; July 16; v. 252; p. 629.
Dinesen, Hans P., Herlöv, Denmark. Method and apparatus for drying materials in sacks and the like. No. 1,271,293; July 2; v. 252; p. 153.
Dinn, Patrick J., Roxbury, Mass. Barrel-head fastener. No. 1,272,020; July 9; v. 252; p. 389.
Disinger, Ernest, assignor to Willard Storage Battery Company, Cleveland, Ohio. Machine for casting straps to battery-plates. No. 1,274,016; July 30; v. 252; p. 1029.
Dittrick, John, Perth, Ontario, Canada. Chair-leg extension. No. 1,272,636; July 16; v. 252; p. 589.
Dixon, Amos F., Newark, N. J., assignor, by mesne assignments, to Western Electric Company, Incorporated. Printing-telegraph system. No. 1,271,141; July 2; v. 252; p. 109.
Dixon, George C., Dixon, and W. N. Haskell, Sterling, Ill. Speedometer dial and indicator. No. 1,272,396; July 16; v. 252; p. 521.
Doble Laboratories. (See Doble, John A. and W. A., Jr., assignors.)
Doble Laboratories. (See Doble, William A., assignor.)
Doble, William A., Jr. (See Doble, John A. and W. A., Jr.)
Doble, William A., assignor to Doble Laboratories, San Francisco, Cal. Fuel-burner. No. 1,273,466; July 23; v. 252; p. 842.
Doble, John A. and W. A., Jr., assignors to Doble Laboratories, San Francisco, Cal. Fuel-burner. No. 1,273,467; July 23; v. 252; p. 842.
Dobson, Tom, Pawtucket, R. I. Valve. No. 1,271,446; July 2; v. 252; p. 193.
Dodds, Ethan I. (See Flannery, Stafford, and Dodds.)
Dodds, Ethan I., Zellenople, assignor to Kerner Manufacturing Company, Pittsburgh, Pa. Making bolts. No. 1,271,142; July 2; v. 252; p. 109.
Dodds, Ethan I., assignor to Flannery Bolt Company, Pittsburgh, Pa. Stay-bolt structure. No. 1,271,863; July 9; v. 252; p. 343.
Doehler Die-Casting Company. (See Bamberg and Doehler, assignors.)
Doehler, Herman H. (See Bamberg and Doehler.)
Doern, Peter, New Rochelle, N. Y. Wall construction. No. 1,271,447; July 2; v. 252; p. 193.
Dohmen, Arthur, Cologne, Germany, assignor to A. F. Krause, Buffalo, N. Y. Apparatus for effecting electrolysis. No. 1,272,397; July 16; v. 252; p. 522.
Doig, Emma, executrix. (See Doig, James, assignor.)
Doig, Emma, executrix. (See Harriett, William F., assignor.)
Doig, James, assignor to E. Doig, executrix, Brooklyn, N. Y. Staple-driving machine. No. 1,271,548; July 9; v. 252; p. 256.
Dolmage, Mihran M., Washington, D. C. Two-way-repeater circuits. No. 1,272,022; July 9; v. 252; p. 389.
Doman, Albert E., Elbridge, assignor, by mesne assignments, to Dyneto Electric Corporation, Syracuse, N. Y. Brush unit. No. 1,272,637; July 16; v. 252; p. 589.
Domestic Engineering Company, The. (See Dickey, Ernest, assignor.)
Donnell Tank Protector Company. (See Clifford, Victor, assignor.)
Donnelly, William T., Brooklyn, N. Y. Securing wooden parts. No. 1,273,588; July 23; v. 252; p. 875.
Donnelly, William T., Brooklyn, N. Y. Securing wooden parts. No. 1,273,771; July 23; v. 252; p. 923.
Doran, Charles A., assignor to Bauer & Black, Chicago, Ill. Weft-straightening apparatus. No. 1,272,924; July 16; v. 252; p. 671.
Dorau, John P., Jefferson, Wis. Driving mechanism for washing-machines. No. 1,273,336; July 23; v. 252; p. 806.
Dorau, John P., North Fond du Lac, Wis. Driving mechanism for washing-machines. No. 1,273,337; July 23; v. 252; p. 807.
Dorment, Frank C., Detroit, Mich., assignor to The Rogers Electric Laboratories Company, Cleveland, Ohio. Volatilizer. No. 1,271,866; July 9; v. 252; p. 343.
Dorrance, David W., San Jose, Cal. Artificial-limb joint. No. 1,271,448; July 2; v. 252; p. 193.
Dorroh, Alfred R., Washington, D. C. Muffler. No. 1,273,150; July 23; v. 252; p. 761.
Dorsey, Harry O., Atlanta, Ga. Furnace-grate. No. 1,274,147; July 30; v. 252; p. 1067.
Dorsey, Walter A., assignor to The Bonney-Floyd Company, Columbus, Ohio. Car-mover. No. 1,272,398; July 16; v. 252; p. 522.
Dostie, George J., Detroit, Mich. Resilient clutch. No. 1,272,286; July 9; v. 252; p. 449.
Donaud, Alexandre, Nantes, France. Fuel-heater. No. 1,271,143; July 2; v. 252; p. 109.
Double Fabric Tire Company, The. (See Murray, Albert L., assignor.)
Douglas, Louis M. (See Parsons, Walker, Cook, and Douglas.)
Douglas, William, Bristol, England. Cycle. No. 1,272,399; July 16; v. 252; p. 522.
Dow Chemical Company, The. (See Putnam, Mark E., assignor.)
Downes, Louis W., and W. S. Mayer, assignors to D. & W. Fuse Company, Providence, R. I. Relay-switch. No. 1,273,045; July 16; v. 252; p. 704.
Downing, John H., Minneapolis, Minn., assignor to the State of Minnesota. Needle-adjusting means. No. 1,273,589; July 23; v. 252; p. 875.

Doyle, John P., Wellesley, Mass. Automatic gas shut-off. No. 1,270,930; July 2; v. 252; p. 51.
Drach, George B., assignor to Jersey City Printing Company, Jersey City, N. J. Drilling books. No. 1,273,468; July 23; v. 252; p. 843.
Drake, George F., Oakland, Cal. Nut-lock. No. 1,271,449; July 2; v. 252; p. 193.
Drake, Walter H., San Francisco, Cal. Apparatus for producing articles from pulp. No. 1,274,148; July 30; v. 252; p. 1067.
Dralle, Rudolph E., St. Louis, Mo. Cover for display-lasts for shoes and the like. No. 1,272,400; July 16; v. 252; p. 523.
Drapeau, Emile, Montreal, Quebec, Canada. Fire-extinguisher. No. 1,274,017; July 30; v. 252; p. 1029.
Draper Corporation. (See Ballou, Eugene H., assignor.)
Draper Corporation. (See Mills, John, assignor.)
Draper Corporation. (See Nutting, Charles E., assignor.)
Draper Corporation. (See Rhoades, Alonzo E., assignor.)
Draper Corporation. (See Smith, John, assignor.)
Draper Corporation. (See Stimpson, Edward S., assignor.)
Dreier, Charles A. (See Christensen, Howard H., assignor.)
Drew, Arthur J., Philadelphia, Pa. Decorticating-machine. No. 1,273,750; July 23; v. 252; p. 917.
Driver, Wilbur B., East Orange, N. J. Alloy for resistance elements, &c. No. 1,274,250; July 30; v. 252; p. 1096.
Drufva, John T., Longmeadow, Mass., assignor to Henry Hyman & Co., Inc., New York, N. Y. Portable electric light. No. 1,272,781; July 16; v. 252; p. 629.
Drummond, Carlton A., Los Angeles, Cal. Fluid-clutch. No. 1,271,502; July 2; v. 252; p. 209.
Drury, John E., and R. C. Folsom, Boston, Mass., assignors to The American Sugar Refining Company. Method and apparatus for treating sugar. No. 1,270,796; July 2; v. 252; p. 11.
Du Loney, James A., assignor of one-half to C. R. Nelson, Seattle, Wash. Electric-heated clothes-presser. No. 1,272,638; July 16; v. 252; p. 590.
Duckett, Jud L., Wichita Falls, Tex. Holder. No. 1,271,451; July 2; v. 252; p. 194.
Duckett, Ralph E., San Francisco, Cal. Combined fork and spoon. No. 1,271,679; July 9; v. 252; p. 293.
Dudley, Howard M., Philadelphia, Pa. Dyeing-machine. No. 1,271,144; July 2; v. 252; p. 110.
Dudley, Howard M., Philadelphia, Pa. Dyeing-machine. No. 1,271,549; July 9; v. 252; p. 256.
Dudley, Howard M., Philadelphia, Pa. Dyeing-machine. No. 1,271,550; July 9; v. 252; p. 256.
Dudley, William J., and T. A. Richard, Wilmington, Ohio. Egg-turning tray. No. 1,270,931; July 2; v. 252; p. 51.
Duffy, James P. B. (See Murphy, Thomas J. assignor.)
Duffy, Patrick F., Newburyport, Mass. Drip-pan alarm. No. 1,272,782; July 16; v. 252; p. 630.
Duffy, Thomas I., assignor to Benjamin Electric Manufacturing Company, Chicago, Ill. Automobile-headlight. No. 1,274,018; July 30; v. 252; p. 1030.
Duffy, William A., Newport, R. I. Condenser for distilling plants. No. 1,272,925; July 16; v. 252; p. 672.
Dugger, Edward E., and W. D. Woods, Osage, Okla. Cattle-guard. No. 1,271,503; July 2; v. 252; p. 209.
Dulgan, Reginald C., Mia Mia, Victoria, Australia. Wire-strainer. No. 1,271,294; July 2; v. 252; p. 153.
Dukeshier, John, *et al.* (See Dukeshier, Wintworth W., assignor.)
Dukeshier, Wintworth W., assignor of twenty-three one-hundredths to J. Dukeshier and twenty-three one-hundredths to F. Clausin, Kansas City, Kans. Propeller. No. 1,273,751; July 23; v. 252; p. 917.
Dulude, J. Amedee, *et al.* (See Bisaillon, Zenophile, assignor.)
Duluth Show Case Company. (See Ostram, Roy A., assignor.)
Dumanois, Emile P., Paris, France. Internal-combustion engine. No. 1,273,834; July 30; v. 252; p. 978.
Dun Lany, William P., assignor to Sears, Roebuck and Company, Chicago, Ill. Doll or the like. No. 1,273,469; July 23; v. 252; p. 843.
Duncan, Joseph S., and U. G. Lee, assignors to Addressograph Company, Chicago, Ill. Stencil addressing-machine. No. 1,262,926; July 16; v. 252; p. 672.
Duncan, Joseph S., assignor to Addressograph Company, Chicago, Ill. Hand addressing-machine. No. 1,274,350; July 30; v. 252; p. 1122.
Duncan, Thomas C., St. Joseph, Mo. Harvesting-machine. No. 1,271,867; July 9; v. 252; p. 343.
Dunham, Charles W., Edgewood borough, assignor to The Union Switch & Signal Company, Swissvale, Pa. Track instrument. No. 1,273,835; July 30; v. 252; p. 979.
Dunkley, Melville E., Kalamazoo, Mich. Canning. No. 1,270,707; July 2; v. 252; p. 11.
Dunkley, Melville E., Kalamazoo, Mich. Canning. No. 1,270,708; July 2; v. 252; p. 12.
Dunlop Rubber Company, The. (See Twiss, Douglas F., assignor.)
Dunn, C. A. (See Myers, Melvin A., assignor.)
Dunn, C. K. (See Myers, Melvin A., assignor.)
Dunn, Emanuel W., Los Angeles, Cal. Heater. No. 1,271,680; July 9; v. 252; p. 293.
Dunn, George W. (See Button, Frank R., assignor.)
Dunn, George W., Newport, Ky. Collapsible frame. No. 1,272,023; July 9; v. 252; p. 389.
Dunn, Hugh T., New York, N. Y. Motor-pump fire-hydrant. No. 1,272,639; July 16; v. 252; p. 590.
Dunn, John, Honolulu, Hawaii. Pineapple-fleshing machine. No. 1,271,868; July 9; v. 252; p. 344.
Dunn, L. (See Myers, Melvin A., assignor.)
Dunn, Leo R., Farmer, S. D. Monkey-wrench. No. 1,271,452; July 2; v. 252; p. 194.
Dunn, Robert W. L., Trenton, N. J. Candle-holder. No. 1,272,024; July 9; v. 252; p. 390.
Dunn, William, Elk, Wyo. Self-adjusting track-brace. No. 1,272,236; July 9; v. 252; p. 449.
Dunn, William M., assignor of one-half to E. Hendricks, Shelbyville, Ind. Damper-operating device. No. 1,274,251; July 30; v. 252; p. 1096.
Dunseath, Robert, New York, N. Y. Collapsible block. No. 1,271,869; July 9; v. 252; p. 344.
Duperly, Oscar, Medellin, Colombia. Photographic Camera. No. 1,271,022; July 2; v. 252; p. 70.
Duplicator Manufacturing Company. (See Flanigan, John J., assignor.)
Duryea, William H., Tiffin, Ohio. Filter. No. 1,271,681; July 9; v. 252; p. 293.
Dutchess Hat Works. (See Pearl and Starkey, assignors.)
Dyer, Harry W., East Orange, N. J. Tire-tread construction. No. 1,273,046; July 16; v. 252; p. 704.
Dyer, Philip S. (See Slaght, Daniel C., assignor.)
Dyett, James H., assignor to Hard Manufacturing Company, Buffalo, N. Y. Bed-spring or spring bed-bottom. No. 1,270,799; July 2; v. 252; p. 12.
Dyett, James H., assignor to Hard Manufacturing Company, Buffalo, N. Y. Bed-spring. No. 1,274,149; July 30; v. 252; p. 1067.
Dyneto Electric Corporation. (See Doman, Albert E., assignor.)
Dziezyc, William, Middletown, N. J. Wire-entanglement cutter for bayonets. No. 1,274,019; July 30; v. 252; p. 1030.
E. I. du Pont de Nemours Powder Company. (See Cheney, John, assignor.)
E. I. du Pont de Nemours Powder Company. (See Stowe, Floyd D., assignor.)
E. J. Brooks & Co. (See Brooks, Winfred M., assignor.)
E. R. Durkee & Co. (See Nelson, Gilbert F., assignor.)
Eadie, John M., New York, N. Y. Brace for vehicle running-gear. No. 1,272,025; July 9; v. 252; p. 390.
Eadie, John M., New York, N. Y. Steering and turning device for vehicles. No. 1,272,026; July 9; v. 252; p. 390.
Eagle Wagon Works, The. (See Underhill and Avery, assignors.)
East, Robert J., Winnipeg, Manitoba, Canada. Drinking-fountain head. No. 1,272,927; July 16; v. 252; p. 672.
East, Walter, trustee. (See Cobb, Edwin F., assignor.)
Eastman Kodak Company. (See Barnes, Frederick W., assignor.)
Eastman Kodak Company. (See Bullock, Edward R., assignor.)
Eastman Kodak Company. (See Capstaff, John G., assignor.)
Eastman Kodak Company. (See Folmer, William F., assignor.)
Eastman Kodak Company. (See Galsman, Henry J., assignor.)
Eastman Kodak Company. (See Hoefle and Adams, assignors.)
Eastman Kodak Company. (See Jones, John G., assignor.)
Eastman Kodak Company. (See Marks, Paul J., assignor.)
Eastman Machine Co. (See Clark, Frederick J., assignor.)
Eaton, George M., Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company. Electric locomotive. No. 1,271,682; July 9; v. 252; p. 294.
Eaton, Warren S., Plainfield, N. J. Hydroaeroplane. No. 1,273,836; July 30; v. 252; p. 979.
Ebbecke, Albert, Newark, N. J. Body support or rest and head-rest therefor. No. 1,274,020; July 30; v. 252; p. 1030.
Ebelhare, William H., and C. G. Arvidson, assignors to The Stenotype Company, Indianapolis, Ind. Type-writing machine. No. 1,273,338; July 23; v. 252; p. 807.
Ebeling, Charles W., Elm Grove, W. Va., assignor of one-half to H. W. Rogers, New York, N. Y., and one-half to G. E. House, Wheeling, W. Va. Domestic churn. No. 1,274,021; July 30; v. 252; p. 1031.
Ebert, Otto, Cleveland, Ohio. Reamer. No. 1,273,752; July 23; v. 252; p. 917.
Ebner, John G., and H. L. Giesman, Chicago, Ill. Game apparatus. No. 1,271,551; July 9; v. 252; p. 257.
Eckberg, E. (See Myers, Melvin A., assignor.)
Eclipse Scaffolding Company. (See Whitney, Egbert, assignor.)
Econometer Co., The. (See Gebhart, John C., assignor.)
Edgar Zinc Company. (See Whipple and Baldwin, assignors.)
Edgecomb, Henry R., Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company. Measuring instrument. No. 1,270,800; July 2; v. 252; p. 12.
Edgecomb, Henry R., St. Marys, Pa., assignor to Speer Carbon Company. Electrode for arc-lamps. No. 1,272,401; July 16; v. 252; p. 523.
Edmonds, Samuel P., Catonsville, Md. Life-preserver. No. 1,272,336; July 9; v. 252; p. 478.

Edmunds and Jones Corporation. (See Godley, Charles E., assignor.)

Edmondson, Ellis G., assignor to The American Pad & Textile Company, Greenfield, Ohio. Pad-stuffing machine. No. 1,272,027; July 9; v. 252; p. 391.

Edmundson, Christian, Tientsin, China. Electric-light attachment for pens or pencils. No. 1,274,022; July 30; v. 252; p. 1032.

Educational Motion Picture Machine and Film Company. (See O'Hara, Joseph G. R., assignor.)

Edward F. Caldwell and Company. (See Tizley, Arthur J., assignor.)

Edwards, Alfred K. (See Whitney and Edwards.)

Edwards, Bruce V., Newark, N. J., assignor to Edwards Engineering and Manufacturing Company. Machine for molding plastic material into blocks or bodies. No. 1,271,552; July 9; v. 252; p. 257.

Edwards Engineering and Manufacturing Company. (See Edwards, Bruce V., assignor.)

Edwards, Frank W., assignor to The Ohio Injector Company of Illinois, Chicago, Ill. Protector for water-gages. No. 1,272,640; July 16; v. 252; p. 590.

Edwards, William E., Brooklyn, N. Y. Button. No. 1,273,160; July 23; v. 252; p. 761.

Edwards, William H., Des Moines, assignor of one-half to G. H. Neiswanger, Lorimor, Iowa. Water-heater. No. 1,273,161; July 23; v. 252; p. 761.

Eelhart, Bernard, Holland, Mich. Heat-disseminator. No. 1,273,753; July 23; v. 252; p. 917.

Egan, Florenz M., Mount Vernon, N. Y. Lighting-fixture. No. 1,270,932; July 2; v. 252; p. 51.

Egerton, Henry C., Passaic, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Electromagnetic switching device. No. 1,272,402; July 16; v. 252; p. 523.

Egerton, Henry C., Passaic, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone system. No. 1,272,641; July 16; v. 252; p. 590.

Ehlers, Richard, assignor to A. A. Barkey, Seattle, Wash. Air-supply device for explosive-engines. No. 1,273,837; July 30; v. 252; p. 979.

Ehmke, Wilhelm, Milwaukee, Wis. Cooling-coil for refrigerator-boxes. No. 1,273,162; July 23; v. 252; p 761.

Ehrlich, Joseph G., Cleveland, Ohio. Toy. No. 1,274,023; July 30; v. 252; p. 1032.

Eid, Jacob E., Flaming, Minn. Concrete-mold. No. 1,274,252; July 30; v. 252; p. 1096.

Eighmie, George D., New York, N. Y. Four-wheel drive for automobiles and other vehicles. No. 1,273,339; July 23; v. 252; p. 807.

Einsfeld, Andrew, San Francisco, Cal. Duplex mop. No. 1,271,870; July 9; v. 252; p. 344.

Einstein, Sol. (See Hazelton and Einstein.)

Einung, Henry, Jasper, Minn. Attachment for Ford automobiles. No. 1,271,871; July 9; v. 252; p. 344.

Eisenhut, Frank J., Woodhaven, N. Y. Telephone-support. No. 1,274,150; July 30; v. 252; p. 1067.

Eklund, Axel G., assignor to J. F. Sturdy's Sons Co., Attleboro Falls, Mass. Buckle. No. 1,273,340; July 23; v. 252; p. 807.

Eklund, Stone E., assignor to The Toledo Scale Company, Toledo, Ohio. Scale. No. 1,270,801; July 2; v. 252; p. 13.

Elder, Donald, Onehunga, New Zealand, assignor, by mesne assignments, to Automatic Irrigating Machinery Corporation. Automatic starting and stopping mechanism for irrigation systems. No. 1,272,404; July 16; v. 252; p. 523.

Electric Boat Company. (See Spear, Lawrence Y., assignor.)

Electric Furnace Company, The. (See Baily and Cope, assignors.)

Electric Heating Company. (See Ludwick, Wayne D., assignor.)

Electric Railway Improvement Company, The. (See Huber, William E., assignor.)

Electric Service Supplies Company. (See Mayer, Walter S., assignor.)

Electric Tachometer Corporation, The. (See Kolff, Petrus V., assignor.)

Electric Weighing Company. (See Messiter, Edwin H., assignor.)

Elektrizitätswerk Lonza. (See Danneel and Kuhn, assignors.)

Eley, David, Funk, Ohio. Lifting-jack. No. 1,272,237; July 9; v. 252; p. 450.

Eleyet, Leerl W., Lakeview, Ohio. Telephone-cord take-up. No. 1,271,872; July 9; v. 252; p. 345.

Elliot, William D., Bigtimber, Mont. Paper-bag holder. No. 1,273,941; July 23; v. 252; p. 807.

Elliott, Delbert, Jackson, Mich. Riding-cultivator. No. 1,270,882; July 2; v. 252; p. 13.

Elliott, Floyd E., Lincoln, Nebr. Trailer attachment for motor-cycles. No. 1,271,553; July 9; v. 252; p. 257.

Elliott, Joseph S., Eddy, Tex. Overall-waist. No. 1,273,936; July 16; v. 252; p. 672.

Elliott, William E., Grand Rapids, Mich. Button-removing tool. No. 1,271,023; July 2; v. 252; p. 77.

Ellis, Carleton, Montclair, N. J., assignor, by mesne assignments, to National Carbon Company, Inc., Long Island City, N. Y. Volume-stable manganese depolarizing material. No. 1,272,465; July 16; v. 252; p. 524.

Ellis, Carleton, Montclair, N. J., assignor, by mesne assignments, to National Carbon Company, Inc., Long Island City, N. Y. Void-filled depolarizing mass. No. 1,272,466; July 16; v. 252; p. 524.

Ellis, Carleton, Montclair, N. J., assignor, by mesne assignments, to National Carbon Company, Inc., Long Island City, N. Y. Non-conducting manganese depolarizing electrode. No. 1,272,467; July 16; v. 252; p. 524.

Ellis, Carleton, Montclair, N. J., assignor to C. S. Lutkins, Rye, N. Y. Preparation of synthetic ammonia. No. 1,273,772; July 23; v. 252; p. 923.

Ellis, Carleton, Montclair, N. J., assignor to Ellis-Foster Company. Naphthol dye and making same. No. 1,274,351; July 30; v. 252; p. 1122.

Ellis-Foster Company. (See Ellis, Carleton, assignor.)

Ellis, Frank I., assignor of one-half to United Engineering & Foundry Company, Pittsburgh, Pa. Mandrel-stripping machine. No. 1,273,163; July 23; v. 252; p. 762.

Ellis, William H., Two Rivers, Wis. Sheet-metal hot-water and sheet-metal irrigating bottle. No. 1,272,238; July 9; v. 252; p. 450.

Ellison, Edward H., assignor to International Casement Company, Jamestown, N. Y. Air-port closure. No. 1,274,151; July 30; v. 252; p. 1068.

Ellison, John N. (See White, George T., assignor.)

Ellison, Lewis M., Chicago, Ill. Draft-gage. No. 1,273,590; July 23; v. 252; p. 875.

Ellithorpe, Gilbert S., Chicago, Ill. Shoe-heel. No. 1,272,929; July 16; v. 252; p. 673.

Ellithorpe, Gilbert S., Chicago, Ill. Heel-lift. No. 1,273,047; July 16; v. 252; p. 705.

Ells, Hallet D., Kansas City, Mo. Truck. No. 1,274,152; July 30; v. 252; p. 1068.

Elmberg, Ernest F., Parkersburg, Iowa. Power-transmission attachment. No. 1,271,688; July 9; v. 252; p. 294.

Elsener, Charles C., Waterloo, Iowa. Combination blanking and forming die. No. 1,270,933; July 2; v. 252; p. 51.

Elster, Anthon W., Canton, S. D. Stretcher-brace. No. 1,273,048; July 16; v. 252; p. 705.

Elwell, Frank T., Los Angeles, Cal. Trolley-splicer. No. 1,272,783; July 16; v. 252; p. 630.

Elwood Myers Company, The. (See Gregg, Robert W., assignor.)

Elzey, Edgar P., assignor to Edwin L. Davidson, Parkersburg, W. Va. Swing-chair. No. 1,271,453; July 2; v. 252; p. 194.

Elzey, Edgar P., assignor to E. L. Davidson, Parkersburg, W. Va. Teeter. No. 1,273,591; July 23; v. 252; p. 875.

Emberger, Ferdinand, Boardman, Oreg. Rheostat. No. 1,273,754; July 23; v. 252; p. 918.

Embree, James W., Manhattan, Kans. Truss-pad. No. 1,273,592; July 23; v. 252; p. 876.

Embree, James W., Manhattan, Kans. Truss-pad. No. 1,273,755; July 23; v. 252; p. 918.

Emerick, Joseph M., Salem, Oreg. Means for shaping the raker-teeth of saws. No. 1,271,295; July 2; v. 252; p. 153.

Emerson Phonograph Co. (See Emerson, Victor H., assignor.)

Emerson, Victor H., New York, N. Y., assignor to Emerson Phonograph Co. Inc. Method of producing sound-records. No. 1,271,684; July 9; v. 252; p. 294.

Emerson, Victor H., New York, N. Y., assignor to Emerson Phonograph Company, Inc. Talking-machine. No. 1,273,342; July 23; v. 252; p. 808.

Emery, Augustus B., Messina, North Transvaal, South Africa. Separation of ores and the like. No. 1,272,642; July 16; v. 252; p. 591.

Emery, Augustus B., Messina, North Transvaal, South Africa. Method of and apparatus for separating ores and the like. No. 1,272,643; July 16; v. 252; p. 591.

Emmerling, Rudolph C., J. H. Wheelock, and C. J. Rohland, assignors to American Model and Instrument Company, Worcester, Mass. Magnet-operated switch. No. 1,271,873; July 9; v. 252; p. 345.

Emmons, Ernest. (See Myers, Melvin A., assignor.)

Emrick, Wade H., Windy, W. Va. Explosive-engine. No. 1,273,164; July 23; v. 252; p. 762.

Ender, James E., L. W. Crompton, and W. C. Burgert, Tampa, Fla. Camera. No. 1,271,685; July 9; v. 252; p. 295.

Endorf, Charles, Jr., assignor to Lindstrom, Smith Company, Chicago, Ill. Pump for vacuum-cleaners. No. 1,273,343; July 23; v. 252; p. 808.

Engelson, Albert, Bellingham, Minn. Self-propelled sled. No. 1,272,239; July 9; v. 252; p. 450.

Engineering Products Corporation. (See Weaver, Joseph B., assignor.)

English, Arthur I., Newton Center, Mass., assignor of two-thirds to B. A. Howes, New York, N. Y. Concrete-mold. No. 1,271,874; July 9; v. 252; p. 845.

Ennis, John E., St. Boniface, Manitoba, Canada. Shell-making machine. No. 1,272,784; July 16; v. 252; p. 630.

Enochs, Andrew C. (See Stivers and Enochs.)

Enomoto, Tatsutaro, Watsonville, Cal. Toy hoop. No. 1,272,240; July 9; v. 252; p. 451.

Enslin, Herbert E., Malden, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Buttoning-machine. No. 1,273,444; July 23; v. 252; p. 835.

Ents, Justus B., Cleveland, Ohio. Motor-vehicle. No. 1,272,930; July 16; v. 252; p. 673.

Entz Motor Patents Corporation. (See Stanley, Robert W., assignor.)

Eral, Frank J. (See Kramer, Umhofer, Eral, and Wildberger.)

Erdélyi, John, Rayland, Ohio. Spring-wheel. No. 1,271,686; July 9; v. 252; p. 205.

Erdice, E. S. (See Keister, Archibald J., assignor.)

Erich, George H., Minneapolis, and D. S. Milne, Fairmont, Minn. Air-gage device. No. 1,273,165; July 23; v. 252; p. 762.

Erickson, Julius, Los Angeles, Cal. Mop-holder. No. 1,272,644; July 16; v. 252; p. 592.

Erickson, John G., *et al.* (See Johnson, Arthur W., assignor.)

Erickson, William F., and H. D. Bolstad, Starbuck, Minn. Shaving kit. No. 1,274,153; July 30; v. 252; p. 1068.

Ernest, Ralph D., Ann Arbor, Mich. Automatic starter and controller. No. 1,273,798; July 23; v. 252; p. 930.

Ernst, Charles A., assignor to The Viscose Company, Marcus Hook, Pa. Spinning-box. No. 1,262,241; July 9; v. 252; p. 451.

Erway, Louis W., Hastings, Mich. Aeroplane. No. 1,273,166; July 23; v. 252; p. 762.

Erwin, Benjamin F., Fairfax, Mo. End-gate. No. 1,271,024; July 2; v. 252; p. 77.

Es Tarsa, Bayer. (See Buchtala, Hans, assignor.)

Estes, Henry D., assignor of one-half to U. S. Carson, Hartford, Ky. Power-transmission attachment for automobiles. No. 1,273,470; July 23; v. 252; p. 843.

Etheridge, Halls B., Gilmerton, Va. Foot-warmer. No. 1,272,931; July 16; v. 252; p. 673.

Etheridge, Theodore S., Grand Rapids, Mich. Pamphlet-covering machine. No. 1,274,154; July 30; v. 252; p. 1069.

Etter, John H., Memphis, Tenn. Manifold heating device. No. 1,273,049; July 16; v. 252; p. 705.

Euler, Clide F., Topeka, Kans. Making combustible gas. No. 1,273,050; July 16; v. 252; p. 705.

Eureka Projector Device Co. (See Jurgensen, August P., assignor.)

Euwer, James E., Topeka, Kans., assignor to The A. C. Gilbert Company, New Haven, Conn. Toy building construction. No. 1,271,145; July 2; v. 252; p. 110.

Evans, Beverly P., and A. M. Fisher, Washington, D. C. Hand-stamp. No. 1,272,028; July 9; v. 252; p. 391.

Evans, Beverly P., and A. M. Fisher, Washington, D. C. Stencil-sheet for hand-stamps. No. 1,272,242; July 9; v. 252; p. 451.

Evans, Clarence T., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Overload circuit-breaker. No. 1,271,875; July 9; v. 252; p. 345.

Evans, Edwin R., Detroit, Mich. Variable-speed winch. No. 1,272,785; July 16; v. 252; p. 631.

Evans, Guy J., Buffalo, N. Y. Addressing-machine. No. 1,271,687; July 9; v. 252; p. 295.

Evans, James E., Los Angeles, Cal. Gas generator and burner. No. 1,274,024; July 30; v. 252; p. 1032.

Evans, Louis M., Alexandria, Va., assignor to The Government of the United States. Pole-changing apparatus. No. 1,273,773; July 23; v. 252; p. 923.

Everett, Edward E., assignor to Philadelphia Storage Battery Company, Philadelphia, Pa. Mold. No. 1,271,296; July 2; v. 252; p. 153.

Everhart, George S., Oshkosh, Wis. Drive-calk for horseshoes. No. 1,274,025; July 30; v. 252; p. 1032.

Evers, William H., Cleveland, Ohio. Concrete flooring construction. No. 1,273,344; July 23; v. 252; p. 808.

Ewen, Edward C., Saginaw, Mich. Recovering graphite from slag. No. 1,271,146; July 2; v. 252; p. 111.

Ewen, Harry A., London, England, assignor to Marconi Wireless Telegraph Company of America, New York, N. Y. Measuring instrument. No. 1,273,167; July 23; v. 252; p. 762.

Ewig, Robert J., Brooklyn, N. Y. Belt-loop and button for trousers. No. 1,274,253; July 30; v. 252; p. 1096.

F. F. Slocum & Co. (See Flanagan, James U., assignor.)

F. I. A. T. (See Fornaca, Guido, assignor.)

F. R. Blair & Co. (See Blair, Frank R., assignor.)

Fagan, John T., Cleveland, Ohio, assignor to General Electric Company. Cane-glass manufacture. No. 1,273,345; July 23; v. 252; p. 808.

Fagan, John T., Cleveland, Ohio, assignor to General Electric Company. Manufacture of glass rods and tubes. No. 1,273,346; July 23; v. 252; p. 809.

Fairbanks, Ivan R., Emmett, Kans. Pipe-clamp. No. 1,271,876; July 9; v. 252; p. 346.

Fairfax, Walter D., Brewster, Ohio. Signaling apparatus for vehicles. No. 1,272,408; July 16; v. 252; p. 524.

Fairfoull, Raymond W., *et al.* (See Unruh, Albert A., assignor.)

Fairhurst, John T., Brooklyn, N. Y. Cabinet. No. 1,273,838; July 30; v. 252; p. 980.

Fane, Frank C., Elmsford, N. Y. Combination belt and suspenders. No. 1,271,554; July 9; v. 252; p. 258.

Fanger Beet Harvester Co., The. (See Fanger, Joseph D., assignor.)

Fanger, Joseph D., assignor to The Fanger Beet Harvester Co., Toledo, Ohio. Beet-topping mechanism. No. 1,273,756; July 23; v. 252; p. 918.

Fanger, Joseph D., assignor to The Fanger Beet Harvester Co., Toledo, Ohio. Rear auger adjustment for beet-harvesters. No. 1,273,757; July 23; v. 252; p. 919.

Fanning, Samuel H., Dallas, Tex. Combined desk and map-cabinet. No. 1,272,645; July 16; v. 252; p. 592.

Farber, Maurice L. (See Armband, Abrahani, assignor.)

Farley, Elliot, *et al.*, trustees. (See Callan, John G., assignor.)

Farman, Dan V., Battle Creek, Mich. Crossing-gate. No. 1,271,877; July 9; v. 252; p. 346.

Farman, Elbert H., McKittrick, Cal. Palmetto-root and weed plow. No. 1,271,504; July 2; v. 252; p. 209.

Farmer, Luke W., Somerville, Mass. Paper carton. No. 1,272,409; July 16; v. 252; p. 524.

Farmer, William E. (See Giersdorf and Farmer.)

Farnham, Frank E., Providence, R. I., assignors to The Jewelers' Supply Company, Biddeford, Me. Safety-catch for pins or brooches. No. 1,271,297; July 2; v. 252; p. 154.

Farnsworth, Alfred W., Derby, England. Spring suspension for vehicles. No. 1,273,052; July 16; v. 252; p. 706.

Farnsworth, Frank E., Chief, Mich. Running-gear for motor-vehicles. No. 1,271,298; July 2; v. 252; p. 154.

Farquhar, Henry S., Wayne, Pa. Machine for removing snow and like material. No. 1,272,786; July 16; v. 252; p. 631.

Farrer, William C., and G. Glossop, Sheffield, England. Shears and similar tool. No. 1,273,839; July 30; v. 252; p. 980.

Fassett, Willard O., Alderpoint, Cal. Camp-stove. No. 1,273,840; July 30; v. 252; p. 980.

Fauber, William H., assignor of one-half to J. R. Taylor, Brooklyn, N. Y. Friction device. No. 1,271,878; July 9; v. 252; p. 346.

Faul, Tom. (See Myers, Melvin A., assignor.)

Faul, William. (See Myers, Melvin A., assignor.)

Faure, Elie F. G. H., Erie, Pa., assignor to Burke Electric Company. Switch mechanism. No. 1,271,555; July 9; v. 252; p. 258.

Fawcett, Charles H., Independence, Iowa. Crate-bottom for tombstones. No. 1,272,335; July 9; v. 252; p. 478.

Fay, John, Columbus, N. D. Animal-poke. No. 1,272,932; July 16; v. 252; p. 673.

Fay, Louis D. (See Mardon and Fay.)

Fay, Thomas J., Brooklyn, N. Y., assignor, by mesne assignments, to The Standard Parts Company, Cleveland, Ohio. Internal-combustion engine. No. 1,271,147; July 2; v. 252; p. 111.

Feasel, Harry L., New York, N. Y., assignor to O-So-Ezy Mop Company. Mop and wringer. No. 1,271,301; July 2; v. 252; p. 155.

Feasel, Harry L., New York, N. Y., assignor to O-So-Ezy Mop Company. Mop and wringer. No. 1,271,302; July 2; v. 252; p. 155.

Fedders, John M., assignor to Fedders Manufacturing Company, Inc., Buffalo, N. Y. Radiator unit. No. 1,272,646; July 16; v. 252; p. 592.

Fedders, John M., assignor to Fedders Manufacturing Company, Inc., Buffalo, N. Y. Radiator unit. No. 1,274,026; July 30; v. 252; p. 1032.

Fedders Manufacturing Company. (See Fedders, John M., assignor.)

Federal Rubber Company, The. (See Healy and Frank, assignors.)

Feebusch, Charles P., Kansas City, Mo., and J. O. Roberts, Salina, Kans. Caster. No. 1,271,559; July 9; v. 252; p. 259.

Feiss, Richard A., Cleveland, Ohio. Price-slip for piece-work. No. 1,272,243; July 9; v. 252; p. 451.

Feist, Frederick J., Rochester, N. Y., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Rounding and channeling machine. No. 1,271,505; July 2; v. 252; p. 209.

Feld, Benjamin. (See Bridges, William H., assignor.)

Felicetti, John B., Philadelphia, Pa. Mannally-propelled armored vehicle. No. 1,273,593; July 23; v. 252; p. 876.

Felt, Charles C. (See Ayers, Frank W., assignor.)

Felt, Willard O., Bradford, Pa. Freezing water. No. 1,271,879; July 9; v. 252; p. 346.

Feltner, Curtis C., Cerro de Pasco, Peru. Pitcher for cans of condensed milk. No. 1,273,594; July 23; v. 252; p. 876.

Feraldi, Louis F. (See Pavlidés and Feraldi.)

Ferguson, George E., New York, N. Y., assignor to Pyrene Manufacturing Company. Fire-extinguishing and fireproofing composition. No. 1,271,506; July 2; v. 252; p. 210.

Ferguson, John A., Denver, Colo. Mold for tiles. No. 1,272,647; July 16; v. 252; p. 593.

Ferguson, Joseph R., Newark, N. J. Motor-vehicle. No. 1,272,648; July 16; v. 252; p. 593.

Ferguson, Raymond M., assignor of one-half to D. Langhray, Grand Rapids, Mich. Form for building silo-blocks. No. 1,273,168; July 23; v. 252; p. 763.

Fergusson, Alan R., New York, N. Y. Method of and means for mechanical indexing. No. 1,270,934; July 2; v. 252; p. 51.

Fernandez, José, Los Angeles, Cal. Water-fountain. No. 1,270,935; July 2; v. 252; p. 52.

Ferris, Howard J., assignor to Hunt, Helm, Ferris & Company, Harvard, Ill. Overhead track. No. 1,271,454; July 2; v. 252; p. 195.

Ferris-Stevenson Corporation. (See Adams, Arthur J., assignor.)

Ferris, Thomas H., Brooklyn, N. Y. Plumbing-fitting. No. 1,273,471; July 23; v. 252; p. 843.

Edmunds and Jones Corporation. (See Godley, Charles E., assignor.)

Edmondson, Ellis G., assignor to The American Pad & Textile Company, Greenfield, Ohio. Pad-stuffing machine. No. 1,272,027; July 9; v. 252; p. 391.

Edmundson, Christian, Tientsin, China. Electric-light attachment for pens or pencils. No. 1,274,022; July 30; v. 252; p. 1032.

Educational Motion Picture Machine and Film Company. (See O'Hara, Joseph G. R., assignor.)

Edward F. Caldwell and Company. (See Tizley, Arthur J., assignor.)

Edwards, Alfred K. (See Whitney and Edwards.)

Edwards, Bruce V., Newark, N. J., assignor to Edwards Engineering and Manufacturing Company. Machine for molding plastic material into blocks or bodies. No. 1,271,552; July 9; v. 252; p. 257.

Edwards Engineering and Manufacturing Company. (See Edwards, Bruce V., assignor.)

Edwards, Frank W., assignor to The Ohio Injector Company of Illinois, Chicago, Ill. Protector for water-gages. No. 1,272,640; July 16; v. 252; p. 590.

Edwards, William E., Brooklyn, N. Y. Button. No. 1,273,160; July 23; v. 252; p. 761.

Edwards, William H., Des Moines, assignor of one-half to G. H. Neiswanger, Lorimor, Iowa. Water-heater. No. 1,273,161; July 23; v. 252; p. 761.

Eelhart, Bernard, Holland, Mich. Heat-disseminator. No. 1,273,753; July 23; v. 252; p. 917.

Egan, Florenz M., Mount Vernon, N. Y. Lighting-fixture. No. 1,270,932; July 2; v. 252; p. 51.

Egerton, Henry C., Passaic, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Electromagnetic switching device. No. 1,272,402; July 16; v. 252; p. 523.

Egerton, Henry C., Passaic, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone system. No. 1,272,641; July 16; v. 252; p. 590.

Ehlers, Richard, asrignor to A. A. Barkey, Seattle, Wash. Air-supply device for explosive-engines. No. 1,273,837; July 30; v. 252; p. 979.

Ehmke, Wilhelm, Milwaukee, Wis. Cooling-coil for refrigerator-boxes. No. 1,273,162; July 23; v. 252; p. 761.

Ehrlich, Joseph G., Cleveland, Ohio. Toy. No. 1,274,023; July 30; v. 252; p. 1032.

Eld, Jacob E., Fleming, Minn. Concrete-mold. No. 1,274,252; July 30; v. 252; p. 1096.

Elghmie, George D., New York, N. Y. Four-wheel drive for automobiles and other vehicles. No. 1,273,339; July 23; v. 252; p. 807.

Elnsfeld, Andrew, San Francisco, Cal. Duplex mop. No. 1,271,870; July 9; v. 252; p. 344.

Elnstein, Sol. (See Hazelton and Einstein.)

Elnung, Henry, Jasper, Minn. Attachment for Ford automobiles. No. 1,271,871; July 9; v. 252; p. 344.

Eisenhut, Frank J., Woodhaven, N. Y. Telephone-support. No. 1,274,150; July 30; v. 252; p. 1067.

Eklund, Axel G., assignor to J. F. Sturdy's Sons Co., Attleboro Falls, Mass. Buckle. No. 1,273,340; July 23; v. 252; p. 807.

Eklund, Stone E., assignor to The Toledo Scale Company, Toledo, Ohio. Scale. No. 1,270,801; July 2; v. 252; p. 13.

Elder, Donald, Onehunga, New Zealand, assignor, by mesne assignments, to Automatic Irrigating Machinery Corporation. Automatic-starting and stopping mechanism for irrigation systems. No. 1,272,404; July 16; v. 252; p. 523.

Electric Boat Company. (See Spear, Lawrence Y., assignor.)

Electric Furnace Company, The. (See Bally and Cope, assignors.)

Electric Heating Company. (See Ludwick, Wayne D., assignor.)

Electric Railway Improvement Company, The. (See Huber, William E., assignor.)

Electric Service Supplies Company. (See Mayer, Walter S., assignor.)

Electric Tachometer Corporation, The. (See Kolff, Petrus V., assignor.)

Electric Weighing Company. (See Messiter, Edwin H., assignor.)

Elektrizitätswerk Lonza. (See Danneel and Kuhn, assignors.)

Eley, David, Funk, Ohio. Lifting-jack. No. 1,272,237; July 9; v. 252; p. 450.

Eleyet, Leevi W., Lakeview, Ohio. Telephone-cord take-up. No. 1,271,872; July 9; v. 252; p. 345.

Elliot, William D., Bigtimber, Mont. Paper-bag holder. No. 1,273,341; July 23; v. 252; p. 807.

Elliott, Delbert, Jackson, Mich. Riding-cultivator. No. 1,270,802; July 2; v. 252; p. 13.

Elliott, Floyd E., Lincoln, Nebr. Trailer attachment for motor-cycles. No. 1,271,553; July 9; v. 252; p. 257.

Elliott, Joseph S., Eddy, Tex. Overall-waist. No. 1,272,928; July 16; v. 252; p. 672.

Elliott, William E., Grand Rapids, Mich. Button-removing tool. No. 1,271,023; July 2; v. 252; p. 77.

Ellis, Carleton, Montclair, N. J., assignor, by mesne assignments, to National Carbon Company, Inc., Long Island City, N. Y. Volume-stable manganese depolarizing material. No. 1,272,405; July 16; v. 252; p. 524.

Ellis, Carleton, Montclair, N. J., assignor, by mesne assignments, to National Carbon Company, Inc., Long Island City, N. Y. Void-filled depolarizing mass. No. 1,272,406; July 16; v. 252; p. 524.

Ellis, Carleton, Montclair, N. J., assignor, by mesne assignments, to National Carbon Company, Inc., Long Island City, N. Y. Non-conducting manganese depolarizing electrode. No. 1,272,407; July 16; v. 252; p. 524.

Ellis, Carleton, Montclair, N. J., assignor to C. S. Lutkins, Rye, N. Y. Preparation of synthetic ammonia. No. 1,273,772; July 23; v. 252; p. 923.

Ellis, Carleton, Montclair, N. J., assignor to Ellis-Foster Company. Naphthol dye and making same. No. 1,274,351; July 30; v. 252; p. 1122.

Ellis-Foster Company. (See Ellis, Carleton, assignor.)

Ellis, Frank I., assignor of one-half to United Engineering & Foundry Company, Pittsburgh, Pa. Mandrel-stripping machine. No. 1,273,163; July 23; v. 252; p. 762.

Ellis, William H., Two Rivers, Wis. Sheet-metal hot-water and sheet-metal irrigating bottle. No. 1,272,238; July 9; v. 252; p. 450.

Ellison, Edward H., assignor to International Casement Company, Jamestown, N. Y. Air-port closure. No. 1,274,151; July 30; v. 252; p. 1068.

Ellison, John N. (See White, George T., assignor.)

Ellison, Lewis M., Chicago, Ill. Draft-gage. No. 1,273,590; July 23; v. 252; p. 875.

Ellithorpe, Gilbert S., Chicago, Ill. Shoe-heel. No. 1,272,929; July 16; v. 252; p. 673.

Ellithorpe, Gilbert S., Chicago, Ill. Heel-lift. No. 1,273,047; July 16; v. 252; p. 705.

Ellis, Hallet D., Kansas City, Mo. Truck. No. 1,274,152; July 30; v. 252; p. 1068.

Elmberg, Ernest F., Parkersburg, Iowa. Power-transmission attachment. No. 1,271,683; July 9; v. 252; p. 294.

Elsener, Charles C., Waterloo, Iowa. Combination blanking and forming die. No. 1,270,933; July 2; v. 252; p. 51.

Elster, Anthon W., Canton, S. D. Stretcher-brace. No. 1,273,048; July 16; v. 252; p. 705.

Elwell, Frank T., Los Angeles, Cal. Trolley-splicer. No. 1,272,783; July 16; v. 252; p. 630.

Elwood Myers Company, The. (See Gregg, Robert W., assignor.)

Elzey, Edgar P., assignor to Edwin L. Davidson, Parkersburg, W. Va. Swing-chair. No. 1,271,453; July 2; v. 252; p. 194.

Elzey, Edgar P., assignor to E. L. Davidson, Parkersburg, W. Va. Teeter. No. 1,273,591; July 23; v. 252; p. 875.

Emberger, Ferdinand, Boardman, Oreg. Rheostat. No. 1,273,754; July 23; v. 252; p. 918.

Embree, James W., Manhattan, Kans. Truss-pad. No. 1,273,592; July 23; v. 252; p. 876.

Embree, James W., Manhattan, Kans. Truss-pad. No. 1,273,755; July 23; v. 252; p. 918.

Emerick, Joseph M., Salem, Oreg. Means for shaping the raker-teeth of saws. No. 1,271,295; July 2; v. 252; p. 153.

Emerson Phonograph Co. (See Emerson, Victor H., assignor.)

Emerson, Victor H., New York, N. Y., assignor to Emerson Phonograph Co. Inc. Method of producing sound-records. No. 1,271,684; July 9; v. 252; p. 294.

Emerson, Victor H., New York, N. Y., assignor to Emerson Phonograph Company, Inc. Talking machine. No. 1,273,342; July 23; v. 252; p. 808.

Emery, Augustus B., Messina, North Transvaal, South Africa. Separation of ores and the like. No. 1,272,642; July 16; v. 252; p. 591.

Emery, Augustus B., Messina, North Transvaal, South Africa. Method of and apparatus for separating ores and the like. No. 1,272,643; July 16; v. 252; p. 591.

Emmerling, Rudolph C., J. H. Wheelock, and C. J. Rohland, assignors to American Model and Instrument Company, Worcester, Mass. Magnet-operated switch. No. 1,271,873; July 9; v. 252; p. 345.

Emmons, Ernest. (See Myers, Melvin A., assignor.)

Emrick, Wade H., Windy, W. Va. Explosive-engine. No. 1,273,164; July 23; v. 252; p. 762.

Ender, James E., L. W. Crompton, and W. C. Burgert, Tampa, Fla. Camera. No. 1,271,685; July 9; v. 252; p. 295.

Endorf, Charles, Jr., assignor to Lindstrom, Smith Company, Chicago, Ill. Pump for vacuum-cleaners. No. 1,273,343; July 23; v. 252; p. 808.

Engelson, Albert, Bellingham, Minn. Self-propelled sled. No. 1,272,239; July 9; v. 252; p. 450.

Engineering Products Corporation. (See Weaver, Joseph B., assignor.)

English, Arthur I., Newton Center, Mass., assignor of two-thirds to B. A. Howes, New York, N. Y. Concrete-mold. No. 1,271,874; July 9; v. 252; p. 345.

Ennis, John E., St. Boniface, Manitoba, Canada. Shell-making machine. No. 1,272,784; July 16; v. 252; p. 630.

Enochs, Andrew C. (See Stivers and Enochs.)

Enomoto, Tatsutaro, Watsonville, Cal. Toy hoop. No. 1,272,240; July 9; v. 252; p. 451.

Ensiin, Herbert E., Malden, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Buttoning-machine. No. 1,273,444; July 23; v. 252; p. 835.

Entz, Justus B., Cleveland, Ohio. Motor-vehicle. No. 1,272,930; July 16; v. 252; p. 673.

Entz Motor Patents Corporation. (See Stanley, Robert W., assignor.)

Eral, Frank J. (See Kramer, Umhofer, Eral, and Wildberger.)

Erdélyi, John, Rayland, Ohio. Spring-wheel. No. 1,271,686; July 9; v. 252; p. 295.

Erdice, E. S. (See Keister, Archibald J., assignor.)

Erich, George H., Minneapolis, and D. S. Milne, Fairmont, Minn. Air-gage device. No. 1,273,165; July 23; v. 252; p. 762.

Ericksen, Julius, Los Angeles, Cal. Mop-holder. No. 1,272,644; July 16; v. 252; p. 592.

Erickson, John G., et al. (See Johnson, Arthur W., assignor.)

Erickson, William F., and H. D. Bolstad, Starbuck, Minn. Shaving kit. No. 1,274,153; July 30; v. 252; p. 1068.

Ernest, Ralph D., Ann Arbor, Mich. Automatic starter and controller. No. 1,273,798; July 23; v. 252; p. 930.

Ernst, Charles A., assignor to The Viscose Company, Marcus Hook, Pa. Spinning-box. No. 1,262,241; July 9; v. 252; p. 451.

Erway, Louis W., Hastings, Mich. Aeroplane. No. 1,273,166; July 23; v. 252; p. 762.

Erwin, Benjamin F., Fairfax, Mo. End-gate. No. 1,271,024; July 2; v. 252; p. 77.

Es Tarsa, Bayer. (See Buchtala, Hans, assignor.)

Estes, Henry D., assignor of one-half to D. S. Carson, Hartford, Ky. Power-transmission attachment for automobiles. No. 1,273,470; July 23; v. 252; p. 843.

Etheridge, Hallis B., Gilmerton, Va. Foot-warmer. No. 1,272,931; July 16; v. 252; p. 673.

Etheridge, Theodore S., Grand Rapids, Mich. Pamphlet-covering machine. No. 1,274,154; July 30; v. 252; p. 1069.

Etter, John H., Memphis, Tenn. Manifold heating device. No. 1,273,049; July 16; v. 252; p. 705.

Euler, Clide F., Topeka, Kans. Making combustible gas. No. 1,273,050; July 16; v. 252; p. 705.

Euphrat, Theophile, Norwalk, Conn. Shade-holder. No. 1,273,051; July 16; v. 252; p. 705.

Eureka Projector Device Co. (See Jurgensen, August P., assignor.)

Euwer, James E., Topeka, Kans., assignor to The A. C. Gilbert Company, New Haven, Conn. Toy building construction. No. 1,271,145; July 2; v. 252; p. 110.

Evans, Beverly P., and A. M. Fisher, Washington, D. C. Hand-stamp. No. 1,272,028; July 9; v. 252; p. 391.

Evans, Beverly P., and A. M. Fisher, Washington, D. C. Stencil-sheet for hand-stamps. No. 1,272,242; July 9; v. 252; p. 451.

Evans, Clarence T., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Overload circuit-breaker. No. 1,271,875; July 9; v. 252; p. 345.

Evans, Edwin R., Detroit, Mich. Variable-speed winch. No. 1,272,785; July 16; v. 252; p. 631.

Evans, Guy J., Buffalo, N. Y. Addressing-machine. No. 1,271,687; July 9; v. 252; p. 295.

Evans, James E., Los Angeles, Cal. Gas generator and burner. No. 1,274,024; July 30; v. 252; p. 1032.

Evans, Louis M., Alexandria, Va., assignor to The Government of the United States. Pole-changing apparatus. No. 1,273,773; July 23; v. 252; p. 923.

Everett, Edward E., assignor to Philadelphia Storage Battery Company, Philadelphia, Pa. Mold. No. 1,271,296; July 2; v. 252; p. 153.

Everhart, George S., Oshkosh, Wis. Drive-calk for horse-shoes. No. 1,274,025; July 30; v. 252; p. 1032.

Evers, William H., Cleveland, Ohio. Concrete flooring construction. No. 1,273,344; July 23; v. 252; p. 808.

Ewen, Edward C., Saginaw, Mich. Recovering graphite from slag. No. 1,271,146; July 2; v. 252; p. 111.

Ewen, Harry A., London, England, assignor to Marconi Wireless Telegraph Company of America, New York, N. Y. Measuring instrument. No. 1,273,167; July 23; v. 252; p. 762.

Ewig, Robert J., Brooklyn, N. Y. Belt-loop and button for trousers. No. 1,274,253; July 30; v. 252; p. 1096.

F. F. Slocum & Co. (See Flanagan, James D., assignor.)

F. I. A. T. (See Fornaca, Guido, assignor.)

F. R. Blair & Co. (See Blair, Frank R., assignor.)

Fagan, John T., Cleveland, Ohio, assignor to General Electric Company. Cane-glass manufacture. No. 1,273,345; July 23; v. 252; p. 808.

Fagan, John T., Cleveland, Ohio, assignor to General Electric Company. Manufacture of glass rods and tubes. No. 1,273,346; July 23; v. 252; p. 809.

Fairbanks, Ivan B., Emmett, Kans. Pipe-clamp. No. 1,271,876; July 9; v. 252; p. 346.

Fairfax, Walter D., Brewster, Ohio. Signaling apparatus for vehicles. No. 1,272,408; July 16; v. 252; p. 524.

Fairfoull, Raymond W., et al. (See Unruh, Albert A., assignor.)

Fairhurst, John T., Brooklyn, N. Y. Cabinet. No. 1,273,838; July 30; v. 252; p. 980.

Fane, Frank C., Elmsford, N. Y. Combination belt and suspenders. No. 1,271,554; July 9; v. 252; p. 258.

Fanger Beet Harvester Co., The. (See Fanger, Joseph D., assignor.)

Fanger, Joseph D., assignor to The Fanger Beet Harvester Co., Toledo, Ohio. Beet-topping mechanism. No. 1,273,756; July 23; v. 252; p. 918.

Fanger, Joseph D., assignor to The Fanger Beet Harvester Co., Toledo, Ohio. Rear auger adjustment for beet-harvesters. No. 1,273,757; July 23; v. 252; p. 919.

Fanning, Samuel H., Dallas, Tex. Combined desk and map-cabinet. No. 1,272,645; July 16; v. 252; p. 592.

Farber, Maurice L. (See Armband, Abraham, assignor.)

Farley, Eliot, et al., trustees. (See Callan, John G., assignor.)

Farman, Dan V., Battle Creek, Mich. Crossing-gate. No. 1,271,877; July 9; v. 252; p. 346.

Farman, Elbert H., McKittrick, Cal. Palmetto-root and weed plow. No. 1,271,504; July 2; v. 252; p. 209.

Farmer, Luke W., Somerville, Mass. Paper carton. No. 1,272,409; July 16; v. 252; p. 524.

Farmer, William E. (See Glersdorf and Farmer.)

Farnham, Frank E., Providence, R. I., assignors to The Jewelers' Supply Company, Biddeford, Me. Safety-catch for pins or brooches. No. 1,271,297; July 2; v. 252; p. 154.

Farnsworth, Alfred W., Derby, England. Spring suspension for vehicles. No. 1,273,052; July 16; v. 252; p. 706.

Farnsworth, Frank E., Chief, Mich. Running-gear for motor-vehicles. No. 1,271,298; July 2; v. 252; p. 154.

Farquhar, Henry S., Wayne, Pa. Machine for removing snow and like material. No. 1,272,786; July 16; v. 252; p. 631.

Farrer, William C., and G. Glossop, Sheffield, England. Shears and similar tool. No. 1,273,839; July 30; v. 252; p. 980.

Fassett, Willard O., Alderpoint, Cal. Camp-stove. No. 1,273,840; July 30; v. 252; p. 980.

Fauber, William H., assignor of one-half to J. R. Taylor, Brooklyn, N. Y. Friction device. No. 1,271,878; July 9; v. 252; p. 346.

Faul, Tom. (See Myers, Melvin A., assignor.)

Faul, William. (See Myers, Melvin A., assignor.)

Faure, Elie F. G. H., Erle, Pa., assignor to Burke Electric Company. Switch mechanism. No. 1,271,555; July 9; v. 252; p. 258.

Fawcett, Charles H., Independence, Iowa. Crate-bottom for tombstones. No. 1,272,335; July 9; v. 252; p. 478.

Fay, John, Columbus, N. D. Animal-poke. No. 1,272,932; July 16; v. 252; p. 673.

Fay, Louis D. (See Mardon and Fay.)

Fay, Thomas J., Brooklyn, N. Y., assignor, by mesne assignments, to The Standard Parts Company, Cleveland, Ohio. Internal-combustion engine. No. 1,271,147; July 2; v. 252; p. 111.

Feasel, Harry L., New York, N. Y., assignor to O-So-Ezy Mop Company. Mop and wringer. No. 1,271,301; July 2; v. 252; p. 155.

Feasel, Harry L., New York, N. Y., assignor to O-So-Ezy Mop Company. Mop and wringer. No. 1,271,302; July 2; v. 252; p. 155.

Fedders, John M., assignor to Fedders Manufacturing Company, Inc., Buffalo, N. Y. Radiator unit. No. 1,272,646; July 16; v. 252; p. 592.

Fedders, John M., assignor to Fedders Manufacturing Company, Inc., Buffalo, N. Y. Radiator unit. No. 1,274,026; July 30; v. 252; p. 1032.

Fedders Manufacturing Company. (See Fedders, John M., assignor.)

Federal Rubber Company, The. (See Healy and Frank, assignors.)

Feebusch, Charles P., Kansas City, Mo., and J. O. Roberts, Salina, Kans. Caster. No. 1,271,559; July 9; v. 252; p. 259.

Felss, Richard A., Cleveland, Ohio. Price-slip for piece-work. No. 1,272,243; July 9; v. 252; p. 451.

Feist, Frederick J., Rochester, N. Y., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Rounding and channeling machine. No. 1,271,505; July 2; v. 252; p. 209.

Feld, Benjamin. (See Bridges, William H., assignor.)

Felicetti, John B., Philadelphia, Pa. Manually-propelled armored vehicle. No. 1,273,593; July 23; v. 252; p. 876.

Felt, Charles C. (See Ayers, Frank W., assignor.)

Felt, Willard O., Bradford, Pa. Freezing water. No. 1,271,879; July 9; v. 252; p. 346.

Feltner, Curtis C., Cerro de Pasco, Peru. Pitcher for cans of condensed milk. No. 1,273,594; July 23; v. 252; p. 876.

Feraldi, Louis F. (See Pavlides and Feraldi.)

Ferguson, George E., New York, N. Y., assignor to Pyrene Manufacturing Company. Fire-extinguishing and fireproofing composition. No. 1,271,506; July 2; v. 252; p. 210.

Ferguson, John A., Denver, Colo. Mold for tiles. No. 1,272,647; July 16; v. 252; p. 593.

Ferguson, Joseph B., Newark, N. J. Motor-vehicle. No. 1,272,648; July 16; v. 252; p. 593.

Ferguson, Raymond M., assignor of one-half to D. Laughray, Grand Rapids, Mich. Form for building silo-blocks. No. 1,273,168; July 23; v. 252; p. 763.

Fergusson, Alan R., New York, N. Y. Method of and means for mechanical indexing. No. 1,270,934; July 2; v. 252; p. 51.

Fernandez, José, Los Angeles, Cal. Water-fountain. No. 1,270,935; July 2; v. 252; p. 52.

Ferris, Howard J., assignor to Hunt, Helm, Ferris & Company, Harvard, Ill. Overhead track. No. 1,271,454; July 2; v. 252; p. 195.

Ferris-Stevenson Corporation. (See Adams, Arthur J., assignor.)

Ferris, Thomas H., Brooklyn, N. Y. Plumbing-fitting. No. 1,273,471; July 23; v. 252; p. 843.

Ferris, Walter, assignor to Bucyrus Company, South Milwaukee, Wis. Propelling mechanism for locomotive-cranes and the like. No. 1,273,472; July 23; v. 252; p. 844.

Ferris, Walton C., assignor to National Manufacturing Company, Lincoln, Nebr. Steam-pressure cooker. No. 1,273,347; July 23; v. 252; p. 810.

Field, Oscar S., New York, N. Y., assignor to Hall Switch & Signal Co. Alternating-current relay. No. 1,272,410; July 16; v. 252; p. 524.

Fifield, Albert F., Newark, N. J. assignor to The Singer Manufacturing Company. Sewing-machine. No. 1,273,348; July 23; v. 252; p. 810.

Filbin, James D., Cleveland, Ohio, assignor to Municipal Engineering and Contracting Company. Combined flusher and sprinkler nozzle. No. 1,273,349; July 23; v. 252; p. 810.

Fink, Colin G., and W. E. Koerner, East Orange, N. J., assignors to General Electric Company. Leading-in conductor. No. 1,273,758; July 23; v. 252; p. 919.

Finkelstein, Meyer N., Greenwich, Conn. Lamp. No. 1,273,473; July 23; v. 252; p. 844.

Finn, Charles C., Seattle, Wash. Autographic device for cameras. No. 1,272,029; July 9; v. 252; p. 391.

Firestone Tire & Rubber Company, The. (See Stevens, William C., assignor.)

Fish, Frederick K., Jr., assignor to Lumber Tie and Timber Vulcanizing Company, New York, N. Y. Drier. No. 1,272,649; July 16; v. 252; p. 592.

Fish, Harold, Stratford, assignor to The Ready Tool Company, Bridgeport, Conn. Cutting-tool. No. 1,271,299; July 2; v. 252; p. 154.

Fish, Herbert L., Bakersfield, Cal., assignor, by mesne assignments, to Automatic Electric Company. Automatic telephone-exchange system. No. 1,274,357; July 30; v. 252; p. 1123.

Fisher, Alexander M. (See Evans and Fisher.)

Fisher, Emmett, Quincy, Ill., Sash-fastener. No. 1,273,169; July 23; v. 252; p. 763.

Fisher, Frank E., Detroit, Mich. Means for supporting electric lighting and starting units. No. 1,273,170; July 23; v. 252; p. 763.

Fisher, George F., Roselle, N. J., assignor to The Hartford Rubber Works Co. Tire and making same. No. 1,271,880; July 9; v. 252; p. 347.

Fisher, James P., Bartlesville, Okla. Steam-generator. No. 1,273,596; July 23; v. 252; p. 877.

Fisher, James P., Bartlesville, Okla. Multiple orifice-meter. No. 1,273,597; July 23; v. 252; p. 877.

Fisher, James P., Bartlesville, Okla. Apparatus for separating entrained liquids from gases. No. 1,273,595; July 23; v. 252; p. 876.

Fiske, William G., Purfleet, England. Apparatus for the treatment of paper-stock. No. 1,273,841; July 30; v. 252; p. 980.

Fitts, James L., Pensauken township, Camden county, N. J., assignor to Warren Webster & Company. Means for making elastic vessels. No. 1,271,455; July 2; v. 252; p. 195.

Fitts, Norman V., Denver, Colo. Water-gate. No. 1,272,933; July 16; v. 252; p. 673.

Fitz Gerald, Inez E., Oakland, Cal. Clothes-holder. No. 1,272,244; July 9; v. 252; p. 452.

Fitz Gerald, Ray H., Pittsburgh, Pa. Display-carton. No. 1,272,411; July 16; v. 252; p. 525.

Fitzgerald, G. G. (See Myers, Melvin A., assignor.)

Fitzgerald, Marie E., St. Louis, Mo. Combination library and dressing table. No. 1,272,245; July 9; v. 252; p. 452.

Flack, Theodore J., St. Louis, Mo. Rectal dilator. No. 1,271,456; July 2; v. 252; p. 195.

Flanagan, Edward, Philadelphia, Pa. Smoke-house. No. 1,271,300; July 2; v. 252; p. 154.

Flanagan, James U., assignor to F. F. Slocomb & Co., Incorporated, Wilmington, Del. Method and apparatus for drying skins. No. 1,273,598; July 23; v. 252; p. 877.

Flanigan, John J., assignor to Duplicator Manufacturing Company, Chicago, Ill. Multiple-copying machine. No. 1,272,787; July 16; v. 252; p. 631.

Flanigan, John J., assignor to Duplicator Manufacturing Company, Chicago, Ill. Multiple-copying machine. No. 1,272,788; July 16; v. 252; p. 632.

Flannery Bolt Company. (See Dodds, Ethan I., assignor.)

Flannery Bolt Company. (See Flannery, Stafford, and Dodds, assignors.)

Flannery Bolt Company. (See Gallagher, Peter F., assignor.)

Flannery Bolt Company. (See Lacerda, Harry A., assignor.)

Flannery, John R., B. E. D. Stafford, and E. I. Dodds, assignors to Flannery Bolt Company, Pittsburgh, Pa. Stay-bolt structure. No. 1,271,688; July 9; v. 252; p. 296.

Fleckenstein, Joseph P., Bethlehem, Pa., assignor, by mesne assignments, to Bethlehem Steel Company. Frog. No. 1,271,556; July 9; v. 252; p. 258.

Fleek, William A., Douglas, Alaska. Shaft-coupling. No. 1,274,254; July 30; v. 252; p. 1097.

Fleetwood Metal Body Company. (See Kern, Jacob S., assignor.)

Flegel, Harrison D., Racine, Wis. Serving-fork. No. 1,272,246; July 9; v. 252; p. 452.

Fleischer, Emil, Dresden-Altstadt, Germany. Manufacturing producer-gas. No. 1,273,474; July 23; v. 252; p. 844.

Fletcher, Theodore, San Antonio, Tex. Speed-regulating means. No. 1,271,881; July 9; v. 252; p. 347.

Fleury, Oswald T., Boston, Mass. Safety-razor. No. 1,273,842; July 30; v. 252; p. 981.

Flogerzi, John B., St. Paul, Minn. Master cut-over switch. No. 1,273,211; July 23; v. 252; p. 774.

Flowers, Clarence O., Flint, Mich. Dumping-car. No. 1,271,303; July 2; v. 252; p. 155.

Floyd, Albert R., Huntington, W. Va. Washing apparatus. No. 1,274,027; July 30; v. 252; p. 1033.

Floyd Invalid Lifter Company, The. (See Floyd, Robert L., assignor.)

Floyd, Robert L., assignor to The Floyd Invalid Lifter Company, Staunton, Va. Device for lifting and moving invalids. No. 1,273,599; July 23; v. 252; p. 878.

Floyd, Robert L., assignor to The Floyd Invalid Lifter Company, Staunton, Va. Mechanism for lifting and turning invalids. No. 1,273,600; July 23; v. 252; p. 878.

Floyd, William B., assignor of three-fourths to J. A. McDonald, Fort Worth, Tex. Automatic vaporizing-plug. No. 1,271,304; July 2; v. 252; p. 155.

Flynn, Edmund T., Cambridge, assignor to Cambridge Reversible Life Float, Inc., Boston, Mass. Life-raft. No. 1,272,412; July 16; v. 252; p. 525.

Fogg, Newell T., Sanford, Me. Torpedo-netting. No. 1,271,689; July 9; v. 252; p. 296.

Foley, William V., New Brunswick, N. J. Picture-projecting apparatus. No. 1,273,843; July 30; v. 252; p. 981.

Folkers, Folert, Crichton, assignor to himself and L. E. Campbell, Mobile, Ala. Automatic lubricator. No. 1,271,305; July 2; v. 252; p. 156.

Folmer, William F., assignor to Eastman Kodak Company, Rochester, N. Y. Wind-motor. No. 1,270,803; July 2; v. 252; p. 13.

Folsom, Rufus C. (See Drury and Folsom.)

Foltz, Ira W., Chicago, Ill. Furnace. No. 1,274,155; July 30; v. 252; p. 1069.

Fontaine, Alfred. (See Vincent and Fontaine.)

Fontanelli, Luigi, Ferrara, Italy. Recovering caffein. No. 1,273,054; July 16; v. 252; p. 706.

Fooshee, John J. (See Blauvelt and Fooshee.)

Ford, Ben K., Oak Park, Ill., assignor to American Can Company, New York, N. Y. Making jacketed cans. No. 1,272,789; July 16; v. 252; p. 632.

Ford, Bruce, Philadelphia, Pa. Storage battery. No. 1,271,148; July 2; v. 252; p. 111.

Ford, Bruce, Philadelphia, Pa. Secondary or storage battery. No. 1,271,690; July 9; v. 252; p. 296.

Ford, Bruce, Philadelphia, Pa. Secondary or storage battery. No. 1,271,691; July 9; v. 252; p. 296.

Ford, Bruce, Philadelphia, Pa. Electric storage battery. No. 1,271,692; July 9; v. 252; p. 297.

Ford, Bruce, Philadelphia, Pa. Jar for submarine and like batteries. No. 1,272,247; July 9; v. 252; p. 452.

Ford, Hannibal C., Jamaica, and H. L. Tanner, assignors to Sperry Gyroscope Company, Brooklyn, N. Y. Gyroscopic compass for ships. No. 1,273,759; July 23; v. 252; p. 919.

Ford, Hannibal C., Jamaica, and H. L. Tanner, assignors to The Sperry Gyroscope Company, Brooklyn, N. Y. Gyroscopic compass and controlling the same. No. 1,273,799; July 23; v. 252; p. 930.

Ford, Harriet L., Seattle, Wash. Laundry device. No. 1,271,149; July 2; v. 252; p. 111.

Ford, John H., Webster City, Iowa. Attachment for cultivators. No. 1,271,882; July 9; v. 252; p. 347.

Ford, Stuart M., assignor to The Salt's Textile Manufacturing Company, Bridgeport, Conn. Shuttle for looms. No. 1,272,650; July 16; v. 252; p. 593.

Fore River Shipbuilding Corporation. (See Warriner, Robert, assignor.)

Fornaca, Guido, Turin, Italy, assignor to F. I. A. T. Vehicle brake mechanism. No. 1,271,509; July 2; v. 252; p. 210.

Forsberg, Oscar F. (See Reynolds and Forsberg.)

Forsberg, Peter W., Schenectady, N. Y., assignor to General Electric Company. Electrical system of power transmission and regenerative braking. No. 1,270,804; July 2; v. 252; p. 14.

Forsee, William C., Kansas City, Mo. Washing apparatus. No. 1,271,025; July 2; v. 252; p. 77.

Forsyth, Benjamin F., assignor of seven and one-half one-hundredths to C. M. Griffith, seven and one-half one-hundredths to L. M. Griffith, and forty-two one-hundredths to F. Ziethen, Chicago, Ill. Scaffold. No. 1,271,557; July 9; v. 252; p. 258.

Forsyth, George H., Chicago, Ill. Car-window construction. No. 1,274,028; July 30; v. 252; p. 1033.

Forsyth, George H., Chicago, Ill. Window-screen. No. 1,274,029; July 30; v. 252; p. 1033.

Fort, Emma M., Glidden, Iowa. Thread-holder. No. 1,272,030; July 9; v. 252; p. 392.

Fortescue, Charles L., Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company. Rectifier-equalizing system. No. 1,270,805; July 2; v. 252; p. 14.

Fortescue, Charles L., Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company. Railway signaling system. No. 1,270,806; July 2; v. 252; p. 15.

Foster Brothers Manufacturing Company. (See Foster, William B., assignor.)

Foster Brothers Manufacturing Company. (See Kelly, William J., assignor.)

Foster, Clarence M., Toledo, Ohio. Wrench. No. 1,271,693; July 9; v. 252; p. 297.

Foster, Ernest H., Dongan Hills, assignor to Power Specialty Company, New York, N. Y. Superheater for steam-boilers. No. 1,272,248; July 9; v. 252; p. 452.

Foster, Lewis L., Govans, Md., assignor of one-half to J. H. Ruehmling, Brooklyn, N. Y. Air-compressor. No. 1,272,651; July 16; v. 252; p. 594.

Foster, Peli W., assignor to Power Specialty Company, New York, N. Y. Tube-expander. No. 1,273,475; July 23; v. 252; p. 845.

Foster, William B., assignor to Foster Brothers Manufacturing Company, Utica, N. Y. Movable cushion for couch-hammock backs and the like. No. 1,270,807; July 2; v. 252; p. 15.

Foulkrod, Byron. (See Myers, Melvin A., assignor.)

Foundry Equipment Company, The. (See Coleman, Frederick A., assignor.)

Fow, Raymond S. C., and S. M. Templeton, Philadelphia, Pa., said Fow assignor to said Templeton. Securing apparatus for meat-slicing machines. No. 1,272,934; July 16; v. 252; p. 674.

Fowler, Clarence B., assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone system. No. 1,271,883; July 9; v. 252; p. 348.

Fox, David J., Boston, Mass. Air-moistening device. No. 1,271,306; July 2; v. 252; p. 156.

Foxboro Company, The. (See Bristol, Edgar H., assignor.)

Fraenkell, Eugen J., New York, N. Y. Apparatus for making hollow articles from plastic material. No. 1,273,601; July 23; v. 252; p. 878.

Fragmeier, William O., and O. G. Muhlig, Portland, Oreg. Spike-making device. No. 1,273,760; July 23; v. 252; p. 920.

Franc, Joseph M. E., Lyon, France. Vehicle-spring. No. 1,273,761; July 23; v. 252; p. 920.

Francart, Fernand M., Springdale, Pa. Device for use in connection with the drawing of glass cylinders. No. 1,272,652; July 16; v. 252; p. 594.

France, Arthur G., London, England. Buckle or fastening device for straps, bands, and the like. No. 1,274,030; July 30; v. 252; p. 1034.

Francis, John C., Boston, assignor to Samson Electric Company, Canton, Mass. Thermostatic time cut-out. No. 1,271,558; July 9; v. 252; p. 259.

Franco, John, San Juan Bautista, Cal. Auto-tractor. No. 1,273,350; July 23; v. 252; p. 811.

Frank A. Weeks Mfg. Co. (See Crozier, Michael A., assignor.)

Frank, Arthur A. (See Healy and Frank.)

Franklin, Charles H., Schenectady, N. Y. Rotary tool. No. 1,270,808; July 2; v. 252; p. 15.

Franklin, David J., Columbia, S. C. Air-brake mechanism. No. 1,274,156; July 30; v. 252; p. 1069.

Frantz, Christian, Niagara Falls, N. Y. Grain-separator. No. 1,272,790; July 16; v. 252; p. 632.

Frauenheim, Joseph A., Zellenople, assignor to Kerner Manufacturing Company, Pittsburgh, Pa. Making bolts. No. 1,271,150; July 2; v. 252; p. 111.

Frauenheim, Joseph A., Zellenople, assignor to Kerner Manufacturing Company, Pittsburgh, Pa. Bolt. No. 1,271,151; July 2; v. 252; p. 112.

Frazzano, Frank, Washington, D. C. Bath-tub appliance. No. 1,272,936; July 16; v. 252; p. 674.

Freas, Samuel T., Trenton, N. J., assignor to Henry Disston & Sons, Incorporated, Philadelphia, Pa. Detachable-segment saw. No. 1,274,255; July 30; v. 252; p. 1097.

Freck, Charles B., Asheville, N. C. Closet-bowl. No. 1,271,026; July 2; v. 252; p. 77.

Fred H. Knapp Co. (See Knapp and Dewey, assignors.)

Frederick, Ethelbert R., East Orange, N. J., assignor to Havone Corporation, New York, N. Y. Cigarette-case. No. 1,271,884; July 9; v. 252; p. 348.

Frederick, Halsey A., Hackensack, N. J., assignor to Western Electric Company, New York, N. Y. Telephone-receiver. No. 1,273,351; July 23; v. 252; p. 811.

Frederick Osann Company, The. (See Lyons, Robert L., assignor.)

Fredrickson, Melvin C., Cameron, Wis. Telephone-mouthpiece. No. 1,272,413; July 16; v. 252; p. 525.

Freeman, John R., Providence, R. I. Portable winch. No. 1,270,809; July 2; v. 252; p. 15.

Freer, Phelps M., Detroit, Mich. Rotary gas-engine. No. 1,272,791; July 16; v. 252; p. 633.

Freimark, Otto, Martin, Ohio. Rail-brake. No. 1,273,212; July 23; v. 252; p. 775.

French, James C., Kenosha, Wis., assignor to F. C. Austin, Chicago, Ill. Tunneling-machine. No. 1,272,653; July 16; v. 252; p. 594.

Frey, Herbert H., assignor to Stromberg Motor Devices Company, Chicago, Ill. Carbureter. No. 1,274,256; July 30; v. 252; p. 1097.

Freydberg, Aaron, New York, N. Y. Paste-applying mechanism for fabric-slitting machines. No. 1,271,885; July 9; v. 252; p. 348.

Frick Company. (See Manns, William H., assignor.)

Frick, Joseph L., and H. G. Clemenger, Jamestown, N. Y. Motor traction-car. No. 1,272,935; July 16; v. 252; p. 674.

Frink, Charles H., Northampton, Mass. Repeating device for talking-machines. No. 1,274,157; July 30; v. 252; p. 1069.

Fritts, Kenneth M., Millcreek township, Erie county, Pa. Boring-tool holder. No. 1,271,152; July 2; v. 252; p. 112.

Frohe, Charles F., assignor to Scientific Products Company, Inc., Buffalo, N. Y. Fireproofing and waterproofing composition. No. 1,273,213; July 23; v. 252; p. 775.

Fruited Cereal Company, The. (See Pursell, James P., assignor.)

Frye, Daniel M., Jr., Philadelphia, Pa., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Machine for leveling spring-heel shoes. No. 1,271,694; July 9; v. 252; p. 297.

Fuchs, Herman, St. Louis, Mo. Valve-cap. No. 1,271,695; July 9; v. 252; p. 297.

Fucik, Edward J., assignor to Great Lakes Dredge and Dock Company, Chicago, Ill. Fender for docks. No. 1,270,810; July 2; v. 252; p. 16.

Fudge, John W., Dunkirk, Ind. Auxiliary air-intake. No. 1,272,414; July 16; v. 252; p. 525.

Fuller, Franz A., Newark, N. J., assignor to J. E. Mergott Company, Newark, N. J. Bag-fastener. No. 1,273,352; July 23; v. 252; p. 812.

Fuller, Franz A., assignor to The J. E. Mergott Company, Newark, N. J. Pad holder or case. No. 1,273,353; July 23; v. 252; p. 812.

Fuller, Truman S., Schenectady, N. Y., assignor to General Electric Company. Alloy. No. 1,273,762; July 23; v. 252; p. 920.

Fulton, Charles H., St. Louis, Mo., assignor, by mesne assignments, to Metallurgical Laboratories, Incorporated, Chicago, Ill. Apparatus and method for condensing zinc-vapor. No. 1,271,560; July 9; v. 252; p. 259.

Fulton, Charles H., Cleveland, Ohio, assignor, by mesne assignments, to Metallurgical Laboratories, Incorporated, Chicago, Ill. Roasting ore. No. 1,273,844. July 30; v. 252; p. 981.

Fulton, Samuel M., Pomona, Cal. Refrigerator. No. 1,272,937; July 16; v. 252; p. 675.

Funderburk, Otis C., assignor to Detroit Lubricator Company, Detroit, Mich. Carbureter. No. 1,273,845; July 30; v. 252; p. 981.

Furbush, Frank L., and O. H. Cilley, Westford, assignors to C. G. Sargent's Sons Corporation, Graniteville, Westford, Mass. Feeding mechanism for fibrous material. No. 1,272,654; July 16; v. 252; p. 595.

Furlong, James J., Tacoma, Wash. Eye-shield. No. 1,274,257; July 30; v. 252; p. 1098.

Gage, Roy N., assignor to J. F. Walton, Sturgis, Mich. Adjustable chair. No. 1,271,561; July 9; v. 252; p. 260.

Gall, John F., assignor to The Simmons Manufacturing Company, Kenosha, Wis. Automatic polishing and lacquering machine. No. 1,271,027; July 2; v. 252; p. 78.

Gaines, Erasmus D., Clinton, Iowa. Stylographic lettering instrument. No. 1,271,457; July 2; v. 252; p. 196.

Galsman, Henry J., New York, assignor to Eastman Kodak Company, Rochester, N. Y. Method of and apparatus for producing designations upon photographic material. No. 1,272,415; July 16; v. 252; p. 526.

Gajan, Joseph, New York, N. Y. Non-skid device for automobile-trucks. No. 1,272,938; July 16; v. 252; p. 675.

Galadnkes, John, Lewiston, Me. Drawing device. No. 1,272,792; July 16; v. 252; p. 633.

Gallagher, Emma G., *et al.* (See Schadee, Gustav, assignor.)

Gallagher, Peter F., Baltimore, Md., assignor to Flannery Bolt Company, Pittsburgh, Pa. Stay-bolt connection. No. 1,272,416; July 16; v. 252; p. 526.

Gallup, Rockwell L., and W. G. Wachs, Chicago, Ill., assignors to Barry-Wehmiller Machinery Company, St. Louis, Mo. Bottle-washing machine. No. 1,273,602; July 23; v. 252; p. 878.

Gallup, Rockwell L., and W. G. Wachs, Chicago, Ill., assignors to Barry-Wehmiller Machinery Company, St. Louis, Mo. Bottle-washing machine. No. 1,273,603; July 23; v. 252; p. 879.

Gallup, Rockwell L., and W. G. Wachs, Chicago, Ill., assignors to Barry-Wehmiller Machinery Company, St. Louis, Mo. Bottle-washing machine. No. 1,273,604; July 23; v. 252; p. 879.

Gally, Robert A., assignor to The Baldwin Company, Cincinnati, Ohio. Pumper-spring. No. 1,271,458; July 2; v. 252; p. 196.

Gally, Robert A., assignor to The Baldwin Company, Cincinnati, Ohio. Air-pumper check. No. 1,271,562; July 9; v. 252; p. 260.

Gally, Robert A., assignor to The Baldwin Company, Cincinnati, Ohio. Music-sheet-travel-control perforation. No. 1,271,886; July 9; v. 252; p. 349.

Gally, Robert A., assignor to The Baldwin Company, Cincinnati, Ohio. Pitman and spreader. No. 1,272,249; July 9; v. 252; p. 453.

Gally, Robert A., assignor to The Baldwin Company, Cincinnati, Ohio. Music-player valve-action. No. 1,273,846; July 30; v. 252; p. 982.

Gally, Robert A., assignor to The Baldwin Company, Cincinnati, Ohio. Valve with double throw. No. 1,274,031; July 30; v. 252; p. 1034.

Gammeter, John R., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Rubber-shoe press. No. 1,271,307; July 2; v. 252; p. 156.

Gammon, Benjamin W., Brooklyn, N. Y. Goggles. No. 1,272,939; July 16; v. 252; p. 675.

Ganzel, Charles D., Cleveland, Ohio. Bed-table. No. 1,273,354; July 23; v. 252; p. 812.

Gapko, John, Avella, Pa. Milk-pasteurizer. No. 1,271,153; July 2; v. 252; p. 112.
Garant, Philias, Woburn, Quebec, Canada. Shoe-rack. No. 1,270,811; July 2; v. 252; p. 16.
Gardiner, James I., assignor of one-half to F. G. Guest, Seattle, Wash. Vaporizer. No. 1,273,106; July 16; v. 252; p. 719.
Garford Manufacturing Company, The. (See Mizer, Fred N., assignor.)
Garl, Manious, Akron, Ohio. Automobile-signal. No. 1,271,696; July 9; v. 252; p. 298.
Garman, Raymond H., Wilmette, Ill. Book, &c., for children. No. 1,273,763; July 23; v. 252; p. 920.
Garnett, Walter J., Eastport, Me. Apparatus for extracting oil. No. 1,271,028; July 2; v. 252; p. 78.
Garrett, Berton A., Schenectady, N. Y., assignor to General Electric Company. Coupling. No. 1,273,764; July 23; v. 252; p. 920.
Garrison, Charles, Brookline, Mass. Life-preserver. No. 1,271,154; July 2; v. 252; p. 112.
Gates, Daniel F. (See Davis and Gates.)
Gathmann, Emil, Baltimore, Md. Practice-bomb. No. 1,271,029; July 2; v. 252; p. 79.
Gavin, Joseph A., Brooklyn, N. Y. Waterproof storm-shield. No. 1,273,765; July 23; v. 252; p. 921.
Gawlet, Gregory, Los Angeles, Cal. Loading and unloading machine. No. 1,272,655; July 16; v. 252; p. 595.
Gay, Cassius M., deceased, Los Angeles, Cal.; N. H. Gay, executor. Ice-making apparatus. No. 1,273,055; July 16; v. 252; p. 706.
Gay, Norman H., executor. (See Gay, Cassius M.)
Gear Grinding Machine Company. (See Ward, Frederick A., assignor.)
Gebhart, John C., assignor to The Econometer Co., St. Louis, Mo. Apparatus for measuring ribbon. No. 1,273,766; July 23; v. 252; p. 921.
Gee, David A., Astoria, Oreg. Lock. No. 1,272,417; July 16; v. 252; p. 526.
Gee, William J., Tulse Hill, London, England. Method of and apparatus for drying china or other clay, fullers' earth, pigments, whiting, and the like. No. 1,274,158; July 30; v. 252; p. 1070.
Geist, Harry F., assignor, by mesne assignments, to Webster Electric Company, Racine, Wis. Ignition system. No. 1,271,030; July 2; v. 252; p. 79.
Geist, Harry F., Sumter, S. C., assignor to Splitdorf Electrical Company, Newark, N. J. Ignition device. No. 1,271,155; July 2; v. 252; p. 113.
Gelb, Joseph, New York, N. Y. Electric-arc lamp. No. 1,272,418; July 16; v. 252; p. 526.
Gendron Wheel Company. (See Carmichael, Oral, assignor.)
General Bakelite Company. (See Townsend, Clinton P., assignor.)
General Electric Company. (See Arnold, Benjamin H., assignor.)
General Electric Company. (See Collins, Edgar F., assignor.)
General Electric Company. (See Creighton, Elmer E. F., assignor.)
General Electric Company. (See Fagan, John T., assignor.)
General Electric Company. (See Fink and Koerner, assignors.)
General Electric Company. (See Forsberg, Peter W., assignor.)
General Electric Company. (See Fuller, Truman S., assignor.)
General Electric Company. (See Garrett, Berton A., assignor.)
General Electric Company. (See Hill, Charles H., assignor.)
General Electric Company. (See Hobart, Henry M., assignor.)
General Electric Company. (See Kiefer, Johann, assignor.)
General Electric Company. (See Langmuir, Irving, assignor.)
General Electric Company. (See London, William J. A., assignor.)
General Electric Company. (See Orr, Clark, assignor.)
General Electric Company. (See Parsons, Robert J., assignor.)
General Electric Company. (See Perry, Charles L., assignor.)
General Electric Company. (See Priest, Edward D., assignor.)
General Electric Company. (See Steinmetz, Charles P., assignor.)
General Electric Company. (See Wagner, Paul, assignor.)
General Electric Company. (See White, William C., assignor.)
General Electric Company. (See Whitney, Laurence H., assignor.)
General Electric Company. (See Wolff, Georg, assignor.)
General Electric Company. (See Wright, Gilbert, assignor.)
General Fire Extinguisher Company. (See Loepsinger, Albert J., assignor.)
General Fireproofing Company, The. (See Schaffert, Adolf H., assignor.)
General Motors Company. (See Motherwell, Alexander A., assignor.)
General Railway Signal Company. (See Burke, James, assignor.)
General Railway Signal Company. (See Rekers, Gerret, assignor.)
General Rubber Company. (See Slocum, Edward M., assignor.)
General Reduction Gas and By-Products Company. (See Hornsey, John W., assignor.)
Gentry, Oliver H., Rochester, N. Y. Adjustable coat and hat rack. No. 1,270,936; July 2; v. 252; p. 52.
George, Frederick J. (See Scherer and George.)
George H. Frothingham Company. (See Prescott, Arthur T., assignor.)
George, John H., assignor to Hawthorne Manufacturing Company, Inc., Bridgeport, Conn. Electrical connection. No. 1,273,056; July 16; v. 252; p. 706.
Gerdes, Fred T., Rochester, Ind. Grain-car door. No. 1,274,159; July 30; v. 252; p. 1070.
Gerdom, Clarence, Fort Hancock, N. J., assignor to Ordnance Improvement Company, New York, N. Y. Smokeless-powder charge. No. 1,274,258; July 30; v. 252; p. 1098.
Gerke, William H., St. Paul, Minn. Draft appliance. No. 1,271,563; July 9; v. 252; p. 260.
German, Solomon, Halethorpe, Md. Corn-husking machine. No. 1,273,355; July 23; v. 252; p. 812.
Gero, Victor, Philadelphia, Pa. Tuft-yarn frame for looms. No. 1,272,656; July 16; v. 252; p. 595.
Gerow, William D., and F. O. Prusia, Detroit, Mich. Metallic vehicle-body. No. 1,271,697; July 9; v. 252; p. 298.
Giardino, Anthony, Brockton, Mass. Clasp. No. 1,274,160; July 30; v. 252; p. 1070.
Gibbons, James W., Boston, Mass. Measuring device. No. 1,270,937; July 2; v. 252; p. 52.
Gibbs-Inman Company. (See Gibbs, James D., assignor.)
Gibbs, James D., assignor to Gibbs-Inman Company, Louisville, Ky. Railway-pass. No. 1,274,032; July 30; v. 252; p. 1034.
Gibson, Frederick J., Oakland, Cal. Amusement device. No. 1,272,250; July 9; v. 252; p. 453.
Gibson, Hutton. (See Hrdlar and Gibson.)
Gichner, Frederick S., Washington, D. C. Game apparatus. No. 1,273,847; July 30; v. 252; p. 982.
Giersdorf, Edward L., and W. E. Farmer, Monroe, Nebr. Preheater. No. 1,273,767; July 23; v. 252; p. 921.
Giesman, Harry L. (See Ebner and Giesman.)
Gilberg, Charles G., Chicago, Ill. Tracking device for music-sheets and the like. No. 1,272,793; July 16; v. 252; p. 633.
Gilbert, Alfred C., assignor to The A. C. Gilbert Company, New Haven, Conn. Toy building construction. No. 1,270,812; July 2; v. 252; p. 16.
Gilbert, William. (See Colborn, George L., assignor.)
Gilchrest, James M. and E. F. Graham, Denver, Colo. Automobile-signal. No. 1,274,259; July 30; v. 252; p. 1098.
Gill, John H., Yonkers, N. Y. Spark-plug. No. 1,273,476; July 23; v. 252; p. 845.
Gillam, Joseph E., Salt Lake City, Utah. Mop-wringer. No. 1,273,768; July 23; v. 252; p. 921.
Gillespie, Harvey M., assignor to The P. & M. Company, Chicago, Ill. Rail-anchor. No. 1,273,848; July 30; v. 252; p. 982.
Gilliland, Orra L., Summit, S. D., assignor to National Shock Loader Co., Minneapolis, Minn. Loader. No. 1,272,419; July 16; v. 252; p. 527.
Gilman, Ralph E., Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company. Turbo end bell. No. 1,272,420; July 16; v. 252; p. 527.
Girtanner, Alexander, New York, N. Y., assignor to American Steam Conveyor Corporation, Chicago, Ill. Ash-conveyer. No. 1,272,794; July 16; v. 252; p. 634.
Girtanner, Alexander, and R. H. Miller, St. Louis, Mo., assignors, by mesne assignments, to American Steam Conveyor Corporation, Chicago, Ill. Ash-conveyer system. No. 1,273,849; July 30; v. 252; p. 982.
Given, Guy C., Tamaqua, Pa., assignor to Atlas Powder Company, Wilmington, Del. Producing ammonium perchlorate. No. 1,273,477; July 23; v. 252; p. 845.
Givler, Margaret and R. C., Seattle, Wash. Photographic camera. No. 1,271,156; July 2; v. 252; p. 113.
Givler, Robert C. (See Givler, Margaret and R. C.)
Gleason, Thomas M., Racine, Wis. Portable cradle for bath-tubs. No. 1,273,214; July 23; v. 252; p. 775.
Glenn, William J., Steelton, Ontario, Canada. Relief-valve. No. 1,272,251; July 9; v. 252; p. 453.
Glissenti, Angelo, Brescia, Italy. Apparatus for throwing projectiles. No. 1,272,421; July 16; v. 252; p. 527.
Globe Machine & Stamping Company, The. (See Schroeder and Root, assignors.)
Glossop, George. (See Farrer and Glossop.)
Glover Fuel Economizer Company. (See Glover, Oscar, assignor.)
Glover, Oscar, assignor to Glover Fuel Economizer Company, Incorporated, Louisville, Ky. Fuel-economizer for internal-combustion engines. No. 1,270,938; July 2; v. 252; p. 53.
Goddard, Frederick M., Brooklyn, N. Y. Hedge-trimmer. No. 1,272,795; July 16; v. 252; p. 634.
Godley, Charles E., Detroit, Mich., assignor, by mesne assignments, to Edmunds & Jones Corporation, New York, N. Y. Oil-lamp-font fastener. No. 1,270,939; July 2; v. 252; p. 53.
Godley, Charles E., assignor to Edmunds and Jones Corporation, Detroit, Mich. Lamp-mounting. No. 1,270,940; July 2; v. 252; p. 53.

Godley, Charles E., assignor to Edmunds and Jones Corporation, Detroit, Mich. Switch. No. 1,272,941; July 16; v. 252; p. 676.
Gohmert, Otto A., Yorktown, Tex. Discharge-nozzle. No. 1,272,031; July 9; v. 252; p. 392.
Goldfield, Abraham T., assignor to Spring Valley Wood Products Corporation, Spring Valley, N. Y. Velocipede-horse. No. 1,272,796; July 16; v. 252; p. 634.
Goldie, William, Wilkinsburg, Pa. Reinforcing-bar for concrete construction. No. 1,272,422; July 16; v. 252; p. 528.
Golding, Sebron W., and J. W. Witthause, Price, Utah. Multiple-socket wrench. No. 1,273,774; July 23; v. 252; p. 923.
Goldman, Matthew S., Pittsburgh, Pa. Advertising and educational toy. No. 1,273,605; July 23; v. 252; p. 880.
Goldstein, Louis, Morristown, N. J. Convertible cape, coat, and blanket. No. 1,272,042; July 16; v. 252; p. 676.
Goldthwait, Carl E., Lynn, assignor to C. W. H. Moulton Company, Somerville, Mass. Brace for grated shelves. No. 1,273,215; July 23; v. 252; p. 775.
Good Inventions Co. (See Good, John, assignor.)
Good, John, assignor to Good Inventions Co., Brooklyn, N. Y. Fuel-supply means for combustion-engines. No. 1,273,356; July 23; v. 252; p. 813.
Goodrich, David M., Mount Kisco, N. Y., assignor to United Paper Box Company of America, Inc., Brooklyn, N. Y. Box. No. 1,271,096; July 9; v. 252; p. 298.
Goodrum, Charles L., assignor to Western Electric Company, Incorporated, New York, N. Y. Selector-circuit for automatic and semi-automatic telephone systems. No. 1,273,850; July 30; v. 252; p. 983.
Goodwin, Alfred H., Ripon, Cal. Adjustable jack. No. 1,271,507; July 2; v. 252; p. 210.
Goodwin, Robert B., Memphis, Tenn. Mucilage-container. No. 1,273,478; July 23; v. 252; p. 845.
Goodwin, William M., Central Square, N. Y. Valve-operating means. No. 1,270,941; July 2; v. 252; p. 53.
Goodyear Tire & Rubber Company, The. (See Kraft, Herman T., assignor.)
Goodyear Tire and Rubber Company, The. (See Nall, Edward, assignor.)
Goodyear Tire & Rubber Company, The. (See Upson, Ralph H., assignor.)
Goodyear's Metallic Rubber Shoe Company, The. (See Heiser and Binkle, assignors.)
Goodyear's Metallic Rubber Shoe Company. (See Randall, Chester J., assignor.)
Gordon, Harry L., Chicago, Ill. Wire-stretcher. No. 1,271,564; July 9; v. 252; p. 260.
Gordon, Samuel W., assignor of one-half to H. M. Brant, Newark, N. J. Universal sterilizing stop-cock device. No. 1,272,943; July 16; v. 252; p. 676.
Gore, Frederick W., Huntington, N. Y. Aircraft. No. 1,272,797; July 16; v. 252; p. 634.
Gorr, Walter B., assignor to Skinner Engine Company, Erie, Pa. Compensating valve-gear. No. 1,271,157; July 2; v. 252; p. 114.
Goss Printing Press Company, The. (See Goss, Samuel G., assignor.)
Goss Printing Press Company, The. (See Smith, Ernest J., assignor.)
Goss, Samuel G., Glencoe, assignor to The Goss Printing Press Company, Chicago, Ill. Planographic-printing machine. No. 1,272,032; July 9; v. 252; p. 392.
Gossard, Samuel S., and J. E. Crandall, Belvidere, Ill. Headlight control. No. 1,271,565; July 9; v. 252; p. 260.
Gossard, Samuel S., and J. E. Crandall, Belvidere, Ill. Headlight control. No. 1,271,566; July 9; v. 252; p. 261.
Gosse, Selby, Cambridge, Mass. Propelling apparatus. No. 1,273,216; July 23; v. 252; p. 775.
Gosselin, Benoît J. X., London, England. Bottle and like vessel. No. 1,273,479; July 23; v. 252; p. 845.
Gossell, Henry W. (See Gossell, Louis J. and H. W., assignors.)
Gossell, Louis J. and H. W., near Verndale, Minn. Traction-wheel. No. 1,271,887; July 9; v. 252; p. 349.
Gossett, Joseph A., and J. C. Hewitt, assignors to The Canton Foundry and Machine Company, Canton, Ohio. Adjustable bearing block. No. 1,271,888; July 9; v. 252; p. 350.
Gould & Ash. (See Ash, Charles S., assignor.)
Gould Coupler Company. (See McGary and Sunderland, assignors.)
Gougnard, Henri C. L., Paris, France, assignor, by mesne assignments, to The Linde Air Products Company, Cleveland, Ohio. Electrolyzing apparatus. No. 1,273,357; July 23; v. 252; p. 813.
Government of the United States, The. (See Evans, Louis M., assignor.)
Government of the United States. (See Palmer, Robert C., assignor.)
Gow, Alexander M., Duluth, Minn. Crossover. No. 1,271,510; July 2; v. 252; p. 211.
Gow, Alexander M., Duluth, Minn. Gas-producer. No. 1,272,252; July 9; v. 252; p. 454.
Gowen, Thomas G., Boonville, Ind. Means for preventing whipping out of ends of flags. No. 1,270,813; July 2; v. 252; p. 16.
Graffin, John L., Astoria, N. Y. Apparatus for distillation of coal. No. 1,274,033; July 30; v. 252; p. 1035.
Graham, Ellis F. (See Gilchrest and Graham.)
Graham, Thomas W., Graham, Colo. Friction drive. No. 1,271,158; July 2; v. 252; p. 114.
Graham, William S., assignor to Parlin & Orendorff Company, Canton, Ill. Lister-plow. No. 1,271,031; July 2; v. 252; p. 79.
Gruhn, Thorwald E., et al. (See Vaughan, Henry H., assignor.)
Granger, Frank B., assignor to Hall Borchert Dress Form Company, New York, N. Y. Dress-form. No. 1,271,889; July 9; v. 252; p. 350.
Granger, Frank B., Columbus, Ohio, assignor to Hall-Borchert Dress Form Company, New York, N. Y. Adjustable dress-form. No. 1,271,890; July 9; v. 252; p. 350.
Grant, David, assignor to The Lyman Gun Sight Corporation, Middlefield, Conn. Die mechanism for shaping gun-sights and other articles. No. 1,273,769; July 23; v. 252; p. 922.
Grant, David, assignor to The Lyman Gun Sight Corporation, Middlefield, Conn. Making gun-sights. No. 1,273,770; July 23; v. 252; p. 922.
Gravell, James H., New York, N. Y. Galvanized iron. No. 1,273,358; July 23; v. 252; p. 813.
Gray, Edward E., Aurora, Ill., assignor to Gray Pneumatic Gear Shift Company. Gear-shifting mechanism. No. 1,272,423; July 16; v. 252; p. 528.
Gray National Telautograph Company. (See Tiffany, George S., assignor.)
Gray, Nell, Jr. (See Wadhams, Darius T., assignor.)
Gray Pneumatic Gear Shift Company. (See Gray, Edward E., assignor.)
Great Lakes Dredge and Dock Company. (See Fucik, Edward J., assignor.)
Green, Azaria, St. Paul, Minn. Picture-hanger. No. 1,273,057; July 16; v. 252; p. 706.
Green, Henry M., Kansas City, Mo. Well-cleaning device. No. 1,272,253; July 9; v. 252; p. 454.
Green, J. Birchard, assignor to Chicago Steel and Wire Company, Chicago, Ill. Reel. No. 1,271,308; July 2; v. 252; p. 156.
Green, Percival, San Francisco, Cal. Cable-clamp. No. 1,272,944; July 16; v. 252; p. 676.
Green, William M., Evanston, Ill. Camera. No. 1,272,798; July 16; v. 252; p. 635.
Green, William R., Chicago, Ill. Fire-escape. No. 1,272,254; July 9; v. 252; p. 454.
Greene, Clifford, assignor to The Cincinnati Ball Crank Company, Oakley, Cincinnati, Ohio. Steering reach-rod. No. 1,272,033; July 9; v. 252; p. 393.
Greene, Harold D., Britt, Iowa. Antiskid tire-grip. No. 1,271,699; July 9; v. 252; p. 298.
Greene, Willard C., and L. E. Shaw, East Orange, N. J. Cigar and cigarette holder. No. 1,271,159; July 2; v. 252; p. 114.
Greenman, La Roy, Holland, Mich. Poultry-guard. No. 1,272,657; July 16; v. 252; p. 595.
Greenwood, Edgar, Bradford, and A. Sharp, Manchester, England. Apparatus for use in connection with molding, shaping, or otherwise working dough. No. 1,271,700; July 9; v. 252; p. 299.
Greer, John H., Fort Worth, Tex. Candy-wrapping machine. No. 1,272,799; July 16; v. 252; p. 635.
Greeson, Merion H., Tampa, Fla. Ball-cock. No. 1,271,459; July 2; v. 252; p. 196.
Gregg, Charles N. (See Brienza, Angelo, assignor.)
Gregg, Marjorie T., Boston, Mass. Nethergarment. No. 1,272,034; July 9; v. 252; p. 393.
Gregg, Robert W., assignor to The Elwood Myers Company, Springfield, Ohio. Shoe-shining kit. No. 1,272,424; July 16; v. 252; p. 528.
Gregory, Ralph, Mount Washington, and W. E. Minton, Kansas City, Mo. Oil well-cleaning apparatus. No. 1,271,511; July 2; v. 252; p. 211.
Grelck, William P. M., Lincoln, Nebr. Milk-food product and making the same. No. 1,272,035; July 9; v. 252; p. 393.
Gressett, Joseph B., Jr., Meridian, Miss. Railway-tie. No. 1,273,217; July 23; v. 252; p. 776.
Grether, William, Dayton, Ohio. Portable electric lantern. No. 1,273,851; July 30; v. 252; p. 983.
Greuler, Charles R., Saugus, Mass. Carbureter. No. 1,272,036; July 9; v. 252; p. 393.
Grey Iron Casting Company. (See Coventry, William A., assignor.)
Griffin, Lewis B., Candor, N. Y. Film-rectifier. No. 1,273,359; July 23; v. 252; p. 813.
Griffin, Lorne A., and L. C. Vanderlip, Elkhart, Ind., assignors to American Steam Conveyor Corporation, Chicago, Ill. Suction apparatus for conveyer-conduits. No. 1,271,567; July 9; v. 252; p. 261.
Griffin, Patrick J., Anniston, Ala. Furnace-roof. No. 1,274,034; July 30; v. 252; p. 1035.
Griffith, Claude M., et al. (See Forsyth, Benjamin F., assignor.)
Griffith, James E., Austin, Tex. Chair-cot. No. 1,271,701; July 9; v. 252; p. 299.
Griffith, Leona M., et al. (See Forsyth, Benjamin F., assignor.)
Griffith, Margaret E., Philadelphia, Pa. Receptacle. No. 1,273,480; July 23; v. 252; p. 845.
Grimm, George W., West Hoboken, N. J. Artificial tooth. No. 1,270,942; July 2; v. 252; p. 54.
Grimm, George W., West Hoboken, N. J. Artificial tooth. No. 1,270,943; July 2; v. 252; p. 54.
Grip Nut Company. (See Sharp, William R., assignor.)
Grodl, Charles C. (See Campau, Julian G., assignor.)

Grogan, Edward W., Byers, Tex. Combination fence and repair tool. No. 1,272,658; July 16; v. 252; p. 596.
Groh, Bernard C., assignor to Automatic Electric Company, Chicago, Ill. Automatic telephone system. No. 1,271,032; July 2; v. 252; p. 79.
Groomes, Reid T., Chicago, Ill. Chase-fastening. No. 1,272,659; July 16; v. 252; p. 596.
Gross, Angus R., Baltimore, Md. Blow-torch. No. 1,274,260; July 30; v. 252; p. 1098.
Gross, Conrad C., Pasadena, Cal. Food-baking device. No. 1,271,309; July 2; v. 252; p. 157.
Grove, Anton L., Hot Springs, Mont. Restraining device. No. 1,270,814; July 2; v. 252; p. 17.
Grover, Albert D., New York, N. Y., and E. E. Barber, Malden, Mass., assignors, by mesne assignments, to Autosales Corporation. Coin-refunding device for coin-controlled machines. No. 1,274,261; July 30; v. 252; p. 1099.
Groves, Elmer H. (See Armstrong and Groves.)
Groves, Ray H., assignor of twenty-eight one-hundredths to E. J. Clough and thirty-six one-hundredths to G. W. Percival, Portland, Oreg. Interlocking building-block. No. 1,271,160; July 2; v. 252; p. 114.
Gruenwick, Adolf, American Falls, Idaho. Agricultural implement. No. 1,271,702; July 9; v. 252; p. 209.
Gruenfeldt, Emil, assignor, by mesne assignments, to The Baker R & L Company, Cleveland, Ohio. Steering-gear. No. 1,272,800; July 16; v. 252; p. 635.
Grundmann, Michael G., Faribault, Minn. Shoe-fastening. No. 1,273,360; July 23; v. 252; p. 813.
Gruss, Otto H., Jamaica, assignor to Simplex Photo Products Company, Morris Park, N. Y. Photographic shutter. No. 1,274,262; July 30; v. 252; p. 1099.
Gubbins, John F. (See Settergren, Bernhard, assignor.)
Guest, Francis G. (See Gardiner, James I., assignor.)
Guettler, Herbert, Chicago Ill., and W. L. Davis, Eau Claire, Wis. Barking-drum. No. 1,272,945; July 16; v. 252; p. 677.
Guggenbuehler, Carl, Newark, N. J. Babbitting tool or mold. No. 1,271,810; July 2; v. 252; p. 157.
Gulbert, F. Walter, Detroit, Mich. Forming sheet-metal products. No. 1,271,703; July 9; v. 252; p. 300.
Gundling, Albert, Jersey City, N. J. Acrobatic figure toy. No. 1,272,946; July 16; v. 252; p. 677.
Gustin, Clyde V., Monett, Mo. Roller-skate. No. 1,271,891; July 9; v. 252; p. 350.
Gustin, Clyde V., Monett, Mo. Automobile-headlight. No. 1,273,218; July 23; v. 252; p. 776.
Guthrie, Tracy W., Sewickley, Pa. Method of and apparatus for unloading cars. No. 1,272,425; July 16; v. 252; p. 529.
Gysel, Marvin A., Rochester, N. Y. Signal. No. 1,273,606; July 23; v. 252; p. 880.
H. H. Hoffman & Company. (See Worley, Ernest T., assignor.)
H. H. Mayhew Company. (See Bardwell, Edwin A., assignor.)
H. W. Johns-Manville Company. (See Christenson, George, assignor.)
Haas, Daniel A., Belleville, Ill. Shocker attachment for binders. No. 1,272,426; July 16; v. 252; p. 529.
Haas, Joseph. (See Higgin and Haas.)
Haas, Philip M., Youngstown, Ohio, and F. M. Nair, Beaver Falls, Pa. Bar-cutting machine. No. 1,273,775; July 23; v. 252; p. 923.
Haas, William H., assignor to Murphy Iron Works, Detroit, Mich. Stoker. No. 1,273,481; July 23; v. 252; p. 846.
Haas, William N., and H. C. Young, assignors to Roko Mfg. Co., Denver, Colo. Composition for use with printers' ink. No. 1,273,361; July 23; v. 252; p. 814.
Habesham, Anthony O., Bogota, N. J. Knockdown merry-go-round. No. 1,271,692; July 9; v. 252; p. 350.
Hackett, Paul J., Seattle, assignor to Universal High Power Telephone Company, King county, Wash. Differential microphone. No. 1,274,035; July 30; v. 252; p. 1035.
Hackney, James T., Versailles, Ky. Convertible vehicle-body. No. 1,273,362; July 23; v. 252; p. 814.
Haderlein, Grace A., assignor to Kabo Corset Co., Chicago, Ill. Breast-waist. No. 1,272,427; July 16; v. 252; p. 529.
Hadley, Oliver R., Bradford, N. H. Envelop-closure. No. 1,272,428; July 16; v. 252; p. 529.
Hahl, Augustus L., Chicago, Ill. Secondary-clock movement. No. 1,271,704; July 9; v. 252; p. 300.
Hahn, Earl H., Mallard, Iowa. Motor-cycle starter. No. 1,272,947; July 16; v. 252; p. 677.
Haigh, Harry J., Stapleton, N. Y. Multiple baking-pan. No. 1,270,815; July 2; v. 252; p. 17.
Haigh, Harry J., Stapleton, and I. S. Bodkin, New York, N. Y., said Bodkin assignor to said Haigh. Machine for making baking-pans. No. 1,270,816; July 2; v. 252; p. 17.
Hale, Fred E., Omaha, Nebr., assignor, by mesne assignments, to United States Carburetor Company. Carburetor accessory. No. 1,273,363; July 23; v. 252; p. 814.
Hale, William E., assignor to R. H. Beaumont Company, Philadelphia, Pa. Means for operating overhead valves of cooling apparatus. No. 1,272,037; July 9; v. 252; p. 884.
Haley, Ernest T., Lufkin, Tex. Fireplace-guard. No. 1,273,776; July 23; v. 252; p. 923.
Halford, John H., Bridgeport, Pa., assignor to James Lees and Sons Company. Treating worsted yarn. No. 1,271,893; July 9; v. 252; p. 351.
Hall-Borchert Dress Form Company. (See Granger, Frank R., assignor.)
Hall-Borchert Dress Form Company. (See Kroll, Waldemar, assignor.)
Hall, Harold A., San Jose, Cal. Cylinder for internal-combustion engines. No. 1,274,161; July 30; v. 252; p. 1070.
Hall, Harry G., Atlanta, Ga. Pasteboard tray. No. 1,271,033; July 2; v. 252; p. 80.
Hall, Harry G., Atlanta, Ga. Collapsible box. No. 1,271,034; July 2; v. 252; p. 80.
Hall, Holmes, *et al.* (See May, Harry E., assignor.)
Hall, James H., Lexington, Mo. Chalking-machine. No. 1,273,219; July 23; v. 252; p. 776.
Hall, Jay H., Cleveland, Ohio. Overload apparatus. No. 1,273,101; July 16; v. 252; p. 718.
Hall, Lincoln, Los Angeles, Cal. Label-file. No. 1,271,508; July 2; v. 252; p. 210.
Hall, Royal L., Buffalo township, Marquette county, Wis. Fulcrum-changing machine. No. 1,271,568; July 9; v. 252; p. 261.
Hall, Rupert E., Philadelphia, Pa. Dental articulator. No. 1,271,161; July 2; v. 252; p. 115.
Hall Switch & Signal Co. (See Field, Oscar S., assignor.)
Halladay, Lewis P., Streator, Ill. Bumper. No. 1,273,482; July 23; v. 252; p. 846.
Hallam, Thomas J., Lynn, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Eyeleting-machine. No. 1,271,722; July 9; v. 252; p. 305.
Halleran, Thomas A., Flushing, N. Y. Tire-pump for automobiles. No. 1,273,483; July 23; v. 252; p. 846.
Halsey, Edward S., Albany, N. Y. Automatic absorber-refrigerator. No. 1,273,364; July 23; v. 252; p. 814.
Halsey, James T., deceased, Philadelphia, Pa.; S. M. M. Halsey, administratrix. Brake. No. 1,272,038; July 9; v. 252; p. 394.
Halsey, Sue M. M. (See Halsey, James T.)
Halstead, Hobart, Montclair, N. J. Jewelry. No. 1,271,894; July 9; v. 252; p. 351.
Ham Boiler Corporation. (See Adelmann, Hans, assignor.)
Hamann, J. W. (See Schondelmaier, Charles G., assignor.)
Hamilton, Cameron G., assignor of one-half to C. K. Sturtevant, Seattle, Wash. Combination head-lamp and flash-light. No. 1,274,263; July 30; v. 252; p. 1100.
Hammar, Charles C. R., San Francisco, Cal. Key-pulling device. No. 1,273,484; July 23; v. 252; p. 847.
Hammond, John H., Jr., Gloucester, Mass. Selective electric-wave signaling. No. 1,274,264; July 30; v. 252; p. 1100.
Hammond, John H., jr., Gloucester, Mass. Automatic guide-light for vessels. No. 1,274,265; July 30; v. 252; p. 1100.
Hammond, William P., Boston, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Shoe-rack. No. 1,270,817; July 2; v. 252; p. 18.
Hancock, Albert V., Denver, Colo. Internal-combustion engine. No. 1,271,569; July 9; v. 252; p. 262.
Hancock, John, Philadelphia, Pa. Wire fabric. No. 1,272,660; July 16; v. 252; p. 596.
Handbury, John D., Goshen, Ind. Vehicle-wheel rim. No. 1,272,429; July 16; v. 252; p. 530.
Handel, Ruben, Columbus, Ohio. Violin hand-support. No. 1,271,460; July 2; v. 252; p. 196.
Handler, William, Newark, N. J. Handle. No. 1,272,948; July 16; v. 252; p. 677.
Handy, James O., and R. M. Isham, assignors, by mesne assignments, to Allen S. Davison Company, Pittsburgh, Pa. Refractory and making same. No. 1,270,818; July 2; v. 252; p. 18.
Handy, James O., and R. M. Isham, assignors, by mesne assignments, to Allen S. Davison Company, Pittsburgh, Pa. Refractory material and making same. No. 1,270,819; July 2; v. 252; p. 18.
Handy Manufacturing Company. (See Bergstrom, Oscar, assignor.)
Hanlon, Edward F. (See Wolmer, Hanlon, and Thomson.)
Hanna, Henry O., Oakland, Cal. Vertegraph. No. 1,271,461; July 2; v. 252; p. 197.
Hanna, Leon C., Tampa, Fla., assignor of one-half to J. F. Baldoser, Bushnell, Ill. Explosion-engine. No. 1,272,255; July 9; v. 252; p. 455.
Hanna, Walter H., assignor, by mesne assignments, to Baker-Vawter Company, Benton Harbor, Mich. Account-tray. No. 1,272,699; July 16; v. 252; p. 607.
Hansen, Albert A., Kenmare, N. D. Compressor or terminal for coil-springs. No. 1,271,462; July 2; v. 252; p. 197.
Hansen, Einar, Rjukan, Norway, assignor to Norsk Hydro-Elektrisk Kvaelstofaktieselskab, Christiania, Norway. Apparatus for effecting a continuous crystallization from solutions. No. 1,273,058; July 16; v. 252; p. 707.
Hansen, Hans N., Westbrook, Minn. Sled attachment and propeller for motor-vehicles. No. 1,273,777; July 23; v. 252; p. 924.

Hansen, Hjalmar J., Erie, Pa., assignor to Burke Electric Company. Self-oiling bearing. No. 1,271,570; July 9; v. 252; p. 262.
Hansen, Merritt R., and A. C. Houser, assignors to The Buckeye Steel Castings Company, Columbus, Ohio. Air-operated clamping device. No. 1,274,036; July 30; v. 252; p. 1035.
Hanson, Albert L. (See Hanson, Charles A. and A. L.)
Hanson, Charles A. and A. L., Munising, Mich. Landmark and elevation cap for setting in concrete. No. 1,272,430; July 16; v. 252; p. 530.
Hanson, George A. (See Wilson, Joseph D., assignor.)
Hanson, Hans, Hartford, Conn., assignor, by mesne assignments, to Underwood Computing Machine Company, New York, N. Y. Combined type-writing and computing machine. No. 1,271,311; July 2; v. 252; p. 157.
Hanson, Martin M., Clearwater, Nebr. Revoluble valve for internal-combustion motors. No. 1,274,100; July 30; v. 252; p. 1053.
Hanson, Oscar W., Salina, Kans. Headlight-dimmer. No. 1,273,778; July 23; v. 252; p. 924.
Hard Manufacturing Company. (See Dyett, James H., assignor.)
Harder, William L., Birmingham, Ala. Noiseless railway-crossing. No. 1,271,312; July 2; v. 252; p. 158.
Hardin, Jacques J., Oak Park, assignor to E. F. Sintz, Chicago, Ill. Combustion device. No. 1,271,463; July 2; v. 252; p. 197.
Harding, Carroll R. (See Isaacs and Harding.)
Harding, Charles K., Chicago, Ill. Maintaining electric spark-plug insulators free from conducting-carbon. No. 1,272,431; July 16; v. 252; p. 530.
Hardinge, Harry W., New York, N. Y. Feeder for tube-mills. No. 1,272,801; July 16; v. 252; p. 636.
Hardy, Herman F., Jason, N. C. Bean-harvester. No. 1,271,705; July 9; v. 252; p. 300.
Harlow, Clarence B., assignor to Benjamin Electric Manufacturing Company, Chicago, Ill. Relay. No. 1,272,482; July 16; v. 252; p. 530.
Harmon, William O., La Pryor, Tex. Fastener for anti-skid-chains. No. 1,271,464; July 2; v. 252; p. 198.
Harper, Elbert L., *et al.* (See Nihart, Frank R., assignor.)
Harriett, William F., assignor to E. Doig, executrix, Brooklyn, N. Y. Box-nailing machine. No. 1,271,571; July 9; v. 252; p. 262.
Harris, Arthur W., Erdington, England, assignor to B. F. Wyler, New York, N. Y. Mechanism for controlling carbons of arc-lamps. No. 1,271,162; July 2; v. 252; p. 115.
Harris, Carl C., Orange, Mass. Fulling-mill. No. 1,273,852; July 30; v. 252; p. 984.
Harris, Edward E., Tulsa, Okla. Combined salt and pepper holder. No. 1,273,779; July 23; v. 252; p. 924.
Harris, Emyin, *et al.* (See Owen, Moses, assignor.)
Harris, Joseph D., assignor to McCord Manufacturing Company, Detroit, Mich. Screen for lubricator-pumps. No. 1,271,035; July 2; v. 252; p. 80.
Harrison, Joseph. (See Van Dyke and Harrison.)
Harrod, Linn B., Little Rock, Ark. Carburetor attachment. No. 1,272,433; July 16; v. 252; p. 531.
Hart, George. (See Myers, Melvin A., assignor.)
Hart, Harry S., Chicago, Ill. Dump-car construction. No. 1,273,853; July 30; v. 252; p. 984.
Hart, Orlando W., Fall River, Mass. Roller-bearing. No. 1,270,820; July 2; v. 252; p. 18.
Hart, Orlando W., Fall River, Mass. Antifriction-bearing. No. 1,270,821; July 2; v. 252; p. 18.
Hart, William J., Mount Vernon, N. Y., assignor to Splitdorf Electrical Company, Newark, N. J. Combined engine and dynamo-electric-machine frame. No. 1,272,949; July 16; v. 252; p. 678.
Hartford, Edward V., Deal, N. J. Electrically-operated brake mechanism. No. 1,271,163; July 2; v. 252; p. 115.
Hartford Rubber Works Co., The. (See Fisher, George F., assignor.)
Harvey Hubbell, Inc. (See D'Olier, Henry D., Jr., assignor.)
Harvey, James D., Evanston, and J. W. Tierney, Chicago, Ill. Humidifier for radiators and the like. No. 1,273,780; July 23; v. 252; p. 925.
Harvey, Leonard J., Seattle, Wash. Safety-brake for automobiles and other vehicles. No. 1,272,337; July 9; v. 252; p. 478.
Hasbrouck, John C., Jr., New York, N. Y. Flight retarder or brake for airships. No. 1,274,037; July 30; v. 252; p. 1036.
Hashiguchi, Yoshio, Seattle, Wash. Combined knife and fork. No. 1,272,661; July 16; v. 252; p. 596.
Haskell, Edward H., *et al.* (See Dawes, Robert, assignor.)
Haskell, Walter N. (See Dixon and Haskell.)
Hasler, Harry H., Cresson, Pa. Device for segregating by means of deflecting surfaces. No. 1,270,944; July 2; v. 252; p. 54.
Hastings, Donald T., assignor to Holley Brothers Company, Detroit, Mich. Air-washer. No. 1,272,484; July 16; v. 252; p. 531.
Hastings, Herbert, Rochester, N. Y., assignor to Art in Buttons, Inc. Machine for locating and embossing buttons. No. 1,272,435; July 16; v. 252; p. 531.
Hastings, Herbert, Brighton, assignor to Rochester Manufacturing Co., Inc., Rochester, N. Y. Fluid-gage. No. 1,272,436; July 16; v. 252; p. 532.
Hausmann, Bernard, New York, N. Y. Window. No. 1,272,039; July 9; v. 252; p. 394.
Hauter, William B., assignor to A. F. Meyer Mfg. Co., Morton, Ill. Grain-dump. No. 1,273,854; July 30; v. 252; p. 984.
Havone Corporation. (See Frederick, Ethelbert R., assignor.)
Hawkins, Charles H., Freeport, assignor to Standard Oil Company of New York, New York, N. Y. Candle-making machine. No. 1,271,512; July 2; v. 252; p. 211.
Hawkins, Edgar M., and O. M. Hoch, assignors to M. D. Knowlton Company, Rochester, N. Y. Pressure adjustment for box-staying machines and the like. No. 1,272,802; July 16; v. 252; p. 636.
Hawkins, Harry E. F., Vineland, N. J. Auxiliary air device for internal-combustion engines. No. 1,272,950; July 16; v. 252; p. 678.
Hawks, George R., Lodi, Wis. Traffic-signal. No. 1,273,607; July 23; v. 252; p. 880.
Hawrylasz, Nykyfor, Tarentum, Pa. Aeroplane-protector. No. 1,270,945; July 2; v. 252; p. 54.
Hawthorne Manufacturing Company. (See George, John H., assignor.)
Hawthorne Manufacturing Company. (See Roffy, Joseph T., assignor.)
Hayden, Claude D., Curtis, Nebr. Can-opener. No. 1,271,465; July 2; v. 252; p. 198.
Hayden, Ellis L., Warren, Ohio. Hot-air register. No. 1,271,313; July 2; v. 252; p. 158.
Hayes, Benjamin P., assignor, by mesne assignments, to Automatic Bookkeeping Register Company, Kansas City, Mo. Selecting-bar for adding or like machines. No. 1,271,466; July 2; v. 252; p. 198.
Hayes, Frank, and C. Rupp, assignors to California Walnut Growers Association, Los Angeles, Cal. Nut-cracker. No. 1,272,803; July 16; v. 252; p. 637.
Hayes, George H., Hazelton, Kans. Fuel-heater. No. 1,271,572; July 9; v. 252; p. 262.
Hayes, Hattie R., Salix, Iowa. Device for preventing hens from setting. No. 1,274,266; July 30; v. 252; p. 1101.
Hayes Manufacturing Co. (See Rehbein, Conrad, assignor.)
Hayes, Thomas J., Roslindale, and H. C. Moulton, Dorchester, assignors to Arbetter Felling Machine Company, Boston, Mass. Blindstitch sewing-machine. No. 1,273,855; July 30; v. 252; p. 984.
Haynes Stellite Co. (See Lurker, Edward, assignor.)
Hazard, Henry T., Los Angeles, Cal. Steering mechanism. No. 1,271,706; July 9; v. 252; p. 300.
Hazard, Henry T., Los Angeles, Cal. Bumper. No. 1,272,256; July 9; v. 252; p. 455.
Hazleton, Robert T., and S. Einstein, assignors to The Cincinnati Milling Machine Company, Cincinnati, Ohio. Automatic table-lowerer. No. 1,273,365; July 23; v. 252; p. 815.
Healy, Leon J. D., and A. A. Frank, Milwaukee, assignors to The Federal Rubber Company, Cudahy, Wis. Vulcanizing and molding articles made of rubber and the like. No. 1,272,040; July 9; v. 252; p. 395.
Heap, Jesse J., New York, N. Y., assignor to Union Special Machine Company, Chicago, Ill. Sewing-machine. No. 1,274,162; July 30; v. 252; p. 1071.
Heard, Thomas J., Wilson, Kans. Guard-rail. No. 1,272,437; July 16; v. 252; p. 532.
Hebert, Alfred A., Chippewa Falls, Wis. Sliding door. No. 1,274,267; July 30; v. 252; p. 1101.
Hechenbleikner, Ingenuin, assignor to Chemical Construction Company, Charlotte, N. C. Apparatus for spraying liquids. No. 1,273,856; July 30; v. 252; p. 985.
Hedberg, Peter L., Chicago, Ill. Locking and antisteering device for automobiles. No. 1,271,573; July 9; v. 252; p. 262.
Hedgcock, William C., assignor to American Steel Foundries, Chicago, Ill. Beam for brakes. No. 1,274,163; July 30; v. 252; p. 1071.
Heekin Can Company, The. (See Wentworth, Jesse S., assignor.)
Heideman, Fred J., Detroit, Mich., assignor to Kelvinator Corporation, Wilmington, Del. Compressor for refrigerating apparatus. No. 1,273,366; July 23; v. 252; p. 815.
Heinrich, Stephen J., Newton Highlands, Mass. Air-brush. No. 1,272,438; July 16; v. 252; p. 532.
Heinrichs, Berg, assignor to Mid-West Box Company, Anderson, Ind. Machine for making corrugated board. No. 1,273,367; July 23; v. 252; p. 815.
Heiser, Edward, and P. Binkle, Berlin, Ontario, Canada, assignors to The Goodyear's Metallic Rubber Shoe Company. Combination rubber and leather footwear. No. 1,271,707; July 9; v. 252; p. 301.
Helsey & Co., A. H. (See Sanford, Andrew J., assignor.)
Helbronner, André. (See Recklinghausen, Helbronner, and Henri.)
Helfenstein, Edgar B., Los Angeles, Cal. Paper-padding apparatus. No. 1,273,781; July 23; v. 252; p. 925.
Helle, Warren W., Hinsdale, assignor to Starlte Manufacturing Company, Chicago, Ill. Roller and flexible sheet. No. 1,272,338; July 9; v. 252; p. 479.
Heller, Frederick, Newark, N. J. Jewelry novelty. No. 1,272,257; July 9; v. 252; p. 455.

Heller, Hugo, assignor to Oelwerke Stern Sonneborn Akt. Ges., Cologne, Germany. Softening water. No. 1,273,857; July 30; v. 252; p. 985.
Heller, Milton L., Brooklyn, N. Y. Waistband. No. 1,272,439; July 16; v. 252; p. 533.
Hellmund, Rudolf E., Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company. Circuit-interrupter. No. 1,270,822; July 2; v. 252; p. 19.
Helson, Gilbert F., Bayside, assignor to E. R. Durkee & Co., Elmhurst, New York, N. Y. Wrapper-holder. No. 1,271,314; July 2; v. 252; p. 158.
Hendricks, Emanuel. (See Dunn, William M., assignor.)
Henke, Harold W. and S. H., Lewisham, London, England. Speed-indicator. No. 1,271,467; July 2; v. 252; p. 198.
Henke, Sidney H. (See Henke, Harold W. and S. H.)
Hennell, Robert. (See Myers, Melvin A., assignor.)
Henning, David M., Memphis, Tenn. Bill-form. No. 1,272,258; July 9; v. 252; p. 456.
Henri, Victor. (See Recklinghausen, Helbronner, and Henri.)
Henrikson, Gustaf. (See Henrikson, Otto and G.)
Henrikson, Otto, Minneapolis, Minn., and G. Henrikson, Chicago, Ill. Motor-vehicle. No. 1,274,164; July 30; v. 252; p. 1071.
Henry Disston & Sons. (See Freas, Samuel T., assignor.)
Henry, Frank T., Michigan City, Ind. Bundle or package tie. No. 1,271,895; July 9; v. 252; p. 351.
Henry Hyman & Co. (See Drufva, John T., assignor.)
Hensman, William, Southfields, London, England. Fire-escape. No. 1,273,485; July 23; v. 252; p. 847.
Hentz, Albert G., Collinwood, Ohio, assignor of two-thirds to B. B. Milner, New York, N. Y. Locomotive exhaust apparatus. No. 1,272,662; July 16; v. 252; p. 596.
Hepp, Waldemar. (See Wulf, John W., assignor.)
Herman, Joseph, Peoria, assignor to Keystone Steel & Wire Company, South Bartonville, Ill. Apparatus for drawing wire. No. 1,270,946; July 2; v. 252; p. 54.
Hermann, Arnold, Sharpsburg, Pa. Mathematical puzzle. No. 1,270,947; July 2; v. 252; p. 55.
Hermann, Carl S., Newark, Ohio. Cover for firearms. No. 1,274,268; July 30; v. 252; p. 1101.
Herold, Anthony J., Omaha, Nebr. Clamp. No. 1,272,259; July 9; v. 252; p. 456.
Herr, Herbert T., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Combination gearing and thrust-bearing. No. 1,272,041; July 9; v. 252; p. 395.
Herrimann, George E. (See Tucker, Benjamin W., assignor.)
Hershman, Paul R., Chicago, Ill., assignor to The Mineral Products Company, New York, N. Y. Reduction of metallic oxids. No. 1,273,220; July 23; v. 252; p. 777.
Hertner, John H. (See Cookingham and Hertner.)
Hess, Michael, assignor to International Printing Co. of Indiana, Indianapolis, Ind. Clamp mechanism for box-forming machines. No. 1,272,440; July 16; v. 252; p. 533.
Hewitt, John C. (See Gossett and Hewitt.)
Heys, John J., Lynn, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Machine for molding leather. No. 1,271,315; July 2; v. 252; p. 158.
Hicks, John, Edgeworth, Pa. Container. No. 1,272,951; July 16; v. 252; p. 678.
Higgin, Henry, and C. Traut, assignors to The Higgin Manufacturing Company, Newport, Ky. Screen for revolving windows. No. 1,273,221; July 23; v. 252; p. 777.
Higgin, Henry, and J. Haas, assignors to The Higgin Manufacturing Company, Newport, Ky. Window-screen. No. 1,273,222; July 23; v. 252; p. 777.
Higgin Manufacturing Company, The. (See Higgin and Haas, assignors.)
Higgin Manufacturing Company, The. (See Higgin and Traut, assignors.)
Higgins, George H. (See Jennison and Higgins.)
Higgins, Robert A., Henderson, Colo. Aircraft. No. 1,271,896; July 9; v. 252; p. 352.
Higgs, William A. (See Swan and Higgs.)
Hilberry, John T., Lansdale, Pa. Ironing-table. No. 1,272,441; July 16; v. 252; p. 533.
Hild, Frederic W., Denver, Colo. Dash-pot. No. 1,273,059; July 16; v. 252; p. 707.
Hildebrand, William R., Chicago, Ill. Filter. No. 1,273,608; July 23; v. 252; p. 881.
Hilker, Alexander W., Chicago, Ill. Piston-ring. No. 1,274,038; July 30; v. 252; p. 1036.
Hill, Charles H., Lynn, Mass. Cushion and support for the feet. No. 1,271,468; July 2; v. 252; p. 199.
Hill, Charles H., Schenectady, N. Y., assignor to General Electric Company. Electric switch. No. 1,271,316; July 2; v. 252; p. 159.
Hill, Irving. (See Broderick, George H., assignor.)
Hill, James B., Puente, Cal. Harrow. No. 1,272,260; July 9; v. 252; p. 456.
Hillman, Herbert H., Grand Haven, Mich. Refrigerator. No. 1,272,804; July 16; v. 252; p. 637.
Hills, Sidney C., assignor to The Turner & Seymour Manufacturing Co., Torrington, Conn. Egg-beater. No. 1,273,486; July 23; v. 252; p. 847.
Hilton, Arthur E., assignor to R. Hoe and Co., New York, N. Y. Cutting mechanism. No. 1,273,368; July 23; v. 252; p. 815.
Hiltz, Lawson D., Marysville, New Brunswick, Canada. Blindstitch-tip for shoes. No. 1,273,487; July 23; v. 252; p. 848.
Himmel, Solomon. (See Hormes, William T., assignor.)
Himmel, Solomon. (See Miller, Andrew E., assignor.)
Himmelberger, Richard W., Lebanon, Pa. Receptacle. No. 1,272,443; July 16; v. 252; p. 533.
Hind, Robert R., Honolulu, Hawaii. Rotary cutter. No. 1,273,488; July 23; v. 252; p. 848.
Hinds, Sherwood, Fort Wayne, Ind. Pump-inclosing casing. No. 1,274,039; July 30; v. 252; p. 1036.
Hiniker, Benjamin F., Taft, Cal. Internal rotary spider. No. 1,273,858; July 30; v. 252; p. 985.
Hinners, Frank E., Milwaukee, Wis. Converter-lining. No. 1,272,442; July 16; v. 252; p. 533.
Hinrichsen, Edward E., assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone-exchange system. No. 1,271,897; July 9; v. 252; p. 352.
Hirsch, Alcan and M., New York, N. Y., assignors to Alpha Manufacturing Company. Making metallic cerium and the like. No. 1,273,223; July 23; v. 252; p. 777.
Hirsch, Marx. (See Hirsch, Alcan and M.)
Hitchcock, Ella M., Los Angeles, Cal. Supporter-fastener. No. 1,273,369; July 23; v. 252; p. 816.
Hitchcock, Lewis H., Knoxville, Tenn. Wall-paper machine. No. 1,274,040; July 30; v. 252; p. 1037.
Hitchcock, Reuben, assignor to The Cleveland Folding Machine Company, Cleveland, Ohio. Folding-machine. No. 1,273,609; July 23; v. 252; p. 881.
Hobart, Henry M., Schenectady, N. Y., assignor to General Electric Company. Electric ship propulsion. No. 1,273,782; July 23; v. 252; p. 925.
Hobbs, Willis F., Bridgeport, Conn. Self-fastening ferrule for tool-handles. No. 1,272,042; July 9; v. 252; p. 395.
Hoberg, Frank H., Green Bay, Wis. Paper-pulp machine. No. 1,274,041; July 30; v. 252; p. 1037.
Hoch, Otto M. (See Hawkins and Hoch.)
Hochberger, John, assignor to L. J. Hochberger, Chicago, Ill. Attaching means for bibs. No. 1,273,859; July 30; v. 252; p. 985.
Hochberger, Lillian J. (See Hochberger, John, assignor.)
Hoefle, Hugo F., and G. W. Adams, assignors to Eastman Kodak Company, Rochester, N. Y. Trimming-board. No. 1,270,823; July 2; v. 252; p. 19.
Hoelzer, George J., Oklahoma, Okla. Floor-jack. No. 1,273,489; July 23; v. 252; p. 848.
Hoepner, George, Chicago, Ill. Looper mechanism for sewing-machines. No. 1,270,948; July 2; v. 252; p. 55.
Hoey, John J., Providence, R. I. Tenter-clip. No. 1,272,663; July 16; v. 252; p. 597.
Hoey, John J., Providence, R. I. Tenter-clip. No. 1,273,610; July 23; v. 252; p. 881.
Hoff, Carl P., St. Joseph, Mo. Concrete edging and marking tool combined. No. 1,273,060; July 16; v. 252; p. 707.
Hoff, John A., St. Louis, Mo. Testing aerated-beverage containers. No. 1,272,043; July 9; v. 252; p. 395.
Hoff, Olaf C., *et al.* (See Johannessen, Johan E., assignor.)
Hoffman, Addison F., Pittsburgh, Pa. Recovering sulfur. No. 1,273,370; July 23; v. 252; p. 816.
Hoffman, Arthur H., Ames, Iowa. Charging-regulator for storage batteries. No. 1,273,490; July 23; v. 252; p. 848.
Hogan, Herbert J., Los Angeles, Cal. Aeroplane. No. 1,272,805; July 16; v. 252; p. 637.
Hoke, Harry A., Altoona, Pa. Safety-support for locomotive cross-head guides. No. 1,271,317; July 2; v. 252; p. 159.
Hoke, Harry A., Altoona, Pa. Locomotive-brake. No. 1,272,044; July 9; v. 252; p. 396.
Holcomb & Hoke Mfg. Co. (See McMeans and Tripp, assignors.)
Holcomb & Hoke Manufacturing Company. (See Talbert and Carter, assignors.)
Holdeman, William T., Chicago, Ill. Adjustable connection for switches. No. 1,270,824; July 2; v. 252; p. 19.
Holland-Letz, William, assignor to The Letz Manufacturing Company, Crown Point, Ind. Corn-planter. No. 1,274,062; July 30; v. 252; p. 1042.
Holland, Newman H., assignor to New Jersey Patent Company, West Orange, N. J. Controlling device. No. 1,272,261; July 9; v. 252; p. 456.
Holland, Newman H., assignor to New Jersey Patent Company, West Orange, N. J. Photograph. No. 1,272,262; July 9; v. 252; p. 457.
Holley Brothers Company. (See Hastings, Donald T., assignor.)
Holliday, John S., Wilkinsburg, assignor to The Union Switch & Signal Company, Swissvale, Pa. System for the transmission and distribution of electrical energy. No. 1,272,444; July 16; v. 252; p. 534.
Holliday, John S., Wilkinsburg, assignor to The Union Switch & Signal Company, Swissvale, Pa. Circuit-controlling device. No. 1,272,445; July 16; v. 252; p. 534.
Holmes, Fred E., Detroit, Mich. Lamp. No. 1,271,574; July 9; v. 252; p. 263.
Holmes, George A., Newton Center, assignor to F. Joy, Winchester, Mass. Stud for snap-fasteners. No. 1,273,491; July 23; v. 252; p. 848.

Holmes, Major E., Lakewood, Ohio, assignor, by mesne assignments, to National Carbon Company, Inc. Electric-battery depolarizer. No. 1,272,952; July 16; v. 252; p. 678.
Holmström, Carl, deceased, Westminster, London, England; K. A. Holmström, executrix. Breech-loading ordnance. No. 1,273,860; July 30; v. 252; p. 985.
Holmström, Katherine A., executrix. (See Holmström, Carl.)
Holstein, Alexander, Philadelphia, Pa. Snap-fastener. No. 1,272,806; July 16; v. 252; p. 637.
Holt Auto Devices Company. (See Holt, Edward E., assignor.)
Holt, Edward E., assignor to Holt Auto Devices Company, Chicago, Ill. Pneumatic valve. No. 1,271,898; July 9; v. 252; p. 352.
Holt, Oscar, Rothsay, Minn. Potato-cutting machine. No. 1,274,042; July 30; v. 252; p. 1037.
Holth, Sophus K., Edinburg, N. D. Sled. No. 1,271,709; July 9; v. 252; p. 301.
Holtz, Peter H., Detroit, Mich. Carbureter. No. 1,272,953; July 16; v. 252; p. 678.
Hooker, James. (See Hooker, Willis L., assignor.)
Hooker, William, Aldershot, England. Atmospheric gas-burner. No. 1,272,263; July 9; v. 252; p. 457.
Hooker, Willis L., Scottsburg, assignor of one-ninth to J. Hooker, Indianapolis, Ind. Power-transmitting means. No. 1,270,825; July 2; v. 252; p. 20.
Hoole Machine & Engraving Works. (See Werle, John F., assignor.)
Hooper, Franklin P., Rapid City, S. D. Charge-forming device for explosive-engines. No. 1,272,264; July 9; v. 252; p. 457.
Hooper, Frederick E. (See White and Hooper.)
Hopf, Rudolph A., and C. Maas, New York, N. Y. Joint for doll-heads and the like. No. 1,273,061; July 16; v. 252; p. 707.
Hopkins, Marcus C., Jersey City, N. J., assignor, by mesne assignments, to Lektophone Corporation, New York, N. Y. Sound-regenerating machine. No. 1,271,527; July 2; v. 252; p. 215.
Hopkins, Marcus C., assignor, by mesne assignments, to Lektophone Corporation, New York, N. Y. Sound-regenerating machine. No. 1,271,528; July 2; v. 252; p. 216.
Hopkins, Marcus C., assignor, by mesne assignments, to Lektophone Corporation, New York, N. Y. Acoustic device. No. 1,271,529; July 2; v. 252; p. 216.
Hoque, James V., Long Beach, Cal. Automobile-signal. No. 1,273,611; July 23; v. 252; p. 881.
Hormes, William T., Govans, assignor to S. Himmel, Baltimore, Md. Caster. No. 1,274,165; July 30; v. 252; p. 1072.
Horn, Charles A., New York, N. Y., assignor of one-fourth to W. E. Rundle, East Orange, and one-fourth to H. E. Lombard, Bloomfield, N. J. Automatic furnace-grate. No. 1,271,710; July 9; v. 252; p. 301.
Horn, Ernest H., assignor to Waterbury Clock Co., Waterbury, Conn. Gearing unit for time-trains. No. 1,271,318; July 2; v. 252; p. 159.
Horn, Jacob S., Muenster, Tex. Broom-rack. No. 1,272,265; July 9; v. 252; p. 457.
Horn, Mary C., Muenster, Tex. Preparing carrot flakes. No. 1,272,266; July 9; v. 252; p. 457.
Horne, James. (See Dawson and Horne.)
Horne, James A., Denver, Colo., assignor, by mesne assignments, to E. L. Clover. Propelling mechanism. No. 1,274,043; July 30; v. 252; p. 1038.
Horne, James A., Denver, Colo. Propelling mechanism. No. 1,274,044; July 30; v. 252; p. 1038.
Horning, Herman G., New York, N. Y. Spark-plug. No. 1,272,954; July 16; v. 252; p. 679.
Hornsey, John W., Summit, N. J., assignor to General Reduction Gas and By-Products Company. Making producer-gas. No. 1,270,949; July 2; v. 252; p. 55.
Horst, Szczepan and W., Buffalo, N. Y. Fire-alarm box. No. 1,271,469; July 2; v. 252; p. 199.
Horst, Waclaw. (See Horst, Szczepan and W.)
Horstman, Herman D., Syracuse, Nebr. Burial-vault. No. 1,271,708; July 9; v. 252; p. 301.
Horton, Aaron. (See Cline and Horton.)
Horton, Bryson D., Detroit, Mich. Connector. No. 1,273,224; July 23; v. 252; p. 778.
Horton, Bryson D., Detroit, and F. Zenker, Highland Park, assignors to Detroit Fuse & Mfg. Company, Detroit, Mich. Connector. No. 1,275,225; July 23; v. 252; p. 778.
Horton, Charles S., Huntley, Mont. Glare-deflector. No. 1,273,934; July 30; v. 252; p. 1008.
Horton, Robert E., Albany, N. Y. Pipe-joint. No. 1,272,267; July 9; v. 252; p. 458.
Horváth, Charles, New Brunswick, N. J. Combination button-fastener and eyeleting tool. No. 1,271,711; July 8; v. 252; p. 302.
Hotham, John, Fort Pierce, Fla. Fork. No. 1,274,358; July 30; v. 252; p. 1123.
Hotsinpiller, Rolandus G., Bridgeport, Ill. Transmission-gearing. No. 1,271,319; July 2; v. 252; p. 160.
Hough, Charles R., Washington, D. C. Wind-shield attachment. No. 1,272,955; July 16; v. 252; p. 679.
Houghton, Orley C., assignor to F. C. Austin, Chicago, Ill. Motor-driven vehicle. No. 1,270,826; July 2; v. 252; p. 20.
House, George E., *et al.* (See Ebeling, Charles W., assignor.)
Houseman, Charles, Rochester, assignor to Underwood Typewriter Co., New York, N. Y. Printing-machine. No. 1,270,827; July 2; v. 252; p. 21.
Houser, Alfred C. (See Hansen and Houser.)
Housekeeper, William G., Philadelphia, Pa., assignor to Western Electric Company, Incorporated, New York, N. Y. Electric conductor. No. 1,271,320; July 2; v. 252; p. 160.
Hovland, Henry, East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Impulse-transmitter. No. 1,271,164; July 2; v. 252; p. 116.
Howard, Frank H., Reading, Pa. Chain-link-forming machine. No. 1,271,165; July 2; v. 252; p. 116.
Howard, Frank W., New York, N. Y. Umbrella. No. 1,273,861; July 30; v. 252; p. 986.
Howard, Henry, Brookline, and F. G. Stantial, Melrose, Mass. Recovering sulfur dioxid from furnace-gases. No. 1,271,899; July 9; v. 252; p. 352.
Howard, Leonye V. (See Buckman, Ignatus, assignor.)
Howe, James A., assignor to Taylor Instrument Companies, Rochester, N. Y. Instrument-housing support. No. 1,272,448; July 16; v. 252; p. 535.
Howe, Perley G., and A. R. Lambert, Anderson, Ind. Motor-vehicle tire-engine. No. 1,272,956; July 16; v. 252; p. 679.
Howe, William T., Macon, Mo. Combination wagon-bed and hay-frame. No. 1,273,226; July 23; v. 252; p. 778.
Howes, Benjamin A. (See English, Arthur L., assignor.)
Hren, Joseph, Kingston, N. Y. Slicing and wrapping machine. No. 1,273,227; July 23; v. 252; p. 778.
Hribar, Joe, Waukegan, and H. Gibson, North Chicago, Ill. Clutch. No. 1,272,268; July 9; v. 252; p. 458.
Hubbard, William, Rochester, N. Y., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Finishing heels. No. 1,273,062; July 16; v. 252; p. 708.
Hubbard, William, Rochester, N. Y., assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for finishing heels. No. 1,273,063; July 16; v. 252; p. 708.
Hubbard, William, Rochester, N. Y., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Heel. No. 1,273,492; July 23; v. 252; p. 849.
Huber, Charles J. (See Morey and Huber.)
Huber Mfg. Co. (See Crane, Henry H., assignor.)
Huber, Werner, Zurich, Switzerland. Automobile-towing device. No. 1,273,064; July 16; v. 252; p. 708.
Huber, William E., East Cleveland, assignor to The Electric Railway Improvement Company, Cleveland, Ohio. Bonding rails. No. 1,273,493; July 23; v. 252; p. 849.
Hudry, John, Hazleton, Pa. Combined velocipede, go-cart, and sled. No. 1,274,045; July 30; v. 252; p. 1038.
Hudziak, Albert, Frontier, Wyo. Soldier's protector. No. 1,273,371; July 23; v. 252; p. 816.
Huff, Russell, assignor to Packard Motor Car Company, Detroit, Mich. Control device. No. 1,270,828; July 2; v. 252; p. 21.
Huffer, Simon, Decatur, Ill. Sanitary hand-spray. No. 1,274,269; July 30; v. 252; p. 1101.
Huffman, Charles C., assignor to Sunbeam Chemical Company, Chicago, Ill. Universal blue dye and producing the same. No. 1,274,046; July 30; v. 252; p. 1038.
Huffman, Charles C., assignor to Sunbeam Chemical Company, Chicago, Ill. Universal yellow dye and producing the same. No. 1,274,047; July 30; v. 252; p. 1039.
Huffman, Charles C., assignor to Sunbeam Chemical Company, Chicago, Ill. Universal brown dye and producing the same. No. 1,274,048; July 30; v. 252; p. 1039.
Huffman, Charles C., assignor to Sunbeam Chemical Company, Chicago, Ill. Universal red dye and producing the same. No. 1,274,049; July 30; v. 252; p. 1039.
Hughes, William. (See Paulett, Jones, and Hughes.)
Humburg, Jacob H., Mount Angel, Oreg. Hinge for stile-doors. No. 1,271,900; July 9; v. 252; p. 352.
Hume, Robert F., Lima, Ohio. Incubator. No. 1,274,166; July 30; v. 252; p. 1072.
Humiston, Dawson M., Aurora, Ill. Slitting and winding machine. No. 1,273,228; July 23; v. 252; p. 778.
Hummel, John W., and F. W. Uhde, Philadelphia, Pa. Tire. No. 1,272,664; July 16; v. 252; p. 597.
Humphrey, Alexander F., and R. C. Michaels, assignors of one-fifth to W. L. Swartz, Pittsburgh, Pa. Flush-tank valve. No. 1,272,957; July 16; v. 252; p. 680.
Humphrey Gas Pump Company. (See Humphrey, Herbert A., assignor.)
Humphrey Gas Pump Company. (See Humphrey and Rusdell, assignors.)
Humphrey, Herbert A., London, and W. J. Rusdell, Dudley, England, assignors to Humphrey Gas Pump Company. Utilizing an expansive force. No. 1,271,712; July 9; v. 252; p. 302.
Humphrey, Herbert A., London, England, assignor to Humphrey Gas Pump Company. Utilizing an expansive force in the movement of liquid. No. 1,272,269; July 9; v. 252; p. 458.
Hunt, George H., Monroe Center, Ill. Automobile storm-awning. No. 1,272,958; July 16; v. 252; p. 680.
Hunt, Helm, Ferris & Company. (See Ferris, Howard J., assignor.)
Hunter, George C., Cleveland, Ohio. Machine for sharpening saws. No. 1,272,339; July 9; v. 252; p. 479.
Hupp Motor Car Corporation. (See Watts, Frank E. assignor.)

Hurlbrink, Ernst, Berlin-Friedenau, Germany. Two-stroke-cycle internal-combustion engine. No. 1,273,229; July 23; v. 252; p. 779.
Hurst, Samuel, Werneth, Oldham, England. Flat brushing or cleaning arrangements for carding-engines and such like. No. 1,272,045; July 9; v. 252; p. 396.
Hutchins, Constantine, *et al.*, Trustees. (See Callan, John G., assignor.)
Hutchins, Otis, assignor to The Carborundum Company, Niagara Falls, N. Y. Production of silicon tetrachlorid. No. 1,271,713; July 9; v. 252; p. 302.
Hutton, Louis P., Orlando, Fla. Chimney-cap. No. 1,271,166; July 2; v. 252; p. 116.
Hydraulic Pressed Steel Company, The. (See Davidson, Harry O., assignor.)
Iamonaco, Angelo M., Rochester, N. Y. Steam-cooker. No. 1,272,046; July 9; v. 252; p. 396.
Ibaraki, Tamejiro, South Bethlehem, Pa. Carpenter's marking-line. No. 1,271,470; July 2; v. 252; p. 199.
Ideal Specialties Manufacturing Corporation. (See Oppenheim, Leo, assignor.)
Ilieff, Ilion, Washington, D. C. Resilient wheel. No. 1,272,807; July 16; v. 252; p. 638.
Illinois Publishing and Printing Company. (See Lamphere, Charles S., assignor.)
Imbriani, Ralph, Brooklyn, assignor of one-half to N. Cypher, New York, N. Y. Shoe-rack. No. 1,273,494; July 23; v. 252; p. 849.
Imhoff, John H., Chazy, N. Y., assignor, by mesne assignments, to Johnson Automobile Lock Co., Chicago, Ill. Gear-shift and ignition lock. No. 1,272,449; July 16; v. 252; p. 535.
Imhoff, John H., assignor, by mesne assignments, to Johnson Automobile Lock Co., Chicago, Ill. Gear-lock. No. 1,273,372; July 23; v. 252; p. 816.
Imperial Brass Manufacturing Company, The. (See Woods, Joseph M., assignor.)
Independent Button Fastener Machine Company. (See Snelerson, Samuel L., assignor.)
Indiana Manufacturing Company, The. (See MacGregor, Wallace F., assignor.)
Individual Drinking Cup Company. (See Luellen, Lawrence W., assignor.)
Industrial Poured Concrete House Co. (See Bachman, Robert A., assignor.)
Inglese, Albert, San Francisco, Cal. Geometric wood-carver. No. 1,274,270; July 30; v. 252; p. 1101.
Inlaid Company, The. (See Butler, David H., assignor.)
International Casement Company. (See Ellison, Edward H., assignor.)
International Conveyor Corporation. (See Stuart, Francis L., assignor.)
International Cork Company. (See Alberti, Emilio, assignor.)
International Harvester Company of New Jersey. (See Benjamin, Bert R., assignor.)
International Harvester Company of New Jersey. (See Burgess, Edward W., assignor.)
International Harvester Company of New Jersey. (See Raney and Benjamin, assignors.)
International Money Machine Company. (See Mann, Miles H., assignor.)
International Motor Company. (See Masury, Alfred F., assignor.)
International Paper Company. (See Lombard, Nathaniel, assignor.)
International Precipitation Company. (See Nestell, Raymond J., assignor.)
International Printing Co. of Indiana. (See Hess, Michael, assignor.)
Interstate Electric Novelty Company. (See Janovsky, Arnost, assignor.)
Iredale, Thomas E., *et al.* (See Calkins, Almon B., assignor.)
Ireland, Alfred E., Sharon Hill, Pa., assignor to Simmons Manufacturing Company, Kenosha, Wis. Mattress-frame. No. 1,270,829; July 2; v. 252; p. 21.
Ireland, A. Bertsell and F. L., Norwich, N. Y. Cutting and folding machine. No. 1,273,495; July 23; v. 252; p. 849.
Ireland, Frank L. (See Ireland, A. Bertsell and F. L.)
Isaacs, John D., New York, and C. R. Harding, Brooklyn, N. Y. Railway-switch mechanism. No. 1,274,271; July 30; v. 252; p. 1102.
Isaacson, Fred A., Topeka, Kans. Locomotive-truck. No. 1,272,450; July 16; v. 252; p. 535.
Iseri, Robert K., Sacramento, Cal. Set of bookkeeping-records. No. 1,271,167; July 2; v. 252; p. 116.
Isham, Robert M. (See Handy and Isham.)
Isom, Walter L., Crows Landing, Cal. Grain-reclaimer. No. 1,272,665; July 16; v. 252; p. 597.
Isom, Walter L., Crows Landing, Cal. Mechanical hay-shocker. No. 1,272,666; July 16; v. 252; p. 597.
Ittner, Martin H., Jersey City, N. J. Hydrogenating oily material containing unsaturated bodies. No. 1,271,575; July 9; v. 252; p. 263.
Ittner, Martin H., Jersey City, N. J. Hydrogenation of unsaturated bodies. No. 1,271,576; July 9; v. 252; p. 264.
Ives, Herbert E., Philadelphia, Pa., assignor to Bausch & Lomb Optical Company, Rochester, N. Y. Apparatus for and method of testing visual acuity. No. 1,270,830; July 2; v. 252; p. 21.
Iwagemi, Echi R., Chicago, Ill. Photo-camera. No. 1,273,373; July 23; v. 252; p. 817.

J. Henry Koenling Company, The. (See Von Wahlde and Stiens, assignors.)
J. E. Mergott Company. (See Fuller, Franz A., assignor.)
J. F. Sturdy's Sons Co. (See Burgess, Frederick G., assignor.)
J. F. Sturdy's Sons Co. (See Eklund, Axel G., assignor.)
J. G. Wilson Corporation. (See Sutton, Woodruff, assignor.)
J. H. Sager Company. (See Sager, Clinton M., assignor.)
J. R. Palmenberg's Sons. (See Palmenberg, Emil T., assignor.)
J. S. Young & Company. (See Warkup, Herbert, assignor.)
Jabelonsky, Carl H., Spokane, Wash. Corner reinforcement and protector. No. 1,273,612; July 23; v. 252; p. 882.
Jackson, George. (See Clarke and Jackson.)
Jackson, George F., Mount Pleasant, Tex. Railway-frog. No. 1,274,050; July 30; v. 252; p. 1039.
Jackson, Nelson, Neepawa, Manitoba, Canada. Sheaf-loader. No. 1,273,065; July 16; v. 252; p. 708.
Jackson, Ralph G., Chester, assignor to The Congoleum Company, Philadelphia, Pa. Wrapping for floor-coverings. No. 1,272,047; July 9; v. 252; p. 397.
Jackson, Ray P., Edgewood Park, Pa., assignor to Westinghouse Electric and Manufacturing Company. Static protective apparatus. No. 1,270,881; July 2; v. 252; p. 22.
Jacob Haish Company. (See Anderson, Martin E., assignor.)
Jacobs, Harry M., Schenectady, N. Y., assignor, by mesne assignments, to Union Switch and Signal Company. Slow-acting sectionalizing device. No. 1,272,446; July 16; v. 252; p. 534.
Jacobs, Harry M., Schenectady, N. Y., assignor, by mesne assignments, to Union Switch and Signal Company. System for the transmission and distribution of electrical energy. No. 1,272,447; July 16; v. 252; p. 535.
Jacobs, Isidor M., Kansas City, and W. Cramer, assignors, by mesne assignments, to Truck, Tractor and Manufacturing Company, St. Louis, Mo. Mechanical movement and power-transformer. No. 1,273,613; July 23; v. 252; p. 882.
Jacobs, Isidor M., Kansas City, and W. Cramer, assignors, by mesne assignments, to Truck, Tractor and Manufacturing Company, St. Louis, Mo. Support for gasolene-tanks in motor-vehicles. No. 1,273,614; July 23; v. 252; p. 882.
Jacobs, Isidor M., Kansas City, and W. Cramer, assignors, by mesne assignments, to Truck, Tractor and Manufacturing Company, St. Louis, Mo. Adjustable brake-rigging for motor-vehicles. No. 1,273,615; July 23; v. 252; p. 882.
Jacobs, Isidor M., Kansas City, and W. Cramer, assignors, by mesne assignments, to Truck, Tractor and Manufacturing Company, St. Louis, Mo. Adjustable hood for motor-vehicles. No. 1,273,616; July 23; v. 252; p. 882.
Jacobs, Isidor M., Kansas City, and W. Cramer, assignors to Truck, Tractor and Manufacturing Company, St. Louis, Mo. Dashboard-anchor for motor-vehicles. No. 1,273,617; July 23; v. 252; p. 883.
Jacobsen, Ernest, Melbourne, Victoria, Australia. File for correspondence, &c. No. 1,273,862; July 30; v. 252; p. 986.
Jacobson, Arthur G., and A. J. Brown, Chicago, Ill. Permutation-padlock. No. 1,274,051; July 30; v. 252; p. 1039.
Jacobus, David S., Jersey City, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Steam-boiler. No. 1,272,667; July 16; v. 252; p. 597.
Jaeger, Charles. (See Berko, Emile, assignor.)
Jaeger, Jonathan K., Fenwood, Saskatchewan, Canada. Engine. No. 1,271,471; July 2; v. 252; p. 200.
Jahn, Berthold, New Britain, Conn., assignor to Public Service Cup Company, Brooklyn, N. Y. Dispensing device. No. 1,272,668; July 16; v. 252; p. 598.
Jakobson, Max, New York, N. Y. Bomb-shield for ships, buildings, and other structures. No. 1,271,472; July 2; v. 252; p. 200.
James Lees and Sons Company. (See Halford, John H., assignor.)
James Manufacturing Company. (See Shodron, John G., assignor.)
Jander, Henry, Brooklyn, N. Y. Portable truck for feeding trays to ovens. No. 1,272,048; July 9; v. 252; p. 397.
Jandos, Pauline, Chicago, Ill. Medical instrument. No. 1,273,066; July 16; v. 252; p. 709.
Jandron, Alphonse, Marquette, Mich. Automobile-signal. No. 1,273,230; July 23; v. 252; p. 779.
Jandus Arc Lamp & Electric Company, The. (See Denman-Jones, Adrian, assignors.)
Janovsky, Arnost, assignor to Interstate Electric Novelty Company, Brooklyn, N. Y. Trench flash-light. No. 1,272,808; July 16; v. 252; p. 638.
Jarmuth, Adolph J., Seattle, Wash., assignor to E. S. Bennett, New York, N. Y. Gold-saving apparatus. No. 1,271,714; July 9; v. 252; p. 302.
Jarvik, Jacob, New York, N. Y. Lambrequin. No. 1,272,959; July 16; v. 252; p. 680.
Järvlö, William, West Quincy, Mass. Automatic chalk-line holder. No. 1,272,270; July 9; v. 252; p. 459.

Jay, Edward G., Jr., Philadelphia, Pa., assignor to Warren Webster & Company. Method of setting meters and means therefor. No. 1,271,901; July 9; v. 252; p. 353.
Jay, Edward G., Jr., Philadelphia, Pa., assignor to Warren Webster and Company. Chart-drum for recording apparatus. No. 1,272,960; July 16; v. 252; p. 680.
Jeannetaud, Joseph, Dubuque, Iowa. Electric clothes-presser. No. 1,271,577; July 9; v. 252; p. 264.
Jeavons, William R., Cleveland, Ohio. Apparatus for cooking. No. 1,271,168; July 2; v. 252; p. 117.
Jeavons, William R., and A. R. Whittaker, Cleveland, Ohio. Oil-stove. No. 1,271,169; July 2; v. 252; p. 117.
Jefferies, Frederick L., and W. Spain, Riverside, Ill., assignors to Corn Products Refining Company. Apparatus for drying bottles. No. 1,272,346; July 9; v. 252; p. 481.
Jeffers, Jesse, assignor to The Whitin Machine Works, Whitinsville, Mass. Quiller. No. 1,272,669; July 16; v. 252; p. 598.
Jeffrey Manufacturing Company, The. (See Levin, Nils D., assignor.)
Jellinek, Charles, and D. Stern, New York, N. Y. Chair. No. 1,271,170; July 2; v. 252; p. 118.
Jenkins, Alexander F., assignor to The Alexander Milburn Company, Baltimore, Md. Cutting and welding torch. No. 1,274,052; July 30; v. 252; p. 1040.
Jenkins, Alexander F., Baltimore, Md. Cutting and welding torch. No. 1,274,053; July 30; v. 252; p. 1040.
Jenkins, George W., St. Louis, Mo. Agricultural implement. No. 1,273,496; July 23; v. 252; p. 850.
Jenkins, Henry A., Fayetteville, N. C. Fin for vessels. No. 1,271,036; July 2; v. 252; p. 81.
Jenkins, John T. (See Briggs and Jenkins.)
Jennings, David J., Cleveland, Ohio. Mandrel for forming paper receptacles. No. 1,273,497; July 23; v. 252; p. 850.
Jennings, Oliver S., Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company. Revolving fan. No. 1,270,832; July 2; v. 252; p. 22.
Jennings, Oliver S., Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company. Revolving fan. No. 1,270,833; July 2; v. 252; p. 22.
Jennings, Victor H., Worcester, Mass., assignor to Universal Patents Company, Woonsocket, R. I. Woven carrier. No. 1,273,790; July 23; v. 252; p. 927.
Jennison, Jesse, and G. H. Higgins, Cortland, N. Y. Manufacturing tops and lows for same. No. 1,272,451; July 16; v. 252; p. 536.
Jensen, George C., Oakland, Cal. Locking unit for levers. No. 1,270,834; July 2; v. 252; p. 22.
Jensen, George C., Oakland, Cal. Lever-locking unit. No. 1,271,902; July 9; v. 252; p. 353.
Jensen, George C., Oakland, Cal. Lever structure and lock for same. No. 1,271,903; July 9; v. 252; p. 354.
Jentzer, Henry, St. Louis, Mo. Column-form. No. 1,272,961; July 16; v. 252; p. 681.
Jersemann, Max, Brooklyn, N. Y. Fluid or semifluid dispensing device for table use. No. 1,270,835; July 2; v. 252; p. 23.
Jersey City Printing Company. (See Drach, George B., assignor.)
Jewelers Supply Company, The. (See Farnham, Frank E., assignor.)
Johannessen, Johan E., assignor of one-fifth to J. A. Sether, one-fifth to O. C. Hoff, one-fifth to C. J. Christiansen, Brooklyn, and one-fifth to O. A. Waage, New York, N. Y. Marlinespike. No. 1,272,962; July 16; v. 252; p. 681.
Johannessen, Johan E., Brooklyn, and O. A. Waage, New York, N. Y. Marlinespike. No. 1,274,272; July 30; v. 252; p. 1102.
Johansen, Thorvald C., Grand Island, Nebr. Scaffold. No. 1,273,231; July 23; v. 252; p. 779.
Johanson, Emil G., Rockford, Ill. Irreversible gearing. No. 1,270,950; July 2; v. 252; p. 56.
Johanson, Emil G., Chicago, Ill. Translucent glass. No. 1,274,054; July 30; v. 252; p. 1040.
John H. Wiemers, Inc. (See Joyce, Martin W., assignor.)
Johns, Luther. (See Boello, Louis N., assignor.)
Johns-Pratt Company, The. (See Cole, Robert C., assignor.)
Johnson, Albert L., Hamburg, N. Y. Means for roughening bars. No. 1,270,836; July 2; v. 252; p. 23.
Johnson, Alfred, A. C. Swanson, and A. H. Utterberg, Chicago, Ill. Pneumatic action. No. 1,274,055; July 30; v. 252; p. 1040.
Johnson, Allan W., Colton, Cal., assignor to American Steel Window Company, Chicago, Ill. Joint for metal sashes and forming the same. No. 1,272,809; July 16; v. 252; p. 638.
Johnson, Arthur A., assignor to Underwood Typewriter Company, New York, N. Y. Manifolding. No. 1,273,863; July 30; v. 252; p. 986.
Johnson, Arthur W., assignor of one-fifth to J. G. Erickson and one-fifth to G. F. Johnson, Minneapolis, Minn. Water-motor. No. 1,270,951; July 2; v. 252; p. 56.
Johnson, August G., Monessen, assignor to Pittsburgh Steel Company, Pittsburgh, Pa. Mechanism for making wire fences. No. 1,273,374; July 23; v. 252; p. 817.
Johnson Automobile Lock Co. (See Imhoff, John H., assignor.)
Johnson, Carl. (See Myers, Melvin A., assignor.)
Johnson, Carl F., assignor to Johnson Service Company, Milwaukee, Wis. Automatic control device. No. 1,272,810; July 16; v. 252; p. 639.
Johnson, Charles T. (See Zollar and Johnson.)
Johnson, Chester F., Detroit, Mich. Drawing-board. No. 1,272,049; July 9; v. 252; p. 397.
Johnson, Cornelius E., assignor to The Proudfit Loose Leaf Company, Grand Rapids, Mich. Loose-leaf device. No. 1,272,963; July 16; v. 252; p. 681.
Johnson, Edward E., St. Paul, Minn. Device for applying metal ribbon to perforated pipe. No. 1,272,452; July 16; v. 252; p. 536.
Johnson, Frances O., Paducah, Ky. Playing-cards. No. 1,273,864; July 30; v. 252; p. 987.
Johnson, Frederick M. G., Montreal, Quebec, Canada. Separating nitro compounds from liquids. No. 1,271,578; July 9; v. 252; p. 264.
Johnson, Geo. F., *et al.* (See Johnson, Arthur M., assignor.)
Johnson, George A., Chicago, Ill., assignor to W. H. Miner, Chazy, N. Y. Draft-rigging. No. 1,273,865; July 30; v. 252; p. 987.
Johnson, George A., Chicago, Ill., assignor to W. H. Miner, Chazy, N. Y. Side bearing for cars. No. 1,273,866; July 30; v. 252; p. 987.
Johnson, George A., Chicago, Ill., assignor to W. H. Miner, Chazy, N. Y. Gravity-roller side bearing. No. 1,273,867; July 30; v. 252; p. 988.
Johnson, George A., Chicago, Ill., assignor to W. H. Miner, Chazy, N. Y. Roller side bearing. No. 1,273,868; July 30; v. 252; p. 988.
Johnson, Gustave T., assignor to P. B. Yates Machine Company, Beloit, Wis. Saw-guard. No. 1,271,473; July 2; v. 252; p. 200.
Johnson, Jay M., Chicago, assignor to W. P. Butler, Berwin, Ill. Ticket mutilating, canceling, and counting device. No. 1,270,837; July 2; v. 252; p. 23.
Johnson, John A. (See Myers, Melvin A., assignor.)
Johnson, John E., and C. H. Oslund, assignors to The O. & J. Machine Company, Worcester, Mass. Labeling-machine. No. 1,272,670; July 16; v. 252; p. 598.
Johnson, Lewis H., Bloomfield, N. J., assignor, by mesne assignments, to Western Electric Company, Telephone system. No. 1,271,171; July 2; v. 252; p. 118.
Johnson, Samuel M., assignor to Johnson's Convertible Boats and Rafts Limited, Cardiff, Wales. Convertible raft and the like. No. 1,274,273; July 30; v. 252; p. 1102.
Johnson Service Company. (See Johnson, Carl F., assignor.)
Johnson, Victor S. (See Davis and Johnson.)
Johnson, Woolsey M., Hartford, Conn. Cadmium-evolving process. No. 1,271,172; July 2; v. 252; p. 119.
Johnson's Convertible Boats and Rafts Limited. (See Johnson, Samuel M., assignor.)
Johnston, Clarence S., Glendive, Mont. Sectional wheel-rim. No. 1,273,274; July 30; v. 252; p. 1102.
Johnston, James S., Utica, N. Y. Long-range torpedo. No. 1,272,964; July 16; v. 252; p. 682.
Jone, Hugo, Brooklyn, N. Y. Testing milk. No. 1,273,375; July 23; v. 252; p. 817.
Jones, Bassett. (See Wilson, Sutton, and Jones.)
Jones, Butler M., Detroit, Mich. Post-hole-digging machine. No. 1,271,904; July 9; v. 252; p. 354.
Jones, Edward A., Pittsfield, Mass., and R. J. Marx, London, England. Refining-engine. No. 1,272,453; July 16; v. 252; p. 536.
Jones, Edward S., assignor of one-twentieth to J. H. Jones and one-fourth to L. G. Adams, Mobile, Ala. Submarine-detector. No. 1,272,811; July 16; v. 252; p. 639.
Jones, Edwin, Cleveland, Ohio. Release-clevis for car-couplings. No. 1,274,057; July 30; v. 252; p. 1041.
Jones, Guerdon O., Bouton, Iowa. Tire-pressure valve and signal. No. 1,270,952; July 2; v. 252; p. 56.
Jones, John D., assignor to The Self-Oiling Wheel & Bearing Co., Walla Walla, Wash. Hub-attaching device. No. 1,274,167; July 30; v. 252; p. 1072.
Jones, John G., assignor to Eastman Kodak Company, Rochester, N. Y. Photographic-film cartridge. No. 1,272,454; July 16; v. 252; p. 536.
Jones, John H., *et al.* (See Jones, Edward S., assignor.)
Jones, John M. (See Baughn, Samuel C., assignor.)
Jones, Le Roy F., Waiakoa, Hawaii. Detachable bow-support for shoes. No. 1,273,376; July 23; v. 252; p. 817.
Jones, Lloyd, assignor to United Engineering and Foundry Company, Pittsburgh, Pa. Universal coupling. No. 1,271,905; July 9; v. 252; p. 354.
Jones, Lyman D., Bridgeport, Conn. Vehicle-spring. No. 1,270,953; July 2; v. 252; p. 57.
Jones, Roger B., Philadelphia, Pa., assignor to Underwood Typewriter Company, New York, N. Y. Typewriting machine. No. 1,272,455; July 16; v. 252; p. 536.
Jones, Walter A. (See De Vaughn, Harry E., assignor.)
Jones, William A. (See Paulett, Jones and Hughes.)
Jonson, John G., Seattle, Wash. Film-controlled indicator for moving-picture apparatus. No. 1,272,671; July 16; v. 252; p. 599.
Jordan, Edward, Oak Park, and J. F. Reinert, South Elgin, Ill., assignors of one-third to E. J. Roche. Automatic hot-box alarm for journal-boxes of railway-cars. No. 1,270,954; July 2; v. 252; p. 57.
Josephson, Adalbert, New York, N. Y. Display-card. No. 1,273,377; July 23; v. 252; p. 818.

Josephson, Henry, Cleveland, Ohio. Brake mechanism for automobiles or motor-vehicles. No. 1,270,838; July 2; v. 252; p. 24.
Joy, Fred. (See Holmes, George A., assignor.)
Joy, Fred. (See McCormack, George A., assignor.)
Joy, Joseph F., Belle Vernon, Pa. Coal-winning device. No. 1,273,869; July 30; v. 252; p. 988.
Joyce, Martin W., assignor to John H. Wiemers, Inc., New York, N. Y. Cloth-reel. No. 1,272,672; July 16; v. 252; p. 599.
Juengst, Charles A., Croton Falls, N. Y., assignor to American Assembling Machine Company. Variable-speed conveyer. No. 1,271,903; July 9; v. 252; p. 355.
Julien, Cyprien E. P., and R. Marguerat, Paris, France. Hydraulic lifting device. No. 1,273,618; July 23; v. 252; p. 883.
Julius, George A., Sydney, New South Wales, Australia. Race-totalizator. No. 1,273,067; July 16; v. 252; p. 709.
Jurgensen, August P., assignor to Eureka Projector Device Co. Inc., New York, N. Y. Optical apparatus. No. 1,273,068; July 16; v. 252; p. 710.
Jury, Alfred E., New York, N. Y., assignor to Rubber Regenerating Company. Indicator. No. 1,271,907; July 9; v. 252; p. 355.
Jury, Alfred E., New York, N. Y., assignor to Rubber Regenerating Company. Testing-machine. No. 1,271,908; July 9; v. 252; p. 355.
Kabo Corset Co. (See Haderlein, Grace A., assignor.)
Kabo Corset Co. (See Keller, Herman A., assignor.)
Kaddeland, Christen R., Shelton, Conn., assignor, by mesne assignments, to Premier Printing Machinery Co., Boston, Mass. Dual adjusting mechanism for ink-fountains, &c. No. 1,273,498; July 23; v. 252; p. 850.
Kaehler, Paul, Berlin, Germany. Telegraphic apparatus. No. 1,273,499; July 23; v. 252; p. 851.
Kahrs, Henry J. (See Bodri, Christian, assignor.)
Kakaska, Henry W., Mandan, N. D. Spark-plug intensifier. No. 1,271,037; July 2; v. 252; p. 81.
Kalamazoo Corset Company. (See Bowman, Charles F., assignor.)
Kalmanowitz, Jacob, Brooklyn, N. Y. Adjustable window-screen. No. 1,272,271; July 9; v. 252; p. 459.
Kaltenbach, Charles E., Cranford, N. J. Textile fabric. No. 1,270,955; July 2; v. 252; p. 57.
Kamphefner, Thomas, Waldron, Mo. Twine-box top. No. 1,272,456; July 16; v. 252; p. 537.
Kandler, Edmund, and P. Sachse, assignors to Bausch & Lomb Optical Company, Rochester, N. Y. Semi-automatic tray-support. No. 1,272,457; July 16; v. 252; p. 537.
Kanner, Samuel, Bronx, assignor to The Royal Stropper Co., Inc., New York, N. Y. Razor-blade-sharpening machine. No. 1,271,715; July 9; v. 252; p. 303.
Kansas City Gasoleue Company, The. (See Wellman, Frank E., assignor.)
Karban, August and C. F., assignors of one-third to M Pilnacek, New York, N. Y. Carcass-splitting machine. No. 1,271,909; July 9; v. 252; p. 356.
Karban, Charles F. (See Karban, August and C. F.)
Karle, John D., Roselle Park, N. J. Detachable handle. No. 1,271,716; July 9; v. 252; p. 303.
Karns, John P., Boulder, Colo. Heading-machine. No. 1,271,821; July 2; v. 252; p. 160.
Kartzmark, Otto, Jersey City, N. J. Match-safe. No. 1,272,965; July 16; v. 252; p. 682.
Kashian, Minas H., Amesbury, Mass. Convertible automobile top. No. 1,274,275; July 30; v. 252; p. 1103.
Kasiaiis, Anthoni, New Haven, Conn. Fuel-igniter. No. 1,274,276; July 30; v. 252; p. 1103.
Katzberg, Herman, Prosser, Nebr. Five-horse evener. No. 1,271,910; July 9; v. 252; p. 356.
Kaufmann, Carl H., Santa Ana, Cal. Belt-guard. No. 1,271,717; July 9; v. 252; p. 304.
Kavanagh, George L., Montreal, Quebec, Canada. Process of and apparatus for making vehicle-tires. No. 1,271,579; July 9; v. 252; p. 264.
Kearney, William J., Des Moines, Iowa. Pliers. No. 1,271,911; July 9; v. 252; p. 356.
Keary, John P. (See Margetts, George R., assignor.)
Keckler, Charles W., Newark, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone-exchange system. No. 1,271,322; July 2; v. 252; p. 160.
Keckler, Charles W., Newark, N. J., assignor, by mesne assignments, to Western Electric Company, Incorporated. Service-observing circuit for telephone-lines. No. 1,272,673; July 16; v. 252; p. 599.
Keckritz, Anton R., Union, Oreg. Spring-governor hitch for plows. No. 1,273,069; July 16; v. 252; p. 710.
Keefer, Thomas A., assignor, by mesne assignments, to The Dayton Adding Machine and Time Lock Co., Dayton, Ohio. Recording device. No. 1,273,114; July 16; v. 252; p. 721.
Keene, Edward S., Agricultural College, N. D. Lettering-pen. No. 1,271,580; July 9; v. 252; p. 264.
Kehlmann, Leopold, New York, N. Y. Cigarette-making machine. No. 1,274,168; July 30; v. 252; p. 1072.
Kelster, Archibald J., Grinnell, assignor of one-half to E. S. Erdice, Keota, Iowa. Artificial bait. No. 1,272,812; July 16; v. 252; p. 639.
Keith, Frederick R., Randolph, Mass. Insole. No. 1,272,966; July 16; v. 252; p. 682.
Keith, John E., assignor to The Novelty Cutlery Company, Canton, Ohio. Churn. No. 1,271,581; July 9; v. 252; p. 265.
Keithley, Herbert R., assignor to A. R. Couden, trustee, Michigan City, Ind. Dump-car. No. 1,271,474; July 2; v. 252; p. 200.
Kell, Lester L., St. Louis, Mo. Cord-adjuster. No. 1,272,272; July 9; v. 252; p. 459.
Kell, Lester L., St. Louis, Mo. Swing. No. 1,272,273; July 9; v. 252; p. 459.
Keller, Andreas R., Melrose Park, Ill. Strainer apparatus. No. 1,272,458; July 16; v. 252; p. 537.
Keller, Henry G., Owasso, Ind. Hog-catching tool. No. 1,272,050; July 9; v. 252; p. 398.
Keller, Herman A., assignor to Kabo Corset Co., Chicago, Ill. Button-mounting for garment-supporters. No. 1,272,674; July 16; v. 252; p. 600.
Kelley, Donald W., Oneida, N. Y. Producing bearing-apertures in trap-springs. No. 1,272,051; July 9; v. 252; p. 398.
Kellner, Gustav A. H. (See Saegmuller and Kellner.)
Kellogg, George W., assignor to Kellogg Manufacturing Company, Rochester, N. Y. Fluid-pump. (Reissue.) No. 14,490; July 2; v. 252; p. 217.
Kellogg Manufacturing Company. (See Kellogg, George W., assignor.) (Reissue.)
Kellogg Switchboard and Supply Company. (See Schoenwolf, Fred, assignor.)
Kellogg Switchboard & Supply Company. (See Smith, Charles H., assignor.)
Kelly, Marcus L., Garfield, Ark. Felly. No. 1,271,038; July 2; v. 252; p. 81.
Kelly, William H., Sparks, Nev. Attachment for motion-picture-projecting machines. No. 1,273,070; July 16; v. 252; p. 710.
Kelly, William J., Clinton, Iowa. Sofa-bed. No. 1,270,839; July 2; v. 252; p. 24.
Kelly, William J., Clinton, Iowa, assignor to Foster Brothers Manufacturing Company, Utica, N. Y. Cushion-seat and mattress. No. 1,270,840; July 2; v. 252; p. 24.
Kelly, William J., Clinton, Iowa, assignor to Foster Brothers Manufacturing Company, Utica, N. Y. Cushion-spring structure. No. 1,270,841; July 2; v. 252; p. 25.
Kelsey, Stella. (See Myers, Melvin A., assignor.)
Kelsey Wheel Company. (See Winter, John R., assignor.)
Kelvinator Corporation. (See Heldeman, Fred J., assignor.)
Kelvinator Corporation. (See Yates, Charles E., assignor.)
Kemp, Jacob G., assignor of one-half to M. J. Otey, Stillwater, Okla. Check. No. 1,272,340; July 9; v. 252; p. 479.
Kemper, Charles W. and J. T., Oakland, Cal. Clamp. No. 1,271,912; July 9; v. 252; p. 356.
Kemper, John T. (See Kemper, Charles W. and J. T.)
Kempny, Karnl, Cleveland, Ohio. Trap. No. 1,271,323; July 2; v. 252; p. 161.
Kempsmith Manufacturing Co., The. (See Parsons, Fred A., assignor.)
Kennedy, David S., Brooklyn, N. Y., assignor to Mergenthaler Linotype Company. Typographical machine. No. 1,271,718; July 9; v. 252; p. 304.
Kennedy, George C., Waterloo, Iowa. Means for varying the areal delivery of rose-heads. No. 1,271,719; July 9; v. 252; p. 304.
Kennett, William, and E. T. Krebs, Carson City, Nev. Fuel-briquet. No. 1,273,619; July 23; v. 252; p. 883.
Kennicott, Cass L., Chicago Heights, Ill., assignor of one-half to The Permutit Company, New York, N. Y. Water-softening apparatus. No. 1,272,052; July 9; v. 252; p. 398.
Kennicott, Cass L., Chicago Heights, Ill., assignor of one-half to The Permutit Company, New York, N. Y. Means for regulating water-softening apparatus. No. 1,272,053; July 9; v. 252; p. 398.
Kennicott, Cass L., Chicago Heights, Ill., assignor of one-half to The Permutit Company, New York, N. Y. Means for regulating the feed of chemicals in water-softening apparatus. No. 1,272,054; July 9; v. 252; p. 399.
Kennington, William O., Detroit, Mich., assignor to Remy Electric Company, Anderson, Ind. Means for controlling electric circuits. No. 1,273,378; July 23; v. 252; p. 818.
Kent-Owens Machine Company, The. (See Ross, Hugh C., assignor.)
Kenway, Herbert W., Newton, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Eyeleting-machine. No. 1,271,720; July 9; v. 252; p. 304.
Kern, Jacob S., assignor to Fleetwood Metal Body Company, Fleetwood, Pa. Latch device for folding doors. No. 1,271,582; July 9; v. 252; p. 265.
Kerner Manufacturing Company. (See Dodds, Ethan I., assignor.)
Kerner Manufacturing Company. (See Frauenheim, Joseph A., assignor.)
Kesling, Elmer G., Bloomfield, Mo. Print-titling attachment for film-cameras and method of producing titled negatives. No. 1,270,956; July 2; v. 252; p. 57.
Kesses, Charles, New York, N. Y. Printing-machine. No. 1,271,913; July 9; v. 252; p. 357.
Ketch, George W., and F. J. Berger, Portland, Oreg. Cabinet combination ironing-board and breakfast-table. No. 1,273,232; July 23; v. 252; p. 780.

Ketler, William H., Camden, N. J. Cooking and heating attachment for gas-jets. No. 1,271,583; July 9; v. 252; p. 265.
Ketteison, Harry C., Milwaukee, Wis. Roofing-cleat. No. 1,273,500; July 23; v. 252; p. 851.
Kettering, Charles F., Dayton, Ohio, assignor to The Dayton Engineering Laboratories Company. Ignition system. No. 1,272,056; July 9; v. 252; p. 399.
Kettering, Charles F., and W. A. Chryst, Dayton, Ohio, assignors to The Dayton Engineering Laboratories Company. Electrical system for engines. No. 1,272,055; July 9; v. 252; p. 399.
Kettering, Charles F., and W. A. Chryst, Dayton, Ohio, assignors to The Dayton Engineering Laboratories Company. Engine starting device. No. 1,273,870; July 30; v. 252; p. 989.
Kettering, Charles F., and W. A. Chryst, Dayton, Ohio, assignors to The Dayton Engineering Laboratories Company. Engine starting system. No. 1,273,871; July 30; v. 252; p. 989.
Kewaunee Mfg. Co. (See Werwath, Oscar, assignor.)
Keyes, Frederick G., East Orange, assignor to Cooper Hewitt Electric Company, Hoboken, N. J. Production of metallic tungsten powder. No. 1,270,842; July 2; v. 252; p. 25.
Keyes, Frederick G., East Orange, assignor to Cooper Hewitt Electric Company, Hoboken, N. J. Electric lamp. No. 1,270,843; July 2; v. 252; p. 25.
Keyoke Railway Equipment Company. (See Murray, George C., assignor.)
Keystone Steel & Wire Company. (See Herman, Joseph, assignor.)
Keystone Type Foundry. (See Rendle, Arthur E., assignor.)
Kiefer, Johann, Charlottenburg, Germany, assignor to General Electric Company. Regulator for motor arc-lamps. No. 1,271,475; July 2; v. 252; p. 201.
Kiefer, Johann, Charlottenburg, Germany, assignor to General Electric Company. Device for actuating signals and the like. No. 1,273,620; July 23; v. 252; p. 883.
Kiehler, Frederick, assignor to Cadillac Motor Car Company, Detroit, Mich. Vehicle-top support. No. 1,271,039; July 2; v. 252; p. 81.
Kiesele, John A., Maplewood, N. J. Invalid's back-rest or support. No. 1,274,277; July 30; v. 252; p. 1103.
Kihss, Peter, Brooklyn, N. Y. Gasolene-engine attachment. No. 1,271,324; July 2; v. 252; p. 161.
Killian, Lawrence J. (See Ogden, Joseph P., assignor.)
Kimball, Albert G. (See Waterhouse, Harvey M., assignor.)
Kimball, James L., Virginia, Minn. Steel tie. No. 1,271,040; July 2; v. 252; p. 82.
Kimber, Walter E., Harlesden, London, England. Apparatus for charging compressed air with atomized liquids. No. 1,273,501; July 23; v. 252; p. 851.
Kimpitsu Seishi Kabushiki Kaisha, Ltd. (See Kuroki, Shingo, assignor.) (Reissue.)
Kincaly, John H., Ferguson, Mo. Kerosene-burner. No. 1,271,325; July 2; v. 252; p. 161.
Kincaly, John H., Ferguson, Mo. Spray-head. No. 1,272,274; July 9; v. 252; p. 459.
King, Clifford G., Providence, R. I. Chain or bracelet. No. 1,271,041; July 2; v. 252; p. 82.
King, James D., Ellensburg, Wash. Automobile-locking device. No. 1,271,173; July 2; v. 252; p. 119.
King, Robert M., Wauneta, Nebr. Automatic gate. No. 1,274,278; July 30; v. 252; p. 1103.
King, Rufus, Plainville, assignor to Bugbee and Niles Co., North Attleboro, Mass. Clasp for straps or ribbons. No. 1,272,675; July 16; v. 252; p. 600.
Kinghan, Frederick A., assignor of one-third to W. Black, Renwick, Iowa. Equalizer for sliding doors, drawers, or the like. No. 1,274,279; July 30; v. 252; p. 1104.
Kingsbury, George P., Brooklyn, N. Y., assignor to Mergenthaler Linotype Company. Typographical machine. No. 1,271,723; July 9; v. 252; p. 305.
Kinnear Manufacturing Company, The. (See Brunst, William M., assignor.)
Kinnear Manufacturing Company, The. (See McCloud, Edward H., assignor.)
Kinney, Justus R., Allston, Mass. Power-transmission device. No. 1,272,813; July 16; v. 252; p. 639.
Kinney, Justus R., Allston, Mass. Fluid-clutch. No. 1,272,814; July 16; v. 252; p. 640.
Kirkpatrick, Frank C., Tupelo, Miss. Cultivator. No. 1,273,621; July 23; v. 252; p. 884.
Kirsch, Anthony, assignor to Wilson Bohannen, Inc., Brooklyn, N. Y. Lock. No. 1,272,967; July 16; v. 252; p. 682.
Kirshner, Abraham S., assignor to W. H. Rapeport, Philadelphia, Pa. Bumper for automobiles. No. 1,270,844; July 2; v. 252; p. 25.
Kitts Steam Specialty Co. (See Kitts, Willard A., Jr., assignor.)
Kitts, Willard A., Jr., Mountain Lakes, N. J., assignor to Kitts Steam Specialty Co., Inc., Oswego, N. Y. Damper-regulator. No. 1,272,459; July 16; v. 252; p. 538.
Kivlan, John L., Boston, Mass. Extensible rack. No. 1,271,326; July 2; v. 252; p. 161.
Klages, George W. (See Waterloo and Klages.)
Klayman, Benjamin. (See Klayman, Israel, assignor.)
Klayman, Israel, assignor of one-half to B. Klayman, Baltimore, Md. Window-frame. No. 1,271,174; July 2; v. 252; p. 119.
Klee, John G., Boston, Mass. Hair-pin. No. 1,273,872; July 30; v. 252; p. 989.
Kleebauer, Charles P., Brooklyn, assignor to Cohoes Envelope Co., Inc., Cohoes, N. Y. Shipping-tag. No. 1,272,968; July 16; v. 252; p. 683.
Klein, Carl J., Mount Vernon, Ill. Moistening device. No. 1,272,275; July 9; v. 252; p. 460.
Klein, Charles H., Chaska, Minn. Drier. No. 1,272,676; July 16; v. 252; p. 600.
Klein, Erwin, Peekskill, N. Y. Vinegar-making. No. 1,272,276; July 9; v. 252; p. 460.
Klein, Erwin, Peekskill, N. Y. Apparatus for vinegar-making. No. 1,272,277; July 9; v. 252; p. 460.
Klemmer, Al C., Lewistown, Mont. Automobile-lifter. No. 1,271,584; July 9; v. 252; p. 265.
Klise, Albert B., assignor to Blackmer Rotary Pump Co., Petoskey, Mich. Rotary pump. No. 1,271,585; July 9; v. 252; p. 266.
Kluglewicz, Teofil, Erie, Pa. Ice-cream dipper. No. 1,271,327; July 2; v. 252; p. 162.
Knapp, Frederick H., Roland Park, and H. G. Dewey, assignors to Fred H. Knapp Company, Westminster, Md. Labeling-machine. No. 1,271,724; July 9; v. 252; p. 306.
Knapp, Howard H., assignor to The American Textile Manufacturing Company, Cleveland, Ohio. Fountain-mop. No. 1,271,586; July 9; v. 252; p. 266.
Knight, Anna B. (See Beale and Knight.)
Knoell, Charles J., Tonawanda, N. Y. Child's vehicle. No. 1,271,175; July 2; v. 252; p. 119.
Knoll, Charles W., Crete, Nebr. Seal device for sewers. No. 1,272,460; July 16; v. 252; p. 538.
Knowles, Edward R., Brooklyn, N. Y. Separating materials from gases. No. 1,273,791; July 23; v. 252; p. 927.
Knox, Luther L., Bellevue, assignor to Blaw-Knox Company, Pittsburgh, Pa. Water-cooled front for furnaces. No. 1,273,233; July 23; v. 252; p. 780.
Knox, Luther L., Bellevue, assignor to Blaw-Knox Company, Pittsburgh, Pa. Water-cooling system for furnaces. No. 1,273,234; July 23; v. 252; p. 780.
Knudson, Knud, assignor to The Trumbull Electric Manufacturing Co., Plainville, Conn. Handle. No. 1,273,379; July 23; v. 252; p. 818.
Kny-Scheerer Corporation, The. (See Berlin, Paul, assignor.)
Kocialek, George J., Avoca, Pa. Water-bomb. No. 1,272,461; July 16; v. 252; p. 538.
Koehring Machine Company. (See Lichtenberg, Erich H., assignor.)
Koehl, George J., San Diego, assignor to Lightening Machine Co., San Diego county, Cal. Cranking device for explosive-engines. No. 1,271,476; July 2; v. 252; p. 201.
Koerner, Walter E. (See Fink and Koerner.)
Kohn, Leo M., Buffalo, N. Y. Fabric-folding machine. No. 1,272,462; July 16; v. 252; p. 539.
Kohnle, Frederick, assignor to The Monarch Tag Company, Dayton, Ohio. Price-tag. No. 1,272,057; July 9; v. 252; p. 400.
Kolff, Petrus V., Philadelphia, Pa., assignor, by mesne assignments, to The Electric Tachometer Corporation. Adjustable support for commutator-brushes. No. 1,270,957; July 2; v. 252; p. 58.
Kollman, William H., Belle Plaine, Iowa. Canning appliance. No. 1,273,622; July 23; v. 252; p. 884.
Kollock, George L., and R. P. Martin, assignors to Universal Hammer Company, Seattle, Wash. Automatic hammer. No. 1,273,873; July 30; v. 252; p. 989.
Koob, John P., Sunapee, N. H. Clothes-pin. No. 1,274,280; July 30; v. 252; p. 1104.
Kops, Daniel, New York, N. Y. Brassière. No. 1,272,946; July 16; v. 252; p. 676.
Korn, Oscar, Detroit, Mich. Visual signal for automobiles. No. 1,272,969; July 16; v. 252; p. 683.
Korndorfer, Caspar J., Richmond borough, N. Y. Check-book. No. 1,273,874; July 30; v. 252; p. 990.
Kornstein, Ulrich, New York, N. Y. Fountain-pen. No. 1,271,477; July 2; v. 252; p. 201.
Koss, John M. (See Stiner and Koss.)
Kosta, Emanuel, Monticello, Wis. Flexible or rigid hand-bag. No. 1,273,875; July 30; v. 252; p. 990.
Kothny, Gottdank L., and R. Suczek, assignors to C. H. Wheeler Manufacturing Company, Philadelphia, Pa. Ejector condensate-pump. No. 1,273,876; July 30; v. 252; p. 990.
Kowalski, Gus J., Detroit, Mich. Projectile. No. 1,274,281; July 30; v. 252; p. 1104.
Krafft, Alfred, Honolulu, Hawaii. Treating raw-sugar juices. No. 1,271,914; July 9; v. 252; p. 357.
Kraft, Herman T., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Suspension-patch for balloons. No. 1,272,058; July 9; v. 252; p. 400.
Kraker, Henry, Holland, Mich. Humidifier for heating plants. No. 1,271,587; July 9; v. 252; p. 266.
Kramer, Ernest A. (See Allen, William H., assignor.)
Kramer, Erwin, Carlstadt, N. J. Garment-fastener holder. No. 1,274,282; July 30; v. 252; p. 1105.
Kramer, Erwin, Carlstadt, N. J. Hook-and-eye tape. No. 1,274,283; July 30; v. 252; p. 1105.
Kramer, John W. (See Thibodeaux, Arthur J., assignor.)
Kramer, Julius, J., Umhofer, F. J. Eral, and H. Wildberger, assignors to Pullman Couch Company, Chicago, Ill. Sofa-bed. No. 1,271,725; July 9; v. 252; p. 306.

Krantz, Hubert F., assignor to Krantz Manufacturing Company, Inc., Brooklyn, N. Y. Floor-box. No. 1,271,478; July 2; v. 252; p. 201.

Krantz, Hubert F., assignor to Krantz Manufacturing Company, Inc., Brooklyn, N. Y. Oil-switchboard. No. 1,272,677; July 16; v. 252; p. 601.

Krantz, Hubert F., assignor to Krantz Manufacturing Company, Inc., Brooklyn, N. Y. Panel-board. No. 1,273,623; July 23; v. 252; p. 884.

Krantz, Hubert F., assignor to Krantz Manufacturing Company, Inc., Brooklyn, N. Y. Self-actuating safety-panel. (Reissue.) No. 14,498; July 30; v. 252; p. 1125.

Krantz Manufacturing Company. (See Krantz, Hubert F., assignor.)

Krasny, Frank E., Irvington, N. J. Button-cutting machine. No. 1,271,042; July 2; v. 252; p. 82.

Krauch, Carl. (See Bosch, Mittasch, and Krauch.)

Kraus, Charles A., Newton Highlands, and R. D. Malley, Lynn, Mass. Distribution system for vapor electric apparatus. No. 1,272,463; July 16; v. 252; p. 539.

Krause, Albert F. (See Dohmen, Arthur, assignor.)

Kraut, Charles F., assignor to The Kraut Safety Valve Company, Baltimore, Md. Safety-valve. No. 1,271,726; July 9; v. 252; p. 306.

Kraut Safety Valve Company, The. (See Kraut, Charles F., assignor.)

Krauth, Albert, Hamilton, Ohio. Music-stand. No. 1,271,328; July 2; v. 252; p. 162.

Krauth, Albert, Hamilton, Ohio. Paper-perforator. No. 1,271,727; July 9; v. 252; p. 307.

Kravicez, Frank, Hartford, Conn. Clothes-drier. No. 1,274,284; July 30; v. 252; p. 1105.

Kray, Elmer P., North Yakima, Wash. Priming mechanism for internal-combustion engines. No. 1,274,285; July 30; v. 252; p. 1105.

Krebs, Ernst T. (See Kennett and Krebs.)

Kreitler, John A., Newark, N. J. Power-driven screw-press. No. 1,271,728; July 9; v. 252; p. 307.

Kritz, Frank, assignor, by mesne assignments, to The Standard Parts Company, Cleveland, Ohio. Tube-welding mechanism. No. 1,273,502; July 23; v. 252; p. 852.

Kristufek, Ladislav F., Chicago, Ill. Compressor. No. 1,271,729; July 9; v. 252; p. 307.

Kroeger Piano Company. (See Parsons, George H., assignor.)

Kroll, Waldemar, Weehawken, assignor to Hall-Borchert Dress Form Company, Hoboken, N. J. Dress-form stand. No. 1,272,678; July 16; v. 252; p. 601.

Krollius, William, San Francisco, Cal. Skate-sharpener. No. 1,273,624; July 23; v. 252; p. 884.

Krone, Harry H., Chicago, Ill. Boot-black stand. No. 1,271,588; July 9; v. 252; p. 267.

Krumholz, Alfred F., assignor of one-half to A. Krumholz, Chicago, Ill. Fire-box. No. 1,271,479; July 2; v. 252; p. 202.

Krumholz, August. (See Krumholz, Alfred F., assignor.)

Kudrer, Charles, Pittsburgh, Pa. Motor-cycle back-rest. No. 1,272,970; July 16; v. 252; p. 683.

Kuehnrich, Paul R., Sheffield, England. Alloy. No. 1,273,877; July 30; v. 252; p. 990.

Kuentzel, Curt, assignor to The Republic Rubber Company, Youngstown, Ohio. Tire-making machine. No. 1,273,071; July 16; v. 252; p. 710.

Kuhn, Emil. (See Danneel and Kuhn.)

Kuhn, Harry A., Pittsburgh, Pa. Apparatus for mining coal. No. 1,273,504; July 23; v. 252; p. 852.

Kuhn, Harry A., and W. W. Macfarren, Pittsburgh, Pa.; said Macfarren assignor to said Kuhn. Mining-machine. No. 1,273,503; July 23; v. 252; p. 852.

Kuhn, William O., Seattle, Wash. Rotary internal-combustion engine. No. 1,273,380; July 23; v. 252; p. 818.

Kuhns, J. J. (See Myers, Melvin A., assignor.)

Kulesar, Lewis, Punxsutawney, Pa. Airplane. No. 1,271,480; July 2; v. 252; p. 202.

Kunzer, Louis G. (See Lewis, John H., assignor.)

Kureczka, Petro, Clearfield, Pa. Man-carrier. No. 1,271,176; July 2; v. 252; p. 119.

Kuroki, Shingo, assignor to Kimpitsu Seishi Kabushiki Kaisha, Ltd., Tokyo, Japan. Writing-paper and making the same. (Reissue.) No. 14,499; July 30; v. 252; p. 1127.

Kurtz, John C., Los Angeles, Cal. Power-lock for automobiles. No. 1,272,815; July 16; v. 252; p. 641.

Kusiak, Fred, assignor of one-half to N. Kusiak, New York, N. Y. Horseshoe. No. 1,271,177; July 2; v. 252; p. 120.

Kusiak, Nik. (See Kusiak, Fred, assignor.)

Kutin, Edward, Harrah, Okla. Clothes-pin. No. 1,274,286; July 30; v. 252; p. 1105.

Kutsche, Oswald, Pittsburgh, Pa. Air-cleaner and cleaning air. No. 1,274,058; July 30; v. 252; p. 1041.

Kuzmier, Xenophon, Hartsdale, N. Y. Prepared food and making the same. No. 1,273,072; July 16; v. 252; p. 711.

Kyle, John, Springfield, Ohio, assignor to Miehle Printing Press & Manufacturing Company, Chicago, Ill. Adjustable gripper-pad. No. 1,271,329; July 2; v. 252; p. 162.

L. Wolff Manufacturing Company. (See Lindsay, William, assignor.)

La Belle, Frederick B., Wagoner, Okla. Loop-shield. No. 1,272,464; July 16; v. 252; p. 539.

Le Chapelle, Fred N., Beverly, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Thread-fastening machine. No. 1,271,481; July 2; v. 252; p. 202.

La Joie, Herbert J., Orange, N. J., assignor to Autopiano Company. Pianel and pedal operating mechanism. No. 1,273,382; July 23; v. 252; p. 819.

La Roe, Henry, North River, N. Y. Bed-spring tightener. No. 1,273,074; July 16; v. 252; p. 711.

Labombarde, Elie W., Nashua, N. H. Top gluing mechanism. No. 1,271,730; July 9; v. 252; p. 308.

Labombarde, Elie W. (See Sidebotham, Melvin H., assignor.)

Lacasse, Joseph A., Detroit, Mich. Game apparatus. No. 1,273,381; July 23; v. 252; p. 819.

Lacerda, Harry A., assignor to Flannery Bolt Company, Schenectady, N. Y. Stay-bolt for boilers. No. 1,272,465; July 16; v. 252; p. 539.

Lackman, Alexander, Bradford, Pa. Manufacture of formates and oxalates. No. 1,274,169; July 30; v. 252; p. 1073.

Lacroix, Joseph D., Baltimore, Md., assignor to The Wilson Distilling Company, Jersey City, N. J. Spinning-machine for bottles. No. 1,273,878; July 30; v. 252; p. 990.

Lacy, Burritt S., Sewaren, N. J., assignor to The Roessler & Hasslacher Chemical Co., New York, N. Y. Separation of the constituents of gaseous mixtures. No. 1,272,059; July 9; v. 252; p. 400.

Lacy, John B., Chicago, Ill. Refrigerator. No. 1,271,482; July 2; v. 252; p. 203.

Ladd, James B., Philadelphia, Pa., assignor to United States Cast Iron Pipe and Foundry Company, Burlington, N. J. Socket-pattern mechanism. No. 1,272,060; July 9; v. 252; p. 400.

Ladd, James B., Philadelphia, Pa., assignor to United States Cast Iron Pipe and Foundry Company, Burlington, N. J. Pattern-ramming machine for pipe-molding. No. 1,272,278; July 9; v. 252; p. 460.

Lagergren, Nils M., Portland, Oreg. Bed. No. 1,273,879; July 30; v. 252; p. 991.

Lake, John, Philadelphia, Pa. Dry-dock system. No. 1,272,679; July 16; v. 252; p. 601.

Lake, Simon, Milford, Conn. Fly-wheel. No. 1,272,061; July 9; v. 252; p. 401.

Lake, Simon, Milford, Conn. Apparatus for making metal castings. No. 1,272,662; July 9; v. 252; p. 461.

Lake, Simon, Milford, Conn. Concrete building construction. No. 1,273,073; July 16; v. 252; p. 711.

Lamar, Leonard A., Portland, Oreg. Submarine. No. 1,271,513; July 2; v. 252; p. 212.

Lamar, Leonard A., and P. Borgan, Portland, Oreg. Life-saving apparatus. No. 1,273,383; July 23; v. 252; p. 819.

Lambert, Alvan R. (See Howe and Lambert.)

Lambert, Henry M., Portland, Oreg. Rotary engine. No. 1,271,178; July 2; v. 252; p. 120.

Lamont, John A., assignor to American Steel Foundries, Chicago, Ill. Truck side frame. No. 1,274,170; July 30; v. 252; p. 1073.

Lamphere, Charles S., assignor to Illinois Publishing and Printing Company, Chicago, Ill. Miter-machine. No. 1,273,235; July 23; v. 252; p. 780.

Lance, George, Ponderey, Idaho. Rail-joint. No. 1,273,505; July 23; v. 252; p. 852.

Lanchester, Frederick W., London, England. Fuel-feed valve and valve-operating mechanism for internal-combustion engines. No. 1,274,059; July 30; v. 252; p. 1042.

Lancor, Joseph H., Providence, R. I. Bow-holder. No. 1,271,731; July 9; v. 252; p. 308.

Landau, Max, Berlin, Germany. Preserving wood. No. 1,274,171; July 30; v. 252; p. 1073.

Landers, Douglas J., *et al.* (See Thompson, George W., assignor.)

Landers, Frary & Clark. (See Warner, Alonzo A., assignor.)

Landsiedel, Harry, Poplar Bluff, Mo., assignor, by mesne assignments, to The Dalton Adding Machine Company, Cincinnati, Ohio. Adding-machine. No. 1,270,845; July 2; v. 252; p. 25.

Lane, Alfred M., St. Louis, Mo. Torpedo-snare. No. 1,272,680; July 16; v. 252; p. 601.

Lane Bryant, Inc. (See Malsin, Albert, assignor.)

Lane, Charles W., Atlanta, Ga. Antirattler for window-sashes. No. 1,273,625; July 23; v. 252; p. 885.

Lane, Frank. (See Beezley and Lane.)

Lane, John W., Los Angeles, Cal. Thread-cutting tool. No. 1,270,958; July 2; v. 252; p. 58.

Lang, Edward M., Jr., Portland, Me. Collar-button. No. 1,274,060; July 30; v. 252; p. 1042.

Lang, George L., assignor to Splitdorf Electrical Company, Newark, N. J. Lubricant-cup. No. 1,270,846; July 2; v. 252; p. 26.

Langmuir, Irving, Schenectady, N. Y., assignor to General Electric Company. Incandescent lamp. No. 1,271,483; July 2; v. 252; p. 203.

Langmuir, Irving, Schenectady, N. Y., assignor to General Electric Company. Means for transforming direct current. No. 1,273,626; July 23; v. 252; p. 885.

Langmuir, Irving, Schenectady, N. Y., assignor to General Electric Company. Method of and means for controlling electric currents or potentials. No. 1,273,627; July 23; v. 252; p. 885.

Langmuir, Irving, Schenectady, N. Y., assignor to General Electric Company. Film-conductor and making the same. No. 1,273,628; July 23; v. 252; p. 885.

Langmuir, Irving, Schenectady, N. Y., assignor to General Electric Company. Exhausting incandescent lamps. No. 1,273,629; July 23; v. 252; p. 886.

Langmuir, Irving, Schenectady, N. Y., assignor to General Electric Company. Electron-discharge apparatus. No. 1,273,630; July 23; v. 252; p. 886.

Langmuir, Irving, Schenectady, N. Y., assignor to General Electric Company. Electron-discharge apparatus. No. 1,273,783; July 23; v. 252; p. 925.

Langner, Lawrence, Whitestone Landing, N. Y., assignor to The Dayton Engineering Laboratories Company. Engine starting device. No. 1,273,880; July 30; v. 252; p. 991.

Langton, George H., and J. W. Small, Portsmouth, Va. Flexible pipe-coupling. No. 1,271,179; July 2; v. 252; p. 120.

Lanning, James K., trustee. (See Truesdell, John P., assignor.)

Lare, Charles A., Eugene, Oreg. Combined contact and enlarging printer. No. 1,273,881; July 30; v. 252; p. 991.

Larkin Co. (See Morey and Huber, assignors.)

Laroche, Arthur J. (See Beauchemin and Laroche.)

Larson, Albert C., New Cambria, Kans. Covering attachment for drills. No. 1,272,466; July 16; v. 252; p. 540.

Larter, Halsey M., assignor to Larter & Sons, Newark, N. J. Knife. No. 1,274,288; July 30; v. 252; p. 1105.

Larter & Sons. (See Larter, Halsey M., assignor.)

Lasaga, Próspero. (See Velo and Lasaga.)

Latour, Marius C. A., and J. Bethenod, Paris, France. Machine for transforming the frequency of currents. No. 1,271,915; July 9; v. 252; p. 357.

Latta, Emmit G., Syracuse, N. Y. Type-writing machine. No. 1,273,882; July 30; v. 252; p. 992.

Latta, Emmit G., Syracuse, N. Y., assignor to Corona Typewriter Company, Inc. Ribbon mechanism. (Reissue. No. 14,491; July 2; v. 252; p. 218.

Latta, Emmit G., Syracuse, N. Y., assignor to Corona Typewriter Company, Inc. Type-writing machine. (Reissue.) No. 14,495; July 23; v. 252; p. 931.

Lauhe, John, Deer Island, Oreg. Protective tread-covering for automobile-tires. No. 1,273,792; July 23; v. 252; p. 928.

Lauer, Walter D., Chicago, Ill. Tire-vulcanizer. No. 1,271,589; July 9; v. 252; p. 267.

Laughray, Daisy. (See Ferguson, Raymond M., assignor.)

Laurent, Louis C., Denver, Colo. Temporary binder. No. 1,271,484; July 2; v. 252; p. 203.

Lauter Company. (See Lynde, Frank G., assignor.)

Lavanchy, Gustave, Neuchâtel, Switzerland. Toy building element. No. 1,271,180; July 2; v. 252; p. 121.

Lawrence, Edward V., New York, N. Y. Vehicle safety-brake mechanism. No. 1,271,916; July 9; v. 252; p. 357.

Lawson Manufacturing Company. (See Parisen, Robert T., assignor.)

Lawton, William J., Genoa Junction, Wis. Lining for brake-bands. No. 1,270,959; July 2; v. 252; p. 59.

Layne, Mahlon E., Houston, Tex. Pump mechanism. No. 1,272,681; July 16; v. 252; p. 602.

Layne, Mahlon E., Houston, Tex. Well-screen. No. 1,273,236; July 23; v. 252; p. 781.

Lazarides, Platon, New York, N. Y. Lock. No. 1,273,883; July 30; v. 252; p. 992.

Leake, G. D. (See Myers, Melvin A., assignor.)

Lederer, Anton, Vienna, Austria, assignor to Westinghouse Lamp Company. Manufacture of wires from refractory materials. No. 1,273,506; July 23; v. 252; p. 853.

Lee, Elmo W., Tamaroa, Ill. Toilet-article holder or cabinet. No. 1,274,172; July 30; v. 252; p. 1073.

Lee, Frederick G., Rochester, N. Y. Headlight-lens. No. 1,274,173; July 30; v. 252; p. 1074.

Lee, Hoard, Houston, Tex. Combination pool and billiard table. No. 1,273,237; July 23; v. 252; p. 781.

Lee, Jesse P., Stockton, Ga. Boll-weevil catcher. No. 1,270,847; July 2; v. 252; p. 26.

Lee, John J., Brooklyn, assignor to Behrend & Rothschild, New York, N. Y. Hollow body and making same. No. 1,274,174; July 30; v. 252; p. 1074.

Lee, Truel T., Amos, Ark. Spring-clip. No. 1,271,043; July 2; v. 252; p. 82.

Lee, Ulysses G. (See Duncan and Lee.)

Leech, Aubrey B., assignor of one-half to J. Neu, Los Angeles, Cal. Sign. No. 1,271,044; July 2; v. 252; p. 83.

Leer, Charles H. (See Burt, James H., assignor.)

Lefever, Eden G., Boyertown, Pa. Driving attachment for talking-machines. No. 1,271,590; July 9; v. 252; p. 267.

Lehmann, Arthur E. (See Contant and Lehmann.)

Leich Electric Company. (See Leich, Oscar M., assignor.)

Leich, Oscar M., assignor to Leich Electric Company, Genoa, Ill. Current-modifier. No. 1,271,732; July 9; v. 252; p. 308.

Leich, Oscar M., assignor to Leich Electric Company, Genoa, Ill. Current-modifier. No. 1,271,733; July 9; v. 252; p. 308.

Lektophone Corporation. (See Hopkins, Marcus C., assignor.)

Lenders, Adolph W. H., Cedar Rapids, Iowa. Producing dustless starch. No. 1,272,682; July 16; v. 252; p. 602.

Lenhart, William S., Atlantic City, N. J. Carbureter. No. 1,271,181; July 2; v. 252; p. 121.

Leon, Morris, and A. B. Vance, Fort Smith, Ark.; said Vance assignor to said Leon. Display-holder. No. 1,273,238; July 23; v. 252; p. 781.

Leon, Morris, and A. B. Vance, Fort Smith, Ark.; said Vance assignor to said Leon. Display-holder. No. 1,273,239; July 23; v. 252; p. 781.

Leonard, Howard M., Jackson, Mich. Tractor. No. 1,273,631; July 23; v. 252; p. 886.

Leonard, Joseph B., Detroit, Mich. Brake-band. No. 1,273,507; July 23; v. 252; p. 853.

Leonard, Lewis L., Ocean Grove, N. J. Corn-stalk cutter and loader. No. 1,273,240; July 23; v. 252; p. 782.

Leonard, William L., and J. E. Myers, Altoona, Pa. Cross-head pin. No. 1,274,061; July 30; v. 252; p. 1042.

Lepage, Joseph E., Montreal, Quebec, Canada. Life-saving suit. No. 1,271,045; July 2; v. 252; p. 83.

Lesch, Edward, New York, N. Y. Collar-button. No. 1,271,182; July 2; v. 252; p. 121.

Lesem, Isaac H., St. Louis, Mo. Fan. No. 1,273,384; July 23; v. 252; p. 819.

Lesem, Isador, Wichita, Kans. Explosion-engine. No. 1,272,683; July 16; v. 252; p. 602.

Leslie, Graham P., assignor to J. W. Leslie, trustee, Boston, Mass. Safety-razor. No. 1,272,816; July 16; v. 252; p. 641.

Leslie, James W., trustee. (See Leslie, Graham P., assignor.)

Letsch, Frederick W. (See McFarland and Letsch.)

Letz Manufacturing Company, The. (See Holland-Letz, William, assignor.)

Leustig, Benno B., Cleveland, Ohio. Demountable wheel-rim. No. 1,272,467; July 16; v. 252; p. 540.

Leustig, Benno B., Cleveland, Ohio. Rail-support. No. 1,273,508; July 23; v. 252; p. 853.

Leuthner, Frank J. (See Tickner, Frank W., assignor.)

Levi, Robert, New York, N. Y. Dress-shield and making same. No. 1,272,684; July 16; v. 252; p. 603.

Levin, Nils D., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Axle journal-box for outside-wheel locomotives. No. 1,273,884; July 30; v. 252; p. 993.

Levinson, Moses, New York, N. Y. Electric iron. No. 1,272,663; July 9; v. 252; p. 402.

Levis, Willis S., Yonkers, N. Y. Composite figure toy. No. 1,272,685; July 16; v. 252; p. 603.

Lewis, Antone J., Irvington, Cal. Automobile-signal. No. 1,274,289; July 30; v. 252; p. 1106.

Lewis, Arthur J., Stratford, assignor to The Baird Machine Company, Bridgeport, Conn. Spring-assembling mechanism for snap-fasteners. No. 1,271,330; July 2; v. 252; p. 163.

Lewis, James W., assignor of one-half to R. Boykin, Boley, Okla. Road-map system and apparatus. No. 1,272,817; July 16; v. 252; p. 641.

Lewis, John A., assignor to Tygart Valley Glass Company, Grafton, W. Va. Device for removing rings from glassware. No. 1,272,971; July 16; v. 252; p. 683.

Lewis, John H., Chicago, assignor of one-half to L. G. Kunzer, Oak Park, Ill. Locomotive noiseless smoke-consumer. No. 1,273,885; July 30; v. 252; p. 993.

Lewis, Lloyd V., Edgewood borough, assignor to The Union Switch & Signal Company, Swissvale, Pa. Circuit-controller. No. 1,272,972; July 16; v. 252; p. 684.

Lewis, Maurice, Paducah, Ky. Swivel-chain. No. 1,273,241; July 23; v. 252; p. 782.

Lewis, Rollin C., assignor to The Yale & Towne Manufacturing Company, Stamford, Conn. Lever-handle for safe-doors. No. 1,271,331; July 2; v. 252; p. 163.

Lewis, Thomas, Frankfort Heights, Ill. Coal-mine trap-door. No. 1,272,468; July 16; v. 252; p. 540.

Lezins, Max, Cleveland, Ohio. Automatic damper for stoves and furnaces. No. 1,272,064; July 9; v. 252; p. 402.

Liberman, Bernard, Philadelphia, Pa. Cigar-maker's table. No. 1,271,332; July 2; v. 252; p. 163.

Lichtenberg, Erich H., assignor to Kochring Machine Company, Milwaukee, Wis. Portable conveyer. No. 1,273,886; July 30; v. 252; p. 993.

Lidberg, Tiodolf, Chicago, Ill. Electrotherapeutic instrument. No. 1,272,469; July 16; v. 252; p. 540.

Liebegott, George H. (See Sloan and Liebegott.)

Liebowitz, Benjamin, New York, N. Y. Arc oscillation-generator. No. 1,271,183; July 2; v. 252; p. 122.

Lifshitz, Irving, New York, N. Y. Cloth-cutting machine. No. 1,272,818; July 16; v. 252; p. 641.

Lightening Machine Co. (See Koehl, George J., assignor.)

Lillig, George V. (See Millhouse, Henry, assignor.)

Limont, Alexander W., assignor to Bridgeport Brass Company, Bridgeport, Conn. Making projectile-bands. No. 1,274,359; July 30; v. 252; p. 1124.

Lincoln, Paul M., Pittsburgh, Pa. Electric recording and integrating device. No. 1,273,102; July 16; v. 252; p. 718.

Lind, Herman H., Lakewood, and D. K. Swartwout, Mayfield Heights, Ohio. Ventilator. No. 1,271,333; July 2; v. 252; p. 163.

Linde Air Products Company, The. (See Gougnard, Henri C. L., assignor.)

Lindemann, Albert J. (See Brennan and Lindemann.)

Lindemann, William G., Milwaukee, Wis. Cushion-tire. No. 1,273,887; July 30; v. 252; p. 994.

Linder, Walter W., Cooleemee, N. C., assignor, by mesne assignments, to Terrell Machine Company. Machine for cleaning bobbins. No. 1,273,075; July 16; v. 252; p. 711.

Lindhorst, George H. W., Nisqually, Wash. Automobile-truck. No. 1,273,076; July 16; v. 252; p. 712.

Lindmeier, Frederick and J., Oak Park, Ill. Humidifier. No. 1,273,888; July 30; v. 252; p. 994.

Lindmeier, Justus. (See Lindmeier, Frederick and J.)

Lindquist, Abel S., Springdale, Pa. Attachment for combination-squares. No. 1,273,510; July 23; v. 252; p. 854.

Lindsay, William, assignor to L. Wolff Manufacturing Company, Chicago, Ill. Enameling-powder distributer. No. 1,273,632; July 23; v. 252; p. 887.

Lindström, Charles A., assignor to Pressed Steel Car Company, Pittsburgh, Pa. Discharge-door-operating mechanism. No. 1,271,334; July 2; v. 252; p. 163.

Lindstrom, Frank R., Milaca, Minn. Harpoon-fork. No. 1,272,686; July 16; v. 252; p. 602.

Lindstrom, Smith Company. (See Endorf, Charles, Jr., assignor.)

Link-Belt Company. (See Pratt, Howell D., assignor.)

Linn, William, Philadelphia, Pa. Handhold for cars. No. 1,274,063; July 30; v. 252; p. 1043.

Linnett, Edgar B., assignor to Searls Manufacturing Company, Newark, N. J. Wardrobe-trunk clothes-carrier. No. 1,272,819; July 16; v. 252; p. 642.

Linton, Sidney J., Groveland, N. Y. Hose-clamp. No. 1,270,960; July 2; v. 252; p. 59.

Lipkowski, Joseph de, Paris, France. Repeating accelerator for compressed-air brakes. No. 1,274,290; July 30; v. 252; p. 1106.

Lippert, Samuel, East Cleveland, Ohio. Valve. No. 1,270,961; July 2; v. 252; p. 59.

Little, Charles H., East Cleveland, Ohio. Ruler. No. 1,274,291; July 30; v. 252; p. 1106.

Little, Charles H., East Cleveland, Ohio. Ruler. No. 1,274,292; July 30; v. 252; p. 1106.

Little, Charles H., East Cleveland, Ohio. Scale. No. 1,274,293; July 30; v. 252; p. 1107.

Little, Theodore W., Brookline, assignor to Walworth Manufacturing Company, Boston, Mass. Wrench. No. 1,271,734; July 9; v. 252; p. 309.

Littlefield, Frank A., assignor to Nashua Machine Company, Nashua, N. H. Steam-trap and valve therefor. No. 1,272,470; July 16; v. 252; p. 541.

Littlejohn, Henry E. (See Robison and Littlejohn.)

Liverance, Frank E., Jr., Wyoming Park, Mich., assignor to The McCaskey Register Company, Alliance, Ohio. Leaf for filing appliances. No. 1,273,242; July 23; v. 252; p. 782.

Liverance, Frank E., Jr., Wyoming Park, Mich., assignor to The McCaskey Register Company, Alliance, Ohio. Filing appliance. No. 1,273,243; July 23; v. 252; p. 782.

Ljungström, Birger, Stockholm, and F. Ljungström, Brevik Lidingön, Sweden. Rotating field-magnet. No. 1,273,385; July 23; v. 252; p. 820.

Ljungström, Birger, Stockholm, and F. Ljungström, Brevik, Lidingön, Sweden. Rotating field-magnet. No. 1,273,511; July 23; v. 252; p. 854.

Ljungström, Fredrik. (See Ljungström, Birger and F.)

Ljungström, Fredrik, Stockholm, Sweden, assignor to Aktiebolaget Ljungstrom Angturbin. Reversible radial-flow turbine. No. 1,273,633; July 23; v. 252; p. 887.

Llewellyn, William. (See Walker, Frank, assignor.)

Lobl, Frederick, Middleboro, Mass. Game. No. 1,274,294; July 30; v. 252; p. 1107.

Lockwood, Benjamin F., Oakland, Cal. Illuminated watch-holder. No. 1,271,735; July 9; v. 252; p. 309.

Loeb, Rudolf, Jenkintown, Pa. Sewing-machine. No. 1,273,386; July 23; v. 252; p. 820.

Loeb, Rudolf, Jenkintown, Pa. Die for setting chevron-stripes. No. 1,273,512; July 23; v. 252; p. 854.

Loepsinger, Albert J., Providence, R. I., assignor to General Fire Extinguisher Company, New York, N. Y. Automatic sprinkler. No. 1,273,387; July 23; v. 252; p. 820.

Loewenstine, Maurice, Cincinnati, Ohio. Paper-roll winder. No. 1,271,736; July 9; v. 252; p. 309.

Loflin, Virginia H., Centerville, Md. Ironing-board stand. No. 1,272,471; July 16; v. 252; p. 541.

Logan, Charles H., assignor of one-half to E. H. Bennett, Sedalia, Mo. Wire-stretcher. No. 1,273,889; July 30; v. 252; p. 994.

Logan, Henry H., Vancouver, British Columbia, Canada. Flexible shaft-coupling. No. 1,272,687; July 16; v. 252; p. 604.

Logan, Robert J., St. John, New Brunswick, Canada. Toy. No. 1,274,295; July 30; v. 252; p. 1107.

Lohman, Carl A., Seattle, Wash. Lumber-bundling frame. No. 1,271,046; July 2; v. 252; p. 83.

Lohman, Carl A., Seattle, Wash. Unpiling device for lumber. No. 1,272,472; July 16; v. 252; p. 541.

Lombard, Harold E., *et al.* (See Horn, Charles A., assignor.)

Lombard, Nathaniel, Worcester, Mass., assignor to International Paper Company. Pulp-heating mechanism. No. 1,272,473; July 16; v. 252; p. 541.

London, William J. A., Springfield, Mass., assignor to General Electric Company. Shaft-packing. No. 1,273,634; July 23; v. 252; p. 887.

Long, Edward C., Westmont borough, Pa. Car-truck frame. No. 1,274,296; July 30; v. 252; p. 1107.

Long, Eli M., assignor to The Standard Optical Company, Geneva, N. Y. Edge-grinding machine for lenses. No. 1,272,474; July 16; v. 252; p. 542.

Long, George G., San Francisco, Cal. Stage-shadowgraph. No. 1,272,820; July 16; v. 252; p. 642.

Long, Ira L., Monmouth, Ill. Transmission for automobiles. No. 1,273,635; July 23; v. 252; p. 888.

Long, John E., Hot Springs, Mont. Tractor. No. 1,272,475; July 16; v. 252; p. 542.

Long, William T., Auburn, Wash. Wrench. No. 1,270,848; July 2; v. 252; p. 26.

Longtin, Hercule A., *et al.* (See Bisaillon, Zenophile, assignor.)

Longtin, Joseph M., *et al.* (See Bisaillon, Zenophile, assignor.)

Loomis, Burdett, Hartford, Conn. Retting, ungumming, and drying fiber plants and woody material. No. 1,271,591; July 9; v. 252; p. 267.

Lopez, Frank H., Cumming, Cal. Tire structure. No. 1,272,476; July 16; v. 252; p. 542.

Lorenzen, Charles. (See Lorenzen, Edward B. and C.)

Lorenzen, Edward B. and C., Lorain, Ohio. Valve. No. 1,274,297; July 30; v. 252; p. 1108.

Loseth, Christopher, Council Bluffs, Iowa. Drive-anchor. No. 1,273,890; July 30; v. 252; p. 994.

Loughran, John F., Chehalis, Wash. Detachable sleigh-runner. No. 1,272,341; July 9; v. 252; p. 479.

Louis, Elek, New York, N. Y. Organ. No. 1,272,821; July 16; v. 252; p. 642.

Lovan, Alphonso B., *et al.* (See Thompson, George W., assignor.)

Löw, Wilhelm, Heidelberg, Germany. Apparatus for consecutively affixing serial views to film-bands. No. 1,273,113; July 16; v. 252; p. 721.

Lowe, Clyde E. (See Clark and Lowe.)

Lowe, Leon P., San Francisco, Cal. Gas or vapor heater. No. 1,273,636; July 23; v. 252; p. 888.

Lowenstein, Arthur, Chicago, Ill. Steaming of oils, &c. No. 1,274,175; July 30; v. 252; p. 1074.

Lowrimore, Marion H., Obatchee, Ala. Funnel. No. 1,272,477; July 16; v. 252; p. 543.

Loxterman, Howard B., Pittsburgh, assignor to Blaw Steel Construction Company, Hoboken, Pa. Tunnel mold-form. No. 1,273,244; July 23; v. 252; p. 783.

Loyer, Joseph C. and O. M., Detroit, Mich. Machine for making composition shingles. No. 1,273,388; July 23; v. 252; p. 821.

Loyer, Oliver M. (See Loyer, Joseph C. and O. M.)

Lozier, Charles E., Elyria, Ohio. Bearing-lubricator. No. 1,271,737; July 9; v. 252; p. 309.

Lucas, Marshall Y., Boise, Idaho. Bulb. No. 1,271,184; July 2; v. 252; p. 122.

Lucas, Robert M., Chicago, Ill. Automatic lubricator. No. 1,274,298; July 30; v. 252; p. 1108.

Lucas, Samuel M., Pittsburgh, assignor to The Union Switch & Signal Company, Swissvale, Pa. Relay. No. 1,272,973; July 16; v. 252; p. 684.

Ludeke, Emil, Rochester, N. Y. Fastening device. No. 1,274,064; July 30; v. 252; p. 1043.

Ludwick, Wayne D., near Tacoma, Wash., assignor to Electric Heating Company. Electric water-heater. No. 1,273,389; July 23; v. 252; p. 821.

Luellen, Lawrence W., Mountain Lakes, N. J., assignor to Individual Drinking Cup Company, New York, N. Y. Receptacle. No. 1,273,891; July 30; v. 252; p. 994.

Lukus, Alina, Flagstaff, Ariz. Washtub. No. 1,272,478; July 16; v. 252; p. 543.

Lumber Tie and Timber Vulcanizing Company. (See Fish, Frederick K., Jr., assignor.)

Lummis, Charles W., assignor to Morgan Construction Company, Worcester, Mass. Feeding mechanism for gas-producers. No. 1,270,962; July 2; v. 252; p. 59.

Lummis, Charles W., assignor to Morgan Construction Company, Worcester, Mass. Feeding mechanism for gas-producers. No. 1,270,963; July 2; v. 252; p. 60.

Lummis, Charles W., Worcester, Mass., assignor to Morgan Construction Company. Feeding mechanism for gas-producers. No. 1,274,176; July 30; v. 252; p. 1075.

Lund, Charles W., Willow, Cal. Whistle. No. 1,272,822; July 16; v. 252; p. 642.

Lund, James L., New York, N. Y. Cleaning-machine. No. 1,273,077; July 16; v. 252; p. 712.

Lund, Thomas, Beverly, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Grinding-machine. No. 1,273,892; July 30; v. 252; p. 995.

Lundell, Alben E., assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone-exchange system. No. 1,271,185; July 2; v. 252; p. 122.

Lundell, Alben E., assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone-exchange system. No. 1,271,186; July 2; v. 252; p. 122.

Lundell, Alben E., assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone-exchange system. No. 1,271,335; July 2; v. 252; p. 164.

Lundell, Alben E., assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone-exchange system. No. 1,271,336; July 2; v. 252; p. 164.

Lundell, Alben E., assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone system. No. 1,271,337; July 2; v. 252; p. 164.

Lundell, Alben E., assignor to Western Electric Company, Incorporated, New York, N. Y. Circuit-interrupting device. No. 1,272,279; July 9; v. 252; p. 461.

Lundell, Alben E., assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone system. No. 1,272,280; July 9; v. 252; p. 461.

Lundell, Alben E., assignor to Western Electric Company, Incorporated, New York, N. Y. Electromagnetic switching device. No. 1,273,245; July 23; v. 252; p. 783.

Lundgren, Harry, and F. Teberg, Oakland, Cal. Ticket-canceling machine. No. 1,273,390; July 23; v. 252; p. 821.

Lundin, Gustaf W., Bellevue, Iowa. Connecting device for train telephone-lines. No. 1,273,246; July 23; v. 252; p. 783.

Lundquist, Frank A., assignor to Western Electric Company, Incorporated, New York, N. Y. Automatic switch. No. 1,273,247; July 23; v. 252; p. 783.

Lundstrom, Charles G., Vero, Fla. Fertilizer-dropping device. No. 1,270,849; July 2; v. 252; p. 27.

Lurker, Edward, assignor to Haynes Stellite Co., Kokomo, Ind. Milling-cutter. No. 1,273,248; July 23; v. 252; p. 784.

Lurker, Edward, assignor to Haynes Stellite Co., Kokomo, Ind. Cutting-tool for lathes, planers, shapers, and the like. No. 1,273,249; July 23; v. 252; p. 784.

Luth, William, Albion, Nebr. Light-shield. No. 1,273,637; July 23; v. 252; p. 888.

Luther Grinder Manufacturing Company. (See Bethke, Leo, assignor.)

Lutkins, Clinton S. (See Ellis, Carleton, assignor.)

Lutz, George A., Cranford, N. J., assignor to American Circular Loom Company, Pittsburgh, Pa. Means for protecting conduit or pipe threads. No. 1,271,187; July 2; v. 252; p. 123.

Lux, Jacob, Edgeley, N. D. Railway-crossing signal. No. 1,274,177; July 30; v. 252; p. 1075.

Luxmore, William, Chicago, Ill. Spring terminal clip. No. 1,273,250; July 23; v. 252; p. 784.

Lycan, Albert E., Kooskia, Idaho. Trap. No. 1,272,974; July 16; v. 252; p. 685.

Lyche, Leo A., Sandviken, near Christiania, Norway. Apparatus for drying paper, pasteboard, wood-pulp, and other materials. No. 1,271,738; July 9; v. 252; p. 309.

Lyle, John S., McLoud, Okla. Agricultural implement. No. 1,273,251; July 23; v. 252; p. 784.

Lyman Gun Sight Corporation, The. (See Grant, David, assignor.)

Lynde, Frank G., assignor to Lauter Company, Newark, N. J. Pneumatic action. No. 1,271,188; July 2; v. 252; p. 123.

Lyon, John S., assignor of one-half to T. C. Uhlen, Rochester, N. Y. Convertible baby-bed. No. 1,273,638; July 23; v. 252; p. 888.

Lyons, Edgar S. (See Robb and Lyons.)

Lyons, Harry C., New York, N. Y. Liquid-dispenser. No. 1,272,688; July 16; v. 252; p. 604.

Lyons, John G., New York, N. Y. Christmas-tree holder. No. 1,273,639; July 23; v. 252; p. 889.

Lyons, Robert L., Waltham, Mass., assignor to Frederick Osann Company, New York, N. Y. Sewing-machine. No. 1,272,065; July 9; v. 252; p. 402.

Lyons, Robert L., Waltham, Mass., assignor to The Frederick Osann Company, New York, N. Y. Sewing-machine having thread-cutting devices. No. 1,272,066; July 9; v. 252; p. 402.

Lyons, Robert L., Waltham, Mass., assignor to The Frederick Osann Company, New York, N. Y. Sewing-machine. No. 1,272,067; July 9; v. 252; p. 403.

M. D. Knowlton Company. (See Hawkins and Hoch, assignors.)

M and T Button Company. (See Thayer, Granville F., assignor.)

Maas, Carl. (See Hoff and Maas.)

Maas, George H., Milwaukee, Wis. Receptacle. No. 1,273,254; July 23; v. 252; p. 785.

Mable, Abram E., *et al.* (See Madsen, Frederick G., assignor.)

MacDonald, John W., Portsmouth, Va. Apparatus for raising sunken vessels. No. 1,271,342; July 2; v. 252; p. 165.

MacDonald, Norman J., Winnipeg, Manitoba, Canada. Floor. No. 1,272,826; July 16; v. 252; p. 644.

MacDougall, Harry W., East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone-exchange system. No. 1,272,689; July 16; v. 252; p. 604.

MacFarlane, Oliver P. (See Wade, Jessie, assignor.)

MacGill, Charles F. (See Daniels, Farrington, assignor.)

MacGill, Charles F. (See Smith, Charles G, assignor.)

MacGregor, Wallace F., Racine, Wis., assignor to The Indiana Manufacturing Company, Indianapolis, Ind. Pneumatic straw-stacker. No. 1,273,255; July 23; v. 252; p. 785.

Macbeth, George and M., Liverpool, England. Cash-register. No. 1,272,977; July 16; v. 252; p. 685.

Macbeth, George and M., Liverpool, England. Cash-register. No. 1,272,978; July 16; v. 252; p. 686.

Macbeth, Malcolm. (See Macbeth, George and M.)

Macfarren, Walter W. (See Kuhn and Macfarren.)

Macleod, Albert A., Swampscott, and L. M. Brown, Beverly, Mass., assignors, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Shoe-machine. No. 1,271,741; July 9; v. 252; p. 310.

Macnicol, Arnold N., Melbourne, Victoria, Australia. Liquid-sprinkler. No. 1,272,070; July 9; v. 252; p. 404.

Macy, Burt H., Somerville, Mass. Elevator safety-lock. No. 1,270,853; July 2; v. 252; p. 28.

Macy, Burt H., Somerville, Mass. Elevator-locking system. No. 1,270,854; July 2; v. 252; p. 28.

Madden, Jeremiah M., New York, N. Y. Insect-destroyer. No. 1,272,283; July 9; v. 252; p. 462.

Madeley, Ralph P., Sacramento, Cal. Railway-spike. No. 1,272,071; July 9; v. 252; p. 404.

Madison, Oscar M., Osborne, Kansas. Lace and embroidery display drawer. No. 1,273,894; July 30; v. 252; p. 995.

Madsen, Frederick G., Chicago, assignor of one-third to A. E. Mable, Evanston, and one-third to J. O. Thomas, Chicago, Ill. Automobile-lock. No. 1,272,072; July 9; v. 252; p. 404.

Madsen, Mads H., Kimballton, Iowa. Railway construction. No. 1,272,827; July 16; v. 252; p. 644.

Madsen, Mads H., Kimballton, Iowa. Corn-planter drop mechanism. No. 1,272,828; July 16; v. 252; p. 644.

Madsen, Rasmus H., Hollywood, Cal. Coaster-brake lining. No. 1,272,690; July 16; v. 252; p. 605.

Mafam Motor-Apparate G. m. b. H. (See Diehl, Hermann, assignor.)

Mafam Motor-Apparate G. m. b. H. (See Rilling, Albert, assignor.)

Magnetic Power Transmitter Company. (See Satterstrom, Ferdinand, assignor.)

Magnus, John, Poplar Bluff, Mo., assignor, by mesne assignments, to The Dalton Adding Machine Company, Cincinnati, Ohio. Adding-machine. No. 1,270,855; July 2; v. 252; p. 29.

Magsby, Stephen M., Lula, Miss. Tag-holder. No. 1,272,284; July 9; v. 252; p. 463.

Maher, Jeremiah S., St. Louis, Mo. Automobile rear axle. No. 1,271,742; July 9; v. 252; p. 311.

Maher, Solomon, North Adams, Mass. Woodworker's saw. No. 1,272,691; July 16; v. 252; p. 605.

Mahlberg, Peter M., Hopkins, Minn. Button. No. 1,272,829; July 16; v. 252; p. 644.

Malley, Roy D. (See Kraus and Malley.)

Malley, Roy D., East Orange, assignor to Cooper Hewitt Electric Company, Hoboken, N. J. Support for electric-lamp filaments. No. 1,270,856; July 2; v. 252; p. 29.

Mair, William B., Birmingham, England. Instrument for gaging internal diameters. No. 1,273,641; July 23; v. 252; p. 889.

Maitland, Harold T., Marcus Hook, assignor to Sun Company, Philadelphia, Pa. Refining hydrocarbon oils. No. 1,272,979; July 16; v. 252; p. 686.

Majewski, Wladyslaw, San Francisco, Cal. Rotary compression-machine. No. 1,272,073; July 9; v. 252; p. 405.

Majot, Emile, Maumee, Ohio. Gas and air mixer for glass furnaces. No. 1,273,171; July 23; v. 252; p. 764.

Makrenos, John E., Detroit, Mich. Armor for vehicles. No. 1,273,515; July 23; v. 252; p. 855.

Malleable Iron Range Company. (See Smith, Kenneth C., assignor.)

Mallory, Harry C., Bellport, N. Y. Heat-regulator. No. 1,274,066; July 30; v. 252; p. 1043.

Malphurs, Joel W., Gainesville, Fla. Dust and cinder conveyer for railway passenger-coaches. No. 1,271,918; July 9; v. 252; p. 358.

Malsin, Albert, assignor to Lane Bryant, Inc., New York, N. Y. Corset. No. 1,272,830; July 16; v. 252; p. 645.

Malsin, Albert, New York, N. Y. Corset-clasp. No. 1,272,831; July 16; v. 252; p. 645.

Malstrom, Carl H., Brooklyn, N. Y., and W. K. Andersen, Bethlehem, Pa., assignors to F. Purdy, Chicago, Ill. Carbureter. (Reissue.) No. 14,496; July 23; v. 252; p. 938.

Mangel, Wallie C., Fairfax, assignor of one-half to E. F. Berkner, Sleepy Eye, Minn. Trailer attachment for automobiles. No. 1,272,487; July 16; v. 252; p. 546.

Manley, Frank, Silverton, Colo. Grade-controlled auxiliary air-valve for internal-combustion engines. No. 1,272,285; July 9; v. 252; p. 463.

Mann, Miles H., assignor to International Money Machine Company, Terre Haute, Ind. Register attachment. No. 1,273,895; July 30; v. 252; p. 996.

Manning, Flavian D., Perryville, Mo. Deborning-chute. No. 1,271,343; July 2; v. 252; p. 166.

Manning, William W., Mountainair, N. Mex. Glove-thimble. No. 1,273,256; July 23; v. 252; p. 786.

Manns, William H., assignor to Frick Company, Waynesboro, Pa. Ammonia-condenser for ice-machines. No. 1,272,286; July 9; v. 252; p. 463.

Manogue, William T., St. Louis, Mo., assignor, by mesne assignments, to Schroeder Headlight & Generator Company, Evansville, Ind. Fluid-turbine. No. 1,273,257; July 23; v. 252; p. 786.

Mantle Lamp Company of America, The. (See Davis and Johnson, assignors.)

Manzer, Chester B., New York, N. Y. Amusement device. No. 1,272,488; July 16; v. 252; p. 546.

Marnascio, Frank A., Phillipsburg, N. J. Dust-collector. No. 1,272,489; July 16; v. 252; p. 546.

Marconi, Guglielmo, London, England, assignor to Marconi Wireless Telegraph Company of America, New York, N. Y. Wireless-telegraph transmitter. No. 1,271,190; July 2; v. 252; p. 124.

Marconi Wireless Telegraph Company of America. (See Ewen, Harry A., assignor.)

Marconi Wireless Telegraph Company of America. (See Marconi, Guglielmo, assignor.)

Marconi Wireless Telegraph Company of America. (See Weagant, Roy A., assignor.)

Marcus, Jacob, Rochester, N. Y. Bit-stock. No.1,272,980; July 16; v. 252; p. 686.

Mardis, Paul L. (See Simmon and Mardis.)

Mardon, John S., and L. D. Fay, Loyalton, Cal. Wood-working-machine. No. 1,273,516; July 23; v. 252; p. 855.

Margetts, George R., assignor of one-half to J. P. Keary, Chicago, Ill. Spoon. No. 1,273,642; July 23; v. 252; p. 889.

Marguerat, Robert. (See Jullen and Marguerat.)

Marinsky, Davis, New York, N. Y. Machine for making fastening devices. No. 1,272,981; July 16; v. 252; p. 686.

Markham, Charles M., Milwaukee, Wis. Column-clamp. No. 1,270,965; July 2; v. 252; p. 60.

Marks, Paul J., assignor to Eastman Kodak Company, Rochester, N. Y. Detachable shutter-releasing device. No. 1,273,172; July 23; v. 252; p. 764.

Marrs, Huston H., Denver, Colo. Gas-lamp. No. 1,271,048; July 2; v. 252; p. 84.

Marshall, Frank D., Central City, Iowa. Grain-shocker. No. 1,273,517; July 23; v. 252; p. 856.

Marshall, James E., Caney, Kans. Inclinometer. No. 1,271,049; July 2; v. 252; p. 84.

Martell, Andrew K., and E. Monhof, Los Angeles, Cal. Tractor. No. 1,272,287; July 9; v. 252; p. 464.

Martell, Louis H., Elyria, Ohio. Packing device. No. 1,272,288; July 9; v. 252; p. 464.

Martin, Clarence H., Endeavor, Wis. Lightning-arrester. No. 1,271,050; July 2; v. 252; p. 84.

Martin, Otto J. T. G. R., Vancouver, British Columbia, Canada. Smelting and refining furnace. No. 1,271,051; July 2; v. 252; p. 85.

Martin, Otto J. T. G. R., Vancouver, British Columbia, Canada. Lining for furnaces. No. 1,271,052; July 2; v. 252; p. 85.

Martin, Richard H., Toccoa, Ga. Quick plug attachment. No. 1,273,896; July 30; v. 252; p. 996.

Martin, Robert P. (See Kollock and Martin.)

Martino, Natale, New York, N. Y. Neck-protector. No. 1,274,067; July 30; v. 252; p. 1044.

Martner, Samuel C. (See Briggs, John F., assignor.)

Marx, Gustave C. (See Zabriskie and Marx.)

Marx, Henry C., Chicago, Ill. Combined metallophone and zither. No. 1,272,832; July 16; v. 252; p. 645.

Marx, Robert J. (See Jones and Marx.)

Mason, Thomas F. (See Way and Mason.)

Mason, William S., Mayfield, N. Y. Electric-lighting system. No. 1,273,258; July 23; v. 252; p. 786.

Massey, Emmett, Proctor, Ark. Sawmill set-works. No. 1,272,289; July 9; v. 252; p. 464.

Masury, Alfred F., assignor to International Motor Company, New York, N. Y. Radiator for automobiles. No. 1,271,191; July 2; v. 252; p. 124.

Matear, Huon A., Liverpool, England. Internal spring heel-seat. No. 1,272,490; July 16; v. 252; p. 547.

Mather, George E., East Orange, N. J., and B. Bailey, assignors to Western Electric Company, Incorporated, New York, N. Y. Transmitter-support. No. 1,272,692; July 16; v. 252; p. 605.

Mathews, Thomas, Leicester, England. Toy, kindergarten appliance, &c. No. 1,273,643; July 23; v. 252; p. 890.

Mathias, Thaddeus B., Denver, Colo. Tire-tool. No. 1,271,919; July 9; v. 252; p. 358.

Matson, Charles M. (See Matson, Martin M. and C. M.)

Matson, Martin M. and C. M., Mabscott, W. Va. Motor. No. 1,273,079; July 16; v. 252; p. 713.

Mattatuck Manufacturing Company, The. (See Peck, Charles W., assignor.)

Matteson, George F., Ridley Park, Pa., assignor to The Veeder Manufacturing Company, Hartford, Conn. Counter for moving objects. No. 1,273,897; July 30; v. 252; p. 996.

Mattman, Emil, Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company. Retaining means. No. 1,272,693; July 16; v. 252; p. 606.

Mattson, Evald M., Inman, Kans. Rotary valve mechanism for engines. No. 1,271,344; July 2; v. 252; p. 166.

Matz, Frederick W., Valley City, N. D. Lever mechanism for vehicle-brakes. No. 1,271,595; July 9; v. 252; p. 269.

Mauch, Wilhelm, Jr., Zeeland, N. D. Grain-treating machine. No. 1,274,180; July 30; v. 252; p. 1076.

Maudslay, Reginald W., Coventry, England. Lubrication of laminated springs. No. 1,272,290; July 9; v. 252; p. 464.

Maxwell, George S., Newark, N. J., assignor to The Taximeter Register Company, Washington, D. C. Taximeter. No. 1,271,920; July 9; v. 252; p. 359.

Maxwell Motor Company. (See Moule, Harry R., assignor.)

May, Harry E., assignor of one-third to H. Hall, Sedalia, and one-third to H. K. Wagner, St. Louis, Mo. Mud-hook. No. 1,272,291; July 9; v. 252; p. 465.

Mayer, Walter S. (See Downes and Mayer.)

Mayer, Walter S., assignor to Electric Service Supplies Company, Philadelphia, Pa. Insulator-support. No. 1,271,596; July 9; v. 252; p. 269.

Mayhew, Frank J. (See Taylor, Horace H., assignor.)

Maynard, Arthur H., Warwick, R. I., assignor to Boston Wire Stitcher Company, Portland, Me. Work-guide for wire-stitching machines. No. 1,272,694; July 16; v. 252; p. 606.

Maynes, Hyla F., Gaines, Pa. Mechanical-inscription camera. No. 1,274,179; July 30; v. 252; p. 1075.

Maynes, Hyla F., Gaines, Pa. Mechanical-inscription camera. No. 1,274,302; July 30; v. 252; p. 1109.

Maytag Company, The. (See Snyder, Howard F., assignor.)

Mazade, Maurice A., Paris, France. Joint for fixing elastic tubes upon metal pipes. No. 1,271,597; July 9; v. 252; p. 269.

Maze, Harry T., Anderson, Ind. Combined hair brush and comb. No. 1,272,982; July 16; v. 252; p. 687.

McAtee, William A., *et al.* (See Thompson, George W., assignor.)

McBean, Duncan D., New York, N. Y. Building foundations for subaqueous tunnels. No. 1,272,479; July 16; v. 252; p. 543.

McBride, William S., Caldwell, Ohio. Playing-cards. No. 1,272,480; July 16; v. 252; p. 548.

McCann, Ronald A., New Brunswick, N. J., assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway signaling. No. 1,271,592; July 9; v. 252; p. 267.

McCann, Ronald A., assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway signaling. No. 1,271,593; July 9; v. 252; p. 268.

McCarthy, Michael J., Florence, Mass. Separator-coop for poultry. No. 1,272,823; July 16; v. 252; p. 643.

McCaskey Register Company, The. (See Liverance, Frank E., Jr., assignor.)

McClain, Jamesie E., Tempe, Ariz. Dumping-scraper. No. 1,271,485; July 2; v. 252; p. 203.

McClean, Alexander W. (See Peck and McClean.)

McCloud, Edward H., assignor to The Kinnear Manufacturing Company, Columbus, Ohio. Power-transmission mechanism. No. 1,270,964; July 2; v. 252; p. 60.

McClure, Charles W., and E. J. Reilly, assignors to The William Pollock Company, Youngstown, Ohio. Liquid-metal-charging car for open-hearth furnaces. No. 1,273,391; July 23; v. 252; p. 822.

McClure, F. Lynn. (See Curtis, Jesse T., assignor.)

McClure, Roderick, and C. Owens, Fort Laramie, Wyo.; said Owens assignor to said McClure. Combined bending and cutting machine. No. 1,272,068; July 9; v. 252; p. 403.

McClure, Roderick, assignor to H. G. Baruis, Gilman, Mont. Demountable rim. No. 1,273,640; July 23; v. 252; p. 889.

McConahey, William M., Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, Combination transformer and circuit-breaker. No. 1,270,850; July 2; v. 252; p. 27.

McCord, Alvin C., Chicago, Ill. Means for combining side frames and journal-boxes with car-trucks. No. 1,272,824; July 16; v. 252; p. 643.

McCord, Alvin C., Chicago, Ill. Draft-rigging for cars. No. 1,273,252; July 23; v. 252; p. 785.

McCord Manufacturing Company. (See Harris, Joseph D. assignor.)

McCord, Otto D., Rock Island, Ill. Cement-form tie-clamp. No. 1,272,281; July 9; v. 252; p. 462.

McCormack, George A., Medford, assignor to F. Joy, Winchester, Mass. Stud for snap-fasteners. No. 1,273,513; July 23; v. 252; p. 855.

McCulloch, Charles A. (See Ripken, Hugo F., assignor.)

McCullough, Morgan, Los Angeles, Cal. Suspender-strap fastening means. No. 1,271,338; July 2; v. 252; p. 165.

McCurdy, Samuel. (See McVeigh and McCurdy.)

McDonald, Charles D., Chicago, Ill. Die-press mechanism. No. 1,272,481; July 16; v. 252; p. 544.

McDonald, Charles J. (See Chenette, Frank A., assignor.)

McDonald, J. A. (See Floyd, William B., assignor.)

McDonough, Robert H., Detroit, Mich. Combination-lock. No. 1,271,739; July 9; v. 252; p. 310.

McDougall, Walter. (See Barlow, Arthur, assignor.)

McElree, T. M. (See Myers, Melvin A., assignor.)

McElroy, James F., Albany, N. Y., assignor to Consolidated Car-Heating Company. Thermostatically-controlled circuit. No. 1,270,851; July 2; v. 252; p. 27.

McFadden, Albert R., Jeromesville, Ohio. Package-tie. No. 1,272,482; July 16; v. 252; p. 544.

McFalls, David H., *et al.* (See Calkins, Almon B., assignor.)

McFarland, James W., Brownwood, Tex. Washboiler. No. 1,271,189; July 2; v. 252; p. 124.

McFarland, John N., and F. W. Letsch, Baltimore, Md.; said Letsch assignor to said McFarland. Switch-operating device for motor-vehicles. No. 1,273,514; July 23; v. 252; p. 855.

McGann, Owen J., Carrollton, assignor of one-half to G. Sinclair, Hanoverton, Ohio. Rotary internal-combustion engine. No. 1,272,975; July 16; v. 252; p. 683.

McGary, Alexander, and J. P. Sunderland, New York, N. Y., assignors, by mesne assignments, to Gould Coupler Company. Closet. No. 1,272,483; July 16; v. 252; p. 544.

McGill, George F. (See Bruhn and McGill.)

McGinnis, Elwood T., Atlantic City, N. J. Coin-holder. No. 1,271,339; July 2; v. 252; p. 165.

McGinnis, William A., Chicago, Ill. Garment-hanger. No. 1,273,253; July 23; v. 252; p. 785.

McGowan, Henry S., McGowan, Wash. Rudder-controlled shield. No. 1,274,299; July 30; v. 252; p. 1108.

McGowan, Michael F., Bremerton, Wash. Game apparatus. No. 1,274,178; July 30; v. 252; p. 1075.

McInturff, Ernest R., Bealeton, Va. Oscillating engine-valve. No. 1,274,300; July 30; v. 252; p. 1108.

McIntyre, James, Jersey City, N. J. Truss. No. 1,273,893; July 30; v. 252; p. 995.

McIntyre, William J., Hannah, N. D. Toothpick-dispensing device. No. 1,272,825; July 16; v. 252; p. 643.

McKee Glass Company. (See Smith, Maurice A., assignor.)

McKee, Harry W., Cincinnati, Ohio. Moving implement. No. 1,271,594; July 9; v. 252; p. 268.

McKee, Ralph H., Ridgefield Park, N. J. Obtaining alcohol from sulfite liquors. No. 1,273,392; July 23; v. 252; p. 822.

McKenna, William F. (See Phillips and McKenna.)

McKinney, James L., St. Louis, Mo. Signal. No. 1,271,740; July 9; v. 252; p. 310.

McLaughlin, James E., and D. Bordeleau, Grand Mere, Quebec, Canada. Agricultural implement. No. 1,270,852; July 2; v. 252; p. 28.

McLaughlin, Michael J., St. Louis, Mo. Ornamental plaque and making the same. No. 1,272,484; July 16; v. 252; p. 545.

McLoughlin Bros. (See Beals, William, assignor.)

McLucas, Earl R., North Yakima, Wash. Wheel-truing device. No. 1,272,976; July 16; v. 252; p. 685.

McMahon, William H., Bruce, S. D. Muffler. No. 1,272,485; July 16; v. 252; p. 545.

McManis, Charles E., Akron, Ohio. Coupling. No. 1,272,486; July 16; v. 252; p. 545.

McManus, Luis M., Houston, Tex., assignor of one-half to J. H. Warner, New York, N. Y. Machine-gun. No. 1,273,078; July 16; v. 252; p. 712.

McMeans, Orange E., and C. A. Tripp, assignors to Holcomb & Hoke Mfg. Co., Indianapolis, Ind. Mechanical movement. No. 1,271,917; July 9; v. 252; p. 358.

McMillan, John G., San Jose, Cal. Adjustable surveying-target. No. 1,272,069; July 9; v. 252; p. 403.

McMurtry, Earl V. (See McMurtry, Julian J., and E. V.)

McMurtry, Julian J. and E. V., San Francisco, Cal. Paper-box-taping machine. No. 1,274,065; July 30; v. 252; p. 1043.

McNabb, Alvin C., Dallas, assignor of one-half to C. L. Wakefield, Dallas county, Tex. Elevator signal system. No. 1,274,301; July 30; v. 252; p. 1109.

McNeice, James D. B. (See Carter, Daniel, assignor.)

McQuarrie, James A., Joggin Mines, Nova Scotia, Canada. Combined coat and vest. No. 1,271,047; July 2; v. 252; p. 84.

McQuarrie, James L., Montclair, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone-exchange system. No. 1,272,282; July 9; v. 252; p. 462.

McVeigh, John, and S. McCurdy, Londonderry, Ireland. Garment-pocket. No. 1,271,341; July 2; v. 252; p. 165.

Meacham, Benjamin E., Lorain, Ohio, assignor to American Stove Company, St. Louis, Mo. Thermo-controlled gas-oven. No. 1,273,644; July 23; v. 252; p. 890.

Megow, Charles F., Detroit, Mich. Tractor. No. 1,272,491; July 16; v. 252; p. 547.

Megow, Robert, Minneapolis, Minn. Heel and shank support. No. 1,273,080; July 16; v. 252; p. 713.

Mehlhorn, Charles, Philadelphia, Pa. Roadway. No. 1,271,921; July 9; v. 252; p. 359.

Meier, Edward C., Phoenixville, Pa. Boiler construction. No. 1,271,598; July 9; v. 252; p. 269.

Meier, Henry J., New York, N. Y. Writing implement. No. 1,274,303; July 30; v. 252; p. 1110.

Melick, Walter L., Columbus, Ohio. Making sodium aluminate. No. 1,271,192; July 2; v. 252; p. 124.

Melton, Lloyd L., and H. R. Whomes, assignors to Dearborn Truck Company, Chicago, Ill. Motor-vehicle. No. 1,271,053; July 2; v. 252; p. 85.

Melville Clark Piano Company. (See Clark, Melville, assignor.)

Melvin, Charles H., and J. P. Seaholm, assignors to Deere and Company, Moline, Ill. Rolling colter and jointer. No. 1,273,898; July 30; v. 252; p. 997.

Mendenhall, Albert, Oskaloosa, Iowa. Can-opening device. No. 1,271,922; July 9; v. 252; p. 359.

Menge, Anton C., and W. H. Pipes, Myrtlegrove, La. Roller-flue cutter. No. 1,271,345; July 2; v. 252; p. 167.

Means, Walter K., Chelsea, Mass. Camera. No. 1,272,292; July 9; v. 252; p. 465.

Mensendick, Herman H., St. Louis, Mo. System for awarding articles of manufacture as prizes. No. 1,273,509; July 23; v. 252; p. 853.

Menzo, Salvatore G., Philadelphia, Pa. Furniture construction. No. 1,272,983; July 16; v. 252; p. 687.

Mercák, Andrew, East Douglass, Mass. Soldering-iron. No. 1,273,518; July 23; v. 252; p. 858.

Mergenthaler Linotype Company. (See Boardman, Robert O., assignor.)

Mergenthaler Linotype Company. (See Kennedy, David S., assignor.)

Mergenthaler Linotype Company. (See Kingsbury, George P., assignor.)

Merkley, George R., Seattle, Wash. Bevel-cutting saw. No. 1,273,393; July 23; v. 252; p. 822.

Merle, Joseph, Bensonhurst, N. Y. Liquid-fuel burner. No. 1,271,923; July 9; v. 252; p. 360.

Merman, Otto A. (See Ramberg and Merman.)

Merrill, Arthur F., Portland, Oreg. Soapsuds apparatus. No. 1,273,259; July 23; v. 252; p. 786.

Merritt, James M., assignor to Boyle Manufacturing Company, Los Angeles, Cal. Carrier. No. 1,271,054; July 2; v. 252; p. 85.

Messer, Maurice E., Cleveland Heights, Ohio. Cleaning garments. No. 1,271,599; July 9; v. 252; p. 269.

Messiter, Edwin H., Brooklyn, N. Y., assignor to Electric Weighing Company. Ship-trimming apparatus. No. 1,272,074; July 9; v. 252; p. 405.

Messmer, Joseph, Kirkwood, assignor to Continental Brass & Foundries Company, St. Louis, Mo. Thermostatic valve. No. 1,273,899; July 30; v. 252; p. 997.

Metal Office Furniture Co. (See Wege, Peter M., assignor.)

Metal Specialties Manufacturing Company. (See Berg, John, assignor.)

Metallurgical Laboratories. (See Fulton, Charles H., assignor.)

Metcalf, Jefferson D., assignor of one-half to W. L. Ream, Gilbert, La. Eyeglasses. No. 1,272,833; July 16; v. 252; p. 645.

Metz, Herman A. (See Riethmueller, Richard H., assignor.)

Mewes, Henry J. (See Buric, Johann, assignor.)

Meyer, Albert C., San Diego, Cal. Electric sign. No. 1,271,600; July 9; v. 252; p. 270.

Meyer, Albert C., San Diego, Cal. Hand-stamp rack. No. 1,271,601; July 9; v. 252; p. 270.

Meyer, George, Seattle, Wash. Chain saw. No. 1,273,394; July 23; v. 252; p. 823.

Meyer, Harry, Wellston, Mo. Pneumatic action for player-pianos. No. 1,271,193; July 2; v. 252; p. 125.

Meyer, Peter, Newark, N. J. Spring-roll. No. 1,271,194; July 2; v. 252; p. 125.

Meyercord, George R., Chicago, Ill. Counter construction. No. 1,272,492; July 16; v. 252; p. 547.

Meyers, Hugh D., Grundy Center, Iowa. Shock-absorber. No. 1,271,346; July 2; v. 252; p. 167.

Meyers, Louis, Brooklyn, N. Y. Lock. No. 1,274,181; July 30; v. 252; p. 1076.

Michaels, Raymond C. (See Humphrey and Michaels.)

Micheau, F. H. (See Myers, Melvin A., assignor.)

Micheau, Joe. (See Myers, Melvin A., assignor.)

Michel, Christopher B., Oakland, Cal. Automobile-signal. No. 1,270,857; July 2; v. 252; p. 29.

Michel, John, Philadelphia, Pa. Vulcanizer. No. 1,271,055; July 2; v. 252; p. 86.

Michener, Wayland D., Roselle Park, N. J., assignor to The Singer Manufacturing Company. Means for attaching hooks and eyes to fabrics. No. 1,270,966; July 2; v. 252; p. 61.

Mid-West Box Company. (See Heinrichs, Berg, assignor.)

Middelstadt, John F., Crabtree, Oreg. Water-trap for lighting systems. No. 1,271,195; July 2; v. 252; p. 125.

Middleton, Arthur R., Wayside, Md. Water-tight bearing for propeller-shafts and the like. No. 1,272,834; July 16; v. 252; p. 645.

Michle Printing Press & Manufacturing Company. (See Kyle, John, assignor.)

Michle, Robert, Chicago, Ill. Mechanism for adjusting paper upon feed-boards. No. 1,272,075; July 9; v. 252; p. 405.

Michle, Robert, Chicago, Ill. Mechanism for adjusting paper upon feed-boards. No. 1,273,081; July 16; v. 252; p. 713.

Miles, Edward J., Newton, Iowa. Engine-bearing burning-in and oil-burnishing machine. No. 1,274,304; July 30; v. 252; p. 1110.

Miller, Andrew E., assignor to S. Himmel, Baltimore, Md. Display-rack. No. 1,274,182; July 30; v. 252; p. 1077.

Miller, Daniel D., assignor to Western Electric Company, Incorporated, New York, N. Y. Electromagnetic switching device. No. 1,271,924; July 9; v. 252; p. 360.

Miller, Edmund A. (See Twitchell, Charles R., assignor.)

Miller, Frank W., Chicago, Ill. Vacuum system. No. 1,273,900; July 30; v. 252; p. 997.

Miller, Frederick H., Wilkinsburg, and R. D. Brown, assignors of one-third to said Miller, one-third to said Brown, and one-third to H. L. Stitt, Pittsburgh, Pa. Signal-fusee. No. 1,273,260; July 23; v. 252; p. 787.

Miller, Harry A., and F. M. Adamson, Los Angeles, Cal. Carbureter. No. 1,272,695; July 16; v. 252; p. 606.

Miller, Harry B., Syracuse, N. Y. Die-stock. No. 1,273,082; July 16; v. 252; p. 713.

Miller, John, Jr., Beloit, Wis., assignor to Charles H. Besly & Company, Chicago, Ill. Bearing for disk grinders. No. 1,272,493; July 16; v. 252; p. 547.

Miller, Robert H. (See Girtanner and Miller.)

Miller, Robert P., assignor to Union Iron Works of Los Angeles, Los Angeles, Cal. Light-diffusing means for motion-picture studios. No. 1,271,056; July 2; v. 252; p. 86.

Miller, Walter H., Orange, N. J. Device for shaving phonograph records or blanks. No. 1,274,183; July 30; v. 252; p. 1077.

Miller, Willis K., Carlisle, Pa. Umbrella. No. 1,274,305; July 30; v. 252; p. 1110.

Millers, James M., Vancouver, British Columbia, Canada. Non-refillable bottle. No. 1,273,083; July 16; v. 252; p. 714.

Millhouse, Henry, assignor of one-half to G. V. Lillig, Chicago, Ill. Trick toy. No. 1,271,057; July 2; v. 252; p. 86.

Millington, Theodore H., Pontiac, Mich. Power-transmitting means for motor-driven vehicles. No. 1,273,519; July 23; v. 252; p. 856.

Millington, Theodore H., Winnetka, Ill. Power-transmitting means for motor-vehicles. No. 1,274,068; July 30; v. 252; p. 1044.

Mills, Bertie E., assignor to Mills Novelty Company, Chicago, Ill. Weighing-scale. No. 1,272,835; July 16; v. 252; p. 646.

Mills, Bertie E., assignor to Mills Novelty Company, Chicago, Ill. Weighing-scale. No. 1,272,836; July 16; v. 252; p. 646.

Mills, George W., Jr., Brooklyn, N. Y. Neckwear. No. 1,273,261; July 23; v. 252; p. 787.

Mills, George W., Jr., Brooklyn, N. Y. Neckwear. No. 1,273,262; July 23; v. 252; p. 787.

Mills, George W., Jr., New York, N. Y. Necktie. No. 1,273,263; July 23; v. 252; p. 787.

Mills, Henry R. (See Carr and Mills.)

Mills, John, Brookline, assignor to Draper Corporation, Hopedale, Mass. Automatic filling-replenishing loom. No. 1,274,352; July 30; v. 252; p. 1122.

Mills, Melvin A., Methuen, Mass. Bearing-engine. No. 1,272,837; July 16; v. 252; p. 647.

Mills Novelty Company. (See Mills, Bertie E., assignor.)

Millsaps, Daniel W., Washington, D. C. Door. No. 1,273,520; July 23; v. 252; p. 856.

Milne, David S. (See Erich and Milne.)

Milner, B. B. (See Hentz, Albert G., assignor.)

Miner, James H., Lumberton, Miss., Flange-lubricator. No. 1,271,058; July 2; v. 252; p. 87.

Miner, William H. (See Johnson, George A., assignor.)

Miner, William H. (See O'Connor, John F., assignor.)

Mineral Products Company, The. (See Hershman, Paul R., assignor.)

Minn, Bernard A., Milwaukee, Wis. Return-chute for pool-tables. No. 1,272,494; July 16; v. 252; p. 548.

Minor, Louis S., Portsmouth, Ohio. Receptacle. No. 1,271,602; July 9; v. 252; p. 270.

Minter, Maurice M., assignor of one-half to P. J. Brown, Albany, Ga. Kiln. No. 1,272,495; July 16; v. 252; p. 548.

Minton, William E. (See Gregory, and Minton.)

Mirmillo, Charles, Oakland, Cal. Gun. No. 1,272,293; July 9; v. 252; p. 466.

Mishawaka Woolen Manufacturing Company. (See Bradley, Charles E., assignor.)

Mitchell, Ardon M., Tuckahoe, assignor to Mitchell & Grenelle, Inc., New York, N. Y. Obtaining magnesium oxid from dolomite, &c. No. 1,273,110; July 16; v. 252; p. 720.

Mitchell, Arthur A., Coleraine, Minn. Excavating apparatus. No. 1,274,069; July 30; v. 252; p. 1044.

Mitchell & Grenelle. (See Mitchell, Ardon M., assignor.)

Mittasch, Alwin. (See Bosch, Mittasch, and Krauch.)

Mize, William H., Celina, Tex. Wheeled sectional harrow. No. 1,272,294; July 9; v. 252; p. 466.

Mizer, Fred N., assignor to The Garford Manufacturing Company, Elyria, Ohio. Armature for dynamo-electric machines. No. 1,270,967; July 2; v. 252; p. 61.

Moale, Philip R. (See Radford, Robert L., assignor.)

Mock, Hugo, New Brighton, N. Y. Picture-hanger. No. 1,272,696; July 16; v. 252; p. 606.

Mock, Hugo, New Brighton, N. Y. Fireless cooker. No. 1,273,645; July 23; v. 252; p. 891.

Mock, Hugo, New York, N. Y. Container. No. 1,273,646; July 23; v. 252; p. 891.

Moeller, Alfred C., and J. F. Stevenson, Seattle, Wash. Transmission-gear casing. No. 1,272,496; July 16; v. 252; p. 548.

Moffatt, James R., assignor to Union Special Machine Company, Chicago, Ill. Sewing-machine and folding mechanism therefor. No. 1,271,059; July 2; v. 252; p. 87.

Moffitt, Robert R., Lamar, Colo. Grain-car door. No. 1,271,347; July 2; v. 252; p. 167.

Moffitt, Thomas E., Naco, Ariz. Harness-snap. No. 1,271,348; July 2; v. 252; p. 167.

Molsson, George M., Beaufort, S. C. Tool kit. No 1,274,306; July 30; v. 252; p. 1110.

Moline Plow Company. (See Case, Henry J., assignor.)

Moline Plow Company. (See Dickinson, Harry S., assignor.)

Moller, Clarence C., Bronx, N. Y. Elevating and dumping apparatus. No. 1,274,307; July 30; v. 252; p. 1110.

Molyneux, George E. (See Stowe and Molyneux.)

Momb, Ole, West Duluth, Minn. Search-light. No. 1,273,084; July 16; v. 252; p. 714.

Monahan, Earl H., Hyannis, Nebr. Vehicle-spring construction. No. 1,272,497; July 16; v. 252; p. 549.

Monarch Tag Company, The. (See Kohnle, Frederick, assignor.)

Monday, Mileden S., Caney, Okla. Rail-joint. No. 1,272,498; July 16; v. 252; p. 549.

Moness, Jacob M., Long Island City, N. Y. Recovering waste products. No. 1,274,184; July 30; v. 252; p. 1077.

Monhof, Emil. (See Martell and Monhof.)

Monroe Calculating Machine Company. (See Phinney, Edgar E., assignor.)

Monteith, Dickson S., assignor to Chemical Construction Company, Charlotte, N. C. Apparatus for rectifying and concentrating liquids. No. 1,271,849; July 2; v. 252; p. 167.

Montgomery, Marlin D., Chicago, Ill. Vehicle-body. No. 1,272,076; July 9; v. 252; p. 406.

Moon, Frank D., Englewood, N. J. Self-locking clip. No. 1,271,350; July 2; v. 252; p. 168.

Mooney, Frank H., assignor to The Conklin Pen Manufacturing Company, Toledo, Ohio. Engraving-machine. No. 1,271,196; July 2; v. 252; p. 125.

Mooney, Frank H., Hinsdale, Ill., assignor to The Conklin Pen Manufacturing Company, Toledo, Ohio. Fountain-pen. No. 1,272,697; July 16; v. 252; p. 607.

Moore, Albert B., Roselle, N. J. Brush-holder. No. 1,273,647; July 23; v. 252; p. 891.

Moore, Edward Y., Cleveland, Ohio. Hoisting mechanism. No. 1,272,838; July 16; v. 252; p. 647.

Moore, Franklin O., Glendale, Cal. Fly-swatter. No. 1,272,295; July 9; v. 252; p. 466.

Moore, George, Joplin, Mo., assignor to The Chemical Process Company, New York, N. Y. Water-purifier. No. 1,271,925; July 9; v. 252; p. 360.

Moore, George, Joplin, Mo., assignor to The Chemical Process Company, New York, N. Y. Sewage treatment. No. 1,271,926; July 9; v. 252; p. 360.

Moore, John S. (See Moore, Sylvester J., assignor.)

Moore, Joseph W., Runcorn, assignor to Castner-Kellner Alkali Company Limited, London, England. Manufacture of bleaching-powder. No. 1,272,880; July 16; v. 252; p. 659.

Moore, Miles F., assignor of one-half to S. I. Walles, Los Angeles, Cal. Railway-crossing. No. 1,273,085; July 16; v. 252; p. 714.

Moore, Rufus N., Thorp Springs, Tex. Process and formula for tanning hides. No. 1,271,060; July 2; v. 252; p. 87.

Moore, Sylvester J., assignor of one-half to J. S. Moore, London, Ontario, Canada. Gas-meter. No. 1,272,499; July 16; v. 252; p. 549.

Moore, Thomas C., Taft, Cal. Liquid-meter. No. 1,271,351; July 2; v. 252; p. 168.

Moore and White Company, The. (See White, Joseph A., assignor.)

Moore, William C. (See Underwood and Moore.)

Moore, William E., Pittsburgh, Pa. Electric furnace. No. 1,272,077; July 9; v. 252; p. 406.

Moore, William J. P., New York, N. Y. Brake-drum for wheels. No. 1,274,185; July 30; v. 252; p. 1077.

Moran, Arthur T., Hopkinton, Mass. Cigarette and match case. No. 1,273,264; July 23; v. 252; p. 788.

More-Jones Brass & Metal Company. (See Burgess, Joseph E., assignor.)

Moreland, William E., Union City, Ga. Buckle. No. 1,272,296; July 9; v. 252; p. 466.

Morey, Charles B., and C. J. Huber, assignors to Larkin Co., Buffalo, N. Y. Cleaning metal articles. No. 1,274,186; July 30; v. 252; p. 1078.

Morgan Construction Company. (See Lummis, Charles W., assignor.)

Morgan, Edmund C., New York, N. Y., assignor to American Morgan Company, Chicago, Ill. Mining-machine. No. 1,271,197; July 2; v. 252; p. 126.

Morgan, Edmund C., Chicago, Ill. Mining and loading machine. No. 1,271,198; July 2; v. 252; p. 126.

Morgan, Edmund C., Chicago, Ill. Mining-machine. No. 1,271,199; July 2; v. 252; p. 127.

Morgan, Gilbert T., London, England. Manufacture of para-amino-N-methylformanilid. No. 1,273,901; July 30; v. 252; p. 998.

Morgan, Ralph L. (See Carland and Morgan.)

Morgan, William H., Alliance, Ohio. Forging, flanging, and other press. No. 1,273,265; July 23; v. 252; p. 788.

Morgan, William T., Jr. (See Ashmore and Morgan.)

Morrill, Edmund N., Warren, N. H., assignor to Andes Exploration & Smelting Corporation. Method of and apparatus for smelting tin. No. 1,271,200; July 2; v. 252; p. 127.

Morris, Harold B., Glendale, Cal. Manufacture of chairs. No. 1,273,521; July 23; v. 252; p. 857.

Morris, Harry, Groveland, N. Y. Snow-plow. No. 1,272,839; July 16; v. 252; p. 647.

Morrison, Abraham C., Essex Fells, N. J. Treating gases. No. 1,273,929; July 30; v. 252; p. 1006.

Morse, Andrew D., Framingham, assignor to Dennison Manufacturing Company, Boston, Mass. Tag-fastener. No. 1,271,743; July 9; v. 252; p. 311.

Morse, Robert V., Ithaca, N. Y. Dynamo-electric machine. No. 1,271,061; July 2; v. 252; p. 87.

Mortimer, Charles G., East Orange, N. J., assignor to National Binding Machine Company, New York, N. Y. Device for automatically moistening and serving strips of tape. No. 1,271,608; July 9; v. 252; p. 270.

Morton, Walter, Windsor, Ontario, Canada. Carbureter. No. 1,274,070; July 30; v. 252; p. 1045.

Morton, Woolridge B., New York, N. Y. Paper-box machine. No. 1,271,604; July 9; v. 252; p. 271.

Moser, Henry O., Buffalo Gap, Saskatchewan, Canada. Device for removing and replacing wagon-bodies and the like. No. 1,272,500; July 16; v. 252; p. 549.

Mosher, Walter H., Lowville, N. Y. Music-turner. No. 1,271,744; July 9; v. 252; p. 311.

Motherwell, Alexander A., Flint, Mich., assignor to General Motors Company, Jersey City, N. J. Forming crankshafts. No. 1,271,606; July 9; v. 252; p. 271.

Motsinger, Newell H., Fredonia, Pa. Rotary engine. No. 1,272,297; July 9; v. 252; p. 466.

Mougey, Wilbur E. (See Andersegg and Mougey.)

Moule, Harry R., assignor to Maxwell Motor Company, Inc., Detroit, Mich. Automobile-loading system. No. 1,272,501; July 16; v. 252; p. 550.

Moulton, Harley C. (See Hayes and Moulton.)

Mow, William J., Grass Valley, Cal. Brake for uphauls for mines. No. 1,274,071; July 30; v. 252; p. 1045.

Mowry Machinery Manufacturing Company. (See Mowry, Roy M., assignor.)

Mowry, Roy M., assignor to Mowry Machinery Manufacturing Company, Los Angeles, Cal. Wire-tie and making same. No. 1,272,502; July 16; v. 252; p. 550.

Mudge & Company. (See Vanatta, Jean K., assignor.)

Muegge, Helmuth G., Baker, Oreg. Posting-box. No. 1,271,201; July 2; v. 252; p. 127.

Mueller, Edward T., assignor of one-half to E. A. Christoph, Chicago, Ill. Chain-link. No. 1,271,202; July 2; v. 252; p. 128.

Muhlig, Otto G. (See Fragmeier and Muhlig.)

Muir, Joseph A., Smithboro, Ill. Signal for mine-railways. No. 1,274,072; July 30; v. 252; p. 1045.

Mularz, Joseph, assignor of one-third to I. Solosky, Midland, Mich. Indicating-buoy. No. 1,273,522; July 23; v. 252; p. 857.

Mulder, Cornelius A., Amsterdam, Netherlands. Safety-razor. No. 1,271,352; July 2; v. 252; p. 168.

Müller, Friederich, Hartford, Conn. Automobile-body. No. 1,271,745; July 9; v. 252; p. 311.

Müller, Friederich, Hartford, Conn., assignor to Pratt & Whitney Company, New York, N. Y. Magazine mechanism. No. 1,273,902; July 30; v. 252; p. 998.

Müller, Friederich, Hartford, Conn., assignor to Pratt & Whitney Company, New York, N. Y. Driving mechanism. No. 1,273,903; July 30; v. 252; p. 998.

Müller, Friederich, assignor to Pratt & Whitney Company, Hartford, Conn. Tap-making machine. No. 1,273,904; July 30; v. 252; p. 998.

Muller, William T. (See Scriver, George, assignor.)

Multicolor Intaglio Press Company. (See Saalburg, Charles W., assignor.)

Mummery, Edwin G., Detroit, Mich. Vapor-burner. No. 1,273,173; July 23; v. 252; p. 765.

Mundell, Charles N., Los Angeles, Cal. Power-transmitting mechanism. No. 1,271,203; July 2; v. 252; p. 128.

Municipal Engineering and Contracting Company. (See Filbin, James D., assignor.)

Munter, Charles, New York, N. Y. Abdominal support. No. 1,271,746; July 9; v. 252; p. 312.

Murchey, David L., Detroit, Mich. Game-counter. No. 1,271,927; July 9; v. 252; p. 361.

Murnane, Daniel J., assignor to Zouri Drawn Metals Company, Chicago Heights, Ill. Angling-machine. No. 1,271,353; July 2; v. 252; p. 168.

Murphy, Alfred F., Montreal, Quebec, Canada. Valve. No. 1,271,062; July 2; v. 252; p. 88.

Murphy, Clinton C., Chicago, Ill. assignor to P. H. Murphy Company, Parnassus, Pa. Car-roof. No. 1,274,808; July 30; v. 252; p. 1111.

Murphy, Edward E., Winchester, Mass. Carbonating apparatus. No. 1,272,298; July 9; v. 252; p. 467.

Murphy, Edward E., Winchester, Mass. Mixing means for carbonating apparatus. No. 1,272,299; July 9; v. 252; p. 467.

Murphy Iron Works. (See Haas, William H., assignor.)

Murphy, Thomas J., assignor of one-half to J. P. B. Duffy, Rochester, N. Y. Sounder. No. 1,271,514; July 2; v. 252; p. 212.

Murphy, Walter P. (See Sisson, Vinton E., assignor.)

Murphy, Walter P., Chicago, Ill. Car-door. No. 1,271,063; July 2; v. 252; p. 88.

Murray, Albert L., assignor to The Double Fabric Tire Company, Auburn, Ind. Device for shaping and vulcanizing automobile-tire patches. No. 1,274,073; July 30; v. 252; p. 1046.

Murray, George C., Chicago, Ill., assignor to Keyoke Railway Equipment Company. Draw-bar and yoke. No. 1,272,078; July 9; v. 252; p. 406.

Murray, Jane L. W., Craiglockhart, Scotland. Piece of furniture convertible for use as a bed, couch, bath-chair, or the like. No. 1,271,515; July 2; v. 252; p. 212.

Murray, Joseph B. (See Murray, Thomas E., Jr., and J. B.)

Murray, Thomas E., New York, N. Y. Crude-oil still. No. 1,273,523; July 23; v. 252; p. 857.

Murray, Thomas E., New York, N. Y. Coupling for flanged tubes or pipes. No. 1,273,524; July 23; v. 252; p. 857.

Murray, Thomas E., Jr., and J. B., Brooklyn, N. Y. Hand-grenade shell and making the same. No. 1,273,525; July 23; v. 252; p. 858.

Muse, John B., Cameron, N. C. Tobacco-drying system and apparatus. No. 1,273,395; July 23; v. 252; p. 823.

Muse, John B., Cameron, N. C. Heating and drying apparatus. No. 1,273,396; July 23; v. 252; p. 823.

Muire, Michael, Chester, Pa. Projectile for field-guns. No. 1,272,984; July 16; v. 252; p. 688.

Myers, George P., assignor to Myers Machine Co., Sheboygan, Wis. Elevating mechanism for truck-bodies. No. 1,272,840; July 16; v. 252; p. 647.

Myers, John E. (See Leonard and Myers.)

Myers Machine Co. (See Myers, George P., assignor.)

Myers, Melvin A., Kane, Pa., assignor of three two-hundredths to H. W. Short, one two-hundredth to Chas. W. Nelson, two two-hundredths to F. W. Spencer, five two-hundredths to Archie Short, three two-hundredths to Meade Robinson, three two-hundredths to C. G. Dahlen, three two-hundredths to Lyle F. Robinson, two two-hundredths to W. P. Zink, three two-hundredths to Harold Spencer, two two-hundredths to William H. Spence, three two-hundredths to F. J. Robinson, two two-hundredths to Norman Patrick, two two-hundredths to E. R. Collinge, three two-hundredths to Carl Johnson, three two-hundredths to William Faul, six two-hundredths to John H. Scott, one two-hundredth to G. G. Fitzgerald, two two-hundredths to L. Dunn, one two-hundredth to Laurence Ohlson, two two-hundredths to G. D. Leake, five two-hundredths to C. R. Carnahan, one two-hundredth to Byron Foulkrod, one two-hundredth to Ernest Emmons, one two-hundredth to Porter Smith, two two-hundredths to C. K. Dunn, one two-hundredth to A. Baker, two two-hundredths to Robert Hennell, one two-hundredth to Axel E. Anderson, one two-hundredth to W. W. Paup, one two-hundredth to T. M. McElree, three two-hundredths to Leon Torpy, two two-hundredths to Mrs. Dora Robinson, two two-hundredths to Miss Ruth Robinson, one two-hundredth to Mrs. Stella Kelsey, one two-hundredth to Adelbert Sykes, one two-hundredth to H. Danks, one two-hundredth to Lloyd Sanford, one two-hundredth to John A. Johnson, two two-hundredths to Tom Faul, one two-hundredth to William Burton, one two-hundredth to William Noel, one two-hundredth to F. H. Micheau, two two-hundredths to William Simpkins, two two-hundredths to Norman Simpkins, one two-hundredth to Henry Bearkle, one two-hundredth to Joe Micheau, two two-hundredths to George Hart, one two-hundredth to John Block, one two-hundredth to C. A. Dunn, two two-hundredths to J. J. Kuhns, one two-hundredth to E. Eckborg, and one two-hundredth to Bessie L. Short. Resilient wheel. No. 1,272,300; July 9; v. 252; p. 468.

Myers, William M., St. Joseph Mo. Pressure-regulator for pneumatic tires. No. 1,273,905; July 30; v. 252; p. 999.

Naamlooze Vennootschap Hollandsche Proteine Maatschappij. (See Wennagel, Theodor S., assignor.)

Naamlooze Vennootschap "Werf Conrad." (See De Bijll Nachenius, Henri A. J., assignor.)

Nagel, Theodore, Chicago, Ill. Lamp. No. 1,270,858; July 2; v. 252; p. 30.

Nagy, József, Dayton, Ohio. Motorman's seat. No. 1,271,747; July 9; v. 252; p. 312.

Nair, Frank M. (See Haas and Nair.)

Nakahara, Ichigoro, Tokyo, Japan. Dental articulator. No. 1,272,985; July 16; v. 252; p. 688.

Nall, Edward, assignor to The Goodyear Tire and Rubber Company, Akron, Ohio. Cutting or trimming machine. No. 1,273,526; July 23; v. 252; p. 858.

Nap, Meinderd S., Holland, Mich. Molding-machine. No. 1,273,649; July 23; v. 252; p. 892.

Nashua Machine Company. (See Littlefield, Frank A., assignor.)

National Binding Machine Company. (See Mortimer, Charles G., assignor.)

National Blank Book Company. (See Schade, John, assignor.)

National Carbon Company. (See Burns, Deane, assignor.)

National Carbon Company. (See Ellis, Carleton, assignor.)

National Carbon Company. (See Holmes, Major E., assignor.)

National Carbon Company. (See Rhoades, Lloyd R., assignor.)

National Equipment Company. (See Bausman, Alonzo L., assignor.)

National Equipment Company. (See Schoppner, William C., assignor.)

National Fiber Textile Company, The. (See Summers, Bertrand S., assignor.)

National Manufacturing Company. (See Ferris, Walton C., assignor.)

National Marking Machine Company, The. (See Bearmore, Albert D., assignor.)

National Paper Products Co. (See Alcher, Gustav A., assignor.)

National Shock Loader Co. (See Gilliland, Orra L., assignor.)

Natural Differential Co. (See Taylor, Clarence W., assignor.)

Nearhof, Dirk W., Oostburg, Wis. Direction-indicator for automobiles. No. 1,271,064; July 2; v. 252; p. 88.

Needham, Hobart L., McMinnville, Oreg. Perfume-vending machine. No. 1,271,204; July 2; v. 252; p. 128.

Neil, De Witte T., Homer, La. Automobile-signal. No. 1,274,309; July 30; v. 252; p. 1111.

Neill, Walter E., Englewood, N. J. Display-rack. No. 1,273,397; July 23; v. 252; p. 823.

Neiswanger, George H. (See Edwards, William H., assignor.)

Nelles, Rudolf, Baltimore, Md. Canteen. No. 1,271,928; July 9; v. 252; p. 861.

Nelles, Rudolf, Baltimore, Md. Releasing-hook for boats, &c. No. 1,273,650; July 23; v. 252; p. 892.

Nelson, Alice C., Tipton, Mo. Chimney-flue. No. 1,272,503; July 16; v. 252; p. 550.

Nelson, August P., Oberon, N. D. Tongs. No. 1,274,187; July 30; v. 252; p. 1078

Nelson, August W., Spokane, Wash. Head-rest. No. 1,271,205; July 2; v. 252; p. 129.
Nelson, Charles R. (See Du Laney, James A., assignor.)
Nelson, Chas. W. (See Myers, Melvin A., assignor.
Nelson, Elof, Oak Creek, Colo. Baker's furnace. No. 1,271,065; July 2; v. 252; p. 88.
Nelson, Emil A., Duluth, Minn. Focusing device for moving-picture machines. No. 1,271,748; July 9; v. 252; p. 312.
Nelson, Emil A., Duluth, Minn. Focusing device for moving-picture machines. No. 1,271,929; July 9; v. 252; p. 361.
Nelson, George W., assignor to The Standard Sewing Machine Company, Cleveland, Ohio. Bobbin-case latch for sewing-machines. No. 1,274,188; July 30; v. 252; p. 1078.
Nelson, Harmon O., assignor to Whitin Machine Works, Whitinsville, Mass. Gearing. No. 1,270,859; July 2; v. 252; p. 30.
Nelson, Robert E., Keystone, S. D. Ore-separator. No. 1,272,301; July 9; v. 252; p. 468.
Nestell, Raymond J., assignor to International Precipitation Company, Los Angeles, Cal. Increasing the solubility of the potassium content of cement-kiln dust. No. 1,274,310; July 30; v. 252; p. 1111.
Netzorg, Charles S., Chicago, Ill. Advertising display-card. No. 1,272,504; July 16; v. 252; p. 550.
Neu, Joseph. (See Leech, Aubrey B., assignor.)
Neuteboom, Boudewijn B. (See Taylor and Neuteboom.)
New Britain Machine Company, The. (See Brown, Robert S., assignor.)
New Departure Manufacturing Co., The. (See Rockwell, Albert F., assignor.)
New Jersey Patent Company. See Aiken, Edward L., assignor.)
New Jersey Patent Company. (See Holland, Newman H., assignor.)
New York Couch Bed Company. (See Sisbower and Pittoni, assignors.)
New York Signal Co. (See Bonitoa, Felix J., assignor.)
Newburn, Theodore W., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Fluid-pressure recorder. No. 1,274,189; July 30; v. 252; p. 1078.
Newcomb, Harold A., Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company. Electric welding. No. 1,270,860; July 2; v. 252; p. 30.
Newcomb, Harold A., Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company. Metallic joint and making the same. No. 1,272,700; July 16; v. 252; p. 608.
Newell, Alfred L., Prestbury, England. Scale, rule, and like measure of length. No. 1,273,086; July 16; v. 252; p. 714.
Newhard, Franklin H. D., Catasauqua, Pa. Resilient wheel. No. 1,274,311; July 30; v. 252; p. 1111.
Newhouse, Alphonse, San Francisco, Cal. Blade-sharpener. No. 1,271,930; July 9; v. 252; p. 362.
Newport, Vernon A., Dayton, Pa. Railway-joint. No. 1,270,968; July 2; v. 252; p. 62.
Newton, Richard T., Nutley, N. J. Vehicle. No. 1,273,087; July 16; v. 252; p. 715.
Neyer, Joseph, Jr. (See Bell, Earl R., assignor.)
Nias, Henry, assignor to Public Service Cup Company, Brooklyn, N. Y. Cup-dispenser. No. 1,272,701; July 16; v. 252; p. 608.
Nicholas Power Company. (See Power, Nicholas, assignor.)
Nicholas, William, New York, and W. Ackerman, Larchmont, N. Y., assignors, by mesne assignments, to United States Graphotype Company. Line-pushing means for type casting and composing machines. No. 1,271,206; July 2; v. 252; p. 129.
Nichols, Clarence H., *et al.* (See Thompson, George W., assignor.)
Nickey, Harrison C., Hartford City, Ind. Wagon. No. 1,273,906; July 30; v. 252; p. 999.
Nickum, George S., Glendale, Cal. Variable reversible shaft-drive. No. 1,271,207; July 2; v. 252; p. 129.
Nicoll, William B., Fort William, Ontario, Canada. Article-holding attachment for the arm. No. 1,274,312; July 30; v. 252; p. 1112.
Nielsen, Aage W., Chicago, Ill. Combined measuring and filling apparatus. No. 1,271,749; July 9; v. 252; p. 312.
Nielsen, Carl. (See Burdick and Nielsen.)
Nielsen, Theodor Lundeljergaard, Sönder-Bjerre, Denmark. Beet-harvesting machine. No. 1,272,986; July 16; v. 252; p. 688.
Niemi, Isaac, assignor of one-half to A. Salmi, Eben Junction, Mich. Rail-tie. No. 1,271,516; July 2; v. 252; p. 213.
Nihart, Frank B., assignor of nine-tenths to E. L. Harper and E. B. Overton, Bay Minette, Ala. Stationery-holder. No. 1,273,398; July 23; v. 252; p. 824.
Nist, William J., and W. G. Ertel, Pittsburgh, Pa. Spring-wheel. No. 1,274,190; July 30; v. 252; p. 1078.
Nixon, Miles G., Chicago, Ill., and O. Smith, Bridgeton, N. J. Filing-case for disk-records. No. 1,274,191; July 30; v. 252; p. 1079.
Noakes, Robert J., assignor of one-half to G. J. Sheppard, Montreal, Quebec, Canada. Pipe-coupling. No. 1,273,174; July 23; v. 252; p. 765.
Noble, Thomas E., Yale, Okla. Earth-boring tool. No. 1,271,750; July 9; v. 252; p. 313.
Noel, William. (See Myers, Melvin A., assignor.)
Noiseless Typewriter Company, The (See Sheehan, Edward J., assignor.)
Nolan, Francis A., St. Paul, Minn. Resilient shoe-heel. No. 1,273,175; July 23; v. 252; p. 765.
Nonpareil Manufacturing Company. (See Adams, William J., assignor.)
Nordfors, Conrad. (See Wood and Nordfors.)
Noriega, Indalecio, Mexico, Mexico. Synchronic twin phonograph. No. 1,271,066; July 2; v. 252; p. 88.
Norman, Gustav, Aberdeen, Wash. Garter or garment fastener. No. 1,272,079; July 9; v. 252; p. 406.
Norman, James E., Throp Springs, Tex. Gin-saw filer and gummer. No. 1,272,343; July 9; v. 252; p. 480.
Norris, William J., London, England. Press for expressing liquids and forming articles from pulp and other material. No. 1,273,527; July 23; v. 252; p. 859.
Norsk Hydro-elektrisk Kvaelstofaktieselskab. (See Bergve, Elnar, assignor.)
Norsk Hydro-Elektrisk Kvaelstofaktieselskab. (See Hansen, Elnar, assignor.)
Northcraft, Ambro J., St. Louis, Mo. Type-writer's cabinet. No. 1,273,528; July 23; v. 252; p. 859.
Northern Engineering Works. (See Thurber and Rackleyeft, assignors.)
Northrop, Charles E., Dayton, Ohio. Lock. No. 1,274,313; July 30; v. 252; p. 1112.
Northwood, John A., *et al.* (See Owen, Moses, assignor.)
Norton, Charles H., and J. S. Wilcox, Jr., assignors to Norton Grinding Company, Worcester, Mass. Work-drive for grinding-machines. No. 1,271,208; July 2; v. 252; p. 129.
Norton, Edwin K., Canonsburg, Pa., assignor to Continental Can Company, Incorporated, Syracuse, N. Y. Combined filling and closing machine. No. 1,273,651; July 23; v. 252; p. 892.
Norton Grinding Company. (See Norton and Wilcox, assignors.)
Norton, William B. (See Abbott, Adrian O., Jr., assignor.)
Norton, William B., Detroit, Mich. Paper milk-receptacle. No. 1,272,080; July 9; v. 252; p. 406.
Novelty Cutlery Company, The. (See Keith, John E., assignor.)
Noyess, Frank, Ypsilanti, Mich. Fence-post. No. 1,271,751; July 9; v. 252; p. 313.
Nukada, Yutaka, Tokyo, Japan. Preparation of proteid silver. No. 1,272,987; July 16; v. 252; p. 689.
Null, Rufus H., Greensboro, N. C. Adjustable table-leg clamp. No. 1,273,088; July 16; v. 252; p. 715.
Nus, Glenn, Arlington, Iowa. Valve mechanism for internal-combustion engines. No. 1,271,354; July 2; v. 252; p. 169.
Nute, John L., Kennett Square, Pa. Adjustable mold-jacket. No. 1,271,752; July 9; v. 252; p. 313.
Nutting, Alfred B. (See Nutting, Harvey R. and A. B.)
Nutting, Charles E., assignor to Draper Corporation, Hopedale, Mass. Weft-feeler for looms. No. 1,272,702; July 16; v. 252; p. 608.
Nutting, Harvey R., Salisbury, and A. B. Nutting, Boston, Mass. Clutch. No. 1,272,081; July 9; v. 252; p. 407.
Nylen, Alfred H., Piedmont, Cal. Salvaging apparatus. No. 1,272,302; July 9; v. 252; p. 469.
O. & J. Machine Company, The. (See Johnston and Oslund, assignors.)
O-So-Ezy Mop Company. (See Feasel, Harry L., assignor.)
O'Brien, Joseph, Lucas, Kans. Engine-supporting bracket. No. 1,274,074; July 30; v. 252; p. 1046.
O'Connor, Arthur F., assignor to The Union Railway Equipment Co., Chicago, Ill. Car-roof. No. 1,273,399; July 23; v. 252; p. 824.
O'Connor, John F., Chicago, Ill., assignor to W. H. Miner, Chazy, N. Y. Roller side bearing. No. 1,273,400; July 23; v. 252; p. 824.
O'Connor, John F., Chicago, Ill., assignor to W. H. Miner, Chazy, N. Y. Railway-car draft-rigging. No. 1,273,907; July 30; v. 252; p. 999.
O'Connor, John F., Chicago, Ill., assignor to W. H. Miner, Chazy, N. Y. Draft-rigging for cars. No. 1,273,908; July 30; v. 252; p. 1000.
O'Connor, John F., Chicago, Ill., assignor to W. H. Miner, Chazy, N. Y. Antifriction-roller and making same. No. 1,273,909; July 30; v. 252; p. 1000.
O'Connor, John F., Chicago, Ill., assignor to W. H. Miner, Chazy, N. Y. Hand-brake. No. 1,273,910; July 30; v. 252; p. 1000.
O'Connor, William, Boulder, Colo. Draft-wheel connection for wheel and gang plows. No. 1,274,075; July 30; v. 252; p. 1046.
O'Donnell, George J., Waterbury, Conn. Sash-holder. No. 1,271,517; July 2; v. 252; p. 213.
O'Hara, Joseph G. R., assignor to Educational Motion Picture Machine and Film Company, St. Louis, Mo. Projecting-lamp. No. 1,272,505; July 16; v. 252; p. 550.
O'Loughlin, John, Rochester, N. Y. Block-dressing implement. No. 1,271,606; July 9; v. 252; p. 271.
O'Neal, Oscar, Fremont, Mich. Demountable rim. No. 1,272,342; July 9; v. 252; p. 479.
O'Sullivan, Patrick J., Kanturk, Ireland. Tube-tester. No. 1,273,914; July 30; v. 252; p. 1002.

Oakes, Francis J., and S. O. Dillon, New York, N. Y. Dyeing. No. 1,271,067; July 2; v. 252; p. 89.
Oakley, John, Springfield, Mass. Broach. No. 1,272,841; July 16; v. 252; p. 648.
Odermatt, Clarence W. (See Baum and Odermatt.)
Oehrle Brothers Company. (See Oehrle, Franklin W., assignor.)
Oehrle, Franklin W., assignor to Oehrle Brothers Company, Philadelphia, Pa. Machine for making ornamental rope or cord. No. 1,273,911; July 30; v. 252; p. 1000.
Oehrle, Franklin W., assignor to Oehrle Brothers Company, Philadelphia, Pa. Machine for making ornamental rope or cord. No. 1,273,912; July 30; v. 252; p. 1001.
Oelwerke Stern Sonneborn Akt. Ges. (See Heller, Hugo, assignor.)
Ogden, Joseph P., assignor of one-third to L. J. Killian, Lynn, Mass. Glass or lens for headlights. No. 1, 271,931; July 9; v. 252; p. 362.
Ogle, Mary L., Covington, Ky. Puzzle. No. 1,273,089; July 16; v. 252; p. 715.
Ogrodniczek, Lucja, Scranton, Pa. Aviator's saver. No. 1,274,314; July 30; v. 252; p. 1112.
Ohio Blower Company, The. (See Swartwout, Denton K., assignor.)
Ohio Injector Company of Illinois, The. (See Edwards, Frank W., assignor.)
Ohlson, Laurence. (See Myers, Melvin A., assignor.)
Ohmer, John F., Dayton, Ohio. Ticket issuing and auditing machine. No. 1,274,192; July 30; v. 252; p. 1079.
Olander, Ernest V., Grand Rapids, Mich. Egg-beater and mixing-spoon. No. 1,272,506; July 16; v. 252; p. 551.
Oldfield, William H., Rochester, N. Y. Noiseless flushing-tank. No. 1,271,209; July 2; v. 252; p. 130.
Olejniczak, Kaiser, Buffalo, N. Y. Insect-trap. No. 1,271,355; July 2; v. 252; p. 169.
Olerich, Earl, *et al.* (See Olerich, Henry, assignor.)
Olerich, Henry, assignor of one-fifteenth to V. Olerich, Omaha, Nebr., one-fifteenth to J. Olerich, one-fifteenth to H. A. Olerich, one-fifteenth to H. Olerich, one-fifteenth to V. Olerich, one-fifteenth to R. Olerich, one-fifteenth to M. Ricke, one-fifteenth to H. Ricke, one-fifteenth to W. Ricke, one-fifteenth to B. Ricke, one-fifteenth to A. Ricke, one-fifteenth to F. Brinker, one-fifteenth to E. Olerich, and one-fifteenth to F. Van Erdewyk, Breda, Iowa. Tractor. No. 1,273,652; July 23; v. 252; p. 893.
Olerich, H. A., *et al.* (See Olerich, Henry, assignor.)
Olerich, Harmon, *et al.* (See Olerich, Henry, assignor.)
Olerich, Joseph, *et al.* (See Olerich, Henry, assignor.)
Olerich, Robert, *et al.* (See Olerich, Henry, assignor.)
Olerich, Victor, *et al.* (See Olerich, Henry, assignor.)
Olerich, Viola, *et al.* (See Olerich, Henry, assignor.)
Olin, Giles A., Siletz, Oreg. Tree-measuring device. No 1,274,315; July 30; v. 252; p. 1112.
Olish, George F., deceased, Minneapolis, Minn., P. S. Olish, executor. Nut-lock. No. 1,272,988; July 16; v. 252; p. 689.
Olish, Peter S., executor. (See Olish, George F.)
Olive, Henry G., Morenci, Ariz. Leaf-tobacco-packing case. No. 1,271,932; July 9; v. 252; p. 362.
Oliver, Charles E., London, England. Wheel for road-vehicles. No. 1,271,068; July 2; v. 252; p. 89.
Olsen, Charles J., New York, N. Y. Rowing-boat. No. 1,273,176; July 23; v. 252; p. 765.
Olver, Alfred W., assignor to The Carborundum Company, Niagara Falls, N. Y. Refractory ceramic article and making the same. No. 1,273,529; July 23; v. 252; p. 859.
Oppenheim, Leo, New York, N. Y., assignor to Ideal Specialties Manufacturing Corporation. Paper-fastener. No. 1,271,607; July 9; v. 252; p. 272.
Oppenheimer, Max, and S. L. Ashenfarb, New York, N. Y. Attachment on frames for hand-mirrors. No. 1,272,703; July 16; v. 252; p. 608.
Ordnance Improvement Company. (See Gerdom, Clarence, assignor.)
Orr, Clark, Fort Wayne, Ind., assignor to General Electric Company. Rotary refrigerating-machine. No. 1,273,653; July 23; v. 252; p. 893.
Orr, Robert P. and R. A. Albany, N. Y. Clamping shoehorn. No. 1,271,069; July 2; v. 252, p. 89.
Orr, Russell A. (See Orr, Robert P. and R. A.)
Orvold, Oluf L., St. Paul, assignor of one-half to F. E. Bewyer, Minneapolis, Minn. Measuring device. No. 1,271,486; July 2; v. 252; p. 204.
Osborn, Albert D. (See Taylor and Osborn.)
Osborne, George, Cutler, Wis. Road-scraper. No. 1,273,654; July 23; v. 252; p. 894.
Oslund, Charles H. (See Johnson and Oslund.)
Ostenberg, Pontus, San Jose, Cal. Centrifugal pump. No. 1,273,918; July 30; v. 252; p. 1001.
Ostram, Roy A., assignor to Duluth Show Case Company, Duluth, Minn. Store-fixture. No. 1,272,989; July 16; v. 252; p. 689.
Ostroske, Anthony, Detroit, Mich. Keyless lock. No. 1,272,303; July 9; v. 252; p. 469.
Otey, Monroe J. (See Kemp, Jacob G., assignor.)
Otness, Melvin J., Stony Plain, Alberta, Canada. Hat-retainer. No. 1,272,507; July 16; v. 252; p. 551.
Ott, Harvey N., assignor to Spencer Lens Company, Buffalo, N. Y. Electrode-holder for electric-arc lamps. No. 1,273,915; July 30; v. 252; p. 1002.
Otte, Otho M., Jamestown, N. Y. Sheet-metal structure. No. 1,271,210; July 2; v. 252; p. 130.
Otte, Otho M., Jamestown, N. Y. Spot-light mounting. No. 1,272,842; July 16; v. 252; p. 648.
Otto, Arthur L., Philadelphia, Pa.; W. W. Watson, C. Anderson, and E. M. Underwood, Jamestown, N. Y.; said Watson, Anderson, and Underwood assignors to said Otto. Port-light screen. No. 1,272,990; July 16; v. 252; p. 689.
Otto, George F., Detroit, Mich. Tank-filler. No. 1,274,316; July 30; v. 252; p. 1113.
Outerbridge, Cyril N., Charlottesville, Va. Carbureter. No. 1,273,401; July 23; v. 252; p. 824.
Overstrom, Gustave A., Pasadena, Cal. Flexible bearing for high-speed spindles. No. 1,273,655; July 23; v. 252; p. 894.
Overton, Edward B., *et al.* (See Nihart, Frank B., assignor.)
Owen, Mary A., executrix. (See Owen, Moses.)
Owen, Moses, deceased; M. A. Owen, executrix, assignor to herself, J. A. Northwood, and E. Harris, Westmont, Johnstown, Pa. Cutting-off tool for bar metals. No. 1,272,508; July 16; v. 252; p. 551.
Owen, R. M. (See Stowe and Molyneaux, assignors.)
Owens, Claude. (See McClure and Owens.)
Owens, Elbert C., Ottawa, Kans. Figure toy. No. 1,272,304; July 9; v. 252; p. 469.
Owens, Harvey M., Leominster, Mass. Mounting for hairpins and the like. No. 1,273,530; July 23; v. 252; p. 859.
Owens, Michael J., assignor to The Toledo Glass Company, Toledo, Ohio. Charging and poking mechanism for gas-producers. No. 1,273,177; July 23; v. 252; p. 765.
P. Lorillard Company. (See Williams, George M., assignor.)
P. B. Yates Machine Company. (See Johnson, Gustave T., assignor.)
P & M Company, The. (See Gillespie, Harvey M., assignor.)
P. H. Murphy Company. (See Murphy, Clinton C., assignor.)
Paasche, Jens A., Chicago, Ill. Pneumatic paint-brush. No. 1,273,784; July 23; v. 252; p. 926.
Pachynski, Joseph. (See Schoening and Pachynski.)
Pacific Box Factory Inc. (See Stickel, Charles, assignor.)
Packard Motor Car Company. (See Belden, Edward H., assignor.)
Packard Motor Car Company. (See Huff, Russell, assignor.)
Packard Motor Car Company. (See Tibbetts, Milton, assignor.)
Pagel, Theodore J. (See Chamberland, William D., assignor.)
Paget, Harry E., Chicago, Ill. Strainer. No. 1,273,656; July 23; v. 252; p. 894.
Paget, Stewart C., Wallingford, England. Internal-combustion engine. No. 1,272,305; July 9; v. 252; p. 470.
Paglieri, Ferruccio, Bologna, Italy. Hand-vise. No. 1,272,991; July 16; v. 252; p. 690.
Paige, Arthur E., Philadelphia, Pa. Multifocal optical element. No. 1,271,356; July 2; v. 252; p. 160.
Palecheck, George D. and T. W., Milwaukee, Wis. Screw-threading sheet-metal tubular objects. No. 1,271,070; July 2; v. 252; p. 90.
Palecheck, Theodore W. (See Palecheck, George D. and T. W.)
Palm Brothers Company, The. (See Becker, Albert S., assignor.)
Palmatary, John T., *et al.* (See Dacy, Michael J., assignor.)
Palmenberg, Emil T., New York, N. Y. Arm-adjusting device for display-figures. No. 1,272,992; July 16; v. 252; p. 690.
Palmenberg, Emil T., assignor to J. R. Palmenberg's Sons, Inc., New York, N. Y. Display-form. No. 1,274,317; July 30; v. 252; p. 1113.
Palmer, Clyde. (See Palmer, Harmon S., assignor.)
Palmer, Harmon S., assignor of one-half to C. Palmer, Washington, D. C. Toy building-blocks. No. 1,274,353; July 30; v. 252; p. 1122.
Palmer, Herbert R., Cleveland Heights, Ohio. Dry-cell battery and making same. No. 1,271,933; July 9; v. 252; p. 362.
Palmer, Herbert R., Cleveland, Ohio. Lamp. No. 1,272,509; July 16; v. 252; p. 551.
Palmer, Robert C., Pensacola, Fla., assignor, by mesne assignments, to the Government of the United States. Method of destructively distilling wood. No. 1,271,071; July 2; v. 252; p. 90.
Pann, August, Brooklyn, N. Y. Household-tool for repairing the valve-seats of faucets and the like. No. 1,271,608; July 9; v. 252; p. 272.
Panzer, George F., Jr., Baltimore, Md. Illuminated automobile-tag. No. 1,274,318; July 30; v. 252; p. 1113.
Paoli, Peter E., Wilmette, Ill. Theatrical device. No. 1,273,111; July 16; v. 252; p. 720.
Pape, Herman G., New York, N. Y. Combined telegraph and telephone instrument. No. 1,270,861; July 2; v. 252; p. 30.
Pape, Herman G., New York, N. Y. Combined sound-reproducer and lighting-fixture. No. 1,272,843; July 16; v. 252; p. 648.
Pape, Herman G., New York, N. Y. Speaking and signaling apparatus. No. 1,272,993; July 16; v. 252; p. 690.

Nelson, August W., Spokane, Wash. Head-rest. No. 1,271,205; July 2; v. 252; p. 129.
Nelson, Charles R. (See Du Laney, James A., assignor.)
Nelson, Chas. W. (See Myers, Melvin A., assignor.
Nelson, Elof, Oak Creek, Colo. Baker's furnace. No. 1,271,065; July 2; v. 252; p. 88.
Nelson, Emil A., Duluth, Minn. Focusing device for moving-picture machines. No. 1,271,748; July 9; v. 252; p. 312.
Nelson, Emil A., Duluth, Minn. Focusing device for moving-picture machines. No. 1,271,929; July 9; v. 252; p. 361.
Nelson, George W., assignor to The Standard Sewing Machine Company, Cleveland, Ohio. Bobbin-case latch for sewing-machines. No. 1,274,188; July 30; v. 252; p. 1078.
Nelson, Harmon O., assignor to Whitin Machine Works, Whitinsville, Mass. Gearing. No. 1,270,859; July 2; v. 252; p. 30.
Nelson, Robert E., Keystone, S. D. Ore-separator. No. 1,272,801; July 9; v. 252; p. 468.
Nesbell, Raymond J., assignor to International Precipitation Company, Los Angeles, Cal. Increasing the solubility of the potassium content of cement-kiln dust. No. 1,274,310; July 30; v. 252; p. 1111.
Netzorg, Charles S., Chicago, Ill. Advertising display-card. No. 1,272,504; July 16; v. 252; p. 550.
Neu, Joseph. (See Leech, Aubrey B., assignor.)
Neuteboom, Boudewijn B. (See Taylor and Neuteboom.)
New Britain Machine Company, The. (See Brown, Robert S., assignor.)
New Departure Manufacturing Co., The. (See Rockwell, Albert F., assignor.)
New Jersey Patent Company. See Aiken, Edward L., assignor.)
New Jersey Patent Company. (See Holland, Newman H., assignor.)
New York Couch Bed Company. (See Sisbower and Pittoni, assignors.)
New York Signal Co. (See Benitoa, Felix J., assignor.)
Newburn, Theodore W., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Fluid-pressure recorder. No. 1,274,189; July 30; v. 252; p. 1078.
Newcomb, Harold A., Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company. Electric welding. No. 1,270,860; July 2; v. 252; p. 30.
Newcomb, Harold A., Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company. Metallic joint and making the same. No. 1,272,700; July 16; v. 252; p. 608.
Newell, Alfred L., Prestbury, England. Scale, rule, and like measure of length. No. 1,273,086; July 16; v. 252; p. 714.
Newhard, Franklin H. D., Catasanqua, Pa. Resilient wheel. No. 1,274,311; July 30; v. 252; p. 1111.
Newhouse, Alphonse, San Francisco, Cal. Blade-sharpener. No. 1,271,930; July 9; v. 252; p. 362.
Newport, Vernon A., Dayton, Pa. Railway-joint. No. 1,270,968; July 2; v. 252; p. 62.
Newton, Richard T., Nutley, N. J. Vehicle. No. 1,273,087; July 16; v. 252; p. 715.
Neyer, Joseph, Jr. (See Bell, Earl R., assignor.)
Nias, Henry, assignor to Public Service Cup Company, Brooklyn, N. Y. Cup-dispenser. No. 1,272,701; July 16; v. 252; p. 608.
Nicholas Power Company. (See Power, Nicholas, assignor.)
Nicholas, William, New York, and W. Ackerman, Larchmont, N. Y., assignors, by mesne assignments, to United States Graphotype Company. Line-pushing means for type casting and composing machines. No. 1,271,206; July 2; v. 252; p. 129.
Nichols, Clarence H., *et al.* (See Thompson, George W., assignor.)
Nickey, Harrison C., Hartford City, Ind. Wagon. No. 1,273,906; July 30; v. 252; p. 999.
Nickum, George S., Glendale, Cal. Variable reversible shaft-drive. No. 1,271,207; July 2; v. 252; p. 129.
Nicoll, William B., Fort William, Ontario, Canada. Article-holding attachment for the arm. No. 1,274,312; July 30; v. 252; p. 1112.
Nielsen, Aage W., Chicago, Ill. Combined measuring and filling apparatus. No. 1,271,749; July 9; v. 252; p. 312.
Nielsen, Carl. (See Burdick and Nielsen.)
Nielsen, Theodor Lundeljerggaard, Sönder-Bjerre, Denmark. Beet-harvesting machine. No. 1,272,986; July 16; v. 252; p. 688.
Niemi, Isaac, assignor of one-half to A. Salmi, Eben Junction, Mich. Rail-tie. No. 1,271,516; July 2; v. 252; p. 213.
Nihart, Frank B., assignor of nine-tenths to E. L. Harper and E. B. Overton, Bay Minette, Ala. Stationery-holder. No. 1,273,398; July 23; v. 252; p. 824.
Nist, William J., and W. G. Ertel, Pittsburgh, Pa. Spring-wheel. No. 1,274,190; July 30; v. 252; p. 1078.
Nixon, Miles G., Chicago, Ill., and O. Smith, Bridgeton, N. J. Filing-case for disk-records. No. 1,274,191; July 30; v. 252; p. 1079.
Noakes, Robert J., assignor of one-half to G. J. Sheppard, Montreal, Quebec, Canada. Pipe-coupling. No. 1,273,174; July 23; v. 252; p. 765.
Noble, Thomas E., Yale, Okla. Earth-boring tool. No. 1,271,750; July 9; v. 252; p. 313.
Noel, William. (See Myers, Melvin A., assignor.)
Noiseless Typewriter Company, The (See Sheehan, Edward J., assignor.)
Nolan, Francis A., St. Paul, Minn. Resilient shoe-heel. No. 1,273,175; July 23; v. 252; p. 765.
Nonpareil Manufacturing Company. (See Adams, William J., assignor.)
Nordfors, Conrad. (See Wood and Nordfors.)
Noriega, Indalecio, Mexico, Mexico. Synchronic twin phonograph. No. 1,271,066; July 2; v. 252; p. 88.
Norman, Gustav, Aberdeen, Wash. Garter or garment fastener. No. 1,272,079; July 9; v. 252; p. 406.
Norman, James E., Throp Springs, Tex. Gin-saw filer and gummer. No. 1,272,343; July 9; v. 252; p. 480.
Norris, William J., London, England. Press for expressing liquids and forming articles from pulp and other material. No. 1,273,527; July 23; v. 252; p. 859.
Norsk Hydro-elektrisk Kvaelstofaktieselskab. (See Bergve, Einar, assignor.)
Norsk Hydro-Elektrisk Kvaelstofaktieselskab. (See Hansen, Einar, assignor.)
Northcraft, Ambro J., St. Louis, Mo. Type-writer's cabinet. No. 1,273,528; July 23; v. 252; p. 859.
Northern Engineering Works. (See Thurber and Rackleyeft, assignors.)
Northrop, Charles E., Dayton, Ohio. Lock. No. 1,274,313; July 30; v. 252; p. 1112.
Northwood, John A., *et al.* (See Owen, Moses, assignor.)
Norton, Charles H., and J. S. Wilcox, Jr., assignors to Norton Grinding Company, Worcester, Mass. Work-drive for grinding-machines. No. 1,271,208; July 2; v. 252; p. 129.
Norton, Edwin K., Canonsburg, Pa., assignor to Continental Can Company, Incorporated, Syracuse, N. Y. Combined filling and closing machine. No. 1,273,651; July 23; v. 252; p. 892.
Norton Grinding Company. (See Norton and Wilcox, assignors.)
Norton, William B. (See Abbott, Adrian O., Jr., assignor.)
Norton, William B., Detroit, Mich. Paper milk-receptacle. No. 1,272,080; July 9; v. 252; p. 406.
Novelty Cutlery Company, The. (See Keith, John E., assignor.)
Novess, Frank, Ypsilanti, Mich. Fence-post. No. 1,271,751; July 9; v. 252; p. 313.
Nukada, Yutaka, Tokyo, Japan. Preparation of proteid silver. No. 1,272,987; July 16; v. 252; p. 689.
Null, Rufus H., Greensboro, N. C. Adjustable table-leg clamp. No. 1,273,088; July 16; v. 252; p. 715.
Nus, Glenn, Arlington, Iowa. Valve mechanism for internal-combustion engines. No. 1,271,354; July 2; v. 252; p. 169.
Nute, John L., Kennett Square, Pa. Adjustable mold-jacket. No. 1,271,752; July 9; v. 252; p. 313.
Nutting, Alfred B. (See Nutting, Harvey R. and A. B.)
Nutting, Charles E., assignor to Draper Corporation, Hopedale, Mass. Weft-feeler for looms. No. 1,272,702; July 16; v. 252; p. 608.
Nutting, Harvey R., Salisbury, and A. B. Nutting, Boston, Mass. Clutch. No. 1,272,081; July 9; v. 252; p. 407.
Nylen, Alfred H., Piedmont, Cal. Salvaging apparatus. No. 1,272,302; July 9; v. 252; p. 469.
O. & J. Machine Company, The. (See Johnston and Oslund, assignors.)
O-So-Ezy Mop Company. (See Feasel, Harry L., assignor.)
O'Brien, Joseph, Lucas, Kans. Engine-supporting bracket. No. 1,274,074; July 30; v. 252; p. 1046.
O'Connor, Arthur F., assignor to The Union Railway Equipment Co., Chicago, Ill. Car-roof. No. 1,273,399; July 23; v. 252; p. 824.
O'Connor, John F., Chicago, Ill., assignor to W. H. Miner, Chazy, N. Y. Roller side bearing. No. 1,273,400; July 23; v. 252; p. 824.
O'Connor, John F., Chicago, Ill., assignor to W. H. Miner, Chazy, N. Y. Railway-car draft-rigging. No. 1,273,907; July 30; v. 252; p. 999.
O'Connor, John F., Chicago, Ill., assignor to W. H. Miner, Chazy, N. Y. Draft-rigging for cars. No. 1,273,908; July 30; v. 252; p. 1000.
O'Connor, John F., Chicago, Ill., assignor to W. H. Miner, Chazy, N. Y. Antifriction-roller and making same. No. 1,273,909; July 30; v. 252; p. 1000.
O'Connor, John F., Chicago, Ill., assignor to W. H. Miner, Chazy, N. Y. Hand-brake. No. 1,273,910; July 30; v. 252; p. 1000.
O'Connor, William, Boulder, Colo. Draft-wheel connection for wheel and gang plows. No. 1,274,075; July 30; v. 252; p. 1046.
O'Donnell, George J., Waterbury, Conn. Sash-holder. No. 1,271,517; July 2; v. 252; p. 213.
O'Hara, Joseph G. R., assignor to Educational Motion Picture Machine and Film Company, St. Louis, Mo. Projecting-lamp. No. 1,272,505; July 16; v. 252; p. 550.
O'Loughlin, John, Rochester, N. Y. Block-dressing implement. No. 1,271,606; July 9; v. 252; p. 271.
O'Neal, Oscar, Fremont, Mich. Demountable rim. No. 1,272,342; July 9; v. 252; p. 479.
O'Sullivan, Patrick J., Kanturk, Ireland. Tube-tester. No. 1,273,914; July 30; v. 252; p. 1002.

Oakes, Francis J., and S. O. Dillon, New York, N. Y. Dyeing. No. 1,271,067; July 2; v. 252; p. 89.
Oakley, John, Springfield, Mass. Broach. No. 1,272,841; July 16; v. 252; p. 648.
Odermatt, Clarence W. (See Baum and Odermatt.)
Oehrle Brothers Company. (See Oehrle, Franklin W., assignor.)
Oehrle, Franklin W., assignor to Oehrle Brothers Company, Philadelphia, Pa. Machine for making ornamental rope or cord. No. 1,273,911; July 30; v. 252; p. 1000.
Oehrle, Franklin W., assignor to Oehrle Brothers Company, Philadelphia, Pa. Machine for making ornamental rope or cord. No. 1,273,912; July 30; v. 252; p. 1001.
Oelwerke Stern Sonneborn Akt. Ges. (See Heller, Hugo, assignor.)
Ogden, Joseph P., assignor of one-third to L. J. Killian, Lynn, Mass. Glass or lens for headlights. No. 1, 271,931; July 9; v. 252; p. 362.
Ogle, Mary L., Covington, Ky. Puzzle. No. 1,273,089; July 16; v. 252; p. 715.
Ogrodniczek, Lucja, Scranton, Pa. Aviator's saver. No. 1,274,314; July 30; v. 252; p. 1112.
Ohio Blower Company, The. (See Swartwout, Denton K., assignor.)
Ohio Injector Company of Illinois, The. (See Edwards, Frank W., assignor.)
Ohlson, Laurence. (See Myers, Melvin A., assignor.)
Ohmer, John F., Dayton, Ohio. Ticket issuing and auditing machine. No. 1,274,192; July 30; v. 252; p. 1079.
Olander, Ernest V., Grand Rapids, Mich. Egg-beater and mixing-spoon. No. 1,272,506; July 16; v. 252; p. 551.
Oldfield, William H., Rochester, N. Y. Noiseless flushing-tank. No. 1,271,209; July 2; v. 252; p. 130.
Olejniczak, Kaiser, Buffalo, N. Y. Insect-trap. No. 1,271,355; July 2; v. 252; p. 169.
Olerich, Earl, *et al.* (See Olerich, Henry, assignor.)
Olerich, Henry, assignor of one-fifteenth to V. Olerich, Omaha, Nebr., one-fifteenth to J. Olerich, one-fifteenth to H. A. Olerich, one-fifteenth to H. Olerich, one-fifteenth to V. Olerich, one-fifteenth to R. Olerich, one-fifteenth to M. Ricke, one-fifteenth to H. Ricke, one-fifteenth to W. Ricke, one-fifteenth to B. Ricke, one-fifteenth to A. Ricke, one-fifteenth to F. Brinker, one-fifteenth to E. Olerich, and one-fifteenth to F. Van Erdewyk, Breda, Iowa. Tractor. No. 1,273,652; July 23; v. 252; p. 893.
Olerich, H. A., *et al.* (See Olerich, Henry, assignor.)
Olerich, Harmon, *et al.* (See Olerich, Henry, assignor.)
Olerich, Joseph, *et al.* (See Olerich, Henry, assignor.)
Olerich, Robert, *et al.* (See Olerich, Henry, assignor.)
Olerich, Victor, *et al.* (See Olerich, Henry, assignor.)
Olerich, Viola, *et al.* (See Olerich, Henry, assignor.)
Olin, Giles A., Siletz, Oreg. Tree-measuring device. No 1,274,315; July 30; v. 252; p. 1112.
Olish, George F., deceased, Minneapolis, Minn., P. S. Olish, executor. Nut-lock. No. 1,272,988; July 16; v. 252; p. 689.
Olish, Peter S., executor. (See Olish, George F.)
Olive, Henry G., Morenci, Ariz. Leaf-tobacco-packing case. No. 1,271,932; July 9; v. 252; p. 362.
Oliver, Charles E., London, England. Wheel for road-vehicles. No. 1,271,068; July 2; v. 252; p. 89.
Olsen, Charles J., New York, N. Y. Rowing-boat. No. 1,273,176; July 23; v. 252; p. 765.
Olver, Alfred W., assignor to The Carborundum Company, Niagara Falls, N. Y. Refractory ceramic article and making the same. No. 1,273,529; July 23; v. 252; p. 859.
Oppenheim, Leo, New York, N. Y., assignor to Ideal Specialties Manufacturing Corporation. Paper-fastener. No. 1,271,607; July 9; v. 252; p. 272.
Oppenheimer, Max, and S. L. Ashenfarb, New York, N. Y. Attachment on frames for hand-mirrors. No. 1,272,703; July 16; v. 252; p. 608.
Ordnance Improvement Company. (See Gerdom, Clarence, assignor.)
Orr, Clark, Fort Wayne, Ind., assignor to General Electric Company. Rotary refrigerating-machine. No. 1,273,653; July 23; v. 252; p. 893.
Orr, Robert P. and R. A., Albany, N. Y. Clamping shoe-horn. No. 1,271,069; July 2; v. 252, p. 89.
Orr, Russell A. (See Orr, Robert P. and R. A.)
Orvold, Oluf L., St. Paul, assignor of one-half to F. E. Bewyer, Minneapolis, Minn. Measuring device. No. 1,271,486; July 2; v. 252; p. 204.
Osborn, Albert D. (See Taylor and Osborn.)
Osborne, George, Cutler, Wis. Road-scraper. No. 1,273,654; July 23; v. 252; p. 894.
Oslund, Charles H. (See Johnson and Oslund.)
Ostenberg, Pontus, San Jose, Cal. Centrifugal pump. No. 1,273,913; July 30; v. 252; p. 1001.
Ostram, Roy A., assignor to Duluth Show Case Company, Duluth, Minn. Store-fixture. No. 1,272,989; July 16; v. 252; p. 689.
Ostroske, Anthony, Detroit, Mich. Keyless lock. No. 1,272,303; July 9; v. 252; p. 469.
Otey, Monroe J. (See Kemp, Jacob G., assignor.)
Otness, Melvin J., Stony Plain, Alberta, Canada. Hat-retainer. No. 1,272,507; July 16; v. 252; p. 551.
Ott, Harvey N., assignor to Spencer Lens Company, Buffalo, N. Y. Electrode-holder for electric-arc lamps. No. 1,273,915; July 30; v. 252; p. 1002.
Otte, Otho M., Jamestown, N. Y. Sheet-metal structure. No. 1,271,210; July 2; v. 252; p. 130.
Otte, Otho M., Jamestown, N. Y. Spot-light mounting. No. 1,272,842; July 16; v. 252; p. 648.
Otto, Arthur L., Philadelphia, Pa., W. W. Watson, C. Anderson, and E. M. Underwood, Jamestown, N. Y., said Watson, Anderson, and Underwood assignors to said Otto. Port-light screen. No. 1,272,990; July 16; v. 252; p. 689.
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Outerbridge, Cyril N., Charlottesville, Va. Carbureter. No. 1,273,401; July 23; v. 252; p. 824.
Overstrom, Gustave A., Pasadena, Cal. Flexible bearing for high-speed spindles. No. 1,273,655; July 23; v. 252; p. 894.
Overton, Edward B., *et al.* (See Nihart, Frank B., assignor.)
Owen, Mary A., executrix. (See Owen, Moses.)
Owen, Moses, deceased; M. A. Owen, executrix, assignor to herself, J. A. Northwood, and E. Harris, Westmont, Johnstown, Pa. Cutting-off tool for bar metals. No. 1,272,508; July 16; v. 252; p. 551.
Owen, R. M. (See Stowe and Molyneaux, assignors.)
Owens, Claude. (See McClure and Owens.)
Owens, Elbert C., Ottawa, Kans. Figure toy. No. 1,272,304; July 9; v. 252; p. 469.
Owens, Harvey M., Leominster, Mass. Mounting for hair-pins and the like. No. 1,273,530; July 23; v. 252; p. 859.
Owens, Michael J., assignor to The Toledo Glass Company, Toledo, Ohio. Charging and poking mechanism for gas-producers. No. 1,273,177; July 23; v. 252; p. 765.
P. Lorillard Company. (See Williams, George M., assignor.)
P. B. Yates Machine Company. (See Johnson, Gustave T., assignor.)
P & M Company, The. (See Gillespie, Harvey M., assignor.)
P. H. Murphy Company. (See Murphy, Clinton C., assignor.)
Paasche, Jens A., Chicago, Ill. Pneumatic paint-brush. No. 1,273,784; July 23; v. 252; p. 926.
Pachynski, Joseph. (See Schoening and Pachynski.)
Pacific Box Factory Inc. (See Stickel, Charles, assignor.)
Packard Motor Car Company. (See Belden, Edward H., assignor.)
Packard Motor Car Company. (See Huff, Russell, assignor.)
Packard Motor Car Company. (See Tibbetts, Milton, assignor.)
Pagel, Theodore J. (See Chamberland, William D., assignor.)
Paget, Harry E., Chicago, Ill. Strainer. No. 1,273,656; July 23; v. 252; p. 894.
Paget, Stewart C., Wallingford, England. Internal-combustion engine. No. 1,272,305; July 9; v. 252; p. 470.
Pagliari, Ferruccio, Bologna, Italy. Hand-vise. No. 1,272,991; July 16; v. 252; p. 690.
Paige, Arthur E., Philadelphia, Pa. Multifocal optical element. No. 1,271,356; July 2; v. 252; p. 169.
Palecheck, George D. and T. W., Milwaukee, Wis. Screw-threading sheet-metal tubular objects. No. 1,271,070; July 2; v. 252; p. 90.
Palecheck, Theodore W. (See Palecheck, George D. and T. W.)
Palm Brothers Company, The. (See Becker, Albert S., assignor.)
Palmatary, John T., *et al.* (See Dacy, Michael J., assignor.)
Palmenberg, Emil T., New York, N. Y. Arm-adjusting device for display-figures. No. 1,272,992; July 16; v. 252; p. 690.
Palmenberg, Emil T., assignor to J. R. Palmenberg's Sons, Inc., New York, N. Y. Display-form. No. 1,274,317; July 30; v. 252; p. 1113.
Palmer, Clyde. (See Palmer, Harmon S., assignor.)
Palmer, Harmon S., assignor of one-half to C. Palmer, Washington, D. C. Toy building-blocks. No. 1,274,353; July 30; v. 252; p. 1122.
Palmer, Herbert R., Cleveland Heights, Ohio. Dry-cell battery and making same. No. 1,271,933; July 9; v. 252; p. 362.
Palmer, Herbert R., Cleveland, Ohio. Lamp. No. 1,272,509; July 16; v. 252; p. 551.
Palmer, Robert C., Pensacola, Fla., assignor, by mesne assignments, to the Government of the United States. Method of destructively distilling wood. No. 1,271,071; July 2; v. 252; p. 90.
Pann, August, Brooklyn, N. Y. Household-tool for repairing the valve-seats of faucets and the like. No. 1,271,608; July 9; v. 252; p. 272.
Panzer, George F., Jr., Baltimore, Md. Illuminated automobile-tag. No. 1,274,318; July 30; v. 252; p. 1113.
Paoli, Peter E., Wilmette, Ill. Theatrical device. No. 1,273,111; July 16; v. 252; p. 720.
Pape, Herman G., New York, N. Y. Combined telegraph and telephone instrument. No. 1,270,861; July 2; v. 252; p. 30.
Pape, Herman G., New York, N. Y. Combined sound-reproducer and lighting-fixture. No. 1,272,843; July 16; v. 252; p. 648.
Pape, Herman G., New York, N. Y. Speaking and signaling apparatus. No. 1,272,993; July 16; v. 252; p. 690.

Paper Service Co. (See Schuchart and Brown, assignors.)
Papke, Bernard, Lincoln, Nebr. Cream-separator. No. 1,273,916; July 30; v. 252; p. 1003.
Paquette, Napoleon, Grand Rapids, Mich. Machine-oiler. No. 1,271,753; July 9; v. 252; p. 313.
Paradis, Florence F., Idaho Springs, Colo. Signal for motor-vehicles. No. 1,273,657; July 23; v. 252; p. 894.
Paragon Binder Corporation. (See Webster, Bradford, assignor.)
Paragon Metal Cap Company. (See Carvalho, Leslie R. N., assignor.)
Paramount Hosiery Form Drying Co. (See Rieck, William L., assignor.)
Paridon, Michael, Barberton, Ohio, assignor to The Diamond Match Company, Chicago, Ill. Machine for making match-books. No. 1,272,510; July 16; v. 252; p. 552.
Parlsen, Robert T., assignor to Lawson Manufacturing Company, Pittsburgh, Pa. Gas-stove. No. 1,272,306; July 9; v. 252; p. 470.
Parish, Le Grand, *et al.* (See Vaughan, Henry H., assignor.)
Parke, Davis & Company. (See Aldrich, Thomas B., assignor.)
Parker, Chandler L., Lynn, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Truing device for rolls of buffing-machines. No. 1,272,511; July 16; v. 252; p. 552.
Parker, Frank I., assignor, by mesne assignments, to The Cutler-Hammer Mfg. Company, Milwaukee, Wis. Process and apparatus for sealing electromagnetic windings. No. 1,270,969; July 2; v. 252; p. 62.
Parker, George D., Riverside, Cal. Fruit-sizer. No. 1,272,307; July 9; v. 252; p. 470.
Parker, Howard, Berlin, N. H., assignor to Berlin Mills Company, Portland, Me. Manufacture of pipes, tubes, and like hollow bodies. No. 1,271,211; July 2; v. 252; p. 130.
Parker, Victor, Maberry, N. C. Rain-signal. No. 1,272,308; July 9; v. 252; p. 471.
Parker, William C., Chicago, Ill. Emergency locking mechanism. No. 1,272,082; July 9; v. 252; p. 407.
Parker Wire Goods Company. (See Benway, Fredrick M., assignor.)
Parkersburg Manufacturing Company. (See Schluter, William, assignor.)
Parlin & Orendorff Company. (See Graham, William S., assignor.)
Parobi, Theodore, Dundee Lake, N. J. Smoke-consumer. No. 1,273,402; July 23; v. 252; p. 825.
Parradee, Edward, Chicago, Ill. Clamping device. No. 1,273,658; July 23; v. 252; p. 894.
Parrish, James R., Nashville, Tenn. Napkin or bib holder. No. 1,272,512; July 16; v. 252; p. 552.
Parsloe, Frederick E., Milwaukee, Wis. Machine for examining textiles. No. 1,272,513; July 16; v. 252; p. 552.
Parsons, Charles A., Newcastle-upon-Tyne, R. J. Walker, S. S. Cook, and L. M. Douglas, Wallsend, England; said Walker, said Cook, and said Douglas assignors to said Parsons. Ship-propulsion installation. No. 1,274,319; July 30; v. 252; p. 1113.
Parsons, Fred A., Milwaukee, assignor to The Kempsmith Manufacturing Co., West Allis, Wis. Transmission mechanism for machine-tools. No. 1,270,862; July 2; v. 252; p. 31.
Parsons, George H., assignor to Kroeger Piano Company, Stamford, Conn. Pedal-controlled phrasing device for player-pianos. No. 1,271,934; July 9; v. 252; p. 363.
Parsons, Philip D., Philadelphia, Pa., assignor to Scott Paper Company. Apparatus for sealing packing-cases. No. 1,273,531; July 23; v. 252; p. 859.
Parsons, Richard C., London, England. Fluid pump, turbine, and the like. No. 1,271,072; July 2; v. 252; p. 90.
Parsons, Robert J., Schenectady, N. Y., assignor to General Electric Company. Double-current overload-relay. No. 1,273,659; July 23; v. 252; p. 895.
Patch, Harry M., Seattle, Wash. Change-speed mechanism for automobiles. No. 1,273,266; July 23; v. 252; p. 788.
Pateiski, Erich J., Chicago, Ill. Electric-railway system. No. 1,272,844; July 16; v. 252; p. 649.
Pateiski, Erich J., Chicago, Ill. Electric-railway system. No. 1,274,076; July 30; v. 252; p. 1046.
Patrick, Norman. (See Myers, Melvin A., assignor.)
Patten, Milton K., Torrington, Conn. Fishing-rod. No. 1,271,073; July 2; v. 252; p. 90.
Patterson, Joseph A., Waynesburg, Pa. Rail-joint. No. 1,273,660; July 23; v. 252; p. 895.
Paul, Andrew G., Boston, Mass. Valve device for use in heating systems. No. 1,271,212; July 2; v. 252; p. 130.
Paul, Leon R., Hereford, Tex. Nut-lock. No. 1,271,935; July 9; v. 252; p. 363.
Paulett, Henry, Godrergraig, W. A. Jones, Swansea, and W. Hughes, Ystalyfera, Wales. Cooking-oven. No. 1,272,514; July 16; v. 252; p. 553.
Paulsen, Edmund, Omaha, Nebr. Dump-wagon. No. 1,270,863; July 2; v. 252; p. 31.
Paulson, Edward, Greenvalley, Wis. Rail-joint. No. 1,272,704; July 16; v. 252; p. 609.
Paup, W. W. (See Myers, Melvin A., assignor.)
Paupa, Joseph, assignor to Thos. E. Wilson & Co., Chicago, Ill. Aviation-helmet. No. 1,272,309; July 9; v. 252; p. 471.
Pavlidés, Paul G., and L. F. Feraldi, Paris, France. Flexible metallic tire for motor and other vehicles. No. 1,271,609; July 9; v. 252; p. 272.
Pavlidés, Paul. Paris, France. Turbine set. No. 1,274,320; July 30; v. 252; p. 1113.
Pawling and Harnischfeger Company. (See Weickel, Henry, assignor.)
Payne, Frank E. (See Crane and Payne.)
Pearl, John W., and W. Starkey, assignors to Dutchess Hat Works, Beacon, N. Y. Fur-napped felt-bodied hat. No. 1,273,403; July 23; v. 252; p. 825.
Pearson, Coleman F., Montgomery, Ala. Grease-catching device for automobiles. No. 1,273,918; July 30; v. 252; p. 1003.
Pearson, Nels, Deep Bay, British Columbia, Canada. Safety-hook. No. 1,272,705; July 16; v. 252; p. 609.
Pease, George W., Pittsfield, Mass. Garment. No. 1,272,706; July 16; v. 252; p. 609.
Pease, George W., Pittsfield, Mass. Garment. No. 1,273,532; July 23; v. 252; p. 860.
Peck, Charles W., assignor to The Mattatuck Manufacturing Company, Waterbury, Conn. Stranding-machine. No. 1,271,518; July 2; v. 252; p. 213.
Peck, James F., Sherman, Tex. Hopper-door. No. 1,272,515; July 16; v. 252; p. 553.
Peck, Roderick A., and A. W. McClean, St. Louis, Mo. Universal, extensible, balanced bracket. No. 1,272,845; July 16; v. 252; p. 649.
Peck, Stow & Wilcox Company, The. (See Broemel, Louis, assignor.)
Pedrick, Albert H., Springfield, Ohio. Pavement-cutting machine. No. 1,271,757; July 9; v. 252; p. 314.
Peed, James R., Jersey City, N. J. Medicine-dropping bottle. No. 1,273,919; July 30; v. 252; p. 1003.
Peerless Knitting Mills Company, The. (See Scott, Robert A., assignor.)
Peery, James. (See Bean, Edgar V., assignor.)
Peffers, Andrew R., Aurora, assignor of one-half to F. C. Schultz, Congess Park, Ill. Nut-lock. No. 1,274,077; July 30; v. 252; p. 1047.
Pelto, Matt, Warren, Ohio. Figure toy. No. 1,272,516; July 16; v. 252; p. 553.
Penn Hardware Company. (See Cleaver, George E., assignor.)
Pennsylvania Tank Car Company, The. (See Rodman and Stevenson, assignors.)
Percival, Glenn W., *et al.* (See Groves, Ray H., assignor.)
Perdew, Herbert B. (See Calahan, John F., assignor.)
Perfect Bottle Opener Company. (See Cochrane, Robert B., assignor.)
Perfection Manufacturing Company. (See Stines, Edward H., assignor.)
Perkins Electric Switch Manufacturing Company, The. (See Thomas, George B., assignor.)
Perkins, William A., Cortland, N. Y. Hydrocarbon-mixture heater. No. 1,271,357; July 2; v. 252; p. 170.
Perlman, Louis H., New York, N. Y. Wheel. No. 1,271,936; July 9; v. 252; p. 363.
Perlmutter, Joseph, Jersey City, N. J. Cue-tip holder. No. 1,270,864; July 2; v. 252; p. 32.
Permutit Company, The. (See Kennicott, Cass L., assignor.)
Perry, Charles L., Schenectady, N. Y., assignor to General Electric Company. Interlocking control for mine-hoists. No. 1,273,661; July 23; v. 252; p. 895.
Perry, Frederick H., Beverly, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Machine for operating on shoes. No. 1,272,707; July 16; v. 252; p. 610.
Perry, Frederick H., Beverly, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Rounding and channeling machine. No. 1,272,708; July 16; v. 252; p. 610.
Perry, Frederick H., Beverly, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Channeling shoe-soles. No. 1,272,709; July 16; v. 252; p. 610.
Perry, Orin F. and Orin F., Jr., New York, N. Y. Mounting for rapid-fire guns and the like. No. 1,273,178; July 23; v. 252; p. 706.
Perry, Orin F. and Orin F., Jr., New York, N. Y. Mounting for machine-guns and the like. No. 1,273,179; July 23; v. 252; p. 706.
Perry, Thomas O., Oak Park, Ill. Aircraft for mechanical flight and automatic soaring. No. 1,272,846; July 16; v. 252; p. 649.
Pertz, John W., La Fayette, Ind. Paper or fiber board machine. No. 1,272,847; July 16; v. 252; p. 650.
Peter, Hans, Liestal, Switzerland. Carbureter for internal-combustion engines. No. 1,271,610; July 9; v. 252; p. 272.
Petersen, Viggo S. K., Gentofte, Denmark. Milk-cooling apparatus. No. 1,273,404; July 23; v. 252; p. 825.
Peterson, John, Felch, assignor of one-half to S. J. Peterson, Foster City, Mich. Pan-lifter. No. 1,273,785; July 23; v. 252; p. 926.
Peterson, Per A., New York, N. Y. Flying-machine. No. 1,273,267; July 23; v. 252; p. 788.
Peterson, Svan J. (See Peterson, John, assignor.)

Petinot, Napoleon G., assignor to United States Alloys Corporation, New York, N. Y. Manufacture of shaped castings of ferrosilicid. No. 1,274,360; July 30; v. 252; p. 1124.
Pellto, Andrea, Trenton, N. J. Muffler for internal-combustion engines. No. 1,271,758; July 9; v. 252; p. 314.
Petito, Andrea, Trenton, N. J. Shock-absorber. No. 1,274,321; July 30; v. 252; p. 1114.
Petres, Paul, Astoria, N. Y. Dirigible propeller mounting. No. 1,271,213; July 2; v. 252; p. 131.
Petrie Process Company. (See Petrie, Walter, assignor.)
Petrie, Walter, Endicott, assignor to Petrie Process Company, New York, N. Y. Tanning. No. 1,273,662; July 23; v. 252; p. 896.
Petry, Jacob, Pittsburgh, Pa. Pattern for dental plates. No. 1,274,322; July 30; v. 252; p. 1114.
Petterman, Albert J., Chicago, Ill. Trousers-stretcher. No. 1,271,759; July 9; v. 252; p. 314.
Petterson, Bertill C. (See Petterson, Simon G. and B. C.)
Petterson, Simon G. and B. C., Memphis, Tenn. Wagon. No. 1,273,405; July 23; v. 252; p. 826.
Petty, Calhoun, assignor of one-half to W. A. Shamberger, Frierson, La. Splice-bar. No. 1,272,310; July 9; v. 252; p. 471.
Petty, William E., Pipestone, Minn. Fly-trap for screen-doors. No. 1,271,214; July 2; v. 252; p. 131.
Pfahler, William Q., Toledo, Ohio. Worm-drive. No. 1,273,533; July 23; v. 252; p. 860.
Pfanstiehl, Carl A., Highland Park, assignor to Pfanstiehl Company, Inc., North Chicago, Ill. Electric furnace. No. 1,271,760; July 9; v. 252; p. 314.
Pfanstiehl, Carl A., Waukegan, assignor to Pfanstiehl Company, Inc., North Chicago, Ill. Electric furnace. No. 1,273,920; July 30; v. 252; p. 1003.
Pfanstiehl Company (See Pfanstiehl, Carl A., assignor.)
Pfeifer, Leo L., Columbus, Ohio. Lamp. No. 1,272,517; July 16; v. 252; p. 554.
Pfeiffer, George, Providence, R. I., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Center stop-motion. No. 1,270,865; July 2; v. 252; p. 32.
Phelan, Richard A. (See Weguelin and Phelan.)
Phelps, William S., Portland, Oreg. Arch-support. No. 1,272,994; July 16; v. 252; p. 690.
Philadelphia Storage Battery Company. (See Everett, Edward E., assignor.)
Philadelphia Storage Battery Company. (See Skinner, James M., assignor.)
Phillips, William F., *et al.* (See Collins, James F., assignor.)
Phillips, William G., Jr., and W. F. McKenna, Brooklyn, N. Y. Coffee product and process of making the same. No. 1,271,761; July 9; v. 252; p. 315.
Phinney, Edgar E., assignor to Monroe Calculating Machine Company, New York, N. Y. Carrying mechanism for calculating-machines. No. 1,272,083; July 9; v. 252; p. 407.
Pickard, William, Laporte, Ind. Bobbin. No. 1,271,074; July 2; v. 252; p. 90.
Pickett, Bradley E., Yankton, S. D. Neck-pad. No. 1,272,084; July 9; v. 252; p. 408.
Picketts, James, San Diego, Cal. Resilient wheel. No. 1,271,936; July 9; v. 252; p. 170.
Pickl, Emma. (See Pickl, Paul, assignor.)
Pickl, Paul, assignor to E. Pickl, Chicago, Ill. Producing hydrogen peroxid. No. 1,271,611; July 9; v. 252; p. 273.
Piel, Gottfried. (See Denison, Julian, assignor.)
Pieper, Alphonse F. (See Pieper, Oscar H. and A. F.)
Pieper, Oscar H. and A. F., Rochester, N. Y. Pulley-guard. No. 1,271,612; July 9; v. 252; p. 273.
Pieper, Oscar H. and A. F., Rochester, N. Y. Lubricating-bearing. No. 1,272,518; July 16; v. 252; p. 554.
Pierce, Guy C., New York, N. Y., assignor, by mesne assignments, to Automatic Straight Air Brake Company, Wilmington, Del. Supporting diaphragms. No. 1,273,534; July 23; v. 252; p. 860.
Pierce Packer & Supply Co. (See Pierce, William S., assignor.)
Pierce, William S., assignor to Pierce Packer & Supply Co., Franklin, Pa. Device for use in oil and gas wells. No. 1,273,663; July 23; v. 252; p. 896.
Pierson, Swan P., Milford, Mass. Automobile steering-gear. No. 1,272,085; July 9; v. 252; p. 408.
Pigeon, Albert M., assignor to Wildman Mfg. Co., Norristown, Pa. Spring beard-needle. No. 1,271,075; July 2; v. 252; p. 91.
Pilger, George J., Scranton, Pa. Air-brake system. No. 1,274,193; July 30; v. 252; p. 1080.
Pilnacek, Michael. (See Karhan, August and C. F., assignors.)
Piotrowski, Mikolaj, Elmira Heights, N. Y. Alcohol-burner. No. 1,272,995; July 16; v. 252; p. 691.
Piper, Mark A., Marblehead, Mass. Trousers-belt. No. 1,272,519; July 16; v. 252; p. 554.
Pipes, William H. (See Menge and Pipes.)
Pirög, Jan, Passaic, N. J. Wire-cutting bayonet. No. 1,274,194; July 30; v. 252; p. 1080.
Pitney, Arthur H., Joliet, Ill. Mail-marking machine and postage-meter. No. 1,273,793; July 23; v. 252; p. 928.
Pittoni, Louis E. (See Siebower and Pittoni.)
Pittsburgh Steel Company. (See Johnson, August G., assignor.)
Plack, Henry E., Towson, Md. Adjustable curtain-bracket. No. 1,272,848; July 16; v. 252; p. 650.
Plaisted, Harold M., Granite City, Ill., assignor to The Williams Patent Crusher & Pulverizer Co., St. Louis, Mo. Pneumatic separating system. No. 1,272,311; July 9; v. 252; p. 472.
Platt, Clarence D., Bridgeport, Conn. Box knock-out. No. 1,271,215; July 2; v. 252; p. 131.
Platt, Clarence D., Bridgeport, Conn. Switch-box. No. 1,271,216; July 2; v. 252; p. 132.
Platt, Clarence D., Bridgeport, Conn. Electrical receptacle. No. 1,271,217; July 2; v. 252; p. 132.
Platt, Clarence D., Bridgeport, Conn. Protective box for meter connections. No. 1,272,086; July 9; v. 252; p. 408.
Pochopien, John, Flint, Mich. Bath-tub cabinet. No. 1,272,087; July 9; v. 252; p. 408.
Podobiedoff, Iwan, Petrograd, Russia. Well-casing head. No. 1,272,312; July 9; v. 252; p. 472.
Poehlmann, Andrew T. (See Talbot, William W., assignor.)
Poetschke, Paul, Milford, Del. Reinforced paper article. No. 1,274,323; July 30; v. 252; p. 1115.
Poetschke, Paul, Milford, Del. Phonograph-record and making the same. No. 1,274,324; July 30; v. 252; p. 1115.
Polson, Carl, Vermillion, Kans. End-gate for wagons. No. 1,274,325; July 30; v. 252; p. 1115.
Pomfret, John, Sr., Paterson, N. J. Lock-bar barrier for protecting ships against torpedo attacks. No. 1,273,664; July 23; v. 252; p. 896.
Poole, Arthur F., Chicago, Ill. Toggle-bolt. No. 1,271,763; July 9; v. 252; p. 315.
Poole, Arthur F., Chicago, Ill., assignor to The Wahl Company, Wilmington, Del. Calculating-machine. No. 1,271,762; July 9; v. 252; p. 315.
Poole, Arthur F., Chicago, Ill., assignor, by mesne assignments, to The Wahl Company, Wilmington, Del. Calculating-machine. No. 1,273,180; July 23; v. 252; p. 766.
Poole, Charles A., Jersey City, N. J. Tiltable post. No. 1,272,088; July 9; v. 252; p. 408.
Porter, Edwin S., New York, N. Y. Arc-lamp. No. 1,272,313; July 9; v. 252; p. 472.
Porter, Ernest D., Los Angeles, Cal. Ventilating-deflator. No. 1,273,665; July 23; v. 252; p. 897.
Poschadel, Leonard R., New York, N. Y. Dish. No. 1,272,996; July 16; v. 252; p. 691.
Pospeshil, Joseph B., Detroit, Mich. Spring attachment for motor-vehicles. No. 1,272,520; July 16; v. 252; p. 559.
Post, Alfred P. (See Spielman and Post.)
Potterf, Orlystis M., Larned, Kans. Electrically-heated drier for clothing. No. 1,271,613; July 9; v. 252; p. 273.
Poulsen, Robert, Hutchinson, Minn. Pail-cover attachment. No. 1,271,756; July 9; v. 252; p. 313.
Powell, Alfred H., American Fork, Utah. Fruit slicer and corer. No. 1,271,218; July 2; v. 252; p. 132.
Powell, H. R. (See Ashmore and Morgan, assignors.)
Powell, Harold G., Omaha, Nebr. Collapsible top for vehicles. No. 1,273,090; July 16; v. 252; p. 715.
Powell, Reginald L., Cawnpore, India. Railway-signal midway wire-compensator. No. 1,272,314; July 9; v. 252; p. 473.
Powell, Walter B., Washington, D. C. Combined micrometer height-gage and indicator. No. 1,272,997; July 16; v. 252; p. 691.
Power, Nicholas, Brooklyn, assignor to Nicholas Power Company, New York, N. Y. Tension device for moving-picture machines. No. 1,270,866; July 2; v. 252; p. 32.
Power, Nicholas, Brooklyn, assignor to Nicholas Power Company, New York, N. Y. Supporting-frame for motion-picture machines. No. 1,273,921; July 30; v. 252; p. 1004.
Power Specialty Company. (See Foster, Ernest H., assignor.)
Power Specialty Company. (See Foster, Pell W., assignor.)
Powers Accounting Machine Company. (See Powers, James, assignor.)
Powers, Charles C., Williams, Ariz. Electrical heater. No. 1,273,666; July 23; v. 252; p. 897.
Powers, Frank T., assignor to Powers Photo Engraving Company, New York, N. Y. Making photomechanical color-printing plates. No. 1,272,521; July 16; v. 252; p. 555.
Powers, Fred W., Chicago, Ill. Heat-indicating device. No. 1,274,326; July 30; v. 252; p. 1115.
Powers, George G., assignor to Union Wire Mattress Company, Chicago, Ill. Bed-spring construction. No. 1,273,181; July 23; v. 252; p. 767.
Powers, Isaac, Terre Haute, Ind. Smoke-generator for smoking meats. No. 1,273,535; July 23; v. 252; p. 860.
Powers, James, assignor to Powers Accounting Machine Company, New York, N. Y. Combined type-writer and perforating machine. No. 1,271,614; July 9; v. 252; p. 273.
Powers, James, assignor to Powers Accounting Machine Company, New York, N. Y. Twelve-key hand-punch. No. 1,272,089; July 9; v. 252; p. 409.
Powers, James H., Evansville, Ind. Lamp. No. 1,272,315; July 9; v. 252; p. 473.
Powers Photo Engraving Company. (See Powers, Frank T., assignor.)

Poyet, Jean A., Lyon, France. Motor. No. 1,273,667; July 23; v. 252; p. 897.
Pranke, August, North Detroit, Mich. Vegetable-washing machine. No. 1,273,268; July 23; v. 252; p. 789.
Pratt, Arthur D., New York, N. Y., assignor to The Babcock & Wilcox Company, Bayonne, N. J. Water-tube boiler. No. 1,274,327; July 30; v. 252; p. 1116.
Pratt, Howell D., Philadelphia, Pa., assignor to Link-Belt Company, Chicago, Ill. Machine for cleaning railway-ballast. No. 1,272,849; July 16; v. 252; p. 650.
Pratt, Paul, Hackensack, N. J. Stenographer's note-book holder. No. 1,271,219; July 2; v. 252; p. 133.
Pratt & Whitney Company. (See Miller, Friederich, assignor.)
Pratt, Wilson, Salt Lake City, Utah. Beet-harvester. No. 1,271,076; July 2; v. 252; p. 91.
Prattinger, Alexander J., New York, N. Y. Line-clutch. No. 1,273,922; July 30; v. 252; p. 1004.
Premier Printing Machinery Co. (See Kaddeland, Christen R., assignor.)
Prescott, Arthur T., East Orange, N. J., assignor to George H. Frothingham Company, New York, N. Y. Door and operating mechanism therefor. No. 1,273,923; July 30; v. 252; p. 1004.
Pressed Steel Car Company. (See Lindström, Charles A., assignor.)
Price, Charles P., assignor to American Tar Company, Malden, Mass. Still for crude bituminous materials. No. 1,273,091; July 16; v. 252; p. 716.
Price, Charles S., Rutherford, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Fuse. No. 1,270,867; July 2; v. 252; p. 33.
Price, Edmund J., Montague, Cal. Air-intake regulator. No. 1,271,359; July 2; v. 252; p. 170.
Price, Lenora, Davenport, Okla. Doll. No. 1,274,328; July 30; v. 252; p. 1116.
Prichard, William M., Cooledge, Tex. Attachment for huller-gins. No. 1,273,182; July 23; v. 252; p. 767.
Priest, Edward D., Schenectady, N. Y., assignor to General Electric Company. Torpedo. No. 1,273,668; July 23; v. 252; p. 897.
Prifold, George, Linwood, assignor to The Congoleum Company, Philadelphia, Pa. Manufacturing printed rugs. No. 1,273,536; July 23; v. 252; p. 861.
Printing Ink Compound Co. (See Rackle, Charles H., assignor.)
Printz, Daniel F., assignor to American Skate & Manufacturing Company, Reading, Pa. Skate-roller. No. 1,274,078; July 30; v. 252; p. 1047.
Prittie, Robert W., Toronto, Ontario, Canada. Composition of matter. No. 1,273,669; July 23; v. 252; p. 897.
Probasco, Paul F., Kansas City, Mo. Piston-ring. No. 1,271,077; July 2; v. 252; p. 91.
Producers Oil Company. (See Scott, Clarence N., assignor.)
Producers Supply Co. (See Sheasley, Charles H., assignor.)
Pronovost, Joseph, Detroit, Mich. Spring-frame for vehicle-wheels. No. 1,271,360; July 2; v. 252; p. 170.
Proudfit Loose Leaf Company, The. (See Johnson, Cornelius E., assignor.)
Prusia, Franklin O. (See Gerow and Prusia.)
Public Service Cup Company. (See Jahn, Berthold, assignor.)
Public Service Cup Company. (See Nias, Henry, assignor.)
Pugge, Fritz, Cambridge, Mass. Soap-shaver. No. 1,273,269; July 23; v. 252; p. 789.
Pullar, Robert A., Anacortes, Wash. Attachment for motor-vehicles. No. 1,273,270; July 23; v. 252; p. 789.
Pullinger, Thomas C. W., The Brae, near Dumfries, Scotland, assignor to American B. H. P. Aero Engine Corporation, New York, N. Y. Valve mechanism and associated parts of internal-combustion engines. No. 1,271,764; July 9; v. 252; p. 315.
Pullman Couch Company. (See Kramer, Umhofer, Eral, and Wildberger, assignors.)
Purdie, Alexander, Wyandotte, Mich. Snap connection for tire-chains. No. 1,273,271; July 23; v. 252; p. 790.
Purdy, Frederick. (See Malstrom and Andersen, assignors.) (Reissue.)
Purnell, Benjamin, Benton Harbor, Mich. Automatic flushing device. No. 1,274,195; July 30; v. 252; p. 1080.
Pursell, James P., assignor to The Fruited Cereal Company, Quincy, Ill. Prepared health food and making same. No. 1,271,765; July 9; v. 252; p. 316.
Putnam, Mark E., assignor to The Dow Chemical Company, Midland, Mich. Making benzaldehyde. No. 1,272,522; July 16; v. 252; p. 555.
Pyle, William D., Indianapolis, Ind. Circuit-protective device. No. 1,272,090; July 9; v. 252; p. 409.
Pyrene Manufacturing Company. (See Ferguson, George E., assignor.)
Quast, Bruno, Cologne-Deutz, Germany. Continuous rolling-mill. No. 1,271,361; July 2; v. 252; p. 171.
Quéron, Jules G. C., and J. Courbon, St.-Etienne, France. Cartridge-feeding belt for machine-guns. No. 1,273,670; July 23, v. 252; p. 897.
Quinn, Martin J., Toronto, Ontario, Canada. Electric switch. No. 1,271,220; July 2; v. 252; p. 133.
Quinn, Martin J., Toronto, Ontario, Canada. Electric switch. No. 1,271,221; July 2; v. 252; p. 133.
Quinn, Thomas H., New Haven, Conn. Valve for flushing-tanks. No. 1,272,091; July 9; v. 252; p. 409.
R. Hoe and Co. (See Hilton, Arthur E., assignor.)
R. Hoe & Co. (See Roesen, Oscar, assignor.)
R. Hoe and Co. (See Roesen and Tornberg, assignors.)
R. H. Beaumont Company. (See Hale, William E., assignor.)
R. U. V. Company, The. (See Recklinghausen, Helbronner and Henri, assignors.)
Raab, Edward H., Fort Wayne, Ind. Towel-holder. No. 1,271,766; July 9; v. 252; p. 316.
Rabbe, Frank W., Ottawa, Ontario, Canada. Ticket-holder. No. 1,271,078; July 2; v. 252; p. 91.
Rabehl, Frederick W., Alexandria, Minn. Litter-carrier. No. 1,272,523; July 16; v. 252; p. 555.
Rabenold, Charles F., Glenside, and G. W. Carns, Philadelphia, Pa. Lamp. No. 1,272,524; July 16; v. 252; p. 555.
Raber, Joseph, assignor to Burroughs Adding Machine Company, Detroit, Mich. Adding-machine. No. 1,270,868; July 2; v. 252; p. 33.
Rackle, Charles H., assignor to Printing Ink Compound Co., New York, N. Y. Composition for preventing smut of printing-ink. No. 1,272,092; July 9; v. 252; p. 410.
Rackleyeft, John W. (See Thurber and Rackleyeft.)
Radcliffe, Carlton R., New York, N. Y. Power-transmitting apparatus. No. 1,271,079; July 2; v. 252; p. 92.
Radford, Robert L., assignor of one-fourth to P. B. Moale, Asheville, N. C. Package-tying device. No. 1,271,767; July 9; v. 252; p. 316.
Raflovich, Harry, New York, N. Y. Wheel-rim. No. 1,271,222; July 2; v. 252; p. 133.
Rain, Anton, Garfield, N. J. Internal-combustion engine. No. 1,274,329; July 30; v. 252; p. 1116.
Railway Materials Company, The. (See Cram, Tim B., assignor.)
Rainey, Clifton K., Knoxville, Tenn. Account system. No. 1,271,080; July 2; v. 252; p. 92.
Rainey, Paul M., Glen Ridge, N. J., assignor, by mesne assignments, to Western Electric Company, Incorporated. Fluctuation-damping means for rotatable members. No. 1,271,362; July 2; v. 252; p. 171.
Ralston, John E., Vincennes, Ind. Door-stop. No. 1,271,363. July 2; v. 252; p. 171.
Ralya, William S., assignor to A. H. Bohnstengel, Cincinnati, Ohio. Furnace. No. 1,271,364; July 2; v. 252; p. 171.
Ramberg, John H., and O. A. Merman, Minneapolis, Minn. Window-frame and slip-sill for drop-sashes. No. 1,272,093; July 9; v. 252; p. 410.
Rampone, Frédéric Neuchâtel, Switzerland. Valve for fluid-tanks and like structures. No. 1,273,537; July 23; v. 252; p. 861.
Ramsay, James W., Brooklyn, N. Y. Camera. No. 1,273,183; July 23; v. 252; p. 767.
Ramsey, Charles O. (See Wolfe, Clinton M., assignor.)
Ramsher, John C., Shenandoah, Pa. Lock. No. 1,272,710; July 16; v. 252; p. 610.
Ramson, Leo, Leonia, N. J. Abrasive tool. No. 1,273,184; July 23; v. 252; p. 769.
Ranch, Bertram F., Seattle, Wash. Automatic registering device. No. 1,273,273; July 23; v. 252; p. 790.
Rand, James H., Newton, Mass. Index. No. 1,272,094; July 9; v. 252; p. 410.
Rand, James H., Jr., North Tonawanda, N. Y. Card-index system. No. 1,272,525; July 16; v. 252; p. 556.
Rand, James H., Jr., assignor to Zenith Systems Corporation, Tonawanda, N. Y. Card-index system. No. 1,272,526; July 16; v. 252; p. 556.
Randall, Chester J., Naugatuck, Conn., assignor to The Goodyear's Metallic Rubber Shoe Company. Apparatus for exhausting the interior of rubber articles. No. 1,273,112; July 16; v. 252; p. 721.
Raney, Clemma R., Chicago, and B. R. Benjamin, Oak Park, Ill., assignors to International Harvester Company of New Jersey. Cord-holder for grain-binders. No. 1,272,711; July 16; v. 252; p. 611.
Raney, Estell C., assignor to The Automatic Reclosing Circuit Breaker Company, Columbus, Ohio. Automatically-reclosing circuit-breaker. No. 1,273,786; July 23; v. 252; p. 926.
Ranger, Karl F., Detroit, Mich. Universal joint. No. 1,271,615; July 9; v. 252; p. 274.
Ranger, Karl F., Detroit, Mich. Universal joint. No. 1,271,616; July 9; v. 252; p. 274.
Rankin, Jeff, Glendale, Ariz. Sickle attachment. No. 1,272,095; July 9; v. 252; p. 410.
Rankin, Joseph P., Plenty, Saskatchewan, Canada. Fountain-comb. No. 1,273,272; July 23; v. 252; p. 790.
Rapeport, William H. (See Kirshner, Abraham S., assignor.)
Rasmussen, Albert E., North Yakima, Wash. Valve. No. 1,272,998; July 16; v. 252; p. 691.
Rathgeb, Joseph J., Jr., New York, N. Y. Vending-machine. No. 1,272,096; July 9; v. 252; p. 411.
Ray, Albert D., Cleveland, Ohio. Oil-bolt. No. 1,271,768; July 9; v. 252; p. 316.
Rayfield, Frederick J., Chicago, Ill. Thermostatic cooling system for internal-combustion engines. No. 1,273,406; July 23; v. 252; p. 826.
Raymond, William M., Long Beach, Cal. Humidifier. No. 1,271,769; July 9; v. 252; p. 316.

Rea, Agostino, Helper, Utah. Coal-mining machine. No. 1,271,617; July 9; v. 252; p. 275.
Ready Tool Company, The. (See Fish, Harold, assignor.)
Reagan Bale Company. (See Taft, John A., assignor.)
Ream, William L. (See Metcalf, Jefferson D., assignor.)
Rebman, Christian, Republican City, Nebr. Stock-feeder. No. 1,271,937; July 9; v. 252; p. 364.
Recklinghausen, Max von, Suresnes, France, assignor to Cooper Hewitt Electric Company, Hoboken, N. J. Seal for vapor electric apparatus. No. 1,271,245; July 2; v. 252; p. 140.
Recklinghausen, Max von, A. Helbronner, and V. Henri, Paris, France, assignors, by mesne assignments, to The R. U. V. Company, Inc. Sterilizing liquids. No. 1,271,246; July 2; v. 251; p. 140.
Recuero, J. Gabriel, Panama, Panama. Aeroplane. No. 1,272,712; July 16; v. 252; p. 611.
Red-Devil-Speed Hammer Company, The. (See Cayo, Julius N., assignor.)
Redfield, Cleveland, Ogden, Utah, assignor to Automatic Controller and Manufacturing Company. Circuit-controlling device. No. 1,273,092; July 16; v. 252; p. 716.
Reed, Charles E., Chicago, Ill. Pattern-cutting machine. No. 1,274,196; July 30; v. 252; p. 1080.
Reed, George C. (See Winton and Reed.)
Reed, James H., Swampscott, Mass. Tack-making machine. No. 1,272,097; July 9; v. 252; p. 411.
Reed, Walter C., Dalton, assignor to The Telelectric Company, Pittsfield, Mass. Circuit-controller. No. 1,272,317; July 9; v. 252; p. 473.
Reed, William R., assignor of one-half to A. Welch, Toronto, Ontario, Canada. Combined ash sifter and receptacle. No. 1,271,223; July 2; v. 252; p. 134.
Reese, Frank, Minneapolis, Minn. Portable grooving-tool. No. 1,271,618; July 9; v. 252; p. 275.
Reeves, Carlos J., Maricopa, Cal. Heaving-plug. No. 1,271,770; July 9; v. 252; p. 317.
Reeves, Clifton, Trenton, N. J. Steam-valve. No. 1,271,938; July 9; v. 252; p. 364.
Reeves, Herbert J., New York, N. Y. Sprinkler-nozzle. No. 1,271,939; July 9; v. 252; p. 364.
Reeves, Loula S., Warren, Ohio. Toy figure. No. 1,273,538; July 23; v. 252; p. 861.
Rehbein, Conrad, assignor to Hayes Manufacturing Co., Detroit, Mich. Edge-bending machine. No. 1,272,999; July 16; v. 252; p. 691.
Rehrauer, Randolph, Two Rivers, Wis. Rain-trough support. No. 1,272,527; July 16; v. 252; p. 556.
Reich, Valdemar F., Pittsburgh, Pa. Animal-trap. No. 1,273,185; July 23; v. 252; p. 768.
Reid, Allan E., assignor to E. F. Bowen, Providence, R. I. Portable water-heater. No. 1,271,487; July 2; v. 252; p. 204.
Reid, John, New York, N. Y. Ship. No. 1,271,081; July 2; v. 252; p. 92.
Reilly, Edgar J. (See McClure and Reilly.)
Reilly, William J., and D. V. Sickman, Denver, Colo. Hydraulic cartridge apparatus. No. 1,271,940; July 9; v. 252; p. 364.
Reily, Daniel J., San Francisco, Cal. Plant-holder. No. 1,272,713; July 16; v. 252; p. 611.
Reily, John P., St. Louis, Mo. Boot or shoe heel. No. 1,272,098; July 9; v. 252; p. 411.
Reinert, John F. (See Jordan and Reinert.)
Reinhalter, Peter, Wilkes-Barre, Pa. Connector for outlet-boxes. No. 1,272,714; July 16; v. 252; p. 611.
Reinschmidt, John, New York, N. Y. Undergarment. No. 1,271,082; July 2; v. 252; p. 93.
Reiser, Sigmund, Cincinnati, Ohio. Locking device for motor-vehicles. No. 1,271,941; July 9; v. 252; p. 364.
Rekers, Gerret, Rochester, assignor to General Railway Signal Company, Gates, N. Y. Semaphore-signal mechanism. No. 1,272,099; July 9; v. 252; p. 411.
Reliance Ball Bearing Door Hanger Company. (See Weiss, Louis T., assignor.)
Relling, Martin T., Butler, Pa. Seal for car-doors. No. 1,270,869; July 2; v. 252; p. 33.
Remington Typewriter Company. (See Barney, Edwin E., assignor.)
Remington Typewriter Company. (See Carbart, Herbert A., assignor.)
Remington Typewriter Company. (See Selb, George A., assignor.)
Remington Typewriter Company. (See Smith, Arthur W., assignor.)
Remington Typewriter Company. (See Straub, Joseph E., assignor.)
Remy Electric Company. (See Kennington, William O., assignor.)
Renblom, Eskil B., *et al.* (See Anderson, George A., assignor.)
Rendle, Arthur E., assignor to Keystone Type Foundry, Philadelphia, Pa. Skylight. No. 1,272,100; July 9; v. 252; p. 412.
Republic Rubber Company, The. (See Kuentzel, Curt, assignor.)
Reuschline, George L., Philadelphia, Pa., assignor to American Ice Company. Apparatus for harvesting ice. No. 1,274,079; July 30; v. 252; p. 1047.
Reynolds, Albert W., Jr., Princeton, W. Va. Wrench. No. 1,271,365; July 2; v. 252; p. 172.
Reynolds, John N., Greenwich, Conn., and O. F. Forsberg, Yonkers, assignors to Western Electric Company, New York, N. Y. Terminal bank. No. 1,273,274; July 23; v. 252; p. 790.
Reynolds, Morley P., assignor to The W. S. Tyler Company, Cleveland, Ohio. Hatch-ventilator and ice-plug. No. 1,274,197; July 30; v. 252; p. 1081.
Rhoades, Alonzo E., assignor to Draper Corporation, Hopedale, Mass. Battery mechanism for automatic filling-replenishing looms. No. 1,272,716; July 16; v. 252; p. 611.
Rhoades, Lloyd R., Fremont, Ohio, assignor, by mesne assignments, to National Carbon Company, Inc. Electric battery. No. 1,273,000; July 16; v. 252; p. 692.
Rhodes, Herbert M., Natchez, Miss. Seed-harvesting machine. No. 1,272,717; July 16; v. 252; p. 612.
Rhody, Eliza, assignor of one-half to E. T. Botkin, Farmland, Ind. Vehicle-wheel. No. 1,273,924; July 30; v. 252; p. 1005.
Ricardo, Harry R., London, England. Internal-combustion engine. No. 1,271,942; July 9; v. 252; p. 365.
Rice, George H., Castner, Hawaii. Automatic safety attachment for cranking devices. No. 1,272,101; July 9; v. 252; p. 412.
Rice, Milo E., Kansas City, Mo. Artificial limb. No. 1,271,771; July 9; v. 252; p. 317.
Rice, Murry E., Delphos, Kans. Feed-bag supporter. No. 1,272,102; July 9; v. 252; p. 413.
Rice, Thomas B., Philadelphia, Pa. Package. No. 1,274,198; July 30; v. 252; p. 1081.
Rich, Frank K., Hyannis, assignor to The Standard Comb Company, Leominster, Mass. Knitting-needle. No. 1,272,316; July 9; v. 252; p. 473.
Rich, William H., Wrentham, Mass. Tool for razing buildings, scaffolds, and analogous work. No. 1,270,970; July 2; v. 252; p. 62.
Richard, Thomas A. (See Dudley and Richard.)
Richards, George C., Berkeley, Cal. Fume-condenser. No. 1,272,528; July 16; v. 252; p. 557.
Richards, James H., Moscow, Idaho. Automobile steering-gear. No. 1,272,103; July 9; v. 252; p. 413.
Richards, Joe H., Detroit, Mich. Gas-generator. No. 1,272,529; July 16; v. 252; p. 557.
Richards, Robert L., Meridian, Tex. Portable bathing apparatus. No. 1,272,715; July 16; v. 252; p. 611.
Richman, John W., Gilroy, Cal. Device for feeding brush-wood to cutters. No. 1,271,773; July 9; v. 252; p. 317.
Richmond, George E., Austin, Tex. Airship. No. 1,270,971; July 2; v. 252; p. 62.
Richmond-Standard Manufacturing Company, The. (See Zimmerman, Albert J., assignor.)
Richter, Charles B. (See Richter, Emil G. and C. B.)
Richter, Emil G., assignor to C. B. Richter, Chicago, Ill. Gas-stove. No. 1,273,671; July 23; v. 252; p. 897.
Richter, Hermann E., Tucknhoe, assignor to C. F. Cassens, Yonkers, N. Y. Valve mechanism for internal-combustion engines. No. 1,274,080; July 30; v. 252; p. 1047.
Ricke, Anton, *et al.* (See Olerich, Henry, assignor.)
Ricke, Ben, *et al.* (See Olerich, Henry, assignor.)
Ricke, Henry, *et al.* (See Olerich, Henry, assignor.)
Ricke Martna, *et al.* (See Olerich, Henry, assignor.)
Ricke, William, *et al.* (See Olerich, Henry, assignor.)
Rickel, Tremont W., McAllen, Tex. Window-sash lock. No. 1,271,772; July 9; v. 252; p. 317.
Riddle, Abner B., assignor of one-half to A. T. Ward, Bynum, N. C. Sprout-puller. No. 1,272,530; July 16; v. 252; p. 557.
Rieck, William L., Kankakee, assignor to Paramount Hosiery Form Drying Co., Chicago, Ill. Hosiery drying and shaping structure. No. 1,273,093; July 16; v. 252; p. 716.
Riethmueller, Richard H., Philadelphia, Pa. Hypodermic needle. No. 1,272,104; July 9; v. 252; p. 413.
Riethmueller, Richard H., Montclair, N. J., assignor to H. A. Metz, New York, N. Y. Hypodermic needle. No. 1,274,081; July 30; v. 252; p. 1048.
Riggan, John L., Spring Grove, Va. Crank-handle-retaining device. No. 1,271,774; July 9; v. 252; p. 318.
Riggs, George R., Washington, D. C., assignor of one-half to F. A. Schaefer, Raspeburg, Md. Vehicle-wheel. No. 1,271,366; July 2; v. 252; p. 172.
Riggs, Horace A., Indianapolis, Ind. Centrifugal separator or clarifier. No. 1,271,367; July 2; v. 252; p. 172.
Right Way Cooker Company, The. (See Stivers and Enochs, assignors.)
Rigot, Paul, Jr., Wheeling, W. Va. Necktie-fastener. No. 1,273,094; July 16; v. 252; p. 717.
Riley, Albert G. (See Riley, Howard V. and A. G.)
Riley, Howard V. and A. G., Flint, Mich. Device for reforming fruit-jar covers. No. 1,272,105; July 9; v. 252; p. 413.
Riley, John W., Waverly, N. Y. Universal elliptical-spring former. No. 1,272,531; July 16; v. 252; p. 558.
Rilling, Albert, assignor to Mafam Motor-Apparate G. m. b. H., Frankfort-on-the-Main, Germany. Means for use in automatically controlling the timing in magneto-ignition apparatus. No. 1,273,095; July 16; v. 252; p. 717.
Rimailho, Emile, assignor to Compagnie Des Forges Et Acieries De La Marine Et D'Homecourt, Paris, France. Wheeled gun-carriage with wide scope of fire. No. 1,272,106; July 9; v. 252; p. 414.
Rinsche, Frank C., assignor to Burroughs Adding Machine Company, Detroit, Mich. Adding-machine. No. 1,270,870; July 2; v. 252; p. 33.

Rinsche, Frank C., assignor to Burroughs Adding Machine Company, Detroit, Mich. Retarding mechanism. No. 1,273,539; July 23; v. 252; p. 861.
Rintelman, Anton H., Chicago, Ill. Needle for talking-machines. No. 1,271,224; July 2; v. 252; p. 134.
Riordan, Robert W., Brooklyn, N. Y. Apple-corer. No. 1,272,107; July 9; v. 252; p. 414.
Ripken, Hugo F., assignor of one-half to C. A. McCulloch, Minneapolis, Minn. Drifting and relief valve. No. 1,272,718; July 16; v. 252; p. 612.
Rinchard, Joseph J., Pasadena, Cal. Valve-grinding tool. No. 1,271,488; July 2; v. 252; p. 204.
Ritter, Henry J., Tippecanoe City, Ohio. Kitchen-cabinet. No. 1,273,925; July 30; v. 252; p. 1005.
Rixson, Oscar C., New Rochelle, N. Y. Composite metallic structure. No. 1,270,871; July 2; v. 251; p. 84.
Robb, John, and E. S. Lyons, Toronto, Ontario, Canada. Hand-drill. No. 1,272,108; July 9; v. 252; p. 414.
Robbe, Julius, Memphis, Tenn. Train-speed control. No. 1,274,330; July 30; v. 252; p. 1116.
Robbins, Albert F., Waltham, Mass. Chuck-closer. No. 1,272,109; July 9; v. 252; p. 414.
Robbins, Percy A., Timmins, Ontario, Canada. Settler for fluid mixtures. No. 1,272,850; July 16; v. 252; p. 651.
Robert N. Bassett Company. (See Russ, John B., assignor.)
Roberts, Harry T., Oakland, Cal. Automatic spark-advancing mechanism. No. 1,274,082; July 30; v. 252; p. 1048.
Roberts, Harry T., San Francisco, Cal. Spark-timing mechanism. No. 1,274,083; July 30; v. 252; p. 1048.
Roberts, Isaac, and W. Shaw, Brooklyn, N. Y., assignors to said Isaac Roberts. Rotary pump. No. 1,270,872; July 2; v. 252; p. 34.
Roberts, James M., Frelonia, Ky. Holder for miners' lamps. No. 1,271,368; July 2; v. 252; p. 173.
Roberts, Julius O. (See Feebusch and Roberts.)
Roberts, Robert R., Washington, D. C., assignor to The United Textile Company. Treating fiber. No. 1,272,851; July 16; v. 252; p. 651.
Robertson, Isaac W., Akron, Ohio. Method of and apparatus for shaping plastic sheets. No. 1,270,873; July 2; v. 252; p. 34.
Robinson, Arthur C., Los Angeles, Cal. Combined air-supply valve and gage. No. 1,271,489; July 2; v. 252; p. 204.
Robinson, Arthur W., Montreal, Quebec, Canada. Dredge. No. 1,272,110; July 9; v. 252; p. 415.
Robinson, Dora. (See Myers, Melvin A., assignor.)
Robinson, F. J. (See Myers, Melvin A., assignor.)
Robinson, Lyle F. (See Myers, Melvin A., assignor.)
Robinson, Meade. (See Myers, Melvin A., assignor.)
Robinson, Minor L., Villa Grove, Ill. Reversing-gear for fluid-motors. No. 1,271,369; July 2; v. 252; p. 173.
Robinson, Ruth. (See Myers, Melvin A., assignor.)
Robinson, William B., Denver, Colo. Brick-scoring mechanism. No. 1,272,533; July 16; v. 252; p. 558.
Robinson, William H., assignor to G. H. Brown, Brooklyn, N. Y. Spring-wheel. No. 1,272,852; July 16; v. 252; p. 651.
Robison, John A., and H. E. Littlejohn, Greer, S. C. Loom attachment. No. 1,272,532; July 16; v. 252; p. 558.
Roche, Edward J., *et al.* (See Jordan and Reinert, assignors.)
Rochester Manufacturing Co. (See Hastings, Herbert, assignor.)
Rockenfield, William A., Indianapolis, Ind. Silent-chain joint. No. 1,273,001; July 16; v. 252; p. 692.
Rockwell, Albert F., assignor to The New Departure Manufacturing Company, Bristol, Conn. Comparator-gage. No. 1,274,331; July 30; v. 252; p. 1117.
Rodd, George S., Houghton, Mich. Operating mechanism for steering-apparatus indicators. No. 1,274,199; July 30; v. 252; p. 1081.
Rodgers, Peter A., Proctor, Minn. Egg-boiler. No. 1,272,318; July 9; v. 252; p. 473.
Rodin, Charles, Isanti, Minn. Door-opener. No. 1,272,853; July 16; v. 252; p. 651.
Rodman Chemical Company. (See Rodman, Hugh, assignor.)
Rodman, Hugh, Edgewood, assignor to Rodman Chemical Company, Verona, Pa. Case-hardening material. No. 1,270,874; July 2; v. 252; p. 34.
Rodman, Hugh, Edgewood, Pa., assignor to Rodman Chemical Company. Food product and method of making the same. No. 1,270,875; July 2; v. 252; p. 34.
Rodman, Thomas, Youngstown, Ohio, and F. M. Stevenson, assignors to The Pennsylvania Tank Car Company, Sharon, Pa. Striking-plate. No. 1,273,540; July 23; v. 252; p. 861.
Rodman, Thomas, Youngstown, Ohio, and F. M. Stevenson, assignors to The Pennsylvania Tank Car Company, Sharon, Pa. Carry-iron. No. 1,273,541; July 23; v. 252; p. 862.
Rodman, Thomas, Youngstown, Ohio, and F. M. Stevenson, assignors to The Pennsylvania Tank Car Co., Sharon, Pa. Tank-support for tank-cars. No. 1,274,200; July 30; v. 252; p. 1081.
Roebuck, Alvah C., assignor to Woodstock Typewriter Company, Woodstock, Ill. Movable line-finder. No. 1,272,111; July 9; v. 252; p. 415.
Roedel, John, assignor, by mesne assignments, to U. S. Light & Heat Corporation, Niagara Falls, N. Y. Bearing. No. 1,271,225; July 2; v. 252; p. 134.
Roesch, Alfred, assignor to Charles J. Tagliabue Manufacturing Co., Brooklyn, N. Y. Temperature-controlling device. No. 1,273,407; July 23; v. 252; p. 826.
Roesen, Oscar, assignor to R. Hoe & Co., New York, N. Y. Web-feeding mechanism. No. 1,273,926; July 30; v. 252; p. 1005.
Roesen, Oscar and I. Tornberg, assignors to R. Hoe and Co., New York, N. Y. Plate-clamp. No. 1,273,275; July 23; v. 252; p. 790.
Roessler & Hasslacher Chemical Co., The. (See Lacy, Burritt S., assignor.)
Roessling, Otto H., assignor to C. Beck Company, Philadelphia, Pa. Machine for making paper tubes. No. 1,271,370; July 2; v. 252; p. 173.
Roffy, Joseph T., Pittsburgh, Pa., assignor, by mesne assignments, to Hawthorne Manufacturing Company, Incorporated, Bridgeport, Conn. Illuminating apparatus. No. 1,270,972; July 2; v. 252; p. 63.
Rogers Electric Laboratories Company, The. (See Dorment, Frank C., assignor.)
Rogers, Frank M., Baltimore, Md. Tension device for loom-shuttles. No. 1,272,112; July 9; v. 252; p. 415.
Rogers, Harrison W., *et al.* (See Ebeling, Charles W., assignor.)
Rogers, Homer S., assignor to J. R. Ball, Milwaukee, Wis. Pneumatic pump. No. 1,274,332; July 30; v. 252; p. 1117.
Rogers, Ovid H., Sacramento, assignor to himself and J. Brack, trustee, San Francisco, Cal. Steering-knuckle. No. 1,272,534; July 16; v. 252; p. 558.
Rohland, Curt J. (See Emmerling, Wheelock, and Rohland.)
Rohrlantz, Henry, West Orange, assignor to Unit Signal Co., Plainfield, N. J. Vehicle-signal. No. 1,273,672; July 23; v. 252; p. 898.
Roko Mfg. Co. (See Haas and Young, assignors.)
Roland, Theodore, Menominee, Wis. Aero-anglemeter. No. 1,274,333; July 30; v. 252; p. 1117.
Roller, Milton B., Palo Alto, assignor to Thomas Day Company, San Francisco, Cal. Lighting-fixture. No. 1,273,408; July 23; v. 252; p. 826.
Rollo, Thomas S., Galveston, Tex. Automobile safety-signal. No. 1,272,535; July 16; v. 252; p. 559.
Romberger, John. (See Bencze and Romberger.)
Romero, Alfredo L., Jersey, Cal. Weed-puller. No. 1,274,201; July 30; v. 252; p. 1082.
Rooke, Henry L., Jr., Houston, Tex. Protecting-casing for electrical conductors. No 1,272,719; July 16; v. 252; p. 613.
Root, Ralph R. (See Schroeder and Root.)
Rork, James E., Kalamazoo, Mich. Electrical connector. No. 1,271,226; July 2; v. 252; p. 134.
Rose, Robert E., Wilmington, Del. Baking preparation. No. 1,274,334; July 30; v. 252; p. 1118.
Rose, William, Gainsborough, England. Bag-making machine. No. 1,271,519; July 2; v. 252; p. 218.
Rose, Wilhelm F., La Moure, N. D. Cotton-picker. No. 1,274,335; July 30; v. 252; p. 1118.
Rosen, Jean, Paris, France. Manufacture of an agglutinant for coatings. No. 1,273,927; July 30; v. 252; p. 1006.
Rosen, Jean, assignor to Société Anonyme des Combustibles Industriels, Paris, France. Manufacture of impregnated material. No. 1,273,673; July 23; v. 252; p. 898.
Rosenfeld, Maurice S., New York, N. Y. Cleaning films. No. 1,273,928; July 30; v. 252; p. 1006.
Rosengren, Anders A., Malö, Sweden. Machine for the capsuling of bottles. No. 1,271,944; July 9; v. 252; p. 365.
Rosenstock, Lucie C., Nutley, N. J. Dispensing device for liquid soap, &c. No. 1,271,945; July 9; v. 252; p. 366.
Rosenthal, Uraia I. (See Crowley and Rosenthal.)
Rosenwasser, Morris, New York, N. Y. Combined walking-stick and garment-rack. No. 1,270,973; July 2; v. 252; p. 63.
Ross, Frank W. (See Wright and Ross.)
Ross, George A., Chicago, Ill. Cupola. No. 1,272,854; July 16; v. 252; p. 652.
Ross, Harry B., Benton Harbor, Mich. Motor-vehicle. No. 1,271,946; July 9; v. 252; p. 366.
Ross, Harry B., Benton Harbor, Mich. Portable elevator. No. 1,271,947; July 9; v. 252; p. 366.
Ross, Hugh C., assignor to The Kent-Owens Machine Company, Toledo, Ohio. Milling-machine. No. 1,274,084; July 30; v. 252; p. 1049.
Rossi, Auguste J., Niagara Falls, assignor to The Titanium Alloy Manufacturing Company, New York, N. Y. Titanic-oxid concentrate and obtaining the same. No. 1,272,855; July 16; v. 252; p. 652.
Rossing, Orren. (See Schneider, Frederick E., assignor.)
Roth, Peter, New Salem, N. D. Fruit-jar holder. No. 1,273,096; July 16; v. 252; p. 717.
Roth, Peter O., New York, N. Y. Boiler. No. 1,272,113; July 9; v. 252; p. 415.
Rothwill, Herbert, Scobey, Mont. Sheet-guide for cylinder-presses. No. 1,273,276; July 23; v. 252; p. 791.
Rotophot Akt. Ges. fur Graphische Industrie. (See Blecher, Carl, assignor.)
Roulland, Charles, Paris, France. Contact-ring system. No. 1,273,409; July 23; v. 252; p. 827.
Rourke, Michael, Windsor, Ontario, Canada. Bin-ventilator. No. 1,272,536; July 16; v. 252; p. 559.
Roush, Cecil A., Upper Sandusky, Ohio. Shade-roller holder. No. 1,272,114; July 9; v. 252; p. 416.

Roush, Lee, Beaver, Pa. Preparation of yeast. No. 1,271,371; July 2; v. 252; p. 173.
Routsong, Warren T., Traverse City, Mich. Potato-sorter. No. 1,274,085; July 30; v. 252; p. 1049.
Roy, Charles J., Santa Monica, Cal. Trap. No. 1,271,372; July 2; v. 252; p. 174.
Royal Stropper Co., The. (See Kanner, Samuel, assignor.)
Royal Typewriter Company. (See Schwartz, Albert A., assignor.)
Rozycki, Sigmund, Seattle, Wash. Substitute for fats as shortening. No. 1,273,410; July 23; v. 252; p. 827.
Rubber Regenerating Company. (See Crawford, Neil D., assignor.)
Rubber Regenerating Company. (See Jury, Alfred E., assignor.)
Rubber Regenerating Company. (See Steinle, William J., assignor.)
Rubin, Adolph, assignor to Sieber Products Mfg. Co., St. Louis, Mo. Loose-leaf binder. No. 1,271,227; July 2; v. 252; p. 135.
Rubin, Adolph, assignor to Sieber Products Mfg. Co., St. Louis, Mo. Loose-leaf binder. No. 1,271,228; July 2; v. 252; p. 135.
Rucker, Clair V., New York, N. Y. Packet for transparent bulletins. No. 1,271,775; July 9; v. 252; p. 318.
Rudd, Harold H., (See Dann and Rudd.)
Ruehmling, John H. (See Foster, Lewis L., assignor.)
Ruggles, Henry B., Pasadena, Cal., assignor to American Products Company, St. Louis, Mo. Box. No. 1,271,948; July 9; v. 252; p. 367.
Rumney, Fred A., Boston, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Fastener-setting machine. No. 1,271,776; July 9; v. 252; p. 318.
Rundle, W. Everett, *et al.* (See Horn, Charles A., assignor.)
Rupp, Carl. (See Hayes and Rupp.)
Rusdell, William J. (See Humphrey and Rusdell.)
Rushton, Kenneth, assignor to the Baldwin Locomotive Works, Philadelphia, Pa. Swing-truck for locomotives. No. 1,272,118; July 9; v. 252; p. 417.
Rushton, Kenneth, assignor to The Baldwin Locomotive Works, Philadelphia, Pa. Gage. No. 1,272,856; July 16; v. 252; p. 652.
Rusk, Henry G., Orlando, Fla. Plow. No. 1,271,373; July 2; v. 252; p. 174.
Russ, John B., assignor to Robert N. Bassett Company, Shelton, Conn. Hook and eye. No. 1,272,857; July 16; v. 252; p. 652.
Russel, Albert W., assignor to Russel Motor Axle Company, Detroit, Mich. Vehicle-axle. No. 1,272,858; July 16; v. 252; p. 652.
Russel Motor Axle Company. (See Russel, Albert W., assignor.)
Russell, Byron N., and T. V. Smith, assignors of one-third to W. A. Russell, Weed, Cal. Foot-operating device. No. 1,273,186; July 23; v. 252; p. 768.
Russell, Duke R., Chicago, Ill. Making high-percentage calcium carbid. No. 1,271,229; July 2; v. 252; p. 135.
Russell, Leo, Mineral Wells, Tex. Lock-strike. No. 1,272,115; July 9; v. 252; p. 416.
Russell, Robert A., New York, N. Y. Closure for receptacles. No. 1,272,859; July 16; v. 252; p. 653.
Russell, Thomas N., assignor to Chicago-Cleveland Car Roofing Company, Chicago, Ill. Car-end construction. No. 1,272,116; July 9; v. 252; p. 416.
Russell, Thomas N., assignor to Chicago-Cleveland Car Roofing Company, Chicago, Ill. Railway-car. No. 1,272,117; July 9; v. 252; p. 417.
Russell, Walter A. (See Russell and Smith, assignors.)
Rusteberg, August A., Chicago, Ill. Oil-gas generator and burner. No. 1,273,277; July 23; v. 252; p. 791.
Ruth, Robert H., New York, N. Y., assignor to Benjamin Electric Manufacturing Company, Chicago, Ill. Electric-lamp-supporting device. No. 1,274,202; July 30; v. 252; p. 1082.
Ryan, Louis A., Everett, Mass. Vehicle-wheel hub. No. 1,272,119; July 9; v. 252; p. 417.
Rydberg, Birger L., Lindesberg, Sweden. Ball-bearing or roller-bearing. No. 1,273,187; July 23; v. 252; p. 768.
Ryland, Charles F., Aldershot, England. Magnetic compass. No. 1,273,411; July 23; v. 252; p. 827.
Saalburg, Charles W., Richmond Hill, assignor to Multicolor Intaglio Press Company, New York, N. Y. Method of printing. No. 1,271,949; July 9; v. 252; p. 367.
Sabo, Joseph W., Van Meter, Pa. Container-cover fastener. No. 1,271,230; July 2; v. 252; p. 135.
Sachse, Paul. (See Handler and Sachse.)
Saegmuller, George N., and G. A. H. Kellner, assignors to Bausch & Lomb Optical Company, Rochester, N. Y. Periscope and optical system therefor. No. 1,270,876; July 2; v. 252; p. 34.
Sager, Clinton M. (See Sager, James H. and C. M.)
Sager, Clinton M., assignor to J. H. Sager Company, Rochester, N. Y. Connection between automobile-bumpers and vehicle-frames. No. 1,274,086; July 30; v. 252; p. 1050.
Sager, James H. and C. M., Rochester, N. Y. Article-securing means. No. 1,274,203; July 30; v. 252; p. 1082.
Saindon, Joseph E., Chehalis, Wash. Logging-hook. No. 1,272,860; July 16; v. 252; p. 653.
Saint, William K., Vancouver, British Columbia, Canada. Scaffold. No. 1,272,120; July 9; v. 252; p. 418.
Salazar, Emilio R., Habana, Cuba. Brake-operating apparatus. No. 1,274,336; July 30; v. 252; p. 1118.
Saimi, Andrew. (See Niemi, Isaac, assignor.)
Salsbury, Edward, Chicago, Ill. Motor-vehicle. No. 1,273,412; July 23; v. 252; p. 827.
Salt's Textile Manufacturing Company, The. (See Ford, Stuart M., assignor.)
Sammarone, Amato N., Akron, Ohio. Electrodynamic machinery. No. 1,271,374; July 2; v. 252; p. 174.
Sample, Fred M., Jacksonville, Oreg. Suit for aviators. No. 1,272,537; July 16; v. 252; p. 559.
Samson Electric Company. (See Francis, John C., assignor.)
Samuels, Wilhelm, Indianapolis, Ind. Slide-valve mechanism. No. 1,273,002; July 16; v. 252; p. 692.
Sanders, William E., Watertown, N. Y. Liquid-measuring tank. No. 1,273,103; July 16; v. 252; p. 719.
Sandidge, Thomas R., Sr., Fort Worth, Tex. Splitting-ax. No. 1,272,538; July 16; v. 252; p. 559.
Sanford, Andrew J., assignor to A. H. Heisey & Co., Newark, Ohio. Apparatus for making cord-passages in candlesticks. No. 1,272,861; July 16; v. 252; p. 653.
Sanford, Andrew J., assignor to A. H. Heisey & Co., Newark, Ohio. Making cord-passages in candlesticks. No. 1,272,862; July 16; v. 252; p. 654.
Sanford, Lloyd. (See Myers, Melvin A., assignor.)
Sanford, William B., *et al.* (See Thompson, George W., assignor.)
Sanit-Air Company. (See Ciglia, Ernest F., assignor.)
Sanitary Can Machinery Company. (See Brenzinger, Julius, assignor.)
Sapper, Charles H., South Norfolk, Va. Slat-adjusting device for louver-blinds. No. 1,271,619; July 9; v. 252; p. 275.
Sargent & Company. (See Voight, Henry G., assignor.)
Sargl, Gothard, East Grand Forks, Minn. Illuminated water-gage. No. 1,273,413; July 23; v. 252; p. 827.
Satterstrom, Ferdinand, Hastings, assignor to Magnetic Power Transmitter Company, Faribault, Minn. Rotatable electromagnetic clutch. No. 1,273,003; July 16; v. 252; p. 693.
Saunders, Daniel G., Jr., Kansas City, Mo. Vehicle-top. No. 1,272,539; July 16; v. 252; p. 559.
Saunders Motor Power Company. (See Saunders, Roy, assignor.)
Saunders, Roy, St. Louis, Mo., assignor to Saunders Motor Power Company, East St. Louis, Ill. Rotary engine. No. 1,271,950; July 9; v. 252; p. 368.
Saunders, Samuel, Manchester, England. Automatic controlling means for heating and lighting installations and such like. No. 1,272,121; July 9; v. 252; p. 418.
Saunders, Samuel L., Boston, Mass. Rotary internal-combustion engine. No. 1,271,777; July 9; v. 252; p. 319.
Saunders, Samuel U., Miami, Fla. Saddle-cover. No. 1,271,375; July 2; v. 252; p. 174.
Saurer, Firma Adolphe. (See Schlatter, Gustav, assignor.)
Saurer, Hippolyt, Arbon, Switzerland. Device for controlling and regulating the thread tension in shuttles of embroidering-machines. No. 1,273,278; July 23; v. 252; p. 791.
Savage, Will R., Omaha, Nebr. Electric switch. No. 1,273,188; July 23; v. 252; p. 768.
Savaria, Lester N., Bremerton, Wash. Measuring-spigot. No. 1,273,279; July 23; v. 252; p. 792.
Sayre, Charles S., Albion, Wis. Lawn-mower sharpener. No. 1,271,778; July 9; v. 252; p. 319.
Schade, John, assignor to National Blank Book Company, Holyoke, Mass. Loose-leaf binder. No. 1,270,974; July 2; v. 252; p. 63.
Schade, John, assignor to National Blank Book Company, Holyoke, Mass. Loose-leaf binder. No. 1,270,975; July 2; v. 252; p. 64.
Schade, John, assignor to National Blank Book Company, Holyoke, Mass. Friction-clutch device for telescoping elements. No. 1,270,976; July 2; v. 252; p. 64.
Schade, John, assignor to National Blank Book Co., Holyoke, Mass. Friction-clutch device for telescoping elements. No. 1,270,977; July 2; v. 252; p. 64.
Schade, John, assignor to National Blank Book Co., Holyoke, Mass. Loose-leaf ledger. No. 1,270,978; July 2; v. 252; p. 65.
Schadee, Alice, *et al.* (See Schadee, Gustav, assignor.)
Schadee, Gustav, assignor, by mesne assignments, of two-thirds to E. G. Gallagher and one-third to A. Schadee, New York, N. Y. Vehicle-wheel. No. 1,272,122; July 9; v. 252; p. 418.
Schafer, Ferdinand A. (See Riggs, George R., assignor.)
Schaffert, Adolf H., assignor to The General Fireproofing Company, Youngstown, Ohio. Interlocking drawer unit. No. 1,271,083; July 2; v. 252; p. 93.
Schantz, Edwin M., Chicago, Ill., assignor to The Computing Scale Company, Dayton, Ohio. Computing-scale. No. 1,273,414; July 23; v. 252; p. 828.
Schär, Alfred, Flawil, Switzerland. Plansifter. No. 1,271,084; July 2; v. 252; p. 93.
Schaufler, Walderma C., Mohawk, N. Y. Garment. No. 1,271,086; July 2; v. 252; p. 94.
Schecher, John L. (See Young, John S. and H. W., assignors.)

Scheinkman, Bernard, New York, N. Y. Self-retaining splint. No. 1,270,880; July 2; v. 252; p. 36.
Schell, Harvey K., Polo, Ill. Shear-guard. No. 1,272,123; July 9; v. 252; p. 419.
Schendler, Paul H., Erie, Pa. Clothes-wringer. No. 1,271,085; July 2; v. 252; p. 93.
Scherer, John F., and F. J. George, Minneapolis, Minn. Traction device for automobile-wheels. No. 1,273,930; July 30; v. 252; p. 1006.
Schild, John P., Cleveland, Ohio. Self-closing faucet. No. 1,273,931; July 30; v. 252; p. 1007.
Schlatter, Gustav, Steinach, Switzerland, assignor to Firma Adolphe Saurer, Arbon, Switzerland. Indicator for multiple-speed-transmission gearing. No. 1,273,932; July 30; v. 252; p. 1007.
Schlueter, Henry W., Los Angeles, Cal. Railway-tie. No. 1,273,678; July 23; v. 252; p. 899.
Schluter, William, assignor to Parkersburg Manufacturing Company, Parkersburg, Iowa. Belt attachment for motor-vehicles. No. 1,272,124; July 9; v. 252; p. 419.
Schmalzl, Joseph, South Bethlehem, Pa. Rocking-chair fan. No. 1,273,097; July 16; v. 252; p. 717.
Schmidt, Adolphe W., Lewiston, Idaho. Roller-mill scraper. No. 1,272,863; July 16; v. 252; p. 654.
Schmidt, Albert, assignor to Champion Ignition Company, Flint, Mich. Spark-plug. No. 1,271,620; July 9; v. 252; p. 275.
Schmidt, Ben, Bigstone City, S. D. Power-transmission device. No. 1,273,674; July 23; v. 252; p. 898.
Schmidt, Charles D., Woodhaven, N. Y. Antiskid device for vehicle-wheels. No. 1,273,933; July 30; v. 252; p. 1007.
Schmidt, Frank G., San Jose, Cal. Ore-separator. No. 1,272,125; July 9; v. 252; p. 419.
Schmitt, William C., Portland, Oreg. Game apparatus. No. 1,273,675; July 23; v. 252; p. 898.
Schmoliner, Jakob, Detroit, Mich. Mop-wringer. No. 1,271,621; July 9; v. 252; p. 276.
Schneider, Eugène, Le Creuzot, France. Traction device. No. 1,271,951; July 9; v. 252; p. 368.
Schneider, Fredrick E., assignor of one-half to O. Rossing, Highland, Wis. Wire-stretcher. No. 1,273,676; July 23; v. 252; p. 898.
Schneider, Ralph F., New York, N. Y. Thermal circuit-closer. No. 1,271,087; July 2; v. 252; p. 94.
Schoenberg, Ralph A., now by judicial change of name R. A. Belmont, New York, N. Y. Pin-plug connector. No. 1,272,126; July 9; v. 252; p. 420.
Schoening, William A., and J. Pachynski, Chicago, Ill. Mounting for folding windows and the like. No. 1,272,864; July 16; v. 252; p. 654.
Schoenwolf, Fred, assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Telephone system with automatic ringing disconnect. No. 1,273,189; July 23; v. 252; p. 769.
Schoepko, Nikolaus, Chicago, Ill. Furnace. No. 1,271,088; July 2; v. 252; p. 94.
Schondelmaier, Charles G., assignor of one-half to J. W. Hamann, Jacksonville, Fla. Lubricator. No. 1,271,376; July 2; v. 252; p. 174.
Schooler, Lewis, Des Moines, Iowa. Catheter. No. 1,273,542; July 23; v. 252; p. 862.
Schooling, Charles F., *et al.* (See Avis, William C., assignor.)
Schoonover, William J., Belvidere, Ill. Gearing for washing-machines. No. 1,274,087; July 30; v. 252; p. 1050.
Schoonover, William J., Belvidere, Ill. Gearing for washing-machines. No. 1,274,088; July 30; v. 252; p. 1050.
Schoppner, William C., New York, N. Y., assignor to National Equipment Company, Springfield, Mass. Coating-machine. No. 1,270,881; July 2; v. 252; p. 36.
Schrader, George W., Utica, N. Y. Sewing-machine. No. 1,273,935; July 30; v. 252; p. 1008.
Schreiber, Edward A., Chicago, Ill., assignor, by mesne assignments, to Vapor Car Heating Company, Inc. Heating apparatus for tank-cars. No. 1,273,936; July 30; v. 252; p. 1008.
Schreier, Emil, Verdigre, Nebr., assignor to E. P. Schreier. Stock-tank. No. 1,272,720; July 16; v. 252; p. 613.
Schreier, Emil P. (See Schreier, Emil, assignor.)
Schreier, Harry. (See Van Hoofstadt, Edward, assignor.)
Schrenkeisen, Arthur, New York, N. Y. Couch-bed. No. 1,271,952; July 9; v. 252; p. 368.
Schroder, Fred F., assignor to The Stewart Manufacturing Company, Chicago, Ill. Check-writer. No. 1,271,231; July 2; v. 252; p. 136.
Schroeder, Albert F., and R. R. Root, assignors to The Globe Machine & Stamping Company, Cleveland, Ohio. Manifold. No. 1,271,779; July 9; v. 252; p. 319.
Schroeder Headlight & Generator Company. (See Manogue, William T., assignor.)
Schuchart, Paul A., and G. G. Brown, New York, N. Y., assignors to Paper Service Co. Dispensing-cabinet. No. 1,273,280; July 23; v. 252; p. 792.
Schuh, Frank, Trenton, N. J. Water-closet. No. 1,273,415; July 23; v. 252; p. 828.
Schulder, Fred, assignor to United Brass Manufacturing Company, Cleveland, Ohio. Self-closing faucet. No. 1,270,882; July 2; v. 252; p. 37.
Schulder, Fred, assignor to United Brass Manufacturing Company, Cleveland, Ohio. Self-closing faucet. No. 1,272,867; July 16; v. 252; p. 655.
Schultz, Frederick C. (See Peffers, Andrew R., assignor.)
Schulz, Fred, Oakland, Cal. Automatic regulating device for heaters. No. 1,270,877; July 2; v. 252; p. 35.
Schumann, Frank, Philadelphia, Pa. Flagpole and support therefor. No. 1,273,098; July 16; v. 252; p. 718.
Schumann, Otto, Jr., assignor to O. Schumann, Portland, Oreg. Clutch-shifter for automobiles and other vehicles. No. 1,273,543; July 23; v. 252; p. 862.
Schutte, Laura C., Hilland, S. D. Cuff-link. No. 1,271,089; July 2; v. 252; p. 95.
Schuts, Frank, Cameron, Tex. Bale-tie buckle. No. 1,272,127; July 9; v. 252; p. 420.
Schwantes, Otto R., Clintonville, Wis. Shock-absorber. No. 1,273,677; July 23; v. 252; p. 899.
Schwartz, Albert A., assignor to Royal Typewriter Company, Inc., New York, N. Y. Platen and pressure-roll feeding means. No. 1,270,979; July 2; v. 252; p. 65.
Schwartz, Jacob G., Davenport, Iowa. Wrench. No. 1,274,337; July 30; v. 252; p. 1118.
Schwenck, Rudy C. (See Batchell and Schwenck.)
Schwentler, Francis E., assignor to The American Brake Company, St. Louis, Mo. Independent clasp-brake for trailer-trucks. No. 1,270,878; July 2; v. 252; p. 35.
Scientific Products Company. (See Frohe, Charles F., assignor.)
Scott, Clarence N., assignor to Producers Oil Company, Houston, Tex. Oil-well screen. No. 1,272,540; July 16; v. 252; p. 560.
Scott, David J., *et al.*, executors. (See Scott, David J., assignor.)
Scott, David J., assignor to I. and D. J. Scott, executors. Offset perfecting-press. No. 1,272,128; July 9; v. 252; p. 420.
Scott, David J., Plainfield, N. J., assignor to I. Scott and D. J. Scott, executors. Offset perfecting-press. No. 1,273,004; July 16; v. 252; p. 693.
Scott, David J., Plainfield, N. J., assignor to I. Scott and D. J. Scott, executors. Offset perfecting-press. No. 1,273,544; July 23; v. 252; p. 862.
Scott, Frederick C., Detroit, Mich. Hose-clamp. No. 1,272,541; July 16; v. 252; p. 560.
Scott, Isabella, *et al.*, executors. (See Scott, David J., assignor.)
Scott, John D., New York, N. Y. Stereopticon-slide. No. 1,273,190; July 23; v. 252; p. 769.
Scott, John H. (See Myers, Melvin A., assignor.)
Scott, Josiah, Toledo, Ohio. Door-check. No. 1,273,937; July 30; v. 252; p. 1009.
Scott, Lester F., Jr., Los Angeles, Cal. Sign. No. 1,270,883; July 2; v. 252; p. 37.
Scott Paper Company. (See Parsons, Philip D., assignor.)
Scott, Robert A., assignor to The Peerless Knitting Mills Company, Boston, Mass. Underwear. No. 1,274,354; July 30; v. 252; p. 1122.
Scott, Robert W., Boston, Mass., assignor, by mesne assignments, to Scott & Williams, Incorporated. Circular-knitting machine. No. 1,272,865; July 16; v. 252; p. 655.
Scott, Robert W., Boston, Mass., assignor, by mesne assignments, to Scott & Williams, Incorporated. Yarn-severing mechanism for knitting-machines. No. 1,274,338; July 30; v. 252; p. 1119.
Scott & Williams. (See Scott, Robert W., assignor.)
Scriver, George, Creemore, assignor to W. T. Muller, Collingwood, Ontario, Canada. Air-pump. No. 1,271,232; July 2; v. 252; p. 136.
Seagull, Henry, and O. H. Wechsler, New York, N. Y. Movable-eye doll. No. 1,274,339; July 30; v. 252; p. 1119.
Seaholm, John P. (See Melvin and Seaholm.)
Searles, Herbert N., New York, N. Y. Rotary fan. No. 1,271,622; July 9; v. 252; p. 276.
Searls Manufacturing Company. (See Linnett, Edgar B., assignor.)
Sears, Roebuck and Company. (See Dun Lany, William P., assignor.)
Sebring, Bert A., Pueblo, Colo. Blade-sharpening device. No. 1,271,953; July 9; v. 252; p. 368.
Sedlacek, John E., Howells, Nebr. Draft-equalizer. No. 1,274,089; July 30; v. 252; p. 1051.
Seffens, Hiram W., Aberdeen, S. D. Battery-terminal remover. No. 1,272,129; July 9; v. 252; p. 421.
Segel, Michael, New York, assignor to E. M. Uebelmesser, Bayside, N. Y. Compensating feed for moving-picture machines. No. 1,271,623; July 9; v. 252; p. 276.
Seib, George A., assignor to Remington Typewriter Company, Ilion, N. Y. Type-writing machine. No. 1,271,780; July 9; v. 252; p. 319.
Seib, George A., assignor to Remington Typewriter Company, Ilion, N. Y. Type-writing machine. No. 1,273,545; July 23; v. 252; p. 862.
Seidl, Rudolf. (See Bunkley, Joel W., assignor.)
Self-Oiling Wheel & Bearing Co., The. (See Jones, John D., assignor.)
Selm, Gottlieb J., Seattle, Wash. Toy. No. 1,273,416; July 23; v. 252; p. 829.
Seng, Wendelin P., Chicago, Ill. Motor-vehicle control. No. 1,274,204; July 30; v. 252; p. 1083.
Servatius, Michael F., Chicago, Ill. Meat-curing machine. No. 1,271,490; July 2; v. 252; p. 205.
Sether, Johan A., *et al.* (See Johannessen, Johan E., assignor.)
Settergren, Bernhard, assignor, by mesne assignments, to J. F. Gubbins, Chicago, Ill. Clutch device for automobiles and the like. No. 1,274,090; July 30; v. 252; p. 1051.

Seward, William, Toronto, Ontario, Canada. Manufacture of sheet-rubber. No. 1,274,091; July 30; v. 252; p. 1051.
Seymour, Dudley S., Oak Park, assignor to Union Special Machine Company, Chicago, Ill. Presser-foot for sewing-machines. No. 1,274,092; July 30; v. 252; p. 1051.
Shamberger, W. A. (See Petty, Calhoun, assignor.
Shanks, John S., Canton, Ohio. Combined drier and laundry-stove. No. 1,272,721; July 16; v. 252; p. 613.
Shanley, James, Detroit, Mich. Signal. No. 1,274,340; July 30; v. 252; p. 1119.
Shannon, Oscar M., Larchmont, N. Y. File-cabinet. No. 1,273,005; July 16; v. 252; p. 693.
Shannon, William H., and J. H. Bogard, San Saba, Tex. Headlight-steering mechanism. No. 1,272,542; July 16; v. 252; p. 560.
Sharp, Alfred. (See Greenwood and Sharp.)
Sharp, John, Oakmont, Pa. Chuck. No. 1,273,546; July 23; v. 252; p. 863.
Sharp, William E., assignor to Grip Nut Company, Chicago, Ill. Grip-nut. No. 1,271,781; July 9; v. 252; p. 319.
Sharp, William E., assignor to Grip Nut Company, Chicago, Ill. Lock-nut and making the same. No. 1,271,782; July 9; v. 252; p. 320.
Sharples, Philip M., West Chester, assignor to White Heat Products Company, Planebrook, Pa. Making artificial stone. No. 1,273,547; July 23; v. 252; p. 863.
Shaten, Nathan L., Philadelphia, Pa. Heater and ventilator for automobiles. No. 1,273,006; July 16; v. 252; p. 693.
Shaten, Nathan L., Philadelphia, Pa. Heater and ventilator for automobiles. No. 1,273,007; July 16; v. 252; p. 694.
Shaw, Louis E. (See Greene and Shaw.)
Shaw, Walter, Dedham, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Eycleting-machine. No. 1,271,721; July 9; v. 252; p. 305.
Shaw, William. (See Roberts and Shaw.)
Shenaley, Charles H., assignor to Producers Supply Co., Franklin, Pa. Packer for wells. No. 1,273,548; July 23; v. 252; p. 863.
Sheehan, Edward J., New York, N. Y., assignor to The Noiseless Typewriter Company, Middletown, Conn. Type-writing machine. No. 1,272,543; July 16; v. 252; p. 560.
Sheer, Henry M., Quincy, Ill. Incubator. No. 1,273,679; July 23; v. 252; p. 899.
Sheets, Earl H., Muskogee, Okla. Apparatus for obtaining liquid hydrocarbons. No. 1,273,191; July 23; v. 252; p. 769.
Sheinman, Louis, New York, N. Y. Dispensing attachment for ether-cans. No. 1,272,544; July 16; v. 252; p. 561.
Sheppard, George J. (See Noakes, Robert J., assignor.)
Sherer, William G., Chicago, Ill. Display-counter. No. 1,271,783; July 9; v. 252; p. 320.
Sheridon, William, Toledo, Ohio. Automatic mold-feeding apparatus for brick-molding machines. No. 1,273,008; July 16; v. 252; p. 694.
Sherman, Willis S., Milwaukee, Wis. Saw-mounting. No. 1,271,233; July 2; v. 252; p. 136.
Sherwin, Frank, Brooklings, S. D. Draft-bar. No. 1,272,545; July 16; v. 252; p. 561.
Shields, Robert J., Hobgood, N. C. Torpedo-guard for ships. No. 1,271,090; July 2; v. 252; p. 95.
Shiner, Albert E., London, England. Rotary pump. No. 1,271,377; July 2; v. 252; p. 175.
Shodron, John G., Milwaukee, assignor to James Manufacturing Company, Fort Atkinson, Wis. Barn-ventilator. No. 1,270,879; July 2; v. 252; p. 36.
Shorb, William A., assignor to Decatur Pump & Manufacturing Co., Decatur, Ill. Base. No. 1,272,866; July 16; v. 252; p. 655.
Shores, William T., *et al.* (See Thompson, George W., assignor.)
Short, Archie. (See Myers, Melvin A., assignor.)
Short, Bessie L. (See Myers, Melvin A., assignor.)
Short, H. W. (See Myers, Melvin A., assignor.)
Shubert, Byron L., Vliets, Kans. Individual wind-shield. No. 1,272,130; July 9; v. 252; p. 421.
Shuman, Constantine and V., Philadelphia, Pa. Reinforced sheet-glass and making same. No. 1,274,205; July 30; v. 252; p. 1083.
Shuman, Constantine and V., Philadelphia, Pa. Means for making reinforced sheet-glass. No. 1,274,206; July 30; v. 252; p. 1083.
Shuman, Victor. (See Shuman, Constantine and V.)
Shurloc Elevator Safety Company. (See Williamson, Glenn S., assignor.)
Shutt, Charles H., Philadelphia, Pa. Electrically-controlled mechanism. No. 1,273,938; July 30; v. 252; p. 1009.
Sibley, James T., New York, N. Y. Diaphragmatic sound-producer. No. 1,270,884; July 2; v. 252; p. 37.
Sickman, Davy V. (See Reilly and Sickman.)
Sidebotham, Melvin H., assignor to E. W. Labombarde, Nashua, N. H. Tabbing-machine. No. 1,274,093; July 30; v. 252; p. 1052.
Sidel, Oscar, Colden, N. Y. Yielding furniture-support. No. 1,273,939; July 30; v. 252; p. 1010.
Sieber Products Mfg. Co. (See Rubin, Adolph, assignor.)
Silbar, Joseph L., St. Paul, Minn. Automobile thief-alarm. No. 1,271,624; July 9; v. 252; p. 277.
Silberg, Carl T., Bellingham, Wash. Splice for joiners. No. 1,272,131; July 9; v. 252; p. 421.
Silver-Chamberlin Company. (See Wilson, Joseph T., assignor.)
Simmon, Karl A., Edgewood Park, and P. L. Mardis, Wilkinsburg, Pa., assignors to Westinghouse Electric and Manufacturing Company. System of distribution. No. 1,270,885; July 2; v. 252; p. 37.
Simmons Manufacturing Company, The. (See Gail, John F., assignor.)
Simmons Manufacturing Company. (See Irelan, Alfred E., assignor.)
Simmons Manufacturing Co., The. (See Simmons, Paul R., assignor.)
Simmons, Oscar C., Hamlin, Tex. Adjustable window-shade support. No. 1,271,954; July 9; v. 252; p. 368.
Simmons, Paul R., assignor to The Simmons Manufacturing Co., Huntington, Ind. Dish-forming machine. No. 1,273,009; July 16; v. 252; p. 694.
Simonsson, Wilhelm, New York, N. Y. Measuring instrument. No. 1,271,491; July 2; v. 252; p. 205.
Simpkins, Norman. (See Myers, Melvin A., assignor.)
Simpkins, William. (See Myers, Melvin A., assignor.)
Simplex Photo Products Co. (See Gruss, Otto H., assignor.)
Simplex Window Company. (See Soule, Arthur C., assignor.)
Simpson, Edwin I., Philadelphia, Pa. Golf-bag. No. 1,271,784; July 9; v. 252; p. 320.
Simpson, Leon G., assignor to Bausch & Lomb Optical Company, Rochester, N. Y. Lens-grinding machine. No. 1,272,546; July 16; v. 252; p. 561.
Simpson, Robert, Otley, England. Boot and shoe cleaning device. No. 1,273,680; July 23; v. 252; p. 899.
Sinclair, George. (See McGann, Owen J., assignor.)
Singer, Jacob J., St. Louis, Mo. Illuminating device for transparent pictures and photographic negatives. No. 1,272,547; July 16; v. 252; p. 562.
Singer Manufacturing Company, The. (See Abercrombie, Charles M., assignor.)
Singer Manufacturing Company, The. (See De Voe, Albert H., assignor.)
Singer Manufacturing Company, The. (See Fifield, Albert F., assignor.)
Singer Manufacturing Company, The. (See Michener, Wayland D., assignor.)
Sipher, Edmund F., Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company. Shielding system for vapor-converters. No. 1,272,548; July 16; v. 252; p. 562.
Siptrott, Paul, New York, N. Y. Mold. No. 1,270,886; July 2; v. 252; p. 38.
Sisbower, George F., East Orange, N. J., and L. E. Pittoni, assignors to New York Couch Bed Company, New York, N. Y. Extension-couch. No. 1,271,955; July 9; v. 252; p. 369.
Sisson, Vinton E., assignor to W. P. Murphy, Chicago, Ill. Sheet-metal end structure for railway-cars. No. 1,271,234; July 2; v. 252; p. 137.
Sito, Shinichiro, Prairie City, Oreg. Lamp-shade. No. 1,271,091; July 2; v. 252; p. 95.
Skinner Engine Company. (See Gorr, Walter B., assignor.)
Skinner, James M., assignor to Philadelphia Storage Battery Company, Philadelphia, Pa. Retainer for active material of storage-battery electrodes. No. 1,272,868; July 16; v. 252; p. 656.
Skinner, Le Grand, Erie, Pa. Compensating valve-gear. No. 1,270,980; July 2; v. 252; p. 65.
Skinner, Le Grand, Erie, Pa. Valve-gear. No. 1,270,981; July 2; v. 252; p. 65.
Slack, Thomas W., Fort Worth, Tex. Automatic pump and windmill connection. No. 1,272,132; July 9; v. 252; p. 421.
Slaght, Daniel C., Easton, Pa., assignor of one-half to P. S. Dyer, Phillipsburg, N. J. Traction-wheel. No. 1,274,341; July 30; v. 252; p. 1119.
Slater, Henry B., Los Angeles, Cal. Gas-absorption apparatus. No. 1,272,321; July 9; v. 252; p. 474.
Slater, Vern. (See Slater and West, assignors.)
Slater, Vern, and T. C. Stuart, Denver, Colo.; said Stuart assignor to said Slater. Fume-dissipator. No. 1,273,681; July 23; v. 252; p. 899.
Slater, Vern, and L. D. West, assignors, by mesne assignments to Vern Slater, Denver, Colo. Fume-dissemi nator. No. 1,273,682; July 23; v. 252; p. 900.
Slater, Vern, and L. D. West, assignors, by mesne assignments, to Vern Slater, Denver, Colo. Humidifier. No 1,273,683; July 23; v. 252; p. 900.
Slavin, Thomas H., Los Angeles, assignor of one-half to C. E. Wilcox, Bakersfield, and one-half to W. W. Wilson, Los Angeles, Cal. Well-boring apparatus. No 1,273,099; July 16; v. 252; p. 718.
Slipher, Jay D., Frankfort, Ind. Headlight control. No. 1,272,133; July 9; v. 252; p. 422.
Sloan, James R., and G. H. Liebegott, Altoona, Pa. Electric switch. No. 1,274,094; July 30; v. 252; p. 1052.
Slocum, Avram & Slocum. (See Cahusac, Clarence N., assignor.)
Slocum, Edward M., Medan, Sumatra, Dutch East Indies, assignor to General Rubber Company. Process of coagulating latex and product thereof. No. 1,270,887; July 2; v. 252; p. 38.

Sloper, Thomas, Devizes, England. Manufacturing endless driving-belts. No. 1,271,785; July 9; v. 252; p. 320.

Sloper, Thomas, Devizes, England. Hydroaeroplane. No. 1,273,549; July 23; v. 252; p. 863.

Small, Edward C., Los Angeles, Cal. Supplemental drive-wheel for motor-vehicles. No. 1,273,684; July 23; v. 252; p. 900.

Small, John W. (See Langton and Small.)

Smiedel, Oscar, Chicago, Ill. Spraying-nozzle. No. 1,273,685; July 23; v. 252; p. 900.

Smigiel, Julian, Hartford, Conn. Soldering-tool. No. 1,273,281; July 23; v. 252; p. 792.

Smith, Albert E., assignor of one-half to B. D. Zimmerman, Milwaukee, Wis. Automobile-bumper. No. 1,271,786; July 9; v. 252; p. 320.

Smith, Albert H., Birmingham, England. Work-holder for machine-tools and the like. No. 1,273,417; July 23; v. 252; p. 829.

Smith, Andrew, San Mateo, Cal. Manufacture of perforated metal for drainage-casings, screens, &c. No. 1,271,787; July 9; v. 252; p. 321.

Smith, Arthur W., New York, assignor to Remington Typewriter Company, Ilion, N. Y. Type-writing machine. No. 1,273,010; July 16; v. 252; p. 694.

Smith, Benjamin H., Turtle Creek, Pa., assignor to Westinghouse Electric and Manufacturing Company. Relay. No. 1,273,940; July 30; v. 252; p. 1010.

Smith, Charles G., assignor of one-half to C. F. MacGill, Cambridge, Mass. Speedometer. No. 1,271,092; July 2; v. 252; p. 95.

Smith, Charles H., Sanford, Fla. Lathe attachment. No. 1,272,549; July 16; v. 252; p. 562.

Smith, Charles H., assignor to Kellogg Switchboard & Supply Company, Chicago, Ill. Non-interfering key. No. 1,271,378; July 2; v. 252; p. 175.

Smith, Charles K., Niagara Falls, N. Y. Tire-armor. No. 1,272,134; July 9; v. 252; p. 422.

Smith, Ernest J., assignor to The Goss Printing Press Company. Chicago, Ill. Inking mechanism. No. 1,272,135; July 9; v. 252; p. 422.

Smith, Ernest J., assignor to The Goss Printing Press Company, Chicago, Ill. Printing-press. No. 1,272,136; July 9; v. 252; p. 422.

Smith, George H. (See Boltz, Solomon H., assignor.)

Smith, Harry O., Kansas City, Mo. Fastener. No. 1,273,100; July 16; v. 252; p. 718.

Smith, James H., Farmville, N. C. Planter. No. 1,272,550; July 16; v. 252; p. 562.

Smith, Jesse D., New York, N. Y. Automatic switch-operating device. No. 1,273,282; July 23; v. 252; p. 792.

Smith, Jesse D., New York, N. Y. Fuel-controlling device for motor-vehicles. No. 1,273,283; July 23; v. 252; p. 792.

Smith, John, assignor to Draper Corporation, Hopedale, Mass. Shuttle. No. 1,273,794; July 23; v. 252; p. 928.

Smith, John F., assignor of fifty-five one-hundredths to H. B. Burkhart, Seattle, Wash. Brake-band. No. 1,273,941; July 30; v. 252; p. 1010.

Smith, John F., assignor of fifty-five one-hundredths to H. B. Burkhart, Seattle, Wash. Oil-burner. No. 1,273,942; July 30; v. 252; p. 1010.

Smith, Kenneth C., assignor to Malleable Iron Range Company, Beaver Dam, Wis. Imitation stove. No. 1,270,888; July 2; v. 252; p. 38.

Smith, Mary L., Marlboro, N. H. Shoe-fastener. No. 1,272,137; July 9; v. 252; p. 423.

Smith, Maurice A., Jeannette, Pa. Fire-polishing apparatus. No. 1,274,095; July 30; v. 252; p. 1052.

Smith, Maurice A., assignor to McKee Glass Company, Jeannette, Pa. Lens. No. 1,273,192; July 23; v. 252; p. 769.

Smith, Nelson I., Winsted, Conn. Ladder attachment. No. 1,272,551; July 16; v. 252; p. 563.

Smith, Oberlin. (See Nixon and Smith.)

Smith, Oberlin, Bridgeton, N. J. Press. No. 1,273,686; July 23; v. 252; p. 901.

Smith, Percy, Detroit, Mich. Screw-driver. No. 1,273,193; July 23; v. 252; p. 769.

Smith, Porter. (See Myers, Melvin A., assignor.)

Smith, Reuben S., Milwaukee, Wis., assignor to A. O. Smith Corporation, Eddyville, N. Y. Internal-combustion engine. No. 1,273,943; July 30; v. 252; p. 1011.

Smith, Sidney L., Pittsburgh, Pa. Gas-heater. No. 1,273,284; July 23; v. 252; p. 792.

Smith, Thomas, Birmingham, Ala. Boiler-setting. No. 1,274,342; July 30; v. 252; p. 1120.

Smith, Thomas V. (See Russell and Smith.)

Smith, William, Reading, Pa. Door-latch. No. 1,274,096; July 30; v. 252; p. 1052.

Smith, William A. (See Bowman, Levi M., assignor.)

Smith, William A., assignor to The Denver Rock Drill Manufacturing Company, Denver, Colo. Tool-retainer. No. 1,273,944; July 30; v. 252; p. 1011.

Smith, William H., Deming, N. Mex. Automatic liquid-elevator. No. 1,271,956; July 9; v. 252; p. 369.

Smith, William J., assignor to Waterbury Clock Co., Waterbury, Conn. Butt-hinge. No. 1,271,235; July 2; v. 252; p. 137.

Smolowich, Morris, and J. Stone, Chicago, Ill. Coating and drying machine. No. 1,273,194; July 23; v. 252; p. 770.

Smrz, Emil F. (See Hardin, Jacques J., assignor.)

Snee, John A., Jr., West Elizabeth, Pa. Variable-power regulation. No. 1,271,788; July 9; v. 252; p. 321.

Snelerson, Samuel L., Boston, Mass., assignor to Independent Button Fastener Machine Company. Button-setting machine. No. 1,271,789; July 9; v. 252; p. 321.

Snelling, Walter O., Pittsburgh, Pa. Photochemical apparatus. No. 1,271,790; July 9; v. 252; p. 322.

Snelling, Walter O., Pittsburgh, Pa. Fertilizing method and material. No. 1,274,343; July 30; v. 252; p. 1120.

Snyder, Arthur M., Fairfield, Iowa. Internal-combustion engine. No. 1,273,285; July 23; v. 252; p. 795.

Snyder, Emmanuell H., Davenport, Iowa. Check-head device. No. 1,272,722; July 16; v. 252; p. 618.

Snyder, Frederick T., Oak Park, Ill. Electric-furnace contact. No. 1,271,093; July 2; v. 252; p. 95.

Snyder, George C., assignor to W. H. Davis, trustee, New York, N. Y. Apparatus for manufacturing hollow ware. No. 1,270,889; July 2; v. 252; p. 39.

Snyder, George C., assignor to W. H. Davis, trustee, New York, N. Y. Manufacture of hollow ware. No. 1,270,890; July 2; v. 252; p. 39.

Snyder, George C., assignor to W. H. Davis, trustee, New York, N. Y. Hollow ware. No. 1,270,891; July 2; v. 252; p. 39.

Snyder, Harrison B., Palmyra, Pa. Fluid-control apparatus. No. 1,273,195; July 23; v. 252; p. 770.

Snyder, Howard F., assignor to The Maytag Company, Newton, Iowa. Draining device. No. 1,271,625; July 9; v. 252; p. 277.

Snyder, Howard F., assignor to The Maytag Company, Newton, Iowa. Band-cutter for threshing-machine feeders. No. 1,271,626; July 9; v. 252; p. 277.

Snyder, Michael T., *et al.* (See Unruh, Albert A., assignor.)

Snyder, Thomas J., Anatone, Wash. Shock-absorber. No. 1,273,011; July 16; v. 252; p. 695.

Société Anonyme des Combustibles Industriels. (See Rosen, Jean, assignor.)

Societe pour l'exploitation d'Articles de Modes Masculines (S. A. M. M. S. A.). (See Varaud, André, assignor.)

Solosky, I. (See Mularz, Joseph, assignor.)

Somerford, Walter W., Rosslyn, Va. Horizontal honey-extractor. No. 1,273,286; July 23; v. 252; p. 795.

Sonn, Sidney H., New York, N. Y. Neckwear-holder. No. 1,271,379; July 2; v. 252; p. 175.

Sonners, Ora, Cody, Wyo. Current-motor. No. 1,272,322; July 9; v. 252; p. 474.

Soos, Franklin W., Asbury Park, N. J. Paper doll. No. 1,273,945; July 30; v. 252; p. 1011.

Sordyka, Jozef, Grand Rapids, Mich. Balloon construction. No. 1,274,207; July 30; v. 252; p. 1084.

Sorensen, Charlie G. (See Wigness, Cornelius R., assignor.)

Sortwell, Daniel R., *et al.*, trustees. (See Callan, John G., assignor.)

Sosskin, Harry, Philadelphia, Pa. Radiator. No. 1,271,236; July 2; v. 252; p. 137.

Soule, Arthur C., assignor to Simplex Window Company, San Francisco, Cal. Window-sash mounting. No. 1,271,380; July 2; v. 252; p. 176.

Soule, Herbert G., Hinton, Iowa. Permutation-lock. No. 1,274,097; July 30; v. 252; p. 1053.

Souther, John G., Jamaica Plain, Mass. Dispensing device. No. 1,273,012; July 16; v. 252; p. 695.

Southern, John W., Vancouver, British Columbia, Canada. Oven-temperature regulator. No. 1,273,196; July 23; v. 252; p. 771.

Spain, William. (See Jefferies and Spain.)

Spear, Furman D., assignor to Armspear Manufacturing Company, New York, N. Y., Signal-lantern. No. 1,274,098; July 30; v. 252; p. 1053.

Spear, Lawrence Y., Groton, Conn., assignor to Electric Boat Company, New York, N. Y. Hatch structure for submarines. No. 1,271,381; July 2; v. 252; p. 176.

Speer Carbon Company. (See Edgcomb, Henry R., assignor.)

Speller, Frank N., Pittsburgh, Pa. Apparatus for heating and deoxidizing water. No. 1,274,099; July 30; v. 252; p. 1053.

Spence, William H. (See Myers, Melvin A., assignor.)

Spencer, F. W. (See Myers, Melvin A., assignor.)

Spencer, Harold. (See Myers, Melvin A., assignor.)

Spencer Lens Company. (See Ott, Harvey N., assignor.)

Spencer, Lewis P., and W. H. Wilson, New Bedford, Mass. Shuttle. No. 1,272,138; July 9; v. 252; p. 423.

Spencer, Robert P., Seattle Wash. Pipe-bending machine. No. 1,272,552; July 16; v. 252; p. 563.

Spencer, William L., Houston, Tex. Garment-protector. No. 1,270,982; July 2; v. 252; p. 66.

Sperry Gyroscope Company, The. (See Ford and Tanner, assignors.)

Spickerman, Christian, Sandwich, Ill. Door-mat. No. 1,271,094; July 2; v. 252; p. 96.

Spiegel, Alexander S., Chicago, Ill. Autographic camera. No. 1,270,983; July 2; v. 252; p. 66.

Spiegel, Joseph F., Toronto, Ontario, Canada. Fuel-burner. No. 1,271,791; July 9; v. 252; p. 322.

Spielman, Adolph, and A. P. Post, Philadelphia, Pa. System of distant control of gas ignition by mechanical means. No. 1,273,197; July 23; v. 252; p. 771.

Spielman, Maximillian H., New York, N. Y. Cigar-lighter. No. 1,272,869; July 16; v. 252; p. 656.

Spitzglass, Jacob M., Chicago, Ill. Gage. No. 1,274,101; July 30; v. 252; p. 1054.

Splitdorf Electrical Company. (See Dean, William W., assignor.)

Splitdorf Electrical Company. (See Geist, Harry F., assignor.)

Splitdorf Electrical Company. (See Hart, William J., assignor.)

Splitdorf Electrical Company. (See Lang, George L., assignor.)

Splitdorf Electrical Company. (See Warren, Robert M., assignor.)

Spotswood, Frank D., Lexington, Ky. Game device. No. 1,272,553; July 16; v. 252; p. 563.

Sprengnether, William F., St. Louis, Mo. Tread-band for pneumatic tires. No. 1,271,957; July 9; v. 252; p. 369.

Spring Valley Wood Products Corporation. (See Goldfield, Abraham T., assignor.)

Srakula, Joseph, Lugerville, Wis. Interchangeable wheel for vehicles. No. 1,274,102; July 30; v. 252; p. 1054.

Stafford, Benjamin E. D. (See Flannery, Stafford, and Dodds.)

Staines, Guy G., Albion, N. Y., assignor to M. O. Staines, Toronto, Canada. Adjustable horse. No. 1,271,095; July 2; v. 252; p. 96.

Staines, Myrtle O. (See Staines, Guy G., assignor.)

Stallman, Granville H., Chicago, Ill. Hog-scraping machine. No. 1,273,198; July 23; v. 252; p. 771.

Stamp, Harley, Philadelphia, Pa. Supporting device. No. 1,273,550; July 23; v. 252; p. 864.

Stampa, Guiseppe. (See Borghesani and Stampa.)

Standard Comb Company, The. (See Rich, Frank K., assignor.)

Standard Oil Company of New York. (See Hawkins, Charles H., assignor.)

Standard Optical Company, The. (See Long, Eli M., assignor.)

Standard Parts Company, The. (See Clapper, Joseph B., assignor.)

Standard Parts Company, The. (See Fay, Thomas J., assignor.)

Standard Parts Company, The. (See Kritz, Frank, assignor.)

Standard Sewing Machine Company, The. (See Nelson, George W., assignor.)

Standish, John F., Winthrop, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Blank-holder. No. 1,271,792; July 9; v. 252; p. 322.

Standley, Earnest L., Rush, Ark. Concentrating-table. No. 1,273,946; July 30; v. 252; p. 1011.

Stankewicz, Taduesz, Carteret, N. J. Wire-cutter. No. 1,273,287; July 23; v. 252; p. 795.

Stanley, Dennis F., Bozeman, Mont. Tabulating device. No. 1,270,802; July 2; v. 252; p. 39.

Stanley, Edgar A., Youngstown, Ohio. Form for wall construction. No. 1,272,139; July 9; v. 252; p. 423.

Stanley, Robert W., Cleveland, Ohio, assignor to Entz Motor Patents Corporation. Brush-holder. No. 1,271,793; July 9; v. 252; p. 322.

Stanowsky, Alexander, Rotterdam, Netherlands. Method and apparatus for casting metal. No. 1,273,418; July 23; v. 252; p. 829.

Stansfield, Walter S., Wyke, and J. Wilkinson, Shipley, assignors to Bradford Dyers' Association Limited, Bradford, England. Treating and finishing fabrics. No. 1,273,551; July 23; v. 252; p. 864.

Stantial, Frank G. (See Howard and Stantial.)

Starite Manufacturing Company. (See Helle, Warren W., assignor.)

Starkey, William. (See Pearl and Starkey.)

State of Minnesota. (See Downing, John H., assignor.)

Staub, Clarence E., Mascoutah, Ill. Unbreakable clothes-pin. No. 1,274,344; July 30; v. 252; p. 1120.

Stearns, Marcus C., Buffalo, N. Y. Cuff-button. No. 1,271,958; July 9; v. 252; p. 369.

Stebbing, Frank, Washington, D. C. Life-preserver. No. 1,273,687; July 23; v. 252; p. 901.

Steele, William S., Strongfield, Saskatchewan, Canada. Grain-saving attachment for binders. No. 1,272,140; July 9; v. 252; p. 424.

Steenbjerg, Peder J., Frederiksberg, near Copenhagen, Denmark. Temperature-indicator. No. 1,272,554; July 16; v. 252; p. 564.

Stein, David F., Montreal, Canada. Bag-turning machine. No. 1,270,893; July 2; v. 252; p. 40.

Stein, George W., Chicago, Ill. Combined window ventilator and screen. No. 1,273,288; July 23; v. 252; p. 794.

Steinle, William J., Elmhurst Heights, N. Y., assignor to Rubber Regenerating Company. Device for laying tire fabric on cores. No. 1,272,555; July 16; v. 252; p. 564.

Steinmetz, Charles P., Schenectady, N. Y., assignor to General Electric Company. Protective device. No. 1,270,894; July 2; v. 252; p. 40.

Stenotype Company, The. (See Ebelhare and Arvidson, assignors.)

Sterling, William W., Ruth, Nev. Plug-valve. No. 1,274,345; July 30; v. 252; p. 1120.

Stern, David. (See Jellinek and Stern.)

Stevens, Frank, Philadelphia, Pa. Sound-transmitting apparatus. No. 1,273,107; July 16; v. 252; p. 719.

Stevens, William C., Summit, assignor to The Firestone Tire & Rubber Company, Akron, Ohio. Motor-tire-bead-base-applying machine. No. 1,270,895; July 2; v. 252; p. 40.

Stevenson, Charles W., Puyallup, Wash. Crate-making machine. No. 1,273,947; July 30; v. 252; p. 1012.

Stevenson, Frank M. (See Rodman and Stevenson.)

Stevenson, George H., Mount Vernon, assignor to Western Electric Company, Incorporated, New York, N. Y. Protective device. No. 1,271,794; July 9; v. 252; p. 323.

Stevenson, John F. (See Moeller and Stevenson.)

Steward, Charles M., Plano, Ill. Removable spur for treads of tractor-wheels. No. 1,270,984; July 2; v. 252; p. 66.

Steward, Louise D., Boise, Idaho. Sole for boots and shoes. No. 1,272,556; July 16; v. 252; p. 564.

Stewart, James, Morningside, New Zealand. Securing means for watches, keys, and the like upon the person of the owner. No. 1,273,419; July 23; v. 252; p. 830.

Stewart, John P., and J. R. Childs, Kansas City, Mo. Lock for boxes. No. 1,271,096; July 2; v. 252; p. 96.

Stewart Manufacturing Company, The. (See Schroder, Fred F., assignor.)

Stewart-Warner Speedometer Corporation. (See Berg, Joseph, assignor.)

Stewart, William C., Swampscott, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Machine for operating on soles. No. 1,271,795; July 9; v. 252; p. 323.

Stichel, Charles, assignor to Pacific Box Factory Inc., San Francisco, Cal. Feeding-table. No. 1,271,959; July 9; v. 252; p. 370.

Stiens, Frank A. (See Von Wahlde and Stiens.)

Stimpson, Edward S., assignor to Draper Corporation, Hopedale, Mass. Filling-parting mechanism. No. 1,272,557; July 16; v. 252; p. 564.

Stiner, Earl, and J. M. Koss, Detroit, Mich. Resilient wheel. No. 1,272,558; July 16; v. 252; p. 565.

Stines, Edward H., assignor to Perfection Manufacturing Company, New Brunswick, N. J. Thread-guide. No. 1,271,492; July 2; v. 252; p. 206.

Stirlss, Jacob, Brooklyn, N. Y. Coin-controlled vending-machine. No. 1,273,013; July 16; v. 252; p. 695.

Stitt, Herbert L. (See Miller and Brown, assignors.)

Stivers, Jake M., and A. C. Enochs, assignors to The Right Way Cooker Company, Oklahoma, Okla. Frying apparatus. No. 1,271,796; July 9; v. 252; p. 323.

Stock, Julius A., assignor to W. C. Richtie & Company, Chicago, Ill. Capping-machine. No. 1,272,559; July 16; v. 252; p. 565.

Stoddard, Charles F., Boston, Mass. Note-sheet for player-pianos and the like. No. 1,270,985; July 2; v. 252; p. 66.

Stokes, John S., Moorestown, N. J., assignor to Stokes & Smith Company, Summerdale, Pa. Stayed or tabbed box-covering blank. No. 1,273,420; July 23; v. 252; p. 830.

Stokes & Smith Company. (See Stokes, John S., assignor.)

Stoll, Marea H., Beatrice, Nebr. Combined punch and button-set tool. No. 1,272,870; July 16; v. 252; p. 656.

Stone, Elmer B., assignor to The American Hardware Corporation, New Britain, Conn. Padlock. No. 1,271,382; July 2; v. 252; p. 176.

Stone, James, La Crosse, Wis. Collapsible table. No. 1,272,560; July 16; v. 252; p. 565.

Stone, Joseph. (See Smolowich and Stone.)

Stone, Walter F. (See Barrett and Stone.)

Storch, George W., Appleton, Wis. Carbureter. No. 1,272,561; July 16; v. 252; p. 566.

Storie, James, Edinburgh, Scotland. Apparatus for raising and lowering ships' boats. No. 1,271,237; July 2; v. 252; p. 137.

Storud, Arnold, Farm Park River, N. D. Bob-sled. No. 1,272,562; July 16; v. 252; p. 566.

Story, Frank, Seattle, Wash. Device for cleaning pipes. No. 1,274,103; July 30; v. 252; p. 1054.

Stout, Edward E. (See Weydell, Jarl M., assignor.)

Stowe, Floyd D., assignor to E. I. du Pont de Nemours Powder Company, Wilmington, Del. Slide-former machine. No. 1,271,797; July 9; v. 252; p. 324.

Stowe, Floyd D., assignor to E. I. du Pont de Nemours Powder Company, Wilmington, Del. Head-forming machine. No. 1,271,798; July 9; v. 252; p. 324.

Stowe, Floyd D., assignor to E. I. du Pont de Nemours Powder Company, Wilmington, Del. Bung-press. No. 1,274,268; July 30; v. 252; p. 1084.

Stowe, George, New York, N. Y., and G. E. Molyneux, Bayonne, N. J., assignors of one-third to R. M. Owen. Combination lamp and horn. No. 1,271,097; July 2; v. 252; p. 96.

Stowell, Frank C., Medford, Mass. Ventilator. No. 1,271,238; July 2; v. 252; p. 137.

Straub, Joseph E., assignor to Remington Typewriter Company, Ilion, N. Y. Type-writing machine. No. 1,270,986; July 2; v. 252; p. 67.

Strauch, Benjamin, Baltimore, Md. Marine propulsion. No. 1,272,141; July 9; v. 252; p. 424.

Street, Elmer O., Cave City, Ark. Adjustable swing-rod. No. 1,271,383; July 2; v. 252; p. 176.

Streng, Einar. (See Anderson and Streng.)

Stroll, Rudolph, Washington, D. C. Bath-tub seat. No. 1,271,384; July 2; v. 252; p. 177.

Stromberg Motor Devices Company. (See Frey, Herbert H., assignor.)

Stroud, John B., Pass Christian, Miss. Fluid-controlled switch-operating mechanism. No. 1,270,987; July 2; v. 252; p. 67.

Stroud, William. (See Barr and Stroud.)

Stuart, Francis L., Baltimore, Md. Apparatus for loading and unloading. No. 1,270,896; July 2; v. 252; p. 40.

Stuart, Francis L., Washington, D. C., assignor to International Conveyor Corporation, New York, N. Y. Unloading and conveying apparatus. No. 1,271,385; July 2; v. 252; p. 177.

Stuart, Francis L., Washington, D. C., assignor to International Conveyor Corporation, New York, N. Y. Reclaiming and conveying apparatus. No. 1,271,493; July 2; v. 252; p. 206.

Stuart, Francis L., Washington, D. C., assignor to International Conveyor Corporation, New York, N. Y. Scraper-plow reclaiming apparatus. No. 1,271,627; July 9; v. 252; p. 277.

Stuart, Francis L., Washington, D. C., assignor to International Conveyor Corporation, New York, N. Y. Loading apparatus. No. 1,271,628; July 9; v. 252; p. 278.

Stuart, Francis L., Washington, D. C., assignor to International Conveyor Corporation, New York, N. Y. Reclaiming apparatus. No. 1,272,563; July 16; v. 252; p. 566.

Stuart, Francis L., Washington, D. C., assignor to International Conveyor Corporation, New York, N. Y. Reclaiming and elevating apparatus. No. 1,272,564; July 16; v. 252; p. 567.

Stuart, Tracy C. (See Slater and Stuart.)

Stuckey, Sadie, Tulsa, Okla. Electric hair-curling kit. No. 1,273,199; July 23; v. 252; p. 772.

Sturtevant, Cullen K. (See Hamilton, Cameron G., assignor.)

Suczek, Robert. (See Kothny and Suczek.)

Suczek, Robert, assignor to C. H. Wheeler Manufacturing Company, Philadelphia, Pa. Condensing apparatus. No. 1,273,948; July 30; v. 252; p. 1012.

Sudderth, Jacob A., Buford, Ga. Washboard. No. 1,272,142; July 9; v. 252; p. 424.

Sullivan, Edward F., Oakland, Cal. Traction belt-chain. No. 1,271,239; July 2; v. 252; p. 138.

Sullivan, Frank J., Clintonville, Wis. Combined driving and steering axle. No. 1,272,565; July 16; v. 252; p. 567.

Sullivan, Thomas H., Sidney, Ohio. Heel-protector. No. 1,272,143; July 9; v. 252; p. 424.

Sullivan, William M., Arcadia, Cal. Automobile-wheel. No. 1,272,723; July 16; v. 252; p. 613.

Summerrow, Edward D., Cedar Bayou, Tex. Device for controlling the flow of fluid from wells. No. 1,273,949; July 30; v. 252; p. 1012.

Summers, Bertrand S., Port Huron, Mich., assignor to The National Fiber Textile Company, Neenah, Wis. Paper yarn and making same. No. 1,271,098; July 2; v. 252; p. 97.

Summers, Edgar W., Pittsburgh, Pa. Door arrangement for dump-cars. No. 1,272,871; July 16; v. 252; p. 656.

Summers, Robert B., Okmulgee, Okla. Ditching-machine. No. 1,272,144; July 9; v. 252; p. 425.

Sun Company. (See Maitland, Harold T., assignor.)

Sunbeam Chemical Company. (See Huffman, Charles C., assignor.)

Sunderland, John P.. (See McGary and Sunderland.)

Sunderman Corporation. (See Sunderman, Frederick R., assignor.)

Sunderman, Frederick R., Detroit, Mich., assignor to Sunderman Corporation, Newburgh, N. Y. Internal-combustion engine. No. 1,271,799; July 9; v. 252; p. 324.

Sutherland, Alexander K., New Britain, assignor to The Trumbull Electric Manufacturing Company, Plainville, Conn. Quick-break switch. No. 1,271,520; July 2; v. 252; p. 214.

Sutherland, Daniel M., Jr., Trenton, assignor to The Agasote Millboard Co., Ewing township, N. J. Manufacture of pulp boards. No. 1,272,566; July 16; v. 252; p. 567.

Sutton, Woodruff. (See Wilson, Sutton, and Jones.)

Sutton, Woodruff, New York, N. Y., assignor to J. G. Wilson Corporation, Norfolk, Va. Illuminant. No. 1,271,800; July 9; v. 252; p. 325.

Swan, John B., Denver, Colo. Hand-cultivator. No. 1,272,567; July 16; v. 252; p. 568.

Swan Manufacturing Company, The. (See Swan and Higgs, assignors.)

Swan, Willis A., and W. A. Higgs, Detroit, Mich., assignors to The Swan Manufacturing Company. Air-pump. No. 1,272,568; July 16; v. 252; p. 568.

Swanson, Arthur C. (See Johnson, Swanson, and Utterberg.)

Swartwout, Denton K. (See Lind and Swartwout.)

Swartwout, Denton K., Cleveland Heights, Ohio. Ventilating system. No. 1,271,494; July 2; v. 252; p. 206.

Swartwout, Denton K., assignor to The Ohio Blower Company, Cleveland, Ohio. Ventilator. No. 1,272,872; July 16; v. 252; p. 657.

Swartz, William L. (See Humphrey and Michaels, assignors.)

Swaykus, John C., and A. Tkacz, Lackawanna, N. Y. Lubricating device. No. 1,272,569; July 16; v. 252; p. 568.

Sweet, William E., Dowagiac, Mich. Internal-combustion engine. No. 1,272,570; July 16; v. 252; p. 569.

Swiderski, Wladislaw, Peshtigo, Wis. Underwater gun. No. 1,270,988; July 2; v. 252; p. 68.

Swift, George W., Jr., Bordentown, N. J. Machine for making window-envelops. No. 1,271,801; July 9; v. 252; p. 325.

Swift, Willard E., Worcester, assignor to United States Envelope Company, Springfield, Mass. Machine for attaching flap securing means to envelops. No. 1,274,346; July 30; v. 252; p. 1120.

Swift, William E., Waverly, Ill. Device to prevent hens from setting. No. 1,274,104; July 30; v. 252; p. 1055.

Swoboda, Bolesław. (See Swoboda, Wilhelm and B.)

Swoboda, Wilhelm, Alton, and B. Swoboda, East St. Louis, Ill. Railway safety-signal. No. 1,271,831; July 9; v. 252; p. 333.

Sykes, Adelbert. (See Myers, Melvin A., assignor.)

Symonds, George P., assignor to Alberger Pump and Condenser Company, New York, N. Y. Multisplitter spray-nozzle. No. 1,273,200; July 23; v. 252; p. 772.

T. R. Arden Co. (See Arden, Thomas R., assignor.)

T. L. Smith Company, The. (See Brackenbury, Edward W., assignor.)

Tada, Tametaro, Tokushima, Ken, Japan. Preparing gelatin. No. 1,271,960; July 9; v. 252; p. 370.

Taft, John A., assignor to Reagan Bale Company, San Antonio, Tex. Bale-core-operating device. No. 1,272,724; July 16; v. 252; p. 614.

Talbert, Daniel H., Indianapolis, Ind., and C. W. Carter, Minneapolis, Minn., assignors to Holcomb & Hoke Manufacturing Company, Indianapolis, Ind. Corn-popping machine. No. 1,272,725; July 16; v. 252; p. 614.

Talbot, William W., assignor of one-half to Akron Tire and Rubber Company, Inc., Baltimore, Md. Pressure-gage. No. 1,271,802; July 9; v. 252; p. 325.

Talbot, William W., New York, N. Y., assignor of one-half to A. T. Poehlmann, Baltimore, Md. Non-skid armor for wheel-tires. No. 1,273,688; July 23; v. 252; p. 901.

Taliani, Michele, Isola Liri, Italy. Apparatus for the catalytic oxidation of ammonia. No. 1,270,989; July 2; v. 252; p. 68.

Tannar, Alpheus H., Mapleton, Kans. Road-drag. No. 1,271,099; July 2; v. 252; p. 97.

Tanner, Harry L. (See Ford and Tanner.)

Tarbox, John P., assignor, by mesne assignments, to Curtiss Aeroplane and Motor Corporation, Buffalo, N. Y. Assembly-form for aeroplane-wings. No. 1,271,386; July 2; v. 252; p. 177.

Tate, John B., Altoona, Pa. Fuel-tank-sealing valve. No. 1,271,521; July 2; v. 252; p. 214.

Tate, Samuel G., assignor to Union Special Machine Company, Chicago, Ill. Seam for sewed articles. No. 1,271,240; July 2; v. 252; p. 138.

Tate, Samuel G., assignor to Union Special Machine Company, Chicago, Ill. Seam for sewed articles. No. 1,271,241; July 2; v. 252; p. 139.

Tatulis, Steven B., Chicago, Ill. Floor-washing machine. No. 1,271,629; July 9; v. 252; p. 278.

Tatum, Lewis L., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Automatic weighing device. No. 1,274,209; July 30; v. 252; p. 1085.

Taveau, René D., assignor to The Atlantic Refining Company, Philadelphia, Pa. Petroleum product and process of making the same. No. 1,271,387; July 2; v. 252; p. 177.

Taximeter & Register Company, The. (See Maxwell, George S., assignor.)

Tayc, William A., Cincinnati, Ohio. Direction-signal for automobiles. No. 1,274,347; July 30; v. 252; p. 1121.

Taylor, Cecil H., and B. B. Neuteboom, Detroit, Mich. Casting for internal-combustion engines. No. 1,274,105; July 30; v. 252; p. 1055.

Taylor, Charles H., Toronto, Ontario, Canada. Thread or worm cutter. No. 1,273,421; July 23; v. 252; p. 830.

Taylor, Clarence W., assignor to Natural Differential Co., Chicago, Ill. Differential mechanism. No. 1,270,897; July 2; v. 252; p. 41.

Taylor Electric Truck Co. (See Taylor, John, assignor.)

Taylor, Elmore R., Ducor, Cal. Rack for automobile-steps. No. 1,273,787; July 23; v. 252; p. 926.

Taylor, Henry H., Keokuk, Iowa. Reversible glove. No. 1,272,571; July 16; v. 252; p. 569.

Taylor, Horace H., Oakland, assignor of one-third to F. J. Mayhew, San Francisco, Cal. Resilient wheel. No. 1,271,100; July 2; v. 252; p. 97.

Taylor Instrument Companies. (See Howe, James A., assignor.)

Taylor, Jack E., Cleveland, Ohio. Tire shoe or casing. No. 1,271,388; July 2; v. 252; p. 178.

Taylor, John, Albany, assignor to Taylor Electric Truck Co., Troy, N. Y. Car-truck. No. 1,274,348; July 30; v. 252; p. 1121.

Taylor, John R. (See Fauber, William H., assignor.)

Taylor, Samuel M., and A. D. Osborn, Blairsden, Cal. Circular-saw machine. No. 1,273,422; July 23; v. 252; p. 830.

Taylor-Wharton Iron & Steel Co (See Apgar and Andrews, assignors.)

Taylor, William F., El Reno, Okla. Differential gearing. No. 1,271,101; July 2; v. 252; p. 97.

Taylor, William J. B., Findlater, Saskatchewan, Canada. Screen. No. 1,271,389; July 2; v. 252; p. 178.

Teahen, James M., Detroit, Mich. Package. No. 1,272,145; July 9; v. 252; p. 425.

Teberg, Frank. (See Lundgren and Teberg.)

Technicolor Motion Picture Corporation. (See Comstock, Daniel F., assignor.)

Teeple, William S., Wellsburg, W. Va. Glass-forming machine. No. 1,271,961; July 9; v. 252; p. 370.

Telelectric Company, The. (See Reed, Walter C., assignor.)

Teltzrow, Robert F. J., Beaver Dam, Wis. Flying-machine. No. 1,273,950; July 30; v. 252; p. 1012.

Templeton, Samuel M. (See Fow and Templeton.)

Terrell Machine Company. (See Linder, Walter W., assignor.)

Terry, Harry S., Courtland, Kans. Hand bundle-tie. No. 1,274,210; July 30; v. 252; p. 1085.

Teskey, Alva P., Luverne, Minn. Periscope attachment for submarines. No. 1,272,873; July 16; v. 252; p. 657.

Teuber, Max, New York, N. Y. Luggage-carrier. No. 1,273,201; July 23; v. 252; p. 772.

Tharp, Frank E., and P. C. Ambler, Shenandoah, Iowa. Hog-oiler. No. 1,273,014; July 16; v. 252; p. 696.

Thatcher, Albert G. H., West Bridgford, England. Means for closing or sealing up vessels. No. 1,271,242; July 2; v. 252; p. 139.

Thayer, Granville F., Providence, R. I., assignor to M and T Button Company, Boston, Mass. Button-carding machine. No. 1,273,552; July 23; v. 252; p. 864.

Thayer, Harry W. (See Whitaker and Thayer.)

Thayer, Russell, Philadelphia, Pa. Extraction of platinum and similar metals from their sands and ores. No. 1,273,202; July 23; v. 252; p. 772.

Theadore, Paul, Lansing, Mich. Safety stop apparatus. No. 1,273,951; July 30; v. 252; p. 1013.

Thesier, Joseph H., Syracuse, N. Y. Tire-cleat. No. 1,274,211; July 30; v. 252; p. 1085.

Thibodeaux, Arthur J., assignor of one-half to J. W. Kramer, Chicago, Ill. Tissue-holder for manufacturing matrix-mats. No. 1,272,572; July 16; v. 252; p. 570.

Thomas, David P., *et al.* (See Anderson, George A., assignor.)

Thomas Day Company. (See Roller, Milton B., assignor.)

Thomas, Edward, assignor to Underwood Typewriter Company, New York, N. Y. Type-writing machine. No. 1,274,106; July 30; v. 252; p. 1055.

Thomas, Edwin F., Meriden, Conn. Buttonhole electric light. No. 1,271,390; July 2; v. 252; p. 178.

Thomas Foreign Patents Limited. (See Thomas, John G. P., assignor.)

Thomas, George B., assignor to The Bryant Electric Company, Bridgeport, Conn. Electric-lamp socket. No. 1,272,146; July 9; v. 252; p. 425.

Thomas, George B., assignor to The Perkins Electric Switch Manufacturing Company, Bridgeport, Conn. Electric switch. No. 1,272,147; July 9; v. 252; p. 425.

Thomas, John G. P., Chiswick, assignor to Thomas Foreign Patents Limited, Kensington, London, England. Charging of accumulators from a variable-speed dynamo-electric machine. No. 1,272,148; July 9; v. 252; p. 426.

Thomas, John L., Morriston, Swansea, England. Coupling or shackle for colliery and like wagons. No. 1,273,689; July 23; v. 252; p. 901.

Thomas, Joseph O., *et al.* (See Madsen, Frederick G., assignor.)

Thomas, Newton F., Jasper, Tenn. Identification-tag. No. 1,272,573; July 16; v. 252; p. 570.

Thomas-Oberkirch Company. (See Thomas, William M., assignor.)

Thomas, Percy H., Upper Montclair, N. J. Electric insulator. No. 1,273,015; July 16; v. 252; p. 696.

Thomas, William M., assignor to Thomas-Oberkirch Company, Limited, New York, N. Y. Support for cameras, machine-guns, and the like. No. 1,272,574; July 16; v. 252; p. 570.

Thompson, Alan C. (See Conlan, George A., assignor.)

Thompson, Archibald R., Lakewood, Ohio. Burner. No. 1,273,423; July 23; v. 252; p. 830.

Thompson, George W., assignor of thirty-two one-hundred-and-twenty-eighths to W. B. Sanford, twenty-four one-hundred-and-twenty-eighths to D. J. Landers, twenty-one one-hundred-and-twenty-eighths to W. A. McAtee, twelve one-hundred-and-twenty-eighths to A. B. Lovan, twelve one-hundred-and-twenty-eighths to G. W. Young, three one-hundred-and-twenty-eighths to W. T. Shores, Springfield, Mo., and six one-hundred-and-twenty-eighths to C. H. Nichols, New York, N. Y. Acetylene-gas generator. No. 1,272,726; July 16; v. 252; p. 614.

Thompson, George W., assignor of thirty-two one-hundred-and-twenty-eighths to W. B. Sanford, twenty-four one-hundred-and-twenty-eighths to D. J. Landers, twenty-one one-hundred-and-twenty-eighths to W. A. McAtee, twelve one-hundred-and-twenty-eighths to A. B. Lovan, twelve one-hundred-and-twenty-eighths to G. W. Young, three one-hundred-and-twenty-eighths to W. T. Shores, Springfield, Mo., and six one-hundred-and-twenty-eighths to C. H. Nichols, New York, N. Y. Acetylene-gas generating and supply system. No. 1,272,727; July 16; v. 252; p. 615.

Thompson, George W., assignor of thirty-two one-hundred-and-twenty-eighths to W. B. Sanford, twenty-four one-hundred-and-twenty-eighths to D. J. Landers, twenty-one one-hundred-and-twenty-eighths to W. A. McAtee, twelve one-hundred-and-twenty-eighths to A. B. Lovan, twelve one-hundred-and-twenty-eighths to G. W. Young, three one-hundred-and-twenty-eighths to W. T. Shores, Springfield, Mo., and six one-hundred-and-twenty-eighths to C. H. Nichols, New York, N. Y. Acetylene-gas generator. No. 1,274,212; July 30; v. 252; p. 1086.

Thompson, Herbert, Toronto, Ontario, Canada. Automatic foot-rest shock-absorber. No. 1,272,575; July 16; v. 252; p. 571.

Thompson, James W., Spokane, Wash. Harvester. No. 1,271,808; July 9; v. 252; p. 325.

Thompson, John H., New Haven, assignor to R. G. Cleveland, Bridgeport, Conn. Card and indicator for card-index systems. No. 1,272,149; July 9; v. 252; p. 426.

Thompson, Lewis P., Minneapolis, Minn. Resilient tire. No. 1,272,576; July 16; v. 252; p. 571.

Thompson, Reuben R., Cohoes, N. Y., assignor to Union Special Machine Company, Chicago, Ill. Presser-foot for sewing-machines. No. 1,273,108; July 16; v. 252; p. 720.

Thompson, Robert, Jersey City, N. J. Gas-stove. No. 1,271,243; July 2; v. 252; p. 139.

Thomson, Elihu, Swampscott, assignor to Thomson Spot Welder Company, Boston, Mass. Electric welding. No. 1,273,203; July 23; v. 252; p. 773.

Thomson, Guy L. (See Wolmer, Hanlon, and Thomson.)

Thomson Spot Welder Company. (See Thomson, Elihu, assignor.)

Thornton, William F., Birmingham, Ala. Unloading apparatus. No. 1,272,150; July 9; v. 252; p. 426.

Thorsen, Hyrum, Annabella, Utah. Sleigh. No. 1,271,102; July 2; v. 252; p. 98.

Thos. E. Wilson & Co. (See Paupa, Joseph, assignor.)

Thrane, Victor, Christiania, Norway. Production of nitrogen compounds from metal carbids. No. 1,273,690; July 23; v. 252; p. 902.

Throckmorton, John L., Clarksburg, Ohio. Truss. No. 1,272,577; July 16; v. 252; p. 571.

Thunell, Fred, Salt Lake City, Utah. Sign-rack for letters and numerals. No. 1,271,804; July 9; v. 252; p. 326.

Thurber, Edward J., New Orleans, La., and J. W. Racklyeft, assignor, by mesne assignments, to Northern Engineering Works, Detroit, Mich. Valve mechanism. No. 1,271,805; July 9; v. 252; p. 326.

Tibbetts, Milton, assignor to Packard Motor Car Company, Detroit, Mich. Engine. No. 1,272,323; July 9; v. 252; p. 474.

Tibbetts, Milton, assignor to Packard Motor Car Company, Detroit, Mich. Vibration-damping device. No. 1,273,952; July 30; v. 252; p. 1013.

Tibbs, Edith L., Greenville, S. C. Fire-alarm. No. 1,271,806; July 9; v. 252; p. 326.

Tickner, Frank W., Sharpsville, Pa., assignor of one-half to F. J. Leuthner, Buffalo, N. Y. Molding apparatus. No. 1,274,107; July 30; v. 252; p. 1056.

Tideman, Carl G., deceased, Worcester; R. M. Tideman, executrix, assignor to C. T. Burlin, Northbridge Center, Mass. Automatic nut-tapping machine. No. 1,274,355; July 30; v. 252; p. 1123.

Tideman, Rose M., executrix. (See Tideman, Carl G.)

Tierney, John W. (See Harvey and Tierney.)

Tiffany, George S., Summit, N. J., assignor to Gray National Telautograph Company, New York, N. Y. Telautographic apparatus. No. 1,272,874; July 16; v. 252; p. 657.

Tiller, Martin J., Wanamingo, Minn. Power-transmission universal joint. No. 1,274,213; July 30; v. 252; p. 1086.

Tinsley, William J., Woodhaven, N. Y. Printer's quoin. No. 1,271,807; July 9; v. 252; p. 326.

Tismer, Paul G., New York, N. Y. Cylinder and piston device. No. 1,272,578; July 16; v. 252; p. 572.

Titanium Alloy Manufacturing Company, The. (See Rossi, Auguste J., assignor.)

Tizley, Arthur J., assignor to Edward F. Caldwell and Company, New York, N. Y. Shade-holder. No. 1,274,214; July 30; v. 252; p. 1086.

Tkacz, Alex. (See Swaykus and Tkacz.)

Tobias, Alexander, New York, N. Y. Combined step-ladder and ironing-board support. No. 1,271,808; July 9; v. 252; p. 327.

Todd, George W., Omaha, Nebr. Dispensing-receptacle for liquid anesthetics. No. 1,272,579; July 16; v. 252; p. 572.

Todd, Herman A., *et al.* (See Champlin, Raymond, assignor.)

Toledo Commutator Co., The. (See Alexander, Louis A., assignor.)

Toledo Glass Company, The. (See Owens, Michael J., assignor.)

Toledo Scale Company, The. (See Eklund, Stone E., assignor.)

Tolhurst Machine Works. (See Bryson, Tandy A., assignor.)

Tombyll, Thomas H., Montreal, Canada, and L. Bottger, New York, assignors to United States Flax Harvesting Co. (Inc.), City Island, N. Y. Flax attachment for harvesters. No. 1,272,875; July 16; v. 252; p. 658.

Tompkins, Fred C. (See Clifford and Tompkins.)

Torano, Jose A., Key West, Fla. Chair. No. 1,273,953; July 30; v. 252; p. 1013.

Tornberg, Isidor. (See Roesen and Tornberg.)

Torp, John A., Aberdeen, Wash. Working-bench. No. 1,272,151; July 9; v. 252; p. 426.

Torpy, Leon. (See Myers, Melvin A., assignor.)

Torsion Balance Company, The. (See Becker, Christopher A., assignor.)

Totten, Harvey S., Port Angeles, Wash. Washing-machine. No. 1,271,809; July 9; v. 252; p. 327.

Tow, James O., Columbia, Mo. Internal-combustion-engine cylinder. No. 1,273,109; July 16; v. 252; p. 720.

Tower, Willie J., Seattle, Wash. Rotary engine. No. 1,272,728; July 16; v. 252; p. 615.
Townsend, Clinton P., Washington, D. C., assignor to General Bakelite Company, New York, N. Y. Coating composition. No. 1,273,954; July 30; v. 252; p. 1014.
Townsend, Everett L., La Crosse, Wis. Auxiliary workrest. No. 1,274,215; July 30; v. 252; p. 1087.
Towsley, Irving S. (See Towsley, Kathryn and I. S.)
Towsley, Kathryn and I. S., Philadelphia, Pa. Profile-recorder. No. 1,272,729; July 16; v. 252; p. 616.
Tozzi, Angelo M., Bayonne, N. J., assignor to Tozzi Manufacturing Company, New York, N. Y. Machine for uniting sections of cork and the like. No. 1,274,216; July 30; v. 252; p. 1087.
Tozzi Manufacturing Company. (See Tozzi, Angelo M., assignor.)
Trager, Harry E., Arcanum, Ohio. Combined harrow and hoe. No. 1,272,152; July 9; v. 252; p. 427.
Tramutolo, Gerardo, Newark, N. J. Baggage-transfer. No. 1,273,424; July 23; v. 252; p. 831.
Traut, Clifford. (See Higgin and Traut.)
Trenary, Henry F. (See Burrows and Trenary.)
Trenner, Simon, Chicago, Ill. Glare-subduing and light conserving and distributing device for headlights of automobiles, &c. No. 1,274,217; July 30; v. 252; p. 1087.
Trent, Harold E., Murraysville, Pa., assignor to Westinghouse Electric & Manufacturing Company. Dash-pot. No. 1,270,898; July 2; v. 252; p. 41.
Trescott, Charles B., Chicago, Ill. Curing meat. No. 1,271,962; July 9; v. 252; p. 371.
Trigwell, James R., Norbury, England. Head for siphon-bottles and other vessels. No. 1,273,955; July 30; v. 252; p. 1014.
Tripp, Charles A. (See McMeans and Tripp.)
Trojan, Joseph E., Columbus, Tex. Portable extensible ladder. No. 1,271,391; July 2; v. 252; p. 178.
Troupe, Paul V., Gary, S. D. Rail-tie. No. 1,273,691; July 23; v. 252; p. 902.
Truck, Tractor and Manufacturing Company. (See Jacobs and Cramer, assignors.)
Truesdell, John P., Tiverton, R. I., assignor of one-half to J. K. Lanning, trustee, Fall River, Mass. Lamp-burner. No. 1,271,103; July 2; v. 252; p. 98.
Trumbull Electric Manufacturing Co. (See Knudson, Knud, assignor.)
Trumbull Electric Manufacturing Company, The. (See Sutherland, Alexander K., assignor.)
Tucker, Benjamin W., South Orange, assignor to G. E. Herrimann, Morristown, N. J. Barrel. No. 1,274,108; July 30; v. 252; p. 1056.
Tucker, Edwin W., North Prairie, Wis. Automatic brake for trucks. No. 1,273,692; July 23; v. 252; p. 902.
Tucker, Leonard M., Seattle, Wash. Manually-propelled vehicle. No. 1,273,693; July 23; v. 252; p. 902.
Tucker, Percy E., Bremerton, Wash. Apparatus for the generation of steam. No. 1,270,990; July 2; v. 252; p. 68.
Tullar, Chester W., Detroit, Mich. Envelop. No. 1,273,956; July 30; v. 252; p. 1014.
Tumminello, Vincent, Cefalù, Italy. Cuff-button. No. 1,273,204; July 23; v. 252; p. 773.
Turner, George E., Olympia, Wash. Saw-tool. No. 1,272,153; July 9; v. 252; p. 427.
Turner, Ira B., Philadelphia, Pa. Automobile-signal. No. 1,272,154; July 9; v. 252; p. 427.
Turner & Seymour Manufacturing Co., The. (See Hills, Sidney C., assignor.)
Turner, Walter V., Wilkinsburg, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Safety car control. No. 1,273,104; July 16; v. 252; p. 719.
Turney, Paul W., Portland, Oreg. Making and new food product of milk. No. 1,274,218; July 30; v. 252; p. 1088.
Tuttle, Orley C., Old Forge, N. Y. Artificial-minnow bait. No. 1,273,425; July 23; v. 252; p. 831.
Twiss, Douglas F., Sutton Coldfield, assignor to The Dunlop Rubber Company, Limited, Westminster, London, England. Vulcanization of rubber and similar materials. No. 1,271,810; July 9; v. 252; p. 327.
Twitchell, Charles R., Artesia, assignor of one-half to E. A. Miller, Los Angeles, Cal. Traction-wheel. No. 1,270,991; July 2; v. 252; p. 68.
Tygard, James W., Plainfield, N. J. Balanced reversing rotary engine. No. 1,272,876; July 16; v. 252; p. 658.
Tygart Valley Glass Company. (See Lewis, John A., assignor.)
Tyson, Homer N., Davenport, Wash. Subterranean broadcaster. No. 1,273,694; July 23; v. 252; p. 903.
U. S. Industrial Alcohol Co. (See Backhaus, Arthur A., assignor.)
U. S. Light & Heat Corporation. (See Bliss, William L., assignor.)
U. S. Light & Heat Corporation. (See Roedel, John, assignor.)
U. S. Slicing Machine Company. (See Van Berkel, Cornelis F. M., assignor.)
Uebelmesser, Elizabeth M. (See Segel, Michael, assignor.)
Uhde, Frederick W. (See Hummel and Uhde.)
Uhlen, Traugot C. (See Lyon, John S., assignor.)
Ulbrecht, Robert, Chicago, Ill. Apparatus for removing excrementa, &c., from dairy-barns. No. 1,274,219; July 30; v. 252; p. 1088.
Ulrey, Frank H., Chicago, Ill. Shoe-lace fastener. No. 1,274,220; July 30; v. 252; p. 1088.
Umhofer, Joseph. (See Kramer, Umhofer, Eral, and Wildberger.)
Underhill, Walter A., and C. C. Avery, assignors to The Eagle Wagon Works, Auburn, N. Y. Steering mechanism for wagon-trains. No. 1,274,109; July 30; v. 252; p. 1056.
Underwood Computing Machine Company. (See Carlin, Samuel E., assignor.)
Underwood Computing Machine Company. (See Degener, Gustave O., assignor.)
Underwood Computing Machine Company. (See Hanson, Hans, assignor.)
Underwood Computing Machine Company. (See Wright, Walter, assignor.)
Underwood, Elihu C., and W. C. Moore, Kansas City, Mo. Condenser for refrigerating apparatus. No. 1,272,730; July 16; v. 252; p. 616.
Underwood, Elliot M. (See Otto, Watson, Anderson, and Underwood.)
Underwood, John T. (See Des Jardins, Benjamin M., assignor.)
Underwood Typewriter Company. (See Creahan, Michael F., assignor.)
Underwood Typewriter Co. (See Houseman, Charles, assignor.)
Underwood Typewriter Company. (See Johnson, Arthur A., assignor.)
Underwood Typewriter Company. (See Jones, Roger B., assignor.)
Underwood Typewriter Company. (See Thomas, Edward, assignor.)
Ungar, Gustav A., Hartford, Conn. Differential. No. 1,273,957; July 30; v. 252; p. 1014.
Union Iron Works of Los Angeles. (See Miller, Robert P., assignor.)
Union Railway Equipment Co., The. (See O'Connor, Arthur F., assignor.)
Union Special Machine Company. (See Heap, Jesse J., assignor.)
Union Special Machine Company. (See Moffatt, James R., assignor.)
Union Special Machine Company. (See Seymour, Dudley S., assignor.)
Union Special Machine Company. (See Tate, Samuel G., assignor.)
Union Special Machine Company. (See Thompson, Reuben B., assignor.)
Union Switch & Signal Company, The. (See Dunham, Charles W., assignor.)
Union Switch & Signal Company, The. (See Holliday, John S., assignor.)
Union Switch & Signal Company. (See Jacobs, Harry M., assignor.)
Union Switch & Signal Company, The. (See Lewis, Lloyd V., assignor.)
Union Switch & Signal Company, The. (See Lucas, Samuel M., assignor.)
Union Switch & Signal Company, The. (See McCann, Ronald A., assignor.)
Union Wire Mattress Company. (See Powers, George G., assignor.)
Unit Signal Co. (See Rohrdantz, Henry, assignor.)
United Brass Manufacturing Company. (See Schuldér, Fred, assignor.)
United Engineering & Foundry Company. (See Ellis, Frank I., assignor.)
United Engineering and Foundry Company. (See Jones, Lloyd, assignor.)
United Paper Box Company of America. (See Goodrich, David M., assignor.)
United Shoe Machinery Corporation. (See Bazzoni, Lewis J., assignor.)
United Shoe Machinery Corporation. (See Bertrand, Frederic E., assignor.)
United Shoe Machinery Corporation. (See Brock, Matthias, assignor.)
United Shoe Machinery Corporation. (See Brown, Louis M., assignor.)
United Shoe Machinery Corporation. (See Caron, John V., assignor.)
United Shoe Machinery Corporation. (See Enslin, Herbert E., assignor.)
United Shoe Machinery Corporation. (See Feist, Frederick J., assignor.)
United Shoe Machinery Corporation. (See Frye, Daniel M., Jr., assignor.)
United Shoe Machinery Corporation. (See Hallam, Thomas J., assignor.)
United Shoe Machinery Corporation. (See Hammond, William P., assignor.)
United Shoe Machinery Corporation. (See Heys, John J., assignor.)
United Shoe Machinery Corporation. (See Hubbard, William, assignor.)
United Shoe Machinery Corporation. (See Kenway, Herbert W., assignor.)
United Shoe Machinery Corporation. (See La Chapelle, Fred N., assignor.)
United Shoe Machinery Corporation. (See Lund, Thomas, assignor.)
United Shoe Machinery Corporation. (See Macleod and Brown, assignors.)
United Shoe Machinery Corporation. (See Parker, Chandler, assignor.)

United Shoe Machinery Corporation. (See Perry, Frederick H., assignor.)
United Shoe Machinery Corporation. (See Rumney, Fred A., assignor.)
United Shoe Machinery Corporation. (See Shaw, Walter, assignor.)
United Shoe Machinery Corporation. (See Standish, John F., assignor.)
United Shoe Machinery Corporation. (See Stewart, William C., assignor.)
United Shoe Machinery Corporation. (See Warren, Frank H., assignor.)
United States Air Craft Corporation Inc. (See Bongarts, Benno J., assignor.)
United States Alloys Corporation. (See Petinot, Napoleon G., assignor.)
United States Carburetor Company. (See Hale, Fred E., assignor.)
United States Cast Iron Pipe and Foundry Company. (See Ladd, James B., assignor.)
United States Envelope Company. (See Swift, Willard E., assignor.)
United States Flax Harvesting Co. (See Tombyll and Bottger, assignors.)
United States Graphotype Company. (See Nicholas and Ackerman, assignors.)
United States Nickel Company. (See Dhavernas, Joseph, assignor.)
United Textile Company, The. (See Roberts, Robert R., assignor.)
Universal Balance Door Incorporated, The. (See Van Kannel, Theophilus, assignor.)
Universal Coin Lock Company. (See Boswell, George G. F., assignor.)
Universal Hammer Company. (See Kollock and Martin, assignors.)
Universal High Power Telephone Company. (See Hackett, Paul J., assignor.)
Universal Machine Company, The. (See Urschel, Bertis H., assignor.)
Universal Optical Corporation. (See Beattey, Earle J. R., assignor.)
Universal Patents Company. (See Jennings, Victor H., assignor.)
Universal Turbine Company, The. (See Anderson, Emil, assignor.)
Unruh, Albert A., Portland, Oreg., assignor of one-third to R. W. Fairfoull, Portland, Oreg., and one-third to M. T. Snyder, New Orleans, La. Antislipping device for shoes. No. 1,274,110; July 30; v. 252; p. 1057.
Unswirth, Isaac, Cleveland, Ohio. Lining for the throats of fireplaces. No. 1,273,695; July 23; v. 252; p. 903.
Upson, Ralph H., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Parachute. No. 1,273,553; July 23; v. 252; p. 865.
Upton, Henry J., Medford, Mass. Fountain-pen. No. 1,272,731; July 16; v. 252; p. 616.
Urschel, Bertis H., assignor to The Universal Machine Company, Bowling Green, Ohio. Universal joint. No. 1,273,289; July 23; v. 252; p. 794.
Utterberg, Alfred H. (See Johnson, Swanson, and Utterberg.)
Vaca, Pedro, San Antonio, Tex. Automobile direction-signal. No. 1,272,734; July 16; v. 252; p. 617.
Vacuum Muffler Corporation, The. (See Andersen, Halvor, assignor.)
Vagneux, Edmond, Clermont-Ferrand, France. Device for strengthening rail-joints. No. 1,272,877; July 16; v. 252; p. 658.
Van Aken, John C., Manlius, N. Y. Toy vehicle. No. 1,273,290; July 23; v. 252; p. 794.
Van Berkel, Cornelis F. M., assignor to U. S. Slicing Machine Company, Laporte, Ind. Grip for slicing-machines. No. 1,272,580; July 16; v. 252; p. 572.
Van Briggle, Lilburn H., Indianapolis, Ind. Carbureter. No. 1,273,554; July 23; v. 252; p. 865.
Van Dorn, William T., Chicago, Ill. Car-axle and repairing car-axles. No. 1,272,581; July 16; v. 252; p. 572.
Van Dyke, Edgar C., and J. Harrison, Philadelphia, Pa. Label. No. 1,273,105; July 16; v. 252; p. 719.
Van Erdewyk Frank, *et al.* (See Olerich, Henry, assignor.)
Van Hoofstadt, Edward, assignor, by mesne assignments, to H. Schreier, New York, N. Y. Package-filling machine. No. 1,271,244; July 2; v. 252; p. 139.
Van Kannel, Theophilus, Yardville, N. J., assignor to The Universal Balance Door Incorporated, New York, N. Y. Wind and gravity balanced door. No. 1,272,732; July 16; v. 252; p. 616.
Van Omme, Martemus, Des Moines, Iowa. Corn picking and husking machine. No. 1,272,733; July 16; v. 252; p. 617.
Van Syckle, Leonidas H., deceased; J. F. Creamer, executor, Fort Lee, N. J. Tellurian. No. 1,271,104; July 2; v. 252; p. 99.
Van Voorhout, Adriaan W. C., The Hague, Netherlands. Phenol-aldehyde condensation product. No. 1,271,392; July 2; v. 252; p. 179.
Van Voorhout, Adriaan W. C., Delft, Netherlands. Phenol-aldehyde condensation product. No. 1,271,393; July 2; v. 252; p. 179.
Vanatta, Jean K., assignor to Mudge & Company, Chicago, Ill. Power-plant construction for railway motor-cars. No. 1,271,630; July 9; v. 252; p. 278.
Vance, Alpha B. (See Leon and Vance.)
Vanderlip, Louis C. (See Griffin and Vanderlip.)
Vanhoof, Louis, Alexandria, La. Automatic mail-box hanger. No. 1,273,696; July 23; v. 252; p. 903.
Vapor Car Heating Company. (See Schreiber, Edward A., assignor.)
Varaud, André, assignor to Societe pour l'Exploitation d'Articles de Modes Masculines (S. A. M. M. S. A.), Geneva, Switzerland. Trousers-crease marker. No. 1,273,555; July 23; v. 252; p. 865.
Vargo, Louis J. (See Braund and Vargo.)
Vaudreuil, John, Milwaukee, Wis. Continuous-feeding type-writer. No. 1,270,992; July 2; v. 252; p. 69.
Vaughan, David F., Riverton, N. J. Switch-heating device. No. 1,273,291; July 23; v. 252; p. 794.
Vaughan, Henry H., Montreal, Canada, assignor of one-third to L. Parish, New York, N. Y., and one-third to T. E. Grahn, Cleveland, Ohio. Locomotive feed-water heater. No. 1,270,899; July 2; v. 252; p. 41.
Veeder Manufacturing Company, The. (See Matteson, George F., assignor.)
Velo, Angelo and P. Lasaga, Habana, Cuba. Driveway for automobiles. No. 1,271,631; July 9; v. 252; p. 279.
Veness, Emma M., Millers, N. Y. Knitting-needle. No. 1,270,993; July 2; v. 252; p. 69.
Verona Chemical Company. (See Walter, Ernest, assignor.)
Ves Sells, Orie E., Detroit, Mich. Refrigerating apparatus. No. 1,272,735; July 16; v. 252; p. 617.
Vescio, Pasquale and P., Port Chester, N. Y. Shoe. No. 1,273,292; July 23; v. 252; p. 795.
Vescio, Peter. (See Vescio, Pasquale and P.)
Vickers Limited. (See Dawson and Buckham, assignors.)
Vickers Limited. (See Dawson and Horne, assignors.)
Vickery, Frank A. (See Yoder and Vickery.)
Victor Electric Corporation. (See Wantz, Julius B., assignor.)
Vidal, John, Brooklyn, N. Y. Pencil attachment. No. 1,273,697; July 23; v. 252; p. 903.
Vilandrer, Anna L., St. Paul, Minn. Clasp. No. 1,271,963; July 9; v. 252; p. 371.
Vincent-Alward Company, The. (See Vincent, William W., assignor.)
Vincent, Charley, and A. Fontaine, New Haven, Conn. Wrench. No. 1,271,811; July 9; v. 252; p. 327.
Vincent, Edward H., Detroit, Mich. Shiftable steering-wheel. No. 1,272,581; July 16; v. 252; p. 573.
Vincent, William W., assignor to The Vincent-Alward Company, Kenosha, Wis. Spring construction. No. 1,273,428; July 23; v. 252; p. 831.
Viscose Company, The. (See Ernst, Charles A., assignor.)
Viviano, Salvatore, St. Louis, Mo. Apparatus for drying macaroni, spaghetti, and similar foods. No. 1,270,900; July 2; v. 252; p. 41.
Voight, Henry G., New Britain, assignor to Sargent & Company, New Haven, Conn. Lock. No. 1,271,632; July 9; v. 252; p. 279.
Voight, Henry G., New Britain, assignor to Sargent & Company, New Haven, Conn. Lock. No. 1,273,958; July 30; v. 252; p. 1014.
Voigt, Richard H., Milwaukee, Wis. Folding box. No. 1,272,878; July 16; v. 252; p. 659.
Von Culin, Clayton, New York, N. Y., and G. W. Beach, Saybrook, Conn. Shoe. No. 1,274,111; July 30; v. 252; p. 1057.
Von Schrenk, Arnold, New York, N. Y. Nail, spike, and the like. No. 1,273,427; July 23; v. 252; p. 831.
Von Wahlde, Frederick T., and F. A. Stiens, St. Bernard, assignors to The J. Henry Koenig Company, Cincinnati, Ohio. Can-labeling machine. No. 1,273,795; July 23; v. 252; p. 929.
Vrubel, Joseph F., Hartford, Conn. Mandolin-support. No. 1,272,583; July 16; v. 252; p. 573.
W. C. Richtie & Company. (See Stock, Julius A., assignor.)
W. S. Tyler Company, The. (See Reynolds, Morley P., assignor.)
Waage, O. A., *et al.* (See Johannessen, Johan E., assignor.)
Waage, Osborne A. (See Johannessen and Waage.)
Wachs, Walter G. (See Gallup and Wachs.)
Wade, Ethel A., Springfield, Mo. Skirt-marker. No. 1,271,394; July 2; v. 252; p. 179.
Wade, Jessie, West Kensington, assignor of one-half to O. P. MacFarlane, London, England. Cinematographic film. No. 1,271,247; July 2; v. 252; p. 140.
Wadhams, Darius T., assignor to N. Gray, Jr., Oswego, N. Y. Feeding and spacing mechanism for cutting-machines. No. 1,273,959; July 30; v. 252; p. 1015.
Wagemaker, Isaac, Grand Rapids, Mich. Tab construction for index-card guides. No. 1,273,960; July 30; v. 252; p. 1015.
Wagner, Frederick U., Rahway, N. J. Railway-car. No. 1,271,812; July 9; v. 252; p. 328.
Wagner, Hugh K., *et al.* (See May, Harry E., assignor.)
Wagner, Joseph R., Chicago, Ill. Wind-shield for automobiles. No. 1,273,429; July 23; v. 252; p. 832.
Wagner, Lawrence A., Youngstown, Ohio. Reinforced plastic fence-post with base. No. 1,271,105; July 2; v. 252; p. 99.
Wagner Manufacturing Company, The. (See Bingham, Robert O., assignor.)
Wagner, Paul, Charlottenburg, Germany, assignor to General Electric Company. Ventilating apparatus. No. 1,273,788; July 23; v. 252; p. 927.
Wahl Company, The. (See Poole, Arthur F., assignor.)
Wahlert, Henry A. (See Burton and Wahlert.)
Wailes, Sydney I. (See Moore, Miles F., assignor.)

Wainwright, Charles, and F. J. Carney, Erie, Pa. Plate-valve. No. 1,273,698; July 23; v. 252; p. 903.
Wakefield, Charles L. (See McNabb, Alvin C., assignor.)
Walcoff, Harry, New York, N. Y. Knickerbockers. No. 1,271,248; July 2; v. 252; p. 140.
Waldo, George E., and E. F. Wilson, Chicago, Ill.; said Wilson assignor to said Waldo. Trolley-catcher. No. 1,271,106; July 2; v. 252; p. 99.
Waldow, Alexis F., assignor to The Whitin Machine Works, Whitinsville, Mass. Stop-motion apparatus. No. 1,271,964; July 9; v. 252; p. 371.
Waldron, William H., New Brunswick, N. J. Printing-machine. No. 1,271,965; July 9; v. 252; p. 371.
Wales, Roland T., Sewaren, N. J. Core-mold for hollow walls. No. 1,272,736; July 16; v. 252; p. 617.
Walker, Alexander, What Cheer, Iowa. Boxing for drills. No. 1,272,961; July 30; v. 252; p. 1015.
Walker, Charles N., Jamestown, Colo. Headlight mechanism for automobiles. No. 1,271,395; July 2; v. 252; p. 179.
Walker, Edward C., 3d, Brookline, Mass. Electrolytic production of perchloric acid. No. 1,271,633; July 9; v. 252; p. 279.
Walker, Frank, assignor to W. Llewellyn, Los Angeles, Cal. Automatic flush-tank. No. 1,271,813; July 9; v. 252; p. 328.
Walker, Gaines M., St. Louis, Mo. Basket. No. 1,272,324; July 9; v. 252; p. 475.
Walker, Henry B., Lancaster, Ohio. Pump. No. 1,272,737; July 16; v. 252; p. 618.
Walker, Joseph A., Springfield, Ill. Coal-mine drill. No. 1,271,396; July 2; v. 252; p. 179.
Walker, Robert J. (See Parsons, Walker, Cook, and Douglas.)
Walker, William J., Sylvania, Ga. Boll-weevil destroyer. No. 1,271,397; July 2; v. 252; p. 180.
Walkup, Samuel T., New York, N. Y., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Controller for power-operated mechanism. No. 1,270,994; July 2; v. 252; p. 69.
Wall, James P., Pittsburgh, Pa. Wheel for valves and the like. No. 1,272,738; July 16; v. 252; p. 618.
Waller, Gustave F., Redwood City, Cal. Concrete-form. No. 1,273,699; July 23; v. 252; p. 904.
Walling, Frederick J., Minneapolis, Minn. Hot-water boiler. No. 1,271,634; July 9; v. 252; p. 279.
Walter, Ernest, Belleville, assignor to Verona Chemical Company, Newark, N. J. Device for rolling cylindrical bodies. No. 1,272,739; July 16; v. 252; p. 618.
Walters, William H., Altoona, Pa. Throttle-valve. No. 1,274,112; July 30; v. 252; p. 1057.
Walton, Jerrold F. (See Gage, Roy N., assignor.)
Walton, Jerrold F. Sturgis, Mich. Adjustable chair. No. 1,271,635; July 9; v. 252; p. 280.
Walton, Jerrold F., Sturgis, Mich. Adjustable chair. No. 1,271,636; July 9; v. 252; p. 281.
Walton, Jerrold F., Sturgis, Mich. Furniture. No. 1,271,637; July 9; v. 252; p. 281.
Walworth Manufacturing Company. (See Little, Theodore W., assignor.)
Wambaugh, Mahlon W., St. Louis, Mo. Rail-joint and track-fastener. No. 1,274,221; July 30; v. 252; p. 1088.
Wanders, Hans, Boston, Mass. Universal joint. No. 1,272,740; July 16; v. 252; p. 618.
Wantz, Julius B., assignor, by mesne assignments, to Victor Electric Corporation, Chicago, Ill. Electric-circuit-controlling mechanism. No. 1,272,879; July 16; v. 252; p. 659.
Ward, Adonnos T. (See Riddle, Abner B., assignor.)
Ward, Alexander L., New York, N. Y. Collapsible container. No. 1,273,430; July 23; v. 252; p. 832.
Ward, Frederick A., assignor to Gear Grinding Machine Company, Detroit, Mich. Grinding spline-shafts and other interrupted cylindrical bodies. No. 1,271,495; July 2; v. 252; p. 207.
Ward, Frederick A., Detroit, Mich., assignor to The Gear Grinding Machine Company. Splined shaft. No. 1,273,016; July 16; v. 252; p. 696.
Ward, Louis M., Lincoln, Nebr. Agricultural machine. No. 1,273,205; July 23; v. 252; p. 773.
Warfield, Aaron N., London, Ontario, Canada. Car construction. No. 1,272,741; July 16; v. 252; p. 619.
Warfield, Aaron N., London, Ontario, Canada. Car construction. No. 1,274,113; July 30; v. 252; p. 1057.
Waring, Walter W., Sterling, Kans. Pocket index-file. No. 1,272,155; July 9; v. 252; p. 427.
Warkup, Herbert, Kingston, N. Y., assignor to J. S. Young & Company, Hanover, Pa. Vegetable dye and making same. No. 1,273,293; July 23; v. 252; p. 795.
Warminski, Stanislaw, Baltimore, Md. Horseshoe. No. 1,273,294; July 23; v. 252; p. 795.
Warne, Frederick C., Mansfield, Ohio. Nut-lock. No. 1,272,584; July 16; v. 252; p. 573.
Warner, Alonso A., assignor to Landers, Frary & Clark, New Britain, Conn. Safety-razor. No. 1,271,249; July 2; v. 252; p. 140.
Warner, James H. (See McManus, Luis M., assignor.)
Warren Featherbone Co., The. (See Cutler, Henry H., assignor.)
Warren, Frank H., Swampscott, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Trimming-machine. No. 1,271,638; July 9; v. 252; p. 282.
Warren, James H., Baltimore, Md. Apparatus for separating materials. No. 1,274,114; July 30; v. 252; p. 1058.
Warren, Robert M., Sumter, S. C., assignor to Splitdorf Electrical Company, Newark, N. J. Electric generator. No. 1,274,115; July 30; v. 252; p. 1058.
Warren Webster & Company. (See Fitts, James L., assignor.)
Warren Webster & Company. (See Jay, Edward G., Jr., assignor.)
Warriner, Robert, assignor to Fore River Shipbuilding Corporation, Quincy, Mass. Gearing. No. 1,273,656; July 23; v. 252; p. 806.
Washburn, John S., Suffern, N. Y. Grate. No. 1,271,398; July 2; v. 252; p. 180.
Washburne, James V., Syracuse, N. Y. Combined tag and fastening-clip. No. 1,274,222; July 30; v. 252; p. 1089.
Waterbury Clock Co. (See Horn, Ernest H., assignor.)
Waterbury Clock Co. (See Smith, William J., assignor.)
Waterhouse, Ezra P., assignor of one-half to Worcester Envelope Company, Worcester, Mass. Envelop-machine. No. 1,271,250; July 2; v. 252; p. 140.
Waterhouse, Harvey M., assignor of one-half to A. G. Kimball, Hayden, Colo. Ditching-machine. No. 1,273,206; July 23; v. 252; p. 773.
Waterloo, John, Monongahela, assignor to Window Glass Machine Company, Pittsburgh, Pa. Sorting glass plates and pieces. No. 1,272,156; July 9; v. 252; p. 428.
Waterloo, John, Monongahela, assignor to Window Glass Machine Company, Pittsburgh, Pa. Apparatus for sorting glass plates and pieces. No. 1,272,157; July 9; v. 252; p. 428.
Waterloo, John, Monongahela, and George W. Klages, assignors to Window Glass Machine Company, Pittsburgh, Pa. Glass-cutting apparatus. No. 1,272,158; July 9; v. 252; p. 428.
Waters, Edward T., Omaha, Nebr. Assembler-slide-controlling device for type-bar-casting machines. No. 1,273,962; July 30; v. 252; p. 1015.
Watrous, Earl G., Chicago, Ill. Water-closet system for railway-cars. No. 1,270,902; July 2; v. 252; p. 42.
Watrous, Earl G., Chicago, Ill. Automatic supply-valve. No. 1,270,901; July 2; v. 252; p. 42.
Watson, Frank R., Baltimore, Md. Stove-cover. No. 1,273,700; July 23; v. 252; p. 904.
Watson, William W. (See Otto, Watson, Anderson, and Underwood.)
Watters, George M., Minneapolis, Minn. Sanding-machine. No. 1,271,639; July 9; v. 252; p. 282.
Watts, Frank E., Detroit, Mich., assignor to Hupp Motor Car Corporation, Richmond, Va. Universal-joint assembly. No. 1,273,963; July 30; v. 252; p. 1016.
Waugh, Johnson S., Shepard, Ohio. Freight-car door. No. 1,273,017; July 16; v. 252; p. 696.
Way, Robert R., and T. F. Mason, Webb City, Mo. Belter. No. 1,273,701; July 23; v. 252; p. 904.
Weagant, Roy A., Roselle, N. J., assignor to Marconi Wireless Telegraph Company of America, New York, N. Y. Method and apparatus for radiosignaling. No. 1,273,431; July 23; v. 252; p. 832.
Weaver, Joseph B., assignor to Engineering Products Corporation, Newport News, Va. Gripping and aligning head for holding turbine-blades while milling. No. 1,271,399; July 2; v. 252; p. 180.
Webb, Harry A., Hamden, Conn. Pneumatic automobile-tire. No. 1,273,964; July 30; v. 252; p. 1016.
Weber, August, Jersey City, N. J. Tooth comfort kit. No. 1,274,116; July 30; v. 252; p. 1059.
Webster, Bradford, Louisville, Ky., assignor, by mesne assignments, to Paragon Binder Corporation, New York, N. Y. Book. No. 1,274,117; July 30; v. 252; p. 1059.
Webster Electric Company. (See Geist, Harry F., assignor.)
Wechsler, Oscar H. (See Seagull and Wechsler.)
Wedgeworth, John F., Sarepta, La. Tie-plate. No. 1,274,118; July 30; v. 252; p. 1059.
Weed, Howard W., Stamford, Conn. Folding back. No. 1,272,159; July 9; v. 252; p. 428.
Weeks, Frank A., Plainfield, N. J. Inkstand. No. 1,272,585; July 16; v. 252; p. 573.
Weeks, Jackson S., *et al.*, trustees. (See Weeks, Joseph H., assignor.)
Weeks, Joseph H., Rutledge, assignor to J. S. Weeks, Delaware county, and R. M. Weeks, trustees, Philadelphia, Pa. Composition for electrolytes for electrical etching. No. 1,273,432; July 23; v. 252; p. 832.
Weeks, Raymond M., *et al.*, trustees. (See Weeks, Joseph H., assignor.)
Weeks, William, Chicago, Ill. Duplex engine. No. 1,271,966; July 9; v. 252; p. 372.
Wege, Peter M., assignor to Metal Office Furniture Co., Grand Rapids, Mich. Desk or table top construction. No. 1,273,207; July 23; v. 252; p. 773.
Weguelin, Harold A., and R. A. Phelan, St. Louis, Mo. Combined eye-dropper, syringe, and medicine-holder. No. 1,272,742; July 16; v. 252; p. 619.
Wehner, Alphonse P. (See Core and Wehner.)
Wehr, Rudolph, New York, N. Y. Internal-combustion engine. No. 1,273,433; July 23; v. 252; p. 833.

Wehrle, Laurence H., Murfreesboro, Tenn. Ventilating wind-shield for motor-vehicles. No. 1,273,965; July 30; v. 252; p. 1017.
Weickel, Henry, Milwaukee, assignor to Pawling and Harnischfeger Company, West Milwaukee, Wis. Hoisting and conveying apparatus. No. 1,270,995; July 2; v. 252; p. 69.
Weil, Charles L., Port Huron, Mich. Salt manufacture. No. 1,273,208; July 23; v. 252; p. 774.
Weis, Charles, Lancaster, Pa. Collar. No. 1,273,702; July 23; v. 252; p. 904.
Weis, Orville, Thayer, Kans. Film-shifting mechanism for cameras. No. 1,274,223; July 30; v. 252; p. 1089.
Weismantel, Joseph, Irvington, N. J. Launching apparatus for steam or sailing vessels. No. 1,270,903; July 2; v. 252; p. 42.
Weiss, Louis T., Brooklyn, assignor to Reliance Ball Bearing Door Hanger Company, New York, N. Y. Device for operating sliding doors. No. 1,272,160; July 9; v. 252; p. 429.
Weissenborn, Albert B., assignor of one-half to Appleton Wire Works, Appleton, Wis. Fourdrinier wire-stretcher. No. 1,272,536; July 16; v. 252; p. 574.
Welch, Albert. (See Reed, William R., assignor.)
Welcome, Virgil J., Los Angeles, Cal. Meat-pounder. No. 1,272,743; July 16; v. 252; p. 619.
Weller, Carl, Zurich, Switzerland. Spraying apparatus. No. 1,271,107; July 2; v. 252; p. 100.
Wellman, Frank E., assignor to The Kansas City Gasolene Company, Kansas City, Kans. Oil-refining apparatus. No. 1,273,966; July 30; v. 252; p. 1017.
Wells, Chipman J., Long Beach, Cal. Disappearing bed. No. 1,271,814; July 9; v. 252; p. 328.
Wells, Henry E., Kahoka, Mo. Sewing-cabinet. No. 1,272,587; July 16; v. 252; p. 574.
Wells, Raymond, Homer, N. Y., assignor to Cobwell Corporation, Cleveland, Ohio. Apparatus for extracting oils and the like. No. 1,272,744; July 16; v. 252; p. 620.
Wennagel, Theodor S., Alt-Rahlstedt, near Hamburg, Germany, assignor to Firm Naamlooze Vennootschap Hollandsche Proteine Maatschappij, Amsterdam, Netherlands. Phenol-aldehyde condensation product. No. 1,273,967; July 30; v. 252; p. 1017.
Wentling, William H., Harrisburg, Pa. Device relating to ordnance. No. 1,271,640; July 9; v. 252; p. 282.
Wentworth, Jesse S., Norwood, assignor to The Heekin Can Company, Cincinnati, Ohio. Can. No. 1,273,018; July 16; v. 252; p. 697.
Werkheiser, Robert C., Lansdale, Pa. Comb-cleaner. No. 1,271,967; July 9; v. 252; p. 372.
Werle, John F., assignor to Hoole Machine & Engraving Works, Incorporated, Brooklyn, N. Y. Printing-machine. No. 1,273,295; July 23; v. 252; p. 795.
Wert, Charles H., Newton Hamilton, Pa. Wrench. No. 1,271,400; July 2; v. 252; p. 181.
Werwath, Oscar, Milwaukee, assignor to Kewaunee Mfg. Co., Kewaunee, Wis. Cabinet. No. 1,271,641; July 9; v. 252; p. 282.
West, Leonidas D. (See Slater and West.)
West, William J., Seattle, Wash. Shoe for donkey-sleds. No. 1,273,296; July 23; v. 252; p. 796.
Western Electric Company. (See Anderegg and Mougey, assignors.)
Western Electric Company. (See Baldwin, Charles F., assignor.)
Western Electric Company. (See Bell, John H., assignor.)
Western Electric Company. (See Bellamy, Harry T., assignor.)
Western Electric Company. (See Booth, William T., assignor.)
Western Electric Company. (See Britten, William G., assignor.)
Western Electric Company. (See Buckley, Oliver E., assignor.)
Western Electric Company. (See Clausen, Henry P., assignor.)
Western Electric Company. (See Conway, Roy D., assignor.)
Western Electric Company. (See Dickinson, Lewis E., assignor.)
Western Electric Company. (See Dixon, Amos F., assignor.)
Western Electric Company. (See Egerton, Henry C., assignor.)
Western Electric Company. (See Fowler, Clarence B., assignor.)
Western Electric Company. (See Frederick, Halsey A., assignor.)
Western Electric Company. (See Goodrum, Charles L., assignor.)
Western Electric Company. (See Hinrichsen, Edward E., assignor.)
Western Electric Company. (See Houskeeper, William G., assignor.)
Western Electric Company. (See Hovland, Henry, assignor.)
Western Electric Company. (See Johnson, Lewis H., assignor.)
Western Electric Company. (See Keckler, Charles W., assignor.)
Western Electric Company. (See Lundell, Alben E., assignor.)
Western Electric Company. (See Lundquist, Frank A., assignor.)
Western Electric Company. (See MacDougall, Harry W., assignor.)
Western Electric Company. (See Mather and Bailey, assignors.)
Western Electric Company. (See McQuarrie, James L., assignor.)
Western Electric Company. (See Miller, Daniel D., assignor.)
Western Electric Company. (See Price, Charles S., assignor.)
Western Electric Company. (See Rainey, Paul M., assignor.)
Western Electric Company. (See Reynolds and Forsberg, assignors.)
Western Electric Company. (See Stevenson, George H., assignor.)
Western Electric Company. (See Young, Charles R., assignor.)
Westinghouse Air Brake Company, The. (See Newburn, Theodore W., assignor.)
Westinghouse Air Brake Company, The. (See Turner, Walter V., assignor.)
Westinghouse Electric and Manufacturing Company. (See Chubb, Lewis W., assignor.)
Westinghouse Electric and Manufacturing Company. (See Conrad, Frank, assignor.)
Westinghouse Electric and Manufacturing Company. (See Cook, Charles S., assignor.)
Westinghouse Electric and Manufacturing Company. (See Dann and Rudd, assignors.)
Westinghouse Electric and Manufacturing Company. (See Denman, Earl W., assignor.)
Westinghouse Electric and Manufacturing Company. (See Eaton, George M., assignor.)
Westinghouse Electric and Manufacturing Company. (See Edgecomb, Henry R., assignor.)
Westinghouse Electric and Manufacturing Company. (See Fortescue, Charles L., assignor.)
Westinghouse Electric and Manufacturing Company. (See Gilman, Ralph E., assignor.)
Westinghouse Electric & Manufacturing Company. (See Hellmund, Rudolf E., assignor.)
Westinghouse Electric & Manufacturing Company. (See Herr, Herbert T., assignor.)
Westinghouse Electric and Manufacturing Company. (See Jackson, Ray P., assignor.)
Westinghouse Electric and Manufacturing Company. (See Jennings, Oliver S., assignor.)
Westinghouse Electric and Manufacturing Company. (See Mattman, Emil, assignor.)
Westinghouse Electric and Manufacturing Company. (See McConahey, William M., assignor.)
Westinghouse Electric and Manufacturing Company. (See Newcomb, Harold A., assignor.)
Westinghouse Electric and Manufacturing Company. (See Shmmon and Mardis, assignors.)
Westinghouse Electric and Manufacturing Company. (See Sipher, Edmund F., assignor.)
Westinghouse Electric and Manufacturing Company. (See Smith, Benjamin H., assignor.)
Westinghouse Electric & Manufacturing Company. (See Trent, Harold E., assignor.)
Westinghouse Electric and Manufacturing Company. (See Wynn, Francis E., assignor.)
Westinghouse Lamp Company. (See Lederer, Anton, assignor.)
Wetter, Charles W., St. Gallen, Switzerland. Embroidering-machine. No. 1,274,119; July 30; v. 252; p. 1059.
Weydell, Jarl M., assignor of one-half to E. E. Stout, Indianapolis, Ind. Magnetic clutch. No. 1,271,401; July 2; v. 252; p. 181.
Wheary, George H., Racine, Wis. Drawer construction for trunks. No. 1,273,297; July 23; v. 252; p. 796.
Whedon, Le Grand S., Medina, N. Y. Sofa-bed. No. 1,273,968; July 30; v. 252; p. 1017.
Wheeler Automatic Machine Co. (See Wheeler, Omar A., assignor.)
Wheeler, Omar A., Portland, Oreg., assignor to Wheeler Automatic Machine Co. Work-holder for automatic sewing-machines. No. 1,270,996; July 2; v. 252; p. 70.
Wheelock, John H. (See Emmerling, Wheelock, and Rohland.)
Whelan, Michael J., Muskegon, Mich., assignor to Brunswick-Balke-Collender Co. Closet-seat. No. 1,273,703; July 23; v. 252; p. 905.
Whipple, George W., and C. H. Baldwin, Cherryvale, Kans., assignors to Edgar Zinc Company. Retort-charging machine. No. 1,274,120; July 30; v. 252; p. 1060.
Whitaker, Dillard A., and H. W. Thayer, Sacramento, Cal. Life-boat. No. 1,273,298; July 23; v. 252; p. 796.
White, Charles, Baltimore, Md. Wind-shield-treating device. No. 1,273,434; July 23; v. 252; p. 833.
White, Edwin L., Brooklyn, N. Y. Combined bowl-hanger and socket-support. No. 1,270,904; July 2; v. 252; p. 43.
White, Everett H., St. Paul, Minn. Heat-regulator. No. 1,271,815; July 9; v. 252; p. 329.

White, Fred E., and F. E. Hooper, assignors to Central Oil & Gas Stove Company, Gardner, Mass. Oil-stove. No. 1,273,209; July 23; v. 252; p. 774.
White, Fred E., and F. E. Hooper, assignor to Central Oil & Gas Stove Company, Gardner, Mass. Oil-stove. No. 1,273,210; July 23; v. 252; p. 774.
White, Frederick H., New York, N. Y. Screw-driver. No. 1,271,816; July 9; v. 252; p. 329.
White, George T., assignor of one-half to J. N. Ellison, Portsmouth, Ohio. Water-strainer for pumps and the like. No. 1,274,121; July 30; v. 252; p. 1060.
White Heat Products Company. (See Sharples, Philip M., assignor.)
White, Henry W., New Orleans, La. Asphalt-shingle fastener. No. 1,270,905; July 2; v. 252; p. 43.
White, John H., North Yakima, Wash. Dimmer for headlights. No. 1,272,746; July 16; v. 252; p. 620.
White, Joseph A., assignor to The Moore and White Company, Philadelphia, Pa. Friction-clutch. No. 1,272,745; July 16; v. 252; p. 620.
White, Louis A., Brooklyn, N. Y. Magnetic valve. No. 1,271,108; July 2; v. 252; p. 100.
White, Noah R., Delta, Colo. Milk and mail receptacle. No. 1,274,224; July 30; v. 252; p. 1089.
White, Pierce L., McCormick, S. C. Cushioned wheel. No. 1,272,161; July 9; v. 252; p. 429.
White Sewing Machine Company, The. (See Colegrove, Charles E., assignor.)
White, Thomas C. C. B., Cowley, Alberta, Canada. Tumbling toy. No. 1,272,588; July 16; v. 252; p. 574.
White, William C., Schenectady, N. Y., assignor to General Electric Company. Wireless signaling system. No. 1,273,789; July 23; v. 252; p. 927.
White, William M., Milwaukee, Wis. Hydraulic regainer. No. 1,273,557; July 23; v. 252; p. 866.
White, William M., Milwaukee, Wis. Method of increasing head. No. 1,273,558; July 23; v. 252; p. 866.
White, William M., Milwaukee, Wis. Spiral regainer. No. 1,273,559; July 23; v. 252; p. 867.
White, William M., Milwaukee, Wis. Apparatus for increasing head. No. 1,273,704; July 23; v. 252; p. 905.
White, William M., Milwaukee, Wis. Apparatus for regaining head. No. 1,273,705; July 23; v. 252; p. 905.
Whitelaw, John F. (See Anderson, Clarke, and Whitelaw.)
Whitesell, Harry, Browerville, Minn. Spring-tire. No. 1,271,109; July 2; v. 252; p. 100.
Whitin, George M., assignor to The Whitin Machine Works, Whitinsville, Mass. Heilmann-type comber. No. 1,273,299; July 23; v. 252; p. 796.
Whitin Machine Works, The. (See Crockett, Frank L., assignor.)
Whitin Machine Works, The. (See Jeffers, Jesse, assignor.)
Whitin Machine Works. (See Nelson, Harmon O., assignor.)
Whitin Machine Works, The. (See Waldow, Alexis F., assignor.)
Whitin Machine Works, The. (See Whitin, George M., assignor.)
Whiting, Theo C., Philadelphia, Pa. Motor-controlling mechanism. No. 1,273,300; July 23; v. 252; p. 797.
Whitney, Egbert, assignor to Eclipse Scaffolding Company, Omaha, Nebr. Suspended scaffolding. No. 1,270,906; July 2; v. 252; p. 43.
Whitney, Frank E., and A. K. Edwards, assignors to Commercial Truck Company of America, Philadelphia, Pa. Punching-machine. No. 1,272,747; July 16; v. 252; p. 621.
Whitney, Laurence H., Pittsfield, Mass., assignor to General Electric Company. Annealing aluminum. No. 1,273,706; July 23; v. 252; p. 905.
Whitney Machine Company. (See Whitney, Robert F., assignor.)
Whitney, Robert F., assignor to Whitney Machine Company, Winchester, Mass. Hide and leather working machine. No. 1,272,162; July 9; v. 252; p. 429.
Whitney, William A., Oregon, Ill. Ball-bearing jack. No. 1,272,589; July 16; v. 252; p. 574.
Whittaker, Arnold R. (See Jeavons and Whittaker.)
Whittier, Albert E., Bristol, Conn. Mechanical thermometer. No. 1,273,707; July 23; v. 252; p. 906.
Whittle, Harry E. (See Babcock, Wade H., assignor.)
Whitworth, Bevill W., assignor of one-third to T. A. Whitworth and one-third to C. S. Whitworth, Cedar Falls, Iowa. Freight-car grain-door. No. 1,272,325; July 9; v. 252; p. 475.
Whitworth, Charles S., *et al.* (See Whitworth, Bevill W., assignor.)
Whitworth, Thomas A., *et al.* (See Whitworth, Bevill W., assignor.)
Whomes, Harry R. (See Melton and Whomes.)
Wiberg, Oskar A., Finspong, assignor, by mesne assignments, to Aktiebolaget Ljungströms Ångturbin, Stockholm, Sweden. Elastic-fluid turbine. No. 1,271,402; July 2; v. 252; p. 181.
Widhelm, Joseph G., Fremont, Nebr. Tank-heater. No. 1,273,560; July 23; v. 252; p. 867.
Widstrand, Herbert, Chicago, Ill. Shade-holder. No. 1,274,122; July 30; v. 252; p. 1060.
Wiedey, John W., Baltimore, Md. Lamp-socket. No. 1,272,163; July 9; v. 252; p. 429.
Wiegand, August W., Sedalia, Mo. Safety appliance for locomotives. No. 1,271,642; July 9; v. 252; p. 283.
Wiggins, Donegan R., Salem, Oreg. Sight for firearms. No. 1,273,019; July 16; v. 252; p. 697.
Wigginton, Newton J., Opequon, Va. Animal-exterminator. No. 1,274,123; July 30; v. 252; p. 1061.
Wightman, Mark A., Bath, N. Y. Sliding-door lock. No. 1,272,590; July 16; v. 252; p. 575.
Wigle, Wilson B., Fullerton, Cal. Underreamer. No. 1,273,708; July 23; v. 252; p. 906.
Wigness, Cornelius R., assignor of one-half to C. G. Sorensen, Harlan, Iowa. Trap. No. 1,270,907; July 2; v. 252; p. 44.
Wilbur, Walter, Lynden, Wash. Clothes-washing apparatus. No. 1,273,561; July 23; v. 252; p. 867.
Wilcox, Charles E., *et al.* (See Slavin, Thomas H., assignor.)
Wilcox, Joseph S. (See Norton and Wilcox.)
Wildberger, Henry. (See Kramer, Umhofer, Eral, and Wildberger.)
Wilde, Joseph and J. Carter, Pawtucket, R. I. Antiskidding device. No. 1,274,124; July 30; v. 252; p. 1061.
Wilder, Joe H. (See Woodson and Wilder.)
Wilder, Ralph E., Johnstown, Pa. Truck-frame. No. 1,270,908; July 2; v. 252; p. 44.
Wildman Mfg. Co. (See Bortman, Emanuel W., assignor.)
Wildman Mfg. Co. (See Pigeon, Albert M., assignor.)
Wildt & Co. (See Wildt, Hans M. A. C., assignor.)
Wildt, Hans M. A. C., assignor to Wildt & Co., Limited, Leicester, England. Stop-motion for machines for winding yarns, threads, and the like. No. 1,273,562; July 23; v. 252; p. 868.
Wiley, George M., Los Angeles, Cal. Display apparatus. No. 1,271,817; July 9; v. 252; p. 329.
Wilke, Erwin L., Buffalo, N. Y. Apparatus for use in the manufacture of sulfuric anhydrid and the like. No. 1,270,997; July 2; v. 252; p. 70.
Wilkinson, Joe. (See Stansfield and Wilkinson.)
Will, Otto, San Francisco, Cal. Gyroscope-propeller. No. 1,270,998; July 2; v. 252; p. 71.
Willard Storage Battery Company. (See Disinger, Ernest, assignor.)
Willenbring, John, Richmond, Minn. Device for utilizing kerosene for gasolene-engines. No. 1,274,125; July 30; v. 252; p. 1061.
Willett, Byron P., Detroit, Mich. Toy. No. 1,272,748; July 16; v. 252; p. 621.
Willett, Louis, Annapolis Junction, Md. Horseshoe. No. 1,272,591; July 16; v. 252; p. 575.
Willhite, Emerson E., Algona, Iowa. Tractor attachment. No. 1,272,592; July 16; v. 252; p. 575.
William Pollock Company, The. (See McClure and Reilly, assignors.)
William Schollhorn Company, The. (See Bernard, William A., assignor.)
Williams, Arthur R., Washington, D. C. Automobile-signal. No. 1,273,709; July 23; v. 252; p. 906.
Williams, Curles T., Trenton, N. J. Tire-inflation nozzle. No. 1,270,999; July 2; v. 252; p. 71.
Williams, Frank D., Los Angeles, Cal. Taking motion-pictures. No. 1,273,435; July 23; v. 252; p. 833.
Williams, George M., Elizabeth, N. J., assignor to P. Lorillard Company, New York, N. Y. Applying tissue wrappers to cigars, &c. No. 1,271,251; July 2; v. 252; p. 141.
Williams, George M., Elizabeth, N. J., assignor to P. Lorillard Company, New York, N. Y. Applying tissue wrappers to cigars, &c. No. 1,271,403; July 2; v. 252; p. 182.
Williams, John F., New York, N. Y. Garment-hanger. No. 1,272,164; July 9; v. 252; p. 430.
Williams, Milton F., assignor to Williams Patent Crusher and Pulverizer Company, St. Louis, Mo. Breaker-plate for grinders. No. 1,274,126; July 30; v. 252; p. 1061.
Williams Patent Crusher & Pulverizer Co., The. (See Plaisted, Harold M., assignor.)
Williams Patent Crusher and Pulverizer Co. (See Williams, Milton F., assignor.)
Williams, Tom, Marysville, Kans. Rotary spader. No. 1,271,818; July 9; v. 252; p. 330.
Williamson, Glenn S., assignor to Shurloc Elevator Safety Company, Inc., New York, N. Y. Safety system for swinging elevator doors. No. 1,274,127; July 30; v. 252; p. 1062.
Williamson, Joel E., Evansville, Ind. Telephone attachment. No. 1,274,128; July 30; v. 252; p. 1062.
Willis, Russell L., Manchester, N. H. Attachment for collapsible tubes. No. 1,274,129; July 30; v. 252; p. 1062.
Willson, Charles T., Millerton, N. Y. Water-cooling apparatus. No. 1,273,436; July 23; v. 252; p. 833.
Wilmore, John T., Seattle, Wash. Vending-machine. No. 1,273,437; July 23; v. 252; p. 834.
Wilson, Albert M., Cherokee, Iowa. Hose-supporter. No. 1,274,225; July 30; v. 252; p. 1089.
Wilson Bohannen, Inc. (See Kirsch, Anthony, assignor.)
Wilson, Charles W., St. Louis, Mo. Automobile traffic-signal. No. 1,271,404; July 2; v. 252; p. 182.
Wilson, Clara P., Los Angeles, Cal. Foldable mattress. No. 1,271,496; July 2; v. 252; p. 207.
Wilson, Cortez L., Bisbee, Ariz. Drill-extractor. No. 1,272,749; July 16; v. 252; p. 621.
Wilson Distilling Company, The. (See Lacroix, Joseph D., assignor.)

Wilson, Edgar I., Kansas City, Mo. Illuminated sign. No. 1,272,593; July 16; v. 252; p. 576.
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Wilson, James G. (See Wilson, Sutton, and Jones, assignors.)
Wilson, Joseph D., assignor of one-half to G. A. Hanson, Upland, Cal. Preserving citrus fruits. No. 1,272,750; July 16; v. 252; p. 621.
Wilson, Joseph T., Clayton, N. J., assignor to Silver-Chamberlin Company. Tooth-brush. No. 1,271,252; July 2; v. 252; p. 141.
Wilson, Percy H., Norfolk, Va.; W. Sutton and B. Jones, New York, N. Y., assignors to James G. Wilson, Norfolk, Va. Illuminant. No. 1,271,819; July 9; v. 252; p. 330.
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Wilson, William W., *et al.* (See Slavin, Thomas H., assignor.)
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Window Glass Machine Company. (See Waterloo and Klages, assignors.)
Winfrey, Herbert O., Austin, Tex. Machine for making tamales. No. 1,271,406; July 2; v. 252; p. 182.
Winkleman, Fred G., Quarry, Wis. Automobile-signal. No. 1,274,130; July 30; v. 252; p. 1062.
Winks, John O., San Francisco, Cal. Rotary motor. No. 1,270,909; July 2; v. 252; p. 44.
Winsor, John, Corry, Pa. Wire-bending machine. No. 1,273,020; July 16; v. 252; p. 697.
Winston, Overton, Minneapolis, Minn. Headlight. No. 1,273,969; July 30; v. 252; p. 1017.
Winston, Overton, Minneapolis, Minn. Headlight. No. 1,273,970; July 30; v. 252; p. 1018.
Winter, John R., assignor to Kelsey Wheel Company, Detroit, Mich. Apparatus for forming brake-drums. No. 1,272,751; July 16; v. 252; p. 622.
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Wisconsin Electric Company. (See Beach, Chester H., assignor.)
Witter, John L. (See Darby, Jesse W., assignor.)
Witthause, John W. (See Golding and Witthause.)
Wolcott, Harvey D., Birmingham, Ala. End-thrust-bearing attachment for the transmission-shafts of Ford automobiles. No. 1,272,165; July 9; v. 252; p. 430.
Wold, Olaus C., Chicago, Ill. Air-brush. No. 1,272,752; July 16; v. 252; p. 622.
Wolfe, Clinton M., assignor of one-half to C. O. Ramsey, Coeburn, Va. Spool-holder. No. 1,273,971; July 30; v. 252; p. 1018.
Wolff, Aaron H., New York, N. Y. Heating apparatus. No. 1,270,910; July 2; v. 252; p. 44.
Wolff, Georg, Hermsdorf, near Berlin, Germany, assignor to General Electric Company. Protective device. No. 1,271,407; July 2; v. 252; p. 183.
Wolfram, Clarence E., Belleplaine, Minn. Internal-combustion engine. No. 1,274,226; July 30; v. 252; p. 1090.
Wolmer, John A., E. F. Hanlon, and G. L. Thomson, Indianapolis, Ind. Boiler stay-bolt. No. 1,273,563; July 23; v. 252; p. 868.
Wolter, Fred, St. Charles, Minn. Hinge. No. 1,272,594; July 16; v. 252; p. 576.
Wood, Abraham, Ramsbottom, England. Grenade and like throwing apparatus. No. 1,273,301; July 23; v. 252; p. 797.
Wood, Albert D., Canton, N. C. Set-screw. No. 1,271,408; July 2; v. 252; p. 183.
Wood, Benjamin F., Lenzburg, La. Device for controlling supply of water to boilers. No. 1,272,753; July 16; v. 252; p. 622.
Wood, Garfield A., Detroit, Mich. Gear-pump. No. 1,271,968; July 9; v. 252; p. 372.
Wood, Garfield A., Detroit, Mich. Hoisting and dumping mechanism. No. 1,271,969; July 9; v. 252; p. 373.
Wood, Garfield A., Detroit, Mich. Gear-pump. No. 1,271,970; July 9; v. 252; p. 373.
Wood, Garfield A., Detroit, Mich. Hoisting mechanism for motor-vehicles. No. 1,271,971; July 9; v. 252; p. 374.
Wood, Garfield A., Detroit, Mich. Hoisting and dumping mechanism. No. 1,271,972; July 9; v. 252; p. 374.
Wood, Garfield A., Detroit, Mich. Dumping-truck. No. 1,271,973; July 9; v. 252; p. 375.
Wood, Garfield A., Detroit, Mich. Truck-body-dumping mechanism. No. 1,271,974; July 9; v. 252; p. 375.
Wood, Garfield A., Detroit, Mich. Truck-body-dumping mechanism. No. 1,271,975; July 9; v. 252; p. 376.
Wood, Garfield A., Detroit, Mich. Hydraulic hoisting device. No. 1,271,976; July 9; v. 252; p. 376.
Wood, Garfield A., Detroit, Mich. Hoisting mechanism for motor-vehicles. No. 1,271,977; July 9; v. 252; p. 377.
Wood, Garfield A., Detroit, Mich. Hydraulic hoisting device. No. 1,271,978; July 9; v. 252; p. 377.
Wood, Henry A. W., assignor, by mesne assignments, to Wood Newspaper Machinery Corporation, New York, N. Y. Paper-guard for folding mechanism. No. 1,271,644; July 9; v. 252; p. 283.
Wood, Henry A. W., New York, N. Y., and C. Nordfors, Jersey City Heights, N. J., assignors, by mesne assignments to Wood Newspaper Machinery Corporation, New York, N. Y. Sheet-counting device. No. 1,272,438; July 23; v. 252; p. 834.
Wood Newspaper Machinery Corporation. (See Wood, Henry A. W., assignor.)
Wood Newspaper Machinery Corporation. (See Wood and Nordfors, assignors.)
Wood, Robert O., Brookline, assignor to Arthur D. Little, Incorporated, Boston, Mass. Device for testing the tearing strength of paper. No. 1,273,972; July 30; v. 252; p. 1018.
Woods, Joseph M., assignor to The Imperial Brass Manufacturing Company, Chicago, Ill. Lock for automobiles. No. 1,270,911; July 2; v. 252; p. 45.
Woods, Leonard, St. Louis, Mo. Trousers-supporter. No. 1,272,754; July 16; v. 252; p. 622.
Woods, William D. (See Dugger and Woods.)
Woodman, Richard N., Chicago, Ill. Automobile rear signal. No. 1,273,973; July 30; v. 252; p. 1018.
Woodson, John M. and J. H. Wilder, LaFollette, Tenn., assignors of two-fifths to said Wilder and three-fifths to said Woodson. Liquid-filter. No. 1,274,227; July 30; v. 252; p. 1090.
Woodson, Robert E., St. Louis, Mo. Nut-cracking machine. No. 1,273,974; July 30; v. 252; p. 1019.
Woodstock Typewriter Company. (See Roebuck, Alvah C., assignor.)
Woodward, Irving C., assignor to Central West Manufacturing Co., Chicago, Ill. Nut-lock. No. 1,273,439; July 23; v. 252; p. 834.
Woody, Isabel G., Seattle, Wash. Combined steering-wheel and indicator. No. 1,273,440; July 23; v. 252; p. 834.
Woolcock, John A. E., Heidelberg, Victoria, Australia. Adjustable device for use in cutting tenons. No. 1,270,912; July 2; v. 252; p. 45.
Woolworth, Edward J., Kearney, Nebr. Hay-cutter. No. 1,273,975; July 30; v. 252; p. 1019.
Worcester Envelope Company. (See Waterhouse, Ezra P., assignor.)
Worley, Ernest T., Port, assignor to H. H. Hoffman & Company, Houston, Tex. Crude-Oil burner. No. 1,273,976; July 30; v. 252; p. 1020.
Worth, John S., assignor to himself and W. P. Worth, Contesville, Pa. Car construction. No. 1,273,564; July 23; v. 252; p. 868.
Worth, William P. (See Worth, John S., assignor.)
Wren, Thomas B., Mahanoy City, Pa. Foot-tread. No. 1,271,979; July 9; v. 252; p. 378.
Wright, Daniel M., Hartford, Conn. Dieing-machine. No. 1,270,913; July 2; v. 252; p. 46.
Wright, Gilbert, Schenectady, N. Y., assignor to General Electric Company. Electric-lighting apparatus. No. 1,271,980; July 9; v. 252; p. 378.
Wright, Gilbert, Schenectady, N. Y., assignor to General Electric Company. Socket and plug device. No. 1,271,981; July 9; v. 252; p. 378.
Wright, Henry C., and F. W. Ross, Elmira, N. Y. Automobile-signal. No. 1,271,645; July 9; v. 252; p. 284.
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Wright, Sidney, Brooklyn, N. Y. Road-scarifier. No. 1,272,755; July 16; v. 252; p. 622.
Wright, Sidney, Brooklyn, N. Y. Road-planer. No. 1,272,756; July 16; v. 252; p. 623.
Wright, Walter, assignor to Underwood Computing Machine Company, New York, N. Y. Combined type-writing and computing machine. No. 1,271,253; July 2; v. 252; p. 141.
Wright, Walter, assignor to Underwood Computing Machine Company, New York, N. Y. Computing-machine. No. 1,271,254; July 2; v. 252; p. 142.
Wright, Walter, assignor to Underwood Computing Machine Company, New York, N. Y. Combined type-writing and computing machine. No. 1,271,820; July 9; v. 252; p. 330.
Wright, Walter, assignor to Underwood Computing Machine Company, New York, N. Y. Combined type-writing and computing machine. No. 1,271,821; July 9; v. 252; p. 330.
Wright, Walter, assignor to Underwood Computing Machine Company, New York, N. Y. Combined type-writing and computing machine. No. 1,271,982; July 9; v. 252; p. 379.
Wright, Walter, assignor to Underwood Computing Machine Company, New York, N. Y. Type-writing machine. No. 1,273,302; July 23; v. 252; p. 797.
Wuebben, Frank B., Dayton, Ohio. Air-torpedo. No. 1,273,303; July 23; v. 252; p. 797.
Wulf, John W., assignor of one-third to W. Hepp, San Juan, Porto Rico. Code device. No. 1,271,000; July 2; v. 252; p. 71.
Wussow, Henry F., Jr., Bonduel, Wis. Rail-joint. No. 1,271,646; July 9; v. 252; p. 284.
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Wyman, George W., Delmar, Del. Combustion-accelerator for boiler-furnaces. No. 1,271,983; July 9; v. 252; p. 379.
Wynn, Ernest, Laona, Wis. Automobile-body. No. 1,273,977; July 30; v. 252; p. 1020.
Wynne, Francis E., Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company. Cell-retaining device. No. 1,271,409; July 2; v. 252; p. 183.
Yaggy, Luther M., Bowman, N. D. Driving mechanism for tractors. No. 1,273,711; July 23; v. 252; p. 906.
Yale & Towne Manufacturing Company, The. (See Lewis, Rollin C., assignor.)

Yates, Charles E., Detroit, Mich., assignor, by mesne assignments, to Kelvinator Corporation, Wilmington, Del. Pressure-regulating valve. No. 1,273,304; July 23; v. 252; p. 798.
Yoder, Levi L., and F. A. Vickery, Portland, Oreg. Automatic fuel-vaporizer. No. 1,273,565; July 23; v. 252; p. 868.
Yoder, Maurice J., Hemet, Cal. Motor-vehicle. No. 1,272,757; July 16; v. 252; p. 623.
Young, Charles R., Bloomfield, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Loading-coil case. No. 1,272,166; July 9; v. 252; p. 430.
Young, Dwayne G., Seattle, Wash. Collapsing tin cans for shipment. No. 1,273,306; July 23; v. 252; p. 798.
Young, Edward W. (See Young, John S. and E. W.)
Young, George W., *et al.* (See Thompson, George W., assignor.)
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Young, John S. and E. W., assignors of one-half to J. L. Schecher, Los Angeles, Cal. Folding bed. No. 1,273,978; July 30; v. 252; p. 1020.
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Young, Peter M., Chicago, Ill. Swivel and ring. No. 1,271,647; July 9; v. 252; p. 284.
Young, Preston M., Utica, N. Y. Universal joint. No. 1,272,758; July 16; v. 252; p. 623.
Young, Robert G., Bream, England. Signaling apparatus. No. 1,273,979; July 30; v. 252; p. 1020.
Youngren, Oscar A., New York, N. Y. Net and cable cutting attachment for submarine boats. No. 1,272,168; July 9; v. 252; p. 431.
Yttrup, John F. C., Pittsburgh, Pa. Hand-grenade. No. 1,272,759; July 16; v. 252; p. 624.
Zabawa, Michael J., Grand Rapids, Wis. Motor-actuated shovel. No. 1,271,648; July 9; v. 252; p. 285.
Zabriskie, Henry L., Westfield, and G. C. Marx, assignors to Diehl Manufacturing Company, Elizabeth, N. J. Commutator and commutator-bar. No. 1,271,984; July 9; v. 252; p. 379.
Zagora, Joseph, Racine, Wis. Fluid-circulation indicator and distributer. No. 1,274,228; July 30; v. 262; p. 1090.
Zahm, Edward, Buffalo, N. Y. Liquid-dispensing apparatus. No. 1,273,021; July 16; v. 252; p. 697.
Zahrajian, Ghoogas, Syracuse, N. Y. Pressure-gage. No. 1,271,410; July 2; v. 252; p. 183.
Zam, Nicholas, Cleveland, Ohio. Gas-range-lighting appliance. No. 1,271,822; July 9; v. 252; p. 331.
Zeigler, Perry D., Olean, N. Y. Hand-covering. No. 1,271,110; July 2; v. 252; p. 101.
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Zenker, Frederick. (See Horton and Zenker.)
Zerbe, George, Tipsa, Ind. Envelop. No. 1,272,169; July 9; v. 252; p. 431.
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Zimmer, Paul H., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Electromagnetic switch. No. 1,271,001; July 2; v. 252; p. 71.
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Zimmerman, Albert J., Dayton, Ohio, assignor, by mesne assignments, to The Richmond-Standard Manufacturing Company, Richmond, Ind. Weighing-scale. No. 1,271,497; July 2; v. 252; p. 207.
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Zinssmeister, Carl L., Newark, N. J. Fluid seal for stuffing-boxes. No. 1,272,171; July 9; v. 252; p. 431.
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Grether, William, Dayton, Ohio. Portable electric lantern. No. 52,237; July 30; v. 252; p. 1128.
Grote, Walter. (See Adamson, Cecil F., assignor.)
Grothe, Walter, Fremont, Ohio, assignor, by mesne assignments, to National Carbon Company, Inc. Electric-battery anode. No. 52,215; July 23; v. 252; p. 942.
Hammond, Myron B., Bridgeport, Conn. Man's garter. Nos. 52,133–5; July 2; v. 252; p. 223.
Harvey, Frank W., Jr., Chicago, Ill. Pocket-case. No. 52,176; July 16; v. 252; p. 724.
Haupt, Harry, Elmsford, N. Y., assignor to Kimpton, Haupt & Co., New York, N. Y. Pen-rack. No. 52,216; July 23; v. 252; p. 942.
Haynes, Charles R., Naugatuck, Conn., assignor to The Goodyear's Metallic Rubber Shoe Co. Sole. No. 52,217; July 23; v. 252; p. 942.
Heathcote, Edwin C., Brooklyn, N. Y. Emblem, brooch, ring-top, lavalliere, button, or similar article. No. 52,218; July 23; v. 252; p. 942.
Hogan, Michael J., assignor to The Imperial Brass Manufacturing Company, Chicago, Ill. Advertising-tablet. No. 52,136; July 2; v. 252; p. 223.
Holstein, Adolph M., Syracuse, N. Y. Panel for furniture, caskets, and interior and exterior decorations. No. 52,160; July 9; v. 252; p. 483.
Holstein, Adolph M., Syracuse, N. Y. Pilaster for furniture, casket, interior or exterior decoration. No. 52,161; July 9; v. 252; p. 483.
Holstein, Adolph M., Syracuse, N. Y. Border ornament for furniture, casket, interior or exterior decoration. Nos. 52,162–4; July 9; v. 252; pp. 483, 484.
Holstein, Adolph M., Syracuse, N. Y. Corner ornament for furniture, caskets, and interior and exterior decorations. No. 52,165; July 9; v. 252; p. 484.
Holstein, Adolph M., Syracuse, N. Y. Furniture, casket, interior or exterior decoration. No. 52,166; July 9; v. 252; p. 484.
Hoover, Howard E., Chicago, Ill., assignor to The Hoover Suction Sweeper Company, New Berlin, Ohio. Brush for suction-cleaners and the like. No. 52,238; July 30; v. 252; p. 1128.
Hoover Suction Sweeper Company, The. (See Hoover, Howard E., assignor.)
Huben, Gustav A., Chicago, Ill. Rubber heel. No. 52,137; July 2; v. 252; p. 223.
Huber, Alice P., assignor to Felix Meyer, New York, N. Y. Lace. No. 52,138; July 2; v. 252; p. 224.
Humbert, Richard E., Montclair, N. J. Toy head-block. No. 52,239; July 30; v. 252; p. 1128.
Humphrey, Elizabeth, Cincinnati, Ohio. Sewing-cabinet. No. 52,219; July 23; v. 252; p. 942.
Imperial Brass Manufacturing Company, The. (See Hogan, Michael J., assignor.)
Incandescent Supply Company. (See Jankelson, Samuel, assignor.)
Indiana Rubber & Insulated Wire Co. (See Musselman, Alvin J., assignor.)
International Silver Co. (See Kintz, Alfred G., assignor.)
Irwin-Hodson Company. (See Bronner, Frederick H., assignor.)
Ivoryloid Co., The. (See Schaffer, Frank H., assignor.)
Jacot, Louis, Birmingham, England. Wristlet-watch cover. No. 52,220; July 23; v. 252; p. 942.
Jankelson, Samuel, Rockaway Beach, assignor to Incandescent Supply Company, New York, N. Y. Ring for lamp-bowl holders. No. 52,221; July 23; v. 252; p. 943.
Jones, William F., and W. Kellum, Wilmington, N. C. Advertising-cabinet. No. 52,167; July 9; v. 252; p. 484.
Joseph Fahys & Company. (See Kaupmann, Frederick, assignor.)
Karpeles, Maurice J., Providence, R. I. Display-stand. No. 52,240; July 30; v. 252; p. 1128.
Kaupmann, Frederick, Brooklyn, assignor to Joseph Fahys & Company, New York, N. Y. Spoon, fork, or similar article. No. 52,168; July 9; v. 252; p. 485.
Kellum, Woodus. (See Jones and Kellum.)
Kendig, Julian H., Pittsburgh, Pa. Strain-insulator. No. 52,139; July 2; v. 252; p. 224.
Kimpton, Haupt & Co. (See Haupt, Harry, assignor.)
Kintz, Alfred G., Wallingford, assignor to International Silver Co., Meriden, Conn. Spoon, fork, or similar article. No. 52,222; July 23; v. 252; p. 943.
Leff, Jacques H., and R. H. Spira, New York, N. Y. Badge. No. 52,140; July 2; v. 252; p. 224.
Lehman, Max R., Quincy, Ill., assignor to Steiger & Kerr Stove & Foundry Company, San Francisco, Cal. Stove. No. 52,141; July 2; v. 252; p. 224.
Link, Charles W., Los Angeles, Cal. Automobile-top. No. 52,142; July 2; v. 252; p. 224.
Longfellow, Henry W., Boston, Mass. Child's vehicle. No. 52,241; July 30; v. 252; p. 1129.
Macbeth Arc Lamp Company, The. (See Eachus, Iredell, assignor.)
Mancuso, Ralph, Brooklyn, N. Y. Statue-doll. No. 52,242; July 30; v. 252; p. 1129.
Manning, Fowler, assignor to Winchester Repeating Arms Co., New Haven, Conn. Show-case for shoulder-arms. No. 52,223; July 23; v. 252; p. 943.
Meyer, Felix. (See Huber, Alice P., assignor.)
Mountford, Thomas, Newark, N. J. Jewelry-gallery. No. 52,243; July 30; v. 252; p. 1129.
Musselman, Alvin J., Chicago, Ill., assignor to Indiana Rubber & Insulated Wire Co., Jonesboro, Ind. Vehicle-tire. No. 52,224; July 23; v. 252; p. 943.
National Carbon Company. (See Grothe, Walter, assignor.)
Nelson, Eveld L., Minneapolis, Minn. Mirror-pedestal. No. 52,169; July 9; v. 252; p. 485.
Nichols, William B., Delaware City, Del. Photo-frame. No. 52,143; July 2; v. 252; p. 224.
Nunn, James W., Denver, Colo. Pencil-clip. No. 52,144; July 2; v. 252; p. 225.
Orizaroff, Zvetko, Harrisburg, Pa. Picture-holder. No. 52,177; July 16; v. 252; p. 725.
Owen, Oscar L., assignor to Whitin Machine Works, Whitinsville, Mass. Top-roll-saddle stirrup. No. 52,145; July 2; v. 252; p. 225.
Owen, William C., Cleveland, Ohio. Tire-casing. No. 52,170; July 9; v. 252; p. 485.
Paraffine Companies, The. (See Post, Cornelia M., assignor.)
Parsons, Wyckliffe W. (See Read and Parsons.)
Pfons, Frank, Coshocton, Ohio, assignor to American Safety Razor Co., Inc., Brooklyn, N. Y. Display-cabinet. No. 52,225; July 23; v. 252; p. 943.
Phillips, Herbert A., and J. G. Stamm, Cleveland, Ohio. Tire-casing. No. 52,178; July 16; v. 252; p. 725.
Phillips, Herbert A., and J. G. Stamm, Cleveland, Ohio. Flag, banner, pennant, or similar article. No. 52,179; July 16; v. 252; p. 725.
Pike, William A., assignor to Eaton, Crane & Pike Company, Pittsfield, Mass. Display-card. No. 52,226; July 23; v. 252; p. 943.
Post, Cornelia M., Philadelphia, Pa., assignor to The Paraffine Companies, Inc., San Francisco, Cal. Linoleum, oil-cloth, or floor-covering. Nos. 52,180–93; July 16; v. 252; pp. 725–7.
Ramsdell, James W., Highland Park, Mich. Drinking-fountain. No. 52,244; July 30; v. 252; p. 1129.
Read, Frank P., and W. W. Parsons, Chicago, Ill. Combined phonograph-cabinet and hall-clock case. No. 52,194; July 16; v. 252; p. 728.
Redfern, Albert, Plainfield, N. J., assignor to The Stein, Doblin Lace Co. Lace. No. 52,146; July 2; v. 252; p. 225.
Reizenstein, Charles L., Pittsburgh, Pa. Glass plate or similar article. No. 52,171; July 9; v. 252; p. 485.
Rice, Alexander, Montgomery, Ala. Novelty paper hat. Nos. 52,147–9; July 2; v. 252; p. 225.
Richardson, John W., Detroit, Mich. Tire. No. 52,227; July 23; v. 252; p. 944.
Ringel, Charles, New York, N. Y. Doll. No. 52,195; July 16; v. 252; p. 728.
Sanda, Wilma, New York, N. Y. Skirt-trousers. No. 52,245; July 30; v. 252; p. 1130.
Schaffer, Frank H., Providence, R. I., assignor to The Ivoryloid Co., Inc., New York, N. Y. Brooch-pin or similar article of jewelry. No. 52,228; July 23; v. 252; p. 944.
Schweitzer, Ernest J. (See Wagner and Schweitzer.)
Schwinn, Ignaz, Chicago, Ill. Bicycle-frame. No. 52,150; July 2; v. 252; p. 226.
Scrogin, James M., Mare Island, Cal. Memorial pin. No. 52,196; July 16; v. 252; p. 728.
Sears, John S., New York, N. Y. Article of manufacture. No. 52,197; July 16; v. 252; p. 728.
Sonora Phonograph Corporation. (See Wolff, Joseph, assignor.)
Spencer, Charles H., Chicago, Ill. Finger-ring or similar article of jewelry. Nos. 52,229–30; July 23; v. 252; p. 944.
Spira, Robert H. (See Leff and Spira.)
Stamm, John G. (See Phillips and Stamm.)
Star Rubber Company, The. (See Weaver, Orlando L., assignor.)
Stean, Jules H., assignor of one-half to C. Burrage, Worcester, Mass. Cigar-perforator. No. 52,151; July 2; v. 252; p. 226.
Steiger & Kerr Stove & Foundry Company. (See Lehman, Max R., assignor.)
Stein, The. (See Redfern, Albert, assignor.)
Stollwerck, Albert N., Jersey City, N. J. Chocolate cake. No. 52,246; July 30; v. 252; p. 1130.
Susquehanna Silk Mills. (See Bunting, James H., assignor.)
Titus Blatter & Company. (See Coste, Emile, assignor.)
Tuttle & Bailey Mfg. Co. (See Tuttle, Clifford H., assignor.)
Tuttle, Clifford H., Englewood, N. J., assignor to Tuttle & Bailey Mfg. Co., Brooklyn, N. Y. Picture-frame. No. 52,231; July 23; v. 252; p. 944.
Vieira, Antonio, assignor of one-half to A. De Leon, New York, N. Y. Plaque. No. 52,198; July 16; v. 252; p. 728.

Wagner, Robert G., and E. J. Schweitzer, Los Angeles, Cal. Chandelier for a lighting-fixture. No. 52,152; July 2; v. 252; p. 226.
Weaver, Orlando L., assignor to The Star Rubber Company, Akron, Ohio. Tire-casing. No. 52,153; July 2; v. 252; p. 226.
Whitin Machine Works. (See Owen, Oscar L., assignor.)
Wilkinson, Randolph N., Huntington, W. Va. Child's vehicle. No. 52,154; July 2; v. 252; p. 226.
Winchester Repeating Arms Co. (See Manning, Fowler, assignor.)
Wing, Albert E., Cleveland, Ohio. Vehicle-tire. No. 52,232; July 23; v. 252; p. 944.
Wolff, Joseph, Brooklyn, N. Y., assignor to Sonora Phonograph Corporation. Casing for sound-boxes. No. 52,155; July 2; v. 252; p. 226.
Ziegler, Franz F., assignor to Davol Rubber Company, Providence, R. I. Hollow rubber figure toy. Nos. 52,199–200; July 16; v. 252; p. 729.
Zunish, Peter, Jenkins, Ky. Can-opener. No. 52,156; July 2; v. 252; p. 226.

ALPHABETICAL LIST OF REGISTRANTS OF TRADE-MARKS.

Adams, Lloyd, South Brownsville, Pa. Remedy for galls, sores, and cuts in animals. No. 122,121; July 2; v. 252; p. 241.
African Association Limited, Liverpool, England. Palm oil and kernels and cocoa for food purposes. No. 122,251; July 16; v. 252; p. 741.
African Association Limited, Liverpool, England. Certain named oils used as fuel and for illuminating or lubricating purposes. No. 122,252; July 16; v. 252; p. 741.
Aitken, Hugh W., Glasgow, Scotland. Antifriction metals. No. 122,254; July 16; v. 252; p. 741.
Alcemo Manufacturing Company, Newark, N. J. Non-freeze compound applicable for the radiators of automobiles. No. 122,174; July 9; v. 252; p. 499.
Alcemo Manufacturing Company, Newark, N. J. Tire-sealing compound. No. 122,296; July 23; v. 252; p. 957.
Alfa-Celo Corporation, The, Los Angeles, Cal. Malted milk. No. 122,122; July 2; v. 252; p. 241.
Allen, Dan W., Evanston, Ill. Furniture-polish. No. 122,297; July 23; v. 252; p. 957.
Altonaer Margarine-Werke Mohr & Co., G. m. b. H., Altona-Ottensen, Germany. Vegetable food extract. No. 122,253; July 16; v. 252; p. 741.
Aluminum Goods Mfg. Company, Manitowoc, Wis. Aluminum cooking utensils and household goods. No. 122,123; July 2; v. 252; p. 241.
American Agricultural Chemical Company, The, New York, N. Y. Fertilizers. No. 122,363; July 30; v. 252; p. 1139.
American Optical Company, Southbridge, Mass. Certain named measuring and scientific appliances and parts. No. 122,175; July 9; v. 252; p. 499.
American Optical Company, Southbridge, Mass. Ophthalmic mountings and parts thereof. No. 122,176; July 9; v. 252; p. 499.
American Steel Products Co., Macomb, Ill. Certain named cutlery, machinery, and tools and parts thereof. No. 122,255; July 16; v. 252; p. 741.
American Textiles Export Corporation, Jersey City, N. J., and New York, N. Y. Cotton blankets. No. 122,364; July 30; v. 252; p. 1139.
Andover Laxine Water Company, Andover, Ohio. Mineral water. No. 122,365; July 30; v. 252; p. 1139.
Arbuckle Brothers, New York, N. Y., and Chicago, Ill. Tea. No. 122,298; July 23; v. 252; p. 957.
Associated Import & Export Co., Inc., New York, N. Y. Aniline dyes. No. 122,256; July 16; v. 252; p. 741.
Associated Tanners Machinery Co., Salem, Mass. Certain named leather-working machinery. No. 122,124; July 2; v. 252; p. 241.
Autoplano Company, New York, N. Y. Pianos, organs, player pianos and actions, note-sheets. No. 122,257; July 16; v. 252; p. 741.
Baer, Isaac, Meeker, Colo. Butter. No. 122,368; July 30; v. 252; p. 1139.
Banner Cigar Manufacturing Co., The, Detroit, Mich. Cigars. No. 122,180; July 9; v. 252; p. 499.
Barber Milling Company, Minneapolis, Minn. Wheat-flour. No. 122,299; July 23; v. 252; p. 957.
Barnsley & Sons, Geo., Sheffield, England. Certain named cutlery, machinery, and tools and parts thereof. Nos. 122,260–1; July 16; v. 252; p. 741.
Barrett Company, The, New York, N. Y. Sheathing-paper. No. 122,300; July 23; v. 252; p. 957.
Barrow Mfg. Co., New York, N. Y. Ladies' and misses' one and two piece flat underwear. No. 122,177; July 9; v. 252; p. 499.
Baxt, Edward, Philadelphia, Pa. Certain named foods. No. 122,301; July 23; v. 252; p. 957.
Beau-Site Company, The, New York, N. Y. Certain named toilet preparations and bitters for mixing purposes. No. 122,125; July 2; v. 252; p. 241.
Beau-Site Company, The, New York, N. Y. Toilet soap, shaving-soap, and shaving-cream. No. 122,179; July 9; v. 252; p. 499.
Beekman Paper and Card Company, New York, N. Y. Writing and printing papers. No. 122,178; July 9; v. 252; p. 499.
Benjamin Electric Manufacturing Company, Chicago, Ill. Regulating devices for electric lamps. No. 122,181; July 9; v. 252; p. 499.
Benn Lumber Company, Inc., The, Cincinnati, Ohio. Lumber. No. 122,183; July 9; v. 252; p. 499.
Bernstein Manufacturing Company, Philadelphia, Pa. Bedsteads, bed-springs, and mattresses. No. 122,184; July 9; v. 252; p. 499.
Bier, M. D., Joseph, New York, N. Y. Healing prophylactic powder for certain named diseases and conditions. No. 122,367; July 30; v. 252; p. 1139.
Blaskopf & Co., New York, N. Y. Outer suits and dresses. No. 122,182; July 9; v. 252; p. 499.
Bond, Madam Nannie, Bessemer, Ala. Hair-grower. No. 122,126; July 2; v. 252; p. 241.
Boston Confectionery Co., Cambridge, Mass. Candy. No. 122,262; July 16; v. 252; p. 741.
Botacha Ointment Co., Jacksonville, Fla. Ointment for piles, cuts, burns, and eczema. No. 122,127; July 2; v. 252; p. 241.
Burke, Joseph R., Portland, Oreg. Canned salmon. No. 122,128; July 2; v. 252; p. 241.
Burns, Henry H., Battle Creek, Mich. Paper-baler. No. 122,129; July 2; v. 252; p. 241.
Burt H. Winchester, Inc., Newark, N. J. Poultry feed. No. 122,295; July 16; v. 252; p. 742.
Burton Bros. & Co., New York, N. Y. Dyed cotton piece goods. No. 122,263; July 16; v. 252; p. 741.
Bush, Beach & Gent Inc., New York, N. Y. Dyestuffs—viz., dyewood extracts in crystal, paste, and powder form. No. 122,130; July 2; v. 252; p. 241.
C. F. Sauer Co., The, Richmond, Va. Food-flavoring extracts. No. 122,286; July 16; v. 252; p. 742.
Capdau and Breslin, New Orleans, La. Medicine for stomach and bowel disorders. No. 122,371; July 30; v. 252; p. 1139.
Carbon Destroyer Corporation, New York, N. Y. Apparatus for moistening air for use on gas-engines. No. 122,185; July 9; v. 252; p. 499.
Carib Syndicate, Limited, New York, N. Y. Crude and refined petroleum and asphalt. No. 122,186; July 9; v. 252; p. 499.
Caribonum Company, Limited, Leyton, London, England. Carbon-papers, type-writer ribbons, and printing and writing inks. No. 122,187; July 9; v. 252; p. 499.
Carpenter & Company, Los Angeles, Cal. Internal-combustion engine and moisturizers therefor. No. 122,131; July 2; v. 252; p. 241.
Carson, Pirie, Scott & Co., Chicago, Ill. Shell hair-pins. No. 122,188; July 9; v. 252; p. 499.
Carson, Pirie, Scott & Co., Chicago, Ill. Certain named clothing for men and boys. No. 122,189; July 9; v. 252; p. 499.
Celluloid Company, The, Newark, N. J., and New York, N. Y. Paper-knives, penholders, memorandum-tablets. No. 122,264; July 16; v. 252; p. 741.
Celluloid Company, The, Newark, N. J., and New York, N. Y. Certain named articles made of compounds of pyroxylin. No. 122,372; July 30; v. 252; p. 1139.
Celluloid Company, The, Newark, N. J., and New York, N. Y. Pipe-bits and cigar-holders made of pyroxylin compounds. No. 122,373; July 30; v. 252; p. 1139.
Celluloid Company, The, Newark, N. J., and New York, N. Y. Certain named articles made of compounds of pyroxylin. No. 122,374; July 30; v. 252; p. 1139.
Champion Spark Plug Company, Toledo, Ohio. Spark-plug porcelains. No. 122,132; July 2; v. 252; p. 241.
Chapin-Sacks Manufacturing Company, Washington, D. C. Ice-cream. No. 122,133; July 2; v. 252; p. 241.
Chickamauga Fertilizer Works, Atlanta, Ga. Fertilizer. No. 122,190; July 9; v. 252; p. 499.
Christensen, Peter C., West Orange, N. J. Photographic developers. No. 122,304; July 23; v. 252; p. 957.
Cleeland Inshuro Pen Company, Butler, Pa. Fountain-pens. No. 122,307; July 23; v. 252; p. 957.
Coast Fishing Co., Inc., Wilmington, Cal. Canned sardines packed in cotton-seed oils and spiced tomato sauce. No. 122,375; July 30; v. 252; p. 1139.
Cohen, Benjamin M., New York, N. Y. Silk, cotton, and woolen piece goods. No. 122,305; July 23; v. 252; p. 957.
Coles & Company, New York, N. Y. Clothes-baskets. No. 122,376; July 30; v. 252; p. 1139.
Colgate & Co., Jersey City, N. J. Soap for cleaning and preserving leather and imitation-leather goods. No. 122,306; July 23; v. 252; p. 957.
Columbia Fastener Company, Chicago, Ill. Dress-fasteners. No. 122,265; July 16; v. 252; p. 741.

Commercial Shirt Company, New York, N. Y. Dress, negligée, work, and under shirts. No. 122,194; July 9; v. 252; p. 499.
Consolidated Safety Pin Co., Bloomfield, N. J. Safety-pins. Nos. 122,192–3; July 9; v. 252; p. 499.
Coolrite Co., Inc., The, Ithaca, N. Y. Certain named chemicals, medicines, and pharmaceutical preparations. No. 122,377; July 30; v. 252; p. 1139.
Cooper-Bell Varnish Co., Chicago, Ill. Varnishes. No. 122,191; July 9; v. 252; p. 499.
Crystal Soap Company, Milwaukee, Wis. Toilet soaps. No. 122,266; July 16; v. 252; p. 741.
Cullen Brokerage Co., The, Omaha, Nebr. Certain named foods. No. 122,308; July 23; v. 252; p. 957.
Cuno Engineering Corporation, The, Meriden, Conn. Certain named electrical apparatus, machines, and supplies. No. 122,309; July 23; v. 252; p. 957.
Curtis Corporation, The, Bloomington, Cal. Sauce or relish for seasoning foods. No. 122,310; July 23; v. 252; p. 957.
D. De Bernardi & Co., Inc., San Francisco, Cal. Cheese. No. 122,134; July 2; v. 252; p. 241.
Dagg, Derneden Co., Seattle, Wash. Men's dress, negligée, and work shirts. No. 122,195; July 9; v. 252; p. 499.
Delaware Punch Company of Texas, The, San Antonio, Tex. Non-alcoholic maltless beverages sold as soft drinks and extracts and syrups for making the same. No. 122,196; July 9; v. 252; p. 499.
Denninger Garment Manufacturing Company, The, Los Angeles, Cal. Certain named ladies' and children's garments. No. 122,197; July 9; v. 252; p. 499.
District of Columbia Paper Manufacturing Company, Alexandria, Va., and Washington, D. C. Paper. No. 122,267; July 16; v. 252; p. 741.
Dubuc Paper Company, Chicago, Ill. Envelops. No. 122,268; July 16; v. 252; p. 741.
Dubois Watch Case Company, Brooklyn, N. Y. Watches. No. 122,198; July 9; v. 252; p. 499.
E. & Z. Van Raalte, New York, N. Y. Veils. No. 122,400; July 30; v. 252; p. 1140.
E. A. Foy Company, The, Cincinnati, Ohio. Lightning-rods. No. 122,137; July 2; v. 252; p. 241.
E. F. Houghton & Co., Philadelphia, Pa. Oil for use in the softening, strengthening, and dyeing of textiles. No. 122,383; July 30; v. 252; p. 1139.
Earl Fruit Company, Sacramento, Cal. Certain named fresh fruits. No. 122,269; July 16; v. 252; p. 741.
Eastern Tablet Company, Albany, N. Y. Writing-tablets and printing and writing papers. No. 122,199; July 9; v. 252; p. 499.
Eastman Kodak Company, Rochester, N. Y. Photographic paper. No. 122,200; July 9; v. 250; p. 499.
Eaton's Uzon Company Inc., Roanoke, Va. Cleaning compound in the nature of a paste for certain named surfaces. No. 122,135; July 2; v. 252; p. 241.
Electric Appliance Company, Chicago, Ill. Auto oil-soap, cream metal-polish, hand-cleansers. No. 122,270; July 16; v. 252; p. 741.
Electric Rubber Reclaiming Company, The, Barberton, Ohio. Composition soles and heels for shoes and boots. No. 122,201; July 9; v. 252; p. 499.
Ellis, Keturah R., Louisville, Ky. Ointment to be applied to the scalp to promote growth of hair. No. 122,203; July 9; v. 252; p. 500.
Elmer Candy Company, Inc., New Orleans, La. Candy. No. 122,271; July 16; v. 252; p. 741.
Empire Soap Company, New York, N. Y. Soap. No. 122,202; July 9; v. 252; p. 499.
Esteban, Hermanos, Barcelona, Spain. Cotton and linen piece goods. No. 122,378; July 30; v. 252; p. 1139.
Fafnir Bearing Company, The, New Britain, Conn. Certain named cutlery, machinery, and tools, and parts thereof. No. 122,136; July 2; v. 252; p. 241.
Federal Bearings Co. Inc., Fairview, Poughkeepsie, N. Y. Antifriction-bearings. No. 122,204; July 9; v. 252; p. 500.
Ferry, Rollo H., Spokane, Wash. Dental preparation. No. 122,380; July 30; v. 252; p. 1139.
Fertile Company, The, Cleveland, Ohio. Fertilizer. No. 122,205; July 9; v. 252; p. 500.
Foote Mineral Co., Philadelphia, Pa. Lithium, magnesium, strontium, and thorium nitrate. No. 122,138; July 2; v. 252; p. 241.
Forstmann & Huffmann Co., Passaic, N. J. Woolen piece goods. No. 122,382; July 30; v. 252; p. 1139.
Fretz, Gross & Co., Philadelphia, Pa. Umbrellas, parasols, and frames and trimmings thereof. No. 122,381; July 30; v. 252; p. 1139.
Freund, Henry G., Davenport, Iowa. Veterinary medicine. No. 122,311; July 23; v. 252; p. 957.
Fujita, Runosuke, New York, N. Y. Panama hats. No. 122,206; July 9; v. 252; p. 500.
Garza, Pablo G., Monterey, Mexico. Medicine for use in the treatment of epilepsy. No. 122,340; July 23; v. 252; p. 958.
Gawurin, Leon, New York, N. Y. Face-powder. No. 122,139; July 2; v. 252; p. 241.
Gaylord, Charles H., Chicago, Ill. Lime to be used by hand or applied to buffing-wheels in the polishing of metals. No. 122,273; July 16; v. 252; p. 741.
Gempp, Edwin S., St. Louis, Mo. Bread. No. 122,140; July 2; v. 252; p. 241.
Gerhart, Robert L., Lancaster, Pa. Coffee. No. 122,312; July 23; v. 252; p. 957.
Gillen & Boney, Inc., Lincoln, Nebr. Candy. No. 122,313; July 23; v. 252; p. 957.
Ginnetti Manufacturing Company, Washington, D. C. Liquid preparation used in treatment of the hair. No. 122,314; July 23; v. 252; p. 957.
Globe Shirt & Overall Co., Abingdon, Ill. Men's outer coats and coat-dusters. No. 122,141; July 2; v. 252; p. 241.
Globe Steel Company, The, Mansfield, Ohio. Metallic particles in grain, powdered, or pulverized form for stone-working operations. No. 122,207; July 9; v. 252; p. 500.
Goldstein & Co., A., Hoboken, N. J. Canned tomato sauce. No. 122,317; July 23; v. 252; p. 957.
Grand Ledge Milk Co., Detroit, Mich. Evaporated milk. No. 122,272; July 16; v. 252; p. 741.
Green Camera Company, Chicago, Ill. Cameras and tripods, moving-picture projectors and screens therefor. No. 122,208; July 9; v. 252; p. 500.
Gross, Leopold, New York, N. Y. Wheat-flour. No. 122,209; July 9; v. 252; p. 500.
Guano & Raggio, Inc., Philadelphia, Pa. Alimentary pastes, covering all kinds of macaroni. No. 122,158; July 2; v. 252; p. 242.
Guaranteed Remedies Co., The, Elyria, Ohio. Preparation for the treatment of piles. No. 122,318; July 23; v. 252; p. 957.
Hanson, Alfred M., Inkster, N. D. Hay-lifting machines. No. 122,142; July 2; v. 252; p. 241.
Harriet Hubbard Ayer, Inc., New York, N. Y. Certain named chemicals and pharmaceutical preparations for toilet purposes. Nos. 122,258–9; July 16; v. 252; p. 741.
Harris Soap Company, Buffalo, N. Y. Laundry and oil soaps. No. 122,319; July 23; v. 252; p. 957.
Haskelite Manufacturing Corporation, Grand Rapids, Mich. Laminated wood. No. 122,211; July 9; v. 252; p. 500.
Henne, Isabelle, Brooklyn, N. Y. Top lifts for shoe-heels. No. 122,212; July 9; v. 252; p. 500.
Henry Blewett & Son, Inc., Somerville, Mass. Bread. No. 122,302; July 23; v. 252; p. 957.
Henry Glass & Co., New York, N. Y. Cotton piece goods. No. 122,315; July 23; v. 252; p. 957.
Henry Zimmern & Company, Inc., New York, N. Y. Certain named paints and painters' materials. No. 122,362; July 23; v. 252; p. 959.
Hergenrether & Son, Joseph, Chicago, Ill. House-brooms which consist of a fiber brush with wooden tops and wooden handles. No. 122,213; July 9; v. 252; p. 500.
Hinds, Aurelius S., Portland, Me. Face and talcum powder. No. 122,320; July 23; v. 252; p. 957.
Hitt, Thomas G., Seattle, Wash. Perfumes. No. 122,143; July 2; v. 252; p. 241.
Hobbie Bros. Company, Inc., Roanoke, Va. Pianos and player-pianos. No. 122,321; July 23; v. 252; p. 957.
Hobson, Elmer S., New York, N. Y. Automobile lubricating oils and greases. No. 122,214; July 9; v. 252; p. 500.
Hoencke, Gustav C., Houston, Tex. Fluid eye-tonic. No. 122,379; July 30; v. 252; p. 1139.
Holley Company, The, Rochester, N. Y. Food product intended as a substitute for eggs. No. 122,146; July 2; v. 252; p. 241.
Holzderber, Charles P., New York, N. Y. Brewed fermented beverage without alcohol made from hops, barley, and malt. No. 122,215; July 9; v. 252; p. 500.
Improved Liquid Glues Co., Ltd., The, London, England. Liquid glue. No. 122,323; July 23; v. 252; p. 957.
International Drug Company, Wilmington, Del. Toilet soap. No. 122,274; July 16; v. 252; p. 741.
Ireland, Curtis, St. Louis, Mo. Cream-chocolate bars. No. 122,147; July 2; v. 252; p. 241.
J. Chas. Teepe, Inc., New York and Long Island City, N. Y. Certain named house-furnishing woodenware and cabinet-work. No. 122,244; July 9; v. 252; p. 501.
J. and J. Baldwin and Partners, Limited, Halifax, England. Wire brushes for raising a soft warmth-retaining surface on knitted woolen fabrics. No. 122,366; July 30; v. 252; p. 1139.
J. W. Goddard & Sons, Incorporated, New York, N. Y. Cotton piece goods. No. 122,316; July 23; v. 252; p. 957.
Jedell, Helen, Newark, N. J. Automobile-radiator-cap heat or temperature indicating devices. No. 122,275; July 16; v. 252; p. 741.
John Campbell & Co., New York, N. Y. Coal-tar products. Nos. 122,369–70; July 30; v. 252; p. 1139.
John Hoberg Co., The, Green Bay, Wis. Toilet-paper. Nos. 122,144–5; July 2; v. 252; p. 241.
John Hoberg Co., The, Green Bay, Wis. Toilet-paper. No. 122,322; July 23; v. 252; p. 957.
Johnson, W. H., Pine Bluff, Ark. Chemical compound mixed with poultry food as a tonic and to increase egg production. No. 122,148; July 2; v. 252; p. 241.
Jones, Julius R., Richmond, Va. Scalp preparation. No. 122,324; July 23; v. 252; p. 957.
Joseph Ross & Company, Irvington, N. J. Manicure and toilet tools, hand-forceps, and surgical scissors. No. 122,393; July 30; v. 252; p. 1140.
Kelley, Ralph H., Brooklyn, N. Y. Salve used in the treatment of boils and kindred troubles. No. 122,216; July 9; v. 252; p. 500.

Kellogg, John L., Battle Creek, Mich. Food known as toasted corn flakes. No. 122,149; July 2; v. 252; p. 241.
Kenmore Wall Board Company, The, Buffalo, N. Y. Wall-board and building-paper. No. 122,217; July 9; v. 252; p. 500.
Kerosene Burning Carburetor Company, Detroit, Mich. Manifolds, mechanical primers, carbureters, and parts thereof. No. 122,325; July 23; v. 252; p. 957.
Keystone Leather Goods Co., New York, N. Y. Certain named leather goods. No. 122,218; July 9; v. 252; p. 500.
Lange Canning Co., Eau Claire, Wis. Canned vegetables and hominy. No. 122,276; July 16; v. 252; p. 741.
Langerman, Joseph, Chicago, Ill. Preparation for the treatment of gonorrhea and gleet. No. 122,327; July 23; v. 252; p. 958.
Lawson Manufacturing Company, Chicago, Ill. Hinges, door-guards, and lavatory-trimmings. No. 122,150; July 2; v. 252; p. 241.
Levy Mattress Company, Inc., New Orleans, La. Mattresses. No. 122,219; July 9; v. 252; p. 500.
Lewis, Mary L., Americus, Ga. Hair-pomade. No. 122,384; July 30; v. 252; p. 1139.
Linden Valley Chocolate Co., Trenton, N. J. Molasses and chocolate candy. No. 122,326; July 23; v. 252; p. 958.
Long Furniture Company, The, Hanover, Pa. Certain named furniture. No. 122,221; July 9; v. 252; p. 500.
Loose-Wiles Biscuit Company, Kansas City, Mo. Crackers. No. 122,328; July 23; v. 252; p. 958.
Los Angeles Olive Growers Association, Los Angeles, Cal. Cooked and uncooked canned fruit, bottled and canned pickles and vegetables. No. 122,329; July 23; v. 252; p. 958.
Lyko Medicine Company, Kansas City, Mo. General tonic. No. 122,330; July 23; v. 252; p. 958.
Mable, Todd & Co., New York, N. Y. Fountain-pens. No. 122,278; July 16; v. 252; p. 742.
MacDonell Chow Corp., New York, N. Y. Dried beans. No. 122,279; July 16; v. 252; p. 742.
Macdonald, James, New York, N. Y. Toilet preparations and cosmetics. No. 122,385; July 30; v. 252; p. 1139.
Manuel Brothers Company, Minneapolis, Minn., and Grand View, Sunnyside and Zillah, Wash. Fresh apples in boxes. No. 122,151; July 2; v. 252; p. 242.
Martin, M. B., Spokane, Wash. Cigars, smoking-tobacco, chewing-tobacco, and cigarettes. No. 122,222; July 9; v. 252; p. 500.
Max Huncke Chemical Co., The, Brooklyn, N. Y. Embalming fluids. No. 122,223; July 9; v. 252; p. 500.
McKelvy, Eleanor C., Atchison, Kans. Floor-polish. No. 122,277; July 16; v. 252; p. 741.
Mentho-Listine Chemical Co., Houston, Tex. Mouth-wash and tooth-paste. No. 122,386; July 30; v. 252; p. 1139.
Micca, Domenico L., West Hoboken, N. J. Salve for treatment of burns. No. 122,152; July 2; v. 252; p. 242.
Mid-West Manufacturing Company, Sioux Falls, S. D. Automobile dolly-jacks. No. 122,331; July 23; v. 252; p. 958.
Mills, Felix, Haskell, Okla. Blood-tonic. No. 122,332; July 23; v. 252; p. 958.
Milton Bradley Co., Springfield, Mass. Card games. No. 122,303; July 23; v. 252; p. 957.
Mittelstaedt, Emma T., New York, N. Y. Hair-nets. Nos. 122,281–2; July 16; v. 252; p. 742.
Montauk Paint Manufacturing Company, Brooklyn, N. Y. Prepared gold, aluminum, and enamel paints, stovepipe-enamels, and screen-varnishes. No. 122,333; July 23; v. 252; p. 958.
Moorhead Knitting Company, Harrisburg, Pa. Hosiery. No. 122,224; July 9; v. 252; p. 500.
Morell Manufacturing Company, The, Denver, Colo. Soaps in paste, powder, cake, or liquid form. No. 122,280; July 16; v. 252; p. 742.
Morey Bros., Evanston, Ill. Washing-powder. No. 122,283; July 16; v. 252; p. 742.
Myers, David C., Hughesville, Pa. Salves for treating certain named affections of man and horse. No. 122,334; July 23; v. 252; p. 958.
National Fireworks Distributing Co., The, Boston, Mass. Toy torpedo consisting of a mass of pyrotechnic composition. No. 122,225; July 9; v. 252; p. 500.
Nereim, Sommer & Milkes, Inc., Chicago, Ill. Silk piece goods. No. 122,387; July 30; v. 252; p. 1139.
North & Judd M'f'g Co., New Britain, Conn. Roller-buckles. No. 122,335; July 23; v. 252; p. 958.
Northern Chemical Co. of Michigan, Detroit, Mich. Soot destroyer and remover. No. 122,388; July 30; v. 252; p. 1139.
Northwestern Chemical Co., The, Marietta, Ohio. Monthly publication. No. 122,153; July 2; v. 252; p. 242.
Occidental Medicine Co., Arecibo, Porto Rico. Uterine and anemia tonics, eczema, skin, and ulcer ointment. No. 122,337; July 23; v. 252; p. 958.
Oklahoma City Mill & Elevator Co., Oklahoma, Okla. Wheat-flour. No. 122,389; July 30; v. 252; p. 1139.
Owl Supply Company, Boston, Mass. Paper-clips. No. 122,336; July 23; v. 252; p. 958.
P. & M. Co., The, Chicago, Ill. Metal rail-anchors, anti-creepers, tie-plates, splice-bars, guard-rail clamps, and rail-bond wire-holders. No. 122,226; July 9; v. 252; p. 500.
Pacific Mills, Lawrence and Boston, Mass. Cotton piece goods. No. 122,390; July 30; v. 252; p. 1139.
Pacific Mills, Lawrence and Boston Mass. Cotton and woolen piece goods. No. 122,391; July 30; v. 252; p. 1140.
Pacific Pea Packing Company, Eau Claire, Wis., and Oakdale, Cal. Canned peas and beans. No. 122,154; July 2; v. 252; p. 242.
Pape, Harry W., Cincinnati, Ohio. Purgative beverage. No. 122,227; July 9; v. 252; p. 500.
Paralta Plays, Inc., New York, N. Y. Motion-picture films. No. 122,228; July 9; v. 252; p. 500.
Park & Pollard Company, The, Boston, Mass. Chick feed. No. 122,341; July 23; v. 252; p. 958.
Parsons Trading Company, New York, N. Y. Roll-paper cutters and holders. No. 122,155; July 2; v. 252; p. 242.
Parsons Trading Company, New York, N. Y. Certain named inks and inking materials. No. 122,229; July 9; v. 252; p. 500.
Pathé Exchange, Inc., New York, N. Y. Cinematograph-films. No. 122,230; July 9; v. 252; p. 500.
Patten, William, Rhinebeck, N. Y. Fresh eggs. No. 122,284; July 16; v. 252; p. 742.
Peckham, John H., North Attleboro, Mass. Certain named jewelry and precious-metal ware. No. 122,231; July 9; v. 252; p. 500.
Peppas, Vasili, Braddock, Pa. Preparation for rheumatism. No. 122,356; July 23; v. 252; p. 958.
Perkins Glue Company, Lansdale, Pa. Starch-glue material. No. 122,338; July 23; v. 252; p. 958.
Petroleum Products Co., San Francisco, Cal. Lubricating-oil and rust-preventive. No. 122,339; July 23; v. 252; p. 958.
Pheiffier, Ellen W., Parkersburg, W. Va. Hair-tonic. No. 122,342; July 23; v. 252; p. 958.
Pierce Oil Corporation, New York, N. Y., and St. Louis, Mo. Petroleum products consisting of gasolene, kerosene, lubricating-oils, lubricating-grease, and paraffin-wax. No. 122,232; July 9; v. 252; p. 500.
Pierman, Alexander N., Newark N. J. Electrically-operated signal-horns. No. 122,156; July 2; v. 252; p. 242.
Pike Manufacturing Company, Pike and Littleton, N. H.; Evansville, Vt.; Orleans, Ind.; Hot Springs, Ark., and New York, N. Y. Razor-strops. No. 122,233; July 9; v. 252; p. 501.
Porter, Thomas A., La Fayette, La. Preparation for dyspepsia. No. 122,234; July 9; v. 252; p. 501.
Pullclean Manufacturing Co., Inc., New York, N. Y. Towel-cabinets. No. 122,392; July 30; v. 252; p. 1140.
Puri-tis Chemical Co., Detroit, Mich. Hair-tonic. No. 122,157; July 2; v. 252; p. 242.
Rea-Patterson Milling Company, The, Coffeyville, Kans. Wheat-flour. No. 122,397; July 30; v. 252; p. 1140.
Remiller Co., The, New York, N. Y. Liquid, olive-oil, toilet, and violet soaps, shaving-cream. No. 122,159; July 2; v. 252; p. 242.
Robeson Cutlery Company, The, Rochester, N. Y. Pocket-knives. No. 122,160; July 2; v. 252; p. 242.
Rolling File Tool Company, Seattle, Wash. Metal-cutting tools used in metal-working machinery, abrading-machines, &c. No. 122,343; July 23; v. 252; p. 958.
Rosenbloom, Benjamin L., Wheeling, W. Va. Liquid preparation for the preservation of the leather in boots and shoes. No. 122,344; July 23; v. 252; p. 958.
Royal Phonograph Company, Chicago, Ill. Phonographs. No. 122,285; July 16; v. 252; p. 742.
S. Liebmann's Sons, Inc., Brooklyn, N. Y. Non-intoxicating beverage brewed from malt, hops, and cereals. No. 122,220; July 9; v. 252; p. 500.
Saal Brothers, New York, N. Y. Butter and eggs. No. 122,394; July 30; v. 252; p. 1140.
Savannah Sugar Refining Corporation, Savannah, Ga. Sugar. No. 122,345; July 23; v. 252; p. 958.
Schinko, John M., Des Moines, Iowa. Hair-tonic. No. 122,235; July 9; v. 252; p. 501.
Schuylkill Silk Mills, Reading, Pa. Undergarment for women, comprising a knit silk knickerbocker. No. 122,236; July 9; v. 252; p. 501.
Seibert Mfg. Company, Camden, N. J. Detergent to be used as an aid to soap for washing purposes. No. 122,287; July 16; v. 252; p. 742.
Shriver, Morris C., Pittsburgh, Pa. Thermometers. No. 122,237; July 9; v. 252; p. 501.
Sikes, Eugene W., Savannah, Ga. Medicine to relieve hog-cholera. No. 122,238; July 9; v. 252; p. 501.
Silver Manufacturing Company, The, Salem, Ohio. Metal-working drill-presses. No. 122,161; July 2; v. 252; p. 242.
Silverberg Import Co., Inc., New York, N. Y. Veils and hair-nets. No. 122,395; July 30; v. 252; p. 1140.
Skibo Confectionery Co., New York, N. Y. Candy. No. 122,347; July 23; v. 252; p. 958.
Skinner Mfg. Co., Omaha, Nebr. Prepared food composed of corn and wheat flours similar to cut spaghetti. No. 122,348; July 23; v. 252; p. 958.
Sladden, Sidney, New York, N. Y. Bank-stationery—viz., Pass-books, ledger and signature cards. No. 122,162; July 2; v. 252; p. 242.
Smith, Allen, Jr., Camp Lewis, American Lake, near Tacoma, Wash. Hat-straps. No. 122,346; July 23; v. 252; p. 958.
Smith, Clarence R., Philadelphia, Pa. Tobacco cigarettes. No. 122,239; July 9; v. 252; p. 501.

Smith, Kline & French Co., Philadelphia, Pa. Insecticide. No. 122,398; July 30; v. 252; p. 1140.
Société Générale des Cirages Francais, Paris, France. Boot and shoe blacking. No. 122,163; July 2; v. 252; p. 242.
Southern Oil & Ink Company, Savannah, Ga.; Nashville, Tenn., and New York, N. Y. Certain named chemicals, medicines, and pharmaceutical preparations. No. 122,240; July 9; v. 252; p. 501.
Standard Oil Company, Bayonne, N. J. Certain named oils and greases. No. 122,349; July 23; v. 252; p. 958.
Standard Silk Dyeing Company, Paterson, N. J. Piece-dyed and piece dyed and finished silks and silk and cotton goods. No. 122,350; July 23; v. 252; p. 958.
Standard Varnish Works, New York, N. Y. Varnishes, stains, enamels, japans, driers, dry and ready-mixed paints. No. 122,241; July 9; v. 252; p. 501.
Star Chemical Company, Philadelphia, Pa. Printing-roller wash and preservative. No. 122,164; July 2; v. 252; p. 242.
Star Oil Company, The, Chicago, Ill. Lubricating-oil. Nos. 122,288–9; July 16; v. 252; p. 742.
Staten Island Chemical Corporation, The, Paterson, N. J., and New York, N. Y. Chemical compounds suitable for the softening of water. No. 122,242; July 9; v. 252; p. 501.
Steeleville Milling Company, Steeleville, Ill. Self-rising wheat-flour. No. 122,396; July 30; v. 252; p. 1140.
Stiles-Pellens Coffee Co., Cincinnati, Ohio. Coffee. No. 122,351; July 23; v. 252; p. 958.
Studer, Bernard E., Los Angeles, Cal. Remedy for nervous condtions due to the monthly periods or change of life. No. 122,165; July 2; v. 252; p. 242.
Success Seed Grader Company, Spokane, Wash. Seed-graders. No. 122,243; July 9; v. 252; p. 501.
Swift and Company, Chicago, Ill. Poultry feed. No. 122,290; July 16; v. 252; p. 742.
Swift & Company, Chicago, Ill. Oleomargarin. Nos. 122,353–4; July 23; v. 252; p. 958.
Symons Bros. & Co., Saginaw, Mich. Coffee. No. 122,352; July 23; v. 252; p. 958.
Terzich, John M., Sutter Creek, Cal. Electric switches. No. 122,245; July 9; v. 252; p. 501.
Thames Drug Company, Beaumont, Tex. Chemical ant-exterminator. No. 122,246; July 9; v. 252; p. 501.
Thomas, Edwin T., Chicago, Ill. Motor and baby caps. No. 122,166; July 2; v. 252; p. 242.
Thomas Harper & Sons Ltd., Redditch and London, England. Hand sewing-machines. No. 122,210; July 9; v. 252; p. 500.
Titus, Helena J., New York, N. Y. Certain named pharmaceutical preparations for toilet purposes. No. 122,399; July 30; v. 252; p. 1140.
Troy Chemical Company, Binghamton, N. Y. Cattle and stock medicine and tonic. No. 122,167; July 2; v. 252; p. 242.
Union Pacific Tea Company, New York, N. Y. Certain named foods. No. 122,355; July 23; v. 252; p. 958.
Union Paper and Twine Company, The, Cleveland, Ohio. Wrapping-paper. No. 122,291; July 16; v. 252; p. 742.
Union Paper and Twine Company, Cleveland, Ohio. Toilet-paper. No. 122,292; July 16; v. 252; p. 742.
Vick Chemical Co., The, near Greensboro, N. C. Medicinal salve for use by external treatment and internal vapors. No. 122,168; July 2; v. 252; p. 242.
Vineland Preserving Company, Jersey City, N. J. Alimentary paste products. No. 122,357; July 23; v. 252; p. 958.
Waddington Condensed Milk Co. Inc., Waddington, N. Y. Condensed milk. No. 122,358; July 23; v. 252; p. 958.
Wahl Adding Machine Company, Chicago, Ill. Fountain-pens, pen-points for same, magazine lead-pencils, and the holders and leads constituting same. No. 122,401; July 30; v. 252; p. 1140.
Walworth Manufacturing Company, Boston, Mass. Steam-fittings of all kinds. No. 122,169; July 2; v. 252; p. 242.
Weinthrop Company, The, Chicago, Ill. Certain games. No. 122,359; July 23; v. 252; p. 959.
Wendell, Mark T., Boston, Mass. Tea. Nos. 122,170–1; July 2; v. 252; p. 242.
Western Electric Company Incorporated, New York, N. Y. Friction-tape for insulation purposes. No. 122,360; July 23; v. 252; p. 959.
Western Oil Refining Company, Indianapolis, Ind. Gasolene. No. 122,247; July 9; v. 252; p. 501.
White Bros. & Crum Co., Lewiston, Idaho, and Yakima, Wash. Fresh apples. No. 122,361; July 23; v. 252; p. 959.
White Lock Company, Chicago, Ill. Wiper devices for wind-shields, windows, and the like. No. 122,248; July 9; v. 252; p. 501.
White Sewing Machine Company, Cleveland, Ohio. Sewing-machines. No. 122,249; July 9; v. 252; p. 501.
Whitemore Manufacturing Co., Galva, Ill. Grain-elevator spouts, sectional grain-elevator spouts, grain-elevator spout sections, and parts of grain-elevator spouts. No. 122,250; July 9; v. 252; p. 501.
Wilkey Laboratories, Chicago, Ill. Liquid for cleaning and polishing colored leathers. Nos. 122,293–4; July 16; v. 252; p. 742.
Winckler, George, New York, N. Y. Tooth, nail, hair, clothes, &c., brushes. No. 122,402; July 30; v. 252; p. 1140.
Witherspoon, Thomas S., Denver, Colo. Carbon-eliminator. No. 122,403; July 30; v. 252; p. 1140.
Woodward-Williams Co. Inc., Rochester, N. Y. Razor-blade stroppers. No. 122,172; July 2; v. 252; p. 242.
Workman Packing Co., San Francisco, Cal. Canned goods. No. 122,173; July 2; v. 252; p. 242.
Young & Griffin Coffee Co., Inc., New York, N. Y. Coffee. No. 122,404; July 30; v. 252; p. 1140.
Zolper, William, Wilmington, Del. Lung-testing toys. No. 122,405; July 30; v. 252; p. 1140.

ALPHABETICAL LIST OF REGISTRANTS OF LABELS.

A. Goodman & Sons, Inc., New York, N. Y. "Berliner Tea Matzoths." (For Matzoths.) No. 20,713; July 2; v. 252; p. 243.
Beckman Company, The, Cleveland, Ohio. "Beckman Bed Blankets." (For Bed-Blankets.) No. 20,708; July 2; v. 252; p. 243.
Bristow & McDonald, Butte, Mont. "World's Wonder Polish." (For a Polish.) No. 20,709; July 2; v. 252; p. 243.
C. F. Sauer Co., The, Richmond, Va. "Sauer's." (For Flavoring Extracts.) No. 20,724; July 2; v. 252; p. 243.
California Fruit Exchange, Sacramento, Cal. "Lock Brand." (For Crates Containing Fresh Grapes.) No. 20,737; July 30; v. 252; p. 1141.
Centennial Mill Co., Memphis, Tenn. "Loyalty." (For Flour.) No. 20,731; July 9; v. 252; p. 502.
Clover Manufacturing Co., Norwalk, Conn. "Clover Compound." (For Abrasive Materials.) No. 20,738; July 30; v. 252; p. 1141.
Creamette Co., The, Minneapolis, Minn. "Creamette Cereals." (For Cereal Breakfast Food.) No. 20,739; July 30; v. 252; p. 1141.
Davis & Geck, Inc., Brooklyn, N. Y. "Trench Tubes." (For Trench-Tubes.) No. 20,711; July 2; v. 252; p. 243.
Duncan, William S., Springfield, Mass. "Automoonshine." (For Polish.) No. 20,740; July 30; v. 252; p. 1141.
Dunham, James A., Brooklyn, N. Y. "No Blow 'Atherton' Quality Veil." (For Veils.) No. 20,712; July 2; v. 252; p. 243.
E. I. Horsman Co., New York, N. Y. "Horsman's Boy Magician Outfit." (For Magician Outfits or Magic Sets.) No. 20,745; July 30; v. 252; p. 1141.
Fairview Chemical Co., Fairview, Mont. "A Sur Shot." (For a Bot and Worm Remover.) No. 20,741; July 30; v. 252; p. 1141.
Finkselman, George A., Chicago, Ill. "Antiseptic George's Medicated Cones." (For Antiseptic Suppositories.) No. 20,734; July 9; v. 252; p. 502.
Fischer Drug Co., Savannah, Ga. "Hicks Seminole Liniment." (For a Liniment.) No. 20,742; July 30; v. 252; p. 1141.
Formusa, V., Chicago, Ill. "V. Formusa." (For Alimentary Paste.) No. 20,743; July 30; v. 252; p. 1141.
George Borgfeldt & Co., New York, N. Y. "Active Blocks." (For Toy Building-Blocks.) No. 20,730; July 9; v. 252; p. 502.
Harter Candy Co., The, Toledo, Ohio. "Sweetheart Kisses." (For Kisses.) No. 20,714; July 2; v. 252; p. 243.
Honore, Jack, Princeton, N. J. "Oleaqua." (For Hair-Tonic.) No. 20,744; July 30; v. 252; p. 1141.
John H. Wilkins Company, Washington, D. C. "A Perfect Blend Wilkins Coffee." (For Coffee.) No. 20,727; July 2; v. 252; p. 243.
Johnston Fruit Co., Santa Barbara, Cal. "Pacific." (For Lemons.) No. 20,715; July 2; v. 252; p. 243.
Korn, Oscar, Detroit, Mich. "Cool-Flow." (For Non-Alcoholic Beverages.) No. 20,746; July 30; v. 252; p. 1141.
Krank, Alfred J., St. Paul, Minn. "Krank's Lemon Cleansing Cream." (For Cold-Cream and Cleansing-Cream.) No. 20,716; July 2; v. 252; p. 243.
Krank, Alfred J., St. Paul, Minn. "Krank's Shoe Cream." (For a Preparation for Polishing and Preserving All Kinds of Leather.) No. 20,717; July 2; v. 252; p. 243.
McQuay-Norris Mfg. Co., St. Louis, Mo. "McQuay-Norris Superoyl Ring." (For Rings.) No. 20,749; July 30; v. 252; p. 1141.
Merton Dairy Products Co., Merton, Wis. "Tea Rose." (For Condensed Milk.) No. 20,747; July 30; v. 252; p. 1141.

Oriental Silk Printing Company, New York, N. Y. "Authentic Designs." (For Silk and Cotton Samplers.) No. 20,718; July 2; v. 252; p. 243.

Oriental Silk Printing Company, New York, N. Y. "Authentic Designs." (For Silk and Cotton Knitting-Bags.) No. 20,719; July 2; v. 252; p. 243.

Ozene Company, Oklahoma, Okla. "Ozene." (For a Hair-Tonic and Dandruff Remedy.) No. 20,720; July 2; v. 252; p. 243.

Peoples Brewing Co., The, Terre Haute, Ind. "Celto." (For Non-Intoxicating Beverages.) No. 20,721; July 2; v. 252; p. 243.

Purity Cream Cheese Co., The, Cleveland, Ohio. "Edelweiss." (For Cheese.) No. 20,748; July 30; v. 252; p. 1141.

Remue Remedies Company, The, Denver, Colo. "Remue." (For a Proprietary Preparation.) No. 20,722; July 2; v. 252; p. 243.

Riley-Schubert-Grossman Co., The, Chicago, Ill. "America's Guide to Economy." (For Catalogues.) No. 20,750; July 30; v. 252; p. 1141.

Rosenfeld, Joseph, New York, N. Y. "Over The Top." (For Chocolates.) No. 20,723; July 2; v. 252; p. 243.

Schoenfeld, Leo E., Chicago, Ill. "Pall Mall Olive Oil." (For Pure Olive-Oil.) No. 20,735; July 9; v. 252; p. 502.

Simon Ascher & Co., Inc., New York, N. Y. "Ascher Knit Goods, with the Figure of the Lamb." (For Knit Goods.) No. 20,729; July 9; v. 252; p. 502.

Snap-Fastener Sales Co. Corp., New York, N. Y. "The Liberty." (For Snap-Fasteners.) No. 20,751; July 30; v. 252; p. 1141.

Stafford Packing Co., The, Wilmington, Cal. "De Luxe." (For Canned Sardines.) No. 20,752; July 30; v. 252; p. 1141.

Swayze, Samuel M., New York, N. Y. "Over The Top Into Berlin." (For Games.) No. 20,725; July 2; v. 252; p. 243.

Thomas A. Edison, Inc., West Orange, N. J. "The New Edison 'The Phonograph with a Soul.'" (For Phonographs.) No. 20,732; July 9; v. 252; p. 502.

Thoro Corporation, The, Chicago, Ill. "Thoro." (For Powdered Skin-Cleanser.) No. 20,736; July 9; v. 252; p. 502.

Tri-State Cigar M'f'g. Co., The, New Brunswick, N. J. "Idyll." (For Cigars.) No. 20,726; July 2; v. 252; p. 243.

W. D. Carpenter Co., Syracuse, N. Y. "No-Fly." (For a Fly-Spray.) No. 20,710; July 2; v. 252; p. 243.

Zlattner, David, Brooklyn, N. Y. "Pauline Garcia." (For Cigars.) No. 20,728; July 2; v. 252; p. 243.

ALPHABETICAL LIST OF REGISTRANTS OF PRINTS.

Connor, Albert W., Cincinnati, Ohio. "The 'Casco' System for Replacing Motor Boat Tops." (For Motor-Boat Tops.) No. 4,911; July 2; v. 252; p. 243.

Crane, James C., New York, N. Y. "Can't Start too Young." (For a Toilet Cream.) No. 4,912; July 2; v. 252; p. 243.

Detmer Woolen Co., New York, N. Y. "Beware." (For Detmer Woolens.) No. 4,913; July 2; v. 252; p. 243.

Express Spark Plug Co., Washington, D. C. "Be good to your Motor." (For Spark-Plugs.) No. 4,917; July 30; v. 252; p. 1141.

Kaufmann & Strauss Company, New York, N. Y. "Try One of Our Cigars—The Best Smoke." (For Cigars.) No. 4,918; July 30; v. 252; p. 1141.

Ross Manufacturing Company, Kansas City, Mo. "Plumbers' Auto Repair Kit." (For Kits Containing Plumbers' Supplies.) No. 4,914; July 2; v. 252; p. 243.

W. L. Douglas Shoe Co., Brockton and Boston, Mass.; Portland, Me.; New York and Buffalo, N. Y.; Denver, Colo., and Philadelphia, Pa. "Depositing all of his first month's earnings in the bank." (For Shoes.) No. 4,916; July 30; v. 252; p. 1141.

Williams Patent Crusher & Pulverizer Co., St. Louis, Mo. "Latest Metal and Gravel Katcher, the Greatest and Only Fire Preventor." (For Gravel-Catchers.) No. 4,915; July 9; v. 252; p. 502.

DISCLAIMER.

Valerius, Theodore L., Fort Atkinson, Wis.; disclaimer filed by assignee, The Creamery Package Manufacturing Company. Pasteurizer and ripener. No. 1,232,128; disclaimer filed July 5; v. 252; p. 249.

ALPHABETICAL LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED DURING THE MONTH OF JULY, 1918.

[Abbreviations: "v."—Official Gazette.]

Abdominal support. C. Munter. No. 1,271,746; July 9; v. 252; p. 312.

Abdominal support, Pneumatic. R. S. Carling. No. No. 1,272,329; July 9; v. 252; p. 476.

Abrasive tool. L. Ramson. No. 1,273,184; July 23; v. 252; p. 767.

Account system. C. K. Rainey. No. 1,271,080; July 2; v. 252; p. 92.

Account-tray. W. H. Hanna. No. 1,272,699; July 16; v. 252; p. 607.

Accumulators from a variable-speed dynamo-electric machine, Charging of. J. G. P. Thomas. No. 1,272,148; July 9; v. 252; p. 426.

Acetylene-generators, Carbid-feed for. J. O. Bewan. No. 1,271,420; July 2; v. 252; p. 186.

Acoustic device. M. C. Hopkins. No. 1,271,529; July 2; v. 252; p. 216.

Adding-machine. H. Landsiedel. No. 1,270,845; July 2; v. 252; p. 25.

Adding-machine. J. Magnus. No. 1,270,855; July 2; v. 252; p. 29.

Adding-machine. J. Raber. No. 1,270,868; July 2; v. 252; p. 33.

Adding-machine. F. C. Rinsche. No. 1,270,870; July 2; v. 252; p. 33.

Adding or like machines, Selecting-bar for. B. P. Hayes. No. 1,271,466; July 2; v. 252; p. 198.

Addressing-machine. G. J. Evans. No. 1,271,687; July 9; v. 252; p. 295.

Addressing-machine, Hand. J. S. Duncan. No. 1,274,350; July 30; v. 252; p. 1122.

Addressing-machine, Stencil. J. S. Duncan and U. G. Lee. No. 1,272,926; July 16; v. 252; p. 672.

Adjustable chair. R. N. Gage. No. 1,271,561; July 9; v. 252; p. 260.

Adjustable chair. J. F. Walton. No. 1,271,635; July 9; v. 252; p. 280.

Adjustable chair. J. F. Walton. No. 1,271,636; July 9; v. 252; p. 281.

Adjustable jack. A. D. Goodwin. No. 1,271,507; July 2; v. 252; p. 210.

Advertising device. W. H. Babcock. No. 1,272,184; July 9; v. 252; p. 435.

Advertising display-card. C. S. Netzorg. No. 1,272,504; July 16; v. 252; p. 550.

Aerial mine. R. J. Daly. No. 1,272,333; July 9; v. 252; p. 477.

Aero-anglemeter. T. Roland. No. 1,274,833; July 30; v. 252; p. 1117.

Aeroplane. L. W. Erway. No. 1,273,166; July 23; v. 252; p. 762.

Aeroplane. H. J. Hogan. No. 1,272,805; July 16; v. 252; p. 637.

Aeroplane. J. G. Recuero. No. 1,272,712; July 16; v. 252; p. 611.

Aeroplane-protector. N. Hawrylasz. No. 1,270,945; July 2; v. 252; p. 54.

Aeroplane-wings, Assembly-form for. J. P. Tarbox. No. 1,271,386; July 2; v. 252; p. 177.

Agricultural implement. A. Grueneick. No. 1,271,702; July 9; v. 252; p. 299.

Agricultural implement. G. W. Jenkins. No. 1,273,496; July 23; v. 252; p. 850.

Agricultural implement. J. S. Lyle. No. 1,273,251; July 23; v. 252; p. 784.

Agricultural implement. J. E. McLaughlin and D. Bordeleau. No. 1,270,852; July 2; v. 252; p. 28.

Agricultural machine. L. M. Ward. No. 1,273,205; July 23; v. 252; p. 773.

Air and liquid supplying device. F. W. Collins. No. 1,272,379; July 16; v. 252; p. 517.

Air-brake mechanism. D. J. Franklin. No. 1,274,156; July 30; v. 252; p. 1069.

Air-brake system. G. J. Pilger. No. 1,274,193; July 30; v. 252; p. 1080.

Air brakes, Repeating-accelerator for compressed-. J. de Lipkowski. No. 1,274,290; July 30; v. 252; p. 1106.

Air-cleaner and cleaning air. O. Kutsche. No. 1,274,058; July 30; p. 252; p. 1041.

Air-compressor. C. L. Braley. No. 1,272,611; July 16; v. 252; p. 581.

Air-compressor. L. L. Foster. No. 1,272,651; July 16; v. 252; p. 594.

Air-conduits, Valve-controlled connector for. F. B. Charroin. (Reissue.) No. 14,494; July 23; v. 252; p. 930.

Air-gage device. G. H. Erich and D. S. Milne. No. 1,273,165; July 23; v. 252; p. 762.

Air-intake, Auxiliary. J. W. Fudge. No. 1,272,414; July 16; v. 252; p. 525.

Air-intake regulator. E. J. Price. No. 1,271,359; July 2; v. 252; p. 170.

Air-moistening device. D. J. Fox. No. 1,271,306; July 2; v. 252; p. 156.

Air or the like, Apparatus for cooling, humidifying, and filtering. H. F. Brown. No. 1,271,271; July 2; v. 252; p. 147.

Air-port closure. E. H. Ellison. No. 1,274,151; July 30; v. 252; p. 1068.

Air-pumper check. R. A. Gally. No. 1,271,562; July 9; v. 252; p. 260.

Air-washer. D. W. Hastings. No. 1,272,434; July 16; v. 252; p. 531.

Air with atomized liquids, Apparatus for charging compressed. W. E. Kimber. No. 1,273,501; July 23; v. 252; p. 851.

Aircraft. F. W. Gore. No. 1,272,797; July 16; v. 252; p. 634.

Aircraft. R. A. Higgins. No. 1,271,896; July 9; v. 252; p. 352.

Aircraft construction. R. Brunson. No. 1,272,373; July 16; v. 252; p. 515.

Aircraft for mechanical flight and automatic soaring. T. O. Perry. No. 1,272,846; July 16; v. 252; p. 649.

Aircraft-launching mechanism. G. L. Cabot. No. 1,272,211; July 9; v. 252; p. 442.

Airplane. L. Kuicsar. No. 1,271,480; July 2; v. 252; p. 202.

Airship. G. M. Cook. No. 1,273,827; July 30; v. 252; p. 976.

Airship. G. E. Richmond. No. 1,270,971; July 2; v. 252; p. 62.

Airships, Flight retarder or brake for. J. C. Hasbrouck, Jr. No. 1,274,037; July 30; v. 252; p. 1036.

Alarm: *See*—
Automobile thief-alarm.
Drip-pan alarm.
Fire-alarm.
Hot-box alarm.

Alcohol-burner. M. Piotrowski. No. 1,272,995; July 16; v. 252; p. 691.

Alcohol from sulfite liquors, Obtaining. R. H. McKee. No. 1,273,892; July 23; v. 252; p. 822.

Alloy. T. S. Fuller. No. 1,273,762; July 23; v. 252; p. 920.

Alloy. P. R. Kuehnrich. No. 1,273,877; July 30; v. 252; p. 990.

Alloy for resistance elements, &c. W. B. Driver. No. 1,274,250; July 30; v. 252; p. 1096.

Aluminum-solder. D. M. Campbell. No. 1,273,146; July 23; v. 252; p. 757.

Alunite in technically useful forms, Recovering the constituents of. H. J. Detwiller. No. 1,274,145; July 30; v. 252; p. 1066.

Ammonia, Apparatus for the catalytic oxidation of. M. Taliani. No. 1,270,989; July 2; v. 252; p. 68.

Ammonia, Preparation of synthetic. C. Ellis. No. 1,273,772; July 23; v. 252; p. 928.

Ammonium perchlorate, Producing. G. C. Given. No. 1,273,477; July 23; v. 252; p. 846.

Amusement device. F. J. Gibson. No. 1,272,250; July 9; v. 252; p. 453.

Amusement device. C. B. Manser. No. 1,272,488; July 16; v. 252; p. 546.

Anchor. P. L. E. Del Fungo-Giera. No. 1,271,442; July 2; v. 252; p. 192.

Anchor, Drive-. C. Loseth. No. 1,273,890; July 30; v. 252; p. 994.

Anesthetics, Dispensing-receptacle for liquid. G. W. Todd. No. 1,272,579; July 16; v. 252; p. 572.

Angling-machine. D. J. Murnane. No. 1,271,353. July 2; v. 252; p. 168.
Animal-exterminator. N. J. Wigginton. No. 1,274,123; July 30; v. 252; p. 1061.
Animal-trap. V. F. Reich. No. 1,273,185; July 23; v. 252; p. 768.
Annealing aluminum. L. H. Whitney. No. 1,273,706; July 23; v. 252; p. 905.
Antifriction-roller and making same. J. F. O'Connor. No. 1,273,909; July 30; v. 252; p. 1000.
Antiskid device for vehicle-wheels. C. D. Schmidt. No. 1,273,933; July 30; v. 252; p. 1007.
Antiskidding device. J. Wilde and J. Carter. No. 1,274,124; July 30; v. 252; p. 1061.
Arc-oscillation generator. B. Liebowitz. No. 1,271,183; July 2; v. 252; p. 122.
Arch-support. W. S. Phelps. No. 1,272,994; July 16; v. 252; p. 690.
Arm, Artificial. W. P. Anderson, N. C. Clarke, and J. F. Whitelaw. No. 1,272,179; July 9; v. 252; p. 434.
Armature for dynamo-electric machines. F. N. Mizer. No. 1,270,967; July 2; v. 252; p. 61.
Article-holding attachment for the arm. W. B. Nicoll. No. 1,274,312; July 30; v. 252; p. 1112.
Article-securing means. J. H. and C. M. Sager. No. 1,274,203; July 30; v. 252; p. 1082.
Article-supporting device. J. E. Burns. No. 1,272,772; July 16; v. 252; p. 627.
Ash-conveyer. A. Girtanner. No. 1,272,794; July 16; v. 252; p. 634.
Ash-conveyer system. A. Girtanner and R. H. Miller. No. 1,273,849; July 30; v. 252; p. 982.
Automatic gate. R. M. King. No. 1,274,278; July 30; v. 252; p. 1103.
Automatic lubricator. F. Folkers. No. 1,271,305; July 2; v. 252; p. 156.
Automatic lubricator. R. M. Lucas. No. 1,274,298; July 30; v. 252; p. 1108.
Automatic sprinkler. A. J. Loepsinger. No. 1,273,887; July 23; v. 252; p. 820.
Automatic switch. F. A. Lundquist. No. 1,273,247; July 23; v. 252; p. 783.
Automobile-body. F. Müller. No. 1,271,745; July 9; v. 252; p. 311.
Automobile-body. E. Wynn. No. 1,273,977; July 30; v. 252; p. 1020.
Automobile-body, Convertible. C. J. Carlson. No. 1,272,620; July 16; v. 252; p. 584.
Automobile-bumper. A. S. Kirshner. No. 1,270,844; July 2; v. 252; p. 25.
Automobile-bumper. A. E. Smith. No. 1,271,786; July 9; v. 252; p. 320.
Automobile-bumper support. J. Berg. No. 1,273,450; July 23; v. 252; p. 837.
Automobile-bumpers and vehicle-frames, Connection between. C. M. Sager. No. 1,274,086; July 30; v. 252; p. 1050.
Automobile direction-indicator. D. W. Nearhof. No. 1,271,064; July 2; v. 252; p. 88.
Automobile direction-signal. W. A. Tayc. No. 1,274,347; July 30; v. 252; p. 1121.
Automobile direction-signal. P. Vaca. No. 1,272,734; July 16; v. 252; p. 617.
Automobile-driveway. A. Velo and P. Lasaga. No. 1,271,631; July 9; v. 252; p. 279.
Automobile grease-catching device. C. F. Pearson. No. 1,273,918; July 30; v. 252; p. 1003.
Automobile heater and ventilator. N. L. Shaten. No. 1,273,006; July 16; v. 252; p. 693.
Automobile heater and ventilator. N. L. Shaten. No. 1,273,007; July 16; v. 252; p. 694.
Automobile-hood fastener. B. F. Cline. No. 1,273,832; July 23; v. 252; p. 805.
Automobile indicating device. H. H. Boyce. No. 1,272,002; July 9; v. 252; p. 884.
Automobile-jack. A. E. Dewey. No. 1,273,833; July 30; v. 252; p. 978.
Automobile-lifter. A. C. Klemme. No. 1,271,584; July 9; v. 252; p. 265.
Automobile-loading system. H. R. Moule. No. 1,272,501; July 16; v. 252; p. 550.
Automobile-lock. F. G. Madsen. No. 1,272,072; July 9; v. 252; p. 404.
Automobile-lock. J. M. Woods. No. 1,270,911; July 2; v. 252; p. 45.
Automobile locking and antisteering device. P. L. Hedberg. No. 1,271,573; July 9; v. 252; p. 262.
Automobile-locking device. J. D. King. No. 1,271,173; July 2; v. 252; p. 119.
Automobile-radiators, Indicating instrument for. H. H. Boyce. No. 1,272,367; July 16; v. 252; p. 514.
Automobile rear signal. R. N. Woodman. No. 1,273,973; July 30; v. 252; p. 1018.
Automobile-rest. J. A. Beierschmitt. No. 1,271,421; July 2; v. 252; p. 186.
Automobile safety-signal. T. S. Rollo. No. 1,272,535; July 16; v. 252; p. 559.
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Automobile-signal. J. M. Glichreest and E. F. Graham. No. 1,274,259; July 30; v. 252; p. 1098.
Automobile-signal. J. V. Hogue. No. 1,273,611; July 23; v. 252; p. 881.
Automobile-signal. A. Jandron. No. 1,273,230; July 23; v. 252; p. 779.
Automobile-signal. A. J. Lewis. No. 1,274,289; July 30; v. 252; p. 1106.
Automobile-signal. C. B. Michel. No. 1,270,857; July 2; v. 252; p. 29.
Automobile-signal. D. T. Neil. No. 1,274,309; July 30; v. 252; p. 1111.
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Automobile-signal. A. R. Williams. No. 1,273,709; July 23; v. 252; p. 906.
Automobile-signal. F. G. Winkleman. No. 1,274,130; July 30; v. 252; p. 1062.
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Automobile-tag, Illuminated. G. F. Panzer, Jr. No. 1,274,318; July 30; v. 252; p. 1113.
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Automobile-top, Convertible. M. H. Kashian. No. 1,274,275; July 30; v. 252; p. 1103.
Automobile-towing device. W. Huber. No. 1,273,064; July 16; v. 252; p. 708.
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Automobile visual signal. O. Korn. No. 1,272,969; July 16; v. 252; p. 683.
Automobile-wheel. W. M. Sullivan. No. 1,272,723; July 16; v. 252; p. 613.
Automobile-wheels, Traction device for. J. F. Scherer and F. J. George. No. 1,273,930; July 30; v. 252; p. 1006.
Automobile wind-shield. J. R. Wagner. No. 1,273,429; July 23; v. 252; p. 832.
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Automobiles and the like, Clutch mechanism for. B. Settergren. No. 1,274,090; July 30; v. 252; p. 1051.
Automobiles, Attachment for Ford. H. Ennung. No. 1,271,871; July 9; v. 252; p. 344.
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Automobiles, End-thrust-bearing attachment for the transmission-shafts of Ford. H. D. Wolcott. No. 1,272,165; July 9; v. 252; p. 430.
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Automobiles, Power-lock for. J. C. Kurtz. No. 1,272,815; July 16; v. 252; p. 641.
Automobiles, Power-transmission attachment for. H. D. Estes. No. 1,273,470; July 23; v. 252; p. 843.
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Aviator's saver. L. Ogrodniczek. No. 1,274,314; July 30; v. 252; p. 1112.
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Babbitting tool or mold. C. Guggenbuehler. No. 1,271,310; July 2; v. 252; p. 157.
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Bag and suitcase. A. H. Christie. No. 1,274,008; July 30; v. 252; p. 1025.
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Bag-making machine. W. Rose. No. 1,271,519; July 2; v. 252; p. 213.
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Bag-tying machine. A. M. Bates. No. 1,272,603; July 16; v. 252; p. 579.

Baggage-transfer. G. Tramutolo. No. 1,273,424; July 23; v. 252; p. 831.
Bait, Artificial. A. J. Keister. No. 1,272,812; July 16; v. 252; p. 639.
Bait, Artificial fish-. S. Arnold. No. 1,272,188; July 9; v. 252; p. 435.
Bait, Artificial fish-. L. W. Cameron. No. 1,272,008; July 9; v. 252; p. 384.
Bait, Artificial-minnow. O. C. Tuttle. No. 1,273,425; July 23; v. 252; p. 831.
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Baking-pan, Multiple. H. J. Haigh. No. 1,270,815; July 2; v. 252; p. 17.
Baking-pans, Machine for making. H. J. Haigh and I. S. Bodkin. No. 1,270,816; July 2; v. 252; p. 17.
Baking preparation. R. E. Rose. No. 1,274,334; July 30; v. 252; p. 1118.
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Balloon construction. J. Bordyka. No. 1,274,207; July 30; v. 252; p. 1084.
Balloons, Suspension-patch for. H. T. Kraft. No. 1,272,058; July 9; v. 252; p. 400.
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Fuel-burner.
Gas-burner.
Gas or oil burner.
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Engines, Fuel-feed valve and valve-operating mechanism for internal-combustion. F. W. Lanchester. No. 1,274,059; July 30; v. 252; p. 1042.
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Drill-extractor.
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Furniture convertible for use as bed, couch, bath-chair, or the like, Piece of. J. L. W. Murray. No. 1,271,515; July 2; v. 252; p. 212.

Furniture-support, Yielding. O. Sidel. No. 1,273,939; July 30; v. 252; p. 1010.

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Fusee, Signal-. F. H. Miller and R. D. Brown. No. 1,273,260; July 23; v. 252; p. 787.

Fusible link. C. Briebine. No. 1,272,869; July 16; v. 252; p. 515.

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Draft-gage. Pressure-gage.
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Gage. H. B. Azadian. No. 1,273,986; July 30; v. 252; p. 1022.

Gage. H. B. Azadian. No. 1,273,987; July 30; v. 252; p. 1022.

Gage. T. C. and J. T. Bevan. No. 1,272,363; July 16; v. 252; p. 518.

Gage. K. Rushton. No. 1,272,856; July 16; v. 252; p. 652.

Gage. J. M. Spitzglass. No. 1,274,101; July 30; v. 252; p. 1054.

Galvanized iron. J. H. Gravell. No. 1,273,358; July 23; v. 252; p. 813.

Game. F. Lobl. No. 1,274,294; July 30; v. 252; p. 1107.

Game apparatus. T. W. Branch. No. 1,273,024; July 16; v. 252; p. 698.

Game apparatus. W. T. Brooks. No. 1,274,185; July 30; v. 252; p. 1063.

Game apparatus. J. W. Darby. No. 1,272,014; July 9; v. 252; p. 387.

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Game apparatus. F. S. Gichner. No. 1,273,847; July 30; v. 252; p. 892.

Game apparatus. J. A. Lacasse. No. 1,273,381; July 23; v. 252; p. 819.

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Game apparatus. W. C. Schmitt. No. 1,273,675; July 23; v. 252; p. 898.

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Garment. G. W. Pease. No. 1,273,532; July 23; v. 252; p. 860.

Garment. W. G. Schaufler. No. 1,271,086; July 2; v. 252; p. 94.

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Garment-fastener holder. E. Kramer. No. 1,274,282; July 30; v. 252; p. 1105.

Garment-hanger. B. M. Allen. No. 1,272,884; July 16; v. 252; p. 661.

Garment-hanger. W. A. McGinnis. No. 1,273,253; July 23; v. 252; p. 785.

Garment-hanger. J. F. Williams. No. 1,272,164; July 9; v. 252; p. 430.

Garment-protector. W. L. Spencer. No. 1,270,982; July 2; v. 252; p. 66.

Garments, Cleaning. M. E. Messer. No. 1,271,599; July 9; v. 252; p. 269.

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Gas-burner, Atmospheric. W. Hooker. No. 1,272,263; July 9; v. 252; p. 457.

Gas-burners, Pilot for. M. M. Diluchio. No. 1,272,780; July 16; v. 252; p. 629.

Gas cut-off, Automatic. J. Brombacher. No. 1,273,574; July 23; v. 252; p. 871.

Gas-engine. P. Calabro. No. 1,271,431; July 2; v. 252; p. 189.

Gas-engine, Rotary. P. M. Freer. No. 1,272,791; July 16; v. 252; p. 633.

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Gas lighting and extinguishing apparatus. D. Carter. No. 1,271,274; July 2; v. 252; p. 148.

Gas lighting and extinguishing apparatus. D. Carter. No. 1,272,331; July 9; v. 252; p. 477.

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Gas, Making producer-. J. W. Hornsey. No. 1,270,949; July 2; v. 252; p. 55.

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Gas-meter, Double-acting-diaphragm rotary. E. B. De La Matyr. No. 1,273,042; July 16; v. 252; p. 703.

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Gas-producer-feeding mechanism. C. W. Lummis. No 1,270,963; July 2; v. 252; p. 60.

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Gearing, Differential. W. F. Taylor. No. 1,271,101; July 2; v. 252; p. 97.

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Electric generator. Steam-generator.
Gas-generator.

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Glandular extractive product and manufacturing same. T. B. Aldrich. No. 1,271,111; July 2; v. 252; p. 101.

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Glass plates and pieces, Sorting. J. Waterloo. No. 1,272,156; July 9; v. 252; p. 428.

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Handle, W. Handler. No. 1,272,948; July 16; v. 252; p 677.
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Headlight control. S. S. Gossard and J. E. Crandall. No. 1,271,566; July 9; v. 252; p. 261.
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Electrical heater. Lamp-heater.
Feed-water heater. Tank-heater.
Fuel-heater. Water-heater.
Gas-heater.
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Concrete-mold. Tile-mold.
Mold. C. S. Campbell. No. 1,271,849; July 9; v. 252; p. 339.
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Rotary motor. Water-motor.
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Music-holder. V. I. Armstrong. No. 1,270,767; July 2; v. 252; p. 4.
Music-leaf turner. T. P. Arsneau. No. 1,271,829; July 9; v. 252; p. 333.
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Oil-burner. L. K. Belcher. No. 1,272,897; July 16; v. 252; p. 664.
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Packing, Piston-. G. Christenson. No. 1,273,737; July 23; v. 252; p. 913.
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Pad holder or case. F. A. Fuller. No. 1,273,353; July 23; v. 252; p. 812.
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Paper-padding apparatus. E. B. Helfenstein. No. 1,273,781; July 23; v. 252; p. 925.
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Paper-receptacle-making machine. E. L. Bracy. No. 1,271,422; July 2; v. 252; p. 186.
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Perambulator or baby-carriage. A. J. Adams. No. 1,271,986; July 9; v. 252; p. 379.
Perchloric acid, Electrolytic production of. E. C. Walker, 3d. No. 1,271,638; July 9; v. 252; p. 279.
Percolator. R. O. Bingham. No. 1,271,011; July 2; v. 252; p. 74.
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Periscope and optical system therefor. G. N. Saegmuller and G. A. H. Kellner. No. 1,270,876; July 2; v. 252; p. 34.
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Railway-ballast, Machine for cleaning. H. D. Pratt. No. 1,272,849; July 16; v. 252; p. 650.
Railway-brake. S. A. Crone. No. 1,272,779; July 16; v. 252; p. 629.
Railway construction. M. H. Madsen. No. 1,272,827; July 16; v. 252; p. 644.
Railway-crossing. M. F. Moore. No. 1,273,085; July 16; v. 252; p. 714.
Railway-crossing, Noiseless. W. L. Harder. No. 1,271,312; July 2; v. 252; p. 158.
Railway-crossing signal. J. Lux. No. 1,274,177; July 30; v. 252; p. 1075.
Railway-frog. J. Alonzo. No. 1,273,983; July 30; v. 252; p. 1021.
Railway-frog. G. F. Jackson. No. 1,274,050; July 30; v. 252; p. 1039.
Railway-joint. V. A. Newport. No. 1,270,968; July 2; v. 252; p. 62.
Railway-pass. J. D. Gibbs. No. 1,274,032; July 30; v. 252; p. 1034.
Railway passenger-coaches, Dust and cinder conveyer for. J. W. Malphurs. No. 1,271,918; July 9; v. 252; p. 358.
Railway safety-signal. W. and B. Swoboda. No. 1,271,831; July 9; v. 252; p. 333.
Railway-signal midway wire-compensator. R. L. Powell. No. 1,272,314; July 9; v. 252; p. 473.
Railway signaling. R. A. McCann. No. 1,271,592; July 9; v. 252; p. 267.
Railway signaling. R. A. McCann. No. 1,271,593; July 9; v. 252; p. 268.
Railway signaling system. C. L. Fortescue. No. 1,270,806; July 2; v. 252; p. 15.
Railway-spike. R. P. Madeley. No. 1,272,071; July 9; v. 252; p. 404.

Railway-switch. J. Alonso. No. 1,273,984; July 30; v. 252; p. 1021.
Railway-switch mechanism. J. D. Isaacs and C. R. Harding. No. 1,274,271; July 30; v. 252; p. 1102.
Railway system, Electric-. E. J. Pateiski. No. 1,272,844; July 16; v. 252; p. 649.
Railway system, Electric-. E. J. Pateiski. No. 1,274,076; July 30; v. 252; p. 1046.
Railway-tie. C. W. Cason, Sr. No. 1,272,008; July 9; v. 252; p. 386.
Railway-tie. J. B. Gressett, Jr. No. 1,273,217; July 23; v. 252; p. 776.
Railway-tie. H. W. Schlueter. No. 1,273,678; July 23; v. 252; p. 899.
Railways, Signal for mine-. J. A. Muir. No. 1,274,072; July 30; v. 252; p. 1045.
Rain-signal. V. Parker. No. 1,272,308; July 9; v. 252; p. 471.
Rake: *See*—
Hay-rake.
Rake attachment, Hay-. A. G. Argo. No. 1,272,885; July 16; v. 252; p. 661.
Range-finder. A. B. Cox. No. 1,273,152; July 23; v. 252; p. 759.
Range-finders, Optical adjuster for. A. Barr and W. Stroud. No. 1,272,326; July 9; v. 252; p. 475.
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Ratchet-wrench. J. F. Brior. No. 1,273,726; July 23; v. 252; p. 910.
Razing buildings, scaffolds, and analogous work, Tool for. W. H. Rich. No. 1,270,970; July 2; v. 252; p. 62.
Razor. W. H. Blake. No. 1,273,137; July 23; v. 252; p. 754.
Razor. O. A. Clark. No. 1,274,139; July 30; v. 252; p. 1065.
Razor, Safety-. O. Cartlidge. No. 1,270,783; July 2; v. 252; p. 8.
Razor, Safety-. O. T. Fleury. No. 1,273,842; July 30; v. 252; p. 981.
Razor, Safety-. G. P. Leslie. No. 1,272,816; July 16; v. 252; p. 641.
Razor, Safety-. C. A. Mulder. No. 1,271,352; July 2; v. 252; p. 168.
Razor, Safety-. A. A. Warner. No. 1,271,249; July 2; v. 252; p. 140.
Reamer. O. Ebert. No. 1,273,752; July 23; v. 252; p. 917.
Receptacle. W. H. Baugman. No. 1,272,762; July 16; v. 252; p. 625.
Receptacle. M. E. Griffith. No. 1,273,480; July 23; v. 252; p. 845.
Receptacle. R. W. Himmelberger. No. 1,272,443; July 16; v. 252; p. 533.
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Receptacle. L. S. Minor. No. 1,271,602; July 9; v. 252; p. 270.
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Reclaiming and elevating apparatus. F. L. Stuart. No. 1,272,564; July 16; v. 252; p. 567.
Reclaiming apparatus. F. L. Stuart. No. 1,272,563; July 16; v. 252; p. 566.
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Recording device. T. A. Keefer. No. 1,273,114; July 16; v. 252; p. 721.
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Rectifier-equalising system. C. L. Fortescue. No. 1,270,805; July 2; v. 252; p. 14.
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Fishing-reel.
Reel. J. B. Green. No. 1,271,308; July 2; v. 252; p. 156.
Refining-engine. E. A. Jones and R. J. Marx. No. 1,272,453; July 16; v. 252; p. 536.
Refractory and making same. J. O. Handy and R. M. Isham. No. 1,270,818; July 2; v. 252; p. 18.
Refractory material and making same. J. O. Handy and R. M. Isham. No. 1,270,819; July 2; v. 252; p. 18.
Refrigerant and other fluid circulating apparatus, Safety construction for. G. P. Carroll. No. 1,273,577; July 23; v. 252; p. 872.
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Rope or cord, Machine for making ornamental. F. W. Oehrle. No. 1,273,912; July 30; v. 252; p. 1001.
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Ruler. C. H. Little. No. 1,274,292; July 30; v. 252; p. 1106.
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Pump-screen. Window-screen.
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Secondary or storage battery. B. Ford. No. 1,271,691; July 9; v. 252; p. 296.
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Cream-separator.
Grain-separator.
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Sewing-machine attachment. E. H. Cheeseman. No. 1,272,774; July 16; v. 252; p. 628.
Sewing-machine belt. A. J. F. Bower. No. 1,271,014; July 2; v. 252; p. 75.
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Sewing-machine having thread-cutting devices. R. L. Lyons. No. 1,272,066; July 9; v. 252; p. 402.
Sewing-machine, Hemstitch. C. M. Abercrombie. No. 1,271,256; July 2; v. 252; p. 142.
Sewing-machine hemming attachment. A. H. De Voe. No. 1,271,291; July 2; v. 252; p. 152.
Sewing-machine looper mechanism. G. Hoepner. No. 1,270,948; July 2; v. 252; p. 55.
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Sewing-machine presser-foot mechanism. A. H. De Voe. No. 1,270,929; July 2; v. 252; p. 50.
Sewing-machine ruffling mechanism. A. H. De Voe. No. 1,273,156; July 23; v. 252; p. 760.
Sewing-machines, Bobbin-case latch for. G. W. Nelson. No. 1,274,188; July 30; v. 252; p. 1078.
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Shade-roller holder. C. A. Roush. No. 1,272,114; July 9; v. 252; p. 416.
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Shaft-coupling. W. A. Fleck. No. 1,274,254; July 30; v. 252; p. 1097.
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Sharpener, Blade-. A. Newhouse. No. 1,271,930; July 9; v. 252; p. 862.
Sharpener, Lawn-mower. C. Sayre. No. 1,271,778; July 9; v. 252; p. 819.
Sharpener, Skate-. W. Krollius. No. 1,273,624; July 23; v. 252; p. 884.
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Shaving-kit. W. F. Erickson and H. D. Bolstad. No. 1,274,153; July 30; v. 252; p. 1068.
Sheaf-loader. N. Jackson. No. 1,273,065; July 16; v. 252; p. 708.
Shear-guard. H. K. Schell. No. 1,272,123; July 9; v. 252; p. 419.
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Shears and similar tool. W. C. Farrer and G. Glossop. No. 1,273,839; July 30; v. 252; p. 980.
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Ships against torpedo attacks, Lock-bar barrier for protecting. J. Pomfret, Sr. No. 1,273,664; July 23; v. 252; p. 896.
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Shock-absorber. R. S. Carter. No. 1,273,329; July 23; v. 252; p. 804.
Shock-absorber. H. D. Meyers. No. 1,271,846; July 2; v. 252; p. 167.
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Automobile safety-signal.
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Starch, Producing dustless. A. W. H. Lenders. No. 1,272,682; July 16; v. 252; p. 602.
Starter and controller, Automatic. R. D. Ernest. No. 1,273,798; July 23; v. 252; p. 930.
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Stay-bolt structure. J. R. Flannery, B. E. D. Stafford, and E. I. Dodds. No. 1,271,688; July 9; v. 252; p. 296.
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Steam-generator. J. P. Fisher. No. 1,273,596; July 23; v. 252; p. 877.
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Steering-wheel and indicator, Combined. I. G. Woody. No. 1,273,440; July 23; v. 252; p. 834.
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Still, Crude-oil. T. E. Murray. No. 1,273,523; July 23; v. 252; p. 857.
Still for crude bituminous materials. C. P. Price. No. 1,273,091; July 16; v. 252; p. 716.
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Stoker. W. H. Haas. No. 1,273,481; July 23; v. 252; p. 846.
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Stone-gatherer. C. C. Corey. No. 1,274,244; July 30; v. 252; p. 1094.
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Store-fixture. R. A. Ostram. No. 1,272,989; July 16; v. 252; p. 689.
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Stove-door hinge. G. B. Child. No. 1,273,735; July 23; v. 252; p. 912.
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Stove, Oil-. W. R. Jeavons and A. R. Whittaker. No. 1,271,169; July 2; v. 252; p. 117.
Stove, Oil-. F. E. White and F. E. Hooper. No. 1,273,209; July 23; v. 252; p. 774.
Stove, Oil-. F. E. White and F. E. Hooper. No. 1,273,210; July 23; v. 252; p. 774.
Stove-shield attachment, Gasolene-. J. Bergman. No. 1,273,317; July 23; v. 252; p. 801.
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Strainer. H. E. Paget. No. 1,273,656; July 23; v. 252; p. 894.
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Strap-working machine. A. J. Brauer. No. 1,272,612; July 16; v. 252; p. 581.
Street-cleaner. W. Brajdovics. No. 1,273,998; July 30; v. 252; p. 1024.
Stretcher-brace. A. W. Elster. No. 1,273,048; July 16; v. 252; p. 705.
Stud-and-socket fastener. F. S. Carr. (Reissue.) No. 14,492; July 9; v. 252; p. 482.
Stud for snap-fasteners. G. A. Holmes. No. 1,273,491; July 23; v. 252; p. 848.
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Swing. L. L. Kell. No. 1,272,278; July 9; v. 252; p. 459.
Swing-chair. E. P. Elsey. No. 1,271,453; July 2; v. 252; p. 194.
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Electric switch. Quick-break switch.
Electromagnetic switch. Railway-switch.
Headlight-switch. Relay-switch.
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Switch. H. W. Cheney. (Reissue.) No. 14,493; July 16; v. 252; p. 722.
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Fuel-tank. Stock-tank.
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Bundle or package tie.
Package-tie.
Rail-tie.
Railway-tie.
Steel tie.
Wire-tie.
Tie-plate. J. F. Wedgeworth. No. 1,274,118; July 30; v. 252; p. 1050.
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Tire and fastening means therefor. J. Boryszewski. No. 1,274,237; July 30; v. 252; p. 1093.
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Tire-grip. Antiskid. H. D. Greene. No. 1,271,699; July 9; v. 252; p. 298.
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Tire-holder license and lamp bracket, Combination. R. C. Agner. No. 1,273,117; July 23; v. 252; p. 749.
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Tire-making machine. C. Kuentzel. No. 1,273,071; July 16; v. 252; p. 710.
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Tire, Resilient. L. P. Thompson. No. 1,272,576; July 16; v. 252; p. 571.
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Titanic-oxid concentrate and obtaining the same. A. J. Rossi. No. 1,272,855; July 16; v. 252; p. 652.
Tobacco drying system and apparatus. J. B. Muse. No. 1,273,395; July 23; v. 252; p. 823.
Tobacco packing-case, Leaf-. H. G. Olive. No. 1,271,932; July 9; v. 252; p. 362.
Toggle-bolt. A. F. Poole. No. 1,271,763; July 9; v. 252; p. 315.
Toilet-article casing. E. F. Ciglia. No. 1,272,010; July 9; v. 252; p. 386.
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Tongs. A. P. Nelson. No. 1,274,187; July 30; v. 252; p. 1078.
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Tool kit. G. M. Moisson. No. 1,274,306; July 30; v. 252; p. 1110.
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Tooth comfort kit. A. Weber. No. 1,274,116; July 30; v. 252; p. 1059.
Tooth-regulator. J. E. Canning. No. 1,271,850; July 9; v. 252; p. 339.
Toothpick-dispensing device. W. J. McIntyre. No. 1,272,825; July 16; v. 252; p. 643.
Tops and bows for the same, Manufacturing. J. Jennison and G. H. Higgins. No. 1,272,451; July 16; v. 252; p. 536.

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Torch, Cutting and welding. A. F. Jenkins. No. 1,274,053; July 30; v. 252; p. 1040.
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Vehicle controller, Electric-. D. C. Cookingham and J. H. Hertner. No. 1,270,789; July 2; v. 252; p. 9.
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Vehicle-signal. H. Rohrdantz. No. 1,273,672; July 23; v. 252; p. 898.
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Vehicles, Adjustable hood for motor-. I. M. Jacobs and W. Cramer. No. 1,273,616; July 23; v. 252; p. 882.
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Fly-wheel. Vehicle interchangeable wheel.
Resilient wheel.
Spring-wheel.
Wheel. L. H. Perlman. No. 1,271,936; July 9; v. 252; p. 363.
Wheel for valves and the like. J. P. Wall. No. 1,272,738; July 16; v. 252; p. 618.
Wheel-locking device, Demountable-. C. Booth. No. 1,273,320; July 23; v. 252; p. 802.
Wheel-rim. H. Rafiovich. No. 1,271,222; July 2; v. 252; p. 133.
Wheel-rim, Demountable. B. B. Leustig. No. 1,272,467; July 16; v. 252; p. 540.
Wheel-rim, Sectional. C. S. Johnston. No. 1,274,274; July 30; v. 252; p. 1102.
Wheel rim, Vehicle-. J. D. Handbury. No. 1,272,429; July 16; v. 252; p. 530.
Wheel-truing device. E. R. McLucas. No. 1,272,976; July 16; v. 252; p. 685.
Wheels, Brake-drum for. W. J. P. Moore. No. 1,274,185; July 30; v. 252; p. 1077.
Wheels, Spring-frame for vehicle-. J. Pronovost. No. 1,271,360; July 2; v. 252; p. 170.
Wheeled machine. A. Altenberg. No. 1,273,985; July 30; v. 252; p. 1021.
Whistle. C. W. Lund. No. 1,272,822; July 16; v. 252; p. 642.
Winch, Portable. J. R. Freeman. No. 1,270,809; July 2; v. 252; p. 15.
Winch, Variable-speed. E. R. Evans. No. 1,272,785; July 16; v. 252; p. 631.
Wind-motor. W. F. Folmer. No. 1,270,803; July 2; v. 252; p. 13.
Wind-shield attachment. C. R. Hough. No. 1,272,955; July 16; v. 252; p. 679.
Wind-shield for motor-vehicles, Ventilating. L. H. Wehrle. No. 1,273,965; July 30; v. 252; p. 1017.
Wind-shield, Individual. B. L. Shubert. No. 1,272,180; July 9; v. 252; p. 421.
Wind-shield-treating device. C. White. No. 1,273,434; July 23; v. 252; p. 833.
Winding yarns, threads, and the like, Stop-motion for machines for. H. M. A. C. Wildt. No. 1,273,562; July 23; v. 252; p. 868.
Windmill. O. M. Cox. No. 1,273,582; July 23; v. 252; p. 873.
Window. B. Hausmann. No. 1,272,039; July 9; v. 252; p. 394.
Window construction. F. Arbter. No. 1,273,309; July 23; v. 252; p. 799.
Window construction. S. B. Zimmer. No. 1,270,915; July 2; v. 252; p. 46.
Window-frame. I. Klayman. No. 1,271,174; July 2; v. 252; p. 119.
Window frame and sashes. H. E. Campbell. No. 1,273,453; July 23; v. 252; p. 838.
Window frame and sashes. H. E. Campbell. No. 1,273,454; July 23; v. 252; p. 839.
Window frame and sashes. H. E. Campbell. No. 1,273,455; July 23; v. 252; p. 839.
Window-jack. A. P. Aculn. No. 1,272,173; July 9; v. 252; p. 432.
Window-screen. G. H. Forsyth. No. 1,274,029; July 30; v. 252; p. 1033.
Window-screen. H. Higgin and J. Haas. No. 1,273,222; July 23; v. 252; p. 777.
Window-screen, Adjustable. J. Kalmanowits. No. 1,272,271; July 9; v. 252; p. 459.
Window-screen for swinging sashes. W. Bayley. No. 1,273,183; July 23; v. 252; p. 753.
Window screen, Revolving. H. Higgin and C. Traut. No. 1,273,221; July 23; v. 252; p. 777.
Window-seat. J. E. Burns. No. 1,274,000; July 30; v. 252; p. 1025.
Window ventilator and screen, Combined. G. W. Stein. No. 1,273,288; July 23; v. 252; p. 794.
Windows and the like, Mounting for folding. W. A. Schoening and J. Pachynski. No. 1,272,864; July 16; v. 252; p. 654.
Wire-bending machine. J. Winsor. No. 1,273,020; July 16; v. 252; p. 697.
Wire-clamp. F. E. Beazell. No. 1,273,909; July 30; v. 252; p. 971.
Wire-cutter. T. Stankewiss. No. 1,273,287; July 23; v. 252; p. 795.
Wire-cutting attachment. J. Zukowski. No. 1,273,980; July 30; v. 252; p. 1020.
Wire-drawing apparatus. J. Herman. No. 1,270,946; July 2; v. 252; p. 54.
Wire fabric. J. Hancock. No. 1,272,660; July 16; v. 252; p. 596.
Wire-stretcher. W. A. Campbell. No. 1,273,456; July 23; v. 252; p. 839.
Wire-stretcher. H. L. Gordon. No. 1,271,564; July 9; v. 252; p. 260.
Wire-stretcher. C. H. Logan. No. 1,273,889; July 30; v. 252; p. 994.
Wire-stretcher. F. E. Schneider. No. 1,273,676; July 23; v. 252; p. 898.
Wire-stretcher, Fourdrinier. A. B. Weisenborn. No. 1,272,586; July 16; v. 252; p. 574.
Wire-tie and making same. R. M. Mowry. No. 1,272,502; July 16; v. 252; p. 550.
Wire-twisting tool. J. Borbley. No. 1,272,904; July 16; v. 252; p. 666.
Wires, Apparatus for producing flashes by the electric volatilization of fusible. J. and P. Courtier. No. 1,274,009; July 30; v. 252; p. 1027.
Wires from refractory materials, Manufacture of. F. A. Lederer. No. 1,273,506; July 23; v. 252; p. 863.
Wood-carver, Geometric. A. Inglese. No. 1,274,270; July 30; v. 252; p. 1101.
Wood, Preserving. M. Landau. No. 1,274,171; July 30; v. 252; p. 1073.
Wood-working machine. J. S. Mardon and L. D. Fay. No. 1,273,516; July 23; v. 252; p. 855.
Wooden parts, Securing. W. T. Donnelly. No. 1,273,588; July 23; v. 252; p. 875.
Wooden parts, Securing. W. T. Donnelly. No. 1,273,771; July 23; v. 252; p. 923.
Work handling device and support. E. S. Cronk. No. 1,271,500; July 2; v. 252; p. 208.
Work-rest, Auxiliary. E. L. Townsend. No. 1,274,215; July 30; v. 252; p. 1087.
Working-bench. J. A. Torp. No. 1,272,151; July 9; v. 252; p. 426.
Worm-drive. W. Q. Pfahler. No. 1,273,533; July 23; v. 252; p. 860.
Woven carrier. V. H. Jennings. No. 1,273,790; July 23; v. 252; p. 927.
Wrapper-holder. G. F. Helson. No. 1,271,314; July 2 v. 252; p. 158.
Wrench: *See*—
Monkey-wrench. Ratchet-wrench.
Multiple-socket wrench.
Nut and bolt-holding wrench.
Wrench. A. C. Beadle. No. 1,273,989; July 30; v. 252; p. 1022.
Wrench. C. M. Foster. No. 1,271,693; July 9; v. 252; p. 297.
Wrench. T. W. Little. No. 1,271,734; July 9; v. 252; p. 309.
Wrench. W. T. Long. No. 1,270,848; July 2; v. 252; p. 26.
Wrench. A. W. Reynolds, Jr. No. 1,271,365; July 2; v. 252; p. 172.
Wrench. J. G. Schwartz. No. 1,274,337; July 30; v. 252; p. 1118.
Wrench. C. Vincent and A. Fontaine. No. 1,271,811; July 9; v. 252; p. 327.
Wrench. C. H. Wert. No. 1,271,400; July 2; v. 252; p. 181.
Wringer: *See*—
Clothes-wringer. Mop-wringer.
Writer, Check-. F. F. Schroder. No. 1,271,231; July 2; v. 252; p. 136.
Writing implement. H. J. Meier. No. 1,274,303; July 30; v. 252; p. 1110.
Writing-sheet and envelop, Combined. W. C. De Wendt. No. 1,271,862; July 9; v. 252; p. 342.
X-ray machine, Cross-bridge. P. Berlin. No. 1,273,812; July 30; v. 252; p. 972.
X-ray machine stand. J. Zsabka. No. 1,273,308; July 23; v. 252; p. 798.
Yarn, Treating worsted. J. H. Halford. No. 1,271,893; July 9; v. 252; p. 351.
Yeast, Preparation of. L. Roush. No. 1,271,371; July 2; v. 252; p. 173.
Zinc, Electrothermic extraction of. E. S. Berglund. No. 1,271,267; July 2; v. 252; p. 145.
Zinc, Treating. C. A. H. De Saulles. No. 1,274,249; July 30; v. 252; p. 1095.
Zinc vapors, Apparatus and method for condensing. C. H. Fulton. No. 1,271,560; July 9; v. 252; p. 259.

ALPHABETICAL LIST OF DESIGNS.

Advertising-cabinet. W. F. Jones and W. Kellum. No. 52,167; July 9; v. 252; p. 484.
Advertising-tablet. M. J. Hogan. No. 52,136; July 2; v. 252; p. 223.
Article of manufacture. E. Coste. No. 52,127; July 2; v. 252; p. 222.
Article of manufacture. J. S. Sears. No. 52,197; July 16; v. 252; p. 728.
Ash-tray and holder for pipes, tobacco, and matches, Combined. L. U. Bruyere. No. 52,126; July 2; v. 252; p. 222.
Automobile-body. J. H. Bourgon. No. 52,125; July 2; v. 252; p. 221.
Automobile-top. C. W. Link. No. 52,142; July 2; v. 252; p. 224.
Badge. J. H. Leff and R. H. Spira. No. 52,140; July 2; v. 252; p. 224.
Belt-holder. J. L. Flannery, Jr. No. 52,130; July 2; v. 252; p. 222.
Bicycle-frame. I. Schwinn. No. 52,150; July 2; v. 252; p. 225.
Border ornament for furniture, casket, interior or exterior decoration. A. M. Holstein. Nos. 52,162–4; July 9; v. 252; pp. 483–4.
Brocade. J. H. Bunting. Nos. 52,204–5; July 23; v. 252; p. 940.
Brooch-pin or similar article of jewelry. F. H. Schaffer. No. 52,228; July 23; v. 252; p. 944.
Brush for suction-cleaners and the like. H. E. Hoover. No. 52,238; July 30; v. 252; p. 1128.
Cabinet, Display-. F. Pfous. No. 52,225; July 23; v. 252; p. 943.
Cake, Chocolate. A. N. Stollwerck. No. 52,246; July 30; v. 252; p. 1130.
Can-opener. P. Zunish. No. 52,156; July 2; v. 252; p. 226.
Car for children, Three-wheeled. R. K. Dawson. No. 52,209; July 23; v. 252; p. 941.
Card, Display-. W. A. Pike. No. 52,226; July 23; v. 252; p. 943.
Card or mounting, Display. J. L. Flannery, Jr. Nos. 52,212–13; July 23; v. 252; p. 941.
Carton. J. L. Flannery, Jr. No. 52,131; July 2; v. 252; p. 222.
Chandelier for a lighting-fixture. R. G. Wagner and E. J. Schweitzer. No. 52,152; July 2; v. 252; p. 226.
Cigar-perforator. J. H. Stead. No. 52,151; July 2; v. 252; p. 226.
Corner ornament for furniture, caskets, and interior and exterior decorations. A. M. Holstein. No. 52,165; July 9; v. 252; p. 484.
Cornet. E. A. Couturier. No. 52,207; July 23; v. 252; p. 940.
Display-stand. M. J. Karpeles. No. 52,240; July 30; v. 252; p. 1128.
Doll. L. M. Fellom. Nos. 52,174–5; July 16; v. 252; p. 724.
Doll. C. Ringel. No. 52,195; July 16; v. 252; p. 728.
Doll, Statue-. R. Mancuso. No. 52,242; July 30; v. 252; p. 1129.
Drinking-fountain. J. W. Ramsdell. No. 52,244; July 30; v. 252; p. 1129.
Electric-battery anode. W. Grothe. No. 52,215; July 23; v. 252; p. 942.
Emblem. E. B. Craig. No. 52,128; July 2; v. 252; p. 222.
Emblem, badge, or similar article. G. T. Bynner. No. 52,206; July 23; v. 252; p. 940.
Emblem, brooch, ring-top, lavallière, button, or similar article. E. C. Heathcote. No. 52,218; July 23; v. 252; p. 942.
Flag, banner, pennant, or similar article. H. A. Phillips and J. G. Stamm. No. 52,179; July 16; v. 252; p. 725.
Flag or emblem. C. F. Adamson. No. 52,202; July 23; v. 252; p. 939.
Furniture, casket, interior or exterior decoration. A. M. Holstein. No. 52,166; July 9; v. 252; p. 484.
Game-board. W. J. Donne. No. 52,210; July 23; v. 252; p. 941.
Garter, Man's. M. B. Hammond. Nos. 52,133–5; July 2; v. 252; p. 223.
Glass plate or similar article. C. L. Reizenstein. No. 52,171; July 9; v. 252; p. 485
Heel, Rubber. G. A. Huben. No. 52,137; July 2; v. 252; p. 223.
Insulator, Strain-. J. H. Kendig. No. 52,139; July 2; v. 252; p. 224.
Jewelry-gallery. T. Mountford. No. 52,243; July 30; v. 252; p. 1129.
Jump-ring coupling. W. J. Gagnon. No. 52,132; July 2; v. 252; p. 223.
Lace. A. P. Huber. No. 52,138; July 2; v. 252; p. 224.
Lace. A. Redfern. No. 52,146; July 2; v. 252; p. 225.
Lamp-bowl holders, Ring for. S. Jankelson. No. 52,221; July 23; v. 252; p. 943.
Lamp-casing. J. L. Dawes. No. 52,208; July 23; v. 252; p. 940.
Lamp casing, Arc-. I. Eachus. No. 52,211; July 23; v. 252; p. 941.
Lamp-shade. G. J. Bauer. No. 52,172; July 16; v. 252; p. 724.
Lantern, Portable electric. W. Grether. No. 52,237; July 30; v. 252; p. 1128.
Linoleum, oil-cloth, or floor-covering. C. M. Post. Nos. 52,180–93; July 16; v. 252; pp. 725–7.
Medallion. Individual service-. F. H. Bronner. No. 52,203; July 23; v. 252; p. 940.
Mirror-pedestal. E. L. Nelson. No. 52,169; July 9; v. 252; p. 485.
Panel for furniture, caskets, and interior and exterior decorations. A. M. Holstein. No. 52,160; July 9; v. 252; p. 483.
Paper doily. F. Conrad. No. 52,234; July 30; v. 252; p. 1127.
Paper hat, Novelty. A. Rice. Nos. 52,147–9; July 2; v. 252; p. 225.
Pen-rack. H. Haupt. No. 52,216; July 23; v. 252; p. 942.
Pencil-cup. J. W. Nunn. No. 52,144; July 2; v. 252; p. 225.
Perambulators, Running-gear frame for. A. J. Adams. No. 52,201; July 23; v. 252; p. 939.
Phonograph-cabinet and hall-clock case, Combined. F. P. Read and W. W. Parsons. No. 52,194; July 16; v. 252; p. 728.
Phonograph case or cabinet. E. Forrest. No. 52,214; July 23; v. 252; p. 941.
Photo-frame. W. B. Nichols. No. 52,143; July 2; v. 252; p. 224.
Picture-frame. J. Benko. No. 52,173; July 16; v. 252; p. 724.
Picture-frame. C. H. Tuttle. No. 52,231; July 23; v. 252; p. 944.
Picture-frame, Ornamental. P. Ballstreri. No. 52,233; July 30; v. 252; p. 1127.
Picture-holder. Z. Orizaroff. No. 52,177; July 16; v. 252; p. 725.
Pilaster for furniture, casket, interior or exterior decoration. A. M. Holstein. No. 52,161; July 9; v. 252; p. 483.
Pin, Memorial. J. M. Scrogin. No. 52,196; July 16; v. 252; p. 728.
Plaque. A. Vieira. No. 52,198; July 16; v. 252; p. 728.
Pocket-case. F. W. Harvey, Jr. No. 52,176; July 16; v. 252; p. 724.
Railway-tie plate. I. L. Edwards. No. 52,157; July 9; v. 252; p. 483.
Ring or similar article of jewelry, Finger-. C. H. Spencer. Nos. 52,229–30; July 23; v. 252; p. 944.
Sewing-cabinet. E. Humphrey. No. 52,219; July 23; v. 252; p. 942.
Show-case for shoulder-arms. F. Manning. No. 52,223; July 23; v. 252; p. 943.
Signal housing and support. J. R. Dunlap. No. 52,235; July 30; v. 252; p. 1128.
Skirt-trousers. W. Sanda. No. 52,245; July 30; v. 252; p. 1130.
Sole. C. R. Haynes. No. 52,217; July 23; v. 252; p. 942.
Sound-box casing. J. Wolff. No. 52,155; July 2; v. 252; p. 226.
Spoon, fork, or similar article. F. Kaupmann. No. 52,168; July 9; v. 252; p. 485.
Spoon, fork, or similar article. A. G. Kintz. No. 52,222; July 23; v. 252; p. 943.
Stirrup, Top-roll-saddle. O. L. Owen. No. 52,145; July 2; v. 252; p. 225.
Stove. M. R. Lebman. No. 52,141; July 2; v. 252; p. 224.
Tire. J. W. Richardson. No. 52,227; July 23; v. 252; p. 944.
Tire-casing. W. C. Owen. No. 52,170; July 9; v. 252; p. 485.
Tire-casing. H. A. Phillips and J. G. Stamm. No. 52,178; July 16; v. 252; p. 725.
Tire-casing. O. L. Weaver. No. 52,153; July 2; v. 252; p. 226.
Tire, Vehicle-. A. J. Musselman. No. 52,224; July 23; v. 252; p. 943.
Tire, Vehicle-. A. E. Wing. No. 52,232; July 23; v. 252; p. 944.
Tool, Combination-. L. V. Aronson. No. 52,157; July 9; v. 252; p. 483.
Toy balloon. F. J. Creque. No. 52,129; July 2; v. 252; p. 222.
Toy head-block. R. E. Humbert. No. 52,239; July 30; v. 252; p. 1128.
Toy, Hollow rubber figure. F. F. Ziegler. Nos. 52,199–200; July 16; v. 252; p. 729.
Vehicle, Child's. H. W. Longfellow. No. 52,241; July 30; v. 252; p. 1129.
Vehicle, Child's. R. N. Wilkinson. No. 52,154; July 2; v. 252; p. 226.
Washboards, Soap-rest for. H. J. Gilbert. No. 52,236; July 30; v. 252; p. 1128.
Waste-basket. E. H. Derry. No. 52,158; July 9; v. 252; p. 483.
Watch cover, Wristlet-. L. Jacot. No. 52,220; July 23; v. 252; p. 942.

ALPHABETICAL LIST OF TRADE-MARKS.

Alimentary pastes covering all kinds of macaroni. Guano & Raggio. No. 122,158; July 2; v. 252; p. 242.
Ant-exterminator, Chemical. Thames Drug Company. No. 122,246; July 9; v. 252; p. 581.
Apples, Fresh. White Bros. & Crum Co. No. 122,361; July 23; v. 252; p. 959.
Apples in boxes, Fresh. Manuel Brothers Company. No. 122,151; July 2; v. 252; p. 242.
Automobile dolly-jacks. Mid-West Manufacturing Company. No. 122,331; July 23; v. 252; p. 958.
Automobile-radiator-cap heat or temperature indicating devices. H. Jedell. No. 122,275; July 16; v. 252; p. 741.
Baskets, Clothes-. Coles & Company. No. 122,376; July 30; v. 252; p. 1139.
Beans, Dried. MacDonell Chow Corp. No. 122,279; July 16; v. 252; p. 742.
Bearings, Antifriction-. The Federal Bearings Co. No. 122,204; July 9; v. 252; p. 500.
Bedsteads, bed-springs, mattresses. Bernstein Manufacturing Company. No. 122,184; July 9; v. 252; p. 499.
Beverage, Non-intoxicating. S. Liebmann's Sons. No. 122,220; July 9; v. 252; p. 500.
Beverage without alcohol, Brewed fermented. C. P. Holzderber. No. 122,215; July 9; v. 252; p. 500.
Beverages and extracts and syrups for making same, Non-alcoholic maltless. The Delaware Punch Company of Texas. No. 122,196; July 9; v. 252; p. 499.
Blankets, Cotton. American Textiles Export Corporation. No. 122,364; July 30; v. 252; p. 1139.
Boot and shoe blacking. Société Générale des Cirages Francais. No. 122,163; July 2; v. 252; p. 242.
Borax, witch-hazel, ammonia, &c. The Beau Site Company. No. 122,125; July 2; v. 252; p. 241.
Bread. Henry Blewett & Son. No. 122,302; July 23; v. 252; p. 957.
Bread. E. S. Gempp. No. 122,140; July 2; v. 252; p. 241.
Brooms, House-. J. Hergenrether & Son. No. 122,213; July 9; v. 252; p. 500.
Brushes for raising a soft, warmth-retaining surface on knitted woolen fabrics, Wire. J. and J. Baldwin and Partners. No. 122,366; July 30; v. 252; p. 1139.
Brushes, Tooth, hair, clothes, &c. G. Winckler. No. 122,402; July 30; v. 252; p. 1140.
Butter. I. Baer. No. 122,368; July 30; v. 252; p. 1139.
Butter and eggs. Saal Brothers. No. 122,394; July 30; v. 252; p. 1140.
Cabinets, Towel-. Pullclean Manufacturing Co. No. 122,392; July 30; v. 252; p. 1140.
Cameras and tripods, moving-picture projectors and screens therefor. The Green Camera Company. No. 122,208; July 9; v. 252; p. 500.
Candy. Boston Confectionery Co. No. 122,262; July 16; v. 252; p. 741.
Candy. Elmer Candy Company. No. 122,271; July 16; v. 252; p. 741.
Candy. Gillen & Boney. No. 122,313; July 23; v. 252; p. 957.
Candy. Skibo Confectionery Co. No. 122,347; July 23; v. 252; p. 958.
Candy, Molasses and chocolate. Linden Valley Chocolate Co. No. 122,326; July 23; v. 252; p. 958.
Canned foods. Workman Packing Co. No. 122,173; July 2; v. 252; p. 242.
Canned fruit, bottled and canned pickles and vegetables. Los Angeles Olive Growers Association. No. 122,329; July 23; v. 252; p. 958.
Canned peas and beans. Pacific Pea Packing Company. No. 122,154; July 2; v. 252; p. 242.
Canned salmon. J. R. Burke. No. 122,128; July 2; v. 252; p. 241.
Canned sardines and spiced tomato sauce. Coast Fishing Co. No. 122,375; July 30; v. 252; p. 1139.
Canned tomato sauce. A. Goldstein & Co. No. 122,317; July 23; v. 252; p. 957.
Canned vegetables and hominy. Lange Canning Co. No. 122,276; July 16; v. 252; p. 741.
Caps, Motor and baby. E. T. Thomas. No. 122,166; July 2; v. 252; p. 242.
Carbon-eliminator. T. S. Witherspoon. No. 122,403; July 30; v. 252; p. 1140.
Cheese. D. De Bernardi & Co. No. 122,134; July 2; v. 252; p. 241.
Chemical compound to be mixed with poultry food as a tonic, &c. W. H. Johnson. No. 122,148; July 2; v. 252; p. 241.
Chemicals and pharmaceutical preparations for toilet purposes, Certain named. H. H. Ayer. Nos. 122,258–9; July 16; v. 252; p. 741.
Chemicals, medicines, and pharmaceutical preparations, Certain named. The Coolrite Co. No. 122,377; July 30; v. 252; p. 1139.
Chemicals, medicines, and pharmaceutical preparations, Certain named. Southern Oil & Ink Company. No. 122,240; July 9; v. 252; p. 501.
Chocolate bars, Cream-. C. Ireland. No. 122,147; July 2; v. 252; p. 241.
Cigarettes, Tobacco. C. R. Smith. No. 122,239; July 9; v. 252; p. 501.
Cigars. The Banner Cigar Manufacturing Co. No. 122,180; July 9; v. 252; p. 499.
Cigars, tobacco, cigarettes. M. B. Martin. No. 122,222; July 9; v. 252; p. 500.
Cinematograph-films. Pathé Exchange. No. 122,230; July 9; v. 252; p. 500.
Cleaning and polishing liquid for colored leathers. Wilkey Laboratories. Nos. 122,293–4; July 16; v. 252; p. 742.
Cleaning-paste for certain named surfaces. Eaton's Uzon Company. No. 122,135; July 2; v. 252; p. 241.
Clothing for men and boys, Certain named. Carson, Pirie, Scott & Co. No. 122,189; July 9; v. 252; p. 499.
Coal-tar products. John Campbell & Co. Nos. 122,369–70; July 30; v. 252; p. 1139.
Coats and coat-dusters, Men's outer. Globe Shirt & Overall Co. No. 122,141; July 2; v. 252; p. 241.
Coffee. R. L. Gerhart. No. 122,312; July 23; v. 252; p. 957.
Coffee. Stiles-Pellens Coffee Co. No. 122,351; July 23; v. 252; p. 958.
Coffee. Symons Bros. & Co. No. 122,352; July 23; v. 252; p. 958.
Coffee. Young & Griffin Coffee Co. No. 122,404; July 30; v. 252; p. 1140.
Cooking utensils and household goods, Aluminum. Aluminum Goods Mfg. Company. No. 122,123; July 2; v. 252; p. 241.
Corn flakes, Toasted. J. L. Kellogg. No. 122,149; July 2; v. 252; p. 241.
Cotton and linen piece goods. Esteban Hermanos. No. 122,378; July 30; v. 252; p. 1139.
Cotton and woolen piece goods. Pacific Mills. No. 122,391; July 30; v. 252; p. 1140.
Cotton piece goods. J. W. Goddard & Sons. No. 122,316; July 23; v. 252; p. 957.
Cotton piece goods. Henry Glass & Co. No. 122,315; July 23; v. 252; p. 957.
Cotton piece goods. Pacific Mills. No. 122,390; July 30; v. 252; p. 1139.
Cotton piece goods, Dyed. Burton Bros. & Co. No. 122,263; July 16; v. 252; p. 741.
Crackers. Loose-Wiles Biscuit Company. No. 122,328; July 23; v. 252; p. 958.
Cutlery, machinery, and tools, and parts thereof, Certain named. American Steel Products Co. No. 122,255; July 16; v. 252; p. 741.
Cutlery, machinery, and tools, and parts thereof, Certain named. G. Barnsley & Sons. Nos. 122,260–61; July 16; v. 252; p. 741.
Cutlery, machinery, and tools, and parts thereof, Certain named. The Fafnir Bearing Company. No. 122,136; July 2; v. 252; p. 241.
Dental preparation. R. H. Ferry. No. 122,380; July 30; v. 252; p. 1139.
Detergent used as an aid to soap for washing. Seibert Mfg. Company. No. 122,287; July 16; v. 252; p. 742.
Dress-fasteners. Columbia Fastener Company. No. 122,265; July 16; v. 252; p. 741.
Drill-presses, Metal-working. The Silver Manufacturing Company. No. 122,161; July 2; v. 252; p. 242.
Dyes, Anilin. Associated Import & Export Co. No. 122,256; July 16; v. 252; p. 741.
Dyewood extracts. Bush, Beach & Gent. No. 122,130; July 2; v. 252; p. 241.
Egg substitute. The Holley Company. No. 122,146; July 2; v. 252; p. 241.
Eggs, Fresh. W. Patten. No. 122,284; July 16; v. 252; p. 742.
Electric switches. J. M. Terzich. No. 122,245; July 9; v. 252; p. 501.
Electrical apparatus, machines, and supplies, Certain named. The Cuno Engineering Corporation. No. 122,309; July 23; v. 252; p. 957.
Elevator and sectional elevator spouts, spout-sections, and parts thereof. Whitemore Manufacturing Co. No. 122,250; July 9; v. 252; p. 501.
Embalming fluids. The Max Huncke Chemical Co. No. 122,223; July 9; v. 252; p. 500.
Engines and moisturizers therefor, Internal-combustion. Carpenter & Company. No. 122,131; July 2; v. 252; p. 241.
Engines, Apparatus for moistening air for use on gas-. Carbon Destroyer Corporation. No. 122,185; July 9; v. 252; p. 499.
Envelops. Duboc Paper Company. No. 122,268; July 16; v. 252; p. 741.
Eye-tonic. G. C. Hoencke. No. 122,379; July 30; v. 252; p. 1139.
Feed, Chick. The Park & Pollard Company. No. 122,341; July 23; v. 252; p. 958.

Feed, Poultry. Burt H. Winchester, Inc. No. 122,295; July 16; v. 252; p. 742.
Feed, Poultry. Swift and Company. No. 122,290; July 16; v. 252; p. 742.
Fertilizer. Chickamauga Fertilizer Works. No. 122,190; July 9; v. 252; p. 499.
Fertilizer. The Fertile Company. No. 122,205; July 9; v. 252; p. 500.
Fertilizers. The American Agricultural Chemical Company. No. 122,363; July 30; v. 252; p. 1139.
Flavoring extracts, Food-. The C. F. Sauer Co. No. 122,286; July 16; v. 252; p. 742.
Floor-polish. E. C. McKelvy. No. 122,277; July 16; v. 252; p. 741.
Flour, Self-rising wheat-. Steeleville Milling Company. No. 122,396; July 30; v. 252; p. 1140.
Flour, Wheat-. Barber Milling Company. No. 122,299; July 23; v. 252; p. 957.
Flour, Wheat-. L. Gross. No. 122,209; July 9; v. 252; p. 500.
Flour, Wheat-. Oklahoma City Mill & Elevator Co. No. 122,389; July 30; v. 252; p. 1139.
Flour, Wheat-. The Rea-Patterson Milling Company. No. 122,397; July 30; v. 252; p. 1140.
Food extract, Vegetable. Altonaer Margarine-Werke Mohr & Co. G. m. b. H. No. 122,258; July 16; v. 252; p. 741.
Food, Prepared. Skinner Mfg. Co. No. 122,348; July 23; v. 252; p. 958.
Foods, Certain named. E. Baxt. No. 122,301; July 23; v. 252; p. 957.
Foods, Certain named. The Cullen Brokerage Co. No. 122,308; July 23; v. 252; p. 957.
Foods, Certain named. Union Pacific Tea Company. No. 122,355; July 23; v. 252; p. 958.
Friction-tape for insulation purposes. Western Electric Company. No. 122,360; July 23; v. 252; p. 959.
Fruits, Certain named fresh. Earl Fruit Company. No. 122,269; July 16; v. 252; p. 741.
Furniture, Certain named. The Long Furniture Company. No. 122,221; July 9; v. 252; p. 500.
Furniture-polish. D. W. Allen. No. 122,297; July 23; v. 252; p. 957.
Games. The Weinthrop Company. No. 122,359; July 23; v. 252; p. 959.
Games, Card. Milton Bradley Co. No. 122,308; July 23; v. 252; p. 957.
Garments, Certain named ladies' and children's. The Denninger Garment Manufacturing Company. No. 122,197; July 9; v. 252; p. 499.
Gasolene. Western Oil Refining Co. No. 122,247; July 9; v. 252; p. 501.
Glue, Liquid. The Improved Liquid Glues Co. No. 122,323; July 23; v. 252; p. 957.
Glue material, Starch-. Perkins Glue Company. No. 122,338; July 23; v. 252; p. 958.
Hair-grower. Madam N. Bond. No. 122,126; July 2; v. 252; p. 241.
Hair-nets. E. T. Mittelstaedt. Nos. 122,281–2; July 16; v. 252; p. 742.
Hair-ointment. K. R. Ellis. No. 122,203; July 9; v. 252; p. 500.
Hair-pins, Shell. Carson, Pirie, Scott & Co. No. 122,188; July 9; v. 252; p. 499.
Hair-pomade. M. L. Lewis. No. 122,384; July 30; v. 252; p. 1139.
Hair-tonic. E. W. Pheiffer. No. 122,842; July 23; v. 252; p. 958.
Hair-tonic. Puri-tis Chemical Co. No. 122,157; July 2; v. 252; p. 242.
Hair-tonic. J. M. Schinko. No. 122,235; July 9; v. 252; p. 501.
Hat-straps. A. Smith, Jr. No. 122,346; July 23; v. 252; p. 958.
Hats, Panama. R. Fujita. No. 122,206; July 9; v. 252; p. 500.
Hay-lifting machines. A. M. Hanson. No. 122,142; July 2; v. 252; p. 241.
Heels, Top lifts for shoe-. I. Henne. No. 122,212; July 9; v. 252; p. 500.
Hinges, door-guards, &c. Lawson Mfg. Co. No. 122,150; July 2; v. 252; p. 241.
Hog-cholera medicine. E. W. Sikes. No. 122,238; July 9; v. 252; p. 501.
Horns, Electrically-operated signal-. A. N. Pierman. No. 122,156; July 2; v. 252; p. 242.
Hosiery. Moorhead Knitting Company. No. 122,224; July 9; v. 252; p. 500.
House-furnishing woodenware and cabinet-work, Certain named. J. Chas. Teepe, Inc. No. 122,244; July 9; v. 252; p. 501.
Ice-cream. Chapin-Sacks Manufacturing Company. No. 122,133; July 2; v. 252; p. 241.
Inks, &c. Parsons Trading Company. No. 122,229; July 9; v. 252; p. 500.
Insecticide. Smith, Kline & French Co. No. 122,398; July 30; v. 252; p. 1140.
Jewelry and precious-metal ware, Certain named. J. H. Peckham. No. 122,231; July 9; v. 252; p. 500.
Knives, Pocket-. The Robeson Cutlery Company. No. 122,160; July 2; v. 252; p. 242.
Lamp-regulating devices. Electric-. Benjamin Electric Manufacturing Company. No. 122,181; July 9; v. 252; p. 499.
Leather goods, Certain named. Keystone Leather Goods Co. No. 122,218; July 9; v. 252; p. 500.
Leather preservative, Boot and shoe. B. L. Rosenbloom. No. 122,344; July 23; v. 252; p. 958.
Leather-working machinery. Associated Tanners Machinery Co. No. 122,124; July 2; v. 252; p. 241.
Lightning-rods. The E. A. Foy Company. No. 122,137; July 2; v. 252; p. 241.
Lime to be used in the polishing of metals. C. H. Gaylord. No. 122,275; July 16; v. 252; p. 741.
Lithium, magnesium, strontium, thorium nitrate. Foote Mineral Co. No. 122,138; July 2; v. 252; p. 241.
Lumber. The Benn Lumber Company. No. 122,183; July 9; v. 252; p. 499.
Manicure and toilet tools, hand-forceps, and surgical scissors. Joseph Rose & Company. No. 122,393; July 30; v. 252; p. 1140.
Manifolds, mechanical primers, carbureters, and parts thereof. Kerosene Burning Carburetor Company. No. 122,325; July 23; v. 252; p. 957.
Mattresses. Levy Mattress Company. No. 122,219; July 9; v. 252; p. 500.
Measuring and scientific appliances and parts, Certain named. American Optical Company. No. 122,175; July 9; v. 252; p. 499.
Medicine and tonic, Cattle and stock. Troy Chemical Co. No. 122,167; July 2; v. 252; p. 242.
Medicine for epilepsy. P. G. Garsa. No. 122,340; July 23; v. 252; p. 958.
Medicine for stomach and bowel disorders. Capdau and Breslin. No. 122,371; July 30; v. 252; p. 1139.
Metal-cutting tools used in metal-working machinery, abrading-machines, reamers, and files. Rolling File Tool Company. No. 122,343; July 23; v. 252; p. 958.
Metals, Antifriction. H. W. Aitken. No. 122,254; July 16; v. 252; p. 741.
Metallic particles for stoneworking operations. The Globe Steel Company. No. 122,207; July 9; v. 252; p. 500.
Milk, Condensed. Waddington Condensed Milk Co. No. 122,358; July 23; v. 252; p. 958.
Milk, Evaporated. Grand Ledge Milk Co. No. 122,272; July 16; v. 252; p. 741.
Milk, Malted. The Alfa-Celo Corporation. No. 122,122; July 2; v. 252; p. 241.
Mouth-wash and tooth-paste. Mentho-Listine Chemical Co. No. 122,386; July 30; v. 252; p. 1139.
Needles, Hand sewing. Thomas Harper & Sons. No. 122,210; July 9; v. 252; p. 500.
Oil and kernels and cocoa for food purposes, Palm. African Association. No. 122,251; July 16; v. 252; p. 741.
Oil and rust-preventive. Petroleum Products Co. No. 122,339; July 23; v. 252; p. 958.
Oil for use in the softening, strengthening, and dyeing of textiles. E. F. Houghton & Co. No. 122,383; July 30; v. 252; p. 1139.
Oil, Lubricating. The Star Oil Company. Nos. 122,288–9; July 16; v. 252; p. 742.
Oils and greases, Automobile lubricating. E. S. Hobson. No. 122,214; July 9; v. 252; p. 500.
Oils and greases, Certain named. Standard Oil Company. No. 122,849; July 23; v. 252; p. 958.
Oils for fuel, illuminating, or lubricating purposes, Palm, &c. African Association. No. 122,252; July 16; v. 252; p. 741.
Ointment for piles, cuts, burns, and eczema. Botacha Ointment Co. No. 122,127; July 2; v. 252; p. 241.
Oleomargarin. Swift and Company. Nos. 122,353–4; July 23; v. 252; p. 958.
Ophthalmic mountings and parts thereof. American Optical Company. No. 122,176; July 9; v. 252; p. 499.
Paints and painters' materials, Certain named. Henry Zimmern & Company. No. 122,362; July 23; v. 252; p. 959.
Paints, enamels, varnishes. Montauk Paint Manufacturing Company. No. 122,338; July 23; v. 252; p. 958.
Paper. District of Columbia Paper Manufacturing Company. No. 122,267; July 16; v. 252; p. 741.
Paper-baler. H. H. Burns. No. 122,129; July 2; v. 252; p. 241.
Paper-clips. Owl Supply Company. No. 122,336; July 23; v. 252; p. 958.
Paper cutters and holders, Roll-. Parsons Trading Company. No. 122,155; July 2; v. 252; p. 242.
Paper-knives, penholders, memorandum-tablets. The Celluloid Company. No. 122,264; July 16; v. 252; p. 741.
Paper, Sheathing-. The Barrett Company. No. 122,300; July 23; v. 252; p. 957.
Paper, Toilet-. The John Hoberg Co. Nos. 122,144–5; July 2; v. 252; p. 241.
Paper, Toilet-. The John Hoberg Co. No. 122,322; July 23; v. 252; p. 957.
Paper, Toilet-. The Union Paper and Twine Company. No. 122,292; July 16; v. 252 p. 742.
Paper, Wrapping-. The Union Paper and Twine Company. No. 122,291; July 16; v. 252; p. 742.
Papers, type-writer ribbons, inks, Carbon-. Caribonum Company. No. 122,187; July 9; v. 252; p. 499.
Papers, Writing and printing. Beekman Paper and Card Company. No. 122,178; July 9; v. 252; p. 499.
Paste products, Alimentary. Vineland Preserving Company. No. 122,357; July 23; v. 252; p. 958.
Pens and pen-points, magazine lead-pencils, and the holders and leads. Fountain-. Wahl Adding Machine Company. No. 122,401; July 30; v. 252; p. 1140.

Pens, Fountain-. Cleeland Inshuro Pen Company. No. 122,307; July 23; v. 252; p. 957.
Pens, Fountain-. Mabie, Todd & Co. No. 122,278; July 16; v. 252; p. 742.
Perfumes. T. G. Hitt. No. 122,143; July 2; v. 252; p. 241.
Petroleum and asphalt. Carib Syndicate. No. 122,186; July 9; v. 252; p. 499.
Petroleum products. Pierce Oil Corporation. No. 122,232; July 9; v. 252; p. 500.
Pharmaceutical preparations for toilet purposes, Certain named. H. J. Titus. No. 122,399; July 30; v. 252; p. 1140.
Phonographs. Royal Phonograph Company. No. 122,285; July 16; v. 252; p. 742.
Photographic developers. P. C. Christensen. No. 122,304; July 23; v. 252; p. 957.
Photographic paper. Eastman Kodak Company. No. 122,200; July 9; v. 252; p. 499.
Pianos and player pianos. Hobbie Bros. Company. No. 122,321; July 23; v. 252; p. 957.
Pianos, organs, player-pianos, etc. Autopiano Company. No. 122,257; July 16; v. 252; p. 741.
Picture films, Motion-. Paralta Plays. No. 122,228; July 9; v. 252; p. 500.
Pins, Safety-. Consolidated Safety Pin Co. Nos. 122,192–3; July 9; v. 252; p. 499.
Powder, Face-. L. Gawurin. No. 122,139; July 2; v. 252; p. 241.
Powder for use in the treatment of diseased conditions of mucous membrane, &c., Healing prophylactic. J. Bier, M. D. No. 122,367; July 30; v. 252; p. 1139.
Powders, Face and talcum. A. S. Hinds. No. 122,320; July 23; v. 252; p. 957.
Preparation for dyspepsia. T. A. Porter. No. 122,234; July 9; v. 252; p. 501.
Preparation for rheumatism. V. Peppas. No. 122,356; July 23; v. 252; p. 958.
Preparation for the treatment of gonorrhea and gleet. J. Langerman. No. 122,327; July 23; v. 252; p. 958.
Preparation for the treatment of piles. The Guaranteed Remedies Co. No. 222,318; July 23; v. 252; p. 957.
Printing-roller wash and preservative. Star Chemical Company. No. 122,164; July 2; v. 252; p. 242.
Publication, Monthly. The Northwestern Chemical Company. No. 122,153; July 2; v. 252; p. 242.
Purgative beverage. H. W. Pape. No. 122,227; July 9; v. 252; p. 500.
Pyroxylin, Certain named articles made of compounds of. The Celluloid Company. Nos. 122,372–4; July 30; v. 252; p. 1139.
Radiators of automobiles, Non-freeze compound for. Alcemo Manufacturing Company. No. 122,174; July 9; v. 252; p. 499.
Rail-anchors, anticreepers, tie-plates, &c., Metal. The P. & M. Co. No. 122,226; July 9; v. 252; p. 500.
Razor-blade stroppers. Woodward-Williams Co. No. 122,172; July 2; v. 252; p. 242.
Razor-strops. Pike Manufacturing Company. No. 122,233; July 9; v. 252; p. 501.
Remedy for galls, sores, and cuts in animals. L. Adams. No. 122,121; July 2; v. 252; p. 241.
Remedy for nervous conditions due to monthly periods or change of life. B. E. Studer. No. 122,165; July 2; v. 252; p. 242.
Roller-buckles. North & Judd M'f'g Co. No. 122,335; July 23; v. 252; p. 958.
Salve for boils, carbuncles, and kindred troubles. R. H. Kelley. No. 122,216; July 9; v. 252; p. 500.
Salve for burns. D. L. Micca. No. 122,152; July 2; v. 252; p. 242.
Salve for spasmodic croup, pneumonia, &c., Medicinal. The Vick Chemical Co. No. 122,168; July 2; v. 252; p. 242.
Salves for treating certain affections of man and horse. D. C. Myers. No. 122,334; July 23; v. 252; p. 958.
Sauce or relish for seasoning foods. The Curtis Corporation. No. 122,310; July 23; v. 252; p. 957.
Scalp preparation. J. R. Jones. No. 122,324; July 23; v. 252; p. 957.
Scalp remedies. Ginnetti Manufacturing Company. No. 122,314; July 23; v. 252; p. 957.
Seed-graders. Success Seed Grader Company. No. 122,243; July 9; v. 252; p. 501.
Sewing-machines. White Sewing Machine Company. No. 122,249; July 9; v. 252; p. 501.
Shirts and undershirts. Commercial Shirt Company. No. 122,194; July 9; v. 252; p. 499.
Shirts, Men's. Dagg, Derneden Co. No. 122,195; July 9; v. 252; p. 499.
Silk, cotton, and woolen piece goods. B. M. Cohen. No. 122,305; July 23; v. 252; p. 957.
Silk piece goods. Nereim, Sommer & Milkes. No. 122,387; July 30; v. 252; p. 1139.
Silks and silk and cotton goods. Standard Silk Dyeing Company. No. 122,350; July 23; v. 252; p. 958.
Soap. Empire Soap Company. No. 122,202; July 9; v. 252; p. 499.
Soap, cream metal-polish, hand-cleansers, Auto oil-. Electric Appliance Company. No. 122,270; July 16; v. 252; p. 741.
Soap for cleaning and preserving leather and imitation-leather goods. Colgate & Co. No. 122,306; July 26; v. 252; p. 957.
Soap, Toilet. International Drug Company. No. 122,274; July 16; v. 252; p. 741.
Soaps. The Morell Manufacturing Company. No. 122,280; July 16; v. 252; p. 742.
Soaps and shaving-cream. The Remiller Co. No. 122,159; July 2; v. 252; p. 242.
Soaps and shaving-cream, Toilet and shaving. The Beau-Site Company. No. 122,179; July 9; v. 252; p. 499.
Soaps, Laundry and oil. Harris Soap Company. No. 122,310; July 23; v. 252; p. 957.
Soaps, Toilet. Crystal Soap Company. No. 122,266; July 16; v. 252; p. 741.
Soles and heels for shoes and boots, Composition. The Electric Rubber Reclaiming Company. No. 122,201; July 9; v. 252; p. 499.
Soot destroyer and remover. Northern Chemical Co. of Michigan. No. 122,388; July 30; v. 252; p. 1139.
Spark-plug porcelains. Champion Spark Plug Company. No. 122,132; July 2; v. 252; p. 241.
Stationery, Bank-. S. Sladden. No. 122,162; July 2; v. 252; p. 242.
Steam-fittings. Walworth Manufacturing Company. No. 122,169; July 2; v. 252; p. 242.
Sugar. Savannah Sugar Refining Corporation. No. 122,345; July 23; v. 252; p. 958.
Suits and dresses, Outer. Blaskopf & Co. No. 122,182; July 9; v. 252; p. 499.
Tablets, printing and writing papers, Writing-. Eastern Tablet Company. No. 122,199; July 9; v. 252; p. 499.
Tea. Arbuckle Brothers. No. 122,298; July 23; v. 252; p. 957.
Tea. M. T. Wendell. Nos. 122,170–1; July 2; v. 252; p. 242.
Thermometers. M. C. Shriver. No. 122,287; July 9; v. 252; p. 501.
Tire-sealing compound. Alcemo Manufacturing Company. No. 122,296; July 23; v. 252; p. 957.
Toilet preparations and cosmetics. J. Macdonald. No. 122,385; July 30; v. 252; p. 1139.
Tonic, Blood-. F. Mills. No. 122,332; July 23; v. 252; p. 958.
Tonic, General. Lyko Medicine Company. No. 122,330; July 23; v. 252; p. 958.
Tonics, eczema, skin, and ulcer ointment, Uterine and anæmia. Occidental Medicine Co. No. 122,337; July 23; v. 252; p. 958.
Toy torpedo. The National Fireworks Distributing Co. No. 122,225; July 9; v. 252; p. 500.
Toys, Lung-testing. W. Zolper. No. 122,405; July 30; v. 252; p. 1140.
Umbrellas, parasols, frames and trimmings thereof. Fretz, Gross & Co. No. 122,381; July 30; v. 252; p. 1139.
Undergarment for women. Schuylkill Silk Mills. No. 122,236; July 9; v. 252; p. 501.
Underwear, Ladies' and misses' flat. Barrow Mfg. Co. No. 122,177; July 9; v. 252; p. 499.
Varnishes. Cooper-Bell Varnish Co. No. 122,191; July 9; v. 252; p. 499.
Varnishes, stains, enamels, &c. Standard Varnish Works. No. 122,241; July 9; v. 252; p. 501.
Veils. E. & Z. Van Raalte. No. 122,400; July 30; v. 252; p. 1140.
Veils and hair-nets. Silverberg Import Co. No. 122,395; July 30; v. 252; p. 1140.
Veterinary medicine. H. G. Freund. No. 122,311; July 23; v. 252; p. 957.
Wall-board and building-paper. The Kenmore Wall Board Company. No. 122,217; July 9; v. 252; p. 500.
Washing compound. Morey Bros. No. 122,283; July 16; v. 252; p. 742.
Watches. Dubois Watch Case Company. No. 122,198; July 9; v. 252; p. 499.
Water, Mineral. Andover Laxine Water Company. No. 122,305; July 30; v. 252; p. 1139.
Water-softening compounds, Chemical. The Staten Island Chemical Corporation. No. 122,242; July 9; v. 252; p. 501.
Wind-shield, window and the like wiper devices. White Lock Company. No. 122,248; July 9; v. 252; p. 501.
Wood, Laminated. Haskelite Manufacturing Corporation. No. 122,211; July 9; v. 252; p. 500.
Woolen piece goods. Forstmann & Huffmann Co. No. 122,382; July 30; v. 252; p. 1139.

ALPHABETICAL LIST OF LABELS.

"A Perfect Blend Wilkins Coffee." (For Coffee.) John H. Wilkins Company. No. 20,727; July 2; v. 252; p. 248.

"A Sur Shot." (For a Bot and Worm Remover.) Fairview Chemical Co. No. 20,741; July 30; v. 252; p. 1141.

"Active Blocks." (For Toy Building-Blocks.) George Borgfeldt & Co. No. 20,730; July 9; v. 252; p. 502.

"America's Guide to Economy." (For Catalogues.) The Riley-Schubert-Grossman Co. No. 20,750; July 30; v. 252; p. 1141.

"Antiseptic George's Medicated Cones." (For Antiseptic Suppositories.) G. A. Finkselman. No. 20,734; July 9; v. 252; p. 502.

"Aschers Knit Goods, with the Figure of the Lamb." (For Knit Goods.) Simon Ascher & Co., Inc. No. 20,729; July 9; v. 252; p. 502.

"Authentic Designs." (For Silk and Cotton Knitting-Bags.) Oriental Silk Printing Company. No. 20,719; July 2; v. 252; p. 243.

"Authentic Designs." (For Silk and Cotton Samples.) Oriental Silk Printing Company. No. 20,718; July 2; v. 252; p. 243.

"Automoonshine." (For Polish.) W. S. Duncan. No. 20,740; July 30; v. 252; p. 1141.

"Beckman Bed Blankets." (For Bed-Blankets.) The Beckman Company. No. 20,708; July 2; v. 252; p. 243.

"Berliner Tea Matzoths." (For Matzoths.) A. Goodman & Sons. No. 20,713; July 2; v. 252; p. 243.

"Celto." (For Non-Intoxicating Beverages.) The Peoples Brewing Co. No. 20,721; July 2; v. 252; p. 248.

"Clover Compound." (For Abrasive Materials.) Clover Manufacturing Co. No. 20,738; July 30; v. 252; p. 1141.

"Cool-Flow." (For Non-Alcoholic Beverages.) O. Korn. No. 20,746; July 30; v. 252; p. 1141.

"Creamette Cereal." (For Cereal Breakfast Food.) The Creamette Company. No. 20,739; July 30; v. 252; p. 1141.

"De Luxe." (For Canned Sardines.) The Stafford Packing Co. No. 20,752; July 30; v. 252; p. 1141.

"Edelweiss." (For Cheese.) The Purity Cream Cheese Co. No. 20,748; July 30; v. 252; p. 1141.

"Hick's Seminole Liniment." (For a Liniment.) Fischer Drug Company. No. 20,742; July 30; v. 252; p. 1141.

"Horsman's Boy Magician Outfit." (For Magician Outfits or Magic Sets.) E. I Horsman Co. No. 20,745; July 30; v. 252; p. 1141.

"Idyll." (For Cigars.) The Tri-State Cigar M'fg. Co. No. 20,726. July 2; v. 252; p. 243.

"Krank's Lemon Cleansing Cream." (For Cold-Cream and Cleansing-Cream.) A. J. Krank. No. 20,716; July 2; v. 252; p. 243.

"Krank's Shoe Cream." (For a Preparation for Polishing and Preserving All Kinds of Leather.) A. J. Krank. No. 20,717; July 2; v. 252; p. 243.

"Lock Brand." (For Crates Containing Fresh Grapes.) California Fruit Exchange. No. 20,737; July 30; v. 252; p. 1141.

"Loyalty." (For Flour.) Centennial Mill Co. No. 20,731; July 9; v. 252; p. 502.

"McQuay-Norris Superoyl Ring." (For Rings.) McQuay-Norris Mfg. Company. No. 20,749; July 30; v. 252; p. 1141.

"No Blow Atherton Quality Veil." (For Veils.) J. A. Dunham. No. 20,712; July 2; v. 252; p. 243.

"No-Fly." (For a Fly-Spray.) W. D. Carpenter Co. No. 20,710; July 2; v. 252; p. 243.

"Oleaqua." (For Hair-Tonic.) J. Honore. No. 20,744; July 30; v. 252; p. 1141.

"Over The Top." (For Chocolates.) J. Rosenfeld. No. 20,723; July 2; v. 252; p. 243.

"Over The Top Into Berlin." (For Games.) S. M. Swayze. No. 20,725; July 2; v. 252; p. 243.

"Ozene." (For Hair-Tonic and Dandruff Remedy.) Ozene Company. No. 20,720; July 2; v. 252; p. 243.

"Pacific." (For Lemons.) Johnston Fruit Co. No. 20,715; July 2; v. 252; p. 243.

"Pall Mall Olive Oil." (For Pure Olive-Oil.) L. E. Schoenfeld. No. 20,735; July 9; v. 252; p. 502.

"Pauline Garcia." (For Cigars.) D. Zlattner. No. 20,728; July 2; v. 252; p. 243.

"Remue." (For a Proprietary Preparation.) The Remue Remedies Company. No. 20,722; July 2; v. 252; p. 243.

"Sauer's." (For Flavoring Extracts.) The C. F. Sauer Co. No. 20,724; July 2; v. 252; p. 243.

"Sweetheart Kisses." (For Kisses.) The Harter Candy Co. No. 20,714; July 2; v. 252; p. 243.

"Tea Rose." (For Condensed Milk.) Merton Dairy Products Co. No. 20,747; July 30; v. 252; p. 1141.

"The Liberty." (For Snap-Fasteners.) Snap-Fastener Sales Co. Corp. No. 20,751; July 30; v. 252; p. 1141.

"The New Edison 'The Phonograph with a Soul.'" (For Phonographs.) Thomas A. Edison, Inc. Nos. 20,732–3; July 9; v. 252; p. 502.

"Thoro." (For Powdered Skin-Cleanser.) The Thoro Corporation. No. 20,736; July 9; v. 252; p. 502.

"Trench Tubes." (For Trench-Tubes.) Davis & Geck. No. 20,711; July 2; v. 252; p. 243.

"V. Formusa." (For Alimentary Paste.) V. Formusa. No. 20,743; July 30; v. 252; p. 1141.

"World's Wonder Polish." (For a Polish.) Bristow & McDonald. No. 20,709; July 2; v. 252; p. 243.

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"Be good to your Motor." (For Spark-Plugs.) Express Spark Plug Company. No. 4,917; July 30; v. 252; p. 1141.

"Beware." (For Detmer Woolens.) Detmer Woolen Co. No. 4,913; July 2; v. 252; p. 243.

"Can't Start Too Young." (For a Toilet Cream.) J. C. Crane. No. 4,912; July 2; v. 252; p. 243.

"Depositing all of his first month's earnings in the bank." (For Shoes.) W. L. Douglas Shoe Co. No. 4,916; July 30; v. 252; p. 1141

"Latest Metal and Gravel Katcher, the Greatest and Only Fire Preventor." (For Gravel-Catchers.) Williams Patent Crusher & Pulverizer Co. No. 4,915; July 9; v. 252; p. 502.

"Plumbers' Auto Repair Kit." (For Kits Containing Plumbers' Supplies.) Ross Manufacturing Company. No. 4,914; July 2; v. 252; p. 243.

"The 'Casco' System for Replacing Motor Boat Tops." (For Motor-Boat Tops.) A. W. Connor. No. 4,911; July 2; v. 252; p. 243.

"Try One Of Our Cigars—The Best Smoke." (For Cigars.) Kaufmann & Strauss Company. No. 4,918; July 30; v. 252; p. 1141.

DISCLAIMERS.

Pasteurizer and ripener. T. L. Valerius. No. 1,232,128; date of patent July 3, 1918; disclaimer filed July 5, 1918; v. 252; p. 249.

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JULY, 1918.

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ERRATA.

1,275,214, page 271, in heading, assignment, after residence of patentee insert *assignor to Henry E. Edwards, Jackson, Mich.*

1,275,326, page 301, strike out claims 2 and 9.

1,276,005, page 521, in heading, assignment, after the word "assignor" insert the words *of one-half.*

1,276,419, page 637, in heading, name of patentee, for "Frederick E. Sandburn" read *Frederick E. Sanburn.*

1,277,164, page 876, fourth claim, line 1, before the word "partially" insert the word *means.*

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Trade-Marks	None.			
Labels	62	No. 20,753 to No.	20,775,	inclusive.
Prints	5	No. 4,919 to No.	4,923,	inclusive.
Reissues	1	No. 14,500.		
Total	871			

Amendment to the Rules of Practice.

(ORDER No. 2,417.)

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., July 31, 1918.

Acting under the provisions of section 483 of the Revised Statutes and with the approval of the Secretary of the Interior, Rule 17 of the Rules of Practice of the United States Patent Office is amended by adding thereto the following:

(*h*) Every attorney registered to practice before the United States Patent Office shall submit to the Commissioner of Patents for approval copies of all proposed advertising matter, circulars, letters, cards, etc., intended to solicit patent business, and if it be not disapproved by him and the attorney so notified within ten days after submission, it may be considered approved.

Any registered attorney sending out or using any such matter, a copy of which has not been submitted to the Commissioner of Patents in accordance with this rule, or which has been disapproved by the Commissioner of Patents, shall be subject to suspension or disbarment,

so that the rule as amended will read as follows:

17. An applicant or an assignee of the entire interest may prosecute his own case, but he is advised, unless familiar with such matters, to employ a competent patent attorney, as the value of patents depends largely upon the skilful preparation of the specification and claims. The office can not aid in the selection of an attorney.

A register of attorneys will be kept in this office, on which will be entered the names of all persons entitled to represent applicants before the Patent Office in the presentation and prosecution of applications for patent. The names of persons in the following classes will, upon their written request, be entered upon this register.

(*a*) Any attorney at law who is in good standing in any court of record in the United States or any of the States or Territories thereof and who shall furnish a certificate of the clerk of such United States, State, or Territorial court, duly authenticated under the seal of the court, that he is an attorney in good standing.

(*b*) Any person not an attorney at law who is a citizen or resident of the United States and who shall file proof to the satisfaction of the Commissioner that he is of good moral character and of good repute and possessed of the necessary legal and technical qualifications to enable him to render applicants for patents valuable service and is otherwise competent to advise and assist them in the presentation and prosecution of their applications before the Patent Office.

(*c*) Any foreign patent attorney not a resident of the United States, who shall file proof to the satisfaction of the Commissioner that he is registered and in good standing before the patent office of the country of which he is a citizen or subject, and is possessed of the qualifications stated in paragraph (*b*).

(*d*) Any firm will be registered which shall show that the individual members composing the firm are each and all registered under the provisions of the preceding sections.

(*e*) The Commissioner may require proof of qualifications other than those specified in paragraph (*a*) and reserves the right to decline to recognise any attorney, agent, or other person applying for registration under this rule.

(*f*) Any person or firm not registered and not entitled to be recognized under this rule as an attorney or agent to represent applicants generally may, upon a showing of circumstances which render it necessary or justifiable, be recognized by the Commissioner to prosecute as attorney or agent certain specified application or applications, but this limited recognition shall not extend further than the application or applications named.

(*g*) No person not registered or entitled to recognition as above provided will be permitted to prosecute applications before the Patent Office.

(*h*) Every attorney registered to practice before the United States Patent Office shall submit to the Commissioner of Patents for approval copies of all proposed advertising matter, circulars, letters, cards, etc., intended to solicit patent business, and if it be not disapproved by him and the attorney so notified within ten days after submission, it may be considered approved.

Any registered attorney sending out or using any such matter, a copy of which has not been submitted to the Commissioner of Patents in accordance with this rule, or which has been disapproved by the Commissioner of Patents, shall be subject to suspension or disbarment.

J. T. NEWTON,
Commissioner.

Disbarred Attorneys.

It is hereby directed that any person who has been disbarred from practice before the Patent Office by order of the Commissioner will be denied access to the files of the Office, either in his own capacity or as the representative of any other person or firm.

APPLICATIONS UNDER EXAMINATION.

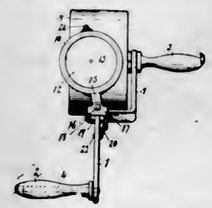
Condition at Close of Business August 2, 1918.

Room No.	Divisions and subjects of invention.	Oldest new application and oldest action by applicant awaiting office action.		No. of applications awaiting action.
		New.	Amended.	
314	1. Closure Operators; Fences; Gates; Harrows and Diggers; Plows; Railway Gates; Planting; Scattering Unloaders; Trees, Plants, and Flowers.	June 20	July 6	136
128	2. Bee Culture; Curtains, Shades, and Screens; Dairy; Paper Files and Binders; Medicines; Pneumatics; Preserving; Presses; Tents, Canopies, Umbrellas, and Canes; Tobacco.	Apr. 22	May 18	376
175	3. Electric Heating and Rheostats; Electrochemistry; Heating; Metal-Founding; Metallurgical Apparatus; Metallurgy; Metal Treatment; Plastic Metal Working.	Apr. 22	June 7	195
234	4. Conveyers; Elevators; Excavating; Hoisting; Material or Article Handling; Pneumatic Despatch; Pushing and Pulling Implements; Railway Mail Delivery; Store-Service; Traversing Hoists.	June 13	July 10	158
167	5. Book-Making; Books, Strips and Leaves; Harvesters; Jewelry; Manifolding; Music; Printed Matter.	May 3	June 11	228
318	6. Bleaching and Dyeing; Chemicals; Explosives; Fertilizers; Liquid Coating Compositions; Plastic Compositions; Substance Preparation.	Apr. 1	June 6	364
312	7. Educational Appliances; Games and Toys; Optics; Velocipedes	May 6	June 3	243
131	8. Beds; Chairs; Flexible-Sheet Securing Devices; Furniture; Kitchen and Table Articles; Store Furniture; Supports.	June 10	June 12	221
221	9. Air and Gas Pumps; Hydraulic Motors; Motors, Fluid; Motors, Fluid-Current; Pumps; Marine Propulsion.	Feb. 13	June 21	447
235	10. Carriages and Wagons; Motor Vehicles	Apr. 17	June 24	553
154	11. Boot and Shoe Making; Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Spring Devices; Whips and Whip Apparatus.	June 3	July 11	190
322	12. Journal-Boxes, Pulleys, and Shafting; Machine Elements	Apr. 9	May 2	744
329	13. Ammunition and Explosive Charge Making; Bolt, Nail, Nut, Rivet, and Screw Making; Button Making; Chain, Staple, and Horseshoe Making; Driven, Headed, and Screw-Threaded Fastenings; Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Tools and Implements, Making; Metal Working; Needle and Pin Making; Nut and Bolt Locks; Turning.	Mar. 8	May 4	548
323	14. Compound Tools; Cutting and Punching Sheets and Bars; Farriery; Metal-Bending; Sheet-Metal Ware, Making; Tools; Wire Fabrics and Structure; Wire-Working.	May 23	June 8	152
308	15. Bread, Pastry, and Confection Making; Coating; Fuel; Glass; Laminated Fabrics and Analogous Manufactures; Paper-Making and Fiber Liberation; Plastic Block and Earthenware Apparatus; Plastics.	June 24	July 5	245
112	16. Electric Signaling-A; Radiant Energy; Telegraphy; Telephony	Apr. 1	May 2	504
307	17. Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet Material Associating or Folding; Sheet Feeding or Delivering; Type Setting.	May 21	May 27	133
229	18. Fluid-Pressure Regulators; Injectors and Ejectors; Liquid Heaters and Vaporizers; Power Plants; Speed Responsive Devices; Steam and Vacuum Pumps; Steam-Engines; Steam-Engine Valves.	Apr. 29	May 31	455
236	19. Dampers, Automatic; Furnaces; Heating Systems; Stoves and Furnaces; Domestic Cooking Vessels.	May 3	May 31	314
179	20. Artificial Body Members; Builders' Hardware; Cutlery; Dentistry; Locks and Latches; Safes; Undertaking.	June 17	July 1	234
212	21. Brakes and Gins; Carding; Cloth-Finishing; Continuous-Strip Feeding; Cordage; Felt and Fur; Knitting and Netting; Silk; Spinning; Weaving; Winding and Reeling.	Apr. 8	May 4	270
249	22. Aeronautics; Firearms; Ordnance	May 2	June 27	319
217	23. Acoustics; Coin-Handling; Horology; Recorders; Registers; Sound Recording and Reproducing; Time-Controlling Mechanism.	May 6	May 8	240
144	24. Apparel; Apparel Apparatus; Garment Supporters; Sewing-Machines	June 18	June 27	194
315	25. Agitating; Butchering; Centrifugal Bowl Separators; Mills; Threshing; Vegetable Cutters and Crushers; Gas Separation.	June 24	June 11	116
105	26. Electricity, Generation; Motive Power	Jan. 5	Apr. 15	566
214	27. Brushing and Scrubbing; Grinding and Polishing; Laundry; Washing Apparatus	May 13	June 10	262
225	28. Internal-Combustion Engines	Apr. 20	May 21	504
147	29. Boring and Drilling; Chucks or Sockets; Coopering; Fire-Escapes; Ladders; Rod Joints or Couplings; Wheelwright-Machines; Wooden Buildings; Wood-Sawing; Wood-Turning; Woodworking; Wood-working Tools.	Feb. 26	May 1	471
152	30. Illuminating-Burners; Illumination; Liquid and Gaseous Fuel Burners; Type-Writing Machines	May 17	July 11	288
172	31. Alcohol; Ammonia, Water, and Wood Distillation; Charcoal and Coke; Gas, Heating and Illuminating; Hides, Skins, and Leather; Hydraulic Cement and Lime; Mineral Oils; Oils, Fats, and Glue; Sugar and Salt.	Apr. 6	May 16	276
278	32. Gas and Liquid Contact Apparatus; Heat Exchange; Packaging Liquids; Refrigeration	Feb. 5	June 10	634
70	33. Bridges; Hydraulic Engineering; Masonry and Concrete Structures; Metallic Building Structures; Paving; Roofs.	Apr. 30	June 6	228
304	34. Railways; Railway Rails and Joints; Railway Rolling Stock; Railway Ties and Fasteners; Track-Sanders; Vehicle-Fenders.	Mar. 5	June 27	58
57	35. Buckles, Buttons, Clasps, Etc.; Card, Picture, and Sign Exhibiting; Signals; Toilet	Feb. 27	May 2	481
204	36. Driers; Geometrical Instruments; Measuring Instruments; Photography; Force Measuring	June 7	June 12	491
107	37. Electric Lamps; Electricity, Circuit Makers and Breakers; Electricity, Conduits; Electricity, General Applications.	Mar. 22	Apr. 15	697
378	38. Animal Husbandry; Earth Boring; Fishing and Trapping; Stationery; Stone-Working; Wells	July 5	July 10	94
220	39. Joint Packings; Multiple Valves; Packed Shaft or Rod Joints; Pipe Joints or Couplings; Valved Pipe Joints or Couplings; Water Distribution.	Mar. 21	May 14	292
273	40. Baggage; Bottles and Jars; Check-Controlled Apparatus; Cloth, Leather, and Rubber Receptacles; Deposit and Collection Receptacles; Metallic Shipping and Storing Vessels; Package and Article Carriers; Paper Receptacles; Special Receptacles and Packages; Wooden Receptacles.	Apr. 5	May 3	487
125	41. Railway Draft Appliances; Resilient Tires and Wheels	Apr. 24	May 17	243
114	42. Electricity, Conductors; Electricity-Transmission to Vehicles; Electric Signaling	Jan. 23	Jan. 25	606
382	43. Baths and Closets; Dispensing; Dispensing Beverages; Electricity, Medical and Surgical; Fire-Extinguishers; Sewerage; Surgery; Water Purification.	Apr. 15	May 24	215
253	44. Air-Guns, Catapults, and Targets; Ammunition and Explosive Devices; Boats and Buoys; Ships	June 27	June 26	169
379	45. Clutches; Lubrication; Motors; Railway Brakes	Mar. 16	Apr. 11	334
	Oldest new case, Jan. 5; oldest amended, Jan. 25.			
	Total number of applications awaiting action			14, 75
163	TRADE-MARKS, DESIGNS, LABELS AND PRINTS:			
	Trade-Marks	July 3	July 10	555
	Designs	May 25	June 12	388
	Labels and Prints	July 24	July 29	14

PATENTS

GRANTED AUGUST 6, 1918.

1,274,361. PHONOGRAPH. HARRY ADAMS, U. S. Navy. Filed Oct. 25, 1916. Serial No. 127,540. (Cl. 274—17.)



1. In a device of the character described, the combination of a portable frame, a sound record rotatably mounted in the frame, a diaphragm, a plate to which the diaphragm is pivotally mounted, a pivot pin upon the frame upon which the said plate is pivotally mounted, a spring engaging the plate and tending to hold the diaphragm adjacent to the record and means for operatively moving said parts in relation to each other.

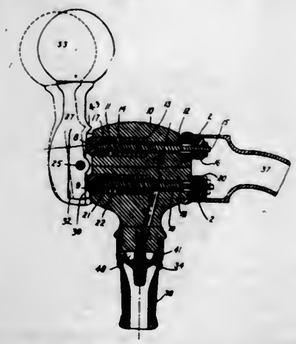
2. In a device of the character described, the combination of a frame, a handle located at each end of the frame said handles disposed in opposite directions and at right angles with length of the frame, a sound record connected with one of said handles and a diaphragm upon the frame.

3. In a device of the character described, the combination of a frame, a handle located at each end of the frame, said handles rotatably mounted in the frame, a spindle integral with one of said handles, a sound record secured upon said spindle and a diaphragm upon the frame.

4. In a device of the character described, the combination of a frame, handles located at the ends of the frame, a sound record secured upon one of said handles, a diaphragm pivotally mounted upon said frame at a point between the two handles and a stylus upon said diaphragm for engaging the sound record.

[Claim 5 not printed in the Gazette.]

1,274,362. VALVE FOR SODA-FOUNTAINS. EDWARD M. ADAMS, New York, N. Y., assignor to Morris H. Petigor, New York, N. Y. Filed Feb. 4, 1918. Serial No. 215,268. (Cl. 225—24.)



1. A double valve for beverage dispensing, comprising a body having a pair of relatively superposed bores, a spring-closed valve normally closing the inner end of each bore and having a stem slidable therethrough and projecting beyond the outer end of the bore, said body having a pair of ears disposed on opposite sides of the projecting valve stems and extending above and below the upper and lower stems, respectively, to inclose the same, the outer edge of each ear inclining at both ends toward the body from a central point, said ears further being perforated adjacent said central point, and a lever pivoted between said ears in their perforations and formed with oppositely projecting ears overextending the ears of the body and normally engaging the central points of said body ears, said lever ears engaging the latter for limiting the swinging movement of the lever.

2. In a double valve for beverage dispensing, a body having a pair of parallel bores, a valve stem slidable in each bore, a spring to keep each valve normally seated, a pair of spaced apertured ears on the body substantially parallel with the plane of the bores and each ear provided with oppositely beveled edges, a lever hinged between said ears to swing on an axis substantially perpendicular to the plane of the bores and between the valve stems and normally engaging the stems, whereby on swinging the lever in one direction one valve is lifted and on swinging the lever in the other direction the other valve is lifted, the lever being arranged to engage the body between the ears and the respective beveled edges of said ears to arrest its swing in both directions to limit the lifting of the valves.

1,274,363. RETAINING-CLIP FOR TYPE OR PRINTING-PLATES. WILLIAM R. ALLEN, Cleveland, Ohio, assignor to The American Multigraph Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 19, 1917. Serial No. 169,626. (Cl. 101—381.)



1. A spring clip comprising a head and two projecting wings which are bowed outwardly, said wings having their edge portions formed into a coöperating recess and a projection respectively, whereby their free edges may move beyond the plane between the wings.

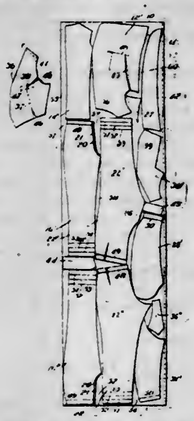
9. A spring clip for use between a pair of parallel type-holding rails, said clip being made of a single piece of sheet metal having a flat intermediate portion with rounded edges, two inwardly projecting portions substantially parallel to the flat portion and spaced therefrom, and two wings projecting from the inner edges of the inwardly projecting portions, said wings being outwardly bowed while being longitudinally straight, one of said wings having a central recess and the corners of the other wing being removed to points overlapping the recess, whereby the free edge of one wing may be caused to overlap the free edge of the other wing.

[Claims 2 to 8 not printed in the Gazette.]

1,274,364. METHOD OF CUTTING GARMENTS. JOHN W. BABB, Chicago, Ill. Filed Apr. 1, 1918. Serial No. 225,876. (Cl. 33—11.)

3. The method of cutting a business man's suit and an extra pair of trousers from a minimum length of cloth which consists (a) in modifying the pattern parts relative to prior art practice (1) by moving slightly forward the shoulder seams of the coat and vest, the sleeve back seams at the top and bottom, the trousers side seams and the trousers crotch seams, (2) by piecing in the crotch the

trousers backs of one pair, and (3) by replacing the prior art vest front by a new vest front made in two sections, and then (*b*) cutting the material according to the modified pattern parts when laid upon the cloth doubled along a central longitudinal line, as follows: a coat back in one corner of the cloth with its top near the end of the cloth and its rear edge adjacent to one edge of the cloth, a coat front next to said back with its lower end near the end of the cloth and its forward edge adjacent the forward edge of said back, a coat facing with its lower end toward the end of the cloth and its forward edge adjacent to the rear edge of the coat front, the top of said facing extending slightly beyond the upper end of said coat front, a pair of trousers fronts bottom to bottom in line with each other and said coat back with their front edges adjacent to one edge of the cloth, an upper collar part intervening between said bottoms, a pair of trousers backs top to top in line with each other and said coat front with their front edges



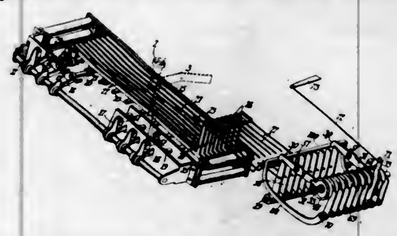
adjacent to the rear edges of said trousers fronts, the trousers back which lies nearest the center of the cloth being cut away at the crotch, a piece for filling out this cut away portion positioned in the space left by the arm hole of said coat front, an upper sleeve part with its forward edge adjacent to the edge of the cloth and its rear edge adjacent to the rear edges of said trousers backs between the crotch points, a vest front section between said coat facing and said upper sleeve part with its front edge adjacent to the rear edge of the said adjacent trousers back, an under sleeve part in the corner of the cloth diagonally opposite to said coat back with its rear edge adjacent to the rear edge of the said adjacent trousers back, a second vest front section between said upper and under sleeve parts, and a pocket flap located between said upper sleeve part and the first mentioned vest front section.

[Claims 1 and 2 not printed in the Gazette.]

1,274,365. COMBINED TYPE-WRITING AND COMPUTING MACHINE. WALTER E. BARNARD, Hartford, Conn., assignor, by mesne assignments, to Underwood Computing Machine Company, New York, N. Y., a Corporation of New York. Filed July 2, 1912. Serial No. 707,153. (Cl. 235—62.)

3. The combination with a computing head, of a carriage, a set of numeral keys, a set of gears for actuating said computing head variable amounts, each having a number of teeth corresponding to the value of the associated numeral key, a set of cams, one connected to each of said gears, said cams being of graded magnitudes and corresponding in magnitude to the number of teeth on the associated gear and means operable by any one of said cams for preventing the movement of said carriage until the teeth of the associated gear in action have done their work.

15. The combination of a source of power, a master wheel or member, a stepped or assorted set of gears, a set of keys, means selectively operated by the keys for operatively connecting said source of power to said master wheel through any selected one of said gears, means operable by said source of power for disconnecting the keys from said connecting means and for subsequently restoring the connection of the keys, and means for automatically disconnecting said master wheel from said source of power.

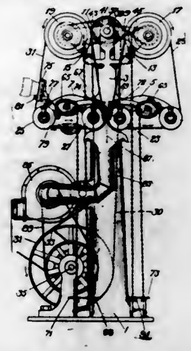


26. The combination with a series of numeral keys, of valuating mechanism for determining the extent of a computation to correspond with the value of a numeral key actuated, and make-and-break connections between said numeral keys and said valuating mechanism whereby said numeral keys, which are normally in dominance over said valuating mechanism, may start said valuating mechanism in action and lose dominance thereover, said connections including a trip, a tripper arm for actuating said trip, a linkage for operating said tripper arm, and a disconnector for positively breaking the connection between said trip and said tripper arm.

36. In a computing machine, the combination with numeral keys and computing wheels, of a power shaft, clutches under the control of said keys for causing said wheels to be turned by said shaft, each clutch forming part of an indexing device for turning said wheels, a traveling carriage for selecting the wheel to be turned, an escapement for said carriage controlled by said keys independently of said shaft, a lock for holding said carriage, and a connection whereby any clutch while turning makes said lock effective.

[Claims 1, 2, 4 to 14, 16 to 25, and 27 to 35 not printed in the Gazette.]

1,274,366. BUFFING-MACHINE. LEWIS J. BAZZONI, Swampscott, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed May 1, 1912. Serial No. 694,534. (Cl. 51—17.)



1. A machine of the class described having, in combination, a set of pulleys, a belt running around the pulleys of said set, a second set of pulleys having their ends in substantially the same plane as those of the first set, a second belt running around the pulleys of the second set, means for operating one pulley of each set to cause the operative runs of the belts to travel toward each other, pressers normally held out of contact with the back of the operative runs of said belts, said pressers being shaped to enter the angle between the sole of a shoe and the breast of the heel, and treadle operated means for moving said pressers into contact with the backs of said operative runs, there being a free and unobstructed space beneath said operative runs to permit manual presentation of a shoe.

2. A machine of the class described having, in combination, a plurality of buffing belts arranged in proximity to each other in position to permit a shoe to be presented manually first to the operative run of one and then to the operative run of the other, means for causing the operative runs of said belts to travel toward each other and an exhaust pipe common to the two belts and having its receiving mouth located in proximity to adjacent portions of the runs of the belts which are traveling toward each other.

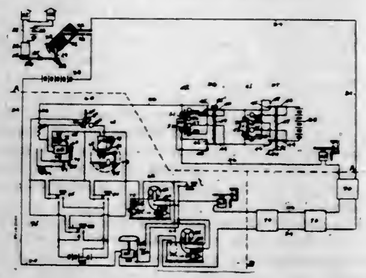
3. A machine of the class described having, in combination, a plurality of buffing belts arranged in proximity to each other in position to permit a shoe to be presented manually first to the operative run of one and then to the operative run of the other, means for causing the operative runs of said belts to travel toward each other, and a frusto-conical rotary member movable at will into and out of contact with the back of the operative run of one of said belts.

4. A machine of the class described having, in combination, a plurality of buffing belts having approximately horizontal operative runs which are normally straight, there being a free and unobstructed space beneath said runs to permit manual presentation of a shoe first to one belt and then to the other, means for causing said operative runs to travel toward each other, a presser located adjacent the back of each belt at the operative run thereof and normally out of contact therewith, and treadle actuated means for causing either presser to contact instantly with the back of the respective belt and thereby force said belt downwardly at the point of contact.

5. A machine of the class described having, in combination, a belt having an inclined run, a combined belt supporting and heel supporting member and a pivot connecting said member with the frame of the machine.

[Claims 6 to 10 not printed in the Gazette.]

1,274,367. SIGNAL SYSTEM. CLARENCE E. BEACH, Binghamton, N. Y., assignor, by mesne assignments, to The Gamewell Fire Alarm Telegraph Company, Newton Upper Falls, Mass., a Corporation of New York. Filed Oct. 1, 1915. Serial No. 53,563. (Cl. 177—360.)



1. In a signal system:—make and break telegraphic transmitting and receiving devices, alarming devices so constructed as to be responsive to extraordinary current changes but not to be responsive to ordinary makes and breaks, one of said alarming devices comprising recording mechanism having a paper feeding train adapted to be conditioned upon each stroke of an alarm to run for a time longer than the longest interval between strokes of any alarm, transmitting mechanism adapted to cause responsive operation of said alarming devices, and disabling mechanism for one of said telegraphic transmitting devices suitably controlled by the running of said train.

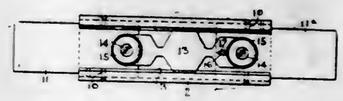
10. In a signal system:—a central station and one or more substations; make and break telegraphic transmitting and nonpolarized telegraphic receiving devices at substations; alarming devices at said substations some of which are polarized; two classes of alarm circuits each including certain of said alarming devices at the substations and transmitting mechanism at the central station adapted to cause responsive operation of said alarming devices, one class of alarm circuits including telegraphic devices and polarized alarming devices, and the other class of alarm circuits including alarming devices comprising recording mechanism having paper feeding trains adapted to be conditioned upon each stroke of an alarm to run for a time longer than the longest interval between strokes of any alarm; and disabling mechanism at one or more substations for the telegraphic transmitting devices thereat suitably controlled by the running of said trains.

22. In a signal system comprising a circuit including make and break telegraphic transmitting and receiving devices, a main current source, alarming devices not responsive to ordinary makes and breaks but responsive to extraordinary current changes, and transmitting mechanism adapted to produce said extraordinary current changes;—one or more emergency keys each associated with one or more of said alarming devices, and current sources associated with each of said keys, the capacity of the current sources being such and the emergency keys being so connected that they will be adapted to operatively alter the current flow through the associated alarming devices without operatively altering the current flow throughout the remainder of the circuit.

29. In a signaling system:—make and break telegraphic transmitting and receiving devices, alarming devices so constructed as to be responsive to extraordinary current changes but not to be responsive to ordinary makes and breaks, one of said alarming devices comprising a time train adapted to be conditioned upon each stroke of an alarm to run for a time longer than the longest interval between strokes of any alarm, transmitting mechanism adapted to cause responsive operation of said alarming devices, and a shunt for one of said telegraphic transmitting devices so controlled by said train as to be closed during the running of said train.

[Claims 2 to 9, 11 to 21, and 23 to 28 not printed in the Gazette.]

1,274,368. FUSE. HARRY L. BECK, Pittsburgh, JOHN WEIBLE, Coraopolis, and JERRY J. HOULAHEN, Millvale, Pa. Filed Oct. 4, 1915. Serial No. 53,932. (Cl. 175—273.)



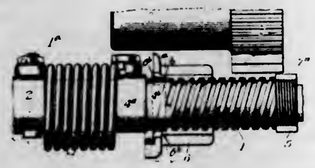
1. In a fuse, the combination of a suitable shell or casing having a longitudinally extending opening, terminals in said shell extending beyond the ends thereof, a fuse wire connected to said terminals, a shutter slidable in said opening, a cap permanently connected to said shutter adapted to close one end of said shell, and a cap closing the opposite end of said shell having a freely detachably locking connection with said shutter whereby said removable cap will lock both caps in position.

[Claims 2 and 3 not printed in the Gazette.]

1,274,369. ENGINE-STARTER. VINCENT BENDIX, Chicago, Ill. Filed Aug. 14, 1916. Serial No. 114,696. (Cl. 74—7.)

1. In a drive for an engine starter, the combination of a rotatable screw member, and a member screw threaded

thereon and capable of longitudinal movement thereof and rotary movement therewith, said second mentioned member being weighted on one end and on one side of its axis of rotation and having screw threads for only a portion of its length.

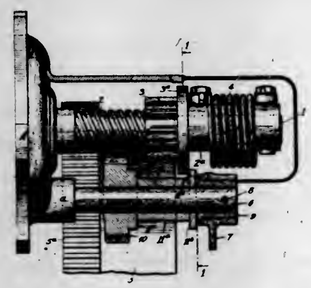


3. In a drive for an engine starter, the combination of a rotatable screw-shaft, and a member screw-threaded thereon and capable of longitudinal movement thereof and rotary movement therewith, said member having at one end a weight arranged on one side of the axis of rotation of such member and located on one side of a plane extending at right angles to the longitudinal axis of the shaft and running through the point of support of the weight and said member on the shaft, whereby the centrifugal action of the weight in the rotation of said member tends to move the plane of rotation of such weight into a plane coincident with said plane passing through said point of support.

4. In a drive for an engine starter, the combination of a rotatable screw-shaft, and a member screw-threaded thereon and capable of longitudinal movement thereof to engage a part of the engine to be started and capable of rotary movement therewith, said member being weighted at the end opposite its engaging end and having its internal screw-threads extending only partially through its bore, such threads stopping short of the weighted end of said member.

[Claims 2, 5, and 6 not printed in the Gazette.]

1,274,370. ENGINE-STARTER. VINCENT BENDIX, Chicago, Ill. Filed Oct. 12, 1916. Serial No. 125,293. (Cl. 74—7.)



1. In a drive of the character described, the combination of a rotatable member, a driving member mounted thereon for rotary movement therewith and longitudinal movement thereon, and a second driving member which is operated and controlled by the first driving member and which is adapted to be thereby operatively engaged with a part of the engine to be started.

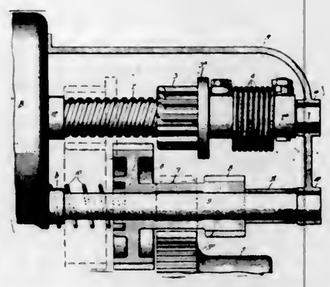
7. In a drive of the character described, the combination of a rotatable screw shaft, a pinion screw threaded thereon for rotary movement therewith and longitudinal movement thereon, and a second pinion which is adapted to operatively engage a part of the engine to be started and with which the first pinion is adapted to mesh when the screw shaft is rotated, said first pinion having a projection adapted to engage the second pinion and move it longitudinally in one direction and the second pinion having a projection adapted to be engaged by said first named projection whereby the second pinion is moved longitudinally in the other direction.

12. In a drive of the character described, the combination of a driving shaft, a screw shaft driven thereby, a driving member mounted on the screw shaft for rotary movement therewith and longitudinal movement thereof, a shaft parallel to the driving shaft, and a second driving member which is mounted on the second-named shaft and operated and controlled by the first-named driving member, and which is adapted to be thereby operatively engaged with a part of the engine to be started.

13. In a drive of the character described, the combination of a motor-driven member mounted for automatic longitudinal movement when the motor is operated, and a driving member mounted for rotary and longitudinal movement and, when moved longitudinally, adapted to be engaged with a part of the engine to be started, said driving member being so moved longitudinally by the first-named member in its longitudinal movement.

[Claims 2 to 6, 8 to 11, 13, and 14 not printed in the Gazette.]

1,274,371. ENGINE-STARTER. VINCENT BENDIX, Chicago, Ill. Filed Oct. 30, 1916. Serial No. 128,478. (Cl. 74—7.)



1. In a drive of the character described, the combination of a rotatable member, a driving member mounted thereon for rotary movement therewith and longitudinal movement thereon, and normally inoperative reduction means between such driving member and a part of the engine to be started and controlled by and made operative when the driving member is actuated.

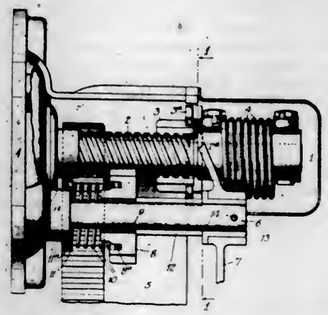
3. In a drive of the character described, the combination of a rotatable member, a driving member mounted thereon for rotary movement therewith, and longitudinal movement thereon, and reduction gearing intermediate the driving member and a part of the engine to be started and mounted for bodily movement longitudinally, said gearing being located in the path of movement of the driving member and moved longitudinally thereby.

12. In a drive of the character described, the combination of a rotatable member, a driving member mounted thereon for rotary movement therewith and longitudinal movement thereof, and reduction means which is operated and controlled by the driving member and which is adapted to be thereby operatively engaged with a part of the engine to be started.

15. In a drive of the character described, the combination of a driving shaft, a rotatable member driven thereby, a driving member mounted thereon for rotary movement therewith and longitudinal movement thereof, a second shaft parallel with the first-named shaft, reduction means mounted on the second shaft for rotary movement thereon and longitudinal movement thereof, said means being operated and controlled by the driving member and adapted to be thereby operatively engaged with a part of the engine to be started, and means for yieldingly holding the reduction means in an inoperative position.

[Claims 2, 4 to 11, 13, 14, and 16 not printed in the Gazette.]

1,274,372. ENGINE-STARTER. VINCENT BENDIX, Chicago, Ill., and HENRY E. VAN NESS, Elmira, N. Y.; said Van Ness assignor of his right to Eclipse Machine Company, Elmira, N. Y., a Corporation of New York. Filed Nov. 8, 1916. Serial No. 130,225. (Cl. 74—7.)



1. In a drive of the character described, the combination of a rotatable member, a driving member mounted thereon, a second driving member operated and controlled by the first driving member and adapted to be thereby operatively engaged with a part of the engine to be started but normally out of engagement therewith, and means for holding such second driving member in normal position.

5. In a drive of the character described, the combination of a motor-driven member mounted for automatic longitudinal movement when the motor is operated, a driving member mounted for rotary and longitudinal movement and, when moved longitudinally, adapted to be engaged with a part of the engine to be started, said first-named member coöperating with the driving member to move it longitudinally, the latter member being normally out of engagement with the engine part, and yielding means for holding the driving member in such normal position.

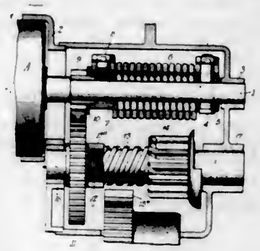
7. In a drive of the character described, the combination of a rotatable member, a driving member mounted thereon for rotary movement therewith and longitudinal movement thereon, a second driving member which is adapted to be rotated by the first driving member and to be moved thereby into engagement with a part of the engine to be started, and means for holding the second driving member in normal position and out of said engagement with the engine part.

14. In a drive of the character described, the combination of a rotatable screw shaft, a pinion screw threaded thereon for rotary movement therewith and longitudinal movement thereon, a second pinion which is adapted to engage a part of the engine to be started and with which the first pinion is adapted to mesh when the screw shaft is rotated, a plain shaft which is parallel with the screw shaft and on which the second pinion is loosely mounted for both rotary and longitudinal movements, and a spring encircling the shaft and bearing against the second pinion to hold the latter in normal position, the second pinion being arranged in the path of the first pinion and moved thereby into engagement with a part of the engine to be started, the second pinion having on one side a groove to receive one end of the spring, and a spring retainer mounted on the plain shaft for holding the other end of the spring.

[Claims 2 to 4, 6, and 8 to 13 not printed in the Gazette.]

1,274,373. ENGINE-STARTER. VINCENT BENDIX, Chicago, Ill. Filed June 18, 1917. Serial No. 175,430. (Cl. 74—7.)

1. The combination of a driving shaft, yielding driving means mounted on said shaft, a second driving shaft, operating connections between said means and the latter shaft, and a driving member mounted on such latter shaft for longitudinal movement thereof and rotary movement therewith.



5. The combination of a primary driving shaft, a driving device loosely mounted thereon, a coiled spring encircling said shaft and connecting between it and said device, a secondary driving shaft, a driven device thereon driven by said driving device, and a driving member mounted on the secondary shaft for longitudinal movement thereof and rotary movement therewith.

16. The combination of a driving shaft, a pinion loosely mounted thereon, a yielding driving connection between the shaft and pinion, a second driving shaft, a gear secured thereto and adapted to mesh with the pinion, and a driving member adapted to be rotated by the latter shaft and mounted for longitudinal movement with respect thereto and rotary movement therewith, said pinion being capable of bodily movement along its shaft and the gear together with its shaft being capable of endwise movement and the pinion having a flange embracing a side of the gear.

23. The combination of a screw shaft, a pinion mounted for rotary movement therewith and longitudinal movement with respect thereto, a driven gear wheel connected with the screw shaft for driving it, a driving gear wheel for driving the other wheel, said two gear wheels being mounted to move axially together, a motor, and a spring driving connection between the motor and driving gear wheel, such spring being arranged to yieldingly resist said axial movement of the gear wheels.

[Claims 2 to 4, 6 to 15, and 17 to 22 not printed in the Gazette.]

1,274,374. SELF-CLOSING CONTAINER. EDGAR B. BICKER, St. Louis, Mo. Filed Jan. 18, 1917. Serial No. 142,995. (Cl. 229—17.)



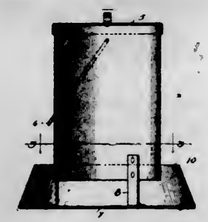
1. A container comprising a body portion having integrally formed folding flaps arranged to form the ends of the container, means for holding the bottom end flap to completely close the bottom of the container, means for holding the top end flaps to partially close the top of the container, the said top end flaps being detached along one side of the container to form an open seam between said side of the container and said flaps, and an elastic element secured to the container body adjacent the top end thereof.

3. A container comprising a body portion formed from a single piece of material and provided with a single bottom end flap adapted to completely close the lower end of the container, and with two top end flaps adapted to partially close the upper end of the container, means for securing the upper end flaps in the proper position

and leaving one side of the container detached from the top end flaps, there being a notch formed in the side of the container adjacent the free ends of the top end flaps, and a lining for said container projecting over the recess formed in the side of the container, thus providing a pouring spout for the contents of the container.

[Claim 2 not printed in the Gazette.]

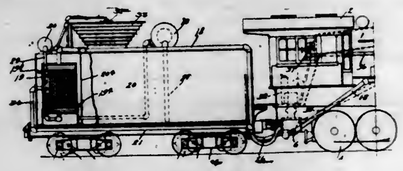
1,274,375. FEED-HOPPER. WILBUR L. BLOWS, Waukegan, Ill. Filed Mar. 6, 1918. Serial No. 220,703. (Cl. 119—52.)



1. In a device of the character set forth, the combination of a receptacle having an open bottom, a pan secured to said bottom and having upwardly and inwardly sloping sides extending above the bottom of the receptacle and terminating adjacent to the sides of the receptacle to form a narrow feed opening, and means for resiliently supporting said receptacle whereby the elastic action of the support will help to cause the feed to flow into the feed opening as fast as consumed and will also tend to prevent the fowls from roosting on the device.

[Claim 2 not printed in the Gazette.]

1,274,376. LOCOMOTIVE. WILLIAM J. BOHAN, St. Paul, Minn. Filed Sept. 15, 1915. Serial No. 50,834. (Cl. 105—17.)



1. In a locomotive, the combination with a steam cylinder, drive wheels and connections between the same, of a truck associated with said locomotive, an electric motor for driving the wheels of said truck, and an electric generator supplying current to said motor, and itself driven by a force generated in the locomotive boiler.

2. In a locomotive, the combination with the steam cylinders, drive wheels and connections between the same, of a truck associated with said locomotive, an electric motor for driving the wheels of said truck, an electric generator supplying current to said motor, a steam motor for driving said generator, and steam connections from the locomotive boiler to said steam motor.

3. In a locomotive, the combination with the steam cylinders, drive wheels and connections between the same, of a truck supporting a part of the weight of the locomotive, an electric motor for driving the wheels of said truck, an electric generator supplying current to said motor, a steam motor for driving said generator, and steam connections from the locomotive boiler to said steam motor.

4. In a locomotive, the combination with the steam cylinders, drive wheels and connections between the same, of a truck supporting a part of the weight of the locomotive, electric motors for driving the wheels of said truck, an electric generator supplying current to said motors, a steam motor for driving said generator, and steam connections leading from the exhaust from the locomotive cylinders to said steam motor.

5. In a locomotive, the combination with the steam cylinders, drive wheels and driving connections between the same, of a front truck supporting the front end of the boiler, an electric motor for driving the wheels of said truck, an electric generator on said truck for driving said truck wheels, a steam turbine on said truck for driving said generator, and steam connections from the locomotive boiler to said steam turbine.

[Claims 6 to 25 not printed in the Gazette.]

1,274,377. CAR-LADDER. WILLIAM J. BOHAN, St. Paul, Minn. Original application filed July 12, 1915, Serial No. 39,288. Divided and this application filed Apr. 7, 1917. Serial No. 160,382. (Cl. 105—195.)

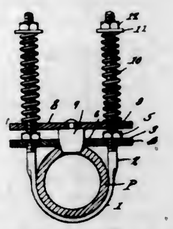


1. In car construction, a channel-shaped vertical post at one edge of the car end, a second vertical post at the end of the car side adjacent said first named post, the flanges of said two posts being riveted together, and side and end ladders, the rungs of said ladders at those ends located at the corner of the car being secured to said riveted flanges.

3. In a car ladder construction, the combination with a side ladder and an end ladder located at the corner of the car, each of said ladders comprising a series of rungs and a pair of stiles, the stile at the corner of the car being common to both ladders, said stile forming also the corner post of the car, all of said stiles being formed by commercial bars disposed on the outside of the car.

[Claim 2 not printed in the Gazette.]

1,274,378. RELIEF-VALVE. ABRAHAM BREITSTEIN, Richmond, Va. Filed Feb. 16, 1918. Serial No. 217,604. (Cl. 137—53.)

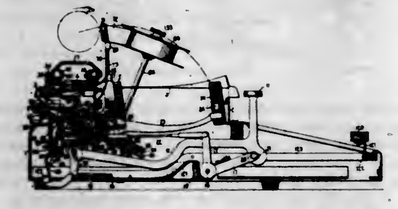


1. A relief valve for water pipes including a clip for straddling a pipe and having threaded stems, a holding plate adjustably mounted on the stems and having an aperture, a spring pressed follower slidable on the stems, and a sealing plug carried by the follower and normally projecting through said aperture.

2. A relief valve for water pipes including a clip for straddling a pipe and having a threaded stem at each end, a holding plate adjustably mounted on the stems and having an aperture, a follower slidably mounted on the stems, a plug carried by the follower and normally projecting through the aperture, and adjustably mounted springs on the stems for holding the follower in normal position.

3. The combination with a water pipe having an aperture, of a clip straddling the pipe, threaded stems projecting from the clip, a holding plate adjustably mounted on the stems and clamping on the pipe, said plate having an aperture concentric with and of greater diameter than the aperture in the pipe, a follower slidably mounted on the stems, a sealing plug thereon and normally projecting through the holding plate and into the aperture in the pipe, and yielding means for pressing the follower and plug to their normal positions.

1,274,379. TYPE-WRITING MACHINE. ARTHUR J. BRIGGS, Syracuse, N. Y., assignor to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Filed Aug. 28, 1916. Serial No. 117,258. (Cl. 197—154.)



1. In a typewriting machine, the combination with the type bars, and a universal bar operated thereby, of a plate or frame constituting the support of said universal bar; three-point guiding means for said supporting frame, said guiding means at one of said points consisting of an arm of a lever; and a ribbon vibrator operated by said lever.

15. In a typewriting machine, the combination of a ribbon spool, a ratchet wheel for turning the same, a fixed bracket, a slide or link slidably and pivotally connected with said bracket and carrying a driving pawl, a retaining pawl supported by said bracket, means for sliding said link to operate said ratchet wheel, and means for turning said link about its connection with said bracket and thereby moving said pawls into and out of engagement with said wheel.

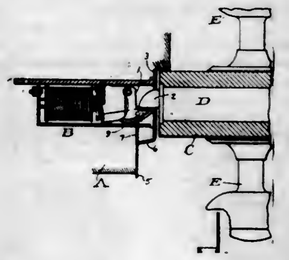
[Claims 2 to 14 not printed in the Gazette.]

1,274,380. SOCKET-TRANSFORMER. LEO F. BRISLIN, Ashland, Ky. Filed Oct. 13, 1917. Serial No. 196,454. (Cl. 175—361.)



In a device of the class described, an elongated cylindrical shell, an insulating closure sealed in each end of said shell, a plug sealed into one of said closures, a socket sealed into the other closure, a transformer having primary and secondary windings, conductors connecting the primary winding of the transformer and the plug, conductors connecting the secondary winding of the transformer and the socket, and a pair of terminals extending through said shell and having their inner ends connected to said last named conductors, said transformer and said conductors entirely inclosed by said shell and said closures.

1,274,381. ELECTRIC LOCK-STRIKE. JEROME B. BROOKS, Syracuse, N. Y. Filed Feb. 1, 1918. Serial No. 214,934. (Cl. 70—15.)



1. In door fastening means of the character specified, a keeper or facing plate having an opening in the forward edge thereof and provided with a forward extension offset therefrom and having a rear extension projecting into the said opening.

2. In door securing means of the character specified, a keeper embodying a plate having an opening in the forward edge thereof and having a forward extension offset from the plate and in line with the opening thereof, said extension having a rear projection provided at its rear edge with a tongue, substantially as and for the purpose specified.

3. In door securing means of the character specified, a keeper or facing plate having an opening in its forward edge and provided with an extension offset therefrom, said extension having a rearwardly extending projection formed at its rear edge with a rearwardly projecting tongue, the several parts being of integral formation.

1,274,382. ADJUSTABLE TRAY. JOHN LOUIS BURGOYNE, San Francisco, Cal. Filed Feb. 15, 1916. Serial No. 78,554. (Cl. 45—7.)



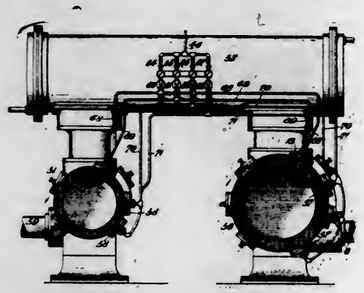
1. In an adjustable telescopic tray, sections having a plurality of parallel longitudinal depressions therein, side walls substantially the same height as the upper walls of the depressions on said inner section extending downwardly to a plane below the bottom level of the depression, and a larger companion section of the same contour slidably receiving said first mentioned section.

2. An extensible tray for drawers having telescopically connected members, one of said members being smaller than the other and adapted to slide therein, said members having longitudinal depressions therein, said members being composed of a single piece of metal having a depressed top face, parallel side walls, a bottom wall, and an end wall covering one end only of each member, the opposite open end of the larger member adaptable to receive the open end of the smaller member, and the side walls extending below said depressions to rest on the bottom of the drawer and support the tray.

3. In an adjustable telescopic tray for drawers, a pair of telescoping sections formed with depressions therein; integral supporting side walls substantially the same height as the top wall of the depressions, said side walls extending below the bottom of the depressions to rest on the bottom of the drawer and support the tray.

[Claim 4 not printed in the Gazette.]

1,274,383. APPARATUS FOR UNLOADING COMPRESSORS. WILLIAM H. CALLAN, Franklin, Pa., assignor to Chicago Pneumatic Tool Company, Chicago, Ill., a Corporation of New Jersey. Filed Feb. 19, 1916. Serial No. 79,287. (Cl. 230—24.)



1. In a compressor, a cylinder formed with an air inlet, clearance chambers communicating with the air inlet, and a compression chamber having its end portions in valve controlled communication with said clearance chambers, in combination with inlet valves controlling communicating between the air inlet and the clearance chambers.

3. In a compressor, a cylinder formed with an air inlet, independent clearance chambers communicating with the air inlet, and a compression chamber communicating on opposite sides of its compressing element with the independent clearance chambers, a receiver, inlet valves controlling communication between the air inlet and the clearance chamber, valves controlled by the receiver pressure and automatically controlling communication between the clearance chambers and the compression chamber, and means to manually actuate said last named valves.

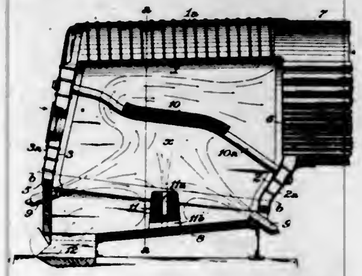
5. In a compressor, the combination of a compressor cylinder having a main air inlet, independent clearance chambers in valve controlled communication therewith, and a compression chamber, each end of which communicates with an independent clearance chamber, a valve between each clearance chamber and the compression chamber, auxiliary valves communicating with each end of the compression chamber and with the air inlet, and means to manually actuate said valves.

6. In a compressor, the combination of a compressor cylinder having a main air inlet, independent clearance chambers in valve controlled communication therewith, and a compression chamber, each end of which communicates with an independent clearance chamber, a valve between each clearance chamber and the compression chamber, auxiliary valves communicating with each end of the compression chamber and with the air inlet, and means to automatically actuate said valves.

11. In a compressor, the combination of a cylinder having a compression chamber, clearance chambers communicating with the ends thereof, an air inlet in valve-controlled communication with said clearance chambers, valves controlling communication between the clearance chambers and the ends of the compression chamber, auxiliary inlet valves at the ends of the compression chamber, a receiver communicating with said compression chamber, automatic means for placing the clearance chamber at one end in communication with the compression chamber when the pressure in the receiver reaches a predetermined point, automatic means for placing the clearance chamber at the other end into communication with the compression chamber when the pressure in said receiver reaches a predetermined higher point, and automatic means for successively holding open said auxiliary valves when the pressure in said receiver continues to increase.

[Claims 2, 4, and 7 to 10 not printed in the Gazette.]

1,274,384. BURNING PULVERIZED FUEL. VIRGINIUS Z. CARACRISTI, Albany, N. Y., assignor to Locomotive Pulverized Fuel Company, a Corporation of Delaware. Filed Nov. 5, 1913. Serial No. 799,269. (Cl. 110—28.)



1. The combination with a furnace having a floor, of a plurality of fuel delivery conduits projecting diagonally upward and discharging toward a substantially central locus of combustion, a baffle plate or deflector supported above the plane of said locus of combustion, and a bridge wall projecting upwardly from the floor substantially toward the locus of combustion and providing an auxiliary air supply for the fire-box.

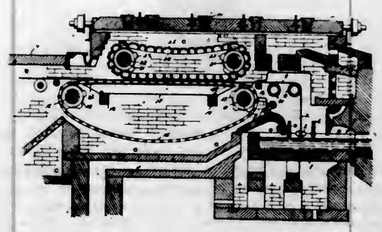
2. The combination with a locomotive fire-box having water falls and a plurality of circulating tubes connecting front and rear walls, of means for delivering to said fire-box a plurality of upwardly converging bodies or columns of combustible matter, said bodies or columns meeting at a substantially central locus of combustion, and a baffle supported on said tubes substantially centrally of the fire-box and over the locus of combustion.

4. The combination with a furnace having a floor, of means for delivering a plurality of bodies or columns of combustible matter in the direction of a substantially central locus of combustion in the fire-box, a baffle-plate or deflector supported above the plane of said locus of combustion, and a bridge wall projecting upwardly from the floor substantially toward the locus of combustion and providing an auxiliary air supply for the fire-box.

6. The combination with a furnace having a floor, of means for delivering a plurality of bodies or columns of combustible matter in the direction of a substantially central locus of combustion, means for deflecting the products of combustion, and a bridge wall projecting upwardly from the floor substantially toward the locus of combustion.

[Claims 3 and 5 not printed in the Gazette.]

1,274,385. SHEET-GLASS-DRAWING MECHANISM. IRVING W. COLBURN, Toledo, Ohio, assignor to The Toledo Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Oct. 15, 1915. Serial No. 55,952. (Cl. 49—17.)



1. In a machine for drawing sheet glass, a source of molten glass and means for drawing glass therefrom in sheet form, said means comprising a stationary horizontal table or support and a drawing table consisting of an endless belt of longitudinally extending links arranged in transverse series with the links of each series alternating with and overlapping those of the adjacent series, with the overlapping portions in close juxtaposition to each other, and means for driving said drawing table with its horizontal run resting upon and supported by said stationary table.

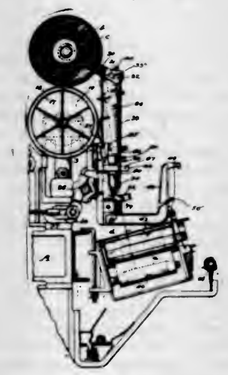
4. In a sheet glass drawing machine, the combination of an endless drawing table composed of alternating overlapping closely positioned links, with traveling means clamping the sheet upon said table, and a flat stationary table supporting said drawing table in its horizontal run.

5. In a sheet glass drawing machine, the combination of an endless drawing table comprising alternate overlapping closely positioned links, a flat stationary supporting surface on which the horizontal run of the drawing table travels and by which it is supported, said support also having a slightly inclined end upon which the drawing table travels and is supported, and traveling means clamping the sheet on said drawing table.

6. In a sheet glass drawing machine, the combination of an endless drawing table with a grip-bar device comprising an endless series of grip bars pivoted together, each bar being composed of a plurality of metal sections U-shaped in cross section and nested one within the other.

[Claims 2 and 3 not printed in the Gazette.]

1,274,386. WINDER. HOWARD D. COLMAN, Rockford, Ill., assignor to Howard D. Colman, Luther L. Miller, and Harry A. Severson, Copartners trading as Barber-Colman Company, Rockford, Ill. Filed Feb. 1, 1915. Serial No. 5,563. (Cl. 242—37.)



10. A winder having, in combination, a standard, a lever pivoted between its ends on said standard and arranged at its rear end to support the yarn mass being formed; a link depending from the forward end of said lever; a hook adapted to pull said link down to swing said lever; a vertical rock shaft having a finger arranged to move said link rearwardly into position to be engaged by said hook; a spring tending to rock said shaft; and means controlled by the thread being wound to hold the shaft against rotation by the spring.

11. A winder having, in combination, a unit comprising means at its rear side for rotating a yarn-mass, a lever pivoted upon a horizontal axis located forwardly of said rotating means, the rear end of said lever being arranged to support a yarn mass in operative relation to said rotating means, two bobbin-holders located forwardly of the axis of said lever, a reserve-thread clamp above said bobbin-holders, and thread-controlled means for swinging said lever to place the yarn mass at a point forward of the axis of said lever.

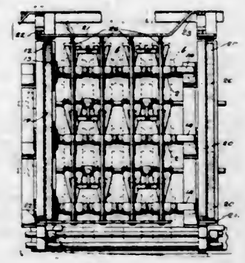
15. A winder having, in combination, means for rotating a yarn mass, a lever pivoted in a plane above said rotating means for supporting a yarn mass in contact with said rotating means, a lug fixed to said lever at the axis thereof, a bell crank lever pivoted in a plane below said axis, one arm of which bell crank lever bears against said lug, and a spring acting upon the other arm of said bell crank lever to hold the first mentioned arm of the bell crank lever against said lug.

22. A winder comprising means for supporting a winding couple, said couple consisting of a bobbin and a cross-wound yarn mass; and a tapering yarn guard between the members of the couple, the small end of the guard being directed toward the bobbin and the large end of the guard being directed toward the cross-wound yarn mass.

28. A winder having in combination, a drum having a yarn-traversing cam-groove, a cheese support movable to place the cheese in and out of contact with the drum, a bobbin holder, and means providing a zigzag passage for the thread extending between the cheese and the bobbin to delay lateral movement of the yarn into the cam groove.

[Claims 1 to 9, 12 to 14, 16 to 21, 23 to 27, and 29 to 34 not printed in the Gazette.]

1,274,387. YARN-CARRIER SUPPORT. HOWARD D. COLMAN, Rockford, Ill., assignor to Howard D. Colman, Luther L. Miller, and Harry A. Severson, Copartners doing business at Rockford, Ill., as Barber-Colman Company. Filed Nov. 28, 1916. Serial No. 133,982. (Cl. 242—131.)



1. A device adapted to receive tubular yarn containers at a winder, and also adapted to support said containers while the latter are being unwound by a warper, comprising a base arranged to rest interchangeably upon its lower side and upon one of its edges, a spindle attached to said base, and a plurality of rollers rotatably mounted on said spindle, each of said rollers being of smaller diameter than the interior diameter of the yarn containers, whereby the yarn containers are freely placeable upon and removable from the spindle when the latter is in upright position, each of said rollers being constructed to hold its yarn container out of contact with adjacent yarn containers when the spindle is in horizontal position.

2. A device adapted to receive tubular yarn containers at a winder, and also adapted to support said containers while the yarn is being unwound by a warper, comprising a member, a spindle attached to said member, and a plurality of rollers rotatably mounted on said spindle, each of said rollers being of smaller diameter than the interior diameter of the yarn containers, whereby the yarn containers are freely placeable upon and removable from the spindle when the latter is in upright position, each of said rollers being constructed to hold its yarn container out of contact with adjacent yarn containers when the spindle is in horizontal position.

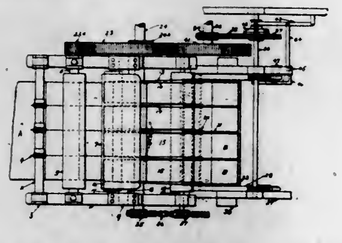
15. A warper creel having, in combination, a frame having a compartment therein, a base removably mounted in said compartment, a plurality of spindles on the base, a plurality of rollers on each spindle, each roller being arranged to support a single yarn carrier, and a set of thread guides for the threads of said yarn carriers, said set being movable into and out of operative relation to the compartment.

20. A creel having, in combination, a frame having a compartment therein, yarn-carrier supports in said compartment, a series of brakes at one side of the compartment, there being a brake for each yarn carrier, and a set of thread guides for the threads of said yarn carriers, said set being movable into and out of position to close the other side of the compartment.

27. A warper creel having, in combination, a frame having a compartment therein, a base removably mounted in said compartment, a spindle on the base, a plurality of rollers on the spindle, each roller being arranged to support a single yarn carrier, a gate for closing the compartment, and thread guides on the gate for the threads of said yarn carriers.

[Claims 3 to 14, 16 to 19, 21 to 26, 28, and 29 not printed in the Gazette.]

1,274,388. SHINGLE-PACKING MACHINE. CHARLES A. COONEY, Erie, Pa., assignor of one-half to Richard A. Cooney, Erie, Pa. Filed Sept. 28, 1917. Serial No. 193,678. (Cl. 100—59.)



1. In a shingle packing machine, the combination of a receiving chute having a plurality of ways; and spreaders between the ways separating shingles delivered to the chute.

4. In a shingle packing machine, the combination of a receiving chute having a plurality of ways; spreaders between the ways; and a receiving device receiving shingles from the ways separating shingles delivered to the chute.

9. In a shingle packing machine, the combination of a receiving chute having a plurality of ways; spreaders between the ways; a receiving device receiving shingles from the ways; and means for advancing the device as the shingles are deposited, comprising a carrier adapted to support a plurality of receptacles positioned to receive shingles from the ways; and guides at the ends of the ways adapted to extend into the receptacles.

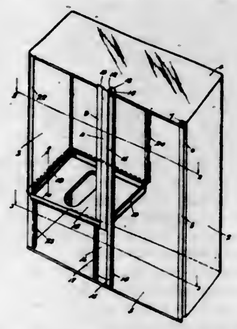
11. In a shingle packing machine, the combination of a receiving chute having a plurality of ways; and spreaders between the ways, said spreaders having slotted ends for receiving receptacles.

15. In a shingle packing machine, the combination of a slitter; ways leading from the slitter; spreaders forming partitions between the ways, said spreaders having slotted ends; belts in the bottoms of said ways; a receptacle support adapted to hold receptacles in position to receive shingles from the ways with the edges of the receptacles in said slots; and means for advancing the receptacle support as the shingles are deposited, comprising a yielding returning device; a driving connection with the slitter; a clutch in said connection; and means actuated with a movement of the support for controlling the clutch.

[Claims 2, 3, 5 to 8, 10, and 12 to 14 not printed in the Gazette.]

1,274,389. REFRIGERATOR CONSTRUCTION. FRANK J. M. CURRAN, Grand Rapids, Mich., assignor to Grand Rapids Refrigerator Co., Grand Rapids, Mich., a Corporation of Michigan. Filed Jan. 2, 1918. Serial No. 209,938. (Cl. 45—71.)

1. A refrigerator construction including an inner metal lining comprising a back, sides, bottom and top, with a post disposed between the top and bottom of the lining at the front edges thereof and at a point between the sides, and a tray secured to one side and a part of the back of the lining and supported at one corner by the post a distance above the bottom of the lining, substantially as described.



4. A refrigerator construction including a lining comprising a back, sides, bottom and top, a post disposed between the top and bottom of the lining at the front edges thereof and at a point between the sides, a tray located between the post and one side and the back of the lining and supported thereby a distance above the bottom of said lining, a rib in the back of the lining above the rear inner corner of the tray, and a vertical partition disposed between the tray and the top of the lining, said partition bearing against the post and said rib at its front and rear edges, respectively.

6. A refrigerator construction including a lining comprising a back, sides, bottom and top, a post disposed between the top and bottom of the lining at the front edges thereof and at a point between the sides, said post being partly divided horizontally from one side edge thereof toward the other a distance above its lower end and formed below said division point with a back and two oppositely disposed and forwardly turned substantially U-shaped bends at the sides thereof, one of said bends extending the full length of the post, and above said division point with a forwardly turned section bent from the rear leg of said last mentioned U-shaped bend and which extends a short distance in front of said bend, then turned at right angles for a distance and then to the rear at right angles for a short distance, terminating in a section paralleling the back of the lining, and a tray disposed horizontally within the lining and bearing at its front inner corner on the upper end of said lower portion of the post, and connected at one side and back to a side and the back of the lining.

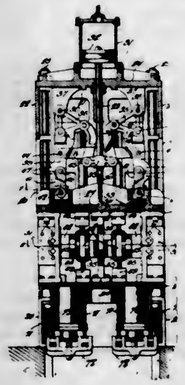
7. A refrigerator construction containing the elements in combination claimed in claim 6, said side of the lining to which a side of the tray is connected being formed at its front edge below the tray with an inwardly and forwardly turned U-shaped bend, and above the tray being turned inwardly, and the other side of the lining at its front edge being formed for its full length with an inwardly and forwardly turned U-shaped bend, substantially as described.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,274,390. CRANK-SHAFT-TWISTING MACHINE. MARK H. DAMERELL, Detroit, Mich., assignor to Wyman-Gordon Company, Worcester, Mass., a Corporation of Massachusetts. Filed Feb. 16, 1917. Serial No. 148,981. (Cl. 153—2.)

1. A crank shaft twisting machine having in combination a base plate, a head plate, holding and twisting devices each separable and each having portions associated with each of said plates, means to move one of said plates toward and from the other plate, and means to thereafter actuate said twisting devices angularly.

4. A crank shaft twisting machine comprising a base plate, a head plate reciprocative thereabove, separable twisting devices each having a portion associated with and movable with each one of said plates, means for reciprocating said head plate and for locking said plate in operative position, and means for thereafter effecting operative twisting movement of said devices relative to said plates.



6. A crank shaft twisting machine comprising relatively movable base and head plates each provided with an arcuate trunnion surface, shaft holding devices mounted on said plates, separable crank twisting members each having an arcuate portion seated in one of said trunnion surfaces, means for relatively moving said plates to operative position, and means for thereafter rocking the twisting members on the associated trunnion surfaces.

8. A crank shaft twisting machine having, in combination, holding devices for the shaft bearings and for certain of the crank bearings, crank shaft twisting devices for the remaining crank bearings, and means to actuate said twisting devices and to simultaneously slide certain of said holding devices laterally to aline said shaft bearings.

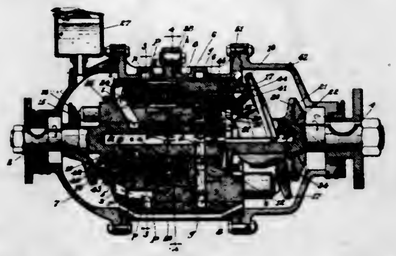
11. A crank shaft twisting machine having, in combination, a base plate, a head plate, separable holding and twisting devices each having portions associated with each of said plates, means to move one of said plates toward and from the other plate, and means to thereafter actuate said twisting devices angularly, said plate-moving means comprising levers mounted on movable pivots, links connecting one end of each lever to one of said plates, and means connecting the opposite end of each lever to pivots fixed in the frame, said links, levers and members forming double toggle devices effective to resist separation of said plates when in operative position.

[Claims 2, 3, 5, 7, 9, and 10 not printed in the Gazette.]

1,274,391. HYDRAULIC TRANSMISSION MECHANISM. WILLIAM M. DAVIS, Cambridge, Mass., assignor of one-eighth to Raynor M. Gardiner, Belmont, Mass., one-eighth to Wilmer D. Hemming, Colorado Springs, Colo., and one-fourth to Raynor M. Gardiner as executor of Carl Chadwick, deceased. Filed July 12, 1915. Serial No. 39,314. (Cl. 60—53.)

1. In a hydraulic transmission mechanism, the combination of a rotary shaft, a barrel fast on said shaft, a motor comprising a plurality of reciprocating pistons mounted in cylinders formed in said barrel, a driving shaft, a pump driven by said shaft and comprising a plurality of reciprocating pistons mounted in cylinders formed in said barrel, and valve means for controlling the flow of liquid between said pump and said motor.

12. In a hydraulic transmission mechanism, the combination with a member having a piston cylinder formed therein and a piston mounted in said cylinder, of means acting on said piston to crowd it toward one side of the cylinder, said piston having a pressure recess formed therein in the side that is pressed against the cylinder, and a duct leading from said recess to the cylinder chamber below the piston, said recess being of sufficient area to cause the fluid pressure on it to substantially balance the force tending to crowd the piston against the side of the cylinder.



13. In a hydraulic transmission mechanism, the combination with a rotary driven shaft and a barrel rotatable with said shaft, of a driving shaft, a pump having a part rotatable with said driving shaft and including means rotatable with said barrel, a motor operated by the fluid set in motion by said pump, and means for varying the ratio of the drive between said shafts.

14. In a hydraulic transmission mechanism, the combination with a driving shaft and a pump including a cam plate driven by said shaft, a plurality of reciprocating pistons operated by said cam plate and means intermediate said pistons and cam plate constructed and arranged to transform the rotary motion of the cam plate into reciprocating motion of the pistons solely through sliding friction, of a motor operated by the liquid set in motion by said pump and comprising another set of reciprocating pistons, means for controlling the reciprocating movement of the motor pistons, a shaft driven by said motor, said motor being constructed and arranged to enable its pistons to have their effective movement solely through sliding friction, and means for substantially neutralizing by means of liquid pressures the more important mechanical pressures between the friction surface of the parts of the mechanism.

17. In a hydraulic transmission mechanism, the combination with a rotary driving shaft, a pump driven by said shaft, a motor operated by the fluid set in motion by said pump and a second shaft driven by said motor, said motor having cylinders extending substantially parallel to said second shaft and said pump and motor including a common element mounted for rotation with said driven shaft.

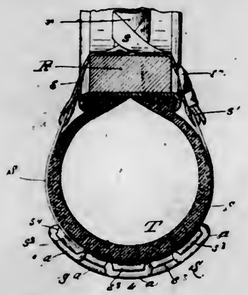
[Claims 2 to 11, 15, 16, and 18 not printed in the Gazette.]

1,274,392. ANTISKID DEVICE FOR VEHICLE-WHEELS. MAYER DAXE, New York, N. Y. Filed Aug. 20, 1917. Serial No. 187,034. (Cl. 152—14.)

1. In an anti-skid device of the character designated, a tread shield formed to snugly fit the peripheral surface of the tread, and also formed with elongated externally protuberant embossments with openings at the extremities thereof, frictional gripping staples the ends of which are inturned within said embossments, and means for securing the shield in position on the tread, for the purpose described.

2. In an anti-skid device of the character designated, a tread shield formed to snugly fit the peripheral surface of the tread, and also formed with elongated externally protuberant embossments with openings at the extremities thereof, frictional gripping staples the ends of which

are inturned within said embossments and clenched against the medial parts thereof, and means for securing



the shield in position on the tread, for the purpose described.

1,274,393. COMBINED CHURN AND BUTTER-WORKER. REUBEN B. DISBROW, St. Paul, Minn. Filed Jan. 12, 1918. Serial No. 211,658. (Cl. 259—84.)



1. The combination with a horizontally disposed rotary drum, of inner rollers located on opposite sides of the axis of the drum, outer rollers located on opposite sides of the axis of the drum at greater distance from said axis than the said inner rollers, all of said rollers being carried by said drum, and means for rotating said drum and outer rollers in the same direction and the said inner rollers in the opposite direction said inner rollers, in respect to each other, rotating in the same direction and being in such close juxtaposition that the butter cannot pass downward between the same.

2. The combination with a horizontally disposed rotary drum, of two inner rollers journaled to the heads of said drum with their axes equidistant on opposite sides of the axis of said drum, two outer rollers also journaled to the heads of said drum with their axes located equidistant from and on opposite sides of the axis of the drum but a greater distance from the axis of the said drum than said inner rollers, the plane that intersects the axes of said inner rollers being oblique to the plane that intersects the axis of said outer rollers, lifting shelves extending from diametrically opposite points on the interior of the drum toward the adjacent outer rollers, and means for rotating said drum and outer rollers in one direction and said inner rollers in the opposite direction.

3. The combination with a horizontally disposed rotary drum, of inner rollers located on opposite sides of the axis of the drum, outer rollers located on opposite sides of the axis of the drum at greater distance from said axis than said inner rollers, all of said rollers being carried by said drum, and means for rotating said drum and outer rollers in the same direction and the said inner rollers in the opposite direction, the plane that intersects the axes of said inner rollers being oblique to the plane that intersects the axis of said outer rollers.

[Claims 4 to 6 not printed in the Gazette.]

1,274,394. METHOD OF MAKING CARBOLIC ACID. HERBERT H. DOW, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed July 10, 1916. Serial No. 108,293. (Cl. 23—24.)

1. In a method of making phenol synthetically, the steps which consist in treating a bromo-derivative of benzene with an alkaline hydroxid solution, whereby the phenate of such alkali is produced; and then adding an acid to such phenate, whereby the latter is converted into phenol.

2. In a method of making phenol synthetically, the steps which consist in treating mono-brom-benzol with an alkaline hydroxid solution, whereby the phenate and bromid of such alkali are produced; and then adding an acid to such phenate, whereby the latter is converted into phenol.

3. In a method of making phenol synthetically, the steps which consist in treating mono-brom-benzol with a dilute solution of sodium hydroxid, whereby sodium phenate and sodium bromid are produced; and then adding an acid to such phenate, whereby the latter is converted into phenol.

4. In a method of making phenol synthetically, the steps which consist in heating a mixture of mono-brom-benzol and a dilute solution of sodium hydroxid to a temperature producing a pressure of approximately 300 pounds, whereby sodium phenate and bromid are produced; and then adding an acid to such phenate, whereby the latter is converted into phenol.

1,274,395. SPARK-PLUG ELECTRODE AND ALLOY THEREFOR. WILBUR BEDELL DRIVER, East Orange, N. J. Filed May 15, 1918. Serial No. 234,600. (Cl. 75—1.)



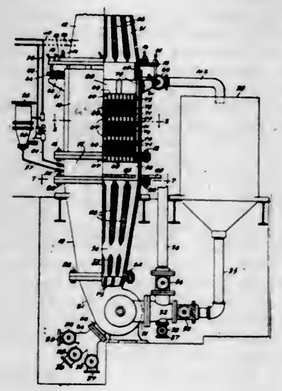
1. In a spark plug, electrodes composed of an alloy comprising manganese and chromium and a metal having the characteristics common to nickel and cobalt, the latter metal constituting over eighty (80) per cent. of the alloy.

3. In a spark plug, electrodes composed of an alloy comprising manganese about two (2) per cent., chromium about three and one-half (3½) per cent., the balance being substantially nickel.

4. An alloy composed substantially of nickel, manganese and chromium, in substantially the proportions, manganese two (2) per cent., chromium three and one-half (3½) per cent., nickel ninety-four and one-half (94½) per cent.

[Claim 2 not printed in the Gazette.]

1,274,396. DYEING-MACHINE. HOWARD M. DUDLEY, Philadelphia, Pa. Filed Feb. 15, 1917. Serial No. 148,712. (Cl. 8—19.)



1. In a dyeing machine, in combination, a chamber, a series of movable fiber trays adjacent to each other within the chamber, each tray comprising an imperforate side member and a foraminous bottom, a chamber below the fiber trays, a series of upwardly disposed plates within the second chamber, and means for forcing a liquid upwardly between the plates in the second chamber and the foraminous bottoms of the series of fiber trays.

2. In a dyeing machine, in combination, a chamber, a series of removable fiber trays adjacent to each other within the chamber, each tray comprising an imperforate side member and a foraminous bottom of a series of transverse grate-bars, means for holding said trays in position, a liquid supply chamber below the fiber trays, a chamber below the supply chamber, a series of upwardly disposed plates within the last-mentioned chamber, means for forcing a liquid through the device, a reserve tank, means for conducting a liquid from the top of the receptacle to the reserve tank, and means for conducting the liquid from the reserve tank to the liquid forcing means.

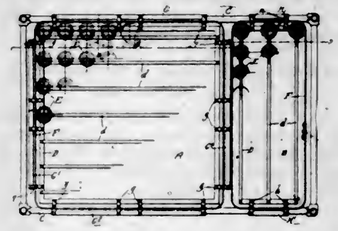
4. In a dyeing machine, in combination, a chamber, a series of removable fiber trays within the chamber, each tray comprising a side member and a foraminous bottom, a testing device proportionate to and similar to, and exterior of, the larger device, and means connecting the two devices whereby a liquid may be forced equally through both, and means for forcing a liquid through both devices.

9. In a dyeing machine, in combination, a chamber, a series of removable fiber trays adjacent to each other within the chamber, each tray comprising an imperforate side member and a foraminous bottom of transverse grate-bars, a chamber below the trays, a series of upwardly disposed plates within the second chamber, a third chamber above the trays, a series of upwardly disposed plates within the third chamber, a testing device, proportionate to and similar to, and exterior of, the larger device, means for forcing a liquid through the two devices, means for forcing air through the two devices and means whereby the fiber in one device may be examined during the treatment of the fiber in the other device.

[Claims 3 and 5 to 8 not printed in the Gazette.]

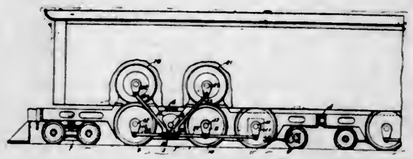
1,274,397. BED-SPRING. JAMES H. DYETT, Buffalo, N. Y., assignor to Hard Manufacturing Company, Buffalo, N. Y. Filed Jan. 20, 1915. Serial No. 3,415. (Cl. 5—65.)

1. A bed spring composed of separate sections each comprising a frame and springs mounted thereon, one of said sections being substantially square whereby said section is adapted to be turned and arranged on a bedstead with either dimension thereof extending lengthwise of the bed, and supporting members which are secured to the frame of said square section at the four edges thereof and are adjustable toward and from said edges to fit and engage a bedstead for supporting said section thereon and which can be swung into close proximity to the edges out of the way of the other section.



2. A bed spring composed of a plurality of sections each comprising a lower frame and springs supported by said frame the dimension of one of said sections lengthwise of the bed being substantially equal to the width of the bedstead with which the bed spring is to be used, and supporting members secured to the lower frame of said section at the four edges thereof and located at an elevation between said frame and the tops of said springs whereby said section can be placed on the bedstead with either dimension thereof extending lengthwise of the bedstead, the two supporting members which are arranged lengthwise of the bed being adapted to rest on the side rails of the bedstead and the other two supporting members being adapted to swing into close proximity to the transverse sides of said section to bring one side of said section into close relation to the other section to form a substantially continuous bed spring.

1,274,398. LOCOMOTIVE. GEORGE M. EATON, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 14, 1916. Serial No. 136,874. (Cl. 105—259.)



1. In a locomotive, the combination with a cab, of two articulated running gears, each of said running gears comprising two auxiliary trucks, a plurality of pairs of driving wheels located between the auxiliary trucks, side-rod members for joining said driving wheels, motors mounted above said driving wheels, and means for joining the motors to a point on the side-rod members intermediate two pairs of said driving wheels.

2. In a locomotive, the combination with a cab, of two articulated running gears, each of said running gears comprising two auxiliary trucks, a plurality of pairs of driving wheels located between the auxiliary trucks, a jack shaft disposed between two pairs of said driving wheels, a plurality of motors mounted above said driving wheels, and rods for joining said jack shaft to the motors and to the driving wheels.

3. In a locomotive, the combination with a cab, of two articulated running gears, each of said running gears comprising a four-wheel pivotal truck, a two-wheel radial truck, three pairs of driving wheels disposed between said radial and said pivotal trucks, a jack shaft disposed between two pairs of the driving wheels, two motors mounted above the driving wheels, and means com-

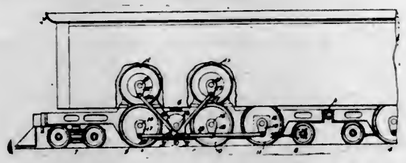
prising rod members for joining the jack shaft to the motors and to the driving wheels.

4. In a locomotive, a jack shaft, two motor rods connected to said jack shaft, and two side rods independently and directly joined to said motor rods.

5. In a locomotive, the combination with a plurality of pairs of driving wheels and a plurality of motors mounted adjacent to said driving wheels, of a jack shaft, motor rods for connecting said motors to the jack shaft, and side rods independently and directly joined to said motor rods.

[Claims 6 to 10 not printed in the Gazette.]

1,274,399. LOCOMOTIVE DRIVING MECHANISM. GEORGE M. EATON, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 14, 1916. Serial No. 136,875. (Cl. 105—259.)



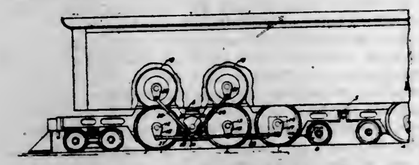
1. In a locomotive, the combination with a plurality of driving wheels and a plurality of propelling motors, of a jack shaft, a crank and a crank pin at each end of said jack shaft, pairs of side rods and pairs of motor rods pivotally connected together on each side of said locomotive, one rod on each side of the locomotive being pivotally connected to the adjacent crank by one of said crank pins.

2. In a locomotive, the combination with a plurality of pairs of driving wheels and a plurality of motors mounted above said driving wheels, of a jack shaft, two motor rods and two side rods for connecting said motors to the driving wheels, said motor rods being pivotally connected together and to said jack shaft and the two side rods having independent pivotal connections to one of said motor rods.

3. In an electric locomotive, the combination with a plurality of driving wheels and a plurality of propelling electric motors, of a jack shaft, a crank and a crank pin at each end of said jack shaft, pairs of side rods and pairs of motor rods pivotally connected together on each side of the locomotive for connecting the motors to the driving wheels, one of said rods on each side of the locomotive having an enlarged end pivoted on the adjacent crank pin.

[Claims 4 to 8 not printed in the Gazette.]

1,274,400. LOCOMOTIVE DRIVING MECHANISM. GEORGE M. EATON, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 14, 1916. Serial No. 136,876. (Cl. 105—259.)



1. In a locomotive, the combination with two motor rods and two side rods disposed in the same vertical plane, of means for pivotally joining the two motor rods and one of the side rods to the other side rod.

2. In a locomotive, the combination with a plurality of pairs of driving wheels, and two motors mounted above said driving wheels, of two side rods and two motor rods disposed in the same vertical plane for joining the motors to the driving wheels, one of said side rods having independent pivotal connection with the other three rods.

3. In a locomotive, the combination with a plurality of pairs of driving wheels and a plurality of motors mounted adjacent to said driving wheels, of a jack shaft between the driving wheels, and motor rods and side rods for joining said motors to the jack shaft and to the driving wheels, one of said side rods having independent pivotal connections with each of the other rods.

4. In a locomotive, two motor rods, two side rods, one of said side rods having a point thereon which effects a movement of symmetrical rotation with respect to the two motor rods, and independent pivotal connections between the last-mentioned side rod and the remaining rods, said points of connection being disposed adjacent to said point having a movement of symmetrical rotation.

5. In a locomotive, three pairs of driving wheels, two motors mounted above said driving wheels, side rods for connecting the pairs of driving wheels together, motor rods for connecting the motors to the side rods, and independent connections between one of said side rods and each of the other side and motor rods.

[Claims 6 to 11 not printed in the Gazette.]

1,274,401. INDICATING MEANS FOR ROPE. FREDERICK M. EVERETT, Auburn, N. Y., assignor to Columbian Rope Company, Auburn, N. Y., a Corporation of New York. Filed Feb. 11, 1914. Serial No. 818,137. (Cl. 40—2.)



1. As an article of manufacture, a self-identifying rope formed of elements twisted together, whereby the elements are spirally disposed longitudinally of the rope, and a means for identifying the rope comprising a thin, flat and pliant tape incorporated in the interior of the rope between the elements and extending substantially parallel with the same throughout the length of the rope wholly within its boundaries, and without displacing said elements relatively to each other in such manner to affect their normal strength and operation of the rope as a whole, whereby each portion of the rope carries a permanent identification with it independent of the strain bearing elements of the rope.

2. As an article of manufacture, a self-identifying rope formed of strands, and having incorporated within the same, and extending throughout its length, a thin, flat and pliant tape provided with rope identifying characteristics, which tape lies wholly within the boundaries of the rope without displacing any of the rope strands so as to interfere with their position and mutual coöperation as strain bearing elements.

3. As an article of manufacture, a self-identifying rope formed of strands, each strand embodying yarns twisted together, at least one of said strands having incorporated in the interior thereof between the yarns, a thin, flat, wear-resisting identifying tape extending substantially parallel with the yarns throughout the length of the rope and lying wholly within the boundaries of the rope from end to end, whereby the identifying tape is inexposed to causes which might destroy its capacity for identification.

4. The combination with a rope whose surface is normally uneven and subject to abrasion of a flat ribbon having matter printed upon it, collapsible transversely, arranged within the rope and surrounded and protected by the regular rope structure, whereby information regarding the surrounding rope is permanently associated therewith notwithstanding its superficial roughness and abrasion.

1,274,402. RADIATOR. JOHN M. FEDDERS, Buffalo, N. Y., assignor to Fedders Manufacturing Company, Inc., Buffalo, N. Y., a Corporation of New York. Filed Oct. 15, 1917. Serial No. 196,609. (Cl. 257—130.)



1. A radiator comprising a plurality of water tubes one wall of each tube being arranged opposite and spaced apart from a wall of an adjacent tube, and a radiating member arranged between adjacent tubes and having a longitudinal web, a flange arranged at one side edge of the web and projecting laterally therefrom in one direction into engagement with one wall of one of said tubes, another flange arranged on the other side edge of said web and projecting laterally therefrom in the opposite direction into engagement with one wall of another tube, and retaining lips projecting in opposite directions from said web into engagement with the opposing walls of two adjacent water tubes.

2. A radiator comprising a plurality of water tubes, one wall of each tube being arranged opposite and spaced apart from a wall of an adjacent tube, and a radiating member arranged between adjacent tubes and having a longitudinal web, a flange arranged at one side edge of the web and projecting laterally therefrom in one direction in engagement with one wall of one of said tubes, another flange arranged at the other side edge of said web and projecting laterally therefrom in the opposite direction into engagement with one wall of another tube, and retaining lips struck out of said web and projecting in opposite directions therefrom into engagement with the opposing walls of two adjacent water tubes.

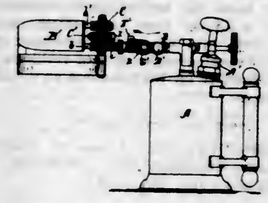
3. A radiator comprising a plurality of water tubes, one wall of each tube being arranged opposite and spaced apart from a wall of an adjacent tube, and a radiating member arranged between adjacent tubes and having a longitudinal web, a flange arranged at one side edge of the web and projecting laterally therefrom in one direction in engagement with one wall of one of said tubes, another flange arranged at the other side edge of said web and projecting laterally therefrom in the opposite direction into engagement with one wall of another tube, and retaining lips struck out of said web and arranged in line with said flanges, respectively, and projecting in opposite directions into engagement with the opposing walls of two adjacent water tubes.

4. A radiator comprising a plurality of water tubes, one wall of each tube being arranged opposite and spaced apart from the wall of an adjacent tube, and a radiating member arranged between adjacent tubes and having a longitudinal web, a flange arranged at one side edge of the web and projecting laterally therefrom in one direction into engagement with one wall of one of said tubes, another flange arranged at the other side edge of said web and projecting laterally therefrom in the opposite direction into engagement with one wall of another tube, and retaining lips projecting in opposite directions from said web into engagement with the opposing walls of two adjacent water tubes, said water tube walls being corrugated and the flanges of said radiating member engaging with the valleys of corresponding corrugations on the opposing walls of two adjacent water tubes.

5. A radiator comprising a plurality of water tubes, one wall of each tube being arranged opposite and spaced apart from a wall of an adjacent tube, and a radiating member rranged between adjacent tubes and having a longitudinal web, a flange arranged at one side edge of the web and projecting laterally therefrom in one direction in engagement with one wall of one of said tubes, another flange arranged at the other side edge of said web and projecting laterally therefrom in the opposite direction into engagement with one wall of another tube, and retaining lips struck out of said web and projecting in opposite directions therefrom into engagement with the opposing walls of two adjacent water tubes, said water tube walls being corrugated and the flanges of said radiating member engaging with the valleys of corresponding corrugations on the opposing walls of two adjacent water tubes.

[Claims 6 and 7 not printed in the Gazette.]

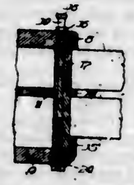
1,274,403. HYDROCARBON-TORCH. CHRISTIAN G. FILZER, Erie, Pa. Filed Jan. 24, 1918. Serial No. 213,481. (Cl. 158—33.)



1. In a hydro-carbon torch, a container, a valve housing in communication therewith, a vapor generator, a transversely hinged tubular connection between said housing and said generator, a cylindrical projection in axial alinement with the pivot of said hinged connection, and a spring coiled around said projection one end thereof engaging the movable member of said connection and the opposite end thereof engaging the stationary member of said connection, substantially as set forth.

[Claims 2 to 5 not printed in the Gazette.]

1,274,404. SAFETY-ANCHOR FOR WINDOW-CLEANERS. MURDO G. FINLAYSON, Chicago, Ill. Filed Jan. 25, 1918. Serial No. 213,645. (Cl. 72—108.)



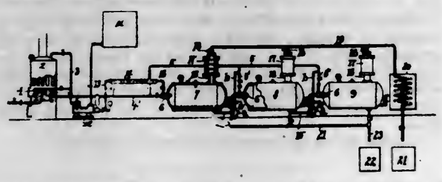
2. A safety anchor comprising a pair of substantially parallel wrought metal rods, a combination wall-engaging-abutment and spacer-bar through which the rods pass, said rods being shaped a predetermined distance inwardly from the front ends of the rods for rigid engagement by the spacer bar in its relative position, the front end of each rod having a head, and means applicable to the rear ends of the rods and for engagement with a wall to prevent longitudinal withdrawal of the rods.

3. A safety anchor comprising a pair of substantially parallel cylindrical wrought metal rods, each rod having a head at its front end and tapered from the head rearwardly a predetermined distance, a combination wall engaging abutment and spacer bar through which the rods

pass, said bar normally engaging the tapered portion of the rods and wedged thereon to prevent rotation of the rods, and means applicable to the rear ends of the rods and for engagement with a wall to prevent longitudinal withdrawal of the rods.

[Claim 1 not printed in the Gazette.]

1,274,405. APPARATUS FOR REDUCING CRUDE PETROLEUM. CHAUNCEY B. FORWARD, Urbana, Ohio. Filed Sept. 25, 1916. Serial No. 121,933. (Cl. 196—13.)



An apparatus as described, comprising a series of separator chambers, means to force oil and superheated steam together into the first of said chambers and to maintain a predetermined vapor pressure therein, a passage for vapor from the top of each chamber and a passage for the residuum from the bottom thereof arranged to discharge into the next succeeding chamber, means to add superheated vapor to said residuum in said passage and an atomizer for the residuum at the discharge end of said passage.

1,274,406. HOSE-COUPLING. JAMES W. FRAZIER and FRED E. HANSEN, Cleveland, Ohio. Filed Apr. 3, 1918. Serial No. 226,373. (Cl. 285—175.)



1. A coupling comprising an entering member having an annular exterior flange and a segmental rib spaced therefrom, and a receiving member having a socket portion adapted to receive said flange and a segmental interior rib spaced inwardly from its end and adapted to interlock with said first rib, said socket having an inward protuberance and said flange having a plurality of notches, one of said notches being so located as to register with said protuberance when said ribs are in disengaged position and another of said notches being so located as to register with said protuberance when said ribs are in engaged position.

2. A coupling comprising an entering member having a cylindrical portion formed with an annular exterior flange and a segmental exterior rib, and a receiving member having a cylindrical recess adapted to embrace said flange and also having a segmental interior rib adapted to coöperate with said first rib, the wall of said socket having an inward protuberance and said flange having a plurality of notches, one of said notches being arranged to register with said protuberance when the ribs are in disengaged position and another notch being arranged to register with said protuberance when the ribs are in engaged position.

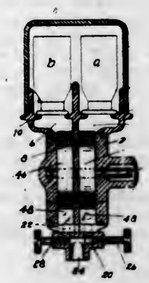
3. A coupling comprising an entering member having an annular exterior flange and a segmental rib spaced therefrom, and a receiving member having a socket portion adapted to receive said flange and a segmental interior rib spaced inwardly from its end and adapted to interlock with said first rib, said socket having an inward protuberance and said flange having a plurality of notches, one of said notches being so located as to register with said protuberance when said ribs are in disengaged position and another of said notches being so located as to register with said protuberance when the ribs are engaged position, and yielding means carried by one member and coöperating with the other to hold said flange in line with said protuberance when the ribs are engaged.

4. A coupling comprising a receiving member having a cylindrical bore and a socket larger than said bore, said socket being formed intermediate of its length with an internal segmental rib, an entering member having a cylindrical portion adapted to fit within said bore and a flange adapted to fit within the mouth of said socket, the exterior of said entering member being formed with a segmental rib spaced from said flange and adapted to cooperate with said first rib, yielding means located in said bore and adapted to be engaged by said entering member, and an inward protuberance carried by said socket between its mouth and rib, said flange being narrower than the space between said protuberance and rib and having notches therein for the passage of said protuberance, one notch arranged to register with said protuberance when the ribs are in engaged position and the other arranged to register with said protuberance when the ribs are in disengaged position.

5. A coupling comprising a receiving member having a socket formed internally with a protuberance and a segmental rib, and an entering member formed externally with a flange and a segmental rib adapted to coöperate with said first rib, said flange being not wider than the distance between said protuberance and first rib and having angularly spaced notches adapted to permit the passage of said protuberance, one notch registering with the protuberance when the ribs are disengaged and the other registering with said protuberance when the ribs are engaged.

[Claims 6 to 10 not printed in the Gazette.]

1,274,407. DEVICE FOR APPLYING FLUIDS TO SHOES. FREDERICK M. FURBER, Revere, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Feb. 11, 1916. Serial No. 77,754. (Cl. 91—44.)

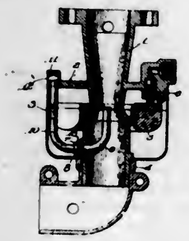


1. A device of the class described comprising, in combination, a fluid receptacle provided with an outlet, a cylindrical member rotatable in said receptacle with its peripheral surface spaced from the walls of the receptacle and its ends closely adjacent to the sides of the receptacle, and a deflector constructed and arranged to divert from the periphery of said member the fluid entrained thereby, said deflector being constructed to close substantially the passage between the periphery of said member and one of the walls of the receptacle, and the peripheral surface of said member being closely adjacent to another wall of the receptacle to form a restricted fluid passage of such size as to cause the accumulation of fluid under pressure at the outlet.

5. A device of the class described comprising, in combination, a pair of fluid receptacles each provided with an outlet connected to a common nozzle, means for controlling the delivery of fluid through said outlets to permit either of the outlets to be open while the other is closed, and interconnected constantly rotated driven means in each of the receptacles for causing the fluid to accumulate under pressure at the outlet, said means being constructed and arranged to prevent the development of undue pressure at the outlet in either receptacle when said outlet is closed during the use of fluid from the other receptacle.

[Claims 2 to 4 and 6 not printed in the Gazette.]

1,274,408. CARBURETER. LEVI S. GARDNER, Cedar Grove, La. Filed July 2, 1914, Serial No. 848,544. Renewed Jan. 24, 1918. Serial No. 213,614. (Cl. 261—121.)



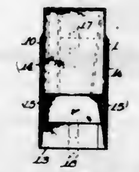
1. A carbureter comprising a body member in the form of a Venturi tube, a constant level reservoir surrounding the lower end of said Venturi tube, a U-shaped air conduit including two L-shaped tubes having one of its arms arranged axially of the Venturi tube and the other arm lying within said reservoir, the first mentioned arm terminating a short distance above the plane of the normal liquid level in the reservoir and the other arm projecting out through the top of the reservoir, and there being a restricted port leading from the reservoir into the yoke portion of said U-shaped conduit.

2. A carbureter comprising a body member in the form of a Venturi tube having a laterally projecting flange surrounding the same between the ends thereof, said body member having an opening therethrough at a point located at a considerable distance below said flange, an L-shaped tube having one arm arranged axially of the Venturi tube and its other arm projecting into said opening, a second L-shaped tube lying outside of said body member with one arm projecting into and supported by said flange and the other arm projecting into the aforesaid opening, a cup-shaped member underlying said flange and forming therewith a fuel reservoir, said body member having a restricted port leading from the interior of the said reservoir to the aforesaid opening, and means coöperating with the reservoir for maintaining fuel at a constant level therein.

3. A carbureter comprising a body member in the form of a Venturi tube having a laterally projecting flange surrounding the same between the ends thereof, said body member having a passage therethrough at a point located at a considerable distance below said flange, a U-shaped air conduit containing in its yoke portion the aforesaaid passage, one arm of said conduit lying outside of said body and having its upper end supported by said flange, a cup-shaped member underlying said flange and forming therewith a fuel reservoir, and there being a restricted port leading from the interior of the said reservoir into the yoke portion of said conduit, and means coöperating with the reservoir for maintaining fuel at a constant level therein.

1,274,409. MATCH-BOX HOLDER. HENRY W. GOODNOW, Worcester, Mass., assignor of one-half to John P. Ryan, Worcester, Mass. Filed Mar. 19, 1917. Serial No. 155,718. (Cl. 206—31.)

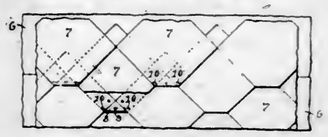
1. A match-box holder comprising two sides, a front, and a back, all of sheet material and hinged together at their vertical edges to form an open-ended rectangular casing, one of said sides having a slot formed therein by a substantially U-shaped cut, and the partially severed portion forming a tongue effective to support both the outer and inner members of the match-box at different elevations, the scratching surface of said box being exposed through said slot.



3. A match-box holder comprising two sides, a front, and a back, all of sheet material and hinged together at their vertical edges to form an open-ended rectangular casing, one of said sides having a slot formed therein by a substantially U-shaped cut, and the tongue formed by said cut being folded transversely at a point below the center of its length and having the upper portion gummed to the inner side of the lower portion and to the inner surface of the box below the U-shaped cut, the support thus formed extending upwardly inside the box cover when in use, and supporting the inner box member in raised position.

[Claim 2 not printed in the Gazette.]

1,274,410. FLEXIBLE SHINGLE. ALBERT ABBE GRISWOLD, Providence, R. I., assignor of one-half to John Francis Chevalier, Brookline, Mass. Filed Apr. 25, 1918. Serial No. 230,789. (Cl. 108—8.)



1. A flexible shingle having a flap bent under the shingle, sidewise extending members on the flap and adapted to go under the edges of adjacent shingle, in shingling a roof or the like, for the purpose as described.

2. A flexible shingle having a bent under flap, a member formed of wire secured to the flap and having outstanding ends adapted to go under the edges of adjacent shingles, previously laid, for the purpose as described.

3. A flexible shingle having a bent under corner flap, a member formed of wire penetrating the flap and having outstanding ends adapted to go under the edges of adjacent shingles previously laid, for the purpose as described.

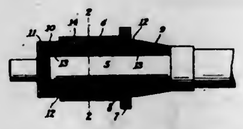
4. A flexible shingle adapted to be laid diagonally and having a bent under corner flap, a member formed of wire secured to the flap and having outstanding ends adapted to go under the edges of adjacent shingles previously laid, said flap being cemented flat to the shingle, all for the purpose as described.

1,274,411. COMMUTATOR AND THE METHOD OF MANUFACTURING THE SAME. EDWARD A. HALBLEIB and THOMAS L. LEE, Rochester, N. Y., assignors to North East Electric Company, Rochester, N. Y., a Corporation of New York. Filed June 26, 1915. Serial No. 36,519. (Cl. 200—12.)

1. The method of making commutators which consists in clamping commutator-bars against a body of yielding insulating material, with a pressure sufficient to impress them into said body and then subjecting said material to a hardening treatment.

5. A commutator comprising commutator-bars with inwardly and outwardly directed bearing-surfaces at their ends; clamping and supporting means for the bars; and insulating material interposed between said means and said bearing-surfaces, the insulating material engaging

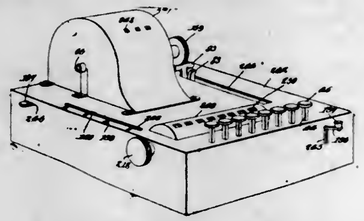
the inwardly-directed surfaces being comparatively yielding so as to permit the position of the bars to be determined with reference to the outwardly-directed surfaces.



8. The method of making a commutator comprising a rigid core, commutator-bars, and end-members, which method consists in clamping the bars between the end-members and around the core, with a body of insulating material, comprising incompletely cured phenolic resin, interposed between the bars and the core, and then completing the curing of said resin by the agency of heat.

[Claims 2 to 4, 6, and 7 not printed in the Gazette.]

1,274,412. LUMBER-REGISTER. JOSEPH WILLIAM HALEY and CHARLES BRAMBLE YELTON, Erlanger, Ky. Filed Sept. 13, 1916. Serial No. 119,914. (Cl. 235—79.)



1. A machine for registering lumber including separate stops, separate length designating means, means operated by the length designating means for shifting a selected stop, adding mechanism, and means for moving the selected stop to vary the extent of operation of the adding mechanism in proportion to the difference in widths of lumber of a designated length.

2. The combination with separate stops, of separate length designating means, means operated by said designating means for shifting a selected stop, width indicating means, means for moving the selected stop and the width indicating means in unison, adding mechanism, and means limited by the stop for actuating said mechanism.

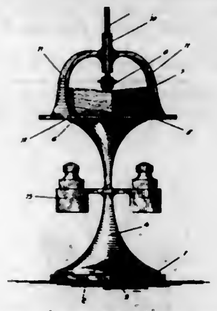
3. The combination with adding mechanism, of means for actuating the same, separate stops, adjustable width indicating means, means operated therewith for spreading or retracting the stops relative to each other, separate length designating means, and means operated thereby for projecting a selcted stop into the path of the actuating means of the adding mechanism.

4. The combination with adding mechanism, of a shiftable structure, means operated thereby when moved in one direction for actuating said mechanism, stops, lumber width indicating means, means operated therewith for moving each stop equally relative to the next adjoining stops, said stops being moved simultaneously, and means for projecting a selected stop into the path of the shiftable structure.

5. The combination with adding mechanism, of a shiftable structure, means operated thereby when moved in one direction for actuating said mechanism, stops, lumber width indicating means, means operated therewith for moving each stop equally relative to the next adjoining stops, said stops being moved simultaneously, and separate length designating means, and means operated thereby for projecting a selected stop into the path of the shiftable structure.

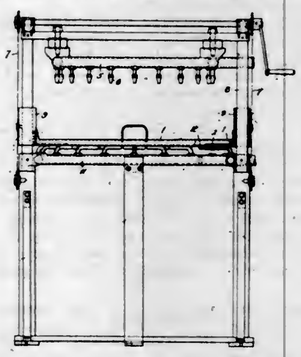
[Claims 6 to 61 not printed in the Gazette.]

1,274,413. NAPKIN-HOLDER. HARRY H. HART and WILLIAM S. HART, Sacramento, Cal. Filed Dec. 10, 1917. Serial No. 206,522. (Cl. 211—29.)



A napkin holder comprising a circular base plate, a pair of spaced arms fixed to and conforming to the curvature of the base plate and arching over the same, a bearing supported centrally between the arms, and a sliding weight guided vertically through the bearing, the base being arranged to hold a stack of napkins in such manner that the curvature of the arms will prevent lateral displacement thereof while the weight will prevent undesired vertical displacement of the same from the stack.

1,274,414. BURNING OFF, SEASONING, AND HARDENING INCANDESCENT GAS-MANTLES. MAXIM HANSON HERSEY, Amherst Park, London, England, assignor to The Convex Incandescent Mantle Company Limited, Covent Garden, London, England. Filed June 27, 1917. Serial No. 177,343. (Cl. 67—100.)



1. A machine for burning-off, seasoning and hardening incandescent gas mantles comprising a guiding framework, a mantle supporting ring mounted upon said framework, means for moving said mantle supporting ring, a series of supports mounted on said ring and adapted to hold in their normal position the mantles to be operated upon, two gas rings mounted on said framework, a single air inlet for each gas ring and means for gas ring movement upon the said guiding framework.

2. A machine for seasoning incandescent gas mantles comprising a framework, a gas ring mounted upon said framework, a mantle supporting ring mounted upon said framework, a series of seasoning burners projecting from said gas ring at right angles to the plane of the ring and adapted to register with and enter the interiors of the mantles held in said supporting ring and means for moving the mantle supporting ring toward said seasoning burners.

[Claims 3 to 5 not printed in the Gazette.]

1,274,415. DUST-COUNTER. EARL V. HILL, Chicago, Ill. Filed Feb. 5, 1917. Serial No. 146,639. (Cl. 73—51.)



1. In a device of the class described, a reciprocating pump for drawing in and discharging a definite charge of air, a chamber in operative connection with the cylinder of the pump, a support within the chamber and a disk stationarily mounted on the support and having adhesive thereon in the path of the current of air for arresting particles of solid matter.

4. In a device of the class described, a pump, a dust separation chamber comprising a base having means for detachably connecting it to the pump, a cup detachably connected to the base and a support for a disk having sticky matter thereon mounted in said chamber.

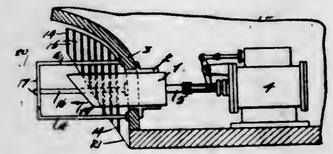
5. In a device of the class described, an air pump adapted to draw in and discharge a predetermined definite charge of air, a series of chambers connected to the air pump there being series communication between the pump and chambers such that the charge of air drawn in by the pump passes successively through the chambers, and similar means in each of the chambers for arresting particles of dust contained in the air.

7. In a device of the class described, a pump, a dust separation chamber attached to said pump and communicating with the cylinder thereof, one of the walls of said chamber being detachable for access to the interior thereof, means within the chamber for detachably holding a disk, and a disk on said means having adhesive thereon.

8. In a device of the class described a pump, a dust separation chamber mounted on the pump and communicating with the cylinder thereof, said chamber having a removable wall, a disk support mounted on said wall, and a disk detachably mounted on said support.

[Claims 2, 3, and 6 not printed in the Gazette.]

1,274,416. PROPULSION DEVICE FOR VESSELS. MARCUS HOLLANDER, Brooklyn, N. Y. Filed June 18, 1917. Serial No. 175,294. (Cl. 115—31.)



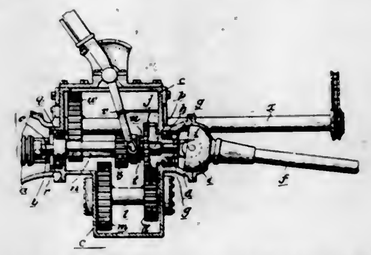
5. In combination with a vessel, a propeller consisting of a hollow body passing through the stern of the vessel, said body being open at both ends, one end of said body being located exteriorly of the vessel, the opposite end being located within the vessel, a head intermediate the ends of the body having an opening therethrough, a valve to close said opening and arranged to open outwardly when said body is drawn ahead to permit air from within the vessel to pass outwardly into the rearward open end of said body, means to reciprocate said body, and supplemental means located in the open outer end of the hollow body to break the vacuum at said end when said body is drawn inwardly.

7. In combination with a reciprocating propeller, means independent of the propeller to introduce air into the water adjacent the outer end of the propeller.

10. In combination with a vessel, a plurality of vertically disposed plates of different lengths, arranged to cover the entire surface of the stern of the vessel, said plates being spaced apart to provide vertical channels and said channels being open at the top and bottom but closed at the sides thereof, all arranged so that when the vessel is propelled, air is drawn down between the plates to prevent the formation of a vacuum at the lower ends of the plates.

[Claims 1 to 4, 6, 8, and 9 not printed in the Gazette.]

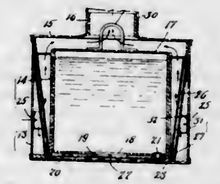
1,274,417. MOTOR-VEHICLE GEARING. PERLEY G. HOWE, Anderson, Ind. Filed Jan. 2, 1918. Serial No. 209,915. (Cl. 74—58.)



1. An auxiliary transmission mechanism adapted to be installed adjacent the transmission gearing of an automobile, comprising a short shaft adapted to be connected to the main driven-shaft of the transmission so as to be thereby variably driven from the transmission, a pinion slidably but non-rotatively mounted on said short shaft, means for clutching this short shaft to the propeller shaft of the vehicle, a gear on the forward end of said propeller shaft, and a counter-shaft provided with a pair of gears one of which meshes with the gear on the forward end of the propeller shaft and the other of which is adapted to mesh with the slidable pinion on the short shaft when said clutch is out, for the purpose set forth.

[Claim 2 not printed in the Gazette.]

1,274,418. HUMIDIFIER FOR GASOLENE-ENGINES. PAUL HUNT, Brookline, Mass. Filed July 2, 1917. Serial No. 178,323. (Cl. 261—107.)



2. A humidifier for gasolene engines having a passageway for a current of air, a frame removably mounted in said passageway, a diaphragm carried by said frame, said diaphragm comprising two thicknesses of absorbent material with a space between them, and means for automatically supplying said diaphragm with water.

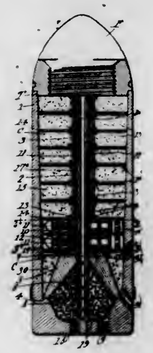
6. A humidifier for gasolene motors having inner and outer walls providing an annular chamber between them, the outer wall having a series of air-inlet holes, an air outlet from said chamber, means for supplying the lower portion of the chamber with water, absorbent material in said chamber, and a flexible valve curtain overlapping the inner ends of said air-inlet holes.

[Claims 1 and 3 to 5 not printed in the Gazette.]

1,274,419. ANTI-AIRCRAFT PROJECTILE. LEONARD D. JACKSON, Alexandria, Va., assignor of one-fourth to William Campbell, Alexandria, Va. Filed June 30, 1915. Serial No. 37,251. (Cl. 102—29.)

1. A device of the character described, including a casing having an explosive chamber; a composite auxiliary projectile carried by the said casing; flexible members secured to the auxiliary projectile; and means for im-

parting an independent rotary motion to the auxiliary projectile.



4. In a device of the character described, including a casing having an explosive containing chamber; a composite auxiliary projectile supported within the said casing; opposed centrifugal slugs flexibly connected to the said auxiliary projectile; and radial lugs extending from the said auxiliary projectile to operably engage rotary motion imparting means embodied in said casing.

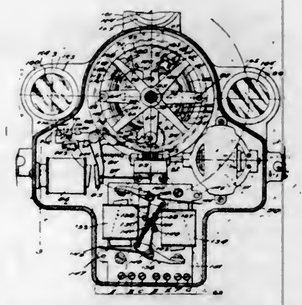
8. In a device of the character described, including a casing having an explosive containing chamber; an axial ignition tube communicating with the said chamber, means for preventing the said tube from rotating with respect to the said casing; a frusto-conical projecting member which forms one wall of the explosive containing chamber; sleeves detachably supported by the said ignition tube; opposed flexible elements secured to the said sleeves; and opposed centrifugal slugs attached to the said flexible elements.

12. In a device of the character described, including a casing having an explosive containing chamber; an axial ignition tube secured to the said casing and communicating with the explosive containing chamber, said tube having a plurality of helical grooves formed in the periphery thereof; a frusto-conical projecting member which forms the outer wall of the explosive containing chamber; spaced annular partitions detachably supported on the said ignition tube; spaced sleeves detachably supported on the ignition tube and interposed between the said partitions; opposed flexible elements secured at their inner ends to the said sleeves; opposed centrifugal slugs of uniform weight secured at the outer ends of certain of the said flexible elements; opposed centrifugal slugs of unequal weight secured at each outer end of the remaining flexible elements; radial lugs extending from the said spacing sleeves into sliding engagement with the said helical grooves of the ignition tube and adapted to impart an independent rotary motion to the said sleeves, flexible elements and centrifugal slugs, after they have been violently projected along the said ignition tube and out of the said casing, by the explosion of the explosive material in the said chamber.

16. In a device of the character described, including a casing having an explosive containing chamber; a compartment for the reception of a smoke producing composition; an annular series of inwardly and rearwardly disposed air inlet apertures which communicate with and extend tangentially from the said compartment; an annular series of outwardly and rearwardly disposed air and smoke apertures which communicate with and extend tangentially from the said compartment; a composite auxiliary projectile detachably mounted within the said casing; and means for imparting an independent rotary motion to the said auxiliary projectile, after its discharge from the said casing.

[Claims 2, 3, 5 to 7, 9 to 11, and 13 to 15 not printed in the Gazette.]

1,274,420. SIGNAL. FERDINAND G. HENRY, Philadelphia, Pa. Filed Mar. 13, 1916. Serial No. 83,952. (Cl. 177—337.)



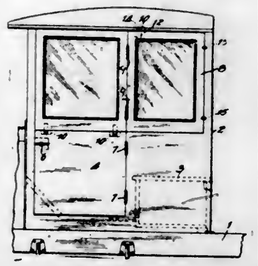
1. In a signaling device, a support, lights carried upon opposite sides of the support, an arm pivoted upon the support to swing in opposite directions, a transparent colored disk carried by the arm positioned to swing in front of either light, a motor for operating the arm, means to supply current to operate the motor in either direction, means to latch the arm with the disk covering one of the lights, and means to release the arm to permit the arm to swing to normal.

5. In a signaling device, a rotating member, a cam positioned to engage the rotating member at predetermined positions, and a solenoid having a core forming a part of said cam.

7. In a signaling device, a rotating member provided with a plurality of pins of different lengths and rotating in different arcs, latches positioned to selectively engage the pins and stop the rotation of the rotating member, and electro-magnetic means for actuating the locking members.

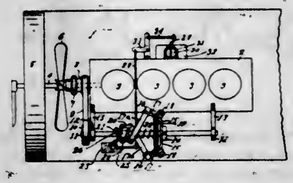
[Claims 2 to 4 and 6 not printed in the Gazette.]

1,274,421. DRIVER'S CAB FOR MOTOR-TRUCKS. WILLIAM L. KISSEL, Hartford, Wis. Filed Mar. 6, 1917. Serial No. 152,529. (Cl. 21—14.)



In a freight-hauling truck, the combination of a cab body, one side of which contains an opening of greater width at its upper portion than its lower portion, a door comprising a lower section and a separable upper section, the lower section closing the lower portion of said opening and being hinged at its rear edge to the side of the body, the upper section of the door closing a part of said wide upper portion of the opening, fastening devices for securing said door sections together comprising parts carried by the upper door section and projecting down and overlapping the abutting edge of the lower door section, a window or wall section closing the remaining rear portion of said opening, to which latter section the upper door section is hinged coaxially with the lower door section, dowel pins projecting horizontally rearward from the rear vertical edge of said window section and engaging in sockets in the cab body, and a fastening device located at the forward upper corner of said window section and comprising a part carried by said section and projecting upwardly and overlapping the abutting portion of the body for firmly securing said window section to the body while allowing said section to be removed therefrom by forward withdrawal in the plane of said dowel pins, whereby the cab may be converted at will by removing the upper door section, or the upper and lower door sections alone, or the upper section and the window section alone, or all three of said sections at the same time.

1,274,422. GOVERNOR FOR EXPLOSIVE-ENGINES. AUGUST H. KRAFT, Rosemount, Minn. Filed Apr. 2, 1918. Serial No. 226,340. (Cl. 264—3.)



1. In a speed governor for explosive engines, suitable frame work, a shaft mounted therein and operative connection for rotating said shaft by the engine, a collar fixed on the shaft and provided with two opposite radial arms, an angular lever fulcrumed on each of said arms and having a short arm with a weight on it, and a longer arm with a link at the end of it, a collar slidable on the shaft and connected to said links, springs arranged to normally close the weighted arms, a shaft mounted near the governor and having three radial arms, one of said arms acting on the slidable collar to aid the centrifugal force in spreading the weights of the governor, the second arm having operative connection with the gas intake valve of the engine, a spring connected with the third arm and an operating rod connected with said spring, and means for holding the operating rod in different positions so as to vary the tension of the spring.

2. The structure specified in claim 1, and means for rendering the action of the operating rod positive relative to the arm to which it is connected.

1,274,423. DENTAL-FLOSS CASE. NICHOLAS A. KRISTMANN, Menlo Park, Cal. Filed Feb. 21, 1918. Serial No. 218,471. (Cl. 132—12.)



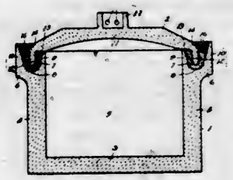
1. A dental floss holder comprising a case, a partition wall arranged at one end of the case having apertures therethrough for the passage of dental floss, a tubular two pronged fork through which the floss passes attached to the same end of the case, a dental floss containing tube arranged in said case and means for pressing the end of the tube against said partition wall, whereby the floss is clamped in position.

3. A dental floss holder comprising a case, a holder for dental floss including arms in spaced relation attached to said case, a partition wall in said case having an aperture therein through which the floss passes, a dental floss containing tube in said case, a plug in the end of said tube having an aperture therein through which the floss passes before it passes through the aperture in the partition wall and means for pressing the plug against the partition wall to clamp the dental floss.

4. A dental floss holder comprising a case, a partition wall in said case having apertures therein through which the dental floss passes, a tubular two pronged fork attached to said case and through which the floss passes, a floss containing tube in said case, a plug in the end of said tube having an aperture therein offset with respect to the aperture in the partition wall through which the outgoing floss passes, and underlying the second aperture through which the used floss passes and a knob secured to the end of said tube in screw threaded engagement with said case whereby rotation of the knob moves the tube longitudinally in the case.

[Claims 2 and 5 not printed in the Gazette.]

1,274,424. BURIAL-VAULT. GUSTAV KUEHN, East St. Louis, Ill. Filed Apr. 3, 1916. Serial No. 88,667. (Cl. 72—7.)

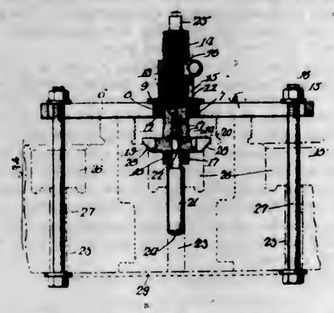


A burial vault comprising a casket receiving section and a cover section, said casket receiving section having a continuous approximately V-shaped channel formed in its upper face to provide a channel which is wider at its top than at its base for the reception of a cement filling, the upper edge of the inner wall of said channel being in a uniform plane considerably below the plane of the outer wall of said channel and adapted to act as a stop upon which the cover section is adapted to seat, said cover section having a continuous tongue of even diameter throughout depending from the outer edge thereof and adapted to be suspended in said channel in concentric relation therewith and held from engagement with the bottom of the channel due to the cover section resting upon the inner wall of the channel, said channel when filled with the cement filling is adapted to unite the cover tongue with the inner and outer walls of the channel and with the wall of the casket receiving section below the channel and a sealing channel formed between the outer wall of the aforesaid V-shaped channel and the outer edge of the cover section and above the cement filling after the cover section has been positioned upon the casket receiving section, said sealing channel adapted to be filled with the sealing agent to protect the cement filling from attracting moisture before the cement filling has set.

1,274,425. TOOL. JOHN F. KYTLICA, Chicago, Ill. Filed Jan. 31, 1918. Serial No. 214,582. (Cl. 90—12.5.)

1. In a tool of the class described, the combination with a slotted supporting bar having means to fix it across a valve chamber, of a collar located on said bar, a bit carrier located for rotation in said collar and adapted to extend into the valve chamber, a bit transversely mounted on said carrier, and means to center and adjust the carrier with respect to the collar and valve seat, said means including a rod detachably connected to the inner end of the bit carrier and extended therefrom in axial alinement therewith and adapted for location in the openings for the valve stems.

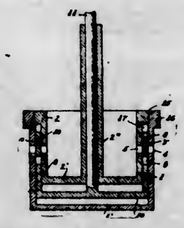
5. In a tool of the class described, the combination with a supporting bar provided with an opening therethrough and having means to fix it across a valve chamber, of a collar located in said opening and having a downwardly tapered opening, a bit carrier located for rotation



in said collar and adapted to extend into the valve chamber, a bit transversely mounted on said carrier, and a rod detachably located in the lower portion of the carrier and engaging the bit and having means to engage the opening in the valve chamber for the valve stem.

[Claims 2 to 4 not printed in the Gazette.]

1,274,426. VALVE. JOHN LAMBERT, Jr., New Rochelle, and HARRY B. LAMBERT, North Pelham, N. Y. Filed Feb. 26, 1917. Serial No. 151,029. (Cl. 137—4.)

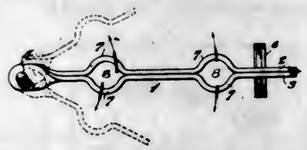


7. In a valve, a casing comprising an inner casing-member having a centrally perforated wall carrying an annular ported wall extending at a right angle thereto, a sleeve extending outward from the perforation of said inner wall, a like shaped outer casing member secured at its open end to the peripheral outer end of the inner casing member, the end wall of the outer casing member being imperforate and the annular wall thereof having a port or ports registering with the port or ports in the annular wall of the inner casing member, a like shaped moving valve member provided in the annular wall with a port or ports adapted to be brought into and out of registry with the port or ports of the inner and outer casing walls, and a central valve-stem connected with the valve-member for reciprocatingly actuating the same passing through said sleeve, the outer casing being provided with an outer annular male screw-thread for securing the same in position, and the valve-stem-sleeve being provided with a like screw-thread for the reception of a securing nut.

12. In a valve, an outer casing closed at one end by an end wall and open at the other end, an inner casing having an end wall secured in the outer casing and spaced from the end wall of said outer casing, a valve member having a disk portion reciprocably mounted between said end walls, the disk portion and casings forming closed air chambers on either side of said disk portion so that the air in said air chambers will form air cushions to resiliently resist the action of said disk portion and the thereto-connected valve member, there being a perforation through one of said end walls, and a stem connected to said disk portion extending through said perforation outwardly from said air chambers to be there connected for actuation, there being ports in registration with one another in said casings, there being ports in said valve member, the stem being actuatable to in turn actuate the disk portion to bring the ports of said valve member either into or out of registration with the ports of said casings.

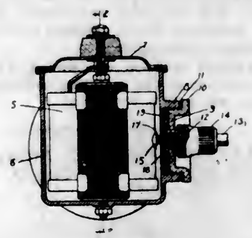
[Claims 1 to 6 and 8 to 11 not printed in the Gazette.]

1,274,427. AUTOMOBILE-LOCK. HENRY LANDMANN, Philadelphia, Pa. Filed Apr. 11, 1917. Serial No. 161,115. (Cl. 70—126.)



A reversible device for locking movable members of an automobile or like vehicle formed of a pair of matched bars, each bar with its appurtenances being of integral construction, said bars having at opposite ends perforated ears, the ears at one end being connected freely by a pivotal member, and ears at the other end being adapted to be engaged by a lock-like member and intermediate of said opposite ears, laterally turned loops which are open on their inner sides and open throughout from top to bottom, the pivotal ears being bent at an angle to the surfaces of the bars which form the walls of said loops.

1,274,428. INDUCTION-COIL. THOMAS L. LEE, Rochester, N. Y., assignor to North East Electric Company, Rochester, N. Y., a Corporation of New York. Filed Nov. 1, 1917. Serial No. 199,642. (Cl. 175—360.)



1. In an induction-coil, the combination of a metal casing provided with a terminal-opening; an insulating bushing closing said opening; a high-tension binding-post mounted on said bushing; and a lateral projection, on said binding-post, extending to within safe sparking distance from the casing at the periphery of said opening therein.

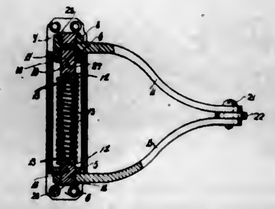
2. In an induction-coil, the combination of a metal casing provided with a terminal-opening; an insulating bushing closing said opening; a conductor for high-tension current passing through the bushing; and a conductive member, on said conductor, projecting therefrom toward the periphery of said opening and to within safe sparking distance from the casing, at a plurality of points substantially equi-distant from the casing.

4. In an induction-coil, the combination of primary and secondary windings; an insulated secondary terminal mounted laterally upon the windings; a metal casing inclosing the windings and provided with a lateral opening substantially concentric with said terminal; an insulating bushing removably inserted in said opening; a binding-post mounted on said bushing and having a socket at its inner end, and a contact-spring mounted in the socket

in the binding-post and normally engaging said terminal and affording an electric connection between the terminal and the binding-post.

[Claims 3 and 5 not printed in the Gazette.]

1,274,429. CONTROLLING-SPRING FOR DOORS AND THE LIKE. JOSEPH LILLY, Small Heath, Birmingham, England. Filed Nov. 21, 1917. Serial No. 203,206. (Cl. 16—100.)



1. In a controlling spring for doors and the like the combination of an attachment bracket; an arm freely pivoted to said bracket but having its movement restricted by the bracket; a second arm also pivoted to the bracket having an unlimited angular movement in relation to the bracket and having its extremity abutting against said freely pivoted arm; and a spring one end of which is secured to the bracket and the other end to said second arm.

2. In a controlling spring for doors and the like the combination of an attachment bracket formed in two parts, viz. a main part and an auxiliary part pivoted to said main part; an arm pivoted to the main bracket part but having a limited angular movement in relation thereto; a second arm pivoted to the bracket and having an unlimited angular movement relative thereto; a spring having its one end connected to the main bracket part and its other end connected to said second arm, and means for detachably connecting said two arms together.

3. In a controlling spring for doors and the like the combination of an attachment bracket formed in two parts, viz. a main part and an auxiliary part pivoted to said main part; an arm pivoted to the main bracket part but having a limited angular movement in relation thereto; a second arm pivoted to the main bracket part having an unlimited angular movement in relation thereto and having its free extremity detachably connected to the free extremity of the first arm; and a roller carried at the free extremity of said second arm.

6. In a controlling spring for doors and the like the combination of an attachment bracket formed in two parts, viz. a main part and an auxiliary part; an arm having a limited angular movement in relation to said bracket; a bearing pin securing said arm to the main part of the bracket having an unlimited angular movement in relation to the bracket; a second arm; a second bearing pin securing said second arm to the auxiliary bracket and having a projection on its extremity provided with holes whereby said bearing pin may be adjusted angularly; and a spring connecting the two bearing pins together.

7. In a controlling spring for doors and the like the combination of an attachment bracket formed in two parts, viz. a main part and an auxiliary part; an arm; a bearing pin securing said arm to the main part of the bracket; a second arm pivoted to the bracket having an unlimited angular movement in relation to the main part thereof and having its free extremity detachably connected to the free extremity of the first arm; a roller carried at the free extremity of said second arm; a second bearing pin securing said second arm to the auxiliary bracket and having a projection on its extremity provided with holes whereby said bearing pin may be adjusted angularly; and a spring connecting the two bearing pins together.

[Claims 4 and 5 not printed in the Gazette.]

1,274,430. COMPOSITION FOR REMOVING PAINT AND VARNISH. CHARLES MCADAM, Chicago, Ill., assignor to Chadeloid Chemical Company, New York, N. Y., a Corporation of West Virginia. Filed June 14, 1915. Serial No. 33,883. (Cl. 87—5.)

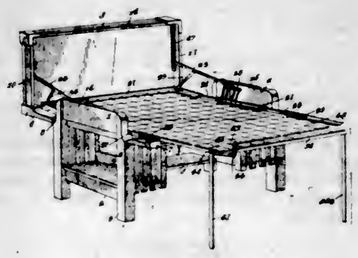
1. A composition for removing paint and varnish, consisting of a true emulsion, having a distinct acid reaction, in which cresol (cresylic acid) acts as a finish penetrating agent.

2. A composition for removing paint and varnish consisting of an emulsion of cresol, a loosening agent and a wax.

3. A composition for removing paint and varnish consisting of cresol, spermaceti, grain alcohol, acetone, celluloid and gum camphor combined as an emulsion substantially as described.

4. A finish remover of a substantially non-aqueous character comprising finish solvent material with emulsified wax, said remover containing a relatively slowly volatile hydroxy derivative of benzol having an acid tendency and comprising a phenol of the cresol type.

1,274,431. COMBINATION TABLE AND BED. MARTIN D. MIESNER, Wittenberg, Mo. Filed July 11, 1916. Serial No. 108,627. (Cl. 5—17.)



1. In combination with a table having the top thereof hingedly connected to be capable of opening and closing movement, a bed bottom foldably mounted in conjunction with the table structure to have portions thereof moved by the swinging of the table top, and means to normally exert tension to swing the table top to an intermediate position between the opened and closed positions thereof.

3. A combination table and bed comprising a frame structure having a table top hingedly mounted thereon, a spring frame structure made up of a plurality of side pieces and having cross pieces at the ends thereof foldably mounted on the frame, bed spring structure associated with the foldable frame and the parts being so mounted that when folded they are inclosed within the confines of the table so that the top can be closed, levers mounted on the ends of the frame structure to be capable of rocking movement, a sliding connection between one end of each of said levers and the table top, springs connected with the remaining end of each lever and having connection with fixed portions of the structure to thus normally resiliently urge the levers to an upright relation, and links connected with the levers and with portions of the spring frame structure in such a manner that as the table top is raised by the springs connected therewith the frame will be extended.

5. A combination table and bed comprising a frame structure having supporting posts and with portions of the posts cut away to form blocks, hinges connecting said blocks to be swung into and out of fitted relation with the post, a top connected with the blocks at one side of said frame to be capable of swinging movement therewith and arranged to be swung to an open relation in which it is extended from the frame structure through the hinged mounting of the blocks thereon, a spring frame made to have a plurality of side sections to permit folding thereof, portions of the spring frame being attached to the supporting frame, a connection from said hingedly

mounted top to the end portion of the spring frame mounted adjacent thereto, means connected with the remaining end of the spring frame to support the same in an operative relation, and means by which the parts are supported in the open and in the closed positions.

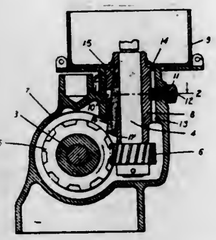
[Claims 2, 4, and 6 not printed in the Gazette.]

1,274,432. CORN-HUSKING MACHINE. NORDAL MIKELSON, Meckling, S. D. Filed Sept. 10, 1915. Serial No. 50,067. (Cl. 130—5.)



In a corn husking machine, the combination of a frame, a pair of inclined husking rollers in horizontally spaced relation, a reciprocable shuttle in the form of a flat bar disposed upon the rollers in parallelism thereto and having one longitudinal edge serrated and said edge located above the space between the rollers, a pair of links pivotally mounted at one of their ends upon the frame for supporting the shuttle upon their opposite ends, means for vibrating said shuttle across the upper face of said rollers and in a plane parallel to the plane of the inclination thereof.

1,274,433. POWER-TRANSMISSION MECHANISM. EDWIN S. MIX, Rochester, N. Y., assignor to North East Electric Company, Rochester, N. Y., a Corporation of New York. Filed July 2, 1917. Serial No. 178,216. (Cl. 74—36.)

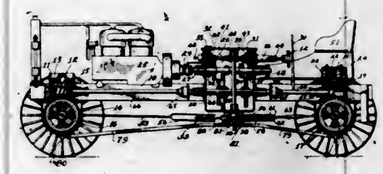


1. Power-transmission mechanism having, in combination, an upright shaft; a driven gear mounted on said shaft; a driving-gear engaging said driven gear; an oil-tight casing inclosing the gears and provided with a bearing for the upright shaft, said bearing having an oil-passage extending, from the upper part of its bearing-surface, downwardly to a point above the driving-gear; and a wick, in said oil-passage, of which the lower end is exposed, above the driving-gear, to contact with the lubricant raised by the rotation of the gear.

2. In power-transmission mechanism comprising a horizontal shaft, an upright shaft, gears mounted on and connecting the shafts, an oil-tight casing inclosing the gears, a bearing-sleeve, for the upright shaft, and a timer-housing mounted on the bearing-sleeve; the provision of an oil-passage, in the bearing-sleeve, extending from the upper part of its bearing-surface, to a point on the outer surface of the sleeve and near the lower end thereof; and a wick, in said oil-passage, of which the lower end is exposed, above the gear on the horizontal shaft, to the lubricant raised by the rotation of said gear.

3. In power-transmission mechanism comprising an oil-tight casing, a vertical bearing-sleeve mounted thereon, a shaft mounted in said sleeve, and mechanism, in said casing, for rotating said shaft; a screw, arranged to secure the bearing-sleeve in the casing, which screw is longitudinally perforated to provide an air-vent communicating with the interior of the casing.

1,274,434. STEERING AND STARTING MECHANISM FOR TRACTORS. WALTER S. MORTON, Harrisburg, Pa. Filed Oct. 30, 1915. Serial No. 58,828. (Cl. 180—81.)



1. In a motor-driven vehicle, in combination, a frame, a motor supported thereupon, a power-steering shaft, driving means for driving the same in either direction from said motor, a driving member on said shaft, steering mechanism actuated thereby, said driving means for driving said power-steering shaft from said motor including clutches corresponding respectively to two directions of driving the power-steering shaft, means for closing either of said clutches at will, including a hand-operated shifting device, said shifting device including a bar, a member adjacent said bar connected with the axles and arranged to rotate in steering the vehicle and means carried by said last-named member for engaging said bar for throwing either of said clutches open at the limit of the steering movement, and means constantly connected with said power steering shaft for rotating the same by hand when both clutches are open.

3. In a motor-driven vehicle, in combination, a frame, a motor mounted upon said frame, transmission mechanism, a clutch for driving the transmission mechanism from said motor, said transmission mechanism including driven gears for driving the wheels of the vehicle, and a hand-power device comprising a ratchet, a pawl and an operating lever therefor, connected with the gears of the transmission mechanism to rotate the wheels of the vehicle when said clutch is open.

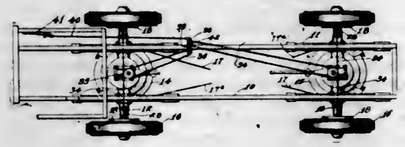
4. In a motor-driven vehicle, in combination, a frame, a motor mounted upon said frame, transmission mechanism, a clutch for driving the transmission mechanism from said motor, said transmission mechanism including driven gears for driving the wheels of the vehicle and having a neutral position in which the driven gears are ineffective to drive the wheels of the vehicle, axles for the vehicle wheels, mounted on the frame to swing in a front and rear direction in steering the vehicle, steering mechanism driven by the transmission mechanism for swinging the axles in steering, and a hand-power device connected with the transmission mechanism to actuate the same to swing the axles when said clutch is open.

5. In a motor-driven vehicle, in combination, a frame, a motor mounted upon said frame, transmission mechanism driven by said motor, a clutch member driven in one direction by said transmission mechanism, another clutch member driven in the opposite direction by said transmission mechanism, steering mechanism, a driving member therefor, clutch members coöperating with the aforesaid clutch members to drive said driving member in either direction by said motor, and hand-operated means for holding said second named clutch members in their open position and means for actuating said driving member to steer directly by hand.

6. In a motor-driven vehicle and in combination, transmission mechanism, traction drive mechanism operated thereby, steering mechanism operatively extending into said transmission mechanism to permit steering by power at will, a motor, clutch connections between said motor and transmission mechanism, and manually operable means extending into said transmission mechanism beyond said clutch and adapted to provide transmission mechanism operation when the clutch is disengaged, whereby either or both traction drive or steering action may be had manually during clutch inactivity.

[Claim 2 not printed in the Gazette.]

1,274,435. BRAKE FOR MOTOR-TRUCKS. WALTER S. MORTON, Harrisburg, Pa. Filed Oct. 30, 1915. Serial No. 58,830. (Cl. 21—8.)



1. In a brake mechanism for motor-trucks, in combination, a frame, an axle pivotally mounted on said frame to swing in a front and rear direction, wheels carried by said axle, an independent brake mechanism associated with each wheel and free from coöperation with the wheel tread, each mechanism being located between the frame and the wheel, and means for concurrently actuating said mechanisms in any position the axle may assume in steering the vehicle, said means including a connector extending continuously from one mechanism to the other.

2. In a brake mechanism for motor-trucks, in combination, a frame, a pair of axles pivotally mounted on said frame and connected to swing in a front and rear direction, wheels carried by said axles, independent brake mechanisms associated with each wheel, and means for concurrently actuating the mechanisms of all the wheels in any position the axles may assume in steering the vehicle, said means including an actuator for the mechanisms of the wheels of each axle, and an element to which the several actuators are secured, the movements of which provide the concurrent setting of the mechanisms.

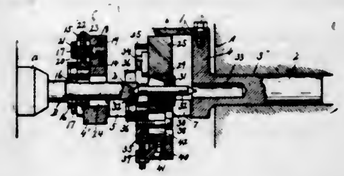
3. In a brake mechanism for motor-trucks, in combination, a frame, an axle pivotally mounted on said frame to swing in a front and rear direction, wheels carried by said axle, a brake associated with each wheel, an operating member for each brake supported substantially on the pivotal axis about which the axle swings in steering, said member being movable in a substantially horizontal plane on an axis corresponding with such pivotal axis, and a control member connected therewith to apply the brakes, the connection of said control member to said operating members operating to apply the brakes simultaneously.

4. In a brake mechanism for motor-trucks, in combination, a frame, an axle pivotally mounted on said frame to swing in a front and rear direction, wheels carried by said axle, a brake associated with each wheel, a flexible member connected to each brake and extending inwardly to substantially the point at which the pivotal axis of the axle is located, guiding means for said flexible member located adjacent to the pivotal axis of the axle, and hand-operated means for simultaneously exerting a pull on said flexible member to apply the brakes simultaneously to said wheels.

5. In a brake mechanism for motor-trucks, in combination, a frame, a pair of axles pivotally mounted on said frame to swing in a front and rear direction, wheels carried by said axles, a brake associated with each wheel, a flexible member connected to the brakes for each wheel of an axle and extending inwardly to a point near the pivotal axis of the axle carrying said wheels, means adjacent the pivotal axis of each axle for supporting and guiding the said flexible member, and hand-operated means for simultaneously exerting tension in all of the flexible members to apply the brakes to all of the wheels simultaneously.

[Claims 6 to 8 not printed in the Gazette.]

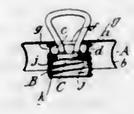
1,274,436. TOOL-HOLDER FOR SCREW-MACHINES. JOHN F. MURPHY and BERNARD A. RYAN, Syracuse, N. Y. Filed Apr. 23, 1917. Serial No. 163,954. (Cl. 82—2.)



2. In a screw machine, the combination of a rotary work-holder, a head movable back and forth lengthwise of the axis of the work-holder, a supplemental head adjustable lengthwise of and upon the first-named head, means for clamping the supplemental head in its adjusted position, a work-centering tool mounted on the supplemental head coaxial with the axis of the work for making a centering hole in the end of the work, means on the head for supporting a separate tool in advance of the centering tool to operate upon the periphery of the work, and means on the supplemental head for engaging and steadying the periphery of the end of the work operated upon by the centering tool.

[Claims 1 and 3 not printed in the Gazette.]

1,274,437. STOPPER FOR WATER-BOTTLES OR THE LIKE. EUGENE V. MYERS, East Orange, N. J., assignor to A. Schrader's Son, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Nov. 12, 1915. Serial No. 61,016. (Cl. 215—58.)



2. A device of the character described comprising a sheet metal neck member having an upper wall, a socket member having its upper end connected to said wall, a seat at the point of juncture of said parts, said socket member being formed with passages below said seat, and a stopper screwing in said socket member, said stopper adapted to make a tight joint with said seat when in its uppermost position and to uncover said passages when in its lower position, and means for preventing said stopper from screwing completely out of said socket member.

[Claims 1 and 3 not printed in the Gazette.]

1,274,438. MEANS FOR VENTILATING MINE-WORKINGS AND THE LIKE. STANLEY NETTLETON, Johannesburg, Transvaal, South Africa. Filed Nov. 17, 1914. Serial No. 872,594. (Cl. 285—71.)



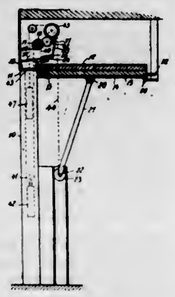
1. In a ventilating conduit, the combination of a plurality of sections of fabric tube and rings of regular non-

circular form at the ends thereof adapted to pass through one another when angularly displaced and thereafter rotated to interlock.

2. A ventilating conduit comprising sections of fabric tube provided at their ends with elliptical interlocking rings.

3. In a ventilating conduit, the combination of a plurality of sections of brattice cloth tubes and elliptical rings at the ends thereof for coupling said sections together.

1,274,439. STRUT-DOOR. JOHN EDWARD OGDEN, Cornwall, N. Y., and CHARLES C. TOMKINSON, Plainfield, N. J.; said Tomkinson assignor to said Ogden. Original application filed Oct. 30, 1917, Serial No. 199,276. Divided and this application filed May 23, 1918. Serial No. 236,116. (Cl. 20—19.)



1. A door comprising an upper section and a lower section, guide connections between the sections to provide for the lower section being raised up beside the upper section, downwardly extending struts having their upper ends pivotally connected with the sides of the upper section above its lower edge, hoisting means, connections therefrom to the lower corners of the lower door section, whereby the lower section may be first raised vertically beside the upper section and thereafter the lower edges of both sections may be raised together vertically, permitting the other portions of the sections to swing out of the vertical plane, hoisting means for the lower ends of the struts, and means actuated by the vertical movement of the lower section for connecting the strut hoisting means with the door hoisting means.

2. A door comprising an upper section and a lower section, guide connections between the sections to provide for the lower section being raised up beside the upper section, downwardly extending struts having their upper ends pivotally connected with the sides of the upper section above its lower edge, hoisting means, connections therefrom to the lower corners of the lower door sections, whereby the lower section may be first raised vertically beside the upper section and thereafter the lower edges of both sections may be raised together vertically, permitting the other portions of the sections to swing out of the vertical plane, hoisting means for the lower ends of the struts, and means actuated by the vertical movement of the lower section for connecting the strut hoisting means with the door hoisting means, in opening, and actuated by the movement of the sections to the vertical plane in closing, to disconnect the strut hoisting means from the door hoisting means.

3. A door comprising an upper section and a lower section, guide connections between the sections to provide for the lower section being raised up beside the upper section, downwardly extending struts having their upper ends pivotally connected with the sides of the upper section above its lower edge, a hoisting shaft, connections therefrom to the lower corners of the lower door section, whereby the lower section may be first raised vertically beside the upper section and thereafter the lower edges of both sections may be raised together vertically, permitting the other portions of the sections to swing out of the vertical plane, hoisting means for the struts comprising sheaves, and flexible elements connected with the lower ends of the struts and running over said sheaves, reduction gearing between said sheaves and the hoisting shaft, and means actuated by the movements of the door sections for connecting and disconnecting said gearing.

4. A door comprising an upper section and a lower section, guide connections between the sections to provide for the lower section being raised up beside the upper section, downwardly extending struts having their upper ends pivotally connected with the sides of the upper section above its lower edge, a hoisting shaft, connections therefrom to the lower corners of the lower door section, whereby the lower section may be first raised vertically beside the upper section and thereafter the lower edges of both sections may be raised together vertically, permitting the other portions of the sections to swing out of the vertical plane, hoisting means for the struts comprising sheaves, and flexible elements connected with the lower ends of the struts and running over said sheaves, a gear on the hoisting shaft, a gear connected with said sheaves, an intermediate gear, a movable support therefor, and means on the lower door for causing the movement of said lower door section to move said gear support to bring the intermediate gear into or out of mesh with said other gears.

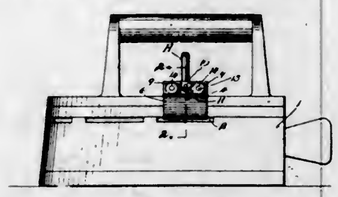
1,274,440. DRINKING-RECEPTACLE FOR CATTLE. JOHN B. OLSON, Fort Atkinson, Wis., assignor to James Manufacturing Company, Fort Atkinson, Wis., a Corporation of Wisconsin. Filed June 12, 1916. Serial No. 103,075. (Cl. 119—75.)



1. A drinking fountain for animals, comprising the combination of a bowl having a water supply connection, an automatically swinging lid, and means for utilizing the water in the bowl to retard the closing movement of the lid.

[Claims 2 and 3 not printed in the Gazette.]

1,274,441. HOLDER-CLAMP FOR IRONING-MACHINES. WILLIAM H. OLVER, Oshkosh, Wis. Filed Oct. 11, 1917. Serial No. 195,941. (Cl. 68—9.)



A two part holder clamp for irons comprising a pair of angular plates, the corresponding arm of each plate having a lip to engage the walls of the iron, one of the other arms of one of the plates having a laterally extending apertured ear, the corresponding arm of the other plate having a pair of spaced ears, the space therebetween alining with the aperture in the other ear, and a clamping member for engaging the ears to retain the two parts of the holder together.

1,274,442. YARN-CARRIER SUPPORT. BURT A. PETERSON, Rockford, Ill., assignor to Howard D. Colman, Luther L. Miller, and Harry A. Severson, Copartners doing business at Rockford, Ill., as Barber-Colman Company. Filed Apr. 23, 1917. Serial No. 163,814. (Cl. 242—130.)



1. A creel section having a supporting base and a spindle extending perpendicularly to the base, a roller on the spindle, ball-bearings between the ends of the roller and the spindle, said roller being chambered to contain oil, the end of said roller adjacent to the base being chambered to form a pocket to contain the oil, the inner wall of said pocket keeping the oil out of the adjacent ball-bearing.

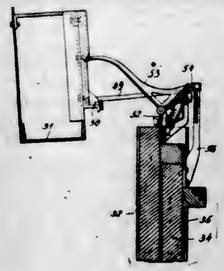
8. A creel section comprising a base having a spindle thereon; and a plurality of rollers on said spindle, each roller being adapted to support a yarn carrier having end bearing flanges, and an interior sleeve of larger interior diameter than said flanges, each roller having end portions of reduced diameter to support the bearing flanges of the yarn carrier, said sleeve resting upon the roller when one of said flanges is above the space between two rollers, so as to hold said flange up out of engagement with the end of the roller.

9. A yarn carrier support having, in combination, a spindle, and a plurality of rollers on said spindle arranged relatively close together, each roller being adapted to support a yarn carrier having end bearing elements, each roller having at its ends annular beveled surfaces on which the bearing elements of the yarn carrier are normally supported.

10. A yarn carrier support having, in combination, a sleeve, ball races at the ends of said sleeve, a roller, ball races carried by the roller, and balls between the ball races on the sleeve and the ball races on the roller, said roller having a chamber to receive lubricant, the sleeve having an opening through which lubricant may be introduced into the chamber.

[Claims 2 to 7 not printed in the Gazette.]

1,274,443. DOOR. ARTHUR T. PRESCOTT, East Orange, N. J., assignor to George H. Frothingham Company, New York, N. Y., a Corporation of New York. Filed Apr. 10, 1916. Serial No. 90,045. (Cl. 20—19.)



1. The combination with a door casing comprising side posts and a lintel defining the door opening, of a door comprising an upper section, links suspending the section from above the door-opening, stationary guide ways on the door posts, a lower door section adapted to coöperate with the upper section and provided with means to coöperate with the guide ways on the door posts, a stationary guide above the door-opening, a bell crank lever pivotally mounted on the upper section and adapted to engage the guide above the door-opening when the door approaches its closed position, and means acting upon the bell crank lever tending to swing the top of the door closed.

5. The combination with a door casing comprising side posts and a lintel defining the door-opening, of a door comprising an upper section, links suspending the section from above the door-opening, stationary guide ways on the door posts, a lower door section adapted to coöperate with the upper section and provided at its lower corners with means to coöperate with the guide ways on the door posts, a stationary guide above the door-opening, a bell crank lever pivotally mounted on the upper section and adapted to engage the stationary guide above the door-opening when the door approaches its closed position, and a spring attached to the bell crank lever and tending to throw the top of the door inward against the casing when the bell crank lever engages the stationary guide above the door opening, and an arm attached to the lower door section for actuating the bell crank lever to break in the door at the top when the lower door section overlaps the upper section in opening.

8. The combination with a door casing comprising side posts and a lintel defining the door-opening, of a door comprising an upper section, a lower section adapted to slide upon the upper section, means for suspending the door to permit it to swing out of a vertical position above the door-opening, a stationary guide bracket secured above the door-opening and having a hooked projection, a bell crank lever pivotally mounted on the upper section and having one arm adapted to coöperate with the guide bracket, a latch adapted to engage said hooked projection for holding the door against the casing at the top, resilient means acting upon the bell crank lever to force the door closed at the top when the bell crank arm engages the guide bracket, an arm attached to the lower door section and adapted to release the latch and actuate the bell crank lever in opposition to the resilient means to break in the door at the top and release the bell crank lever from the guide bracket, a latch supported by the upper door section for holding the bell crank lever in position to coöperate with the guide bracket in closing, and a releasing lever pivotally mounted above the door-opening for tripping the holding latch when the bell crank lever engages the bracket in closing.

14. An attachment for multi-section doors comprising for the upper door section, a bell crank breaking-in lever, a spring tending to hold said lever in a retracted position and a latch for holding the lever in its actuated position, and for the lower door section, an actuating lever adapted to coöperate with one arm of the bell crank lever.

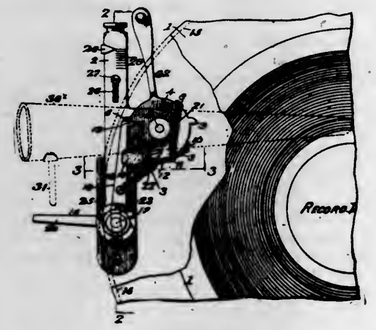
16. The combination with a door casing comprising side posts and a lintel defining a door opening, of a door section, means for suspending said section arranged to cause it to swing out of a vertical position above the door opening in opening and to permit it to swing back into a vertical position in closing, and an elongated pivotal member engageable with a rigid member, the pivot and rigid member being mounted on the door section and the casing, one on one and the other on the other, so that the number may be canted transversely to the door by relative movement of said rigid member or pivot, or of the pivoted member pivotally with relation to either, and arranged to force the top of the door section against the lintel in closing.

[Claims 2 to 4, 6, 7, 9 to 13, 15, and 17 not printed in the Gazette.]

1,274,444. AUTOMATIC STOP FOR TALKING-MACHINES. HENRY P. PROUD, Philadelphia, Pa. Filed Mar. 27, 1917. Serial No. 157,664. (Cl. 74—46.)

1. In a stop attachment for a talking machine, a rotatable head, a brake member thereon, a base, an elbow lever pivoted on said base and having means engageable with said head to lock the latter and the other limb movable independently of and adapted to be in the path of a movable member of said machine, means on said head and the base for causing rotation of the head, and means on

said elbow lever and base independent of said rotating means and acting on the said arm of the elbow lever to



hold the latter in engagement with said head, said base being slidably mounted.

[Claims 2 and 3 not printed in the Gazette.]

1,274,445. WINDOW WASHER AND WIPER. JOHN G. RANDALL, Dallas, Tex., assignor of one-half to John T. Shepherd, Dallas, Tex. Filed Apr. 30, 1917. Serial No. 165,370. (Cl. 15—59.)



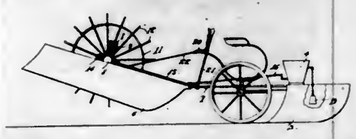
In a window wiping device, the combination of channel guides of substantially U-shaped cross section adapted to be mounted on the inner edge of the sash frame and abut against the inner and outer surfaces of the glass pane, pulleys placed in alinement with said guides, of slide blocks confined within the channels, a cord connecting the slide blocks and passing over the pulleys, and a wiper extending across the pane to be wiped and carried by the slide blocks.

1,274,446. FILING-CABINET. JOHN P. RATIGAN, Claremont, N. H. Filed July 10, 1914. Serial No. 850,245. (Cl. 45—77.)



As a new article of manufacture, a filing cabinet comprising side members, slide supporting guides thereon, each guide having an offset section in the back thereof, a slide receiving channel in the guide, a groove in the back of the channel and within the offset section of the guide, a drawer supporting slide in each channel having an upset section thereof positioned in the groove, guide fastening members in the grooves positioned to be engaged by the upset slide section to stop the movement of the slides.

1,274,447. PLANTER. JOHN H. REED, Lancaster, Wis. Filed Sept. 6, 1917. Serial No. 189,991. (Cl. 111—25.)

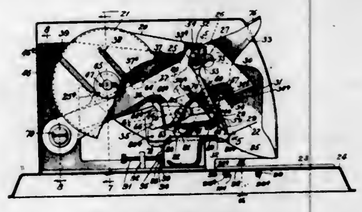


1. A planter comprising, in combination with a wheel supported frame and seed delivering mechanism thereon, runners pivotally secured to the frame, flanges on the runners, a shaft journaled on the runners, a wheel rigid on the shaft and contacting the ground to turn the shaft, a mutilated gear on the shaft, a rack yoke reciprocated by the mutilated gear, and mechanism actuated by the reciprocation of the yoke to operate the seed delivering mechanism.

3. A planter comprising, in combination with a wheel supported frame and seed delivering mechanism thereon, runners secured to the frame, a shaft journaled on the runners, a wheel rigid on the shaft and contacting the ground to turn the shaft, a mutilated gear on the shaft, a rack yoke reciprocated by the mutilated gear, mechanism actuated by the reciprocation of the yoke to operate the seed delivering mechanism, and a marker operated by the reciprocation of the yoke to indicate the points of seed delivery.

[Claim 2 not printed in the Gazette.]

1,274,448. STAMP VENDING AND AFFIXING MACHINE. GEORGE L. REICHHELM, Detroit, Mich., assignor, by mesne assignments, to P. R. Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 21, 1911. Serial No. 609,881. (Cl. 216—33.)



1. In a machine of the class described, means for engaging a stamp, or the like, of a series in ribbon form, for imparting thereto a feeding movement, and a resisting element in the path of said stamp and said means adapted to receive the pressure thereof subsequent to the feeding movement.

2. In a machine of the class described, means adapted to bend a stamp, or the like, of a series thereof having the form of a ribbon to a position forming an angle with said series, means adapted to engage said stamp and to impart to said series a feeding movement, a resisting element against which said means is adapted to press said stamp, and means for moistening the gummed side of said stamp.

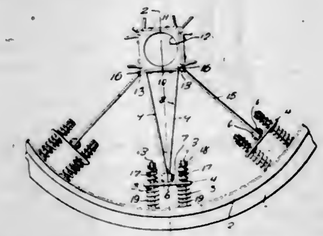
23. In a machine of the class described, means for holding a series of stamps having the form of a ribbon, means for bending the first or end stamp at an angle to said ribbon, and means for engaging said end stamp and moving said ribbon with relation to said holding means, said engaging means being also adapted to move said stamp toward and against an envelop or the like.

25. In a machine of the class described, means for holding a series of stamps having the form of a ribbon, a secondary bending element around which a stamp may be bent, a primary bending element for pressing said stamp around said secondary bending element, and means for pressing said stamp between said bending elements.

31. In a machine of the class described, means for yieldably holding the end portion of a supply of stamps having the form of a ribbon, means for engaging a stamp of said ribbon and drawing it through said yieldable holding means, and means carried by said holding means for adjusting said stamp in said holding means with relation to said engaging means.

[Claims 3 to 22, 24, 26 to 30, and 32 to 40 not printed in the Gazette.]

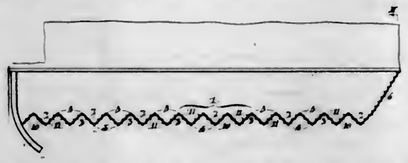
1,274,449. RESILIENT WHEEL. ROBERT V. REID, Cottonwood, Ala. Filed Nov. 19, 1917. Serial No. 202,823. (Cl. 152—28.)



2. In a wheel, a hub-block of regular polygonal outline, a rim concentric therewith, supporting plates secured to said rim, each plate being provided at its center with a pair of spaced transverse ears, and spokes formed from sheet material each having outwardly tapering arms and a base connecting the inner ends of said arms and secured to one face of the hub-block, the outer ends of the arms of the spokes being brought together and secured between the ears of said supporting plate.

[Claim 1 not printed in the Gazette.]

1,274,450. PROCESS OF BEACH-BUILDING. JOSEPH PERCY REMINGTON, Philadelphia, Pa. Filed May 20, 1916. Serial No. 98,730. (Cl. 61—30.)



1. The process of beach building which consists in separating the landward flow caused by the waves from the seaward flow and causing each seaward flow to pass over a barrier, whereby it is sufficiently checked to permit precipitation of the sand carried by it.

3. The process of beach building which consists in constricting a portion of each landward flow caused by the waves, whereby it is given power enough to carry sand with it over a barrier at a certain point and dividing each seaward flow at said points, whereby it is caused to pass back over said barrier at certain other points, where it is checked sufficiently to permit precipitation of the sand carried thereby.

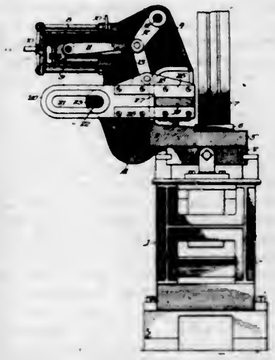
5. In a beach builder, the combination of substantially water-tight means for constricting a portion of each landward flow toward a certain point whereby it is given sufficient power to carry sand with it over a barrier at that point, means for deflecting each seaward flow away from that point to points where no landward flow is encountered, and means for checking the seaward flow at said points sufficiently to permit precipitation of the sand carried thereby.

7. A continuous zigzag and substantially water-tight retaining wall located on a beach subject to wave erosion, said wall having a continuously level top extending above the beach to such a height that each landward flow is divided by the seaward points, and caused to pass over the wall at the landward points, while the seaward flow is divided by the landward points, and caused to pass back over the wall at the seaward points.

11. A three-sided and substantially water-tight inclosure capable of retaining sand located on a beach subject to wave erosion within the tidal limits, said inclosure having a plurality of seaward points, whereby each incoming flow is divided and caused to flow over the wall intermediate said points.

[Claims 2, 4, 6, and 8 to 10 not printed in the Gazette.]

1,274,451. CLAMPING MECHANISM FOR WELDERS. ARCHER W. RICHARDS, Lakewood, Ohio, assignor, by mesne assignments, to The Firestone Steel Products Company, Akron, Ohio, a Corporation of Ohio. Filed May 18, 1917. Serial No. 169,439. (Cl. 219—17.)



1. In combination with an electric welder, a clamping arm adapted to hold the work, and means to move said clamping arm in one direction over the work, and in another direction to clamping position.

3. In combination with an electric welder, a clamping arm, a support for said arm adapted to guide it for horizontal movement to clamping position and release it for clamping.

7. A clamping mechanism for an electric welder, comprising a bracket on said welder, a clamping arm capable of both horizontal and vertical movement, a rail on said bracket to support the clamping arm for horizontal movement, a shaft passing through the arm and adapted to form a pivot for the vertical movement of the arm, a toggle lever connected to said bracket and said arm, and a fluid actuated mechanism for operating said toggle to move the clamping arm both horizontally and vertically.

[Claims 2 and 4 to 6 not printed in the Gazette].

1,274,452. GREASE-GUN FILLER. JOHN J. RICHARDS, Jr., Brookline, Mass., assignor, by mesne assignments, to The Randall-Faichney Company, Inc., Boston, Mass., a Corporation of Massachusetts. Filed Mar. 15, 1915. Serial No. 14,564. (Cl. 221—78.)

1. A grease gun filler comprising a sheet metal body rolled into tubular form and having integral longitudinal extensions at one end on opposite sides of the axis of such form, the ends of said extensions being bent toward one another and joined together and provided with a guideway, a piston fitting the interior of said form, and a

piston rod connected to said piston and passing therefrom through such guideway.



3. A grease gun filler consisting of a cylindrical shell open at one side and end, the edges of such side opening being separated by a distance less than the diameter of said shell, a pusher fitting the interior of the shell and being retained therein by said edges, and a rod connected to said pusher, the shell having a guide through which said rod passes and by which it is retained, and the corners of the shell at the open end thereof being cut away sufficiently to permit displacement of the pusher laterally out of the shell.

5. A grease gun filler comprising a sheet metal body curved into the form of the segment of a cylindrical shell including more than a semicylinder, said body having strips extending from separated points at one end thereof and being bent together across the axis of the cylinder and overlapped at their ends, such ends having complemental locking tongues and apertures and also having alined openings to admit a piston rod, said body having on its end from which said strips extend, and between the strips, an out-turned integral lip, and also having inwardly struck stop tongues near the points where said strips are joined to the body, a piston disk fitting the interior of the body shell, and a rod connected to said disk and passing through the said alined openings.

6. A grease gun filler comprising a sheet metal body curved into the form of the segment of a cylindrical shell including more than a semicylinder, said body having strips extending from separated points at one end thereof and being bent together across the axis of the cylinder and overlapped at their ends, such ends having complemental locking tongues and apertures and also having alined openings to admit a piston rod, a piston disk fitting the interior of the body shell, and a rod connected to said disk and passing through the said alined openings.

[Claims 2, 4, 7, and 8 not printed in the Gazette.]

1,274,453. SAFETY-PIN. HOWARD B. ROBINSON, Hartford, Conn. Filed Feb. 15, 1915. Serial No. 8,135. (Cl. 24—156.)



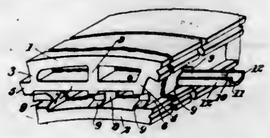
A safety pin including a head having a plate closing one side of the head and with sockets formed in opposite edges of the head, a rigid branch having its end secured in one of said sockets, a limber branch insertible in the other of said sockets, and a resilient tongue formed by cutting slits crosswise of said plate to a point within the boundary of a lip of said socket for the limber branch, said tongue being pressed inwardly to resiliently engage the inner surface of said lip whereby insertion of the pointed end of the limber branch is permitted but accidental disengagement is prevented.

1,274,454. DRENCHING-BOTTLE. ELIJAH O. ROGERS, Ada, Okla. Filed Jan. 26, 1914, Serial No. 814,491. Renewed Nov. 13, 1917. Serial No. 201,875. (Cl. 128—27.)



A drenching bottle comprising a tubular body having one end reduced to form a discharge spout, a cap threaded on the other end of said body and forming the bottom of the bottle, said cap having its central portion depressed and extending into the body, a hollow cylindrical shield carried by the depressed portion of the cap and extending longitudinally of the bottle within the latter, a rod slidable in the bottom of said depressed portion and in one end of the shield, a valve carried by the inner end of the rod and adapted to seat in the inner end of the spout, a bridge embodied in said cap exteriorly of the bottle and in which the rod also slides, a flange on the rod between the bridge and the outer face of the bottom of the depressed portion of the cap, a spring encircling the rod and bearing against the bridge and flange to normally hold the valve seated, and lever operated means mounted on the cap for moving the valve from its seat.

1,274,455. STRUCTURAL BLOCK. WILLIAM H. ROOK, Jr., Akron, Ohio, assignor to George R. Hill, Akron, Ohio. Filed Dec. 24, 1914. Serial No. 878,913. (Cl. 72—38.)

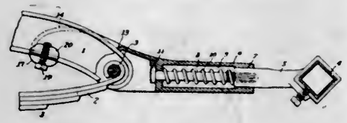


1. A structural block, having an outer wall, an inner wall, and connecting side walls, the ends of the block provided with transverse recesses extending inwardly in the direction of the length of the block and arranged below a median plane, the tops and bottoms of said recesses being inclined, and a mortar-receiving strip arranged in the recesses in the adjacent ends of alined blocks and adapted to be moved radially by co-action with the inclines of said recesses to distribute the mortar between the ends of the blocks as the blocks are moved toward one another.

2. A hollow segmental structural block, having an outer wall, an inner wall and opposite side walls, a transverse web connecting the side walls, and a perpendicular partition connecting the outer and inner walls and the transverse web and located between the side walls, the ends of the block provided with recesses in the side walls and perpendicular partition and located adjacent to the transverse web, the tops and bottoms of said recesses being

inclined for the purpose specified, and a trough-like strip for use in the said recesses in the ends of adjacent blocks to receive and distribute the joint-sealing mortar.

1,274,456. CONNECTION BETWEEN AUTOMOBILE-BUMPERS AND VEHICLE-FRAMES. CLINTON M. SAGER, Rochester, N. Y., assignor to J. H. Sager Company, Rochester, N. Y., a Corporation. Filed Apr. 13, 1917. Serial No. 161,694. (Cl. 293—55.)



1. The combination with a vehicle frame bar of channel form with the channel facing inwardly, of a bumper supporting arm having an abutment for coöperation with the end of the bar, and a portion extending in rear of said abutment and provided with a vertical abutment for coöperating with the side face of the bar, means for securing said portion to the bar in immediate proximity to the abutment with the front end of the bar, and a hooked clip near the free end of said portion extending under the bar and engaging about the lowermost flange of the latter for holding the vertical abutment in contact with the side face of the bar.

3. The combination with a vehicle frame bar of channel form with the channel facing inwardly, the forward end of the bar being curved, of a bumper supporting arm having an abutment for coöperation with the end of the bar, and a rearwardly-extending portion formed with the vertical face coöperating with the side of the bar in rear of and in a plane above said abutment, said rearwardly-extending portion carrying means which extends laterally under the bar at the free end of said portion and engages about the lowermost flange of the bar, and means for securing the portion at a point between the abutment and said free end.

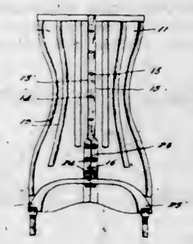
4. The combination with a vehicle frame bar of channel form with the channel facing inwardly, of a bumper supporting arm having an abutment for coöperation with the end of the bar, and a portion extending in rear of the abutment and having a vertical face for coöperating with the side of the frame bar, a bolt connecting the said portion to the vehicle frame bar adjacent to said abutment, and a clip on the free end of the rearwardly extending portion engaging about the lowermost flange of the frame bar and holding the rearwardly extending portion firm against the side face of the frame bar.

6. The combination with a vehicle frame bar of channel form with the channel facing inwardly; a spring; and a bolt connecting said spring to the vehicle frame bar; of a bumper supporting arm having a depending portion provided with an opening through which said bolt passes to secure the bumper supporting arm to the vehicle, a lateral projection on the depending portion coöperating with the forward end of the vehicle frame bar, and a portion extending rearwardly from said abutting portion; and a hooked bolt carried by the rearwardly extending portion and extending laterally therefrom about the lower flange of the vehicle frame bar to secure the rear end of the bumper supporting arm.

7. The combination with a vehicle frame bar of channel form with the channel facing inwardly; a spring; and a bolt connecting the spring to the vehicle frame bar; of a bumper supporting arm having a depending portion engaging a vertical face of the vehicle frame bar and provided with an opening through which the bolt passes to secure the bumper supporting arm to the vehicle, a lateral projection on the depending portion engaging the forward end of the vehicle frame bar, and a portion extending rearwardly from the bumper supporting arm and having a vertical face for coöperating with the vertical side face of the vehicle frame bar; and a clip carried by said rearwardly extending portion and extending laterally therefrom under the frame bar to engage about the lowermost flange of said frame bar in order to secure the rear end of the bumper supporting arm to the frame bar.

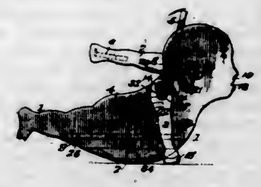
[Claims 2 and 5 not printed in the Gazette.]

1,274,457. REDUCING-CORSET. GEORGE E. SCHENCK, East Rutherford, N. J., assignor to Cora M. Davis, New York, N. Y. Filed Jan. 31, 1916. Serial No. 75,381. (Cl. 2—73.)



A reducing corset composed of two sections the body portion of each of which is formed of pure laminated rubber, rubber strips cemented at their marginal edges on the outer face of each body portion at spaced intervals and vertically thereof to form pockets, a fabric covered reinforcing stay mounted in each of the pockets, metal front stays one of which is provided with hooks while the other is provided with eyes, casements of rubberized fabric surrounding the metal front stays and securing the front stays to the front edges of the sections, lace receiving metal stays, casements of rubberized fabric for connecting the lace receiving metal stays to the adjacent rear edges of each section, a lace engaging through the receiving stays for connecting the sections together and reinforcing bindings cemented to the upper and lower edges of the sections and also covering the adjacent edges of the pockets and the casements.

1,274,458. COMBINED CHILD'S ROCKING-CHAIR, STATIONARY CHAIR, CRIB, AND BABY-CARRIAGE. THEODORE SCHISGALL, New York, N. Y., assignor to Travelight Mfg. Co., Philadelphia, Pa., a Corporation of Delaware. Filed Dec. 22, 1917. Serial No. 208,854. (Cl. 155—6.)



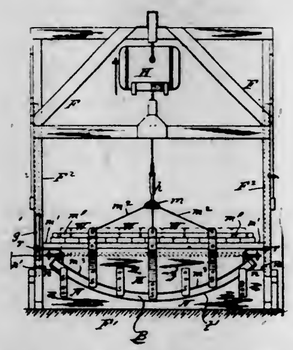
1. A rocking body having a side piece, a leg pivotally connected with said side piece and adapted to prevent rocking of said body, and coöperating studs and means for holding said leg in either a vertical or a horizontal position and supplemental means on said side piece engaging the free end of the leg for assisting in holding the leg in horizontal position.

4. A rocking body having thereon a seat, a back supporting member, a floor, a slidable leg, the latter being adapted to prevent rocking of said body, means for holding said leg in either its vertical or horizontal position, an axle connected with said floor and removable therefrom, and means for removably connecting said floor with said body and means for firmly connecting the axle with the floor and side pieces.

6. A rocking body, an axle, wheels mounted thereon, said axle having recesses in which the lower ends of the side pieces of said body may be seated, means for removably connecting said axle with the adjacent portion of said body, dowels adapted to enter said pieces and axle and connect said axle and pieces, and a catch on said axle adapted to engage a bracket member on the adjacent portion of the body adapted to removably connect said axle with said portion.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,274,459. WOOD-BENDING APPARATUS. FREDERIC SCHREIBMAN, Toronto, Ontario, Canada. Filed Jan. 5, 1917. Serial No. 140,664. (Cl. 144—256.)



1. In wood bending apparatus of the character designated, in combination, a fixed lower concave die, and a movable upper convex die in alinement therewith, flexible means for pivotally suspending said movable convex die in such manner that it is free to adapt itself to the work to be done, and hoisting mechanism connected with said flexible means of suspension, whereby said movable convex die may be raised or lowered with relation to the fixed concave die, for the purpose described.

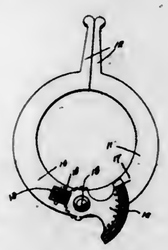
5. In wood bending apparatus of the character designated, in combination, a fixed lower concave die and a movable upper convex die in alinement therewith, said movable convex die being formed with a longitudinal recess in its face, means for supporting loose weight on said movable convex die, said movable weights, flexible means for pivotally suspending said weighted movable convex die in such manner that it is free to adapt itself to the work to be done, hoisting mechanism connected with said flexible means of suspension, whereby said weighted movable convex die may be raised and lowered with relation to said fixed concave die, and a blank retainer consisting of a strip of flexible metal formed with clamps adapted to embrace the ends of the wooden blank and with a take-up bolt engaging with the said clamps and adapted to extend through said longitudinal recess in the face of the weighted movable convex die, together with means for securing said clamps to said take-up rod, for the purpose described.

8. In wood bending apparatus of the character designated, in combination, a concave die and a convex die, one stationary and the other movable with relation thereto, the movable die being pivotally supported upon a flexible suspender, and hoisting mechanism connected with said flexible suspender whereby the movable die may be raised and lowered, for the purpose described.

[Claims 2 to 4, 6, 7, and 9 not printed in the Gazette.]

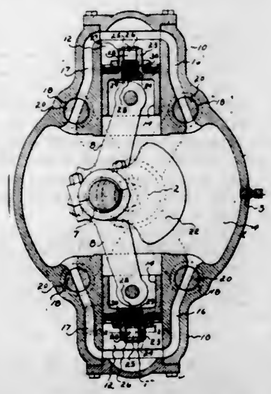
1,274,460. CALIPERS. ESTER M. SEALY, Honolulu, Hawaii. Filed Dec. 3, 1917. Serial No. 205,166. (Cl. 33—148.)

1. A measuring instrument of the class described, comprising jaws having their end portions pivotally connected together, one of said jaws having an indicating mark thereon and being provided with a gear head about the pivot point thereof, and the second gear being extended in overlapping relation to the first mentioned jaw and terminating in an arcuate scale head moving in operative position on the indicating mark on the first jaw, and a worm screw rotatably mounted in said second jaw and engaging the teeth of the gear head of the first jaw, rotation of the worm screw imparting movement to the first jaw.



2. A measuring instrument of the character described comprising a pair of jaws pivotally connected together, one of said jaws being provided with an indicating mark and the other jaw being extended in overlapping relation to the first jaw and terminating in an arcuate scale moving in operative relation to the indicating mark upon said first jaw, and means for imparting movement to the first jaw and holding the same in an adjusted position.

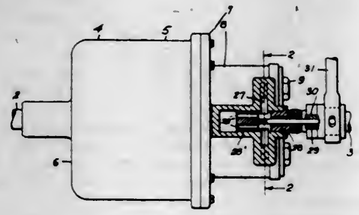
1,274,461. CLUTCH. WILBUR L. SHEPARD, Elmwood, Conn., assignor of one-third to Hubert C. Hart, Unionville, Conn., and one-third to William H. Legate, Hartford, Conn. Filed July 31, 1917. Serial No. 183,663. (Cl. 192—18.)



1. The combination of a rotary shell having a chamber, passages leading from said chamber at opposite sides thereof and also having cylinders in which the outer ends of the passages open, a valve extending across each of said passages, means for opening or closing the valve to either permit or check the flow of liquid from the chamber to and along said passages, pistons in the respective cylinders and at opposite sides of which the respective passages are situated, a shaft extending into the shell and operatively connected with the pistons, the shell having means associated therewith for receiving a liquid and also having automatically operable check valves adapted to be opened by suction to supply liquid to said passages on leakage of the liquid from the passages.

2. The combination of a rotary shell having a chamber, passages leading from said chamber at opposite sides thereof, and also having cylinders in which the outer ends of the passages open, a valve extending across each passage, means for opening or closing the valves to either permit or check the flow of liquid from the chamber to and along said passages, pistons in the respective cylinders and at opposite sides of which the respective passages are located, and outwardly opening check valves carried by the heads of the respective pistons.

1,274,462. CLUTCH. WILBUR L. SHEPARD, Elmwood, Conn. Filed Aug. 21, 1917. Serial No. 187,341. (Cl. 192—18.)

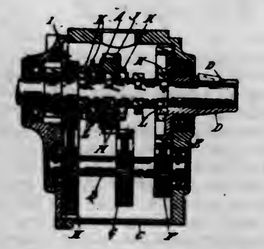


1. A device of the class described comprising a casing to contain liquid, a driving shaft extended into the casing, a gear rotative with said driving shaft, a driven shaft also extended into the casing and rotative therewith, pistons in said casing operable to effect the movement of the liquid and both reciprocative in parallelism with said shafts, gears in mesh with the other gear, and having means for reciprocating the pistons, and means for checking as desired, the movement of the liquid.

3. A device of the class described comprising a casing to contain liquid, a driving shaft extending into the casing and rotative with respect thereto, a bevel gear fixed to said shaft, within the casing, a driven shaft extending into the casing and rotative therewith, a pair of opposite bevel gears also within the casing and in mesh with said bevel gear, the casing having cylinders and also having an annular passage in communication with said cylinders, a pair of pistons, in parallelism with said shafts, a pair of valves, means for at will moving said valves across said passage to check the flow of liquid along said passage, eccentrics connected with the respective opposite bevel gears, and pitmen associated with the respective eccentrics for action thereby and respectively connected with said pistons.

[Claim 2 not printed in the Gazette.]

1,274,463. CHANGE-SPEED GEAR. GEORGE ENOCH STANLEY, Coventry, England. Filed Sept. 28, 1917. Serial No. 193,711. (Cl. 74—59.)



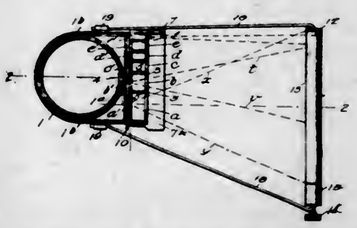
1. In a change speed gear for motor vehicles the combination of a driving shaft; a lay shaft parallel thereto; a driven shaft axially alined with the driving shaft and geared permanently to the lay shaft; gear wheels carried on a sliding member on the driving shaft and adapted to gear with a wheel on the lay shaft; dogs on each side of the sliding member; and splines on the driving shaft to engage said dogs and spaced longitudinally so as to engage the dogs after the sliding member toothed wheel is meshed with a toothed wheel on the lay shaft.

3. In a change speed gear for motor vehicles, the combination of a driving shaft; a lay shaft parallel thereto; a driven shaft axially alined with the driving shaft and geared permanently to the lay shaft; gear wheels carried on a sliding member on the driving shaft and adapted to gear with wheels on the lay shaft; alternately long and short dogs arranged in a ring on each side of the sliding member; and correspondingly long and short splines on the driving shaft to engage said dogs, which splines are spaced longitudinally so as to engage the dogs after a toothed wheel on the sliding member is meshed with its appropriate toothed wheel on the lay shaft.

5. In a change speed gear for motor vehicles, the combination of a driving shaft; a lay shaft parallel thereto; a driven shaft axially alined with the driving shaft and geared permanently to the lay shaft; gear wheels carried on a sliding member on the driving shaft and adapted to gear with wheels on the lay shaft; dogs on each side of the sliding member; splines on the driving shaft to engage said dogs and spaced longitudinally so as to engage the dogs after a toothed wheel on the sliding member is meshed with its appropriate toothed wheel on the lay shaft; and a reverse gear comprising a reverse shaft parallel to the driving shaft; and two toothed wheels keyed to the reverse shaft one of which is permanently meshed with the largest of the lay shaft wheels and the other is adapted to mesh with the smaller of the toothed wheels on the sliding member when the latter is moved endwise into an appropriate position.

[Claims 2 and 4 not printed in the Gazette.]

1,274,464. DEVICE FOR DETERMINING THE ACTINIC POWER OF LIGHT. FRANK M. STEADMAN, Caracas, Venezuela. Substitute for application Serial No. 871,281, filed Nov. 10, 1914. This application filed Dec. 22, 1915, Serial No. 68,286. Renewed Dec. 13, 1917. Serial No. 207,018. (Cl. 95—10.)



1. In a device for determining the actinic power of light, a casing, a sensitive surface disposed within the casing, a wall carried by said casing, said wall being spaced from said sensitized surface and having a series of rectangular openings, the major axes of the series being parallel and of uniform length and the areas of the openings diminishing progressively from one end of the series in simple proportion.

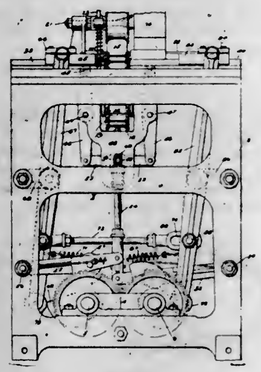
8. The combination with a casing, of a sensitized strip disposed within the casing, a partition and wall carried by said casing, transverse partitions extending between said first-mentioned partition and said wall, said first-mentioned partition having a series of uniform openings and said wall having a series of corresponding rectangular openings, the major axes of the rectangular openings being parallel and of uniform length and the areas of said last-named series of openings diminishing progressively from one end of the series, a standard light reflecting surface rigidly secured to said casing for reflecting light through the openings in the wall, and a movable cover for shutting off the light coming to the outer openings from

the light reflecting surface or permitting the entrance of light from the light reflecting surface.

10. The combination with a casing, of a sensitized strip disposed within the casing, a partition and a wall carried by said casing, transverse partitions extending between said first-mentioned partition and said wall, said first-mentioned partition having a series of uniform openings and said wall having a series of corresponding rectangular openings, the major axes of the rectangular openings being parallel and of uniform length and the areas of said last-named series of openings diminishing progressively from one end of the series, a standard light reflecting surface rigidly secured to said casing for reflecting light through the openings in the outer wall, a movable cover for shutting off the light coming to the outer openings from the light reflecting surface or permitting the entrance of light from the light reflecting surface, means for varying the amount of light reflected from the light reflecting surface, said last-named means comprising an endless belt having a dark portion and a light portion, and means for shifting the endless belt.

[Claims 2 to 7, 9, and 11 to 16 not printed in the Gazette.]

1,274,465. MACHINE FOR INSERTING CROSS-WIRES IN SOLID TIRES. WILLIAM C. STEVENS, Akron, Ohio, assignor to The Firestone Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed June 18, 1915. Serial No. 34,801. (Cl. 1—1.)



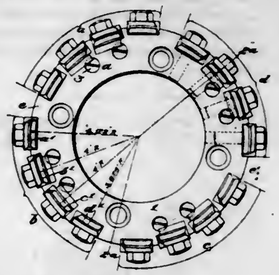
1. A machine of the character described, comprising means for advancing a tire through the machine, guides at either side of the tire, means for moving said guides against the tire, and a piercing element and a wire inserting element operable through said guides.

15. A machine for inserting cross wires in cushion tires, comprising means for supporting the tire, means for piercing and inserting cross wires in the tire, guides for said piercing and cross wire inserting means, and means to force the guides against the base of the tire during the piercing and inserting operations, whereby the tire is put under lateral pressure.

21. In a machine for inserting cross wires in solid tires, the combination of a rotary annular tire supporting drum provided with a series of recesses, tire directing means on said drum at the sides thereof for holding it from lateral displacement in its movement through the machine, and a tire perforating and a wire driving device on opposite sides of said drum, the directing means being apertured for the passage of the tire perforating means, and means arranged to enter the recesses in succession to lock the drum in position step by step.

[Claims 2 to 14, 16 to 20, 22, and 23 not printed in the Gazette.]

1,274,466. GEAR-CUTTER. ARTHUR L. STEWART and BENJAMIN H. BICKLE, Rochester, N. Y., assignors to Gleason Works, Rochester, N. Y., a Corporation of New York. Filed Mar. 12, 1917. Serial No. 154,185. (Cl. 29—105.)



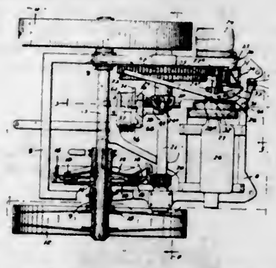
1. A gear cutter comprising a rotatable head or support having a plurality of roughing tools arranged thereon adapted to engage opposite sides of teeth, and a plurality of finishing tools adapted to subsequently engage the corresponding sides of the teeth.

7. A gear cutter comprising a rotatable head or support having a series of gangs of tools, each gang being adapted to engage a separate slot or tooth space and including a plurality of roughing and finishing tools, the finishing tools of the different gangs being arranged at the same distances from the center of the head.

10. A gear cutter comprising a rotatable head or support having a plurality of roughing tools extending axially of the tool head and provided with cutting edges at different distances from the center and their clearance on opposite sides, and a plurality of axially extending finishing tools having the points of their cutting edges at substantially the same distance from the center and their clearance on opposite sides.

[Claims 2 to 6, 8, 9, and 11 not printed in the Gazette.]

1,274,467. TRANSMISSION MECHANISM. CHARLES H. STINSON, Watertown, S. D. Filed Oct. 23, 1916. Serial No. 127,087. (Cl. 74—58.)



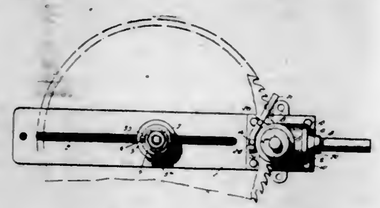
1. In a transmission mechanism having forward and reverse driving gears, a controller shaft mounted for endwise and rocking movements, the one movement of said shaft serving to move certain of said gears into and out of action and the other movement thereof serving to throw the reverse gears into and out of action, and a controlling lever having at its intermediate portion a shiftable fulcrum, and which lever is arranged to rock on its fulcrum to impart one of said movements to said controller shaft and has a movement in another direction that shifts its said fulcrum to impart the other of said movements to said controller shaft.

3. In a transmission mechanism, the combination with a driving shaft having laterally spaced pinions of different diameters, of a driven shaft having laterally adjustable gears of different diameters adapted to mesh, one with each of said pinions but movable into a neutral position between the same, a wide faced reverse pinion movable into and out of mesh with one of the pinions of said driving shaft and with one of the gears of said driven shaft when said two gears are in neutral position, a controller shaft mounted for endwise and oscillatory movements, connections whereby endwise movements of said shaft will move said reverse pinion into and out of operative position, and connections whereby oscillatory movements of said shaft will move the gears of said driven shaft to and from neutral position.

5. In a transmission mechanism, the combination with a driving shaft having laterally spaced pinions of different diameters, of a driven shaft having laterally adjustable gears of different diameters adapted to mesh, one with each of said pinions but movable into a neutral position between the same, a wide faced reverse pinion movable into and out of mesh with one of the pinions of said driving shaft and with one of the gears of said driven shaft when said two gears are in neutral position, a controller shaft mounted for endwise and oscillatory movements, connections whereby endwise movements of said shaft will move said reverse pinion into and out of operative position, connections whereby oscillatory movements of said shaft will move the gears of said driven shaft to and from neutral position, a controller lever for moving said shaft, as stated, and a lever regulating device having a transverse slot with an intermediate lateral extension, movements of said lever in said transverse slot serving to move said gears to and from neutral position, and movements of said lever into the lateral extension of said slot serving to move said reverse pinion to and from operative position.

[Claims 2 and 4 not printed in the Gazette.]

1,274,468. SAW-SET. INOWALL O. STUVLAND, Everett, Wash. Filed Apr. 4, 1918. Serial No. 226,715. (Cl. 76—67.)



A device of the character specified, comprising a base, a standard at one end of the base, an anvil supported by the standard, a hammer mounted in the standard to move toward and from the anvil, a spring normally pressing the hammer toward the anvil, means for varying the tension of the spring, a cam for moving the hammer away from the anvil against the tension of the spring, a saw support for rotatably mounting a saw on the base and adjustable toward and from the standard, means on the standard for engaging the teeth of the saw to advance the same, and a connection between the said means and the anvil for advancing the saw whenever the hammer is lifted, said advancing means comprising an elbow lever having one arm pivoted to the standard and having the other provided with a pawl for engaging the teeth, a pin on the hammer for engaging the pivoted arm of the elbow lever, and set screws for limiting the movement of the elbow lever, one of the set screws engaging the pin.

1,274,469. SWING-HOOK. CHARLES C. SUNDERLAND, Trenton, N. J., assignor to John A. Roebling's Sons Company, a Corporation of New Jersey. Filed Aug. 21, 1917. Serial No. 187,453. (Cl. 24—242.)

3. A swing hook having two hook members pivoted together, an eye formed by one of said members, a locking member linked through said eye, a head formed on the other hook member and located within and having a movement transversely through said eye, said head coacting with said locking member to lock said hook members



together, said locking member being formed to release said head for unlocking the hook when the locking member is moved transversely through the eye into a certain position.

[Claims 1 and 2 not printed in the Gazette.]

1,274,470. MEANS FOR SECURING WOOD FLOORING AND TRIMMING IN PLACE IN FIREPROOF BUILDINGS. CHARLES L. THORNBERRY, Lincoln, Nebr. Filed May 11, 1917. Serial No. 167,998. (Cl. 72—105.)



1. A sleeper for floor or wall construction consisting of a wooden strip of truncated triangular formation in cross section, provided with a longitudinally disposed groove or channel along its base, and having a row of inwardly inclined bores extending from one of the inclined sides to the bottom thereof, said bores connecting at their inner ends with said groove or channel, the flat upper or outer face of the strip being imperforate and the width of the groove or channel being materially less than the width of the base, so as to leave flat portions of the base along each side of the groove or channel.

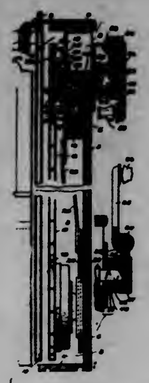
3. In a wall or floor employing individually spaced plastic bases or beds in lieu of the usual cement or concrete filler occupying the entire space beneath the wall or flooring, the combination with said plastic bases, of wooden strips individual to each base and bedded therein, each strip being of truncated triangular formation in cross section, the base being wider than the upper or outer face and having a longitudinal groove the width of which is less than the width of the base, while the upper or outer face of the strip is made flat and imperforate, and inclined bores leading from the base to the inclined sides, both ends of the bores being open, said bores at their inner ends opening into the said longitudinal groove, and the bores at one side intersecting with the bores at the other side at a point within the strip above the groove, whereby when the strip is pressed down upon the base, the material forming the latter is forced through the bores and falls over the inclined sides of the strip outside the bores and forms a securing head.

[Claim 2 not printed in the Gazette.]

1,274,471. GEAR ACTUATING AND LOCKING MECHANISM. FREDERICK J. TODD, Egg Harbor, N. J. Filed Oct. 12, 1917. Serial No. 196,330. (Cl. 74—7.)

1. The combination with a window member, of means for moving the same comprising a driving wheel, a gear

for driving said wheel, a pinion meshing with said gear for driving the same, a locking plate with which said pinion is adapted to engage, and means for rotating said pinion and for moving the same longitudinally with respect to said locking plate while remaining in mesh with said gear.



10. The combination with a window member, of means for actuating the same comprising a gear, a locking plate, a pinion constantly in mesh with said gear and adapted to engage said locking plate, a rotatable member for rotating said pinion, a projection on said pinion engaged by said rotatable member, said projection having a cam surface, an operating member pivoted to said rotatable member, and a member slidable in said rotatable member and adapted to engage said cam surface, said operating member having a cam surface engaging said slidable member for actuating the same in response to pivotal movement of said operating member.

11. The combination with a window member, of means for actuating the same comprising a gear, a locking plate, a pinion constantly in mesh with said gear and adapted to engage said locking plate, a rotatable member for rotating said pinion and with respect to which said pinion has longitudinal movement, a crank member pivoted on said rotatable member, and means actuated by said crank member in movement upon its pivot for shifting said pinion longitudinally.

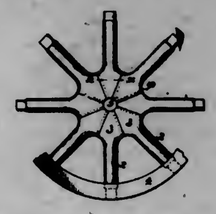
12. Gear actuating and locking mechanism comprising a gear, a pinion meshing with said gear for driving the same, a locking member with which said pinion is adapted to engage, and means for rotating said pinion and for moving the same longitudinally with respect to said locking member while in mesh with said gear.

20. Gear actuating and locking mechanism comprising a gear, a locking member, a pinion meshing with said gear and adapted to be locked against rotation by said locking member, a rotatable member for rotating said pinion, a crank pivoted on said rotatable member, and means actuated by said crank in movement upon its pivot for shifting said pinion longitudinally.

[Claims 2 to 9 and 13 to 19 not printed in the Gazette.]

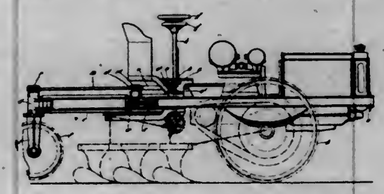
1,274,472. WHEEL. ROBERT C. WALL, Philadelphia, Pa. Filed Aug. 16, 1917. Serial No. 186,440. (Cl. 21—31.)

1. A wheel structure consisting of a plurality of spoke members each having a V-shaped hub section and which when assembled provide a continuous hub with radiating spokes, the opposite edges of all of the hub sections except two respectively provided with a rib and a groove and of the remaining two hub sections one of which is provided on both its edges with ribs and the other provided on both its edges with grooves, said ribs and grooves of all of the hub sections arranged radially and interlocking in pairs to unite the adjacent hub sections to prevent the spoke members separating radially and circumferentially, said ribs formed on the edges of the hub sections to constitute a permanent part thereof.



2. A wheel structure consisting of a plurality of spoke members each having a V-shaped hub section and which when assembled provide a continuous hub with radiating spokes, the abutting edges of the hub sections united by interlocking ribs and grooves integrally formed with said hub sections, said ribs and grooves arranged radially of the hub and said interlocking hub sections having their interlocking ribbed and grooved edges made of complementary forms, whereby a rib of one section will interlock with a groove of the next adjacent section to prevent said spokes separating radially and circumferentially.

1,274,473. MECHANICAL TRACTOR FOR AGRICULTURAL PURPOSES. FRANCIS MARK WALLER, Stafford, England. Filed Apr. 14, 1917. Serial No. 162,154. (Cl. 180—27.)



1. A mechanical tractor for agricultural purposes comprising a main frame carrying a pair of driving wheels, a secondary frame pivoted to the main frame to the rear of said driving wheels, a wheel pivotally mounted in a head carried by the secondary frame, and duplicate steering mechanisms whereby the tractor can be steered by simultaneously setting up relative movement between the two frames, and turning the rear wheel about its pivotal axis.

2. A mechanical tractor having three wheels two of which are arranged in parallel relation to one another at a suitable distance apart so as to form a pair and one or both of which may be driven, and the other of which is arranged behind the aforesaid pair of wheels and is capable either of being placed to run centrally with respect to said pair of wheels or of being offset to either side, the pair of wheels being mounted on the main frame and the third wheel on a secondary frame or beam which is pivoted to the main frame at a suitable distance behind the axis of the pair of wheels; irreversible mechanism operated by a hand wheel for steering the vehicle about the point of pivot of the two frames and similar mechanism for steering the vehicle about the point of pivot of the third wheel.

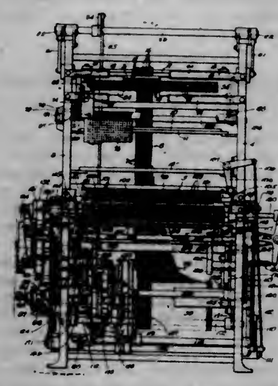
3. In a mechanical tractor for agricultural purposes the combination of a main frame, a pair of driving wheels carried by said frame, a secondary frame pivoted to the main frame to the rear of the driving wheels, a third wheel pivotally mounted in said secondary frame, mechanism operated by a hand wheel for setting up relative movement between the two frames at their points of pivot, mechanism operated by a hand wheel concentrically mounted in relation to the before named hand wheel for turning the rear wheel about its pivotal axis in the secondary frame, and means for locking both of said mechanisms so that either can be rendered inoperative while the other remains operative.

4. In a mechanical tractor for agricultural purposes the combination of a main frame, a pair of driving wheels carried by said frame, a secondary frame pivoted to the main frame to the rear of the driving wheels, a third wheel pivotally mounted in said secondary frame, hand wheel operated mechanism for setting up relative movement between the two frames at their points of pivot, hand wheel operated mechanism for turning the rear wheel about its pivotal axis in the secondary frame, and means for setting and fixing the secondary frame or beam carrying the rear wheel in varying positions in relation to the main frame.

5. In a mechanical tractor for agricultural purposes the combination of a main frame, a pair of driving wheels carried by said frame, a secondary frame pivoted to the main frame to the rear of the driving wheels, a third wheel pivotally mounted in said secondary frame, irreversible mechanism for setting up relative movement between the two frames at their points of pivot, and irreversible mechanism for turning the rear wheel about its pivotal axis, both mechanisms being so arranged as to be capable of simultaneous operation.

[Claim 6 not printed in the Gazette.]

1,274,474. MACHINE FOR SELECTING; SPOOLING, SHEARING, AND DRAWING IN YARN FOR AXMINSTER LOOMS. THOMAS P. WALSH, Boston, Mass., assignor, by mesne assignments, to American Warp-Drawing Machine Company, a Corporation of Maine. Filed Feb. 28, 1910, Serial No. 546,325. Renewed Dec. 24, 1917. Serial No. 208,699. (Cl. 139—94.)



2. In a machine of the kind described, means to support a spool and its yarn guiding tubes in relative position for threading the latter and winding the spool, and yarn tubing means movable through the tubes from the spool end of the latter to receive the yarns and thence back through the tube and out at the spool end with the yarns in the threading operation to leave the free ends of the yarns in winding position with relation to the spool.

10. In a machine of the kind described, means for delivering a supply of yarns, winding mechanism for winding yarns therefrom on a spool, means for supporting a tube frame, drawing-in mechanism for drawing-in said yarns through the tubes of the tube frame, severing mechanism for severing the yarns from said supply subsequent to the winding and drawing-in operations, and rotary brushing means for straightening out and maintaining in proper separated relation the severed ends of the supply yarns.

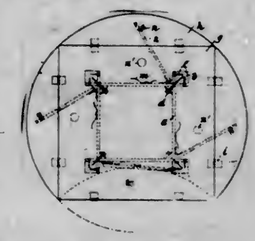
48. In a machine of the kind described, winding mechanism to wind a spool with a complement of selected yarns, yarn selecting mechanism for dissimultaneously selecting the particular yarns for said complement to be wound, drawing-in mechanism to place the selected yarns through yarn guide tubes, and means to operate said drawing-in mechanism to draw in all of said yarns simultaneously.

74. In a machine of the kind described, winding means to wind a complement of selected yarns on a spool, a key device for determining the yarn selections one at a time, a jacquard controlled by the key device, means to lock the jacquard in step with said selections and in accordance with said selections, and means to operate the jacquard to position the selected yarns after it has been so controlled and locked.

80. In a machine of the kind described, winding mechanism to wind a spool with a complement of selected yarns, and yarn selecting and positioning mechanism, including locking means for maintaining said selection while a plurality of spools are being wound therefrom with the same selection, and a manually controlled device for unlocking said locking means, said machine including means for permitting the winding of successive spools without disturbing said selection.

[Claims 1, 3 to 9, 11 to 47, 49 to 73, 75 to 79, 81, and 82 not printed in the Gazette.]

1,274,475. FOLDING-LEAF TABLE. ALBERT WANNER, Jr., New York, N. Y. Filed Jan. 18, 1915. Serial No. 2,794. (Cl. 45—9.)



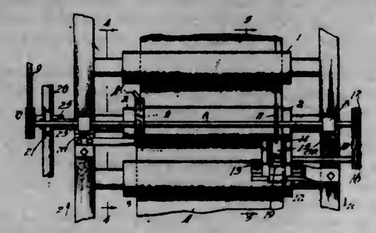
1. In a table, the combination of a frame including several spaced legs, horizontal rails each formed of one piece of material of uniform horizontal thickness, said rails having their ends crossed and halved into each other and each leg being secured in the outer angle of a crossing of two rails and having inner surfaces thereof bearing against the outer surfaces of said two rails, and a circular top secured on the frame and including a center part having its sides parallel with the rails and leaves pivoted to the sides of the top and foldable under the same, the curved outer edge of each leaf being adapted to project in between the two adjoining legs in the folded position of said leaf.

2. A table frame including several spaced legs, horizontal rails joining the legs, each two adjoining rails having their ends crossed and halved into each other and each leg being arranged in the outer angle of a crossing of two rails, securing means extending through the end of each rail into the corresponding leg, and a securing device extending through the crossing portions of each two rails and into the corresponding leg in bisecting relation to the angle of the crossing.

1,274,476. APPARATUS FOR TRIMMING AND MARKING WALL-PAPER. STEWART WARING, Evanston, Ill., assignor to Sears, Roebuck and Company, Chicago, Ill., a Corporation of New York. Filed June 28, 1916. Serial No. 106,837. (Cl. 33—37.)

1. A wall-paper trimming and marking machine comprising a surface over which the paper runs, a shaft extending transversely of the paper, a marking disk and a circular knife mounted on said shaft in peripheral contact with the selvages of the paper lying upon said

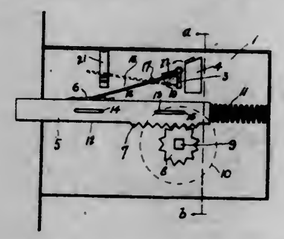
surface, means for conveying color to the periphery of the marking disk, and means for rotating the shaft.



2. A wall-paper trimming and marking machine comprising a roll over which the paper is drawn, a marking disk and a circular knife, supporting means for the disk and the knife, means for rotating the disk and the knife in peripheral contact with the selvages of the paper lying upon said roll, and means for conveying color to the periphery of the marking disk.

[Claims 3 and 4 not printed in the Gazette.]

1,274,477. LOCK. JOHN THOMAS WARNE, Burnaby, British Columbia, Canada. Filed Oct. 24, 1917. Serial No. 198,306. (Cl. 70—29.)



1. In a lock, the combination with a casing having a key hole, of a key bit, a sliding bolt having upper edge notches and lower edge teeth, an independent pawl pivoted off center located between the bolt and key bit having its long end normally coacting with said notches and its short end disposed to be contacted by the key bit so as to raise or lower the notch engaging end, and a pinion engaging the said teeth by the rotation of which the bolt may be projected or retracted.

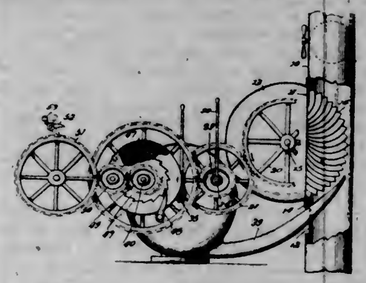
2. In a lock, the combination with a casing having a keyhole, of a sliding bolt having upper edge notches and lower edge teeth, a suitably fulcrumed pawl having one end co-acting with the said notches and its other end disposed to be contacted by the key bit so as to raise or lower the notch-engaging end, spring jaws between which the notch-engaging end is forced when raised, and a pinion engaging the said teeth by the rotation of which the bolt may be projected or retracted.

3. In a lock, the combination with a casing having a key hole, of a sliding bolt mounted for projection or retraction and provided with upper edge notches, and a straight flat pawl suitably fulcrumed intermediate of its length having its long end coacting with said notches and its short end disposed to lie in the path of the key bit so that the notch engaging end may be raised or lowered by direct contact of the key bit with the short end.

[Claim 4 not printed in the Gazette.]

1,274,478. AIR-GENERATOR. FRANK I. WEBB, McKeesport, Pa. Filed Dec. 5, 1917. Serial No. 205,549. (Cl. 253—38.)

1. In a power generator, the combination of a vertical tube open at its lower end, a turbine wheel mounted to extend partly within the tube, a blower for creating an upward current of air within the tube to initially start rotation of the turbine wheel to overcome its inertia, a spring motor for rotating the same, and means operable by rotation of the turbine for winding up the motor.



2. A power generator including a vertical column, a turbine wheel mounted therein, a gear operable by rotation of said turbine wheel, a second gear in meshing engagement with the first, a clutch member carried by said second gear, a third gear, a clutch member carried by said third gear for meshing engagement with the other clutch member, a fan having an outlet extending into the column, a shaft operating said fan, a pinion loosely mounted on said shaft, clutch members for connecting said shaft with the pinion, said pinion being in meshing engagement with the second gear, a spring drum, a fourth gear carried by the spring drum, in meshing engagement with the third gear, a fifth gear in meshing engagement with the pinion, clutch mechanism for connecting said fourth and fifth gears, reduction gears operable by rotation of said spring drum, and releasable pawls to engage the reduction gear and the spring drum to prevent rearward rotation thereof.

1,274,479. MANUFACTURE OF PHOSPHORUS. HARRY ORLANDO HICKMAN WENMAN, Bishop's Castle, England. Filed Dec. 7, 1917. Serial No. 205,992. (Cl. 204—63.)

1. In the manufacture of phosphorus, adding molten slag to silicate and carbon in an electric furnace.

2. In the manufacture of phosphorus, running molten slag direct from a steel furnace into an electric furnace, supplying silicate and carbon to the electric furnace, and maintaining the furnace at the temperature required to vaporize the phosphorus.

3. In the manufacture of phosphorus, supplying silicate to an electric furnace, running molten slag direct from a steel furnace into said electric furnace and introducing carbon into said electric furnace.

1,274,480. FUEL PRODUCT AND PROCESS OF MAKING SAME. OSCAR F. WERNER, San Jose, Cal. Filed Aug. 30, 1917. Serial No. 188,957. (Cl. 44—1.)

1. A fuel product comprising a compressed mixture of lampblack, a comminuted combustible body material and an asphalt binder.

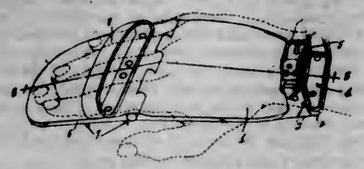
3. A fuel product consisting of a compressed mixture of lampblack, a comminuted combustible body material, an incombustible comminuted cementitious material, and an asphalt binder.

5. A fuel product consisting of a compressed mixture of lampblack substantially 70 parts, a comminuted combustible body material substantially 30 parts, asphalt binder substantially 5 parts, and lime dust substantially 2 parts.

9. The method of making the herein described fuel product, consisting in forming a heated mixture of lampblack, a comminuted combustible body forming material and a comminuted cementitious material, mixing with said mixture an asphalt binder previously heated to a liquid form, then subjecting the mass to pressure and subsequently cooling the same.

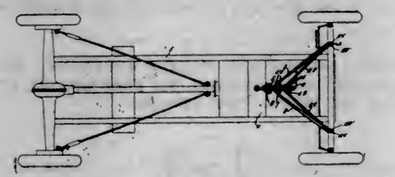
[Claims 2, 4, and 6 to 8 not printed in the Gazette.]

1,274,481. ICE-MITTEN. GEORGE L. WEST, Rockport, Mo. Filed Apr. 27, 1918. Serial No. 231,128. (Cl. 2—104.)



An ice mitten including a palm plate reduced in width at the wrist end thereof, upstanding ears at said end and merging along curved lines into the said end of the plate, a wrist strap secured to and constituting a lining for the wrist end of the plate and the ears, a finger plate hinged to one end of the palm plate, prongs extending from the finger plate, and a finger receiving strap secured to the back of the finger plate.

1,274,482. RADIUS-ROD FOR AUTOMOBILES. FRANKLIN P. WHITE, Shallotte, N. C. Filed Feb. 21, 1918. Serial No. 218,506. (Cl. 21—182.)



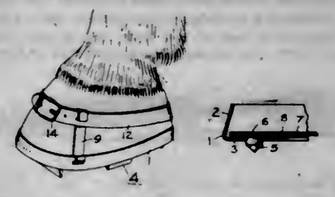
1. An attachment for motor vehicles including a threaded rod or stem having a ball at one end for engagement with a socket member on a motor vehicle, an eye adjustably mounted on the rod and having diverging rods for attachment to the front axle of a motor vehicle, and forwardly diverging braces adjustably connected to said threaded rod for attachment to said axle.

2. An attachment for motor vehicles including a threaded rod or stem having a ball at one end for engagement with a socket member on a motor vehicle, a member adjustably mounted on said rod and having diverging members for attachment to the upper portion of the front axle of a motor vehicle, and braces in front of and adjustably connected to said threaded rod, said braces diverging forwardly and adapted to be attached to the bottom of said front axle.

3. An attachment for motor vehicles including a threaded rod or stem having a ball at one end for engagement with a socket member on a motor vehicle, an eye adjustably mounted on said rod, a forwardly diverging tubular member extending from the eye, pins seated in the forward ends of said members, stems projecting therefrom for engagement with the spring supporting posts on the front axle of a motor vehicle, another eye mounted on the threaded rod, forwardly extending brace rods projecting therefrom for engagement with the stems of the spring supporting posts on the front axle.

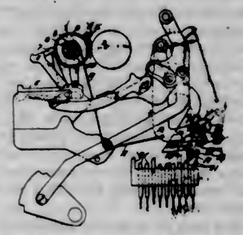
4. The combination with a motor vehicle having an engine base provided with a socket, of a threaded rod having a ball at one end detachably seated in the socket, spring supporting posts mounted on the front axle of a motor vehicle, and having stems projecting downwardly through said axle, there being a transverse opening in each of the posts, an eye adjustably mounted on the threaded rod and having tubular members diverging forwardly therefrom, pins seated in said members and having stems projecting through the openings in the posts and secured therein, another eye adjustably mounted on the threaded rod, and forwardly diverging braces extending therefrom and engaging the lower end portions of the stems of the posts.

1,274,483. HORSESHOE. SAMUEL WIESENBERG, New York, N. Y. Filed Mar. 26, 1917. Serial No. 157,388. (Cl. 168—18.)



In a horseshoe, an angle band having a horizontal and an upstanding section both having openings therein, removable calks having body portions and flanged heads, said body portions being inserted through the openings in the horizontal section of said angle band and the flanged heads resting on said horizontal section, means for securing said calks against movement in said shoe comprising a plate resting on the upper surface of the flanges of said calks and in spaced relation to said horizontal section, screws securing said plate to said section for adjusting the space relation of said plate to said section for preventing play between said flanges and said plate and section, hooks passing through the openings in said upstanding section of said angle band, and means supported by said hooks for securing said shoe to the hoof of an animal.

1,274,484. TABULATING-MACHINE AND CARDS THEREFOR. ROBERT NEIL WILLIAMS, London, England, assignor to Powers Accounting Machine Company, New York, N. Y., a Corporation of Delaware. Filed Nov. 13, 1915. Serial No. 61,259. (Cl. 101—96.)



1. In a machine for tabulating statistical and other data, mechanism controlled by a perforated card whereby certain perforations in said card may be indicated as letters of the alphabet, said mechanism comprising a type wheel having a complete alphabet thereon, a row of pins for controlling the type wheel, the pins being adapted to coöperate in combinations; and means for positioning said type wheel according to the combination of the controlling pins.

4. In a machine for tabulating statistical and other data, the combination of a character carrying part provided with a plurality of different characters; a group of control pins adapted to control said part in combinations; and means for positioning said character carrying part according to the combination of the control pins.

[Claims 2, 3, and 5 to 9 not printed in the Gazette.]

1,274,485. PENCIL. WARREN STEPHEN WILLIAMS, Zanesville, Ohio. Filed Dec. 6, 1916. Serial No 135,427. (Cl. 120—18.)

1. In a pencil, a casing having a tip and smooth internal walls, a nut longitudinally movable within said

casing and guided by the walls thereof, the interior of said casing and the exterior of said nut being polygonal in shape to prevent rotation of said nut as it is moved along the casing, a plunger connected to said nut to move with the same, a screw-threaded elongated bolt rotatably mounted within and engaging said nut and of greater length than the latter, said bolt being hollow throughout and closed at all points except the outer end thereby forming a receptacle for surplus lead, means for closing the outer end of the bolt, and a cap connected with said outer end of the bolt for turning the latter.



10. In a pencil, a casing having a tip, a bearing at the end of the casing remote from the tip, a screw-threaded bolt engaging said bearing and prevented from axial movement thereby, the interior of said bolt being provided with a chamber forming a magazine to receive surplus lead or crayon, a closure provided with an eraser for closing the end of said chamber, a cap connected with the outer end of the bolt and adapted to perform the dual function of keeping the eraser clean and forming a finger hold to be grasped for rotating the bolt and a nut having a plunger and actuated by said bolt to force lead through the tip.

20. In a pencil, a casing comprising a tip having an elongated passage adapted to rigidly support a lead throughout its length, said passage being roughened to frictionally engage the lead and adjustable to clamp the lead, a screw-threaded bolt having a head rotatably mounted in the end of the casing remote from the tip, projecting centrally into the same for a portion of the length thereof and arranged symmetrically relatively thereto, a hollow elongated nut encircling said bolt and filling the space between the same and said casing, said nut being movable longitudinally of the casing, but non-rotatable relatively thereto and extending around the inner end of the bolt, a plunger attached to said inner end of the nut centrally thereof in alinement with said bolt and said passage and adapted to engage the inner end of the lead to advance the same through the passage, a centering device within the casing at one end of said plunger for properly centering the lead into said passage from the rear and slots through said casing and nut exposing the bolt, whereby the length of lead remaining within the tip may be determined, said bolt comprising a magazine adapted to receive surplus leads, a stopper provided with an eraser for closing said magazine, and an actuating cap mounted upon the head of said bolt and inclosing said eraser.

[Claims 2 to 9 and 11 to 19 not printed in the Gazette.]

1,274,486. SEPARATOR. CARTER A. WILLIS and REUBEN M. WILLIS, Chanute, Kans. Filed Mar. 29, 1917. Serial No. 158,362. (Cl. 137—103.)



1. In a device of the class described, a tank pivoted at one end and having a drain at its free end, a supply pipe for said tank, means governed by the downward movement of said tank for opening said drain, and a spring supporting the free end of said tank.

2. In a device of the class described, a tank, a pair of pipes communicating with said tank at one end, the outer ends of said pipes projecting in opposite directions and in axial alnement, bearings for said ends, a drain valve at the opposite end of said tank, means for yieldably supporting the free end of said tank, and means governed by the movements of said tank for controlling said valve.

3. In a device of the class described, a tank, the said tank being pivoted at one end and being capable of swinging vertically, a drain pipe at the free end of said tank, a lift valve in said drain, standards carried by said drain and being arranged one upon each side of said valve, levers pivoted at one end to said standards and extending therefrom in crossed relation past the stem of said valve, the said levers being secured to said stem, the free ends of said levers projecting beyond the said tank, and stops adjacent the free end of said levers and against which the latter are adapted to engage.

4. The combination with a vertically movable tank, of a post beneath and adjacent one end of said tank, a lever pivoted horizontally on said post and having its upper surface inclined downwardly at one end, a roller on the opposite end of said lever engaged with said tank, a rolling weight on the inclined end of said lever, and a stop on the free end of said inclined extremity.

5. The combination with a vertically movable tank, a valve in said tank adapted to open when the said tank moves a predetermined distance downwardly, a yoke pivoted beneath said tank, the bight portion of said yoke being engaged with the said tank, the upper edges of the arms of said yoke being inclined downwardly at their outer ends, rolling weights on the said arms, stops at the outer ends of said arms to limit the movement of said weights in one direction, and springs tending to lift said tank.

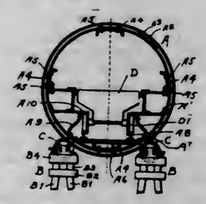
1,274,487. NOZZLE AND NOZZLE-MOUNTING. LOUIS WILPUTTE, New Rochelle, N. Y. Filed Sept. 26, 1917. Serial No. 193,325. (Cl. 158—99.)

1. As a new article of manufacture a coke oven burner nozzle of refractory earthenware comprising a body portion formed with a spherical seating surface and a centering portion projecting radially from said spherical surface.

4. A coke oven burner nozzle and mounting comprising in combination a seat member of refractory earthenware formed with a port outwardly flared and ground to conical form at one end, and a nozzle having a seat engaging surface ground to spherical form, and having a tubular portion projecting radially from said surface and loosely received in the restricted portion of said port.

[Claims 2 and 3 not printed in the Gazette.]

1,274,488. DUMP. ALEXANDER HAMILTON WOOD, Petros, Tenn., assignor to Wood Equipment Company, a Corporation of Illinois. Filed Sept. 13, 1916. Serial No 119,947. (Cl. 214—52.)

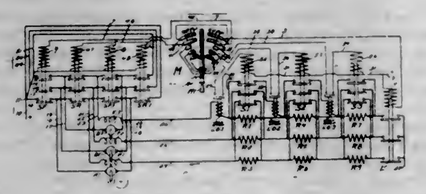


1. In an apparatus of the nature described, the combination of an approximately horizontal, flexible, tubular frame comprising means located within said frame for guiding a car into said frame and supporting it while said frame is being turned on its axis, a supporting

structure, and wheels on said structure and engaging said frame at opposite sides of the upright axial plane of said frame and each having an axle which is horizontal and parallel to said frame, a bearing block surrounding each end of said axle, a chair for each of said bearing blocks, said chair and said bearing block being formed for interengagement of said members to permit sliding of the bearing block horizontally toward and from said plane and each of said chairs comprising a top plate extending across the adjacent bearing block and bolts engaging said top plate whereby said top plate may be forced downward to bind the adjacent bearing block and whereby said top plate may be released sufficiently to permit the sliding of the bearing block, and means adapted to engage the chair and the bearing block for moving said block when it is not held by the top plate, substantially as described.

[Claims 2 to 4 not printed in the Gazette.]

1,274,489. MOTOR-CONTROL SYSTEM. REUBEN I. WRIGHT, Wickliffe-on-the-Lake, Ohio, assignor to The Electric Controller & Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 18, 1917. Serial No. 162,891. (Cl. 172—179.)



1. In a motor control system, current supply mains, a plurality of series motors arranged in parallel and having their rotary elements mechanically connected so as to rotate together, a plurality of banks of resistance sections for the motors, means for establishing dynamic braking circuits for some of the motors, a switch for cutting out simultaneously a resistance section from each bank to start the motors and for causing the said switch to cut out simultaneously a resistance section from each bank in each dynamic braking circuit, each resistance bank being connected across the supply mains and in series with some of the motors.

2. In a motor control system, current supply mains, a plurality of series of motors arranged in parallel and having their rotary elements mechanically connected so as to rotate together, reversing switches for the motors, a plurality of banks of starting resistance sections, each section being connected across the supply mains and in series with some of the motors, and means whereby, upon the operation of the reversing switches to reverse the motors, the only electrical path from one motor to another will be in series with two banks of resistance sections.

6. In a motor control system, current supply means, a plurality of series of motors arranged in parallel and having their rotary elements mechanically connected so as to rotate together, reversing switches for the motors, a plurality of banks of starting resistance sections, each section being connected across the supply mains and in series with some of the motors, a dynamic braking circuit for one of the motors including one of the banks of resistance sections, and means whereby, when the reversing switches operate to reverse the motors, or when the dynamic braking circuit is closed, current above a safe value is prevented from flowing from any motor to any other motor.

[Claims 3 to 5 and 7 not printed in the Gazette.]

1,274,490. CAR-DOOR HANGER. DONALD J. WYATT, Fremont, Nebr. Filed Apr. 3, 1917. Serial No. 159,451. (Cl. 16—91.)

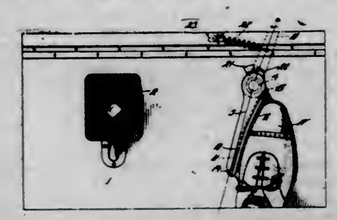
1. In a device of the class described, the combination of a base member, an outwardly extending upwardly curved goose-neck having an inwardly extending upper end, said goose-neck being formed upon said base member and having its upper end spaced from said base member, said base member having an opening in alinement with the end of said goose-neck, a bolt passing through the opening in said base member and engaging the end of said goose-neck, a collar carried upon said bolt, a core carried by said bolt and being held against shifting in one direction by said collar, a sheave rotatably mounted upon the end of said neck and upon said core, whereby the sheave will be held against displacement.



2. In a device of the class described, the combination of a base member, an outwardly extending upwardly curved goose-neck having an inwardly extending upper end, said goose-neck being formed upon said base member and having its upper end spaced from said base member, said base member having an opening in alinement with the spaced end of said goose-neck, a squared bolt passing through the opening in said base member and engaging the end of said goose-neck, a core positioned upon said squared bolt and fitting adjacent the end of said goose-neck, a collar carried upon said bolt and bearing upon said core for holding the core against shifting, a sheave rotatably mounted upon said core and the end of said goose-neck, and anti-friction means interposed between said core and said sheave.

3. In a device of the class described, the combination of a base member, a goose-neck formed upon said base member, a core having a sleeve bearing upon said goose-neck, means for supporting said core, said goose-neck having a well in the top portion thereof, said sleeve having a channel communicating with said well, a sheave rotatably mounted upon said core and said goose-neck, whereby lubricant may be placed within the well to pass through said channel and lubricate the inner portions of said sheave.

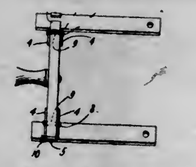
1,274,491. CONTROLLING DEVICE FOR ACCELERATORS. FRANK D. ZELL, Jr., Philadelphia, Pa. Filed Nov. 20, 1916. Serial No. 132,362. (Cl. 74—81.)



A controlling device for accelerators including a floor forming a supporting structure, a controlling lever pivotally mounted above said floor, said lever having an edge portion, said edge portion throughout its length being movable in a plane substantially parallel with the floor

and operative by a side movement of the foot of an operator, a stop on said floor, a projection on said lever, and automatic means for moving and holding said projection in contact with said stop, substantially as described.

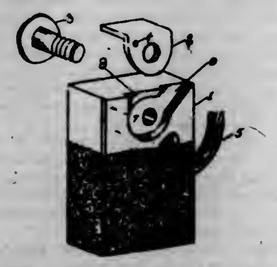
1,274,492. CONNECTOR. FREDRICK ZENKER, Highland Park, Mich., assignor to Detroit Fuse & Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 29, 1917. Serial No. 158,168. (Cl. 175—282.)



1. A connecting device for connecting a member provided with recesses adjacent its edges to a cross-head, and embracing a plurality of pairs of arms, one set of said arms being adapted to engage the end of said cross head, another pair being adapted to fit into said recesses and secure said cross head and said member together.

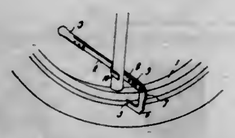
[Claim 2 not printed in the Gazette.]

1,274,493. ELECTRIC CONDUCTOR. CHARLES W. ADAMS, Saginaw, Mich., assignor to The United States Graphite Company, Saginaw, Mich., a Corporation of Michigan. Filed Feb. 13, 1918. Serial No. 216,901. (Cl. 200—26.)



In combination a carbon brush formed with a transverse bore, and a recess, a bolt received in said bore and projecting into said recess, a flexible conductor, one end of said conductor wrapped around said bolt within said recess, a clip superposed on said conductor and clamped thereagainst by said bolt, said clip formed with a vent opening, and solder for securing said brush, bolt, conductor and clip together.

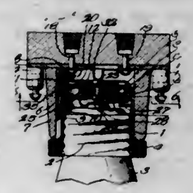
1,274,494. RIM-REMOVER FOR WHEELS. JOHN H. ARMSTRONG, Cloquet, Minn. Filed Nov. 30, 1917. Serial No. 204,763. (Cl. 157—6.)



1. A wheel rim remover including a shank equipped with a handle on one end and having a U-shaped extension on its opposite end, the terminal of which is recessed to receive the rim when the latter is to be removed, said extension having a recess at one of its angles to engage the rim when the latter is to be replaced on the wheel, and a spoke engaging means adapted to lie in a horizontal position in relation to the shank.

2. A wheel rim remover and replacer including a shank provided with a U-shaped extension, said extension having a plurality of recesses for engaging with the rim, an adjustable metal strap having a hook on one end and said strap being pivotally connected to one side of said shank adapted to lie in a longitudinal position in relation to the shank.

1,274,495. FILM-SOCKET. HERMAN H. ASHINGER, South Bend, Ind., assignor to George Cutter Company, South Bend, Ind., a Corporation of Indiana. Filed June 16, 1917. Serial No. 175,113. (Cl. 173—344.)



1. A film socket having a base provided with a self closing line switch, a dielectric film, a metallic shell adapted to be inserted into the base and thereby open the line switch and put said shell in circuit, said shell being internally threaded to take a standard electric lamp base, the inner end of the shell being adapted to support the dielectric film, and a resilient film retainer inherently tending to press the film against the external surface of the inner end of the shell, said retainer being fastened to the shell at a point other than the external surface of the inner end of said shell.

4. A device of the class described having two terminals, one making electric connection with the center contact of the lamp when the lamp is in place and the other making connection with the outer contact of the lamp, a disruptable dielectric, and a retainer therefor, said retainer being in series with one of said terminals and separated from the other of said terminals by said dielectric, said dielectric being annular and the terminals upon which it rests having an annular surface for supporting it, whereby the dielectric may be angularly shifted to a new position, and one of the elements between which the dielectric is disposed having puncture defining projections directed toward the other of said elements.

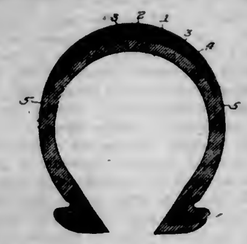
9. A film socket having a base provided with a self closing line switch, a metallic shell adapted to be inserted into the base and thereby open the line switch and put the shell in circuit, said shell being internally threaded for the reception of a standard lamp base, the inner end of the shell having an annular surface, an annular dielectric film adapted to contact said surface, and a film retainer for holding the film in place, said retainer being in circuit with the center contact of the lamp when the lamp is in place and having projections of restricted area for contacting the film, to thus define the points at which the rupture of the film shall occur.

[Claims 2, 3, 5 to 8, and 10 to 16 not printed in the Gazette.]

1,274,496. PROCESS OF MANUFACTURING TIRE-CASINGS. RUDOLPH J. ARENS, Akron, Ohio, assignor to The Firestone Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Oct. 31, 1917. Serial No. 199,573. (Cl. 154—14.)

1. The process of manufacturing tire casings comprising forming the carcass and the tread, providing a positioning formation on one of said parts, applying a breaker strip to the tire in two parallel strips, and positioning and spacing said strips by means of said formation.

2. The process of manufacturing tire casings comprising forming the carcass and the tread, providing a positioning formation on the tread, applying a breaker strip composed of two parallel strips of fabric to the tread at the sides of and adjacent to said formation, and applying the tread and breaker strip to the carcass.

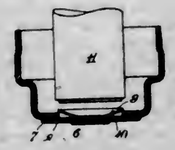


3. The process of manufacturing tire casings, comprising forming the carcass and the tread, providing a rib longitudinally of the tread, applying a breaker strip composed of two parallel strips of fabric to the tread at the sides of and adjacent to said rib, and applying the tread and breaker strip to the carcass.

4. The process of manufacturing tire casings, comprising forming the carcass and the tread, providing a longitudinal rib centrally of the tread, applying a breaker strip composed of two parallel strips of fabric to the tread at the sides of and adjacent to said rib, and applying the tread and breaker strips centrally of the carcass.

5. The process of manufacturing tire casings, comprising forming the carcass and the tread, providing a longitudinal rib centrally of one of the said portions and applying a breaker strip composed of two parallel strips of fabric to the portion having the rib at the sides of said rib and adjacent thereto.

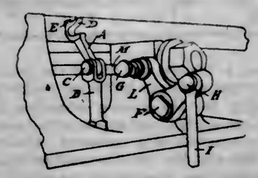
1,274,497. DEVICE FOR SECURING NAME-PLATES AND THE LIKE. FREDERICK HOWARD AULD, Columbus, Ohio. Filed Sept. 15, 1917. Serial No. 191,554. (Cl. 40—20.)



1. Means for securing a name plate to another object having an opening consisting in the combination with the name plate, of a cup shaped member to fit in the opening and an expanding member to press the annular wall of the cup shaped member against the wall of the opening.

[Claim 2 not printed in the Gazette.]

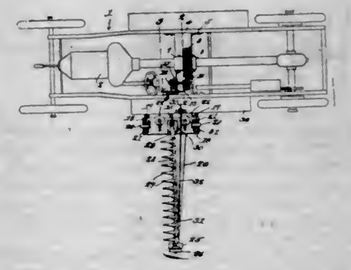
1,274,498. SAFETY CATCH DEVICE TO PREVENT THE ACCIDENTAL STARTING OF FORGING AND OTHER MACHINES. THOMAS BAKER and EDWIN COOKE, Horwich, England. Filed Dec. 5, 1917. Serial No. 205,564. (Cl. 74—5.)



1. In a device of the class described, a supporting structure, a bell crank pivoted thereon, a starting element secured to one arm of said bell crank, and a catch pivoted to said supporting structure for holding said bell crank in a predetermined position.

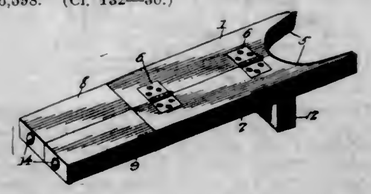
[Claim 2 not printed in the Gazette.]

1,274,499. AUTOMOBILE MOWER. JOHN L. BEASLEY, Memphis, Tenn. Filed Sept. 24, 1917. Serial No. 192,995. (Cl. 56—33.)



An automobile mower embodying, in combination with an automobile chassis, including a motor, a drive shaft, and a casing for the shaft, a bracket detachably secured within the chassis, hubs on the bracket for the reception of the casing, means for binding the casing within the hubs, a gear wheel on the drive shaft within the bracket and between the hubs, a counter shaft journaled in the bracket, a gear wheel feathered on the countershaft and adapted to mesh with the first mentioned gear wheel, a wrist plate on the counter shaft, hangers secured to the chassis, a mower blade supported by the hangers, and a pitman connected to the mower blade and the wrist plate.

1,274,500. FOLDING BOOTJACK. LANDON C. BELL, Columbus, Ohio. Filed Apr. 4, 1918. Serial No. 226,598. (Cl. 132—30.)



2. A boot jack comprising sections hinged together on the upper side of the jack, sections hinged to the ends of the first mentioned sections on the under side of the jack, and means on the under side of the first mentioned sections for supporting one end of the jack in a raised position and for securing the second mentioned sections in their folded positions.

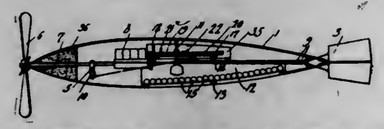
3. A boot jack comprising a pair of sections foldable longitudinally one upon the other, a pair of longitudinal extension sections carried by the ends of the first mentioned sections, and foldable transversely upon said sections, and legs for supporting the boot engaging end of the jack in a raised position, said legs being foldable upon the first sections and having means for engaging the second sections and holding the said sections in their folded positions.

5. A boot jack comprising a pair of sections hinged together and adapted to fold longitudinally one upon the other, a pair of longitudinal extension sections hinged to and adapted to fold upon the first sections, means tending to maintain the last mentioned sections in extended positions, legs for supporting the boot engaging end of the jack in a raised position and adapted to fold upon the first mentioned sections to engage the

second mentioned sections to maintain the latter in their folded positions, and means tending to maintain the legs in their extended positions.

[Claims 1 and 4 not printed in the Gazette.]

1,274,501. AERIAL BOMB-DROPPER. SHERMAN S. BENSON, York, Nebr. Filed July 6, 1917. Serial No. 178,991. (Cl. 244—1.)

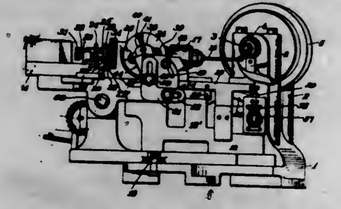


1. An aerial bomb dropper including a body, sustaining means therefor, an explosive element carried by the body for normally maintaining the balance of the body, means for automatically releasing said explosive element to destroy the balance of the body and cause the body to descend, and an explosive charge in the body for destroying the body when it descends.

2. An aerial bomb dropper embodying a body, sustaining means therefor, a door arranged to open downwardly, means for normally holding the door closed, bombs supported by said door, and means for limiting the downward movement of the doors to deflect the bombs.

[Claims 3 to 5 not printed in the Gazette.]

1,274,502. MACHINE FOR FLUTING TWIST-DRILL BLANKS. ORAMEL S. BICKFORD, Greenfield, Mass. Filed Mar. 12, 1917. Serial No. 154,099. (Cl. 90—21.)



1. The combination in a twist-drill forming machine, of a base piece, a cutter rotatably supported thereon, means for clamping a drill blank in place, means for varying the angular relation both in a horizontal and vertical plane between the axis of the blank and the cutter, devices for automatically rotating the blank as the same is fed forward to the cutter, devices for automatically maintaining the drill blank against rotation during a portion of its travel as the same is moved in a rearward direction away from the cutter and to cause the blank to present the opposite side of the blank to the cutter on its next forward movement toward the cutter.

2. The combination in a machine for fluting or grooving twist-drill blanks comprising a base piece, a cutter shaft, a cutter carried thereby, a head stock, a chuck carried by the head stock for securing the drill blank, means to adjust the angular relation between the axis of the drill blank and the axis of the cutter shaft, a cam plate, operative mechanism between said plate and the chuck to automatically rotate the drill blank about its axis during the forward movement of the head stock for varying the lead or pitch of the groove that is being cut in the blank, and means for automatically disconnecting said chuck and rotating means at a definite position during the travel in a reverse direction.

3. The combination in a machine for fluting or grooving twist drill blanks, comprising a base piece, a cutter shaft, a cutter carried thereby, a head stock, a chuck carried by the head stock for securing the drill blank, means to adjust the angular relationship between the axis of the drill-blank and the axis of the cutter shaft, a cam block, operative mechanism between said block and the chuck to automatically rotate the drill blank about its axis during the forward movement of the head stock for varying the lead or pitch of the groove that is being cut in the blank, and means for automatically disconnecting said chuck and rotating means at the termination of the forward movement, automatic trip devices to cause the head stock to move at a greater rate of motion during the return movement than during the forward movement while the blank is being fluted.

4. A twist drill machine, comprising a base member, a cutter supporting shaft mounted thereon, a plate movable on the base-member for varying the angular relation between the blank holding means and the cutter shaft, a worm shaft, bevel gear connections between the cutter shaft and the worm shaft to permit the plate to move on the base piece, a table on which the drill blank supporting devices are carried, a lever connected to the table, means for lowering the table to vary the depth of cut of the flutes as the drill blank forming devices are moved forward toward the cutter, and means including a cam device on the lever for automatically moving the blank into a position that is free from the cutter at the termination of the cutting operation.

12. A drill fluting machine, comprising, in combination with a base piece, a head stock slidably mounted thereon, means for reciprocating the head stock, a rotatable chuck to receive the drill blank, an adjustable and angular shaped cam block secured to the frame work, operative means between said block and the rotatable chuck for varying the pitch of the fluting, and a cutter for forming the fluting.
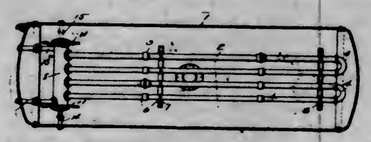
[Claims 5 to 11 not printed in the Gazette.]

1,274,503. MANUFACTURE OF UREA. CARL BOSCH, ALWIN MITTASCH, and CARL NERESHEIMER, Ludwigshafen-on-the-Rhine, Germany, assignors to Badische Anilin & Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany, a Corporation. Filed Apr. 16, 1915. Serial No. 21,911. (Cl. 23—24.)

1. The process of making urea which comprises mixing with ammonium carbamate a relatively small proportion of a catalyst which will not convert more than half the carbamate into carbonate and then heating the mixture under conditions which effect conversion of the carbamate into urea, said catalyst being a substance which will promote this urea-forming reaction.

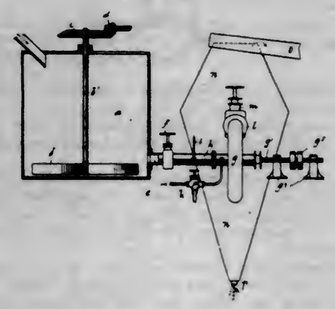
2. The process of making urea which comprises mixing with ammonium carbamate a relatively small proportion of water insufficient to convert half the carbamate into carbonate and then heating the mixture under conditions which effect conversion of the carbamate into urea, the water serving as a catalyst in promoting this urea-forming reaction.

1,274,504. HEATING DEVICE FOR TANK-CARS. GROVER CLEVELAND BOWEN, Coffeyville, Kans. Filed Nov. 6, 1917. Serial No. 200,589. (Cl. 257—198.)



In a tank car, a heating device for the tank, comprising a series of pipes arranged in spaced relation and substantially parallel, the pipes being connected in pairs at one end of the car, a manifold at the other end to which the pipes are connected, said manifold extending transversely of the car, and the pipes extending longitudinally of the car, brackets for supporting the pipes secured to the car, each bracket comprising a yoke shaped member consisting of a body extending transversely of the pipes beneath the same and arms connected to the tank, clips engaging over the individual pipes and detachably connected with the body of the yoke, and cradles for supporting the manifold, said manifold having an inlet and an outlet extending through the wall of the tank.

1,274,505. SEPARATION OF MIXED METALLIC SULFIDS. LESLIE BRADFORD, Broken Hill, New South Wales, Australia. Filed Oct. 22, 1914. Serial No. 868,131. (Cl. 83—85.)



1. The process for treating zinc sulfid (blende) ores for the separation of lead sulfid (galena) and pyrite therefrom, which consists in submitting such ores in a more or less finely divided condition to flotation treatment in a separating medium which does not chemically or otherwise permanently affect any of the particles, but does act upon the surface of said zinc sulfid (blende) particles by wetting them but without similarly wetting the sulfids mixed therewith, whereby the said zinc sulfid (blende) particles are caused to sink while the remaining sulfids are permitted to float; said separating medium being acidulated water containing in solution a reducing gas containing sulfur.

3. The process of separating the sulfids of zinc, lead, and iron by selective flotation, which consists in introducing the mixed sulfids into a floating liquid and impregnating the floating liquid with a partially soluble reducing gas containing sulfur in quantity sufficient to cause wetting of the sulfid of zinc without affecting the sulfid of lead.

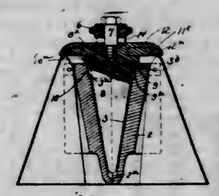
8. The process for treating zinc sulfid (blende) ores for the separation of lead sulfid (galena) and pyrite therefrom, which consists in submitting such ores to flotation in a more or less finely divided condition in a separating medium which does not chemically or otherwise permanently affect any of the particles, but does act upon the surfaces of said zinc sulfid (blende) particles by wetting them but without similarly wetting the sulfids mixed therewith, whereby the said zinc sulfid (blende) particles are caused to sink while the remaining sulfids are permitted to float; said separating medium being water acidulated with sulfuric acid and abounding in sulfur dioxid.

9. The process of separating the sulfids of zinc, lead and iron by selective flotation which comprises the steps of impregnating the floating liquid with sulfur dioxid, introducing the mixed sulfids therein, and subjecting them to flotation treatment therein, thereby causing the wetting of the sulfid of zinc without affecting the other sulfids.

16. The process of flotation consisting in treating ore containing lead and zinc sulfids to divest the zinc sulfid particles of the gaseous envelop about the same, without otherwise altering said zinc sulfid particles, and without removing the envelops of other sulfids, and subjecting the so treated ore to flotation.

[Claims 2, 4 to 7, 10 to 15, and 17 to 20 not printed in the Gazette.]

1,274,506. MOLD FOR ICE-CREAM-CONE MACHINES. FREDERICK A. BRUCKMAN, Portland, Oreg. Filed Jan. 3, 1917. Serial No. 140,402. Renewed Dec. 26, 1917. Serial No. 208,982. (Cl. 107—58.)



1. A pair of separable female mold sections each having a half-cone cavity, a core bar, a core swingably supported from said bar, said core having a head projecting above the top of the female mold sections, and centering lugs mounted on the top of the female mold sections and adapted to engage the core head.

2. A pair of separable female mold sections each having a half-cone cavity, a core bar, a core swingably supported from said bar, said core having a head projecting above the top of the female mold sections, centering lugs mounted on the top of the female mold sections and adapted to engage the core head, said female mold sections having concave recesses at the upper edge of the cavity, said core head having a convex seat surface to oppose the concave recess to leave an annular space around the core head.

7. In combination with the separable female mold sections each having matching half-cone cavities and flat upper surfaces, a core bar, a conical core axially-yieldably-swingably supported on said bar to enter the mold cavity, said core having a head provided with a flat surface normal to the axis of the core, and a vertical cylindrical surface, said head being adapted to form a top closure for the mold cavity, and centering lugs located on the top of the female mold sections to engage said head.

11. As a new article, a core element comprising a top plate, a head, a neck between the head and top plate, and a conical projection from the head, ribs extending from the top plate to the head and laterally beyond the head, the lateral extremities of said top plate being curved over, said top plate forming an oven cover.

19. In combination, a female mold having a cone cavity, a core bar, a core swingably supported from said bar, said core having a head projecting above the top of the female mold, and centering lugs located on the top of the female mold and adapted to engage the core head.

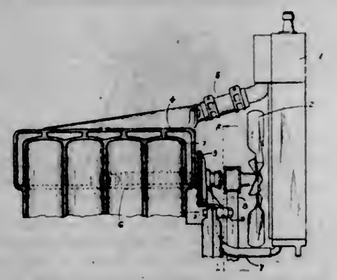
[Claims 3 to 6, 8 to 10, 12 to 18, 20, and 21 not printed in the Gazette.]

1,274,507. WATER-CIRCULATION SYSTEM FOR INTERNAL-COMBUSTION ENGINES. ARTHUR ALBERT BULL, Detroit, Mich. Filed Aug. 11, 1916. Serial No. 114,420. (Cl. 123—175.)

1. A device of the character described comprising a pressure circulating pump unit, adaptable to an engine employing fluid cooling means, to convert said cooling means from natural to positive pump circulation, the said unit being separable therefrom and not essentially an integral part thereof, adapted to function as a supporting member for the existing cooling fan and operated thereby, and capable of angular rotation providing for the adjustment of the fan driving means.

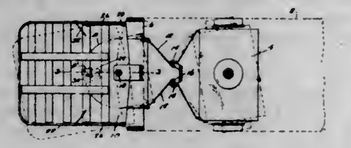
2. A device of the character described, comprising a centrifugal fluid pump unit, adapted to be positioned upon an internal combustion engine, utilizing existing driving means, pivotally mounted, and as a unit independent of the cylinders of the said engine and separable therefrom supporting and operated by the cooling fan and its driving means, consisting of a pump body with inlet and outlet

pipes integral therewith and extending therefrom, a rotor in a chamber, upon a shaft journaled therein, said shaft extending at one end therefrom and a plate inclosing said rotor.



3. A device of the character described comprising a fluid pressure pump and communicating pipes mounted as a unit upon an engine, adapted to function as the supporting means for the cooling fan, adjustably mounted, on a pivot to provide adjustment for the fan driving means, said unit comprising a pump body, a rotor therein, a shaft journaled therein and extending therefrom to accommodate the cooling fan.

1,274,508. CAR-FENDER. SYLVAIN BURQUE, Lynn, Mass. Filed Jan. 10, 1918. Serial No. 211,110. (Cl. 293—13.)



1. In combination with a car having a pivotally mounted wheel truck, a yoke pivotally mounted beneath the car body, connecting means between said truck and yoke to cause corresponding swinging movement thereof, a fender, a support therefor mounted to swing about the axis of said yoke and interlocking means between said yoke and fender to cause simultaneous swinging movement thereof.

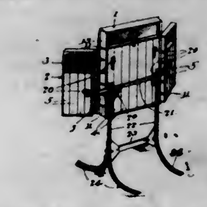
3. In combination with a car having a horizontally swinging actuator, a fender pivotally supported independently of said actuator to swing horizontally in unison therewith and to swing vertically independently thereof, and interlocking means between said fender and actuator arranged to be automatically engaged when the fender is swung downwardly and to be disengaged when it is swung upwardly.

5. In combination with a car a transversely disposed yoke mounted to swing horizontally about a centrally arranged axis, a similarly disposed support arranged to swing about the axis of said yoke, a fender, links connecting said support and said fender permitting upward swinging movement of the fender out of position of use, means on said fender arranged to engage said yoke when in position of use to lock the fender and yoke against independent horizontal swinging movement and to prevent upward swinging movement of the fender with relation to the yoke on its rearmost pivotal connection with said support.

[Claims 2 and 4 not printed in the Gazette.]

1,274,509. DISPLAY-RACK. JOSIAH O. BURNS, Los Angeles, Cal., assignor to Germain Seed and Plant Company, Los Angeles, Cal., a Corporation of California. Filed June 12, 1917. Serial No. 174,214. (Cl. 211—14.)

1. A display rack comprising a stationary section, a movable section hinged to the stationary section, and a support detachably engageable with the stationary section alone so that the movable section can be swung into closed position and also detachably engageable with the stationary and movable sections to prevent closing of the movable section.



3. A display rack comprising a stationary section, a movable section hinged to each side of the stationary section, and a support shiftably engageable with the stationary section, said support in one position engaging the movable sections.

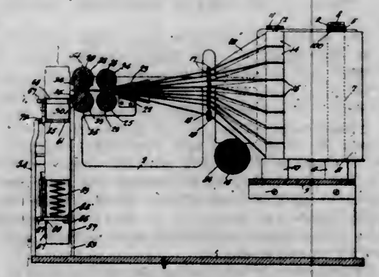
4. A display rack comprising strips, wings bent at an angle from said strips, transverse partition members having perforations, and tongues on the wings passing through the perforations and bent beneath said transverse members.

5. A display rack comprising strips, wings bent at an angle from said strips and terminating in flanges extending parallel to the strips, side members having perforations, transverse partition members having perforations and having tongues at their ends passing through the perforations in the side members and bent over on the outsides of the side members, and tongues on the wings passing through the perforations and bent beneath said transverse members.

6. A display rack comprising vertically extending strips each having a series of separate wings along its side edges to form the sides of pockets, and a partition member extending transversely between each two adjacent wings of both series of all of the strips.

[Claim 2 not printed in the Gazette.]

1,274,510. MACHINE FOR MAKING AND PACKING CIGARETTE-WRAPPERS. BRITTON E. BYRD, Durham, N. C., assignor to Mill Devices Company, Durham, N. C., a Corporation of North Carolina. Filed Feb. 10, 1917. Serial No. 147,838. (Cl. 270—41.)

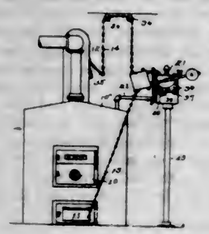


1. In a device of the class described, mechanism for simultaneously advancing superposed ribbons and a wrapper; means for folding the wrapper on the ribbons; mechanism for severing the ribbons and the folded wrapper to form packages; a movable receiver having compartments; a feeder coacting with the packages to advance the same into the compartments; means for moving the receiver to present the compartments successively to the feeder; mechanism for actuating the feeder; and means for operatively connecting all of said mechanisms, whereby one may drive the others.

8. In a device of the class described, a first shaft adapted to support a roll of paper; a cutter disposed approximately parallel to the shaft and constituting means for severing the roll of paper into ribbons; a second shaft disposed approximately at right angles to the first shaft and adapted to support a roll of wrapper; a folder; means for drawing the wrapper and the ribbons through the folder; mechanism for severing the wrapper and the ribbons into packages, after the ribbons and the wrapper have passed through the folder; and means for imparting a twist to the ribbons and for superposing the ribbons, between the first specified cutter and the folder.

[Claims 2 to 7 and 9 to 13 not printed in the Gazette.]

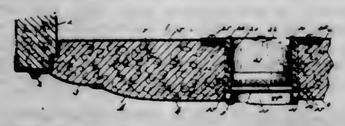
1,274,511. DAMPER-REGULATOR. THOMAS CONNELL, Iowa City, Iowa. Filed May 7, 1917. Serial No. 167,113. (Cl. 236—1.)



1. A regulator device comprising a receptacle, a partition on the interior of said receptacle dividing the receptacle into relatively large and small compartments, said partition having a passage in its lower end, a tube communicating with the top of said larger compartment and extending upwardly, thence laterally, thence downwardly and designed to communicate with a boiler and a bypass leading from the upper portion to said upper compartment to the downwardly extending portion of said tube, a third tube rotatably mounted, on the wall of said receptacle and communicating with the upper end of the small compartment, a container on one end of said third tube in communication therewith at its lower portion, said container being of less capacity than said receptacle.

2. In a regulator device comprising a receptacle, a partition therein for dividing said receptacle into relatively large and small compartments, said partition having a passage in its lower portion, a tube communicating with the upper end of the larger compartment and designed to communicate with a boiler, a tube pivotally mounted on said receptacle and arranged in communication with the upper part of said second compartment, a second receptacle on said tube arranged with its lower portion in communication therewith, said second receptacle being of smaller capacity than said first receptacle.

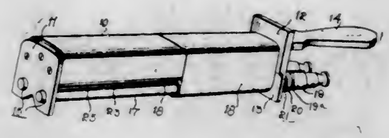
1,274,512. THERMOMETER INSTALLATION. LEE S. CHADWICK, East Cleveland, Ohio, assignor to The Cleveland Metal Products Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 31, 1914. Serial No. 859,338. (Cl. 73—52.)



1. The combination of a member comprising an inner and an outer plate that are separated by a layer of non-heat conducting material, one of said plates having an opening and the layer having a cavity that are in axial alinement, the opening being of lesser diameter than the cavity, an annular member within the cavity adjacent the opening, a ring within the opening and having an extension which projects into the annular member, a disk of transparent material within the annular member and resting against the end of the said extension, a sleeve of non-heat conducting material in the cavity and one end of which engages the periphery of the transparent disk, and a thermometer within the sleeve the dial whereof is spaced from the transparent disk.

2. The combination of a member comprising an inner and an outer plate that are separated by a layer of non-heat conducting material, the inner plate, the layer, and the outer plate having openings that decrease in diameter in the order named, a finishing ring within the opening of the outer plate and having a portion which is flared outwardly over the adjacent portion of the front plate and having also an extension which projects into the opening of the layer, an annular member within the last mentioned opening adjacent the front plate wherewith the finishing ring is connected, a disk of transparent material within the annular member and bearing against the extension of the aforesaid ring, a sleeve of non-heat conducting material within the opening of the layer one end whereof bears against the periphery of the disk, a thermometer within the sleeve and having its dial spaced from the disk, and means whereby the thermometer is connected to the inner plate of the member.

1,274,513. SHARPENING APPLIANCE. CHARLES F. CRAMER, Indiana, Pa. Filed Apr. 8, 1918. Serial No. 227,322. (Cl. 51—1.)



1. A sharpening device of the character described comprising an elongated body having a rounded upper face and rounded corners, supporting members disposed at opposite ends of the body and extending below it, a handle extending from one end of the body, rollers rotatably mounted in the supporting members and disposed beneath the body and extending through the supporting members, a sheet of abrasive material extending over the top of the body and wound upon said rollers, and means on the rollers disposed beneath the handle for holding them against accidental rotation constituting means whereby the rollers may be rotated.

2. A sharpening device of the character described comprising an elongated body having a rounded upper face and rounded corners, supporting members disposed at opposite ends of the body and extending below it, rollers rotatably mounted in the supporting members and extending below the body, a sheet of abrasive material extending over the body and wound upon said rollers, and means on the rollers for holding them against accidental rotation, said means including a nut having screw-threaded operative engagement with a roller and adapted to be turned to bear against the adjacent supporting member.

3. A sharpening device of the character described comprising an elongated body having a rounded upper face and rounded corners, supporting members disposed at opposite ends of the body and extending below it, rollers rotatably mounted in the supporting members and extending below the body, a sheet of abrasive material extending over the body and wound upon said rollers, and means on the rollers for holding them against accidental rotation, said means comprising a pin extending through each roller and bearing against the inside face of the corresponding supporting member, and a nut having screw-threaded engagement with the roller and adapted to bear against the outer face of the support.

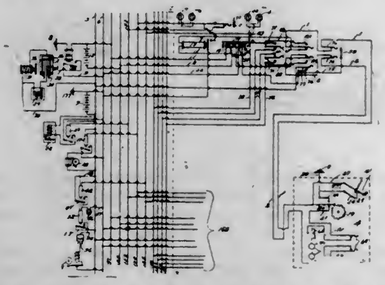
4. A sharpening device of the character described comprising an elongated body having a rounded upper face and rounded corners, supporting members disposed at opposite ends of the body and extending below it, rollers

rotatably mounted in the supporting members and extending below the body, a sheet of abrasive material extending over the body and wound upon said rollers, and means on the rollers for holding them against accidental rotation, said means comprising a pin detachably disposed through each roller and normally bearing against the inside face of the adjacent supporting member, an exteriorly screw-threaded sleeve mounted upon the roller, and a nut having screw-threaded engagement with the sleeve and normally bearing against the outer face of the supporting member.

5. A sharpening device of the character described comprising an elongated supporting body having supporting members at opposite ends and having a handle and extending beyond one of said supporting members, said last named supporting member having upwardly diverging slots, rollers extending through the slots of the last named supporting member, a sheet of abrading material wound upon the rollers and extending over the body, and means on the rollers for holding them from accidental rotation.

[Claims 6 to 8 not printed in the Gazette.]

1,274,514. SIGNAL SYSTEM. NATHANIEL BANKS CREGIER, Chicago, Ill. Filed Jan. 5, 1911, Serial No. 600,989. Renewed Jan. 4, 1918. Serial No. 210,377. (Cl. 179—5.)



1. A signal system comprising line wires extending from a central station to stations, the said line wires being adapted to send impulses through ground connections and through all metallic connections, a source of electrical energy connected with said line wires, a ground connection with said line wires arranged upon one side of the source of electrical energy, a ground connection capable of being completed at the signal stations, and a relay operable by completing the ground connection at the signal stations for operating a permanent visual signal in the central station.

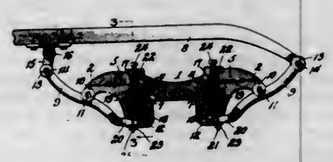
2. A fire alarm signal system comprising line wires extending from the central station to individual engine houses, lamps arranged at the central station upon an indicating map of the locality, a relay mechanism at the central station capable of having a ground connection for completing a circuit through said lamp, a source of electrical energy at the central station grounded connections of the individual engine house operable by the wheels of the engine for actuating said relay and lighting the lamp, and mechanism at the engine house for preserving the ground connections until purposely broken, for maintaining the lamp at the central station in its lighted condition until the engine has been returned to the house.

3. A signal system, comprising a battery, a plurality of line wires extending on opposite sides of said battery terminating in various signal stations, normally open switch members on each of the line wires in said signal stations, a ground connection leading from one of the line wires adjacent the switch member in each station normally out of connection with the line wire, a single permanent ground connection on one side of the battery, a relay on said last named ground connection, a normally open local circuit controlled by said relay, and means for operating the switch members of the line wires at each station and simultaneously close the circuit to the ground, whereby a circuit will be completed through any one or more of the line wires and at the same time through the signal relay on the ground circuit to operate the latter and close the local circuit.

7. In a signal system comprising a source of electrical energy; a plurality of metallic conductors connected thereto extending from opposite poles of said source of electrical energy to substations to form pairs, one pair for each substation; an individual differentially wound relay interposed in each pair of metallic conductors; a permanent signal controlled by said relay; an individual electrically operated signal device interposed in one member of each pair of metallic conductors; electrical contact making means in circuit with said pairs one at each substation; a ground circuit at each substation including a ground contact normally out of electrical connection with said conductors; a permanent ground connected to one pole of said source of electrical energy; an electrically operated signal device interposed in circuit with said permanent ground; means at each substation for operating the electrical contact making means and the ground contact whereby a metallic circuit will be completed through any one or more of the metallic conductors and at the same time completing a circuit through the signal device interposed in circuit with said permanent ground.

[Claims 4 to 6 and 8 to 20 not printed in the Gazette.]

1,274,515. SHOCK-ABSORBER. EDWARD DAMME, Battle Creek, Mich. Continuation in part of application Serial No. 150,714, filed Feb. 24, 1917. This application filed Dec. 3, 1917. Serial No. 205,085. (Cl. 267—8.)



1. A shock absorber comprising relatively movable superposed members, substantially vertically disposed housings carried by one of the members, substantially vertically disposed coiled springs mounted within said housings, said housings being open at their lower ends, and levers, each pivoted at an intermediate point to one of the ends of that member having the housings thereon, for rocking movement, and pivotally connected at one end to the other member, and active at the other end against one of the coiled springs, the last mentioned end working within the lower end of the adjacent housing.

7. The combination with a member adapted to be attached to the body of a vehicle, of a cross bar, said member and said cross bar being in superposed relation, substantially vertically disposed housings fixed to the cross bar and extending therefrom and having spaced sides and open lower ends, rocking levers pivoted intermediate their ends to the ends of the cross bar and also pivoted to the said member, the levers having their inner ends inserted in the open ends and working between the sides of the housings and working against the springs therein, and slidable means mounted in the housings and interposed between the springs therein and the end portions of the levers.

11. The combination with a vehicle frame member, of a cross bar arranged in longitudinal and vertical alinement therewith and in spaced relation beneath the same, substantially vertically disposed housings carried by the cross bar in spaced relation to each other, said housings being open at their lower ends and closed at their upper ends and having vertical slots in their sides, levers intermediately pivoted to the ends of the cross bar beyond the housings and having their ends pivotally connected to the frame member and their inner ends extending into the

lower open ends of the housings, pins traversing the upper portions of said slots and constituting top movable abutments, screws carried by the closed ends of the housings and adapted to bear on said pins for adjusting the same, other pins traversing the lower portions of the slots, and bearing on the inwardly directed ends of the levers and constituting bottom movable abutments, coiled springs mounted in the housings, between the upper and lower pins, and having a normal tendency to separate the same, and rods hooked to the upper pins and passing through the springs and connected to the inner ends of said levers, whereby the spring is compressed in both of the up and down movements of the levers.

[Claims 2 to 6, 8 to 10, and 12 not printed in the Gazette.]

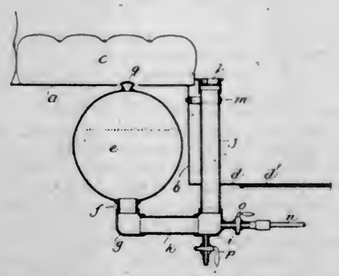
1,274,516. MINING-MACHINE. CHARLES E. DAVIS, Chicago, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed May 10, 1915, Serial No. 26,990. Renewed Jan. 7, 1918. Serial No. 210,771. (Cl. 125—14.)



1. A cutting machine comprising a main frame, wheels upon which said frame is carried, a driving motor adapted to be operatively connected with said wheels, a supporting frame movably mounted on the main frame, a cutting element carried by said supporting frame, a cutter forming a part of said cutting element, a motor for actuating said cutter, a controlling resistance for said cutter actuating motor, means for connecting the driving motor with said supporting frame so as to move it to feed the cutter toward the material to be cut, a controlling resistance for said driving motor, and means for connecting said driving motor with the controlling resistance of the cutter actuating motor when the driving motor is disconnected from the supporting frame and connected with said wheels.

[Claims 2 to 4 not printed in the Gazette.]

1,274,517. GASOLENE-TANK FILLER. LAURENCE W. DAVIS, Vega Alta, Porto Rico. Filed Oct. 7, 1916. Serial No. 124,237. (Cl. 180—54.)



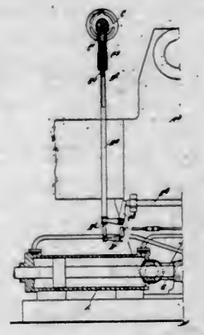
1. In liquid fuel apparatus of the character described, the combination of a fuel tank, a carbureter, connection communicating with the lower portion of the fuel tank for conducting the liquid fuel from the fuel tank to the carbureter, and means associated with the said connection for filling the fuel tank and for supplying fuel directly to the carbureter therethrough.

2. In liquid fuel apparatus of the character described, the combination of a fuel tank, a carbureter, connection communicating with the lower portion of the fuel tank for conducting the liquid fuel from the fuel tank to the carbureter, and a filler pipe communicating with said connection and extending upwardly at least to the level of the top of the fuel tank so that the fuel tank may be filled through said connection and so that fuel may be supplied directly to the carbureter through said filler pipe and connection.

3. In liquid fuel apparatus of the character described, the combination of a seat casing and floor for a motor vehicle, and a gasolene tank within the seat casing, a filler pipe connected to the bottom of said tank and thence extending laterally and upwardly through the floor at the outside of the seat casing and having its intake end at least as high as the top of the tank, and a carbureter pipe connection leading from the laterally extending part of the filler pipe under the floor.

4. The combination with the seat casing and floor of a motor vehicle, of a gasolene tank within the seat casing, a filler pipe connected to the bottom of said tank and thence extending laterally and upwardly through the floor at the outside of the seat casing and having its intake end at least as high as the top of the tank, and a carbureter pipe connection leading from the forward end of the horizontally extending part of the filler pipe under the floor.

1,274,518. ELEVATING MECHANISM OF HEAVY GUNS. ARTHUR TREVOR DAWSON, Westminster, London, and JAMES HORNE, Barrow-in-Furness, England, assignors to Vickers Limited, Westminster, London, England. Filed May 13, 1915. Serial No. 27,961. (Cl. 89—41.)



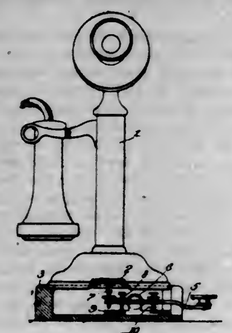
1. In the elevating mechanism of ordnance, the combination with a pressure fluid elevating motor, the control valve thereof, and the actuating handle of said valve, of a reciprocatory member connected to said valve, mechanical means positively moving said member axially from said actuating handle and automatically operating safety depression gear positively moving said member axially to stop the motor.

2. In the elevating mechanism of ordnance, the combination with a pressure fluid elevating motor, the control valve thereof, and the rotary actuating handle of said valve, of a pivoted member connected to said valve, a screw threaded member connected to said pivoted member, a sliding member connected with said screw threaded member, a spring for controlling said sliding member, a rotary member connected to said rotary actuating handle, means for slidably connecting said rotary member to the screw threaded member and means for axially displacing said sliding member against its spring to prevent dangerous depression of the gun.

1,274,519. TELEGRAPHY. PATRICK B. DELANY, South Orange, N. J., assignor to Secret Telegraph Company, New York, N. Y., a Corporation of Delaware. Filed June 4, 1917. Serial No 172,684. (Cl. 179—4.)

1. In telegraphy, the method of mechanically operating a microphone transmitter by a Morse key making metallic contact with said transmitter for vibrations representing signal impulses and making unmetallic contact with said

transmitter for weaker vibrations representing termination of said signals.

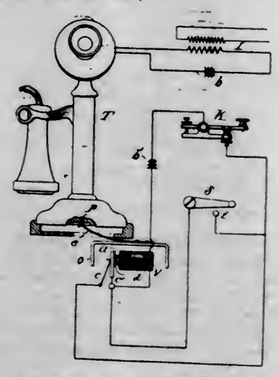


6. In telegraphy, ~~a telephone transmitter~~ having a supporting stand and base therefor, a removable holder for receiving said base, and a Morse signal transmitter in said holder.

7. In telegraphy, a microphone transmitter having a base, and a telegraph key beneath and spaced from said base and adapted to contact therewith only upon operation of the key.

[Claims 2 to 5 and 8 to 10 not printed in the Gazette.]

1,274,520. TELEGRAPHY. PATRICK B. DELANY, South Orange, N. J. Filed Aug. 23, 1917. Serial No. 187,780. (Cl. 179—4.)



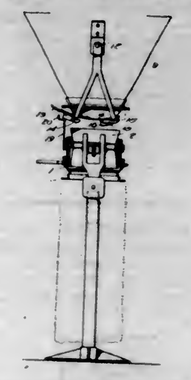
1. In telegraphy, a microphone, a detachable base for said microphone, a buzzer in said base, a telegraph key in said base, and a switch also in said base for transforming said buzzer from an automatic vibrator to single stroke operation under control of said telegraph key.

3. A base holder for telephone transmitters, said holder comprising a buzzer, a telegraph key, a switch controlling said buzzer and openings in said holder through which the levers of said key and said switch extend for manipulation.

[Claims 2 and 4 to 12 not printed in the Gazette.]

1,274,521. AUTOMATIC SCALE. BENJAMIN PICQUET DOTTERER, Charleston, S. C. Filed Oct. 17, 1917. Serial No. 197,053. (Cl. 73—175.)

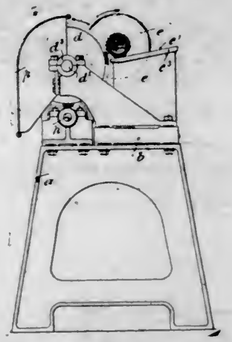
1. In combination, a scale having a chute, means in connection with the chute for clamping a bag to the chute below the same, a gravity discharge spout delivering to the chute, a gate for closing the spout, latches in connection with the gate for holding said gate completely open and partially opened and normally gravity operated to engaging position, and means on the scale for engagement by the latches to hold the gate open when the chute is in lifted position and released by the lowering of the chute under the weight of the material delivered to the



bag, said means comprising a stop plate secured to the scale at the chute and having stops for engagement by the latches to hold the gate in full and partly open position.

[Claims 2 to 4 not printed in the Gazette.]

1,274,522. MACHINE FOR STRIPPING THE WASTE YARN LEFT ON CONDENSER-BOBBINS. JAMES DRONSFIELD, Oldham, England. Filed Dec. 20, 1917. Serial No. 208,075. (Cl. 19—15.)

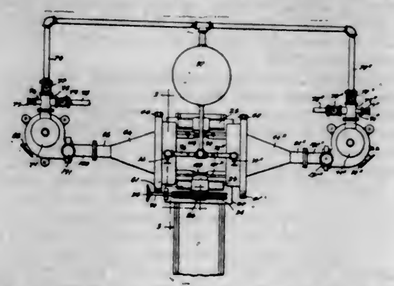


2. A machine for stripping waste yarn from flanged condenser bobbins, having a bobbin feeding table, edges on said table against which the flanges of the bobbins can bear, a rotating toothed cylinder, supporting means for said cylinder, driving gear therefor, a canopy for said cylinder, a rotating comb device, a slotted tube surrounding said rotating comb device and adapted to clean the rotating comb device, independent bearings for the rotating comb device and the slotted tube and an accommodating coupling between the rotating comb device and the slotted tube, all in combination and as described.

[Claims 1, 3, and 4 not printed in the Gazette.]

1,274,523. DYEING-MACHINE. HOWARD M. DUDLEY, Philadelphia, Pa. Filed June 1, 1917. Serial No. 172,170. (Cl. 8—18.)

1. In a dyeing machine, in combination, a receptacle, a series of dyeing chambers having imperforate sides within the receptacle, each dyeing chamber having a fixed foraminous bottom and a movable foraminous top, means for moving the top with respect to the bottom, and for maintaining the top at any predetermined position with respect to the bottom, a conduit within the wall of each dyeing chamber connecting the portion of the receptacle at each end of the dyeing chamber with a testing device, a testing device the contents of which are capable of examination without interrupting the dyeing operation, a chamber at each end of the receptacle abuttable thereon, means for circulating a liquid through the end chambers and the dyeing chambers, means for removing the receptacle from between the two end chambers and means for revolving the receptacle when removed from between the end chambers.



2. In a dyeing machine, in combination, a receptacle, a series of dyeing chambers having imperforate sides within the receptacle, each dyeing chamber having a fixed foraminous bottom and a movable foraminous top, means for moving the top with respect to the bottom, and for maintaining the top at any predetermined position with respect to the bottom, a conduit within the wall of each dyeing chamber connecting the portion of the receptacle at each end of the dyeing chamber with a testing device, a testing device the contents of which are capable of examination without interrupting the dyeing operation, a chamber at each end of the receptacle abuttable thereon, means for circulating a liquid through the end chambers and the dyeing chambers, means for removing the receptacle from between the two end chambers and means for revolving the receptacle when removed from between the end chambers.

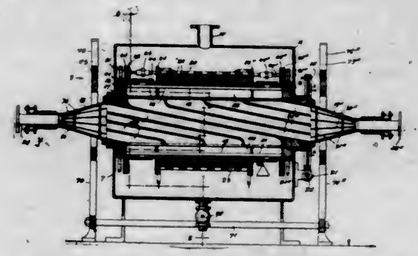
3. In a dyeing machine, in combination, a receptacle, a series of dyeing chambers having imperforate sides within the receptacle, each dyeing chamber having a foraminous bottom with inwardly extended members and a foraminous top with inwardly extended members, means for maintaining the top and bottom at predetermined positions with respect to each other, a chamber at each end of the receptacle capable of abutment thereon, means for passing a liquid through the end chambers and the dyeing chambers, means for removing the liquid after it has passed through either end chamber and the dyeing chambers, means for removing the receptacle from abutment with the end chambers and means for revolving the receptacle.

5. In a dyeing machine, in combination, a receptacle, a series of dyeing chambers having imperforate sides within the receptacle, each dyeing chamber having a fixed foraminous bottom and a movable foraminous top, means for moving the top with respect to the bottom, and for maintaining the top at any predetermined position with respect to the bottom, an imperforate member between the dyeing chambers, a chamber at each end of the receptacle, capable of abutment thereon, a divergent imperforate member in each end chamber capable of abutment upon the imperforate member in the receptacle, means for passing a liquid through the end chambers and around their imperforate members and from thence through the receptacle and the dyeing chambers, means for removing the liquid from the receptacle and returning it producing a circulating system of the liquid, means for removing the receptacle from abutment with the end chambers, and means for revolving the receptacle after such removal to allow the withdrawal of the contents of the dyeing chambers.

6. In a dyeing machine, in combination, a receptacle, a series of dyeing chambers having imperforate sides within the receptacle, each dyeing chamber having a foraminous bottom with inwardly extended members and a foraminous top with inwardly extended members, means for maintaining the top and bottom at predetermined positions with respect to each other, an imperforate member between the dyeing chambers, a chamber at each end of the receptacle abuttable thereon, a divergent imperforate member in each end chamber capable of abutment upon the imperforate member in the receptacle, a conduit within the wall of each dyeing chamber connecting the portion of the receptacle at each end of the dyeing chamber with a testing device, a testing device the contents of which are capable of examination without interrupting the dyeing operation, a pump, means whereby the pump will force a liquid through the end chambers, the receptacle, the dyeing chambers and the testing device, means for returning the liquid to the pump, means for removing the receptacle from abutment upon the end chambers and means for revolving the receptacle.

[Claim 4 not printed in the Gazette.]

1,274,524. FIBER-TREATING MACHINE. HOWARD M. DUDLEY, Philadelphia, Pa. Filed June 15, 1917. Serial No. 174,863. (Cl. 8—17.)



1. In a fiber treating machine, in combination, a foraminous cylinder capable of having a fabric wound thereon, an outwardly extended flange fixedly attached to each end of said cylinder, a series of annular members abutting upon said cylinder slidable over said cylinder oppositely to each other and capable of closing a portion of the openings in the cylinder and means for maintaining the members in any predetermined position over the cylinder.

5. In a fiber treating machine, in combination, a receptacle, an outer foraminous cylinder within the receptacle capable of having a fabric wound thereon, a second foraminous cylinder spaced within the first cylinder, outwardly extended flanges at each end of the cylinders, a plurality of series of annular members abutting upon the outer face of the outer cylinder, means for separating the members of each series to abut upon the edge of a fabric rolled upon the outer cylinder closing all the openings in the outer cylinder except those around which the fabric is wound, means for maintaining the members in abutment against the fabric, means for revolving the cylinders and means for passing liquids, steam and air through the cylinders and the fabric during their revolution.

6. In a fiber treating machine, in combination, a receptacle, an outer foraminous cylinder within the receptacle capable of having a fabric wound thereon, a second foraminous cylinder spaced within the first cylinder, outwardly extended flanges at each end of the cylinders, a plurality of series of annular members abutting upon the outer face of the outer cylinder, means for separating the members of each series to abut upon the edge of a fabric rolled upon the outer cylinder closing all the openings in the outer cylinder except those around which the fabric is wound, means for maintaining the members in abutment against the fabric, means for revolving the cylinders, tubular members connecting the openings in the inner cylinder to a supply source of liquids, steam and air, a flexible foraminous covering capable of being adjusted to closely cover the wound fabric, and means for

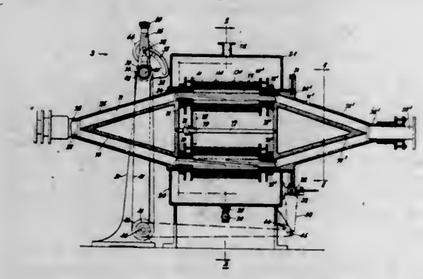
forcing liquids, steam and air outwardly through the device and the fabric wound upon the outer cylinder.

7. In a fiber treating machine, in combination, a foraminous cylinder comprising a series of spaced parallel members capable of having a fabric wound thereon, an outwardly extending flange fixedly attached to each end of said cylinder, a series of annular members abutting upon said cylinder slidable over said cylinder oppositely to each other and capable of closing a portion of the openings in the cylinder and means for maintaining the members in any predetermined position over the cylinder.

8. In a fiber treating machine, in combination, a receptacle, an outer foraminous cylinder comprising a series of spaced parallel members having upwardly and downwardly extended projections within the receptacle, an inner foraminous cylinder spaced from the outer cylinder, tubular members connecting the openings in the inner cylinder with a supply source of liquids, steam and air, a series of slidable members abutting upon the outer face of the outer cylinder, slidably movable from each other to abut upon a fabric wound upon the cylinder closing all of the openings in the cylinder except those covered by the fabric, a flexible foraminous covering capable of close engagement with the exterior surface of the wound fabric, means for revolving the cylinders and the fabric and means for forcing liquids, steam and air through the device and the fabric during the revolution.

[Claims 2 to 4 not printed in the Gazette.]

1,274,525. FABRIC-DYEING MACHINE. HOWARD M. DUDLEY, Philadelphia, Pa. Filed July 25, 1917. Serial No. 182,611. (Cl. 8—17.)



1. A dyeing machine, comprising a dyeing chamber, a series of hollow reels within the dyeing chamber and revoluble therein, each reel composed of a foraminous member and outwardly extended imperforate flanges, the foraminous member being capable of having a fabric wound thereon, means for forcing a liquid equally into all of the hollow reels and from thence through the foraminous members and the fabrics wound thereon, means for submerging the reels continuously within a liquid within the dyeing chamber, and means for revolving the series of reels.

10. A dyeing machine, comprising a dyeing chamber, a series of hollow reels within the dyeing chamber and revoluble therein, each reel composed of a foraminous member and outwardly extended imperforate flanges, the foraminous member being capable of having a fabric wound thereon, divergent openings in the foraminous members, means for closing the openings in a portion of the foraminous members, means for revolving each reel independently of the other reels to allow the winding of a fabric thereon, means for revolving the series of reels around a common axis of revolution, and means for forcing a liquid from the interiors of all the reels outwardly into the dyeing chamber.

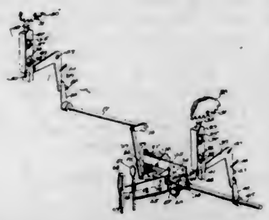
11. A dyeing machine, comprising a dyeing chamber, a removable top to the dyeing chamber, a series of hollow reels within the dyeing chamber and revoluble therein around a common axis of revolution, each reel being composed of a hollow foraminous cylinder, with outwardly extended imperforate flanges, means within the reel whereby a liquid may be impinged equally over the inner face of the foraminous cylinder, means for revolving the series of reels around a common axis, means exterior to the dyeing chamber for revolving each reel independently, means for locking the reels from independent rotation, means for forcing a liquid through the hollow reels and the foraminous cylinders into the dyeing chamber, and means for producing continuous circulation of the liquid through the device.

14. A dyeing machine, comprising a dyeing chamber, a series of hollow reels within the dyeing chamber and revoluble therein, each reel composed of a foraminous member and outwardly extended imperforate flanges, the foraminous member being capable of having a fabric wound thereon, a smaller testing device connected with the interior of a reel and revoluble therewith, means for forcing a liquid equally into all of the hollow reels and from thence through the foraminous members and the testing device and means for revolving the series of reels.

17. A dyeing machine, comprising a dyeing chamber, a removable top to the dyeing chamber, a series of hollow reels within the dycing chamber and revoluble therein around a common axis of revolution, each reel being composed of a hollow foraminous cylinder with outwardly extended imperforate flanges, a series of conduits within the hollow reels connecting the ends of the reels with the inner faces of the foraminous cylinders, means for revolving the series of reels, means for revolving each reel independently of the others, means for locking the reels from independent rotation, a smaller testing device connected with the interior of a reel and revoluble therewith, means for forcing a liquid inwardly into the reels from both ends thereof, and means for the continuous circulation of the liquid through the device.

[Claims 2 to 9, 12, 13, 15, and 16 not printed in the Gazette.]

1,274,526. CALCULATING-MACHINE. JOHN G. DUNKER, Chicago, Ill., assignor to The Wahl Company, Chicago, Ill., a Corporation of Delaware. Filed Sept. 1, 1916. Serial No. 118,147. (Cl. 235—130.)



1. In a calculating machine, the combination of a totalizer gear wheel, a key hole slot in said gear wheel, thereby determining the zero position of said wheel, and a plunger having an enlarged end to enter said slot, and means to bring said plunger in contact with said wheel and thereby mechanically determine whether or not said wheel is in its zero position.

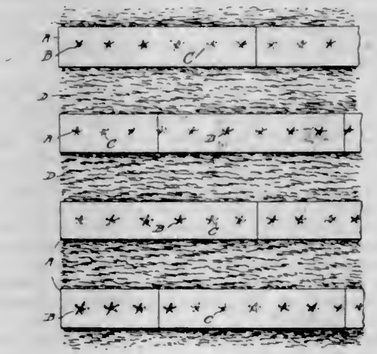
2. In a calculating machine, the combination of a totalizer, a set of numeral wheels having key hole slots in them to thereby determine the zero position of said wheels, a plunger having a head adapted to enter said slots, and means to bring said plunger in a position to engage said slot and afterward contact with said wheels *seriatim*.

10. In a calculating machine, the combination of a decimal carriage, a totalizer, and a zero determining device adapted to be brought into coöperation with said totalizer, the arrangement of the totalizer and zero determining devic being such that motion of said decimal carriage will be prevented unless said totalizer stands at zero during the time said zero determining device is in coöperation with said totalizer.

12. In a calculating machine, the combination of a totalizer, a set of members having slots thtrein, a plunger adapted to be crought into coöperation with said members, and means to advance said members in one direction relative to said plunger, the arrangement being such that advancing means will be inoperative unless said slots are in alinement with said plunger.

[Claims 3 to 9, 11, and 13 not printed in the Gazette.]

1,274,527. MULCH FOR SUGAR-CANE AND THE LIKE. CHARLES FRANKLIN ECKART, Olaa, Hawaii. Filed Nov. 15, 1917. Serial No. 202,149. (Cl. 47—36.)

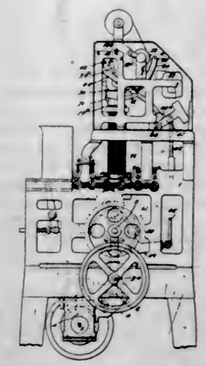


1. A mulch for sugar cane and the like, consisting of a body of fibrous material impregnated with the hydroxid of a metal.

6. A mulch for sugar cane and the like, consisting of a body of fibrous material impregnated or coated with an alkali hydroxid and a hygroscopic or deliquescent salt.

[Claims 2 to 5 and 7 not printed in the Gazette.]

1,274,528. TABULATING-MACHINE. CHARLES FOSTER, Croydon, England, assignor to Powers Accounting Machine Company, New York, N. Y., a Corporation of New York. Filed Sept. 18, 1917. Serial No. 191,930. (Cl. 101—93.)

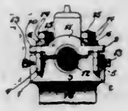


1. In a tabulating machine operated by a perforated card a swinging type bearing member having a number of type thereon greater in number than the number of possible perforations in a column of the card and means operated by said card to position the swinging member to bring the desired type into the printing position.

7. In a tabulating machine operated by a perforated card a swinging type bearing member having a number of type thereon greater in number than the number of possible perforations in the column of the card, a second swinging member, stops controlled by the card for positioning said second swinging member, a spring controlled latch upon the second swinging member, a slot in the second swinging member a stud on the type bearing member projecting through said slot and engaging said latch whereby it may be positioned independently of the second swinging member to bring the desired type into the printing position, and means for giving a slight initial movement to the type bearing member whereby the accidental reëngagement of the latch before the operation of the type bearing sector is avoided.

[Claims 2 to 6 not printed in the Gazette.]

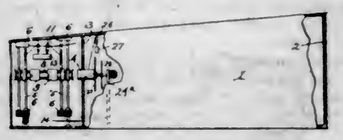
1,274,529. BEARING. PINKNEY P. FRAZER, St. Louis, Mo. Filed Feb. 19, 1918. Serial No. 218,082. (Cl. 64—55.)



1. A bearing comprising a lower brass having inclined slots formed therein, keys disposed in said slots substantially corresponding to the formation thereof, a detachable brass disposed over said keys and supported thereby, and means for connecting said brasses.

2. A bearing comprising a lower brass having inclined slots formed therein, keys disposed in said slots substantially corresponding to the formation thereof, lugs projecting from the upper edge of said keys, a detachable brass disposed over said keys and supported thereby having openings in register with said lugs, and means for connecting said brasses.

1,274,530. ADVERTISING DEVICE. JOHN T. FRITSCHE, Lakewood, Ohio. Filed Mar. 16, 1915. Serial No. 14,741. (Cl. 88—27.)

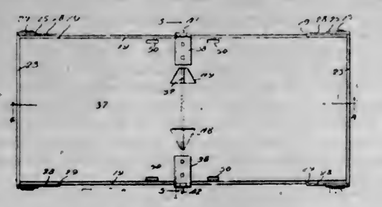


In a device of the character described, the combination of a casing, a projecting lens in a wall thereof, an endless carrier mounted to revolve within the casing behind said lens, a series of holders secured to said carrier, sprocket wheels on which said carrier travels, means for imparting motion to the sprocket wheels, arms connected to one of the sprocket wheels, electrically controlled means for engaging and releasing said arms for periodically stopping the carrier so that the holders may be brought successively in alinement with the lens, and a source of light adapted to be reflected through said lens by said holders.

1,274,531. FOLDING CRATE. SYLVESTER F. GEIGER, Lake Geneva, Wis. Filed Dec. 9, 1915. Serial No. 65,968. (Cl. 220—132.)

1. In a folding crate of the character described a base, side and end members movably associated with said base, a cover associated with said side and end members, means to retain said side and end members in an upright position with respect to said base, a partition

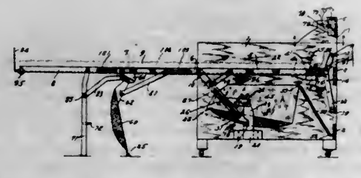
movably associated with said base and having its upper edge portion provided with cutouts, and latching members pivotally mounted on said side members and having their free end portions movable into the cutouts of



said partition to retain the side members against outward bulging, said latching members also supporting said cover while the latter holds the latching members in engagement with said partition.

[Claims 2 and 3 not printed in the Gazette.]

1,274,532. CONVERTIBLE FURNITURE. JOHN RUDOLPH GILDA, Chicago, Ill., assignor to Pullman Couch Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 8, 1915. Serial No. 60,274. (Cl. 5—50.)



5. A seating device comprising a support and a bed bottom member mounted turnably on the lower part of said support, in combination with a locking member mounted turnably on the upper rear part of said support, said turnable members abutting one against the other somewhat back of the plane of their pivotal axes and in a plane substantially tangent, at the point or line of contact, to an arc concentric with the lock axis, said locking member being formed to give clearance for said bed bottom member when the lock is turned from its normal position.

6. In a convertible seating device, a foldable sectional bed bottom including a pair of outer main sections spaced apart, a short connecting section therefor, an inner section to which one of said outer main sections is turnably connected, in combination with a bracket pivoted to said connecting section and connected turnably and slidably to the other of said outer main sections, a back member turnably connected to said bracket, a link having one end pivoted to said bracket and having its other end connected to the inner of said outer main sections for sliding longitudinally thereof, another link pivoted to the first mentioned link and to said back member for controlling the latter, a leg turnably connected to a medial part of the outer of said main sections adjacent to the connection of said bracket, a link having one end pivoted to said bracket and having its opposite end connected to a medial part of said leg, and a link having one end pivoted to the outer part of the said short section and having its opposite end connected turnably and slidably to the inwardly adjacent main section.

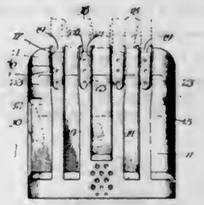
10. In a convertible furniture device, a foldable sectional bed bottom including a pair of bed sections spaced apart, connecting means therefor, and a relatively stationary member to which one of said sections is turnably connected, in combination with a back member carried on said bed bottom in foldable relation to said one of said sections, a leg turnably connected to the other of said sections, controlling means coöperatively related to said connecting means adapted for locking said sections, connecting means, back member, and leg in folded relation and for projecting said back and legs when said sections are unfolded.

13. A convertible furniture device comprising a bed bottom including a pair of main sections, one being the head section and a connecting section, turnably mounted supporting means attached to the other of said main sections, said means being disposed beneath the bed bottom when the latter is unfolded, a bearing for said means, an uprightly disposed guide member positioned back of said bearing and a horizontally disposed guide member positioned between said bearing and the upright guide member, the head section having means for coaction with the vertical guide member, and supporting means for coaction with the horizontal guide member, said means on the head section being demountable from said guide means respectively by movement rearwardly and upwardly subject to suitable manipulation of the head section.

17. A convertible seating device including a support and a foldable sectional bed bottom comprising a pair of main sections normally disposed uprightly one behind the other, and a connecting section at their upper edges, the forward of the upright sections having means whereby it is turnably connected to said support for swinging forward and downward to its bed position, a bowed spacing bar on the connecting section adapted to serve also as a handle, and means for limiting the folding movement of said connecting section on said forward section to less than 90 degrees, whereby the connecting section is held in an inclined normal position and the handle on the connecting section is disposed somewhat forwardly.

[Claims 1 to 4, 7 to 9, 11, 12, 14 to 16, and 18 not printed in the Gazette.]

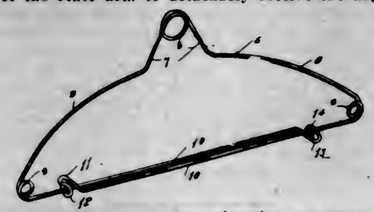
1,274,533. STEAM-SHOVEL DIPPER. ALEXANDER M. GOW, Duluth, Minn. Filed Dec. 10, 1917. Serial No. 206,430. (Cl. 37—39.)



A dipper having a rib on the exterior of the front thereof, said rib having a longitudinal recess extending to the top of the front and around the upper edge thereof and into the inner side of the front of the dipper, the recess being continuous from the exterior to the interior of the front, uniform, and of U shape to form a solid tongue having lateral shoulders, a reversible tooth having jaws to receive said tongue, said jaws being confined between the shoulders, and means for securing the tooth in place.

1,274,534. COMBINED TROUSERS AND COAT HANGER. CLARENCE L. GUERNSEY, Beaverton, Mich. Filed Dec. 27, 1917. Serial No. 209,096. (Cl. 211—13.)

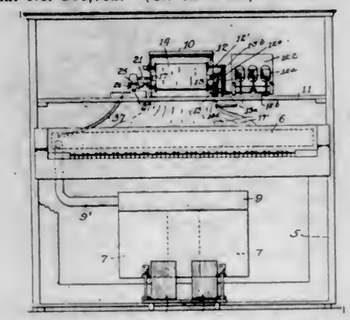
3. A combined trousers and coat hanger comprising a single length of wire coiled intermediate its ends to provide a supporting loop and outwardly and downwardly curved coat supporting arms, the terminals of the arms looped and having their ends extended inwardly in the direction of each other to provide a pair of horizontally disposed clamping arms, the terminal of one clamping arm bent laterally and back upon itself to slidably engage the adjacent arm, and a hook formed integrally with the free end of the other arm to detachably receive the adjacent



arm to permit the arms to have clamping engagement with one another.

[Claims 1 and 2 not printed in the Gazette.]

1,274,535. PLAYER-PIANO MECHANISM. AXEL G. GULBRANSEN and CHRISTIAN GULBRANSEN, Chicago, Ill., assignors to Gulbransen-Dickinson Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 15, 1914. Serial No. 866,752. (Cl. 84—161.)



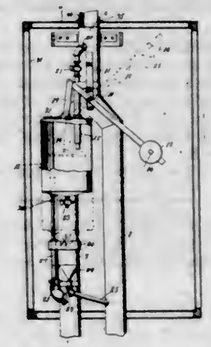
6. In a player piano, a longitudinally movable trackerboard, a music sheet, means for drawing said music over said trackerboard, said trackerboard being provided with two sets of narrow auxiliary openings normally entirely covered by the music sheet, one set being one each side of the center of the tracker and positioned in vertical alinement with and just inside the margin of corresponding tracker openings, suction means connected with said auxiliary openings, and mechanism interposed between said suction means and trackerboard for shifting said trackerboard when the auxiliary openings are exposed to the atmosphere.

7. In a player piano, the combination of suction means, a trackerboard, a music roll and an unwinding roll, a perforated music sheet passing between said rolls and over said trackerboard, said rolls and said trackerboard having relative shifting movement therebetween, a pair of bellows adapted to effect said shifting movement, valves for connecting said bellows to said suction means, said tracker board having two sets of auxiliary openings normally covered by said music sheet when the same is correctly alined on said tracker bar, each of said sets of openings arranged along different sections of said trackerboard and connected to separate chambers in said trackerboard, the openings in one of said sets being controlled by the left hand edges of the music sheet perforations passing over the corresponding trackerboard section, the openings in the other of said sets being controlled by the right-hand edges of the music sheet perforations passing over that corresponding trackerboard section, and pneumatic connections between said chambers and said valves for operating the latter when either of said sets of openings is exposed to atmospheric pressure.

[Claims 1 to 5 not printed in the Gazette.]

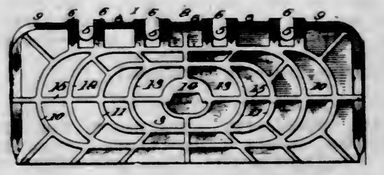
1,274,536. CUT-OUT FOR DOWN-SPOUTS. HARRY L. GURLEY, Marion, Ohio. Filed July 27, 1916. Serial No. 111,704. (Cl. 137—9.)

The combination with a down spout having a pair of branch pipes; of a valve at the juncture of said branch pipes with said down spout and being capable of being moved to alternately establish communication between said spout and either of said pipes, a feed pipe arranged in spaced parallel relation to said down spout and communicating with the interior of the latter at its upper end above said valve, a tubular member arranged in spaced parallel relation with one of said branch pipes and being in communication at its lower end with the latter, a tank having openings in its upper and lower ends at diametrically opposite points, a sleeve communicating with the opening in the upper end of said tank slidably receiv-



ing said feed pipe, an overflow pipe in said tank extending downwardly through the opening in the bottom thereof, the said overflow pipe being engaged in said tubular member, a pipe projecting outwardly from the other of said branch pipes, a funnel on the outer end of said pipe disposed beneath said tank, a drain valve in the bottom of said tank, a lever connected to the valve in said down spout for operating the same, and a link connecting the upper end of said tank with one end of said lever, substantially as described.

1,274,537. ANNEALING-BOX. JOHN A. HELLSTROM, Wheeling, W. Va. Filed Feb. 12, 1918. Serial No. 216,820. (Cl. 263—49.)



1. An annealing box formed as an integral structure, having its top provided with inverted arches, the wall of the arches extending upward and curved in forming approximately cylinders, for the purpose described.

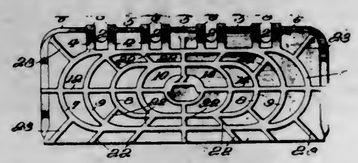
2. An annealing box formed as an integral structure, having its top provided with inverted arches, its sides and ends provided with ribs connected with the wall of the arches, whereby expansion, contraction and strength are provided and cracking, buckling and caving in of the box prevented.

[Claims 3 and 4 not printed in the Gazette.]

1,274,538. ANNEALING-BOX. JOHN A. HELLSTROM, Wheeling, W. Va. Original application filed Feb. 12, 1918, Serial No. 216,820. Divided and this application filed May 20, 1918. Serial No. 235,553. (Cl. 263—49.)

1. An annealing box formed as an integral structure having its top provided with a plurality of transversely

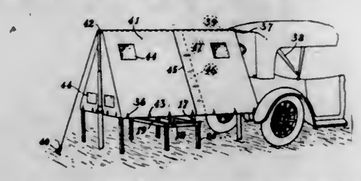
extending U-shaped grooves, the edge walls of which are formed of ribs extending parallel to the said grooves to take care of the expansion and contraction of the top and prevent it from caving in.



5. An annealing box formed as an integral structure having its top provided with a plurality of U-shaped grooves, the edges of which are formed of ribs, the sides of the box provided with a plurality of oblong shaped ribs embracing curved ribs, the ends of the box provided with circular and radiating ribs, the parts combined for the purpose described.

[Claims 2 to 4 not printed in the Gazette.]

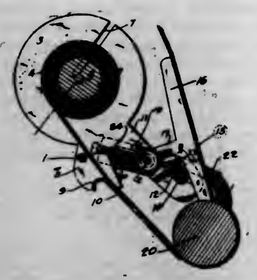
1,274,539. FOLDING-BED ATTACHMENT FOR AUTOMOBILES. LEO HARRIS, Lancaster, Cal. Filed July 30, 1917. Serial No. 183,593. (Cl. 5—9.)



1. A folding bed attachment for automobiles, comprising supporting and attaching bars adapted to be rigidly secured to the automobile and extend horizontally for supporting the entire folded bed and for supporting one end of the unfolded bed, a head rail rigidly connecting the supporting and attaching bars, folding side bars hinged to the extending ends of the supporting and attaching bars, a box frame hinged to the rear ends of the folding side bars, folding legs for supporting the box frame, an end frame hinged to the opposite side of the box frame from the side bars, and folding legs for supporting the end frame; so that the end frame will swing upwardly and then swing forwardly and the box frame will swing upwardly and then the folding side bars will swing upwardly carrying the box frame to a bottom-up position above the supporting and attaching bars.

[Claim 2 not printed in the Gazette.]

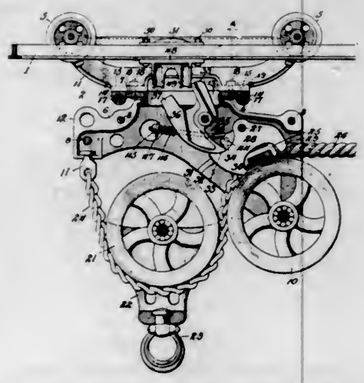
1,274,540. ROLL-PAPER ATTACHMENT FOR TYPEWRITERS. ALBERT E. HALL, National Stock Yards, Ill. Filed Mar. 8, 1918. Serial No. 221,279. (Cl. 197—133.)



1. An improved roll-paper attachment for typewriters, consisting of a suitable frame having two parallel longitudinal rods and parallel end-plates; said end-plates having slots for the insertion of the pintles of a roll of paper and having recessed ears on their under edge, for resting upon the rear paper support of a typewriting-machine; parallel arms extending from the forward edges of the said end-plates; clamping-means at the forward ends of said arms for engaging a carriage-rod of a typewriter; forwardly-projecting knife-arms having their rear portions pivotally and adjustably connected to the said arms; and a knife fixed upon the forward portions of the said knife-arms.

[Claim 2 not printed in the Gazette.]

1,274,541. HAY-CARRIER. HAAKON P. HANSON, Albert Lea, Minn. Filed Jan. 3, 1917, Serial No. 140,408. Renewed May 17, 1918. Serial No. 235,204. (Cl. 104—4.)

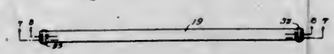


1. A hay carrier provided with opposed truck portions for engaging opposite sides of a track, and a body portion to which the truck portion is connected and with respect to which it is adjustable laterally of the direction of travel, and fastening means between the truck portion and the body portion extending at different angles to provide independent fastening means each capable of holding the parts securely together in the event of loosening of the other fastening means.

4. A hay carrier having a body portion and truck members thereon, the body portion being provided with a plate having terminal lugs and lateral slots and each truck member having ears adapted to the lugs and other ears adapted to the slotted portions of the plate, a set of bolts traversing certain of the ears and the slots in the plate, and another set of bolts traversing the other ears and the lugs of the plate, whereby the trucks may be adjusted laterally of the direction of travel to accommodate them to different widths of track and each set of fastening means is independent in its action from the other set of fastening means.

[Claims 2 and 3 not printed in the Gazette.]

1,274,542. SPRING. THOMAS W. C. HARTMANN, Philadelphia, Pa. Filed Apr. 27, 1918. Serial No. 231,096. (Cl. 267—36.)

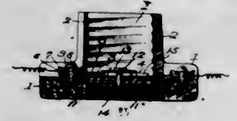


1. A spring of the character described including two leaves, one leaf having integral tongues spaced apart and bent to form an eyelet, the other leaf having a central integral tongue bent to form an eyelet and fitting between the bent tongues of said first leaf; and a pivot member extending through the eyelets thus joined, substantially as described.

3. A spring of the character described including two leaves, one leaf having integral tongues spaced apart and bent to form an eyelet, the other leaf having a central integral tongue bent to form an eyelet and fitting between the bent tongues of said first leaf; and a pivot member extending through the eyelets thus joined, said first leaf having an undercut recess in alinement with the space between its tongues whereby an overlapping portion is provided for a portion of the tongue of said second leaf, said second mentioned leaf having undercut recesses at either side of its tongue to provide overlapping portions for the bent tongues of said first mentioned leaf, substantially as described.

[Claims 2 and 4 not printed in the Gazette.]

1,274,543. SHELL-HOLDER FOR ELECTRIC CUT-OUTS. GEORGE HEINEMAN, Philadelphia, Pa. Filed June 22, 1917. Serial No. 176,292. (Cl. 173—342.)



1. The combination of a shell having a bottom flange and a throat in its side, with an open frame having a neck, said frame and neck resting upon said flange with an eye extended through said throat and having bendable flanges, fastening means passing through said eye, securing means passed through said bottom of the shell, and means beneath the bottom of the shell for retaining said securing means.

[Claim 2 not printed in the Gazette.]

1,274,544. MINER'S LAMPLIGHTER. MAX HENDLER, Staunton, Ill., assignor to Dewar Manufacturing Company, Wilmington, Del., a Corporation of Delaware. Filed Apr. 12, 1913. Serial No. 760,629. (Cl. 67—20.1.)

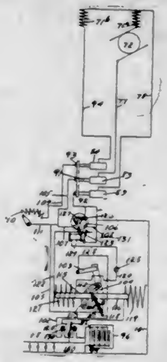


1. The combination with a lamp of the character described, having a reflector surrounding the burner tip of a lamp, of a tube seated in the wall of the reflector and extending rearwardly of the same, the inner end of said tube being provided with spaced ears projecting inwardly from the reflector wall, an abrasive wheel rotatably mounted between said ears, and having its axis disposed in a plane at right angles to the longitudinal axis of the reflector, the periphery of said wheel projecting beyond the plane of the outer edge of the reflector wall, a stick of sparking material slidably mounted in the tube, a spring arranged in the tube and bearing against the sparking stick to force the same into frictional engagement with the abrasive wheel, and a cap threaded upon the end of said tube to removably retain the spring therein and adjust the tension thereof.

[Claims 2 to 6 not printed in the Gazette.]

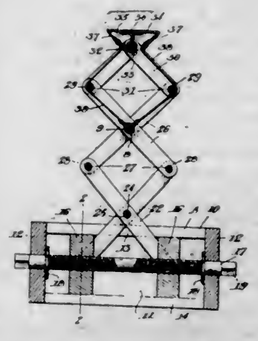
1,274,545. ELECTRICAL GENERATING SYSTEM. FREDERICK ALBERT HERWEHE, Monroe, Iowa. Filed Sept. 28, 1914. Serial No. 863,998. (Cl. 171—315.)

1. In a device of the class described, a generator rotatably mounted and having series and shunt windings, a rheostat in the circuit of the shunt winding, a storage battery in said circuit with said generator, a volt meter in parallel with said storage battery, a switch in said circuit, a polarized relay in said circuit, means controlled through said volt meter for closing said switch, and means actuated through said polarized relay for opening said switch, and electric circuit on said storage battery.



2. In a device of the class described, a generator having series and shunt windings, a rheostat in the circuit of said shunt winding, a storage battery in circuit with the said generator, a volt meter in parallel with said storage battery, a switch in said circuit, a spring actuated switch control, a polarized relay in said circuit, means controlled through said volt meter for operating said spring actuated switch control to close said switch, and means actuated through said polarized relay for operating said actuated switch control to open said switch.

1,274,546. LIFTING DEVICE. VERNER CHARLES HILLIKER, Calumet, Quebec, Canada. Filed Aug. 27, 1917. Serial No. 188,438. (Cl. 254—122.)

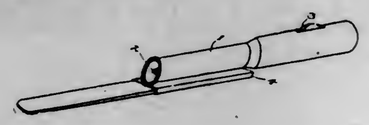


3. A lifting device comprising a frame having beadings on the side walls thereof, blocks having recesses in the lateral walls engaging the beadings, a plurality of pivoted levers carried by the blocks, load engaging means carried by the levers and means for actuating the blocks longitudinally of the frame, the beading preventing the blocks from twisting under stress.

5. A lifting device comprising a plurality of pivoted crossed levers, a pivoted bracket carried by the levers, a platform having angularly disposed depending arms carried by the bracket, flexible means engaging the depending arms for maintaining the platform in horizontal position, and means for actuating the levers.

[Claims 1, 2, and 4 not printed in the Gazette.]

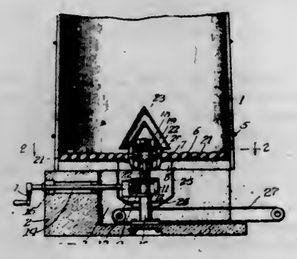
1,274,547. TONGUE-DEPRESSOR. ANTONE T. HOHLE, Minneapolis, Minn. Filed Nov. 11, 1916. Serial No. 130,768. (Cl. 128—24.)



2. In a tongue depressor, the combination of an instrument handle, a receiving socket carried thereby having double gripping means, one of which is adapted to grip and hold a tongue splint of one size and the other of which is adapted to grip and hold a tongue split of a different size.

[Claim 1 not printed in the Gazette.]

1,274,548. FEEDING APPARATUS. WILLIAM A. HOLNAGEL and CHARLES W. MCCLURE, Saginaw, Mich. Filed Feb. 2, 1916. Serial No. 75,777. (Cl. 193—13.)



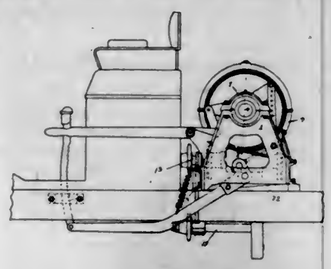
1. In apparatus of the class described, a tank adapted to contain silage or the like, an aperture in the bottom of said tank, a revoluble screw conveyer arranged to rotate about said aperture so as to traverse the entire bottom of said tank, a cap located above said aperture to prevent material in the tank from falling directly therethrough, whereby the material from the entire bottom of said tank is fed evenly and uniformly into said aperture and the entire mass of material in said tank may settle evenly without disturbing the relative horizontal position of the material in the various regions thereof.

2. In apparatus of the class described, a tank or container adapted to contain silage or the like, an aperture in the bottom of said tank, a cap substantially covering said aperture, a horizontal screw conveyer projecting radially from beneath said cap, means to positively revolve said conveyer and means to positively rotate the same about the center of said aperture as an axis whereby said screw conveyer uniformly and evenly feeds off material from the entire bottom of said container, thus permitting the mass of material therein to settle evenly and gradually.

3. In apparatus of the class described, a tank or container for silage or the like, aperture centrally arranged in the bottom of said container, a vertical shaft having a pinion thereon and casting revolubly mounted upon said shaft, a pair of horizontal screw conveyers mounted in said casting and having gears in mesh with the gear on said shaft and means to drive the shaft whereby the revolution of said shaft causes said screw conveyers to revolve and rotate about said aperture, evenly feeding off the material of the bottom of the mass of material through the bottom of the aperture, and a conical cap for preventing material directly above said aperture from falling therethrough.

4. In apparatus of the class described, a silo having a foundation, a passageway into the foundation, an opening between the bottom of the silo and said passageway, said opening being located centrally of the silo, a screw conveyer shaft revolving about said central opening and simultaneously rotating to evenly feed off the material in the silo to said central opening, and a shield above said central opening to prevent the same from becoming clogged by reason of the ensilage above it.

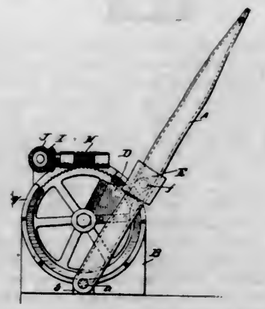
1,274,549. WINCH. LEWIS G. HOWLETT, Bay City, Mich. Filed Mar. 12, 1918. Serial No. 222,015. (Cl. 74—36.)



1. In a winch, a frame, journal boxes thereon adapted to slight oscillatory movement, a drum shaft revolubly mounted in said boxes, a worm wheel fixed to said shaft, a worm, a worm housing supported by said shaft and capable of slight oscillatory movement, a stop secured to said frame, and means adapted to rotate said worm.

2. In combination, a winch comprising pedestals, a drum shaft and a worm wheel fixed thereon, spherical journal boxes on said pedestals, a worm wheel housing carried by said drum shaft and capable of slight oscillatory movement, a worm housing integral with said worm wheel housing, a worm revolubly mounted in said worm housing, a thrust bearing carried by said worm housing, a driving shaft, means for revolving said driving shaft, and stationary stops adapted to limit the oscillatory movement of said housings.

1,274,550. DAVIT. CHRISTIAN HOYER, New York, N. Y., assignor to Ship Builders Iron Works, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 18, 1918. Serial No. 222,988. (Cl. 9—22.)

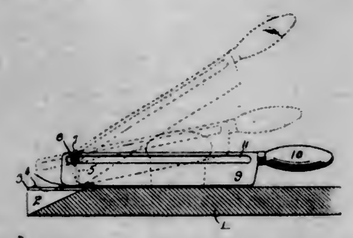


1. In a davit operating mechanism, the combination of a ship's davit adapted to swing inboard and outboard and pivoted to a stationary base, and mechanism for swinging said davit characterized by a worm wheel and means to rotate said worm wheel and an arm on said worm wheel movably engaging a sliding member on said davit.

6. In davit operating mechanism, the combination of a davit adapted to swing inboard and outboard so far that said davit can pick up an inner boat and swing the same clear outboard to be lowered, a worm gear adapted to operate said davit throughout said swinging motion, an arm on said worm gear, and a box adapted to slide on said davit and engaging said arm, and housing to protect said gear from the weather.

[Claims 2 to 5 not printed in the Gazette.]

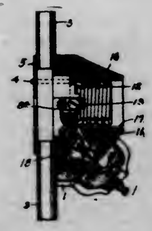
1,274,551. BREAD-CUTTER. JOHN F. HOYT, Newington, N. H. Filed June 6, 1916. Serial No. 102,030. (Cl. 146—12.)



1. In a device of the class described, the combination of a supporting means, a supporting roller carried by said supporting means, said supporting roller being elongated, a knife having an elongated slot formed therein, said roller projecting through said slot, whereby said knife may be reciprocated and tilted for movement over said roller when desired, said roller being considerably longer than the breadth of said knife, thus allowing unrestricted side movement of said blade when desired.

2. In a device of the class described, the combination of a base having a diagonal recess formed in one end thereof, strips fixedly mounted upon said base in alinement with the sides of said recess, supporting posts carried by said strips, bearings carried by the upper portions of said posts, a roller carried by said bearings, a knife having a handle thereon, said knife being provided with an elongated slot, said roller projecting through said slot, said roller being comparatively longer than the breadth of said knife, whereby said knife may be reciprocated by movement over said roller, said recess permitting the knife to be tilted in one direction, and said roller permitting side movement of the knife when necessary without the knife encountering interference throughout its movement for the length of said roller.

1,274,552. ELECTRICAL FITTING. CECIL R. HUBBARD and HENRY R. GILSON, Baden, Pa., assignors to National Metal Molding Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Feb. 21, 1916. Serial No. 79,668. (Cl. 173—334.)



1. A combination lamp socket and attachment plug comprising a base block of insulation provided with a pair of contactors adapted to be connected to an electrical circuit, a pair of lamp socket contact members including a shell secured to said block and electrically connected to said contactors, a pair of attachment-plug clips at one side of and lying in a general plane oblique to the longitudinal axis of said shell, said clips being electrically connected to said contactors, and a cover block of insulation secured to said base block, said cover block being provided with a cylindrical opening to receive said shell and with a recess to receive said clips.

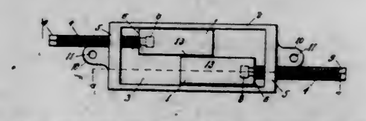
2. A combination lamp socket and attachment plug comprising a substantially flat base block of insulation provided near its center with a pair of slots and a bridge piece between them, a pair of binding posts for the attachment of electrical conductors mounted one on each side of said bridge piece, a lamp socket shell and base contact member mounted on the top of said bridge piece, a pair of attachment plug clips secured to said block at one side of said shell, and a cover block of insulation secured to said base block, said cover block being provided with a cylindrical bore to receive said shell and with recesses to receive said clips.

1,274,553. COLLAR-FASTENER. ELIHU INGRAM, Detroit, Mich. Filed Feb. 9, 1917. Serial No. 147,680. (Cl. 24—101.)



A collar fastener constructed of a strip of sheet metal, formed U-shaped with two keepers or tongues formed integral therewith and extending outward from the side opposite to the wings of the main body.

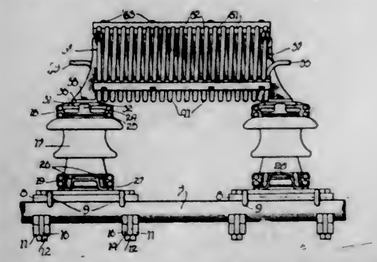
1,274,554. SHAFT-JACK. GEORGE WENTWORTH IVES, Milwaukie, Oreg. Filed Feb. 5, 1918. Serial No. 215,561. (Cl. 254—104.)



2. The combination of a flat, rectangular, open box, having horizontally and outwardly extending, perforated ears at the bottom of the box; two removable wedge blocks, trapezoidal in side view, sliding horizontally and side by side on the bottom of said box and having their heels in engagement with screw members; two propelling screws entering the box from opposite directions, screwably mounted in the end walls of said box, their terminals within the box having turned knobs engaging the wedge blocks and propelling them back and forth within the box; substantially as described.

[Claims 1 and 3 not printed in the Gazette.]

1,274,555. CHOKE-COIL MOUNTING. ERNEST H. JACOBS, Chicago, Ill., assignor to Electrical Engineers Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 29, 1918. Serial No. 231,549. (Cl. 173—28.)



1. In combination, a supporting member, a pair of insulator units on said supporting member, each of said insu-

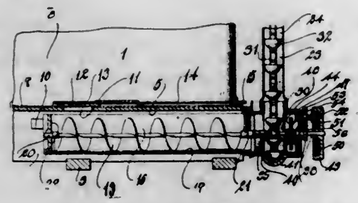
lator units comprising a base member shiftable along said supporting member, an insulator mounted on said base member, a bracket mounted on said insulator, coil attaching means adapted to hold a coil between the brackets of both insulator units, said insulator units being relatively shiftable along said supporting members to change the spacing between said brackets.

5. A bracket for supporting choke coils and the like comprising a plurality of diverging arms, said arms having recesses therein adapted to receive the turn of the choke coil, removable clip members coöperating with said recesses and adapted to clamp the choke coil wire in said recesses and screw means engaging said arms and operable to releasably clamp the clip members to the choke coil.

8. A bracket for supporting a choke coil or the like comprising a plurality of arms, and an attaching base common to the arms, said base being adapted to be mounted on an insulated support, said arms having means at their outer ends for holding the end turn of a choke coil.

[Claims 2 to 4, 6, and 7 not printed in the Gazette.]

1,274,556. CONVEYER. DETLEF JONS, Jr., Spangle, Wash. Filed Jan. 29, 1917. Serial No. 145,158. (Cl. 130—17.)



The combination in a grain conveyer and cleaner, of an elevator, an operating shaft therefor and a spiral conveyer on said shaft located at an angle to the elevator, inclosing casings for the conveyer and elevator, a fan housing supported on the elevator casing and detachably connected with the conveyer casing, a screen dividing the elevator receiving chamber from the housing, a fan mounted on the shaft in the housing, said fan being mounted upon the shaft carrying the conveyer and actuating the elevator, the elevator being between the conveyer and the suction fan whereby the air current is drawn through both the conveyer casing and the elevator casing to the eye of the suction fan, means for operating the shaft, and means for operating the fan at a greater speed than the shaft.

1,274,557. OPHTHALMIC-TEST-LENS TRAY. EDMUND KANDLER, Rochester, N. Y., assignor to Bausch & Lomb Optical Company, Rochester, N. Y., a Corporation of New York. Filed Jan. 25, 1917. Serial No. 144,351. (Cl. 211—28.)



1. An ophthalmic test lens tray embodying channel partitions, plate partitions crossing them and in engagement therewith and together forming a plurality of lens chambers open through from top to bottom, and means for retaining the lenses in the chambers.

2. An ophthalmic test lens tray embodying a series of obliquely slotted channel partitions, plate partitions engaging with the slots of the series of channel partitions and together forming a plurality of lens chambers open through from top to bottom and ranging obliquely to the general facial plane of the tray, and means for retaining the lenses in the chambers.

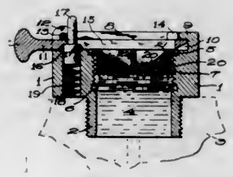
6. An ophthalmic test lens tray embodying channel partitions, plate partitions interlocking therewith and together forming a plurality of lens chambers open through from top to bottom, means for supporting the lenses in the chambers, and a marginal finishing frame comprising opposite end bars, and front and rear channel bars embracing and concealing the ends of the channel partitions and secured to the end frame bars.

8. An ophthalmic test lens tray embodying channel partitions and plate partitions, the plate partitions and flanges of the channel partitions being slotted and interlocked at their slots to form a plurality of lens chambers open through from top to bottom, means for supporting the lenses in the chambers, and a marginal frame of channel bars applied to said partitions, the inner flanges of the end frame bars being slotted correspondingly with the channel partitions and interlocking with slotted end portions of the plate partitions, said frame forming a strengthening border finish for the tray.

11. In a test lens tray, the combination with a plurality of substantially flat partition strips forming the side walls of a series of alined chambers and having slots therein, of a plurality of cross rails forming the ends of said chambers and acting as spacing means for the strips, said rails comprising U shaped channel members having slots in their lateral walls interlocking with the slots in the strips, and a wire passing transversely through the bottom portion of each of the flat partition strips and between each pair of cross rails, to close the bottom of the chamber and to hold the partition strips in locking engagement with the rails.

[Claims 3 to 5, 7, 9, and 10 not printed in the Gazette.]

1,274,558. GREASE-CUP. CHARLES H. KELLEY, Pittsburgh, Pa. Filed May 6, 1918. Serial No. 232,812. (Cl. 184—88.)



1. In a grease cup, a grease receptacle, a slidably attached cover therefor, means to lock said cover in normally closed position on said receptacle, and a grease compression cap disposed therein beneath and compressible into its normal position by said cover.

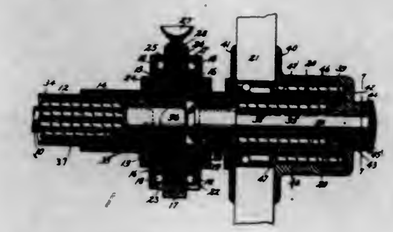
2. In a grease cup, a grease receptacle, a slidable but permanently attached cover therefor, means to lock said cover in normally closed position on said receptacle, and a grease compression cap disposed within said receptacle beneath and compressible into its normal position by said cover, said receptacle having a shouldered recess upon which said cap normally engages.

3. The combination with a bearing having a grease receptacle, of a slidable but fixedly attached cover for said receptacle, means to automatically lock said cover in its normal position on said receptacle, and a grease compression cap disposed within said receptacle beneath and operatively seated in its normal position by the closure of said cover.

1,274,559. AUTOMOBILE-AXLE. JESSE B. KETCHUM, Hampshire, Ill. Filed Mar. 10, 1916. Serial No. 83,337. (Cl. 74—103.)

The combination of a drive axle shaft having a flexibly connected end section, a housing inclosing the axle shaft and having a pivot knuckle composed of a cylindrical head having its axis intersecting the axis of the axle shaft and provided with bearing cones at its ends, a casing in which the head is mounted, said casing having a projecting tubular portion having a wheel bearing, the bottom of the casing being in the form of a cup to receive the corresponding end of the aforesaid head, a cap removably connected to the other end of the casing over the corresponding end of the head, and anti-friction balls between the bearing cones and the aforesaid bottom cup and the cap of the casing, the aforesaid wheel bearing being hollow to receive the end section of the axle shaft, and the internal diameter of said bearing being sufficient to permit the axle shaft and the connection between the same and the end section thereof to pass therethrough.

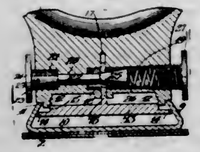
1,274,560. PROCESS OF PURIFYING WATER. VALERIUS KOBELT, Berlin, Germany. Original application filed Feb. 26, 1912, Serial No. 680,132. Divided and this application filed Aug. 14, 1912. Serial No. 715,072. (Cl. 210—1.)



1. The process of purifying water, which comprises subjecting the water to the action of the natural non-crystalline, colloidal alliophanoid (gesteinsgläser) constituents of volcanic rocks freed from granular and inactive materials.

[Claims 2 to 4 not printed in the Gazette.]

1,274,561. CAMERA-CARRIAGE. ROBERT KROEDEL, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Apr. 22, 1918. Serial No. 229,949. (Cl. 95—46.)



1. In a camera, the combination with a track and a carriage movable thereon, of a track gripping member comprising a cross-head adapted to engage the track in opposition to the carriage and a stem on the crosshead and a sliding member guided for rectilinear movement on the carriage, and coöperating with the stem of the gripping member, one of said last mentioned elements having a cam surface engaging the other to move the crosshead against the track.

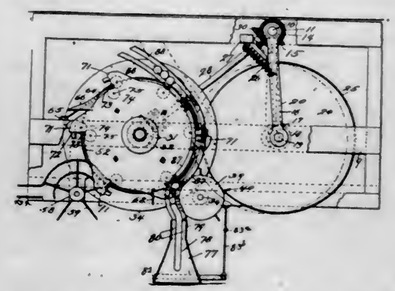
2. In a camera, the combination with a track and a carriage movable thereon, of a track gripping member comprising a crosshead adapted to engage the track in opposition to the carriage and a stem on the cross head, and a sliding member guided in the carriage for rectilinear movement transversely thereof and of the track and terminating in a laterally arranged finger piece, said member being adapted to coöperate with the stem of the gripping member and one of said elements being provided with a cam engaging the other element to move the crosshead against the track.

3. In a camera, the combination with a track and a carriage movable thereon, of a track gripping member, means embodying a laterally arranged finger-piece for drawing the track gripping member into clamping engagement with the track, a spring for actuating said means and finger-piece and a second laterally arranged finger-piece opposed to the first and adjustably mounted in the carriage to engage and regulate the tension of the spring.

4. In a camera, the combination with a track and a carriage movable thereon, of a track gripping member comprising a cross head adapted to engage the track in opposition to the carriage and a stem on the crosshead having an aperture therein, of a push rod slidable in the carriage and embodying a cone-shaped cam adapted to work in the aperture of the crosshead stem to affect the relations of the crosshead and track.

5. In a camera, the combination with a track and a carriage movable thereon, of a track gripping member comprising a crosshead adapted to engage the track in opposition to the carriage and a stem on the crosshead having an aperture therein, of a transverse push rod slidable in the carriage and terminating in a laterally arranged finger-piece, said push rod being provided with a cone-shaped cam working in the aperture of the crosshead stem, a spring for moving the push rod in one direction and a second laterally arranged finger-piece threaded into the carriage in opposition to the first and coöperating with the spring to control its tension.

1,274,562. MACHINE FOR ASSEMBLING BOLTS AND NUTS. WALLACE R. HULL, Pittsburgh, Pa. Filed Aug. 2, 1917. Serial No. 184,115. (Cl. 10—155.)



1. In a machine for assembling bolts and nuts, a rotatable nut carrier, disposed horizontally and having a series of spaced nut carrying devices, means for individually feeding the nuts to the carrier and said devices, a bolt feeder and spacer having means for engaging the bolts, means for effecting a gravitation and disposition of the bolts into individual registering relation to the nuts, and rotatable means frictionally engaging the bolt shanks for turning the latter to screw them into the nuts.

2. In a machine for assembling bolts and nuts, means for feeding the bolts and nuts and moving them successively into engagement individually one relative to the other, and means having a swinging movement and embodying a rotatable device for frictionally engaging and turning the bolt shanks to cause the bolts to screw into the nuts.

3. In a machine for assembling bolts and nuts, a nut carrier having pockets to receive the nuts, means for feeding the nuts to the pockets, a bolt feeder and placer having teeth with anti-frictional devices at their inner portions, the nut carrier and bolt feeder and placer moving in unison, bolt movers to dispose the bolts in position for engagement by the teeth of the feeder and placer and to effect an engagement of the individual bolts and nuts, and means for rotating the bolts to cause them to screw into the nuts.

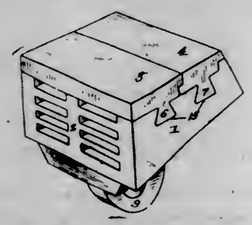
4. In a machine for assembling bolts and nuts, a nut carrier having pockets with upwardly projecting devices at the rear portions thereof, a nut feeding channel having a slot through which the said devices move, means

for moving the nuts through the channel into the pockets, a nut feeder and placer above the nut carrier and movable in unison with the latter, means for causing bolts to be fed into position for engagement by the nut feeder and placer, and means for rotating the bolts to cause them to screw into the nuts.

10. In a machine for assembling bolts and nuts, rotatable devices individually acting upon the bolts and nuts in succession to dispose the individual bolts and nuts in engaging position, the one over the other, and swinging means embodying a rotating device with an exposed edge to frictionally contact with the bolt shanks and turn the bolts in a direction reverse to the movement of the devices for disposing the bolts and nuts into engaging position.

[Claims 5 to 9 not printed in the Gazette.]

1,274,563. FUEL-SUPPORT FOR FURNACES. WILLIAM J. KUNZ, Milwaukee, Wis. Filed Jan. 24, 1917. Serial No. 144,128. (Cl. 110—44.)



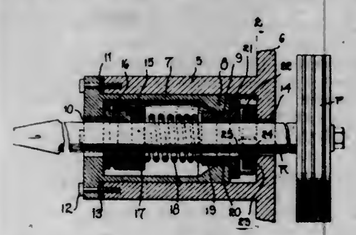
1. A fuel support for furnaces, comprising an open body having solid end and back walls and a perforated front wall, the upper edges of the end walls formed with alined dovetailed seats having parallel and inclined bottoms, and a closed top having spaced depending dovetailed bearings conforming to the seats of the end walls and secured in position by the inclined bottoms thereof, and a transverse central support for the top consisting of a bar-like member extending from the front to the back wall and disposed in a plane above the end wall seats to limit the sliding movement of the top downwardly of the inclined seat bottoms.

2. A fuel support for furnaces, comprising an open body having solid end and back walls and a perforated front wall, the upper edges of the end walls formed with alined dovetailed seats having parallel and inclined bottoms, a closed top having spaced depending dovetailed bearings conforming to the seats of the end walls and secured in position by the inclined bottoms thereof, and a transverse central support for the top consisting of a bar-like member extending from the front to the back wall, and a centrally disposed link depending from the opened bottom wall of the body for receiving a means of connection with the link of an adjacent body.

1,274,564. STUFFING-BOX. WALTER N. LANDMESSER, Oskaloosa, Iowa. Filed Mar. 14, 1918. Serial No. 222,367. (Cl. 286—30.)

2. In a stuffing box for piston cylinders, the combination with the body wall projecting from the cylinder head, of a shell disposed within the projecting wall box and having an opening in one end for the piston rod, packing means within said shell including a spring, a compression nut threaded in the other end of the shell and coacting with the spring, and a plurality of longitudinally projecting pins fixed in the nut and having biting engagement in the wall of the cylinder head to prevent rotation of the nut in the vibration of the piston rod.

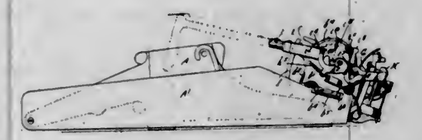
3. In a stuffing box for piston cylinders, the combination with the body wall projecting from the cylinder head, of a shell disposed within the projecting wall and having an opening in one end for the piston rod, packing means within said shell including a spring, a compression nut threaded in the other end of the shell and coacting with the spring, and a plurality of longitudinally projecting pins fixed in the nut and having biting engagement in the wall of the cylinder head to prevent rotation of the nut in the vibration of the piston rod, and



means loosely engaged on the piston rod between said nut and the cylinder head and urged against the face of the nut in the movement of the piston in each direction by fluid pressure entering the end of the stuffing box.

[Claims 1, 4, and 5 not printed in the Gazette.]

1,274,565. TYPE-WRITING MACHINE. EMMIT G. LATTA, Syracuse, N. Y., assignor to Corona Typewriter Company, Inc., a Corporation of New York. Original application filed Nov. 2, 1911, Serial No. 658,153. Divided and this application filed Oct. 6, 1915. Serial No. 54,423. (Cl. 197—114.)



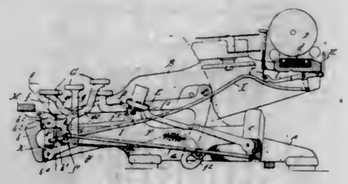
1. In a typewriting machine, the combination of a platen and a carriage for the same, a rocking line space lever extending forwardly from the carriage, an auxiliary lever pivoted at its front end on the carriage in front of the rear end of the line space lever, a pawl pivotally mounted on the rear end of the auxiliary lever, a line space wheel at one end of the platen, and connections whereby the line space lever acts through the auxiliary lever to cause the pawl to pull downwardly on the rear edge of the line space wheel.

5. In a typewriting machine, the combination of a platen having a line space wheel with flat face and toothed edge on one end, and a carriage for the platen, a line space lever extending forwardly from the carriage, an auxiliary lever pivoted on the carriage in front of the platen shaft, with its free rear end provided with a pawl arranged to act downwardly on the line space wheel, and a roller mounted on the auxiliary lever between the line space wheel and inner face of the end of the carriage.

7. In a typewriting machine, the combination of a platen, and a carriage for the same, a line space wheel loosely mounted at one end of the platen inside of the end of the carriage, a shaft fixed to the platen and passing loosely through the line space wheel, a finger wheel screwed onto the end of the shaft outside of the end of the carriage, a sleeve arranged on the shaft and passing through the end of the carriage connecting the line space wheel to the finger wheel and acting to lock the line space wheel directly to the platen when the finger wheel is screwed on the shaft, and a friction device between the platen and the line space wheel acting to frictionally hold the platen against turning when the finger wheel is unscrewed.

[Claims 2 to 4, 6, and 8 to 17 not printed in the Gazette.]

1,274,566. TYPE-WRITING MACHINE. EMMIT G. LATTA, Syracuse, N. Y., assignor to Corona Typewriter Company, Inc., a Corporation of New York. Filed Dec. 4, 1915. Serial No. 64,950. (Cl. 197—186.)



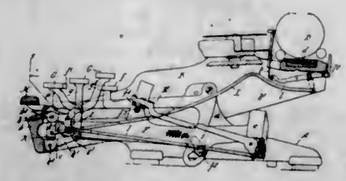
1. In a collapsible typewriting machine having a keyboard, a main frame which supports the working parts of the machine and is composed of two frame parts pivotally connected at a point in the rear of and below the front portion of the keyboard so that the front part of the keyboard moves rearwardly when the movable part of the frame is swung on its pivot to collapse the machine.

3. In a collapsible typewriting machine having a keyboard with keys arranged at different elevations, a main frame which supports the working parts of the machine and is composed of two frame parts pivotally connected at a point between the front and rear portions of the keyboard and below the rear portion thereof so that the front part of the keyboard moves rearwardly and the highest part of the keyboard moves downwardly when the movable part of the frame is swung on its pivot to collapse the machine.

40. In a collapsible typewriting machine, the combination of a base frame, type bars mounted on the base frame, key-operated levers adapted to actuate the type bars, a platen carriage, a support for the key-operated levers and platen carriage, connections between said support and the base frame whereby said support may be moved to shift the platen carriage while upright from an elevated operative position above the level of the type bars to a materially lower level when the machine is not in use, and means for locking the support against movement to hold the carriage in its elevated operative position.

[Claims 2, 4 to 39, and 41 to 44 not printed in the Gazette.]

1,274,567. TYPE-WRITING MACHINE. EMMIT G. LATTA, Syracuse, N. Y., assignor to Corona Typewriter Company, Inc., a Corporation of New York. Original application filed Dec. 4, 1915, Serial No. 64,950. Divided and this application filed Dec. 4, 1915. Serial No. 64,951. (Cl. 197—98.)



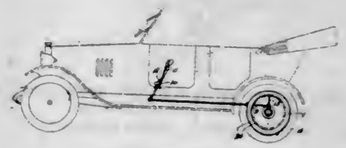
1. In a typewriting machine, the combination of a series of type bars, a series of key stems arranged side by side in a single row and supporting finger keys in different banks, parallel links arranged one above the other and movably supporting each key stem, the upper link for each stem having a depending lever leg, and a link connecting each of said legs to one of the type-bars.

7. In a typewriting machine, the combination of a keyboard comprising keys arranged in different banks and having upright key stems, two parallel series of pivoted links supporting the key stems for all of the keys, and a universal bar arranged to be engaged by the links of one of said series.

22. In a typewriting machine, the combination of a frame, a universal bar movably supported in the forward end of the frame, a space bar pivotally supported in the forward end of the frame above the universal bar, an arm pivotally supported in the frame below the universal bar and adapted to move said bar, and connections between the space bar and said arm for causing the free end of said arm to engage and move the universal bar.

[Claims 2 to 6, 8 to 21, and 23 to 38 not printed in the Gazette.]

1,274,568. HILL-CLIMBING AND ANTISKIDDING DEVICE FOR AUTOMOBILES. CHESTER R. LORD, Mineral City, Ohio. Filed Feb. 15, 1918. Serial No. 217,433. (Cl. 21—210.)



1. In a device of the character described comprising a ring secured to each of the rear wheels of an automobile and concentric therewith, a plurality of road engaging points pivoted upon said ring, a plurality of pivoted lever pawls upon said ring and equal in number to said road engaging points and means adjacent the operator's seat of said automobile for rocking the said lever pawls upon their pivots to swing the road engaging points in position to engage the roadway.

4. In a device of the character described, a ring secured to each of the rear wheels of an automobile, a plurality of road engaging points pivoted upon each of said rings, a plurality of lever pawls pivoted to each of said rings and equal in number to the said road engaging points and adapted to rock said road engaging points upon their pivots to bring them into position to engage the roadway, an off-set tooth upon each of said road engaging points, each of said off-set teeth being disposed in a horizontal plane out of alinement with said road engaging points and lever pawls, a movable arm slidably mounted adjacent each of said wheels and means for moving said movable arm into alinement with said lever pawls and to engage said lever pawls as the wheels rotate and to cause said lever pawls to swing upon their pivots and to rock the road engaging points into position to engage the roadway and means for moving said movable arms out of alinement with said lever pawls and into alinement with the teeth upon said road engaging points and to engage said teeth to swing the road engaging points out of position to engage the roadway.

[Claims 2 and 3 not printed in the Gazette.]

1,274,569. WINDMILL ATTACHMENT. GEORGE WALTER LOVEJOY, Tehachapi, Cal., assignor of one-half to Clarence Schoff, Tehachapi, Cal. Filed Dec. 4, 1917. Serial No. 205,407. (Cl. 74—71.)

1. In a pump structure, a movable pump rod, an equilizer device operative upon the rod, and a lubricant container fixed relatively to the rod and adapted to receive the equalizer device for lubricating the same upon movement of the pump rod.

7. In a pump, a frame, a pump rod movable in the frame, a self-lubricating equalizer secured to the frame, said equalizer comprising a base plate having a passage for said pump rod, an externally threaded packing gland depending from the base plate and surrounding the pump rod, a hollow nut adjustably engaging the threaded packing gland and having packing therein, a nipple portion rising from the base plate and surrounding the rod, an oil container screwed upon said nipple portion and open

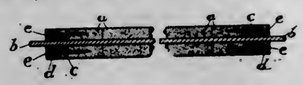
at its upper end, a stop on said rod, a spiral spring mounted on the rod with one end engaged in the nipple



and the other engaged with said stop, and means for adjusting the position of the stop on the rod.

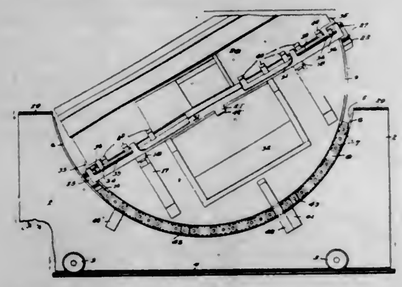
[Claims 2 to 6 not printed in the Gazette.]

1,274,570. UNDERCLEARER-ROLL. NOAH E. LUCAS, Norwich, Conn. Filed Jan. 22, 1917. Serial No. 143,658. (Cl. 19—31.)



An under-clearer roll comprising, in combination, a cork jacket having recessed ends, journal bearings for said roll, conical washers mounted on said journals and seated in the said recesses, binding nuts of fiber screwed upon said journals, and means consisting of a dowel screw for locking the said nuts and washers against rotation with respect to each other.

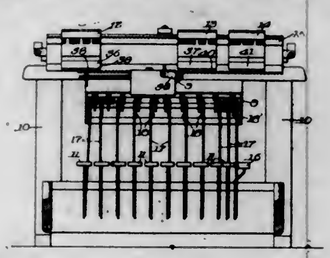
1,274,571. BOX-CAR UNLOADER. JAMES MCDANIEL, Minneapolis, Minn.; Fannie E. McDaniel executrix of said James McDaniel, deceased. Filed June 9, 1916. Serial No. 102,655. (Cl. 214—47.)



1. The combination, with a suitable base, of a segment shaped cradle having anti-friction peripheral bearings thereon, a second segment shaped cradle having anti-friction peripheral bearings in said first named cradle, said cradles being wholly supported upon their peripheral bearings, track rails supported on said second cradle whereon a box car may be placed, and means for moving said cradles to tilt said car successively on its longitudinal and transverse axes and supports provided at intervals for engaging the side wall of the car and having comparatively broad bearing surfaces and movable to avoid projections on the car.

[Claims 2 to 10 not printed in the Gazette.]

1,274,572. CALCULATING-MACHINE. ARTHUR F. POOLE, Chicago, Ill., assignor to The Wahl Company, Wilmington, Del., a Corporation of Delaware. Filed Feb. 24, 1914. Serial No. 820,602. (Cl. 235—130.)



1. In a calculating machine the combination of: a set of numeral keys; a single key locking mechanism comprising a group of shiftable cams acted on by said numeral keys; and means independent of said numeral keys for shifting one of said cams to an alternative position.

2. In a calculating machine the combination of: a set of numeral keys divided into two parts; a single key locking mechanism including a set of cams acted on by said numeral keys; and means for shifting one of said cams to lock all of said keys comprising one of said parts.

3. In a calculating machine the combination of: a set of numeral keys divided into two parts; a single key locking mechanism including a set of cams acted on by said numeral keys; and means for shifting one of said cams to lock the keys in either of said parts.

4. In a calculating machine the combination of: a set of numeral keys divided into two parts; a single key locking mechanism including a set of cams acted on by said numeral keys; and means for shifting the cam between said parts to thereby lock all of the keys in one or the other of said parts.

7. In a calculating machine the combination of: a set of numeral keys divided into two parts; a single key locking mechanism; a set of cams acted on by said numeral keys; a traveling element; and means for shifting the cam between said parts to thereby lock all of said keys in one or the other of said parts.

[Claims 5, 6, and 8 to 10 not printed in the Gazette.]

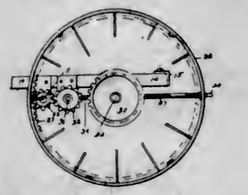
1,274,573. COMB-CLEANER. ERNEST W. MELLIEN, Rogerson, Idaho. Filed July 26, 1916. Serial No. 111,469. (Cl. 15—25.)



1. A comb cleaner of the class described comprising a casing, a comb supporting member carried thereby, a pair of flat cleaning brushes mounted within said casing, each brush provided with laterally extending bristles, the path of movement of the bristles of one brush being adapted to extend within the path of movement of the bristles of the adjoining brush, and means for operating said brushes in opposite direction toward each other.

2. A comb cleaner of the class described comprising a casing, a comb supporting member carried thereby, a pair of substantially flat brush members mounted within said casing and provided with bristles, meshing gears carried by each brush for causing the brushes to rotate in opposite directions toward each other and the bristles of one brush being adapted to extend well within the path of movement of the bristles of the other brush for alternately brushing a comb supported within said casing from opposite sides.

1,274,574. TRACTOR ATTACHMENT. RICHARD W. MEWES, Des Moines, Iowa. Filed Aug. 9, 1917. Serial No. 185,397. (Cl. 180—16.)



1. An attachment for automobiles, comprising gearing devices adapted to be mounted on the rear axle of an automobile in place of the rear wheels thereof, an extra frame, an axle mounted thereon, and tractor wheels on said axle, said tractor wheels each having two gears, said tractor wheels being capable of movement, whereby either of the gears of the tractor wheels may be selectively operatively connected with the gears on the automobile axle.

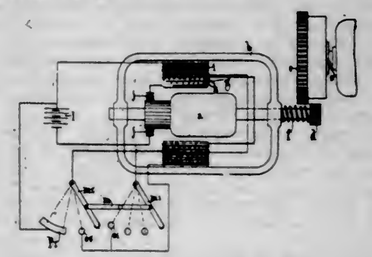
2. In a device of the class described, the combination of an automobile axle with gears mounted thereon in place of the ordinary rear wheels of the automobile, an auxiliary frame designed to be mounted on the automobile, an axle thereon, tractor wheels mounted on said last named axle, said tractor wheels each having two gearing devices, intermediate gearing devices meshing with the gears on said rear automobile axle, and means for adjusting said tractor wheels to different positions, whereby one of the gears on the tractor wheels may be operatively connected with the gears on the automobile rear axle, or the other of the gears on the tractor wheel may be connected with said intermediate gears.

3. In a device of the class described, the combination of an automobile axle with gears mounted thereon in place of the ordinary rear wheels of the automobile, an auxiliary frame designed to be mounted on the automobile, an axle thereon, tractor wheels mounted on said last named axle, said tractor wheels each having two gearing devices, intermediate gearing devices meshing with the gears on said rear automobile axle, and means for adjusting said tractor wheels to different positions, whereby one of the gears on the tractor wheels may be operatively connected with the gears on the automobile rear axle, or the other of the gears on the tractor wheel may be connected with said intermediate gears, said means comprising pairs of bearing blocks for said second shaft, guide devices for said bearing blocks, means for connecting said bearing blocks together, and means for sliding said bearing blocks longitudinally of the machine and for holding them in any of their adjusted positions.

4. In a device of the class described, an attachment comprising a frame having longitudinal side members, guide members mounted thereon, bearing blocks slidably mounted between said guide members and said longitudinal frame members, having at their side edges upwardly and downwardly extending flanges; wear plates above and below said bearing blocks and between the flanges at the upper and lower portions of the blocks respectively, a perforated lubricating plate above the upper wear plate, means for adjusting said bearing blocks longitudinally of the machine, an axle mounted in said bearing blocks, tractor wheels on said axle, and means for operatively connecting said tractor wheels with the rear axle of the automobile.

1,274,575. ELECTRIC STARTER. ALBERT HENRY MIDGLEY, Acton Vale, England, assignor of one-half to Charles Anthony Vandervell, Acton Vale, England. Filed July 10, 1915. Serial No. 39,184. (Cl. 172—239.)

1. A method of starting an internal combustion engine by means of an electric motor through the intermediary of a gear, one member of which is mechanically attached to the engine and the other member thereof to an axially displaceable armature of the motor which is drawn into the field by the magnetization of the poles, consisting in exciting the field by means of two excitation coils, the number of turns and the total resistance of the one coil being substantially greater than the number of turns and total resistance of the other coil, the field being excited first by means of the two excitation coils in series with each other and with the armature and source of energy, and then by the excitation coil having the smaller number of turns and the smaller total resistance in series with the armature and source of current, as and for the purpose set forth.



2. A method of starting an internal combustion engine by means of an electric motor through the intermediary of a gear, one member of which is mechanically attached to the engine and the other member thereof to an axially displaceable armature of the motor which is drawn into the field by the magnetization of the poles, consisting in exciting the field by means of two excitation coils, the number of turns and the total resistance of the one coil being substantially greater than the number of turns and total resistance of the other coil, the field being excited first by means of the two excitation coils in series with each other and with the armature and source of energy, then by the excitation coil having the smaller number of turns and the smaller total resistance in series with the armature and source of current, and finally also by the other excitation coil, as and for the purpose set forth.

[Claim 3 not printed in the Gazette.]

1,274,576. METHOD OF MAKING THERMOMETERS. MAX E. MOELLER, Brooklyn, N. Y. Filed May 11, 1918. Serial No. 233,984. (Cl. 49—82.)



1. The method of making thermometers and the like substantially as herein described, which consists in forming an enlargement at one end of a hollow tube, heating the enlarged portion to the fusing point and opening the end of the bore of the tube by forcing fluid through the material immediately opposite the end of said bore, placing the said enlarged end in an outer tube of greater internal diameter than the external diameter of the first tube, but having a portion approximately equal in di-

ameter to said enlarged portion, fusing the said outer tube and enlarged portion and forming a bulb below said enlarged portion by forcing fluid into the portion of the outer tube below the enlargement while the said portion is heated to a fusing temperature.

2. The herein described method of making thermometers consisting of a plurality of concentric tubes of different diameter and joined together, which consists in first taking a hollow tube, fusing one end and spreading it to form an enlargement, then blowing through the interior of the tube from the opposite end and opening the end which has been closed by the fusing and spreading operation, placing the said tube within another tube and with its enlarged end in a contracted end of the said second tube and holding the remainder of the tubes out of contact, then fusing the ends of the two tubes which are in contact and uniting them, and blowing through the inner tube to form a bulb below the point of junction of the two tubes in the outer tube.

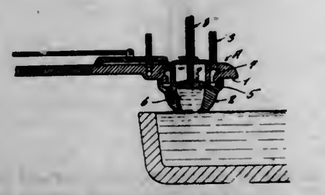
3. The herein described method of making thermometers consisting of a plurality of concentric tubes of different diameter and joined together, which consists in first taking a hollow tube, fusing one end and spreading it to form an enlargement, then blowing through the interior of the tube from the opposite end and opening the end which has been closed by the fusing and spreading operation, forming a second or outer tube of greater internal diameter than the external diameter of the first tube and with a closed contracted end, placing the first tube inside the second with the enlargement in the said contracted end, heating the said ends and uniting them and blowing through the inner tube to form a bulb below the junction of the two tubes in the end of the outer tube.

4. The herein described method of making thermometers consisting of a plurality of concentric tubes of different diameter and joined together, which consists in first taking a hollow tube, fusing one end and spreading it to form an enlargement, then blowing through the interior of the tube from the opposite end and opening the end which has been closed by the fusing and spreading operation, forming a second or outer tube of greater internal diameter than the external diameter of the first tube and with a closed contracted end thicker than its sides, placing the first tube inside the second with the enlargement in the said contracted end, heating the said ends and uniting them and blowing through the inner tube to form a bulb below the junction of the two tubes in the end of the outer tube.

6. The herein described process of making thermometers and the like, which consists in taking a tube of glass, expanding one end thereof, then placing the expanded end in the bottom of a tube with a closed end, then fusing the two ends and forming a bulb in the bottom of the second tube by blowing through the first tube.

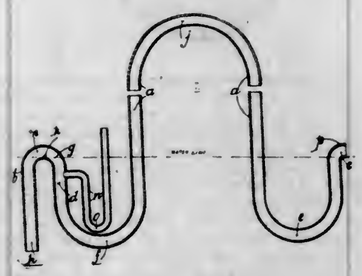
[Claim 5 not printed in the Gazette.]

1,274,577. METHOD OF MAKING GLASSWARE. THOMAS C. MOORSHEAD, Alton, Ill. Filed Feb. 5, 1917. Serial No. 146,660. (Cl. 49—77.)



The method of making glassware which consists in introducing a gaging member into a gathering vessel having an open bottom, placing the open bottom of the gathering vessel in contact with a body of molten glass, creating an air current within said gathering vessel around said gaging member whereby molten glass is drawn upwardly through the open bottom of said vessel to the bottom of said gaging member, removing said gaging member from said vessel, and subjecting the molten glass in said vessel to pressure whereby the central portion of the molten glass is expelled through the open bottom of the vessel, and thereafter forming an article of glassware from the expelled molten glass.

1,274,578. SIPHON. GEORGE ROBERT NICHOLSON, Crofton-Tees, England. Filed Mar. 8, 1917. Serial No. 153,527. (Cl. 137—106.)



1. A compound siphon comprising the combination of a main siphon having a bend always above the level of the water at the source of supply from which the water is to be drawn, a trap at the inlet of said main siphon, a trap at the outlet from said main siphon, a supplementary siphon, the inlet of said supplementary siphon being connected to the outlet of said main siphon, a trapped vent pipe opening out of the compound siphon at a point between the bend of said supplementary siphon and the outlet trap of said main siphon, said vent pipe having an orifice always open to the atmosphere and extending to a level above the level of the water at the source of supply.

2. A compound siphon comprising the combination of a main siphon having a bend always above the level of the water at the source of supply from which the water is to be drawn, a trap at the inlet of said main siphon and means formed on the trap for preventing eddying of the liquid in the main siphon, a trap at the outlet of said main siphon, a supplementary siphon, the inlet of which is connected to the outlet end of said main siphon, a trapped vent pipe opening out of the compound siphon at a point between the bend of said supplementary siphon and the outlet trap of said main siphon, said vent pipe having an orifice always open to the atmosphere and extending to a level above the level of the water at the source of supply.

3. A compound siphon comprising the combination of a main siphon having a bend always above the level of the water at the source of supply from which the water is to be drawn, a trap at the inlet of said main siphon, a hood carried by the inlet end of said main siphon, a trap at the outlet of said main siphon, a supplementary siphon at the inlet end of which is connected the outlet end of said main siphon, a trapped vent pipe opening out of the compound siphon at a point between the bend of said supplementary siphon and the outlet trap of said main siphon, said vent pipe having an orifice always open to the atmosphere and extending to a level above the level of the water at the source of supply.

1,274,579. PRESSURE-GAGE. JOHN L. NILSON and JOHN PRINCE, Chicago, Ill. Filed Jan. 29, 1917. Serial No. 145,054. (Cl. 73—109.)

1. The combination in a gage of the class described, of a nipple which extends through the body of the gage and has thereon a bearing arm which extends at right angles from the body of the nipple to which the dial and the body of the casing are attached, said nipple being arranged perpendicularly to the face or dial of said gage.

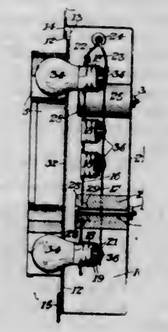
3. The combination in a gage of the class described and its spring and casing, of a nipple having hose or tube-engaging ends projecting from, respectively, the top and bottom of said casing, and an intermediate portion



which connects directly with the gage spring and supports the body of the casing and its mechanism on said nipple.

[Claim 2 not printed in the Gazette.]

1,274,580. ELECTRIC SIGN. MORTIMER NORDEN, New York, N. Y., assignor of one-half to Joseph Norden, New York, N. Y. Filed Sept. 5, 1917. Serial No. 189,895. (Cl. 40—130.)

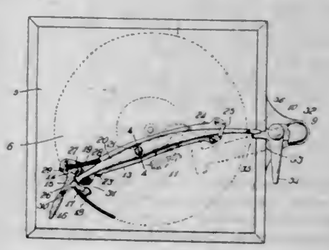


2. In an electric sign, the combination of a box open at the front and having two flat strips extending vertically at either side within said opening below the outer edge of the box formed by bending over the side walls toward each other at right angles, then inwardly, and again at right angles, a transverse strip extending across the front of the box at its top and over said vertical strip for a predetermined distance, another transverse strip extending over and above said vertical strips for a greater distance than the top transverse strip, two spaced parallel contact plates within the box, a monogram of lamp sockets supported by and between said plates, a plurality of posts of insulating material secured at one end to the back of the box and connected at their forward ends to one of said plates and passing through openings in the other plate, a plurality of substitutable pattern plates of a size to fit into the front opening of the box and rest against said vertical flat strips with their lower ends inserted between said strips and said bottom transverse strip, each of said pattern plates being perforated with one character of said monogram of sockets, and lamps attachable to said sockets through said perforations.

[Claim 1 not printed in the Gazette.]

1,274,581. BRAKE MECHANISM FOR TALKING-MACHINES. MARTIN NYSTROM, Chicago, Ill., assignor to The Brunswick-Balke-Collender Company, Chicago, Ill., a Corporation of Delaware. Filed Aug. 23, 1917. Serial No. 187,746. (Cl. 74—46.)

1. In a mechanism of the character described, the combination of a pivoted brake adapted to engage a moving part of a talking machine and having an abutment thereon, an elongated pivoted lever having a toe at one end adapted to engage said abutment, to hold said brake in inoperative position, a spring connecting said brake and lever and tending to move said brake to operative position when said toe is disengaged from said abutment, adjustable means moving with the tone arm of the talking machine and adapted to engage and actuate the other end of said lever, and a heel on said lever opposite said toe and disposed in the path of movement of said brake as the latter is moved to inoperative position to positively move said lever to engage said toe with said abutment.



2. In a mechanism of the character described, the combination of a plate, a brake lever pivoted thereon and having an operating arm, an arm carrying friction means adapted to engage a moving part of a talking machine and an abutment adjacent its pivot, an elongated lever pivoted on said plate and spaced therefrom to prevent frictional engagement therewith, a toe on one end of said lever adapted to engage said abutment, a spring connected to said brake on the side of its pivot opposite said abutment and to said lever, and adjustable means moving with the tone arm of the talking machine and adapted to engage and actuate the other end of said lever to disengage said toe from said abutment.

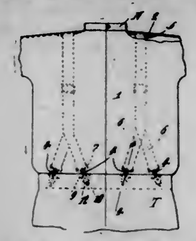
3. In a mechanism of the character described, the combination of a plate, a brake lever pivoted thereon and having an operating arm, an arm carrying friction means adapted to engage a moving part of a talking machine and an abutment adjacent its pivot, an elongated lever pivoted on said plate and spaced therefrom to prevent frictional engagement therewith, a toe on one end of said lever adapted to engage said abutment, a spring connected to said brake on the side of its pivot opposite said abutment and to said lever, adjustable means moving with the tone arm of the talking machine and adapted to engage and actuate the other end of said lever to disengage said toe from said abutment, and a heel on said lever opposite said toe and disposed in the path of movement of said brake as the latter is moved to inoperative position to positively move said lever to engage said toe with said abutment.

4. In a mechanism of the character described, the combination of a plate, a brake lever pivoted thereon and having an operating arm, an arm carrying friction means adapted to engage a moving part of a talking machine, and an abutment adjacent the pivot, a single elongated lever pivoted on said plate and spaced therefrom to prevent frictional engagement therewith, a keeper on said plate embracing said lever to limit movement thereof, a stud on said brake opposite said abutment, a corresponding stud on said lever, a spring connected to said studs, a toe on one end of said lever adapted to engage said abutment, and adjustable means moving with the tone arm of the talking machine and adapted to engage and actuate the other end of said lever to disengage said toe from said abutment.

1,274,582. COMBINED SHIRT AND TROUSERS SUPPORTER. JOHN J. OLSON, Belview, Minn. Filed Oct. 20, 1917. Serial No. 197,658. (Cl. 241—25.)

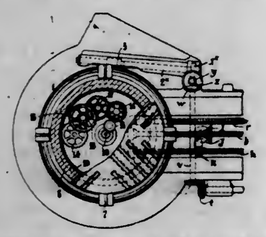
The combination with a shirt having a plurality of transversely alined, longitudinally extending openings below its waist line, of trousers supporting straps, metal loops engaged with the ends of said straps and of a

length greater than the length of the openings and positioned transversely across said openings on the inner face of the shirt when in operative position, whereby said strap ends are prevented from passing through the openings, said loops performing the double function of strap connectors and as stops to prevent the passage of the



strap ends to the outside of the shirt, a shank extending laterally from one member of each loop and then through one of the shirt openings, a bar carried by said shank and arranged parallel with said loop, and fastener carrying tabs secured to said bars.

1,274,583. GEAR-CUTTING MACHINE. CHARLES ALGERNON PARSONS and ALFRED QUINTIN CARNEGIE, Newcastle-upon-Tyne, and STANLEY SMITH COOK, Wallsend, England; said Carnegie and said Cook assignors to said Parsons. Original application filed Mar. 25, 1913, Serial No. 756,762. Divided and this application filed Mar. 2, 1916. Serial No. 81,740. (Cl. 90—4.)

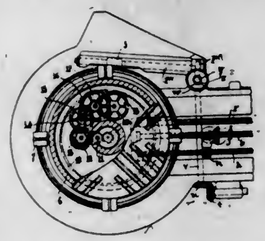


1. A helical gear cutting machine comprising in combination a primary table, a parent gear rotating said table having a driving and driven member, said driven member being attached to said primary table, a secondary table on which the work is carried mounted on said primary table, a train of gearing mounted on said primary table and caused to rotate by the motion thereof, said train of gearing being connected to said secondary table and causing said secondary table to rotate at a different rate from the primary table, means to rotate said parent gear, a hob, means to rotate said hob, means between said hob rotating means and said parent gear rotating means to preserve the correct indexing relation between the rotations of said hob and the rotations of said secondary table, means to feed said hob, and means between said hob feeding means and said parent gear rotating means to preserve correct lead relation between said hob feed and the speed of said secondary table.

[Claims 2 to 6 not printed in the Gazette.]

1,274,584. GEAR-CUTTING MACHINE. CHARLES ALGERNON PARSONS and ALFRED QUINTIN CARNEGIE, Newcastle-upon-Tyne, and STANLEY SMITH COOK, Wallsend, England; said Carnegie and said Cook assignors to said Parsons. Original application filed Mar. 25, 1913, Serial No. 756,762. Divided and this application filed Mar. 2, 1916. Serial No. 81,741. (Cl. 90—4.)

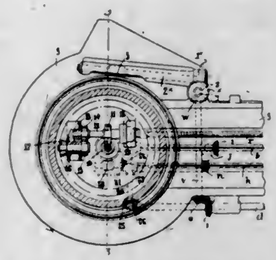
1. A gear cutting machine comprising in combination a primary table having internal teeth thereon, a parent gear rotating the same having a driving and driven member, said driven member being attached to said primary table, a secondary table mounted rotatably on said primary table, a stationary pinion coaxial with said tables, and a train of toothed wheels mounted upon said secondary table, the first of said toothed wheels engaging the stationary coaxial pinion, the last of said toothed wheels engaging the internal teeth carried by said primary table, whereby the train of gearing is caused to rotate by the motion of the primary table and to rotate the sec-



ondary table at a different rate from the primary table, a hob, means to rotate said hob, means between said hob rotating means and said index wheel rotating means to preserve correct indexing relation between the rotations of said hob and the rotations of said secondary table, means to feed said hob, means between said hob feeding means and said index wheel rotating means to preserve correct lead relation between said hob feed and the speed of said work-carrying table.

[Claims 2 to 5 not printed in the Gazette.]

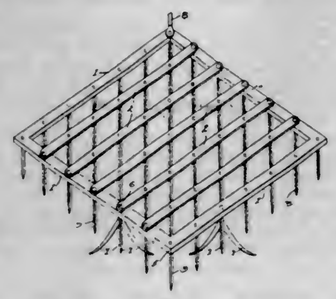
1,274,585. GEAR-CUTTING MACHINE. CHARLES ALGERNON PARSONS and ALFRED QUINTIN CARNEGIE, Newcastle-upon-Tyne, and STANLEY SMITH COOK, Wallsend, England; said Carnegie and said Cook assignors to said Parsons. Original application filed Mar. 25, 1913, Serial No. 756,762. Divided and this application filed Mar. 2, 1916. Serial No. 81,742. (Cl. 90—4.)



1. A gear cutting machine, comprising in combination a primary table, a parent gear for rotating the same comprising a driving and a driven member, said driven member being attached to said table, a secondary table on which the work is carried rotatably mounted on said primary table, a train of gearing mounted upon said primary table, the last member of said train being connected to said secondary table, a shaft co-axial with said table, gear means upon said shaft engaging the first member of said train, and means to rotate said shaft, a hob, means to rotate said hob, means between said hob rotating means and said index wheel rotating means to preserve correct indexing relation between the rotations of said hob and the rotations of said secondary table, means to feed said hob, and means between said hob feeding means and said indexing wheel rotating means to preserve correct lead relation between said hob feed and the speed of said table.

[Claims 2 to 6 not printed in the Gazette.]

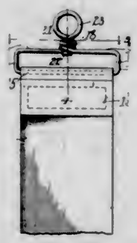
1,274,586. HARROW. CARL PETERSON, Hume, Cal. Filed Jan. 10, 1917. Serial No. 141,598. (Cl. 55—3.)



1. In a harrow, a square frame provided with teeth, a draft hook secured to one corner of said frame and anchors carried by two sides of said frame and spaced away from the frame corner diagonally opposite the draft-hook-corner.

2. In a toothed harrow, a square frame, and anchors spaced equal distances from one corner of said frame, said anchors comprising curved teeth diverging from a central stem, and said stem being carried by the harrow frame.

1,274,587. RAZOR-STROP SWIVEL. CARL E. PETERSON, Irvington, N. J. Filed Feb. 11, 1918. Serial No. 216,470. (Cl. 59—95.)



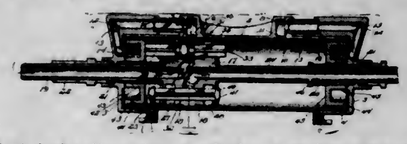
1. A swivel device for razor strops including a loop for receiving the strop and made up of a continuous piece of wire, the end portions of which are twisted together spirally, thereby forming a hollow coil, and a swivel member rotatably received in said hollow coil and having a head on its inner end and means for engaging a support on its outer end.

2. A swivel device for razor strops including a loop formed of a continuous piece of wire with its ends twisted together leaving a central aperture within the twisted portion, the ends of the wire being beveled, whereby the end of the twisted bearing portion is substantially plane, and a swivel member rotatably received in said aperture and having a head on its inner end and a closed loop on its outer end.

1,274,588. HYDRAULIC MOTOR. LIBORIO PURPURA, Wheeling, W. Va. Filed May 22, 1914. Serial No. 840,243. (Cl. 138—2.)

1. A hydraulic motor including a casing, a piston therein, valves controlling the admission of motive fluid to operate the piston, fluid operated means to actuate the valves, said piston being formed with a chamber and a series of ports to admit the fluid to said fluid operated means, one of the valves controlling said ports.

3. A hydraulic motor including a cylinder, a piston therein, motive-fluid control valves operable in the piston, and a valve operating member arranged in the cylinder and operated by the motive fluid.

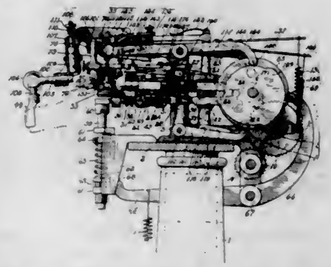


6. A hydraulic motor, a cylinder, a reciprocating piston therein, valves movable in the piston, valve operating members at each end of the cylinder, means for delivering the motive fluid interiorly of the piston, the cylinder being formed with a valve control channel at each end, one of said valves in one position operating to partly check the flow of the fluid from the interior of the piston to said control channel.

18. A hydraulic motor comprising a cylinder, a piston therein, hollow stems extending in opposite directions from the piston and movably mounted in the cylinder ends, a limiting member carried by each end of the cylinder, a valve operating member slidably mounted on each limiting member, an inlet valve member mounted in a bore in the piston, the ends of said member being of cruciform shape and adapted to be engaged by the valve operating members, the piston being formed with a chamber surrounding the valve bore, the wall of said bore formed with openings in line with the chamber, and a disk carried by the valve member to control said openings, said cylinder being formed with a control channel to establish communication between said chamber and valve-operating member in one position of the piston.

[Claims 2, 4, 5, 7 to 17, 19, and 20 not printed in the Gazette.]

1,274,589. LASTING-MACHINE. CHARLES F. PYM, Essex, Ontario, Canada, assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed June 24, 1911. Serial No. 635,183. (Cl. 12—10.)



42. In a lasting machine, the combination with lasting devices, and means for supporting a last with a shoe thereon in position for lasting, of a hold-down for holding the last upon its support, means for moving said support and hold-down relatively to clamp the last between them, a heel member adapted to be moved into engagement with the heel of the shoe on the last, and means operating in timed relation to the relative movement of said support and hold-down for moving said heel member into contact with the heel of the shoe.

108. A machine for working the toe portion of an upper into lasted position having, in combination, means to support a last with a shoe upper thereon in position for lasting, grippers arranged to engage the edge of the upper above the bottom of the supported last at opposite sides of and closely adjacent to the toe end of the last, and power operated mechanism organized automatically to effect relative movement of the grippers and shoe last to updraw the upper about the toe end of the last and to outdraw the upper transversely of the last in diverging directions inclining forwardly.

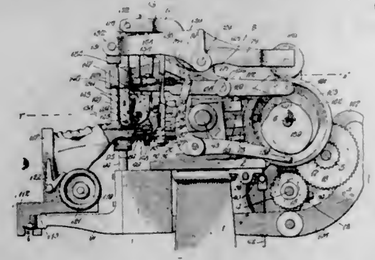
111. A machine for working the toe portion of an upper into lasted position, having in combination, means to support a last with a shoe upper thereon in position for lasting, toe embracing wipers, grippers arranged to engage the edge of the upper above the bottom of the supported last at opposite sides of and closely adjacent to the toe end of the last, means for operating the last supporting means to force the last away from the grippers to cause the grippers to updraw the upper about the toe of the last and to position the last so that the wipers may be advanced over the bottom of the last in a plane between the last bottom and the grippers, means to effect relative movement of the last and grippers to outdraw the upper obliquely forward from the sides of the last toe to spread and tension the toe end of the upper transversely of the last, and means relatively to move the wipers and last to effect the wiping of the upper over the bottom of the toe end of the last.

142. In a power toe lasting machine, shoe holding means and a pair of toe embracing wipers relatively movable to cause said wipers both to upwipe and to overwipe an upper and power operated mechanism for the shoe holding means and the wipers organized to make said wipers repeat an upwiping operation without releasing the shoe.

173. A machine of the class described having, in combination, a jack for supporting a last in inverted position with an upper thereon, grippers for seizing and stretching the upper, a holddown, and means for moving said jack and holddown in opposite directions to clamp the shoe.

[Claims 1 to 41, 43 to 107, 109, 110, 112 to 141, 143 to 172, and 174 to 181 not printed in the Gazette.]

1,274,590. LASTING-MACHINE. CHARLES F. PYM, Essex, Ontario, Canada, assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Dec. 11, 1913. Serial No. 806,126. (Cl. 12—14.)



1. In a machine of the character described, the combination with means for forming a shoe upper against the end of a last, means for clamping an end portion of a last to hold the same in position to be acted upon by said forming means, a fixed support and a rigid member adjustable upon said support longitudinally of the last into engagement with the other end of the last.

55. In a toe lasting machine, the combination with end embracing wipers, of a toe end pincer, a carrier therefor, toe corner pincers, and swinging plates supporting the corner pincers and angularly adjustable on said carrier for positioning the corner pincers relatively to the end pincer and operating said pincers together.

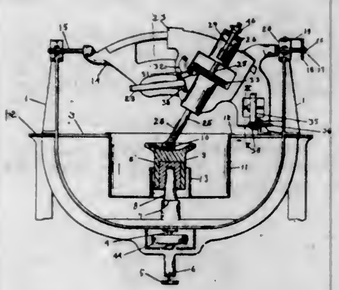
76. In a machine of the character described, the combination with automatically operating means for positioning a shoe upper upon a last, of means arranged to automatically stop said automatically operating means in a pre-determined position during its operation, and means under the control of the operator for starting the machine in a reverse direction to repeat a portion of the operation without releasing the last and shoe upper.

102. In a power toe lasting machine, shoe supporting means, toe embracing wipers, pincers, and power operating mechanism responsive to manual control to effect gripping, pulling and upwiping of the upper about the toe of the shoe, then a return movement of the pincers and wipers, and then a repetition of the gripping, pulling and upwiping movement.

106. A power operated end lasting mechanism constructed and organized automatically to effect relative movements of a last, gripper and end lasting wipers to cause said gripper to pull and tension the upper at the end of the last and to cause said wipers to upwipe the tensioned upper over the end of the last and to overwipe and lay the upper over the edge of a sole on the last, and having manually controlled means for causing said power operated mechanism to effect the upwiping operation as often as desired without releasing the last and shoe or the tension on the gripper upper.

[Claims 2 to 54, 56 to 75, 77 to 101, 103 to 105, and 107 to 112 not printed in the Gazette.]

1,274,591. GRINDER. CLARENCE E. QUIMBY, Toledo, Ohio, assignor to The Continental Lens Company, Toledo, Ohio, a Corporation of Ohio. Filed Apr. 1, 1916. Serial No. 88,252. (Cl. 51—3.)



1. A surface forming apparatus embodying a frame providing a pair of spaced bearings and an intermediate bearing, a rotatable member in said intermediate bearing, a holder carried by said member, an opposing rockable support mounted in the pair of spaced bearings, a rotatable member carried by the rockable support, a holder carried by said rockably supported rotatable member and directable toward the other holder for tool and work cooperation therebetween, and a quick throw device for shifting one holder away from the other independent of movement of the rockable support so that the rockable support may swing its holder freely past the other holder.

4. A surface forming apparatus embodying a frame providing a pair of spaced bearings and an intermediate transversely extending bearing, a rotatable member in said intermediate bearing, a holder carried by said member, an opposing rockable support mounted in the pair of bearings, means for adjusting the rockable support as to its pair of bearings, a rotatable member carried by the rockable support, a holder carried by said rockably supported rotatable member and directable toward the other holder for tool and work coöperation therebetween, and mounting means for shifting the position of the intermediate bearing mounted holder as to its rotatable member.

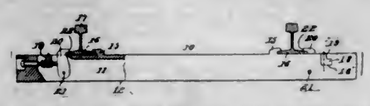
7. A surface forming apparatus embodying a frame providing a pair of uprights having alined spaced bearings, there being a transversely extending bearing intermediate said uprights, a rotatable member in said intermediate bearing, an opposing support mounted in the alined bearings, a rotatable member carried by the support, and opposing tool and work mounting means carried by said members, said alined bearings carried support having means for adjusting its rotatable member axially of the support mounting and axially of the member carried by the support.

9. A frame embodying a pair of holders for the tool and work, each susceptible to wearing off, means connected to the frame for establishing relative movement therebetween, an indicating device adjustably mounted on the frame, said device being provided with a scale and freely swingable pivoted means coacting with the scale and work for disclosing the surface position of the work, one of said holders being movable to permit the device to coact with a holder, and adjusting means for bringing one of the holders to determined working position as disclosed by the device.

10. A surface forming machine embodying a frame having a central upright holder, a pair of uprights upon opposite sides of the holder, a support swingable in said uprights across said central holder, a second holder provided with arc adjustment mounting in the support to direct this second holder at different angles toward the first holder, and driving means for rotating the holders.

[Claims 2, 3, 5, 6, 8, and 11 not printed in the Gazette.]

1,274,592. RAILWAY-TIE AND RAIL-FASTENER. GIOVANNI RACCAGNI, Bridgeport, Conn. Filed Dec. 6, 1917. Serial No. 205,781. (Cl. 238—5.)



1. A tie and rail fastener comprising an elongated body having a chamber therein with slots in the top of the body adjacent its opposite ends, transverse ribs upon the top of the body spaced inwardly of said slots a distance less than the width of the base of a railway rail, locking latches pivoted within said chamber projecting through the said slots and having inwardly projecting hooked ends arranged opposite said ribs and an inwardly moving operating means for the said latches.

2. A tie and rail fastener comprising an elongated body having a chamber therein with slots in the top of the body adjacent its opposite ends, transverse ribs upon the top of the body spaced inwardly of said slots a distance less than the width of the base of a railway rail, locking latches pivoted within said chamber projecting through the said slots, an angular bearing block fitted in a similarly angled slot transversely of said body traversing each of the said slots and an operating screw threaded through each block having a path of movement in line with the adjacently positioned latch.

3. In combination with a metallic body having a chamber therein and a longitudinal slot communicating with the said chamber and extending through the top of the body, a rail engaging rib carried by the top of the body spaced inwardly of said slot, a swinging latch carried by the body having its upper end projecting through the said slot, a bearing block traversing said slot outwardly of the latch, the said body having a closed end outwardly of said block arranged with a recess in its outer face and a passage between said recess and chamber and a screw threaded through said block and freely passing through said passage arranged with a head positioned within said recess, the said screw adapted for adjustable engagement with the said latch during the longitudinal movement of the screw when the device is assembled.

4. In combination with an enlongated body, a transverse rib mounted thereon, a railway rail removably positioned transversely of the body engaging the said rib, a locking latch for the rail pivoted to the said body, an angular bearing block fitted in a similarly angled slot transversely of the body adjacent said latch and an adjusting screw for the latch threaded through the said block.

5. A railway tie comprising a body having a slot in the top thereof, a transverse rib upon the top of the body spaced inwardly from said slot, a railway rail mounted upon the body with its base overlying said slot and in contact with said rib, a latch pivoted within said slot adapted for overlying the base of the rail when the latch is inwardly positioned and an adjusting screw for the latch arranged with an operating head adjacent the free end of the tie.

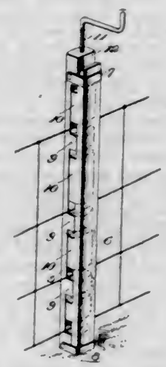
1,274,593. PUZZLE. RALPH E. REID, Brooklyn, N. Y. Filed Aug. 13, 1917. Serial No. 185,994. (Cl. 46—41.)



1. A device of the class described comprising a base portion having a semi-spherical depression therein, an upstanding wall carried by the base portion and surrounding the depression, said base portion having formed therein a circular series of semi-spherical depressions surrounding the first depression concentrically thereto, an upstanding wall carried by the base portion between the first mentioned depression and the surrounding series of depressions, said wall having a passage formed therethrough, a ball disposed within the inclosure of the first mentioned wall, said ball being of a size to seat in any one of the depressions and to extend therefrom above the upper surface of the base, and a second ball located within the inclosure of the first mentioned wall and having a semi-spherical recess in its surface of a size to receive the first mentioned ball snugly therein.

[Claim 2 not printed in the Gazette.]

1,274,594. WIRE-FENCE CLAMP. GROVER RANDOLPH, Flournoy, Cal. Filed Aug. 21, 1917. Serial No. 187,375. (Cl. 254—83.)



2. A wire clamp comprising a pair of longitudinal bars positioned in face to face relation, means for moving one of the bars lengthwise relative to the other, spaced projecting lugs on the inner faces of the bars, the lugs of one bar seating in the space between the lugs of the other bar, and the adjacent lugs of the respective bar having coacting jaw faces extending transversely of the bars, and yokes carried by the ends of one of the bars and embracing the ends of the other bar, said last mentioned bar being slidable in the yokes, and the inner face of the last mentioned bar at one end being beveled to permit swing of said bar outward of the other bar when disengaged from the yoke to the opposite end.

[Claim 1 not printed in the Gazette.]

1,274,595. SANITARY PILLOW. JACOB RANZ, St. Louis, Mo. Filed Jan. 17, 1917. Serial No. 142,797. (Cl. 5—15.)

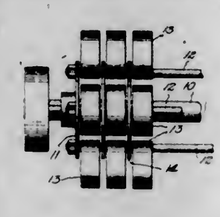
A sanitary pillow constructed of a sheet of woven spring wire, the body portion of the sheet being bent into

corrugations, the ends of the sheet being connected together forming an oval-like hollow body, the outside edges of the body being turned inwardly to provide additional



rigidity to the body, and a casing of fabric placed over the woven body the ends being laced together, substantially as specified.

1,274,596. HOG DEHAIRING, POLISHING, AND SCRAPING MACHINE. ROBERT S. REDFIELD, Chicago, Ill. Filed Mar. 12, 1917. Serial No. 154,088. (Cl. 17—11.)



1. In an apparatus for dehairing hides, a revolving carriage, dehairing means carried thereby, whereby the centrifugal force created by the revolving carriage will yieldably retain said dehairing means in contact with the hair, and means for yieldably retaining the object to be dehaired in the working field of said dehairing means.

3. In a hog dehairing machine, a carriage adapted when rotating to support the hog containing a plurality of rings, means for rotating said carriage and the subsequent expanding of said rings upon their bearings into contact with the hair, and means for conveying the hog past the working field of said dehairing means, said last mentioned means acting independently of said carriage.

6. In a hog dehairing machine, a carriage comprising a base, rods mounted thereon eccentric therewith, rings threaded upon said rods, the inside diameter of the rings being greater than the diameter of the rod upon which they are mounted, means for rotating said carriage and imparting centrifugal force to said rings and means for supporting the hog to one side of and in contact with the working field of said rings.

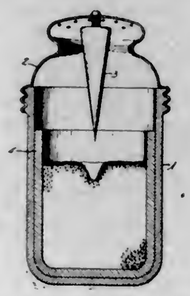
8. In a device of the class described, a plurality of revoluble yieldable means adapted to rotate, advance, and dehair the carcass, means for bringing said carcass into the working field of said first mentioned revoluble means, and means for permitting the carcass to pass from said working field.

11. In a dehairing machine, the combination of a rotatable dehairing element operable by centrifugal force to engage the object to be dehaired, and means for supporting the object to be dehaired, said last mentioned means being arranged at one side of said dehairing element and constructed to position the object to be dehaired in the path of the dehairing element.

[Claims 2, 4, 5, 7, 9, 10, and 12 to 15 not printed in the Gazette.]

1,274,597. SALT-CELLAR. PHILIP C. REILLY, Brooklyn, N. Y. Filed Mar. 14, 1918. Serial No. 222,384. (Cl. 65—45.)

A shaker having a perforated cap provided with a dependent spike; a container covered by the cap; and within the container a therein-movable cup having its open end toward the free end of the spike, the latter extending only part way to the bottom of the cup, and the exterior



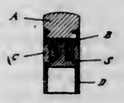
wall of the cup being in close sliding contact with the interior wall of the container.

1,274,598. CUTTER-CHUCK. MAX REISNER, Coney Island, N. Y. Filed Aug. 16, 1917. Serial No. 186,435. (Cl. 29—144.)



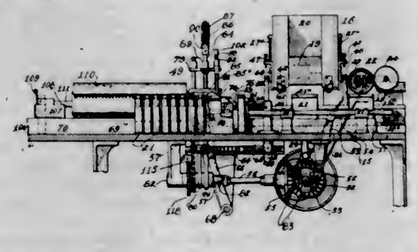
A chuck for cutting stones of the character designated, comprising a tubular jaw piece internally threaded throughout the greater portion of its length and having its outer portion formed into a plurality of jaws adapted to clamp a cutting stone, a rest pin in said tubular jaw piece for the support of the cutting stone, a rest screw abutting against the inner end of said rest pin and engaging with the internal thread in the tubular jaw piece, a handle formed with a threaded stud engaging the internal thread in the said tubular jaw piece, a sleeve overlapping the main portion of the said tubular jaw piece, and radially arranged binding screws in said sleeve, one for each of the clamping jaws of the said tubular jaw piece, for the purpose described.

1,274,599. MEANS FOR SECURING BILLIARD-CUE TIPS. WILLIAM RICHARDSON, South Benwell, Newcastle-upon-Tyne, England. Filed Nov. 5, 1917. Serial No. 200,370. (Cl. 46—9.)



In the herein described means for securing billard cue tips, the combination, with a cue tip of leather, of a split sleeve of which one end is screw-threaded and the other end formed with a V-thread adapted to engage the said tip, a ring fitting over the screw-threaded portion of the split sleeve, and an adapter having a spigot which fits into the bottom part of said ring, the said adapter having at one end screw-threads which screw into the split sleeve and screwthreads at the other end to receive the billard cue, all substantially as and for the purpose set forth and shown.

1,274,600. LABEL-AFFIXING MACHINE. HANS F. RICHTER, Winston-Salem, N. C., assignor to R. J. Reynolds Tobacco Company, Winston-Salem, N. C., a Corporation of New Jersey. Filed Aug. 7, 1915. Serial No. 44,187. (Cl. 216—35.)



1. In a machine for affixing stamps or labels to packages, in combination, supporting means for holding a plurality of labels with the outer face of the foremost label exposed, means for applying an adhesive to the wall of the package which is to receive the label, means for effecting a relative movement between said supporting means and each package to press that wall of the package against the outermost label, leaving an end portion of the label unattached to the package, means operating upon said end portion of the label which extends beyond the package operating to detach the end portion of the label from said supporting means, and means operating thereafter for affixing the said end portion of the label to a side wall of the package.

3. In a machine for affixing stamps or labels to packages, in combination, a magazine for the stamps or labels, means for advancing the packages so that a wall of each package passes adjacent to said magazine, means for affixing a label from said magazine to the adjacent wall of the package so that the end portions of the label project from the package, means for applying an adhesive to the projecting portions of the label, and means for applying and affixing said end portions of the label to the side walls of the package.

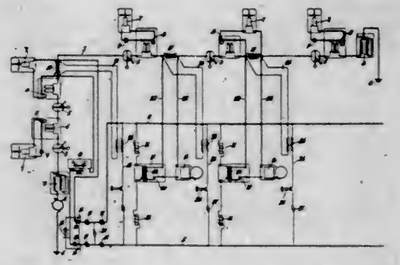
9. In a machine for affixing stamps or labels to the ends of packages, in combination, means for advancing the packages with a selected face foremost along a substantially horizontal feeding line, means for partially affixing a label to the end of each package with an unattached portion extending from the package, means for partially turning the packages during advancing movement and for causing them to move along a second feeding line extending in a direction transverse to the said first named feeding line and with a different face foremost, and means for affixing said unattached portion of the label to the package while on said second feeding line.

24. In a machine for affixing stamps or labels to packages, in combination, a magazine for holding a plurality of labels, means for positioning the package adjacent the magazine, mechanism for separating a label from the other labels of the magazine and for applying a portion of the same to a wall of the package, means for applying an adhesive to the unattached portion of the label, and means for affixing the same thereafter to another wall of the package.

55. In a machine for affixing stamps or labels to the ends of packages, in combination, label affixing mechanism, means for advancing packages along a feeding line past said mechanism, means for actuating said label affixing mechanism to affix a portion of a label to the package, and leaving a portion of the label unattached, means for advancing the packages from said label affixing mechanism along a second feeding line, means intermediate the said feed lines for partially rotating the packages before they enter the second feed line, and means on said second feeding line for completing the affixing of the label to the package.

[Claims 2, 4 to 8, 10 to 23, 25 to 54, and 56 to 77 not printed in the Gazette.]

1,274,601. SYSTEM OF DISTRIBUTION. JOHN A. RITTER, New York, N. Y., assignor to Hall Switch & Signal Co., a Corporation of Maine. Filed Oct. 23, 1915. Serial No. 57,478. (Cl. 179—2.)



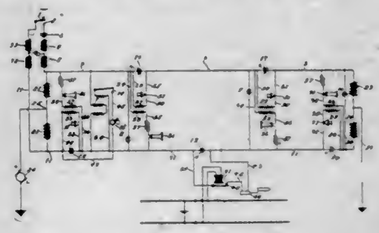
1. A circuit having in one line telegraph transmitting and receiving apparatus, a plurality of storage batteries in series with said telegraph transmitting and receiving apparatus, local circuits in series with said storage batteries adapted to be operated irrespective of the energization of the line, and a generator in series with said line.

5. In a system of the character described, the combination of a line, a plurality of storage batteries in series in said line, translating devices in said line, a source of supply for operating said translating devices and keeping said batteries charged, a local circuit supplied by each storage battery, a selector circuit, selectors in said selector circuit and contacts in each local circuit adapted to be closed by said selectors.

24. In a system of the character described, the combination of a telegraph line, a plurality of electric storage devices in series in said line, a source of supply for said line and for charging said storage devices, a second line, telephones on said second line and connections whereby the transmitter circuits of said telephones are energized by energy from said storage devices.

[Claims 2 to 4, 6 to 23, and 25 not printed in the Gazette.]

1,274,602. SYSTEM OF DISTRIBUTION. JOHN A. RITTER, New York, N. Y., assignor to Hall Switch & Signal Company, a Corporation of Maine. Filed July 6, 1916. Serial No. 107,805. (Cl. 179—8.)

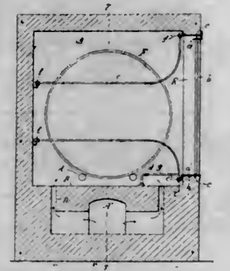


3. In a system of the character described, a multiple circuit having a plurality of electric storage devices in series with more than one branch of same, telephone transmitter circuits local to said storage devices, and means for impressing telephonic currents upon said circuit.

5. In a system of distribution as described, a multiple circuit having a plurality of electric storage devices in series with more than one branch of same, a source of current for charging said electric storage devices, selectors bridged across said circuit, and circuits local to the electrc storage devices controlled by said selectors.

[Claims 1, 2, 4, and 6 to 15 not printed in the Gazette.]

1,274,603. TIRE-HEATING FURNACE. WALTER S. ROCKWELL, New York, N. Y., assignor to W. S. Rockwell Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 25, 1918. Serial No. 224,453. (Cl. 263—5.)



1. In a tire heating furnace, the combination, with the heating-chamber having a doorway adapted to admit tires side by side, and the doorway having opposed flat sides and upper and lower faces with pivot-bearings thereon between the opposed sides, of a series of three or more vertically rotatable door-plates having their pivots intermediate their edges and fitted to the bearings on the said upper and lower faces within the flat sides of the doorway and clear of the said sides, and operating to close the doorway when turned in line with one another.

4. In a tire heating furnace, the combination, with the heating-chamber having a doorway adapted to admit tires side by side, of guide-supporting bars affixed to the front and rear sides of the heating-chamber, and provided with a series of holes or openings to admit guide-rods, and guide-rods secured detachably in the said openings.

[Claims 2, 3, 5, and 6 not printed in the Gazette.]

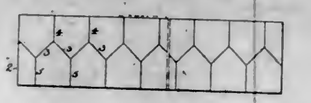
1,274,604. HAT-SECURING MEANS. CARL ROESELER, New York, N. Y. Filed Apr. 9, 1918. Serial No. 227,459. (Cl. 132—25.)



1. A hat fastener comprising a rectangular plate of flexible material, a hollow cap having an open base formed therewith, pairs of elliptical perforations formed at the opposite end of said plate, a two pronged resilient pin engageable to said elliptical perforations, an integral bar formed with the prongs of said pin, and humps formed with the arms of said pin adjacent to said bar whereby it may be locked in said perforations when in an adjusted position.

2. A hat fastener comprising a plate of flexible material having a raised cap formed at one end, a two pronged pin enterable through elliptical openings formed in the opposite end of said plate, the points of said pins being engageable below said cap, and means formed with said pin near the bar end thereof adapted to engage and become locked in said elliptical perforations whereby it is prevented from being withdrawn.

1,274,605. METHOD OF MAKING A PLURALITY OF SHINGLES FROM A SINGLE SHEET OF MATERIAL. CALVIN RUSSELL, Penn Yan, N. Y., assignor to Carrie H. Russell, Penn Yan, N. Y. Filed Jan. 3, 1914. Serial No. 810,176. (Cl. 164—28.)

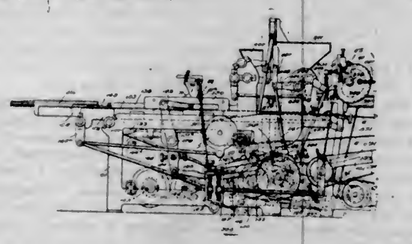


1. The herein described method of forming a plurality of shingle structures from a single sheet of material, which consists in severing the sheet in the direction of one of its dimensions by a plurality of reversing cuts formed by continuous cutting operations, the reversing cuts being oppositely directed and the reversing parts of the cuts being in the same transverse alinement, and also intermittently severing the strips formed by the reversing cuts by a series of separate parallel cuts formed in the sheet in the direction of its other dimension, said parallel cuts terminating in reversing portions of the plurality of reversing cuts.

4. The hereindescribed method of forming shingles from a single sheet of material, which consists in severing the material by continuously cutting along the length thereof in the direction of one of its dimensions by a plurality of parallel zig-zag cuts with the points of the adjacent zig-zag cuts oppositely directed in the same alinement and of different angular dimensions, and severing the sheet in the direction of the other of its dimensions by a plurality of staggered parallel cuts terminating in the points of the zig-zag cuts, whereby shingles are simultaneously formed having three distinct shapes, one double pointed with different angularities for each of its points, and the other two shingles of general rectangular form and having points at one end only but of different angularities.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,274,606. DEPOSITING-MACHINE. FERDINANDO G. SALERNO, Chicago, Ill. Filed Oct. 28, 1916. Serial No. 128,306. (Cl. 107—1.)



1. In a depositing machine having forcing mechanism and depositing nozzles, a stationary feed table, a feeding frame having an upward and downward and also a backward and forward movement, a sliding plate arranged at the front end of said feed table and arranged to be reciprocated horizontally into and out of alinement with said depositing nozzles, said feeding frame being arranged to shift rows of cakes successively from said feed table onto said plate, and a rising and falling transfer belt arranged below said plate.

13. In a depositing machine having forcing mechanism and a row of depositing nozzles, a stationary feed table, a sliding plate arranged at the front of said table and in approximately the same plane, said plate being arranged to be reciprocated forwardly and backwardly into and out of alinement with said depositing nozzles, an intermittently movable rising and falling transfer belt arranged to be fed forwardly beneath said plate, means for feeding cakes from said table onto said plate while such plate is in alinement with the depositing nozzles and for holding the cakes against backward movement as the plate is shifted backwardly, means for holding said belt in uppermost position adjacent said plate as such plate is shifted backwardly and for then lowering and next raising said belt while a succeeding row of cakes is being fed onto said plate, and means for simultaneously giving said belt its intermittent forward feeding movement.

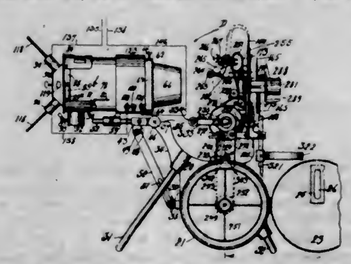
19. In a machine of the character described, a horizontally reciprocating feeding frame arranged to advance rows of cakes, and a depositing mechanism mounted upon said frame and arranged to make deposits of confection upon the cakes while moving in unison therewith.

26. In a machine of the character described, means for feeding cakes in rows, confection depositing mechanism, means for depositing nuts and the like on top of the deposits of confection, and means for sprinkling shredded material on top of the confection and nut deposits.

27. In a machine of the character described, means for feeding cakes in rows, means for depositing charges of confection on the cakes, and means arranged forwardly of the depositing means for sprinkling grated material on cakes passing through the machine.

[Claims 2 to 12, 14 to 18, 20 to 25, and 28 to 31 not printed in the Gazette.]

1,274,607. MOVING-PICTURE-PROJECTING APPARATUS. EBERHARD SCHNEIDER, New York, N. Y. Filed Feb. 19, 1914. Serial No. 819,607. (Cl. 88—17.)



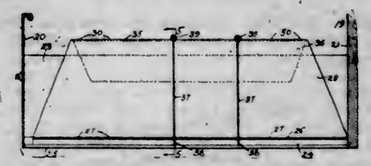
1. In an apparatus of the character described the combination of a frame, a pair of film magazines in the frame, film propelling and projecting means pivoted to the frame, a lamp pivoted to the frame, and means to locate said lamp with its longitudinal axis in a horizontal plane and also in a vertical plane.

6. In an apparatus of the character described the combination of a frame, a pair of film magazines in the frame, a hinge bracket extending from the frame, a frame plate pivoted to said hinge bracket, film propelling and projecting means connected to said frame plate, a bracket extending from the frame plate, a pin extending from the latter bracket, a link with one end pinned to said frame and the other end connected to said pin, and means to clamp the link to the latter bracket, the said link with its adjacent appurtenances enabling the frame plate to be clamped in different positions, the said frame having an abutting face to maintain the frame plate in a horizontal position.

[Claims 2 to 5 and 7 to 9 not printed in the Gazette.]

1,274,608. PARTITION CONSTRUCTION FOR FILING-CABINETS. ANDREW A. SCHRAMM, Philadelphia, Pa. Filed Apr. 14, 1917. Serial No. 161,941. (Cl. 129—16.)

1. The combination with a drawer, of auxiliary sides designed to embrace the sides of the drawer and having portions adapted to rest upon the bottom of the drawer adjacent side surfaces thereof, and other portions adapted to extend over the top edges of the drawer sides and embrace the opposite surfaces of said latter sides, said first portions of the auxiliary sides being of greater height than the sides of the drawer to provide space between the upper edges of the drawer sides and said second portions of the auxiliary sides, substantially as described.



3. The combination with a drawer, of removable auxiliary sides having ledges formed on the tops thereof and holes extending through said ledges, means on the bottom of said drawer providing slots, a detachable partition having a tongue capable of engaging any of said slots, clips secured to said partition, shanks held in frictional engagement between the clips and the partition, said shanks having outer hooked ends depending therefrom designed to enter the holes in said ledges, substantially as described.

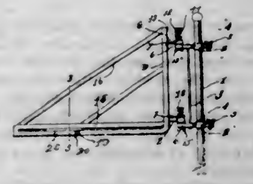
4. The combination with a drawer having permanent sides, of auxiliary sides designed to embrace the sides of the drawer and having edge portions adapted to freely rest upon the bottom of the drawer between the sides thereof, and other portions adapted to extend over the top edges of the drawer sides and freely embrace the outer surfaces of said latter sides, a partition adapted to be positioned transversely between the auxiliary sides, and means for detachably connecting the partition to the auxiliary sides, substantially as described.

7. The combination with a drawer, of auxiliary sides designed to embrace the sides of the drawer and having portions adapted to freely rest upon the bottom of the drawer between the sides thereof, and other portions adapted to extend over the top edges of the drawer sides and freely embrace the outer surfaces of said latter sides, said first portions having their ends extending at an incline, substantially as described.

10. The combination with a drawer, of a rack mounted on the bottom of the drawer and having a row of transversely extending slots, auxiliary sides designed to embrace the sides of the drawer and to rest upon the bottom of the drawer between the sides of said drawer, said auxiliary sides at their top being provided with ledges having rows of holes formed therein, a partition having a tongue designed to engage any of the slots in the rack, means on said partition designed to depend through the holes in said ledges of the auxiliary sides, said auxiliary sides having portions depending from the ledge and designed to engage the outer surfaces of the sides of the drawer, substantially as described.

[Claims 2, 5, 6, 8, and 9 not printed in the Gazette.]

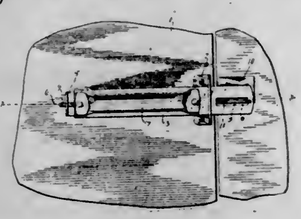
1,274,609. SICK-BED TRAY. OTTO A. SCHROEDER, Green Bay, Wis. Filed Aug. 27, 1917. Serial No. 188,452. (Cl. 45—82.)



A device of the character described comprising spaced clamping means adapted to embrace the post of a bed, a

connecting rod joining the spaced means, a vertical frame having a lower horizontal bar and an offset right-angular extension consisting of a horizontal rail spaced at one side of said bar and below the plane thereof, a shelf section slidable on said rail and disposed beneath the bar, resilient clips on the shelf section and detachably engaging the rail, and hinged clutch connections between the frame and said first named means.

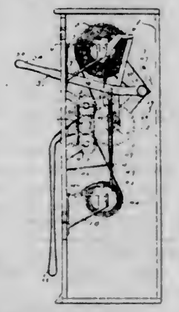
1,274,610. LATCH. WILLIAM B. SCHUELER, Sterling, Ill. Filed Aug. 23, 1917. Serial No. 187,827. (Cl. 70—42.)



1. A device of the class described, comprising a hasp provided at one of its ends with a guide member and at its opposite end with a longitudinal slot; a guide-plate for said guide-member, adapted to be secured to the face of a door; and a catch adapted for attachment to the frame of such door, having a curved edge adapted to engage one end of said slot and draw said hasp inwardly into locked position.

2. In a device of the class described, a hasp slidably mounted on a door and provided at its outer end with a catch opening; and a catch adapted for attachment to the frame of such door and having oppositely curved edges for successive engagement with said opening, to move said hasp first outwardly and then inwardly into locked position.

1,274,611. TOWEL-OPERATING MECHANISM. OSCAR SCHWIMMER, Los Angeles, Cal., assignor to J. J. Newell, Los Angeles, Cal. Filed July 31, 1916, Serial No. 112,440. Renewed June 5, 1918. Serial No. 239,881. (Cl. 45—32.)

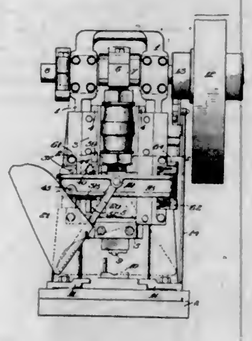


1. A towel cabinet having a plurality of slots therein, a toweling roller therein, a plurality of rollers for drawing and passing the toweling through one of said slots and returning the toweling through the other of said slots, a take-up roller for used toweling, means for operating all of said rollers simultaneously, and a yieldable rod connected with said roller operating means for regulating the travel of said take-up roller as the diameter thereof increases.

2. A towel cabinet having a plurality of slots therein, a toweling supply roller therein, a plurality of rollers for drawing and passing the toweling through one of said slots and returning the toweling through the other of said slots, geared means to operate said rollers, a lever to operate said geared means, a take-up roller for used toweling, and a yielding means connected to and operable by said lever for moving said take-up roller a distance sufficient only to take up the used portion of toweling.

3. A towel cabinet having a plurality of slots therein, a toweling supply roller therein, a plurality of rollers for drawing and passing the toweling through one of said slots and returning it through the other of said slots, geared means to operate said rollers, means connecting the top and lower roller to enable same to yield to unevenness in the toweling, a lever to operate said geared means, a take-up roller in the bottom of the cabinet, and a yielding means controllable by the operation of said lever for regulating the travel of said take-up roller as the diameter thereof increases.

1,274,612. PRESS-GUARD. GEORGE H. SEARS, Rochester, N. Y., assignor, by mesne assignments, of one-half to Charles J. Pembroke and one-half to Frank Keiper, Rochester, N. Y. Filed Aug. 23, 1916. Serial No. 116,424. (Cl. 74—105.)



1. In a safety device for punch presses, the combination with a press comprising a frame, a bed and a ram movable in the frame toward and from the bed, of a displaceable bridge mounted on the frame to span the ram, a movable guard carried by the bridge to block the interval between the bed and ram, and mechanism also carried by the bridge for operating the guard, said mechanism being adapted to coöperate with the mechanism of the press when the bridge is in place to cause an actuation of the guard with each actuation of the ram.

2. In a safety device for punch presses, the combination with a press comprising a frame, a bed, a ram movable in the frame toward and from the bed and controlling mechanism for the ram, of a displaceable bridge pivotally mounted on the frame to span the ram, a movable guard carried by the bridge to block the interval between the bed and ram and mechanism also carried by the bridge for operating the guard embodying a coupling member connecting said mechanism to the ram controlling mechanism when the bridge is in place to cause an actuation of the guard with each actuation of the ram, said coupling member being adapted to detach itself as the bridge is swung out of position on its pivot.

7. In a punch press, the combination of a press having a frame and a ram reciprocating therein, said frame having uprights, one on each side of the ram, a bridge extending between said uprights, said bridge being hinged to one of the uprights and latched to the other upright, a guard mounted on said bridge to swing in a vertical plane in front of the ram, said bridge being capable of being released on one side and swung around carrying said guard therewith away from the ram.

[Claims 3 to 6 and 8 not printed in the Gazette.]

1,274,613. RECEPTACLE. ORVILLE O. SHELINE, Chicago, Ill., assignor to Burnitol Manufacturing Company, Everett, Mass., a Corporation of Maine. Filed Dec. 8, 1917. Serial No. 206,277. (Cl. 4—39.)



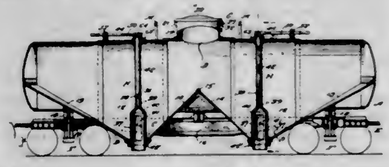
1. A receptacle one side of which comprises a central portion and two lateral portions folded inwardly along the central portion, and a flap on one of said lateral portions folded over one of the other portions and then folded under one of said portions so as to hold the portions together.

2. A receptacle comprising a wall portion, second and third wall portions connected to two sides of said first portion, the second and third portions being folded along said first portion, and a flap on said second portion folding over and then under said third portion so as to hold the three portions together.

3. A receptacle comprising a central wall portion, two lateral wall portions connected to opposite sides of the central portion and folded along the central portion, and a flap on one of the lateral portions folded over and then under the other lateral portion so as to hold the portions together.

[Claims 4 to 17 not printed in the Gazette.]

1,274,614. CAR FOR PERISHABLE GRANULAR MATERIAL. MARVIN E. SHERMAN, Oklahoma, Okla. Filed Jan. 12, 1917. Serial No. 142,011. (Cl. 105—185.)



1. In a car for perishable granular material, the combination of a water-tight body provided with a hopper at its bottom, said hopper provided with an egress opening at its lower end, an upright valve housing about said opening, provided with lateral slots and an upright way open to the exterior of said body, and a valve in said housing including a hollow body provided with slots adapted to be opened to said slots of said housing or to be concealed in the latter, and a stem extending from said valve body through the said way of said housing exteriorly of said body to facilitate operation of said valve from the exterior of the car.

2. In a car for perishable granular material, the combination of a water-tight body provided with a hopper at its bottom, said hopper provided with an egress opening at its lower end, a valve housing about said opening provided with lateral slots, a valve in said housing including a hollow body open at its bottom and provided with lateral slots adapted to be opened to the said slots of said housing or to be concealed in the latter, and a stem extending from said valve body upwardly through said body to facilitate operation of said valve from the exterior of the car, and a removable member at the bottom of said hopper providing an annular seat upon which the said valve rests.

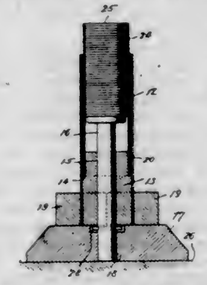
3. In a car for perishable granular material, the combination of a water-tight body provided with a hopper at its bottom, said hopper provided with an egress opening at its lower end, a valve housing about said opening provided with lateral slots, a valve in said housing including a hollow body open at its bottom and provided with lateral slots adapted to be opened to the said slots of said housing or to be concealed, in the latter, and a stem extending from said valve body upwardly through said body to facilitate operation of said valve from the exterior of the car, and a removable spout at the bottom of said hopper providing an annular seat upon which the said valve rests.

4. In a car for perishable granular material, the combination of a water-tight body provided with a hopper at its bottom, said hopper provided with an egress opening at its lower end, an upright valve housing about said opening, provided with lateral slots and an upright way open at the exterior of said body, a valve in said housing including a hollow body provided with slots adapted to be opened to said slots of said housing or to be concealed in the latter and a stem extending from said valve body through the said way of said housing to the exterior of said body, to facilitate operation of said valve from the exterior of the car, and a removable member at the bottom of said hopper provided with an annular seat upon which the said valve rests.

5. In a car for perishable granular material, the combination of a water-tight body provided with a hopper at its bottom, said hopper provided with an egress opening at its lower end, an upright valve housing about said opening, provided with lateral slots and an upright way open at the exterior of said body, a valve in said housing including a hollow body provided with slots adapted to be opened to said slots of said housing or to be concealed in the latter and a stem extending from said valve body through the said way of said housing to the exterior of said body, to facilitate operation of said valve from the exterior of the car, and a removable spout at the bottom of said hopper providing an annular seat upon which the said valve rests.

[Claims 6 to 16 not printed in the Gazette.]

1,274,615. COIN WRAPPING AND COUNTING DEVICE. ALEXANDER B. SHERWOOD, Chicago, Ill. Filed Mar. 1, 1917. Serial No. 151,755. (Cl. 133—1.)



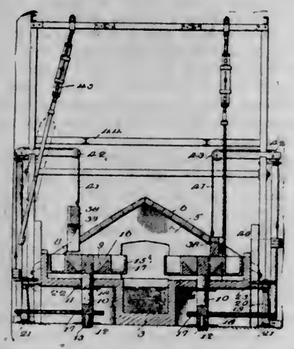
1. In combination, a coin-stacking open-ended tubular receiver for a coin-wrapping tube, an outer tube in which said receiver is removably insertible, provided with an end-head having an opening through it and a shoulder-forming circumferentially reduced inner-end portion about which said receiver seats while coins are fed into one end of a wrapper in said receiver and stacked therein, a push-rod in said opening, extending into one end of said receiver to there support a stack of coins fed into the wrapper through its opposite end, a base containing an opening and on which said outer tube seats with the push-rod extending into the opening therein, and a raised seat on said base for supporting said outer tube in elevated position with the push-rod extending in said base-opening.

3. In combination, a base containing an opening, an adjustable raised seat on the base, an outer tube provided with an end-head having an opening through it and a shoulder-forming circumferentially reduced inner-end portion, a headed push-rod in said head-opening, said outer tube being seatable at its head end on said base

and in elevated position on said raised seat with the push-rod projecting into the base-opening, a coin-stacking open-ended tubular receiver for a coin-wrapping tube, removably insertible into said outer tube to seat therein about its reduced head-portion and into which the push-rod head extends, and a tubular cap removably supported on the upper end of said outer tube and through which coins to be stacked and wrapped in said receiver are fed.

[Claim 2 not printed in the Gazette.]

1,274,616. GLASS APPARATUS. WILLIAM E. SLOPPY, Mount Jewett, Pa., assignor of forty-nine one-hundredths to Orren L. Parkhurst, Kane, Pa. Filed June 12, 1917. Serial No. 174,323. (Cl. 49—17.)



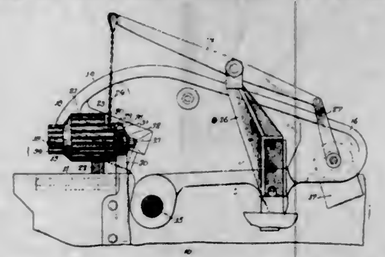
1. In apparatus of the class described, the combination with a furnace having a working chamber and a tank located therein, of a rotary support located within the chamber, pots carried thereby, a wall of the chamber having an opening opposite which the pots are to be brought through the rotation of said supports, and a member movable into position to close said opening in rear of the pot which is located at said opening and when in such position constituting also means for holding the rotary support against rotation.

2. In apparatus of the class described, the combination with a furnace having a working chamber and a tank located therein, of a rotary support located within the chamber, a wall of the chamber having an opening, pots mounted upon the sides of said support and arranged to be brought individually in juxta-position to said opening through rotation of said support, and a member adjustable with relation to said opening and arranged when in one position to straddle a portion of the support to restrain the same from rotary motion and constituting also, in said position, means for closing the opening in rear of the pot, and means for moving said member into and out of said position.

3. In apparatus of the class described, the combination with a furnace having a working chamber and a tank located therein, of a rotary support located within the chamber, and pots carried thereby in position above the surface of the molten glass in the said tank, a wall of the chamber having an opening opposite which the pots are to be brought through the rotation of said support, the said wall of the chamber having a ladle opening in juxta-position to the first-mentioned opening.

4. In apparatus of the class described, a glass furnace having a working chamber and a tank located therein, the floor of the working chamber being located above the said tank, a rotary post extending through the floor of the working chamber and provided at its upper end with a head, means upon the head for supporting pots to receive molten glass, a rotary shaft mounted exteriorly of the furnace and counter to the said post, operative gear connection between the shaft and the post below the floor of the working chamber, the said working chamber being provided in its wall with an opening opposite which the pots are to be brought through rotation of the post, and a manually operable element upon the shaft for rotating the latter, the said element being located adjacent the opening.

1,274,617. HOLDING MEANS FOR CUTTING MECHANISM. RICHARD W. SMILEY, Duluth, Minn. Filed Aug. 20, 1917. Serial No. 187,096. (Cl. 164—41.)



1. In combination, coöperating shearing members, and a cam associated therewith and controllable thereby for positively holding in a given position a piece of material as it is being acted upon by said shearing members.

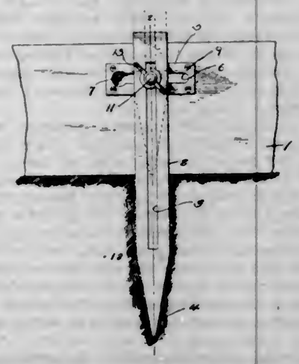
6. In combination, coöperating shearing members, and a cam controllable thereby and movable into engagement with a piece to be acted upon by said shearing members prior to shearing action.

15. In combination, a shear having stationary and movable shearing members, and a work holding member including a cam for holding materials of varying sizes adapted to engage a piece of material to be acted upon by said shearing members, said holding member and movable shearing member being movable simultaneously, said holding member engaging the work prior to shearing action of said shearing members.

21. In combination, a shear having stationary and movable shearing members, a support, a cam roller rotatably mounted on said support for holding a piece of material as it is acted upon by said shear, and a supported lever one end of which is operatively connected to said movable shearing member and the other end of which is operatively connected to the cam roller whereby the cam roller may be positively rotated in one direction to withdraw it from the piece of material being held, said cam roller being movable in another direction under the influence of its own weight to engage the piece of material to be held.

[Claims 2 to 5, 7 to 14, 16 to 20, and 22 to 24 not printed in the Gazette.]

1,274,618. COMBINED CONCRETE-FORM STAKE. CLAYTON A. SMITH, Decatur, Ill. Filed July 13, 1916. Serial No. 109,111. (Cl. 25—118.)

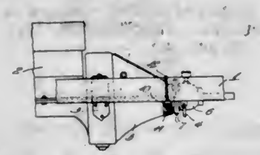


1. A combined concrete form and stake including a form board, a slotted stake, a plate mounted on the board.

a bolt slidably mounted in the plate and adapted to be engaged by the slot in the stake, a nut removably associated with the bolt for guiding the sliding movement of the stake into the ground, and for binding said form and stake together.

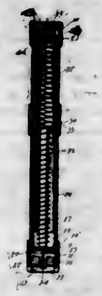
[Claims 2 to 4 not printed in the Gazette.]

1,274,619. UNIVERSAL-JOINT BRACE. EDGAR A. SMITH, Windsor, N. C. Filed Mar. 21, 1918. Serial No. 223,765. (Cl. 180—64.)



In combination with the side bars of an automobile chassis frame, and a power unit mounted between said bars, said unit having at its rear end a rearwardly tapering transmission casing provided with an inclined bottom and terminating at its contracted rear end in a flanged universal joint casing, a transverse bar having its center bowed downwardly under said contracted casing end immediately in advance of the flange of said universal joint casing, said downwardly bowed portion of the bar snugly receiving said rear end of the transmission casing to support the same and hold the entire power unit against rearward shifting, and clamps for securing the ends of said transverse bar to the side bars of the chassis frame.

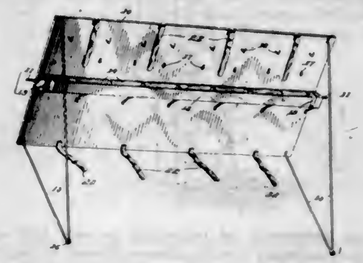
1,274,620. TIRE-GAGE. ANDREAS M. SONNICHSEN, Milwaukee, Wis., assignor to Protex Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 10, 1917. Serial No. 206,519. (Cl. 73—111.)



1. A tire gage comprising an outer slotted casing, having indicating numerals thereon, a piston head, a piston rod mounted within said casing, an open screw threaded cap adapted to fit over the bottom of said casing, a valve unseating means mounted in said cap below said piston head and having an opening communicating with the interior of said casing below the piston head, an adjusting screw fitting within the top of said casing and movable lengthwise thereof, a spring surrounding said piston rod and extending from the piston head to the base of the adjusting screw, a friction sleeve loosely mounted within said casing on the top of said piston head, said sleeve being provided with a projecting ear adapted to extend through the slot in said casing, a registering sleeve mounted on the outside of said casing and engaging said ear whereby the maximum upward movement of said frictional sleeve may be indicated on the scale on said sleeve.

2. A tire gage comprising an outer slotted casing, having indicating numerals thereon, a piston head, a piston rod mounted within said casing, an open screw threaded cap adapted to fit over the bottom of said casing, a valve unseating means mounted in said cap below said piston head and having an opening communicating with the interior of said casing below the piston head, an adjusting screw fitting within the top of said casing and movable lengthwise thereof, a spring surrounding said piston rod and extending from the piston head to the base of the adjusting screw, a friction sleeve loosely mounted within said casing on the top of said piston head, said sleeve being provided with a projecting ear adapted to extend through the slot in said casing, a registering sleeve mounted on the outside of said casing and engaging said ear whereby the maximum upward movement of said frictional sleeve may be read through said opening in the registering sleeve.

1,274,621. SOLDIER'S PROTECTOR. LOUIS FRANK SOPATA, East Hammond, Ind. Filed June 1, 1918. Serial No. 237,703. (Cl. 89—36.)



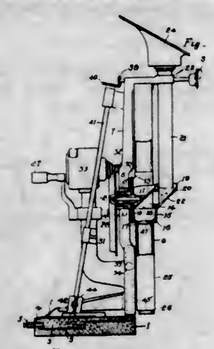
1. A protector comprising an armor plate having firing ports therethrough, wheels detachably carried at the opposite ends of said plate, foldable positioning rods pivoted to the opposite edges of the plate adjacent the opposite ends of the device adapted for seating upon the ground when the plate is in its upright operative position, an ammunition trough extending longitudinally of the plate, pull straps secured to the plate upon the same side thereof as said trough, the points of attachment adjacent the upper and lower edges of the plate, and springs carried by the front face of the plate adjacent the upper and lower edges adapted for resting upon the ground for supporting the edges of the plate when mounted for transportation upon said wheels.

2. In combination with an armor plate having firing ports therethrough, positioning rods pivotally attached to the plate and extending rearwardly thereof forming V-shaped frames when the device is set up for use, a tray secured longitudinally of the plate having transverse passages adjacent to opposite ends adapted for the reception of said rods when in their folded inoperative positions upon the said plate, ground wheels removably carried by the opposite ends of the plate, pull straps secured adjacent the upper and lower edges of the plate, and ground engaging springs carried by the front side of the plate adjacent to opposite edges adapted for engaging the ground when the plate is positioned at an inclination upon the said wheels.

1,274,622. SPEED AND DIRECTION INDICATOR FOR AIRCRAFT. ELMER A. SPERRY, Brooklyn, N. Y., assignor to The Sperry Gyroscope Company, Brooklyn, N. Y., a Corporation of New York. Filed May 12, 1914. Serial No. 838,060. (Cl. 33—46.)

1. A means for indicating both the direction and speed of moving vehicles, comprising a frame adapted to be pivotally secured to the vehicle and to pivot in a horizontal plane and a sight piece mounted for variable angular movement on said frame, an indicator and scale cooperating with said frame to show the angular position of the frame with respect to the vehicle and an indicator connected to the sight piece to show the angular velocity of said sight piece.

10. A means for indicating both the true direction and speed at which an air craft is traveling, comprising a base attached to the air craft, a frame horizontally pivoted on said base, a telescope with its eye piece adjacent the center of rotation mounted on said frame for variable angular movement in a plane at an angle to the horizontal, cross hairs mounted in said telescope whereby both the side drift and the linear speed in the direction of flight may be observed, an indicator and scale cooperating with said frame to show its angular position with respect to said craft and an indicator connected to said telescope to show its angular velocity.



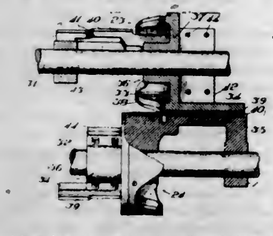
20. An instrument for indicating the side drift of an air craft, comprising a base, a frame pivoted on said base so as to rotate in a horizontal plane, a sight piece mounted for angular movement on said frame in a plane at an angle to the horizontal and means to exclude the light from the sight piece during a predetermined portion of its movement.

27. A drift machine for air craft comprising a base, direction indicating means adjustably mounted on said base adapted to be turned parallel to the true course of the air craft and angle measuring means associated with said means.

30. A speed indicator for moving vehicles comprising a frame, and object focusing means mounted for variable angular movement on said frame, whereby the said object may be kept in focus for a predetermined length of time.

[Claims 2 to 9, 11 to 19, 21 to 26, 28, and 29 not printed in the Gazette.]

1,274,623. ROOFING-MACHINE. ALEXANDER S. SPIEGEL, Chicago, Ill. Filed Feb. 12, 1917. Serial No. 148,111. (Cl. 164—70.)

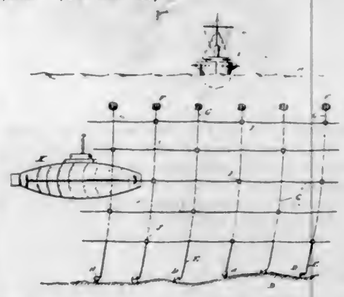


1. In combination, a pair of coöperating slitting rolls each having a circumferentially continuous cutting edge, and two coöperating sets of rotary transverse cutting blades, the blades of each set being coaxially mounted with one of the slitting rolls and extending laterally in opposite directions from the cutting edge of said roll.

4. In combination, a pair of coöperating slitting rolls 23 and 24, each having a circumferentially continuous cutting edge, lateral extensions on said rolls, shearing blades 39 and 40, on the lateral extensions, the said blades coöperating in alternation but at irregular intervals and arranged so that the rolls 23 and 24 turn through a less angular distance between the coöperation of the cutting blade of the roll 23 with the blade 40 of the roll 24 and the coöperation of the blade 39 of the roll 24 with the blade 40 of roll 23 than between the cooperation of the last mentioned blades with those first mentioned.

[Claims 2, 3, and 5 not printed in the Gazette.]

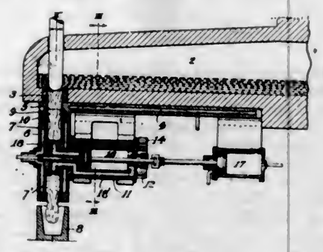
1,274,624. SUBMARINE-NET. JOSEPH A. STEINMETZ, Philadelphia, Pa. Filed Mar. 26, 1917. Serial No. 157,389. (Cl. 102—3.)



1. The combination with a net in extent many times the diameter of a submarine and having numerous large meshes through none of which a submarine can pass freely, of floats secured to the upper side of the net, weights secured to the lower side of the net and adapted to resist the action of said floats when engaged with the earth or bottom, but inadequate, when free from the bottom, for submerging the floats, and contact bombs secured to all regions of the net and adapted to explode when brought into contact with a submarine deflecting the net in any of said regions.

2. The combination with weighted nets and floats capable of supporting the same when free from the sea bottom, of similar nets at a lower level secured to the sea bottom by anchors and having buoyant net-extending members connected to their upper margins.

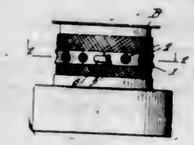
1,274,625. MECHANISM FOR DELIVERING GLASS. THOMAS STENHOUSE, Washington, Pa., assignor to Hazel-Atlas Glass Company, Wheeling, W. Va., a Corporation of West Virginia. Filed June 9, 1916. Serial No. 102,621. (Cl. 49—55.)



In apparatus for delivering glass from furnaces or the like, a furnace spout having an aperture in the underside thereof, a rotatable disk having on its periphery a plurality of containers for the glass, and a receptacle, each of said containers being adapted to be rotated into position to receive the glass from the aperture and to carry it into position to discharge into the receptacle, said disk having a rearward extension containing fluid pressure mechanism, ports connecting said fluid pressure mechanism with each of said containers, and a plunger

operating therein, adapted to evacuate the air from one of said containers and to drive air into the other of said containers.

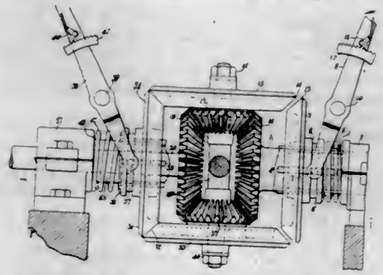
1,274,626. WICK-COUPLING. ARTHUR STEUP, Jersey City, N. J. Filed Feb. 8, 1918. Serial No. 216,037. (Cl. 67—70.)



1. The herein described coupling for a multiple piece wick, the same consisting of a strip of pliable metal having ample openings in its body and inbent teeth along its upper and lower edges, one end of said strip having an opening, and a tongue on the other end of the strip to be passed through said opening and bent back, for the purpose set forth.

[Claim 2 not printed in the Gazette.]

1,274,627. POWER-TRANSMISSION MECHANISM. WILLIAM S. THOMPSON, Leipsic, Ohio. Filed June 10, 1916. Serial No. 102,979. (Cl. 74—34.)



1. A driving shaft, friction members, a differential, a driven shaft, one friction member connected to said driving shaft, another to said differential and a third member mounted about but not connected to the driven shaft, whereby the speed of the driven shaft is reduced as compared to the speed of the driving shaft when the member about the driven shaft is in engagement with the member on the differential and the member on the driving shaft is out of engagement with the differential friction member.

2. A driving shaft, a driven shaft, a bearing for the respective shafts, friction members, a differential, one friction member connected to the differential, another member mounted on the driven shaft bearing, whereby when the friction members are in engagement, the speed of the driven shaft is reduced as compared to the speed of the driving shaft.

3. A driving shaft, a driven shaft, differential gearing, friction members traveling with said differential gearing, one friction member adapted to travel with said driving shaft, and another friction member adapted to travel on the driven shaft, means for stopping the rotation of said members and the differential gearing in their rotation around a longitudinal axis running through the driving shaft and the driven shaft, whereby the direction of motion of the driven shaft is reversed as compared with the direction of motion of the driving shaft.

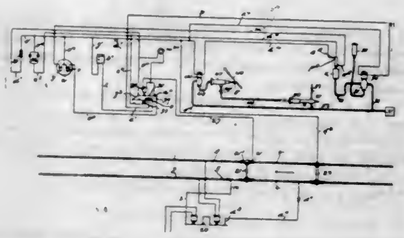
[Claims 4 to 20 not printed in the Gazette.]

1,274,628. TICKET-HOLDER. WILLIAM T. THORP, Hillsboro, Ill. Filed May 15, 1917. Serial No. 168,824. (Cl. 206—39.)

A ticket holder having means to permit the tickets to be arranged therein and held in crossed piles and with the tickets of each pile alternating with those of the other pile, said holder also having an opening in the bottom across which the lowermost ticket extends and to which the tickets of the respective piles are alternately presented, and slots arranged in a common plane and in the side of the holder at the end of the tickets, a follower bearing on the tickets and a spring to exert its tension on the follower and press the latter against the tickets.



1,274,629. AUTOMATIC SIGNAL. GUY P. THURBER, Pittsburgh, Pa., assignor, by mesne assignments, to Automatic Train Control & Signal Company, Pittsburgh, Pa., a Corporation of Delaware. Filed Aug. 23, 1907. Serial No. 389,887. (Cl. 246—27.)



1. In a system of train control, fluid operated train controlling means normally inactive, an electrically controlled valve normally energized to prevent flow of fluid to hold the train controlling means inactive and adapted when deënergized to render the train controlling means active, a timing switch normally sustained by fluid pressure to maintain the electrically controlled valve energized and adapted when pressure is released to deënergize the electrically controlled valve, a cab circuit normally closed and charged, a valve under the control of the cab circuit for normally maintaining fluid pressure in the timing switch and adapted to release the fluid pressure in the timing switch when the cab circuit is ruptured.

9. In a system of train control, an air reservoir, air actuated train controlling means normally inoperative, an electrically controlled fluid valve normally energized to prevent flow of air from the reservoir to the train controlling means and adapted when deënergized to admit air from the reservoir to the train controlling means, a timing switch normally in communication with the air reservoir and sustained by air pressure to normally maintain the electrically controlled valve energized and adapted when air pressure is released to deënergize the electrically controlled valve, a normally closed and charged cab circuit, an electrically controlled fluid valve normally maintained energized by the cab circuit to permit flow of air from the reservoir to the timing switch and adapted when the cab circuit is ruptured to release pressure in the timing switch, an audible signal connected with said last-mentioned electrically controlled fluid valve, adapted to be sounded when said valve is deënergized, and a visual signal adapted to be operated upon the rupture of the cab circuit.

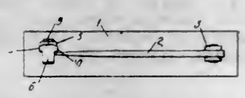
35. A system of train control comprising: an air brake system, a closed electric circuit and means therein for normally holding the air brake system inoperative, and fluid pressure means connected to the air brake system for normally holding the electric circuit complete.

40. In a system of train control, train controlling means, a normally closed electric circuit for normally

holding said train controlling means inoperative, a fluid pressure circuit breaker, a signaling device operated by fluid pressure, and a magnet valve normally energized for normally admitting fluid pressure to the circut breaker to normally hold it in its circuit closing position, and for normally excluding fluid pressure from the signaling device, and which when deënergized exhausts fluid pressure from the circuit breaker to cause it to rupture the circuit, and admits fluid pressure to the signaling device.

[Claims 2 to 8, 10 to 34, 36 to 39, and 41 to 45 not printed in the Gazette.]

1,274,630. SAFETY-CATCH. GEORGE H. TILFORD, Providence, R. I., assignor of one-half to Robert L. Moorhead, Brooklyn, N. Y. Filed Nov. 18, 1916. Serial No. 132,042. (Cl. 24—158.)

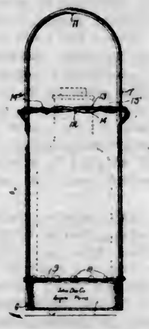


1. An article of the character described, comprising a body-portion, a catch-member and a guard-member mounted to slide longitudinally thereon and transversely to said body-portion.

5. In a bar-pin, the combination with a flat body-portion of a hinge-member, a pin-tongue, a catch-member and a guard-member mounted to slide longitudinally upon the exterior of said catch-member and provided with means for operating said guard-member.

[Claims 2 to 4 not printed in the Gazette.]

1,274,631. BOTTLE-CARRIER. CHARLES M. TILLMANN, Chicago, Ill. Filed May 3, 1917. Serial No. 166,234. (Cl. 217—122.)

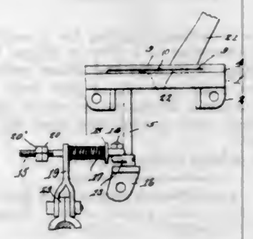


1. A carrier having a U-shaped handle and an article support at its lower end, said support comprising a base having a marginal wall for retaining the article against displacement, said wall comprising a plurality of vertically disposed pegs connected at the outer edge of said base, a plurality of reeds interwoven with and connecting the upper ends of said pegs and forming a relatively narrow edging for the upper edge of the wall, and a covering for the remainder of the wall formed from a relatively wide strip of sheet material, said strip being disposed between the base and the edging and directly below the latter and wholly against the outer faces of said pegs.

3. In a carrier for containers, the combination with a base having a marginal wall for retaining the lower end of the container against displacement, of an inverted U-shaped handle connected at its ends to said base at substantially diametrically opposite points thereof, and an annulus supported by said handle and disposed in a plane above and in spaced relation to said marginal wall for receiving the upper end of the container and retaining the latter against accidental displacement, said annulus being formed from two fiber reeds, each reed being centrally looped and interlaced one with the other, the free ends of the respective reeds being secured to the legs of the handle, said reeds between said annulus and said legs being oppositely twisted to retain said annulus in a horizontal plane.

[Claim 2 not printed in the Gazette.]

1,274,632. GEAR-SHIFTING MECHANISM. NICKOLAI TORMOEN and JOSEPH TORMOEN, Taylor, Wis. Filed June 25, 1917. Serial No. 176,859. (Cl. 74—39.)



1. The combination with an H plate and a lever associated therewith, of a plate slidable on the H plate, resilient means for sliding the latter plate to cover the legs of the H when the lever is in neutral position, and clutch lever operated means for sliding the plate to uncover the legs of the H.

[Claims 2 to 4 not printed in the Gazette.]

1,274,633. COW-TAIL HOLDER. CHARLES J. TRIBE, Ogden, Utah. Filed Dec. 4, 1917. Serial No. 205,356. (Cl. 119—105.)



A cow tail holder comprising a metallic spring strap bent centrally back upon itself, a plate secured to each free end of the strap, said plate having its longitudinal sides bent inwardly to provide flanges, said flanges being cut to provide a plurality of biting teeth, and a buckle carried by the free end of the strap for holding the teeth in engagement with each other.

1,274,634. EGG BEATER AND MIXER. PAUL TRIPKE, Jersey City, N. J. Filed Aug. 10, 1914. Serial No. 856,088. (Cl. 259—126.)

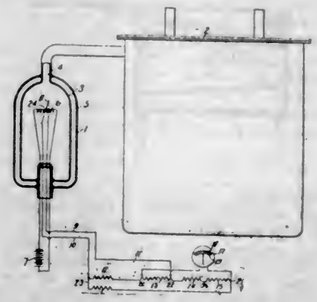
1. In a beater or mixer, the combination of a guiding and supporting bridge, means for supporting said bridge, a spiral or twisted stem, said stem pivotally supported from said bridge and extending below said supporting means, beater arms projecting laterally and upwardly from the lower extremities of said stem, a motor-beater having openings and with said openings engagement with said stem, a plurality of operating or guiding rods extending upwardly from said motor beater and passing through and above said supporting means and said bridge, an operating handle formed out of the extremities of said rods above said bridge.

2. In a beater or mixer, the combination of a guiding and supporting bridge having orifices, means for supporting said bridge a spiral or twisted stem, said stem pivotally supported from said bridge and extending below said supporting means, a motor-beater having openings and with said openings engagement with said stem, beater arms projecting from the lower extremities of said stem laterally and upwardly beyond the circumference of said motor beater, a plurality of operating or guiding rods extending upwardly from said motor-beater and passing through said orifices and above said bridge, an operating handle formed on the ends of said rods above said bridge, a container said supporting means with said bridge adapted to rest on said container, said motor-beater adapted, by being reciprocated on said stem, to simultaneously churn and rotate said stems beater arms back and forth around its circumference in said container.



3. In a beater of mixer, the combination of a guiding and supporting bridge having orifices, a cover having apertures, said cover supporting said bridge, a spiral or twisted stem pivotally suspended from said bridge and extending through one of said apertures below said cover, a handle provided with guiding rods, said rods passing through said orifices of said bridge and through said apertures of said cover, a motor beater having a plurality of openings and with one of said openings engagement with said stem below said cover, said motor beater connected to the lower ends of said rods, beater arms projecting from the lower extremities of said stem laterally and upwardly beyond the circumference of said motor beater said motor beater adapted to be reciprocated on said stem in between said arms and while being reciprocated to beat and simultaneously rotate said stems beater arms around its circumference, said bridge to steady the reciprocating movement of said rods and the rotating of said stem.

1,274,635. MEASURING DEVICE. WILLIAM TSCHUDY, Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 10, 1915. Serial No. 50,077. (Cl. 73—32.)



1. A pressure-measuring device comprising a containing vessel adapted to have internal pressures of any value, a winding within said containing vessel, a source of constant electromotive force operatively connected to the winding, thermal-responsive means associated with the winding, and means for indicating the response of the thermal-responsive means, said indication being a measure of the pressure within the vessel.

5. A temperature-measuring device comprising a vessel adapted to be subjected to the temperature to be determined, said vessel being maintained at a predetermined degree of vacuum, a winding disposed within the vessel, means for supplying current of a constant potential to the said winding, a thermo-couple having one junction connected to the winding, and a measuring instrument for determining the thermal-electromotive force of the thermo-couple, said thermal-electromotive force being a measure of the temperature to be determined.

[Claims 2 to 4 not printed in the Gazette.]

1,274,636. FACE-STAY. MARGARET R. TUCKER, Birmingham, Ala. Filed Sept. 14, 1917. Serial No. 191,418. (Cl. 128—3.)



1. In a device of the character described, an overhead band adapted to extend from the forehead backwardly over the head to the neck, a band connected to the forward end of the overhead band and adapted to pass around in front of the chin, a second band connected to the rear end of the overhead strap and adapted to pass around the neck and under the chin, and fabric passing over the chin and connecting said bands at the chin.

2. In a face stay, an overhead band adapted to extend backwardly over the head from near the forehead nearly to the back of the neck, front and rear straps having a detachable connection to opposite ends of said overhead band, a chin supporting means adapted to be supported in operating position by said front and rear straps, and a forehead band having a detachable connection to the rear portion of the overhead band.

4. In a face stay, a flexible body having a flexible stay disposed substantially horizontally to lie crosswise of each cheek, chin and cheek bands to which said cheek stays are connected, crossed stays connected at their ends to said cheek stays and arranged to pass under the chin, and means to fasten said bands in position on the head of the wearer.

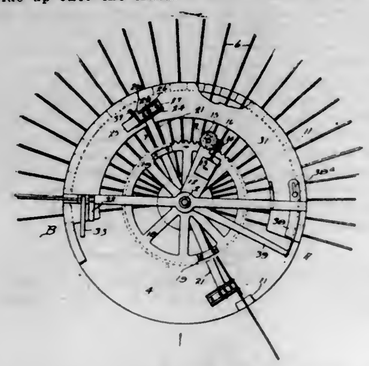
[Claims 3 and 5 to 7 not printed in the Gazette.]

1,274,637. MACHINE FOR DISPLAYING WALL-PAPER. GEORGE VANDERGROUND, Cleveland, Ohio. Filed Mar. 25, 1918. Serial No. 224,498. (Cl. 211—22.)

1. The combination with a support, and a plurality of swinging display arms thereon, of means to successively swing the arms from one position to another, comprising a wheel, means to rotate the same, an arm projecting from the wheel, a pick-up device pivoted to the arm, a tripping device carried by the arm and engaging the pick-up device, means to set the pick-up device to engage a display arm at one position, and means to actuate the tripping device to release the pick-up device at another position.

3. The combination of a supporting disk, a plurality of swinging display arms thereon, a segmental track above the arms, a pick-up device movable around upon the track and adapted to run off one end thereof and engage the foremost arms at one side of the disk and swing the same to the other side of the disk and then advance the whole body of arms a certain distance, and means to then re-

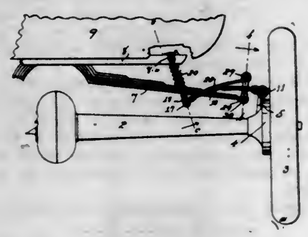
lease the pick-up device from said foremost arm, to permit it to ride up onto the track.



6. The combination of a central shaft, a support thereon, a succession of swinging display arms connected to the shaft, and resting on the support, a wheel rotatable on the shaft, means to drive the wheels, a segmental track located above the arms, and provided with a cam, an operating arm pivoted to the wheel to lift and drop and revolving therewith, and adapted to strike and be lifted by said cam, a pick-up device pivoted to the outer end of said operating arm and adapted to travel upon the track, and to drop off one end thereof and engage and swing the foremost display arm, means adjacent to other end of the track to release the pick-up device, and a projecting finger above the track adapted to engage and reset the pick-up device while the operating arm is lifted by said cam.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,274,638. SPRING SUSPENSION FOR ROAD-VEHICLES. GEORGE F. VOIGHT, San Francisco, Cal. Filed Mar. 2, 1918. Serial No. 220,029. (Cl. 267—19.)



1. The combination with the frame, principal leaf spring and axle of a road vehicle, of a pair of spring leaf levers pivotally supported at their outer ends by the axle, the levers being disposed one on each side of the principal leaf spring and free to move relatively thereto, a more or less rigid connection between the levers adjacent their outer ends, the inner ends of the levers terminating below an intermediate section of the principal leaf spring, a coil spring connection between each of said ends and a section of the vehicle vertically movable relatively to the axle, the arrangements being such that said inner ends may move downwardly relatively to said section of the vehicle against the tension of the coil springs, an intermediate section of each of the levers being bowed upwardly relatively to an approximately horizontal plane extending through the inner and the outer ends of the levers, and a connection between the levers intermediate their ends and one end of the principal leaf spring, the arrangements being such that if a proper load is applied to said end of the principal leaf spring the said intermediate section of the levers may move downwardly and in a direction toward said horizontal plane.

9. The combination with the frame, principal leaf spring and axle of a road vehicle, of a pair of leaf spring levers disposed one above the other, a connection between the inner ends of the levers, corresponding portions of the levers intermediate their ends being in bearing engagement the one against the other thereby causing the outer ends of the levers to be resiliently yieldingly maintained a distance apart by the tension of the levers, the outer ends of the lower lever being pivotally supported by the axle, the inner ends of the levers being supported by a support vertically movable relatively to the axle, and the outer end of the upper lever being adapted to support one end of the principal leaf spring.

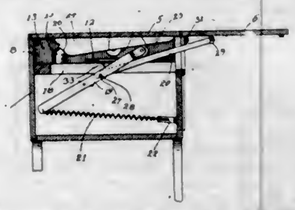
17. In a spring suspension for road vehicles, a spring hanger rigidly secured to the vehicle axle and having an upwardly extending end free, a pair of oscillatory levers laterally spaced apart, one of said levers having its outer end disposed at one side of said upwardly extending end of the spring hanger and pivotally attached thereto and its inner end disposed at one side of the vehicle's principal leaf spring, the other of said levers having its outer end disposed at the opposite side of said upwardly extending end of the spring hanger and pivotally attached thereto and its inner end disposed on the opposite side of said principal leaf spring, a connecting plate extending across from one of said levers to the other lever adjacent the outer ends of said levers, means for rigidly securing portions of said plate to the levers, the arrangements being such that said outer ends of the levers may be held apart at a definite distance by means of said plate, a resilient connection between said inner ends of the levers and a portion of the vehicle subject to rebound, and a connection between said levers intermediate their ends and one end of said principal leaf spring.

20. In a spring suspension for road vehicles, a pair of resiliently flexible leaf spring levers laterally spaced apart and disposed one on each side of the vehicle's principal leaf spring, the inner ends of said levers terminating below the body of the vehicle and adapted to be resiliently connected to a portion of the vehicle subject to rebound, the outer ends of the levers being pivotally attached to the vehicle axle, the levers being adapted to support one end of said principal leaf spring.

[Claims 2 to 8, 10 to 16, 18, 19, and 21 not printed in the Gazette.]

1,274,639. [WITHDRAWN.]

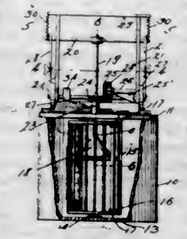
1,274,640. PHONOGRAPH. JOHN M. WADDELL, Greenfield, Ohio. Filed Feb. 14, 1918. Serial No. 217,211. (Cl. 274—2.)



2. A phonograph consisting of a cabinet having a phonograph mechanism therein, a sound amplifying horn connected with said mechanism and opening in a wall of the cabinet adjacent to the mechanism, a sound damper pivotally mounted adjacent to the upper edge of the horn opening, a lid pivotally mounted on the cabinet above the mechanism, and means detachably connecting the lid and the damper, whereby the damper will be raised when the lid is closed and lowered when the lid is raised or whereby the damper may be detached from the lid for independent operation thereof.

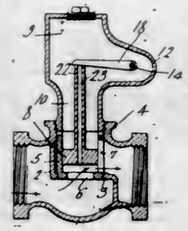
[Claim 1 not printed in the Gazette.]

1,274,641. WASHING-MACHINE. MARTIN WAGNER, Larson, N. D. Filed July 2, 1917. Serial No. 178,188. (Cl. 68—19.)



A washing machine including a tub, a rotary cage mounted in the tub, a reciprocating pounder movable within the cage, a support on the top of the tub, a transverse member slidably carried by the support and arranged to move vertically thereon, a vertical rod connected to the transverse member and to the pounder, a hollow shaft carried by the upper end of the cage and carrying a pinion, a shaft having a pinion meshing with the first pinion for rotating the cage, and means operable by the shaft for reciprocating the pounder.

1,274,642. FLUID-METER. FRANK J. WAGNER and JOHN G. CARNEY, Erie, Pa. Filed July 30, 1917. Serial No. 183,505. (Cl. 73—167.)



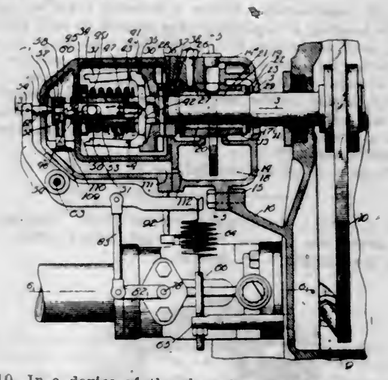
1. A fluid meter embodying a plunger, a guide for the plunger having an opening for the flow of fluid against the plunger and another opening for the passage of fluid from the guide, there being a duct to admit fluid beyond the plunger to equalize the pressures on opposed sides of the plunger, and means operated by the plunger for indicating the volume of flow.

2. A fluid meter embodying a casing for the flow of fluid therethrough, a guide within the casing, a plunger movable in the guide, the guide having an opening for the flow of fluid against the plunger and another opening for the passage of fluid when the plunger is moved, a second casing attached to the aforesaid casing in communication with the guide, the plunger having a stem projecting into the second casing, and indicating means carried by and extending through the second casing having a portion engaging said stem to be operated thereby, the plunger and stem having a bore extending therethrough for the flow of fluid.

[Claims 3 to 8 not printed in the Gazette.]

1,274,643. STEAM-TURBINE. HENRY H. WAIT, Chicago, Ill. Filed Sept. 5, 1916. Serial No. 118,319. (Cl. 264—15.)

1. In a device of the class described, a shaft having a tubular end and a slot communicating with the bore thereof, a head mounted upon the shaft, bell-crank levers fulcrumed on the head and extending through the slot into the bore of the shaft, a plunger mounted in said bore and operatively connected to the levers, a spring for resisting the movement of the plunger under the influence of the levers, a thrust ball bearing at the end of said plunger, a cup surrounding the same, a lever engaging the cup and moved thereby, a motor for operating the shaft, a valve controlling the flow of operating fluid to the motor and connections from the last said lever to the valve for operating the latter.

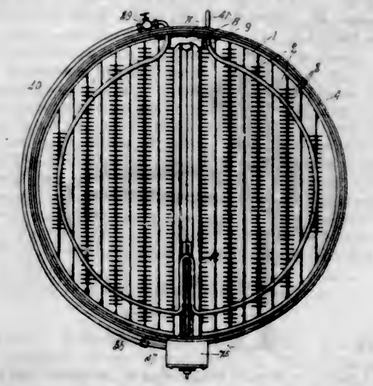


10. In a device of the class described, a rotary shaft, speed governing mechanism on said shaft comprising a plunger moving longitudinally of the shaft, means operated by the plunger for controlling the speed of rotation of the shaft, a thrust bearing intermediate said means and plunger, a bearing surrounding the shaft and in which the latter is journaled, means for supplying oil to said shaft within the bearing, an inclined oil channel formed in the face of the bearing, and a conduit communicating with said channel and with said thrust bearing to convey oil to the latter.

20. In a speed governor, a rotary shaft, a head plate mounted thereon having parallel grooves upon one face thereof, weighted bell crank levers having angular edges seated in said grooves respectively, and movable about the same as fulcra under the influence of centrifugal force, a body movable axially of the shaft, connections between said body and levers comprising flexible plates secured to the body and bearing upon the adjacent ends of the respective levers, and connections from said body for controlling the speed of movement of the shaft.

[Claims 2 to 9 and 11 to 19 not printed in the Gazette.]

1,274,644. OIL-BURNER. CLIFFORD R. WASSELL, Chicago, Ill., assignor to himself, Elmer C. Jensen, Chicago, Ill., William H. Winslow, River Forest, Ill., and Charles A. Brown, Hinsdale, Ill. Filed Oct. 2, 1915. Serial No. 53,684. (Cl. 158—30.)



1. In combination a burner block, a vaporizing tube having communication with said burner block, said tube

being closed at one end, a capillary tube having an opening through its side walls for distributing oil to be vaporized along the sides of said vaporizing tube and a burner jet connected to said vaporizing tube through said block.

11. In combination a burner, a housing, a burner block in said housing, a vaporizing tube secured to said burner block, said vaporizing tube projecting over said burner and having its inner end closed, a pilot burner mounted in said housing beneath said burner block, a vapor tube secured to said burner block and having communication with said vaporizing tube, said vapor tube normally resting in a slot in said housing, and a removable front plate for said housing.

[Claims 2 to 10 not printed in the Gazette.]

1,274,645. SOLDIER'S PROTECTOR. PANKRACY WASYLOWICH, Chelsea, Mass. Filed June 1, 1918. Serial No. 237,750. (Cl. 89—36.)

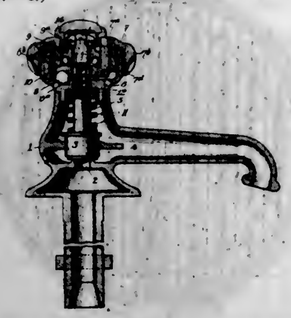


1. A portable bullet protector comprising a plate having a side slot, spaced outer leather coverings upon said plate, springs between said coverings, a plurality of layers of bullet stopping material inwardly of said layers, springs secured between said plate and layers and wood fiber bristles thickly provided upon the outer face of said outer coverings adapted for misleading the enemy as to the presence of said bullet protecting means.

3. In combination with a bullet-proof plate, reinforcing ribs upon said plate, a marginal flange upon the plate, an outer leather covering secured to said flange, a thick covering of wooden bristles projecting from said covering, the said bristles, covering and plate having an interrupted side portion adapted for receiving a fire arm during the operation of the device, a leather layer covering spaced inwardly of said outer covering, springs between said covering, hair and cotton layers positioned inwardly of said inner leather covering, a metallic mesh provided inwardly of said innermost layer, springs interposed between the said mesh and plate, and transferring means for the device attached to said plate.

[Claim 2 not printed in the Gazette.]

1,274,646. LAVATORY-FIXTURE. EARL G. WATROUS, Chicago, Ill. Filed Sept. 19, 1914. Serial No. 862,616. (Cl. 137—4.)

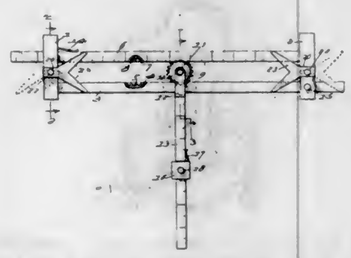


2. A lavatory fixture comprising a casing having an inlet port, a valve governing said port and having a stem, means for operating the valve comprising a bearing head mounted on the valve body and having a series of cam grooves and an upwardly extending shell, a crown handle operatively connected with the valve stem and having grooves opposed to said cam grooves and a downwardly extending shell surrounding the shell on the head, balls received by the pairs of grooves, said upwardly extending shell being adapted to receive the body portion of the handle, said body portion being recessed at its upper end to receive the upper end of the valve stem, an adjusting nut mounted upon such end of the stem and received within the recessed upper end of the handle, and ball bearings between the nut and bottom of such recess.

5. In a lavatory fixture, the combination with a valve body having an inlet port and a valve governing said port, of means for operating the valve comprising a bearing head on the valve body having a series of cam grooves, a crown handle having grooves opposed to said cam grooves, balls received in the pairs of grooves and operating connections between the handle and valve, including ball bearings, said head having a plurality of inwardly directed projections forming stops opposite each of the grooves therein, and the handle having an outwardly directed projection which is normally positioned midway between two of said stops whereby oscillation of the handle in both directions is limited.

[Claims 1, 3, 4, and 6 not printed in the Gazette.]

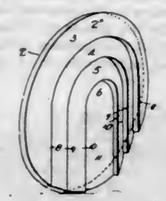
1,274,647. UNIVERSAL CENTER-FINDER. HENRY P. WHIPPLE, Rochester, N. Y. Filed Oct. 5, 1917. Serial No. 194,893. (Cl. 33—191.)



1. The combination, in a center finding implement, of a pair of blocks, a beam attached to each of the blocks and having sliding engagement with the other block, the beams being in spaced relation and having longitudinal slots formed in their facing edges, the beams further having rack teeth formed on the bottoms of said slots, a gear meshing with the teeth of both beams, disks attached to either face of the gear and having rolling contact on the facing edges of the two beams, a third beam having a slotted end which straddles one of the aforesaid beams, and a hollow shaft journaled in the center of the disks and of the gear and having rigid connection with the slotted end of the third beam, the third beam having means whereby the device as a whole may locate the center of one dimension of an object at a specified distance along the other dimension.

2. The combination, in a center finding implement, of a pair of blocks, a beam attached to each of the blocks and having sliding engagement with the other block, the beams being in spaced relation and having longitudinal slots formed on their facing edges, the beams further having rack teeth formed on the bottoms of said slots, a gear meshing with the teeth of both beams, disks attached to either face of the gear and having rolling contact on the facing edges of the two beams, and a hollow shaft journaled in the center of the disks and of the gear, whereby a marking implement may be used to locate centers indicated by the gear.

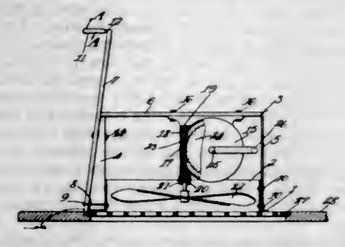
1,274,648. DIMMER-LENS. ALEXANDER CURRY WILSON, Toronto, Ontario, Canada. Filed Dec. 20, 1917. Serial No. 208,100. (Cl. 240—48.4.)



1. A headlight dimming lens comprising an upper portion convexed and stepped to form a plurality of concentric prism like portions and a lower vertical portion having vertical prism like portions forming extensions of the concentric prism like portions.

[Claim 2 not printed in the Gazette.]

1,274,649. REGISTER-FAN. GREEN B. WILSON, Nevada, Iowa. Filed Oct. 24, 1917. Serial No. 198,334. (Cl. 230—11.)



1. In a device of the class described, a base including a plate and a sleeve carried thereby; a U-shaped frame assembled with the base; a casing carried by the crown of the frame and projecting toward the sleeve; a shaft journaled in the casing; a fan mounted on the shaft and operating within the sleeve; means carried by the casing, and external thereto, for driving the shaft; and mechanism in the casing for connecting said means with the shaft.

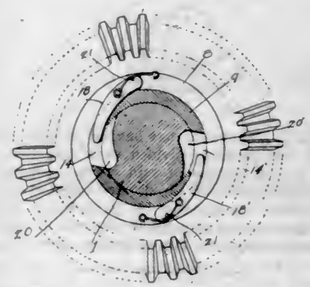
2. In a device of the class described, a frame; a fan carried thereby; frame-carried means for operating the fan; an arm constituting a part of the frame; and a support projecting laterally from the arm, the arm being inclined with respect to the base of the frame.

3. In a device of the class described, a frame; a fan carried thereby; frame-carried means for operating the fan; an arm constituting a part of the frame; a support disposed laterally with respect to the arm; and a hinge uniting the support with the arm adjacent the end of the arm, the arm being inclined with respect to the base of the frame.

1,274,650. MOTOR-VEHICLE DRIVING MECHANISM. WILLIAM WILSON, Marietta, Ga. Filed July 7, 1917. Serial No. 179,107. (Cl. 74—7.)

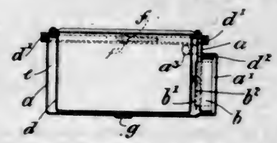
1. The combination with a driving axle and a friction sleeve having a limited movement thereon and formed with diametrically arranged openings having tangential guide faces, of a hub, and oppositely disposed pawls interposed between the hub and axle for engagement with said guide faces.

2. The combination with a two piece driving axle, a single driving wheel and an elongated hub inclosing the adjoining ends of said axle pieces, of a friction sleeve on the axle ends and having a limited movement thereon, said sleeve provided with diametrically arranged slots formed with tangential guide surfaces, and oppositely disposed pawls carried by said hub coöperating with the surfaces of the slots in the sleeve, and with sockets in the periphery of the axle ends adapted to receive said pawls.



3. The combination with a two piece driving axle and its traction wheels thereon, of an elongated hub provided with a driving gear and extending over the adjoining ends of the axle pieces, a friction sleeve on the axle ends and a pin in each piece engaging a slot in the sleeve to limit the movement of the latter, and spring pressed pawls carried by the hub and engaging sockets in the axle pieces, said sleeve having open slots therein to co-act with said pawls, as described.

1,274,651. DEVICE FOR DEVELOPING PHOTOGRAPHIC FILMS AND THE LIKE. SAMUEL WINDRIM and DAVID DONALDSON YOUNG, Belfast, Ireland. Filed Mar. 29, 1915. Serial No. 17,661. (Cl. 95—90.5.)



1. Apparatus for developing photographic film spools comprising a vertically disposed cylindrical tank having spool accommodating means in its wall, a second cylindrical tank of smaller diameter turnably supported within the outer tank, means effecting a light tight joint between the tanks while leaving them free to be turned relatively to each other, and means connected with the inner tank whereby a film strip can be unwound from a spool and drawn into the space between the tanks.

5. Apparatus for developing photographic film spools comprising a vertically disposed cylindrical tank having spool accommodating means in its wall, a second cylindrical tank of smaller diameter turnably supported within the outer tank, means effecting a light tight joint between the tanks while leaving them free to be turned relatively to each other, a turnable partial ring positioned between the tanks, means connected with the inner tank whereby a spool can be unwound and drawn into the space between the tanks and on to the turnable partial ring and a flexible band or envelop on to or into which the film strip can be drawn.

[Claims 2 to 4 not printed in the Gazette.]

1,274,652. LAUNDERABLE HAT. NELL F. WINGET, Minneapolis, Minn. Filed July 25, 1914. Serial No. 852,974. (Cl. 2—118.)

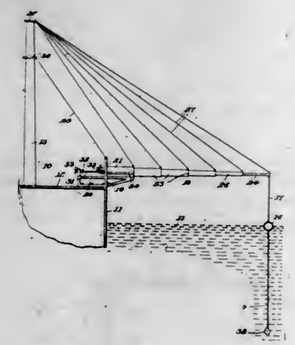
1. A pliable launderable hat having permanently united crown and rim portions, said crown portion being made

up of a plurality of connected segmental pieces, the joint between two of said segmental pieces having separable fasteners, and the said crown being divided on the line of the joint between the separable segments.



2. A pliable launderable hat having permanently united crown and rim portions divided on a line that radiates from the central portion of said crown, coöperating buttons and button holes on the divided edges of said crown, the said rim, at the edges of its divided end, having button holes adapted, to be applied over one of said buttons on said crown when the rim is turned upward.

1,274,653. SHIP-PROTECTOR. JOHN WOSINSKI, Detroit, Mich. Filed Dec. 21, 1917. Serial No. 208,219. (Cl. 114—240.)



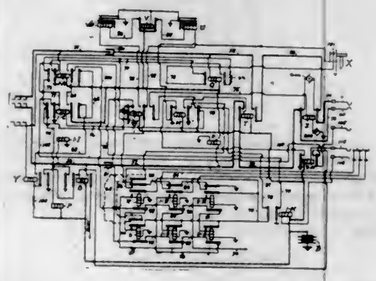
5. A support for protecting screens comprising a bracket having a platform, a tubular pole section longitudinally slidably arranged in dove-tailed connection with the said platform, side racks carried by the said pole section, pinions journaled in the said bracket in constant mesh with the said racks, operating means for the said pinions, a plurality of outwardly positionable pole sections arranged in telescoping relation with the said inner section, the outermost pole section being of solid formation and the other pole sections being tubular in form, a positioning rod axially arranged through all of the said sections excepting the outermost section and in abutting engagement with the inner end of the latter when operatively arranged and an adjustable stop carried by said bracket in contact with the inner end of said rod when the device is assembled with the pole in its open outstretched position.

[Claims 1 to 4 not printed in the Gazette.]

1,274,654. TELEPHONE-EXCHANGE SYSTEM. JOSEPH L. WRIGHT, Cleveland, Ohio, assignor to Western Electric Company, Incorporated, a Corporation of New York. Filed Oct. 6, 1914. Serial No. 865,261. (Cl. 179—18.)

1. In a telephone exchange system, the combination with an automatic switch and a control circuit therefor, of means individually associated with said switch for designating any one of a number of contacts thereon by changing the electrical condition thereof, a sender associated with said control circuit for variably actuating said designating means, and additional means for said switch for selecting the designated contact.

4. In a telephone exchange system, the combination with an automatic switch having associated contacts, of means associated with said switch for selecting said contacts, additional step-by-step means individual to said switch for rendering a particular one of said contacts selectable by said selecting means by changing the electrical condition of said particular contact, and a sender adapted to operate the same, substantially as set forth.



15. In a telephone exchange system, subscribers' stations and a central station and metallic circuits interconnecting them, automatic switching apparatus at the central station for interconnecting lines, designating devices individual to said switching apparatus, means at each subscriber's station for varying the flow of current over the two sides of his line in series to produce groups of impulses varying in number according to a predetermined code, said designating devices being responsive to said impulses in the metallic circuit to designate by changing the electrical condition thereof the switch contacts to be selected by said switching apparatus whereby said switching apparatus effects connections corresponding to the code changes produced by a calling subscriber, substantially as set forth.

18. In a telephone exchange system, the combination with an automatic switch having associated test contacts, releasing means for said switch, a control circuit extending to said automatic switch, means associated with said test contacts comprising a relay and a resistance coil having their windings in series, means exercised over said control circuit for short circuiting said resistance coil through contacts of said relay to effect the release of the automatic switch, substantially as set forth.

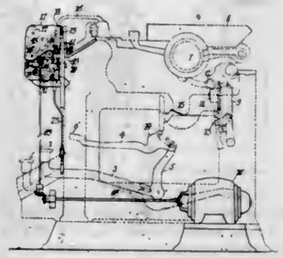
25. In a telephone exchange system, the combination with an automatic switch, a designating device individual to said switch, electromagnetic motive means for said switch, means for operating said designating device step-by-step in accordance with a predetermined code, electromagnetic means associated with said switch for disabling the motive means when it assumes a position corresponding to that of the designating device in accordance with said code, substantially as set forth.

[Claims 2, 3, 5 to 14, 16, 17, 19 to 24, and 26 to 30 not printed in the Gazette.]

1,274,655. COMBINED TYPE-WRITING AND COMPUTING MACHINE. WALTER WRIGHT, New York, N. Y., assignor to Underwood Computing Machine Company, New York, N. Y., a Corporation of New York. Filed May 4, 1912. Serial No. 695,056. (Cl. 235—59.)

1. In a computing machine, the combination with computing wheels and numeral keys, of a carry-over wheel for each computing wheel, each carry-over wheel constantly in mesh with a computing wheel, a spring detent for each computing wheel and effective on its carry-over wheel, means for driving said computing wheels by said keys, and means, brought into action by any key at the beginning of its movement, for removing the detent from the computing wheel which is to be driven, whereby the key is relieved of the burden of said detent while driving said computing wheel.

5. In a computing machine, the combination with numeral keys and a master wheel, of a traveling carriage comprising computing wheels and a carry-over mechanism, a source of power for driving said carry-over mechanism, and a fixedly journaled shaft carrying a slidable wheel driven from said source of power and arranged to travel momentarily with said carry-over mechanism to drive it.

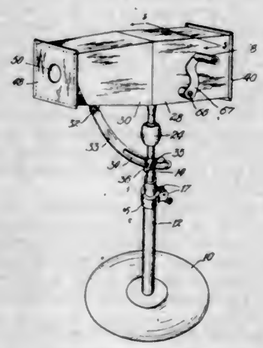


13. In a computing machine, the combination with numeral keys, computing wheels, and a traveling carriage, of a master wheel for engaging said computing wheels *seriatim* to an extent determined by said keys, carry-over wheels, a detent movable independently of its carry-over wheel for holding each computing wheel through its carry-over wheel, and a single member under the control of said keys before they turn the master wheel to lock said carriage and release the detent from the computing wheel engaged by the master wheel.

20. In a computing machine, the combination with computing wheels and a master wheel for turning them *seriatim*, of numeral keys, connections whereby said master wheel is driven by the depression of a key to an extent dependent on the key depressed, a carry-over wheel for each computing wheel, and a power-driven member adjacent only the carry-over wheels above the master wheel in denomination for turning said carry-over wheels.

[Claims 2 to 4, 6 to 12, 14 to 19, and 21 to 23 not printed in the Gazette.]

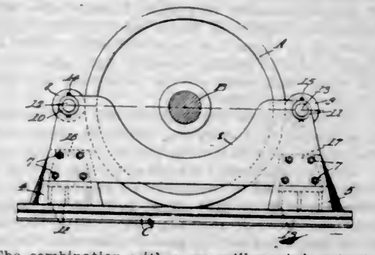
1,274,656. KALEIDOSCOPE. ALEXSANDER ZABIELSKI, Watervliet, N. Y. Filed Jan. 29, 1918. Serial No. 214,264. (Cl. 88—15.)



1. In a kaleidoscope, the combination with a rotatably mounted cone, fragments of material mounted therein, means for rotating said cone, a hollow rectangular casing in which said cone is centered, a support for said casing, means for raising and lowering said support, means for inclining said casing, and means for holding said casing in an adjusted position.

[Claims 2 and 3 not printed in the Gazette.]

1,274,657. TRACK-CLEANER FOR SAWMILL-CARRIAGES. FREDRICK M. ZORN, Little Rock, Ark. Filed Aug. 4, 1917. Serial No. 184,498. (Cl. 104—100.)

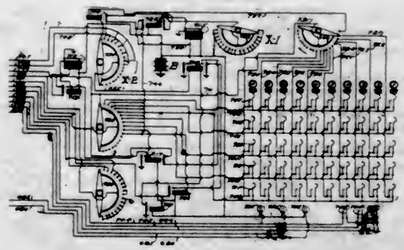


1. The combination with a sawmill-carriage wheel and the supporting rail thereof, of a frame carrying scrapers adjacent said rail, and provided with driven means contacting with the wheel, the driven means being mounted in the same horizontal plane as the axis of the wheel.

3. The combination with a sawmill-carriage wheel and the supporting rail thereof, of a frame inclosing the lower portion of said wheel, and carrying two scrapers adjacent said rail and at opposite ends of the wheel, and rollers journaled in said frame and in contact with the periphery of the wheel, the axes of said rollers and said wheel being on the same horizontal plane.

[Claim 2 not printed in the Gazette.]

1,274,658. TELEPHONE-EXCHANGE SYSTEM. WALTER P. ALBERT, Chicago, Ill., assignor, by mesne assignments, to James R. Garfield, trustee, Cleveland, Ohio. Filed Nov. 21, 1913. Serial No. 802,249. (Cl. 179—27.)



1. In a telephone exchange system, calling and called subscribers' lines, a link circuit for interconnecting said lines, an automatic ringing switch associated with the link circuit, said switch having a normal resting position, interrupting means for operating said switch constantly in recurring cycles in a single direction only when connection is established between said lines, said interrupting means also serving to cause said switch to return to its normal position, a source of ringing current associated with said switch, contacts successively and alternately actuated in each cycle of operation of said ringing switch for severing said link circuit and connecting said ringing source to the called end of said link circuit, disabling means for said ringing circuit, said disabling means being connected through contacts of said ringing switch.

5. In a telephone exchange system, the combination with an automatic step-by-step switch provided with a plurality of cams, said switch having a normal resting position, interrupting means for said switch whereby said cams operate continuously in one direction, a source of ringing current, means controlled by certain of said cams for connecting said ringing current an unlimited number of times and at certain intervals, said interrupting means also serving to cause said switch to return to its normal resting position.

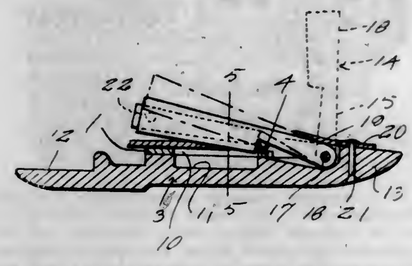
17. In a telephone exchange system, the combination of an automatic step-by-step switch provided with a set of cams, said switch having a normal resting position, interrupting means for rotating said switch whereby said cams are continuously rotated in a single direction only an unlimited number of times, said interrupting means also serving to cause said switch to return to its normal position, a set of flexible contacts associated with each set of cams, said cams serving to operate said contacts at certain stated intervals.

31. In a telephone exchange system, the combination with an automatic step-by-step switch provided with controlling cams, said switch having a normal resting position, interrupting means for rotating said switch whereby ringing current is connected an unlimited number of times by certain of said cams at intervals, additional means provided for disabling said ringing current by other of said cams at any period other than the ringing intervals, said interrupting means also serving to cause said switch to return to its normal resting position.

32. In a telephone exchange system, a calling and a called subscriber's line, a link circuit including an automatic switch for establishing a connection between such lines, an automatic ringing switch associated with such automatic switch, a driving circuit for such automatic ringing switch adapted to drive such switch from normal back to normal in constantly recurring cycles, contacts connected in the movement of such switch for alternately connecting a source of ringing current to the called line and for placing the driving circuit under the control of the calling or called subscriber, and means for maintaining the driving circuit of such ringing switch independent of the control of the subscribers after either the called subscriber has answered or the calling subscriber has abandoned the call.

[Claims 2 to 4, 6 to 16, and 18 to 30 not printed in the Gazette.]

1,274,659. MOWER-KNIFE SHARPENER. JAMES W. ALEXANDER, Old Church, Va. Filed Nov. 17, 1917. Serial No. 202,559. (Cl. 56—43.)

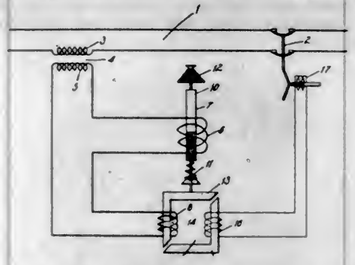


A mower knife sharpener comprising a knife guard, a sharpening element pivotally secured to the guard adjacent the outer end thereof, a leaf spring engaging the upper edge of said sharpening element for normally holding the same in engagement with the cutter blade, said leaf spring being pivotally secured to the outer end of said guard and adapted to be swung out of engagement with the sharpening element whereby the same can be swung upward and out of engagement with the rear end of said guard, when so desired.

1,274,660. RELAY. CLAXTON E. ALLEN, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 6, 1915. Serial No. 44,017. (Cl. 175—270.)

1. In an electrical circuit, the combination with a circuit interrupter and a tripping magnet therefor, of a time-element relay, and means adapted to be actuated by the time-element relay for causing the tripping magnet to be inductively supplied with current from the circuit.

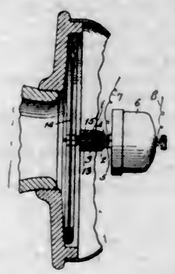
5. In an electrical circuit, the combination with a circuit interrupter and a trip coil therefor, of a time-element relay, an electro-magnetic device having a main winding connected in series with the winding of the relay and a secondary winding operatively connected to the trip coil, and means whereby the electromagnetic device



is actuated by the relay to cause currents to be induced in the secondary winding and the trip coil in accordance with the current traversing the circuit.

[Claims 2 to 4 and 6 to 8 not printed in the Gazette.]

1,274,661. MEANS FOR TRANSLATING WAVE IMPULSES. EDWARD H. AMET, Redondo Beach, Cal. Filed Feb. 28, 1917. Serial No. 151,596. (Cl. 179—100.1.)



1. Impulse transmitting means comprising two resonant members, a non-resonant coupler between and in contact with said members, one of said members being adapted to receive impulses and transmit the same to the non-resonant coupler and the other member being adapted to receive impulses from the non-resonant coupler and transmit the same, the contact faces between said members and said coupler being side by side so that all may be bisected by a single plane extending at right angles to the direction of the impulse translation.

8. An impulse translator comprising a resonant member, a second resonant member, and resilient non-resonant means compressed between and suspended by said members; opposite faces of said means extending side by side to contact with said members in parallelism with the direction of the impulse translation.

9. An impulse translator comprising two resonant members that may be oscillated in the direction of the translating movement and resilient non-resonant means connecting said members and in operative contact with said members only along one or more traces extending side by side in parallelism with the line of direction of the impulse translation.

[Claims 2 to 7 not printed in the Gazette.]

1,274,662. PLUMB-BOB. JOHN ALEXANDER ARMOUR, Baltimore, Md. Filed June 12, 1917. Serial No. 174,196. (Cl. 33—217.)

1. A plumb bob comprising a body having an opening in one end, the walls of said opening tapering toward the center of said body and terminating to define an axially disposed aperture, a pulley mounted within said body for rotation, a plug threaded within said opening, and a pair

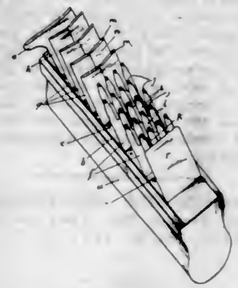
of pivoted clamping elements carried by the plug and having a tapered portion coöperating with the taper in said



opening whereby said elements are moved into gripping relation when the plug is moved within the opening.

[Claim 2 not printed in the Gazette.]

1,274,663. FRUIT AND VEGETABLE PEELING BRUSH. JOHN AUER, Portland, Oreg. Filed May 31, 1918. Serial No. 237,640. (Cl. 146—14.)



1. A peeling brush comprising a handle provided with a plurality of projecting, inclined, resilient members adapted to scarify and abrade, and arranged in series, the scarifying members having their extremities formed into fingers the tips of which are provided with scarifying projections, a resilient guard preceding the scarifying members, the abrading members having a concaved extremity which is provided with abrading projections, and a cavity scraping member located rearward of the series of abrading members, its extremity being concaved and formed with a scraping projection, and being further provided with a lateral scraping projection.

2. A peeling brush comprising a handle provided with a plurality of projecting, inclined, resilient members adapted to scarify and abrade, and arranged in series, the scarifying members being slitted longitudinally and having their extremities formed into fingers the tips of which are provided with scarifying projections, a resilient guard preceding the scarifying members, the abrading members being also slitted longitudinally and having a concaved extremity which is provided with abrading projections, and a cavity scraping member located rearward of the series of the abrading members, its extremity being concaved and formed with a scraping projection and being further provided with a lateral scraping projection.

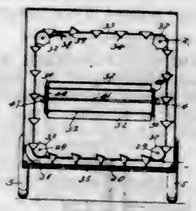
3. A peeling brush comprising a handle provided with a plurality of projecting, inclined, resilient members adapted to scarify and abrade, and arranged in series, the scarifying members being slitted longitudinally and having their extremities formed into fingers the tips of which are provided with scarifying projections, the fingers of one scarifying member being staggered with respect to those of the other, a resilient guard preceding the scarifying members, the abrading members being also slitted longitudinally and having a concaved extremity which is provided with abrading projections, and a cavity scraping member located rearward of the series of the abrading members, its extremity being concaved and formed with a scraping projection and being further provided with a lateral scraping projection.

4. A peeling brush comprising a handle provided with a plurality of projecting, inclined, resilient members adapted to scarify and abrade, and arranged in series, the scarifying members having their extremities formed into fingers the tips of which are provided with scarifying projections, and the fingers of one scarifying member being staggered with respect to those of the other.

5. A peeling brush comprising a handle provided with a plurality of projecting, inclined, resilient members adapted to scarify and abrade, and arranged in series, the scarifying members being slitted longitudinally and having their extremities formed into fingers the tips of which are provided with scarifying projections, and the fingers of one scarifying member being staggered with respect to those of the other.

[Claims 6 to 16 not printed in the Gazette.]

1,274,664. STREET-CLEANING MACHINE. WALTER F. AYARS, Bridgeton, N. J. Filed Jan. 30, 1918. Serial No. 214,503. (Cl. 15—17.)



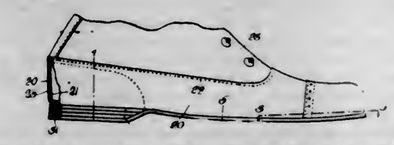
A street cleaning machine including a vehicle body, a dirt trough formed in the bottom thereof formed near the forward end, a boot mounted near one end of the trough, a dirt compartment near the rear part of the body, brushing and sweeping means for depositing dirt in the trough, elevating means operably mounted in the body and passing through the trough and embodying a plurality of shafts arranged near the upper and lower corners of the body, spaced sprocket wheels carried by the shafts, endless chains operating about the alining sprocket wheels, a series of buckets V-shaped in cross section having their ends swingingly connected to opposed links of the chains and normally positioned upright and between the chains, a trip member mounted in the body and designed to tilt each of the buckets as they successively enter the trough so as to facilitate filling of the buckets, a guide mounted near the top of the body for dumping the buckets, another trip member coöperating with the guide for assuring of the successive dumping of the buckets, and conveying means operably mounted in the body for receiving dirt from the buckets and depositing it in the dirt compartment.

1,274,665. SHOE AND METHOD OF MAKING THE SAME. WILLIAM H. BAYNARD, Braintree, Mass. Filed Nov. 13, 1915, Serial No. 61,254. Renewed Aug. 27, 1917. Serial No. 188,490. (Cl. 12—142.)

1. A shoe comprising a vamp having its edge inturned, a limp flexible sole lining, means uniting the edge of the vamp to said sole lining, an outer sole, and separate means uniting said sole to said vamp but not to said lining.

2. A shoe comprising a vamp and a vamp lining united at their lower edges and extending inwardly, a flexible textile sole lining, a line of stitches connecting the edges of the sole lining and the vamp and vamp lining, a sole, and means, separate from said line of stitches, uniting the sole to the vamp and the vamp lining.

3. A shoe comprising an upper consisting of a vamp, a vamp lining, lines of stitches uniting the upper and lower edges of said parts, a sole lining made of flexible material, and a seam connecting the edges of the sole lining to the edges of the vamp and vamp lining, in combination with an outer sole, and stitches connecting said sole to the upper.

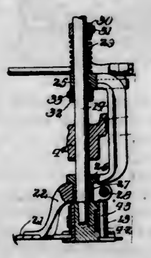


4. A shoe consisting of an upper having its lower edge inturned to lie above the sole, a limp flexible sole lining, stitches uniting the edge of the upper to the sole lining, a sole, and a line of stitches uniting the sole to the upper and located outside the first mentioned stitches and serving to define the shape of the upper at its juncture with the sole.

5. A shoe having no innersole and comprising an upper consisting of a vamp with its lower edge inturned, a flexible textile sole lining, and a seam connecting the edges of the vamp and the sole lining, in combination with an outer sole, and means, independent of the said seam, connecting said sole and the edges of the vamp.

[Claims 6 to 19 not printed in the Gazette.]

1,274,666. TRIMMING MECHANISM FOR SEWING-MACHINES. JOSEPH BERGER, Jr., Utica, N. Y., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed July 20, 1915. Serial No. 40,893. (Cl. 112—6.)



1. A trimming mechanism for sewing machines comprising a stationary member, a movable member coöperating therewith, a yoke, means for oscillating said yoke about a vertical axis, said yoke having an extended bearing projecting downwardly from its lower end, and an arm clamped to said bearing for supporting said movable trimming member.

[Claims 2 to 9 not printed in the Gazette.]

1,274,667. VEHICLE-WHEEL. GEORGE C. BERLIN and CHARLES H. SEBREE, Caldwell, Idaho. Filed May 2, 1917. Serial No. 165,938. (Cl. 21—187.)



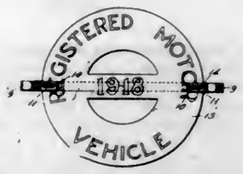
1. In a vehicle wheel, the combination of a vehicle spring; of a ring member carried by said wheel, a bearing supporting frame connected with the spring and associated with said ring member and about which said ring member is revoluble, bearings carried by said frame, certain of which are in engagement with said ring member, a frame having extensions adapted for attachment to a vehicle, the main portion of said frame being slidably engaged with the other of said bearings, and a connection between the last named frame and the vehicle spring.

2. In a vehicle wheel, the combination of a vehicle spring; of a ring member carried by said wheel, a bearing supporting frame connected with the spring and associated with said ring member and about which said ring member is revoluble, bearings carried by said frame and arranged in staggered relation, certain of said bearings engaging said ring member, and a vehicle attached frame having a portion thereof slidably engaged with the other of said bearings and connected to said vehicle spring.

3. In a vehicle wheel, the combination of a vehicle spring; of a ring member carried by said wheel, a bearing supporting frame connected with the spring and associated with said ring member and about which said ring member is revoluble, bearings carried by said frame and arranged in staggered relation, certain of said bearings engaging said ring member, a second frame adapted for connection with the vehicle and engageable with the other bearings and a connection between the last named frame and the vehicle spring.

4. The combination with a vehicle wheel, having an open center and a vehicle spring, of a ring member fitted within the open center and forming a track, a supporting frame having connection with the spring, bearings carried by said frame, certain of said bearings engaged with the track and having peripheral flanges to prevent lateral displacement of said bearings on the track, a second frame slidably engaged with the other bearings, a connection between the second frame and the spring, and means on said connection for the adjustable mounting of an axle therewith.

1,274,668. AUTOMOBILE SEAL-HOLDER. STUART BAGGS BLAIR, Marquez, Tex. Filed Apr. 17, 1918. Serial No. 229,110. (Cl. 40—11.)



1. A registry seal holder including a bar, means carried by the bar for supporting a seal, and means carried by the bar for simultaneously clamping the bar to a support and the seal to said supporting means on the bar.

3. In a seal holder, a bar, means including a sliding sleeve adjustably mounted on the bar, means including a pin carried by the sleeve for receiving a seal, and means mounted on the bar including a clip having a slot arranged to fit over the pin and engage the seal to hold it in place, the range of adjustment of the sliding sleeve being limited by the length of said slot.

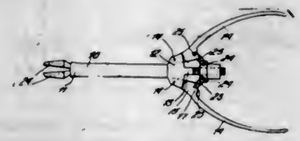
6. In a registry seal holder, a bar, fixed jaws formed on the ends of the bar, movable members forming coöperating jaws, said jaws being adapted to fit over the adjacent tubes of a radiator, means on the bar coacting with portions of the movable jaws for receiving and holding a registry seal, and an arm having a jaw on the end, fixed on the bar and providing a central support.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,274,669. SURGICAL INSTRUMENT. FRANK BOHN, Baltimore, Md. Filed Jan. 14, 1918. Serial No. 211,859. (Cl. 128—28.)

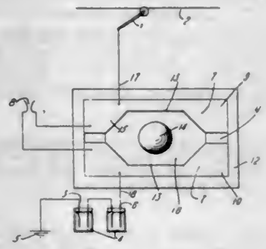
An instrument of the character described, comprising a tubular body portion provided at its forward end with a

portion which is approximately elliptical in cross-section, a rod mounted to reciprocate within the tubular body portion and adapted to be removed therefrom and having its rear end screw-threaded, resilient arms carried by the forward end of the rod and provided with oppositely arranged jaws having cutting edges, said jaws being provided upon their outer sides with cam faces to contact



with the forward portion of the tubular body portion which is approximately elliptical in cross-section, handles pivoted to the rear end of the tubular body portion, an operating element having a screw-threaded opening to receive the rear screw-threaded end of the rod, and links pivotally connecting the operating element and handles.

1,274,670. INERTIA-ACTUATED CHARGING DEVICE FOR ELECTROLYTIC LIGHTNING-ARRESTERS. QUINCY A. BRACKETT, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 6, 1913. Serial No. 788,384. (Cl. 200—27.)



4. An inertia-actuated circuit-closing device comprising two spaced electrodes the opposing surfaces of which have recesses, an interposed insulating base member having a concave surface between the recessed portions of said electrodes, a movable conducting sphere positioned upon the concave surface of said base member, said concave surface causing said sphere to be normally out of simultaneous contact with both of said electrodes and to connect the said electrodes to each other when the circuit closer is subjected to periods of acceleration and deceleration.

[Claims 1 to 3 and 5 to 9 not printed in the Gazette.]

1,274,671. BUCKLE. CHARLES E. BRADSHAW, Waterbury, Conn., assignor to Robert N. Bassett Company, Incorporated, Shelton, Conn., a Corporation of Connecticut. Filed Dec. 23, 1916. Serial No. 138,544. (Cl. 24—191.)

1. A buckle comprising two articulated members and a bearing carried by one of said members having its side provided with an opening from end to end, the other member having a pintle bar journaled in said bearing and a flattened portion to one side of and beyond one end of said pintle bar, the direction of the plane of the said flattened portion being such that the pintle bar can slide into said bearing only when the buckle is not strung with webbing.

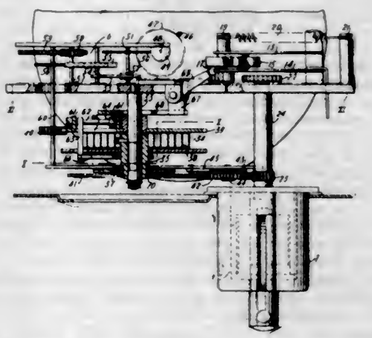
3. A buckle for webbing of the kind which comprises front and back members which may be opened and closed, characterized by the fact that the said front and back members may be disassembled by a lateral movement



relative to each other when the buckle is closed and not strung with webbing.

[Claim 2 not printed in the Gazette.]

1,274,672. PREPAYMENT WATT-HOUR METER. WILLIAM M. BRADSHAW and WALTER G. MYLIUS, Wilkinsburg, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 25, 1914. Serial No. 873,924. (Cl. 235—132.)



1. A meter comprising a rotatable armature, a main spring adapted to be wound from one end, means controlled by the rotation of the aramture for permitting the spring to unwind continuously from the other end, a switch, and means actuated by both ends of the spring for tripping the switch.

2. A meter comprising a rotatable armature, a main spring adapted to be wound from one end, means controlled by the rotation of the armature for permitting the spring to unwind continuously from the other end, a switch biased toward its open position, means for holding the switch in its closed position, and means actuated by the coöperation of both ends of the spring for actuating the switch-holding means to trip the switch.

3. In a prepayment watthour meter, the combination with a main shaft and a main spring, of a segmental gear wheel mounted on the main shaft, a pivotally mounted member having a contact member and a segmental pinion mounted thereon, said pinion being adapted to engage the segmental gear wheel, means for biasing the pivotally mounted member on each side of its dead-center position, means for holding the pivotally mounted member in a predetermined position, and means controlled by the relative position of the ends of the main spring for controlling the said holding means.

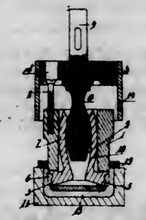
4. In a prepayment meter, the combination with a coin-controlled shaft, of a segmental gear wheel mounted on the shaft, a pivotally-mounted member having a contact member and a segmental pinion mounted thereon, said pinion being adapted to engage said gear wheel when the

shaft is turned under predetermined conditions, means for actuating the pivotally mounted member independently of the shaft after the shaft is turned a predetermined distance, and means for retaining the pivotally mounted member in a predetermined position.

5. In a meter, the combination with a rotatable member, of a switch, a main spring that is wound from one end, an escapement mechanism that is operated by the said rotatable member for permitting the unwinding of the main spring from its other end, and means controlled by the relative positions of the two ends of the said main spring for tripping the said switch under predetermined conditions.

[Claims 6 to 17 not printed in the Gazette.]

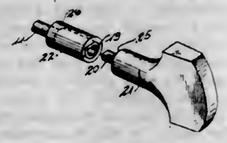
1,274,673. GLASS-MOLDING PLUNGER. ARTHUR BRANCART, Fauquez-by-Virginal, Belgium. Filed Apr. 7, 1917. Serial No. 160,560. (Cl. 49—76.)



1. In a device for molding hollow glass articles having inner projections, a mold, a punch, curved portions contained in said punch and adapted to roll over the inner surface thereof, said curved portions being formed at their lower extremities with hollow recesses corresponding in shape to the projections to be molded, and a rod cooperating with said portions to cause the same to roll over the inner surface of the punch.

2. In a device for molding hollow glass articles having inner projections, a mold, a punch, curved portions contained in said punch and adapted to roll over the inner surface thereof, said curved portions being formed at their lower extremities with hollow recesses corresponding in shape to the projections to be molded, and a rod formed with cam-shaped surfaces cooperating with said portions to cause the same to roll over the inner surface of the punch.

1,274,674. ELECTRIC SWITCH. CHARLES W. BROCKETT, Brooklyn, N. Y., assignor to W. R. Ostrander & Company, New York, N. Y., a Corporation of New York. Filed Oct. 31, 1917. Serial No. 199,418. (Cl. 173—346.)

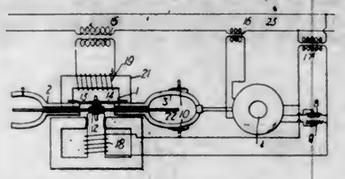


1. In combination, a key switch having an operating spindle provided with an angular-sided socket in the end thereof, an operating key having an angular-sided stem frictionally engaged in said socket, and an insulating covering over said joint between the spindle and detachable key.

[Claims 2 to 4 not printed in the Gazette.]

1,274,675. ELECTRICAL MEASURING INSTRUMENT. HAROLD W. BROWN, Ithaca, N. Y., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 19, 1913. Serial No. 807,707. (Cl. 171—34.)

1. In an electrical measuring instrument, the combination with a means of measuring energy, of a phase-responsive means actuated in accordance with the phase relation of the current and voltage of the energy to be measured, and means actuated by said phase-responsive means for controlling the speed of said energy-measuring means.



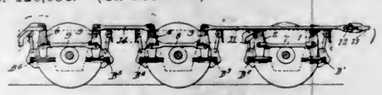
2. In a volt-ampere hour measuring instrument, the combination with a watt-hour meter, of a power-factor meter, and means actuated by said power-factor meter for controlling the speed of said watt-hour meter.

3. In an electrical measuring instrument, the combination with a watt-hour meter, of means for determining the phase relation of the current and voltage in a circuit, and damping magnets for said watt-hour meter, the position of said damping magnets being governed by said phase-determining means.

7. In a volt-ampere hour meter, the combination with a power-measuring instrument, two damping magnets for said instrument, means for so connecting said damping-magnets that the rotation of the armature of said power-measuring instrument does not offset the position of said magnets, and a power-factor meter for controlling the position of said damping magnets with respect to the armature of said power-measuring instrument.

[Claims 4 to 6 and 8 to 10 not printed in the Gazette.]

1,274,676. CLASP-BRAKE DESIGN FOR SIX-WHEELED TRUCKS. THOMAS L. BURTON, St. Louis, Mo., assignor to The American Brake Company, St. Louis, Mo., a Corporation of Missouri. Filed Sept. 14, 1916. Serial No. 120,054. (Cl. 188—24.)



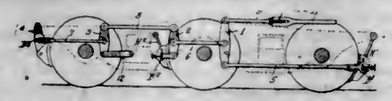
1. In a brake rigging for six-wheeled trucks, the combination with brake beams applied to both sides of each pair of wheels, of truck levers, one being pivotally connected to each brake beam, the truck levers for one pair of wheels being laterally inclined in the opposite direction from the other truck levers, a pull rod connected to the live truck lever of one pair, another pull rod connected to a truck lever of another pair, a cross equalizer connecting said pull rods at one end of the truck, and rods connecting the levers of each pair.

3. In a brake rigging for six-wheeled trucks, the combination with brake beams applied to both sides of each pair of wheels, of truck levers, one being pivotally attached at its lower end to each brake beam, the pair of truck levers for the first pair being inclined laterally toward one side and the levers of the other pairs being inclined toward the other side, rods connecting the levers of each pair, a rod connecting the upper ends of one lever of the middle pair and one lever of the end pair, a pull rod connected to the upper end of the live lever of the first pair, and another pull rod connected to the upper end of a lever of the middle pair, said pull rods extending in the same direction toward one end of the truck.

[Claim 2 not printed in the Gazette.]

1,274,677. BRAKE-RIGGING FOR SIX-WHEELED TRUCKS. THOMAS L. BURTON, St. Louis, Mo., assignor to The American Brake Company, St. Louis, Mo., a Corporation of Missouri. Filed Sept. 14, 1916. Serial No. 120,056. (Cl. 188—24.)

1. In a brake rigging for six wheeled trucks having a single brake beam for each pair of wheels, the combination of an intermediate live truck lever having a rod connection to one end brake beam, another live truck lever pivotally connected to the middle brake beam, a dead truck lever having a rod connection to the other end brake beam, and rods connecting said levers.

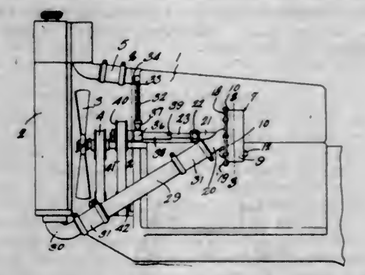


3. In a brake rigging for six wheeled trucks having a single brake beam for each pair of wheels, the combination of a double set of truck levers and rods, one set at each side of the truck, comprising an intermediate live truck lever having a rod connection at its lower end to one of the end brake beams, another truck lever pivotally connected at its lower end to the middle brake beam, a dead truck lever having an intermediate rod connection to the other end brake beam, and a fulcrum at its lower end attached to the truck, a rod connecting the live levers, and another rod connecting the upper ends of the second live lever and the dead lever.

5. In a brake rigging for six wheeled trucks, the combination of a brake beam for each pair of wheels, hanger levers connected at an intermediate point to the opposite ends of one of the end brake beams and carrying brake shoes at their lower ends, a double set of truck levers, one at each side of the truck and comprising intermediate live truck levers having rod connections at their lower ends to one of the end brake beams, another pair of live truck levers pivotally connected at their lower ends to the middle brake beam, dead truck levers having intermediate rod connections to the other end brake beam, and a fulcrum at the lower end attached to the truck, a rod connecting the live levers, and another rod connecting the upper ends of the second live lever and the dead lever.

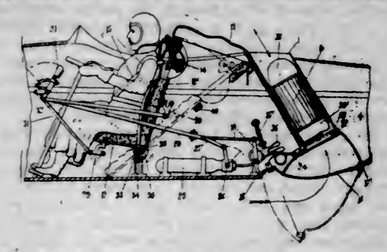
[Claims 2 and 4 not printed in the Gazette.]

1,274,678. WATER CIRCULATING AND COOLING PUMP. JOSEPH C. BUTLER, Pomona, Cal. Filed Jan. 29, 1917. Serial No. 145,237. (Cl. 123—175.)



An internal combustion engine including a shaft, and a cylinder having a water jacket port; a pump casing having a short straight neck secured directly to the cylinder and discharging into the port, the casing being provided on its forward side with an inlet; a rotary member mounted in the casing and having blades operating in a plane at right angles to the engine shaft and parallel to the axis of the neck, the rotary member being located opposite to the port whereby the rotary member will force the water directly in a lateral direction tangentially through the neck and in a straight line into the port; a second shaft constituting a part of the rotary member and journaled in the casing, the second shaft being disposed parallel to the engine shaft; means for connecting the second shaft with the engine shaft; a radiator; a connection between the cylinder jacket and the radiator; and a conduit leading from the inlet to the radiator.

1,274,679. PARACHUTE-LAUNCHING DEVICE. EVERARD RICHARD CALTHROP, London, England. Filed Sept. 13, 1917. Serial No. 191,288. (Cl. 244—21.)

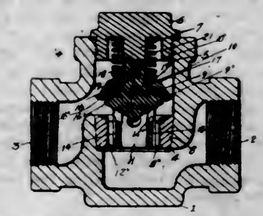


1. In a parachute launching device the combination with a container on the aircraft, of a parachute body and its associated parts, means for attaching the parachute to the airman or aviator and means whereby, without the employment of an injection device, the body of air resisting the aircraft in its flight effects or assists the ejection of the said parachute body and its associated parts nested in said container and the detachment or withdrawal of the aviator from the aircraft.

6. In a parachute launching device, the combination with the aircraft, of a container, a hinged air collecting and conducting device on said container, a parachute body and its associated parts nested in the container, means for attaching the parachute to the aviator, a two part seat, means for attaching the aviator to the said seat, a compressed air reservoir, a tubular connection between the reservoir and the container, an operating handle or lever and connections from said lever to the hinged air collecting and conducting device, to the compressed air reservoir, and to each part of the seat so as to simultaneously operate all the respective mechanisms or devices and effect the ejection of the parachute and the detachment and withdrawal of the aviator from the aircraft.

[Claims 2 to 5 not printed in the Gazette.]

1,274,680. HIGH-PRESSURE VALVE. ABRAHAM LINCOLN CALVERT, Welland, Ontario, Canada. Filed Dec. 17, 1917. Serial No. 207,606. (Cl. 137—32.)



1. In a high pressure valve, the combination with the valve casing having a valve seat, of a valve body formed with a central outflow duct and exterior outflow ducts extending upwardly from the bottom thereof.

2. In a high pressure valve, the combination with the valve casing having a valve seat, of a valve comprising a body portion, a cylindrical portion depending from such body portion having outlet orifices at its upper end next to the valve body and recessed portions formed at the exterior of the cylindrical portion so as to form interior and exterior outflow ducts.

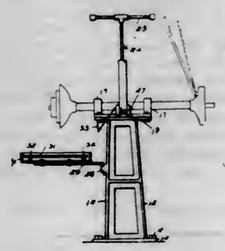
3. In a high pressure valve, the combination with the valve casing having a valve seat having its upper edge inclined, of a valve comprising a valve body having its lower end tapered to conform to the incline of the upper end of the valve seat, a cylindrical portion depending from such tapered portion having orifices at its upper end inclined to conform with the taper of the lower end of the valve body.

4. In a high pressure valve, the combination with the valve casing having a valve seat having its upper edge inclined, of a valve comprising a valve body having its lower end tapered to conform to the incline of the upper end of the valve seat, a cylindrical portion depending from such tapered portion having orifices at its upper end inclined to conform with the taper of the lower end of the valve body, and wing members extending radially outwardly from the exterior of the cylindrical portion so as to pass freely through the valve seat.

5. In a high pressure valve, the combination with the valve casing having a valve seat having its upper edge inclined, of a valve comprising a spring held valve body having its lower end tapered to conform to the incline of the upper end of the valve seat, a cylindrical portion depending from such tapered portion having orifices at its upper end inclined to conform with the taper of the lower end of the valve body, and wing members extending radially outwardly from the exterior of the cylindrical portion so as to pass freely through the valve seat and forming recesses having semi-circular upper ends concaved to merge into the exterior face of the valve and form outflow ducts.

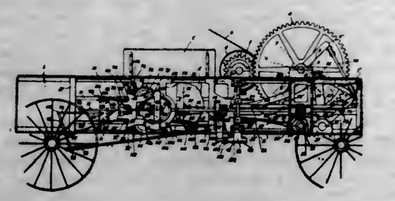
[Claims 6 to 12 not printed in the Gazette.]

1,274,681. REAR-AXLE STAND. JOSEPH S. CARSWELL, Boone, Iowa. Filed July 16, 1917. Serial No. 180,835. (Cl. 29—89.)



In a device of the class described, a support comprising a pair of parallel slightly spaced vertical legs and a horizontal plate secured to the upper end thereof, a clamping device mounted on said plate comprising a pair of spaced jaws and a yoke having a movable jaw therein and pivoted at one end whereby the yoke may be swung to position where the jaw therein may coact with the first two jaws to hold the automobile rear axle housing from movement and to swing upon its pivot whereby the said housing may be removed, said clamping device being of such size that it may be received within the lines of the said plate, and means for reciprocating the movable jaw within said yoke member.

1,274,682. BALING-MACHINE. WALLACE CASWELL, Cherokee, Iowa. Filed Oct. 29, 1915. Serial No. 58,676. (Cl. 100—20.)



1. A baling press, comprising a compression chamber, a plunger operable therein, two reciprocatory carriages mounted on the frame of the compression chamber and adapted to stand at rest during the reciprocation of the plunger except during the final compression stroke of the same, wire feeding mechanism mounted on one carriage, wire tying mechanism mounted on the other carriage, means to reciprocate said carriages with the plunger, and means to actuate the feeding and tying mechanism.

15. A baling press, comprising a compression chamber, a plunger operable therein, two reciprocatory carriages mounted on said chamber, a hook loosely mounted on rear carriage extending forward, an offset grooved guide mounted on the compression chamber in which a projection on said hook operates to raise and lower the free end of said hook as the carriage moves, and a hook on the forward carriage extending rearward, and adapted to engage the hook on the rear carriage, means for reciprocating said carriages with the plunger, substantially, as shown and described.

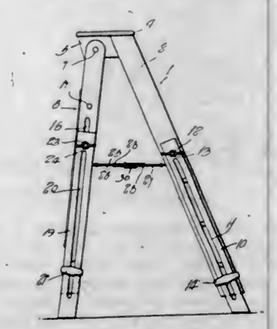
23. A baling press including a compression chamber, a plunger operable therein, means for feeding wire around the bale, a rotary looping element, a wire guiding member mounted therein, and means for twisting the wire, the guiding member being arranged to hold the free end of the wire out of operation during the looping and twisting operation.

39. A baling press comprising a compression chamber, a compression plunger, wire feeding mechanism, wire tying mechanism comprising a wire looping member, a wire twisting head, a gear wheel, and comprising multiple segmental cog wheels and segmental guides adapted to rotate the looping member in one direction to hold the same at rest, to revolve the twister head and to hold the same at rest and to rotate the looping member in the opposite direction and to hold the same at rest.

43. A baling press comprising a compression chamber, wire feeding mechanism, wire tying mechanism, a wire looping member, a wire shearing member pivotally mounted in the same and having teeth adapted to engage a spring tooth mounted on an adjacent guide plate, and means to rotate said looping member to oscillate the shearing member.

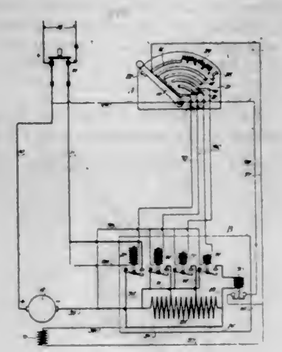
[Claims 2 to 14, 16 to 22, 24 to 38, 40 to 42, and 44 not printed in the Gazette.]

1,274,683. STEP-LADDER. ABRAHAM LINCOLN CHAMPION, Boston, Mass. Filed June 8, 1917. Serial No. 173,613. (Cl. 228—19.)



In an extension leg for ladders, the combination of a pair of flat vertical ladder legs each having a longitudinal slot countersunk at the inner side of the leg, steps extending between said legs and secured thereto, the ends of said steps spanning said slots, a pair of extension legs contacting slidably with the outer sides of said ladder legs, clamping bolts passing through said extension legs and having conical heads seated in said countersunk slots for free sliding without contact with the ends of said steps, and means for preventing said extension legs from pivoting around said clamping bolts.

1,274,684. MOTOR-CONTROLLER. ALLAN J. CLINE, Chicago, Ill. Filed May 22, 1915. Serial No. 29,763. (Cl. 172—179.)



2. In a controller for electric motors, the combination with a motor and its supply circuit, of a series of resistance switches, a series of electro-magnets arranged when in circuit to operate said switches automatically and in succession as the motor reaches different predetermined speeds, and a freely movable manually operable controlling switch arranged to successively close and open the circuits of said magnets in reverse order.

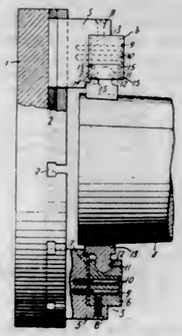
3. In a controller for electric motors, the combination with a motor and its supply circuit, of a series of resistance switches, a series of operating electro-magnets therefor, and a manually operable master switch arranged as it is shifted to close the circuit of said motor and thereafter successively close the circuits of said magnets and, in reverse order, to successively open said circuits, said magnets being responsive to the counter-electromotive force developed by the motor and arranged to automatically operate said resistance switches as the motor reaches different predetermined speeds.

6. In a controller for electric motors, the combination with a motor and a supply circuit, of variable resistances in the armature and field circuits of said motor, a series of electro-magnetic switches responsive to the counter electromotive force developed by the motor and arranged to cut out successive portions of said armature resistance as the motor reaches different predetermined speeds, a manually operable controlling switch arm arranged to successively close the operating circuits of said electro-magnetic switches and thereafter coöperate with said field resistance to accelerate the motor, and an automatic electro-magnetic switch responsive to fluctuation of current through the armature circuit for short-circuiting said field resistance until the motor reaches a predetermined speed in accordance with the setting of said controlling switch arm.

11. In a controller for electric motors, the combination of a motor and its supply circuit, of resistances in the armature and field circuits, respectively, of said motor, an electromagnetic switch arranged to automatically cut out said armature resistance as the motor reaches a certain predetermined speed, a manually operable controlling switch arranged to successively close the supply circuit of said motor and the operating circuit of said electromagnetic switch and thereafter coöperate with said field resistance to accelerate the motor, and an automatic electromagnetic switch responsive to fluctuations of current through the armature circuit for intermittently short circuiting said field resistance until the motor reaches a predetermined speed.

[Claims 1, 4, 5, and 7 to 10 not printed in the Gazette.]

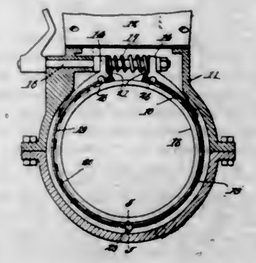
1,274,685. CHUCK FOR MACHINE-TOOLS. JAMES M. CLINE, Turtle Creek, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 6, 1915. Serial No. 799. (Cl. 29—147.)



1. A chuck for machine tools comprising a body member adapted to be received in the slots of a machine tool head plate, a block secured to the said body member by means of screws extending in two directions, the said block being provided with a generally cylindrical recess extending the full length of one of its sides, a working jaw member provided with a projection conforming in shape to the said recess and movably received therein, and plates secured to the said body member and closing the ends of the said recess.

2. A chuck for machine tools comprising a body member having an overhanging portion, a block secured to the said body member by means of screws extending in two directions, the said block being disposed in the angle formed by the said overhanging portion and the remainder of the said body member, and being provided with a recess of generally cylindrical form and of more than semi-circular cross-section, and a working jaw member provided with a projection conforming in shape to the said recess and movably received therein.

1,274,686. LINER FOR TRANSMISSION AND BRAKE BANDS. CLAYTON D. COLLEY, Narrows, Va. Filed June 6, 1916. Serial No. 102,008. (Cl. 74—37.)



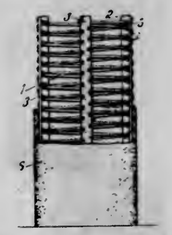
2. As an article of manufacture, a liner for the purpose described, having a pliable backing strap carrying a friction facing, and terminally bendable to occupy radial positions, and a plate secured to the backing at an intermediate point and provided with outturned extremities forming lugs at the side edges of the backing.

4. The combination with a friction band and operating means therefor, of a lining longitudinally insertible along the inner surface of the friction band, means provided on said lining for slidably engaging the edges of the friction

band, and additional means including angularly disposed ends of the lining supported by the aforesaid operating means for holding the lining to the band.

[Claims 1 and 3 not printed in the Gazette.]

1,274,687. REINFORCEMENT FOR CONCRETE COLUMNS. WILLIAM ARTHUR COLLINGS, Kansas City, Mo. Filed Aug. 13, 1917. Serial No. 185,876. (Cl. 72—76.)



1. A reinforcement for concrete columns comprising an upright wire spiral, two upright bars disposed at right angles to each other, one of the bars having openings through which the coils of the spiral respectively extend, and securing devices respectively intermediate of said coils and embracing one edge and two sides of the bar having said openings and extending through and secured to the other bar.

3. A reinforcement for concrete columns comprising a collapsible upright wire spiral, two upright bars disposed at right angles to each other, one of the bars having openings in which the coils of the spiral are respectively pivotally mounted, and reinforcing devices respectively intermediate of said coils and embracing one edge and two sides of the bar having said openings and extending through and secured to the other bar.

5. A reinforcement for concrete columns comprising an upright wire spiral, two upright bars, one having notches in one edge which respectively contain the coils of the spiral, the other bar extending across said notches and closing the same, and means for securing said bars together and for holding them against relative longitudinal movement.

7. A reinforcement for concrete columns comprising an upright wire spiral, two upright bars, one of the bars being disposed edgewise to the flat side of the other bar, said other bar having transverse grooves coöperating with edge grooves provided in the opposite bar for receiving the coils of the spiral, and means for securing said bars together.

8. A reinforcement for concrete columns comprising an upright wire spiral, two upright bars, one having an edge disposed against the flat side of the other, said edge having notches coöperating with transverse grooves in the opposite bar for receiving the coils of the spiral, and securing devices each embracing one of the coils and both of said bars for holding the bars together.

[Claims 2, 4, and 6 not printed in the Gazette.]

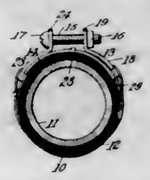
1,274,688. CLAMP. ISIDOR COOPER and OTIS F. PRESBREY, Brooklyn, N. Y., assignors to Otis-Flagg Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 25, 1916. Serial No. 133,289. (Cl. 24—19.)



1. A clamp of the character described, comprising a plain uniform metal strip, independent heads to which the ends of said strip are attached, and means for drawing said heads toward each other for binding the clamp upon the article to which it may be applied, one end of said strip prior to being attached to its head being carried around and threaded through the other head to form one convolution and then brought around for attachment to its head, whereby the strip forms one complete inner band and with the heads a partial outer band.

[Claims 2 to 4 not printed in the Gazette.]

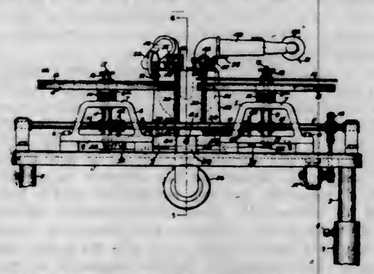
1,274,689. CLAMP. ISIDOR COOPER and OTIS F. PRESBREY, Brooklyn, N. Y., assignors to Otis-Flagg Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 25, 1916. Serial No. 133,290. (Cl. 24—19.)



1. A clamp of the character described comprising a plain uniform flexible strip, independent heads to which the ends of said strip are respectively connected and means for drawing said heads toward each other, said heads being of angle shape and having base members containing openings through which the ends of said strip are folded and also outwardly projecting members to receive the means for drawing the heads toward each other, and one of said heads having a tongue to span the space between the heads.

[Claims 2 and 3 not printed in the Gazette.]

1,274,690. TALKING-MACHINE. ALFONSO CORTELLA, Philadelphia, Pa. Original application filed Aug. 21, 1913, Serial No. 785,853. Divided and this application filed Jan. 22, 1917. Serial No. 143,614. (Cl. 274—10.)



1. A sound recording and reproducing machine comprising a plurality of record carrying members, an independently operative record support thereon, means for inoperatively positioning a plurality of records thereon, means for automatically and substantially simultaneously throwing one record out of and another record into operative position relative to the carrying member.

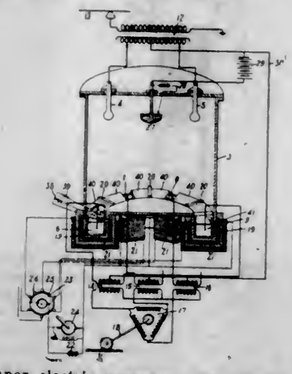
15. A sound reproducing machine comprising a plurality of continuously movable record carrying members, means for continuously moving said members, means for locking a record to each of the record carrying members in succession, and means including a driving shaft for effecting the reproduction of the records in repeated cycles.

20. A sound reproducing machine comprising a plurality of simultaneously operating record carrying members, successively operable record carrying members for holding the records in inoperative position, means for locking the successively operable record carrying members in operative engagement with the simultaneously operating carrying members; and record shifting means including a driving shaft, and a record shifting lever for throwing one record into and a second record out of operation in repeated cycles.

30. A multiple table sound recording and reproducing machine comprising, continuously operable tables, alternating operable record carrying members independently and positively lockable thereto for immediate equal rotative speed therewith, and means including a shaft and record shifting means for automatically moving the carrying members and records in opposite directions.

[Claims 2 to 14, 16 to 19, and 21 to 29 not printed in the Gazette.]

1,274,691. CONVERTING SYSTEM. DAVID C. DAVIS, Swissvale, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 6, 1915. Serial No. 19,565. (Cl. 172—238.)



1. In vapor electric apparatus, the combination with main anodes and cathodes connected to an alternating current source and to an alternating current load, of an auxiliary electrode of bilateral conductivity so connected to energy-storing means as to absorb energy from the vapor arc when the instantaneous voltage of said source is high and to restore said energy to the vapor arc when the instantaneous voltage of said source is low.

3. The combination with a source of single-phase alternating current, of an evacuated container, a pair of anodes therein and connected to terminals of said source, a plurality of cathodes in said container, a polyphase distributing system, a plurality of transformers having their primary windings connected to said cathodes and having their secondary windings connected to said polyphase distributing system, a connection between substantially the mid point of said primary windings to substantially the mid point of said source, an auxiliary electrode within said container and adapted to operate either as an anode or as a cathode, a battery connected between said auxiliary electrode and said mid-point connection, and magnetic means to urge an arc between said anodes and said cathodes to impinge upon each of said cathodes in succession.

[Claim 2 not printed in the Gazette.]

1,274,692. HEEL-PROTECTOR. RAYMOND V. DAVIS, Denver, Colo. Filed Sept. 18, 1917. Serial No. 191,972. (Cl. 36—72.)



1. A heel protector comprising a protector body formed of a plurality of separable sections shaped to fit the heel, and a flat leaf spring bent into substantially U-form and secured at its ends to the sections for holding them about the heel.

4. A heel protector comprising a body formed of a pair of side sections for extending over the side and back of the heel of a shoe, and a spring encircling the sections and secured to the same at its extremities to permit free movement of the sections at their meeting edges.

[Claims 2 and 3 not printed in the Gazette.]

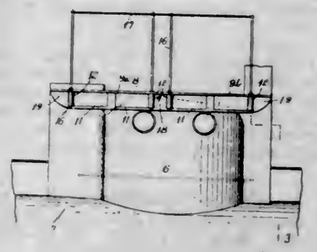
1,274,693. LATCH. JAMES M. DECKER and JAMES H. DECKER, Douglas, Ariz. Filed Aug. 10, 1917. Serial No. 185,515. (Cl. 70—28.)



1. A latch comprising a frame, a stud carried by the frame, a sprocket wheel having an enlarged opening which receives the stud and so arranged that one of its teeth is normally held in engagement with the frame and a lever mounted upon the frame and adapted to elevate the sprocket wheel.

2. A latch comprising a frame provided with arcuate slots, a stud carried by the frame, a sprocket wheel having an enlarged opening which receives the stud and so arranged that one of its teeth is normally held in engagement with the frame, a lever fulcrumed upon the frame and a stud carried by the said lever and passing through the said slot and the opening of the sprocket wheel.

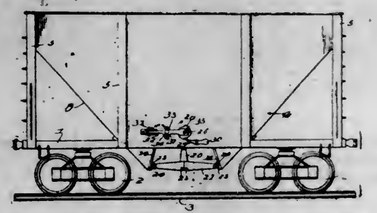
1,274,694. BRIDGE FOR SUBMARINES. HAROLD MASON DE GRAW, New London, Conn., assignor to Electric Boat Company, a Corporation of New Jersey. Filed Sept. 21, 1916. Serial No. 121,366. (Cl. 114—16.)



1. A collapsible bridge structure for submarines comprising, in combination, a fixed bridge, a plurality of side extensions, foldable supporting brackets for the side extensions having stanchion-receiving sockets near their extremities, the side extensions having perforations registering with said sockets when the parts are extended, and stanchions having end portions adapted to pass through the perforations and into the sockets to secure the parts in extended position.

2. A collapsible bridge structure for submarines comprising, in combination, a fixed bridge, a plurality of side extensions hinged to the bridge to fold over on top thereof, foldable supporting brackets for the side extensions having stanchion-receiving sockets near their extremities, the side extensions having perforations registering with said sockets when the parts are extended, and stanchions having end portions adapted to pass through the perforations and into the sockets to secure the parts in extended position.

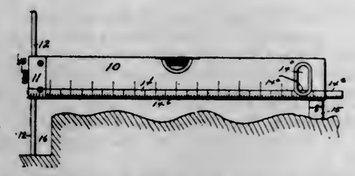
1,274,695. RAILWAY DUMPING-CAR. DAVID PAUL DEIBLER, Jersey Shore, Pa. Filed July 6, 1917. Serial No. 179,007. (Cl. 105—185.)



1. A device of the character described including a supporting frame, a hopper body mounted thereon and provided with opposed discharge openings at the bottom thereof, pivotally mounted doors for removably closing the openings, a shaft journaled in the body, an operable connection between the shaft and the doors whereby when the shaft is rotated in one direction the doors will be opened and closed, coöperative means on the body and on the shaft for assuring of the rotation of the shaft in one direction, a stud carried by the body, a pivotally mounted arm on the body for removable engagement with the stud and the shaft for preventing rotation of the shaft, and means engageable with the stud for holding the arm in a locked position to consequently prevent accidental actuation of the doors.

2. A device of the character described including a supporting frame, a hopper body consisting of sides and end pieces, an inclined bottom section terminating in spaced relation at their lower ends, a brace disposed longitudinally in the body for increasing the rigidity thereof, a pair of spaced transverse braces in the body for coöperating with the lower edges of the bottom section to provide discharge openings, a support of an inverted V-shaped configuration in cross section disposed on the braces and connected to the sides of the body for bracing the sides, a shaft journaled in one side of the body and in the longitudinal brace at a point directly beneath the support, the inner end of the shaft terminating approximately medially of the support, an arm connected to and extending approximately at right angles from the shaft, doors pivotally mounted on the transverse braces for removably closing the openings, a link pivotally connected to the outer end of the arm, and other links pivotally connected to the outer end of the first mentioned link and also pivotally connected to the doors near the outer edges thereof so that upon continued rotation of the shaft, the doors will be alternately opened and closed, means for operating the shaft, and means for locking the shaft.

1,274,696. LEVEL AND RULE MEASURING INSTRUMENT. THEODORE S. DE LAY, Creston, Iowa. Filed June 11, 1917. Serial No. 173,955. (Cl. 33—88.)

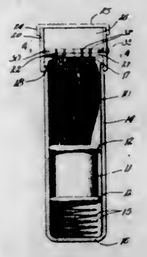


1. Means for determining the horizontal distance between and the relative elevation of two points which are in different horizontal planes, comprising a level, said level being provided with indices of linear measurement, a rule, and means for mounting said rule adjustably on and adapted for movement in a plane at right angles to said level.

3. The combination of a bar level having a measure on one or more of the faces of its bar and extending from end to end thereof, said level being formed with a slide-bearing in and extending from end to end of its bar, a rule mounted and adjustable slidingly in said bearing and adapted to project at one end only therefrom and forming at times an extension of said measure on the level bar, and another rule mounted transversely of, on and extending across the level bar, and also extending across the measure thereon and the first rule.

[Claim 2 not printed in the Gazette.]

1,274,697. SHAVING-BRUSH. PETER DYNOWSKY, Newark, N. J. Filed Mar. 23, 1918. Serial No. 224,317. (Cl. 132—33.)



1. In a shaving brush, the combination with the bristles and the backing therefor, of a casing surrounding said bristles and backing, a spring for projecting said bristles and backing outwardly into operative position, a compartmented cover screw-threaded to said casing and with which said bristles are adapted to make contact, a perforated plate fixed in said cover, a second plate rotatably engaged in said cover, said second plate being also perforated, means for bringing the perforations in said plates into alinement, and powdered soap contained in the compartment in said cover.

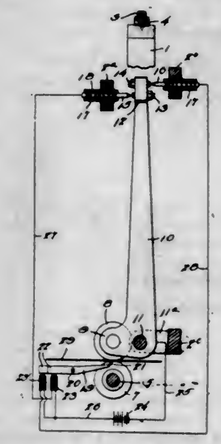
2. In a shaving brush, the combination with the bristle elements, and a holder therefor, a casing surrounding said bristle elements, means formed with said holder adapted to contact with the exterior of said casing whereby it may be moved longitudinally thereof, means for projecting said bristles outwardly, a compartmented cover screw-threaded to said casing, powdered soap contained in the compartment of said cover, a cap thereover, a perforate plate formed with said cover immediately adjacent to the bristles of said brush, a second perforate plate rotatably engaged with said compartmented cover, a screw set at the edge of said rotatable plate, and a slot formed in said cover through which said screw extends and whereby the perforations in said plate may be brought into position.

1,274,698. GAGING-MACHINE. HENRY R. EDGECOMB, Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 4, 1913. Serial No. 804,665. (Cl. 33—147.)

1. In a thickness gaging machine for sheet material, means for feeding a sheet through the machine, and means separate from the said feeding means but electrically actuated thereby for automatically producing on the sheet local markings corresponding with local variations from a uniform thickness.

2. In a thickness gaging machine for sheet material, a plurality of pairs of feed rollers adapted to receive the sheet between them and to move toward and from each other with variations in the thickness of the sheet, recording means disposed adjacent each pair of rollers, and electrically operated means controlled by the relative bodily movement of the rollers for automatically bringing such recording means into action whenever that portion of the sheet between said rollers is either above or below a given uniform thickness.

3. In a thickness gaging machine for sheet material, a pair of feed rollers adapted to receive the sheet between them, a scriber mounted adjacent said rollers, and electrically operated automatic means responsive to movement of one of the said rollers caused by abnormal thickness of the sheet for bringing said scriber into engagement with the sheet.

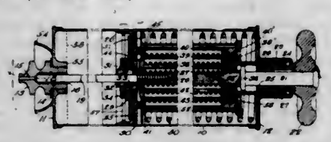


4. In a thickness gaging machine for sheet material, a pair of feed rollers adapted to receive the sheet between them, a scriber mounted adjacent each side of said rollers, and automatic means responsive to movement of one of the said rollers caused by variations of said sheet above or below a given thickness for bringing one or the other of said scribers into engagement with said sheet.

5. In a thickness gaging machine for sheet material, a pair of feed rollers adapted to receive the sheet between them, a series of scribers mounted adjacent said rollers, and automatic means controlled by one of the said rollers for bringing said scribers successively into engagement with said sheet, one after another, as that portion of the sheet between the rollers varies more and more from a given thickness.

[Claims 6 to 20 not printed in the Gazette.]

1,274,699. FIRE-EXTINGUISHER. DANA ESTES, Brookline, Mass. Filed Mar. 12, 1915. Serial No. 13,848. (Cl. 169—17.)



1. A device of the character described, comprising a cylinder and piston arranged to coact, said cylinder having a discharge opening, and spring-actuated means arranged to propel said piston and automatically seal said discharge opening when the piston has advanced a predetermined distance.

25. In a fire extinguisher, the combination of a casing having a discharge nozzle, a piston shiftably mounted in said casing for forcing the contents out through said nozzle, a threaded member rotatably mounted in said casing and engaging said piston, mechanism extending to the outside of said casing and connected to rotate said member for shifting said piston, a valve normally urged to close said nozzle, and means actuated by the movement of said member in said casing for retracting said valve when said piston has been shifted to increase the pressure on the contents in said casing beyond a certain predetermined amount.

29. The combination in a hand operated fire extinguisher, of a fluid containing tube, a piston reciprocable therein, a plurality of telescoping inter-engaging screw members, one of said members being secured to the piston, means for rotating one of the other members and means for preventing rotation of the piston relative to the tube.

[Claims 2 to 24 and 26 to 28 not printed in the Gazette.]

1,274,700. LACED UPPER AND METHOD OF LACING UPPERS. MARK E. FERNALD, Saugus, Mass., assignor to C. C. Blake, Incorporated, Boston, Mass., a Corporation of New York. Filed Aug. 21, 1915, Serial No. 46,734. Renewed Oct. 6, 1917. Serial No. 195,177. (Cl. 12—113.)



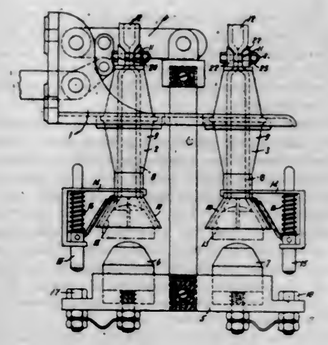
1. That improvement in the art of lacing uppers which consists in assembling a sheet of fabric with the fly, forming studs in the fabric and passing them through the lacing holes, and inserting a fastening through each of the studs on the side of the fly opposite the sheet of fabric, substantially as described.

5. A laced upper comprising a fly provided with parallel rows of lacing holes, a sheet of fabric having studs formed therein and passed through the lacing holes, and a fastening inserted through each of the studs on the side of the fly opposite to the sheet of fabric, substantially as described.

8. A laced upper comprising a fly provided with parallel rows of lacing holes, a sheet of fabric having studs formed therein passing through the lacing holes, and a cord having two loops therein, one of the loops being passed through the row of studs along one edge of the fly and the other loop being passed through the row of studs along the other edge of the fly, substantially as described.

[Claims 2 to 4, 6, and 7 not printed in the Gazette.]

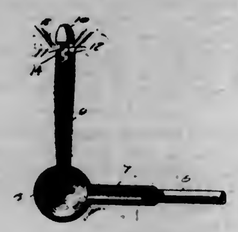
1,274,701. CIRCUIT-INTERRUPTER. FRANK FIX, Irwin, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 9, 1915. Serial No. 54,961. (Cl. 175—282.)



1. A switch member comprising a conducting tube having a flattened portion intermediate its ends and an expanded portion at one end.

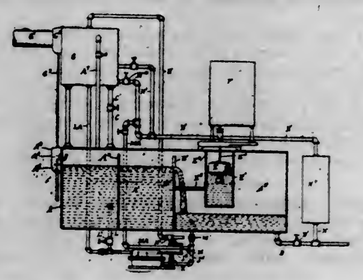
[Claims 2 to 6 not printed in the Gazette.]

1,274,702. IRRIGATING DEVICE. EDWARD P. FOX, Lake Arthur, La. Filed Oct. 9, 1917. Serial No. 195,605. (Cl. 128—25.)



In an irrigating device, a discharge nozzle consisting of a rigid tube, a head having a hollow stem provided with openings arranged at intervals in a series extending approximately longitudinally of the stem, said stem having threaded engagement with one end of the tube, the head being adapted to close the tube when the head is turned home, the end of the tube adjacent to the head being internally beveled to provide for an angular discharge of irrigating liquid, a spherical casing with which the tube is connected, said casing being hollow and having a nipple for connection with the container for the liquid and adapted to be used as an obturator when the tube is introduced.

1,274,703. FLOW-MEASURING APPARATUS. JOSEPH W. GAMBLE, Philadelphia, Pa., assignor to Joseph S. Lovering Wharton, William S. Hallowell, and John C. Jones, Philadelphia, Pa., doing business under the firm-name of Harrison Safety Boiler Works. Filed Dec. 20, 1913. Serial No. 807,878. (Cl. 73—167.)



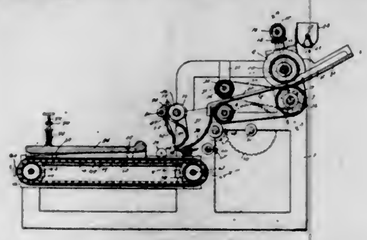
1. In combination, a measuring tank, a weir dividing it into inlet and outlet compartments, a valve regulating the supply to said inlet compartment of the liquid to be measured, and controlling means for said valve automatically responsive to the difference between the liquid heads in said conpartments.

2. In combination, a measuring tank, a weir dividing it into inlet and outlet compartments, a valve regulating the supply to said inlet compartment of the liquid to be measured, and controlling means for said valve jointly responsive to the accumulation of liquid in said outlet compartment and to the rate of flow over the weir, and tending to adjust the valve to increase the supply of liquid on a fall in the liquid level in said outlet compartment or an increase in the rate of flow over the weir, and to decrease the supply of liquid on a rise in the liquid level in said outlet compartment or on a decrease in the rate of flow over the weir.

5. Liquid flow measuring apparatus comprising a weir and formed with an inlet compartment and an outlet compartment into which the liquid to be measured flows from said inlet compartment over said weir, a valve regulating the supply of liquid to be measured to said inlet compartment, and controlling means for said valve comprising a differential pressure device having one pressure chamber connected to one of said compartments and a second pressure chamber connected to the other compartment, and adjustable loading means for said device, the connection between each chamber and the corresponding compartment opening to the latter below the water level normally prevailing therein.

[Claims 3 and 4 not printed in the Gazette.]

1,274,704. BREAD-MAKING MACHINE. JAMES GARVEY, Los Angeles, Cal. Filed Dec. 22, 1913, Serial No. 808,122. Renewed Oct. 31, 1917. Serial No. 199,611. (Cl. 107—9.)



1. A bread making machine having a pair of cutting, forming and folding members for receiving a strip of dough, cutting off a predetermined amount thereof and folding the cut off portion upon itself, and means for ejecting such folded dough from said members.

4. In a bread making machine, a stationary forming member, a pivoted gate at the lower end thereof, a rotary forming member provided with means for cutting the dough, coöperating with said stationary forming member, means for yieldingly holding said gate closed to retain dough in the stationary forming member, an ejector carried by the rotary forming member, means for tilting the ejector with relation to the rotary forming member to eject the dough, said gate being operated by said rotary forming member.

7. In a bread making machine, in combination with a mold belt, a mold board above the mold belt, a slidable element to which said mold board is pivoted at one end, said slidable element permitting the pivoted end of said board to rise from the belt, spring means for yieldingly holding the other end of the mold board toward the belt, and means for regulating the sliding movemut of said sliding element to regulate the rising movement of the pivoted end of the mold board.

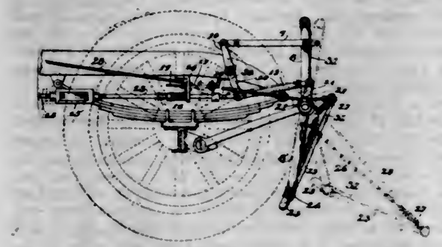
8. In a bread making machine, in combination with a mold belt, rolls supporting the mold belt, a mold board above the mold belt, said mold board being provided with recesses receiving the edges of the mold belt, and spring pressed bars on the mold board yieldingly bearing against the edges of the belt to prevent the entrance of dough.

12. In a bread making machine, a forming device comprising a pair of forming or folding members, means for forming dough into a strip and feeding a portion of the strip into one of said forming members, the second forming member being movably mounted to move with relation to the other forming member and to cut off the dough strip projecting thereinto and to fold the same, and ejector means for moving the folded dough from said forming device.

[Claims 2, 3, 5, 6, 9 to 11, and 13 to 15 not printed in the Gazette.]

1,274,705. FENDER. CHARLES GILBERT, Chicago, Ill. Filed Nov. 6, 1916. Serial No. 129,861. (Cl. 180—83.)

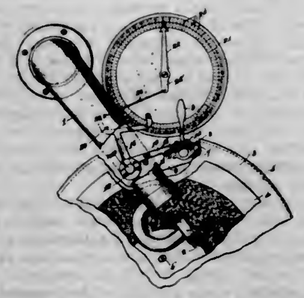
1. The combination with a motor driven vehicle, of an upwardly extending rearwardly yieldable fender frame pivoted at its lower end to the front thereof; a coöperating downwardly extending simultaneously rearwardly yieldable fender frame pivoted at its upper end; a forwardly extending supporting frame at the lower end of said downwardly extending frame; and a wire mesh covering all of said frames, substantially as described.



2. The combination with a motor driven vehicle, of an upwardly extending rearwardly yieldable fender frame pivoted at its lower end to the front thereof; a coöperating downwardly extending rearwardly yieldable fender frame pivoted at its upper end; an operative connection between said fender frames compelling simultaneous rearward movements thereof; a forwardly extending downwardly yieldable supporting frame at the lower end of said downwardly extending frame; and a wire mesh covering both of said frames, substantially as described.

3. The combination with a motor driven vehicle, of a supporting bar arranged at the front thereof; an upwardly extending rearwardly yieldable fender frame pivoted at its lower end on said supporting bar; a coöperating downwardly extending rearwardly yieldable fender frame pivoted at its upper end on said bar; an operative connection between said fender frames compelling simultaneous rearward movements thereof; a brake rod; an operative connection between said fender frames and said brake rod; an ignition circuit; and operative connection between said ignition circuit and said fender frames; a forwardly extending downwardly yieldable supporting frame at the lower end of said downwardly extending frame; a wire mesh covering both of said frames; chains and springs yieldingly supporting said supporting frame; means for limiting the downward swinging of said supporting frame; and flexible cables attached to the forward end of said supporting frame and adapted to fold the same upwardly, substantially as described.

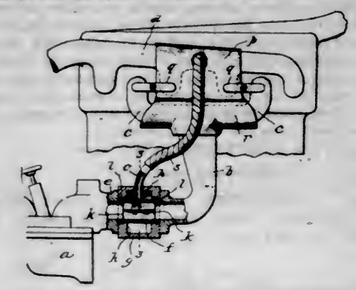
1,274,706. BRAKE-TIMING ATTACHMENT FOR TALKING-MACHINES. ELLSWORTH F. GILES, Altoona, Pa. Filed Apr. 16, 1917. Serial No. 162,294. (Cl. 74—46.)



1. A talking machine equipped with a brake comprising a brake arm, a latch and an adjustable trip arm in combination with a pivotally mounted indicator hand, a connecting rod operatively connecting said indicator hand and said trip and a scale in operative relation to said indicator hand, substantially as described.

[Claims 2 and 3 not printed in the Gazette.]

1,274,707. FUEL-HEATER FOR GASOLENE-ENGINES. JOHN H. GORMAN, Salisbury, N. C., assignor of one-half to Hugh P. Brown, Salisbury, N. C. Filed Jan. 4, 1918. Serial No. 210,296. (Cl. 237—241.)

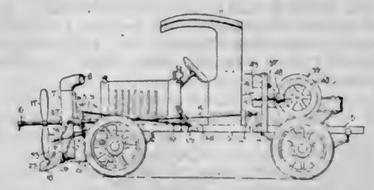


1. The combination with a gasolene engine of a metal heat-conductor, a metal heat-gathering and storing member held in close metallic contact with the exhaust manifold of the engine and having metallic contact with one end of said conductor, and a vaporizer appliance having metallic contact with the other end of said conductor and located between the carbureter and the intake of the engine.

5. The structure defined in claim 1, the vaporizer embodying an inner tube having metallic contact with said conductor and inclosing means for breaking up and atomizing the particles of fuel passing through the tube, said means embodying screens and a metallic heating member inclosed in the tube.

[Claims 2 to 4 not printed in the Gazette.]

1,274,708. SNOW-PLOW. LAWRENCE E. GRABAU, Bonair, Iowa. Filed Apr. 1, 1918. Serial No. 226,004. (Cl. 37—35.)



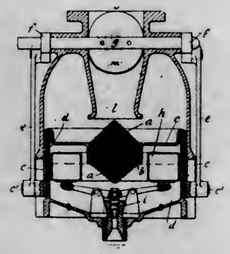
1. The combination with a motor vehicle, of a plow casing and means for mounting the same upon the forward end of the vehicle frame, said casing having an opening in its front wall, a rotary plow mounted in said casing, a snow supporting and directing plate pivoted at the lower edge of the plow casing for vertical swinging movement, means for adjusting said plate to vary the inclination thereof, rods to support the plate and limit its downward swinging movement, guides for said rods on the vehicle frame, and stop members adjustable on the rods to coact with the guides and dispose the forward edge of the plate at a predetermined elevation above the road surface.

3. The combination with a motor vehicle, of a pair of plow casings and means for mounting the same upon the forward end of the motor vehicle frame, a rotary plow mounted in each of said casings, each casing having an opening in its front wall, a transversely disposed plate extending forwardly from the lower edges of the plow casings, obliquely inclined baffle plates fixed upon said transverse plate at the opposite ends thereof to direct the snow inwardly through the openings in the respective casings, and a central forwardly projecting spur fixed to the casing walls to direct the snow into the respective casings.

5. The combination with a motor vehicle, of rotary snow plows and means for mounting said plows upon the forward end of the vehicle frame, each plow having a rearwardly extending shaft, yieldable supporting standards for the rear ends of said shafts, an engine mounted upon the rear end of the vehicle frame, means for transmitting rotation from the engine to said plow shafts including driving elements and driven elements fixed to the rear ends of the plow shafts, and manually operable means connected to said supporting standards to urge the same from their normal positions and disengage the driven elements from the driving elements.

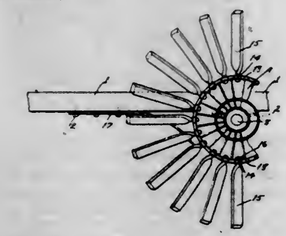
[Claims 2 and 4 not printed in the Gazette.]

1,274,709. CARBURETER. CHARLES JEENS GRACE, Truro, England. Filed June 3, 1916. Serial No. 101,562. (Cl. 261—40.)



In a carbureter, a fuel receptacle, a cover for said receptacle, means for moving the cover, an assemblage of capillary tubes carried by the cover and adapted to deliver liquid fuel, an inlet for the air, and an outlet for the mixture of fuel and air located in the path of the capillary tubes when the cover is moved.

1,274,710. SELF-CLEANING TRACTOR-WHEEL. RUSH E. HAMILTON, Geyserville, Cal., assignor to Hamilton Tractor Company, San Francisco, Cal., a Corporation of California. Filed Apr. 27, 1916. Serial No. 94,032. (Cl. 21—215.)



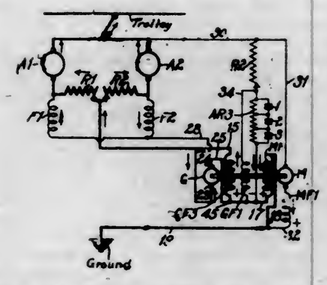
1. A self cleaning tractor wheel comprising a wheel structure having a series of recesses along each edge thereof, and a plurality of soil engaging blades carried thereby and arranged in spaced circumferential rows, one of said blades secured to the solid portion of said wheel rim projecting between each of said recesses.

2. A self cleaning tractor wheel, comprising a wheel structure formed with a series of recessed portions along each edge thereof, and a plurality of soil engaging blades arranged in parallel spaced circumferential rows, one of said blades being extended from the wheel structure projecting between each of said recesses, the end of said blades being so proportioned to the diameter of the wheel structure as to support the full load of the structure thereon.

3. A tractor wheel, comprising a wheel structure having a series of recesses along each edge thereof, a plurality of independently mounted radially disposed soil engaging blades associated therewith and arranged in rows circumferentially of said wheel structure, means for securing the respective blades of the rows to that portion of the wheel structure forming the side walls of said recesses, the distance between the ends of said blades and the point of intersection thereof with the wheel structure being greater than the distance between the wheel structure and the axis of its rotation, whereby the blades support the full load of the structure.

4. A tractor wheel comprising a wheel structure, a plurality of independently mounted radially disposed soil engaging blades carried thereby and arranged in spaced rows circumferentially of said wheel at points beyond the side edges of the main body portion of the wheel structure, the blades of each row being independent of adjacent blades or of corresponding blades of adjacent rows, and means for securing the inner ends of said blades to said wheel structure at a point beyond the side edge of the main body portion of the wheel structure.

1,274,711. SYSTEM OF CONTROL. RUDOLF E. HELLMUND and RALPH E. FERRIS, Swissvale, and LAURENCE M. PERKINS, Wilkinsburg, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed May 20, 1916. Serial No. 98,785. (Cl. 172—179.)



1. In a system of control, the combination with a supply-circuit and a main dynamo-electric machine having an armature and a field winding, of a plurality of auxiliary mechanically-connected armature windings respectively driven from said supply circuit and connected to excite said field winding, a plurality of differentially-related field-magnet windings for the exciting armature winding, and a plurality of cumulatively-related field-magnet windings for the driving armature winding.

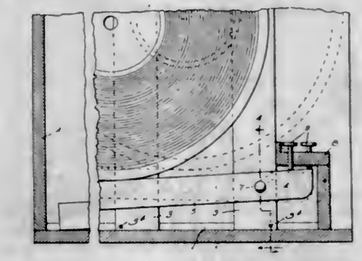
5. In a system of control, the combination with a supply-circuit and a main dynamo-electric machine having an armature and a field winding, of a plurality of auxiliary mechanically-connected armature windings respectively adapted for driving purposes and to excite said field winding, a plurality of field-magnet windings for the respective auxiliary armature windings energized in accordance with the main-armature current, a series field-magnet winding for the driving armature winding adapted to aid its allied field winding, and a shunt-excited field-magnet winding for the exciting armature winding adapted to oppose its allied field winding.

7. In a system of control, the combination with a supply-circuit and a main dynamo-electric machine having an armature and a field winding, of a plurality of auxiliary mechanically-connected armature windings respectively driven from the supply circuit and connected to excite said field winding, and a plurality of field-magnet windings for the respective auxiliary armature windings energized in accordance with the main-armature current and the total main-machine current, respectively.

14. In a system of control, the combination with a supply circuit and a main dynamo-electric machine having an armature and a field winding, of a plurality of auxiliary mechanically-connected armature windings respectively adapted for driving purposes and to excite said field winding, and a plurality of field windings for the driving auxiliary armature winding respectively energized in accordance with the main machine load and with the drivgin-auxiliary-armature load.

[Claims 2 to 4, 6, and 8 to 13 not printed in the Gazette.]

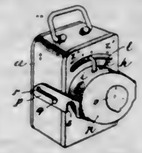
1,274,712. PHONOGRAPH-DISK-RECORD CABINET. HENRY BERNHARD HILGER, Fort Wayne, Ind. Filed May 21, 1917. Serial No. 170,009. (Cl. 211—16.)



1. In a cabinet construction for phonograph disk records, the combination of a plurality of vertically disposed partitions to receive records therebetween, having registering recesses in their opposing sides, levers disposed between said partitions for supporting the records and having apertures therein, and balls disposed within said apertures and projecting beyond the sides of said levers, said balls being received in the recesses in the opposing sides of said partitions to form pivotal mountings for said levers.

2. In a cabinet construction for phonograph disk records, the combination of a plurality of vertically disposed partitions to receive records therebetween having registering V-shaped grooves in their opposing sides, said grooves extending from the forward edges of said partitions and inclining rearwardly, levers disposed between said partitions for supporting the records and having apertures therein, and balls disposed in said apertures and projecting beyond the sides of said levers, said balls being received in the grooves in the opposing sides of said partitions to form pivotal mountings for said levers.

1,274,713. PORTABLE LANTERN. OSCAR HOFFMANN and CARL WOLTER, Stuttgart, Germany. Filed Sept. 8, 1916. Serial No. 119,114. (Cl. 240—8.5.)

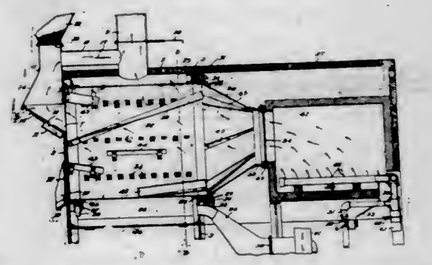


1. In a portable electric lantern in combination, a casing, a tubular projection on the front wall of said casing, an electric lamp in said tubular projection, means for feeding said lamp with electricity, a reflector behind said lamp, openings in said tubular projection allowing the lamp to optionally send bundles of rays not only to the rear upon the reflector, but also in a forward and sidewise direction and to the ground, and a tubular shutter arranged on said tubular projection and adapted to simultaneously close both the side and bottom openings of said projection.

9. In a portable electric lantern in combination, a casing, a tubular projection on the front wall of said casing, an electric lamp in said tubular projection, means for feeding said lamp with electricity, a reflector behind said lamp, openings in said tubular projection allowing the lamp to optionally send bundles of rays not only to the rear upon the reflector, but also in a forward and sidewise direction and to the ground, a tubular shutter arranged on said tubular projection and adapted to simultaneously close both the side and bottom openings of said projection, a front shutter adapted to fully or partly close the front opening of said projection, arms on said shutter in gear with said casing, means for longitudinally displacing said arms relatively to said casing and indentures on said arms in front of the side openings of said tubular projection.

[Claims 2 to 8 not printed in the Gazette.]

1,274,714. ROASTER. RUSSELL HOLMAN, Minneapolis, Minn. Filed Apr. 25, 1917. Serial No. 164,393. (Cl. 34—5.)



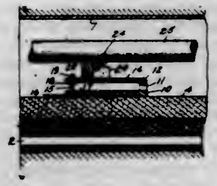
1. A coffee roaster comprising a casing, a drum mounted for revolution therein, means for passing currents of hot air into and through said drum, a hopper provided at one end of said drum for delivering green coffee thereto, said hopper having a port in its lower wall and a valve therefor, a pipe communicating with said port, and a suction fan for said pipe.

2. A roaster comprising a casing, a roasting drum mounted therein and having open ends, a space being provided between the walls of said casing and said drum, a hopper for delivering the material to be roasted through one end of said drum, a cold air intake trunk communicating with said hopper and through it with the interior of said drum, and a suction fan having a trunk communicating with the space between said drum and casing, whereby currents of cold air may be established into and through said drum and through the material therein.

9. A roaster comprising a casing, a roasting drum mounted therein, a space being provided between the walls of said casing and said drum, a suction fan having an intake trunk communicating with the space between said drum and casing and said drum casing having a cool air intake communicating with the interior of said drum.

[Claims 3 to 8 and 10 not printed in the Gazette.]

1,274,715. CONDUIT-SUPPORT. CHARLES HOWARD HOOK and WILLIAM JOSEPH BURKART, Pittsburgh, Pa. Filed Dec. 19, 1917. Serial No. 207,987. (Cl. 137—75.)

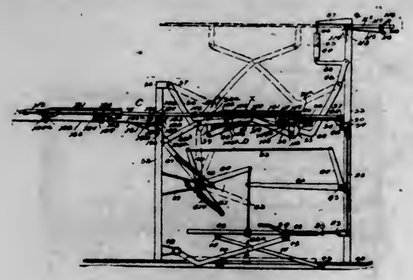


1. A supporting device for pipes comprising a base, a supporting member pivotally connected at one end to the base, a rotatable pipe rest carried by the supporting member, and means to adjust the height of the free end of the supporting member.

2. A supporting device for pipes comprising a pipe rest carried by a spindle having terminal bevel-edged rollers rotatably mounted in oil-retaining pockets forming bearings for said rollers.

3. A supporting device for pipes in conduits comprising a member pivotally mounted at one end, means to adjust the height of the free end of the member, and a rotatable pipe rest carried on the member.

1,274,716. TRANSPORTATION SYSTEM. AARON HORTON and SALYER HORTON, Coleman, Mich. Filed Dec. 31, 1913, Serial No. 809,710. Renewed Jan. 5, 1918. Serial No. 210,561. (Cl. 186—1.)



1. In a transportation system of the character described, an elevated track having an interruption in its course, a bodily depressible track section supported in said interruption and including rails alinable with the rails of the elevated track, means for locking said track section in its raised position, a car, coacting means on the car and track section for causing an unlocking of the track section when the car arrives thereon to permit a depression of the track section, and means for braking the car upon its arrival on the track section.

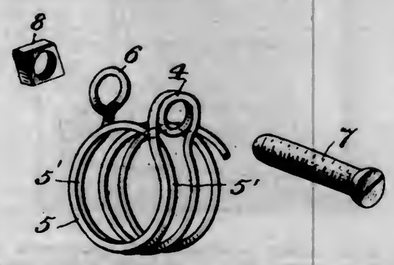
5. In a transportation system, the combination with a car having thereon a laterally shiftable actuating member and means for adjusting said member in any one of a number of positions, of an elevated track having a plurality of interruptions, a bodily depressible track section disposed in each of said interruptions including rails adapted to aline with the rails of the elevated track, means on each track section for locking it in a raised position, means disposed in the track section and adapted to be engaged by the member on the car to thereby cause an unlocking of the track section to permit its depression, the lock actuating means of each depressible section being disposed out of alinement with any of the other actuating means, and brake actuating means disposed in the track section normally depressed but movable upward into an actuating position upon an actuation of the bolt withdrawing means.

29. In a transportation system of the character described, an elevated track section having an interruption therein, a depressible track section disposed in said interrupted portion of the track, a supplementary track section disposed above the depressible track section and having rails adapted to aline with the rails of the elevated track section when the depressible track section is lowered, levers operatively connected to the depressible track section whereby to raise and lower the same, and crossed levers supporting the supplementary track section and operatively connected to the first-named system of levers whereby when the depressible track section is lowered the supplementary section will be lowered into alinement with the elevated track sections and when the depressible track section is raised the supplementary section shall be raised above the level of the elevated track section.

41. In a transportation system of the character described, an elevated track section having an interruption in its course, a depressible track section disposed in said interruption, means disposed immediately in advance of the interruption for braking a car if the depressible track section is lowered, and means disposed in advance of the last named braking means for halting a car for a predetermined period to thereby reduce the speeds of all cars to uniformity prior to their passage into engagement with the first named braking means.

[Claims 2 to 4, 6 to 28, and 30 to 40 not printed in the Gazette].

1,274,717. COMBINED HOSE CLAMP AND SUPPORT. ALBERT B. HURLEY, Seaford, Del., assignor of one-half to Luther W. Hurley, Seaford, Del. Filed Apr. 23, 1915. Serial No. 23,318. (Cl. 285—84.)



1. A combined hose clamp and support comprising a spiral supporting member constructed of a single strand of wire and bent at one terminal thereof to provide a clamping member in the form of a loop, the free end portion of the strand of wire forming said clamping member or loop being firmly held and lying behind a coil or loop of the device, and means for clamping the device in position upon a hose.

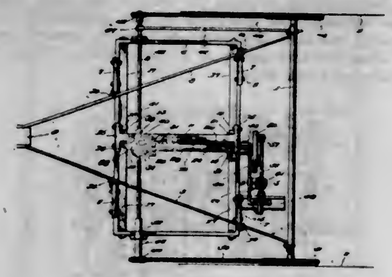
2. A combined hose clamp and support comprising a spiral supporting member constructed of a single strand of wire and bent back upon itself adjacent one terminal thereof to form a bolt receiving eye and a clamping member made up of a plurality of coils or loops, the eye bearing loop thereof being so formed and located as to lie behind an adjacent coil or loop, a second opposed bolt receiving eye formed at the free end of the terminal loop, and a bolt engaging within the eyes for clamping the device in position upon a hose.

3. A combined hose clamp and support comprising a spiral supporting member constructed of a single strand of wire and bent at one terminal thereof to provide a clamping member made up of a plurality of coils or loops, at least one coil of which is adapted to completely encircle the hose, and a coil so bent as to have the free end portion of the strand of wire from which the same is formed positioned and firmly held between convolutions of the device, and means for faatening the device in position upon a hose.

4. A combined hose clamp and support comprising an elongated spiral or convoluted supporting member constructed of a single strand of wire and bent back upon itself adjacent one terminal thereof to form a double clamping loop and a bolt receiving eye, the eye bearing convolution of said double loop being firmly held behind the first convolution thereof, and a second opposed bolt receiving eye formed at the free end of said double loop, and means for clamping the loop upon a hose.

1,274,718. COTTON-CHOPPER. MARTIN A. JONES, McGregor, Tex. Filed Nov. 13, 1917. Serial No. 201,826. (Cl. 97—45.)

1. In a chopper attachment for cultivators, the combination of a main frame, a chopper-carrying frame slidably mounted on the main frame, a lateral supporting arm secured to the chopper-carrying frame, a chopper shaft mounted upon the chopper-carrying frame, means for rotating said shaft, a chopper shank driven by the said shaft, a vibratory bar pivoted at its outer end to the outer end of the lateral supporting arm and at its inner end to the upper end of said shank, and a guide for said bar on said arm.

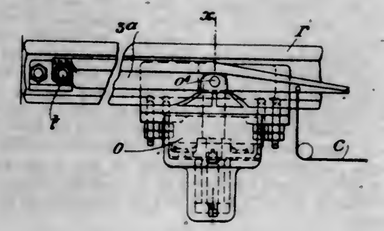


3. In a chopper attachment for cultivators, the combination of a supporting frame, a chopper-carrying frame on the supporting frame, a chopper shaft mounted on said chopper frame, means for rotating said shaft, a chopper shank operatively connected with said shaft, a supporting arm secured to and extending laterally from the chopper-carrying frame, a vibratory bar pivoted at its outer end to the outer end of said arm and at its inner end to the upper end of the chopper shank, a bracket secured to and depending from said lateral arm, a tubular guide on said bracket provided with vertical slots to receive said vibratory bar, and a coiled spring housed by said guide and bearing against the under side of the vibratory bar.

5. In a chopper attachment for cultivators the combination of a main frame, a vertically disposed frame consisting of a longitudinal bar and standards depending from the ends of said bar, cap plates at the ends of said bar fitting against and resting on the front and rear sides of the main frame, braces secured at their upper ends to the corners of said frame and at their lower ends to the lower ends of the said standards, a vertically movable frame slidably mounted on the said standards, a chopper carried by said vertically movable frame, and means for operating said chopper.

[Claims 2 and 4 not printed in the Gazette.]

1,274,719. RAILWAY AND LIKE SIGNALING. ANDREW KERR, Belfast, Ireland. Filed Sept. 6, 1916. Serial No. 118,766. (Cl. 246—47.)



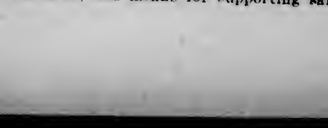
1. In railway signaling, the combination with a signal and means for operating the same, of a device for making and breaking the continuity of said signal operating means, a lever fulcrumed on a track rail and depressible by the wheels of a passing train, and air cushioned means for returning the lever again after each depression, the said lever being connected to the making and breaking device and when depressed operating said device to break the continuity of the signal operating means and when returned permitting the said device to restore the continuity of the signal operating means.

2. In railway signaling, the combination with a signal, and means for operating the same, of a device for making and breaking the continuity of said signal operating means, a lever fulcrumed on a track rail and depressible by the wheels of a passing train, and air cushioned means for returning the lever again after each depression, the said lever being connected to the making and breaking device and when depressed operating said device to break the continuity of the signal operating means and when returned permitting the said device to automatically restore the continuity of the signal operating means.

3. In railway signaling, the combination with a signal and means for operating the same, of a device for making and breaking the continuity of said signal operating means, a lever fulcrumed on a track rail and depressible by the wheels of a passing train, air cushioned means for returning the lever again after each depression, the said lever being connected to the making and breaking device and when depressed operating said device to break the continuity of the signal operating means and when returned permitting the said device to restore the continuity of the signal operating means, and means for controlling the action of said device.

[Claims 4 to 8 not printed in the Gazette.]

1,274,720. COMBINED COMB AND BRUSH. LAWRENCE KIELB, Orleans, Minn. Filed Mar. 4, 1918. Serial No. 220,304. (Cl. 132—35.)



1. In combination with a handle having a chamber, a comb pivoted at one end within the chamber adapted for swinging outwardly thereof in its operative position, a locking latch for the comb longitudinally shiftably arranged within the chamber, resilient positioning means for the latch, one portion of the latch being resilient and provided with a bolt adapted for engagaing the comb adjacent the pivoted end thereof, and releasing means for the latch carried by said bolt adapted for flexing the resilient portion of the latch during the retracting of the bolt.

3. A device of the class described comprising a brush-handle having a side-opening chamber therein, a comb pivoted at one end within the chamber adapted for swinging movement inwardly and outwardly of the chamber, a latch longitudinally movable within the chamber having a resilient end portion adapted for lateral movement therein, a locking bolt upon the resilient end of the latch adapted for engagaing the pivoted end of the comb when in either its open or closed arrangement, and a hook at the opposite end of the latch adapted for locking engagement with the free end of the comb when the latter is closed within the handle.

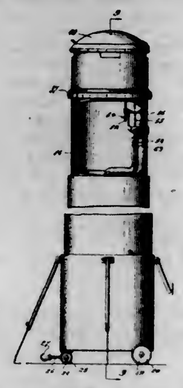
5. A device of the class described comprising a brush-handle having a side-opening chamber therein, a comb pivoted at one end within the chamber adapted for swinging movement inwardly and outwardly of the chamber, a latch longitudinally movable within the chamber having a resilient end portion adapted for lateral movement therein, a locking bolt upon the resilient end of the latch adapted for engaging the pivoted end of the comb when in either its open or closed arrangement, a hook at the opposite end of the latch adapted for locking engagement with the free end of the comb when the latter is closed within the handle, the said handle having an angular slot through one side thereof, an operating rod for the latch carried by the latch-bolt and projecting through said slot, and a finger-engaging plate upon the outer end of said rod.

[Claims 2, 4, and 6 not printed in the Gazette.]

1,274,721. MOVABLE FORT. ANTON KRZAN, Chicago, Ill. Filed Mar. 23, 1918. Serial No. 224,284. (Cl. 89—40.)

1. In a movable fort, the combination with a plurality of inter-engaged telescopic tubes, a truck upon which said tubes are mounted, and means for supporting said truck

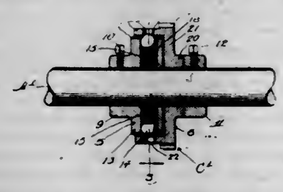
and said tubes laterally, of a turret revolubly mounted upon the uppermost of said tubes, a second series of telescopic tubes engaged interiorly of the first named tubes,



an inflatable sac engaged within the second series of tubes, and means for inflating or deflating said sac whereby said turret may be raised or lowered.

[Claims 2 and 3 not printed in the Gazette.]

1,274,722. AUTOMATIC SAFETY DEVICE FOR PREVENTING OVERLOAD ON MOTORS AND OTHER DRIVING ELEMENTS. PAUL H. LACEY, Chicago, Ill. Filed Jan. 2, 1918. Serial No. 209,875. (Cl. 74—29.)



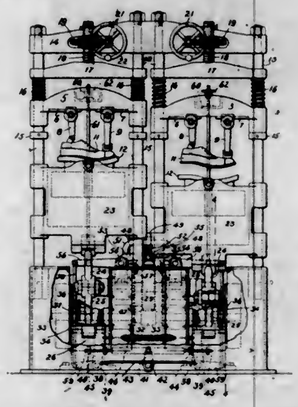
1. In a safety device for transmitting power, a revoluble driving member having a radial socket formed therein, a ball in said socket, a coiled compression spring in said socket, pressing against said ball, a ball retaining band encircling said member and having an aperture formed therein of less diameter than said ball, through which said ball protrudes, and a revoluble driven member having a recess of less diameter than the ball, into which said ball protrudes.

2. In a safety device for transmitting power, a revoluble driving member having radial sockets formed therein, a ball in each socket, a coiled compression spring in said sockets, pressing against said balls, a ball retaining band encircling said member and having apertures formed therein of less diameter than said balls through which said balls protrude, and a revoluble driven head having an annular part surrounding said driving member, said part being formed with recesses of less diameter than the balls, into which the balls protrude.

[Claims 3 and 4 not printed in the Gazette.]

1,274,723. SOLE-PRESSING MACHINE. JOSEPH H. LA ROUCHE, Lynn, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Mar. 11, 1911. Serial No. 613,703. (Cl. 12—36.)

2. A sole pressing machine, having, in combination, a shoe supporting jack, a sole pressing form, a spring for supporting said jack against the pressure of the work, mechanism for moving said form through a variable distance toward the jack, and means connected with the jack, and actuated through the yielding movement thereof, to interrupt the operation of said mechanism automatically and hold said jack and form in pressure position upon the attainment of a predetermined degree of pressure upon the work.



5. A sole pressing machine, having, in combination, cooperating sole pressing members; a source of power, a train of mechanism connecting one of said pressing members and said source of power, having a definite limit of extent of movement, for moving one of said members toward the other; and automatic means for disconnecting said train of mechanism from its source of power to stop the advance of the moving member short of its limit of extent of movement, and for causing a dwell of said members in pressure position, after a predetermined amount of pressure has been applied to the sole.

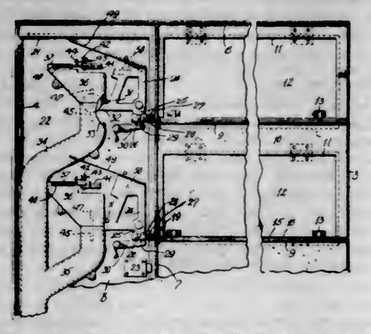
6. A sole pressing machine, having, in combination, two coöperating sole pressing members, and means for producing a continuous relative approach movement of said members in the same general direction first through an indeterminate distance by which the work is engaged and then through a predetermined distance by which the work is compressed.

9. A sole pressing machine, having, in combination, cooperating sole pressing members, mechanism having a definite limit of extent of movement for moving one of said members toward the other, a thrust spring for yieldingly holding said other member, automatic means for interrupting the advance of the moving member short of the limit of its extent of movement, after a predetermined amount of pressure has been placed on work held on said other member, and means for predetermining the pressure comprising an adjustment for the thrust spring and devices to vary the travel of the moving member.

[Claims 1, 3, 4, 7, 8, 10, and 11 not printed in the Gazette.]

1,274,724. NEWSPAPER-VENDING MACHINE. JOHN LEVINE, Detroit, Mich. Filed Aug. 25, 1917. Serial No. 188,111. (Cl. 194—59.)

3. In a newspaper vending machine, a cabinet having a newspaper compartment and an operating compartment, doors for both of said compartments, a latch bar in the paper compartment adapted to hold the door thereof closed and said latch bar extending into the operating compartment of said cabinet, a pivoted member carried by the door of the operating compartment of said cabinet, and normally engaging said latch bar, means engaging said pivoted member adapted to hold said member when shifted with the latch bar in an unlocked position, a coin actuating member carried by the door of the operating compartment of said cabinet and adapted through the medium of a coin to shift said pivot member and means carried by said pivoted member preventing actua-



tion thereof when said latch bar is in an unlocked position.

[Claims 1 and 2 not printed in the Gazette.]

1,274,725. ELECTRODE FOR ARC-LAMPS. GEORGE M. LITTLE, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 6, 1915. Serial No. 44,010. (Cl. 176—121.)



1. An arcing electrode comprising transverse layers of dissimilar materials throughout the length of the consumable portion of the same to provide a constant supply of slag-forming material at the arc and to retard the transference of heat therefrom.

6. An arcing electrode comprising a central support and a plurality of rings disposed upon the said support, the said rings being composed alternately of two dissimilar metals.

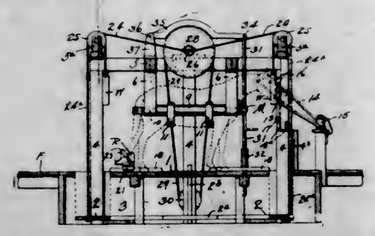
[Claims 2 to 5, 7, and 8 not printed in the Gazette.]

1,274,726. PLASTIC COMPOSITION. WILLIAM MCARTHUR, Tenino, Wash. Filed May 8, 1917, Serial No. 167,316. Renewed Mar. 12, 1918. Serial No. 222,045. (Cl. 106—30.)

1. A plastic composition including pulverized tuff, sodium silicate, sodium chlorid and Portland cement.

2. A plastic composition consisting of pulverized tuff, approximately 50 parts, sodium silicate approximately 12 parts, and sodium chlorid approximately 2 parts, combined with Portland cement and lime.

1,274,727. HORSESHOEING-STAND. CALLIOUS J. MCCARTY, Morgantown, W. Va. Filed Feb. 23, 1918. Serial No. 218,766. (Cl. 119—100.)



1. A horseshoeing-stand including an animal supporting platform, and an elevator surrounding the same.

[Claims 2 to 6 not printed in the Gazette.]

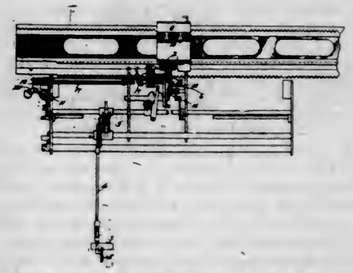
1,274,728. PLASTIC COMPOSITION AND PROCESS OF MAKING THE SAME. JAMES P. A. MCCOY, Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed July 3, 1914. Serial No. 848,801. (Cl. 106—12.)

1. A substantially water-insoluble plastic composition that contains a substantial proportion of tannic material and is capable of being rapidly molded without preliminary shaping.

5. A plastic composition that contains water-insoluble tannic material and cork, and is capable of being rapidly molded without preliminary shaping.

[Claims 2 to 4 not printed in the Gazette.]

1,274,729. TOTAL-PROOF DEVICE FOR ADDING MECHANISM. HENRY N. MCKAY, Oakland, Cal., assignor to The Wahl Company, Wilmington, Del., a Corporation of Delaware. Filed Mar. 10, 1915, Serial No. 13,332. Renewed Dec. 30, 1916. Serial No. 139,852. (Cl. 235—130.)



1. A total proof attachment for adding typewriters which includes in combination the typewriter carriage, numeral keys, a totalizer operable by the keys, a total proof lever, and means connected to and operable by the total proof lever whereby the carriage is arrested between spaces whenever an incorrect key is struck when copying a total shown in the totalizer.

4. The combination in calculating attachments for typewriting machines, of a typewriter, a computer operable by the numeral keys of the typewriter, and a means operative by the depression of a wrong key to block the typewriter carriage between spaces for proving the proper transcription of a total from the computer.

30. In a calculating machine, the combination of a totalizer, a set of computing wheels, a slot in each of said wheels, said slots determining the zero position of said wheels, a zero determining device, and means to bring said zero determining device in contact with said wheels *seriatim*.

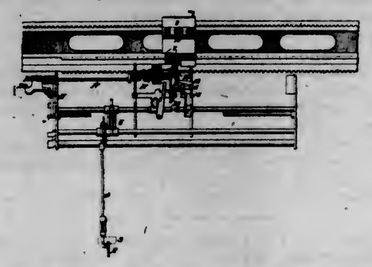
[Claims 2, 3, 5 to 29, and 31 not printed in the Gazette.]

1,274,730. LOCK-ACTUATOR FOR TOTAL-PROOF DEVICES ON COMPUTING-MACHINES. HENRY N. MCKAY, Oakland, Cal., assignor to Wahl Company, Wilmington, Del., a Corporation of Delaware. Filed May 31, 1916. Serial No. 100,989. (Cl. 235—130.)

1. In a totalizer, the combination with a plurality of number wheels, of a plurality of carrying gears adapted to drive said number wheels, a gear adapted to drive any of said carrying gears and a deep notch between certain of the teeth of said carrying gears, said notch having a greater depth than the remaining interdental notches and being so shaped as to not interfere with the driving of said number wheels by said carrying gears.

2. In a totalizer, the combination with a plurality of number wheels, of a plurality of carrying gears adapted to drive said number wheels, a gear adapted to drive any of said carrying gears, and a plurality of deep notches between certain of the teeth of said carrying gears, said notches having a greater depth than the remaining interdental notches and being so shaped as to not interfere

with the driving of said number wheels by said carrying gears.



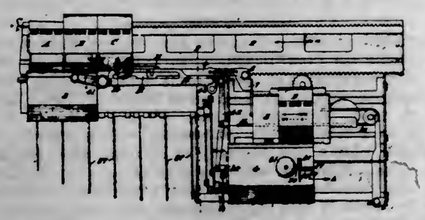
3. In a totalizer, the combination with a plurality of number wheels, of a plurality of carrying gears adapted to drive said number wheels, a gear adapted to drive any of said carrying gears, and a deep notch between certain of the teeth of each of said carrying gears, said notch having a greater depth than the remaining interdental spaces and being shaped so as to not interfere with the driving of said number wheels by said carrying gears, said notch being further so positioned that the notches on all the carrying gears will form an alinement when the number wheels bear certain predetermined relations to each other.

4. In a totalizer, the combination with a plurality of number wheels, of a plurality of carrying gears adapted to drive said number wheels, a gear adapted to drive any of said carrying gears, and a deep notch between certain of the teeth of each of said carrying gears, said notch having a greater depth than the remaining interdental spaces and being shaped so as to not interfere with the driving of said number wheels by said carrying gears, said notches being further so positioned as to form an alinement whenever the number wheels stand at zero.

5. In a totalizer, the combination of a numeral wheel, a computing gear wheel adapted to drive said numeral wheel by means of gear teeth, said computing wheel having certain of the spaces between its teeth deeper than the remaining spaces, said deep spaces being so located as to occupy a certain predetermined relation with the position of said number wheel, whereby the same gear may be used both for driving said number wheel and determining when said number wheel stands at zero.

[Claim 6 not printed in the Gazette.]

1,274,731. TOTAL-PROOF LOCK FOR COMPUTING TYPE-WRITERS. HENRY N. MCKAY, Oakland, Cal., assignor to The Wahl Company, Wilmington, Del., a Corporation of Delaware. Filed May 31, 1916. Serial No. 100,990. (Cl. 235—59.)



1. In a computing typewriter, the combination of a set of digit keys, a traveling carriage, a totalizer, an actuating mechanism to operate said totalizer, and means operable by the totalizer and brought into operation when said traveling carriage has reached a particular position for proving the correct transcription of a total shown in the totalizer.

2. In a computing typewriter having a recording mechanism and a calculating mechanism and certain keys operating the recording mechanism only and other keys common to both mechanisms, the combination with the calculating mechanism of means operative on transcribing a wrong result of a calculation for locking against further operation the keys operating the recording mechanism.
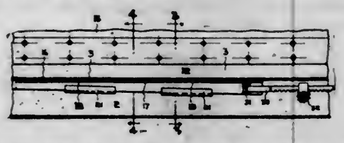
3. In a computing typewriter having a recording mechanism and a calculating mechanism and certain keys operating the recording mechanism only and other keys common to both mechanisms, the combination with the calculating mechanism of means operative on transcribing a wrong result of a calculation for locking against further operation, both the keys operating the recording mechanism and the keys operating the calculating mechanism.

5. In a computing typewriter, the combination with the numeral keys, the carriage, the actuating mechanism and the totalizer therefor, of means controlled by the totalizer for automatically displaying a visible signal when a wrong total is copied from the totalizer.

6. In a computing typewriter the combination with the numeral keys, the carriage, the actuating mechanism and the totalizer therefor, of means controlled by the totalizer for giving an audible signal when a wrong total is copied from the totalizer.

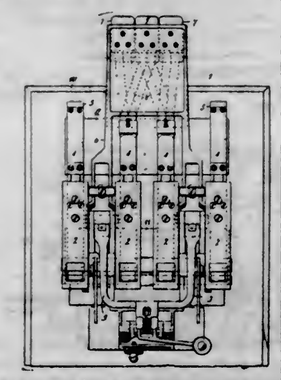
[Claims 4 and 7 to 63 not printed in the Gazette.]

1,274,732. DUMP-CAR. FINLAY A. MCRAE, Montreal, Quebec, Canada. Filed July 3, 1917. Serial No. 178,518. (Cl. 105—14.)



In a railway car a floor having two parallel series of openings therein arranged longitudinally relative to the car, the sides of the openings parallel to the sides of the car being extended downwardly and turned up to present guides, and a pair of slidable doors of inverted channel cross sections having their flanges slidably mounted in the guides, the guides being inclined and the flanges tapered for the purpose of causing the doors to move into tight contact with the floor, when closing the openings, means for opening and closing the doors and means coacting with the last-mentioned means for locking the doors in closed position.

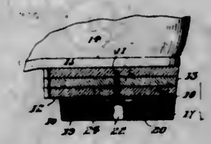
1,274,733. CIRCUIT-INTERRUPTER. JOSEPH N. MAHONEY, Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Fled Aug. 11, 1913. Serial No. 784,084. (Cl. 175—282.)



1. In an electrical circuit breaker, the combination with operating lever arms, of contact units arranged in pairs about each of the said lever arms, said contact units constituting groups comprising a plurality of contact members separated by relatively large air gaps, and means for interconnecting the said contact members.

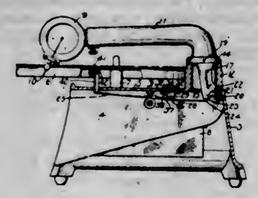
[Claims 2 to 6 not printed in the Gazette.]

1,274,734. DETACHABLE RESILIENT HEEL-TREAD. VINCENT F. MALISZEWSKI, Detroit, Mich. Filed Apr. 27, 1917. Serial No. 164,877. (Cl. 36—39.)



The combination with a rubber heel of circular form, of a combined wear plate and attaching means therefor comprising a substantially imperforate metal disk flatly engaging the upper face of said heel, a perforated metal disk of relatively smaller diameter parallel with and spaced from said imperforate disk and permanently entirely embedded in said heel, and an upwardly tapered tubular metal hub centrally rigidly connecting said disks, said hub forming a bearing to receive the conical portion of a screw passed therethrough into a shoe heel on which said rubber heel may rotate in use to provide for uniform wear.

1,274,735. AUTOMATIC BRAKE FOR TALKING-MACHINES. RAY H. MANSON, Elyria, Ohio, assignor to The Garford Manufacturing Company, Elyria, Ohio, a Corporation of Ohio. Filed June 24, 1916. Serial No. 105,530. (Cl. 74—46.)



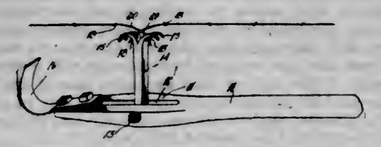
1. In a device of the class described, the combination of a frame, a rotatable member mounted on said frame, an arm pivoted to said frame adapted to coöperate with said rotatable member, a brake lever pivoted in said frame to the underside of the top thereof, a hand on one end of said lever projecting through the top of the frame, a brake shoe on said hand adapted to engage the underside of said rotatable member when the brake is in operation, a cam on the other end of said lever and a finger carried by said pivoted arm for engaging said cam and operating said brake lever to brake the rotatable member.

3. In a device of the class described, the combination of a frame, a rotatable disk adapted to rotate on said frame, a hollow sound conducting arm pivoted in said frame, a finger mounted in said hollow arm and projecting into said hollow frame and braking means mounted in said frame controlled by said finger.

[Claims 2, 4, and 5 not printed in the Gazette.]

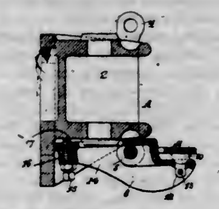
1,274,736. BARB-WIRE STRETCHER. JAMES E. MARGESON, Jasper, N. Y. Filed Jan. 14, 1914. Serial No. 812,092. (Cl. 140—118.)

A device of the character described, comprising an arm bifurcated at one end with the furcations reversely bent to form a double-hook end portion providing gripping claws projecting from opposite sides of said arm, a lever pivotally supporting said arm for swinging movement, and a relatively wide fulcrum end on the lever for partially



embracing a stationary support for the turning of the lever upon the latter.

1,274,737. POCKET FOR ENGINE-COUPLINGS. GEORGE V. MARTIN, Cleveland, Ohio, assignor to The National Malleable Castings Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 14, 1914. Serial No. 866,574. (Cl. 213—42.)

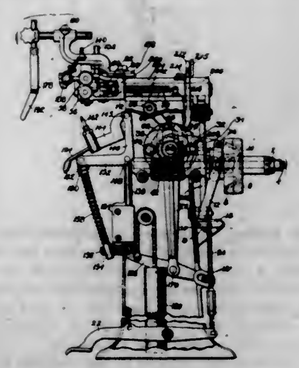


1. In a coupler pocket, a shelf for supporting a coupler head pivotally secured to the pocket, the rear extension of the shelf carrying means for adjusting the height of the forward end of the shelf, the forward end of the shelf supporting a wear plate adapted to engage the under side of a coupler head.

2. In a coupler pocket, a shelf for supporting a coupler head pivotally secured to the pocket and a wear plate seated on the forward end of the shelf adapted to engage the under side of a coupler head, the wear plate being adapted to tilt with the coupler head and to be maintained substantially in a horizontal plane by contact therewith.

[Claim 3 not printed in the Gazette.]

1,274,738. LAST-PULLING MACHINE. BENJAMIN F. MAYO, Salem, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Sept. 16, 1916. Serial No. 120,510. (Cl. 12—1.)



1. In a last pulling machine, in combination, means for holding a shoe, means for holding a last, mechanism for effecting relative movement of the shoe holding means and last holding means to separate the shoe and last, and means operative to incline relatively the shoe and last transversely of the shoe and last and to maintain such

relative inclination for a determinate period during the relative separating movement of the shoe and last.

3. In a last pulling machine, in combination, means for holding a shoe, means for holding a last, mechanism for effecting movement of the last holding means relatively to the shoe holding means and in a direction to separate the last from the shoe, and means operative during the removal of the last to hold one side face of the shoe upper forcibly against a side face of the last to relieve lateral pressure against the opposite side face of the shoe upper as the last is removed therefrom.

5. In a last pulling machine, in combination, means for holding a shoe, means for holding a last, mechanism operative to move the last holding means to pull the last from the shoe, and means, automatically operative during the removal of the last substantially when the last heel has been moved to clear the edge of the shoe counter, to move the shoe holding means to swing the shoe transversely relative to the last and against one side face of the last substantially to reduce the lateral pressure of the last against the opposite side face of the shoe upper as the last is removed from the shoe.

7. In a last pulling machine, in combination, shoe holding means, last holding means, mechanism operative to move the last holding means to pull the last from the shoe, and means operative during the removal of the last from the shoe automatically to swing the shoe holding means to incline the bottom of the shoe from its normal plane and transversely relatively to the last to press and hold one side face of the shoe upper against a side face of the last during the removal of the last from the shoe.

9. In a last pulling machine, means to hold an inverted shoe, means to engage an inverted last within the shoe, and mechanism constructed and arranged automatically to effect relative movement between the shoe holding and last engaging means in a direction to effect separation of a shoe and last and including means automatically operative in timed relation during such relative separating movement to effect relative transverse inclination of the shoe holding and last engaging means forcibly to engage and press in contact the side faces of a shoe upper and last at the inner side of the shoe.

[Claims 2, 4, 6, 8, and 10 to 37 not printed in the Gazette.]

1,274,739. COIN-HOLDER. FRANK M. MEAD, Boylston, Mass., assignor of one-half to Henry A. Fowler, Worcester, Mass. Filed Apr. 10, 1916. Serial No. 90,019. (Cl. 133—6.)

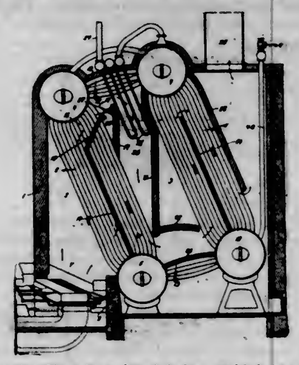


1. A coin holder, comprising a flattened tube open at one end, a partition dividing said tube into two coin holding chambers, a coin delivery member held on the open end of said tube and having a single coin passage therethrough in registration with one only of said coin chambers, said member being removable, to register its passage with the other of said coin chambers.

[Claims 2 and 3 not printed in the Gazette.]

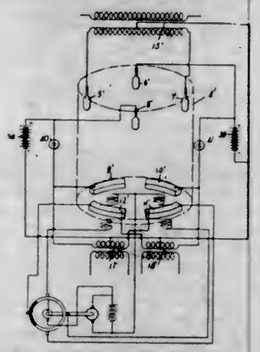
1,274,740. SUPERHEATER CONSTRUCTION FOR BOILERS. EDWARD C. MEIER, Phoenixville, Pa. Filed Mar. 12, 1917. Serial No. 154,069. (Cl. 122—476.)

The combination with a boiler casing, of front and rear boiler units spaced apart and including water tubes, a baffle wall between the units, said wall at its bottom having a portion adjacent the rear tubes of the front boiler unit and at its top having a portion adjacent the rear boiler unit, a baffle extending longitudinally between the tubes of the front boiler unit, an angularly disposed baffle extending from the top of said longitudinal baffle to the rear tubes of said front unit, another baffle spaced between the rear tubes of the front unit and the baffle



wall and extending to a level below said latter angularly disposed baffle, for directing a portion of the products of combustion toward the rear tubes of the front unit, a superheater having a portion extending between said spaced baffle and the baffle wall, and a damper positioned between the rear end of said angularly disposed baffle and the top of the interposed baffle, substantially as described.

1,274,741. CONVERTING SYSTEM. FRIEDRICH W. MEYER, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 24, 1915. Serial No. 16,678. (Cl. 172—238.)



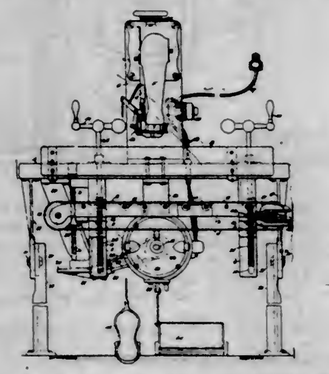
1. The combination with a source of single-phase energy, of a polyphase consumption circuit, a phase-converter of the vapor-arc type connected therebetween and arranged to transfer energy from said single-phase source to said polyphase circuit, and a source of direct current connected to supply energy to said phase-converter when the instantaneous voltage of said single-phase source is less than that of the polyphase circuit.

5. The combination with an evacuated container, of a pair of anodes therein, a source of single-phase alternating current connected to said anodes, a plurality of cathodes therein, a polyphase system of distribution, connections from said cathodes to said polyphase system, a pair of batteries, an asymmetric connection from one of said cathodes to the positive terminal of one of said batteries,

an asymmetric connection from another of said cathodes to the positive terminal of the other battery, a pair of auxiliary anodes in said container, a connection from the positive terminal of each battery to one of said anodes, a connection between neutral points in said single-phase and said polyphase system and the negative terminals of said batteries, and means for causing an arc within said container to operate in succession to each of said cathodes.

[Claims 2 to 4 and 6 not printed in the Gazette.]

1,274,742. BAG-SEWING MACHINE. GEORGE E. MOLYNEUX, Bayonne, N. J., assignor to The Singer Manufacturing Company, a Corporation of New Jersey. Filed Jan. 20, 1914. Serial No. 813,169. (Cl. 112—24.)

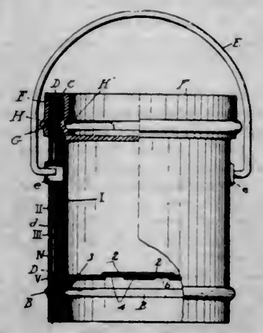


2. In a filled bag sewing apparatus, in combination, a table, a sewing machine supported upon and partially overhanging the edge of said table, an electric motor arranged beneath and sustained by said table, a driving connection between said motor and said sewing machine, an endless conveyer extending beneath the overhanging portion of said sewing machine, a driving connection between said conveyer and said motor, independent means, including vertically disposed worms extending through and above the top of the table for independently raising and lowering the opposite ends of said conveyer, and hand-cranks applied to said worms above said table and accessible to the sewing machine operator from the front of said table.

[Claim 1 not printed in the Gazette.]

1,274,743. [WITHDRAWN.]

1,274,744. PAPER RECEPTACLE. COLMAN J. MULLIN, Locust, N. J., assignor to Thomas Liston, New York, N. Y. Filed Dec. 29, 1913. Serial No. 809,141. (Cl. 229—3.)



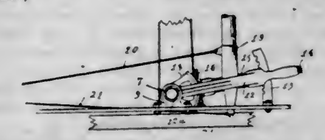
1. A paper receptacle formed from a single blank of material and having a bottom formed by infolding portions of said blank and securing them together by an adhesive, a portion of the receptacle bottom thus formed being in relief from the remainder of said bottom to draw the bottom of the receptacle taut.

7. A receptacle formed from a blank embodying an elongated strip provided along one of its edges with a plurality of series of interspaced integral projections, said strip being adapted to be wound to form a receptacle body having a plurality of plies, and the projections infolded to form the bottom of the receptacle, the different series of projections being so relatively positioned that, when infolded, each successive series breaks joints with the preceding series, whereby a strong, rigid, impervious bottom, integral with the body of the receptacle, is formed.

14. A paper receptacle formed from a single blank of material, which blank is provided along one of its edges with a plurality of series of lateral projections, said blank being rolled to form a receptacle body of a plurality of plies and the projections infolded, one series forming a bottom to the receptacle intermediate the upper and lower edges of the body, and another series forming a flange extending upwardly from the lower edge of the receptacle and abutting the outer edge of the bottom.

[Claims 2 to 6 and 8 to 13 not printed in the Gazette.]

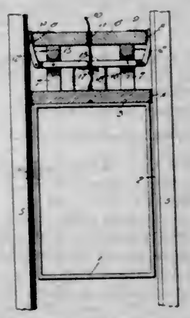
1,274,745. AIRPLANE. HARVEY C. MUMMERT, Buffalo, N. Y. Filed Jan. 18, 1918. Serial No. 212,514. (Cl. 244—29.)



2. In an airplane, the combination with pivoted side planes and a rudder plane, of a yoke pivoted concentrically with the side planes, a rock-shaft carried by the yoke with its axis at a right angle to the axis of the yoke, a lever pivoted to the rock-shaft on an axis at a right angle to that of the shaft and adapted to rock said shaft, and connections between the lever and the rudder plane, to adjust the latter by movement of the lever on its own axis.

[Claim 1 not printed in the Gazette.]

1,274,746. SAFETY DEVICE FOR ELEVATORS. WILLIAM CHRISTOPHER MURPHY, Red Lodge, Mont. Filed May 8, 1918. Serial No. 233,343. (Cl. 187—85.)

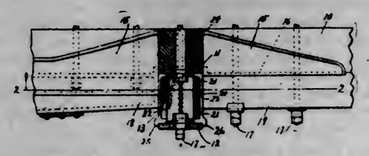


1. In an elevator, the combination with the cage, the guides, and the hoisting cable, of a cross bar arranged above the cage in spaced relation and having an opening through which the cable extends, the ends of the cross bar being recessed to receive the guides, a lever pivoted below the cross bar at each end thereof, a wedge shaped dog pivoted to the outer end of each lever and extending into the adjacent recess of the cross bar, a plate secured to the inner end of one lever and engaging the inner end of the other lever and having an opening through which the

cable passes, the cable having a stop for engaging the plate to normally hold the dogs in lowered position, springs arranged between the levers at the inner ends and the cage and normally acting to force the dogs upward, said dogs having teeth on their outer faces for engaging the guides when they are forced upward.

[Claims 2 and 3 not printed in the Gazette.]

1,274,747. UNDERFRAMING FOR CARS. CHARLES J. NASH, Chicago, Ill., assignor to Universal Draft Gear Attachment Co., a Corporation of Illinois. Filed Oct. 18, 1917. Serial No. 197,249. (Cl. 105—76.)



1. In an underframing for cars, in combination, a bolster having upper and lower plates, a draft arm arching over the bolster and having a depending portion forward of the bolster and a reinforcing element interfitting between the bolster plates and bearing against the depending portion of the draft arm.

2. In an underframing for cars, in combination, a bolster having upper and lower plates, a draft arm arching over the bolster and having a depending portion forward of the bolster, a reinforcing element interfitting between the bolster plates and bearing against the depending portion of the draft arm, and a sub-sill abutting against the rear face of the reinforcing element.

3. In an underframing for cars, in combination, a bolster having upper and lower plates, a draft arm arching over the bolster and having a depending portion forward of the bolster, and a reinforcing element interfitting between the bolster plates and having depending lugs embracing the lower plate, such element bearing against the depending portion of the draft arm.

4. In an underframing for cars, in combination, a bolster having upper and lower plates, a draft arm arching over the bolster and having a depending portion forward of the bolster, a reinforcing element interfitting between the bolster plates and having depending lugs embracing the lower plate, such element bearing against the depending portion of the draft arm, and a sub-sill abutting against the rear face of the reinforcing element.

5. In an underframing for cars, in combination, a bolster having upper and lower plates, a reinforcing element interfitting between such plates and extending forward and backward thereof, and a draft arm arching over the bolster and having transverse shoulders between which the reinforcing element interfits.

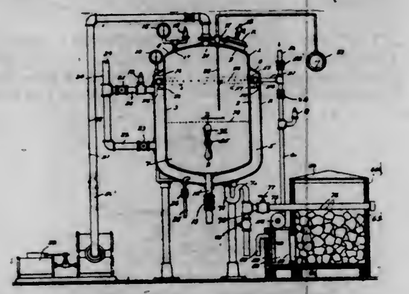
[Claim 6 not printed in the Gazette.]

1,274,748. PROCESS OF TREATING MILK. NIELS D. NIELSEN, Elyria, Ohio. Filed Feb. 11, 1918. Serial No. 216,622. (Cl. 99—15.)

1. The process of treating milk, which consists in introducing into a receptacle a batch of milk to be treated, increasing the temperature of the entire mass of fluid at the rate of at least 12° F. per minute to a temperature of 140° F. by applying a heating medium to the walls of the receptacle, and keeping the mass of fluid in such rapid motion as to prevent scorching of the fluid during such heating of the mass.

4. The process of treating milk or other liquid food, which consists in placing the milk or other food in a vessel, agitating the same, heating the same while in agitation to a temperature of about 140° F. and then cooling such milk or other food to about 40° F. without removing the same from such vessel.

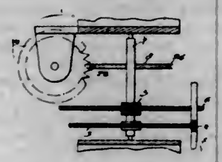
9. The process of treating milk or similar liquid food, which consists in bringing such food to a temperature of about 40° F. and running the same at such temperature into a vessel, applying to the walls of such vessel a heating medium preheated to a temperature of about 212° F. to 220° F., and thereby at a rate of 12° F. or 15° F. per minute heating such food to about 160° F. and above 110° F., thereby limiting the time for development of bacteria, and meanwhile agitating the food to evenly and



quickly expose all parts thereof to the walls of the vessel and therethrough to the heating medium and thereby preventing scorching of such food, and then cooling such food while thus in agitation to a temperature of about 40° F. by applying a cooling agency in place of such heating agency to the walls of said vessel and without removing such food from said vessel.

[Claims 2, 3, and 5 to 8 not printed in the Gazette.]

1,274,749. ESCAPEMENT DEVICE. PAUL NEILL, East Orange, N. J., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 25, 1914. Serial No. 874,021. (Cl. 185—46.)



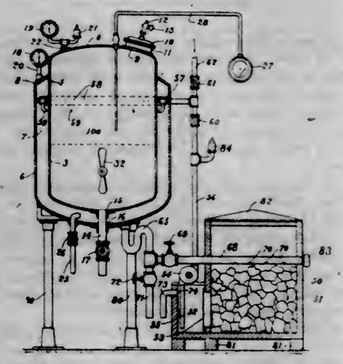
1. An integrating device for a measuring instrument comprising a toothed escapement wheel, indicators operatively connected to the escapement wheel, a spring adapted to move the escapement wheel in one direction only, and a grooved wheel having a notch cut in each of its flanges on opposite radii thereof and adapted to be driven continuously in either direction, said grooved wheel being adapted to engage the teeth of the escapement wheel and the notches being adapted to release the escapement wheel to actuate the indicators in one direction, irrespective of the direction of movement of the grooved wheel.

2. An integrating device for a measuring instrument comprising a toothed escapement wheel tensioned to move in one direction only, indicators operatively connected to the said wheel, and a grooved wheel having a notch cut in each of its flanges on opposite radii thereof and adapted to be driven continuously in either direction by the measuring instrument, the notches being adapted to release the escapement wheel to actuate the indicators in one direction, irrespective of the direction of movement of the grooved wheel.

3. An integrating mechanism comprising a toothed escapement wheel tensioned to move in one direction only, an indicator operatively connected to the escapement wheel, and a continuously operated wheel having two flanges with notches cut therein on opposite radii thereof, said escapement wheel being adapted to be released by the notches in the said flanged wheel to actuate the indicator in one direction, irrespective of the direction of movement of the flanged wheel.

[Claims 4 to 6 not printed in the Gazette.]

1,274,750. PROCESS OF TREATING MILK AND THE LIKE. NIELS D. NIELSEN, Elyria, Ohio. Original application filed Feb. 9, 1918, Serial No. 216,622. Divided and this application filed Mar. 22, 1918. Serial No. 223,909. (Cl. 99—15.)

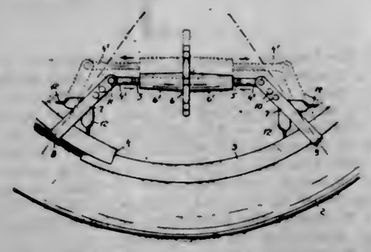


1. The method of treating milk or like liquid, which consists in sterilizing the same, then cooling said liquid to about 36° F. and then filling a space surrounding or substantially surrounding a vessel containing said liquid with a condensable gas and then condensing said gas and thereby creating a heat insulating vacuum about said liquid and then thus maintaining the temperature of such liquid at about 36° F. for a desired length of time.

9. The method of treating milk or the like, which consists in sterilizing the same by heating the same to a temperature of about 145° F. by filling a space surrounding said liquid with a heated condensable gas, then introducing to said space sufficient cooling medium to condense said gas and thereby creating a vacuum or partial vacuum in said space to insulate such liquid from heat, then thereby maintaining such liquid at a constant temperature for about thirty minutes, then introducing to said space a cooling medium sufficient to reduce the temperature of the liquid to about 36° F., then withdrawing such cooling medium and again filling said space with a condensable gas then condensing said gas by introducing cooling water to such space and thereby creating a heat insulating vacuum about said space, whereby the temperature of the liquid may be maintained constant for a suitable period of time.

[Claims 2 to 8 not printed in the Gazette.]

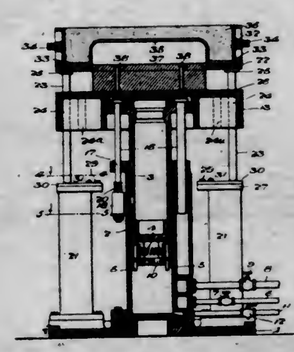
1,274,751. DEMOUNTABLE-RIM REMOVER. JOHN L. NISWANDER, Quincy, Ill. Filed Nov. 7, 1917. Serial No. 200,807. (Cl. 157—1.)



1. A device for removing and replacing demountable rims of vehicle tires, consisting of alined rods oppositely screw-threaded, a turnbuckle connecting said rods, a gripper pivotally connected to the outer end of each rod and made up of diverging resilient shanks having hooked outer ends and parallel approximated inner ends and an inclined brace the inner end of which is located between and rigidly connected to the inner ends of the gripper shanks, each gripper having substantially radial relation to the tire and adapted to be sprung over the rim, said brace having at its outer end biting engagement with the inner surface of the rim.

2. A device for removing and replacing demountable rims of vehicle tires, consisting of alined rods oppositely screw-threaded, a turnbuckle connecting said rods, a gripper pivotally mounted at the outer end of each rod and composed of diverging resilient shanks having hooked outer ends and parallel approximated inner ends, and oppositely inclined braces for each gripper and the inner ends of which are located between and rigidly connected to the inner ends of the gripper shanks, each gripper having substantially radial relation to the tire and adapted to be sprung over the rim, the braces of each gripper having alternative biting engagement with the inner surface of the rim in removing and in replacing the same.

1,274,752. COMBINATION JOLT-RAMMING AND STRIPPING MACHINE. WILLIAM C. NORCROSS, Terre Haute, Ind., assignor to American Molding Machine Co., Terre Haute, Ind., a Corporation of Indiana. Filed Aug. 30, 1917. Serial No. 188,995. (Cl. 22—29.)



1. In a combination jolt-ramming and stripping machine, a table, means for jolting the table and for elevating it, said table being adapted to carry the pattern and the flask, and means carried by and raised with the table adapted for being freed from the table and utilized for supporting the flask while the table is descending to draw the pattern from the mold.

3. In a combination jolt-ramming and stripping machine, a table, means for jolting the table and for elevating it, said table being adapted to carry the pattern and the flask, stripping posts loosely or slidably related to the table and suspended and carried thereby, and supporting means, whereby said posts are rendered adaptable to support the flask and mold on the descent of the table and pattern.

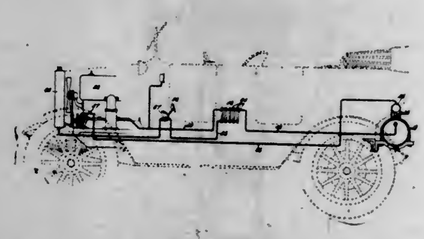
6. In a combination jolt-ramming and stripping machine, a table, means for jolting the table and for elevating it, said table being adapted to carry the pattern and the flask, upright housings, shiftable supports carried by said housings, and stripping posts slidably related to the table and carried thereby which are adapted to enter the housings when the supports are moved out of the way, said supports being adapted to be arranged to engage the stripping posts whereby the posts are adapted to support the flask and mold when the pattern is being drawn by the descent of the table.

7. In a combination jolt-ramming and stripping machine, a table, means for jolting the table and for elevating it, said table being adapted to carry the pattern and the flask, upright housings, stripping posts slidably and removably carried by the table and adapted to be changed from one position to another on said table to accommodate flasks of different sizes, said posts being arranged so that they will enter the housings when in their different set positions, and means carried by the housings adapted to be arranged to engage and support the posts so that the flask will be supported when the pattern is being drawn by the descent of the table.

8. In a combination jolt-ramming and stripping machine, a table, means for jolting the table and for elevating it, said table being adapted to carry the flask, stripping posts loosely carried by and raised with said table for supporting the flask independently of the table when the table descends, and a combined spring cushion and stop carried by the table and arranged so that the spring cushion is first placed under compression before the stop arrests the extreme elevation of the table, whereby the spring cushion serves as an auxiliary means for starting the draw when the table descends.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,274,753. ACETYLENE-GENERATOR. FRANK NORMAN, Des Moines, Iowa, assignor of eight thirty-seconds to Douglas J. Landers, seven thirty-seconds to William A. McAtee, four thirty-seconds to Alphonso B. Lovan, two thirty-seconds to George W. Young, and one thirty-second to William T. Shores, Springfield, Mo., and two thirty-seconds to Clarence H. Nichols, New York, N. Y. Filed Mar. 31, 1916. Serial No. 87,960. (Cl. 48—4.)

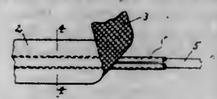


1. The combination with an engine, of an acetylene gas generator, a device operated by the engine for forcing water into the generator, means for supplying the engine with gas from the generator, and means controlled by the pressure of the gas in the generator for preventing the flow of water into the generator, when the gas pressure reaches a predetermined limit, and while said device continues in operation.

2. The combination with an engine, of an acetylene gas generator, a device operated by the engine for forcing water into the generator, means controlled by the pressure of the gas in the generator for preventing the flow of water into the generator when the gas pressure reaches a predetermined limit and while said device continues in operation, a passage connecting the gas generator with the engine, and a device in said passage for modifying the pressure of the gas from the generator to equalize the pressure of the gas toward the engine under varying pressures of the gas in the generator.

3. The combination with an engine and an engine radiator, of an acetylene gas generator, a device operated by the engine for forcing water from the engine radiator into the generator, a passage for conducting the gas from the generator to the engine, a passage for conducting condensation of moisture from said gas passage into the engine radiator, and a valve controlling said last-named passage.

1,274,754. ENVELOP-FASTENER STRIP. ABRAHAM NOVICK, New York, N. Y., assignor to F. L. Schmidt Company, New York, N. Y., a Corporation of New York. Original application filed Sept. 26, 1916, Serial No. 122,190. Divided and this application filed Dec. 27, 1917. Serial No. 209,052. (Cl. 154—52.)



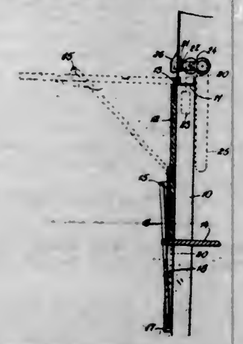
1. A strip of envelop fastener material comprising a strip of sheet material having an adhesive on one face, a strip of metal narrower than said strip of sheet material, and a second strip of sheet material folded about said metal strip, said second strip of sheet material, carrying said metal strip, being laid lengthwise said first strip of sheet material and secured thereto by said adhesive.

3. A strip of envelop fastener material comprising a strip of sheet material having an adhesive on one face, a strip of metal narrower than said strip of sheet material, and a second strip of sheet material folded about said metal strip, said second strip of sheet material, carrying said metal strip, being laid lengthwise and positioned midway widthwise said first strip of sheet material and secured thereto by said adhesive.

7. A strip of envelop fastener material comprising a strip of sheet material having an adhesive on one face, a strip of metal narrower than said strip of sheet material, and a second strip of sheet material, approximately twice the width of said metal strip, being laid parallel to and folded about said metal strip, said folded second strip of sheet material, inclosing said metal strip, being laid lengthwise and positioned midway widthwise said first strip of sheet material and the faces of the adjoining edge portions of said second strip being secured to said first strip by said adhesive.

[Claims 2 and 4 to 6 not printed in the Gazette.]

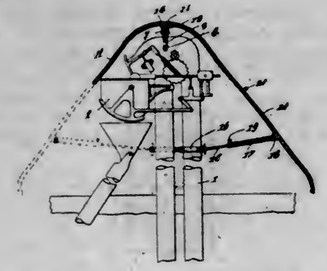
1,274,755. SINGLE-SECTION-STRUT-SUPPORTED DOOR. JOHN EDWARD OGDEN, Cornwall, N. Y. Filed Aug. 1, 1917. Serial No. 183,899. (Cl. 20—16.)



1. A door section hinged at the upper edge of a door opening, brackets at the edges thereof, downwardly extending struts having their upper ends pivoted to said brackets, means for guiding the lower ends of the struts in a substantially vertical direction, the pivotal connection of the upper ends of the struts with the brackets being offset from said guiding means, hoisting mechanism, flexible elements connecting said hoisting mechanism with the lower parts of the struts, said struts being arranged to support the door section in its swung position without obstructing the door opening.

2. A door section hinged at the upper edge of a door opening and arranged to swing outwardly, outwardly projecting brackets at the edges thereof, downwardly extending struts having their upper ends pivoted to said brackets, vertical guides for the lower ends of the struts, extending below the door opening, the pivotal connection of the upper ends of the struts with the brackets being offset from said guides, hoisting mechanism, flexible elements connecting said hoisting mechanism with the lower parts of the struts, said struts being arranged to support the door section in its swung position without obstructing the door opening.

1,274,756. WIRE-RAISER. PALMER M. OLSON, Fort Ransom, N. D. Filed Apr. 16, 1917. Serial No. 162,588. (Cl. 21—183.)



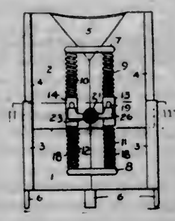
1. In a wire raiser for separators and the like, the combination with a casting adapted to be mounted on the highest point of the separator, and a fork whose shank is mounted in said casting; of a guard consisting of a pair of upwardly converging arms and an arch connecting them, the arch being pivoted in said fork, and means for tilting the guard on its pivot.

2. In a wire raiser for separators and the like, the combination with a casting adapted to be mounted on the highest point of the separator, and a fork whose shank is swivelly mounted in said casting; of a guard comprising front and rear arms united by an arch, the latter being mounted between the fork-arms, and detachable connections between one of said arms and said separator whereby the entire guard may be reversed, for the purpose set forth.

4. In a wire raiser, the combination with a fork, and means for swivelly supporting its stem at the highest point of a vehicle; of a substantially A-shaped guard, pivotal connections between its apex and the fork, a clamp secured to said vehicle, a telescopic rod connecting said clamp with one of the guard-arms, and means for holding the elements of said rod after they have been adjusted.

[Claim 3 not printed in the Gazette.]

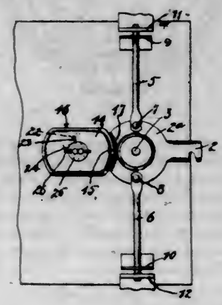
1,274,757. ARMOR OR PROTECTOR FOR INFANTRYMEN. SAMUEL ORENBUCH and NATHAN ROZINSKY, Pittsburgh, Pa. Filed Mar. 19, 1918. Serial No. 223,296. (Cl. 89—36.)



8. An armor for the purpose set forth comprising a telescopic protecting element consisting of an upper and a lower triangular shaped section adjustable relatively to each other, a bar secured to and within each of said sections, a pair of rods depending from one of said bars, a pair of rods extending upwardly from the other of said bars, coupling sleeves receiving the ends of said depending and upwardly extending rods and pins for connecting the sleeves and rods together, and legs depending from the lower of said sections, and a coupling element detachably connected with said sleeves for coupling the protecting element to the body of the wearer.

[Claims 1 to 7 and 9 to 19 not printed in the Gazette.]

1,274,758. DOOR-LOCKING MEANS. LOGAN E. PAGE, New Britain, Conn., assignor to The Hart & Hutchinson Company, New Britain, Conn., a Corporation of Connecticut. Filed Mar. 26, 1918. Serial No. 224,717. (Cl. 70—74.)



1. In a device of the character described, a locking bolt, a rotatable hub therefor and means for rotating the same to project and retract said bolt into and out of the locking position, a locking means for coöperating with the aforesaid locking means comprising a rotatable member mounted adjacent thereto and having a hub clearance wall on one side, a rotatable plug having a limited free rotary movement relatively to said member, said member when in one position engaging the aforesaid locking means to prevent the operation thereof, and when in another position freeing the aforesaid locking means to permit the operation thereof.

2. In a device of the character described, a locking bolt, a manually controlled movable hub for projecting and retracting said bolt, a locking means coöperating with said hub to hold the same against bolt operating movement, said means comprising a rotatable member mounted adjacent to said hub and having a hub clearance wall on one side, a rotatable cylinder lock plug carrying said member and having a limited free rotary movement relatively thereto and arranged to move said member from a hub engaging position to another position to free said hub for the bolt operating movement.

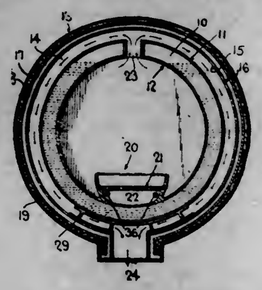
3. In a device of the character described, a locking bolt, a manually controlled movable hub for projecting and retracting said bolt, a locking means coöperating with said hub to hold the same against bolt operating movement, said means comprising a rotatable member mounted adjacent to said hub and having a hub clearance wall on one side, a rotatable cylinder lock plug carrying said member and having a limited free rotary movement relatively thereto and arranged to move said member from a hub engaging position to another position to free said hub for the bolt operating movement, and a stop to limit the turning movement of said rotatable member in one direction.

[Claims 4 to 9 not printed in the Gazette.]

1,274,759. STEAM-BOILER. TRUMAN J. PARKER, Dallas, Tex. Filed Aug. 25, 1917. Serial No. 188,124. (Cl. 122—23.)

A steam boiler comprising an outer cylindrical casing, a lower longitudinally extending passage projecting from

and communicating with the interior of the casing at the bottom thereof, a vertically disposed outlet flue communicating with one end of said passage, a water chamber formed of inner and outer spaced walls arranged concentrically with and spaced from the inner wall of the casing to provide a heat circulating bottom, communicating with the lower longitudinal passage, a central heating chamber formed by the inner wall of the water chamber, an upper



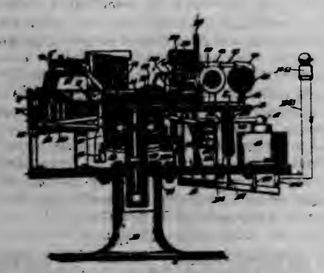
ngitudinally disposed passage extending through the upper portion of the water chamber to establish communication between the heating chamber and the heat circulating chamber and a vertically disposed passage formed by spacing the rear wall of the water chamber from the rear wall of the casing for establishing communication between the heating chamber and the flue through the upper longitudinally disposed passage.

1,274,760. PEN-EXTRACTOR. JOSEPH ANTHONY PARELLA, Washington, D. C. Filed Mar. 22, 1918. Serial No. 223,984. (Cl. 120—97.)



A pen extractor, comprising a U-shaped body portion formed of suitably stiff and resilient metal and having oppositely arranged substantially flat arms; inwardly projecting extensions formed upon the ends of the substantially flat arms by bending the material of said arms, said extensions being disposed perpendicular to said arms and tapered and decreasing in width inwardly, said extensions being of substantial length whereby the fingers are permanently held out of contact with the pen; and serrated jaws formed upon the inner ends of the extensions.

1,274,761. RECORDING APPARATUS FOR SAFE-DEPOSIT BOXES. JOHN PATTEN and ERNEST B. MILLER, Baltimore, Md. Filed Aug. 22, 1914. Serial No. 858,085. (Cl. 234—37.5.)

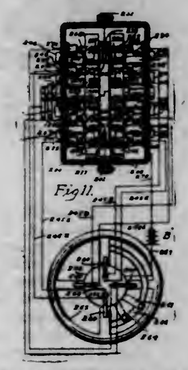


6. In apparatus of the class described, the combination of means for feeding a record blank, a plurality of stations, a plurality of independently operable recording means, vibratory means, members adapted to connect said vibratory means and said recording means, and electrical means controllable from said stations to move said members into and out of operative connection with said vibratory means.

15. In apparatus of the class described, the combination of a plurality of type bars, a continuously rotating shaft, a wheel on said shaft and having its axis inclined with respect to the axis of the shaft, said wheel having a slotted periphery, members connected with said type bars and having slotted portions arranged in the slots in said wheel, and a connecting member carried by said wheel and arranged in said slots, as and for the purpose described.

[Claims 1 to 5, 7 to 14, and 16 to 20 not printed in the Gazette.]

1,274,762. COMBINED CLUTCH, BRAKE, AND GEAR OPERATING LEVER FOR AUTOMOBILES. HUGH D. PEASLEE, Oakland, Cal. Filed Apr. 25, 1912. Serial No. 693,125. (Cl. 74—58.)



8. In a control system for automobiles, a running gear, a motor, a change gear mechanism connected with the motor and running gear, means to set the apparatus for a given gear disengagement, and to select a desired gear engagement at the same time, a clutch to disengage the motor from the gearing, a single operating lever, and means whereby in a single movement of said lever said clutch and gear set may be disengaged followed by the engagement of the desired gear set, as described.

14. In a control system for automobiles, a running gear, a motor, a change gear mechanism connected with the motor and running gear, a clutch for disconnecting the motor from the gearing, a brake, a single lever for operating the clutch, the change gear mechanism and the brake, means whereby a gear set in engagement will be moved toward disengagement during the period in which the clutch is being disengaged and will be completely disengaged at the time the clutch is disengaged, means to engage another set of gears after the disengagement of the previous set of gears, and means whereby the brake will be applied by said lever after the engagement of a gear set, as described.

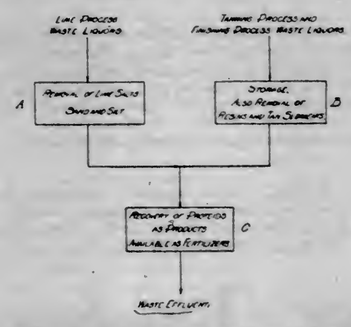
18. In a control system for automobiles, a running gear, a motor, a gear case, a change gear mechanism connected with the running gear and motor, a clutch for disconnecting the motor from the gearing, a pair of rods extending out of the change gear mechanism case for effecting the gear changes, a pair of operating arms connected with said rods, means to lock one of said arms when the other arm is moved, and a single lever for effecting the movement of both of said arms and the operation of the clutch, as described.

25. In a control system for automobiles, a running gear, a motor, a change gear mechanism connecting the motor and the running gear, electrical means to select a given gear engagement, electrical means to disengage the set of gears so engaged, a clutch for disconnecting the motor from the gearing, and a single lever for the operation of the clutch and for effecting the desired gear change when the given selection has been made, as described.

29. In a control system for automobiles, a running gear, a motor, a gear case, a change gear mechanism connecting the motor and the running gear, a clutch for disconnecting the motor from the gearing, a brake, electrical means for setting the apparatus for a given gear disengagement, electrical means to select a given gear engagement at the same time, a single lever for the operation of the clutch, brake and gear change mechanism, said lever effecting the release of the clutch, the disengagement of a set of gears and the engagement of another set of gears and the application of the brake in the order named in a single forward movement.

[Claims 1 to 7, 9 to 13, 15 to 17, 19 to 24, 26 to 28, and 30 not printed in the Gazette.]

1,274,763. RECOVERY OF PROTEIDS FROM WASTE LIQUORS OF THE HIDE-TREATING ART. CHARLES LEE PECK, New York, N. Y., assignor to The Dorr Company, New York, N. Y., a Corporation of Delaware. Filed Mar. 2, 1918. Serial No. 219,981. (Cl. 71—6.)



1. The method of recovering, from the waste liquors of the lime process of the hide-treating art, material available for use in the manufacture of fertilizers and other useful products which consists in separating from said liquors an effluent containing proteids and precipitating and preserving against putrescence said proteids by subjecting them to the action of the waste liquors from the tanning process; substantially as described.

[Claims 2 and 3 not printed in the Gazette.]

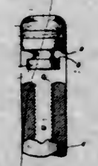
1,274,764. UTENSIL-PROTECTOR. HENNING E. PEDERSEN, Kenosha, Wis., assignor of one-half to Arnold Langenbach, Kenosha, Wis. Filed Feb. 12, 1918. Serial No. 216,811. (Cl. 220—137.)



1. In combination with a utensil, a protector comprising a woven wire shield detachably secured to the utensil and having its bottom in contact with the utensil to prevent overheating of the shield, and means associated with the shield for detachably securing same to the utensil.

2. In combination with a utensil, a protector comprising a woven wire shield adapted to receive the utensil, the bottom of said shield being normally arched upward and adapted to be flattened out upon receiving the utensil, thereby insuring a perfect contact between the two to prevent the shield from becoming overheated, a bead formed at the upper edge of the shield, a strap carried by the bead, a link secured to the ends of the strap, and a handle carried by the link for swinging the same to tighten the strap.

1,274,765. BILLIARD-CUE TIP. JOSEPH PERLMUTTER, Jersey City, N. J. Filed Sept. 1, 1917. Serial No. 189,263. (Cl. 46—9.)



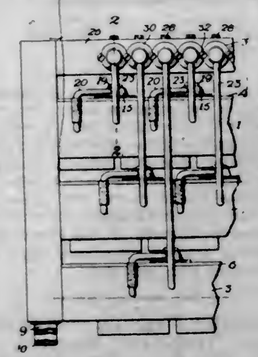
1. In a cue tip, the hitting member having a cylindrical recess on one end, the base member having a cylindrical tongue on one end to register within the recess in the hitting member, the other end being formed as a flange for securing the device on the end of a billiard cue.

2. A cue tip comprising a head or hitting portion and a base portion, the base portion formed, on one end, to dowel into the head portion and having its free end shaped in the form of an annular flange.

3. In a cue tip, the head or hitting member, comprising a hard and a soft layer of similar material, the soft layer shaped for contact with billiard balls, the hard layer containing a cylindrical recess, a base portion, made of fiber or other suitable material, formed with a cylindrical neck or protrusion on one end adapted to register within and be permanently attached to the head member, the other end of the base member forming an annular flange, adapted to be secured to the end of a billiard cue, by suitable retaining means.

[Claims 4 and 5 not printed in the Gazette.]

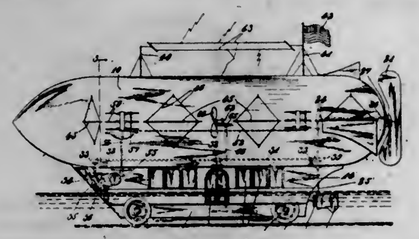
1,274,766. PNEUMATIC PIANO-PLAYER. CLAUS E. PETERSON, Worcester, Mass., assignor, by mesne assignments, to Iverson Piano Player Company, Boston, Mass., a Corporation of Massachusetts. Filed June 21, 1917. Serial No. 176,216. (Cl. 84—178.)



In an instrument of the character described, comprising a series of bars having valve controlled wind chests and motor bellows communicating therewith forming a pneumatic mechanism, the combination with said pneumatic mechanism of a tubular bar inclosing an exhaust chamber, and supported directly over the rear edge of said bars, pipes leading from a tracker bar and passing through said tubular bar from the rear to the front side and provided with a bleed opening upon their upper sides, screws held in the upper side of said tubular bar opposite said openings, caps detachably attached to the front

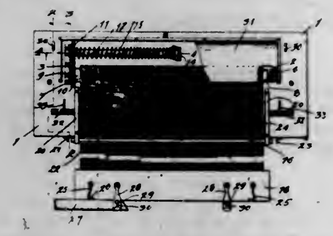
side of said tubular bar, and pipes permanently attached to said caps and leading from said caps to the primary valves of the instrument.

1,274,767. HYDROPLANE. JOSEPH PETIT, New York, N. Y. Filed July 17, 1917. Serial No. 181,023. (Cl. 244—29.)



In a device of the character described, a body portion adapted to float in the water, a bracket secured to the rear end of said body portion, a shaft journaled in said bracket, said shaft having its lower end formed into a strap, a rudder secured to said strap, a pinion provided at the upper end of the shaft, said rudder being cut away adjacent said pinion, a second pinion meshing with the pinion carried by the shaft, and means for rotating said pinion to actuate said rudder.

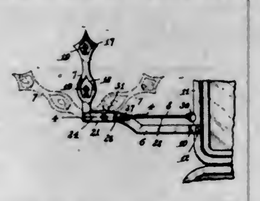
1,274,768. WINDOW-SCREEN. JOHN PETRO, Waterbury, Conn. Filed Sept. 12, 1916. Serial No. 119,705. (Cl. 156—39.)



A device of the character described comprising a plate having a recess in its bottom, a roller supported by the plate and spaced laterally therefrom, a spring actuated shaft supported by the plate adjacent the roller, gearing connecting said shaft with said roller, a second roller disposed beneath said plate and in vertical alinement therewith, and a screen wound on the first named roller and engageable around the second named roller whereby a portion of the screen is disposed in said recess and the portion thereof below said second named roller maintained in vertical alinement with said plate.

1,274,769. SIGNALING DEVICE FOR AUTOMOBILES AND OTHER VEHICLES. FREDERICK C. PFEIL, Buffalo, N. Y. Filed Nov. 15, 1916. Serial No. 131,408. (Cl. 116—31.)

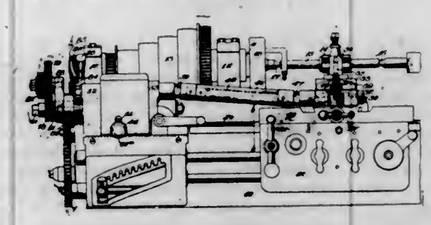
6. In a device of the kind described, an elongated supporting arm adapted for detachable connection to a fixed part of an automobile so as to extend therefrom, the outer end of said arm having a bore smooth at its front end and internally threaded at its rear end, a signaling arm having a hollow stud or stub shaft journaled in the smooth portion of said bore, a nipple having its front end threaded into the threaded portion of said bore and having its rear end externally threaded, a carried member having two flat spaced members, an internally threaded boss between said flat members at their outer front corners and an edge wall connecting said flat members and extending rearwardly and inwardly from said boss, said boss being threadedly connected to the rear end of said nipple, a wire cable having one end secured in the hollow stud or stub shaft of said signaling arm and extending rearwardly through said nipple into the space between the flat members of said carrier member, a manipulating rod having its outer end positioned between said flat members and connected to the other end of said wire cable, and a set screw threaded through the edge wall of said carrier member and adapted to bear against said manipulating rod to position and retain the same at the desired angle to the axis of said signaling arm.



8. The combination with a vehicle, of a support extending outward laterally therefrom, a signaling member adapted to swing in a vertical plane and having its axis in the direction of the length of said vehicle, and an operating element for swinging said signaling member extending inwardly obliquely to the plane of said axis.

[Claims 1 to 5 and 7 not printed in the Gazette.]

1,274,770. LATHE. PETER PLANTINGA, Rochester, N. Y., assignor to Davis Machine Tool Company, Inc., Rochester, N. Y., a Corporation of New York. Filed June 28, 1916. Serial No. 106,302. (Cl. 82—19.)



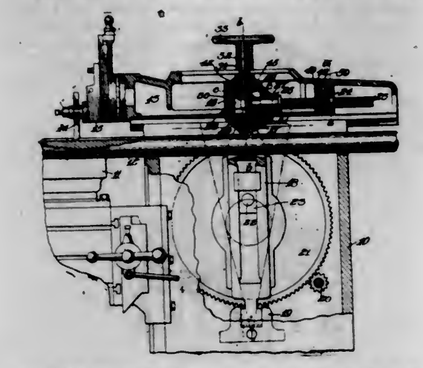
1. A lathe comprising in combination a movable work holding member, a slide, a universal shaft operatively connected with the slide, a second shaft connected with said universal shaft, an arm carried by the second mentioned shaft, a cam, means for rotating the cam in opposite directions, a pivotal member connected with the arm extending in the path of the cam and arranged to actuate the arm upon rotation of the cam in one direction only.

6. A lathe comprising in combination a work holding member, a tool holding slide, a movable rack upon the slide, a feed screw carried by the slide in engagement with the rack, a rotatably mounted shaft, a gear upon the shaft in engagement with the rack, a universal telescopic shaft operatively connected with and removable from said first mentioned shaft, and means for locking the first mentioned shaft to prevent movement of the rack, whereby when said universal shaft is removed and the feed screw operated movement will be imparted to the slide.

9. In a lathe, the combination of work holding means, a slide, a tool holding member on the slide, a shaft operatively connected with the slide, a cam, means for rotating the cam, a bell crank lever on the shaft, and a plurality of dogs adjustable on the bell crank into and out of the path of the cam.

[Claims 2 to 5, 7, 8, and 10 not printed in the Gazette.]

1,274,771. SHAPER AND THE LIKE. PETER PLANTINGA, Rochester, N. Y., assignor to Davis Machine Tool Co., Inc., Rochester, N. Y., a Corporation of New York. Filed Jan. 24, 1917. Serial No. 144,275. (Cl. 90—39.)



1. In a shaping machine, the combination with a reciprocally mounted ram, a slide block thereon, a screw rotatably mounted in the slide block and operatively connected with the ram, means supported in the slide block for actuating the screw for effecting a relative adjustment between the slide block and ram, and means for reciprocating the slide block.

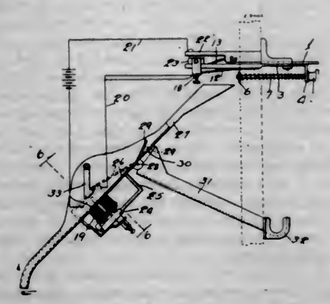
2. In a shaping machine, the combination with a reciprocally mounted ram, a tool head mounted thereon, a slide block also mounted thereon, a screw rotatably mounted in the slide block and operatively connected with the ram, a manually operated shaft also mounted in the slide block, means operatively connecting said shaft and said screw, and means for reciprocating the slide block.

8. A shaping machine comprising a ram, a block thereon, means connecting the block and ram operable to effect adjustment of the ram relatively to the block when the latter is loosened upon the ram, a sleeve having threaded engagement with the block, means for rotating the sleeve to clamp the block upon the ram and a shaft extending through the sleeve operatively connected with the ram adjusting means.

14. In a shaping machine, the combination with a ram, a block mounted thereon, a sleeve mounted to turn in the block, a shaft revolubly mounted in the sleeve for moving the block and ram relatively to each other, and means controlled by said sleeve for locking said shaft against movement.

[Claims 3 to 7 and 9 to 13 not printed in the Gazette.]

1,274,772. COIN-OPERATED DEVICE. JOHN PLATE, Chicago, Ill. Filed Oct. 20, 1915. Serial No. 56,845. (Cl. 194—97.)



1. A coin operated device comprising a coin receiving space, means for moving the coin into said coin receiving space, a coin engaging device associated with said coin receiving space between the outer edge and the center thereof, a movable electric circuit control part projecting into said coin receiving space between the edge thereof and the coin engaging device and adapted to be engaged by the side face of the coin near its periphery so as to be moved to complete an electric circuit, a pressure applying part independent of the means for moving the coin into said coin receiving space and which presses the coin toward said circuit control part, an electro-magnetic device in said circuit, a coin chute into which the coin is received from the coin receiving space, said chute provided with two branches and a part actuated by said electro-magnet to switch the coin into one of said branches, the coin passing into the other branch when the electro-magnetic branch is not actuated by the coin.

4. A coin operated device comprising a selecting device for selecting coins from slugs, said selecting device comprising two pathways for the coin, and an electrically actuated controlling device for directing the coin along one pathway and the slug along the other pathway, a circuit for controlling said controlling device, a switch engaged by the annulus on the side face of the coin near its periphery and adapted to be moved thereby so as to close said switch and complete the said circuit through said controlling device.

[Claims 2, 3, and 5 not printed in the Gazette.]

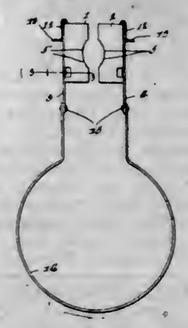
1,274,773. STORE-FRONT CONSTRUCTION. FRANCIS J. PLYM, Niles, Mich. Filed May 19, 1915. Serial No. 29,088. (Cl. 189—73.)



1. In a store front bar, the combination of a resilient cylindrical reinforcing member provided with a vertical slot extending from one end to the other, a back plate, a face plate and means passing through said slot for securing said parts together for the purpose set forth.

2. In a store front bar, the combination of a resilient cylindrical reinforcing member provided with a slot extending from one end to the other, a back plate provided with a semi-circular bearing surface in direct engagement with the reinforcing member on the inner side thereof, a face plate and means for securing said parts together for the purpose set forth.

1,274,774. PIPE-CLAMP. BOYCE D. PONTON, Hallettsville, Tex. Filed July 28, 1916. Serial No. 111,867. (Cl. 81—39.)



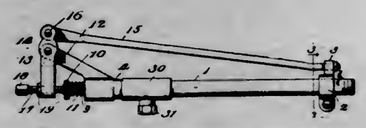
1. An attachment for vises comprising a pair of auxiliary jaws, said jaws having pockets formed therein,

abutment fingers comprising U-shaped elements having outwardly extending projections formed thereon, said U-shaped elements extending into said pockets, whereby said auxiliary jaws will support said abutment fingers, and said abutment fingers projecting beyond said jaws.

2. An attachment for vises comprising a pair of auxiliary jaws, said jaws having pockets formed therein, springs carried upon said pockets, and abutment fingers comprising U-shaped elements having projections extending outwardly therefrom, said U-shaped elements projecting into said pockets, whereby said spring will hold said elements against displacement, and said projections being adapted to support said jaws upon a support.

[Claims 3 and 4 not printed in the Gazette.]

1,274,775. RELIEF-VALVE. ANDREW POSPESEL, Oswego, N. Y. Filed Jan. 16, 1918. Serial No. 212,017. (Cl. 236—9.)



A device for the purpose set forth comprising a thermostatic tube to communicate with a steam supply pipe, a head fitted to and closing the outer end of said thermostatic tube and having an arm projecting obliquely therefrom and beyond the outer end thereof, said head being provided interiorly with a vent passage communicating with the interior of the thermostatic tube, a valve seating upon the inner end of the head to close said vent passage and having its stem extending through the outer end of the head, a collar upon the stem beyond the head, a spring coiled around the stem between the said collar and the end of the head to hold the valve normally seated, a lever pivoted intermediate its ends upon the outer end of the obliquely disposed arm, a brace disposed at one side of the tube and head and having its inner end secured to a fixed support and its outer end pivoted to one end of the lever, an adjusting member mounted in and passing through the free end of the lever operatively engaged with the outer end of the valve stem and a locking member bearing against the lever to hold the adjusting member in a set position relative to the lever.

1,274,776. CARPENTER'S CHALK-LINE. LEO B. PREISSNER, Hartford, Conn. Filed June 29, 1917. Serial No. 177,750. (Cl. 242—96.)

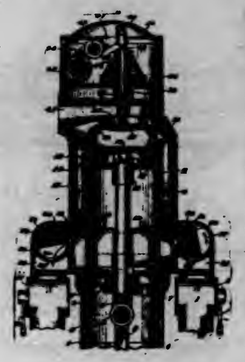


2. A device of the character described including a flanged drum having a central longitudinal passage and one flange slotted, a chalk line wound around the drum with one end inserted in the slot, a rod movable longitudinally in the passage, an extension projecting laterally from one end of the rod to engage the line between it and the adjacent flange, an extension on the other end of the rod projecting from the drum for engagement by the finger, and resilient means urging the rod in a direction to retain the grasp upon the line.

[Claim 1 not printed in the Gazette.]

1,274,777. INTERNAL-COMBUSTION ENGINE. SYDNEY I. PRESCOTT, New York, N. Y. Filed Oct. 13, 1916. Serial No. 125,361. (Cl. 123—21.)

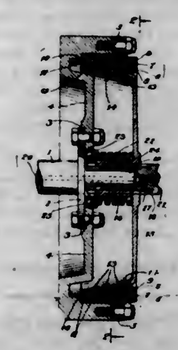
3. An internal combustion engine provided with mechanism for changing its cycle of operation, said mechanism comprising two intake valves alternately opening communication with the engine on alternate piston cycles, and dual devices coöperative therewith for controlling flow of fuel to said valves.



14. An internal combustion engine having separate combustion and induction chambers and provided with mechanism for changing its cycle of operation, said mechanism comprising two intake valves alternately opening communication with the induction chamber on alternate piston cycles, and dual devices coöperative therewith for controlling flow of fuel to said valves.

[Claims 1, 2, 4 to 13, 15, and 16 not printed in the Gazette.]

1,274,778. CLUTCH. SYDNEY I. PRESCOTT, New York, N. Y. Filed Nov. 17, 1916. Serial No. 131,840. (Cl. 192—8.)



1. In a clutch, the combination with a driving member, of a driven member, both of said members having uninterrupted coördinated operating surfaces, and frictional power transmitting means seated in and confined by one of said members in constant contact with its operating surface and located between and circumferentially movable with respect to both of said surfaces.

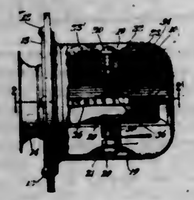
7. In a clutch, the combination with a circular driving member, of a circular driven member, both of said members having uninterrupted coördinated operating surfaces, and a split annular frictional power transmitting ring seated in and confined by one of said members in constant contact with its operating surface and located between and circumferentially movable with respect to both of said surfaces.

13. In a clutch, the combination with a flywheel, of an annular female conical driving member carried thereby said member being arranged to form an oil pocket, a male conical driven member, and a split annular conical expansible power transmitting ring mounted within the oil pocket and between and circumferentially movable with respect to said members.

18. In a clutch, the combination with a driving member, of a driven member, and a single cork studded power transmitting device between and circumferentially movable with respect to said members, the corks being always slightly compressed by constant engagement with the driving member.

[Claims 2 to 6, 8 to 12, 14 to 17, 19, and 20 not printed in the Gazette.]

1,274,779. SIGNAL APPARATUS. EDMUND HUGH PRYCE, New York, N. Y. Filed Feb. 2, 1917. Serial No. 146,057. (Cl. 116—1.)



1. A signal apparatus embodying a sound-producing element, rotatable actuating means therefor, a reciprocating member in operative engagement with said rotatable actuating means and revoluble with respect thereto, means for maintaining said reciprocating member normally projected and under tension, and means for holding said reciprocating member against rotation and to its adjusted tension, substantially as specified.

3. A signal apparatus embodying a sound-producing element, rotatable actuating means therefor including a ratchet mechanism, a reciprocatable rack member in operative engagement with said rotatable actuating means and revoluble with respect thereto, spring means for maintaining said rack member normally projected and under tension, and means for holding said reciprocatable rack member projected against rotation and said spring means to its adjusted tension, substantially as specified.

7. In a signal apparatus, the combination of a casing, a sound producing element carried thereby, a member for actuating said sound producing element, a reciprocatable member operatively connected to said first mentioned member to operate the same, a spring to restore said reciprocatable member to its normal position after it has been depressed, said reciprocatable member being adapted to be moved in other than a reciprocatory manner to tension said spring, and means for holding said reciprocatable member against movement other than a reciprocating movement after said spring has been tensioned, substantially as specified.

10. In a signal apparatus, the combination of a casing, a sound-producing element carried thereby, a shaft rotatably supported within said casing, a revoluble member mounted up said shaft for actuating said sound-producing element, means operatively connecting said revoluble member to said shaft during the rotation of said shaft in one direction only, reciprocatable means for rotating said shaft in said one direction, and a normally tensioned spring for rotating said shaft in the opposite direction and restoring said shaft rotating means to its normal position after it has been actuated, said shaft operating means serving to place said spring under its normal tension, substantially as specified.

12. In a signal apparatus, the combination of a casing, a sound-producing element carried thereby, a shaft rotatably supported within said casing and provided with a pinion, a revoluble member mounted upon said shaft for actuating said sound-producing element, means operatively connecting said revoluble member to said shaft during the rotation of said shaft in one direction only, a reciprocatable member provided with a thread engaging said pinion to rotate said shaft in said one direction, a spring for rotating said shaft in the opposite direction, said reciprocatable member being adapted to be rotated with its threaded portion engaging said pinion, whereby the shaft will be rotated to tension said spring, and removable means for holding said reciprocatable member against rotation after said spring has been tensioned, substantially as specified.

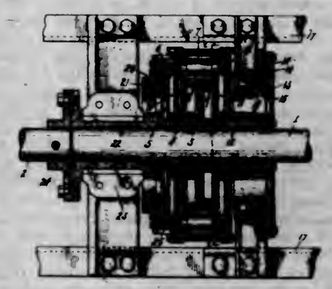
[Claims 2, 4 to 6, 8, 9, and 11 not printed in the Gazette.]

1,274,780. FOUNTAIN-BRUSH. ELMER R. QUAM, Verdi, Minn. Filed Mar. 25, 1916. Serial No. 86,647. (Cl. 15—50.)



A fountain brush comprising a hollow handle a bristle tuft mounted in a removable holder in one end of said handle, said bristle holder having an outlet opening leading therethrough into the bristle tuft, a hollow closure threaded on the opposite end of said handle adapted to form a soap receptacle, a perforated plate spaced a short distance from the open end of said closure and positioned within the hollow handle to form a support for the soap, and brackets fastened to said plate and to the inner side of the closure for holding the plate in position.

1,274,781. FORWARD AND REVERSE DRIVE MECHANISM. EDWARD RATHBUN, Toledo, Ohio. Filed Apr. 21, 1917. Serial No. 163,621. (Cl. 74—34.)



1. In a mechanism of the class described, a drive shaft, a driven member, a gear fixed to the drive shaft, an armature fixed to a side of said gear, a second gear loose on the drive shaft and fixed to the driven member, a set of pinions connecting said gears, means mounted loosely on said shaft and carrying said pinions, an armature fixed to said means, and separate independently operable electromagnetic means, one being stationary and associated with said last mentioned armature to attract and hold it against turning and the other being carried by said second gear and associated with said first armature to attract it and hold the two gears against relative movements.

[Claims 2 and 3 not printed in the Gazette.]

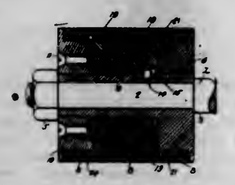
1,274,782. WINDOW-SASH. JOSEPH RAUWALD, Sr., and FRANK RAUWALD, Milwaukee, Wis. Filed Feb. 23, 1917. Serial No. 150,543. (Cl. 20—56.4.)



4. A sash bar for a window sash, consisting of an elongated strip of material having a rabbeted portion forming a shoulder and a groove and also having a plurality of lines of putty anchoring recesses, some of the recesses of the same line extending closer to the shoulder than others, said lines of recesses and the groove extending in lines parallel to the line of the shoulder.

[Claims 1 to 3 not printed in the Gazette.]

1,274,783. PISTON-HEAD. EDWARD RENARD, Burnham, Pa. Filed June 3, 1918. Serial No. 237,882. (Cl. 121—108.)



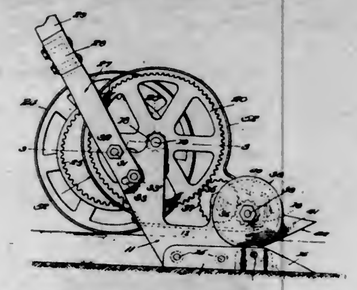
1. The combination in a piston, of a sleeve adapted to be mounted on a piston rod and having an enlargement at one end; a disk mounted on the reduced portion of the sleeve; a body section also mounted on said reduced portion between the enlargement of the sleeve and the disk; means for holding the parts together, both the disk and the body portion, as well as the enlargement of the sleeve having annular grooves; and packing in said grooves.

4. The combination in a piston, of a sleeve the length of the piston and adapted to be mounted on a piston rod, said sleeve having a grooved enlargement at one end of the full diameter of the piston; a disk mounted on the opposite end of the sleeve and also the full diameter of the piston; a body portion mounted between the enlargement of the sleeve and the disk, each of these sections having an annular groove therein and a metallic piston ring mounted in each groove, the body portion having beveled reduced portions at each end forming, when the parts are assembled, annular grooves; and steam packing mounted in said grooves; a series of holes in the flanges of the enlargements of the sleeve and the disk which communicate with the space back of the steam packing when the parts are assembled so that any steam escaping around the end of the piston rings will enter back of the packing rings and will tend to force the rings out against the cylinder.

[Claims 2 and 3 not printed in the Gazette.]

1,274,784. LAWN-BORDER TRIMMER. CLARENCE M. RICHARDSON, Cleveland, Ohio. Filed Oct. 4, 1917. Serial No. 194,790. (Cl. 56—19.)

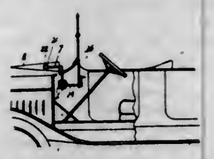
1. In a lawn border trimmer a support including a projection having a rearwardly and downwardly inclined lower face and constituting an upper gathering member, a bearing shoe extending laterally from the frame and having the upper face of its forward portion inclined upwardly and rearwardly and constituting a lower gathering member coacting with the upper gathering member, an upper rotary cutter carried by said support, a lower rotary cutter carried by said shoe and coacting with the upper rotary cutter, and means carried by said support for driving said upper cutter.



7. In a lawn border trimmer, a support including a projection having a rearwardly and downwardly inclined lower face and constituting an upper gathering member, a bearing shoe extending laterally from the frame and having the upper face of its forward portion inclined upwardly and rearwardly and constituting a lower gathering member coacting with the upper gathering member, an upper rotary cutter carried by said support, a stud mounted for rotation with its axial line obliquely to the axial line of the upper rotary cutter, a lower rotary cutter carried by said stud, and means carried by said support for transmitting motion to said upper cutter.

[Claims 2 to 6 not printed in the Gazette.]

1,274,785. SIGNAL FOR AUTOMOBILES. WILBERT R. ROBERTS, South Bend, Ind., assignor of one-half to Frank M. Shafer, South Bend, Ind. Filed Sept. 30, 1916. Serial No. 123,018. (Cl. 116—31.)



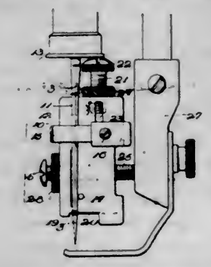
2. A signal for automobiles or the like, comprising a support secured to the cowl, shafts mounted in the support and projecting through the cowl, signal blades carried by the shafts, arms secured to the shafts adjacent the support, an operating disk rotatably mounted upon the support, and connections between the respective arms and disk, said connections being flexible and connected to the same point on the disk to operate but one signal in the movement of the disk in one direction, and springs connected to the arms acting in opposition to the flexible connection.

[Claim 1 not printed in the Gazette.]

1,274,786. NEEDLE-THREADER. GEORGE B. ROWE, Oklahoma, Okla. Filed Feb. 14, 1918. Serial No. 217,088. (Cl. 112—18.)

1. A device of the class described comprising a body having a longitudinally directed needle receiving seat in one side face and a transverse recess in the other side face, said recess converging toward one end and communicating at its contracted end with the needle seat and opening at its lower side through the bottom of the body, a resilient member connected at one end to the body and unsupported at the other end and extending by its unsupported portion over the lower opening of the recess, and means for retaining a needle in said seat with its eye registering with the contracted terminal of the recess.

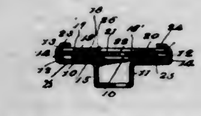
3. A device of the class described comprising a body having a longitudinally directed needle receiving seat in one side face and a transverse recess in the other side face, said recess converging toward one end and communicating at its contracted end with the needle seat and opening at its lower side through the bottom of the body, a stop pin extending from the body adjacent to the



needle seat, a resilient member connected to the body and extending over the lower opening of the recess, and means for retaining a needle in said seat with its eye registering with the contracted terminal of the recess.

[Claims 2 and 4 not printed in the Gazette.]

1,274,787. SEPARABLE BUTTON. GEORGE B. ROWE, Oklahoma, Okla. Filed Feb. 21, 1918. Serial No. 218,558. (Cl. 24—108.)



1. A separable button comprising a hollow body having an outstanding rim and a tubular shank and with an opening communicating with the shank, a cap member bearing upon the rim of the body and having a central opening, coacting locking members spring controlled and disposed beneath the cap member, said locking members having opposing sockets in their confronting edges and accessible through the opening of the cap, and a locking pin adapted to be attached to one flap of a garment and having a barbed outer end and an annular seat to receive the sockets.

[Claims 2 to 4 not printed in the Gazette.]

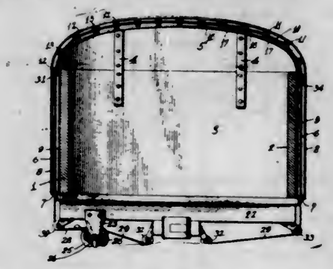
1,274,788. MARKING TUBULAR ARTICLES. AUGUSTUS M. SAUNDERS, McKeesport, Pa., assignor to National Tube Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Oct. 12, 1915. Serial No. 55,591. (Cl. 40—2.)



1. As a new article of manufacture, a rolled metal product having a series of disconnected interruptions in the continuity of the otherwise smooth surface of the product, said interruptions seemingly being unrelated and meaningless but actually having a relative location arranged to form known and legible symbols when viewed from the proper angle relative to the marked surface.

[Claim 2 not printed in the Gazette.]

1,274,789. COVER FOR RAILROAD-CARS. MICHAEL SCHEDLBAUER, Warren, Mich. Filed Apr. 27, 1918. Serial No. 231,087. (Cl. 105—78.)



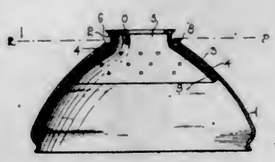
1. The combination of a car body, channel rails at the ends thereof, a cover composed of plates having the ends thereof extending into said channel rails, rods hingedly connecting said plates, wheels on the ends of said rods, with some of said wheels normally engaging said guide rails, and other of said wheels adapted to swing out of engagement therewith so that said cover may be collapsed, and means connected to said cover, at the ends thereof, adapted for shifting said cover relative to said rails.

3. The combination of a car body, rails carried thereby, a cover composed of hingedly connected plate with the ends of said plates extending into said rails, means supporting the ends of the cover plates in said rails, and means operatable at the ends of said car body for simultaneously moving the ends of said cover relative to said rails.

5. The combination of a car body, channel rails at the ends thereof, a cover composed of plates extending from one end of said car body to the opposite end and said plates having the ends thereof extending into said channel rails, rods hingedly connecting said plates together, wheels on the ends of said rods, adapted to support said cover relative to said rails, means carried by said car body intermediate the ends thereof adapted for supporting said cover, and means operatable at one side of said car body adapted for shifting said cover relative to said rail.

[Claims 2 and 4 not printed in the Gazette.]
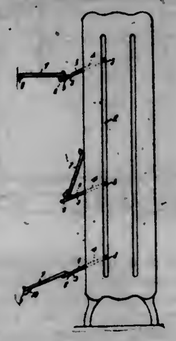
1,274,790. LAMP-SHADE. HERBERT H. SCHNUPP, Jeanette, Pa. Filed Feb. 21, 1918. Serial No. 218,512. (Cl. 240—108.)



In combination with a lamp shade having an opening at its axial center, a shield underlying the upper portion of the shade, the axial center of the shield being provided with an opening defined by an outstanding flange extending through the opening of the shade and affording a securing means, the portion of the shield underlying the

shade being provided with protuberances contacting with the shade for holding said shield and shade in spaced relation, said protuberances being in staggered relation, and means carried by the shield adjacent the flange and engaging a marginal portion of the shade defining the axial opening in the shade for holding the shade and shield in assembled relation, the inner marginal portion of the shield terminating a material distance inwardly of the outer marginal portion of the shade.

1,274,791. RADIATOR ATTACHMENT. MARY A. SCRIMGEOUR, Lewiston, Me. Filed Feb. 26, 1918. Serial No. 219,276. (Cl. 155—9.)



1. A radiator attachment, comprising a bracket provided with means for attachment to a radiator and having openings, a shelf having lugs at different edges to enter the openings of the bracket and secure the shelf thereto, the lugs at one edge of the shaft being differently formed from the lugs at another edge to give a different set to the shelf.

2. A radiator attachment, comprising a bracket adapted to make detachable and adjustable connection with a radiator substantially in the manner specified and provided with under-cut openings, and a shelf having attaching lugs at opposite edges to coöperate with the openings of the bracket to hold the shelf either in horizontal or in inclined position, according as one or the other set of lugs are brought into operative engagement with the bracket.

1,274,792. APPARATUS FOR ATTACHING YARN TO SPINDLES. ALFRED SEMLEY, Rochdale, England. Filed Mar. 16, 1916. Serial No. 84,610. (Cl. 118—64.)



1. A detachable sleeve of the character described for application to a spindle and comprising circumferential portions having an interior passage and a gap or nick which extends entirely through the sleeve from end to end and from the interior passage through the circumferential portions to the circumferences thereof and having engaging means for positively engaging corresponding engaging means upon the spindle.

4. A spindle with engaging faces and a detachable sleeve for application to such spindle and comprising circumferential portions having an interior passage to receive part of the spindle and a gap or nick which extends entirely through the sleeve from end to end and from the interior passage through the circumferential portions to the circumferences thereof and having engaging faces in its interior parts adapted to bear against the engaging faces upon the spindle.

[Claims 2 and 3 not printed in the Gazette.]

1,274,793. ANTISEPTIC OR STERILIZING AGENT FOR USE IN THE PRESERVATIVE TREATMENT OF FOOD. ALEC E. SHERMAN, London, England. Filed Mar. 7, 1918. Serial No. 221,062. (Cl. 99—1.)

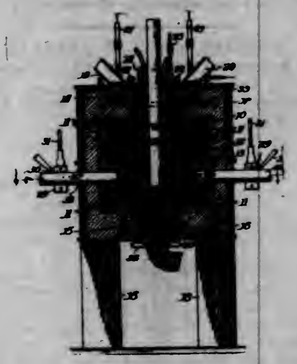
1. The described method of treating meat preliminary to chilling the same, comprising subjecting the meat while in a fresh condition and retaining some of its animal heat to the action of a confined atmosphere containing the vapors of a substance of the thymol class having the formula $C_{10}H_{14}O$.

3. The described method of treating meat preliminary to chilling the same, consisting in subjecting said meat to the action of a confined atmosphere containing vapors of a stearoptene having antiseptic properties vaporized from a chlorinated aqueous solution of sodium carbonate.

4. The improved method of sterilizing meat with the object of preparing it for cold storage treatment so as to prevent it during such treatment from losing its freshness and bloom, which consists in subjecting the meat before it is chilled to an atmosphere containing an antiseptic gas obtained by vaporizing a chlorinated or saline solution containing a stearoptene having the formulæ $C_{10}H_{14}O$; substantially as described.

[Claim 2 not printed in the Gazette.]

1,274,794. ELECTRIC FURNACE. MARK SHOELD, Chicago, Ill., assignor to Armour Fertilizer Works, Chicago, Ill., a Corporation of New Jersey. Filed Jan. 28, 1918. Serial No. 214,053. (Cl. 204—64.)



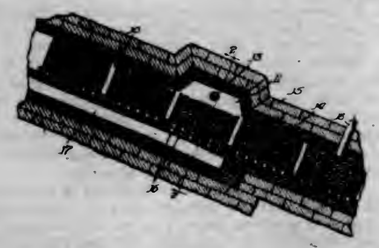
1. In an electric-furnace of the character described, the combination of a furnace-body, an electrically-conductive lining for the heat-chamber thereof, electrodes of electrical conductivity greater than that of said lining arranged to contact with the contents of said heat-chamber and direct a current of electricity therethrough, said contents completing the electric circuit between said electrodes, and means to cause the material to be treated to pass between said electrodes, substantially as described.

5. In an electric-furnace of the character described, the combination of a furnace-body having a vertical passage therethrough, an outer substantially-horizontal ring electrode disposed exteriorly of and adapted to contact with the material to be treated in said furnace body, a center electrode supported from above and projecting down into the plane of said ring electrode, means to feed the material to be treated downwardly between said electrodes, and means to send a current of gas through the material between said electrodes, whereby said interposed material may be heated by an electric current between the electrodes and be subjected simultaneously to the action of the gas, substantially as described.

10. In an electric-furnace of the character described, the combination of a furnace-body having a vertical passage therethrough, an electrically-conductive lining for said passage, a vertically-disposed electrode extending into the cavity of said body and adapted to be surrounded by and contact with the material to be treated, an outer ring electrode disposed exteriorly of and adapted to contact with an intermediate section only of the material to be treated, and means to send a current of gas upwardly through said passage and the material interposed between said electrodes, whereby said material may be simultaneously subjected to the action of the gas and to a heating current of electricity through said electrodes, said electrodes being of greater electrical conductivity than said lining, substantially as described.

[Claims 2 to 4 and 6 to 9 not printed in the Gazette.]

1,274,795. FURNACE FOR CHEMICAL REACTIONS. MARK SHOELD, Chicago, Ill., assignor to Armour Fertilizer Works, Chicago, Ill., a Corporation of New Jersey. Filed Jan. 28, 1918. Serial No. 214,054. (Cl. 204—64.)



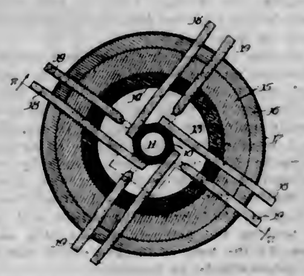
1. In a furnace structure of the character described, the combination of a heat-chamber, means to heat said chamber, a carrier adapted to convey a load of the material to be treated into and out of said chamber, and means to cause a flow of gas independent of said heating means through said carrier load while in said chamber, substantially as described.

8. In a furnace structure of the character described, the combination of an inclined heat-chamber having a perforated floor, a carrier with a perforated bottom-wall adapted to slide through said chamber and convey therethrough a load of the material to be treated, and means to cause a flow of gas into said chamber and out through the perforations of said carrier and chamber, substantially as described.

14. In a furnace structure of the character described, the combination of a heat-chamber, means to heat said chamber, a plurality of carriers adapted to successively convey loads of the material to be treated through said chamber, means to cause a flow of gas through said chamber and the material therein, means to preliminarily heat said gas by the heat of material which has passed through the heat-chamber, and means to heat said material preliminary to its entrance into the heat-chamber by the heat of the gas which has traversed said chamber, substntially as described.

[Claims 2 to 7 and 9 to 13 not printed in the Gazette.]

1,274,796. ELECTRIC FURNACE. MARK SHOELD, Chicago, Ill., assignor to Armour Fertilizer Works, Chicago, Ill., a Corporation of New Jersey. Filed Jan. 28, 1918. Serial No. 214,055. (Cl. 204—64.)



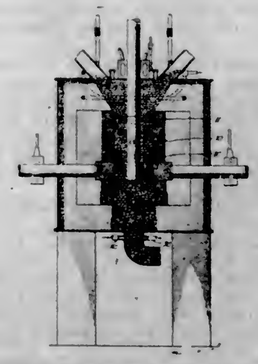
1. In a furnace of the character described, the combination of a member having a conduit for the passage therethrough of the material to be treated, and means to heat the contents of said conduit located externally of said member, said member forming no part of said heating means, substantially as described.

4. In a furnace of the character described, the combination of a member having a conduit for the passage therethrough of the material to be treated, and means to heat an intermediate portion only of the contents of said conduit, said means being located externally of said member, said member forming no part of said heating means, substantially as described.

8. In a furnace of the character described, the combination of a member having a conduit for the passage therethrough of the material to be treated, and means to produce one or more electric-arcs located externally of said member, including one or more electrodes in contact with said member, substantially as described.

[Claims 2, 3, and 5 to 7 not printed in the Gazette.]

1,274,797. PROCESS OF PRODUCING ALUMINUM NITRID. MARK SHOELD, Chicago, Ill., assignor to Armour Fertilizer Works, Chicago, Ill., a Corporation of New Jersey. Filed Jan. 28, 1918. Serial No. 214,056. (Cl. 204—31.)



1. The process of producing aluminum nitrid consisting in causing a uniform distribution of a nitrogen-containing gas through a body of briquets composed of comminuted carbon and alumina and a binder and simultaneously evenly heating such uniform mixture at a sufficient temperature to effect the required chemical reaction, substantially as described.

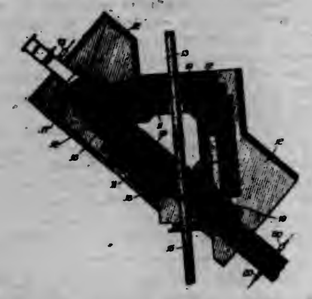
4. The process of producing aluminum nitrid, consisting in causing a uniform distribution of a nitrogen-containing gas through a body of briquets composed of comminuted carbon, alumina, and a binder, simultane-

ously evenly heating such uniform mixture at a sufficient temperature to effect the required chemical reaction by passing a heating current of electricity therethrough, preliminarily heating said gas by the heat of the briquets after undergoing the chemical reaction, and preliminarily heating said briquets by the heat of the discharging gas, substantially as described.

7. The process of producing aluminum nitrid consisting in uniformly mixing a body of briquets composed of comminuted carbon, alumina, and a binder, and a nitrogen-containing gas traveling in opposite directions, and simultaneously uniformly heating an intermediate zone only of such mixture to a temperature of approximately 1800 degrees to 2000 degrees centigrade by passing a heating current of electricity therethrough, thereby preliminarily heating the gas by the heat of the briquets after undergoing the chemical reaction and also preliminarily heating the briquets approaching said intermediate zone by the heat of the gas which has traversed such zone, substantially as described..

[Claims 2, 3, 5, and 6 not printed in the Gazette.]

1,274,798. ELECTRIC FURNACE. MARK SHOELD, Chicago, Ill., assignor to Armour Fertilizer Works, Chicago, Ill., a Corporation of New Jersey. Filed Mar. 6, 1918. Serial No. 220,677. (Cl. 204—64.)



1. In an electric-furnace of the character described, the combination of a heat-chamber, a carbon-lining for said chamber, and electrodes in said chamber exclusive of said lining adapted to maintain between them an electric-arc to heat said chamber, substantially as described.

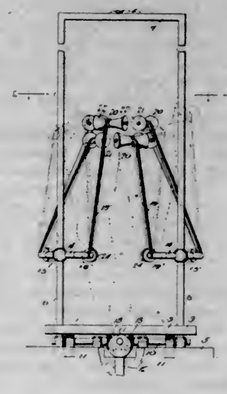
12. In an electric-furnace of the character described, the combination of a heat chamber, means to electrically heat said chamber, means to feed the solid material to be treated through said chamber and change its direction of travel while it is substantially at its hottest temperature, and means to pass gas through said material in a direction opposite of that of its travel, substantially as described.

24. In an electric-furnace of the character described, the combination of a heat chamber, and vertically-arranged electrodes adapted to sustain an electric arc between them in said chamber, said furnace having an inclined passage therethrough for conveying the material to be treated and for directing the passage of gas, said passage being offset practically vertically substantially at a point beneath the arc between said electrodes, substantially as described.

[Claims 2 to 11 and 13 to 23 not printed in the Gazette.]

1,274,799. MASSAGING APPARATUS. WILFRED SHURTLEFF, Moline, Ill., assignor to Dion Geraldine, Chicago, Ill. Filed Aug. 20, 1914, Serial No. 857,679. Renewed Jan. 12, 1918. Serial No. 211,675. (Cl. 128—16.)

3. In an apparatus of the class described, the combination of a patient supporting reciprocating platform, a plurality of pivoted arms projecting centrally and upwardly with respect to said platform and massaging members located at the upper extremities of said arms.



9. A massaging apparatus comprising a plurality of pivotally mounted arms extending upwardly and inwardly within the space inclosed by the pivotal mountings of said arms, and curved massaging rollers carried at the upper extremities thereof, arranged in staggered relation, and adapted to engage a patient's body at contiguous points.

12. A massaging apparatus comprising a plurality of spaced posts, brackets including a central socket adjustably mounted upon said posts and projecting to the sides thereof, unequal arms pivotally secured to the bracket extremities, said arms provided with upper hook-shaped ends, massaging members carried at the upper extremities of said arms, means engaging said arms adapted to move the massaging members one toward the other and maintain the same in continuous contact with a patient's body and at adjustable pressures.

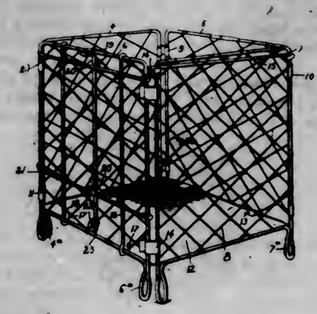
13. A massaging apparatus comprising a plurality of spaced posts, a platform slidably mounted thereon, means engaging said platform adapted to vibrate the same in a vertical direction, a plurality of brackets slidably mounted upon said posts, means for locking said brackets in adjusted positions, a plurality of unequal arms pivotally secured to the extremities of said brackets and provided with upper hook-shaped ends extending inwardly toward one another above the axis of the platform, a plurality of curved massaging rollers carried at the hooked extremities of said arms and adapted to encompass and continuously contact with a patient's body.

18. A massaging apparatus comprising a plurality of massaging rollers, said rollers being staggered, one out of line with the others, and defining a substantially inclosing band adapted to engage the body of the patient at contiguous points, and means for effecting relative reciprocation of said rollers and a patient supported within said inclosing band.

[Claims 1, 2, 4 to 8, 10, 11, and 14 to 17 not printed in the Gazette.]

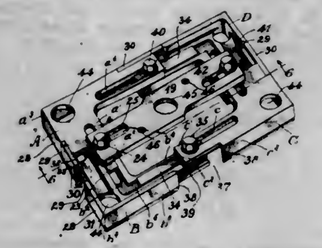
1,274,800. COLLAPSIBLE RECEPTACLE. JOSEPH SKETTENO, Michigan City, Ind. Filed Dec. 1, 1916. Serial No. 134,484. (Cl. 220—133.)

2. In a collapsible receptacle, side frames hingedly connected to each other, clips connecting two of the side frames at a corner, guide bars extending transversely of one of the side walls having seats formed therein, a vertical latch slidably mounted in said seats and having one end thereof engaging one of the side frames, a bottom hinged to one of the side frames having apertures therein, and means carried by the side frames for entering the apertures to support the bottom.



[Claims 1 and 3 not printed in the Gazette.]

1,274,801. FORM-BLOCK FOR BOX-COVERING MACHINES. HARRY B. SMITH, Brooklyn, N. Y., and JAMES D. REIFSNYDER, Philadelphia, Pa., assignors to Stokes & Smith Company, Summerdale, Pa., a Corporation of Pennsylvania. Filed Jan. 13, 1915. Serial No. 2,043. (Cl. 93—59.)

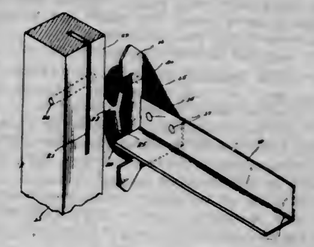


1. An expansible form block for a box covering machine comprising four corner sections with flat side faces having lower, inwardly beveled, marginal edges, means for guiding said corner sections so as to maintain the outer faces thereof in alinement with each other respectively whereby said corner sections may be moved away from each other to assume a more distant relation with gaps between the corner sections, and independent removable filler plates received in said gaps, said filler plates having flat faces of the same depth as the outer side faces of the corner sections and also having lower beveled marginal edges alining with the lower beveled marginal edges of the corner sections.

2. An expansible form block for a box covering machine comprising four corner sections with outer faces adapted to aline respectively and adapted to fit into the corners of a box which is being covered, said corner sections being movable away from each other to assume a more distant relation and to form an enlarged block, alining removable filler plates having faces alining in a vertical plane flush with the outer faces of the corner sections and coöperating therewith to form substantially continuous side faces of the block and extending between the vertices of said corner sections, and clamping means for clamping said corner sections together and simultaneously clamping the filler plates in position, said filler plates having tongues projecting into grooves formed in the corner sections.

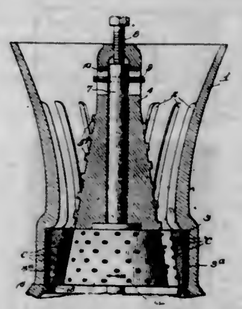
[Claim 3 not printed in the Gazette.]

1,274,802. BED-RAIL-ATTACHING DEVICE. ARTHUR E. SPIEGEL, Shelbyville, Ind. Filed Nov. 15, 1917. Serial No. 202,096. (Cl. 5—55.)



A reversible attaching device for attaching angle iron side rails to bed posts, comprising a bearing plate extending across the end of the angle iron side rail, a flange from said bearing plate attached to the side of said side rail, and a fin projecting from said bearing plate oppositely from said side rail for entering a vertical slot in the bed post, said fin being provided with an end slot and two oppositely oblique slots communicating with said end slot for receiving a cross pin in the bed post, said device being an integral stamping of sheet metal.

1,274,803. METHOD AND APPARATUS FOR SHELLING NUTS. FANNIE SCHUTZ SPITZ, Albuquerque, N. Mex. Filed Jan. 10, 1918. Serial No. 211,149. (Cl. 83—13.)



1. In an apparatus for shelling nuts of the character set forth, the combination of a pair of shelling members arranged one within the other, and means for rotating the one member with respect to the other, the inner member having an exterior conical shape and the other member having its interior similarly shaped, the two members being spaced apart to form an annular chamber between them, the opposing faces of these members being each provided with a multiplicity of semi-cone shape cutting teeth extending into the chamber a distance sufficient to cut only through the shells of the nuts, the teeth on one member having abrupt faces to form a cutting edge, said abrupt faces facing in an opposite direction to the similarly shaped teeth on the other member and the teeth on each member being staggered with reference to each other.

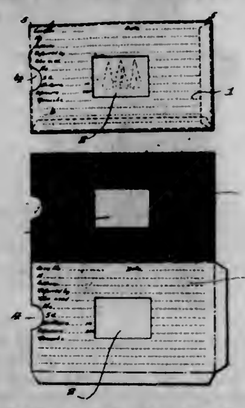
2. In a machine of the type set forth, two conically shaped cracking members arranged one within the other and spaced apart to form an annular chamber, teeth projecting into said annular chamber, said teeth being formed with an abrupt face forming a cutting edge and terminating in an inclined face, the abrupt faces of the teeth on one cracking member facing in a direction opposite to those of the other cracking member, whereby the nuts may be caught between the abrupt faces of the teeth on the two cracking members to rip the shells from the meats of the nuts.

3. The method of removing shells from nuts having comparatively tough shells which consists of gravitating the nuts in a spiral path and during their travel subjecting them repeatedly to a ripping action simultaneously on opposite sides, whereby the shells will be sheared or ripped and the meats freed therefrom.

4. In a machine of the type set forth, two conically shaped cracking members arranged one within the other and spaced apart to form an annular chamber, the outer cracking member being mounted so as to be yieldable radially, teeth projecting into said annular chamber, said teeth being formed with an abrupt face forming a cutting edge and terminating in an inclined face, the abrupt faces of the teeth on one cracking member facing in a direction opposite to those of the other cracking member, whereby the nuts may be caught between the abrupt faces of the teeth on the two cracking members to rip the shells from the meats of the nuts.

5. In an apparatus for shelling nuts of the character set forth, the combination of a pair of shelling members arranged one within the other, and means for rotating the inner member with respect to the other, the outer member being mounted so as to be yieldable radially, the two members being spaced apart to form an annular chamber between them and the opposing faces of these members being each provided with a multiplicity of cutting teeth extending into the chamber a distance sufficient only to rip the shells from the meats of the nuts, as and for the purpose set forth.

1,274,804. COMBINED RADIOGRAPH MOUNT AND CONTAINER. BENJAMIN L. SPITZER, New York, N. Y. Filed May 31, 1917. Serial No. 172,126. (Cl. 40—156.)

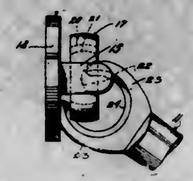


1. In combination, a radiograph mount and container, said container having a rear member having an aperture therein, and also having a corresponding front member having an aperture registering with said first-mentioned aperture, said mount having a radiograph fastened thereto in such a position that said radiograph registers with said aperture when two of the edges of said mount touch two corresponding edges of the said container, the rear surface of said rear member and the front surface of said front member being printed with an opaque ink so that the said rear member is rendered substantially opaque, and notations indicative of the data appertaining to said film being printed upon the front surface of said front member.

[Claim 2 not printed in the Gazette.]

1,274,805. UNIVERSAL COUPLING. JOSEPH B. STAVISH, Plainfield, N. J. Filed Dec. 5, 1916. Serial No. 135,129. (Cl. 74—19.)

A universal coupling comprising a coupling member having longitudinally extending jaws and a central opening therebetween having a beveled edge, a notched knuckle member detachably mounted between said jaws and having a central depression in one face and adapted to rotate between said jaws about an axis at right angles to the longitudinal axis of said coupling member, the distance between the ends of the jaws of said coupling member being greater than the thickness of said knuckle member whereby the latter may be removed from between said jaws, and a second coupling member detachably connected to said knuckle member and including jaws for engaging said knuckle member in a plane at right angles to the jaws of the first named coupling member, the space be-



tween the ends of the jaws of said second named coupling member being greater than the thickness of said knuckle member, said second coupling member being removable from engagement with said knuckle member by swinging the coupling member until the end of one of its jaws enters the beveled opening and engages the face of the knuckle member opposite that having the depression therein, and the end of the opposite jaw thereof enters said depression whereby to permit of a complete withdrawal of said jaws from engagement with said knuckle member.

1,274,806. MOUNTING. FREDERICK A. STEVENS, Providence, R. I., assignor to Stevens and Company, Incorporated, a Corporation of Rhode Island. Filed Oct. 13,1917. Serial No. 196,377. (Cl. 88—50.)



2. In eyeglasses or spectacles, the combination with the frame, of a post on the frame, a head on the post, an operating lever mounted on the frame, a sectional sleeve on the lever journaled on the post engaging the head, a helical spring embracing the sleeve, an arm on the spring engaging the frame, and an arm on the spring engaging the lever.

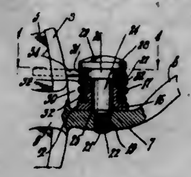
4. In eyeglasses or spectacles, the combination with the frame, of a post on the frame, a head on the post, an operating lever pivotally mounted on the post adjacent the frame, a flange on the lever surrounding the post, annular sections loose on the post extending from the flange to the head, a helical spring comprising a series of coils embracing the flange and the sections, an arm on one end of the spring engaging the frame, and an arm on the other end of the spring engaging the lever.

[Claims 1 and 3 not printed in the Gazette.]

1,274,807. MOUNTING. FREDERICK A. STEVENS, Providence, R. I., assignor to Stevens and Company, Incorporated, a Corporation of Rhode Island. Filed Oct. 13, 1917. Serial No. 196,518. (Cl. 88—50.)

1. In an eyeglass or spectacle mounting, the combination with the frame, of a post upon the frame, a cylindrical shoulder upon the post, a head on the shoulder, an operating arm resting against the frame, a sleeve upon the arm journaled upon the post and below the shoulder, a helical spring surrounding the shoulder and the sleeve, an arm upon one end of the spring engaging the frame, and an arm on the other end of the spring engaging the operating arm.

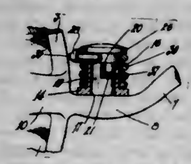
3. In an eyeglass or spectacle mounting, the combination with the frame, of a post upon the frame, a shoulder upon the post, an operating arm, a sleeve upon the arm journaled upon the post, a ring loose upon the post engaging the sleeve and the shoulder, a helical spring com-



prising an end coil embracing the shoulder only, a coil surrounding the ring and the sleeve, an arm continuous with said end coils engaging the frame, and an arm upon the second mentioned coils engaging the operating arm.

[Claim 2 not printed in the Gazette.]

1,274,808. MOUNTING. FREDERICK A. STEVENS, Providence, R. I., assignor to Stevens and Company, Incorporated, a Corporation of Rhode Island. Filed Nov. 2, 1917. Serial No. 199,804. (Cl. 88—50.)

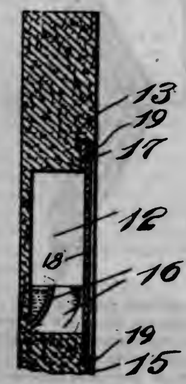


5. In a device of the character described, the combination with the support and a swinging lever, of a post on the support and upon which the lever is mounted to swing, a pin journaled in the post, a head upon the pin, an extension on the head, a helical spring surrounding the post having one end engaging the extension and the other end engaging the lever.

7. In a device of the character described, the combination with the support and a swinging lever, of a tubular post on the support provided wtih a bayonet slot and upon which the lever is mounted, a pin loose in the post, a lug on the pin registering in the slot, a shoulder on the pin abutting against the post, a head on the pin, an extension on the head, a helical spring surrounding the post and engaging the extension and lever.

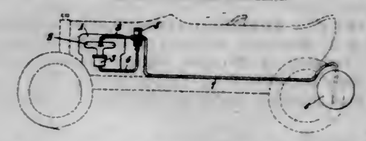
[Claims 1 to 4, 6, and 8 not printed in the Gazette.]

1,274,809. TOMBSTONE. JAMES M. STORM, Jr., New Haven, Wyo. Filed Sept. 23, 1915. Serial No. 52,236. (Cl. 125—15.)



A tomb stone having a cavity therein opening outward through a vertical face thereof and having a shallow cavity in the face surrounding the main cavity, and having the shallow cavity deepened at one side of the main cavity, an epitaph slab in the deepened portion of the shallow cavity and flush with the bottom thereof, and a transparent plate hermetically sealing the main cavity and seated in the shallow cavity and sealed therein.

1,274,810. VACUUM FUEL-FEEDING SYSTEM FOR GASOLENE-ENGINES. HAROLD C. SUCKERT, New York, N. Y. Filed Dec. 28, 1915. Serial No. 68,331. (Cl. 158—36.)



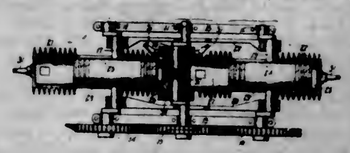
1. A fuel feeding system comprising a single carbureter supply tank, a series of receiving tanks, a valve device having a gasolene supply port and an exhaust port, and means operated by the weight of the accumulated gasolene in the receiving tank for automatically and simultaneously connecting one of said receiving tanks to the exhaust port and supply port of the valve device and another of said receiving tanks to the carbureter supply tank to empty its contents therein to discharge its contents by gravity into said supply tank.

2. A fuel feeding apparatus comprising a suction apparatus, a main fuel supply tank, a carbureter, a single carbureter supply tank, a series of receiving tanks, means operated by the accumulated fuel in one of said receiving tanks for automatically connecting said receiving tanks in succession to the suction apparatus and the main supply tank, said means also operating to disconnect a filled receiving tank from the suction apparatus and the main supply tank and to connect it to the carbureter supply tank.

6. In an apparatus of the class set forth, the combination of an engine, a main supply tank, a carbureter, and means connected to the intake of the engine for automatically supplying gasolene to the carbureter, said means embodying a receiving vessel, a port connecting the interior of said vessel with the intake of the engine, another port leading from the intake to the atmosphere, and automatic means for closing the port leading to the interior of the vessel when the vessel is filled and connecting the other port to the atmosphere, said two ports being of the same capacity so that the amount of air taken into the intake of the engine is at all times approximately the same.

[Claims 3 to 5 and 7 to 10 not printed in the Gazette.]

1,274,811. INTERNAL-COMBUSTION ENGINE. PATRICK J. MONAHAN SULLIVAN, Woodcliffe-on-Hudson, N. J., assignor to Monahan Rotary Engine Corporation, New York, N. Y., a Corporation of New York. Filed Feb. 12, 1917. Serial No. 148,057. (Cl. 123—56.)



1. In combination, three crank shafts, separate pistons connected to two of said crank shafts and carried thereby, and two rigidly connected cylinders carried by the third crank shaft and receiving said pistons.

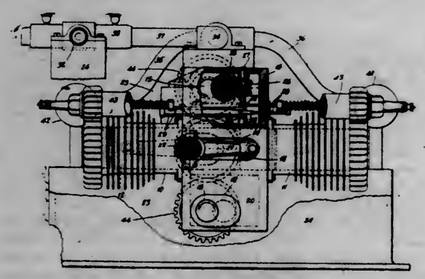
5. In combination, a centrally disposed crank shaft, a plurality of cylinders presenting two separate working chambers on one side of said crank shaft and two separate working chambers on the opposite side of said crank

shaft, pistons within said cylinders, and means for bodily moving said pistons in one direction and simultaneously moving said cylinders in the opposite direction.

8. In combination, a bodily movable, double-ended cylinder having a port at each end thereof, a tube extending lengthwise of said cylinder and bodily carried thereby, said tube having ports registering with the ports of said cylinder, and means for rotating said tube to bring said ports into and out of registry during said body movement of said cylinder.

[Claims 2 to 4, 6, 7, and 9 to 16 not printed in the Gazette.]

1,274,812. INTERNAL-COMBUSTION ENGINE. PATRICK J. MONAHAN SULLIVAN, Woodcliffe-on-Hudson, N. J., assignor to Monahan Rotary Engine Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 30, 1917. Serial No. 204,575. (Cl. 123—56.)



1. In combination, a cylinder, a pair of cranks rotatable about parallel spaced axes for supporting the same and maintaining it at all times in parallelism with an initial position, a piston within said cylinder, and a crank connected to said piston and rotatable in the opposite direction to said first mentioned cranks.

7. In combination, a piston having a planetary movement in one direction and a double-ended cylinder having a planetary movement in the opposite direction.

12. In combination, three shafts arranged in a row and having equal throw cranks, a cylinder connected to and carried by the cranks of the two end shafts and a piston connected to the crank of the intermediate shaft.

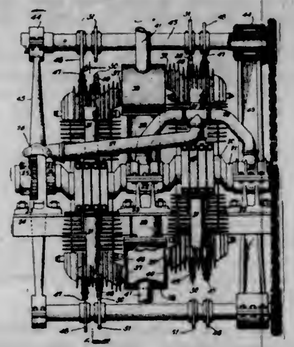
20. In combination, a double-ended cylinder having a planetary movement with its axis maintained in parallelism with an initial position, a supply manifold extending lengthwise of said cylinder and connected to opposite ends thereof, a stationary carbureter, and a conduit having one end connected to said manifold and movable along a circular path and having the opposite end slidably connected to said carbureter.

[Claims 2 to 6, 8 to 11, and 13 to 19 not printed in the Gazette.]

1,274,813. INTERNAL-COMBUSTION ENGINE. PATRICK J. MONAHAN SULLIVAN, Woodcliffe-on-Hudson, N. J., assignor to Monahan Rotary Engine Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 30, 1917. Serial No. 204,576. (Cl. 123—56.)

1. In combination, a cylinder, a piston, a pair of cranks rotatable about parallel spaced axes for supporting said cylinder and permitting bodily movement of said cylinder along a circular path and with its axis maintained at all times in parallelism with an initial position, a crank connected to said piston and having the same throw as the first mentioned cranks, and gearing connecting one of said first mentioned cranks and said last mentioned crank for insuring simultaneous rotation in opposite directions, one of said first mentioned cranks having a gas passage therethrough communicating with the interior of said cylinder.

2. In combination, a cylinder, and a pair of spaced, parallel shafts having their cranks connected thereto for moving said cylinder bodily along a circular path, one of said cranks having a gas passage therethrough communicating with the interior of said cylinder.



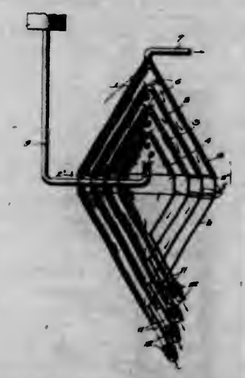
14. In combination, a cylinder having a bodily planetary movement in one direction while maintaining its axis in parallelism with an initial position, a valve carried by said cylinder, and a cam shaft rotatable about a stationary axis and having a cam for operating said valve.

15. In combination, a frame, three shafts arranged in a row and having equal throw cranks, a cylinder connected to and carried by two of said cranks, a piston connected to the crank of the third shaft, a cam-shaft carried by said frame and rotatable about a stationary axis, valve mechanism carried by said cylinder and operated from said cam-shaft, and means for rotating said cam-shaft from one of said crank-shafts.

16. In combination, a cylinder, means for supporting said cylinder and permitting of a bodily movement thereof while maintaining its axis in parallelism with an initial position, a cam mounted independently of said cylinder, a valve carried by said cylinder, and means adapted to periodically engage with said cam to operate said valve during said bodily movement of the cylinder.

[Claims 3 to 13 and 17 to 25 not printed in the Gazette.]

1,274,814. DEWATERER AND CLASSIFIER. ODIN A. SUNDNESS and ROY M. BAKER, Chisholm, Minn. Filed Mar. 16, 1918. Serial No. 222,925. (Cl. 83—82.)



1. In a dewaterer and classifier, the combination of a plurality of receptacles arranged one within the other, each receptacle having communication with the other, and means for delivering a liquid to one of the receptacles which will flow from one receptacle to the other and a separation of the particles therefrom taking place as the velocity of the stream decreases.

2. In a dewaterer and classifier, the combination of a plurality of receptacles arranged one within the other, each receptacle having communication with the other, means for conducting a liquid to one of the receptacles, and means in each receptacle for causing a separation of the particles from the liquid as it passes from one receptacle to another.

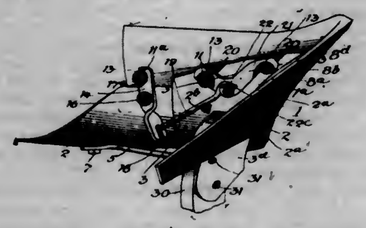
3. In a dewaterer and classifier, the combination of a plurality of receptacles, each consisting of two cone-shaped members connected together at their bases, said receptacles being of varying sizes and arranged one within the other, and having communication with each other, a cone-shaped baffle arranged in each receptacle for deflecting the water from the outlet opening of the receptacle, and means for conducting water to one of the receptacles.

4. In a dewaterer and classifier, the combination of a plurality of cone-shaped receptacles having an opening at their apexes, said receptacles being of varying sizes and arranged one within the other, a cone-shaped baffle located in each receptacle beneath the outlet opening and against which the water comes in contact in entering a receptacle, means for conducting water to one of the receptacles, and means for governing the discharge of the collected material of each receptacle.

5. In a dewaterer and classifier a plurality of receptacles, each of said receptacles containing a body of relatively still water and means for causing a slow downward flow of liquid into the still water of each receptacle and a relatively rapid flow of liquid from each receptacle into the adjacent receptacle.

[Claims 6 and 7 not printed in the Gazette.]

1,274,815. PLOW. FRED W. A. TECHMER, La Crosse, Wis. Filed Sept. 17, 1913. Serial No. 790,152. (Cl. 97—18.)



2. In a plow, the combination of a landside, a moldboard, a detachable plowshare, and means for detachably securing the plowshare, comprising a lever pivoted to the moldboard, means on the share engaged by the lever and a screw for operating the lever around its pivot.

4. In a plow, a combination of a landside, a moldboard, a detachable plowshare, and means for detachably securing the plowshare, comprising a lever pivoted to the moldboard, a screw for operating the lever around its pivot and a keeper on the share engaged by said lever, the lever having a hook at one end for engaging said keeper.

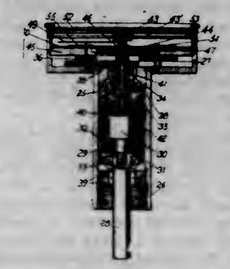
6. In a plow, the combination of a landside, a moldboard, a detachable plowshare, and means detachably securing the plowshare comprising a plurality of keepers on the share, devices adapted by opposing movement to engage and secure the keepers, and draw-means between said devices whereby they will be drawn together and secured in operative position.

8. In a plow, the combination of a landside, a moldboard, a frog to which the land-side and mold board are secured, a detachable plowshare, the frog having a portion thereof projecting below the lower edge of the moldboard having slots in its projecting portion, a pair of keepers on the share adapted to enter said slots, a draw bar having integral hooks for engaging both of the keepers, and means for locking the draw bar.

14. The combination of a moldboard, a landside, a frog, a detachable plowshare having a plurality of keepers mounted thereon, means for securing said detachable section, comprising a lever pivotally mounted on said moldboard, a draw-bar for engaging the keepers on the share, a clamping-bolt connected to said lever and an adjustable connection between the bolt and said bar.

[Claims 1, 3, 5, 7, and 9 to 13 not printed in the Gazette.]

1,274,816. SPEED-INDICATOR. NIKOLA TESLA, New York, N. Y., assignor to Waltham Watch Company, Waltham, Mass., a Corporation of Massachusetts. Filed Dec. 18, 1916. Serial No. 137,691. (Cl. 264—13.)

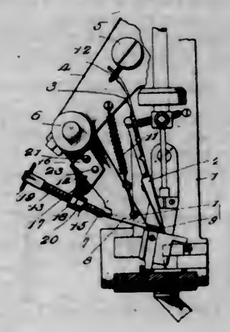


1. In combination, driving and driven elements, having opposed, closely-adjacent, non-contacting friction surfaces; a liquid body interposed between active areas thereof through which the driving element frictionally drags the driven one and thermo-responsive means for varying the active area of the secondary in approximately inverse proportion to the thermo-effected variations in viscosity of the liquid.

7. In a temperature-compensating speed indicator, the combination of a freely rotatable cylindrical cup; a cylinder-formed member in the upper portion thereof, pivoted and spring-restrained; and a body of mercury filling the reservoir-portion of the cup below the pivoted member and extending partially in the narrow interspace between the cup and cylinder.

[Claims 2 to 6 not printed in the Gazette.]

1,274,817. FASTENER-INSERTING MACHINE. JULIUS C. TORCHIA, Hazleton, Pa. Filed Oct. 23, 1917. Serial No. 198,121. (Cl. 164—48.)



1. In a machine of the character set forth, the combination of a supporting structure, a guide thereon, a lever fulcrumed upon the supporting structure above the guide, a second guide held by the fulcrum of the lever in alinement with the first-mentioned guide, a blade carrying arm pivoted to the lower end of the lever, a blade carried by said arm to feed and sever fasteners passing through the

said guides, a bracket secured to and projecting downwardly from said arm above the lower end thereof, a thrust-receiving member mounted in the lower end of said bracket and held thereby against the blade and in spaced relation to the arm, means on said member between the blade and the bracket to engage the bracket and prevent movement of the member from the blade, and a retractile spring having its lower end connected with the lower end of the blade carrying arm and its upper end attached to the lever adjacent the fulcrum thereof whereby the spring will extend substantially parallel with a string of fasteners passing through the said guides.

2. In a machine of the character set forth, the combination of a blade carrying arm, a blade mounted upon the lower end of said arm, a bracket secured to said arm above the lower end thereof and projecting downwardly therefrom and beyond the under side thereof, a thrust receiving member threaded through the lower end of said bracket to bear against the rear end of the blade, and a locking device mounted on the thrust-receiving member between the blade and the bracket to bear against the front side of the bracket.

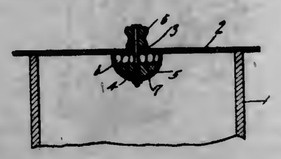
3. In a machine of the character set forth, the combination of a blade-carrying arm, a blade mounted upon the lower end of said arm, a bracket pivoted to said arm and projecting beyond the under side of the same, means for holding the bracket normally against pivotal movement, a thrust-receiving member mounted in the lower end of said bracket and bearing against the outer end of the blade, and means for preventing outward movement of said thrust-receiving member.

1,274,818. BOAT. FRANK TREGONING, Seattle, Wash. Filed Mar. 6, 1918. Serial No. 220,694. (Cl. 9—23.)



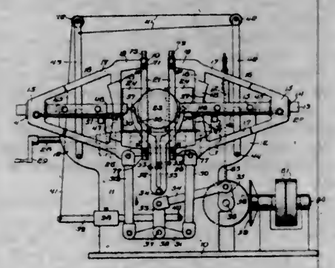
A boat having recesses in the upper edge of its stem and stern, an apron secured on the inner surface of the stem, an apron secured on the inner surface of the stern, said aprons being interposed between the brackets and the said stem and stern, a bracket secured to the stem, a bracket secured to the stern, the said brackets constituting bearings, shafts journaled in the said bearings, said shafts having angularly disposed ends projecting into the recesses, the said boat having seats, journal bearings on the said seats, a journal bearing on the bottom of the boat for one of said shafts, a universal joint connecting the said shafts, a lever for operating one of the shafts, and a collar attached to each shaft and bearing against its respective bracket for holding the shafts against axial movement.

1,274,819. RECEPTACLE-COVER. JOHN F. TROXLER, Greensboro, N. C. Filed Apr. 12, 1918. Serial No. 228,180. (Cl. 217—81.)



A receptacle cover including a transparent plate adapted to slide radially upon a receptacle, a hollow semi-spherical stop upon the bottom of the plate at the center thereof, a weight thereon, there being an article receiving space above the weight and within the stop, a knob upon the center of the top of the plate, and means extending through the knob, stop and plate for holding them assembled.

1,274,820. DUPLEX OSCILLATING SAW. CLARENCE E. VAN AUKEN, Chicago, Ill., assignor to Cora F. Van Auken, Chicago, Ill. Filed May 7, 1917. Serial No. 167,098. (Cl. 29—72.)



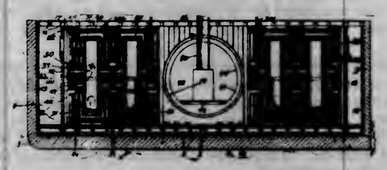
1. In a saw of the class described, an oscillating frame, a saw blade carried by the frame, means for holding the work in position to be acted upon by the saw blade, a guide for the oscillating frame, means for exerting a pressure to advance the oscillating frame along the guide during its cutting stroke, and means for locking the oscillating frame against advancement due to such pressure during its return stroke, substantially as described.

16. In a saw of the class described, the combination of a pair of oscillating frames, saw blades carried by the oscillating frames, means for clamping the work in the center position, guides in longitudinal alinement with one another on opposite sides of the center position, riders mounted upon the respective guides, pivots for mounting the oscillating frames on the riders at points off center with respect to the saw blades, means for exerting an inward pressure on the riders, means for locking the riders against advancement on the inactive return strokes of the saw blades and adapted to release the riders for advancement on the active strokes of the saw blades, and a floating stop member for limiting the approach of the saw blades toward one another, said floating stop member being in the form of a yoke centrally pivoted and provided with stop members adapted to be engaged by the oscillating frames when the limit of approach is reached, substantially as described.

17. In a saw of the class described, an oscillating frame, a saw blade rigidly carried by the frame in parallelism therewith and having a straight cutting edge, and a mounting to which the oscillating frame is pivoted, substantially as described.

[Claims 2 to 15 and 18 to 22 not printed in the Gazette.]

1,274,821. NON-SINKABLE SHIP. ROBERT W. VAIL, New York, N. Y. Filed June 13, 1917. Serial No. 174,488. (Cl. 114—68.)



1. A ship having cargo-protecting cylinders revolubly mounted on a horizontal axis.

2. In a ship, the combination of a cargo-carrying drum, a revoluble cylinder inclosing the drum and means for rotating the revoluble cylinder.

4. In a ship, the combination of water tight upright walls, trunnions mounted in the walls, protective revoluble cylinders revolubly mounted on the trunnions, protective stationary drums within the revoluble cylinders, and inner stationary cargo-carrying drums within the aforesaid stationary drums.

7. In a ship, the combination of an engine room having a protective segmental wall, and means for rotating said wall.

11. In a ship, the combination of a cargo carrying drum supported from axial members, a cylinder revolubly mounted on the axial members to form a protected compartment, water-tight walls separating the aforesaid compartment from other portions of the ship, alined doors for the aforesaid members, means for revolving the revoluble cylinder, an engine room having revoluble protective covering members, and means for revolving said members.

[Claims 3, 5, 6, 8 to 10, and 12 not printed in the Gazette.]

1,274,822. ELECTRICAL MEASURING INSTRUMENT. THOMAS W. VARLEY, New York, N. Y., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Original application filed Oct. 3, 1913, Serial No. 793,123. Patent No. 1,234,976, dated July 31, 1917. Divided and this application filed June 5, 1916. Serial No. 101,716. (Cl. 171—265.)



1. In a wattmeter, the combination with an armature, of a two-part commutator cylinder having its bars displaced 90°, and a brush for each part of the commutator cylinder, said brushes being diametrically disposed with respect to each other.

2. In a dynamo-electric machine, the combination with a four-pole armature, of a commutator cylinder having two parts angularly displaced 90°, and a brush for each part, said brushes being displaced 180° with respect to each other.

3. In a motor, the combination with a four-pole armature, of a commutator cylinder having two parts angularly displaced 90°, and a brush for each part, said brushes being disposed diametrically with respect to each other.

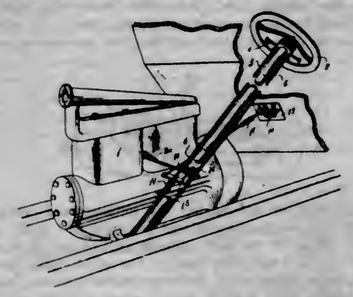
4. A commutator cylinder having two parts angularly disposed 90° with respect to each other and a brush for each part thereof diametrically disposed with respect to each other.

8. In a wattmeter, the combination with a four-pole armature and two collector brushes, of a commutator cylinder having two parts so disposed with respect to each other that the brushes may be so placed that the pressure of one on the commutator cylinder will neutralize that of the other.

[Claims 5 to 7 not printed in the Gazette.]

1,274,823. ACCELERATING FOOT-THROTTLE FOR USE ON AUTOMOBILE-ENGINES. PLEAS E. VINEYARD, Windom, Tex., assignor of one-half to Robert E. Lee, Windom, Tex. Filed Aug. 30, 1917. Serial No. 188,886. (Cl. 74—81.)

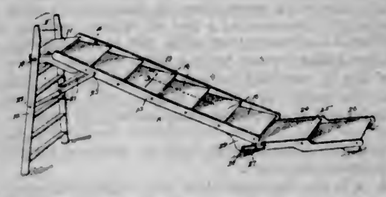
1. In a foot accelerator for controlling the throttle movement of an engine, the combination with a bell crank pivoted in some suitable position upon the engine, a throttle control rod, a foot pedal device correlated with the bell crank for the purpose of controlling same, of a cuff slidably confined upon the throttle control rod, a hand control lever arranged adjacent to the steering wheel, and a suitable connecting arm fixed upon the



control lever and having pivotal connection with the cuff.

[Claim 2 not printed in the Gazette.]

1,274,824. SLIDE. THOMAS WALLACE, Wabash, Ind. Filed Nov. 1, 1916. Serial No. 128,952. (Cl. 46—37.)



1. In an apparatus of the character set forth, a slide-proper having the surface thereof along which the user slides formed of a series of stepped sections.

2. In an apparatus of the character set forth, a slide-proper formed of side-members spaced apart and each containing a series of grooves along its inner surface, said grooves extending at angles to the median lines of said side-members and in substantially parallel relation with each other, a series of sections fitting at opposite edges in the opposed grooves in said side-members to form a stepped sliding-surface, and means engaging said side-members for holding the latter in spaced relation.

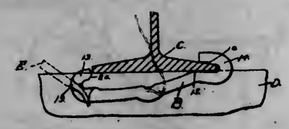
3. In an apparatus of the character set forth, the combination of a slide-proper, a ladder pivoted at its upper end to the upper end of said slide-proper, and an extension-slide pivoted to the lower end of said slide-proper.

4. In an apparatus of the character set forth, the combination of a slide-proper terminating at its upper end in a platform, said slide-proper being formed of a series of sections arranged in stepped relation, and a ladder-section formed of side-members which extend at opposite sides of said platform and project above the latter to form handles to be grasped by the person using the slide, and steps secured to the side-members of said ladder-section, said ladder-section being pivoted at its said side-members to said platform.

1,274,825. RAIL-ANCHOR. HAROLD G. WARR, Chicago, Ill., assignor to The P. & M Company, Chicago, Ill., a Corporation of Illinois. Continuation in part of application Serial No. 858,230, filed Aug. 24, 1914. This application filed June 3, 1916. Serial No. 101,433. (Cl. 238—4.)

1. A device for preventing the longitudinal creep of a railroad rail, comprising a bar of resilient metal adapted to extend under the base flange of the rail and to be strained by application thereto so as to be under spring tension when engaged therewith, formed at one end with a jaw adapted to fit over one edge of the base flange and bear with a snug fit against both upper and lower surfaces

thereof at substantially opposite points, the bar being formed with a bend which bears against the under surface of the base flange and the other extremity extending around and bearing against the upper surface of the base flange on the opposite side from the first-mentioned jaw.



3. A device for preventing the longitudinal creep of a railroad rail, comprising a bar adapted to extend under the base flange of the rail, formed at one end with a jaw adapted to fit over one edge of the base flange bearing against both upper and lower surfaces thereof, the bar being formed with a bend which bears against the under surface of the base flange and the other extremity extending around and bearing against the upper surface of the base flange on the opposite side from the first-mentioned jaw, the under surface of said extremity of the bar being formed with a shoulder adapted to bear against the edge of the rail base.

8. A device for preventing the longitudinal creep of a railroad rail, comprising a bar of slightly resilient metal provided at opposite ends with rail base engaging jaws, said bar being formed with a bend whereby one of said jaws has a cramping or pinching grip on the rail base when the device is applied thereto, and the other jaw being formed so as to wedgingly engage the opposite edge of the rail base, the distance between the interior surfaces of said jaws being greater than the width of the rail, for the purpose described.

12. A device for preventing the longitudinal creep of a railroad rail, comprising a bar adapted to extend under the base flange, formed with jaws at opposite ends which engage the base flange of the rail at four separate places, two on the upper surface thereof and two on the lower surface, said member being resilient and formed so that it is strained when applied to the rail.

14. A device for preventing the longitudinal creep of a railroad rail, comprising a resilient bar the ends of which are in the form of jaws engaging the upper and lower surfaces of the base flange of the rail at opposite edges and the portion between said jaws standing away from said base flange, said bar being formed so that it is strained when applied to the rail, the distance between the jaws being greater than the width of the rail base and the part of one of the jaws bearing on the upper surface of the rail base being recessed to form a shoulder which bears against the edge of said rail base.

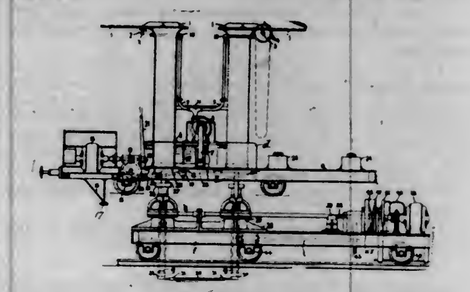
[Claims 2, 4 to 7, 9 to 11, and 13 not printed in the Gazette.]

1,274,826. APPARATUS FOR DISCHARGING AND QUENCHING COKE. STEPHEN NEWCOMBE WELLINGTON, London, England, assignor to Coalite Limited, London, England. Filed Apr. 17, 1916. Serial No. 91,791. (Cl. 202—11.)

1. In coke treating apparatus, in combination, a track, a carriage, receptacles mounted on said carriage, a second carriage and track below the first, coke discharging devices mounted upon the second carriage, and means for bringing the receptacles and discharging means into registry, whereby said receptacles may be discharged.

8. In a coke quenching apparatus, in combination, means for receiving a charge of coke, means for pumping a supply of cooling water against the sides of said receiving means, a carriage on which said receiving and pumping means are mounted, a second carriage, and on said second carriage, discharge effecting means.

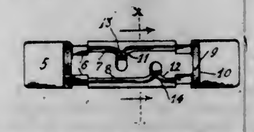
10. In a coke quenching apparatus, in combination, a carriage, a receptacle having vertical sides on said carriage, a closure for the bottom of said receptacle, a flange for supporting said closure, means for removing said supporting flange, and a plunger for supporting said closure and moving it up and down through said receptacle after the closure supporting flange has been removed.



12. In coke quenching apparatus, in combination, coke receptacles, a tank and a pump on said carriage for quenching coke by applying water to the exterior of said receptacle, a second carriage, a discharging device on said second carriage, and means whereby said device may be moved into proper registry to discharge the said receptacle.

[Claims 2 to 7, 9, and 11 not printed in the Gazette.]

1,274,827. LOOSE-LEAF BOOK. RALPH G. WHITLOCK, Los Angeles, Cal. Filed Dec. 4, 1917. Serial No. 205,465. (Cl. 129—24.)

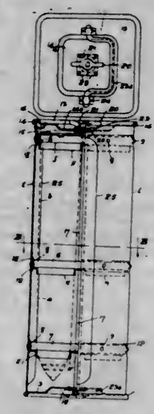


1. In a loose leaf book a back frame comprising a strip of sheet metal whose longitudinal central line lies in the same plane having portions thereof near the ends formed into bearings and other portions thereof formed into lugs; side members terminating in ring members secured to said back member, one of said side members being rockably mounted upon said back member and having a crank intermediate its ends; and a lug struck from said back member and engaging said crank to hold the same against accidental movement when the ring members are opened or closed.

2. In a loose leaf book a back frame comprising a strip of sheet metal whose longitudinal central line lies in the same plane having portions thereof near the ends formed into bearings, and other portions into lugs; and side members terminating in ring members and having cranks intermediate their ends mounted in the bearings on the back member with their cranks engaged by said lugs, said cranks being staggered, one of said members being rockable in its bearings and the other stationary.

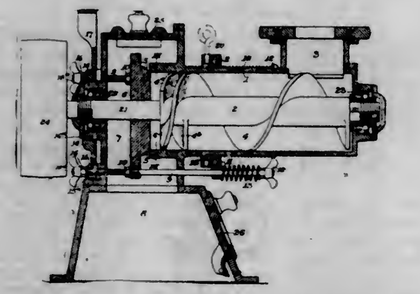
1,274,828. AMMUNITION CASE OR RECEPTACLE. BENJAMIN ALLEN WILLIAMS, Chester, England. Filed Oct. 9, 1917. Serial No. 195,566. (Cl. 206—3.)

In a receptacle for ammunition, in combination; a sheet metal outer case; longitudinal corrugations in the walls of the case; a base permanently secured to the case; a recess in the base; a pivoted handle housed in said recess; a series of stamped sheet metal diaphragms disposed transversely in the receptacle; ridges in the wall of the case for positioning the diaphragms; perforations in the diaphragms to receive the ammunition; a removable lid; a recess in said lid; a pivoted handle housed in said lid recess; a bolt disposed longitudinally in the receptacle and secured to the base, a nut engaging the bolt and the lid by means of which an endwise grip on the ammunition is obtained between the lid and the lowest diaphragm,



and means for securing the nut to the lid, said nut being housed in the recess of the lid.

1,274,829. MIDDLINGS-MILL. AUGUSTUS WOLF, Chambersburg, Pa. Filed Mar. 4, 1918. Serial No. 220,203. (Cl. 83—8.)



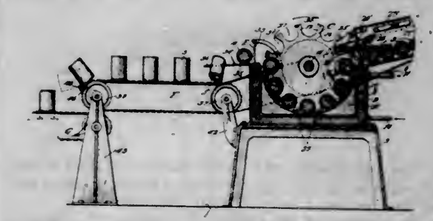
1. The combination of a cylinder, a plate yieldingly held against the end of said cylinder, a screw for moving granular material against said plate whereby it may be extruded in an annular stream, a series of bolts supporting said plate in position, springs on said bolts for applying tension to said plate, a nut for increasing or decreasing said tension; said nut being threaded on the cylinder, and cams for longitudinally moving said bolts to relieve the tension of said springs.

2. In a structure such as set forth in claim 1, a rotatable member having slotted arms through which said bolts pass, and bosses having inclined faces surrounding said bolts; the cams for longitudinally moving said bolts to relieve the tension of the springs being carried by said slotted arms in engagement with said bosses.

1,274,830. CONTAINER-COATING MACHINE. FREDERICK P. WOOD, Oak Park, Ill., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed May 28, 1915. Serial No. 30,912. (Cl. 91—46.)

2. A machine for coating can bodies comprising in combination, a receptacle for holding a coating bath, a rotatable carrier mounted therein and provided with means for engaging the cans to hold them against rotation independently of said carrier, and a hook-shaped arm for automatically delivering cans from said carrier.

4. In a machine for handling coated can bodies, a bath receptacle, means for dipping can bodies therein, a drainage conveyer, means for guiding the dipped cans sidewise toward the drainage conveyer, means for supporting the cans at one end only while the other end drops in a direction transverse to the movement of the conveyer for delivering the can bodies open end downward on said conveyer, a second conveyer below the drainage conveyer, and means for arresting the open end of the can bodies while the closed end tilts over in the direction of the movement of the conveyer on to said second conveyer.

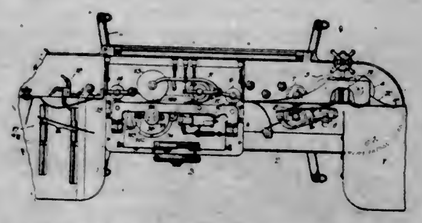


5. The combination of a bath receptacle, a rotary carrier therein having means for holding can bodies with their axes horizontal and parallel with the axis of the carrier, means for disengaging the can bodies from said carrier with their axes in horizontal position, a drainage conveyer, and means whereby the can bodies are caused to roll freely after disengagement and are tilted into vertical position with their open ends downward on said drainage conveyer.

6. A machine for coating can bodies comprising in combination, a receptacle for a bath of coating material, a carrier for dipping can bodies therein, a conveyer for receiving can bodies from said carrier, a blast pipe directed against the closed end of the can body and operating on the same to force excess of coating material toward the open end of said body before the can body is received on said conveyer, and means for depositing the can bodies open end downward on said conveyer.

[Claims 1, 3, and 7 not printed in the Gazette.]

1,274,831. POSTAGE-METER. IRVING C. WOODWARD, Chicago, Ill., assignor to American Postage Meter Co., a Corporation of Arizona. Filed Dec. 1, 1913. Serial No. 804,103. (Cl. 101—91.)



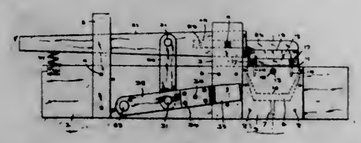
1. A device of the class described, comprising a rotatable member, accounting mechanism supported thereon, a casing surrounding said accounting mechanism and arranged to have a limited movement relative thereto, a lock for normally preventing such relative movement of the casing, operating devices for the accounting mechanism, and means normally preventing adjustment of said accounting mechanism independently of said operating devices, said means being arranged to be rendered ineffective by movement of said casing when in unlocked condition.

14. In a device of the class described, a rotatable printing mechanism including a plurality of adjustable type carriers, means for locking said type carriers against adjustment after a predetermined number of impressions, means operative to release the type carriers for the purpose of permitting resetting thereof, said last mentioned

means having connections for preventing operation of the printing mechanism during resetting operations of the type carriers, and means for counting the operations of said printing mechanism.

[Claims 2 to 13 not printed in the Gazette.]

1,274,832. FIBER-CLEANING DEVICE. ELMER O. WORRICK, Daet, Philippine Islands. Filed Feb. 9, 1917. Serial No. 147,638. (Cl. 13—18.)



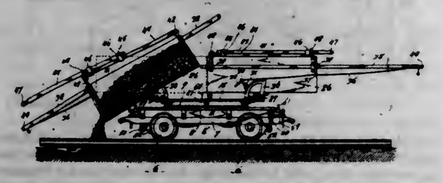
1. The combination of a decorticating tool, and a head block coöperating with said tool; with means to cause said head block to swing to aline itself with said tool.

4. In a device of the character specified, the combination of a recorticating tool, and means for actuating said tool; with a longitudinally swinging head block for coöperating with said tool evenly throughout its length.

8. In a device of the character specified, the combination with an elongated horizontally disposed base member, a compartment in proximity to one end of said base member, a head block swingingly mounted in said compartment and in the longitudinal direction of said base member, a pair of spaced supporting posts upon said base member at one side of said block, a bar pivotally mounted upon and between said supporting posts in proximity to one of its ends, a tool secured in this end of said bar for coöperating with said head block, an expansion spring interposed between said base member and the free end of said bar at the end of said base member remote from said compartment for normally holding said tool in operative position with respect to said head block, a foot lever having one end pivotally mounted upon a side of said base member, and a connection between said foot lever and said bar at a point between the pivotal point of said bar and said expansion spring, whereby upon the downward pressure of said foot lever the free end of said bar will be forced downwardly against said expansion spring for elevating said tool above said head block.

[Claims 2, 3, and 5 to 7 not printed in the Gazette.]

1,274,833. DUMPING PUSH-CAR. GEORGE C. WORTMAN, Denver, Colo. Filed Dec. 18, 1916. Serial No. 137,476. (Cl. 105—188.)



1. A push car including a framework, a pair of body members each of which is hingedly connected with the framework and independently tiltable, and adjustable means for locking the two body members together to prevent either member from assuming the dumping position, said means comprising bars slidably connected with the walls of the body members.

2. A push car comprising a framework, two body members hingedly connected therewith to permit either to assume the dumping position independently of the other, adjustable means for locking each body member in any desired position of tilting adjustment, a handle bar hingedly connected with each body member, a slidable end gate for each body member, and an operable connection between said end gate and said handle bar.

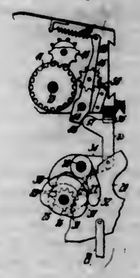
3. A push car comprising a framework, two body members hingedly connected therewith to permit either to assume the dumping position independently of the other, adjustable means for locking each body member in any desired position of tilting adjustment, an extensible handle bar hingedly connected with each body member, a slidable end gate for each member, and an operative connection between said end gate and the handle bar of the member.

4. A push car comprising a framework, two body members hingedly connected therewith to permit either to assume the dumping position independently of the other, adjustable means for locking each body member in the desired position of tilting adjustment, a handle bar hingedly connected with each body member at the inner extremity of the latter, an end gate for each body member, said gate being at the opposite end of the member from that with which the handle bar is hingedly connected, and an operative connection between said end gate and the handle bar substantially as described.

5. A car comprising a framework, two body members hingedly connected therewith to permit either to assume the dumping position independently of the other, means for regulating the tilting of each body member for dumping purposes, a handle bar hingedly connected with each body member and composed of two slidably connected parts, an end gate for each body member, an operable connection between said end gate and the handle bar of the corresponding member.

[Claims 6 to 15 not printed in the Gazette.]

1,274,834. COMBINED TYPE-WRITING AND COMPUTING MACHINE. WALTER WRIGHT, New York, N. Y., assignor to Underwood Computing Machine Company, New York, N. Y., a Corporation of New York. Filed July 8, 1912. Serial No. 708,090. (Cl. 235—63.)



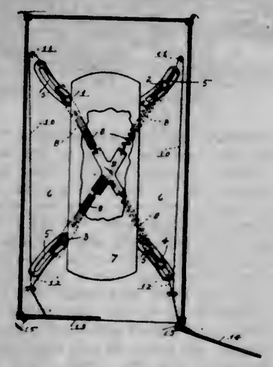
1. In a computing machine, the combination with computing wheels, and a master wheel for driving them *seriatim*; of a carriage controlling the *seriatim* drive of said computing wheels; numeral keys controlling the travel of said carriage and the extent of rotation of said master wheel; a lock for said carriage; a device for both positively engaging and positively releasing said lock; means for actuating said device at the driving stroke of a numeral key, to engage said lock; means for actuating said device as said key completes said driving stroke, to release said lock; means for holding each computing wheel locked; and means operated by said carriage lock, during its engaging movement, to release from its holding means the then active computing wheel.

9. In a computing machine, the combination with computing wheels, of numeral keys for driving said wheels, each of said computing wheels split into two portions, one of said portions having thereon, a carry-over tooth, and the other portion having gear teeth, a series of coupling gears, each connected directly with said portions forming a train, and means connected to said numeral keys to enable said keys to move said coupling gears to break said trains *seriatim* preparatory to the driving of the computing wheels by the numeral keys.

25. In a computing machine, the combination with computing wheels and coupling gears therefor, of numeral keys, means connected to said keys for driving said wheels, connections whereby said keys positively move said couplers to ineffective position and restore them to effective position, and a member forming part of each key connection revolving continuously during the key depression to operate said couplers.

[Claims 2 to 8, 10 to 24, and 26 not printed in the Gazette.]

1,274,835. COFFIN-HOLDING DEVICE FOR HEARSES. HARRY A. YEIDER, Grand Rapids, Mich. Filed Feb. 21, 1918. Serial No. 218,426. (Cl. 21—26.)

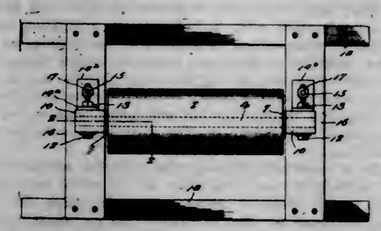


1. In a hearse; a plurality of coffin-holding members movable toward and away from each other; a spring pressing said members toward each other; means connected to said members and adapted to move them away from each other.

5. In a hearse; a hinged door; a plurality of slide bearings; coffin-holding members slidable in said bearings toward and away from each other; springs pressing said members toward each other; flexible means connected to said members and to the door and adapted to move said members away from each other by the door's opening movement and adapted to be swung by the door's movement to one side of its hinge in the open position of the door and to the other side of said hinge in the door's closed position.

[Claims 2 to 4 not printed in the Gazette.]

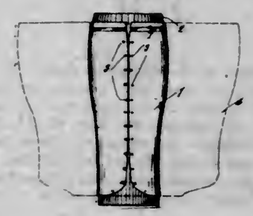
1,274,836. MINE-PULLEY. JAMES BOYD ANDERSON, Shickshinny, Pa. Filed July 17, 1917. Serial No. 181,153. (Cl. 64—52.)



4. An adjustable bearing support for the gudgeon pins of a mine pulley or the like, comprising bearing blocks having bearings adapted to receive the gudgeon pins, angle brackets for supporting said blocks, pivot bolts securing the bottom legs of said brackets to a base and permitting a swivel adjustment of the brackets in a horizontal plane, and pivot bolts passing through apertures in said blocks and the upright legs of said brackets to permit a pivotal adjustment of the blocks in a vertical plane axially of the pulley.

[Claims 1 to 3 not printed in the Gazette.]

1,274,837. METHOD OF MAKING COMBINATION-LEGGINGS. JULES ASCHEIM, Cedarhurst, N. Y. Filed Mar. 28, 1918. Serial No. 225,142. (Cl. 36—2.)



1. In the art of making a combination legging having a fabric facing and a foundation of leather sufficiently stiff and resilient to always tend to assume a definite predetermined normal shape similar to the leg of the wearer, those steps in the art which consists in soaking the leather in water until it absorbs some thereof, stretching it into normal shape, maintaining it in normal shape by holding means, drying it while being so maintained in normal shape at a temperature less than the boiling point of water, and cementing the fabric in a stretched condition to said leather before said holding means are released.

3. In the art of making a combination legging having a fabric facing and a foundation of leather sufficiently stiff and resilient to always tend to assume a definite predetermined normal shape similar to the leg of the wearer, those steps in the art which consist in soaking the leather in water until it absorbs some thereof, stretching it into normal shape, maintaining it in normal shape by holding means, drying it while being so maintained in normal shape at a temperature of about 85° F., and cementing the fabric to said leather before said holding means are released.

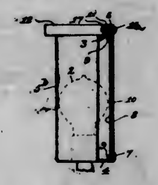
5. In the art of making a combination legging having a fabric facing and a porous foundation sufficiently stiff and resilient to always tend to assume a definite predetermined normal shape, similar to the leg of the wearer, those steps which consist in stretching the said foundation in a direction at right angles to axis of the said legging, stretching the fabric at right angles to the said axis and connecting it to the said foundation while both are in the same stretched condition by means of a thick cement which is forced into the said porous foundation without substantially spreading sidewise, the said cement being sufficiently strong to maintain the fabric in its tensed condition before it hardens, and maintaining the said fabric permanently tensed.

[Claims 2, 4, and 6 not printed in the Gazette.]

1,274,838. NUMBER-ILLUMINATING DEVICE FOR MOTOR-VEHICLES. MORRIS H. ASCHNER, Long Island, N. Y. Filed Oct. 22, 1917. Serial No. 197,844. (Cl. 40—133.)

1. In a device of the character described, comprising a casing having an open face, upstanding flanges formed on the top and bottom edges of said open face, a translucent plate to fittingly engage between the edges of said open face, means for limiting the inward movement of said plate, whereby the plate is held to lie flush with the uppermost of said flanges, the lowermost of said flanges lying out of alinement and in advance of said uppermost flange to form a space between said plate and

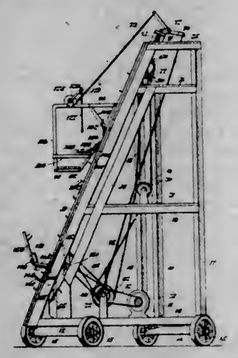
itself in which the lower edge of a license plate is to engage and rest, said uppermost flange having slots therein to register with slots on the license plate, and means to extend through said slots for securing the parts together.



5. In a device of the character described, comprising a casing having an open face, a rigid inwardly extending flange on one edge of the open face of the casing, a hinged flange on the opposite face of the casing, said flanges being adapted to retain a license plate in the open face of the casing, means for limiting the inward movement of the license plate, and means for yieldingly holding the hinged flange in operative retaining position.

[Claims 2 to 4 and 6 not printed in the Gazette.]

1,274,839. LUMBER-STACKING MACHINE. JOHN BANCOCK, Long Island City, N. Y. Filed Apr. 18, 1917. Serial No. 162,913. (Cl. 193—52.)



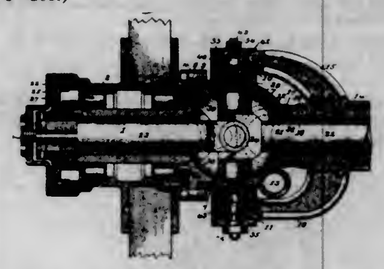
1. In a lumber stacking machine, a framework including an inclined member, conveyers for moving a board along the inclined member, certain of said conveyers being positioned in advance of the others for elevating a board while positioned diagonally with reference to the framework, means for receiving a board discharged from the conveyers, driving means for said conveyers, and means operated from the driving means for changing the position of the means receiving the board.

3. In a lumber stacking machine, a framework, including a base portion, an inclined member mounted thereon, said member having an inclination in two directions with reference to the longitudinal axis of the base, conveyers for moving a board along the inclined member and means for driving the conveyers.

10. In a lumber stacking machine, a framework, a plurality of conveyers mounted therein, driving means for the conveyers, an inclined member coöperating with the conveyers, a platform movable upon the inclined member, a board receiving device thereon, a device for removing boards from the conveyers and discharging them upon the receiving device, said board removing device including a transverse bar extending across the operative runs of the conveyers, and plates projecting from the face of the transverse bar and deflected toward the inclined member and then downwardly, an apron inclined from the receiving device toward the lower portions of the plates, and means for controlling the position of the platform and the device mounted thereon.

[Claims 2, 4 to 9, and 11 to 15 not printed in the Gazette.]

1,274,840. TRACTION-WHEEL. CHESTER T. BANGS, Hobart, Ind. Filed Apr. 7, 1917. Serial No. 160,406. (Cl. 74—103.)



1. In a combined steering and traction wheel of the class wherein the carrying arbor of the wheel has at one end a hollow globular shape casing inclosing the universal coupling of the sectional driving shaft of the wheel, which casing carries the upper and lower trunnions having pivotal connection with vertically spaced pivot jaws on a fixed axle frame, the said inclosing casing having an enlarged head formed with a concave inner face, a marginal attaching flange and a circular bearing portion extending away from said flange, and a semi-globular sub-casing having a circular bore fitting the circular portion of the enlarged head aforesaid, a marginal flange for attachment to the flange of said head, and the upper and lower trunnions aforesaid, substantially as set forth.

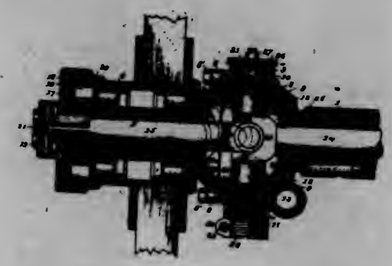
3. In a combined steering and traction wheel of the class wherein the carrying arbor of the wheel has at one end a hollow globular shape casing inclosing the universal coupling of the sectional driving shaft of the wheel, which casing carries the upper and lower trunnions having pivotal connection with vertically spaced pivot jaws on a fixed axle frame, the combination with said inclosing casing formed with a horizontally elongated orifice for relative independent movement of one section of the driving shaft, of a gland member adjustably attached to the axle frame aforesaid and having curved wings for bearing upon the outer surface of said inclosing casing adjacent to the horizontal orifice thereof, and means for adjusting said gland member toward said casing, substantially as set forth.

6. In a combined steering and traction wheel of the class wherein the carrying arbor of the wheel has at one end a hollow globular shape casing inclosing the universal coupling of the sectional driving shaft of the wheel, which casing carries the upper and lower trunnions having pivotal connection with vertically spaced pivot jaws on a fixed axle frame, the combination with said inclosing casing formed with a horizontally elongated orifice for relative independent movement of one section of the driving shaft, of a lubricant containing shell fitting the inner surface of the inclosing casing and having at one end an annular neck adapted for supporting engagement with the axle frame and at the other end an orifice and external holding recess for a packing, substantially as set forth.

8. In a combined steering and traction wheel of the class wherein the carrying arbor of the wheel has at one end a hollow globular shape casing inclosing the universal coupling of the sectional driving shaft of the wheel, which casing carries the upper and lower trunnions having pivotal connection with vertically spaced pivot jaws on a fixed axle frame, the combination with said inclosing casing formed with a horizontally elongated orifice for relative independent movement of one section of the driving axle, of a lubricant containing shell of a globular form supportingly associated with the axle frame and fitting the inner surface of the inclosing casing, the lower trunnion aforesaid having an axial passage alined with an outlet orifice from the lubricant containing shell aforesaid, and means for closing said passage, substantially as set forth.

[Claims 2, 4, 5, and 7 not printed in the Gazette.]

1,274,841. TRACTION-WHEEL. CHESTER T. BANGS, Hobart, Ind. Filed Apr. 7, 1917. Serial No. 160,407. (Cl. 74—103.)



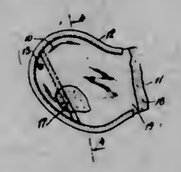
1. In a combined steering and traction wheel of the class wherein the carrying arbor of the wheel is provided at one end with a hollow globular shape casing, and the axle frame is provided with a companion hollow globular shape casing fitting inside the aforesaid casing of the wheel arbor and carrying upper and lower trunnions engaging bearing hubs on said wheel arbor casing, the two shells forming an inclosure for the universal coupling of the driving shaft of the wheel, the combination of the axle frame casing having its cavity formed with a cylindrical extension at its outer end, and a lubricant containing shell arranged in the cavity of the aforesaid casing and comprising inner and outer globular portions connected together by an intermediate cylindrical portion, substantially as set forth.

2. In a combined steering and traction wheel of the class wherein the carrying arbor of the wheel is provided at one end with a hollow globular shape casing, and the axle frame is provided with a companion hollow globular shape casing fitting inside the aforesaid casing of the wheel arbor and carrying upper and lower trunnions engaging bearing hubs on said wheel arbor casing, the two shells forming an inclosure for the universal coupling of the driving shaft of the wheel, the combination of the axle frame casing having its cavity formed with a cylindrical extension at its outer end, and a lubricant containing shell arranged in the cavity of the aforesaid casing and comprising inner and outer globular portions connected together by an intermediate cylindrical portion, substantially as set forth.

4. In a combined steering and traction wheel of the class wherein the carrying arbor of the wheel is provided at one end with a hollow globular shape casing, and the axle frame is provided with a companion hollow globular shape casing fitting inside the aforesaid casing of the wheel arbor and carrying upper and lower trunnions engaging bearing hubs on said wheel arbor casing, the two shells forming an inclosure for the universal coupling of the driving shaft of the wheel, the combination of the axle frame casing having its cavity formed with a cylindrical extension at its outer end, and a lubricant containing shell arranged in the cavity of the aforesaid casing and comprising inner and outer globular portions connected together by an intermediate cylindrical portion and provided at one end with a cylindrical neck having a holding fit in a bore in the axle frame and with horizontally elongated orifice at its opposite end, said orifice being provided with a marginal packing gland, substantially as set forth.

[Claim 3 not printed in the Gazette.]

1,274,842. EAR AND NECK PROTECTOR. DAVID BASCH, New York, N. Y. Filed Feb. 4, 1918. Serial No. 215,262. (Cl. 2—120.)

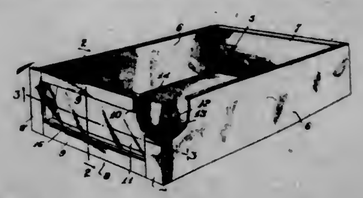


2. An ear and neck protector comprising a band having enlarged dished end portions, the edges of which are adapted to surround the ears and a narrower connecting strip, curved transverse stays affixed to said enlarged end portions, and means connecting the upper outer parts of the enlarged portions.

6. An ear and neck protector comprising a band having enlarged dished end portions, the edges of which are adapted to surround the ears and a narrow connecting strip with its upper edge lower than the upper edges of the end portions and with its lower edge curved upwardly, a binding around the edge of said band, said binding being arranged to contract the edges of the enlarged portions, curved transverse stays affixed to said enlarged end portions, and means connecting the upper outer parts of the enlarged portions.

[Claims 1 and 3 to 5 not printed in the Gazette.]

1,274,843. DISPLAY-DRAWER. EARL HENRY BEKKERING, Duluth, Minn., assignor to Duluth Show Case Company, Duluth, Minn., a Corporation of Minnesota. Filed Mar. 26, 1917. Serial No. 157,514. (Cl. 211—7.)



A display drawer comprising a rectangular container, one end of said container being constructed of top, bottom and end members arranged about a central opening and rabbeted to provide shoulders, a transparent wall resting against said shoulders, fastening strips secured to said end members to rigidly hold said transparent wall, said strips having grooves on their inner faces spaced from said transparent wall, and a wall supported in said grooves and removable therefrom without displacing the end of said container, said last mentioned wall forming with said transparent wall a compartment open at its top and adapted to receive goods to be displayed.

1,274,844. ELECTRIC CONNECTOR. JOHN BERG, Chicago, Ill., assignor to Metal Specialties Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 29, 1917. Serial No. 193,889. (Cl. 173—335.)

1. In an electric connector, a body of insulating material having a socket-entering shank at one end and branching tenons at the other end, sleeves on said tenons provided with bayonet-slots, bayonet-slot-engaging studs on said shank, and a contact-member in said body having a stem embedded in and serving as a contact for said shank

and having branches embedded in and serving as contacts for said tenons.

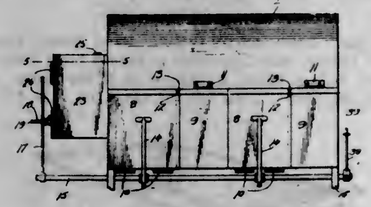


5. In an electric connector, an insulating body provided with a cylindrical plug-portion equipped with bayonet-slot-engaging studs and provided with arms, socket-sleeves mounted on said arms and provided with bayonet-slots, and a pair of contact-members substantially embedded in said body, one of said contact-members having a stem exposed at one side of the plug-portion of said body and having branches in said arms, and the other contact-member having a stem extending through the plug-portion of said body and affording an end-contact and having branches in the arms of said body equipped with spring-projected plungers extending freely into said socket-sleeves.

7. In an electric connector, a contact-member adapted to be embedded in an insulating body, said contact-member comprising a stem having one end adapted to serve as a contact, a bent cross member permanently secured to the other end of said stem, divergent tubular members secured to the end portion of said bent member, and spring-projected plungers mounted in said tubular members.

[Claims 2 to 4 and 6 not printed in the Gazette.]

1,274,845. AUTOMATIC FEED-DROPPER. WILLIAM F. BIRD, Bruceton Mills, W. Va. Filed Aug. 11, 1916. Serial No. 114,454. (Cl. 161—10.)



1. The combination with a receptacle having a hinged door, of a rotatable shaft, an arm fixed to rotate with said shaft, and normally engaged with the door to retain the same in closed position, a lever fixed to rotate with the shaft, a plate provided with a longitudinal slot adapted to receive said lever, a latch mounted on the plate and normally engaged with the lever to retain the same locked therein, and time controlled means for disengaging the latch from the lever to permit the doors to open.

4. The combination with a receptacle having a hinged door, of a shaft, an arm carried by said shaft and normally holding said door in closed position, a lever carried by said shaft, a plate carried by said receptacle and provided with a slot to receive said lever when the door is in closed position, a latch pivoted upon said plate and adapted to be extended across said slot to retain the lever therein, a releasing member pivoted upon said plate and having one end thereof engaged with said latch, a reciprocating actuating member carried by said releasing member, and a clock mechanism including a rotatable winding key engageable at times with said actuating member to move the latch to a lever releasing position.

[Claims 2 and 3 not printed in the Gazette.]

1,274,846. ALARM-SIGNAL. THEODORE BODDE, Lynn, Mass. Filed July 26, 1916. Serial No. 111,486. (Cl. 116—1.)

1. In an alarm signal, the combination with a suitable support, of a hermetically sealed sounding element, a saturated vapor contained in said sounding element, said sounding element including a vibrating wall adapted to emit an audible sound when vibrated by the difference in pressure between the saturated vapor contained within the element and the atmosphere outside the element, means carried by the sounding element for moving the latter bodily in one direction, and means for causing said element to move bodily in the opposite direction.



2. In an alarm signal, the combination with a support adapted to be attached to a heating device of a sounding element movably connected with the support, said sounding element including the vibrating wall, means for moving the element away from the heating device when said element has been subjected to a predetermined degree of heat, and means for causing said element to move toward the heating device when said element is cooled to a predetermined degree of temperature.

3. In an alarm signal, the combination with a suitable support of a hollow hermetically sealed sounding element having a vibrating wall which is vibrated by the difference in pressure between a saturated vapor contained within the element and the atmospheric pressure outside the element, a trigger attached to the wall for moving the sounding element when the wall is moved in one direction, and means coöperating with the trigger for moving the element in the opposite direction when the vibrating wall is moved in another direction.

6. In an alarm signal, a swinging sounding device including a vibrating diaphragm, a trigger attached to the diaphragm and having one end overlapping the edge of the diaphragm, said trigger deriving motion from the vibrating action of the diaphragm, and means adapted to be contacted by the trigger for causing the sounding element to swing.

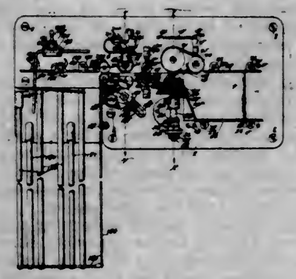
7. In an alarm signal, a swinging sounding element and a trigger carried thereby, a support for the sounding element provided with a lug and an arm which successively and respectively contact with the body of the sounding element and with the trigger thereof for the purpose of stopping and starting the sounding element in its swinging movement.

[Claims 4 and 5 not printed in the Gazette.]

1,274,847. STAMP AND CHECK CANCELING AND POSTMARKING MACHINE. FRANCIS G. BOSWELL, Washington, D. C., assignor to Robert A. Boswell, Washington, D. C. Filed Oct. 22, 1917. Serial No. 197,896. (Cl. 101—236.)

7. In a mail marking machine, an intermittent die-hub, a two-part driving device therefor comprising driving and driven members, the driving member being constantly rotated, the driven member having fixed connection with the die-hub, and automatic means connected with the driving member but remote therefrom for varying the interval of time necessary to overcome the inertia of the die-hub when putting the same in motion.

9. In a mail marking machine, an intermittent die-hub, a two-part driving device therefor comprising a constantly rotating magnetized driving member and a driven member moved by the attractive force thereof, the driven member having fixed connection with the die-hub, and manual means for varying the attractive force of the driving member while the same is in motion.



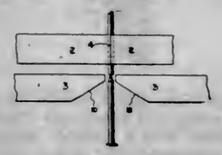
25. In a canceling machine, a die-hub, a two-part driver therefor comprising a driving section and a driven section, means for constantly moving the driving section, means for intermittently arresting and releasing the driven section, the die-hub being secured to the driven section, and letter-controlled means common to both the two-part driver and the releasing and arresting means, whereby the intensity of the force imparted by the driving section to the driven section is automatically increased simultaneously with the release of the driven section.

27. In a mail marking machine, the combination with a bed-plate, of a printing couple and mail advancing couples mounted thereon, each couple having one of its units journaled in the bed-plate, a laterally movable bearing for the other unit of each couple, a sheave for each unit of each couple, an endless belt interconnecting all of the sheaves, an arm pivotally mounted on the bed-plate, an idle sheave carried at the free end of the arm, and a spring tensioned between the arm and the bed-plate and causing the idle sheave to bear upon the belt.

31. A releasing and arresting device comprising a supporting member, a bell-crank lever pivoted thereon, a stop for said lever, an arm swingingly mounted on the supporting member, a stop for said arm, a link carried pivotally at the free end of said arm, said pivotal connection being effected to one side of the longitudinal center of the link and the arm being angularly disposed with reference to the link, a second link having its ends pivotally connected with one end of the first link and one end of the bell-crank lever, a third link having pivotal connection with the other end of said first link, said third link having means for connection to a device for imparting rocking movement to the first link, and springs for drawing the bell-crank lever and swinging arm against their stops.

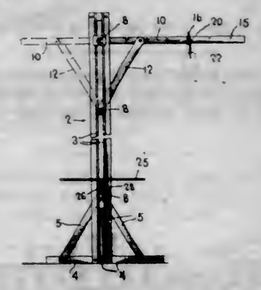
[Claims 1 to 6, 8, 10 to 24, 26, 28 to 30, and 32 to 55 not printed in the Gazette.]

1,274,848. DIES. WILLIAM J. BOYLE, Collingwood, Ontario, Canada, assignor of one-half to Garfield I. Evans, Collingwood, Ontario, Canada. Filed Apr. 12, 1917. Serial No. 161,488. (Cl. 10—53.)



In a nail machine, a pair of coacting horizontally arranged reciprocatory gripping dies adapted to grip a plurality of blanks located in the same plane; of a pair of coacting reciprocatory cutting tools located immediately beneath and extending parallel to the said dies each of said tools having a contacting face having a straight cutting edge and being formed with a series of pairs of cutting facets converging in said cutting edge, each pair being constructed and arranged to act upon one of the blanks, and triangular facets located between the pairs of cutting facets and spaced therefrom to present clearance channels for the purpose of preventing the clippings from jamming together.

1,274,849. DRIER FOR SEED-CORN. HENRY BULLERDICK, Bellevue, Iowa. Filed July 13, 1917. Serial No. 180,323. (Cl. 34—26.)

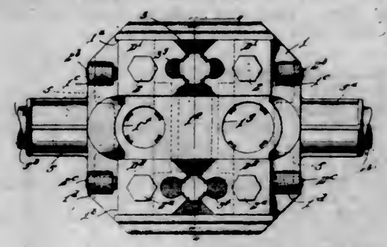


1. In a device of the character described, a central post, radial arms hinged to the post, braces pivoted at one end to the arms and at their other ends removably secured to the post, strips removably secured to the arms, and hangers adapted to engage the pith of the ears of corn and suspend them from the strips.

2. In a device of the character described, a central metal post formed of angle bars united together, radial arms hinged to the post, braces pivoted to the arms at one end and removably secured in the post at their other ends, strips removably secured in the radial arms at right angles thereto, and metal hangers adapted to engage the cobs of corn and suspend the ear from the strips.

[Claims 3 to 5 not printed in the Gazette.]

1,274,850. MULTIPLE DIE-STOCK. WILLIAM V. BULMAN, Philadelphia, Pa. Filed Apr. 18, 1918. Serial No. 229,294. (Cl. 10—114.)
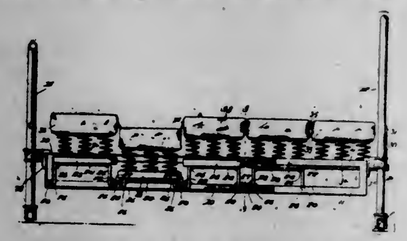


1. In a multiple die stock; opposite spaced side members each having parallel die channels and a rib on its outer face; the channel and rib on one member extending at right angles to the channel and rib on the opposite member; dies in said channels; the rib on one member having openings for positioning a rod or pipe in proper relation to the die on the opposite member.

4. In a multiple die stock; opposite spaced side members each having parallel die channels and rib on its outer face, the channel and rib on one member extending at right angles to the channel and rib on the opposite member; dies in said channels; the rib on one member having openings for positioning a rod or pipe in proper relation to the die on the opposite member; end members rigidly uniting said side members and spacing them properly apart; and handle parts on said end members.

6. In a multiple die stock; opposite spaced members each containing parallel guide channels on its outer face separated by an intermediate spacing rib or bar; an adjustable set of dies in each channel, the channels and rib on one member extending at right angles to the channels and rib on the opposite member; the spacing rib on one member having openings for positioning a rod or pipe in proper relation to the dies on the opposite member; studs rigidly uniting said side members and spacing them properly apart; bolts securing the dies to the members and tapped into said studs; and handles attached to said stock.

[Claims 2, 3, and 5 not printed in the Gazette.]

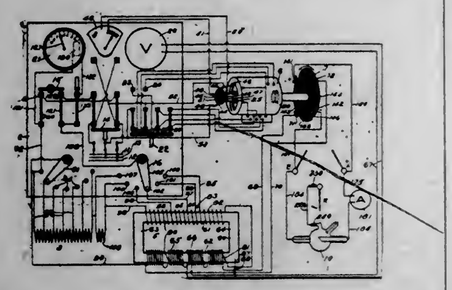
1,274,851. INVALID'S BED. VEROL H. BYRD, Warrior, Ala., assignor of one-half to Sol Byrd, Hickory, Ky. Filed Nov. 24, 1917. Serial No. 203,796. (Cl. 5—45.)



1. The combination with a support, of a plurality of bedding carrying members, means for coupling one of the terminal bedding carrying members at its outer end to swing downwardly at its inner end, and means for supporting the remaining bedding carrying members for vertical movement.

2. The combination with a bedstead, of a plurality of bedding supporting members arranged side by side transversely of the bedstead, means for coupling one of the terminal bedding supporting members at its outer end to swing downwardly at its inner end, and means for supporting the remaining bedding supporting members for vertical and lateral movement.

1,274,852. X-RAY APPARATUS. CHARLES E. CAMPBELL, Lynn, Mass. Filed May 5, 1913. Serial No. 765,538. (Cl. 175—364.)



1. The combination of a self-contained X-ray apparatus comprising a step-up transformer, and terminals by which the transformer may be connected with an external source of current; an electric instrument; and conductors for connecting the instrument with the secondary winding of the transformer to indicate an electrical condition therein; one of said conductors being connected, by conductors embodied in said self-contained apparatus, with one of said terminals, so as to ground the instrument automatically upon the source of current whenever the latter is connected with the said terminal.

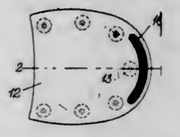
3. A high potential rectifying commutator comprising a rotary member of insulating material having oppositely disposed arcuate conducting plates each extending along about 90° of the periphery of the member, the periphery of said insulating member being cut away back of each arcuate conducting plate, means for driving the member, and four stationary contacts located about 90° apart around the member.

4. A high potential rectifier comprising a rotary member of insulating material having oppositely disposed bridging conductors at its periphery, a synchronous motor for driving the rotary member having a shaft on which the rotary member is mounted, stationary contacts mounted around the periphery of the member, and supporting means for the stationary contacts extending directly and rigidly from the motor casing.

7. A high potential rectifier comprising a rotary disk of insulating material having oppositely disposed bridging conductors spanning about 90° of the periphery of the disk, a synchronous motor for driving the disk having a shaft on the end of which the disk is mounted, four stationary contacts located about 90° apart around the disk, and means for rigidly supporting the stationary contacts including four posts of insulating material extending from the motor casing.

[Claims 2, 5, and 6 not printed in the Gazette.]

1,274,853. RUBBER HEEL. FRED S. CARR, Newton, Mass. Filed Nov. 26, 1917. Serial No. 203,913. (Cl. 36—35.)



1. A rubber heel having fastening means and a top face the rear portion of which is recessed to a depth preferably equal to about one-half of the thickness of the heel, to form a flexible rear portion, the said fastening means being entirely between said flexible portion and the breast of the heel, whereby said flexible portion is adapted to be flexed upwardly.

[Claim 2 not printed in the Gazette.]

1,274,854. DEMOUNTABLE TOP FOR MOTOR-VEHICLES. ARTHUR J. CHAMPAGNE, New York, N. Y., assignor to Christian W. Schildwachter, New York, N. Y. Filed Feb. 29, 1916. Serial No. 81,136. (Cl. 21—62.)



1. The combination, with a vehicle door, of a supplemental section adapted to be mounted thereon, one of said parts being formed with a hook-like projection, and the other with a correspondingly shaped recess, means for locking the projection in the recess, and a second projection coöperating with and spaced from the first.

2. The combination, with a vehicle door, of a supplemental section formed with a hook-like projection, and the other with a correspondingly shaped recess, means for locking the projection in the recess, and a second projection coöperating with and spaced from the first, the recessed part being formed with a lug fitting between said projections, said locking means retaining the lug between the projections.

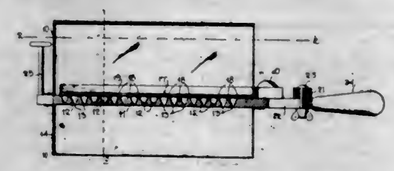
3. The combination, with a vehicle door, of a supplemental section therefor, one of said parts being provided with a lug extending toward the other, and the second part being provided with arms inclosing the lug, and means extending through one of the arms and engaging the lug for locking the arms and lug together, one of the arms being formed with a hook-shaped portion under-hanging a portion of the material of the first part.

4. The combination, with a vehicle door, of a demountable section therefor, the door being provided with a lug, and the section being provided with arms adapted to extend on opposite sides of and engage the lug, one of the arms being formed with a tapering recess opening toward the lug, and the other arm being formed with an aperture, and a bolt having a tapered end, the bolt being extended through the aperture and threaded through the lug and having its tapered end engaging the recess, the recess being positioned and dimensioned for enabling the tapered end of the bolt in entering the recess to draw the arm along the lug in a direction for binding the demountable section tight against the lug.

6. The combination, with a vehicle door, of a demountable section therefor, the door and section having a hook and eye connection, and means coöperating therewith for retaining said connection in operative condition, the said means comprising a bolt threaded through a portion of the material of the door and engaging the hook for pressing the same toward the eye connection and securing the parts together.

[Claim 5 not printed in the Gazette.]

1,274,855. SEED-PLANTER. FREMONT B. CHESBROUGH, New York, N. Y. Filed Sept. 22, 1917. Serial No. 192,762. (Cl. 221—119.)



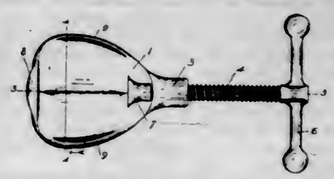
1. A planting device of the character described, including a seed box having a bottom formed with a plurality of seed receiving recesses terminating in apertures extending through the bottom, a manually reciprocatable slide disposed within the seed box and resting upon the bottom thereof and having perforations extending through the slide, oppositely disposed handles attached to the seed box, one of said handles extending in a horizontal plane and the other handle extending in a vertical plane, one end of the slide extending out through the wall of the seed box and being provided with a thumb piece disposed adjacent the horizontally extending handle, and a stop mounted upon the handle and adjustable toward or from the slide and limiting the reciprocation thereof.

[Claim 2 not printed in the Gazette.]

1,274,856. NUTCRACKER. FRANK B. COOK, Chicago, Ill., assignor, by mesne assignments, to Frank B. Cook Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 6, 1914, Serial No. 829,830. Renewed June 6, 1918. Serial No. 238,607. (Cl. 146—3.)

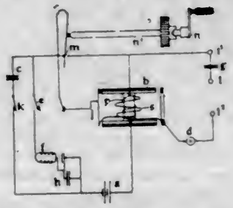
1. An improved nut cracker comprising a receptacle having a bottom V-shape in cross-section, and provided at one end with a fixed jaw having an aperture therein, and at the other end with a threaded boss, a feed screw working in said boss, and a bell shaped jaw rotatably supported by said screw opposite said aperture, said bell shaped jaw being positioned over the apex of said bottom and movable in a line parallel therewith.

2. An improved nut cracker comprising a receptacle provided at one end with a fixed jaw, and at the other end with a threaded boss, a feed screw working in said boss



and provided with a hollow end portion, and a movable jaw rotatably mounted on said hollow end, the latter being provided with an annular retaining flange to prevent displacement of said movable jaw.

1,274,857. FIELD TELEPHONE AND TELEGRAPH. FRANK PATTISON CORK, Audley, Newcastle, England. Filed Dec. 4, 1917. Serial No. 205,459. (Cl. 179—81.)

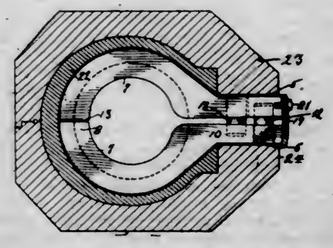


1. In a portable telegraph and telephone instrument, in combination, a magneto, means connected with said magneto to close a circuit through the primary coil of the magneto, whereby signal impulses induced in the secondary coil are sent through a line, a buzzer, a telephone, and switches whereby communication may be established through either the buzzer or the telephone.

2. In a portable field instrument, in combination, a buzzer, a transmitter, and a magneto, means for sending a signal by the magneto to a distant observer, and switches whereby either the transmitter or the buzzer may be used to send messages.

3. In a portable telegraph and telephone instrument, in combination, a transmitter, a switch to connect it with the line, a buzzer, a switch to connect it with the line, whereby either the buzzer or the transmitter may be switched into circuit for communication, a magneto, and means whereby the magneto may be made to induce currents through the line for signaling.

1,274,858. CORE. VICTOR L. COX, Akron, Ohio, assignor of one-half to Aloys Schonenberger, Akron, Ohio. Filed Mar. 26, 1918. Serial No. 224,752. (Cl. 18—45.)



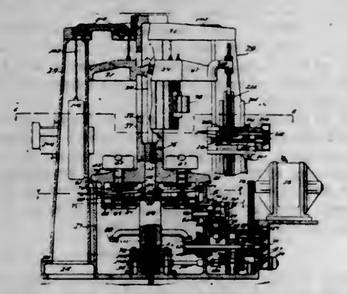
1. A core comprising a plurality of segment-shaped sections adapted when assembled to form an annulus, said sections being of tubular formation and each side

wall thereof provided with an inwardly-projecting radial flange, a plurality of pairs of strengthening members secured in the cavity of each section with the members of each pair opposite to each other and each member provided with an inwardly-extending integral arm secured to one of the flanges of the section in which it is placed, a sectional ring within said core the sections of which are secured to the inner ends of a portion of the arms of said strengthening members and adapted to hold said core sections temporarily in place, and means to separate the inner ends of said strengthening members to spring the side walls of the core sections apart during the vulcanizing operation.

4. A core comprising a plurality of segment-shaped sections adapted when assembled to form an annulus, said sections being of tubular formation and each side wall thereof provided with an inwardly-projecting radial flange, a plurality of pairs of strengthening members secured in the cavity of each section with the members of each pair opposite to each other and each member provided with an inwardly-extending integral arm secured to one of the flanges of the section in which it is placed, the inwardly-extending arms of said strengthening members each provided with a projecting pin and an opening the pins and openings of the opposing members being reversely disposed to permit the pins of one member to be received in the openings in the opposing member, said pins adapted to project through said arms when said arms are in contacting engagement, a sectional ring within said core for holding the sections temporarily in position during the formation of the core, said pins adapted to be forced laterally by engagement with the mold sections during the vulcanizing of the tire shoe to spring the side walls of the core sections apart for compressing the tire shoe held by said mold members.

[Claims 2 and 3 not printed in the Gazette.]

1,274,859. MULTIPLE-SPINDLE TURRET-LATHE. LEE G. DANIELS, Rockford, Ill. Filed Apr. 13, 1916. Serial No. 90,940. (Cl. 29—38.)



4. The combination of a rotatable carrier, mechanism for rotating the same in step by step movements to different stations, a stop pin and a centering pin movable into engagement with the carrier for arresting and centering the carrier at each station, a carrier movable toward and away from the rotary carrier, and mechanism actuated in part by movement of the reciprocable carrier to first move the stop pin and then the centering pin into operative position.

20. In a multiple spindle lathe, the combination with a tool carrier and a work carrier one of which is rotatable to different stations and one of which is reciprocable to bring the tools into and out of operation, of a continuously rotating driving member, a driven member and connections therefrom to the reciprocable carrier for moving the same in opposite directions upon being likewise driven, connections between the driving and driven members including clutches adapted to rotate the driven member in opposite directions, means operated by said driving member for moving the rotary carrier from station to station, mechanism put into operation by rotation of said rotary carrier for throwing in one of said clutches to effect approach of the tools and work and put into operation by movement of the reciprocable carrier to throw this clutch out and the other clutch in at a predetermined point in the movement of said reciprocable carrier, said mechanism being actuated by rotation of the rotary carrier to throw out the last named clutch whereby to stop said reciprocable carrier.

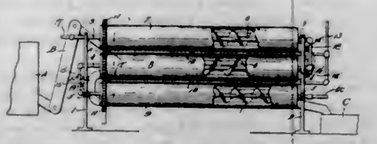
42. In a multiple spindle lathe, the combination of a work carrier and a tool carrier, one of which is revoluble and one reciprocable with respect to the revoluble carrier, mechanism for indexing the revoluble carrier to various stations, mechanism for reciprocating the other carrier comprising a shaft and connections therefrom to the reciprocable carrier for moving the same in opposite directions upon similarly driving the shaft, gear driven devices constantly driven in opposite directions and adapted to be independently connected with the shaft, and means actuated by indexing movement of the revoluble carrier and reciprocable movement of said other carrier for causing said gear driven devices to drive said shaft in opposite directions at predetermined intervals.

54. A machine of the character described, the combination of a work carrier and a tool carrier, one of which is reciprocable to bring the tools into and out of operation, mechanism for moving the reciprocable carrier including a plurality of clutches one of which is adapted to effect approach of the tools to the work and another retracting of the tools, a clutch shifting device, and means for actuating the same including means constantly urging the shifting devices in a direction to engage the tool retracting clutch, means for holding the clutch control means in a set position wherein the approach clutch is engaged, and means actuated by the reciprocable carrier at a predetermined point in its approach movement for releasing the control means for said set position, whereupon the clutch device will be automatically moved by said constantly urging means to engage the tool retracting clutch.

62. In a machine of the character described, the combination of a tool carrier and a work carrier, one of which is revoluble and the other reciprocable to bring the tools into and out of operation, mechanism for indexing the revoluble carrier, mechanism for moving the other carrier reciprocably to produce rapid approach, feed and reverse movements, automatic control mechanism for moving the reciprocable carrier including a control member constantly urged in one direction to produce said reverse movement and movable in the opposite direction to successively cause said rapid approach and feed movements, means actuated by indexing movement of the revoluble carrier for moving said control member to produce the rapid approach movement, and means operated by the reciprocable carrier at predetermined points in its approach movement to successively operate said control member to produce said feed movement and to allow said control member to be actuated by said constantly urging means to produce the reverse movement.

[Claims 1 to 3, 5 to 19, 21 to 41, 43 to 53, 55 to 61, and 63 to 77 not printed in the Gazette.]

1,274,860. WOOD-DRYING MACHINE. ALBERT A. DENTON, Eagle River, Wis. Filed Feb. 10, 1917. Serial No. 147,841. (Cl. 34—5.)



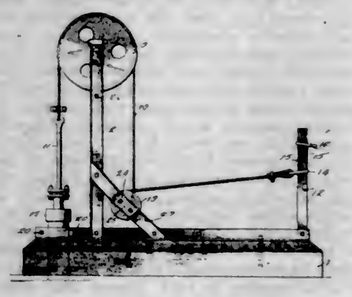
1. A driving machine of the character described comprising a plurality of cylinders having centrally located hollow shafts extending therethrough, gearing mechanism

associated with the cylinders for simultaneously rotating the same, the said shaft being rotatable with the cylinders, screw conveyers mounted upon the said shafts, steam pipes connected to the ends of the shafts for providing a continuous circuit through the steam pipes and the hollow shafts and means for permitting the contents of one cylinder to pass out of the end of the other cylinder into the proximate end of the adjacent cylinder.

2. A drying machine of the character described comprising standards, a plurality of hollow shafts having their ends supported by the standards, a cylinder having a hollow interior and mounted upon each shaft, a plurality of ducts connecting the open ends of the cylinders for permitting the contents thereof to pass from one cylinder to another, while the cylinders are being rotated, and means for rotating the cylinders, certain of the ends of the said shafts being connected together to establish a continuous circuit of hollow members through the said cylinders.

[Claims 3 and 4 not printed in the Gazette.]

1,274,861. EQUALIZING PUMP-JACK. JOSEPH B. DUNLAP, Tulsa, Okla. Filed July 6, 1917. Serial No. 179,081. (Cl. 74—21.)

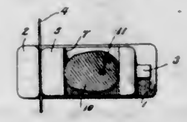


1. A pump jack comprising a frame having means at one end for clamping the frame to the well casing and having a pair of standards at the said end, a sheave wheel journaled between the standards, a cable passing over the sheave wheel and connected to the plunger rod of the pump, an operating lever pivoted to the frame at the opposite end from the standards, the other end of the cable being adjustably connected to the said lever, and a compensating drum journaled adjacent the standards and about which the cable passes between the sheave wheel and the lever, said drum being of smallest diameter at its center and gradually increasing in diameter toward its ends and having a spiral groove running from one end to the other, said drum having an extended journal pin, polygonal for engagement by a wrench.

2. A pump jack comprising a frame having means at one end for clamping the frame to the well casing and having a pair of standards at the said end, a sheave wheel journaled between the standards, a cable passing over the sheave wheel and connected to the plunger rod of the pump, an operating lever pivoted to the frame at the opposite end from the standards, the other end of the cable being adjustably connected to the said lever, and a compensating drum journaled adjacent the standards and about which the cable passes between the sheave wheel and the lever, said drum being of smallest diameter at its center and gradually increasing in diameter toward its ends and having a spiral groove running from one end to the other.

3. A pump jack comprising a frame, a sheave wheel journaled on the frame, a cable passing over the sheave wheel and adapted for connection at one end to the plunger rod of the pump, an operating lever pivoted to the frame at the opposite end from the sheave wheel, the other end of the cable being adjustably connected to the lever, and a compensating drum journaled adjacent to the sheave wheel and about which the cable passes between the sheave wheel and the lever, said drum having a spiral groove running from one end to the other and being of largest diameter toward its ends.

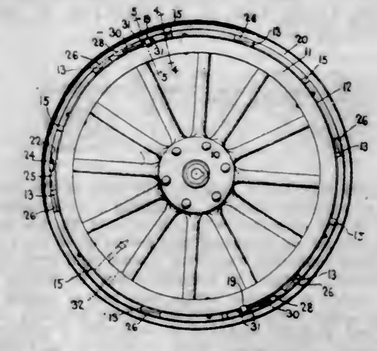
1,274,862. LINE-FASTENER. FREDRICH T. ERBACH, Sheboygan, Wis. Filed Sept. 20, 1916. Serial No. 121,266. (Cl. 24—134.)



2. A line fastener including a relatively flat body, a rigid jaw formed on one end thereof, a rib arranged longitudinally on the body and in spaced relation with the jaw, another jaw provided with a longitudinal groove for receiving the rib, the rib guiding the sliding movement of the jaw, the movable jaw being also provided with a transverse recess on its opposite face which communicates with the groove and thereby provides a longitudinal slot therein, a handle lever, a cam integral with the inner end of the lever and arranged in the transverse recess, and means passing through the extreme inner end of the lever as well as the slot and engaged in the body to permit of swinging movement being imparted to the lever to consequently cause the cam to adjust the movable jaw with respect to the rigid jaw.

[Claim 1 not printed in the Gazette.]

1,274,863. DEMOUNTABLE WHEEL-RIM. HENRY D. ESTES and WALTER H. PARKS, Hartford, Ky. Filed May 25, 1917. Serial No. 171,020. (Cl. 152—21.)



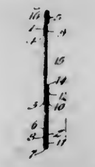
1. A demountable wheel rim including a wedge block carried by the wheel, a stop cleat mounted upon the wheel and provided at one side of the wheel with an outwardly turned lug, a wedge block carried by the rim, the rim being shiftable laterally upon the wheel to engage the said lug and then being rotatable for shifting the said blocks into engagement with each other, said stop lug being arranged to act as a guide for the rim in its rotary movement, and locking means between the rim and wheel for holding the rim against retrograde movement upon the wheel.

[Claims 2 to 7 not printed in the Gazette.]

1,274,864. STENCIL-HOLDER. GUY J. EVANS, Buffalo, N. Y. Filed Nov. 16, 1917. Serial No. 202,281. (Cl. 101—127.)

1. A stencil holder comprising two frame sections which are arranged side by side and receive a filler between them

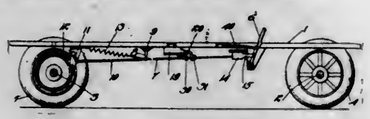
and are provided with corresponding openings, through which the filler is exposed, and one of said frame sections being provided with a longitudinal folded portion which overlaps and is secured to the adjacent edge of the other frame section.



12. A stencil holder comprising two outer frame sections one of which is wide and provided adjacent to one of its longitudinal edges with an opening and adjacent to its opposite longitudinal edge with an inwardly turned flange forming an outer guide, and the other outer frame being narrow and having an opening registering with the opening of the wide frame section and having its inner longitudinal edge forming an inner guide which coöperates with said outer guide and two narrow intermediate frame sections one of which is arranged between said wide outer frame section and said narrow outer frame section and provided with an opening registering with the openings in said outer frame section and provided at its opposite longitudinal edges with folded flanges, and the other intermediate frame section having its inner longitudinal edges arranged between the wide outer frame section and the inner edge portion of said narrow outer frame section while its outer longitudinal edge is provided with an inwardly turned flange and arranged between said wide outer frame section and the outer guide thereof.

[Claims 2 to 11 not printed in the Gazette.]

1,274,865. SLACK-ADJUSTER. FRANCIS DEWEY EVERETT, Saranac Lake, N. Y. Filed July 31, 1917. Serial No. 183,814. (Cl. 188—49.)



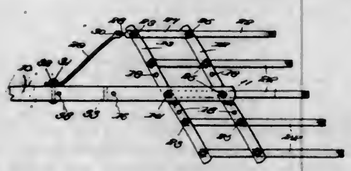
1. A slack adjuster to automatically take up the wear between two friction surfaces, comprising a reciprocatable member or rod connected with one of said friction surfaces, means for reciprocating said rod to move the friction surface connected therewith toward and from the other friction surface, a stationary box or casing, a member which is slidable within said box or casing, a loose connection between said slide member and said connecting rod whereby said rod is permitted a predetermined range of movement with relation to said slide member, means connected with said rod having portions which alternately engage different portions of said slide member at the opposite ends of the normal stroke of said connecting rod, one of which engaging surfaces moves said slide member in an outward direction from the casing whenever said connecting rod moves on its forward stroke more than its normal distance, and a series of separate plates or washers within said casing which are normally supported upon said slide member and which are severally adapted to drop down behind the end of said slide member whenever said slide member is moved out from under any one or more of said plates or washers, and thereby to limit the return movement of said slide member.

3. A slack adjuster to automatically take up the wear between two friction surfaces in which one of the friction surfaces is movable toward and from the other, and is provided with a connecting rod and mechanism for actuating said rod to move the friction surface connected therewith toward and from the other friction surface, said slack adjuster comprising a stationary device, a slide member connected with the stationary device, a loose connection between said slide member and said connecting rod whereby said connecting rod is permitted a predetermined range of movement with relation to said slide member, means connected with said rod having faces which are respectively adapted to be brought into contact with said slide member at the opposite ends of the normal stroke of said connecting rod without actuating said slide member, the surface on said connecting rod which engages said slide member on the stroke which applies the brake, actuating said slide member in an outward direction with relation to said fixed member whenever the said friction applying stroke of the connecting rod exceeds its normal length, and stop mechanism controlled by said slide member in such manner that when said slide member is moved outward with relation to said fixed member, said stop mechanism will automatically move to a position which prevents a return movement of said slide member in relation to said fixed member.

4. A slack adjuster to automatically take up the wear between two friction surfaces, in which one of the friction surfaces is movable toward and from the other, and is provided with a connecting rod and mechanism for actuating said rod to move the friction surface connected therewith toward and from the other friction surface, said slack adjuster comprising a stationary device, a slide member connected with the stationary device, a loose connection between said slide member and said connecting rod whereby said connecting rod is permitted a predetermined range of movement with relation to said slide member, engaging means connected with said rod which respectively are barely brought into engagement with said slide member at the opposite ends of the normal stroke of said connecting rod, the surface on said connecting rod which engages said slide member on the stroke which applies the brake, causing said slide member to be moved with relation to said fixed member whenever the said friction applying stroke of the connecting rod exceeds its normal length, stop mechanism controlled by said slide member in such manner that when said slide member is moved outward with relation to said fixed member, said stop mechanism will automatically move to a position which prevents a return movement of said slide member in relation to said fixed member, and a spring friction or retarding member connected with said fixed member which engages said slide member to prevent accidental movement of the slide member with relation to the fixed member, but which yields to the positive actuation of the engaging member of the connecting rod.

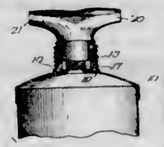
[Claim 2 not printed in the Gazette.]

1,274,866. HARROW. GILBERT H. FERGUSON, Samantha, Ala. Filed Dec. 3, 1917. Serial No. 205,060. (Cl. 55—29.)



A device of the class described comprising a draft tongue, a plurality of beams with certain of said beams having apertures in spaced relation, means for swingingly connecting said beams to said draft tongue in spaced relation, a plurality of cultivator teeth adjustably connected to the apertures of said beams, a strap device connecting said beams at one end and extended into an eye at the other end, and a connecting member having an eye at one end engaging the eye of the strap and connected at the other end to said draft tongue.

1,274,867. CONTAINER-CLOSURE. BEN K. FORD, Oak Park, Ill., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Sept. 30, 1914. Serial No. 864,212. (Cl. 221—23.)



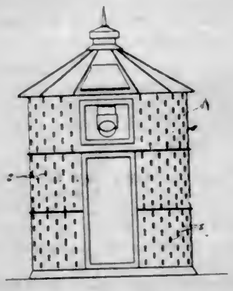
1. A closure for a container comprising a threaded member adapted to be screwed into an open end of said container and having an aperture extending longitudinally thereof, and a partition provided with a perforation having an upwardly deflected edge and fixed beneath said member in position to limit the movement of said member, the perforation in said partition being out of alinement with the aperture through said member.

3. A closure for a container provided with a pouring spout comprising a member adapted to be threaded into a container and having apertures extending longitudinally therethrough, said member having a pair of oppositely disposed passageways communicating with each other and with said apertures, one of said passageways forming a pouring spout and the other means for controlling the rate of flow of the contents of the container, certain of said apertures being respectively disposed at the same sides of the closure as are the said passageways to form a pouring aperture and an air aperture.

5. A closure for a container formed from a sheet metal plate bent at its middle portions and having projections at the middle to provide oppositely extending tubular spouts, and also having its ends bent into tubular form and pressed to form external screw threads, and a stopper provided with an aperture and embraced by the screw-threaded portions.

[Claims 2, 4, and 6 to 10 not printed in the Gazette.]

1,274,868. GRAIN-BIN. CALVIN C. FOUTS, Middletown, Ohio, assignor to The C. C. Fouts Company, Middletown, Ohio, a Corporation of Ohio. Filed Oct. 5, 1916. Serial No. 123,885. (Cl. 189—3.)

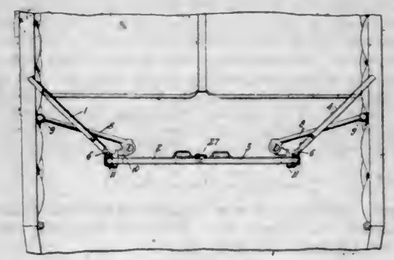


1. A grain bin or the like having elongated portions of its wall pressed inwardly to form openings therein and severed therefrom along their lateral edges only to form truss-like guard strips, each guard strip having its outer surface pressed inward beyond the inner surface of the body of said wall to form slots along the edges thereof to connect the adjacent opening with the interior of the bin, each slot being of a width less than the width of said opening.

2. A grain bin comprising a plurality of sheet metal sections flanged at their edges to afford means for connecting them one to the other, and each having a plurality of elongated openings, guard strips extending lengthwise of the respective openings, connected therewith at the ends thereof and bent inwardly a distance sufficient to form slots along both edges of each guard strip to connect the openings with the interior of the bin, said slots being of a width less than the width of said openings.

3. A grain bin or the like having an opening in the wall thereof, and a truss-like strip having its ends rigidly connected with said wall at opposite edges of said opening, and having its lateral edges spaced away from the adjacent edges of said opening to form slots of a width less than the width of said opening.

1,274,869. WIND-SHIELD FOR AUTOMOBILES AND OTHER PASSENGER-VEHICLES. CHARLES HAL. FRYER, Providence, R. I. Filed Oct. 16, 1916. Serial No. 125,839. (Cl. 21—148.)



1. In a wind shield of the kind described, a horizontally disposed arm pivotally supported on the side wall of a vehicle body intermediate the front and rear seats thereof, and adapted to swing in a substantially horizontal plane, and a wind shield element mounted upon said arm and adapted to swing with relation thereto about a substantially vertical axis and about a substantially horizontal axis, whereby each wind shield element may be placed in an elevated transverse position adjacent the longitudinal center of the vehicle body, or in a depressed longitudinal position adjacent the side wall of the vehicle body.

2. In a wind shield of the kind described, an independent horizontally disposed arm pivotally supported upon each side wall of a vehicle body, intermediate the front and rear seats thereof, and adapted to swing in a substantially horizontal plane, a wind shield element mounted upon each arm and adapted to swing with relation thereto about a substantially vertical axis and about a substantially horizontal axis, whereby each wind shield element may be placed in an elevated transverse position adjacent the longitudinal center of the vehicle body, or in a depressed longitudinal position adjacent the side wall of the vehicle body, and means for connecting the two wind shield elements when in the first mentioned position.

6. In a device of the class described, a shield member; an arm pivoted to the car body to swing in a horizontal plane; said arm being of substantial length as compared to the width of the car providing the sole support of said member, and mounting means intermediate said arm and said shield member permitting said member to pivot in both the vertical and horizontal planes.

7. In a device of the kind described, a shield member, an arm pivoted to the car body to swing in a horizontal plane, said arm being of substantial length as compared to the width of the car providing the sole support of said member, and mounting means intermediate said arm and said shield member permitting said member to pivot in both the vertical and horizontal planes, said arm being on a lower level than said shield member when the latter is in active use.

9. In a wind shield of the kind described, a horizontally disposed arm pivotally supported upon the side wall of the vehicle body intermediate the front and rear seats thereof, and arranged to swing in a substantially horizontal plane, and a pair of wind shield elements being mounted upon said arm and arranged to swing with re-

lation thereto about a common substantially vertical axis and about a common substantially horizontal axis, said elements being independently rotatable about said vertical axis.

[Claims 3 to 5 and 8 not printed in the Gazette.]

1,274,870. LENS-MOUNTING FOR EYEGLASSES. DANIEL G. GOLDING, Fremont, Nebr. Filed Mar. 6, 1916. Serial No. 82,430. (Cl. 88—47.)



The combination with a lens having an edge slot the opposite walls of which are corrugated; of a mount having laterally spaced straps between which the slotted edge portion of the lens fits, and a web on the mount located between the straps and seating in the lens slot and secured therein by a cement filler, said web being corrugated transversely to produce anchoring recesses which are opposite the corrugations of the slot walls and spaced therefrom, said recesses and corrugations receiving the filler.

1,274,871. INDICATOR FOR OILING SYSTEMS. PHILO M. GELATT, La Crosse, Wis. Filed Feb. 10, 1917. Serial No. 147,969. (Cl. 116—31.)



1. An indicator for oiling systems comprising a casing having an inlet and an outlet, a dial plate sealing an opening in the casing, means for securing the dial plate hermetically in position, an index sweeping the plate, and means in the casing for shifting the index, operated by lubricant discharged from the inlet.

3. An indicator for oiling systems comprising a casing having an inlet and an outlet, a vane pivoted between its ends with one of its portions in the path of flow from the inlet and the other portion acting as a counterweight to return the vane to initial position, the portions being in transverse planes, and means on the casing for indicating the movement of the vane.

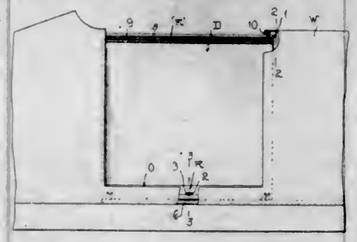
5. An indicator comprising a casing having a flanged opening, a dial plate resting on the flange of the opening and sealing the latter, a cover plate for the dial plate, a collar clamping the dial and cover plate together with interposed gaskets on the flange, an inlet nipple discharging into the casing, an outlet from the casing, a vane oscillatory in the casing in the path of inflow from the inlet, a spindle turned by the vane through a bearing in the dial plate, and an index carried by the spindle that sweeps the dial plate.

7. An indicator comprising a casing having a flanged opening, dial and cover plates removably and hermetically clamped over the opening, a spindle journaled in the dial plate, a vane having transversely disposed blades, secured to the spindle between the blades, and an index secured to the spindle to sweep the dial, the casing having an inlet the flow from which impinges against one of the blades of the vane, and an outlet.

[Claims 2, 4, and 6 not printed in the Gazette.]

1,274,872. MOUNTING FOR SLIDING DOORS. PETER A. GORDON, Detroit, Mich. Filed Apr. 14, 1917. Serial No. 162,091. (Cl. 21—125.)

In combination with a side wall of an automobile provided with an entrance opening through the top of the wall, the wall at one side of the entrance being hollow, a door for said entrance slidable within the hollow portion of the wall, a rail mounted upon the upper edge of the door and extending the entire length thereof, said rail being provided in its top and side faces with grooves extending the entire length thereof, and a single series of



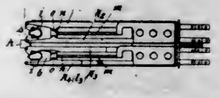
rollers arranged within the upper portion of the hollow wall and supported by the sides and top thereof adjacent the entrance, said rollers being in the same vertical plane transverse of the wall, said rollers contacting with the rail within the grooves thereof, the peripheral portions of the rollers being expansible.

1,274,873. AUTOMOBILE-JACK. ELI GOUGHLER, Youngstown, Ohio. Filed Mar. 14, 1918. Serial No. 222,447. (Cl. 254—123.)



A jack of the class described comprising a lifting lever having a lifting arm hinged at one end thereto and provided with a longitudinally extending socket in its free end, a rod adapted for insertion in said socket, a hub engaging seat carried by said rod, and spacers adapted to be strung on said rod for varying the length of said arm.

1,274,874. ELECTROMAGNETIC RELAY. GEORG GRABE, Nikolassee, near Berlin, Germany, assignor to Siemens & Halske A.-G., Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed Dec. 27, 1915. Serial No. 68,870. (Cl. 175—325.)



1. In an electromagnetic relay with a flat armature extending parallel to the core, the combination of the armature arranged between the contact springs and the energizing winding on the coil, several sets of contact springs and adjustable means operating the contact springs and resting on lateral extensions of the springs.

3. In an electromagnetic relay with a flat armature extending parallel to the core, the combination of an armature provided between the contact springs and the energizing winding on the coil, and a blade spring clamped with one end between the rear pole piece and a plate of magnetic material and attached with the other end to the armature so that the latter, when attracted, bears with its upper broad surface on the portion of the blade spring connected to the magnetic plate.

[Claim 2 not printed in the Gazette.]

1,274,875. INDICATOR. LLOYD B. GRUMAN, Newark, N. J. Filed Apr. 21, 1917. Serial No. 163,359. (Cl. 40—132.)

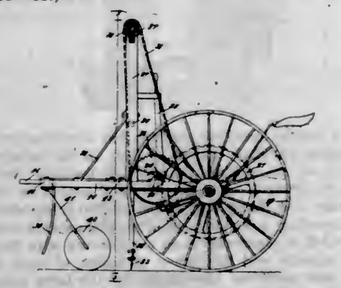
3. An indicator for an automobile comprising a signal box having ledges formed on the lower portion, said box having glazed openings in its front wall, a danger indicating legend on one of said glazed openings, a normally extinguished lamp carried by said box in the rear of said danger indicating legend, the lower portion of said box being open, a glass pane carried upon said ledges for closing the opening in the lower portion of said box, a diagonally disposed partition reflector extending from the upper portion of said box to bear upon said pane in alinement with one of the ledges, thus holding the pane against accidental movement, said partition also bearing upon the indicating legend, thus holding the same in a set position, said partition having an end closure projecting at right angles thereto and engaging the front wall of said box at a point between said glazed openings, and a lamp for constantly illuminating the remaining glazed opening for forming a tail light, while said partition reflector will reflect the rays of the last mentioned lamp downwardly through said glass pane to be projected onto a license plate which may be carried thereadjacent.



7. An indicator for automobiles comprising a signal box having a pair of glazed openings, said box being provided with ledges formed on the lower portion, said box having a danger indicating legend on one of said glazed openings, a normally extinguished lamp carried by said box in the rear of said danger indicating legend, the lower portion of said box being open, a glass pane carried upon said ledges for closing the opening in the lower portion of said box, a partition reflector extending from the upper portion of said box to bear upon said pane in alinement with one of the ledges, thus holding the same against accidental movement, said partition also bearing upon the indicating legend, thus holding the same in set position, and a lamp for constantly illuminating the remaining glazed opening for forming a tail light, while said partition reflector will project the rays of light from said last mentioned lamp downwardly through said glass pane to be reflected onto a license plate which may be carried thereadjacent.

[Claims 1, 2, and 4 to 6 not printed in the Gazette.]

1,274,876. STALK-CHOPPING MACHINE. GEORGE W. GULLETT, Meigs, Ga. Filed Jan. 16, 1917, Serial No. 142,745. Renewed June 1, 1918. Serial No. 237,833. (Cl. 55—63.)

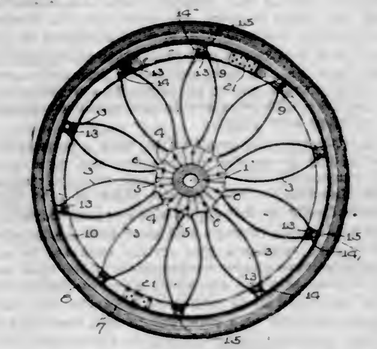


2. A stalk chopping machine comprising a carriage including a tongue, having an opening formed therein, standards carried by said carriage, a cross bar connecting said standards and provided with an opening positioned above the opening of said tongue, a chopping blade, a handle for said chopping blade slidably mounted in the opening of said tongue and cross bar, a crank shaft carried by said standards, a pitman connected with said handle and mounted upon said crank shaft, a driving shaft carried by said frame, and means for imparting rotary movement from said driving shaft to said crank shaft.

3. A stalk chopping machine comprising a carriage, standards carried by said carriage, a crank shaft rotatably carried by said standards, elongated bearings carried by said carriage, a driving shaft slidably and rotatably mounted in the elongated bearings and pivotally mounted at one end, a driven shaft, means for moving said driving shaft into and out of an operative position with respect to the driven shaft, means for transmitting rotary movement from the driving shaft to the driven shaft when the driving shaft is moved to an operative position, a reciprocating cutter, means for transmitting movement from the crank shaft to the reciprocating cutter, and means for transmitting rotary movement from the driven shaft to the crank shaft.

[Claims 1 and 4 not printed in the Gazette.]

1,274,877. SPRING-WHEEL. WINFIELD S. HANCOCK, Washington, D. C., assignor of one-half to Augusta V. Mitchell, Washington, D. C.; H. Rozier Dulany, Jr., committee of the person and trustee of the estate of said W. S. Hancock, together with said A. V. Mitchell, assignors to The A. V. M. Spring Wheel Company, Washington, D. C., a Corporation of the District of Columbia. Filed May 28, 1912. Serial No. 700,246. (Cl. 152—50.)

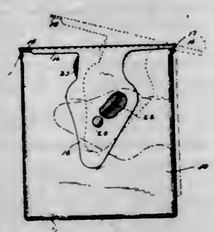


1. A spring wheel of the class described comprising a hub, a felly, a felly plate positioned upon said felly and provided with a plurality of sockets formed therein having open sides, the ends of said sockets being beveled, sectional spokes secured to said hub and provided with inwardly bent feet adapted to fit in said sockets, said spokes adapted to lie snugly against the beveled ends of said sockets, a clamping plate straddling said sockets and engaging said inwardly extending feet of said spokes, said clamping plate provided with beveled sides adapted to hold said sectional spokes snugly in engagement with said beveled ends of said sockets whereby said spokes will be held against yielding movement relative to said sockets, said clamping plates provided with parallel flanges, said flanges projecting beyond the depth of said sockets, and means passing transversely through said felly and through said flanges for firmly holding said flanges in engagement with said felly and holding said clamping plate against accidental removal from said felly, the inner edge of said clamping plate being on the same plane with the inner edge of said felly plate.

2. A spring wheel of the class described comprising a hub, a felly plate, said felly plate provided with a circumferential rib upon its inner face, a substantially U-shaped channel plate positioned upon said rib, said rib provided with a plurality of notches, socket portions struck from said felly plate and fitting snugly within said notches for holding said plate against circumferential movement rela-

tive to said felly, sectional spokes detachably carried by said hub, clamping members straddling the outer ends of said sectional spring spokes for securely holding the same in engagement with said felly plate, and means for holding said clamping member in engagement with said felly plate.

1,274,878. RECEPTACLE. AUGIE L. HANSEN, Evanston, Ill., assignor to Justrite Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed May 18, 1917. Serial No. 169,446. (Cl. 220—9.)

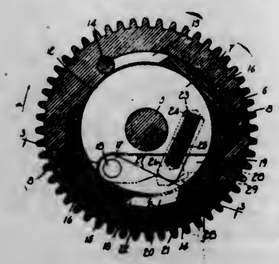


1. In a receptacle, the combination with a rectangular body part having an opening at its upper end, of a cover structure comprising a top plate and side plates extending therefrom alongside of the opposite sides of said body part, diagonal slots in said opposite sides, pins extending from said side plates through said slots into the interior of the body part, V-shaped wire springs anchored at one end to said body part and having their other ends engaging said pins, said pin and slot connection permitting said cover structure to be swung to bring its top plate into various positions with reference to said opening and said springs resisting such swing.

4. In a receptacle, the combination with a rectangular body part having an opening at its upper end, of a cover structure comprising a top plate and side plates extending therefrom alongside of the opposite sides of said body part, diagonal slots in said opposite sides, pins extending from said side plates through said slots into the interior of the body part, V-shaped wire springs anchored at one end to said body part and having their other ends engaging said pins, said pin and slot connection permitting said cover structure to be swung to bring its top plate into various positions with reference to said opening and said springs resisting such swing and protecting housings within the body part secured against the opposite sides thereof to cover said springs, slots and pins.

[Claims 2 and 3 not printed in the Gazette.]

1,274,879. CLUTCH MECHANISM. ARTHUR R. HAVENER, Wayland, Mass., assignor to Judson L. Thomson Mfg. Co., a Corporation of Massachusetts. Filed Mar. 4, 1918. Serial No. 220,195. (Cl. 192—6.)



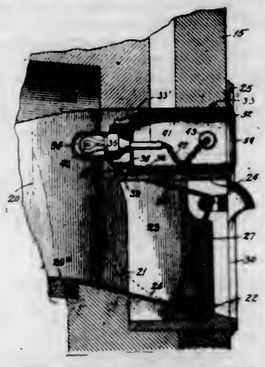
1. A clutch mechanism having, in combination, a driving member, a driven member, a dog mounted on said driven member and adapted to project into a recess in said driving member, the opposite ends of said recess each being adapted to engage said dog and hold it against movement in one direction relatively thereto and means adapted to move said dog to cause the same to project into said recess, whereby said driven member may be locked to said driving member and driven thereby and means to move said dog out of said recess.

3. A clutch mechanism having, in combination, a driving member, a driven member, a dog pivoted on said driven member, said dog having a tooth at one end thereof adapted to project into a recess in said driving member and to be engaged by the opposite ends of said recess and means on said driven member adapted to move said dog to cause the same to project into said recess, whereby said driven member may be locked to said driving member and driven thereby and means to throw said dog out of engagement with said driving member.

5. A clutch mechanism having, in combination, a shaft, a driving member mounted to rotate upon said shaft, a driven member fast to said shaft, said driving member having an annular chamber therein into which said driven member projects, a dog pivotally mounted on said driven member and adapted to project into a recess in said driving member, a pin extending transversely of said driving member and forming one end of said recess, a segmental plate extending transversely of said driving member and forming the other end of said recess, said pin being adapted to abut against the end of said dog to rotate said driven member, a tooth on said dog adapted to engage said plate to prevent said driven member from rotating relatively to said driving member in the direction in which said driving member is rotating, means on said driven member adapted to move said dog to cause the same to project into said recess, whereby said driven member may be locked to said driving member and driven thereby, and means to throw said dog out of engagement with said driving member.

[Claims 2 and 4 not printed in the Gazette.]

1,274,880. BAKING-OVEN. C WELLS HELM, Chicago, Ill. Filed June 22, 1916. Serial No. 105,125. (Cl. 240—5.)



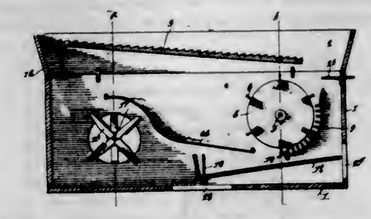
1. In a baking oven, the combination of a structure having a baking chamber therein, a door in the structure at the front of the baking chamber, a housing extending through the front of said structure and having an opening at its rear end, lamp-supporting means removably held in said opening, a switch comprising separable members one of which is removable from the housing with the lamp and its support and the other of which is fixed in the housing, and electrical conductors for the lamp connected to the removable switch member.

[Claims 2 and 3 not printed in the Gazette.]

1,274,881. PEA-HULLER. RILEY HENRY, Williford, Ark. Filed Feb. 27, 1917. Serial No. 151,332. (Cl. 130—30.)

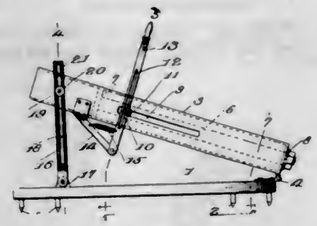
In a pea huller, the combination of a casing, a serrated feed board therein inclined to the horizontal, a cylinder

and concave at and below the lower end of the feed board, a screen below the cylinder and concave and the lower end of the feed board and inclined to the horizontal re-



versely to the feed board, a strap connecting the feed board and screen, and an eccentric on the shaft of the cylinder and engaging the strap at a central point.

1,274,882. GRENADE-THROWER. CLYDE W. HESS, Elizabeth, N. J., assignor of one-half to Blanche I. Hess, Elizabeth, N. J. Filed May 2, 1918. Serial No. 232,055. (Cl. 124—12.)



1. An apparatus for the purpose set forth comprising a base, a barrel hinged at its rear end to the base, an adjustable support for the front end of the barrel, a plunger slidably mounted within the barrel, means for holding the plunger normally projected, and hand controlled means for retracting the plunger.

5. An apparatus for the purpose set forth comprising a base, a barrel supported upon the base and provided with a longitudinal slot in its side, a plunger slidably mounted in the barrel, a fulcrum arm secured to and depending from the barrel, a hand lever pivoted at its lower end to said fulcrum arm and provided with a longitudinal slot, a guide slidably mounted in the longitudinal slot of the lever, the said guide and the plunger, and a spring connecting the lever and the fulcrum arm.

[Claims 2 to 4 not printed in the Gazette.]

1,274,883. AUTOMOBILE-TIRE. LEO HOFMEISTER, Milwaukee, Wis. Filed Mar. 19, 1917. Serial No. 155,789. (Cl. 152—10.)



1. In a tire, the combination of an outer casing, a separate self-sustaining pneumatic inner casing of limited expansibility, and a layer of yielding material interposed between said inner and outer casings to form a cushion therebetween of considerable depth but only partially filling the space between said casings to form air spaces between said casings adjacent the parts which are attached to the rim of the tire when said inner casing is inflated.

[Claims 2 and 3 not printed in the Gazette.]

1,274,884. OIL OR ACID PUMP. WILLIAM W. HUDSON, Salt Lake City, Utah. Filed Apr. 28, 1917. Serial No. 165,147. (Cl. 103—85.)



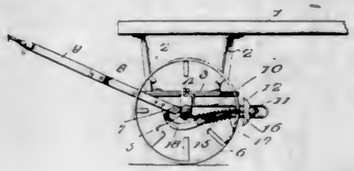
1. An oil or acid pump comprising a cylinder having an inlet and an outlet, a pair of pistons, means for operating one of said pistons, and automatic and positive means out of contact with the other piston for causing it to remain at rest for a predetermined period during the travel of the first named piston in either direction.

2. An acid or oil pump comprising a cylinder having an inlet and an outlet, a pair of pistons, means for causing the travel of the pistons in one direction at the same rate of speed, and automatic and positive means out of contact with both pistons for causing one of said pistons to remain at rest during the continued movement of the other.

5. An oil or acid pump comprising an inlet and an outlet, a pair of opposed pistons, a cross head having connections between one of said pistons and said cross head for operating the piston, a slidable rod connected to said cross head, a second slidable rod disposed parallel to said first named slidable rod having connection with said second named piston, and a pair of pawls carried by said first named slidable rod for engaging said second named slidable rod to move said second piston, and means for disconnecting one of said pawls from said second named rod at any predetermined time.

[Claims 3, 4, and 6 to 11 not printed in the Gazette.]

1,274,885. BRAKE. WOODFORD G. HURST, Oxford, Kans. Filed Oct. 10, 1917. Serial No. 195,811. (Cl. 21—8.)



1. In an apparatus for the purpose set forth, the combination of an axle, a wheel mounted thereon, a guiding and supporting arm secured to and projecting rearwardly from the axle, a tongue pivotally attached to the front of the axle, a brake beam slidably mounted on said guiding and supporting arm, a brake shoe mounted on the beam and arranged to engage the wheel, a coil spring connected at one end with the axle and at its opposite end with the brake beam, an arm carried by the tongue and extending downwardly under the axle, and a link connecting said arm with the brake beam.

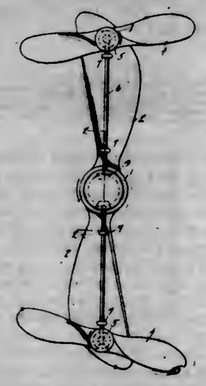
[Claim 2 not printed in the Gazette.]

1,274,886. AIRSHIP-PROPELLER. AUGUST JACOBSON, Alvina, Minn., assignor of one-third to Henry V. Nurmi, Virginia, Minn. Filed Sept. 5, 1917. Serial No. 189,819. (Cl. 170—159.)

1. An airship propeller including a main propeller, auxiliary propellers revolubly mounted upon the blades thereof, and means for rotating said auxiliary propellers independently of the main propeller.

6. An airship propeller including a main propeller, auxiliary propellers revolubly mounted on the blades thereof, an auxiliary propeller shaft mounted concentri-

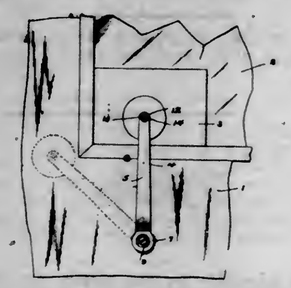
cally with relation to main propeller, a bevel gear on said propeller shaft, auxiliary propeller operating shafts, extending longitudinally of the main propeller blades, gears on the inner ends of said shafts meshing with the aforesaid bevel gears, bevel gears fixedly secured to the opposite ends of said auxiliary propeller operating shaft,



and bevel gears on each auxiliary propeller, rotatable therewith, and having meshing engagement with each last mentioned bevel gears whereby said auxiliary propellers may be rotated by rotation of said auxiliary propeller shaft independently of the main propeller.

[Claims 2 to 5 not printed in the Gazette.]

1,274,887. CARD-HOLDER. SIGVALD T. JENSSEN, Philadelphia, Pa. Filed Apr. 27, 1917. Serial No. 164,854. (Cl. 24—255.)



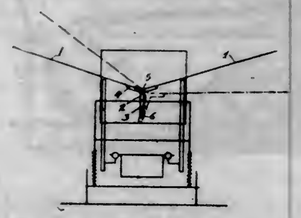
2. A device of the character described, comprising a spring strip adapted to be secured at one end to a support, and a disk spaced from the other end of the strip, having a rotary connection with the strip, and having also a limited angular movement relative to the strip.

4. A device of the character described, comprising a strip of spring metal curved between its ends, said strip, at one end, having an opening for the reception of a securing device, and having a circular ridge on its inner face concentric with said opening, a disk, a rivet loosely connecting the disk with the free end of the strip, and a spacing sleeve on the rivet between the disk and the strip, said spacing sleeve having a tapering end adjacent the strip.

[Claims 1 and 3 not printed in the Gazette.]

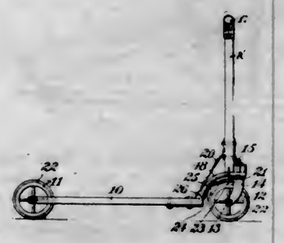
1,274,888. STABILIZATION OF AIRCRAFT. CARL ALFRED JOHANSSON, Christiania, Norway. Original application filed Jan. 18, 1916, Serial No. 72,759. (Now Patent No. 1,223,698.) Divided and this application filed Feb. 12, 1917. Serial No. 148,297. (Cl. 244—29.)

A stabilizer for air craft of the character described, comprising in combination, a carrying plane, adapted to be connected to the front of the air craft frame, a cross-guide connecting said plane to the rear of said frame, consisting of a T-piece secured to said plane and provided with a vertical and a bi-partite horizontal guide slot, the parts of which meet at an obtuse angle, studs on the air craft frame adapted to travel in said slots for allow-



ing a lateral tilting of the plane and a movement of its rear end toward one side, so as to present to that side the largest bearing surface and for allowing it to be slightly lowered at the back so that the front edge will cut the air at an angle for making the air pressure lift the plane substantially as described and for the purpose set forth.

1,274,889. COASTER. CHARLES H. JOHNSON, Newton, Mass. Filed Dec. 1, 1916. Serial No. 134,233. (Cl. 21—191.)



1. A coaster having in combination a single pair of tandem wheels; a platform supported thereby; and a fork from the axle of the forward wheel, having a pivotal connection with the platform at a point above said wheel and forward of its point of tread contact, the whole arranged and adapted to be tipped laterally about the wheel treads and thereby to be steered; and said platform having a surface for supporting the rider arranged between the wheels and below the level of the top of said forward wheel, and having a handle secured rigidly and non-rotatably with respect to the platform whereby the rider may control the tipping.

2. A coaster comprising in combination a single pair of tandem wheels and a platform at a level below the top of the forward wheel, the whole being adapted to tip toward either side about the wheel treads; a fork on the axle of the forward wheel having pivotal connection to the platform above said wheel and forward of its point of tread contact; an arm over the wheel extending backward rigidly from the fork and swinging with the wheel; an extensible spring joining said arm to a part that is rigid with said platform, below the level of the crest of the wheel; and means on the platform holding the intermediate portions of the spring clear of the wheel, the fore part and the aft part of the spring making an angle with each other at said supporting means.

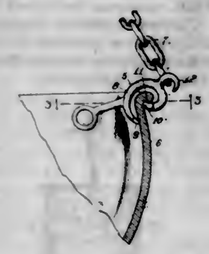
3. A coaster having in combination a platform, tandem wheels, a fork mounting the axle of the forward wheel, with spindle and bearing supporting the platform above and forward of the point of tread contact, part of the platform being a rigid metallic strip reaching from below over the top of the wheel to said bearing, and a rigid handle extending upward from a place thereon at the rear of said bearing.

4. A coaster having in combination a platform, tandem wheels, a fork mounting the axle of the forward wheel, with spindle and bearing supporting the platform above said wheel and forward of its point of tread contact, whereby the coaster is steered by being tipped; said platform having a surface for supporting the rider arranged below the level of said bearing and a metallic strip extending upward and forward over the wheel to and forward of said bearing, thence upward and then backward affording another bearing for said spindle somewhat remote from the first, and thence upward as a rigid support for said handle.

5. A coaster having in combination a platform, tandem wheels, a fork mounting the axle of the forward wheel, with spindle and bearing supporting the platform above and forward of the point of tread contact, part of the platform being a rigid metallic strip reaching from below over the top of the wheel to said bearing, and a rigid handle extending upward from a place thereon at the rear of said bearing, the said strip passing over the wheel being of flanged sheet metal, and the handle being stepped thereon between and held by the flanges.

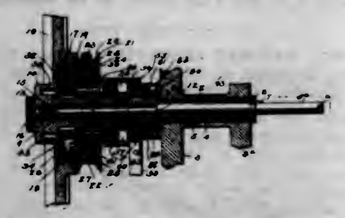
[Claims 6 to 8 not printed in the Gazette.]

1,274,890. GRAVITY-CLAMP FOR LIGHT-REFLECTING BOWLS. CHARLES ERNEST JONES, Chicago, Ill. Filed Jan. 17, 1918. Serial No. 212,262. (Cl. 240—115.)



A gravity bowl clamp formed in one rigid piece and comprising an arch adapted to embrace the edge of the bowl and having arms of unequal length, the shorter arm of the arch being inturned and bifuracted to provide two laterally separated projections for contact with the outside of the bowl at opposite sides of the point of contact of the longer arm of the arch with the inside of the bowl, the said projection being the only part of the clamp contacting with the outside of the bowl, and a chain hook formed on the shorter arm of the arch.

1,274,891. WINDING AND REWINDING MACHINE. ROBERT W. JONES, Wilkes-Barre, Pa. Filed Dec. 18, 1917. Serial No. 207,807. (Cl. 64—5.)



1. The combination with a power shaft; and a drive shaft; of separable drive members, one of which is connected to the drive shaft, and the coacting member adapted to shift relatively to the fast drive member; a stationary control member; a rotatable control member coöperable therewith, and shiftable between the stationary control member and the adjustable drive member to control the position of the latter; and connecting means between the power shaft and drive members, rendered effective by the adjustable drive member when shifted toward the fast drive member.

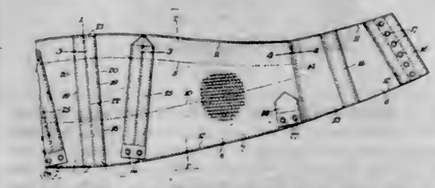
14. The combination with a drive belt; and a drive shaft; of separable drive members between which the belt passes; one of the drive members being secured to the drive shaft, and having a chamber formed therein; the coacting drive member adjustable toward and from the fast member, to tighten or release the belt; and a free wheel connected for simultaneous adjustment with the adjustable drive member, into and out of the chamber in the fast drive member, and rotatable independently of the drive members, the periphery of which wheel is adapted to close the space between the adjustable and fast drive members, when separated; to support the slackened belt.

16. The combination with a drive belt; and a drive shaft; of separable drive members between which the belt passes; one of the drive members being connected to turn with the drive shaft, the coacting drive member adapted for adjustment toward and from the fast drive member, to confine or release the belt; and controlling means to effect such adjustment in one direction, including a stationary cam member; and a rotatable cam member interposed between the adjustable drive member and the stationary cam member, and coöperable with the latter to shift the adjustable drive member toward the fast drive member.

27. The combination with a drive belt; and a drive shaft; of separable drive members, between which the belt passes; one of the drive members connected to turn with the drive shaft; the coacting drive member adapted for adjustment relatively to the fast drive member to engage or release the belt; controlling means to effect such adjustment, including coöperating stationary and rotatable cam members, the rotatable cam member located between the stationary cam member and the adjustable drive member; a strap or holder in which at least one of the cam members is held for rotative and longitudinal adjustment relative to the holder, and means to maintain the cam member where adjusted in the holder.

[Claims 2 to 13, 15, 17 to 26, and 28 to 32 not printed in the Gazette.]

1,274,892. ABDOMINAL BELT. ARTHUR B. KENDRICK, East Orange, N. J., assignor of one-half to James R. Kendrick Company, Inc., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Sept. 16, 1916. Serial No. 120,449. (Cl. 2—188.)



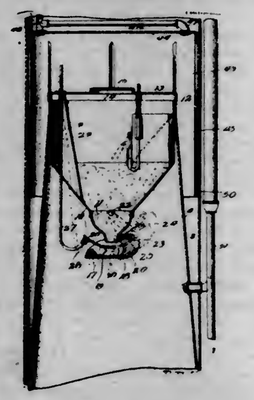
12. An abdominal belt including a fashioned side portion formed of seamless, knit, tubular fabric gradually narrowing from the central portion of the belt and having its courses of stitches extending transversely of the belt, means to prevent the contraction of the wide end of said side portion, means to prevent the expansion of the narrow end of said side portion, and having two spaced strips of elastic material extending through the upper and lower portions respectively of said tubular fabric and attached to said means.

[Claims 1 to 11 and 13 to 16 not printed in the Gazette.]

1,274,893. ACETYLENE-GAS GENERATOR. PIUS F. KILLIAN, Owensboro, Ky. Filed Jan. 12, 1917. Serial No. 142,021. (Cl. 48—52.)

1. A gas generator including a carbid chamber having a discharge spout, and a valve member for controlling the

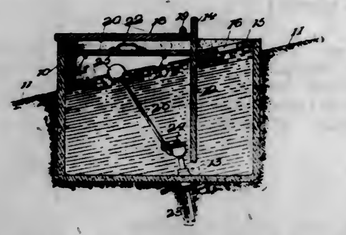
discharge of carbid from the said spout, the said valve member comprising a pocket having a bottom and spaced sides and open at one end and closed at the other end, means pivotally supporting the pocket for swinging movement beneath the said spout, means for moving the said pocket, a cut-off plate extending between the sides of the pocket and at its inner end terminating short of the closed



end of the pocket, the said plate extending relatively close to the end of the discharge spout, means tending to hold the valve member in position beneath the discharge end of the said spout, and adjustable means for limiting the movement of the said valve member to receiving position.

[Claims 2 and 3 not printed in the Gazette.]

1,274,894. AUTOMATIC STOCK-WATERING TROUGH. JAMES W. KIRBY, Harlan, Iowa. Filed Feb. 21, 1918. Serial No. 218,518. (Cl. 119—78.)

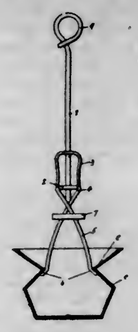


1. A device of the class described comprising a receptacle, a transverse partition dividing the receptacle into compartments and spaced at its lower edge from the bottom of the receptacle and extending at its upper edge above the upper line of the receptacle, a closure for one of said compartments hingedly united to the receptacle and adapted to open against the extended portion of the partition, a stationary closure for the other of said compartments and having restricted openings providing access to the contents of the adjacent compartment.

[Claim 2 not printed in the Gazette.]

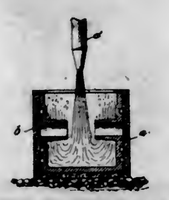
1,274,895. CUSPIDOR-LIFTER. EDWARD BURKE KNAPP, San Jacinto, Cal. Filed May 5, 1917. Serial No. 166,704. (Cl. 57—111.)

A device of the class described including a head comprising a flat metal strip folded to provide terminal eyes, a strip of sheet metal having its lower portion seated between said eyes and its intermediate portion forming an upstanding bail, a spring wire pivotally mounted within each of the eyes and having crossed arms, said wires being spaced apart in the head by the lower portion of the bail, means at the free ends of the arms for engaging the object to be lifted, a disk having apertures through which



the arms extend, and a rod extending from the disk and through the interfitting portions of the metal strips and through the center of the bail, said rod and disk being slidable relative to the arms and strips.

1,274,896. ART OF PERMANENTLY HEAT-EXPANDING CAST-IRON ARTICLES. WILLIAM A. KNAPP, Washington, D. C., assignor, by direct and mesne assignments, to Charles Schwartz, trustee, Washington, D. C. Original application filed Oct. 7, 1915, Serial No. 54,613. Divided and this application filed Oct. 28, 1915. Serial No. 58,444. (Cl. 148—13.)

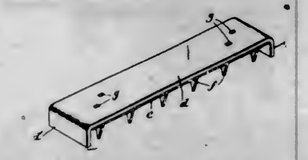


2. The herein described process of causing the permanent expansion of iron castings which consists in bringing them to a red heat, then after the castings have been brought to the desired degree of heat, immediately allowing them to cool, and alternately repeating the said heating and cooling steps to successively expand the articles to the desired degree.

5. The herein described process of causing the permanent expansion of an iron casting which consists in heating the casting uniformly throughout to a temperature between 1400 and 1600 degrees F. and then immediately after such uniform heating has been attained cooling the article.

[Claims 1, 3, and 4 not printed in the Gazette.]

1,274,897. RAILWAY CROSS-TIE. ORVILLE MARSHALL KNOX, Knoxboro, N. Y. Filed Jan. 29, 1918. Serial No. 214,350. (Cl. 238—5.)



1. A railway cross-tie comprising a tie plate of oblong rectangular form, having a vertical web extending centrally and longitudinally upon the underside thereof, said plate also having down-bent end walls abutting against the ends of said web, and reinforcing strips extending along the underside of the tie plate between the web and longitudinal edges of the tie plate and provided with depending anchoring spurs.

2. A railway cross-tie comprising an oblong rectangular tie plate, said plate having a vertical web extending centrally and longitudinally upon the underside thereof, and having downturned end portions resting against the ends of said web, reinforcing strips extending along the underside of the tie plate adjacent to the longitudinal edge thereof and bearing terminally against the said downturned end portions of the tie plate, and spaced rows of V-shaped anchoring spurs projecting downwardly from the reinforcing strips and extending transversely thereof.

1,274,898. MANUFACTURE OF LEAVENED BREAD. HENRY A. KOHMAN, Pittsburgh, Pa., assignor to Ward Baking Company, New York, N. Y., a Corporation of New York. Filed Feb. 15, 1918. Serial No. 217,412. (Cl. 99—10.)

1. The method of making leavened bread, which comprises bringing into admixture with flour, yeast and other ingredients of the dough batch, diastatic and proteolytic enzyms produced by the action of an enzym-producing fungus upon carbohydrate and protein substances, and fermenting the batch; substantially as described.

2. The method of making leavened bread, which comprises bringing into admixture with the flour, yeast and other ingredients of the dough batch, a meal-like product containing diastatic and proteolytic enzyms produced by the action of an enzym-producing fungus upon carbohydrate and protein substances, and fermenting the batch; substantially as described.

7. The method of making leavened bread, which comprises bringing into admixture with the flour, yeast and other ingredients of the dough batch, a meal-like product containing diastatic and proteolytic enzyms produced by the action of *Aspergillus oryzæ* upon such materials as grains, seeds, maize, legumes, or the like and fermenting the batch; substantially as described.

[Claims 3 to 6 not printed in the Gazette.]

1,274,899. LICENSE-HOLDER AND ILLUMINATING-LIGHT THEREFOR. HAROLD C. KRETZ, Rochester, N. Y. Filed Dec. 29, 1917. Serial No. 208,439. (Cl. 40—132.)

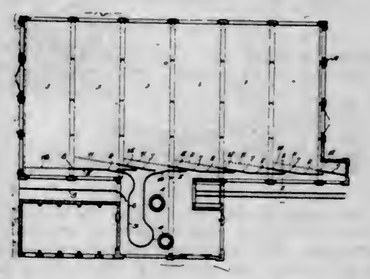


2. In an illuminating light for automobiles, the combination of a casing, a light mounted in said casing, a lens mounted in said casing in line with said light, an opening in the front of said casing below said light, a stenciled number plate mounted in said opening, a swinging reflecting plate mounted in said casing back of said stenciled number plate, and means for shifting said reflecting plate from the angular reflecting position to a vertical background position.

4. In an illuminating light for automobiles, the combination of a casing, an electric light mounted in said casing, stationary contact members mounted in series with said light, a reflecting plate mounted to swing in said casing, contact members mounted on said reflecting plate, said contact members on said reflecting plate being adapted to make contact with said stationary contact members and open or close the electric circuit for said light.

[Claims 1, 3, and 5 to 7 not printed in the Gazette.]

1,274,900. CONVEYING MECHANISM. HENRY M. LANE, Detroit, Mich. Filed Apr. 29, 1918. Serial No. 231,377. (Cl. 104—180.)



1. An overhead trolley system, in combination, a main track, a traveling crane arranged to travel at an angle to the main track, a transfer bridge carried by the crane, and switches for the main tracks, the transfer bridge being arranged at an angle to the crane and in alinement with one of said switches when the switch is in open position.

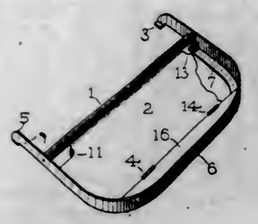
3. A traveling crane having forward and rear wheels, the forward wheel on one side of the crane being substantially in alinement with the rear wheel on the opposite side of the crane, a squaring shaft connecting said alined wheels, and a transfer bridge carried by said crane at an angle to said squaring shaft.

5. In a foundry layout having a plurality of bays, the combination of a main track provided with switches for each of said bays, a traveling crane in each bay, a transfer bridge carried by each of said cranes, said transfer bridge being arranged at an angle to form a continuation of said switch track when the switch is in open position and a connecting track between the transfer bridge and switch track.

6. A traveling crane provided with wheels, a transfer bridge, the transfer bridge being arranged at an acute angle to the axes of the wheels.

[Claims 2 and 4 not printed in the Gazette.]

1,274,901. DETACHABLE BED-SEAT. PER LUDVIG LARSON, Metuchen, N. J. Filed May 21, 1918. Serial No. 235,754. (Cl. 5—41.)

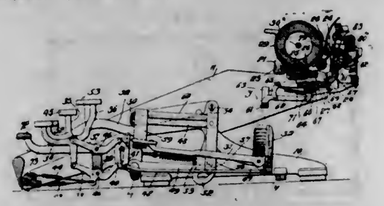


6. A detachable bed seat including a horse shoe frame adapted to straddle a bed, a tie-rod secured between the limbs of said frame within the extremities of said limbs adapted to rest directly upon said bed, a hook mounted upon said frame engaging one end of said bed to retain said frame in an upright position, and a board hinged to

the portion of said frame generally parallel with said rod, and inward extensions upon said frame to support said board.

[Claims 1 to 5 not printed in the Gazette.]

1,274,902. TYPE-WRITING MACHINE. EMMIT G. LATTA, Syracuse, N. Y., assignor to Corona Typewriter Company, Inc., a Corporation of New York. Original application filed Nov. 2, 1911, Serial No. 658,153. Divided and this application filed June 10, 1916. Serial No. 102,934. (Cl. 197—82.)

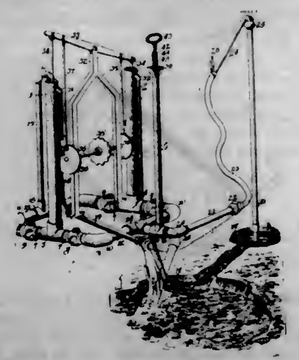


1. In a visible typewriting machine, the combination of a universal keyboard, type operated by individual keys forming a part of the keyboard, a support, a carriage adapted to move along said support, a tension drum tending normally to force the carriage along the support, escapement mechanism including a rack, a pinion, a toothed wheel, a dog carrying lever, all mounted upon the support and adapted with the support and carriage to be moved from a normal operative position to an inoperative and more compart one at the rear of the type, and a universal bar operatively connected to the dog carrier and mounted upon the support to partake of the compact movement of said support and the carriage.

2. In a visible typewriting machine, the combination of a universal keyboard, type-bars operated by individual keys forming a part of the keyboard, a support, a platen carriage adapted to move along said support, a tension drum tending normally to force the carriage along the support, escapement mechanism including a rack, a pinion, a toothed wheel, a dog carrying lever, all mounted upon the support and adapted with the support and platen carriage to be moved from a normal operative position to an inoperative and more compact one at the rear of the type-bars, and a universal bar adapted to be moved by the type-bars and operatively connected to the dog-carrier and mounted upon the support to partake of the compact movement of said support and the platen carriage.

[Claims 3 and 4 not printed in the Gazette.]

1,274,903. REVERSIBLE HYDRAULIC WELL-DIGGING MACHINE. MILTON N. LATTA, Valentine, Nebr. Filed Apr. 5, 1918. Serial No. 226,874. (Cl. 255—24.)



1. In a well digging apparatus, the combination with a drill tube, of a pump cylinder having a plunger, arranged to create a suction in the drill tube, operating means for the plunger including a crank, and means co-acting with the pump cylinder for continuing the suction in the drill tube when the crank passes the dead centers.

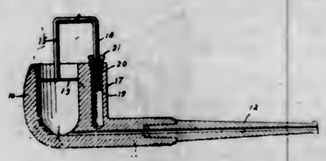
4. In a well digging apparatus, the combination with a drill tube, of a pump cylinder in connection with the drill tube, a plunger operating in the pump cylinder to create a suction through the drill tube, a cylinder in the pump and tube connection, a plunger in said cylinder movable downwardly in the cylinder under the influence of the suction, and means including a spring for returning said plunger to create an auxiliary suction and keep the fluid flow in the drill tube and connection continuous.

8. In a well digging apparatus, a rectangular formation of pipes, a pair of inlet and exhaust flap valves in each side, an exhaust pipe on one end, a suction pipe on the other end, a hose connection to the suction pipe arranged to be connected at the other end to a drill tube, pump cylinders between the pairs of flap valves, said cylinders being open at the upper ends, a plunger in each cylinder operating near the open end, means permitting the escape of air through the plunger and the formation of a water seal on top, a drain for the surplus water, walking beam and crank connections for reciprocating the plungers, the water and gravel columns oscillating in the pump cylinders beneath the plungers, an auxiliary cylinder located in the suction pipe, and an automatically operated plunger in the auxiliary cylinder, arranged to move downwardly when the cranks pass between the dead centers, said plunger including means comprising a spring for forcing the plunger outwardly when the cranks pass over the dead centers, to create an auxiliary suction and keep the flow of the stream in the drill tube continuous.

10. In a well digging apparatus, a pump cylinder open at the upper end, a plunger operating in the upper portion of the pump cylinder and consisting of a hollow body having a minute opening, a plunger rod pivoted to the plunger, said plunger being removable through the open end of the cylinder for inspection and repair, and a ball controlling the minute opening, enabling the escape of air bubbles from the inside of the cylinder and permitting a small quantity of water to settle on top of the plunger to form a seal.

[Claims 2, 3, 5 to 7, 9, 11, and 12 not printed in the Gazette.]

1,274,904. SMOKING-PIPE ATTACHMENT, KARL KURT LEDIG, Newark, N. J., assignor of one-half to Otto A. Ledig, Newark, N. J. Filed Feb. 20, 1917. Serial No. 149,809. (Cl. 131—12.)

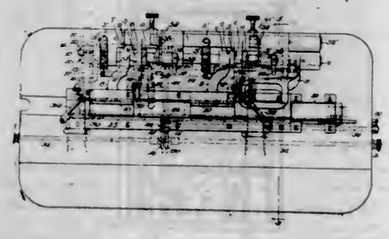


1. The combination with a pipe having a bowl, of a perforated disk adapted to fit in the open end of the bowl, an arched support pivotally mounted at one side of the bowl and extending into the open end thereof and having connection with said disk, and a spring supported by the bowl and engaging said arched support for normally urging the same inwardly to feed said disk against tobacco packed in the bowl.

4. In a pipe, the combination of a bowl provided with a cylinder at one side thereof having its axis substantially parallel with that of the bowl, a U-shaped support having an end projecting into the cylinder, a spring in the cylinder engaging the adjacent end of the support to draw the latter into the cylinder, and a perforated disk carried upon the other end of the support adapted to engage in said bowl to form a follower for packing the tobacco in the bowl as the latter is consumed.

[Claims 2 and 3 not printed in the Gazette.]

1,274,905. TWO-PLATEN HAND ADDRESSING-MACHINE. ULYSSES G. LEE, Chicago, Ill., assignor to Addressograph Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 10, 1915. Serial No. 49,889. (Cl. 101—65.)



1. In a machine of the character described, the combination of a bed, a pivotally mounted shaft, a plurality of independent arms secured to said shaft and adjustable thereon to operative and inoperative positions, a platen mounted on each arm, actuating means for said shaft and means for moving printing members along said bed and adapted to position said members successively beneath said platens.

9. In a machine of the character described, the combination of a bed, a magazine at one end thereof, means for moving printing members in spaced relation along said bed, a shaft, a plurality of arms mounted thereon, an independent platen mounted on each of said arms, means for rocking said shaft to simultaneously move the platens toward and from said bed, and connecting means between said shaft and said first-mentioned means, whereby said printing members are moved forward partway toward printing position as said platens move to printing position and partway toward printing position as said platens return to normal position.

16. In a machine of the character described, the combination of a bed, means for moving printing devices along said bed, a shaft, means for rocking said shaft, a plurality of arms secured to said shaft, an independent platen mounted on each of said arms, a second shaft, connections between said shafts, whereby said second shaft is rocked with said first-mentioned shaft, a ribbon disposed over said bed, means to cause said ribbon to move along said bed comprising a pair of shafts, spools thereon, ratchets connected thereto, pawls operatively connected to said second shaft and adapted to engage said ratchets, and means for moving one of said pawls to inoperative position.

19. In a machine of the character described, the combination of a bed, a platen arm supporting shaft, a platen arm on said supporting shaft carrying a platen adapted to coöperate with said bed, a second shaft, means connected to said second shaft to advance printing devices along said bed, connections between said shafts whereby said second shaft is rocked with said first mentioned shaft, and means for moving impression receiving material transversely of said bed beyond said platen comprising a positively driven roll, a driving connection between said second shaft and roll and a resiliently mounted roll disposed in coöperative relation with said driven roll.

[Claims 2 to 8, 10 to 15, 17, 18, 20, and 21 not printed in the Gazette.]

1,274,906. COLLAR AND NECKTIE HOLDER. WILLIAM H. LEE, Union, N. J. Filed Aug. 11, 1916. Serial No. 114,307. (Cl. 24—49.)

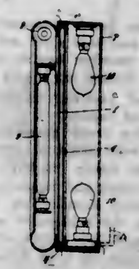
3. In a collar and necktie holder, a plate adapted to be attached at the back of a necktie and provided with a notch at each end, two spring members, one attached at each end of the plate, each spring member having a spring coil portion and extending from the coil portion toward the center of the plate, then extending upwardly through a hole in the center of the plate and toward



the opposite end of the plate and terminating in a downwardly extending point.

[Claims 1, 2, and 4 not printed in the Gazette.]

1,274,907. ILLUMINATED SIGN. WILLIAM REED-LETHBRIDGE, Wellington, New Zealand. Filed June 23, 1915. Serial No. 35,914. (Cl. 40—132.)

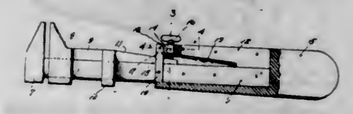


1. An intermittently illuminated sign having an interstitial screen at the front thereof and bearing a design on the face thereof, transparent filling material applied to the interstitial screen and bearing a design which will appear through the interstices when the screen is illuminated from the rear, substantially as set forth.

4. In an intermittently illuminated sign, an interstitial screen at the front thereof, a design on the face thereof, the interstices of said screen being filled with varnish from the rear side thereof, a design painted on the varnish filling the interstices which design will appear through the interstices when the screen is illuminated from the rear, substantially as set forth.

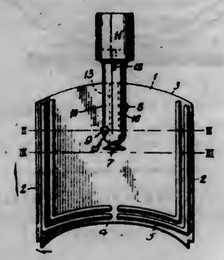
[Claims 2, 3, 5, and 6 not printed in the Gazette.]

1,274,908. WRENCH. CURTIS M. LIGON, Warren, Ariz. Filed Dec. 27, 1916. Serial No. 139,068. (Cl. 81—154.)



A wrench comprising a handle formed with a slot therein, a shank having one end mounted in said slot and a fixed jaw at its other end, an adjustable jaw slidable on said shank and also provided with a shank having an outer beveled edge, a wedging element mounted in said slot and having a portion of one edge engaging the adjacent edge of the first named shank, the remaining portion of said edge being beveled to provide a recess between the same and the adjacent edge of the first named shank for the reception of the shank of said adjustable jaw, the outer end of said wedging element having a screw threaded opening and provided with a reduced extension forming shoulders, transverse bracing elements at the inner end of said handle secured to the first named shank and to said reduced extension and engaging said shoulders and forming guides for receiving therebetween the adjacent end of the shank of said adjustable jaw, and a locking device mounted in said screw threaded opening and engaging the beveled edge of the last named shank for retaining the same in adjusted positions.

1,274,909. BOTTLE-WASHING BRUSH. EMIL LINDERME, Detroit, Mich., assignor to Emil Schwarz, Detroit, Mich. Filed Mar. 25, 1918. Serial No. 224,655. (Cl. 141—7.)

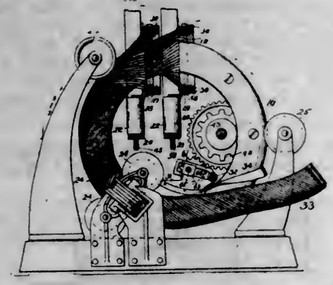


1. A bottle washing brush comprising a holder having a longitudinal bore and side slots with notches adjacent said slots, a flexible member having beads adapted to fit in the bore of said holder with said member projecting from the slots thereof, and lugs on said member engaging in the notches of said holder.

2. A bottle washing brush comprising a flexible member having straight side edges, a convex upper edge, and a concave lower edge, beads on both sides of said member adjacent the straight and concave edges thereof, and lugs centrally of said member on both sides thereof adapted to engage in the holder for said brush.

3. The combination with a holder, of a flat flexible brush mounted therein, means on both faces of said brush extending into one side of said holder adapted to prevent displacement of said brush, and means on both faces of said brush and adapted to engage in the opposite side of said holder and coöperate with the first mentioned means.

1,274,910. METHOD OF FORMING TIRE FABRIC AND TIRES. JOHN T. LISTER, Cleveland, Ohio. Filed Dec. 1, 1916. Serial No. 134,282. (Cl. 154—14.)



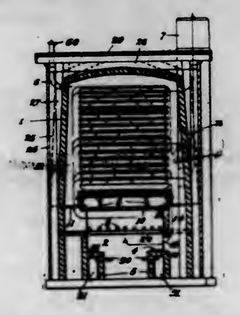
1. The method of forming tires which comprises forming the body of the tire on a core; inserting between the sides at the rim portion of said body an annular rim portion and vulcanizing the parts together.

6. The method of forming a tire which comprises forming a tube out of tire forming material; cutting a strip from the tube; forming the body of the tire from the main portion of the tube; forming an annulus from the strip; and securing said annulus to the body of the tire so as to form a closed tire.

11. The method of forming a tire which comprises winding cords about a portion of an annular core so as to form a circumferentially curved tube having substantially flat inner periphery and substantially straight parallel sides; cutting from the tube the inner flat periphery; forming the body of the tire from the main portion of the tube; forming an annulus from the strip cut from the inner portion of the tube; and placing the annulus between the sides of the body and vulcanizing the two parts together.

[Claims 2 to 5, 7 to 10, and 12 not printed in the Gazette.]

1,274,911. DRY-KILN. CARL A. LOHMAN, Seattle, Wash. Filed July 18, 1917. Serial No. 181,225. (Cl. 34—46.)

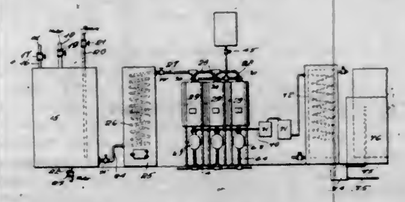


1. A dry kiln having a drying chamber, an air heating chamber beneath the floor of the drying chamber, the air heating chamber having its upper part connected at one side of the kiln with the drying chamber, the other side of the kiln having a flue connecting the lower part of the air heating chamber with the drying chamber, and a damper controlling this latter flue.

2. A dry kiln having a drying chamber, an air heating chamber beneath the drying chamber, and flues to produce a circulation between said chambers, steam discharging pipes, steam heating pipes located in the heating chamber, a damper controlling the circulation from the drying to the heating chamber, a discharging flue for the drying chamber and an air supplying flue for the heating chamber.

3. A dry kiln having a drying chamber, a heating chamber beneath the floor of the drying chamber, said floor having an opening at one side of the kiln forming a communication between said chambers, a flue at the other side of the kiln extending from the floor of the drying chamber downward alongside the heating chamber, and having openings communicating with the heating chamber, a damper controlling said openings, heating pipes arranged in a horizontal layer above the level of said opening into the flue, a discharge flue communicating with the drying chamber, and an air supply flue extending lengthwise of the kiln and having openings discharging into the heating chamber.

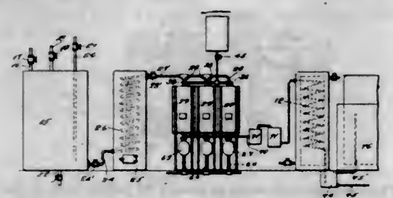
1,274,912. PROCESS OF TREATING PETROLEUM-OILS. WILLIAM F. MASON MCCARTY, Baltimore, Md. Filed Aug. 17, 1916. Serial No. 115,513. (Cl. 196—25.)



1. The herein described process of treating petroleum oils, fractions and the like having a higher boiling point than gasolene, which consists in subjecting the oil to the action of superheated steam in a closed container at substantially 150 pounds pressure to the square inch in the presence of a water soluble aluminum compound and water, allowing the mass to settle, withdrawing the water and the material held in solution or suspension therein from the oil, subjecting the oil thus treated to the action of heat at substantially 400° C. for vaporizing the same, subjecting the vaporized oil to a temperature of substantially 600° C. in the presence of hydrogen and a catalytic agent for decomposing the same, and condensing the condensable portion of the decomposition products.

[Claim 2 not printed in the Gazette.]

1,274,913. APPARATUS FOR TREATING PETROLEUM-OILS. WILLIAM F. MASON MCCARTY, Baltimore, Md. Filed Aug. 17, 1916. Serial No. 115,514. (Cl. 196—1.)

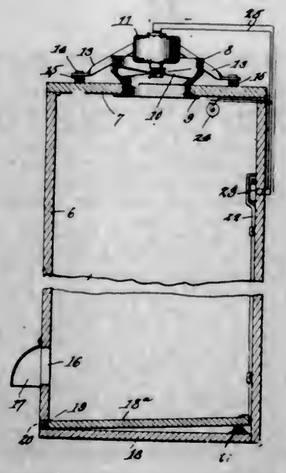


1. In apparatus of the character described, an upstanding cracking tube, a heating shell surrounding the cracking tube, an inclosing conduit arranged within the heating shell and surrounding the cracking tube and having one end thereof in free communication with the interior of the heating shell, a flue for the escape of products of combustion having communication with the opposite end of the inclosing conduit, heat generating devices arranged within the heating shell, means for supplying oil and hydrogen into the upper end of the cracking tube, mechanically operated agitating means arranged within the cracking tube, a collecting chamber connected with the lower end of the cracking tube, and draw-off means connected with the collecting chamber.

3. In apparatus of the character described, a substantially vertical cracking tube, means to supply oil and hydrogen into the upper end of the cracking tube, a collecting chamber connected with the lower end of the cracking tube, an upper draw off pipe connected with the upper end of the chamber, a lower draw off pipe connected with the lower end of the collecting chamber, a reciprocatory and rotatable shaft extending through the cracking tube and chamber, a fan connected with the shaft to rotate therewith and to allow the shaft to move longitudinally with respect thereto and arranged within the lower portion of the chamber, agitators connected with the shaft and arranged within the cracking tube, means to reciprocate the shaft, and means to rotate the shaft.

[Claim 2 not printed in the Gazette.]

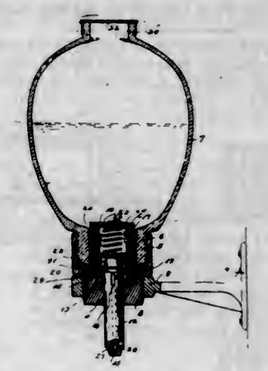
1,274,914. TELEPHONE-BOOTH. JAMES B. MCDEVITT, Chicago, Ill. Filed Oct. 9, 1916. Serial No. 124,664. (Cl. 98—27.)



1. The combination with a booth having an air inlet and an air outlet, of a vertically tiltable floor section in the booth, an exhaust fan associated with the air outlet, an electric motor driving the fan, a switch controlling the motor circuit, said switch being separate and electrically isolated from the floor section, and a switch actuator operatively connected to the aforesaid floor section.

[Claims 2 to 4 not printed in the Gazette.]

1,274,915. LIQUID-DISPENSER. JEREMIAH G. MCENERY, Chicago, Ill. Filed May 23, 1917. Serial No. 170,379. (Cl. 221—94.)



1. In a liquid dispenser, the combination of a liquid reservoir having an opening in its lower end, a supporting base for supporting said reservoir, said base having a guide passageway, a dispensing plunger slidable vertically in said passageway, a dispensing duct through said plunger closed by said base when said plunger is down, a casing open at its lower end and seating on said base around the upper end of said plunger, the top of said casing being closed and provided only with a small orifice for connecting the chamber within said casing with the interior of the reservoir, a spring tending to hold said plunger down, said plunger passageway being brought into communication with said chamber when the plunger is raised, said orifice being sufficiently small to prevent filling of said chamber with liquid when the plunger is down whereby the air in said chamber above the liquid therein will be compressed during upward movement of the plunger to force the liquid in said chamber downwardly through the plunger passageway.

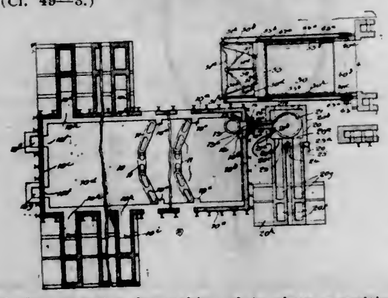
3. In a dispensing device of the class described, the combination of a supporting base, a vertical guide passageway therethrough, a plunger filling said passageway but slidable therein, said plunger having a dispensing duct therethrough closed at its upper end by said base when the plunger is down, a liquid reservoir mounted on said base and surrounding the upper end of the plunger, a casing mounted on said base over the plunger end and extending into said reservoir opening, said casing forming a chamber into which the plunger may pass when shifted upwardly, a spring resisting upward movement of the plunger, and a communicating passageway for connecting the top of said chamber with said reservoir, said communicating passageway being restricted to prevent complete filling of said chamber with liquid whereby when said plunger is raised the air entrapped in said chamber will be compressed and liquid discharged from said chamber into and through said dispensing duct.

5. In a liquid dispensing device of the class described, the combination of a supporting base having a vertical guide passageway therethrough, a dispensing plunger filling said passageway but slidable therein, said plunger having a dispensing duct closed at its upper end by said base when said plunger is down, a liquid reservoir mounted on said base and having an opening, a casing on said base over the top of the plunger and extending

into said reservoir opening, said frame forming a chamber into which the plunger may be raised to bring the dispensing duct into communication with the chamber, and a communicating passageway connecting the top of said chamber with the reservoir, said communicating passageway being of such capacity relative to that of the dispensing duct that when said plunger is raised and its passageway connected with said chamber part of the contents of said chamber will flow through the dispensing duct and part through said communicating passageway.

[Claims 2 and 4 not printed in the Gazette.]

1,274,916. APPARATUS FOR MAKING PLATE-GLASS. JOHN H. MCKELVEY, Kirkwood, and CHARLES F. RYAN, St. Louis, Mo. Filed June 7, 1915. Serial No. 32,599. (Cl. 49—3.)



1. In apparatus for making plate glass, a melting furnace, an auxiliary treating chamber, a collection receptacle located in said chamber thermally independent of said furnace, means to deliver a charge of molten glass from said furnace to said receptacle in said chamber, and means to heat said chamber independently of said furnace.

3. In apparatus for making plate glass, a melting furnace, an auxiliary treating chamber thermally independent of said furnace, a collection receptacle located in said chamber, means to deliver a charge of molten glass from said furnace to said receptacle, means to heat said chamber independently of said furnace, and a rolling-table movable to a position subjacent to said collection receptacle, the latter being operable to deposit its charge directly on said table beneath the roller thereof.

6. In combination, a melting furnace, an auxiliary treating chamber located adjacent to and spaced from and thermally independent of said furnace, means to transfer a charge of glass from said furnace to said chamber, said means comprising a trough or the like, said trough projecting through a wall of said chamber, and a comparatively shallow collection receptacle located in said chamber to receive glass from said trough, said receptacle being tiltably mounted to deliver its contents upon a rolling-table, or the like.

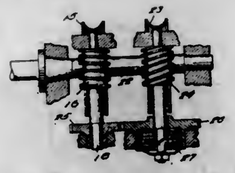
9. In combination, a melting furnace, an auxiliary treating chamber located adjacent to and spaced from and thermally independent of said furnace, means to transfer a charge of glass from said furnace to said chamber, said means comprising a trough or the like, said trough projecting through a wall of said chamber, a comparatively shallow collection receptacle located in said chamber to receive glass from said trough, said receptacle being carried on a rotatable shaft, and means to rotate said shaft to tilt said receptacle.

10. In apparatus for making plate glass, in combination, a melting furnace, an auxiliary treating chamber located adjacent thereto and spaced and thermally independent therefrom, said chamber being provided with a collection receptacle, a leer, and a rolling-table movable from a position subjacent to said receptacle to a position adjacent said leer.

[Claims 2, 4, 5, 7, and 8 not printed in the Gazette.]

1,274,917. [WITHDRAWN.]

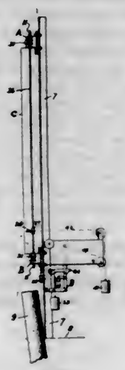
1,274,918. WORM-GEARING. MAX MAAG, Zurich, Switzerland. Filed Aug. 11, 1914. Serial No. 856,226. (Cl. 74—36.)



1. The combination with a source of power and a shaft to be driven therefrom, of a worm wheel on said shaft, a positively driven worm in mesh with said wheel, a second worm also in mesh with said wheel, and connections, including a friction clutch, between the shafts of said worms, whereby the second worm is driven faster than the first.

[Claim 2 not printed in the Gazette.]

1,274,919. METHOD OF AND APPARATUS FOR ELECTRIC HEATING AND TEMPERING. HARRY P. MACDONALD, Montclair, N. J., and EDWARD M. HUGGINS, New York, N. Y., assignors to The Snead & Co. Iron Works, Jersey City, N. J., a Corporation of New Jersey. Filed June 14, 1916. Serial No. 103,627. (Cl. 148—10.)



1. In a heating and tempering apparatus, the combination of a pair of supports adapted to receive the article to be heated, one of said supports being movable by the article as it expands under heat, means for heating the article, and automatic means for cutting off the heat actuated by the movement of the movable support.

5. In a heating and tempering apparatus, the combination of two pairs of supporting jaws adapted to receive the article to be heated, and means for simultaneously operating said two pairs of jaws.

12. An apparatus for heating and tempering metallic objects comprising in combination a supporting frame having means for suspending the article at a point adjacent the upper end thereof, a second means adapted to support the article at a point adjacent the lower end thereof and place it under tension thereby preventing warping and distortion, said two means being relatively movable, and means for heating the article.

18. An apparatus for heat treating metallic articles comprising the combination of means for fixedly supporting the article at an end thereof and under tension and with freedom to expand during heating, and means for heating the article substantially uniformly substantially throughout its length.

20. An apparatus for heat treating metallic articles comprising the combination of a suitable frame, means for heating the article substantially uniformly substantially throughout its length, and means for removably supporting the article in the frame and holding it against warping or distortion throughout its length with freedom to expand during the heating.

[Claims 2 to 4, 6 to 11, 13 to 17, and 19 not printed in the Gazette.]

1,274,920. HAIR-FASTENER. IDA O. MAGNUSON, Smolan, Kans. Filed Jan. 24, 1918. Serial No. 213,570. (Cl. 132—22.)



1. A hair fastener comprising a piece of wire having two prongs with a hook extending parallel therewith, a head carried by said hook having side pockets, the prongs adjacent said head having inwardly projecting clamping fingers positioned to coöperate with said pockets to clamp the head.

2. A hair fastener comprising a pair of prongs having a loop-like hook member arranged parallel with the prongs, a head carried by said hook member composed of a plate having inturned edges clampingly engaged with the side bars of the hook and having pockets in its outer end at its opposite sides, and clamping fingers carried by said prongs in position to enter said pockets to clamp the hair between them and the walls of the pockets.

1,274,921. PRESSURE-GAGE. FRANCIS J. MANNING, Medford, Mass., assignor, by mesne assignments, to American Steam Gauge & Valve Manufacturing Company, Boston, Mass., a Corporation of Massachusetts. Continuation of application Serial No. 798,198, filed Oct. 30, 1913. This application filed Aug. 27, 1915. Serial No. 47,614. (Cl. 73—109.)

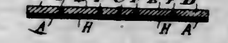


1. A gage including in ts construction a dial plate, a pointer or hand, a rivet connecting said pointer pivotally and in a permanent maner to said dial plate, said pointer having a bowed portion and having also a curved arm, a link pivoted to the end of said curved arm, said bowed portion and arm being flexible and capable of being bent so as to receive a permanent set whereby to alter the position of the pivot connection between the arm and link with respect to the rivet and to shift the position of the pointer respectively, a base portion having a post projecting therefrom and through the dial plate, said post being upset or headed over at its end to retain the dial plate thereon, a Bourdon tube mounted upon said base and having a head provided with an opening at its free end, and a pin or stud rigidly connected to said link and projecting therefrom perpendicularly to the length of the link and contained freely and rotatably in said opening.

2. In a gage, the combination with a pressure actuated member, a pivotally mounted indicator having an arm and an indicating portion both in the same plane, and a link pivotally connected with said arm and with the pressure actuated member, said arm being curved or bowed between the pivot point of the indicator and the connection with the link, whereby the distance betwen said pivot point and connection may be altered by bending the arm.

[Claims 3 and 4 not printed in the Gazette.]

1,274,922. TAP-SOLE. FREDERICK MARSH, Leeds, England, assignor of one-third to William Hey and one-third to John Willie Meadowcroft, York, England. Filed Nov. 21, 1916. Serial No. 132,673. (Cl. 36—30.)



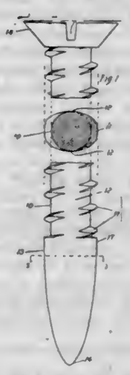
1. As a new article of manufacture, the combination of a sole of non-resilient vulcanized fiber, a plurality of leather strips secured thereto and a plurality of resilient rubber strips within the interstices of said leather strips.

3. As a new article of manufacture, the combination of a sole of vulcanized fiber, a plurality of canvas-backed rubber strips secured thereto, a plurality of leather strips arranged axially along the sole, and a strip across the toe of said sole, said leather strips inclosing said rubber strips and being secured to said sole.

6. As a new article of manufacture, the combination of a tough elastic sole of vulcanized fiber, a second sole of canvas, a series of axial strips of leather skived at the end, a toe-piece of leather skived to overlap said axial strips, each axial strip being separated by a small distance from an adjacent strip, and india rubber strips filling up the spaces between said leather strips, and means to secure the whole firmly together.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,274,923. SCREW. WALTER MEYNER, New York, N. Y. Filed Oct. 16, 1917. Serial No. 196,872. (Cl. 85—21.)

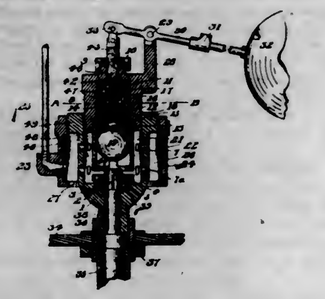


A fastening comprising a shank substantially circular in cross section having two opposite sides substantially plain and free of projections, projecting flanges on the remaining two opposite sides of the shank, a sharpened drixing point on the entering end of the shank, a relatively smooth transversely, convexly, curved, driving guard and shield extending rearwardly from the point and enlarged on the axis of the flanges to substantially elliptical form in cross section with a diameter substantially equal to such flanged portion of the shank to thereby protect the flanges and form a bore to receive said flanges as the fastening is driven, said shield being extended longitudinally a distance to form a bearing long enough to insure straight driving of the fastening and setting of the fibers of the material in which the fastening is driven and a head on the opposite end of the shank for driving the same and for turning it to carry the flanges into solid material.

1,274,924. TANK-VALVE. RAYMOND C. MICHAELS and ALEXANDER F. HUMPHREY, Pittsburgh, Pa., assignors, by direct and mesne assignments, of one-fifth to said Humphrey, three-fifths to said Michaels, and one-fifth to William L. Swartz, Pittsburgh, Pa. Filed Feb. 19, 1917. Serial No. 149,586. (Cl. 137—104.)

3. A valve comprising a goblet-shaped casing having an inlet passage in the stem portion thereof and outlet ports

through the wall of the cup portion of the same, an extension carried by the cup portion of said casing and having an axial bore, a cage depending from the extension and arranged within said cup portion, a valve seat member secured in the bottom of said cup portion and having a passage therethrough in alinement with said inlet passage, an annular depending apron carried by said cup portion of the casing forming a chamber between said cup portion and apron with an annular outlet at the lower end thereof, a sound insulator carried by the inner face of said apron outwardly of the said ports, and a reciprocating controlling means for said valve seat arranged within the bore and said cage.

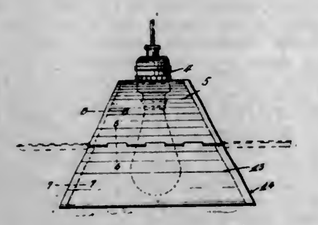


6. A controlling plunger for valves, comprising an upper section having a rectangular chamber in the bottom thereof, a packing at the inner end of said chamber, an intermediate section carried by said upper section, a bolt slidably arranged through said intermediate section with a squared head positioned within said chamber adjacent said packing, a lower section secured to said bolt having a bottom engaging face and a shock-absorbing washer carried by the bolt between said lower and intermediate sections.

7. A reciprocating valve plunger comprising an upper section, an intermediate section rigidly and removably secured thereto, a lower section shiftably attached to said intermediate section and having a bottom engaging face, a cushioning member arranged between said intermediate and lower sections, the said intedmeriate and lower sections being normally separated a greater distance than the thickness of said cushioning member.

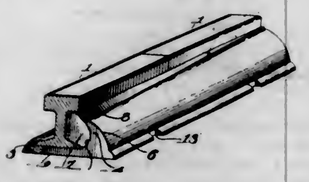
[Claims 1, 2, 4, 5, 8, and 9 not printed in the Gazette.]

1,274,925. ADJUSTABLE SHADE. RICHARD I. MILLS, Roosevelt, Utah. Filed Mar. 1, 1918. Serial No. 219,894. (Cl. 240—108.)



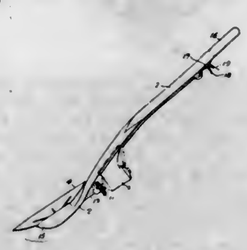
A lamp shade, comprising a top plate, an upper section comprising a plurality of side plates secured to said top plate, each side plate provided with sets of tongues, one set being made up of alternating tongues bent back to constitute a part of a hinge structure and the other set of tongues being straight through their greater portion and to their outer ends, the straight portion of each tongue of the last-mentioned set formed in parallelism with its side plate, shade plates provided with alternating sets of tongues, similarly constructed to the sets of tongues of the side plates, a pintle pin extending through the bent back tongues of the side and shade plates for pivotally securing said plates together, and the tongues provided with the straight portions extending to their ends, constituting stops for limiting the pivotal movement of the shade plates when swung to their normal position, substantially as shown and described.

1,274,926. RAIL-JOINT. WILLIAM H. MILLS, Sherman, N. Y. Filed Feb. 17, 1917. Serial No. 149,331. (Cl. 239—6.)



The combination with a pair of rail sections joined end to end, of a supporting chair for receiving the sections, the chair having an upwardly and inwardly extending rail base engaging flange formed integral with one side, the chair further having an upwardly extending portion formed integral with the other side, the upwardly extending portion being concave on the inside and the said portion tapering in cross section throughout its length, and a wedge block also tapering in cross section and conforming in shape to the concaved side of the said upwardly extending portion and conforming also to the shape of the rail sections between the bottom face of the treads, the sides of the webs and of the top face of the base flanges, the wedge block having a longitudinal shoulder portion adapted to engage the edge of the base flanges to the rail sections on that side opposite from the rail base engaging the flange, whereby lateral pressure exerted on the rail treads on that side opposite the wedge block will tend to tighten the rail bases in the chair.

1,274,927. SHOVEL. JAMES EDWARD MOON, Morrisville, Pa. Filed May 18, 1918. Serial No. 235,299. (Cl. 37—17.)



1. A hand shovel having a rotatable blade; and power means for rotating said blade.

6. The combination in a shovel, of a handle; a rotatable disk mounted on one end of the handle, said disk being dished; a motor on the handle for driving the disk; and a switch located near the hand end of the handle and connected to the motor and arranged to be connected to an electric circuit so that the rotation of the disk can be controlled by the switch.

8. The combination in a hand shovel, of a handle; a rotatable dished disk mounted on one end of the handle; and means for rotating said disk, said disk having a series of radiating ribs thereon.

[Claims 2 to 5 and 7 not printed in the Gazette.]

1,274,928. EMERY-CLOTH HOLDER. HENRY MÜLLER, Waterbury, Conn. Filed May 2, 1918. Serial No. 232,154. (Cl. 51—1.)



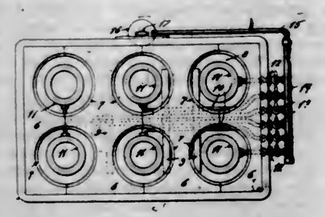
1. An emery cloth holder comprising a body having flat faces, plates secured to opposite sides of the body and projecting beyond the outer end thereof, a clamping block arranged between the projecting ends of the plates, means for connecting the ends of flexible strips to the block, means for locking the block in the body, and means for attaching the opposite ends of flexible strips to the rear end of the body.

2. An emery cloth holder comprising a body having flat faces, plates secured to opposite faces of the body, said plates projecting beyond the outer end of the body, a block arranged between said plates and provided with a stem extending into the end of the body, means for locking the stem with the body, a clamping-plate co-acting with said block and adapted to hold the ends of strips of flexible material between them, and means for connecting the other ends of the strips with the handle end of the device.

3. An emery cloth holder comprising a body having flat faces, plates secured to the said faces and projecting beyond the outer end of the body, a block located between said plates provided with a stem extending into said body, a clamping-plate co-acting with said block and adapted to hold the ends of strips of flexible material between them, a bearing-plate secured to the inner end of the body, a rear clamping-plate co-acting with said bearing-plate, and a handle formed with a screw stem extending through the said plates and into the body and adapted to crowd the rear clamping-plate against the rear bearing-plate and hold the ends of the strip of flexible material between them.

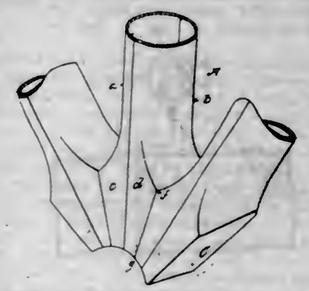
4. An emery cloth holder comprising a body having flat faces, plates secured to said faces and projecting beyond the outer ends of the body, a block located between said plates and formed with a stem extending into the said body, a plate co-acting with the said block and formed with guide pins extending through the block into the said body, a bearing plate secured to the rear end of the body, a rear clamping-plate co-acting with said bearing plate and formed with guide pins extending through the bearing plate into the body, a handle bearing on said rear clamping plate and provided with a stem extending through said rear clamping-plate and bearing-plate into the body, and a transverse bushing with which said screw threaded stem engages.

1,274,929. GAS-STOVE. WILLIAM H. MULLOY, St. Louis, Mo. Filed Mar. 24, 1916. Serial No. 86,472. (Cl. 158—8.)



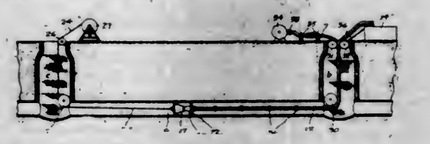
A cooking stove having a baking oven, a fire pot, and doors for the fire pot and baking oven, a flange surrounding the top of said stove, a top for said stove consisting of a series of removable plates provided with lid openings adapted to be seated on said flange, a series of gas burners mounted below the top in registration with each lid opening, a gas supply pipe for each burner, a valve controlled source of gas supply for each pipe, and a series of parallel brackets positioned beneath the gas pipes for supporting the gas pipes and burners in place.

1,274,930. METAL VEHICLE-WHEEL. THOMAS E. MURRAY, New York, N. Y. Filed June 28, 1916. Serial No. 106,316. (Cl. 21—69.)



A vehicle wheel of sheet metal, comprising a plurality of tubular spokes, each spoke being formed in two longitudinally divided similar, interchangeable sections, electrically welded at their meeting edges, and each spoke having an inner end portion of frusto-wedge-shape having flat inclined sides with plane faces, the said flat inclined sides of adjacent spokes being placed in registering contact to form a wheel nave and united one to the other solely by electrically welded joints.

1,274,931. METHOD AND APPARATUS FOR CLEANING SEWER-CONDUITS. GEORGE W. OTTERSON, Springfield, Ohio. Filed Dec. 8, 1917. Serial No. 206,136. (Cl. 182—2.)



1. Sewer-cleaning apparatus comprising an ejector head adapted to pass through a sewer conduit, means for moving the ejector head along the conduit, and pressure and discharge means having two flexible trailer pipes connected with the head.

2. Sewer-cleaning apparatus comprising an ejector head adapted to pass through a sewer conduit and having a pressure nozzle, intake and throat, the nozzle and throat being disposed horizontally and rearwardly directed, means for drawing the head along the conduit, and pressure and discharge hose connected with the nozzle and throat, respectively, of the head and extending rearward therefrom.

3. Sewer-cleaning apparatus comprising a head adapted to pass through a sewer conduit and embodying means for dislodging the accumulations and a hydraulic ejecter for removing them, and two-hose means for supplying the nozzle of the ejector with hydraulic pressure and for conducting away the discharge rearwardly and upwardly to the surface.

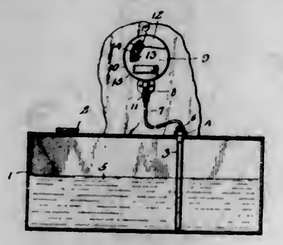
10. The method of cleaning sewer conduits which comprises progressively dislodging the accumulations along the conduit, and hydraulically delivering them rearward of the direction of progress and upward to the surface.

[Claims 4 to 9 and 11 not printed in the Gazette.]

1,274,932. LIQUID DEPTH OR AMOUNT GAGE. LEO JAMES PARYZEK, Cleveland, Ohio. Filed Mar. 31, 1916. Serial No. 88,058. (Cl. 73—110.)

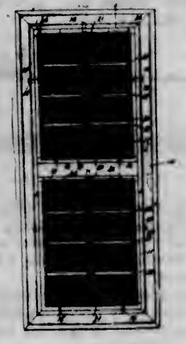
A depth indicating gage comprising a housing provided with a sight opening, a cylindrical casing secured within

the lower portion of said housing, a tube communicating with said casing and adapted for connection with a tank, whose contents are to be gaged, to provide an inclosed air column between the liquid in the tank and the casing, an expansible diaphragm closing the top of said casing, a vertical bracket plate secured within said housing above said casing, a pointer arm pivoted upon said bracket plate, a segment provided with indicia, said pointer arm



being movable over said segment, said plate being provided with an arcuate slot concentric with said pivot, and a vertical connecting rod secured at one end centrally on said diaphragm and having its upper end bent and extending horizontally through said slot and connected with said pointer arm, said slot guiding and limiting the movement of said connecting rod.

1,274,933. DOOR-SCREEN. BERT BRAYTON PERKINS, Monticello, Minn. Filed Dec. 24, 1917. Serial No. 208,643. (Cl. 156—14.)

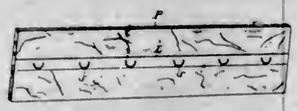


2. A door including a door frame having an opening, and a screen frame removably fitting said opening, screen material secured on the latter frame the top and sides of the screen frame and the opposed members on door frame being beveled, turn-buttons on the door frame at the top and the sides to retain the screen frame in position, and depending pins on the bottom rail of the screen frame, said door frame having pin holes receiving said pins.

3. A door including a frame having an opening to detachably receive a screen, and a screen removably fitting said opening, foraminous covering material on the screen at the front and back, an approximately central vertical bar in the screen extending from the top to the bottom thereof between the front and back coverings and dividing the screen into chambers, the material at the front of the screen having transverse openings extending across the two chambers constituting inlets for flies, the material of the covering at the said inlet openings at the top and bottom of the latter being extended inwardly into the said chambers, and the top rail of the screen having an opening in each compartment at the corner for the discharge of dead flies, said discharge openings extending vertically from the chambers through the said top rail, and the top of said frame when the screen is in position constituting a closure for said discharge openings.

[Claim 1 not printed in the Gazette.]

1,274,934. APPARATUS FOR TAGGING OR LABELING PLUGS OF TOBACCO. JONATHAN PETERSON, Brooklyn, N. Y. Filed Feb. 26, 1918. Serial No. 219,293. (Cl. 1—2.)



2. In apparatus for tagging or labeling plugs of tobacco and in combination, a wire blank supply, staple-forming mechanism operative to produce from a blank a staple having a semi-circular body portion and prongs extending laterally from the ends of the body portion, said mechanism including a support for the shaped staple and wherein the staple prongs project from the support, and means for advancing the plug with its label to said support, whereby the staple prongs will be caused to penetrate the label and plug and position the body portion upon the label.

13. In apparatus for tagging or labeling plugs of tobacco and in combination, staple-forming means adapted to locate a staple at a label applying station, mechanism for presenting a plug with its label to said station, and plug feeding means adapted to deliver plugs with labels to said mechanism individually and intermittently, said mechanism including an oscillatory supporting instrumentality, said feeding means being operative at a point intermediate the extremes of instrumentality movement, and means for controlling feed movements to periods of instrumentality movement, said instrumentality having means whereby the plug and its applied label will be discharged from the instrumentality during the return movement of the latter.

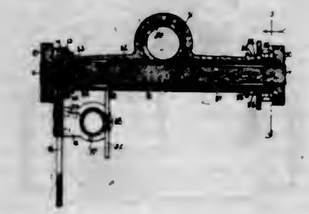
18. In apparatus for tagging or labeling plugs of tobacco and in combination, staple-shaping mechanism including a stationary die, a die normally alined with the shaping die for supporting the staple during the label applying operation, a die movable relative to said stationary die and coöperating therewith to partially shape the staple and locate it in the supporting die, and means for moving the stationary and supporting dies relative to each other to complete the staple formation, said means including an oscillatory member adapted to clamp the staple during the staple completing operation, the movements of the clamping member and the movable die being relatively timed to provide clamping action in succession to the positioning action.

32. In apparatus for tagging or labeling plugs of tobacco and in combination, a yieldable supporting die, means for positioning an embryo wire staple on said die, and mechanism for successively completing the staple and for applying it to a plug with its label, said mechanism including an oscillatory instrumentality having a member movable toward and from said die, means for oscillating said instrumentality in successive cycles, said means including a shiftable arm, operative connections between the member and said arm and normally operative to provide relative yielding connection between the arm and member, means controlled by movements of the positioning means for rendering such connections non-yielding, and cam-control means for rendering said die non-yielding, the control structures of said member and said die being relatively timed to provide non-yielding action of one element during yielding activity of the other element.

42. In apparatus for tagging or labeling plugs of tobacco and in combination, staple-forming means adapted to locate a staple at a label applying station, mechanism for presenting a plug with its label at said station, and plug feeding means adapted to deliver plugs with labels to said mechanism individually and intermittently, said feeding means including a chute or runway for the plugs, and means for controlling the passage of the plugs through said runway, said means including a rock shaft carrying a plug support and a plug holding structure adapted to be brought into activity alternatively, said shaft being normally in one position, and means timed with respect to the staple-forming mechanism for rocking said shaft during a predetermined period.

[Claims 1, 3 to 12, 14 to 17, 19 to 31, 33 to 41, and 43 not printed in the Gazette.]

1,274,935. SOLAR TRANSIT. HERBERT NEWTON RAYMOND, Olympia, Wash. Filed Nov. 6, 1917. Serial No. 200,565. (Cl. 33—46.)



1. In a solar transit, a main axle provided with a latitude arc carrying a solar telescope, a sleeve on the said axle, adjusting screws engaging the sleeve and the main axle, a hub mounted to turn at one end on the said main axle and at the other end on the said sleeve, and a transit telescope carried by the said hub.

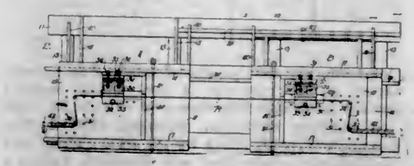
2. In a solar transit, a main axle, a latitude arc attached thereto, a solar telescope mounted on the said latitude arc and having its axis at right angles to the axis of the main axle and spaced therefrom, a transit telescope, and a hub on which the transit telescope is mounted, the hub being mounted to turn on the said axle.

3. In a solar transit, a main axle, a latitude arc attached thereto, a solar telescope mounted on the said latitude arc, a transit telescope, a hub on which the transit telescope is mounted, the hub being mounted to turn on the said axle, and adjusting means to adjust the said hub relative to the said main axle until the axis of the hub coincides with the axis of the said main axle.

4. In a solar transit, the combination of standards, a main axle journaled in the said standards, a transit telescope mounted on the said axle, and a solar telescope mounted on the said axle independent of the transit telescope and extending between the said standards.

5. In a solar transit, the combination of standards, a main axle journaled in the said standards, a latitude arc secured to the said main axle intermediate the said standards, a solar telescope mounted on the said arc, a hub mounted to turn on the said main axle intermediate the standards, and a transit telescope mounted on the said hub.

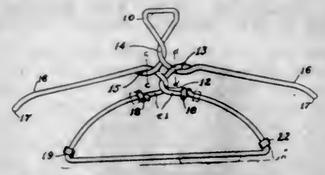
1,274,936. ROD-BENDING MACHINE. JAMES NELSON REYNOLDS, Jersey City, N. J. Filed May 23, 1918. Serial No. 236,154. (Cl. 153—16.)



1. In a rod bending machine, the combination of a base, a plurality of tables supported thereon, one of the tables being adjustable along the base with respect to the other; each table comprising uprights, a table top supported upon the uprights and a bed supported upon the table top, a rod holding device comprising relatively fixed and movable jaws carried by each bed, each bed being provided with a group of systematically arranged vertical holes, and a plurality of anchor pins coöperating with selective holes of the said group and around which the adjacent end of the rod may be bent in succession by a lever action.

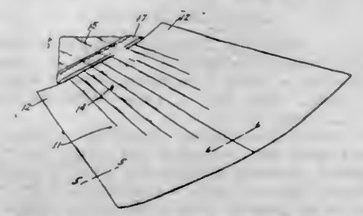
2. In a rod bending machine, the combination of a base, a table supported upon and adjustable endwise along said base for supporting one end of a rod while it is being bent, said table comprising a table top and a bed supported thereon, said bed being provided with a longitudinal dovetailed slot terminating in the inner end of the bed, a gripping device fitted in and adjustable along said slot and comprising relatively fixed and movable jaws, the end of the bed opposite the gripping device being formed with a group of vertical holes, a plurality of fulcrum pins coöperating with selective holes of said group and around which the adjacent end of the rod may be bent in succession by lever action, and means to support the opposite end of the rod while being so bent.

1,274,937. CLOTHES-RETAINER FOR RAILWAY-CAR SLEEPING-APARTMENTS. NELVIA E. RITCHIE, Kansas City, Mo. Filed Apr. 22, 1912. Serial No. 692,272. (Cl. 211—13.)



A clothes retainer comprising a single wire, a short straight portion of said wire in the center of the length thereof adapted to have a strap permanently secured thereto, the remaining portions of said wire bent downward, said portions twisted together forming a half twist a short distance from said straight portion and extending approximately in opposite directions to a distance to form a support for a coat thereon, returned and cross the opposite directed portions forming a half twist near said twisted portion and then twisted together forming a half twist below said coat supporting portion, bent in curved opposite directions forming a wide and low arc, then straight toward and paralleling each other to the opposite sides of said arc and paralleling said arc to near the top of said arc and secured thereto by a single twist, and means on said portions forming said arc to tighten said straight paralleling portions.

1,274,938. CHILD'S BATH-GARMENT. BEATRICE ROSENBERG, Minneapolis, Minn. Filed Nov. 15, 1917. Serial No. 202,219. (Cl. 2—118.)

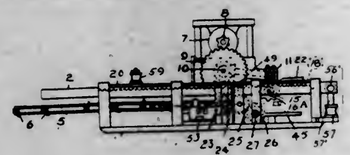


5. A bath robe formed from a rectangular piece of goods having the intermediate portion of its upper edge folded to form plaits, and a hood formed from a single rectangu-

lar piece of goods that is folded both longitudinally and transversely upon itself to afford a double thickness for the hood, the vertical edges of the goods being stitched together at the back of the hood and the horizontal edges thereof being stitched to the plaited upper edge portion of the bath robe.

[Claims 1 to 4 not printed in the Gazette.]

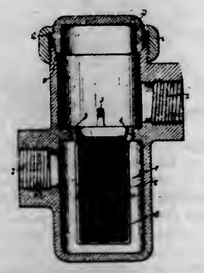
1,274,939. COAL-MINING MACHINE. IMRIE RUDAI and AUGUST SZARKA, Vestaburg, Pa. Filed May 6, 1918. Serial No. 232,923. (Cl. 125—14.)



1. In a mining machine, a frame, a rope-drum thereon, a cutter-carriage on the frame, a motor on the carriage for driving the same and the cutter, a gear on the carriage driven by the motor and gearing on the frame for driving the rope-drum, one of the gears of said gearing being movable into mesh with the gear on the carriage.

[Claims 2 to 7 not printed in the Gazette.]

1,274,940. STRAINER. M JAY SAGE, Brooklyn, N. Y. Filed Aug. 31, 1917. Serial No. 189,127. (Cl. 210—16.)

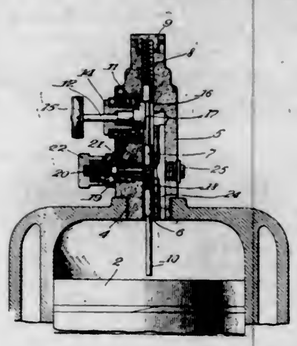


A strainer of the class described comprising a cylindrical casing open at one end and having an inlet opening and an outlet opening disposed at different levels, a transverse partition in said casing below the inlet opening and above the outlet opening, a ring threadable into said partition through the end opening of the casing, a member bridging the ring for facilitating the manipulation of same, said ring having arms extending below the partition beyond the inlet opening, a gauze cylinder secured to said arms, a valve closing the end opening of the casing and having an outer annular shoulder, and a nut adapted to have a threaded engagement with the casing and engage the annular shoulder of the valve to secure the same to its seat in the casing.

1,274,941. IGNITION DEVICE. LEONARDO SANCHEZ, Habana, Cuba, assignor of one-third to Alejandro Angulo and one-third to Guillermo Castro Lopez, Habana, Cuba. Filed Oct. 11, 1917. Serial No. 195,906. (Cl. 123—143.)

1. An igniter for internal combustion engines, comprising a main body portion having means for securing the same to an engine cylinder, a reciprocatory rod carried by said plug and adapted to project into the engine cylinder in the path of travel of the piston therein so as to be reciprocated by the action of said piston, and a body of pyrophoric material adapted to be engaged by said rod upon reciprocation thereof.

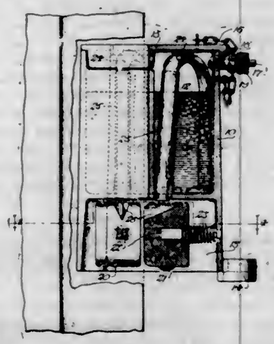
3. An igniter for internal combustion engines, comprising a main plug adapted to be secured in an engine cylinder and having an opening extending longitudinally thereof, a rod mounted in said opening and adapted to project into the engine cylinder in the path of travel of the piston therein so as to be reciprocated thereby, a body of pyrophoric material in contact with said rod so as to produce a spark upon reciprocation thereof, and an eccentric adjustable at will for controlling the position of said rod to advance or retard the spark produced by the igniter.



6. An igniter for internal combustion engines, comprising a main body portion having means for securing the same to an engine cylinder, a reciprocatory rod carried by said plug and adapted to project into the engine cylinder in the path of travel of the piston therein so as to be reciprocated by the action of said piston, and a second rod adapted to be engaged by said first mentioned rod upon reciprocation thereof, one of said rods being provided with pyrophoric material so as to produce a spark upon relative movement between said rods.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,274,942. LUBRICATOR FOR ELEVATOR-GUIDES AND THE LIKE. CHARLES SCHENCK, Chicago, Ill., assignor, by mesne assignments, to Elevator Supplies Company, Inc., Hoboken, N. J., a Corporation. Filed Aug. 26, 1913. Serial No. 786,793. (Cl. 184—22.)



1. A lubricator for elevator guides, comprising a receptacle having an oil reservoir, a horizontally movable spring-pressed guide-engaging shoe, and a wick for feeding oil by capillary attraction extending upward from said reservoir to a point above the oil level thereof and thence downwardly to said shoe, said receptacle having a fixed horizontal guide support for said shoe and also having a fixed substantially vertical support for holding said wick in position to deliver the oil onto the upper face of said shoe.

2. A lubricator for elevator guides, comprising a receptacle having an oil reservoir and a passage therein leading downwardly from a point above the oil level thereof to a point outside of said reservoir and below the oil level, and an oil-feeding wick extending from said reservoir into the upper end of said passage.

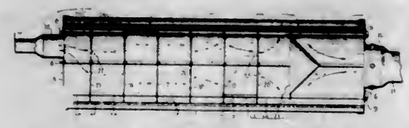
3. A lubricator for elevator guides comprising an oil receptacle, a relatively movable, spring-pressed, guide engaging shoe of non-abrasive, non-absorbent material, said receptacle having a relatively fixed, oil feeding passage extending from a point above the oil level thereof and thence downwardly and arranged to deliver oil onto the upper face of said relatively movable, spring-pressed shoe and an oil wick extending from said receptacle into the upper end of said passage.

4. A lubricator for elevator guides, comprising an oil receptacle, a guide-engaging shoe of non-abrasive material arranged below the oil level of said receptacle, the latter having a passage therein leading downwardly from a point above the oil level thereof to said shoe, and an oil-feeding wick extending from said receptacle into the upper end of said passage.

5. A lubricator for elevator guides adapted to be carried by the car and comprising an oil receptacle, a relatively movable, spring-pressed, guide engaging shoe of non-abrasive, non-absorbent material, said receptacle having a relatively fixed, oil feeding tube extending from a point above the oil level thereof and thence downwardly having its lower delivery end at a point adjacent and directly above the upper face of said relatively movable, spring-pressed shoe, and an oil feeding wick extending from said receptacle into and through said tube.

[Claims 6 to 15 not printed in the Gazette.]

1,274,943. MUFFLER. HERMAN A. SCHMIDT, Detroit, Mich. Filed Apr. 23, 1917, Serial No. 163,861. Renewed June 20, 1918. Serial No. 241,084. (Cl. 121—116.)



A muffling device comprising an outer cylindrical shell, an inner cylindrical shell in spaced relation to said outer shell, caps on the ends of said shells, gas inlet and exhaust connections for said caps, tie rods extending through said inner shell and connecting said cap, baffle members on said rods and in spaced relation, one of said baffle members being conical and pointed toward the gas inlet connections and having its edges spaced from said inner shell, two of said baffle members having a pair of slots with said members positioned with the slots of one member parallel with the slots of the other member and the edges of both of said members engaging said inner shell, two more of said baffle members having each a plurality of slots with one of said members positioned with the slots thereof at right angles to the slots of the other member, and the edges of said members in engagement with said inner shell, and the remaining two of said baffle members being imperforate and substantially rectangular with shell contacting edges, the arrangement of the baffle members being such that the slots of four of said members coöperate with the edges of the imperforate members, the conical member and the inner shell in forming a tortuous passage for gas through the inner shell.

1,274,944. HOSE-SUPPORTER. HENRY SCHOTTENFELS, New York, N. Y. Filed Apr. 24, 1918. Serial No. 230,459. (Cl. 241—6.)

1. A hose supporter comprising a body, having hose-engaging means, a pair of tapes fastened to the body and adapted to extend around the leg, and means on the body with which the free end of one of the tapes engages, the free ends of both tapes being tied together in leg-embracing position.

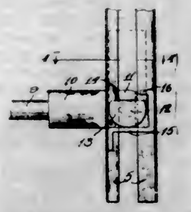


2. A hose supporter comprising a body, a pair of non-elastic tapes fastened at one point to the body, said body having a buttonhole at a portion opposite from the point of connection of the tapes, and the tapes having knots on their free ends, whereby either tape can be inserted through the buttonhole and the free ends thereafter tied into a bow, and hose-engaging means on the body.

3. A hose supporter comprising a body made of two pieces of fabric formed with depending tab-forming extensions doubled back on themselves, with the free ends of the extensions fastened to the body, one tab having a buttonhole extending entirely therethrough and the other tab having a buttonhole in its folded-back portion, and a fastener secured in the last-mentioned buttonhole and with which the first-mentioned buttonhole is adapted to coöperate for securing the supporter to a hose.

4. A hose supporter of the class described comprising a body formed of two pieces of fabric stitched together around their margin and having registering tabs integrally connected therewith, and a pair of tapes fastened between the said pieces at one portion, there being a buttonhole extending through both pieces at a point opposite from where the tapes are fastened thereto.

1,274,945. EXTENDING-BRACKET FOR AWNINGS. HARRY H. SCHROYER, Chicago, Ill., assignor, by mesne assignments, to Protecto Manufacturing Company, a Corporation of Illinois. Original application filed Nov. 26, 1915, Serial No. 63,527. Patent No. 1,243,988. Divided and this application filed Sept. 20, 1917. Serial No. 192,333. (Cl. 156—42.)



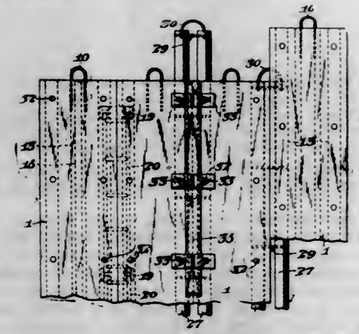
2. The combination with a guide channel, of an angle locking means therein, an extending bracket, and a gudgeon head thereon adapted to engage in said guide channel and having portions thereof cut away to afford a flat surface to permit said gudgeon head to pass the stop when the bracket is in a vertical position and to contact said stop when said bracket is in horizontal position.

5. The combination with channeled guides of stops therein, an extending bracket, an end cap secured on each end thereof, a flange integrally formed on each cap, a stub shaft rigidly secured on each flange at right angles thereto, and a segment shaped head integrally formed on each of said stub shafts engaged in said guides and adapted to engage said stops when said bracket is in extended horizontal position to hold the same against upward movement.

6. The combination with a guide channel, of a stop therein, an extending bracket, and a segment shaped head thereon adapted to pass said stop when the bracket is in a vertical position and contact said stop when said bracket is in a horizontal position to hold said bracket from elevation in said guide channel.

[Claims 1, 3, and 4 not printed in the Gazette.]

1,274,946. CONCRETE CONSTRUCTION. LLOYD M. SEAMAN, Stoneharbor, N. J. Filed Aug. 2, 1915. Serial No. 43,116. (Cl. 72—76.5.)



1. A structure of the class described, comprising sectional units having undercut grooves complementary to the grooves in the adjacent units to form double headed cavities between said adjacent units, means removably cooperative with said grooves for guiding said units into relative parallel alinement, means hardened within said grooves to integrally unite said units, and means comprising a link tending to draw said units together during the hardening of the uniting means.

3. A structure of the class described, comprising sectional units arranged to be successively assembled and having undercut grooves which form double headed cavities between adjacent units, means hardened within said cavities for integrally uniting said units, piling embedded in the earth behind the structure formed by said units, a coping formed upon said structure, and tie-rods directly connecting the respective units with said piling, through said coping.

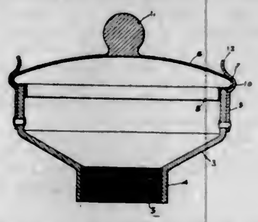
5. A structure of the class described, comprising sectional units forming concrete slabs arranged to be successively assembled and having undercut grooves which form double headed cavities between adjacent units, means coöperative with said grooves arranged to guide said units into relative parallel alinement, means arranged to temporarily seal the joint between said units, means hardened within said cavities for integrally uniting said units, and means arranged to temporarily hold said units together during the hardening process.

7. A structure of the class described, comprising sectional units having grooves in the lateral walls thereof forming a cavity between said units when assembled, cement introduced into said cavities and hardened therein to unite said units, reinforcing locking members in said cement, and spacing means between said members.

8. In a structure of the class described, means for uniting adjacent slabs of concrete having undercut grooves in their respective adjacent edges, comprising a removable key-device having parallel hollow members substantially conforming in shape to the shape of said undercut grooves and fitting snugly therein, and serving to convey concrete into the cavity formed by the complementary grooves.

[Claims 2, 4, and 6 not printed in the Gazette.]

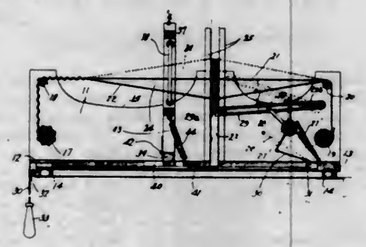
1,274,947. FUNNEL-CAP FOR AUTOMOBILE-RADIATORS. WILLIAM SEITZ, Anderson, Ind. Filed Jan. 21, 1918. Serial No. 213,053. (Cl. 220—124.)



1. The combination with a funnel shaped cap for radiators, and means to attach the same to a radiator, of a cover for said cap having a peripheral bead of greater diameter than the diameter of the cap, and adapted to rest thereon, a downwardly extending flange on the bead adapted to fit within the cap, and yielding fingers on opposite sides of the cap adapted to engage said bead on the cover to hold the same in position on the cap.

2. The combination with a funnel shaped cap for radiators, of a cover for said cap, said cover having a peripheral bead adapted to extend beyond the edge of the cap, and fingers attached to the cap having bowed portions adapted to fit over said bead and hold the cover in position on the cap, the free ends of said fingers being curved and extended above the cap whereby pressure may be applied thereagainst to release the fingers from the bead.

1,274,948. HAND-LOOM. ANNA NOTT SHOOK, New York, N. Y. Filed Jan. 26, 1918. Serial No. 213,881. (Cl. 139—12.)



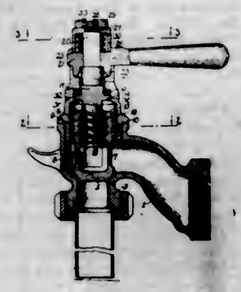
1. The herein described hand loom designed for operation upon a table, the same comprising a frame having pairs of vertical and horizontal guides formed therein, a vertically movable heddle frame guided in one pair of the frame guides, and a beater comprising a base slidable in the other pair of guides and a reed portion pivoted to the base.

7. In a hand loom, the combination with a frame and a heddle frame movable up and down in the frame, of means to control the position of the heddle frame comprising a rock shaft journaled in the frame back of the heddle frame and parallel thereto, a pair of slotted bars connected to the heddle frame, a plurality of arms fixed to the rock shaft and having loose slidable engagement with the slotted bars, a lever connected to the rock shaft, and flexible means coöperating with the lever to hold it stationary temporarily with the heddle frame at any desired elevation.

10. The combination with an elevated support, of a hand loom supported thereon and comprising a frame, a beater located entirely above the support and movable along the front half of the frame, a heddle frame guided in the frame for reciprocations in a vertical plane, and controlling means for the heddle frame comprising a lever connected to the frame back of the heddle frame, connections between the lever and the heddle frame, means acting upon the connections tending to move the heddle frame in one direction, a cord connected to the lever and adapted when drawn to move the heddle frame in the opposite direction, guide means directing the cord along the bottom of the loom over and downward in front of the support, and a treadle connected to the end of the cord whereby the operator may draw upon the cord or hold it with the heddle frame in any desired position with her foot.

[Claims 2 to 6, 8, and 9 not printed in the Gazette.]

1,274,949. PACKLESS ANTIDRIP-VALVE. JAMES C. SMITH, Paterson, N. J. Filed Aug. 30, 1917. Serial No. 188,989. (Cl. 137—4.)

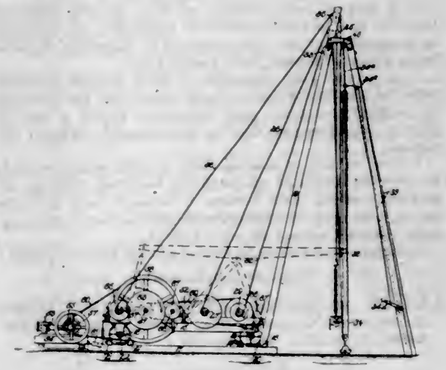


3. In a valve of the character described, a casing, a bonnet removably connected with the casing, a reciprocating valve member arranged in the bonnet and projecting into the casing, said bonnet having a socket in the upper end, a power shaft extending through the bonnet and engaging the valve member for opening and closing the same, a gasket surrounding said power shaft and engaging an enlargement thereof and the bonnet for producing a tight connection, an operating member having a depending portion fitting into said socket for operating said shaft, a spring resting on said operating member, a sleeve having an upper closed end surrounding said spring and resting against said operating member and against said spring, and a locking member for locking the sleeve to said shaft whereby there is a continued upward tendency created by said spring for compressing said gasket.

4. In a valve of the character described, a casing, a bonnet connected with the casing provided with grooves, a valve member having beads or projections fitting into said grooves whereby the valve member may reciprocate but not rotate, said valve member having a threaded portion, a power shaft fitting in the threaded portion of the valve member so that when the power shaft rotates said valve member will move longitudinally according to the direction of rotation of the power member, said power member being also provided with an enlargement having a sharpened flange or bead, a gasket surrounding said power member and arranged so that said bead will be embedded in one side thereof, a sharpened bead or flange extending from said bonnet and embedded in the other side of said gasket, said power member having a squared upper portion, a manually operated member having a head provided with a square opening fitting on the squared part of said power member and a depending annular portion fitting in the upper part of the bonnet, a spring surrounding said squared portion and resting on said head, a sleeve having a closed upper end surrounding said spring and arranged so that the bottom edge will engage said head and the closed end the upper end of said spring, and a nut for holding the closed end against the squared part of said power member whereby the power member may freely rotate and said spring continually act for holding said beads in engagement with said gasket while the sleeve with the closed upper end prevents a downward movement of said power member.

[Claims 1 and 2 not printed in the Gazette.]

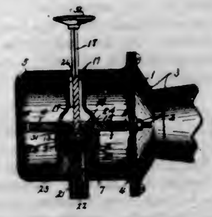
1,274,950. WELL-DRILLING MACHINE. WILLIAM C. SOLE, Sullivan, Ind. Filed Dec. 6, 1916. Serial No. 135,308. (Cl. 254—144.)



1. In a well drilling machine, a frame, a main mast extending upwardly and forwardly from the frame, an auxiliary mast disposed in front of the main mast, a bracket secured to and extending from one mast to the other, a lower sheave, an intermediate sheave, and an upper sheave, the sheaves being journaled in bearings in the main mast, a calf reel journaled in bearings in the frame on a transverse axis and adjacent the main mast, a bull reel journaled in bearings in the frame on a transverse axis and at the rear of the calf reel, a sand reel journaled in bearings in the frame on a transverse axis and in the rear of the bull reel, a tackle secured to the bracket, the fall of the tackle being disposed over the lower sheave and down to the calf reel, a drilling rope extending from the intermediate sheave down to the bull reel, and a sand rope extending from the upper sheave down to the said reel.

[Claim 2 not printed in the Gazette.]

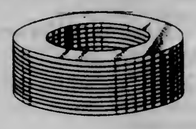
1,274,951. SIGNAL. WILLIAM SPARKS, Jackson, Mich., assignor to The Sparks-Withington Company, a Corporation of Ohio. Original application filed May 11, 1915, Serial No. 27,375. Divided and this application filed Oct. 8, 1915. Serial No. 54,738. (Cl. 116—1.)



1. In a signal, a diaphragm, a diaphragm actuator, a spiral shaft, a nut mounted on said shaft, a case inclosing the nut, and mechanism for causing the actuator to rotate with said case.

[Claims 2 and 3 not printed in the Gazette.]

1,274,952. MAGNET-CORE. JAMES BUCKNER SPEED, New York, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 6, 1916. Serial No. 89,409. (Cl. 175—21.)



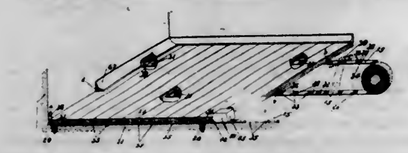
1. A magnet core composed of finely divided magnetic material and insulating material separating the particles of magnetic material, the particles of magnetic material being distorted beyond their elastic limit.

2. A magnet core composed of finely divided magnetic material and insulating material separating the particles of magnetic material, said compound having a specific gravity approximating that of the magnetic material employed.

9. The method of making magnet cores which consists in covering particles of magnetic material with an insulating coating, and forming a mass of said particles into a solid body by pressure sufficient to distort the magnetic material beyond its elastic limit.

[Claims 3 to 8 and 10 to 12 not printed in the Gazette.]

1,274,953. MEANS FOR LAYING FLOORING. ROBERT A. STOEHR, Cincinnati, Ohio. Filed Sept. 20, 1915. Serial No. 51,612. (Cl. 72—101.)



1. In means for laying flooring, the combination with a floor of the character described to be covered, a wall, and tongue and groove flooring boards, of metal strips of the character described laid in spaced-apart relation, with the ends of said strips at said walls turned upwardly, said flooring laid with its groove-edges outward, said strips provided with tongues extending upwardly into the joints between proximate flooring boards and secured in said joints, with said ends of said strips bent downwardly above the flooring, and means for securing said downwardly bent ends in downwardly bent relation.

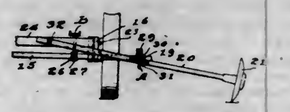
3. In means for laying flooring, the combination with the supporting surface, of flooring-boards whose bottoms are provided with recesses, said flooring-boards laid edge to edge, and flat metal securing strips provided with tongues normally in the plane of the body of said strip registering with said edges and with apertures registering with said recesses, securing means received in said recesses and through said apertures for securing said securing strips to said supporting surface, said tongues bent upwardly between the proximate one of said edges, and hold-down means at said tongues.

[Claim 2 not printed in the Gazette.]

1,274,954. ATTACHMENT FOR CORN-PLANTERS. LAWRENCE W. STUART, Orchard, Iowa. Filed Feb. 9, 1918. Serial No. 216,368. (Cl. 97—83.)

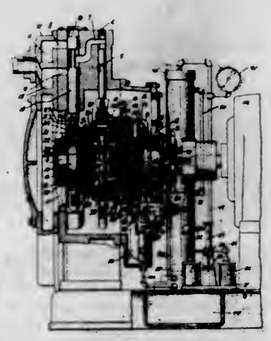
1. A lifting device for planter markers, comprising bracket members having eyes forming bearings, a shaft supported in said bearings, limiting collars on the shaft adjacent to the bearings, a foot lever mounted adjustably on the shaft intermediate the bearings, and lifting arms mounted on the ends of the shaft, in combination with a supported marker staff having a loop for engagement with one of the lifting arms.

2. The combination with a planter frame, of a marker staff having a loop secured thereto, bearing members secured on the planter frame, a shaft in said bearing members, a foot lever on the shaft intermediate the bearing members, and lifting arms mounted on the ends of



the shaft, each of said lifting arms having a terminal finger for engagement with the loop of the marker staff, and a lug forming an offset whereby the engagement of the loop on the marker staff with the finger of the lifting arm is limited.

1,274,955. FLUID MOTOR OR PUMP. AUGUST SUNDH, Hastings-upon-Hudson, N. Y., assignor to Otis Elevator Company, a Corporation of New Jersey. Filed Mar. 20, 1915, Serial No. 15,715. Renewed Feb. 14, 1918. Serial No. 217,226. (Cl. 103—83.)



1. A pump comprising a shaft and a piston reciprocated therefrom, fluid pressure means for varying the length of stroke of the piston, an accumulator for supplying fluid under pressure to said stroke varying means, a pump for charging said accumulator, a valve for bypassing the pump, and automatic electrically controlled means for controlling said bypass valve.

2. A pump comprising a piston, a shaft, an eccentric driven from the shaft for reciprocating the piston, fluid pressure means for shifting the eccentric to vary the stroke of the piston and to reverse the pump, a counterbalance for the eccentric, and means operated by said fluid pressure shifting means for shifting said counterbalance.

3. A pump comprising a piston, a shaft, an eccentric driven from the shaft for reciprocating the piston, fluid pressure means for shifting the eccentric to vary the stroke of the piston and to reverse the pump, a counterbalance for the eccentric, and an operative connection between said eccentric and counterbalance whereby the eccentric and counterbalance will shift simultaneously in opposite directions.

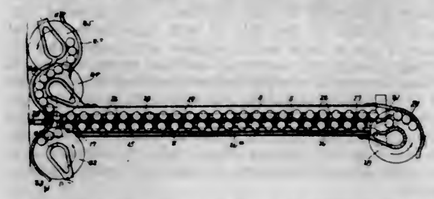
8. A pump comprising a piston, a shaft, an eccentric driven by the shaft for reciprocating the piston, means for shifting the eccentric to vary the stroke of the piston and to reverse the pump, and means to counteract the effect of centrifugal force acting on said eccentric.

13. A pump comprising a piston, a shaft, an eccentric on the shaft for reciprocating the piston, a rod secured at either end to the eccentric, a piston on the rod, a cylinder for said piston, said cylinder being formed in said shaft with its axis at right angles to the axis of

the shaft, and means for directing a fluid under pressure to said cylinder in order to effect a shifting of the eccentric.

[Claims 4 to 7, 9 to 12, and 14 to 20 not printed in the Gazette.]

1,274,956. EXHAUST-BOX FOR CANNING MACHINERY. JOHN C. TALIAFERRO, Baltimore, Md., assignor to Continental Can Company, Incorporated, Syracuse, N. Y., a Corporation of New York. Filed Oct. 19, 1917. Serial No. 197,414. (Cl. 126—272.)



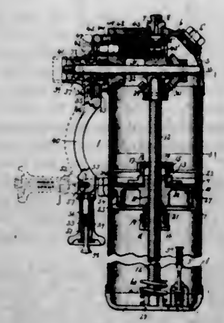
1. An exhaust box for canning machinery including a casing, a rotating drum extending longitudinally of the casing, said drum having a spiral thread wound thereon, brackets coöperating with the drum for supporting the cans, and means whereby said drum may simultaneously operate upon two rows of cans for feeding the same through the exhaust box.

3. An exhaust box for canning machinery including a casing, a drum extending from end to end of the casing and having a spiral thread for moving the cans through the casing, supporting brackets coöperating with the drum, and a guiding rail extending lengthwise of the casing and centrally over said drum whereby two rows of cans may be simultaneously fed through the exhaust box by said drum.

5. An exhaust box for canning machinery including a casing, a drum extending from end to end of the casing and having a spiral thread for moving the cans through the casing, supporting brackets coöperating with the drum, a guiding rail extending lengthwise of the casing and centrally over said drum whereby two rows of cans may be simultaneously fed through the exhaust box by said drum, a rotating disk for delivering the filled cans to the exhaust box, a dividing trigger operated by the cans for directing the cans alternately to the opposite sides of said central guide rail, said drum being perforated, and means for supplying steam to the drum.

[Claims 2, 4, and 6 not printed in the Gazette.]

1,274,957. FIRE-EXTINGUISHER. WALTER H. TIBBALS, Onondaga, N. Y., assignor to Endfire Extinguisher Company, Inc., Syracuse, N. Y., a Corporation of New York. Filed Nov. 26, 1915. Serial No. 63,505. (Cl. 169—17.)



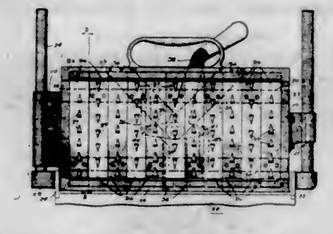
1. In a fire extinguisher of the character described, the combination of a container for the fire extinguishing fluid having an outlet in one end, a piston movable axially in said container and free to rotate about its axis and provided with a central threaded aperture, a screw engaged in said aperture, means for rotating the screw, and additional means separate from the screw, but actuated by a part of the screw-rotating means for opening and closing the outlet.

2. In a fire extinguisher of the character described, a container for the fire extinguishing fluid having an outlet, a piston movable in the container toward and from the outlet, a screw for operating the piston, means for rotating the screw, a valve movable independently of the screw for opening and closing the outlet, and means operated by a portion of the screw-operating means for operating the valve in advance of the beginning of rotation of the screw in either direction.

3. In a fire extinguisher of the character described, the combination of a container for a fire extinguishing fluid having an outlet, a piston movable in the container, a screw for operating the piston, means for rotating the screw, a valve for the outlet separate from the screw, and connections between said screw operating means and valve for opening and closing said valve in advance of the movement of the piston in either direction.

[Claims 4 to 13 not printed in the Gazette.]

1,274,958. HOLDER FOR SLICING-MACHINES. CORNELIS F. M. VAN BERKEL, Laporte, Ind., assignor to U. S. Slicing Machine Company, Laporte, Ind., a Corporation of Indiana. Filed June 27, 1917. Serial No. 177,389. (Cl. 17—14.)



1. A device for holding material to be sliced, comprising a plurality of sets of oppositely inclined prongs, and means for relatively moving said sets of prongs in opposite parallel directions to cause said prongs to penetrate the material to be held.

2. A device for holding material to be sliced, comprising an upright frame, a set of prongs carried by said frame and arranged at a fixed oblique angle thereto, a second set of prongs carried by said frame and arranged at a fixed oblique angle thereto and having their points inclined in a direction opposite to that of the first-mentioned set of prongs, and means for simultaneously moving said sets of prongs in opposite parallel directions to cause said prongs to enter material to be held.

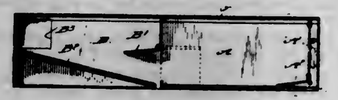
3. A device for holding material to be sliced, comprising a frame, prongs carried by said frame and inclined obtwardly and downwardly therefrom, other prongs carried by said frame and inclined outwardly and upwardly therefrom, and mechanism for moving each of said sets of prongs vertically in the direction of their inclination to cause said prongs to enter material to be sliced.

4. In combination, a plurality of bars arranged side by side, pointed prongs carried by said bars for engaging material to be sliced, and means for shifting said bars longitudinally to cause said prongs to enter said material.

5. In combination, a plurality of bars arranged side by side, prongs carried by said bars for engaging material to be sliced the prongs on adjacent bars being inclined in opposite directions to one another, and mechanism for shifting said bars longitudinally, said mechanism being arranged to move each bar in a direction opposite to the movement of the next adjacent bar.

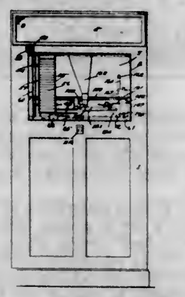
[Claims 6 to 10 not printed in the Gazette.]

1,274,959. AUTOMATIC TRAP FOR RATS, MICE, AND WILD ANIMALS. ALBERTO VALENZUELA, Valparaiso, Chile, assignor of one-half to Roberto Alfredo Nobriga, Valparaiso, Chile. Filed Dec. 20, 1916. Serial No. 138,003. (Cl. 43—26.)



A trap of the character described, including a casing having an entrance compartment, an intermediate compartment, and a receiving compartment, said entrance compartment having an entrance opening, a normally open door for closing said opening, a bait holder within said entrance compartment, a spring controlled latch member pivotally mounted adjacent one end and provided with an engaging shoulder adjacent its opposite end, a normally closed door between the entrance and intermediate compartments connected to and actuated with the said entrance door to open when the latter is closed, a vertically shiftable platform pivoted within the intermediate compartment and having a controlling rod extending from its pivot at one side and provided with a weight, an intermediately pivoted lever having a slotted end normally engaged by said latch member, and to which said rod is pivotally connected, a weight at the opposite end of said lever, a pivoted platform adjacent the bait holder and connected to said latch member for releasing the latter, and a spring door controlling communication between the intermediate and receiving compartments and opening into the latter, all for the purpose described.

1,274,960. AUTOMATIC TALKING-MACHINE. JOHN L. VAUGHN, San Francisco, Cal., assignor of one-half to Charles A. Fey, San Francisco, Cal. Filed Oct. 16, 1916. Serial No. 125,767. (Cl. 274—10.)



1. In a talking machine, the combination with a reproducer, a horizontal turn-table and motor mechanism, said turn-table provided with a record centering pin for passing through an opening in the center of the record when the same is positioned thereon, a magazine for disk records vertically movable to bring any one of the records therein opposite the turn-table, said magazine provided with record centering pins, a carrier including a plurality of arms one pair positioned at opposite sides of the record and each having a downwardly inclined portion for engaging beneath the selected record to move the same vertically relatively to said centering pins, means for operating said carrier to move the record engaged thereby to and from the magazine and into and out of position on the table, and means for vertically moving said magazine and mechanism for engaging said magazine for locking the same.

2. In an automatically operated token controlled talking machine, the combination with a turn table for disk records, driving mechanism for said turn table, a reproducer arm mounted to shift both horizontally and vertically, a sound box on said arm, carriers for automatically moving records into and out of operative position upon said turn table, means for positioning a selected record into operable position relatively to said carriers, and mechanism for rapidly raising and slowly lowering said arm and for moving the same to starting position, the same including a curved arm coöperating with the sound arm and fulcrumed at one end for vertically swinging movement, a cam for raising said arm, and an escapement for regulating the lowering of said arm.

4. In a talking machine, the combination with a reproducer, a turn table provided with a record centering pin and an operating mechanism, a magazine arranged to support a plurality of disk records in superimposed supported relation at one side of said turn table, a fixed centering pin on each record support and adapted for extending through the centering openings in the respective records, means for moving said magazine for bringing any one of the records therein in line with said turn table, and a carrier mechanism for first raising the record from its centering pin, carrying the same to its place of deposit, and lowering said carried record onto its support with the centering pin projecting through the central opening therein.

[Claim 3 not printed in the Gazette.]

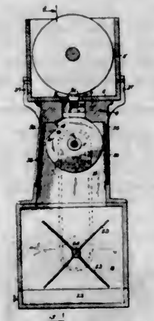
1,274,961. MANUFACTURE OF PHENOL AND ALLIED PRODUCTS. ROGER N. WALLACH, Wappingers Falls, N. Y. Filed Jan. 12, 1918. Serial No. 211,654. (Cl. 23—24.)

1. The process of caustic alkali fusion of organic sulfonic acids in the form of their salts which consists in adding an aqueous solution of such product directly to a mass of the fused caustic alkali.

8. As steps in the manufacture of phenol, preparing a concentrated aqueous solution of benzol sulfonic salt at a temperature of about 100 degrees C. and adding the same to fused caustic alkali at a temperature of about 300 degrees C.

[Claims 2 to 7, 9, and 10 not printed in the Gazette.]

1,274,962. SAMPLING-MACHINE. WILLIAM BUCKHANAN WARE, Memphis, Tenn., assignor of one-half to Andrew T. Madra, Memphis, Tenn. Filed May 11, 1917. Serial No. 167,915. (Cl. 73—21.)



1. In a sampling machine, a conveyer having a bottom with an opening intermediate its ends, means for advancing material longitudinally of the bottom of the conveyer, a sampler wheel rotatably mounted below the opening, means connecting the conveyer bottom around its opening with the sampler wheel at its periphery, the sampler wheel having a pocket in its periphery for the purpose specified.

7. In a sampling machine, a conveyer having a bottom with an opening intermediate its ends, a sampler wheel rotatably mounted below the opening, means connecting the conveyer bottom at its opening with the sampler wheel at its periphery to close the opening, the sampler wheel having a pocket in its periphery, a box disposed below the sampler wheel, a drawer in the box, an agitator in the box for mixing the material collected in the drawer, and means to operate the agitator and the sampler wheel.

[Claims 2 to 6 not printed in the Gazette.]

1,274,963. FLYING-MACHINE FRAME. GEORGE LOUIS WEBER, Philadelphia, Pa. Filed Sept. 30, 1916. Serial No. 123,150. (Cl. 244—30.)



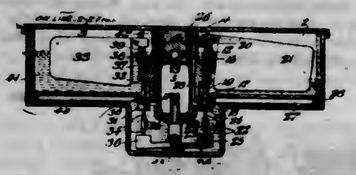
1. In a flying machine structure, the combination with an automobile chassis including a rectangular frame and engine; of a tail frame whose side bars are connected with the side bars of the rectangular frame and extend to the front end of said chassis frame, a plane frame whose lower bars are transversely mounted on and connected with said chassis, and a landing frame carried by and depending from the plane frame.

2. In a flying machine structure, the combination with an automobile chassis including a rectangular frame, an engine, and steering pillar; of a tail frame whose side bars extend parallel to and are connected with the side bars of the chassis frame, a rudder in this frame, flexible connections between the rudder and the steering shaft of said pillar, a plane frame whose lower bars are transversely disposed on and connected with said chassis frame, and a landing frame carried by and depending from the plane frame.

4. A flying machine composed of primary unit sections, consisting respectively of an automobile chassis unit having side bars and provided with a motor and steering gear; a main plane frame unit having front and rear beams or bars adapted to be transversely disposed upon and secured to said chassis frame; a tail frame unit having side bars adapted to be disposed along the chassis side bars and secured thereto; and a landing frame unit adapted to be secured to the said main plane unit.

[Claim 3 not printed in the Gazette.]

1,274,964. CARBURETER FOR INTERNAL-COMBUSTION ENGINES. ALFRED WEILAND, East Orange, N. J. Filed Feb. 17, 1917. Serial No. 149,185. (Cl. 158—36.)

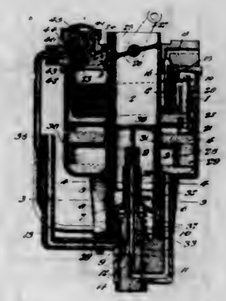


1. In a device of the character stated, a carbureter having a main reservoir and separate liquid fuel chambers communicating with a low level liquid fuel supply, means to normally maintain both chambers under vacuum conditions, and means including liquid sealed outlets to control the admission of air to either chamber whereby said main reservoir supply is automatically replenished.

[Claims 2 to 9 not printed in the Gazette.]

1,274,965. CARBURETER FOR INTERNAL-COMBUSTION ENGINES. ALFRED WEILAND, East Orange, N. J. Filed Feb. 17, 1917. Serial No. 149,186. (Cl. 158—36.)

1. In a carbureter, a main fuel reservoir having an air vent above the normal liquid level, a storing reservoir having an outlet below the normal level in said main reservoir forming a liquid seal, an auxiliary reservoir having an outlet to said storing reservoir, a valve for said auxiliary reservoir outlet, a fuel inlet to said auxiliary reservoir, a valve controlling said inlet, a float in said auxiliary reservoir arranged to actuate both of said valves, and a conduit forming a communication between the auxiliary reservoir and a source of suction whereby a condition of vacuum is maintained in said auxiliary reservoir.



9. In a carbureter, a main fuel reservoir having an air vent, a storing reservoir provided with an outlet communicating with said main reservoir and positioned to be liquid sealed and unsealed by the contents of said main reservoir, an auxiliary reservoir having an outlet positioned to be liquid sealed and unsealed by the contents of said storing reservoir and means controlled by level conditions for rendering said auxiliary reservoir outlet operative or inoperative to the liquid sealing means according to conditions.

[Claims 2 to 8 and 10 not printed in the Gazette.]

1,274,966. PAPER-CLIPPER. ROBERT FILLMORE WENTZ, Allentown, Pa., assignor of one-third to Fred E. Geiser and one-third to S. E. Miller, Easton, Pa. Filed Feb. 26, 1918. Serial No. 219,214. (Cl. 120—84.)



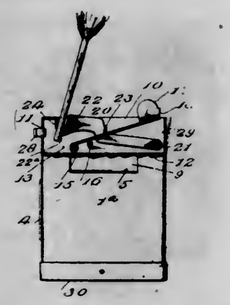
1. A clipper for cutting sections from newspapers and the like comprising a body, a pointed cutter having one edge sharp, and a guard arc-shaped in cross-section arranged over the sharp edge of the cutter and adjacent thereto, said sharp edge being slightly curved so that the point of the guard and the cutter are spaced a sufficient distance apart for permitting the cutter to be forced into a piece of flat paper when the device is at an appreciable angle to the paper.

[Claims 2 and 3 not printed in the Gazette.]

1,274,967. SELF-LIGHTING MATCH CASE. JOSEPH W. WERTS, Anderson, Ind. Filed Oct. 11, 1917. Serial No. 195,991. (Cl. 206—36.)

1. A match lighter comprising a casing having a friction surface, a resilient pivoted match support, means for

holding the match support in set position, a pivoted match grip operated by the match support, and a fixed match grip positioned to coöperate with the pivoted match grip to hold a lighted match after the holding means is released.

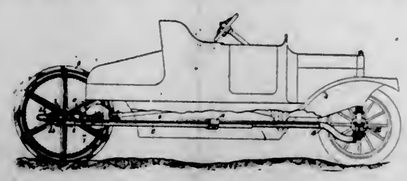


3. A match lighter comprising a casing having a friction surface on one wall thereof, a pivoted match support in the casing to support a match adjacent the friction surface, a catch to hold the match support in set position, a bar on which the match support rests to place it under tension when in latched position, a pivoted match grip operated by the match support, and a fixed match grip which coöperates with the pivoted match grip to hold a match in elevated position after the catch is released.

6. A match lighter comprising a casing formed with a transverse match pocket, and an inclined wall below same, the front of the casing having an opening, the edges of the side walls of the opening being inclined adjacent the pocket to form a passage for a match to said pocket, a pivoted resilient match support in the pocket, means for placing the support under tension and means for holding said support in set position, a fixed match grip in the casing, and a pivoted match grip operated by the support to position and hold a match elevated against the fixed match grip when the support is released.

[Claims 2, 4, and 5 not printed in the Gazette.]

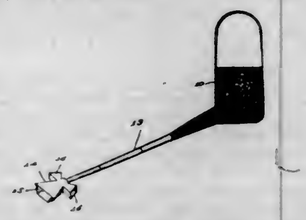
1,274,968. TRACTOR ATTACHMENT FOR AUTOMOBILES. EDWARD BLOUNT WINTERS, Coffeyville, Kans. Filed May 18, 1917. Serial No. 169,392. (Cl. 180—16.)



1. A tractor attachment for automobiles comprising,—a frame having channeled sides, an extension movable in said channeled sides, means for securing the extension to the channeled sides whereby the length of the frame may be varied, bearings near the rear end of the frame, means engaging the channels of the frame adapted to secure the bearings to the frame, an axle in said bearings, tractor wheels on said axle, a draw bar connecting said bearings, clamps for securing the rear axle of an automobile to the frame, means for securing the clamps engaging the channeled sides of the frame, gears associated with the tractor wheels, pinions adapted to be secured to the rear axle of an automobile in place of the rear wheel and adapted to mesh with the gears, and means for securing the front end of the frame to the front axle of the automobile.

2. A tractor attachment for automobiles comprising,—a triangular frame having channeled sides through a part of its length, an extension movable in said channeled sides, means for securing the extension to the channeled sides whereby the length of the frame may be varied, bearings near the rear end of the frame, a draw bar connecting the bearings, an axle in said bearings, tractor wheels on said axle, clamps for securing the rear axle of an automobile to the frame, means associated with said clamps and engaging the bearings, whereby the distance between the tractor axle and that of the automobile may be adjusted, gears associated with the tractor wheels, pinions adapted to be secured to the rear axle of an automobile in place of the rear wheels, said pinions being adapted to mesh with the gears in the tractor wheels, and means for securing the front end of the frame to the front axle of the automobile.

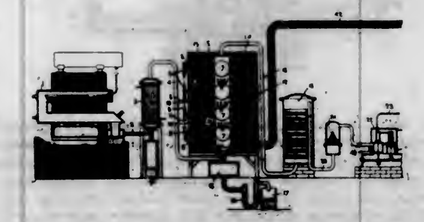
1,274,969. BROADCAST SOWER. GEORGE A. WIRT, Greensburg, Ind. Filed Apr. 27, 1918. Serial No. 231,192. (Cl. 275—11.)



1. A broadcast sower, comprising a hollow head having upwardly and outwardly flared sides, whereby the head is materially wider at its top than at its bottom, said sides comprising a plurality of narrow vertically separated shelves, a delivery spout leading to the rear end of said hollow head, and wind funnels extended laterally at the base of the hollow head in front of the delivery spout.

2. A broadcast sower, comprising a hollow head having upwardly and outwardly flaring sides, whereby the head is materially wider at its top than at its bottom, a delivery spout leading to the rear end of said hollow head, and wind funnels extended laterally at the base of the hollow head in front of the delivery spout.

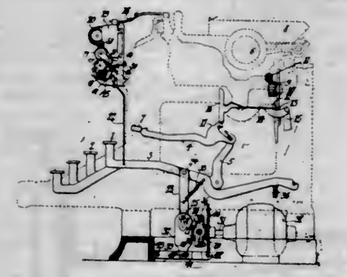
1,274,970. METHOD OF PRODUCING AND SEPARATING LIQUEFIED GAS. LINUS WOLF, Chicago, Ill. Original application filed Dec. 3, 1913, Serial No. 804,333. Divided and this application filed May 31, 1916. Serial No. 100,809. (Cl. 183—115.)



1. The process of producing liquefied constituents of a hydrocarbon gas, such as distillation gas or natural gas, which consists in passing the hydrocarbon gas through a heat-insulated chamber, introducing into said chamber gas constituents of said hydrocarbon gas at a sufficiently low temperature and in sufficient volume to effect the cooling of the hydrocarbon gas to a point where the easily-liquefiable constituents thereof become liquefied, agitating the gas as it passes through said chamber, separating the liquid thus obtained from the gaseous constituents, and then liquefying said gaseous constituents.

[Claims 2 and 3 not printed in the Gazette.]

1,274,971. COMBINED TYPE-WRITING AND COMPUTING MACHINE. WALTER WRIGHT, New York, N. Y., assignor to Underwood Computing Machine Company, New York, N. Y., a Corporation of New York. Filed Sept. 18, 1912. Serial No. 720,914. (Cl. 235—62.)



1. In a combined typewriting and computing machine, the combination of computing mechanism and typewriter numeral keys, connections between said numeral keys and computing wheels so arranged that each key moves free of connection with said computing mechanism during the first part of its down stroke, but moves in connection with said computing mechanism during the remainder of its down stroke, a source of power, a connection between each key and said source of power arranged to pick up each key at the time said key is connected with said computing mechanism and finish the operation of a key to drive said computing mechanism.

2. In a combined typewriting and computing machine, the combination with computing wheels and numeral keys, of a link depending from each numeral key, a lug on each link, a cam in which each lug is guided, and a resilient member supporting said cam.

7. A computing machine having a constantly driven power-member and a continuous grooved cam for controlling the connection between the computing keys and the power.

22. In a combined typewriting and computing machine, the combination with alphabet and numeral keys, of a source of power, means for connecting said power to said numeral keys and not said alphabet keys, a swinging cam for each numeral key, a lug for each key operated by its cam to disconnect said keys from said source of power, computing wheels driven by said power-operated keys, and means for preventing overthrow of said computing wheels.

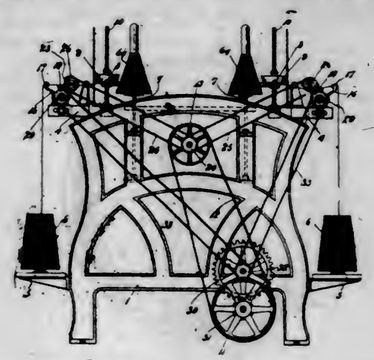
[Claims 3 to 6 and 8 to 21 not printed in the Gazette.]

1,274,972. WINDING AND DYEING MACHINE. WILLIAM A. AINSWORTH, Grand Rapids, Mich., assignor of one-half to Carl N. Mather, Grand Rapids, Mich. Filed July 16, 1917. Serial No. 180,805. (Cl. 8—19.)

1. In a winding and dyeing machine, means to transfer thread, yarn, or like material from one holder therefor to another, and means intermittently apply coloring matter to the length thereof as it is transferred, substantially as described.

7. An attachment adapted for application to winding machines for yarn or like material including a receptacle for containing liquid coloring matter, over which the yarn is adapted to pass, said receptacle having cylindrical form and adapted to lie lengthwise of the machine, a plurality of wicks in the receptacle extending a short distance thereabove, a shaft paralleling the receptacle, a plurality of collars, one for each wick secured on the shaft, and fingers under which the yarn is adapted to pass projecting laterally from each collar.

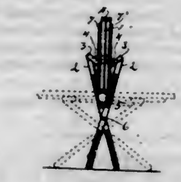
8. In a winding and dyeing machine, means to transfer thread, yarn or like material from one holder therefor to another, a member impregnated with coloring material closely adjacent which the thread, yarn or like material normally passes, and movable means located between one of the holders and said member and operable to intermittently press against the thread, yarn or like material to periodically bring the same into contact engagement with



said member, whereby said material is wiped across the member and receives coloring matter therefrom, intermittently applied in the length of the material, substantially as described.

[Claims 2 to 6, 9, and 10 not printed in the Gazette.]

1,274,973. FOLDING TABLE. WILLIAM E. ALLEN, Grand Rapids, Mich., assignor to Klingman's Sample Furniture Co., Grand Rapids, Mich., a Corporation of Michigan. Filed Jan. 14, 1918. Serial No. 211,891. (Cl. 45—116.)



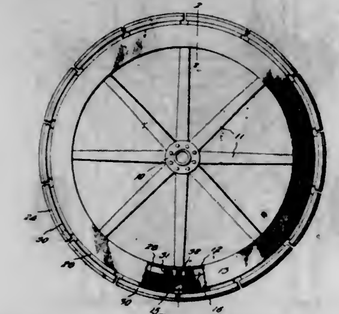
In folding table construction, a top centrally divided in halves and pivotally connected, a cross leg supporting construction pivotally connected with the top, a bolt pivotally connecting the legs near their longitudinal center, said legs chambered around the bolt in their adjacent sides, a helical spring anchored at one end to the bolt, and at the other end to one of the legs, and a locking device to hold the table open against the tension of the spring.

1,274,974. AUTOMOBILE-WHEEL. EDWIN N. BERGSTROM, East Lynn, Mass. Filed Apr. 3, 1917. Serial No. 159,489. (Cl. 152—8.)

1. A wheel including a channel rim having side walls and a center wall dividing the rim into side channels, each divided transversely to provide a plurality of pockets, perforated studs extending from the bottoms of said pockets, securing bolts extending through the studs into the pockets, tread blocks having side and end walls fitting into the pockets, the tread blocks being provided with cups alined with said studs and receiving the ends of said bolts, springs positioned within the pockets about the bolts and engaging the studs and cups, and securing means carried by the bolts within the cups to hold the tread blocks in place.

3. In a wheel, a rim structure having pockets, tread blocks provided with side and end walls fitting into the pockets and with side flanges in spaced relation to the side walls positioned to extend outside the side walls of the rim when the tread blocks move inwardly in the pockets,

cups carried by the tread blocks, securing pins extending from the bottoms of the pockets into the cups, resilient means positioned about the pins and engaging the tread blocks and the bottoms of the pockets, and means within the cups engaging the outer end portions of the pins to limit the outward movement of the tread blocks.

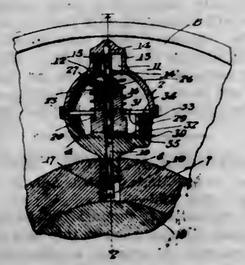


4. A wheel including a rim having pockets, tread blocks fitting into the pockets, spring strips extending in spaced relation to the ends of the pockets and engaging the ends of the tread blocks to yieldably hold the tread blocks against movement longitudinally in the pockets, means slidably mounting the tread blocks and limiting the outward movement thereof, and resilient means yieldably holding the tread blocks extended..

6. A wheel having a rim including longitudinally extending walls and cross strips connecting the walls to provide pockets, the strips terminating in spaced relation to the bottoms of the pockets, U-shaped spring elements passing beneath the cross strips and having their arms extending in spaced relation thereto, tread blocks positioned in the pockets and having their ends portions engaged by the arms, means for slidably retaining the tread blocks in the pockets, and resilient means yieldably holding the tread blocks extended.

[Claims 2 and 5 not printed in the Gazette.]

1,274,975. LUBRICATOR. LEROY A. BIGGAR and RUTHERFORD H. BIGGAR, Oneida, N. Y. Filed June 27, 1917. Serial No. 177,336. (Cl. 184—43.)



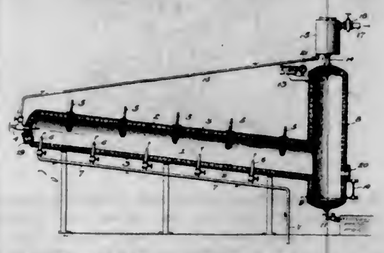
1. A lubricator comprising a reservoir having a cylinder therein, a piston adapted to enter said cylinder to expel fluid from the cylinder, a plurality of perforated mica disks on said piston, and means for loosely holding said disks in place and permitting the same to move longitudinally.

5. In an oil cup, a reservoir formed with a vent and an outlet, a cylinder in said reservoir, a piston in said reservoir adapted to enter the cylinder to expel oil from the outlet, a plurality of perforated disks loosely mounted in face to face relation on the inner end of the piston, and a valve normally closing said vent and adapted to be opened simultaneously with the operation of said piston.

6. A piston for liquid actuating devices having a head, a plurality of superimposed disks positioned on said head, each disk having a plurality of openings, pins on said head extending through some of said openings and heads on said pins located above the outermost disk so as to permit movement of said disks.

[Claims 2 to 4 not printed in the Gazette.]

1,274,976. PROCESS OF DISTILLING OIL. JAMES E. BIGGINS, Port Arthur, Tex., assignor to Gulf Refining Company, Pittsburgh, Pa., a Corporation of Texas. Filed Oct. 23, 1917. Serial No. 198,132. (Cl. 196—25.)

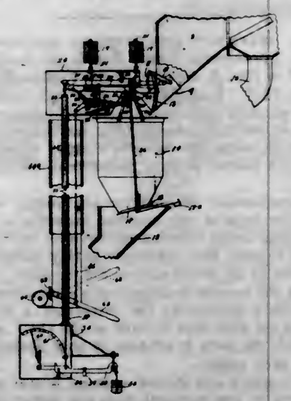


1. In the cracking distillation of petroleum oils, the process which comprises supplying such an oil to a tubular unobstructed chamber maintained at a temperature sufficient for cracking, supplying also sufficient air to such chamber to cause enough combustion to maintain the temperature therein, removing the vapors and gases from the chamber and condensing the vapors to recover the cracked products.

5. In the cracking distillation of petroleum oils, the process which comprises establishing a cracking temperature and a pressure greater than atmospheric within a cylindrical inclined unobstructed chamber, supplying oil at the one end, supplying air at a plurality of points along the length of the chamber to maintain a limited amount of combustion therein and keep up the heat, removing vapors and gases at the other end, settling tar and carbon from such vapors and gases, cooling the mixture sufficiently to condense out any high boiling oils therein, returning the condensate to the feed end of the chamber, and cooling the residual mixture of gases and vapors to recover the cracked products.

[Claims 2 to 4 not printed in the Gazette.]

1,274,977. SCALE. CHARLES E. BIRD, Minneapolis, Minn. Filed Feb. 28, 1917. Serial No. 151,464. (Cl. 73—177.)



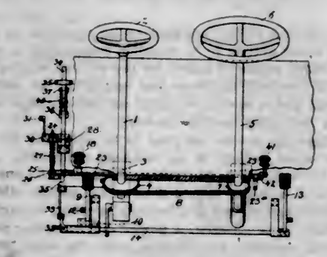
1. A self-contained scale mechanism, comprising interconnected upper and lower load equalizers, and a hopper suspended from said upper load equalizer, all of said parts being gravity arighted.

2. A scale comprising upper and lower load equalizers, a depending hanger carrying said lower load equalizer at its lower end and itself supported from its upper end so that its lower end will be unaffected by settling of the building in which it is hung, an operating connection between said upper and lower load equalizers, and a gravity-arighted hopper suspended from said upper load equalizer.

25. In a scale mechanism, the combination with upper and lower load equalizers and an operating connection between the two, of a hopper supported by said upper load equalizer, a garner delivering to the said hopper, said hopper and garner having gates for controlling the discharge, respectively, therefrom, means for independently but automatically closing said garner and hopper gates, and means operative, at will, for independently opening said garner and hopper gates.

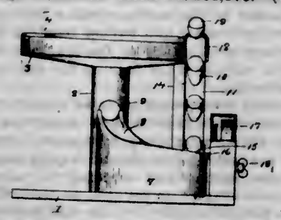
[Claims 3 to 24, 26, and 27 not printed in the Gazette.]

1,274,978. MECHANISM FOR THE CONTROL OF AUTOMOBILES. CLIFFORD M. BISHOP, Brooklyn, N. Y. Filed June 20, 1917. Serial No. 175,753. (Cl. 74—33.)



Mechanism for the control of automobiles, comprising in combination primary steering mechanism and auxiliary steering mechanism operatively connected thereto, said auxiliary mechanism and the connection therefrom being constructed to exert an increased leverage upon the primary steering mechanism.

1,274,979. TOY. GEORGE B. BLILEY, Richmond, Va. Filed Aug. 10, 1917. Serial No. 185,573. (Cl. 46—37.)

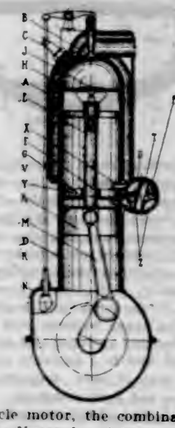


2. A toy comprising an elevated spiral run-way, a drop column at the discharge end of said run-way, a gravity acting return run-way arranged with the intake end thereof at the bottom of the drop column, an endless elevator to convey balls from the discharge end of the return run-way to the intake end of the spiral run-way, and a motor to operate the endless elevator.

[Claim 1 not printed in the Gazette.]

1,274,980. INTERNAL-COMBUSTION ENGINE. PROCTER BREVARD, Weatherford, Tex. Filed Oct. 29, 1917. Serial No. 198,953. (Cl. 123—47.)

1. In combination with a pair of axially alined cylinder members, a piston rod common to both cylinders, pistons carried on the ends of the piston rod within their respective cylinders, a crank shaft, a connection between one end of the piston rod and the crank shaft, a valve cage located adjacent the meeting ends of the two cylinders and having a by-pass connection with each and a carbureter connection, and a rotary valve member within said cage adapted to intermittently close and open said by-pass portions, thereby permitting a charge of explosive mixture which has been partly compressed within the lower chamber by the reciprocation of the piston therein to flow into the upper chamber as an additional charge to that primarily received therein.



3. In a two cycle motor, the combination of a pair of cylinders coaxially disposed and having a common piston rod and a piston for each cylinder carried on the ends thereof, a carbureter connection thereto, a rotary valve member controlling the connection from the carbureter to each of said cylinders and the connection between the cylinders, a crank shaft, means for causing the movement of said valve member in timed relation to the rotation of the crank shaft, thereby permitting the connection between the two cylinders to be open at the desired point in each cycle of operation, to permit the flow of explosive mixture compressed in one of said cylinders into the other of said cylinders, a relief valve in one of said piston members adapted to open during its downward stroke and to close during the upward compression stroke, an exhaust valve adapted to open and close with said relief valve to effect the release of the burned gases as the new compression charges enter the combustion chamber through said relief valve, and a spark plug located in the wall of the combustion chamber.

4. In a gas engine, in combination with a pair of axially alined cylinders, a piston rod adapted to reciprocate through their adjacent ends, a piston member for each of said cylinders, carried on the ends of said piston rod, a relief valve in one of said piston members, an escape valve for burned gases in the end of the cylinder adjacent to the piston having the relief valve, a crank shaft with which the piston rod is operatively connected, a carbureter connection to each of the cylinders, and valve means controlling such connection, whereby the charge initially delivered to the cylinder containing the crank shaft connection is conducted into the other cylinder after being partially compressed.

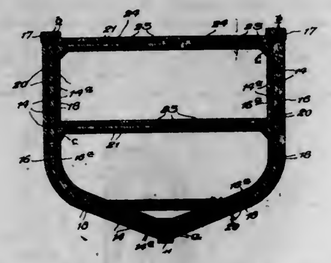
[Claims 2, 5, and 6 not printed in the Gazette.]

1,274,981. REINFORCED SHIP. COTTER T. BRIDE, Washington, D. C. Filed Apr. 23, 1918. Serial No. 230,271. (Cl. 114—65.)

1. In a hull-reinforcing frame, an outer and an inner set of longitudinally-disposed bars arranged in separated relation, and upright rods disposed through each set of bars.

7. In a hull-reinforcing frame, an outer and an inner set of longitudinally-disposed bars arranged in separated rela-

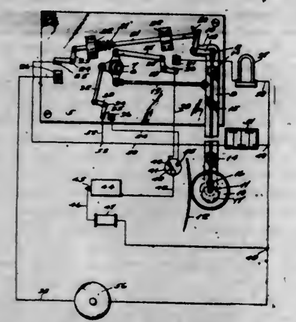
tion, deck members extending from one side of the hull to the other and having their end portions spanning the space between said sets of bars, and upright rods disposed through each set of bars and through said deck members.



9. A hull-reinforcing frame comprising the combination of a keel and gunwale members, an outer and an inner set of bars extending longitudinally of the hull in separated relation between the keel and gunwale member on each side, tie members spanning the space between said sets of bars and disposed at substantially right angles thereto, brace members extending obliquely from one set of bars to the other, deck members extending from one side of the hull to the other and having their end portions spanning the space between said sets of bars, and on each side of the keel an outer and an inner set of rods extending from the keel to a gunwale member through the outer and inner sets of bars, respectively, and through said tie and brace and deck members.

[Claims 2 to 6, 8, and 10 not printed in the Gazette.]

1,274,982. SAFETY APPLIANCE FOR AUTOMOBILES. LEONARD BROWN, Webb City, Mo.; Mary A. Brown administratrix of said Leonard Brown, deceased. Filed Jan. 3, 1917. Serial No. 140,442. (Cl. 177—314.)



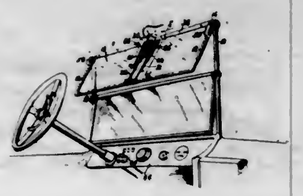
1. The combination with the ignition circuit of an automobile engine, of an alarm circuit, circuit closing means for said circuits, means engageable with the engine flywheel for closing the alarm circuit closing means, and a common member for causing engagement of said last mentioned means with the engine fly wheel and for opening the ignition circuit closing means.

2. The combination with the ignition circuit of a combustion engine, of an alarm circuit, closing means for said circuits, a reciprocal rod connected to one of said circuit closures, means engageable with the engine fly wheel for imparting movement to said reciprocal rod, and a common operating member for causing engagement of the last mentioned means with the engine fly wheel and for opening the closing means of the ignition circuit.

4. In apparatus of the character described, the combination with a storage battery circuit, of a magneto circuit, an alarm circuit connected with the storage battery circuit, a switch in the storage battery circuit, a switch in the magneto circuit, a switch in the alarm circuit, an actuating member connected with the first two named switches to operate them, a movable support arranged near the fly-wheel of the engine and connected with the actuating member to be shifted thereby, a friction pulley carried by the movable support to contact with the fly-wheel, and means actuated by the friction pulley to operate the third named switch.

[Claim 3 not printed in the Gazette.]

1,274,983. CLEANING DEVICE. CHARLOTTE A. BRIDGWOOD, Westwood, N. J. Filed Oct. 16, 1917. Serial No. 196,879. (Cl. 15—59.)



1. A cleaning device adapted to be attached to a wind shield or other article to be cleaned, comprising a carriage having a fixed range of travel on the article, wiping means carried by the said carriage and engaging the surface to be cleaned, and a motor mounted on the carriage and imparting a traveling motion thereto.

3. A cleaning device adapted to be attached to a wind shield or other article to be cleaned, comprising a track adapted to be fixed on the article adjacent the surface to be cleaned, a carriage mounted to travel on the said track, wiping means attached to the carriage and engaging the said surface to be cleaned, a power driven motor mounted on the said carriage and moving with the same, and propelling means driven from the motor to impart a traveling motion to the carriage.

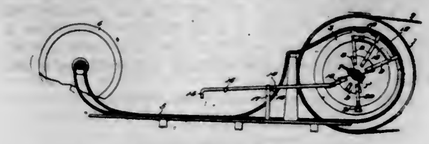
5. A cleaning device adapted to be attached to a wind shield or other article to be cleaned, comprising a track adapted to be fixed on the article adjacent the surface to be cleaned, a carriage mounted to travel on the said track, wiping means attached to the carriage and engaging the said surface to be cleaned, a power driven motor mounted on the said carriage and moving with the same, propelling means driven from the motor to impart a traveling motion to the carriage, and a reversing mechanism for the said motor and having members in the path of the carriage at the ends of the track to reverse the motor on the carriage when nearing the end of its travel in either direction.

7. A cleaning device adapted to be attached to a wind shield or other article to be cleaned, comprising a carriage mounted to travel alternately in opposite directions on one edge of the article to be cleaned, wiping means moving with the said carriage and engaging the surface to be cleaned, a rack adapted to be fixed to the article at the said edge, a pinion in mesh with the said rack and mounted on the said carriage, a motor mounted on the said carriage and driving the said pinion, and means to automatically reverse the said motor on the carriage when nearing the end of its travel in either direction.

[Claims 2, 4, and 6 not printed in the Gazette.]

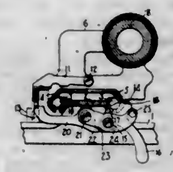
1,274,984. TUG-ROPE HOLDER. JOSEPH P. BURT, Eldorado, Kans. Filed Apr. 26, 1918. Serial No. 230,994. (Cl. 64—51.)

1. A tug-rope holder comprising in combination with a band-wheel and its supporting axle; a bearing-member mounted on the axle; supporting-members mounted on said bearing-member, their free ends being in spaced relation; angulated extensions on said supporting-members; a longitudinally extending strap connecting the angulated extensions; an operating lever for moving the support into and out of engagement with the rope; and means for positively retaining the support in both positions.



2. A tug-rope holder comprising in combination with a band-wheel and its supporting axle; a bearing-member mounted on the axle; supporting-members mounted, at one end, on said bearing-member, their free ends being in spaced relation; angulated extensions on said supporting-members and each provided with a rope-receiving notch; a longitudinally extending strap connecting the angulated extensions; a weighted member disposed on the bearing opposite the supporting members; an operating lever for moving the support into and out of engagement with the rope; means for positively retaining the support in both positions; and means carried on one of the members and adapted to engage the operating lever to maintain the support at the limit of its movement out of engagement with the rope.

1,274,985. TYPE-WRITING MACHINE. HERBERT A. CARHART, Syracuse, N. Y., assignor to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Filed Oct. 4, 1916. Serial No. 123,668. (Cl. 197—193.)



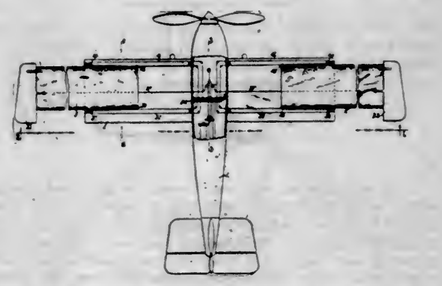
1. In a typewriting machine, the combination of a fixed part of the machine supporting a fixed carriage rail 2 which is provided with a notch, a carriage bar also provided with a notch, and a locking device mounted on the fixed part of the machine and normally out of engagement with both said notches and adapted to enter said notches when the carriage has been moved so that they aline.

2. In a typewriting machine, the combination with a carriage and a stationary frame including a side bar, of a carriage lock comprising a locking lever pivoted on said side bar and having a depending arm constituting a handle, and another arm adapted to enter a notch in said carriage so arranged as to lock the latter in both directions; and a spring detent having a projection adapted to engage one side of said locking lever to hold said lever in one position and to engage the other side of said lever to hold the latter in its other position.

[Claims 3 to 15 not printed in the Gazette.]

1,274,986. AIRPLANE. NORBERT CAROLIN, New York, N. Y. Filed Aug. 23, 1917. Serial No. 187,818. (Cl. 244—29.)

3. An airplane comprising a fuselage, propelling means, steering means, a plurality of lifting planes forming a central unit, a movable cell arranged at each end of said central unit extending from the central unit, each of said cells comprising a pair of lifting planes and truss members forming a complete rigid unit, balancing means in said cells, means for pulling said cells inwardly and outwardly longitudinally of the central section, controlling means for said balancing means, and a compensating mechanism compensating the varying lengths of said controlling means as said cells are moved.

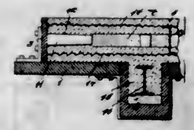


7. An airplane of the character described comprising a fuselage, propelling means, steering means, an upper and a lower lifting plane, the upper lifting plane being provided with a notch in the under surface and the lower lifting plane being provided with a notch in its upper surface, an auxiliary lifting cell having an upper and a lower plane, the planes of said cell fitting into said notches, and means for moving said auxiliary lifting cells longitudinally of the first mentioned lifting planes for increasing or decreasing the lifting surface of the airplane.

8. An airplane comprising a fuselage, propelling means, steering means, a plurality of lifting planes forming a central section, a separate slidable section or cell arranged between said lifting planes adjacent each end, an aileron on each of said slidable sections or cells, means for simultaneously moving said slidable cells longitudinally of the central section outwardly and inwardly, cables connected with said ailerons for operating the same, and means for compensating the length of cables as the cells move inwardly and outwardly.

[Claims 1, 2, and 4 to 6 not printed in the Gazette.]

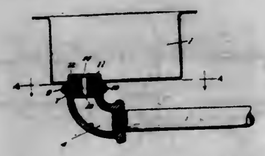
1,274,987. HOLLOW-SLAB BUILDING STRUCTURE. JAMES T. CARROLL, Billings, Mont. Filed Oct. 8, 1917. Serial No. 195,396. (Cl. 25—155.)



1. The method of making hollow slabs, which consists in placing a layer of plastic material in a mold, setting a form on the plastic material with the form spaced from the walls of the mold, producing a sand core in the form, removing the form, applying a passage-forming block between the sand core and a wall of the mold, completing the filling of the mold and covering the sand core with plastic material, removing the mold and also the passage-forming block, and washing out the sand core.

2. The herein-described method of making a slab with an air chamber, which consists in placing a layer of plastic material in a mold, setting up a form on the said layer, making a sand core in the said form, placing tie elements through the sand core with their lower ends embedded in the layer of plastic material and their upper ends projecting out of the core, removing the form, placing one or more passage-forming elements between the sand core and a wall of the mold, completing the filling of the mold with plastic material, removing the mold and the passage-forming elements, and washing out the sand core.

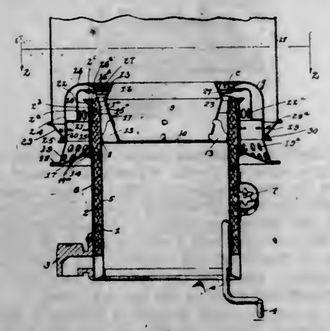
1,274,988. JOINT. LEE S. CHADWICK, Cleveland, Ohio, assignor to The Cleveland Metal Products Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 20, 1914. Serial No. 846,405. (Cl. 285—27.)



1. In combination with two vessels to be joined, one of which is of sheet metal and has an aperture and a V-shaped bead surrounding the same, and the other of which is provided with a threaded opening and a recess surrounding said opening, a compressible washer within said recess, (the recess being of a depth less than the thickness of the washer,) and a tubular screw that passes through the aperture and the washer and is threaded into the aforesaid opening, said screw having a head the underneath surface of which is provided with a ridge that is triangular in cross section to correspond to the shape of the aforesaid bead, the inner slope of each the ridge and the bead being shorter than the outer slope, the ridge being adapted to fit within the bead and embed the same within the compressible washer as the screw is threaded into the aforesaid opening.

2. In combination with two vessels to be joined, one of which is of sheet metal and has an aperture and a bead surrounding the aperture, and the other of which is provided with a threaded opening and a recess surrounding said opening, a compressible washer within said recess, the recess being of a depth less than the thickness of the washer, and a tubular screw passing through the aperture and the washer and threaded into the aforesaid opening, said screw having a head the underneath surface whereof is provided with a ridge, the ridge being adapted to fit within the bead and embed the same within the compressible washer as the screw is threaded into the aforesaid opening.

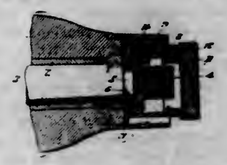
1,274,989. OIL-STOVE. LEE S. CHADWICK, East Cleveland, Ohio, assignor to The Cleveland Metal Products Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 8, 1914. Serial No. 855,860. (Cl. 158—94.)



1. In a burner of the character described, the combination of an inner and an outer wick tube, a wick therebetween, an air distributer within the upper portion of the inner wick tube, and an air distributer about the upper portion of the outer wick tube, the last mentioned distributer having a chamber surrounding and extending below the top of the outer wick tube and having a flange extending above the top of the wick, there being a passageway above said chamber arranged to conduct above the flange and into the space above the wick any fluids that may be in the chamber, one wall of said chamber being provided with openings communicating with said passageway and with openings beneath the first mentioned openings adapted to admit air into the chamber and to permit the escape of vapor from the chamber, the bottom wall of the chamber being formed to constitute a deflector for directing away from the wick tubes and toward the second mentioned openings vapor passing downward through the chamber.

[Claims 2 to 22 not printed in the Gazette.]

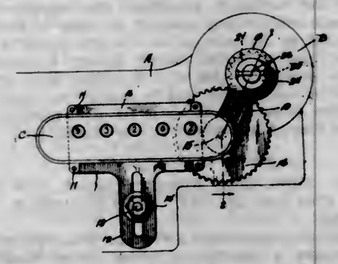
1,274,990. VEHICLE ATTACHMENT. JOSEPH CHABEST, San Francisco, Cal. Filed July 17, 1917. Serial No. 181,122. (Cl. 21—30.)



1. In combination with a vehicle spindle having a squared portion inward of its threaded extension, of a sleeve having a closed end provided with a squared opening to receive the squared portion of the spindle, the said closed end of the sleeve upon its inner face having inwardly disposed ratchet teeth, a flanged nut for the threaded end of the sleeve, a dog passing through an opening in the flange of the nut and designed to engage with the threads of the teeth of the sleeve, an angularly arranged spring pressed finger pivotally secured to one of the sides of the carriage nut and loosely connected with the dog, and a cap nut threadedly engaging with the open end of the sleeve.

2. In combination with a vehicle spindle having a squared portion inward of its threaded end, of a sleeve having a closed end provided with a square opening received on the square portion of the spindle, said closed end of the sleeve having its inner face provided with radially disposed ratchet teeth, a flange carriage nut screwed on the spindle in the sleeve and contacting with the inner face of the sleeve, a dog in the flange of the nut engaging with the teeth of the sleeve, an arm pivotally secured to the dog and pivotally connected to one of the sides of the nut and having a flanged outer end formed upon its inner face with a socket, a spring received in this socket and in a depression in the flange of the nut, and a cap nut for closing the open end of the sleeve.

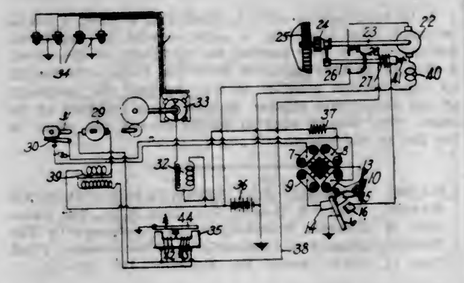
1,274,991. CIRCULAR-COUNTER-LOCKING DEVICE. THOMAS T. CLARK, Andover, Mass. Filed Aug. 14, 1917. Serial No. 186,144. (Cl. 74—7.)



3. In means for locking counters to machines, the combination of a machine having a rotary shaft, of a counter having a rotary shaft, of a link having openings in opposite ends adapted to receive said shafts therethrough, a gear-wheel mounted upon the countershaft beyond the adjacent end of the link, a pin positioned transversely through the hub of the gear-wheel and the counter-shaft to lock the gear-wheel to the shaft and retain the link from removal from the shaft, a gear-wheel mounted on the shaft of the machine and having a hub adapted to project into the opening at the adjacent end of the link, a pin positioned transversely through the hub of the pinion and the machine shaft for securing the pinion thereto, and means for retaining the hub of the pinion within the opening of the link with the end of the pin in the hub of the pinion lying in the plane of the link.

[Claims 1 and 2 not printed in the Gazette.]

1,274,992. STARTING SYSTEM FOR AUTOMOBILES. FRANK CONRAD, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed May 11, 1914. Serial No. 837,717. (Cl. 123—149.)



1. In an electrical system, the combination with an internal combustion engine, and ignition and starting mechanisms therefor, of means comprising a single movable switch member for progressively rendering said ignition mechanism operative, rendering said starting mechanism operative and for automatically rendering said starting mechanism inoperative and independent means for rendering said ignition mechanism inoperative.

2. In an electrical system, the combination with an internal combustion engine, and ignition mechanism and starting mechanism therefor, of controlling means having a plurality of positions, in one of which the ignition mechanism only is operative and in another of which both mechanisms are operative, and means for automatically returning the controlling means to one of said positions when placed in the other position.

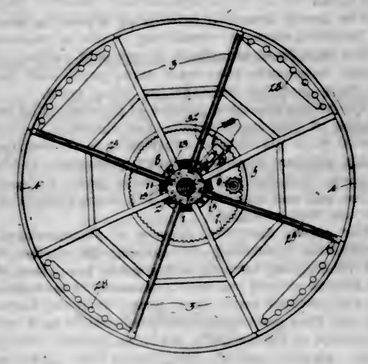
3. In an electrical system, the combination with an internal combustion engine, and starting and igniting mechanisms therefor, of a unitary device for controlling said mechanisms, said device comprising means for maintaining it in either of two positions to render the ignition mechanism operative or inoperative, and means for yieldingly opposing a third position in which the starting mechanism is operative.

11. In an electrical system, the combination with the ignition mechanism and starting mechanism of an internal-combustion engine, of controlling means therefor comprising a unitary switch having independently operable switch members, one for progressively rendering said ignition mechanism operative, rendering said starting mechanism operative and for rendering said starting mechanism inoperative, and another for interrupting the circuit of said ignition mechanism.

12. In an electrical system, the combination with the ignition mechanism and starting mechanism of an internal-combustion engine, of controlling means therefor comprising switch mechanism having two independently operable switch members, one of said members for completing or interrupting the circuit of said ignition mechanism and also for reversing the flow of current in said ignition circuit, and the other member for progressively rendering said ignition mechanism operative, rendering said starting mechanism operative and for automatically rendering said starting mechanism inoperative.

[Claims 4 to 10 not printed in the Gazette.]

1,274,993. ELECTRIC-LIGHTING SYSTEM FOR CAROUSELS. GEORGE H. CRAMER, North Tonawanda, N. Y., assignor to Herschell-Spillman Co., North Tonawanda, N. Y., a Corporation of New York. Filed Sept. 11, 1916. Serial No. 119,429. (Cl. 46—27.)



1. The combination of the rotary sweep-frame of a carousel, separate lamp-circuits mounted on said frame, conductors forming a part of each lamp circuit and extending lengthwise of the sweeps of said frame, said conductors being connected at their ends to switch-sockets arranged at opposite ends of the corresponding sweeps, contact rings rotatable with said sweep-frame, a switch plug for each lamp circuit having connections to said contact-rings respectively and adapted to engage one of said sweep-sockets, a second switch-plug for each lamp-circuit connected with the leads thereof and adapted to engage the other of said sweep-sockets, and relatively stationary contact members engaging said contact rings and adapted to be connected with a source of current.

[Claim 2 not printed in the Gazette.]

1,274,994. CALENDAR. ARTHUR BLOOMER CRANE, Belleville, N. J. Filed Jan. 9, 1917. Serial No. 141,376. (Cl. 40—119.)



1. A calendar comprising a base, an ornamental sheet connected with said base near the upper part, a pad connected to the lower part, said pad containing a monthly

calendar structure, and a card arranged on the base back of the pad formed with a calendar structure having large numbers for indicating the days of the month and a single series of small numbers indicating the days of the year from the first to the last consecutively.

[Claims 2 and 3 not printed in the Gazette.]

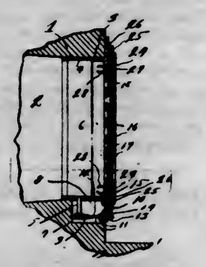
1,274,995. PROCESS OF PLATINUMIZING METAL SURFACES. BENJAMIN B. CROMBIE, Port Chester, N. Y. Filed Mar. 29, 1918. Serial No. 225,461. (Cl. 91—68.2.)

1. The herein described process of depositing platinum upon metallic surfaces, consisting of the mechanical application of a paste comprised of ammonia platino chlorid one part, potassium bi-tartrate eight parts and distilled water three parts, all substantially as set forth.

2. The herein described process of platimunizing metals, consisting of first mechanically and chemically cleansing the metal to be plated, and applying a paste comprised of ammonia platino chlorid one part, potassium bi-tartrate eight parts, and distilled water three parts, by means of a friction pad and continuing until a desired depth of deposition has been attained.

3. The herein described process of platinumizing metallic surfaces consisting of cleansing the surface to be plated, rubbing the surface with a paste comprised of ammonio platino chlorid one part, potassium bi-tartrate eight parts, and distilled water three parts, until the surface is coated and then subjecting the plated article as a cathode in a mixture of twelve parts platinum chlorid, four parts ammonio platino chlorid, and eighty-four parts water, using an anode of pure platinum foil and passing electric current from the anode to the cathode.

1,274,996. SHIELD OR COVER FOR HOT-AIR FLUES. JOSEPHINE K. DAVIS, Maywood, Ill. Filed Oct. 12, 1917. Serial No. 196,144. (Cl. 98—49.)

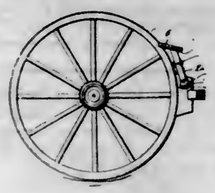


In combination, an outlet opening of a hot air flue, a frame having grate bars mounted in said opening, a cover plate engaging over the grate bars, the inner face of said shield having a pair of U-shaped spring fasteners provided with bulged spring arms passing between the grate bars, to hold the shield securely adjacent the grate bars, said shield having its outer face provided with a bead conforming to the rectangular shape of the shield, the inner face of the shield immediately adjoining the bead having a recess or groove, and a packing fitting in said groove between the shield and the frame, thereby insuring a tight joint.

1,274,997. SCRAPER ATTACHMENT FOR BRAKE-SHOES. ROBERT DIXON, Armells, Mont. Filed Sept. 5, 1917, Serial No. 189,814. Renewed June 21, 1918. Serial No. 241,288. (Cl. 21—23.)

1. In combination with a brake shoe and a wheel, a frame mounted upon the shoe, a roller carried by the frame and adapted to bear against the periphery of the wheel and a scraper member mounted upon the frame and adapted to bear against the periphery of the wheel.

2. In combination with a brake shoe and a wheel, a frame pivotally mounted upon the shoe, means for securing the frame at an adjusted position upon the shoe, a roller carried by the frame and adapted to bear against the periphery of the wheel and a scraper member carried by the frame and adapted to bear against the periphery of the wheel.



3. In combination with a wheel and a shoe, a frame mounted upon the shoe, a roller carried by the frame and adapted to bear against the periphery of the wheel, a scraper member mounted upon the frame and having an edge portion adapted to bear against the periphery of the wheel, said scraper member being provided at its edges with flanges adapted to lie beyond the edges of the tire of the wheel.

1,274,998. METHOD FOR RECOVERING PYRIDINE BASES. FRANK E. DODGE, New York, N. Y., and FREDRICK H. RHODES, Philadelphia, Pa., assignors to The Barrett Company, a Corporation of New Jersey. Filed Jan. 17, 1918. Serial No. 212,375. (Cl. 23—24.)

1. The method of separating the pyridine bases from the saturater baths of the direct or semidirect ammoniam sulfate processes, which consists in saturating the bath liquor, consisting of a saturated acid solution of ammonium sulfate contaminated with salts of pyridine, with ammonia to liberate the pyridine bases from their combination with the acid of the bath and recovering the freed pyridine bases from the neutralized bath.

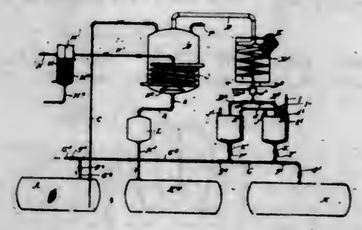
2. The method of separating the pyridine bases from the saturater bath of the direct or semi-direct ammonium sulfate processes, which consists in saturating the bath liquor, consisting of a saturated acid solution of ammonium sulfate contaminated with salts of pyridine, with ammonia to liberate the pyridine bases from their combination with the acid of the bath and separating the free pyrindine bases from the neutralized bath by distillation.

3. The method of separating the pyridine bases from the saturater baths of the direct or semi-direct ammonium sulfate processes, which consists in saturating the bath liquor, consisting of a saturated acid solution of ammonium sulfate contaminated with salts of pyridine, with ammonia to liberate the pyridine bases from their combination with the acid of the bath, separating the freed pyridine bases from the neutralized bath by distillation, and treating the condensed distillate with ammonia to effect a grivital separation of the pyridine bases from the condensed liquid.

1,274,999. METHOD FOR RECOVERING PYRIDINE BASES. FRANK E. DODGE, New York, N. Y., and FREDRICK H. RHODES, Philadelphia, Pa., assignors to The Barrett Company, a Corporation of New Jersey. Filed Jan. 17, 1918. Serial No. 212,376. (Cl. 23—24.)

The method of separating the pyridine bases from the saturated baths of the direct or semi-direct ammonium sulfate processes which consists in saturating the bath liquor consisting of a saturated acid solution of ammonium sulfate contaminated with salts of pyridine, with ammonia to liberate the pyridine bases from their combination with the acid of the bath and agitating the neutralized bath liquor with an oil to induce the absorption of the pyridine bases by the oil.

1,275,000. APPARATUS FOR THE RECOVERY OF PYRIDINE BASES. FRANK E. DODGE, New York, N. Y., and FREDRICK H. RHODES, Philadelphia, Pa., assignors to The Barrett Company, a Corporation of New Jersey. Filed Jan. 17, 1918. Serial No. 212,377. (Cl. 23—24.)



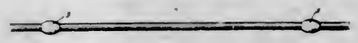
1. Apparatus for the recovery of pyridine bases from the saturated baths of the direct or semi-direct ammonium sulfate processes, consisting of a still to contain the bath liquor in combination with means for introducing ammonia into said still, a condenser connected to reecive the distillate from the still, a receiver for condensates, means for introducing ammonia into said receiver, a receptacle for ammonia liquor and a receptacle for the pyridine bases, and a conduit system whereby the receiver can be connected with either of said receptacles at will.

2. Apparatus for the recovery of pyridine bases from the saturated baths of the direct or semi-direct ammonium sulfate processes, consisting of a tank for the storage of the saturated bath liquor to be treated, in combination with a still to contain portions of such bath liquor, means for introducing ammonia into said still, a condenser connected to receive the distillates from the still, a receiver for the condensed liquid from the still, means for introducing ammonia into said receiver, a storage tank for pyridine bases and a conduit system leading from the receiver to the bath storage tank and to the pyridine base tank.

3. Apparatus for the recovery of pyridine bases from the saturated baths of the direct or semi-direct ammonium sulfate processes, consisting of a tank for a storage of the saturated bath liquor to be treated, in combination with a still to contain portions of such bath liquor, means for introducing ammonia into said still, a condenser connected to receive the distillates from the still, a receiver for the condensed liquid from the still, means for introducing ammonia into said receiver, a storage tank for pyridine bases, a conduit system leading from the receiver to the bath storage tank and to the pyridine base tank, a tank for the neutralized bath from the still and a conduit from said still to said bath.

4. Apparatus for the recovery of pyridine bases from the saturated baths of the direct or semi-direct ammonium sulfate processes, consisting of a tank for the storage of the saturated bath liquor to be treated, in combination with a still to contain portions of such bath liquor, means for introducing ammonia into said still, a condenser connected to receive the distillates from the still, a receiver for the condensed liquid from the still, means for introducing ammonia into said receiver, a storage tank for pyridine bases, a conduit system leading from the receiver to the bath storage tank and to the pyridine base tank, a tank for the neutralized bath from the still, a filter and conduits leading from the still to the filter and from the filter to the tank.

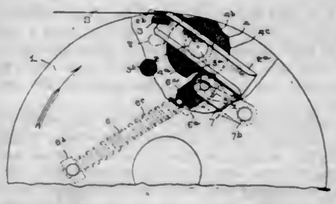
1,275,001. DETONATING BLASTING-FUSE. GEORGE HERBERT DORMER, Eveleth, Minn. Filed Nov. 27, 1917. Serial No. 204,190. (Cl. 102—8.)



1. As an article of manufacture, a burning blasting fuse having detonating sections therein at suitable intervals adapted to serve as a warning of the proximate explosion of the blast.

2. As an article of manufacture, a burning fuse for blasting purposes having detonating sections at intervals of about three feet.

1,275,002. GRIPPER-MOTION. MICHAEL A. DROITCOUR, Delphos, Ohio. Filed Dec. 24, 1917. Serial No. 208,639. (Cl. 101—411.)



1. A gripper mechanism comprising a gripper carrying shaft and devices for rocking same; a cam-member on said shaft having a parti-circular portion and recesses at separated points of said portion, a controlling member adapted to engage said recesses when the shaft is rocked, spring actuated means carrying said member, and means to limit the movement of said member toward the rock shaft whereby when the grippers are closed the action of the spring is effectively directed against the cam member substantially at right angles to a radial line emanating from the gripper shaft.

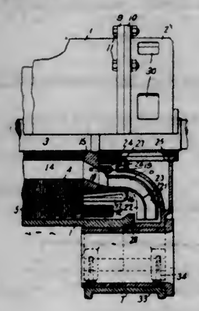
3. In combination, a gripper carrying shaft, a tumbler thereon, and tumbler engaging devices; with a cam on said shaft having a parti-circular portion and spaced recesses in its periphery, a cam roller adapted to engage said cam and to enter the recesses therein; a spring-projected rod carrying said cam roller, and a link pivotally connected with said cam roller and with a fixed point adjacent the cam to limit the inward movement of said cam roller; whereby when the grippers are closed the pressure of the spring is effectively directed against the cam at substantially right angles to a radial line projected from the axis of the gripper shaft.

[Claim 2 not printed in the Gazette.]

1,275,003. DYNAMO-ELECTRIC MACHINE. GEORGE M. EATON, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 9, 1915. Serial No. 44,451. (Cl. 172—286.)

1. In a dynamo-electric machine, the combination with a frame and an armature disposed within said frame and provided with longitudinal ducts, of a housing secured to and forming an annular compartment adjacent the end of said frame and having a row of ventilating openings in its wall, and fan blades secured to said armature adjacent said ducts and extending axially and radially from the armature into said compartment.

2. In a dynamo-electric machine, the combination with a motor frame, an armature disposed therein and provided with longitudinal ducts, and a double fan secured to the end of the armature and having its outer end located beyond the motor frame and adapted to create independent currents of air through said armature ducts and the space between the armature and frame, of a detachable end bearing-housing bracket secured to the end of the motor frame and having peripheral openings in the plane of the outer end of the fan.

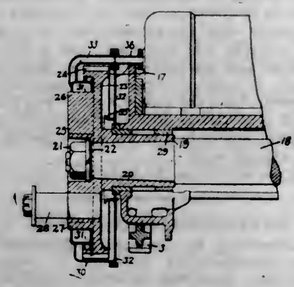


7. In a dynamo-electric machine, the combination with a frame, an armature disposed therein, and a housing secured to said frame, of an axle bracket having a part integral with said frame and a part integral with said housing, an axle cap, and means for securing the cap to said bracket.

10. In a dynamo-electric machine, the combination with a frame member, of an armature disposed therein, a housing member secured to the end of the frame and having a bearing for the end of the armature shaft, said housing forming a compartment adjacent the end of the armature, and said housing and frame having interfitting annular oil-collecting portions adjacent said shaft, and a fan in said compartment having one end secured to said armature and the other end disposed radially with respect to the armature axis.

[Claims 3 to 6, 8, 9, and 11 to 14 not printed in the Gazette.]

1,275,004. GEAR-WHEEL LUBRICATION. GEORGE M. EATON, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 5, 1916. Serial No. 70,445. (Cl. 74—56.)



1. The combination with a rotatable member and a stationary lubricant-containing case therefor, of means for effecting a fluid seal between the member and said case comprising a fluid channel adjacent the joint between said case and said member, said channel having an annular outlet for the escape of fluid to retain the lubricant in said case and another annular outlet for the escape of fluid to exclude foreign matter from said case.

2. The combination with a rotatable gear wheel and a stationary gear case for covering said gear wheel, of means for forming a fluid seal between said gear wheel and said gear case.

6. In an electric locomotive, the combination with a gear wheel, driving motors adapted to rotate said gear wheel, a ventilating system for said motors and a case for said gear wheel, of means for leading the ventilating air through said gear case to effect a fluid seal between said gear wheel and said gear case.

10. In a locomotive, the combination with a frame, a jack shaft, a bearing for supporting said jack shaft on said frame, a gear wheel mounted on said jack shaft to rotate therewith and having gear teeth and a web of lesser thickness than the width of the gear teeth, motors for rotating said gear wheel, and a ventilating system for said motors, of a case for said gear wheel, means for effecting a seal between said bearing and said case, means for said ventilating system to effect a fluid seal between said case and the front of said gear wheel and a cylindrical projection upon said case extending under the teeth of said gear wheel to receive any oil that may fall therefrom.

[Claims 3 to 5, 7 to 9, and 11 not printed in the Gazette.]

1,275,005. SWIMMING-GLOVE. JOHN W. ECKMAN, Decatur, Ill. Filed Feb. 1, 1918. Serial No. 214,950. (Cl. 9—21.)



1. A glove of the class described comprising a hollow body portion, a series of finger portions extending from the body portion, a flexible web between the fingers and the sides of the body portion, a continuous angular flange on the outer edge of the web, and angular rib members between the flange and the finger portions of the glove.

2. A swimmer's glove including a body and a finger portion, a web arranged between the body and the finger portions at the back of the glove, said web being extended outward from the tips of the fingers and being provided with a continuous angular flange, rib members connected with the flange and arranged centrally of the finger portions of the glove and said ribs gradually decreasing in width from their connection with the flanges to their opposite terminals.

1,275,006. BROACH. JAMES A. EDEN, Jr., Springfield, Mass., assignor, by mesne assignments, to John Oakley, Springfield, Mass. Filed May 16, 1917. Serial No. 168,948. (Cl. 90—33.)



1. A broach made in a plurality of side members with teeth between them, such side members being segmental in cross section.

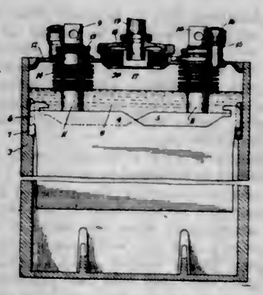
3. A broach comprising longitudinally straight side members and separately formed teeth arranged in a row between said side members, the broach thus formed having interior chip passages which have faces formed by the faces of the teeth.

5. A broach made in a plurality of side members which are segmental in cross-section and detachably fastened together and teeth held between said side members.

7. A broach having separately formed teeth and having chip passages, which passages have faces formed by the faces of the teeth, said broach having a longitudinal passage communicating with the passages between said teeth.

[Claims 2, 4, and 6 not printed in the Gazette.]

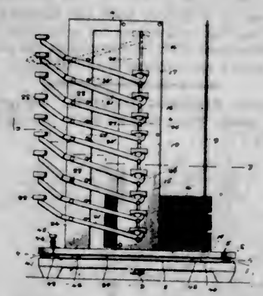
1,275,007. STORAGE-BATTERY INSTALLATION. GRANT E. EDGAR, New London, Conn., assignor to Electric Boat Company, a Corporation of New Jersey. Filed Dec. 22, 1916. Serial No. 138,351. (Cl. 204—29.)



1. A storage battery cell having a casing, a plurality of plates therein, an electrolyte within the casing in which the plates are immersed, inlet and outlet openings in the upper portion of the cell through which air is circulated to carry off heat and gases developed within the cell, and metallic members connected to the plates and extending upwardly therefrom above the surface of the electrolyte within the cell and having the portions thereof above the surface of the electrolyte formed so as to present extended surfaces to the air passing through the upper portion of the cell; substantially as described.

[Claims 2 and 3 not printed in the Gazette.]

1,275,008. PRESCRIPTION-FILING MACHINE. JOSEPH H. ELDER, Avery, Tex. Filed Aug. 7, 1917. Serial No. 184,929. (Cl. 129—3.)



1. In a filing device of the class described, a filing rod, filing clips movable vertically on said filing rod and means to operate the clips.

2. In a device of the class described, a filing rod, filing clips movable vertically on the filing rod, and means for raising and lowering the clips, each clip being detachable from the filing rod and also from its raising and lowering means.

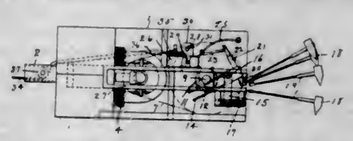
3. In a device of the class described, a filing rod, a guide post, clips arranged for vertical movement on the filing rod, heads arranged for vertical movement in the guide post and each connected to one of the clips, and key levers for raising and lowering the several heads together with the clips.

4. In a device of the class described, a filing clip having means to guide the papers thereon in tens.

6. A filing machine, a base on which the machine is mounted for turning movement, a spring to turn the machine and means to hold the machine in position on the base.

[Claims 5 and 7 not printed in the Gazette.]

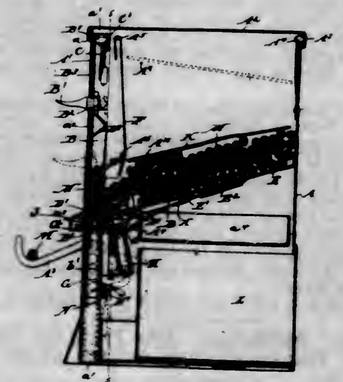
1,275,009. BOILER-CLEANING DEVICE. ERIK O. ERIKSSON, Baltimore, Md. Filed May 5, 1917. Serial No. 166,548. (Cl. 83—64.)



1. A boiler cleaning device comprising a casing, a motor secured within said casing, a shaft mounted in said casing and driven from said motor, a number of cutting heads, means connecting said pivoted cutting heads with said shaft, and means for moving said cutting heads sidewise.

2. A boiler cleaning device comprising a casing, a shaft mounted in said casing, means for driving said shaft, a number of cutting heads independently connected to said shaft and adapted to be reciprocated alternately thereby, a handle secured to said casing, means passing through said handle for moving said cutting heads sidewise, and means for independently adjusting the stroke of said cutting heads.

1,275,010. MATCH HOLDER AND DISPENSER. JOHN ERICSON, New York, N. Y. Filed Dec. 27, 1917. Serial No. 209,044. (Cl. 206—21.)



1. A casing, a receptacle therein for articles to be dispensed, a retainer dividing said receptacle into two communicating compartments, said retainer mounted to swing on horizontally disposed supports and arranged to move vertically on such supports, a movable slide adapted to receive such articles from and arranged to operate partly within one of said compartments, and having a channel through which such articles are delivered and stops in said receptacle for limiting the swing of said retainer toward said slide.

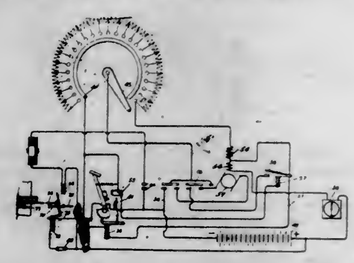
9. A casing, a receptacle therein for articles to be dispensed, a slide movable in said casing and adapted to receive such articles one upon another in series, an ejector mounted on the lower portion of said slide and arranged to eject one of such series, and a yielding member arranged to coact with said ejector, the latter and said member actuated by the movements of said slide.

14. A casing, a receptacle therein for articles to be dispensed, a slide movable in said casing and arranged to

receive such articles from said receptacle, an ejector on said slide adapted to eject such articles from said slide, and means for adjusting the position of said ejector relatively to said slide.

[Claims 2 to 8, 10 to 13, and 15 to 18 not printed in the Gazette.]

1,275,011. AUTOMOBILE. ROLAND S. FEND, Chicago, Ill., assignor to Woods Motor Vehicle Company, Chicago, Ill., a Corporation of Illinois. Filed June 26, 1915. Serial No. 36,595. (Cl. 171—315.)



1. In a motor vehicle, the combination with a gasolene engine of a gas throttle therefor, mechanical means for operating said throttle, and electro-magnetic means for taking the operation of said throttle out of control of said mechanical means and for closing said throttle.

3. In a mixed drive for motor vehicles the combination with a brake and a foot pedal for operating it, of an electro-mechanically controlled lock for said brake, a dynamo for the vehicle, an operator controlled switch for regulating the speed of said dynamo, said switch serving also to control said electro-magnetic lock for said brake, a gasolene engine, a throttle for the engine, and a pair of switches controlled by said brake operating pedal, one of said switches controlling the throttle for said engine and the other of said switches controlling the dynamo circuit.

5. In a mixed drive for motor vehicles the combination with an internal combustion engine and an electric dynamo of a propeller shaft with which said engine and dynamo may be directly connected for driving the vehicle, a throttle for the engine, an operating circuit for said dynamo, a foot brake for the vehicle, a hand operated speed controlling lever for the dynamo, means under the control of said hand operated lever for releasing the foot brake, and means responsive to the release of the foot brake for opening the engine throttle and completing the dynamo operating circuit.

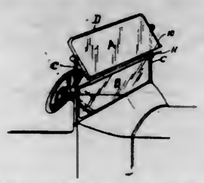
[Claims 2, 4, and 6 not printed in the Gazette.]

1,275,012. PAPER-CLIP. JOHN FRITZ, New Bedford, Mass. Filed Dec. 20, 1916. Serial No. 137,992. (Cl. 24—153.)



As a new article of manufacture, a paper clip formed of a strip of sheet metal bent upon itself to form two members, one member being provided with a long and two short prongs struck up therefrom, the long prong being at the center and the short prongs adjacent the sides of the member, the other member, opposite the long prong, being bent downwardly to form a recess having an inclined bottom, and provided with side openings to receive the short prongs and with a tongue struck up therefrom between the recess and the junction of the two members, the said tongue being bent downwardly and extending partially over the recess and forming therewith a pocket to receive the said long prong.

1,275,013. LOOK-OUT ATTACHMENT. HARRY W. FROST, Detroit, Mich., assignor to Clear Vision Windshield Company, Detroit, Mich., a Corporation of Michigan. Filed Jan. 6, 1916. Serial No. 70,562. (Cl. 21—148.)



1. The combination with a two-part wind shield, the upper part of which is hinged to be rotated on a horizontal axis, of a look-out unit adapted to be attached to the lower part of the shield and projecting forwardly thereof to coöperate with hinged part when the latter is swung forwardly to provide a look-out device comprising two rearwardly diverging planes spaced apart at their forward edges to provide a sight gap.

4. The combination with a two-part wind shield, the upper part of which is hinged to be rotated on a horizontal axis, of a look-out until adapted to be attached to the lower part of the shield and projecting forwardly thereof to cooperate with hinged part when the latter is swung forwardly to provide a look-out device comprising two rearwardly diverging planes spaced apart at their forward edges to provide a sight gap, said unit permitting the upper section to be freely swung into any operative position.

5. The combination with a standard two-part wind shield comprising a lower section and a pivoted upper section, of a plate-like member adapted to be mounted on the upper horizontal edge of the lower section and projecting forwardly thereof to coöperate with the upper section when the latter is swung forwardly to provide a look-out device consisting of two rearwardly diverging planes spaced apart at their forward edges, and a drip member adapted to be mounted on the lower horizontal edge of the upper section, both of said members permitting movement of the upper section to any operative position.

6. The combination with a standard automobile wind shield having two relatively movable sections, of a look-out unit adapted to be attached along the horizontal edge of either the upper or lower section and having a shelf-like portion projecting forwardly and extending in such manner as not to interfere with the opening or closing of the other section, and means for attaching said unit to the vertical marginal frames of either of the said sections.

[Claims 2 and 3 not printed in the Gazette.]

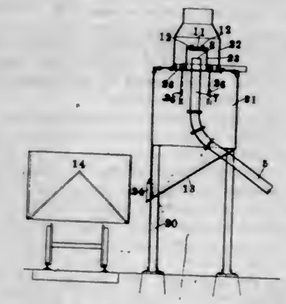
1,275,014. ICE FISHING DEVICE. HENRY GAMPERT, Fitchburg, Mass. Filed May 10, 1918. Serial No. 233,704. (Cl. 43—31.)



1. A fishing device comprising a chambered post adapted for upright positioning, a flag reciprocally carried by the said post normally positioned in the chamber of the latter and adapted for automatic elevating to a visible position upon the biting of the fish, and means to operatively connect said flag to a fish line.

[Claims 2 to 7 not printed in the Gazette.]

1,275,015. DISCHARGE APPARATUS FOR ASH-CONVEYERS. ALEXANDER GIRTANNER and ROBERT H. MILLER, St. Louis, Mo., assignors, by mesne assignments, to American Steam Conveyor Corporation, Chicago, Ill., a Corporation of New York. Filed June 25, 1915. Serial No. 36,195. (Cl. 193—10.)

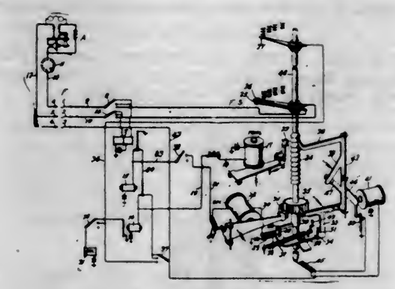


3. The combination with an ash receiving hopper of a mixing chamber communicating therewith, a flue surrounding said mixing chamber, an ash conveyer conduit discharging into said mixing chamber, and means arranged between said mixing chamber and said flue for producing a water curtain.

5. In a structure of the class described the combination with an ash receiving hopper of a mixing chamber communicating therewith and adapted to discharge thereinto, and an ash conveying conduit arranged to discharge vertically and centrally of said mixing chamber.

[Claims 1, 2, and 4 not printed in the Gazette.]

1,275,016. TELEPHONE-EXCHANGE SYSTEM. CHARLES L. GOODRUM, New York, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 29, 1917. Serial No. 158,197. (Cl. 179—18.)



1. In a telephone system, an automatic switch, a group of lines terminating in contacts of said switch means for driving said automatic switch over the contacts of said group, means for causing said switch to stop upon a set of electrically distinguished contacts, a ratchet, a pawl normally in engagement with said ratchet for holding said switch in its actuated position, and mechanical means operated when said automatic switch reaches a predetermined position for withdrawing said pawl from said ratchet to allow said switch to restore to its normal position whereupon it is again driven over the contacts of said group.

2. In a telephone system, an automatic switch, a group of lines terminating in a row of contacts of said switch, means for driving said automatic switch over the entire row of said terminals, a ratchet, a pawl normally in engagement with said ratchet for preventing the restoration of said switch, means for causing said switch to stop upon a set of electrically distinguished contacts, and mechanical means operated when said automatic switch reaches the end of said row to withdraw said pawl from said ratchet to allow said switch to return to the beginning of said row, whereupon said switch is again driven over said row.

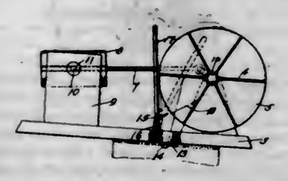
3. In a telephone system, in combination with telephone lines, an automatic switch, means for associating said lines with said automatic switch, trunk groups terminating in contacts of said switch, means for operating said switch to place it in operative relation to the contacts of a trunk group, automatic means for driving said switch over the contacts of said trunk group, means for stopping said switch on the contacts of the first idle trunk of said group, and mechanical means operated when the switch moves off the contacts of the last trunk in said group for restoring said switch in operative relation to the contacts of the first trunk of said trunk group whereupon it is again driven over the contacts of said group in search of an idle trunk.

4. In a telephone system, in combination with telephone lines, an automatic switch, a brush shaft therefor, means for associating calling lines with said switch, primary and secondary magnets for said switch, primary and secondary holding pawls for said brush shaft, a release magnet arranged to withdraw both of said pawls, trunk groups terminating in contacts of said switch, means for operating said primary magnet to set said switch in operative relation to the contacts of a trunk group, automatic means for thereupon operating said secondary magnet for driving the switch over the contacts of said group, means for stopping said switch on the contacts of the first idle trunk of said group, and mechanical means operated by said brush shaft when it reaches a predetermined position for withdrawing said secondary pawl to restore said automatic switch in operative relation to the contacts of the first trunk of said trunk group, whereupon it is again driven over said group in search of an idle trunk.

5. In a telephone exchange system, in combination with telephone lines, a selector, means for associating calling lines with said selector, trunk groups terminating in said selector, primary and secondary driving magnets for said selector, means for operating said primary magnet to set said selector in operative relation to a trunk group, automatic means for thereupon operating said secondary magnet to drive the selector over said group, means for stopping the selector on the first idle trunk, and mechanical means operated when the selector fails to find an idle trunk in said group for restoring said selector in operative relation to said trunk group, whereupon it is again driven over said group.

[Claim 6 not printed in the Gazette.]

1,275,017. TOY ENGINE. OLIVER GROVE, Indianapolis, Ind. Filed Apr. 18, 1918. Serial No. 229,327. (Cl. 46—37).

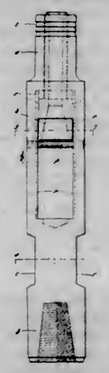


4. A toy engine comprising a base, a paddle wheel mounted to revolve on the base said base having an aperture through which a fluid jet may be projected in a sub-

stantially vertical direction against the paddle wheel, and a baffle connected to the base to swing over the opening to deflect the jet from its vertical direction to a substantially horizontal direction whereby the direction of rotation of the wheel is changed.

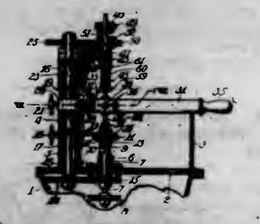
[Claims 1 to 3 not printed in the Gazette.]

1,275,018. SWIVEL FOR USE IN WELL-DRILLING. JOHN GROWDER, Avoca, Ireland. Filed Aug. 17, 1917. Serial No. 186,771. (Cl. 255—26.)



An improved swivel for use in well-drilling to connect the drilling tool with the wire rope by which the tool is raised and lowered, comprising a body having an elongated tubular neck at its upper end, a chamber below its neck, and closed at its lower end, said chamber being of greater diameter than the bore of the neck and having a right-angled shoulder at the junction therewith, and a slot in the side of the chamber, said slot extending from near the upper end of the chamber to the bottom thereof, a tubular spindle having an enlarged lower end and a reduced upper end which is of a length greater than that of the neck of the body and forming a right-angled shoulder at the junction therewith, a washer between the shoulders of the body and spindle, the washer and the enlarged portion of the spindle having their opposing sides flattened, and a cross pin for retaining the spindle in position in the body.

1,275,019. LENS GRINDING AND POLISHING MACHINE. JAMES HALLECK HAMMON, Vincennes, Ind. Filed June 27, 1917. Serial No. 177,238. (Cl. 51—3.)



1. A surfacing machine including a driving shaft and a spindle rotatable on parallel axes, the spindle being journaled and movable longitudinally and having a controllable swingable section, means for controlling the swingable section of the spindle, and a spring directly acting axially on the swingable section of the spindle and to follow the swinging movement of the section.

3. A surfacing machine including an upright driving shaft and a spindle rotatable in unison, the spindle comprising a journaled section having a controllable swinging section, the spindle being movable longitudinally, the machine having an upright pivot member and also a horizontal guide member, a controlling lever collar connected with the pivot member, a controlling lever having a swivel connection with the collar, and a guide collar adjustably carried by the lever and guiding the swinging section of the spindle.

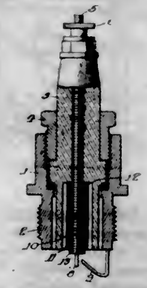
7. In a surfacing machine, the combination with a driving shaft, and a lap mounted on said shaft to be rotated thereby, of a supported frame member, a lens holder to be rotated upon the lap, a spindle comprising an upper section and a lower section and a universal coupling connecting the two sections together, the upper section being rotatably mounted in the frame member, the lower section being adapted to rotate and shift the lens holder on the lap, a supported spring acting directly on the lower section of the spindle, gearing connected with the driving shaft and the spindle, and a pivoted and swiveled lever for controlling the lower section of the spindle to shift or to hold the lens holder to position.

8. In a surfacing machine, the combination of a hollow support, a driving shaft rotatably supported, a toothed driving wheel secured to said shaft, a tool mounted on said shaft, a frame member having a cylindrical portion extending through and rotatively supported in the hollow support, the frame member having an arm thereon that is provided with a journal box, a spindle rotatably mounted in said box to move longitudinally, a toothed driven wheel rotatable on the spindle and having a socket therein, a collar secured to the spindle and having a pin thereon extending into said socket, a main shaft rotatably mounted in the frame member, a toothed wheel secured to the main shaft in mesh with the driving wheel, and a second toothed wheel secured to the main shaft in mesh with the driven wheel.

10. In a surfacing machine, the combination of a pan comprising a bottom and a side wall, the wall having a hollow boss on one portion thereof, a driving shaft rotatable in the bottom of the pan, a pulley and a toothed driving wheel secured to the shaft below said bottom, a frame member having a cylindrical portion rotatively mounted in the hollow boss, the frame member having a lateral arm on the upper portion thereof that is provided with a journal box, a main shaft rotatably mounted in the frame member and extending through the hollow boss, a spindle rotatably mounted in said journal box, a toothed driven wheel on the top of said box to drive the spindle, a toothed wheel secured to the main shaft and meshing with the driving wheels, a second toothed wheel secured to the main shaft and meshing with the driven wheel, and a set-screw mounted in said boss to engage and hold the cylindrical portion of said frame member.

[Claims 2, 4 to 6, 9, and 11 not printed in the Gazette.]

1,275,020. NON-CARBONIZING SPARK-PLUG. CHARLES KNOX HARDING, Chicago, Ill. Filed July 19, 1916. Serial No. 110,027. (Cl. 123—169.)



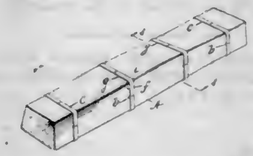
1. A non carbonizing spark plug having electric sparking points, an insulator and catalytic means for producing flameless combustion of part of the explosive mixture in the vicinity of the insulator.

8. A spark plug comprising conducting electrodes, an insulator therebetween having interior surfaces forming part of a chamber for the reception of a portion of the combustible mixture, and catalytic means for producing flameless combustion of part of the mixture in said chamber.

9. In a spark plug, an insulator and catalytic means for maintaining the insulator at the oxidizing temperature of carbon, the catalytic means operating over a period of time appreciably longer than the period of inflammation of the combustible mixture.

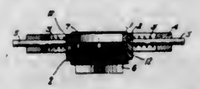
[Claims 2 to 7 not printed in the Gazette.]

1,275,021. TIE. GEORGE H. HARDMAN, Fall River, Mass., assignor to Hardman Railroad Tie Corporation, a Corporation of Delaware. Filed Dec. 12, 1917. Serial No. 206,812. (Cl. 238—1.)



In a reinforcing clamping member for railroad ties, the combination of metallic rods, interengaging spiral loops upon intermediate portions of the rods constituting the body of the member, and non spiral bendable end portions constituting clamping arms.

1,275,022. METHOD OF AND APPARATUS FOR MANUFACTURING TELEPHONE-DIAPHRAGMS. HENRY C. HARRISON, New York, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 9, 1916. Serial No. 130,498. (Cl. 29—148.)



3. A method of producing stretched diaphragms comprising a tension ring and a sheet of expansible material, which method consists in radially compressing the ring by means of a uniform external force, welding the sheet to the tension ring, and removing the external force.

9. In the manufacture of stretched diaphragms comprising a reinforcing frame and a piece of sheet material, a chuck for holding said reinforcing frame under compression, said chuck comprising clamping members and a supporting frame therefor, coiled springs compressed between said supporting frame and the clamping members, whereby the clamping members exert a pressure directed inwardly, and means for controlling the amount of said pressure.

[Claims 1, 2, and 4 to 8 not printed in the Gazette.]

1,275,023. SHAPE-RETAINING DEVICE FOR FELT HATS. GEORGE H. HAUSINGER, Galveston, Tex. Filed Jan. 12, 1918. Serial No. 211,606. (Cl. 2—108.)



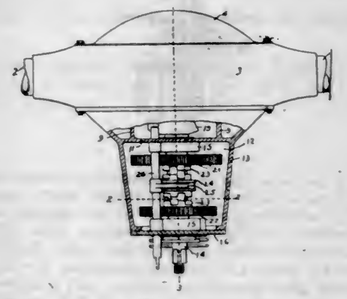
1. In a shape retaining device for a soft hat, a strip of material provided with longitudinal lines spaced to correspond with the measurements of different crowns,

one edge of the strip being provided with cutaway portions and with intervening projecting members, certain of the cutaway portions being of greater extent than others and adapted to be positioned opposite corresponding depressed portions of the crown.

2. In a shape retaining device for a soft hat having a sweat band therein, a strip of material having cutaway portions along one edge and adapted to be placed inside of the crown and to engage the attached edge of the sweat band, those portions of the strip between the cutaway portions supporting adjacent portions of the crown.

[Claim 3 not printed in the Gazette.]

1,275,024. CHANGE-SPEED-GEAR SET FOR MOTOR-VEHICLES. LOUIS P. HELM, Pontiac, Mich. Filed May 25, 1917. Serial No. 170,801. (Cl. 74—59.)



In a device of the character described, the combination with two axle sections, of a driving shaft transverse with said sections, a countershaft beneath said driving shaft and substantially in the plane of the axle, variable speed gearing including gears fast upon one of said shafts and intermeshing gears loose upon the other, differential gearing for driving the axle from the countershaft, a housing having a partition forming compartments respectively receiving said differential gearing and variable speed gearing, a clutch member slidable between said loose gears for alternatively establishing the same in fixed relation to the corresponding shaft, and actuating means for said member projecting exteriorly of said housing.

1,275,025. BRUSH MECHANISM FOR CAN-WASHING MACHINES. ABRAM B. HERR, Lancaster, Pa., assignor of one-third to Elam M. Royer and one-third to John H. Moseman, Lancaster, Pa. Filed Aug. 4, 1915. Serial No. 43,540. (Cl. 141—7.)

1. In a device of the class described, a tubular shaft for conveying cleaning fluid, a slidable shaft mounted thereon, a rotatable shaft carried by the slidable shaft, a set of collapsible brushes driven by the rotatable shaft and positioned to engage the neck portion of a can, a spring retaining said brushes normally in collapsed position, a collar slidable on the rotatable shaft, a collar slidable on the shaft first named, an additional collar slidable on the rotatable shaft and movable therewith, a second series of brushes and link connections between said brushes and the first and second named collars, and link connections between the link connections first named and the additional collar for collapsing the brushes.

2. In a device of the class described, a tubular shaft for conveying cleaning fluid, a slidable shaft mounted thereon, a rotatable shaft carried by the slidable shaft, a set of collapsible brushes driven by the rotatable shaft and positioned to engage the neck portion of a can, means for retaining said brushes in collapsed position and permitting the brushes to be thrown outwardly by centrifugal action, and a set of brushes above the brushes first named for engaging the inner walls of the can, and means for mounting the brushes last named and

giving an initial upward movement thereto by the movement of the slidable shaft, said mounting means permitting of the expansion of the brushes last named by centrifugal action.

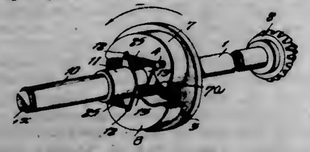


3. In a device of the class described, a tubular shaft for conveying cleaning fluid, a slidable shaft mounted thereon, a rotatable shaft carried by the slidable shaft, a collar slidable on the rotatable shaft, a collar slidable on the shaft first named, an additional collar slidable on the rotatable shaft and movable therewith, a series of brushes and link connections between said brushes and the first and second named collars, and link connections between the link connections first named and additional collar, for collapsing the brushes.

4. In a device of the class described, a tubular shaft for conveying cleaning fluid, a plurality of concentric shafts carried by the shaft first named, one of said concentric shafts being slidable and the other of said shafts being rotatable, driving means for the rotatable shaft, a set of brushes and mounting means therefor, means for driving the brushes by the rotatable shaft, and means for throwing them upwardly by the longitudinal movement of the slidable shaft, said brushes being thrown outwardly by centrifugal action and moved upward by the mechanical action of the mounting means incident to the centrifugal action.

5. In a device of the class described, a plurality of concentric shafts one of which conveys a cleaning fluid, one of which is slidable longitudinally and one of which is rotatable, means for driving the rotatable shaft, a set of brushes including a plurality of oppositely located brush elements, and an additional brush element mounted above those first named, said rotatable shaft imparting rotary movement to all of the brushes and the mounting means permitting them to be thrown outwardly by centrifugal action, and the slidable means effecting the vertical movement of the brushes, said additional brush being mounted to assume a position at an angle with the brushes first named.

1,275,026. CENTRIFUGAL GOVERNOR. JOSEPH JOHN HERZOG and WALTER MARTIN MEDLOCK, Mobile, Ala. Filed Apr. 2, 1917. Serial No. 159,319. (Cl. 264—16.)

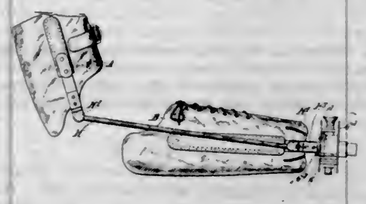


1. In a governor, a shaft, a plate rigidly secured to said shaft, said shaft extending through the center of the plate, a lever pivotally mounted on said shaft, a pair of centrifugal members pivotally mounted on said plate, each of said centrifugal members having a cam surface arranged to engage one side of said lever the point of engagement shifting toward the pivotal point of the lever as the speed increases and spring connections between said lever and said plate for returning said lever to its normal position of rest.

5. In a governor, a shaft, a plate rigidly secured to said shaft, said shaft extending through the center of the plate, a lever pivotally mounted on said shaft, a pair of centrifugal members pivotally mounted on said plate, each of said centrifugal members having a cam surface arranged to engage a side of said lever near the end thereof, the point of engagement shifting toward the pivotal point of the lever as the speed increases, and means for returning the lever to its normal position of rest.

[Claims 2 to 4 not printed in the Gazette.]

1,275,027. ARTIFICIAL ARM. EDWARD WALTER HOBBS, Balham, England. Filed Mar. 6, 1918. Serial No. 220,790. (Cl. 3—12.)



1. In an artificial limb the combination with a plate secured on or at the outer end of a wrist-bucket or the like of stiff or slightly flexible side-irons that extend along opposite sides of the limb and, for the purpose described, are universally jointed (for example by ball-joints) to the plate and to a mounting on the patient's upper arm.

2. The combination with the subject-matter of preceding claiming-clause No. 1, of a second plate for carrying an artificial hand or equivalent device, said plate being pivoted to the bucket-plate on a cross-axis transverse to the axis of the forearm and also provided with locking means to secure it in any desired angular position about said axis (for example a rigid arc concentric with the cross-axis and notched, and a manually-controlled latching lever mounted on the bucket-plate for the purpose of engaging the notches in said arc.)

1,275,028. RIFLE-BARREL. BEN HOLTER, Whitefish, Mont. Filed May 8, 1918. Serial No. 233,293. (Cl. 42—78.)

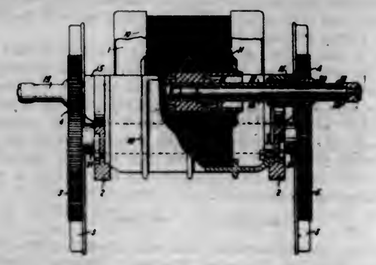


1. A rifle barrel having the wall of its bore composed of alternating lands of which one is in the form of a chord of a circle and the other in the form of an arc of the same circle.

2. A rifle barrel having the wall of its bore composed of a plurality of lands in the form of chords of a circle and of uniform width, alternating with lands in the form of an arc of the same circle and of uniform width.

[Claims 3 and 4 not printed in the Gazette.]

1,275,029. RESILIENT DRIVING CONNECTION. GEORGE H. F. HOLY, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 29, 1915. Serial No. 69,199. (Cl. 74—7.)



1. The combination with a driving and a driven member, of means comprising a hollow shaft and a shaft disposed within said hollow shaft for resiliently connecting said driving and driven members together.

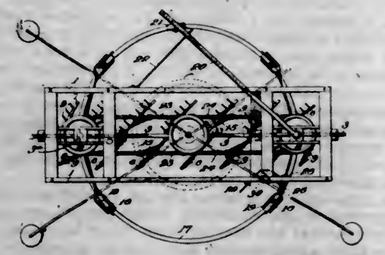
6. A driving connection comprising a rotatably mounted hollow shaft, a shaft disposed within the hollow shaft and having one end secured thereto, a sleeve member one end of which is secured to the other end of the inner shaft and the other end of which is rotatably associated with the hollow shaft, and a pinion secured to said sleeve member.

11. The combination with an electric motor, of a rotatably-mounted hollow shaft, a shaft disposed within said hollow shaft and secured thereto at a point intermediate the ends thereof, two similarly-mounted sleeve members, and a pinion mounted upon each of the sleeve members; one end of one of the sleeve members being rigidly mounted upon one end of the inner shaft and the other end of the sleeve member being rotatably mounted upon one end of the hollow shaft.

12. In an electric locomotive, the combination with a driving member and driven members, of means comprising a resilient shaft for connecting the driving member to the driven members, the opposite ends of said shaft being mechanically connected to said driven members.

[Claims 2 to 5, 7 to 10, 13, and 14 not printed in the Gazette.]

1,275,030. AIR-MOTOR. OLAF L. HOWE, Missoula, Mont. Filed May 17, 1915. Serial No. 28,779. (Cl. 170—6.)



2. A motor comprising a circularly arranged track, a frame designed to travel on said track, a series of vertically disposed shafts, vanes pivotally mounted on said shafts and having a portion extending on each side of said shaft, each of said vanes having movable shutters, upper and lower cables to which said vanes are connected, and a rudder connected to said frame and also traveling on said track.

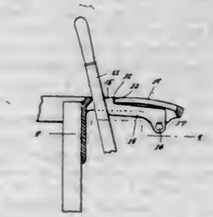
6. An air motor comprising a frame, upper and lower cables mounted thereon, vertically disposed shafts secured to said cables and in the same vertical plane therewith, a series of vanes pivotally mounted on said shafts and having movable shutters designed to be automatically opened and closed.

7. The combination with a frame having upper and lower sheave wheels and endless cables engaging said sheave wheels, of a series of vanes, each having a series of pivoted shutters, one of said shutters having a projecting member, means connecting the vanes to said cables, and means secured to one of said cables with which said projecting member engages.

8. The combination with a frame, of upper and lower endless belts, a series of vanes connected to said belts, and having each a series of pivoted shutters, an arm mounted on the frame and designed to be thrown in the path of the vanes, and means for holding the vanes in the position into which they are moved by engagement with such arm.

[Claims 1 and 3 to 5 not printed in the Gazette.]

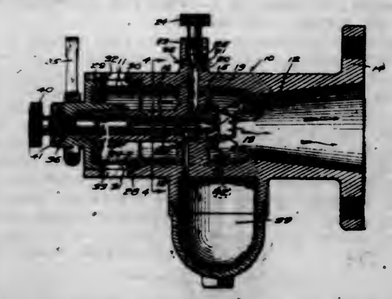
1,275,031. LEVER-LOCK. ALBERT C. HUDGENS, Honea Path, S. C. Filed Mar. 30, 1918. Serial No. 225,752. (Cl. 74—39.)



4. In combination with a plate or lug having an elongated slot providing a guide for a lever, and a notch in one of the walls of the slot to receive the lever, when the said lever is to be held in open position, of a wear plate in the said notch, contacting with one of the edges of the lever, of a wear lug of hardened material in the notch designed to be contacted with one of the edges of the lever, an angle body formed on the wear plate having an elongated opening therein, a bolt member passing through the opening and through an opening in the holding plate or lug piece, and a binding element on the bolt.

[Claims 1 to 3 not printed in the Gazette.]

1,275,032. CARBURETER. EDWARD A. HUENE, Los Angeles, Cal. Filed Dec. 14, 1916. Serial No. 136,994. (Cl. 261—48.)



1. A carbureter for internal combustion engines, comprising a body portion having an air inlet chamber in one end and having a mixing chamber in longitudinal alinement and in communication with the air inlet chamber, a fuel nozzle mounted within the mixing chamber and having its outlet orifice at the axial center of

the mixing chamber; there being an annular carbureting chamber in the body surrounding the outlet orifice; an air tube mounted within the fuel nozzle and longitudinally adjustable; there being a fuel passage around the inner end of the tube within the nozzle so that the adjustment of the tube regulates the flow of fuel; an air valve controlling the inlet chamber, manual means for operating the valve, and means connecting said valve to the tube so that on the opening movement of the valve the tube is moved away from the outlet orifice to open the fuel passage.

2. A carbureter for internal combustion engines, comprising an air inlet chamber, a mixing chamber communicating therewith, a fuel supply comprising a fuel nozzle having its orifice at the entrance of said mixing chamber, a hollow metering pin controlling the orifice of said nozzle and discharging air to the center of the nozzle, and an air inlet valve controlling the admission of air to said air inlet chamber and operatively connected to said pin, so that said pin is longitudinally moved away from the orifice of said fuel nozzle during the opening of said air inlet valve.

3. A carbureter for internal combustion engines, comprising an air inlet chamber, a mixing chamber, communicating therewith, a fuel supply comprising a nozzle opening into said mixing chamber, a hollow fuel metering pin controlling the orifice of said fuel nozzle, means for longitudinally adjusting said pin, said air inlet chamber being provided with an air port, a rotary valve controlling said air port and operatively connected to said pin, means whereby said pin is moved away from the fuel nozzle as said air port is uncovered, said air port being so designed that it is uncovered in a diminishing ratio on the uncovering movement of said valve, while the longitudinal movement of said pin is constant.

7. A carbureter for internal combustion engines, comprising an air inlet chamber, a mixing chamber in communication and in axial alinement therewith, a fuel supply nozzle extending longitudinally of the air inlet chamber and concentric therewith, a carbureting chamber forming a restricted area around the sides and the end of the nozzle and communicating with the mixing chamber, an air inlet passage-way in communication with said carbureting chamber, a hollow metering pin extending longitudinally of the fuel nozzle and adapted to simultaneously regulate the flow of fuel through the nozzle and a flow of auxiliary air to the nozzle through the pin, and a variable air inlet by which air may pass through the inlet chamber around the wall of the carbureting chamber and there unite with the carbureted mixture passing through the mixing chamber.

[Claims 4 to 6 not printed in the Gazette.]

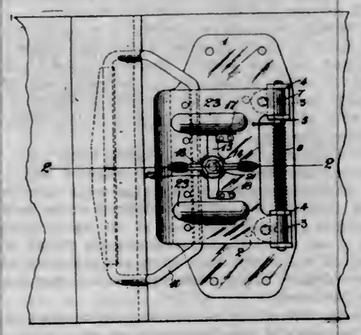
1,275,033. PNEUMATIC-TIRE VALVE. WILLIAM C. HUNTOON, Providence, R. I. Filed Feb. 13, 1918. Serial No. 217,011. (Cl. 152—12.)



1. In a tire valve, a sleeve formed for attachment to the valve stem of an ordinary tire valve and having a valve seat on its interior, a member secured to the sleeve and having a bore and an inwardly extending flange extending partly across the interior of the sleeve, a stem having a valve engageable with said valve seat and with said flange so as to be confined in its movements thereby, a second valve on the last named stem, a coil spring surrounding the last named stem and engaged with said second valve and with said flange, and a nut on said member having a seat for said second valve.

2. In a tire valve, a sleeve formed for attachment to the valve stem of an ordinary tire valve and having a valve seat on its interior, a member secured to the sleeve and having a bore, a spring tensioned stem having a valve engageable with said seat, means to restrict outward movement of said last named stem, a second valve on the last named stem, and a nut on said member operating independent of said restricting means and having a seat for said second valve.

1,275,034. SAFETY-BELT FOR AVIATORS AND OTHERS. MAURICE FRANCIS HUXLEY, Hendon, London, England. Filed Dec. 8, 1917. Serial No. 206,805. (Cl. 24—253.)



1. A fastener for a safety belt for aviators and others, comprising two interengaging members adapted to disengage under the stress of the belt, a rotary locking device for holding said members in engagement and adapted, when rotated into a predetermined position, to release said members, and means for arresting said rotary locking device in said predetermined position when rotated in either a clockwise or anticlockwise direction, substantially as and for the purpose hereinbefore set forth.

3. A fastener for a safety belt for aviators and others, comprising a hinged jawed member having jaws provided with ridges having inclined inner faces, a hasp member adapted to be inserted within the jawed member for retention by said ridges, a locking device for holding the jawed member closed, said hasp being adapted to co-act with said inclined faces to open the jawed member under the stress of the belt when the jawed member is released by said locking device, substantially as and for the purpose hereinbefore set forth.

6. A fastener for a safety belt for aviators and others, comprising a jawed member consisting of two plates hinged together and provided with ridges having inclined inner faces, a hasp member adapted to be inserted between said plates behind the inclined faces on said ridges, a rotary locking device carried by one of said plates, the other of said plates having a slot to permit said locking device to pass therethrough when in a position coincident therewith, and stops on said slotted plate to arrest the locking device in said coincident position, when rotated in either a clockwise or anticlockwise direction for the purpose of permitting the hasp in engagement with the inclined faces of said ridges forcing the plates apart under the stress of the belt to effect an automatic release.

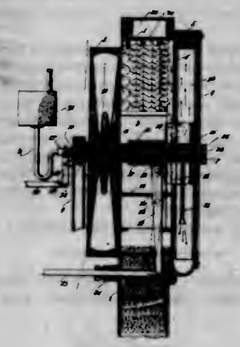
[Claims 2, 4, and 5 not printed in the Gazette.]

1,275,035. DEVICE FOR CLEANING ELECTRODES OF MAKE-AND-BREAK SPARK-PLUGS. HERBERT G. IRWIN, Spur, Tex. Filed Dec. 3, 1917. Serial No. 205,195. (Cl. 123—153.)



A device for cleaning electrodes of make and break spark plugs, comprising a flanged shell having parallel openings formed therein, a tube fitted in one of said openings and having a flange at its lower end, and a nut fitted about its upper end, the inner marginal edge of the flange being beveled, an electrode mounted within said tube and having a cylindrical head at its lower end, with a beveled shoulder engaging said beveled edge of the flange, a collar about said head below the beveled shoulder, a winged nut mounted upon the upper threaded end of the electrode, a connection intermediate said nut and shoulder adjacent thereto, a conical-shaped spiral spring interposed between the latter and said nut, a movable electrode passing through the other opening in the shell, and having a laterally extending finger, with a contact lug thereon, and a handle fixed to the upper projecting end of said movable electrode.

1,275,036. MIXING DEVICE. GEORGE JACOBS, Detroit, Mich. Filed Dec. 13, 1916. Serial No. 136,630. (Cl. 261—18.)



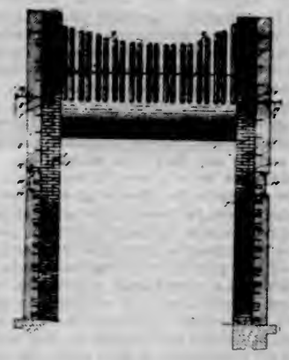
1. A mixing device comprising a chamber, a humidifier having a water supply connection, a tubular shaft axially of said chamber, a fan on said shaft adapted to force air through said humidifier into said chamber, a rotary mixing device carried by said shaft within said chamber, members carried by said mixing device, means extending through said tubular shaft adapted to supply a liquid to said members.

2. A device of the type described comprising a mixing chamber having an outlet connection, a humidifier having a water supply connection, a tubular shaft extending through said humidifier into said mixing chamber, a fan on said shaft adapted to force air through said humidifier into said mixing chamber, means extending through said tubular shaft adapted to admit liquid to said mixing chamber, and means carried by said shaft within said mixing chamber adapted to discharge the liquid by centrifugal force to commingle with the air in said casing.

3. A device of the type described comprising a humidifier having a water supply connection, a mixing chamber carried thereby and in communication with said humidifier, a tubular shaft extending through said humidifier into said mixing chamber, a fan on said shaft adapted to force air through said humidifier into the mixing chamber, means in connection with said humidifier for saturating the air that passes through the humidifier with moisture, means for conducting a supply of liquid through said shaft into said mixing chamber, a mixing device on said shaft within said chamber, and members carried by said shaft adapted to discharge liquid in said chamber by centrifugal force.

4. A device of the type described comprising a humidifier, a mixing chamber connected thereto, a tubular shaft extending through said humidifier into said mixing chamber, a fan on said shaft adapted to force air through said humidifier into said mixing chamber, means in connection with said humidifier adapted to saturate the air passing therethrough with moisture, a mixing device on said shaft within said mixing chamber and having curved blades extending in proximity to the annular wall of said mixing chamber, members carried by said shaft extending through the blades of said mixing device and adapted to discharge liquid in said chamber by centrifugal force, a needle valve in said shaft, a tubular reciprocable valve member adapted to supply and control the admission of liquid to said members, and means in said humidifier movable to and from said mixing chamber adapted to control the admission of moisture saturated air thereto.

1,275,037. FURNACE-WALL STRUCTURE. DAVID S. JACOBUS, Jersey City, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Oct. 2, 1915. Serial No. 53,668. (Cl. 72—101.)

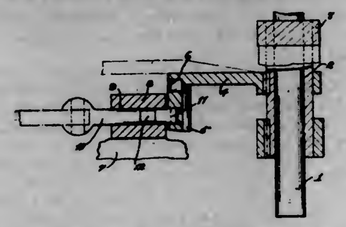


A furnace wall comprising a plurality of horizontal courses of brickwork, tie pieces inserted between the contiguous courses, said tie pieces consisting of metallic grids or mesh construction of flexible material having a series of separated points or projections arranged to space apart the bricks between which it lies and to engage and frictionally hold the bricks, and wall-retaining members supported independently of the wall and to which the projecting flexible portions of said tie pieces are attached, whereby the wall is permitted to move independently of said retaining members and is prevented from bulging by reason of the holding power of said tie pieces and the stiffness of the retaining member.

1,275,038. LEVER-LOCKING CONSTRUCTION. GEORGE C. JENSEN, Oakland, Cal. Filed Feb. 13, 1918. Serial No. 216,962. (Cl. 70—128.)

1. In combination with a lever fulcrumed for selective and operative movement in different planes at right angles to each other, a segment movable with said lever during its selective and operative movement, a manually con-

trolled locking bolt carried by a fixed casing and over the end of which said segment is adapted for movement in different planes on the selective and operative movements of the lever and capable of locked engagement with said segment for locking the lever from movement, and lock controlled mechanism for engaging and locking said locking bolt in engagement with said segment.



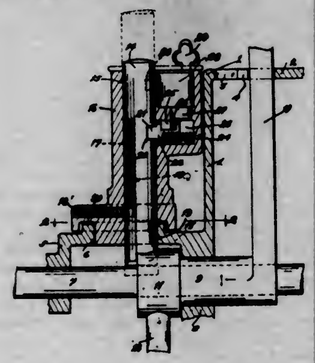
2. In combination with a lever fulcrumed for selective and operative movement in different planes at right angles to each other, a ported segment movable with said lever, a manually operated locking bolt carried by a fixed casing over the end of which said segment is movable when operated in one of its planes and capable of movement for reception with the ports of said segment for locking said lever from movement, and a lock controlled mechanism for locking said bolt with its coöperating port.

3. In combination with a lever, a tubular sleeve associated therewith, a shaft passing through said sleeve and providing a fulcrum for said lever and relatively to which the same is capable of axial and longitudinal movement, a ported segment extending outwardly from the sleeve and movable therewith, said segment provided with a curved face formed with a plurality of apertures, a fixed lock casing disposed adjacent to said segment and over which said segment is capable of movement on the operation of said lever, a longitudinally movable locking bolt carried by said fixed casing for reception at one end within said apertures on the registering of the same therewith due to the movement of the lever, and a key controlled lock mechanism carried within said lock casing for engaging and locking said bolt from withdrawal.

4. In combination with a lever fulcrumed for selective and operative movement in different planes, a portion projecting laterally from the lever at its point of fulcrum, a segment secured to said laterally extended portion and disposed in a plane parallel with said lever and arranged at an angle of approximately 45 degrees thereto, said segment provided with a ported head, a fixed lock casing disposed adjacent to said head and relatively to which said segment head has coöperative movement on the movement of said lever, a locking bolt carried by said fixed casing and adapted for reception with said ports, and lock mechanism for retaining said bolt in locked position and from removal from the port within which it is received.

1,275,039. LOCKING CONSTRUCTION FOR LEVERS. GEORGE C. JENSEN, Oakland, Cal. Filed Feb. 13, 1918. Serial No. 216,968. (Cl. 70—128.)

1. In combination with a lever casing, a lever movably mounted therein and capable of selective and operative movement in different planes, a locking casing for detachably securing to the lever casing through an opening therein, said locking casing provided with an open ended locking bolt guide, a longitudinally movable foot actuated locking bolt mounted in said guide and of a length to project at its opposite ends beyond the open ends of said guide, the inner portion thereof adapted for engaging with a portion of said lever within said lever casing to lock the lever from operative movement therein, said locking bolt provided in its side wall with a transverse groove, a spring pressed bolt locking pin carried by said locking casing and provided with an elongated tongue for engaging within the transverse groove within said locking bolt to retain the same in locking engagement with said lever, a key controlled locking mechanism coöperating with said pin and capable of operation for withdrawing the same from engagement with said bolt, and a spring for removing said locking bolt from engagement with said lever and for projecting the outer end thereof beyond the outer end of said locking bolt guide on the release of said locking pin from engagement therewith.

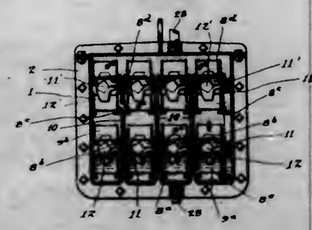


2. In combination with a lever casing, a lever movably mounted therein, said casing provided with an opening adjacent said lever, a mechanism for locking said lever from movement comprising a locking casing for detachable securing within said opening, a member carried thereby for coöperating with the lever to lock the same from operative movement, and a lock controlled device carried by said lock casing for engaging said member to retain the same in locked position relative to the lever, said locking casing being locked from removal from said opening when said member is in locked position relative to said lever.

3. In combination with a lever casing, a lever mounted therein and capable of selective and operative movement in different planes, said casing provided with an opening adjacent said lever, mechanism for locking said lever from movement comprising a lock controlled member carried within a casing for detachably securing to said lever casing through said opening, said lock controlled member adapted for engaging and locking the lever from movement and locking its casing from removal from said lever casing when in said locking position.

[Claims 4 to 9 not printed in the Gazette.]

1,275,040. COOKER. AXEL JOHNSON, Oakland, Cal. Filed Mar. 6, 1917. Serial No. 152,490. (Cl. 126—272.)



2. A cooker comprising a tank, means for feeding cans thereto and discharging the same therefrom, a track within said tank for conveying the cans therethrough, a movable rod positioned parallel to said track, a series of spaced dogs extending laterally from said rod, and mechanism for reciprocating said rod lineally and for oscillating the same angularly to cause said dogs to engage said cans upon the lineal movement of said rod in one direction only.

3. A cooker comprising a tank, a plurality of superposed horizontal parallel tracks adapted to guide a can through said tank, means for feeding a can to the beginning of the lowermost track, means for discharging said can from the end of the uppermost track, mechanism movable into operative relation with one of said tracks and then with the other of said tracks for advancing said can along said respective tracks by a series of lineally successive step movements, and devices for transferring said can from the end of each track to the beginning of the track next above.

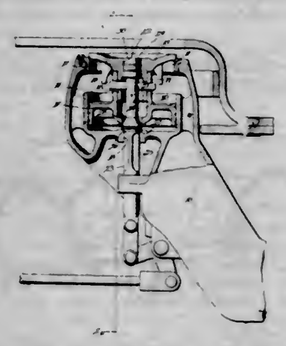
4. A cooker comprising a tank, a plurality of superposed horizontal tracks adapted to form a continuous path for conveying a can through said tank, means for feeding the can to the beginning of said tracks and discharging the same from the end thereof, mechanism common to adjacent superimposed tracks and capable of alternate cooperative movement into operative relation with the respective adjacent superimposed tracks for engaging and advancing said can along said tracks by a series of lineally successive step movements, and devices for transferring said can from one to the other of said tracks.

10. A cooker comprising a tank, a plurality of pairs of parallel tracks within said tank adapted to direct a series of cans therethrough, means for feeding cans successively to said tracks and discharging the same therefrom, a lineally disposed rod associated in operative relation with each pair of tracks, a series of spaced laterally projecting dogs carried by said rods, mechanism for oscillating said rods to cause said dogs to alternately engage the cans upon the two tracks of each pair of tracks, mechanism for lineally reciprocating said rods for causing said dogs to advance said cans alternately upon the two tracks of each pair of tracks, and devices for automatically transferring said cans between said tracks.

12. A cooker comprising a tank, a pair of parallel tracks therewithin adapted to direct a can, rotatable means for transferring a can from one to the other of said tracks, slide means controlling the admission of cans into the tank and the discharge therefrom, and reciprocating mechanism intermediate of and common to both of said tracks for advancing said cans by a series of successive step movements in one direction upon one track and in an opposite direction upon the other of said tracks.

[Claims 1, 5 to 9, and 11 not printed in the Gazette.]

1,275,041. THROTTLE-VALVE. WILLIAM F. KIESEL, Jr., Altoona, Pa. Filed Dec. 5, 1917. Serial No. 205,630. (Cl. 137—4.)



5. In a balanced throttle valve, the combination with a casing having a main port and an auxiliary port and a cylinder therein open at one end and communicating with the outside of said casing at its other end through said auxiliary port, of a main valve for controlling said main port, a piston in said cylinder having a passage therethrough from one side to the other, said piston being operatively connected to the main valve and having an area slightly greater than the area of said main valve, a manually operable valve controlling the auxiliary port and regulating the passage of fluid under pressure therethrough into said cylinder beneath said piston, and a second piston connected with said manually operable valve and having one surface exposed to the pressure of the fluid without the casing, whereby said valve is normally held closed.

6. In a balanced throttle valve, the combination with a casing having a main port and an auxiliary port, and a cylinder therein between said ports, open at one end and communicating with the exterior of said casing at its other end through said auxiliary port, said ports and cylinder being axially alined, of a main valve for controlling said main port, a piston in said cylinder having a passage therethrough from one side to the other, said piston being operatively connected to the main valve and having an area slightly greater than the area of said main valve, a manually operable valve controlling the auxiliary port and regulating the passage of fluid under pressure therethrough into said cylinder beneath said piston, and a valve rigidly connected to said manually operated valve, for controlling the passage through said piston, the two last mentioned valves being moved simultaneously in one direction to open said auxiliary port and close the passage through said piston whereby the fluid under pressure may enter through said port and be trapped beneath the piston to raise the same and to open the main valve, or to be moved in the opposite direction to close the auxiliary port and open the passage through the piston to release the fluid under pressure to allow the piston to descend and thereby close said main valve.

[Claims 1 to 4, 7, and 8 not printed in the Gazette.]

1,275,042. TURNBUCKLE, ALBERT P. KIRCHHUBER, Brooklyn, N. Y. Filed Apr. 10, 1918. Serial No. 227,688. (Cl. 85—31.5.)



1. A turnbuckle, comprising a body and a bolt screwing in the said body and provided with two bores of different diameters, the smaller bore being located on the outer portion of the bolt and the larger bore being arranged on the inner portion of the bolt, the bores being adapted to receive the end of the member on which the turnbuckle is to be used, and a filling material in the inner large bore of the said body and embedding said portion of the said member within the large bore.

2. In a turnbuckle the combination of a connecting member, a turnbuckle body, a bolt screwing in the said body and provided with two bores of different diameters, the smaller bore being located on the outer portion of the bolt and the larger bore being arranged on the inner portion of the bolt, the large bore having a tapering wall and the small bore corresponding in diameter to that of the said connecting member on which the turnbuckle is to be used, the end of the said member extending through the said small bore into the large bore, and a filling in the large bore and embedding the end of the said connecting member.

1,275,043. FRICTION-FACING AND PROCESS OF MAKING SAME. LESTER KIRSCHBRAUN, Evanston, Ill., assignor to The Raybestos Company, Bridgeport, Conn., a Corporation of Connecticut. Filed May 27, 1918. Serial No. 236,957. (Cl. 106—75.)

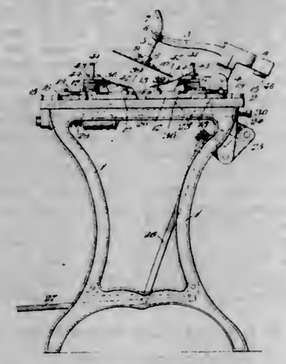
1. A friction facing, the essential wearing surface of which consists of asbestos fiber, a colloidal filler and a binder.

2. A friction facing the wearing surface of which consists of an incombustible fiber, a bituminous binder

and a relatively incombustible filler, the filler and binder being in colloidal relation to each other.

3. The process of making a friction facing consisting in emulsifying a filler and a bitumen to form an emulsified composition, mixing said composition with an incombustible fiber and intimately commingling said fiber with said composition to form said last mentioned mixture into a felted unwoven sheet and drying the same to remove any moisture therefrom.

1,275,044. EDGE TURNING AND PRESSING MACHINE. HARRY A. KOENIG, Philadelphia, Pa. Filed Jan. 8, 1918. Serial No. 210,859. (Cl. 223—15.)



1. In a machine of the character stated, a table, a die adapted to hold a piece of fabric upon said table, a plurality of movable dies mounted for sliding movement on said table and adapted to fold the edge of said fabric over said holding die, gas burners respectively mounted upon said movable dies to maintain said movable dies in heated condition, means to shift all of said movable dies at will and means to concentrate the burner heat upon the respective dies.

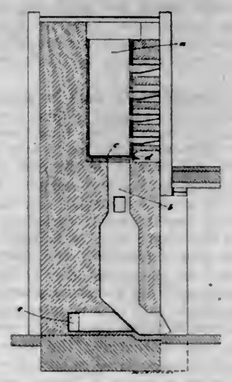
2. In a machine of the character stated, a table, a die of relatively thin material adapted to hold a piece of fabric upon said table, said die having a configuration conforming to the contour of said fabric and being of a size to leave a marginal edge of material projecting beyond said die, a plurality of movable dies slidably mounted upon said table and each having an edge conforming to the shape of a portion of said fabric, gas burners for heating the respective dies and means for simultaneously moving said dies and burners toward said holding die whereby the fabric edge is turned over said holding die and pressed.

5. In a machine of the character stated, a table, a die arranged to hold a piece of fabric upon said table, a plurality of dies mounted for sliding movement on said table to engage and fold the edge of said fabric over said holding die, gas burners respectively mounted on said movable dies to maintain said movable dies in heated condition, means to shift all of said movable dies at will and a plurality of shields respectively secured to said movable dies for deflecting the flame of said gas burners respectively upon the top of said movable dies.

[Claims 3, 4, and 6 not printed in the Gazette.]

1,275,045. PROCESS FOR UTILIZING THE RESIDUES OBTAINED IN THE DISTILLATION OF ZINC. RUDOLF KÖHLER and OTTO BALTIN, Lipine, Germany. Filed Jan. 3, 1914. Serial No. 810,168. (Cl. 75—153.)

1. A process for utilizing the residue of zinc distillation, said process comprising placing a new charge of zinc ore above a glowing residue of a previous charge in which residue some of the flux remains; heating and reducing the new charge from the residue by passing a strong blast through the residue and thence through the new charge; and heating and distilling the new charge, and condensing the vapors thereof, while shut off from the drafts of gas.

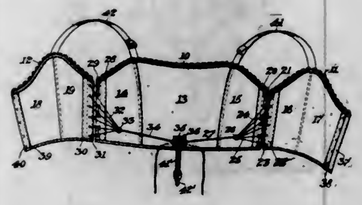


2. A process for utilizing the residue of zinc distillation, said process comprising placing a new charge of zinc ore above a glowing residue of a previous charge, driving into the new charge metallic vapors from the residue by passing a strong blast through the residue and thence through the new charge and heating and distilling the new charge, and condensing the vapors thereof, while shut off from the drafts of gas.

5. A process for utilizing the residue of zinc distillation, said process comprising placing a new charge of zinc ore above a glowing residue of a previous charge in which residue some of the flux remains; burning out the carbon; heating and reducing the new charge and driving into the new charge metallic vapors from the residue by passing a strong blast through the residue and thence through the new charge, thereby partially filtering the blast by the new charge and retaining in the new charge a portion of said vapors; collecting and condensing the vapors which pass through the new charge; inclosing and shutting off from the new charge access thereto of drafts of gas; and heating and distilling the new charge, and condensing the vapors thereof, while shut off from the drafts of gas.

[Claims 3 and 4 not printed in the Gazette.]

1,275,046. BRASSIÈRE. DANIEL KOPS, New York, N. Y. Filed May 11, 1918. Serial No. 233,832. (Cl. 2—73.)

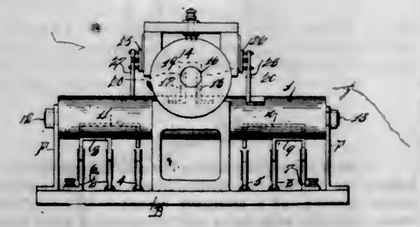


1. A brassière comprising a back member, a front member, laces for adjustably connecting the said members along the axillary line of the garment with corresponding portions of the said laces being attached to one member and passing freely through the adjacent edge of the other member, and looped at opposite portions, a tie-tape, and a device secured to one end of the tie tape and through which the said opposite portions of the said laces pass so as to make the device automatically shiftable to place in adjusting the parts of the garment to position on the wearer.

2. A brassière comprising a back member, a front member, laces for adjusting the said front and back members to position along the axillary line of the garment, the corresponding ends of said laces being secured to the front member at the edge thereof along the axillary line of the garment, and passing freely through the adjacent part of the edge of the back member and looped at their opposite ends, a tie tape, and a device secured to one end of the tie-tape and through which the looped ends of the laces pass in such a manner as to make the said device automatically shiftable to place in adjusting the parts of the garment to position on the wearer.

3. A brassière comprising a back member, a front member, laces by which the front and back members are adjustably connected to one another along the axillary line of the garment, a tie tape, a ring through which the said laces pass and to which one end of the tie tape is connected so that the ring is automatically shiftable to position in adjusting the garment to place on the body of the wearer.

1,275,047. ELECTRICAL SWITCH. HUBERT F. KRANTZ, Brooklyn, N. Y., assignor to Krantz Manufacturing Company, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Dec. 2, 1913. Serial No. 804,167. (Cl 175—281.)



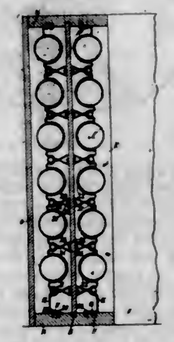
1. A circuit controlling device of the double pole type, comprising a rotatable shaft, means to rotate said shaft into two positions, positive and negative normal contacts, positive and negative emergency contacts, and positive and negative branch line contacts, all of said contacts being spaced from the shaft and being spaced apart along the length of the shaft, a pair of conductor elements carried by the shaft having parts operable when the shaft is rotated into one position to connect the positive and negative normal contacts with the positive and negative branch line contacts, respectively, and operable when the shaft is rotated into a second position to disconnect said contacts, and said conductor elements having other parts also carried by the shaft operable when the shaft is in said second position to connect the positive and negative emergency contacts with the positive and negative branch line contacts respectively, and operable when the shaft is in the first mentioned position to disconnect said last mentioned contacts.

2. A circuit controlling device of the double pole type comprising a rotatable shaft, positive and negative normal contacts, positive and negative emergency contacts, and positive and negative branch line contacts, all spaced from the shaft and spaced apart along the length of the shaft, a pair of conductor elements carried by the shaft having parts operable when the shaft is rotated into one position to connect the positive and negative normal contacts with the positive and negative branch line contacts, respectively, and operable when the shaft is rotated into a second position to disconnect said contacts, said conductor elements having other parts also carried by the shaft operable when the shaft is in said second mentioned position to connect the positive and negative emergency contacts with said positive and negative branch line contacts, respectively, and operable when the shaft is in the first position to disconnect said last mentioned contacts, and electrically operable means to rotate said shaft including means providing a pair of oppositely connected circuits and selectively operable switches therefor, and means to automatically break each of said circuits at the completion, respectively, of its operative performance.

4. A switch board comprising a base board, a normal supply bus-bar and an emergency supply bus-bar extending side by side along one surface of the base board, and a branch line contact arranged at the same surface of the base board, a shaft rotatably supported by the base board at the same surface thereof, being arranged outwardly from said branch line contact and extending thereacross and transversely across said bus-bars, means to rotate the shaft into two positions, and conductor means carried by said shaft to rotate therewith adapted selectively to connect said branch line contact with said normal or said emergency bus-bar according to the position into which the shaft is rotated.

[Claim 3 not printed in the Gazette.]

1,275,048. BOTTLE-CONTAINER. WILLIAM FREDRICK KRUEGER, Chicago, Ill. Filed Oct. 17, 1917. Serial No. 197,077. (Cl. 217—24.)



1. A bottle container including a box having an open side and a rigid member parallel with said open side, a bottle-retaining element extending between the ends of the box and formed with sockets to receive bottles, and separate brackets on said element and rigid therewith, the respective brackets constituting means to secure said element at separated points to said rigid member.

3. A bottle container including a box having an open side and a member rigid with the box and parallel with the open side, and a pair of bottle-retaining elements disposed between opposite ends of the box, each element being bent to form alternately a larger and a smaller clamp to constitute respectively seats for the bodies and necks of bottles, the material of each element being twisted at the smaller clamps and continued laterally in the form of brackets, the said brackets each having a laterally bent foot, and means securing the feet of the respective brackets to the said member.

[Claim 2 not printed in the Gazette.]

1,275,049. BRUSH. WILLIAM F. KUCK, Etna Green, Ind. Filed Apr. 6, 1918. Serial No. 227,054. (Cl. 91—39.)

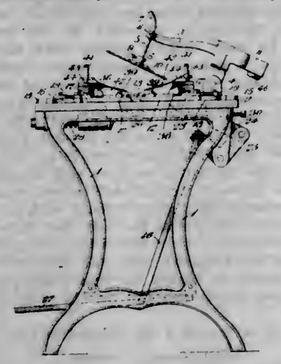
1. A device of the class described including a wheeled frame, a vertical brush mounted on the wheeled frame at one side thereof and projecting laterally therefrom, a vertical feed pipe provided with branch tubes extending to the said brush and a receptacle carried by the upper end of the feed pipe.

4. A device of the class described including a frame provided at the front with a steering wheel having a handle,

and a relatively incombustible filler, the filler and binder being in colloidal relation to each other.

3. The process of making a friction facing consisting in emulsifying a filler and a bitumen to form an emulsified composition, mixing said composition with an incombustible fiber and intimately commingling said fiber with said composition to form said last mentioned mixture into a felted unwoven sheet and drying the same to remove any moisture therefrom.

1,275,044. EDGE TURNING AND PRESSING MACHINE. HARRY A. KOENIG, Philadelphia, Pa. Filed Jan. 8, 1918. Serial No. 210,859. (Cl. 223—15.)



1. In a machine of the character stated, a table, a die adapted to hold a piece of fabric upon said table, a plurality of movable dies mounted for sliding movement on said table and adapted to fold the edge of said fabric over said holding die, gas burners respectively mounted upon said movable dies to maintain said movable dies in heated condition, means to shift all of said movable dies at will and means to concentrate the burner heat upon the respective dies.

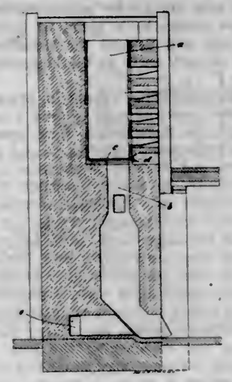
2. In a machine of the character stated, a table, a die of relatively thin material adapted to hold a piece of fabric upon said table, said die having a configuration conforming to the contour of said fabric and being of a size to leave a marginal edge of material projecting beyond said die, a plurality of movable dies slidably mounted upon said table and each having an edge conforming to the shape of a portion of said fabric, gas burners for heating the respective dies and means for simultaneously moving said dies and burners toward said holding die whereby the fabric edge is turned over said holding die and pressed.

5. In a machine of the character stated, a table, a die arranged to hold a piece of fabric upon said table, a plurality of dies mounted for sliding movement on said table to engage and fold the edge of said fabric over said holding die, gas burners respectively mounted on said movable dies to maintain said movable dies in heated condition, means to shift all of said movable dies at will and a plurality of shields respectively secured to said movable dies for deflecting the flame of said gas burners respectively upon the top of said movable dies.

[Claims 3, 4, and 6 not printed in the Gazette.]

1,275,045. PROCESS FOR UTILIZING THE RESIDUES OBTAINED IN THE DISTILLATION OF ZINC. RUDOLF KÖHLER and OTTO BALTIN, Lipine, Germany. Filed Jan. 3, 1914. Serial No. 810,168. (Cl. 75—153.)

1. A process for utilizing the residue of zinc distillation, said process comprising placing a new charge of zinc ore above a glowing residue of a previous charge in which residue some of the flux remains; heating and reducing the new charge from the residue by passing a strong blast through the residue and thence through the new charge; and heating and distilling the new charge, and condensing the vapors thereof, while shut off from the drafts of gas.

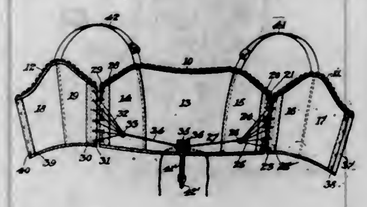


2. A process for utilizing the residue of zinc distillation, said process comprising placing a new charge of zinc ore above a glowing residue of a previous charge, driving into the new charge metallic vapors from the residue by passing a strong blast through the residue and thence through the new charge and heating and distilling the new charge, and condensing the vapors thereof, while shut off from the drafts of gas.

5. A process for utilizing the residue of zinc distillation, said process comprising placing a new charge of zinc ore above a glowing residue of a previous charge in which residue some of the flux remains; burning out the carbon; heating and reducing the new charge and driving into the new charge metallic vapors from the residue by passing a strong blast through the residue and thence through the new charge, thereby partially filtering the blast by the new charge and retaining in the new charge a portion of said vapors; collecting and condensing the vapors which pass through the new charge; inclosing and shutting off from the new charge access thereto of drafts of gas; and heating and distilling the new charge, and condensing the vapors thereof, while shut off from the drafts of gas.

[Claims 3 and 4 not printed in the Gazette.]

1,275,046. BRASSIÈRE. DANIEL KOPS, New York, N. Y. Filed May 11, 1918. Serial No. 233,832. (Cl. 2—73.)

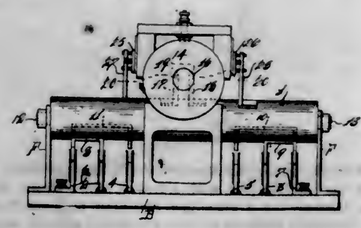


1. A brassière comprising a back member, a front member, laces for adjustably connecting the said members along the axillary line of the garment with corresponding portions of the said laces being attached to one member and passing freely through the adjacent edge of the other member, and looped at opposite portions, a tie-tape, and a device secured to one end of the tie tape and through which the said opposite portions of the said laces pass so as to make the device automatically shiftable to place in adjusting the parts of the garment to position on the wearer.

2. A brassière comprising a back member, a front member, laces for adjusting the said front and back members to position along the axillary line of the garment, the corresponding ends of said laces being secured to the front member at the edge thereof along the axillary line of the garment, and passing freely through the adjacent part of the edge of the back member and looped at their opposite ends, a tie tape, and a device secured to one end of the tie-tape and through which the looped ends of the laces pass in such a manner as to make the said device automatically shiftable to place in adjusting the parts of the garment to position on the wearer.

3. A brassière comprising a back member, a front member, laces by which the front and back members are adjustably connected to one another along the axillary line of the garment, a tie tape, a ring through which the said laces pass and to which one end of the tie tape is connected so that the ring is automatically shiftable to position in adjusting the garment to place on the body of the wearer.

1,275,047. ELECTRICAL SWITCH. HUBERT F. KRANTZ, Brooklyn, N. Y., assignor to Krantz Manufacturing Company, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Dec. 2, 1913. Serial No. 804,167. (Cl. 175—281.)



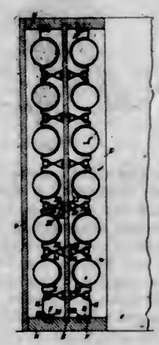
1. A circuit controlling device of the double pole type, comprising a rotatable shaft, means to rotate said shaft into two positions, positive and negative normal contacts, positive and negative emergency contacts, and positive and negative branch line contacts, all of said contacts being spaced from the shaft and being spaced apart along the length of the shaft, a pair of conductor elements carried by the shaft having parts operable when the shaft is rotated into one position to connect the positive and negative normal contacts with the positive and negative branch line contacts, respectively, and operable when the shaft is rotated into a second position to disconnect said contacts, and said conductor elements having other parts also carried by the shaft operable when the shaft is in said second position to connect the positive and negative emergency contacts with the positive and negative branch line contacts respectively, and operable when the shaft is in the first mentioned position to disconnect said last mentioned contacts.

2. A circuit controlling device of the double pole type comprising a rotatable shaft, positive and negative normal contacts, positive and negative emergency contacts, and positive and negative branch line contacts, all spaced from the shaft and spaced apart along the length of the shaft, a pair of conductor elements carried by the shaft having parts operable when the shaft is rotated into one position to connect the positive and negative normal contacts with the positive and negative branch line contacts, respectively, and operable when the shaft is rotated into a second position to disconnect said contacts, said conductor elements having other parts also carried by the shaft operable when the shaft is in said second mentioned position to connect the positive and negative emergency contacts with said positive and negative branch line contacts, respectively, and operable when the shaft is in the first position to disconnect said last mentioned contacts, and electrically operable means to rotate said shaft including means providing a pair of oppositely connected circuits and selectively operable switches therefor, and means to automatically break each of said circuits at the completion, respectively, of its operative performance.

4. A switch board comprising a base board, a normal supply bus-bar and an emergency supply bus-bar extending side by side along one surface of the base board, and a branch line contact arranged at the same surface of the base board, a shaft rotatably supported by the base board at the same surface thereof, being arranged outwardly from said branch line contact and extending thereacross and transversely across said bus-bars, means to rotate the shaft into two positions, and conductor means carried by said shaft to rotate therewith adapted selectively to connect said branch line contact with said normal or said emergency bus-bar according to the position into which the shaft is rotated.

[Claim 3 not printed in the Gazette.]

1,275,048. BOTTLE-CONTAINER. WILLIAM FREDRICK KRUEGER, Chicago, Ill. Filed Oct. 17, 1917. Serial No. 197,077. (Cl. 217—24.)



1. A bottle container including a box having an open side and a rigid member parallel with said open side, a bottle-retaining element extending between the ends of the box and formed with sockets to receive bottles, and separate brackets on said element and rigid therewith, the respective brackets constituting means to secure said element at separated points to said rigid member.

3. A bottle container including a box having an open side and a member rigid with the box and parallel with the open side, and a pair of bottle-retaining elements disposed between opposite ends of the box, each element being bent to form alternately a larger and a smaller clamp to constitute respectively seats for the bodies and necks of bottles, the material of each element being twisted at the smaller clamps and continued laterally in the form of brackets, the said brackets each having a laterally bent foot, and means securing the feet of the respective brackets to the said member.

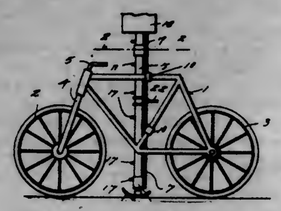
[Claim 2 not printed in the Gazette.]

1,275,049. BRUSH. WILLIAM F. KUCK, Etna Green, Ind. Filed Apr. 6, 1918. Serial No. 227,054. (Cl. 91—39.)

1. A device of the class described including a wheeled frame, a vertical brush mounted on the wheeled frame at one side thereof and projecting laterally therefrom, a vertical feed pipe provided with branch tubes extending to the said brush and a receptacle carried by the upper end of the feed pipe.

4. A device of the class described including a frame provided at the front with a steering wheel having a handle,

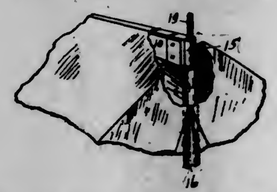
an upright brush secured to the frame, a handle secured to the frame, said brush extending laterally from the



frame, a runner supporting the lower end of the brush and means for supplying the brush with a liquid.

[Claims 2 and 3 not printed in the Gazette.]

1,275,050. CONNECTION-ASSEMBLY FOR AWNINGS AND TENTS. WILLIAM C. LANGDON, Wichita, Kans. Filed Dec. 29, 1917. Serial No. 209,575. (Cl. 135—15.)



1. In tent, awning and allied constructions, an assembly of fastening elements comprising a standard, a threaded spindle end thereon, a bar having a clip provided with a socket adapted to receive said spindle, a canvas covering provided with an eyelet washer adapted to be passed over said spindle and a nut adapted for screwing upon said threaded spindle to rigidly clamp said eyelet washer against said socket for the purposes as specified.

2. In tent, awning and allied constructions, an assembly of fastening elements comprising a standard, a threaded spindle end thereon, a bar, each end of said bar terminating in a metallic cap, cut and formed to provide a tubular socket member adapted to receive said spindle, a canvas covering provided with an eyelet washer, adapted to be passed over said spindle and a nut adapted for screwing upon said threaded spindle to rigidly clamp said eyelet washer against said socket for the purposes as specified.

1,275,051. FLEXIBLE SHAFT. EDWARD E. LARSON, Thompson, Iowa. Filed Sept. 5, 1917. Serial No. 189,727. (Cl. 64—30.)



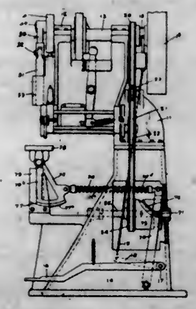
1. A flexible shaft comprising,—a plurality of rings each having radial holes disposed at right angles to each other, links of rounded stock having the extremities thereof bent at right angles for connecting adjacent links, each pair of rings being connected by a pair of diametrically disposed links, and a spacer for retaining said links in engagement with the holes of the rings.

2. A flexible shaft comprising, a plurality of rings each having radial holes disposed at right angles to one another, links connecting diametrically opposite openings of the same ring to the diametrically-opposite openings of an adjacent ring so that the links are in a common plane, and spacers engaging said links for retaining the same in engagement with the rings.

4. A flexible shaft comprising,—a plurality of rings each having radial holes disposed at right angles to one another, diametrically-opposite links, each of said links being formed of rounded stock with extremities bent at right angles to engage the holes in the rings, and a spacer having oppositely-disposed channeled portions for engaging the links connecting the adjacent rings and prevent an accidental disengagement of the lings from the rings.

[Claim 3 not printed in the Gazette.]

1,275,052. BROOM-STAPLING MACHINE. SAMUEL C. LAY, Ridgeville, Ind., and FREDERICK M. BAKER, Detroit, Mich., assignors to The Joseph Lay Company, Ridgeville, Ind., a Corporation. Original application filed Feb. 12, 1917, Serial No. 148,132. Divided and this application filed Apr. 19, 1918. Serial No. 229,524. (Cl. 1—15.)



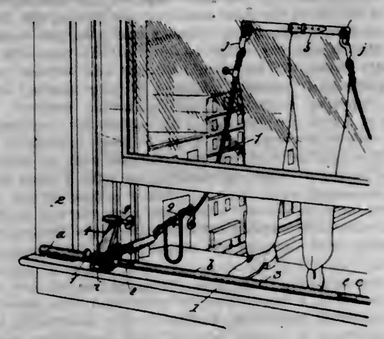
1. A work supporting means for stapling machines, comprising the combination with a frame, and a staple driving means thereon, of a standard mounted on said fame, a shaft vertically slidable in said standard, a work supporting member caried by said standard, frame members pivoted to said work supporting member having convex lower edges, extensions having concave upper edges to receive the convex edges of the frame members, the center of curvature of the curved portions being displaced from the axis of vertical motion, and means for automatically swinging the frame members back and forth, whereby the work supporting member will be raised or lowered by the action of the curved portions of the farme members and extensions.

3. The combination with a frame, and a staple driving mechanism thereon, of a work supporting mechanism comprising a work table, a shaft attached to the work table, a standard on said frame in which said shaft is vertically slidable, a pair of frame members pivoted at their upper ends to said work supporting table, said frame members having their lower ends convexly curved, extensions on the standard having their upper edges concavely curved and adapted to receive the curved ends of the frame members, the center of curvature of the curved portions being displaced from the axis of vertical motion, a drum having a camway therein, means to rotate said drum, a pivotally mounted lever, a roller on said lever entering said camway and adapted to travel therein, and a rod connecting the upper end of said lever with said frame members, whereby when said lever is swung back and forth the frame members will be operate to raise or lower the work supporting table.

[Claims 2, 4, and 5 not printed in the Gazette.]

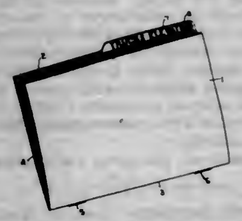
1,275,053. SAFETY APPLIANCE FOR WINDOW-CLEANERS. CARL H. LEIDING, Baltimore, Md. Filed May 16, 1916, Serial No. 97,789. Renewed June 19, 1918. Serial No. 240,864. (Cl. 20—72.)

In a safety appliance for window cleaners, the combination of the following elements, to wit: a bar, a pair of brackets each having a tubular hub provided with a rope loop, said brackets being adapted to be slid longitudinally of said bar, means for fastening each of said brackets to said bar, a pointed thumb screw threaded in the upper



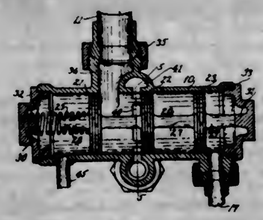
end of each bracket for engagement with the window frame, ropes looped with the loops of said brackets, and snap hooks fastened to said ropes for connection with a strap buckled around the waist of the operator, substantially as set forth.

1,275,054. FILING DEVICE FOR BOUND CATALOGUES, BOOKS, &c. ARTHUR LEON LEWIS, Newtonville, Mass. Filed Apr. 20, 1918. Serial No. 231,293. (Cl. 129—16.7.)



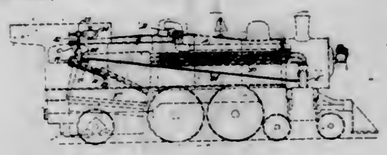
A catalogue in book form comprising a cover in which the leaves are permanently bound, a portion of one of the cover leaves projecting beyond the main edge and said portion having identifying indicia thereon so that when filed with other catalogues of substantially like size the projecting portion permits of the ready selection of the desired catalogue.

1,275,055. LOCOMOTIVE DRIFTING DEVICE. RALPH M. LICKLEY, East Cleveland, Ohio, assignor, by mesne assignments, to The Talmage Manufacturing Co., Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 9, 1915. Serial No. 7,183. (Cl. 121—14.)



In a locomotive drifting device, the combination of a boiler, a dry pipe leading therefrom, a throttle controlling admission to the dry pipe, a steam chest with which the dry pipe communicates, a distributing valve in the steam chest, a cylinder adapted to be in communication with the steam chest under the control of said distributing valve, a conduit leading from the boiler independently of the throttle and leading by branches directly to both ends of the cylinder independently of the distributing valve, check valves in said branches preventing by-passing from one end of the cylinder to the other, an automatic valve in said conduit between the check valves and boiler, said automatic valve having constantly acting means tending to open it and having a pressure-responsive device in communication with the steam chest adapted to close it.

1,275,056. SMOKE-ABATING SYSTEM FOR LOCOMOTIVES. RALPH M. LICKLEY, East Cleveland, Ohio, assignor, by mesne assignments, to The Talmage Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 10, 1915. Serial No. 44,688. (Cl. 110—61.)

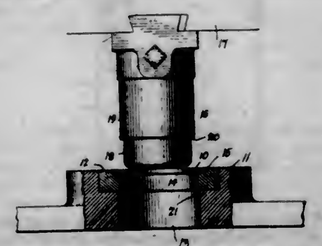


1. The combination in a locomotive of a fire box, fire tubes communicating therewith, a boiler, a steam chest, a dry pipe connecting the boiler with the steam chest, a portion of said dry pipe consisting of a set of pipes located within the fire tubes and constituting a superheater, nozzles discharging into the fire box, a conduit leading to the nozzles, a conduit leading from the supply of saturated steam, a conduit leading from the supply of superheated steam, a valve casing communicating with said three conduits, and a movable valve member in said casing adapted to connect the nozzle conduit with either the superheated steam conduit or the saturated steam conduit.

2. The combination with a locomotive having a boiler, a throttle, a steam chest, a conduit from the boiler to the steam chest controlled by the throttle, there being a superheater included in a part of such conduit, of nozzles discharging into the fire box, a conduit for superheated steam leading from the superheater, a conduit leading from the supply of saturated steam, and means for connecting either of the two conduits last mentioned with the nozzles, said means including a differential piston valve having its larger area subjected to the action of the superheated steam.

[Claim 3 not printed in the Gazette.]

1,275,057. METHOD OF MAKING PROJECTILE-BANDS. ALEXANDER W. LIMONT, Bridgeport, Conn., assignor to Bridgeport Brass Company, Bridgeport, Conn., a Corporation of Connecticut. Original application filed Nov. 5, 1915, Serial No. 59,840. Divided and this application filed Jan. 18, 1918. Serial No. 212,470. (Cl. 29—156.)



1. The method of making a projectile band or the like, which comprises forming a metal washer and then draw-

ing the washer through a die to form a cylindrical band having concentric inner and outer surfaces.

[Claims 2 to 4 not printed in the Gazette.]

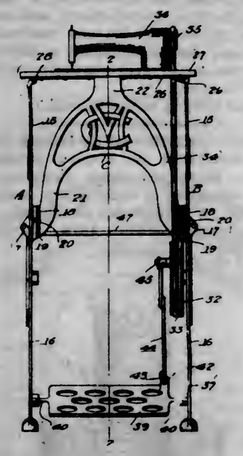
1,275,058. GREASE-GUN. CHARLES LONG, Jeffersonville, Ind. Filed Mar. 15, 1916. Serial No. 84,354. (Cl. 221—78.)



1. A means for dispensing lubricant, including in combination, a container having force feed means therein, and a lubricant containing packet formed of destructible material and having means arranged on one end thereof to permit the securing of the same to the feed means of said container when arranged therein.

2. A means for dispensing lubricant, including in combination, a cylinder having a reduced outlet opening, a strainer arranged adjacent said outlet opening, a piston working in said cylinder carrying a screw element, and a lubricant containing packet formed of destructible material and having means arranged on one end thereof to permit the securing of the same to said screw means when received in the cylinder.

1,275,059. FOLDABLE STAND FOR SEWING-MACHINES. MARY MCCABE, New York, N. Y. Filed Aug. 31, 1917. Serial No. 189,145. (Cl. 45—27.)



1. A device of the class described comprising side members each including a top member and a bottom member and hinges whereby said top and bottom members are foldably connected together, said top and bottom members being each provided adjacent to their meeting edges with tapering guideways, a bridge member, a table extending between the top members and supported therefrom, the bridge member having limbs provided with wedges for engagement with said guide ways and a third limb engageable with the table between the ends thereof.

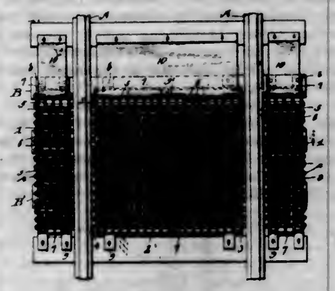
2. A device of the class described comprising side members each including a top member and a bottom member and hinges whereby said top and bottom members are foldably connected together, said top and bottom members being each provided adjacent to their meeting edges with tapering guideways, and a bridge member, the limbs of which are provided with wedges for engagement with said guideways, said bridge member having an upwardly extending neck portion provided with an angular flange having a recess, in combination with a table hingedly connected with the top member of one of the side members and detachably connected with the top member of the other side member, said table having a downwardly extending stud engaging the recess in the angular flange.

4. In a device of the class described, a pair of foldable side members comprising hingedly connected top and bottom members, a table lying between said side members and supported therefrom, and means for assembling said side members in spaced relation, said assembling means including means whereby the top and bottom members of the respective side members will be maintained in extended position against collapsing, and including a portion engageable with the table between the ends thereof when the side members are set up.

6. In a device of the class described, a pair of foldable side members comprising hingedly connected top and bottom members, a table extending between said side members, and means for assembling said side members in spaced relation, said assembling means including means whereby the top and bottom members of the respective side members will be maintained in extended position against collapsing and a portion for supporting the table between the ends thereof, the bottom members of the respective side members being provided near their lower ends with U-shaped sockets having grooves in the inner wall portions thereof, in combination with a treadle having pintles provided with heads engaging the grooves in the respective sockets.

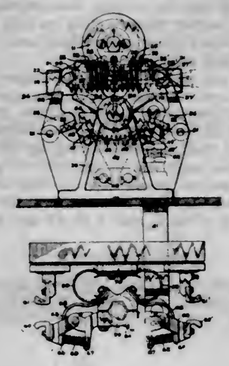
[Claims 3 and 5 not printed in the Gazette.]

1,275,060. CATTLE-GUARD. JOHN T. MCCRAW, Aylesworth, Okla. Filed Nov. 17, 1917. Serial No. 202,584. (Cl. 256—16.)



In a cattle guard, the combination of the rails and the ties, a frame, a plurality of transverse bars carried by said frame, upwardly extending legs secured to the top of one of the ties for supporting one end of the frame on a level with the rails, downwardly extending legs connected with the other end of the frame and having their upper ends connected with the top of another tie for supporting said lower end below the top of said tie, a shield covering the high end of the frame and having one end hinged on the uppermost bar and its other end connected with a tie located beyond said frame and a plurality of rollers on the remaining bars.

1,275,061. OPERATING MECHANISM FOR ELECTRIC CONTROLLERS. NEWELL A. MCKELVEY, Battle Creek, Mich., assignor to General Electric Company, a Corporation of New York. Filed Aug. 18, 1914. Serial No. 857,337. (Cl. 74—14.)



1. A quick action switch operating means comprising a biased plunger resiliently connected to a contact member and so positioned with respect thereto that a movement of the plunger against its bias exerts a force tending to move the contact member, means for normally restraining the movement of the contact member from a predetermined position, means for moving the plunger against its bias, and means for releasing the said contact member so as to be moved quickly to another predetermined position responsively to the force exerted by the said movement of the plunger against its bias.

6. A quick action switch operating means comprising a rocker adapted to be connected with a movable switch member, means for normally restraining said rocker from movement from a predetermined position, a spring plunger carried by said rocker, means for exerting a pressure on said plunger to exert a torque on said rocker, and means for releasing the rocker to move the switch contact member responsively to the pressure on the plunger.

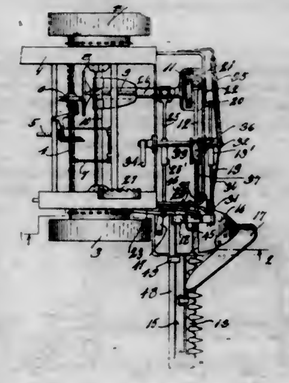
12. A quick action switch operating means comprising a rocker, means for normally restraining the rocker from movement from a predetermined position, a spring plunger moving in a tangent to an arc of oscillation of said rocker and capable of exerting a torque on the rocker, a yoke pivoted coaxially with said rocker, and having arms adapted to engage the ends of said plunger, means for releasing the rocker to move to another predetermined position responsively to the torque exerted on the rocker by the spring plunger, and means for communicating the movement of said rocker to the switch contacts.

17. A quick action switch operating means comprising a shaft, a rocker mounted thereon, a spring plunger connected to the said rocker, movable in a tangent to an arc of oscillation of said rocker and capable of exerting a torque thereon, a shouldered sector-shaped stop secured to said rocker, pawls engaging said stop, means for locking said pawls to restrain the movement of the rocker, means for unlocking the said pawls, means for exerting pressure on the plunger to cause movement of the rocker when the said pawls are released, and means for communicating the movement of said rocker to the switch contacts.

[Claims 2 to 5, 8 to 11, 13 to 16, and 18 to 20 not printed in the Gazette.]

1,275,062. CUTTER-BAR MECHANISM. ROBERT H. MCNEE, Nyssa, Oreg. Filed June 17, 1916. Serial No. 104,247. (Cl. 56—74.)

1. In combination, a wheeled support, a supporting bar pivotally secured at one end thereto, a cutter bar pivotally secured to the other end of said supporting bar, a shaft mounted upon said wheeled support and having a crank arm at its forward end, a flexible connection between said crank arm and the supporting bar aforesaid, a pulley disposed upon the wheeled support over which said connection is disposed, a hanger fixedly mounted on the cutter bar, a second connection connected to the hanger, a cam mounted on said shaft with which the second connection is connected and operable upon rotation of the shaft to actuate the second connection and impart swinging movement to the cutter bar after the latter has been lifted from normal operative position in parallel relation to the surface of the ground, and sustaining means connected to the crank arm of the shaft.



2. In cutter bar mechanism of the class described, the combination with a cutter bar and a wheeled support therefor, a hanger to which the bar is pivotally connected at one end, a yoke member rigidly secured to the cutter bar and arranged in the same plane beneath the hanger member aforesaid, lifting means for said cutter bar comprising a shaft, and a connection intermediate said shaft and the yoke member aforesaid.

1,275,063. PYROXYLIN COMPOSITION. PEPPINO MAJORANA, Louisville, Ky. Filed May 15, 1918. Serial No. 234,811. (Cl. 106—37.)

1. A composition of matter for the purpose described including pyroxylin, from 75 to 85%, spirits of camphor, from 5.5 to 7.5% and camphor gum from 8 to 10.5%.

2. A composition of matter comprising pyroxylin, about 80%; spirits of camphor, about 6½%; gum camphor, about 10½%; and a suitable clarifying and tinting dye, about 2½%.

3. A composition of matter comprising pyroxylin, about 80%; spirits of camphor, about 6½%; gum camphor, about 10½%; and a suitable blue dye, about 2½%.

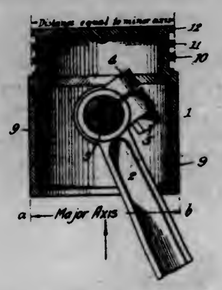
4. A composition for the purpose described comprising pyroxylin from 75 to 85%, spirits of camphor from 5.5 to 7.5%, camphor gum from 8 to 10.5%, and a suitable proportion of a clarifying and tinting dye.

1,275,064. PISTON. ARTHUR C. MASON and ALFRED T. STURT, Flint, Mich., assignors to Chevrolet Motor Company, New York, N. Y., a Corporation of Delaware. Filed July 26, 1916. Serial No. 111,474. (Cl. 74—85.)

1. An engine piston substantially elliptical in horizontal cross section in combination with a cylinder, having a substantially circular cross section.

8. A piston as set forth in claim 7, in which the diameter of the cross section of the circular portion is less than

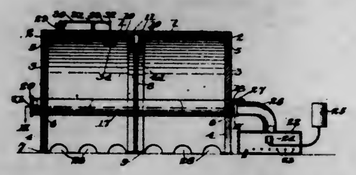
the minor axis of the ellipse, the major axis of the ellipse being substantially equal to the diameter of the cylinder.



13. In combination, an inclosing envelop and an inclosed piston, the horizontal cross section of the two being of substantially different area and shape, respectively.

[Claims 2 to 7 and 9 to 12 not printed in the Gazette.]

1,275,065. BROODER. ERWIN MAURER, Jamaica, N. Y. Filed July 3, 1917. Serial No. 178,355. (Cl. 119—34.)

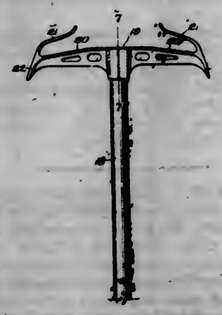


1. A knockdown brooder comprising end pieces having grooves in their edges, a partition having a pair of grooves in its edge, and cover sections each having tongues adapted to fit in one of the grooves in the partition and in the groove in one of the end pieces.

2. In a knockdown brooder, the combination with end pieces, of a partition, a cover detachably connected to the end pieces and partition, a heating pipe, said partition having a passage for said pipe, and flaps controlling access to said passage and serving to support the pipe therein.

[Claim 3 not printed in the Gazette.]

1,275,066. DEVICE FOR SUPPORTING LEATHER-FRAMES AND THE LIKE. EDWARD HARRINGTON MERRILL, Peabody, Mass., assignor to A. C. Lawrence Leather Company, Peabody, Mass., a Corporation of Maine. Filed Oct. 23, 1917. Serial No. 198,102. (Cl. 248—30.)



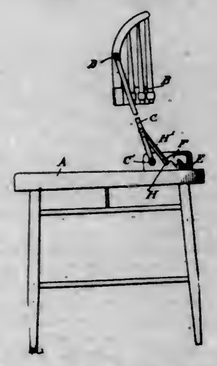
1. A device for supporting leather frames and the like comprising a horizontally disposed rest member, and lips overhanging each end of the rest member, whereby leather frames resting on opposite sides of said member are loosely retained in position by said lips so as to be readily removable.

4. A device for supporting leather frames and the like comprising a horizontally disposed rest member, the upper surface of said member sloping downwardly toward one side so that a leather frame resting on said member tends to slide down said sloping surface, and means for retaining the frame on said member.

8. A device for supporting leather frames and the like comprising a rest member having an upper supporting surface, means projecting upwardly from said member at the outer end of said surface for retaining a frame in position on the rest, and a depending lip projecting downwardly from the outer end of the rest for preventing the leather in the leather frame from catching under the member when a frame is being removed from the rest.

[Claims 2, 3, 5 to 7, and 9 to 12 not printed in the Gazette.]

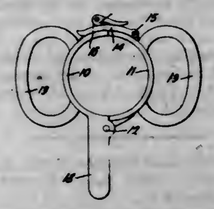
1,275,067. ADJUSTABLE BACK FOR CHAIRS. HARRY MERTZ, Baltimore, Md. Filed Dec. 19, 1917. Serial No. 207,948. (Cl. 155—27.)



3. In combination with a chair seat, plates fastened to the upper surface of the seat near the rear portion thereof and opposite each other, each plate having an opening the marginal edge of which is notched, rods pivoted to said plates in advance of the openings therein, a back to which the upper ends of the rods are pivoted, a bail-shaped member passing through said openings and engaging oppositely disposed notches therein, said bail-shaped member having angled portions extending outside the plates, the extreme ends of the member being curved toward each other and pivotally connected to said rods.

[Claims 1 and 2 not printed in the Gazette.]

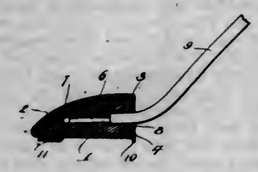
1,275,068. HOSE-HOLDER. WILLIAM F. MESSITER, Brooklyn, N. Y. Filed July 7, 1916, Serial No. 107,983. Renewed Jan. 12, 1918. Serial No. 211,673. (Cl. 248—28.)



A hose clamp comprising a pair of rigid semi-annular members, one of which is provided at one end with a hook

the bill of which extends substantially parallel to the axis of the clamp, all portions of the hook lying between the prolonged end faces of the clamp to facilitate the sliding of the clamp across the object wherewith the hook is to be connected; a pivot element mounted in the butt portion of the hook and in the adjacent end of the other member of the clamp; and a latch mechanism forming a releasable connection between the free ends of the clamp; the member of the clamp being provided with opposed loop-shaped handles disposed in a plane substantially at right angles to the axis of the clamp.

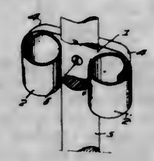
1,275,069. TOE-BOX INSERTER. CHRISTIAN MIKKELSEN, Beloit, Wis. Filed Oct. 4, 1917. Serial No. 194,766. (Cl. 12—103.)



1. A pneumatic toe box inserter comprising a body shaped to conform substantially to the shape of the toe of the shoe in which it is to be used, an air-tight elastic bag fitting snugly over said body and having its edge turned inwardly around the rear end thereof, and a plate secured to said end of the body for clamping said edge of the bag against the same, said body having a port for supplying fluid under pressure between the bag and body to inflate the latter, and said plate having an opening registering with said port.

[Claim 2 not printed in the Gazette.]

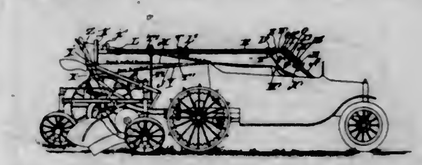
1,275,070. BROOM-HOLDER. SHERMAN MONCRIEF, Center Junction, Iowa. Filed Apr. 19, 1917. Serial No. 163,294. (Cl. 24—257.)



1. A broom holder formed from a single strip of resilient metal including a body, opposed handle engaging coils formed on the respective extremities of the body, spaced longitudinally extending ribs formed on the rear surface of the body adjacent the marginal edges thereof and also formed on and extending partially about the outer surfaces of the coils and terminating at points approximately one-eighth of the distance around the coils whereby to cause the coils to move outwardly from the body when a handle is inserted between the coils so as to spread them.

2. A broom holder including a body formed from a single strip of resilient metal and having a central opening therein, spaced handle engaging coils formed integral with the respective ends of the body, spaced longitudinally extending ribs formed integral with the rear surface of the body adjacent the marginal edges thereof and also formed integral with and extending partially about the outer surfaces of the coils and terminating at points approximately one-eighth of the distance around the coils, whereby when a handle is inserted between the coils to spread them the coils will be moved outwardly from the body and at substantially right angles thereto, and a fastening device engageable with the opening and with a suitable support for forcing the ribs on the body into biting engagement with a support and coöperating with the ribs for anchoring the holder in a substantially rigid position.

1,275,071. EXTENSION STEERING DEVICE FOR TRACTORS AND AUTOMOBILES. LEWIS MONSON, Decorah, Iowa. Filed Mar. 8, 1918. Serial No. 221,175. (Cl. 21—192.)



1. An extension steering device for tractors of automobiles, comprising in combination with a steering head and wheel of an automobile, control levers, said head having an extension at the upper end thereof, an auxiliary steering shaft and wheel having universal jointed connection intermediate the same and said extension of the steering head, members having notched ends engaging the control levers, and means having universal jointed connections with said members for actuating the control levers.

2. An extension steering device for tractors of automobiles, comprising in combination with a steering head and wheel of an automobile, control levers, said head having an extension at the upper end thereof, a yoke secured to said extension of the head and provided with arms, an auxiliary steering shaft and wheel having universal jointed connection with the arms of said yoke, members having notched ends engaging the control levers, and rods having universal jointed connections with said members.

3. An extension steering device for tractors, comprising in combination with the steering head and wheel of an automobile, with an extension upon the upper end of said head, a yoke secured to said extension having arms, an auxiliary steering shaft and wheel fixed thereto, and suitable bearings for said auxiliary shaft, rocking control actuated levers journaled in suitable bearings, hollow shells having notched ends engaging the control levers upon the steering wheel, rods telescoping said shells and having universal jointed connections with said rocking control actuated levers.

1,275,072. MACHINE FOR WRAPPING TUBES. JOSEPH G. MOOMY, Erie, Pa. Filed June 1, 1917. Serial No. 172,322. (Cl. 242—7.)



1. In a tube wrapping machine, the combination of a pole winding spindle comprising a head and tail piece; means for driving and controlling said spindle; a pole unwinding spindle opposite the winding spindle and comprising a head and tail piece, the head and tail piece of one of said spindles being connected; and means for adjusting said connected head and tail piece to adjust the spindles relatively to each other.

2. In a tube wrapping machine, the combination of a pole winding spindle comprising a head and tail piece; means for driving and controlling said spindle; a pole unwinding spindle opposite the winding spindle and comprising connected head and tail pieces; and means for adjusting said connected head and tail pieces to adjust the spindles relatively to each other.

3. In a tube wrapping machine, the combination of a winding spindle; means for driving and controlling said winding spindle; a pole unwinding spindle opposite the winding spindle; head and tail pieces for said spindles, the head and tail pieces for the unwinding spindle being

connected; sliding mountings for said connected head and tail-pieces; and means for actuating said mountings to adjust the unwinding spindle lengthwise relative to the winding spindle.

1,275,073. PROCESS OF MAKING TUBES. JOSEPH G. MOOMY, Erie, Pa. Filed June 1, 1917. Serial No. 172,323. (Cl. 242—7.)



1. In the making of tubes the wrapping of a raw tube with a wrapping material directly from a tube vulcanized while wrapped in said wrapping material.

2. In the making of tubes the moistening of the wrapping material on a vulcanized tube vulcanized while wrapped in the wrapping material, unwinding said wrapping material so moistened from the vulcanized tube and winding it directly on a tube of raw stock as it is unwound from the vulcanized tube.

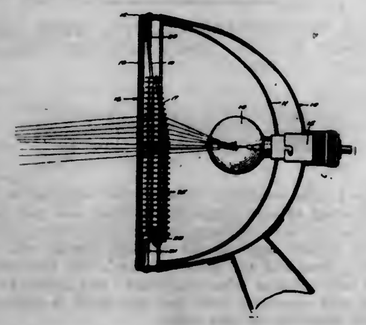
3. In the making of tubes the wrapping of a tube of raw stock spirally with a strip of wrapping material directly from a tube vulcanized while wrapped in said strip of wrapping material wound spirally thereon.

5. In the making of tubes the wrapping of a tube of raw stock with a wrapping material directly from a tube vulcanized while wrapped in said wrapping material and allowing the pull incident to the separation of the wrapping material to act as tension in the winding of the raw tube.

7. In the making of rubber tubes the placing of a vulcanized tube with its wrapping moistened in parallel with and opposite a raw tube to be wrapped, carrying the wrapping from the vulcanized tube to the raw tube, and winding the raw tube by rotation as the vulcanized tube is unwound while allowing the pull of the separating of the wrapping from the vulcanized tube to act in tensioning the wrapping on the raw tube.

[Claims 4 and 6 not printed in the Gazette.]

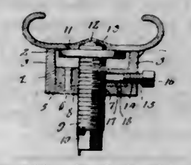
1,275,074. LIGHT-RAY REGULATOR. WILLIAM H. MORRHOUSE, Pasadena, Cal. Filed Sept. 24, 1917. Serial No. 192,926. (Cl. 240—48.4.)



1. The combination with a headlight having a parabolic reflector, a lens in front of the reflector, and a light between the lens and the reflector, of a light ray regulator comprising a series of equally spaced horizontally disposed deflecting vanes mounted one above the other upon vertically extending rods, brace wires extending through the vanes, a lower mounting plate fixed in position behind the lens, bolts securing the lower vane to the lower mounting plate, and an upper mounting plate secured in position behind the lens; the upper ends of the rods being attached to the upper mounting plate.

[Claim 2 not printed in the Gazette.]

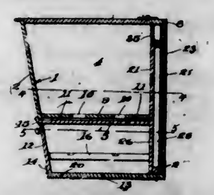
1,275,075. DEMOUNTABLE-RIM LOCK. KAMIL J. NAHAS, Detroit, Mich. Filed Nov. 14, 1917. Serial No. 201,996. (Cl. 152—21.)



1. In a demountable rim lock, the combination of a fixed rim having a channel in the outer face thereof and flanges at opposite sides of said channel, a demountable rim encircling said channeled rim, and securing means for said demountable rim comprising a block seated in the channel of the fixed rim and fixedly held therein, said block and fixed rim being formed with threaded bores in line with each other and extending radially of the wheel, a rim locking screw threaded through said bores and having an enlarged flange to bear against the inner face of the demountable rim and also formed with a central projection beyond said flange, the demountable rim being formed in its inner face with a recess to receive said projection, said block being formed with a bore intersecting said threaded bore, substantially at a right angle, a locking member for said screw mounted in the last named bore, and means for advancing said locking member against said screw.

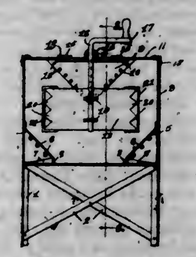
[Claim 2 not printed in the Gazette.]

1,275,076. STATIONARY WASHBOILER. MORRIS NAUER, New York, N. Y. Filed June 6, 1916. Serial No. 101,934. (Cl. 68—30.)



In a stationary boiler, a casing having an upper open end, a horizontal partition secured within the casing, a perforated tray supported upon the horizontal partition, said partition dividing the casing into an upper detergent chamber and a lower heating chamber, and an auxiliary rear wall secured to the casing and spaced from the rear wall thereof, each of said walls being provided with outlet openings to permit of the escape of steam and heat from the casing.

1,275,077. CLOTHES-WASHER. BERT NELSON, Spokane, Wash. Filed Sept. 8, 1917. Serial No. 190,359. (Cl. 68—15.)



1. A clothes washer, including a rectangular tank, plates overlying a portion of the angles formed between two opposed sides of the tank and the top to form compartments, plates overlying the angles formed by the other two opposed sides of the tank and the bottom to form compartments, said plates provided with apertures to permit circulation through said compartments, and an agitator within the tank.

[Claim 2 not printed in the Gazette.]

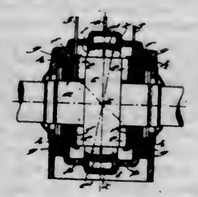
1,275,078. HEEL-CUTTER. WILLIAM J. NESBITT, Los Angeles, Cal. Filed Sept. 18, 1917. Serial No. 192,216. (Cl. 12—42.)



2. The combination with a shaft, of a bushing fitted on said shaft, a sleeve arranged on said bushing and adjustable longitudinally of said shaft, a circular saw mounted on said shaft, and a dished stiffening plate mounted on said sleeve, substantially as and for the purpose set forth.

[Claim 1 not printed in the Gazette.]

1,275,079. FILM-LUBRICATED THRUST AND JOURNAL BEARING. HENRY THORNTON NEWBIGIN, Newcastle-upon-Tyne, England. Filed Apr. 17, 1916. Serial No. 91,741. (Cl. 64—25.)



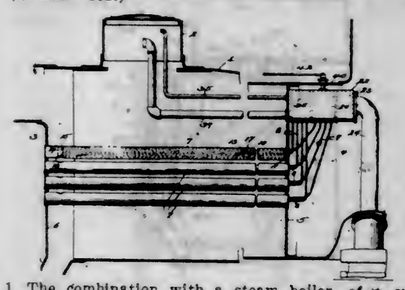
1. The combination of a casing, with a single journal bearing and a double-acting thrust bearing all contained within the casing, the fixed rubbing surface of each bearing comprising a plurality of segmental blocks mounted pivotally in the casing to adjust themselves to the cooperating rotating surface.

3. The combination of a casing, and combined journal and thrust bearings contained therein, the fixed rubbing surface of each bearing comprising a plurality of segmental blocks, and concentric spherical seats on which the blocks are mounted whereby the blocks of each bearing are capable of adjusting themselves in relation to the respective coöperating rotating surfaces.

6. In a combined journal and thrust bearing for a shaft, a housing having an internal spherically shaped seating, a plurality of sets of seatings mounted within the housing concentrically with the first-named seating, a series of pivoted segmental blocks mounted in the first said seating and adapted to engage a longitudinally directed portion of the shaft to form the fixed surface of the journal bearing, and a plurality of sets pivoted segmental pads corresponding in number to the said sets of seatings, the pads being mounted one in each of the last-named seatings and adapted to engage rotating surfaces on the shaft and form fixed thrust bearing surfaces.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,275,080. STEAM-SUPERHEATER. JAMES S. NICHOLS, Atlanta, Ga. Filed May 8, 1915. Serial No. 26,873. (Cl. 121—462.)



1. The combination with a steam boiler, of a superheater, and a single manually controlled valve operative when in one position to return superheated steam from the superheater to the boiler and operative in another position to direct saturated steam from the boiler to an outlet for use while superheated steam is returned to the boiler, and operative in a third position to interrupt the return of superheated steam from the superheater to the boiler and to discharge such superheated steam to the outlet for use.

3. The combination with a steam boiler, of a superheater, and a valve normally operative to cause circulation of steam from the superheater outlet to the boiler and operative sequentially when moved in one direction to discharge saturated steam direct from the boiler to an outlet for use while the circulation of superheated steam from the superheater outlet to the boiler is maintained, and thence to interrupt such circulation of superheated steam to the boiler and direct such superheated steam to the outlet.

5. The combination with a steam boiler, of a superheater, a saturated steam chamber, superheated steam and motive steam chambers, the saturated steam chamber being connected to the steam space of the boiler and to the inlet of the superheater, and the superheated steam chamber being connected to the superheater outlet, and a valve having ports operative to return superheated steam from the superheater to the boiler in one position of the valve and to direct superheated steam from the superheated steam chamber to the motive steam chamber in another position of the valve, the valve also having saturated steam ports operative to connect the saturated steam chamber to the motive steam chamber.

10. The combination of a boiler tube, a superheater unit therein, and a water jacket in the tube for protecting one end of said unit.

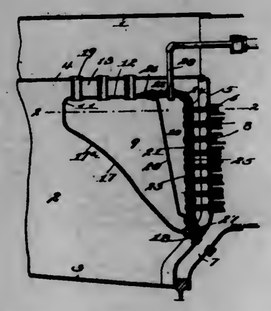
13. The combination of a boiler tube, a superheater unit therein having return bends at its rear end and a tube extending transversely of the boiler tube and having indentations in its forward side to receive and protect said return bends at the rear end of the superheater unit.

[Claims 2, 4, 6 to 9, 11, and 12 not printed in the Gazette.]

1,275,081. STEAM-SUPERHEATER. JAMES S. NICHOLS, Atlanta, Ga. Filed June 23, 1915. Serial No. 35,902. (Cl. 122—481.)

1. The combination with a steam boiler having a fire-box and flues leading from the front thereof, of a water chamber arranged in the fire-box and spaced from the walls thereof to permit passage of gases to the flues, said

chamber being connected to the water space of the boiler to circulate water therethrough, a steam superheating chamber located adjacent to said water chamber and between the latter and said flues, the water and steam superheating chambers being united and combined as a unit, and superheater units in the flues connected directly to the front wall of said steam superheating chamber.



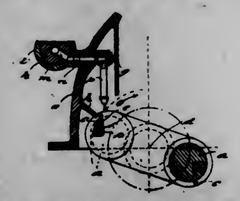
3. The combination with a steam boiler having a fire-box and flues leading therefrom, of a water chamber in the fire-box connected to the water space of the boiler and spaced from the side walls and crown sheet thereof for the passage of products of combustion to the flues, and a steam superheating chamber having its rear wall formed by the forward wall of the water chamber and opposite to the ends of said flues, and superheater units contained in the boiler flues and communicating at their rear ends with said steam superheating chamber.

5. The combination with a steam boiler having a fire-box and flues leading therefrom, of a water chamber in the fire-box connected to the water space of the boiler and spaced from the side walls and crown sheet thereof for the passage of products of combustion to the flues, a steam superheating chamber located at the forward side of the water chamber and having its front wall exposed to the heat of the products of combustion after passing the water chamber, and superheater units connected to and extending forwardly from the front wall of the superheating chamber into the boiler flues.

6. The combination with a steam boiler having a fire-box and flues leading forwardly therefrom, of a superheater unit in the fire-box comprising a water chamber having a rearwardly and upwardly inclined concave rear wall, and a steam superheating chamber located between the water chamber and the flues and protected by the water chamber, and superheater units communicating with and extending forwardly from the superheating chamber into the boiler flues.

[Claims 2 and 4 not printed in the Gazette.]

1,275,082. LUBRICATING CRANK-PIN. OLIVER DANSON NORTH, London, England, assignor to Straker-Squire Limited, London, England. Filed Sept. 24, 1917. Serial No. 192,945. (Cl. 184—6.)



1. Apparatus for lubricating crank pins comprising a scoop fixed to the end of the crank pin, a passage from the scoop to the bearing surface of the crank pin, and means for introducing lubricant into the path of the scoop.

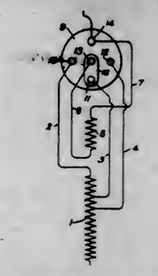
2. Apparatus for lubricating crank pins comprising a scoop having an outer surface concentric with the axis of the crank pin and an inner flat face fixed to the end of the crank pin, and means for introducing lubricant into the path of the scoop.

3. Apparatus for lubricating crank pins comprising a scoop having an outer surface concentric with the axis of the crank pin and an inner flat face fixed to the end of the crank pin, a passage from the scoop to the bearing surface of the crank pin, and means for introducing lubricant into the path of the scoop.

4. Apparatus for lubricating crank pins comprising a scoop fixed to the end of the crank pin, a passage from the scoop to the bearing surface of the crank pin, means for introducing lubricant into the path of the scoop and a screen extending nearly into the path of the scoop so as to shelter the lubricant.

[Claims 5 to 9 not printed in the Gazette.]

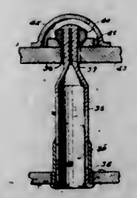
1,275,083. ELECTRICAL APPARATUS. JOHANNES OBTH, Berlin, Germany, assignor to General Electric Company, a Corporation of New York. Filed June 3, 1915. Serial No. 31,983. (Cl. 175—356.)



1. An inclosed connection device comprising in combination a body member of insulating material, a plurality of leads extending through the body member, terminals for said leads comprising a main leading-in terminal a common terminal and a plurality of selective terminals spaced from said common terminal, a link for connecting said common terminal to any one of the selective terminals, and a cap or cover which incloses the terminals and through which the leading-in terminal extends.

2. An inclosed connection device comprising in combination a tubular body member, a terminal board at one end thereof, and a cover inclosing said terminal board and the end of the body member, all of which parts being of suitable insulating material, terminals mounted on the terminal board comprising a main terminal which extends through and supports said cover, a common terminal, and a plurality of selective terminals spaced at equal distances from said common terminal, and a link for connecting said common terminal to any one of the selective terminals.

1,275,084. BOLT FOR BOILERS. MIGUEL PASCALE, Tucson, Ariz. Filed July 11, 1916. Serial No. 108,539 (Cl. 85—1.5.)

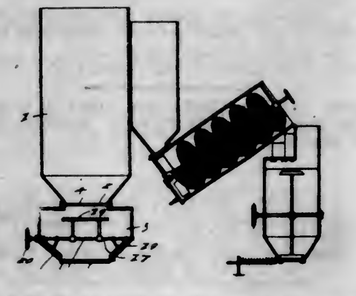


1. A bolt having a hollow shank open at one end, a telltale bore communicating with the hollow shank closed at the head end thereof by a fusible plug.

2. In a boiler, a tubular member open at one end, a sleeve secured thereto adjacent said open end to enlarge the same, a ferrule of ductile material interposed between said sleeve and tubular member, and an extension of said member adapted to be beaded.

[Claims 3 to 8 not printed in the Gazette.]

1,275,085. PEANUT-ROASTING DEVICE. SAMUEL C. PECKHAM, Mexia, Tex., assignor of one-eighth to Merion Adams, Mexia, Tex. Filed Jan. 12, 1917. Serial No. 142,039. (Cl. 34—43.)



1. In a device as set forth, the combination of a raw peanut retaining hopper, a roasting hopper, an agitator positioned within said roasting hopper, a slidable door controlling the communication between said first named hopper and said roasting hopper, and means for opening said door at predetermined times.

2. In a device as set forth, the combination of a raw peanut retaining hopper, a roasting chamber having communication with said hopper, an outlet opening for said roasting chamber, slidable doors controlling the outlet of peanuts out of said roasting chamber and the passage of peanuts from said first named hopper into said chamber, means for opening said doors at predetermined times, said means arranged for opening the outlet door of the roasting chamber to allow the peanuts to pass therefrom prior to the opening of the door for permitting peanuts to pass from the hopper into the roasting chamber.

1,275,086. LAST FOR FORMING LEGGINGS. GEORGE L. PIERCE and KNUT DJERF, Brooklyn, N. Y., assignors to A. G. Spalding & Bros., Jersey City, N. J., a Corporation of New Jersey. Filed Nov. 2, 1917. Serial No. 199,909. (Cl. 12—130.)

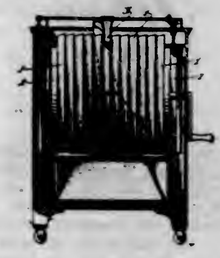


7. A last composed of sections the opposing faces of which are in contact at one side of the last and adapted to fulcrum one on the other at their point of contact, said sections having at or near the opposite edge of said faces channels extending longitudinally and a wedge member inserted in said channels and adapted to separate the sections at this point and position the sections at an angle to each other, substantially as described.

8. A last composed of sections and a wedge inserted between them at one edge only thereof and separating the sections into angular relation, substantially as described.

[Claims 1 to 6 not printed in the Gazette.]

1,275,087. TALKING-MACHINE RECORD. THOR RAJE, Los Angeles, Cal. Filed Jan. 31, 1917. Serial No. 145,774. (Cl. 274—44.)



1. In combination with a horizontally disposed mandrel of uniform diameter, a plurality of relatively narrow record rings mounted on said mandrel, and having abutting edges, each of said rings having an annular projecting lip overlying the meeting edge of the next adjacent record ring on one side, whereby a needle moving upon one ring is transferred to the next adjacent ring to a point inwardly from its edge, said record rings being provided with records in their faces, substantially as described.

3. A reproducing record comprising a record ring substantially square in cross section and provided at one edge with an annular projecting lip tapering inwardly from the outer surface thereof, and adapted to overlie the edge of an abutting record ring fitting thereinto, the outer surface of said ring and the surface of said lip being provided with a record groove, substantially as described.

[Claim 2 not printed in the Gazette.]

1,275,088. SAFETY HAT-PIN. HUMBERTO RAMOS, San Francisco, Cal. Filed Oct. 6, 1917. Serial No. 195,109. (Cl. 132—25.)



1. A hat pin having a sheath, a spring located between the head of the pin and the inner end of the sheath for normally holding the point of the pin within the sheath, one of said parts having a socket thereon and the other part having a projection engaging with said socket to hold the parts in position with the point of the pin projecting from the sheath.

2. A hat pin having a sheath, a sleeve connected with the head of the pin and surrounding the inner end of

the sheath, a spring within the sleeve and bearing against the head and sheath to hold the point of the pin within the sheath, said sheath having a socket thereon and a catch on the sleeve for engaging said socket.

1,275,089. SOUND-MODIFYING MEANS. ALCORN RECTOR, Cleveland, Ohio. Filed May 5, 1917. Serial No. 166,612. (Cl. 274—27.)



1. In combination in a sound reproducing device, a vibrating stylus carrying member; a resilient support; and a vibrating member separate from said stylus carrying member and carried by said support, and to which motion is commmunicated through a non-yielding contact between the same and said stylus carrying member.

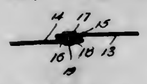
2. In combination in a sound reproducing device, a vibrating stylus, a resilient support, a threaded sleeve carried by said support, and a vibratory threaded member carried by said sleeve and operated by said stylus through a non-yielding contact.

3. In combination in a sound reproducing device, a vibrating stylus carrying member, a resilient support, and a vibrating adjustable member carried by said support and contacting with said stylus carrying member, the contact between said adjustable and stylus carrying members being non-yielding in character.

4. In combination in a sound reproducing device, a vibrating stylus carrying member, a resilient support, a vibratory threaded sleeve carried by said support, and a threaded member separate from said stylus carrying member and carried by said sleeve, and the free end of which contacts with said stylus supporting member, the contact between said free end and said stylus carrying member being non-yielding in character.

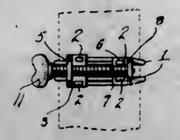
[Claims 5 and 6 not printed in the Gazette.]

1,275,090. REVERSIBLE SHIRT. WILLIAM H. RICHARDS, Philadelphia, Pa. Filed June 24, 1916. Serial No. 105,594. (Cl. 2—41.)



A reversible shirt bosom having one pattern on the obverse and another on the reverse and divided into halves, the inner edge of one half being folded back and hemmed and that of the other half folded forward and hemmed, and unitary means for fastening the hems in contact with each other when the halves are overlapped to close the bosom.

1,275,091. HOSE-CLAMP. EDGAR J. RICHARDSON, Sioux City, Iowa. Filed Apr. 3, 1916. Serial No. 88,652. (Cl. 24—19.)



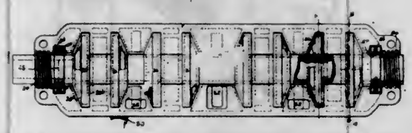
A hose clamp comprising a pair of wire strands, each having its ends in overlapping relation and its terminals curved upon themselves, a pair of angle plates, one side of each having a pair of apertures to receive one of the curved ends of each strand, the other side of one plate having a threaded aperture and the other side of the other plate having a reduced smooth opening, said plates having their sides provided with the first mentioned apertures directed toward each other, a screw engaged in the threaded aperture of the one plate, and having a reduced terminal entering the reduced opening of the other plate.

1,275,092. COMPOSITION FOR MAKING TOYS AND OTHER ARTICLES. ERNST A. RUPPELT, Fitchburg, Mass., assignor of one-tenth to Max B. Schaff, Fitchburg, Mass. Filed Mar. 26, 1918. Serial No. 224,835. (Cl. 106—39.)

2. A composition for making toys and other articles, consisting of glue twenty per cent., paper pulp four per cent., and slate dust seventy-six per cent.

[Claim 1 not printed in the Gazette.]

1,275,093. VALVE MECHANISM. EPPA H. RYON, Waltham, Mass. Filed July 27, 1916. Serial No. 111,733. (Cl. 123—59.)



1. In a valve mechanism, a hollow shaft having a series of hollow disk valves mounted thereon each formed of two separate compartments, one of said compartments having a single external opening and communicating with said hollow shaft, and the other having two external openings formed in the opposite end walls of said valve and out of alinement with each other.

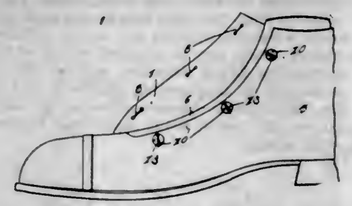
2. A valve mechanism comprising a hollow shaft having a series of disk valves mounted thereon, and a casing for said shaft and valves, each valve having a continuous and unbroken peripheral surface and the interior of each valve being divided into two entirely separate compartments, one compartment communicating with an exhaust passage through said hollow shaft, and having an opening alined at times with an opening leading to and from the engine cylinder, and the second compartment substantially inclosing said first compartment and having openings in the opposite end walls of said valve periodically alined respectively with an opening to the fuel supply, and said opening to the engine cylinder.

3. A valve mechanism comprising a casting and a cap forming a casing, a hollow shaft supported in bearings by said casting and cap, and a plurality of hollow disk valves mounted on said shaft, said casting having a water jacket space, and said cap being divided into a passage for gaseous fuel and a jacket space for circulating water, the jacket spaces in said casting and cap communicating directly with each other and being contained entirely within said casing.

4. In a gas engine, a plurality of cylinders, a casing having a gas intake passage therein and having also a connection to each of said cylinders, and a pair of rotating disk valves for each cylinder mounted on opposite sides of the connection to said cylinder, said valves being mounted to rotate together and having a common axial exhaust passage, each valve alternately connecting said intake passage and said axial exhaust passage to its respective cylinder connection and being thus alternately effective as an intake valve and as an exhaust valve, the two valves in each pair being reversely mounted but cooperating simultaneously as intake or as exhaust valves.

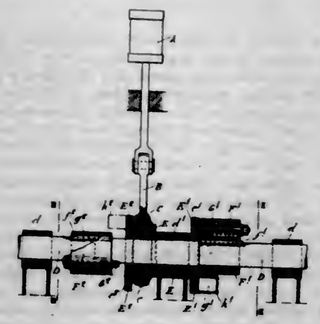
1,275,094. FASTENER. OLIVER B. SANDIFUR, North Manchester, Ind. Filed Apr. 20, 1916. Serial No. 92,448. (Cl. 24—206.)

1. A two-part fastener including a fastener bar having offset ends adapted to be secured to a support, a spring plate and a plurality of substantially spherical members carried by said plate adapted to receive the central portion of said fastener bar between any two adjacent members.



[Claims 2 and 3 not printed in the Gazette.]

1,275,095. ECCENTRIC-REVERSING GEAR. EUGENE SCHNEIDER, Paris, France. Filed Feb. 14, 1918. Serial No. 217,203. (Cl. 121—100.)



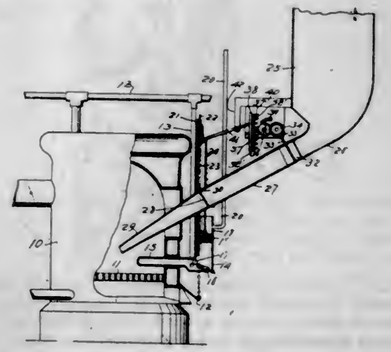
1. In eccentric reversing gear, the combination of a rotating driving shaft longitudinally slidable in both directions in its bearings, a rotatable eccentric loose on said shaft, two disks fixed one to each end of said eccentric, two engaging members carried one by each of said disks, two supports fixed on said shaft, one outside each of said disks, and two engaging members carried one by each of said supports and spaced apart at the desired reversing angle, whereby on sliding said shaft in the required direction so as to engage one or the other of said engaging members with the engaging member of the corresponding eccentric disk, the said eccentric sheave is reversed as desired.

[Claims 2 and 3 not printed in the Gazette.]

1,275,096. AUTOMATIC FURNACE DRAFT AND FUEL REGULATOR. LAWRENCE M. SCHNEIDER, Baudette, Minn. Filed Jan. 18, 1917. Serial No. 143,152. (Cl. 236—6.)

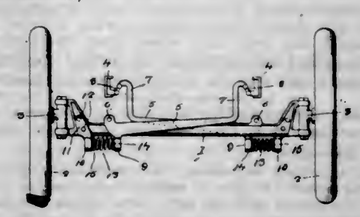
1. The combination with a hot water furnace having a draft door, of a drum positioned within the furnace, automatic means for intermittently effecting communication between the drum and the water compartment of the furnace to supply the drum with water for conversion into steam, a cylinder connected with the drum, a piston in the cylinder and operable by the pressure of the steam in the drum, means operatively connecting the piston and the draft door to close the latter upon movement of the former by steam pressure, a fuel regulator, and connections between the piston and the regulator whereby fuel may be fed to the furnace upon backward movement of the piston due to a decrease of steam in the cylinder.

2. The combination with a hot water furnace, of a fuel hopper connected with the furnace, a combined feeder and gate connected to the hopper to control the passage of fuel to the furnace, gears connected to said combined feeder and gate, a ratchet wheel connected to said gears and mounted for turning movement in one direction only, a lever pivoted at an intermediate point in the direction of its length, a rack bar mounted upon one end of the lever so that it may traverse the ratchet wheel when moved in one direction and intermesh with said wheel when moved in the opposite direction, a steam controlled device connected to the furnace and to the remaining end of the lever whereby the latter is rocked, and automatic means for intermittently establishing communication between the steam controlled device and the hot water compartment of the furnace so that the said device may be supplied with water for conversion into steam.



3. The combination with a furnace for hot water heating, of a drum positioned within the furnace and having an opening in communication with the water compartment of said furnace, a valve opening and closing said opening, a float within the drum and connected to the valve so that the opening may be closed after water in the drum has reached a prescribed level, a vertical cylinder connected with the drum, a piston arranged in the cylinder and adapted to be raised by steam generated in the drum, a lever connected to the piston at one end, a rack bar connected to the opposite end of said lever, means for pivotally supporting the lever between its ends, a vent pipe connected with the other end of the cylinder, so that the cylinder may not be forced upward beyond a certain point, and a one-way operating fuel controlling device mounted for engagement with said rack bar, whereby the fuel controlling device may remain inactive on the upward movement of the piston but rendered active on the downward movement thereof due to the decrease of steam in the drum.

1,275,097. VEHICLE-BODY SUPPORT. BENJAMIN C. SEATON, Nashville, Tenn. Filed Apr. 15, 1916, Serial No. 91,365. Renewed Dec. 5, 1917. Serial No. 205,665. (Cl. 267—8.)

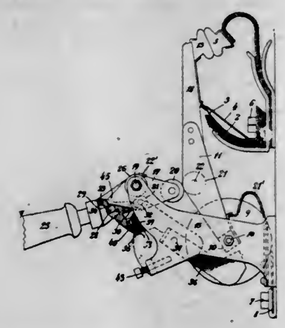


1. The combination with a frame and axle of a vehicle, of body-supporting levers extending transversely under the vehicle frame each having a jointed connection at one end with the frame at one side of the latter and pivotally supported at its other end by the axle at the

opposite side of the frame, and compressible cushioning means for said levers, each of said levers having adjacent to its point of attachment to the axle a compression arm which coöperates with the respective cushion.

[Claims 2 to 4 not printed in the Gazette.]

1,275,098. ELECTRIC SWITCH. JOHN R. SPURRIER, Bethlehem, Pa., assignor to Roller-Smith Company, a Corporation of New York. Filed Oct. 20, 1915. Serial No. 56,833. (Cl. 175—267.)



1. An electric switch comprising a movable switch element, a pivoted element for moving said switch element to closed position, a hand lever, disengageable operating means between said lever and said pivoted element operable in one direction for causing the closing of said switch element by the movement of said lever in one direction, and means whereby said pivoted element may be engaged directly by said hand lever by movement of said lever in the opposite direction to cause the opening of said switch element.

3. An electric switch comprising a movable switch element, an operating handle, an element disconnected from said switch element for moving said switch element to closed position and holding said switch element closed by an overset locking position of said second named element, means for disengageably coupling said handle to said second named element, and electro-magnetic means for breaking the coupling between said handle and said second named element.

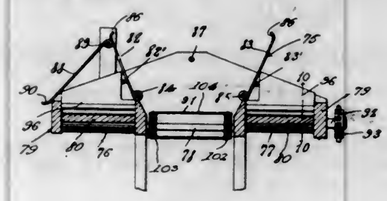
15. In a circuit breaker comprising a plurality of movable switch elements, a pivoted device for simultaneously moving said elements to closed position, and for locking said elements in closed position by an overset position of said device, a pivoted handle, a pawl for securing an operative connection between said handle and said device during closing movement of the breaker, a plurality of electromagnetic devices corresponding respectively with the circuits controlled by said switch elements, and means acted upon by each of said electromagnetic devices for disengaging said pawl during the closing movement of the breaker upon the occurrence of abnormal current in any one of said circuits and for forcing said pivoted device from locking position after the breaker has been fully closed upon the occurrence of an abnormal current in any one of said circuits.

[Claims 2 and 4 to 14 not printed in the Gazette.]

1,275,099. POTATO-SORTER. EDWARD F. STEELE, Terre Haute, Ind. Filed June 19, 1917. Serial No. 175,620. (Cl. 130—32.)

1. In a potato harvester, the combination, of potato elevating means, a pair of endless belts, potato sorting means positioned between said belts, means for distributing potatoes from the elevating means upon the belts, said means arranged whereby all of the potatoes from the elevating means may be directed to one of the belts, said distributing means arranged so that the potatoes may be directed to said sorting means in lieu of upon said belts.

2. In a potato harvester, the combination, of potato elevating means, a pair of endless belts, potato sorting means positioned between said belts, means for distributing potatoes from the elevating means upon the belts, said means arranged whereby all of the potatoes from the elevating means may be directed to one of the belts, said distributing means arranged so that the potatoes may be directed to said sorting means in lieu of upon said belts, said means further arranged so that all of the potatoes from the elevating means may be directed to the sorting means.



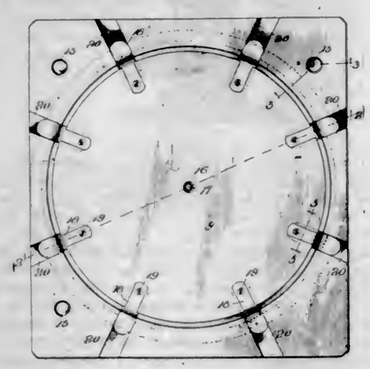
4. In a potato harvester, the combination, of potato elevating means, potato sorting means for receiving potatoes from the elevating means and including a plurality of endless sorting conveyers, chutes positioned at the ends of said conveyers for receiving potatoes therefrom, guiding boards positioned beneath the conveyers for receiving potatoes which fall through the conveyers and delivering them to the conveyer next therebelow, tables positioned upon each side of said chains, endless belts traveling over said tables, a pair of pivotally mounted plates, said pivoted plates being mounted for having their free edges engaging equi-distant of said belts and beneath the delivery end of said elevator whereby the potatoes will be equally distributed to said belts.

5. In a potato harvester, the combination, of potato elevating means, potato sorting means for receiving potatoes from the elevating means and including a plurality of endless sorting conveyers, chutes positioned at the ends of said conveyers for receiving potatoes therefrom, guiding boards positioned beneath the conveyers for receiving the potatoes which fall through the conveyers and delivering them to the conveyer next therebelow, tables positioned upon each side of said chains, endless belts traveling over said tables, a pair of pivotally mounted plates, said pivoted plates being mounted for having their free edges engaging equi-distant of said belts and beneath the delivery end of said elevator whereby the potatoes will be equally distributed to said belts, and a third pivotally mounted plate adapted to engage the upper engaging edge of said first named pivoted plates for guiding all of the potatoes to one of said belts.

6. In a potato harvester, the combination, of potato elevating means, potato sorting means for receiving the potatoes from the elevating means and including a plurality of endless sorting conveyers, chutes positioned at the ends of said conveyers for receiving potatoes therefrom, guiding boards positioned beneath the conveyers for receiving the potatoes which fall through the conveyers and delivering them to the conveyer next therebelow, tables positioned upon each side of said chains, endless belts traveling over said tables, a pair of pivotally mounted plates, said pivoted plates being mounted for having their free edges engaging equi-distant of said belts and beneath the delivery end of said elevator whereby the potatoes will be equally distributed to said belts, and a third pivotally mounted plate adapted to engage the upper engaging edges of said first named pivoted plates for guiding all of the potatoes to one of said belts, chutes extending downwardly from the delivery ends of said belts for receiving rocks and other foreign material and depositing it upon the ground, and a platform carried by the rear end of the harvester.

[Claim 3 not printed in the Gazette.]

1,275,100. DIE FOR PRESSING SOUND-RECORDS. THOMAS STEVENTON, Bridgeport, Conn., assignor to American Graphophone Company, Bridgeport, Conn., a Corporation of West Virginia. Filed May 4, 1915. Serial No. 25,815. (Cl. 18—5.3.)

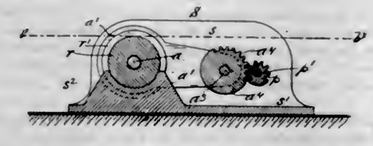


1. In a device for pressing sound-records, a sound record matrix, means for applying pressure to thermo-plastic record-material in working relation with said matrix, means for cutting off the escape of record-material from working relation with said matrix, and means enabling an increase of pressure on said record-material after said second-named means has operated.

15. The method of pressing sound-records which consists in heating thermo-plastic sound record-material placing the heated material in working relation with a sound record matrix, cutting off the escape of the plastic material, and subjecting the confined material to pressure.

[Claims 2 to 14 and 16 to 18 not printed in the Gazette.]

1,275,101. MEANS FOR CHOCKING AND STARTING LIFE-BOATS, &c. JAMES SMITH STOCKMAN, Brooklyn, N. Y. Filed May 6, 1918. Serial No. 232,821. (Cl. 9—24.)



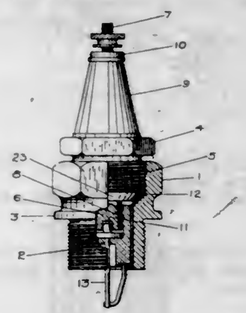
2. A starter-chock of the character designated, comprising a base formed with a chock seat, a keel roller adapted to rest directly upon said chock seat and mounted on a rocker arm, said rocker arm, a gear pivotally and rigidly attached thereto, a power pinion meshing with said gear, and mechanical means for actuating said power pinion, for the purpose described.

9. A starter-chock of the character designated, comprising a base formed with a chock rest and a medial shock, rocker arms mounted in the sides of said base, a power shaft, a lever on said shaft, and a gear on the shaft of said rocker arms and controlling the latter.

[Claims 1 and 3 to 8 not printed in the Gazette.]

1,275,102. SPARK-PLUG. MAURICE P. SULLIVAN, New York, N. Y. Filed Oct. 5, 1916. Serial No. 123,843. (Cl. 123—169.)

1. In an electrical spark plug, a body member adapted to be attached to the cylinder of a gas engine or the like, a gland adapted to be screwed into said body member and having an insulating part press-fitted thereon, said insulating part carrying a portion of a central electrode; and a unitary structure including a metallic cartridge, a ground electrode terminal, an insulating core and a supplemental portion of said central electrode including the terminal thereof being supported by said core and detachable therefrom without removing said body from the engine cylinder.



3. In an electrical spark plug, a hollow shell adapted to be attached to the cylinder of a gas engine or the like, said hollow shell having an enlarged internal diameter at its upper end with threads thereon, a unitary structure including; a metallic cartridge having its upper end flared to fit within said enlarged diameter and a ground electrode attached to the other end thereof, an insulating core within said cartridge, a central electrode terminal carried by said core adapted to coöperate with the said ground electrode; a second insulator carrying a portion of a central electrode, a gland adapted to be press-fitted onto said second electrode and having threads to engage threads on the enlarged part of said shell and to further engage the flared portion of said cartridge to hold the same securely in place within the shell and provide a gas-tight joint, with means for connecting said central electrode portions in operative relationship.

6. In an electrical spark plug the combination of a body member having an internal beveled shoulder, a gland having a beveled shoulder and supported by said body member, a central electrode comprising two parts one of which has a recess in its lower end and is arranged within said gland but insulated therefrom, a cartridge having a flange at one end, a hollow insulating member secured within said cartridge with an internal shoulder thereon, the second part of said central electrode being supported by said internal shoulder and having an enlarged projecting point which coöperates with the recess in the first said part of the central electrode in such a way that the flange on said cartridge and the beveled shoulders of the gland and body member are permitted to form a tight joint when the plug is assembled, a ground electrode terminal, said cartridge, insulating member, ground electrode, and the second part of said central electrode comprising a single unitary structure which is detachably supported within the body member of the plug.

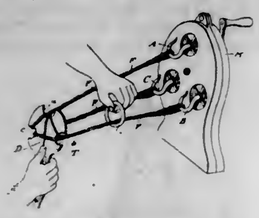
[Claims 2, 4, and 5 not printed in the Gazette.]

1,275,103. METHOD OF INSERTING RINGS IN ROPES. CLAS SWANSON, Ritzville, Wash. Filed Sept. 8, 1917. Serial No. 190,399. (Cl. 28—2.)

1. The method of securing a ring in a halter rope which consists in threading the strand-bights, of which the rope is to be formed; weaving certain of the strand-bights through the ring; positioning the ring at the junction or bend from which the bights spring; and then twisting the bights to form the rope.

4. The method of securing a ring in a halter rope, which latter is made by a rope machine employing a threaded or guide and a series of twisting hooks between which elements the strand is threaded in strand-bights; the passage of certain of the strand-bights through the

cing; the arrangement of the latter behind the threader; the passing of another of said bights through the ring



after it is arranged behind the threader; and the twisting of the bights to form the rope.

[Claims 2 and 3 not printed in the Gazette.]

1,275,104. BINDER-FILE. DANIEL TAYLOR, Dunedin, New Zealand. Filed Nov. 9, 1916. Serial No. 130,316. (Cl. 129—25.)



1. In a binder, the combination, with a pair of binding members to receive between them the papers to be bound and having slots therein; of stitching wires attached to said papers; resilient retaining members engaged at their central portions with said wires and having their end portions inserted through said slots in opposite directions and projecting outwardly beyond the same, and slidable keepers mounted on said binding members for movement along the same, so as to press down the projecting ends of said retaining members and hold them flat against the surface of the binding members.

2. In a binder, the combination with a pair of binding members to receive between them the papers to be bound and having slots therein; of stitching members attached to said papers and provided with laterally-projecting bends; a resilient retaining member engaged at its central portion with said bends, and having its end portions inserted through said slots in opposite directions and projecting outwardly beyond the same, and a sliding keeper on each binding member to engage the adjacent end of said retaining member and hold it flat against the surface of the binding member.

3. In a binder, the combination, with a cover comprising connected back and side members and provided with a pair of flaps having oppositely-located slots, of a pair of slotted binding members to receive between them the papers to be bound, said flaps adapted to be positioned against said binding member so as to bring the slots in the flaps into register with the first-named slots; stitching wires attached to said papers; resilient retaining members having their central portions engaged with said wires and their ends passed through the registering slots; and slidable keepers mounted on said binding members for movement along the same, so as to press down the projecting ends of said retaining members and hold them flat against the surface of the binding members.

1,275,105. NUT-LOCK. ANDREW F. THOMPSON, Englewood, Kans. Filed Apr. 20, 1918. Serial No. 229,782. (Cl. 151—28.)

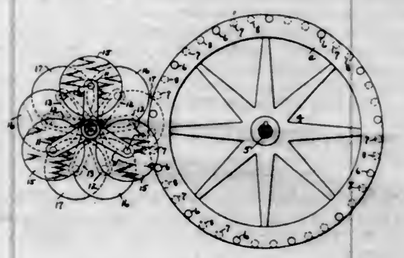
1. In combination with a bolt having a square end, a nut member on said bolt, lugs projecting from two of the opposing sides of the nut, a locking member arranged between the lugs and having a bore receiving the square end of the bolt, and spring means carried by said locking member and co-engaging with the lugs for removably locking the said member between the lugs and to the nut.



4. In combination, a bolt having a square end, a nut threaded on said bolt, said nut having outwardly extending lugs which are notched at their outer ends and which are provided on their inner faces with notches intersecting the first mentioned notches, said nut, upon the outer face thereof being formed with a pocket, a locking member having a bore to receive both the threaded and square portion of the bolt and being of a size to be received in the pocket of the nut, said locking member being constructed of spring material and having two of its opposed sides integrally formed with outwardly extending spring elements adapted to engage with the notches on the inner faces of the lugs.

[Claims 2 and 3 not printed in the Gazette.]

1,275,106. GEARING. CLYDE B. TRUSSELL, Omaha, Nebr. Filed Jan. 7, 1918. Serial No. 210,706. (Cl. 74—41.)



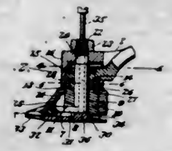
1. In a gearing, an axially mounted wheel provided near its periphery with a plurality of detent-members arranged in series longitudinally of its axis, the detent-members of one series being disposed in staggered relation with reference to the detent members of another series, a revoluble shaft, frame-members disposed at longitudinal intervals of and movable with the revoluble shaft, and a plurality of disks pivotally mounted on said frames for engaging said detent-members.

4. In a gearing, an axially mounted wheel provided outwardly of its axis, with a plurality of detent-members arranged in series longitudinally of its axis, the detent members of one series being disposed in staggered relation with reference to the detent members of another series, a revoluble shaft, frame-members mounted at longitudinal intervals of and movable with the revoluble shaft, a plurality of disks pivotally mounted on said frames for engaging said detent-members, the disks of each frame-member moving into engagement in succession with the detent-members of one of the series of said detent-members of said wheel.

[Claims 2, 3, and 5 to 8 not printed in the Gazette.]

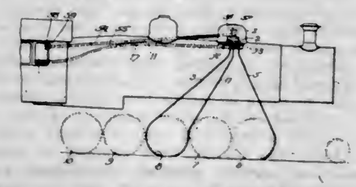
1,275,107. HAIR-CLIPPER. LESLIE E. VASS, Henderson, Ky. Filed Apr. 10, 1917. Serial No. 161,025. Renewed Jan. 8, 1918. Serial No. 210,930. (Cl. 30—1.)

1. In a hair clipper, the combination with fixed and movable blades, and means for reciprocating the movable blade upon the fixed blade; of a gage of T-shaped contour, a hinge connection between the rear end of its shank and the bottom of said fixed blade, a spring inclosing the hinge pin and throwing the front end of said gage normally toward the front edge of said blade, and a rolling element interposed between the shank and the fixed blade and movable toward and away from said hinge for adjusting the position of the front end of the gage.



2. In a hair clipper, the combination with fixed and movable blades, and means for reciprocating the movable blade upon the fixed blade; of a gage of T-shaped contour, a hinge connection between the rear end of its shank and the bottom of said fixed blade, a spring inclosing the hinge pin and throwing the front end of said gage normally toward the front edge of said blade, the shank being longitudinally slotted, and a wheel whose body projects through said slot and whose trunnions overlie the shank, its upper side traveling beneath the fixed blade and its lower side adapted for contact with the customer's head, for the purpose set forth.

1,275,108. TRIPLE SANDING APPARATUS. HARRY VISSERING, Chicago, Ill. Filed Mar. 9, 1917. Serial No. 153,737. (Cl. 291—11.)



5. A locomotive track sanding apparatus comprising in combination a sand trap, a rear sander and a plurality of front sanders on one side of a locomotive and fluid pressure means for discharging sand through either the rear sander or a plurality of front sanders.

[Claims 1 to 4 and 6 to 42 not printed in the Gazette.]

1,275,109. VEHICLE-WHEEL RIM. JAMES H. WAGENHORST, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed May 12, 1913. Serial No. 766,995. (Cl. 152—21.)



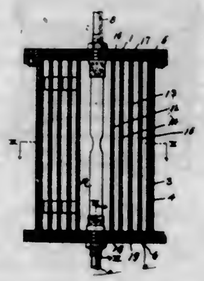
1. In a vehicle wheel, in combination, a fixed wheel member, a detachable rim therefor, and a locking element having engagement with the detachable rim and with a part of said wheel member and adapted to be drawn laterally by a bolt carried by said wheel member and to draw said detachable rim radially inward to its seat by wedging reaction therewith.

2. In a vehicle wheel, in combination, a fixed wheel member, a detachable rim therefor, a retaining clip having a portion for engaging a peripheral portion of said rim, and means for tilting said clip radially inward into wedging engagement with said fixed wheel member.

3. In a vehicle wheel, in combination, a fixed wheel member, a rim therefor, and a common retaining member carried by a bolt in said wheel member and adapted to exert a force upon said rim in a radial direction by the engagement of said retaining member with the fixed wheel member independently of said bolt.

[Claims 4 to 22 not printed in the Gazette.]

1,275,110. ELECTRIC FUSE. WALTER W. WALSH, Wilkinsburg, Pa. Filed June 27, 1916. Serial No. 106,103. (Cl. 175—273.)

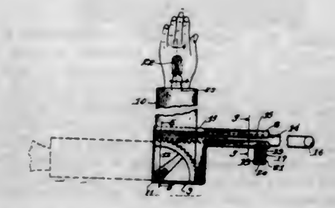


1. An electric fuse casing comprising in combination, end walls, a cylindrical outer wall, a plurality of incomplete cylinders within the outer wall having overlapping sides and arranged alternately on opposite sides of the longitudinal axis of the casing, said cylinders forming a central explosion chamber and a plurality of expansion chambers communicating with each other and with said explosion chambers, and electrical conductors extending through the end walls and provided within the casing with a fusible element.

4. In an electric fuse casing, the combination of a plurality of concentric tubes arranged alternately on opposite sides of the central axis of the casing and having open overlapping sides, said tubes forming an explosion chamber and a plurality of expansion chambers communicating with each other and with said explosion chamber, the tubes on each side of said central axis being united with a rigid structure, and means for bringing the open sides of all of said tubes into registering positions.

[Claims 2 and 3 not printed in the Gazette.]

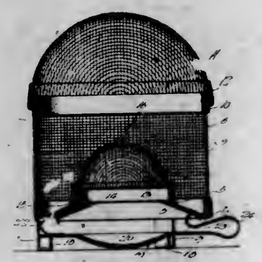
1,275,111. VISIBLE-SIGNAL MECHANISM. ABRAM R. WALTERS, Alhambra, Cal. Filed Feb. 6, 1917. Serial No. 146,994. (Cl. 116—31.)



A signaling device for motor driven vehicles, comprising a housing secured to the vehicle body adjacent its dash, a shaft rotatably mounted in said housing, a semaphore signal in imitation of a human forearm and hand rigidly mounted on said shaft, a segmental gear rigidly secured to said shaft, a horizontally disposed guide bar transversely mounted in said vehicle within reach of the vehicle operator, a manually operated rack bar slidingly mounted in said guide bar, said rack being in mesh with

the segmental gear and adapted to actuate the signal on a movement thereof, and a rack bar spring actuated lock disposed on said guide bar adapted to maintain said signal in its operative or inoperative position.

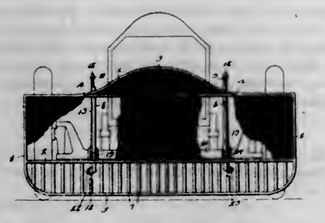
1,275,112. FLY-TRAP. HOWARD W. WATTS, Bloomsburg, Pa. Filed May 27, 1918. Serial No. 236,824. (Cl. 43—22.)



4. A fly trap comprising a cage having an inlet opening through its lower end and provided with legs which support said lower end above a horizontal surface on which it is seated, each of said legs being formed with a supporting element that extends inwardly with relation to said lower end, a pan normally seated on the supporting elements of said legs and being removable therefrom by sliding the pan in a horizontal and rectilinear path, and means for yieldingly securing said pan in its normal position on said supporting elements, an element of said means also constituting a handle whereby said pan may be conveniently manipulated.

[Claims 1 to 3 not printed in the Gazette.]

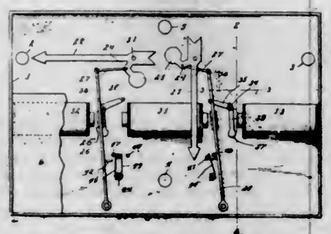
1,275,113. AUTOMOBILE-FENDER. NETTIE WEISS, Harrisburg, Pa. Filed Apr. 13, 1918. Serial No. 228,423. (Cl. 293—54.)



1. A fender for motor vehicles, comprising a scoop frame, vertically disposed bars fastened to said frame, chains attached to the upper extremities of said bars, lateral extensions at the lower extremities of said bars, a guide frame having forwardly extending upper and lower arms having guide ways and to which said chains and lateral extensions of the scoop frame are slidingly attached for yielding movement in a rearward direction, cushioning means interposed between the scoop frame and said guide frame, and means for detachably supporting said structure upon a motor vehicle.

2. A fender for motor vehicles, comprising a scoop frame, vertically disposed bars fastened to said frame, chains attached to the upper extremities of said bars, lateral extensions at the lower extremities of said bars, a guide frame having forwardly extending upper and lower arms having guide ways and to which said chains and lateral extensions of the scoop frame are slidingly attached for yielding movement in a rearward direction, cushioning means interposed between the scoop frame and said guide frame, means for detachably supporting said structure upon a motor vehicle, the fender supporting means comprising a pair of supporting brackets adapted to be secured to the front axle of the vehicle and each embodying forwardly diverging arms terminating in eyes arranged one above the other in spaced relation, and hooks on said guide frame adapted for insertion in said eyes.

1,275,114. AUTOMOBILE-SIGNAL. ROBERT L. WERNTZ, Freeport, Ill. Filed Sept. 5, 1917. Serial No. 189,828. (Cl. 177—339.)



4. In a signal of the type described, the combination with alined and spaced electromagnets, a lever swinging between them and serving as the armature of either, and means for selectively energizing the magnets; of the signal proper, connections between it and the free end of the lever, a catch on the latter, and an angular latch pivotally supported at its angle and having a hook on one arm for engaging said catch when the lever is in one extreme position and its other arm hanging in the magnetic field of one of said magnets, for the purpose set forth.

5. In an automobile signal of the type described, the combination with a casing, left, right, and intermediate electromagnets mounted therein and spaced from each other, means for energizing them selectively, and two levers whereof each is pivoted at its lower end within the casing for swinging movement between the intermediate magnet and one of the other magnets; of two arrow-shaped signals pivoted near their rear ends within the casing above the magnets and adapted to swing to horizontal, or vertical positions, connections between each arrow and the free end of one lever whereby the latter moves from within the magnetic field of one magnet into that of the other as the arrow moves from one of its extreme positions to the other and travels across the neutral space between said fields by the inertia of parts, latch mechanism for holding the lever adjacent the intermediate magnet, and means for tripping said latch when the other magnet is energized.

7. In a signal of the class described, the combination with a member pivoted to swing from horizontal to vertical positions and weighted to stand normally between such extremes of movement, a pivoted lever connected with said member and swung therewith, an armature on the lever, spaced electromagnets between which the lever swings, and means for energizing them selectively; of a signal lamp, a circuit closer, a circuit including the lamp and circuit closer and a source of energy, and a pin on said lever opening the circuit closer when the lever swings to one extreme of its movement.

[Claims 1 to 3 and 6 not printed in the Gazette.]

1,275,115. CONDUIT OR CULVERT MOLD. NEWELL E. WHETSTONE, Poland, Ohio. Filed Dec. 5, 1917. Serial No. 205,577. (Cl. 25—127.)

1. In a conduit mold, inner and outer tubular shells of different diameters, one arranged within the other, tie wires and spacing members to hold the shells spaced, and means at each end of the mold to hold the opposite ends of the shells concentrically spaced.

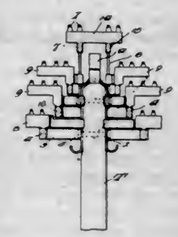
3. In a conduit mold, inner and outer tubular shells, each being longitudinally split, means at one end of the conduit to hold the shells concentric, tying means arranged at intervals along the mold to hold the shells concentric, one end of the inner shell opposite said first named means having expansion means to expand the inner shell concentric with the outer shell.



6. In a cement mold, as set forth, inner and outer shells semi-circular in cross section, one being of less diameter than and arranged within the other, spacing blocks between the shells at one end of the mold, tie wires connecting the inner and outer shells intermediate their ends and being out of alinement with the blocks, the inner shell being longitudinally split, the outer shell having a filling opening, and a cover plate semi-circular and having inner and outer flanges telescoping the inner and outer shells.

[Claims 2, 4, and 5 not printed in the Gazette.]

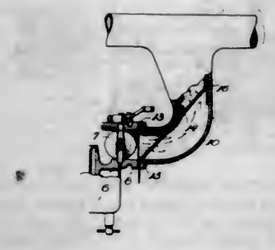
1,275,116. ELECTRICAL-CONDUCTOR SUPPORT. SHEDRICK WHITTER, Safety Harbor, Fla. Filed Nov. 12, 1917. Serial No. 201,503. (Cl. 173—321.)



1. A device of the character described including a substantially U-shaped base, laterally extending arms varying in length arranged on the extremities of said base, and pivotal supporting means detachably mounted on said arms.

2. A device of the character described including a substantially U-shaped base, laterally extending arms varying in lengths arranged on the extremities of said base, pivotal supports detachably mounted on said arms, and means engaged with the supports and engageable with said base for stretching electrical conductors thereon.

1,275,117. GAS-ENGINE ATTACHMENT. DAVID L. WINTERS, Philadelphia, Pa. Filed Apr. 19, 1918. Serial No. 229,577. (Cl. 48—180.)



1. The combination with the intake manifold of an internal combustion engine, of an attachment comprising a compressible frame member and a sheet of easily distortable material of relatively fine mesh mounted thereon, said frame being inserted in the manifold to cross the same at different points and to closely contact with the wall thereof, whereby to compel the repeated passage through said mesh of the explosive compound passing through said manifold.

2. An attachment of the character described comprising a resilient frame member of double elliptical or figure-8 form, and a sheet of fine mesh gauze covering said form, said attachment being adapted to be passed into the intake manifold of an explosive engine and positioned therein to cross the bore thereof at different points, thereby to compel the repeated passage through said mesh of the explosive compound passing through said manifold.

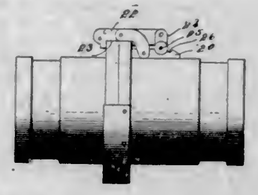
3. An attachment of the character described comprising a frame of bendable or semi-resilient material of substantially figure-8 form, a sheet of gauze mounted thereon, and means for securing said parts in place in the intake manifold of an engine and in angular relation to the bore thereof to compel the explosive compound to pass repeatedly therethrough before reaching the cylinders.

4. In combination with a curved intake manifold of an internal combustion engine, a relatively flat frame of substantially figure-8 form, and a sheet of gauze mounted upon said frame, said frame being mounted in the manifold and extending on opposite sides of the curve thereof, thereby to effectively close the intake manifold at two places to the free passage of explosive compound therethrough, said parts being so positioned and arranged as to compel the explosive compound to pass repeatedly through the gauze.

5. In combination with a curved intake manifold of an internal combustion engine, a relatively flat frame of substantially figure-8 form, and a sheet of gauze mounted upon said frame, said frame being mounted in the manifold and extending on opposite sides of the curve thereof, thereby to effectively close the intake manifold at two places to the free passage of explosive compound therethrough, said parts being so positioned and arranged as to compel the explosive compound to pass repeatedly through the gauze, and means for securely clamping said attachment in place within the manifold.

[Claim 6 not printed in the Gazette.]

1,275,118. PIPE-COUPLING. JOHN F. ANDERSON, Norway, Iowa. Filed July 27, 1917. Serial No. 183,153. (Cl. 285—144.)



2. A hose coupling including a pair of members formed with abutting flanges, a pivoted member carried by one of the members and formed with a notch for the reception of the said flanges, a notched member mounted adjacent said pivoted member, and a locking means carried by the pivoted member for engagement in said notches.

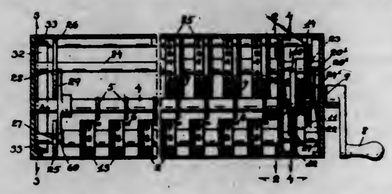
[Claim 1 not printed in the Gazette.]

1,275,119. ZERO-SETTING MECHANISM. FRANK S. BALDWIN, New York, N. Y., assignor to Monroe Calculating Machine Company, New York, N. Y., a Corporation of New York. Filed Sept. 24, 1914. Serial No. 863,316. (Cl. 235—144.)

1. In zero-setting mechanism, a series of numeral wheels having each a stop, a second series of numeral wheels having each a stop, an operating shaft having separate driving clutch connection with the wheels of each series,

the clutches relating to the two series acting oppositely, and a movable member having connection with the operating shaft and moved thereby into the paths of the stops of the wheels of either series.

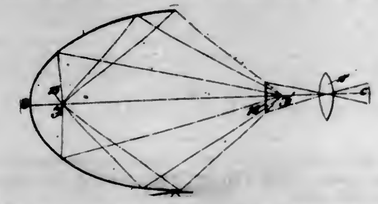
7. In zero-setting mechanism, parallel shafts having each a gear wheel and a notched cam, a series of numeral wheels upon each shaft having pins extending therefrom, an operating shaft having mutilated gear wheels for engagement with the gears of the parallel shafts, said operating shaft having oppositely acting clutch connections with the gear wheels thereon, springs upon the carriage having locking engagement with the gears of the parallel shafts, means upon each mutilated gear to release the re-



spective spring upon turning of the gear, a rock shaft having a series of radial projections spaced apart from each other and adapted for engagement with the pins of the numeral wheels of each parallel shaft respectively, said rock shaft having a cross arm engaging the cams of the parallel shafts to effect the rocking upon turning of each parallel shaft in order.

[Claims 2 to 6 not printed in the Gazette.]

1,275,120. PROJECTING APPARATUS. EDWIN C. BALLMAN, Kirkwood, and EDWARD P. EVERS, St. Louis, Mo. Filed Aug. 6, 1914. Serial No. 855,420. (Cl. 88—24.)



1. A projecting apparatus comprising an ellipsoidal reflector, a source of light positioned at the focus of said reflector so as to cause the latter to concentrate the major part of the light from said source on an object, and means for projecting an image of the object on a screen.

11. A projecting apparatus comprising a source of light, an object, an ellipsoidal reflector positioned with one focus at said source and with the other focus adjacent said object, means for distributing the light from said source uniformly on said object, and means for projecting an image of said object on a screen.

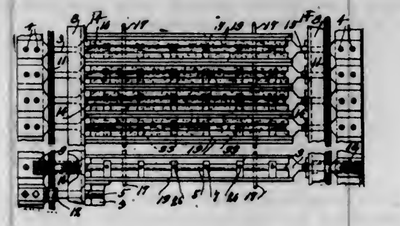
20. The combination with a source of light, of an ellipsoidal reflector having a plurality of foci at one end.

21. The combination with a source of light, of an ellipsoidal reflector having its elliptical axis displaced with respect to its axis of revolution.

[Claims 2 to 10, 12 to 19, and 22 to 29 not printed in the Gazette.]

1,275,121. CONCRETE-FORMING APPARATUS. DAVID G. BENDER, Blue Island, Ill. Filed Mar. 9, 1917. Serial No. 153,697. (Cl. 25—41.)

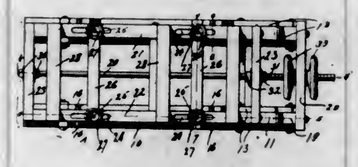
1. In molding apparatus of the class described, the combination of a support including bottom supporting means for material to be molded, movable members mounted thereupon, means for moving said members into operative position, for sustaining material to be molded into units in molding position, stationary mold sides disposed between the movable members aforesaid, and mold ends carried by said movable members in spaced relation and movable by and with said members into position in-



termediate the mold sides whereby to hold said sides in position to receive the material to be molded.

[Claims 2 to 8 not printed in the Gazette.]

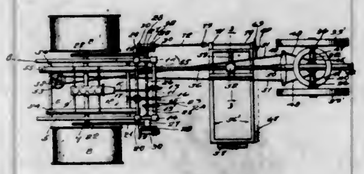
1,275,122. ADJUSTABLE ENGINE-BED. HENRY BORDELEAU, Argusville, N. D. Filed Sept. 19, 1917. Serial No. 192,119. (Cl. 248—30.)



1. An engine bed comprising a base including side members, longitudinal bars, secured to the sides of said side members and provided with spaced enlargements having vertical slots therebetween, clamping bolts carried by said side members, an engine supporting frame mounted upon said side members and having slots through which said bolts extend whereby to permit of an adjustment of said frame longitudinally of said side members, a rod mounted in said frame, hand wheels mounted upon said rod and adapted for alternative engagement with a portion of said base whereby to adjust said frame in opposite directions, hand wheels mounted upon said clamping bolt for securing said frame in its adjusted positions, and rollers having bearings in the vertical slots in the bars secured to said side members of said base and upon which rollers said adjustable frame is supported.

[Claims 2 and 3 not printed in the Gazette.]

1,275,123. COMBINED TRACTOR, BINDER, AND PLOW-TRUCK. LEONARD BROWN, Webb City, Mo.; Mary A. Brown administratrix of said Leonard Brown, deceased. Filed Jan. 3, 1917. Serial No. 140,441. (Cl. 180—1.)



1. Apparatus of the character described, comprising a frame, traction wheels to support and propel the frame, a prime mover carried by the frame to drive the traction wheels, a pair of sleeves secured to the frame near its opposite sides, a steering unit, a coupling pole connected with the steering unit and adapted to be held within either of the sleeves, a counter-shaft carried by the frame and driven by the prime mover, and means for connecting either end of the counter shaft with the operating elements of an apparatus connected thereto.

2. Apparatus of the character described, comprising a frame, traction wheels to support and propel the frame, a prime mover carried by the frame to drive the traction wheels, a pair of sleeves secured to the frame near its opposite sides, a steering unit, a coupling pole connected with the steering unit and adapted to be held within either of the sleeves, a counter shaft carried by the frame and driven by the prime mover, stub-shafts arranged near the ends of the frame and driven by the counter shaft, and driving means for the operating elements of an apparatus connected thereto and adapted to have detachable connection with either stub-shaft in accordance with the same being a right or left hand drive.

3. A tractor of the character described, comprising a frame, traction wheels to support and propel the frame, a prime mover carried by the frame to drive the traction wheels, a pair of sleeves secured to the frame near the opposite sides thereof, a steering unit, a sleeve secured to the steering unit, a coupling pole having one end adjustably mounted in the sleeve of the steering unit and its opposite end adapted to be adjustably mounted in either sleeve of the frame, and means carried by each sleeve to lock the coupling pole thereto in adjustment at a desired position.

4. A tractor of the character described, comprising a frame, traction wheels to support and propel the frame, a prime mover carried by the frame to drive the traction wheels, a sleeve carried by the frame and having its opposite ends open, a steering unit, a sleeve carried by the steering unit, and a coupling pole having one end secured within the sleeve of the steering unit and its opposite end adapted for insertion within either end of the sleeve of the frame whereby the coupling pole may be arranged forwardly or rearwardly of the traction wheels.

5. A tractor of the character described, comprising a wheeled frame, means to propel the wheeled frame, a coupling pole connected with the wheeled frame, an annular bolster, a sleeve rigidly secured to the annular bolster and adapted to receive the end of the coupling pole, horizontally swinging spindles pivotally connected with the annular bolster, means to swing the spindles in a substantially horizontal plane, and wheels rotatably mounted upon the spindles.

1,275,124. SANITARY MOUTHPIECE-COVER FOR TELEPHONE-TRANSMITTERS. GEORGE W. BULLEY, Chicago, Ill. Filed Sept. 9, 1916. Serial No. 119,219. (Cl. 179—185.)



The combination of a telephone transmitter mouthpiece open at its end and having an annular rim, a flat thin metallic diaphragm disk of substantially the diameter of the opening positioned in front thereof and parallel with the plane of the mouthpiece opening, integral spring clips formed at the edge of the disk engaging the mouthpiece for holding the disk in place, and integral spacers holding the disk slightly separate from the mouthpiece to leave a thin annular opening between the mouthpiece rim and the diaphragm disk.

1,275,125. SIGN-POST. GEORGE P. BUTLER, Lebanon, N. H. Filed July 20, 1917. Serial No. 181,724. (Cl. 40—145.)

1. In a device of the character described, a sign board provided at its upper end with a plate having a flat upper face and a beveled under face, and means for clamping a device having a flat under face to the said plate, whereby



the device may be mounted upon the sign board at any desired angle.

[Claims 2 and 3 not printed in the Gazette.]

1,275,126. AUTOMOBILE-LOCK. JOHN A. CAMPBELL, Carbondale, Ill. Filed Apr. 26, 1917. Serial No. 164,775. (Cl. 70—126.)



1. In a locking device for motor vehicles, the combination with a removable toe board, and service brake and clutch pedals having their shanks movable through slots in the board, of means mounted upon the underside of the board adapted in active position to engage both pedal shanks to hold the pedals in depressed position and to also lock the board against removal.

2. In a locking device for motor vehicles, the combination with a removable toe board, and service brake and clutch pedals having their shanks movable through slots in the board, of means mounted upon the underside of the board adapted in active position to engage both pedal shanks to hold the pedals in depressed position and to also lock the board against removal, said means including locking bars mounted for sliding movement upon the board and adapted in active position to engage at their ends in sockets formed in the frame of the vehicle to lock the board in place, abutments formed upon one of the locking bars to engage over the shanks of the pedals when they are depressed, means for moving the locking bars to active position, and a key controlled lock for automatically securing the bars in active position.

3. In a lock for motor vehicles, the combination with service brake and clutch pedals, of means for locking the pedals in depressed position, a spring normally holding such means in inactive position, and step by step means for bringing the locking means to active position.

6. In a lock for motor vehicles, the combination with a clutch controlling member, and a brake-controlling member of a locking bar movable into active position to hold the clutch released and the brakes applied, means for holding said locking bar normally in inactive position, a plunger operatively connected with said locking bar to move the same to active position, and key-controlled means for securing the locking bar in active position.

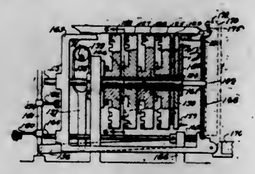
[Claims 4 and 5 not printed in the Gazette.]

1,275,127. EYE-PROTECTOR. JULIAN ALBERT CAMPBELL, Long Beach, Cal. Filed July 11, 1917. Serial No. 179,920. (Cl. 2—149.)



A protector of the character described comprising a relatively narrow nose bridge piece embodying an intermediate curved portion and substantially flat wings projecting outwardly and in opposite directions from the terminals of the curved portion, the wings lying in the same plane with each other and being formed with elongated slits substantially flexible and opaque eye shields, connecting tongues projecting from one end of each shield, and engageable in the slot in the adjacent wing and attaching means engaged in the shields for retaining the shields in position to cover the eyes.

1,275,128. ADMISSION-REGISTERING MECHANISM. ROBERT M. CAMPBELL and LAWRENCE S. CAMPBELL, Los Angeles, Cal. Filed Dec. 1, 1915. Serial No. 64,449. (Cl. 235—31.)



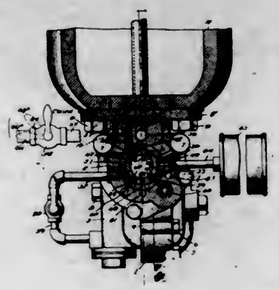
1. In a recording device, the combination of an adding machine, comprising a set of adding disks, needles mounted adjacent said disks and movable therewith; a movable frame provided with a door, and means for holding a record sheet; a lock for said door; mechanism for operating said lock; and means connected to said mechanism and to said lock for operatively moving said frame a given distance on locking the door and a different distance on unlocking the door, whereby to mark said sheet upon operation of said lock with distinguishing marks.

2. In a recording device, the combination of an adding machine, comprising a set of adding disks; needles mounted adjacent said disks and movable therewith; a movable frame provided with a door and means for holding a record sheet; a lock for said door; mechanism for operating said lock comprising a longitudinally movable link; a lever movable transversely and longitudinally to said link and connected thereto to move said link longitudinally; and links connected to said lever and to said frame to move the latter when said lever is moved transverse to said first named link.

3. In a recording device, the combination of an adding machine, comprising a set of adding disks, puncture needles mounted adjacent said disks and arranged to move in one plane on an actuation of said disks; a movable frame provided with a door and means for holding a record sheet; a lock for said door; mechanism for operating said lock comprising a longitudinally movable link; a lever movable transversely and longitudinally to said link and connected thereto to move said link longitudinally; links connected to said lever and to said frame to move the latter when said lever is moved transversely to said first named link; and a plate having a slot in which the end of said lever is disposed, said slot elongated to permit said transverse movement of said lever and having notches disposed at different points to define longitudinal movements of said lever in locking and unlocking said door.

1,275,129. TRIPLE VALVE. WILLIAM GEO. CANION, Baltimore, Md. Filed Jan. 19, 1917. Serial No. 143,341. (Cl. 188—15.)

6. A triple valve including a casing, a rotary valve having a normal range of motion for performing ordinary triple valve functions, and an extended range of motion for performing retaining and recharging functions, a diaphragm operatively connected with said valve for controlling the same, said diaphragm being subjected to opposing train line and auxiliary reservoir pressures, means movable into and out of the path of motion of said diaphragm for permitting the same to have normal and extended ranges of motion, and means for controlling the aforesaid means.



9. A triple valve including a casing, a retainer controlling the exhaust from said casing, said retainer being adjustable to full and partial exhaust positions, a valve operative for performing ordinary triple valve functions and recharging and retaining functions, a diaphragm for operating the valve subjected to opposing train line and auxiliary reservoir pressures, means movable into the path of the diaphragm for normally limiting its movements to adapt the valve to perform ordinary triple valve functions, pressure controlled means in communication with the air system through the valve for operating said member, and a controlling valve in the line of the connection.

10. The triple valve including a casing, a valve controlling ports and passages for performing ordinary triple valve functions, a pressure controlled device subjected to opposing train line and auxiliary reservoir pressures for operating said valve and means for automatically balancing the valve within the valve casing.

[Claims 1 to 5, 7, 8, 11, and 12 not printed in the Gazette.]

1,275,130. PACKAGE-TIE. JOHN CARLSON and MATHIAS CARLSON, Samuels, Idaho. Filed Feb. 27, 1918. Serial No. 219,456. (Cl. 24—18.)

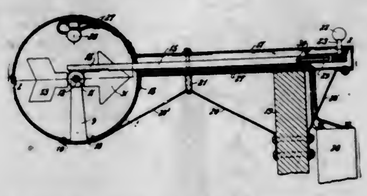


2. A package tie comprising a plate, an attaching clip secured to the bottom face of said plate and adapted to receive the cord after being passed once about an article, a second attaching clip secured to the top face of the plate and adapted to receive the ends of the cord after being passed about the package a second time, and clamping means adapted to engage the second named clip to compress the same against the member for clamping the ends of the cord.

[Claims 1 and 3 not printed in the Gazette.]

1,275,131. DIRECTION-INDICATOR FOR MOTOR-VEHICLES. SUMNER R. CHAPIN, Springfield, Mass. Filed Feb. 7, 1918. Serial No. 215,889. (Cl. 116—31.)

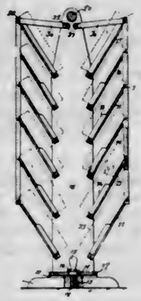
5. A direction indicator for motor vehicles comprising, in combination, an inclosing casing, a shaft rotatably mounted therein, a disk of opaque material secured to the shaft and having an arrow shaped opening formed therein, a transparent piece of colored material secured to the inner side of the disk and over the opening, to show the position of said opening when the shaft is rotated, means for operating the shaft, and means for illuminating the interior of the casing, a rod engaging a pinion on the shaft, said rod being located within a hollow arm to which the casing is secured.



6. A direction indicator for motor vehicles comprising, in combination, an inclosing casing, a shaft rotatably mounted therein, a disk secured to the shaft and having an arrow shaped opening formed therein, a transparent piece secured to the inner side of the disk and over the opening in the disk to show the position of said opening when the shaft is rotated, means for operating the shaft, means for illuminating the interior of the casing, a rod and a spring for securing the rod in different positions of adjustment for the purpose described.

[Claims 1 to 4 not printed in the Gazette.]

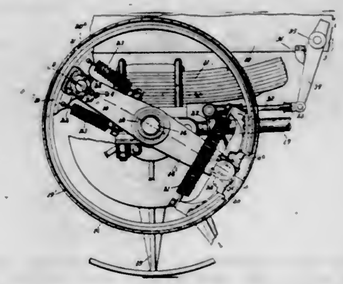
1,275,132. RACK FOR MUSIC-ROLLS OR THE LIKE. ABEL E. CHERNACK, New York, N. Y. Filed Dec. 6, 1917. Serial No. 205,762. (Cl. 211—14.)



1. A rack for player piano roll boxes comprising a floor base, a rectangular frame having bottom, top, and side members rigidly secured together, a swiveling connection between said bottom member of the frame and the base, together with two series of upwardly inclined shelves extending between said side uprights and facing in opposite directions on opposite sides of the plane of said swiveling axis of the frame, the shelves of each series being of sufficient width to support roll boxes placed thereon at right angles to the length of the shells and being arranged so closely together and at such angle that the upper ends of the roll boxes on one shelf extend above the lower margin of the shelf next above and the upper ends of the roll boxes on all the shelves are presented at an angle to facilitate the reading of their titles, the inner margins of the shelves of the opposed series being spaced apart to leave a central open area into which the innermost corners of the roll boxes project, and means at the inner margin of each shelf for supporting the lower inner corner of the roll boxes placed thereon, the shelves of each series being pivoted to said side members of the frame and folding upward against each other into a substantially vertical position, the pivots of adjacent shelves being spaced apart a less distance than the width of the shelves.

2. In a construction such as specified in claim 1, means for collapsing the shelves substantially into the plane of the side uprights for storage and shipping purposes.

1,275,133. MOTOR-VEHICLE. HAROLD D. CHURCH, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 13, 1913. Serial No. 800,803. (Cl. 21—8.)



1. A brake mechanism comprising a brake drum, a brake, and a uniform motion cam for operating said brake.

2. A brake mechanism comprising a brake drum, an expanding brake coöperating with said drum, and a uniform motion cam for operating said brake.

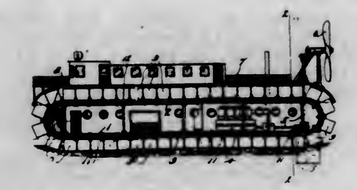
3. A brake mechanism comprising a brake drum, an expanding brake coöperating with said drum, and a double faced uniform motion cam for operating said brake.

4. A brake mechanism comprising a brake drum, a shoe adapted to coöperate with said drum, a plate cam for operating the shoe, and a lever for operating the cam, the cam being formed so as to cause a movement of the brake shoe to a certain extent upon the movement of the lever through a certain number of degrees and to cause a further movement of the brake shoe to an equal extent upon the further movement of the lever through the same number of degrees.

5. In a motor vehicle the combination with a brake drum and the brake shoe coöperating therewith, of a plate cam for operating the brake shoe, a lever for operating the cam, and an adjustable connection between the lever and the cam, said cam being formed so as to cause a uniform motion of the shoe within the limits of movement of the cam.

[Claims 6 to 11 not printed in the Gazette.]

1,275,134. MARINE VESSEL. ACHILLES COLLE, Doylestown, Pa. Filed Feb. 27, 1918. Serial No. 219,424. (Cl. 114—67.)



1. In a boat construction, the combination of a body, an endless float support extending about said body and freely movable under the action of the water incident to propulsion of the boat, and propulsion means for the boat independent of the endless float support.

3. In a boat construction, the combination of a body, an endless float support comprising a series of float elements movable longitudinally and transversely of the boat.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,275,135. LOCK-VALVE. MARTIN J. CUNNINGHAM, Springfield, Mo., assignor of one-half to Emaline B. Cunningham, Springfield, Mo. Filed Oct. 18, 1917. Serial No. 197,229. (Cl. 137—7.)

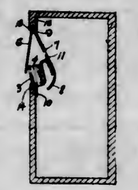


1. A lock valve comprising a casing, a sectional valve located in said casing, said sections being adapted to rotate together and to be relatively adjusted, means for rotating one section of the valve, a spring held plunger located in said valve section adapted to be seated in a bore formed in the valve casing, a screw threaded plunger located in the casing adapted to unseat said plunger, and a key for rotating said screw threaded plunger.

4. A lock valve comprising a casing, a valve located therein, a rotatable plug mounted in said casing and seated in said valve, a spring pressed plug mounted in the rotating plug and adapted to be seated in a recess formed in the casing, a screw threaded plug mounted in the casing for unseating the spring pressed plug, a handle for rotating the plug mounted in the casing, and a screw threaded stem mounted in said plug for holding the spring pressed plug in a set position.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,275,136. MAIL-BOX. FRANK PIERO DE NOBILI, Vancouver, British Columbia, Canada. Filed Feb. 11, 1918. Serial No. 216,547. (Cl. 232—45.)

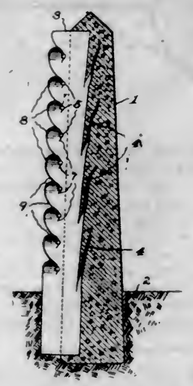


1. In a mail box, the combination with a receptacle having a mail inlet, of a flap swingably connected to the lower edge of the inlet and partially closing the same, a flap swingably connected to the upper edge of the inlet and completing the closure of the same, and means connecting the flaps whereby outward movement of the upper flap swings said lower flap outwardly to form a mail chute for the receptacle.

4. In a mail box, the combination with a receptacle having a mail inlet, of channel shaped members secured to the upper and lower edges of the said inlet, a flap swingably disposed as to its lower edge in the lower channel member and partially closing the inlet, a flap swingably disposed as to its upper edge in the upper channel member completing the closure of the inlet and doubled over so as to form an interior flap the lower end of which is curved and extended below the lower edge of the lower flap, and resilient connecting means between the said lower flap and the said interior flap.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,275,137. WIRE-FENCE FASTENER FOR CEMENT POSTS. HENRY DIEBEL, Detroit, Mich., assignor of one-half to W. H. Wilcox, Detroit, Mich. Filed May 15, 1918. Serial No. 234,655. (Cl. 256—52.)



1. A wire fence fastener for concrete posts, including a sheet metal strip adapted to have the inner edge thereof embedded in the body of the post with the outer edge thereof projecting from the post, said outer edge being provided with a series of wire receiving openings and being formed with substantially longitudinally extending slits intersecting the openings and extending beyond the same in both directions, one end of each of the slits opening outwardly through the edge of the strip and the said slits forming wings which are flexible to admit of fence wires being positioned within the openings.

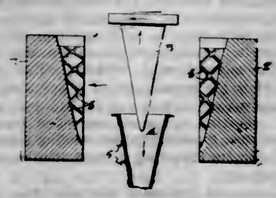
2. A wire fence fastener for concrete posts, including a sheet metal strip adapted to have the inner edge thereof embedded in the body of the post with the outer edge thereof projecting from the post, said outer edge being provided with a series of wire receiving openings and being formed with longitudinally extending slits intersecting the openings, a wing being provided at the edge of the strip for each of the openings and said wings having curved outer and upper edges, the curved upper edge of each wing forming a continuation of the slit and the curved edges of adjacent wings providing flared mouths leading to the respective slits, the wings being flexible to permit of fence wires being positioned within the openings.

[Claims 3 to 5 not printed in the Gazette.]

1,275,138. METHOD OF EXTRACTING CONES FROM THEIR BAKING-MOLDS. ALBERT E. DIETERICH, Washington, D. C. Filed May 7, 1918. Serial No. 233,124. (Cl. 107—58.)

1. The method of releasing cones from their molds which consists in detaching one side of the mold from the cone while holding the cone on the core and to the other side of the mold, loosening the core from the cone, and subsequently detaching the cone from the remaining side of the mold while the core remains projected into the cone.

2. The method of releasing cones from their molds which consists in holding the cone by external and internal engagement at one longitudinal side of the cone while disengaging the other side of the cone from the mold, then releasing the cone from internal engagement, and subsequently releasing the cone from external engagement by internal engagement of the cone on the side first released.

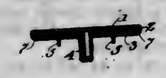


3. The method of releasing cones from split molds which consists in first opening one section of the mold, partly withdrawing the core in the direction of its axis while holding the other section of mold against removal, and releasing the cone from the held mold section by internal engagement.

4. The method of releasing cones from split molds which consists in first opening one section of the mold, partly withdrawing the core in the direction of its axis while holding the other section of mold against removal, then moving the core laterally away from the held mold section to detach the cone therefrom.

5. The method of releasing cones from split molds and their cores which consists in effecting relative movement between one section of the mold on the one hand and the core and other mold section on the other hand, then moving the core axially outward to detach it from the cone and subsequently effecting relative movement between the core and remaining mold section to detach the cone from the remaining mold section.

1,275,139. MILITARY ORNAMENT. JAMES A. DOBAN, Providence, R. I. Filed Nov. 6, 1917. Serial No. 200,586. (Cl. 24—105.)



1. A military ornament, comprising a back including a disk, a stem and fixing points all made in one integral piece, and a face shell having a flange curled over the edge of the disk and thereby united therewith and having the ornament or design or insignia required, and a fastening nut adapted to engage the screw stem to fasten the ornament in place.

[Claims 2 and 3 not printed in the Gazette.]

1,275,140. COUNTERBALANCED CRANK-SHAFT. WILLIAM G. DUNN, Clarinda, Iowa. Filed Mar. 28, 1918. Serial No. 225,279. (Cl. 74—5.)

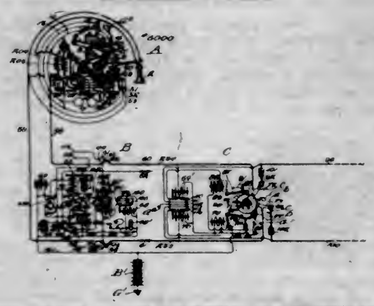


1. In a counterbalanced crank shaft, the combination of a six throw shaft having six crank pins, four long crank arms, and four short crank arms; together with counterbalancing means for said shaft consisting totally of four weights carried one by each of said long crank arms, the weights of the front and rear arms being opposed to those of the next adjacent arms, the centers of mass of said weights being located to balance the long crank arms and the portions of the crank pins attached thereto and in addition the short crank arms and the ends of the crank pins attached to the latter.

4. In a counterbalanced crank shaft, the combination of a shaft having a pair of long crank arms connected at one end by a crank pin, additional crank pins joined to the other ends of said crank arms, the three crank pins being spaced 120 degrees apart, short crank arms joined to said additional crank pins, and bearing journals carrying said short crank arms; together with a pair of counterbalancing weights carried one by each of said long crank arms, the weight of one arm being opposed to that of the other arm and said weights having their centers of mass located to balance both long crank arms, both short crank arms and the three crank pins.

[Claims 2, 3, 5, and 6 not printed in the Gazette.]

1,275,141. TELEPHONE-EXCHANGE APPARATUS AND SYSTEM. JOHN ERICKSON, Chicago, Ill., assignor, by mesne assignments, to Automatic Electric Co., a Corporation of Illinois. Filed July 16, 1906, Serial No. 326,450. Renewed Jan. 2, 1918. Serial No. 210,070. (Cl. 179—18.)



1. In a telephone exchange system, an automatic switch, a line running to said switch, a repeater in said line, provided with relays for controlling the operation of said automatic switch, and a subscriber's calling device for transmitting electrical impulses to operate said repeater, said automatic switch provided with relays responsive to the electrical impulses transmitted by the said repeater relays, said repeater provided with parallel line circuit conductors each having a normally open gap therein, and automatic means for closing said gaps simultaneously with the transmission of the last impulse necessary for completing connection between the telephone lines of the calling and called subscribers.

2. In a telephone exchange system, an automatic switch, a line running to said switch, a repeater in said line, provided with a relay for controlling the operation of said automatic switch, and a subscriber's calling device for transmitting electrical impulses to operate said repeater, said automatic switch provided with a relay responsive to the electrical impulses transmitted by the said repeater relay, said repeater provided with parallel line circuit conductors each having a normally open gap therein, and automatic means for closing said gaps simultaneously with the transmission of the last impulse necessary for completing connection between the telephone lines of the calling and called subscribers.

25. In a telephone system, a line, an impulse sender associated with said line, a repeater associated with said line, another line associated with said repeater, a switch associated with said second line, said repeater having an electromagnetic impulse repeating device responsive to the impulse sender for repeating impulses to the second line for operating said switch, means for connecting said first and second lines after the switch is operated, and means for releasing said switch controlled by said repeater.

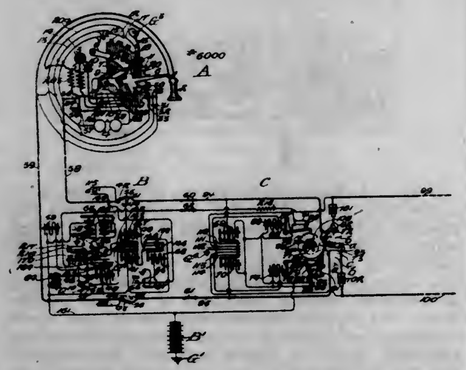
48. In a telephone exchange system, a first-selector, means therein having one motion to select groups and another motion to connect with a line in any selected group, a second-selector, a trunk line connecting the first-selector with the second-selector, a repeater provided with relays controlling the continuity of the trunk line connection between the two selectors, a calling sub-

scriber's telephone line connected with said first-selector, a calling device by which the subscriber controls the first-selector, by which the second-selector is controlled through the medium of the repeater relays, a source of operating current, said repeater relays provided with normally open contacts and a ground connection for grounding the trunk line when the relays are energized.

50. In a telephone exchange system, the combination of a trunk line, an automatic switch at one end of said trunk line, means therein having one motion to select groups and another motion to connect with a line in any selected group, a pair of relays at the other end of said trunk line, means by which the trunk line is severed by the energizing of said relays, and means by which a calling subscriber employs said relays for controlling said automatic switch.

[Claims 3 to 24, 26 to 47, 49, and 51 to 67 not printed in the Gazette.]

1,275,142. TELEPHONE-EXCHANGE APPARATUS AND SYSTEM. JOHN ERICKSON, Chicago, Ill., assignor, by mesne assignments, to Automatic Electric Co., a Corporation of Illinois. Filed July 19, 1906, Serial No. 326,931. Renewed Jan. 2, 1918. Serial No. 210,071. (Cl. 179—18.)



1. In a telephone exchange system, the combination of a telephone line circuit extending between calling and called subscribers' substations, an automatic switch provided with relay means temporarily disconnected from said circuit, a repeater provided with means for repeating or relaying electrical impulses from one portion of said circuit to another, means in said repeater for closing connection between the said portions of the line circuit, an electromagnet for releasing said circuit-closing means in the repeater, a trunk release circuit extending between the automatic switch and the repeater, normally open contacts included in the repeater and controlled by said electromagent, said contacts controlling the continuity of said trunk release circuit, and means for supplying electrical current for operating said automatic switch and repeater.

2. In a telephone system, a telephone line, means for sending impulses over said line, a repeater, means for connecting said line with said repeater, a switch, a line extending from said repeater to said switch, a second switch, electromagnetic means in said repeater responsive to said impulses for operating said switches to build a line connection from the repeater to a second telephone line and to signal said second telephone line, progressively movable means in said repeater for connecting the first line with the switch line after the first switch is operated whereby a connection is established between the first line and the second line, means for releasing said switches controlled by said repeater, and releasing means for disconnecting the first line from said first switch, said first releasing means comprising circuits between the switches separate from the talking circuit.

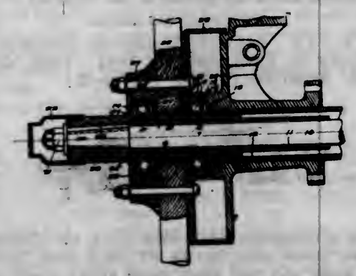
20. In a telephone system, a telephone line, means for sending impulses over said line, a switch associated with said line, a repeater, means in said switch for connecting said line with said repeater, a second switch, a line connecting said repeater with said second switch, means in said repeater responsive to said impulses for operating said second switch, and progressively movable means for connecting inductively said telephone line with said switch line after the second switch is operated, releasing devices in said second switch and in said first switch and circuits for operating the same controlled from said repeater in response to said impulse sending means, one of said release circuits involving a conductor separate from the talking circuit.

45. In a telephone system, a telephone line, means for sending impulses over said line, a switch associated with said line, a repeater, means in said switch for connecting said line with said repeater, a second switch, a line connecting said repeater with said second switch, means in said repeater responsive to said impulses for operating said second switch, and means for connecting inductively said telephone line with said switch line after the second switch is operated, a releasing device in said second switch, a releasing device in said first switch, a first release circuit for controlling said first releasing device, a second release circuit for controlling said second releasing device, both of said releasing devices being controlled from the repeater responsive to said impulse sending means.

49. In a telephone system, a telephone line, means for sending impulses over said line, a switch associated with said line, a repeater, means in said switch for connecting said line with said repeater, a second switch, a line connecting said repeater with said second switch, means in said repeater responsive to said impulses for operating said second switch, and progressively movable means for connecting inductively said telephone line with said switch line after the second switch is operated, a releasing device in said second switch, a releasing device in said first switch, a first release circuit for controlling said first releasing device, a second release circuit for controlling said second releasing device, both of said releasing devices being controlled from the repeater responsive to said impulse sending means.

[Claims 3 to 19, 21 to 44, 46 to 48, 50, and 51 not printed in the Gazette.]

1,275,143. DRIVING-AXLE-HUB CONSTRUCTION FOR MOTOR-DRIVEN VEHICLES. CULLEN C. EVANS, Los Angeles, Cal., assignor to Master Equipment Company, Los Angeles, Cal., a Corporation of California. Filed Sept. 13, 1917. Serial No. 191,301. (Cl. 64—81.)



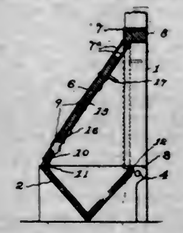
1. A hub construction for motor vehicle driving axles comprising a tubular bushing fixed in the end of an axle housing and extending outwardly therefrom, a bearing mounted upon the bushing, a brake drum rotatably disposed upon said bearing and to which a wheel may be secured, a bolting flange secured against the wheel and rotatably supported upon the bearing of the bushing, and a driving connection securing the wheel and drum to a vehicle axle extending through the bushing and into the housing.

2. A hub construction for motor vehicle driving axles comprising a tubular bushing fixed in the end of an axle housing and extending outwardly therefrom, a bearing mounted upon the bushing, a brake drum rotatably disposed upon said bearing and to which a wheel may be secured, a bolting flange secured against the wheel and rotatably supported upon the bearing, a driving connection securing the wheel and drum to a vehicle axle extending through the bushing and into the housing, and means for supporting the wheel and drum upon the bushing independent of the driving axle.

4. In a hub constructed for motor vehicle driving axles, the combination with an axle housing, of a tubular bushing fixed in the end thereof and extending outwardly therefrom, a driving axle extending through said bushing, a driving hub fixed to the outwardly extending end of said axle, a vehicle wheel secured to said hub, a bolting flange interposed between the wheel and hub, a brake-drum secured upon the opposite side of the wheel and adapted to rotate therewith, anti-friction bearings mounted within the hub of the brake-drum and the bolting flange to rotatably support the wheel upon the tubular bushing, and detachable fastening means adapted to be disposed upon the end of the tubular bushing to prevent accidental displacement of the bearings and wheel rotatably mounted thereon.

[Claim 3 not printed in the Gazette.]

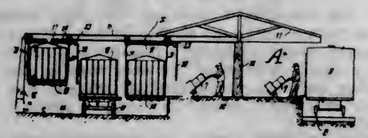
1,275,144. COMBINATION HOG-TROUGH. JAMES FEDDERSON, Beresford, S. D. Filed May 9, 1918. Serial No. 233,528. (Cl. 119—63.)



1. The combination of a pair of spaced standards, a cross bar connecting the standards, a trough arranged between the lower ends of the standards, a swinging gate suspended from the cross bar, hinge members connecting the upper edge of the swinging gate to the cross bar and adjustably connected to the gate to admit of the latter having a limited sliding movement up and down thereon, keepers at the front and rear of the trough, and a latch member on the swinging edge of the gate adapted to be brought into engagement with either of the keepers.

[Claims 2 to 4 not printed in the Gazette.]

1,275,145. TRANSFER SYSTEM FOR FREIGHT-TERMINALS. BENJAMIN F. FITCH, Evanston, Ill., assignor to The Motor Terminals Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 12, 1917. Serial No. 148,075. (Cl. 214—1.)



1. The process of transferring freight from one station to another, which comprises conveying freight from railway cars and assembling it in a unit package or mass, hoisting the package and depositing it upon transporting means, transporting the package to another station, hoisting it from the transporting means, and dispersing the contents.

8. In a freight transfer system, the combination of a raised platform, a freight track on one side thereof, a set of interchangeable bodies, means for suspending them along the edge of the platform on the other side from the freight track, a vehicle runway below suspended bodies, and a truck adapted to drive in such runway beneath the bodies, and mechanism for operating the suspended means to raise and lower the selected body from and onto the truck and for transporting it onto and from the platform.

17. In a transfer system for freight terminals, the combination with a plurality of stations each having a platform and an automobile runway, a railroad track associated with at least one of said stations and adapted to carry freight cars on a hand-trucking level with the platform thereof, a motor truck adapted to travel between the stations, a plurality of removable bodies therefor, and mechanism at each station for raising said bodies and moving them from said truck onto the platform and vice versa.

21. The combination, with a plurality of stations each having a freight platform and a railway track on one side thereof and an automobile runway on the other side, of a set of removable truck bodies, trolley hoisting mechanism extending over the platform and over the runway and adapted to raise and support the bodies, and a truck adapted to stand on the runway and receive and transport any of the bodies.

33. In an apparatus for transferring freight between distant railway cars, the combination of two railway platforms, railroad tracks each adjacent to one edge of one of the platforms, a set of removable automobile bodies, means for suspending the bodies adjacent to another edge of each of said platforms, comprising trolley hoisting mechanism associated with each railway station, means for trucking the freight across the platform from the railway cars to the removable bodies and vice versa, and an automobile truck adapted to receive a loaded body through the instrumentality of the trolley hoisting mechanism at either station and transport it to the other.

[Claims 2 to 7, 9 to 16, 18 to 20, and 22 to 32 not printed in the Gazette.]

1,275,146. [WITHDRAWN.]

1,275,147. GUN-SIGHT. HERMAN R. FRENSDORF, Green Bay, Wis. Filed Nov. 27, 1917. Serial No. 204,152. (Cl. 33—47.)



1. A front sight having a vertical center line of sight provided with an angled recess in its top, one side of the recess lying in a vertical plane coincident with the center line of sight and one side of the sight being beveled adjacent its rear edge to form an angled rear edge which meets the point of intersection of the sides of the recess.

2. A front sight provided with a vertical center line clearly defined by inwardly beveled portions extending from the outer rear side edges of the sight to said center line, and having a vertical portion of the sight elevated above the other, the inner side of this vertical portion being in line wth the vertical center line.

1,275,148. SILO. FRED J. FRIEDLEIN, Guttenberg, Iowa, assignor of one-half to Louis Schroeder, Guttenberg, Iowa. Filed Feb. 9, 1918. Serial No. 216,415. (Cl. 217—86.)

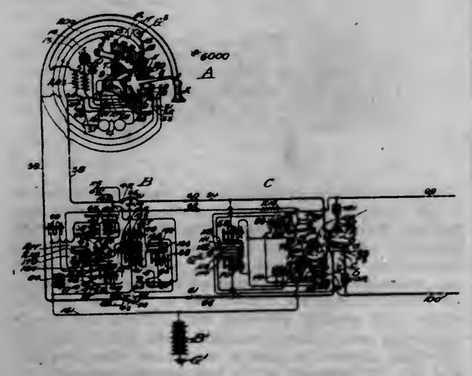
1. A collapsible device comprising a standard, a plurality of bars, means whereby said bars are movably

scriber's telephone line connected with said first-selector, a calling device by which the subscriber controls the first-selector, by which the second-selector is controlled through the medium of the repeater relays, a source of operating current, said repeater relays provided with normally open contacts and a ground connection for grounding the trunk line when the relays are energized.

50. In a telephone exchange system, the combination of a trunk line, an automatic switch at one end of said trunk line, means therein having one motion to select groups and another motion to connect with a line in any selected group, a pair of relays at the other end of said trunk line, means by which the trunk line is severed by the energizing of said relays, and means by which a calling subscriber employs said relays for controlling said automatic switch.

[Claims 3 to 24, 26 to 47, 49, and 51 to 67 not printed in the Gazette.]

1,275,142. TELEPHONE-EXCHANGE APPARATUS AND SYSTEM. JOHN ERICKSON, Chicago, Ill., assignor, by mesne assignments, to Automatic Electric Co., a Corporation of Illinois. Filed July 19, 1906, Serial No. 326,931. Renewed Jan. 2, 1918. Serial No. 210,071. (Cl. 179—18.)



1. In a telephone exchange system, the combination of a telephone line circuit extending between calling and called subscribers' substations, an automatic switch provided with relay means temporarily disconnected from said circuit, a repeater provided with means for repeating or relaying electrical impulses from one portion of said circuit to another, means in said repeater for closing connection between the said portions of the line circuit, an electromagnet for releasing said circuit-closing means in the repeater, a trunk release circuit extending between the automatic switch and the repeater, normally open contacts included in the repeater and controlled by said electromagent, said contacts controlling the continuity of said trunk release circuit, and means for supplying electrical current for operating said automatic switch and repeater.

2. In a telephone system, a telephone line, means for sending impulses over said line, a repeater, means for connecting said line with said repeater, a switch, a line extending from said repeater to said switch, a second switch, electromagnetic means in said repeater responsive to said impulses for operating said switches to build a line connection from the repeater to a second telephone line and to signal said second telephone line, progressively movable means in said repeater for connecting the first line with the switch line after the first switch is operated whereby a connection is established between the first line and the second line, means for releasing said switches controlled by said repeater, and releasing means for disconnecting the first line from said first switch, said first releasing means comprising circuits between the switches separate from the talking circuit.

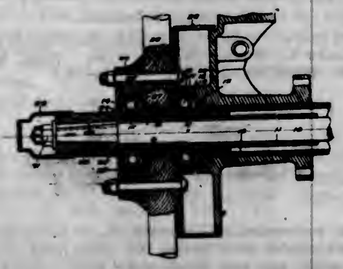
20. In a telephone system, a telephone line, means for sending impulses over said line, a switch associated with said line, a repeater, means in said switch for connecting said line with said repeater, a second switch, a line connecting said repeater with said second switch, means in said repeater responsive to said impulses for operating said second switch, and progressively movable means for connecting inductively said telephone line with said switch line after the second switch is operated, releasing devices in said second switch and in said first switch and circuits for operating the same controlled from said repeater in response to said impulse sending means, one of said release circuits involving a conductor separate from the talking circuit.

45. In a telephone system, a telephone line, means for sending impulses over said line, a switch associated with said line, a repeater, means in said switch for connecting said line with said repeater, a second switch, a line connecting said repeater with said second switch, means in said repeater responsive to said impulses for operating said second switch, and means for connecting inductively said telephone line with said switch line after the second switch is operated, a releasing device in said second switch, a releasing device in said first switch, a first release circuit for controlling said first releasing device, a second release circuit for controlling said second releasing device, both of said releasing devices being controlled from the repeater responsive to said impulse sending means.

49. In a telephone system, a telephone line, means for sending impulses over said line, a switch associated with said line, a repeater, means in said switch for connecting said line with said repeater, a second switch, a line connecting said repeater with said second switch, means in said repeater responsive to said impulses for operating said second switch, and progressively movable means for connecting inductively said telephone line with said switch line after the second switch is operated, a releasing device in said second switch, a releasing device in said first switch, a first release circuit for controlling said first releasing device, a second release circuit for controlling said second releasing device, both of said releasing devices being controlled from the repeater responsive to said impulse sending means.

[Claims 3 to 19, 21 to 44, 46 to 48, 50, and 51 not printed in the Gazette.]

1,275,143. DRIVING-AXLE-HUB CONSTRUCTION FOR MOTOR-DRIVEN VEHICLES. CULLEN C. EVANS, Los Angeles, Cal., assignor to Master Equipment Company, Los Angeles, Cal., a Corporation of California. Filed Sept. 13, 1917. Serial No. 191,301. (Cl. 64—81.)



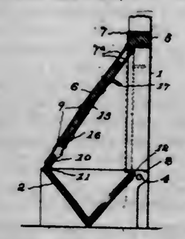
1. A hub construction for motor vehicle driving axles comprising a tubular bushing fixed in the end of an axle housing and extending outwardly therefrom, a bearing mounted upon the bushing, a brake drum rotatably disposed upon said bearing and to which a wheel may be secured, a bolting flange secured against the wheel and rotatably supported upon the bearing of the bushing, and a driving connection securing the wheel and drum to a vehicle axle extending through the bushing and into the housing.

2. A hub construction for motor vehicle driving axles comprising a tubular bushing fixed in the end of an axle housing and extending outwardly therefrom, a bearing mounted upon the bushing, a brake drum rotatably disposed upon said bearing and to which a wheel may be secured, a bolting flange secured against the wheel and rotatably supported upon the bearing, a driving connection securing the wheel and drum to a vehicle axle extending through the bushing and into the housing, and means for supporting the wheel and drum upon the bushing independent of the driving axle.

4. In a hub constructed for motor vehicle driving axles, the combination with an axle housing, of a tubular bushing fixed in the end thereof and extending outwardly therefrom, a driving axle extending through said bushing, a driving hub fixed to the outwardly extending end of said axle, a vehicle wheel secured to said hub, a bolting flange interposed between the wheel and hub, a brake-drum secured upon the opposite side of the wheel and adapted to rotate therewith, anti-friction bearings mounted within the hub of the brake-drum and the bolting flange to rotatably support the wheel upon the tubular bushing, and detachable fastening means adapted to be disposed upon the end of the tubular bushing to prevent accidental displacement of the bearings and wheel rotatably mounted thereon.

[Claim 3 not printed in the Gazette.]

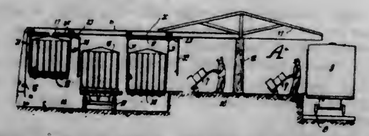
1,275,144. COMBINATION HOG-TROUGH. JAMES FEDDERSON, Beresford, S. D. Filed May 9, 1918. Serial No. 233,528. (Cl. 119—63.)



1. The combination of a pair of spaced standards, a cross bar connecting the standards, a trough arranged between the lower ends of the standards, a swinging gate suspended from the cross bar, hinge members connecting the upper edge of the swinging gate to the cross bar and adjustably connected to the gate to admit of the latter having a limited sliding movement up and down thereon, keepers at the front and rear of the trough, and a latch member on the swinging edge of the gate adapted to be brought into engagement with either of the keepers.

[Claims 2 to 4 not printed in the Gazette.]

1,275,145. TRANSFER SYSTEM FOR FREIGHT-TERMINALS. BENJAMIN F. FITCH, Evanston, Ill., assignor to The Motor Terminals Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 12, 1917. Serial No. 148,075. (Cl. 214—1.)



1. The process of transferring freight from one station to another, which comprises conveying freight from railway cars and assembling it in a unit package or mass, hoisting the package and depositing it upon transporting means, transporting the package to another station, hoisting it from the transporting means, and dispersing the contents.

8. In a freight transfer system, the combination of a raised platform, a freight track on one side thereof, a set of interchangeable bodies, means for suspending them along the edge of the platform on the other side from the freight track, a vehicle runway below suspended bodies, and a truck adapted to drive in such runway beneath the bodies, and mechanism for operating the suspended means to raise and lower the selected body from and onto the truck and for transporting it onto and from the platform.

17. In a transfer system for freight terminals, the combination with a plurality of stations each having a platform and an automobile runway, a railroad track associated with at least one of said stations and adapted to carry freight cars on a hand-trucking level with the platform thereof, a motor truck adapted to travel between the stations, a plurality of removable bodies therefor, and mechanism at each station for raising said bodies and moving them from said truck onto the platform and vice versa.

21. The combination, with a plurality of stations each having a freight platform and a railway track on one side thereof and an automobile runway on the other side, of a set of removable truck bodies, trolley hoisting mechanism extending over the platform and over the runway and adapted to raise and support the bodies, and a truck adapted to stand on the runway and receive and transport any of the bodies.

33. In an apparatus for transferring freight between distant railway cars, the combination of two railway platforms, railroad tracks each adjacent to one edge of one of the platforms, a set of removable automobile bodies, means for suspending the bodies adjacent to another edge of each of said platforms, comprising trolley hoisting mechanism associated with each railway station, means for trucking the freight across the platform from the railway cars to the removable bodies and vice versa, and an automobile truck adapted to receive a loaded body through the instrumentality of the trolley hoisting mechanism at either station and transport it to the other.

[Claims 2 to 7, 9 to 16, 18 to 20, and 22 to 32 not printed in the Gazette.]

1,275,146. [WITHDRAWN.]

1,275,147. GUN-SIGHT. HERMAN R. FRENSDORF, Green Bay, Wis. Filed Nov. 27, 1917. Serial No. 204,152. (Cl. 33—47.)



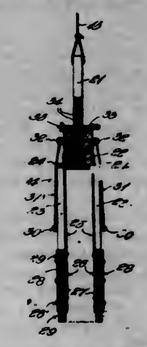
1. A front sight having a vertical center line of sight provided with an angled recess in its top, one side of the recess lying in a vertical plane coincident with the center line of sight and one side of the sight being beveled adjacent its rear edge to form an angled rear edge which meets the point of intersection of the sides of the recess.

2. A front sight provided with a vertical center line clearly defined by inwardly beveled portions extending from the outer rear side edges of the sight to said center line, and having a vertical portion of the sight elevated above the other, the inner side of this vertical portion being in line wth the vertical center line.

1,275,148. SILO. FRED J. FRIEDLEIN, Guttenberg, Iowa, assignor of one-half to Louis Schroeder, Guttenberg, Iowa. Filed Feb. 9, 1918. Serial No. 216,415. (Cl. 217—86.)

1. A collapsible device comprising a standard, a plurality of bars, means whereby said bars are movably

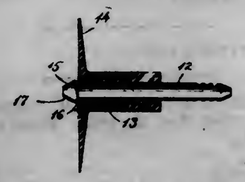
connected to said standard at its lower end, a textile fabric sheet secured to said bars and movable therewith to and from the folded and open positions, a sleeve slidable longitudinally of said standard, a plurality of flexible elements each connecting one of said bars to said sleeve, and means coöperative with said sleeve and standard and flexible elements for holding the cover in its open position below the lower end of the standard.



4. A cover adapted to fit against and around the inner surface of a silo wall and comprising a sheet of material which is impervious to moisture, and heat-insulating material secured to the edge portion of the first said sheet and extending around the margin thereof and terminating between the central and marginal parts of the first said sheet.

[Claims 2, 3, and 5 to 12 not printed in the Gazette.]

1,275,149. PIPE-COUPLING. JOHN R. GAMMETER, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Feb. 8, 1918. Serial No. 215,962. (Cl. 285—25.)

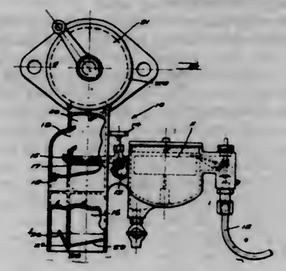


1. A pipe coupling comprising a rigid pipe section having a head at its inner end, and an elastic rubber sleeve tightly surrounding the stem of said section and abutting against its head, the normal aperture of the sleeve being slightly smaller than the head, and the sleeve being exposed for manual engagement and adapted to be shortened by endwise pressure thereon in the direction of said head, whereby the aperture is enlarged and the head drawn out therethrough to disconnect the coupling.

2. A pipe coupling comprising an elastic rubber sleeve formed at one end with a mushroom flange for connecting it to the wall of a fluid receptacle, its other end being exposed for manual engagement, and a rigid pipe section having a stem tightly fitted in the sleeve and a head on its inner end, said head being formed with a rounded shoulder which abuts against the inner end of the sleeve, and a tapered nose.

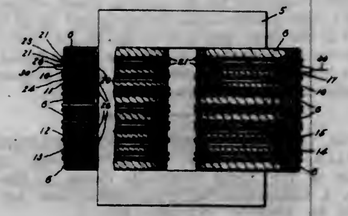
1,275,150. CARBURETER. GEORGE E. GRAY, Compton, Cal., assignor of one-third to Edward A. Carson, Los Angeles, Cal. Filed Mar. 1, 1917. Serial No. 151,797. (Cl. 261—46.)

1. In a carbureter, a throttle valve, means forming a mixture passage and an air passage side by side leading to the throttle valve and having vertical intakes, means for leading fuel into the mixture passage, and an air valve freely mounted with a wing extending into the mixture passage intake and a wing extending into the air passage intake, said wings being set so that when the air passage wing is closed the mixture passage wing is open, the air passage wing being of larger area and heavier than the mixture passage wing; so that the mixture passage wing is normally open and is closed more or less by suction against the air passage wing.



2. A carbureter comprising fuel supply means, a series of horizontally disposed ducts leading from said supply means, means forming a mixture passage having an independent vertical passage-way into which each duct discharges, a throttle valve to which the mixture passage leads, means forming an air passage leading to the throttle valve, said mixture passage and said air passage having vertical intakes side by side, and an air valve freely mounted with a wing extending into the mixture passage intake and a wing extending into the air passage intake, said wings being set so that when the air passage wing is closed the mixture passage wing is open, the air passage wing being of larger area and heavier than the mixture passage wing; so that the mixture passage wing is normally open and is closed more or less by suction against the air passage wing.

1,275,151. PROTECTIVE MEANS FOR ELECTRICAL APPARATUS. FRANK C. GREEN, deceased, Pittsfield, Mass., by Bessie M. Green, administratrix, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Dec. 4, 1916. Serial No. 135,097. (Cl. 175—30.)



1. The combination with an electrical winding, of means for protecting the same against the effects of high frequency energy comprising a plurality of separate permanently closed turns about the same winding axis as the winding and respectively localized adjacent and permanently inductively related to different portions of the winding.

4. An electrical winding comprising a plurality of coils, a conducting turn disposed between those coils and a resistance closing said turn.

7. A transformer comprising a primary winding, a secondary winding inductively related thereto, and a plurality of separate permanently closed turns distributed along and permanently inductively related to one of said windings for protecting the transformer against high frequency energy, said turns establishing magnetomotive forces counter to the leakage magnetomotive forces of parts of the winding tending respectively to establish a plurality of magnetic fluxes linking individual parts of the winding.

[Claims 2, 3, 5, 6, and 8 to 15 not printed in the Gazette.]

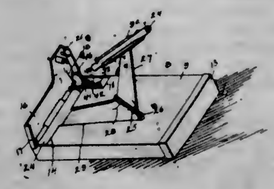
1,275,152. [WITHDRAWN.]

1,275,153. VENDING-MACHINE. HANS HARTMAN, New York, N. Y., assignor to Automatic Vending Machine Co., Newark, N. J., a Corporation. Filed Sept. 18, 1916. Serial No. 120,657. (Cl. 194—80.)



A vending machine comprising a casing to receive a plurality of articles to be vended, means engaging frictionally the lowermost article, a cover for said casing having a coin slot and a coin inlet at one side leading to said coin slot, an article pusher arranged slidably within said coin slot so as to support the first coin inserted, said coin slot overlapping only slightly coins of proper diameter at both sides, being open inwardly to allow smaller coins to fall into said casing from said coin slot, a slidable plunger extending from the top of said cover and guided within the upper part of the coin slot so as to move the article pusher through the medium of said coin, an extension on said article pusher extending from the coin slot into the casing and resting normally upon the uppermost article and a delivery opening arranged at the lowermost part of the casing.

1,275,154. CIGAR HOLDER AND LIGHTER. RAFAEL HERNÁNDEZ and FÉLIX RODRIGUEZ ORTEGA, Santi Spiritus, Cuba. Filed Feb. 23, 1916. Serial No. 80,004. (Cl. 131—59.)

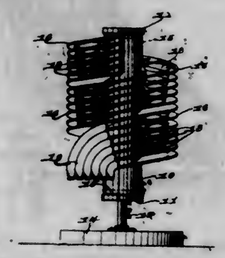


1. A cigar holder including a body having an opening in its top wall at one end thereof, said wall also having a depression communicating with the opening, a picker arm carried by the body and located in the depression, and a spring picker or holder carried by said arm and movable into said opening of the body.

5. A cigar holder including a hollow body having an opening in its upper wall at one end thereof, said upper wall also provided in its upper side with a depression communicating at one end with the opening, a cover hingedly secured to one end wall of the hollow body and closing said opening, a cigar lighter located in said hollow body, said lighter being connected to said cover for operation by the opening of said cover, a spring actuated picker arm pivotally secured to the upper side of said body and in said depression, a spring picker or holder carried by the free end of said arm and movable into said opening, said arm being so arranged as to carry a cigar supported therein to position it over said lighter when in raised position, said cover adapted to engage said picker arm to retain the same in the opening and in inoperative position.

[Claims 2 to 4 not printed in the Gazette.]

1,275,155. COIN-SEPARATING DEVICE. GEORGE N. HINDS, Marion, Ohio. Filed Sept. 2, 1915. Serial No. 48,635. (Cl. 133—3.)



1. An improved coin separating device comprising a tubular core, a supporting rod attached to said core and extending longitudinally therethrough, means for rotatably supporting the same, a plurality of helical plates attached to and encircling said core or standard to form channels, said plates having openings therein, the openings in each plate being of a size different from those in the other plates, and means whereby said rod may be radially oscillated.

6. An improved coin separating device comprising a tubular core, a supporting rod attached to said core and extending longitudinally therethrough, means for rotatably supporting the same, a plurality of helical plates attached to and encircling said core, a casing surrounding said plates and attached to the outer edges thereof, said casing and said plates coöperating to form helical channels, said plates having openings therein, the openings in each plate being of a size different from those in the other plates, said channels having independent downwardly directed delivery chutes inclosed within said casing, and means whereby said core or standard may be oscillated.

[Claims 2 to 5 not printed in the Gazette.]

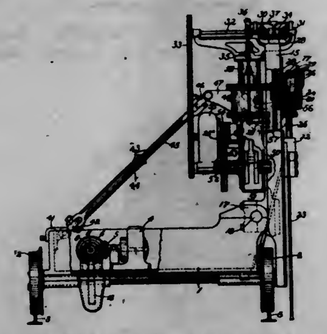
1,275,156. ELECTRIC CHANNELING-MACHINE. ALBERT BALL, Claremont, N. H., assignor, by mesne assignments, to Sullivan Machinery Company, Boston, Mass., a Corporation of Massachusetts. Filed Feb. 2, 1907. Serial No. 355,404. (Cl. 125—2.)

4. A quarrying machine comprising a body, a standard mounted thereon for movement longitudinally thereof, a pulsator mounted upon said standard, a working cylinder likewise mounted upon said standard, fluid pressure connections between said cylinder and pulsator and a driving motor for said pulsator supported by the standard and adjustable thereon whereby in any position of said standard the driving motor may be positioned to permit operation of the machine with the standard close to the work.

9. A channeling machine having a truck, a standard adjustable thereon, a sliding frame on the standard, means for advancing or retracting the frame, cutting appliances on the frame directed to cut a groove at the side of the

truck, a working cylinder to actuate said cutting appliances, also on said frame, a pulsator fixed on the standard, pressure-fluid connections between the working cylinder and the pulsator, and a motor for driving the pulsator.

11. A channeler having a truck, a standard adjustable thereon, a sliding frame on the standard, means for advancing and retracting the frame, cutting appliances on the frame directed to cut a groove at the side of the truck, pressure fluid pulsating means supported by the standard to reciprocate the cutting appliances, said means including a pulsating driving member and a working or driven member with means for transmitting pulsation from one to the other, and a motor supported by the standard to drive the pulsating member.

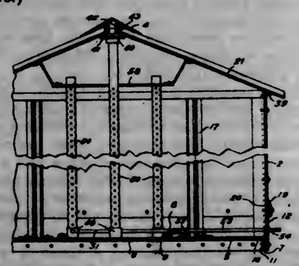


13. A channeling machine having a main frame, a standard, a frame longitudinally adjustable on the standard, means for feeding the frame thereon, a tool driving member exposed to confined working fluid, pulsating means for alternately raising and lowering the pressure of the confined working fluid on either side of said tool driving member, a motor supported on the standard independently of said longitudinally movable frame, and mechanical connections between the motor and the pulsating means.

15. A channeling machine having a main frame, a standard, a frame longitudinally adjustable on the standard, means for feeding the frame thereon, a tool driving member exposed to confined working fluid, pulsating means supported on the standard independently of said longitudinally movable frame for alternately raising and lowering the pressure in the confined working fluid at either side of said tool driving member, a motor, and mechanical connections between the motor and the pulsating means.

[Claims 1 to 8, 5 to 8, 10, 12, 14, and 16 to 19 not printed in the Gazette.]

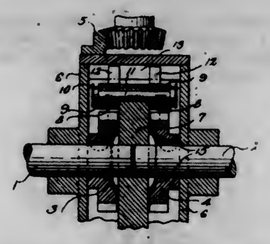
1,275,157. GRAIN-BIN. GEORGE F. BROWN, St. Cloud, Minn., assignor to The International Patent Investment Company, Fargo, N. D., a Corporation of North Dakota. Filed May 11, 1915. Serial No. 27,447. (Cl. 98—26.)



1. A grain bin provided with a ventilating system comprising a plurality of ventilator receptacles, a common feed device for said receptacles, extending from the outside of the bin, and a plurality of vertical perforated flues supported within the bin and having each an end positioned in a ventilator receptacle.

[Claims 2 to 5 not printed in the Gazette.]

1,275,158. DRIVING MECHANISM. ISAAC S. DEMENT, Dayton, Ohio, assignor of one-half to John Collins, Dayton, Ohio. Filed Nov. 19, 1917. Serial No. 202,729. (Cl. 74—7.)

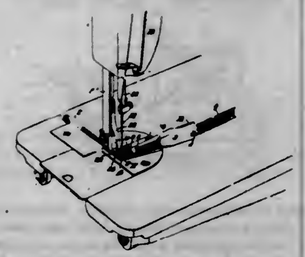


1. The combination with a toothed driven member and a driving member, of a pair of oppositely arranged pawls supported adjacent to said driven member and having projections arranged to be respectively engaged by parts of said driving member to actuate said pawls.

14. The combination with toothed members rotatable about a common axis and each having a ratchet wheel near the inner end thereof, and a driving member mounted on one of said driven members for rotation relatively thereto, a pawl supporting device mounted on said driven members between the two ratchet wheels, a pair of oppositely extending pawls mounted on each side of said supporting member and held against bodily movement relatively thereto, said pawls being separately movable toward and away from the respective ratchet wheels, and each of said pawls having an outwardly extending projection, said driving member having parts arranged on opposite sides of the projection of said pawls, and so arranged that when movement is imparted to said driving member one of said parts will engage the projections of the rearward pawls, move the same out of engagement with the respective ratchet wheels, and will cause power to be transmitted through said rearward pawls to the forward pawls and said driven members.

[Claims 2 to 13 and 15 to 20 not printed in the Gazette.]

1,275,159. SEWING-MACHINE BINDER. ALBERT H. DE VOE, Westfield, N. J., assignor to The Singer Manufacturing Company, a Corporation of New Jersey. Filed Aug. 21, 1914. Serial No. 857,805. (Cl. 270—36.)



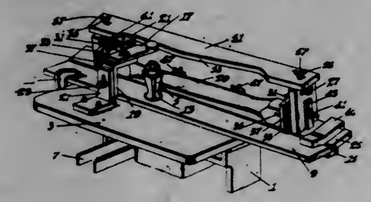
1. A sewing machine binder constructed with a tape-guiding element having a wall formed in a single thickness substantially throughout its length and provided adjacent its delivery end with a tape-aperture extending through said wall, said element at its delivery end having a tape-turning edge of a length not less than the length of said aperture.

5. An English binder consisting of a shell or single wall provided with a beveled end portion for inverting a strip and having an incisioned body portion constructed to act upon and flex in opposite directions both faces of a tape in advance of its inversion.

9. An English binder consisting of a shell or single-wall-member bent between its edges to form superimposed portions of unequal width and having a beveled delivery end for inverting a strip, said shell or walled member being provided adjacent said end portion with an aperture through which a strip may be passed and confined against the outer face of the shell immediately adjacent the inverting beveled end.

[Claims 2 to 4 and 6 to 8 not printed in the Gazette.]

1,275,160. PROFILING-JIG. RAYMOND D. EMERY, Winchendon, Mass., assignor to William M. Whitney, Winchendon, Mass. Filed Nov. 20, 1916. Serial No. 132,847. (Cl. 144—145.)



1. A wood working machine, comprising in combination, a supporting table, a rotary cutter mounted above said table, a right line guide member mounted on said table adjacent said cutter, a standard mounted on said table, a guide element on said standard above said guide member, a separate work carrier having a portion to slide along and rock about said right line guide member, means to secure the work to the carrier, and a pattern mounted on said carrier in predetermined relation to the work and presenting an edge to slide along said guide element as said carrier portion slides along and rocks about said guide member, that the cutter may give the work a form determined by the shape of said pattern.

[Claims 2 and 3 not printed in the Gazette.]

1,275,161. PROCESS OF ELECTROLYTICALLY PRODUCING IRON. AXEL THEODOR CONSTANTIN ESTELLE, Hagen, Germany, assignor to Martin Filip Wijkstrom, Stockholm, Sweden. Filed Nov. 22, 1916. Serial No. 132,768. (Cl. 204—2.)

1. The process of electrolytically producing iron consisting in subjecting to electrolysis a slime of caustic alkaline solution and iron compounds comprising oxygen.

2. The process of electrolytically producing iron consisting in subjecting to electrolysis a slime of caustic alkaline solution and iron compounds comprising oxygen and hydrogen.

3. The process of electrolytically producing iron consisting in treating iron compounds with caustic or carbonic alkali at higher temperatures, and subjecting to electrolysis a slime of caustic alkaline solution and said compounds.

4. The process of electrolytically producing iron consisting in treating iron oxids with caustic or carbonic alkali at higher temperatures, and subjecting to electrolysis a slime of caustic alkaline solution and said oxids.

6. The process of electrolytically producing alloys of iron with other metals consisting in subjecting to electrolysis a slime of caustic alkaline solution and a mixture of compounds of iron and of such metals, as for instance cadmium, which can be precipitated by the electric current under the conditions of the process.

[Claim 5 not printed in the Gazette.]

1,275,162. TETRA-IODO-HEXAMETHYLENETETRAMIN COMPOSITION. KAUFMAN G. FALK and KANEMATSU SUGIURA, New York, N. Y., assignors to George B. Pegram, New York, N. Y. Filed June 23, 1917. Serial No. 176,539. (Cl. 167—9.)

1. A composition of matter to be used as an antiseptic, healing or sterilizing agent for topical application comprising tetra-iodo-hexamethylenetetramin uniformly diffused in collodion, in the relative proportion of substantially 1 to 99.

2. A composition of matter to be used as an antiseptic, healing or sterilizing agent comprising tetra-iodo-hexamethylenetetramin and a liquid solvent therefor, the solvent constituting the major portion of the composition and being present in sufficient proportion to prolong any liberation of iodin from the tetra-iodo-hexamethylenetetramin, and the latter ingredient constituting the minor portion of the composition and being present in sufficient proportion to insure bactericidal action and antisepsis, the solvent being substantially inert chemically with respect to said tetra-iodo-hexamethylenetetramin and capable of adhering to the surface to which applied and of forming a protective coating therefor.

3. A composition of matter to be used as an antiseptic, healing or sterilizing agent comprising tetra-iodo-hexamethylenetetramin and a vehicle therefor, the vehicle constituting the major portion of the composition and having the tetra-iodo-hexamethylenetetramin uniformly diffused therethrough, and being present in sufficient proportion to prolong any liberation of iodin from the tetra-iodo-hexamethylenetetramin, and the latter ingredient constituting the minor portion of the composition and being present in sufficient proportion to insure bactericidal action and antisepsis, the vehicle being a substance of relatively mobile elementary parts and substantially inert chemically with respect to said tetra-iodo-hexamethylenetetramin and capable of adhering to the surface to which applied and of forming a protective coating therefor.

4. A composition of matter to be used as an antiseptic, healing or sterilizing agent comprising tetra-iodo-hexamethylenetetramin and a vehicle therefor, the vehicle constituting the major portion of the composition and having the tetra-iodo-hexamethylenetetramin uniformly diffused therethrough, and being present in sufficient proportion to prolong any liberation of iodin from the tetra-iodo-hexamethylenetetramin, and the latter ingredient constituting the minor portion of the composition and being present in sufficient proportion to insure bactericidal action and antisepsis, the vehicle being a neutral saturated substance of relatively mobile elementary parts, and capable of adhering to the surface to which applied and of forming a protective coating therefor.

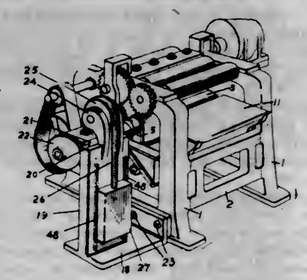
1,275,163. WOOD-PLANING MACHINE. WILLIAM C. FARNUM, Winchendon, Mass., assignor to William M. Whitney, Winchendon, Mass. Filed May 12, 1917. Serial No. 168,144. (Cl. 144—131.)

1. The combination with a normally fixed tool and its support, of an independent driving unit for association with said tool comprising a motor, means directly to connect said motor with said tool to rotate the latter, and supporting means for said motor including means to counterbalance the motor and enable the same to adjust itself to the position required by the tool.

4. The combination with a rotary tool and its support, of means to adjust said tool relatively to said support, a motor having a driving member, means detachably to connect said member with said tool substantially in axial alinement therewith, and means to support and counterbalance said motor.

8. The combination with a cutter cylinder, of a support therefor, means to adjust said cylinder in a direc-

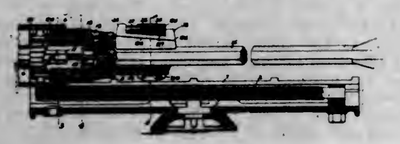
tion at substantially right angles to its longitudinal axis, a motor having a driving member, means to counterbalance said motor, means to support said motor, and counterbalance means, and means flexibly to connect said



driving member with said cutter, that said member may be maintained substantially in axial alinement with the axis of said cutter cylinder.

[Claims 2, 3, 5 to 7, 9, and 10 not printed in the Gazette.]

1,275,164. COMBINED CHUCK AND DRILL EXTRACTOR. GEORGE H. GILMAN, Claremont, N. H., assignor, by mesne assignments, to Sullivan Machinery Company, Boston, Mass., a Corporation of Massachusetts. Filed May 16, 1913. Serial No. 767,974. (Cl. 255—36.)



1. The combination, in a rock drilling machine, of a drill bit having a shank of uniform section, means for hammering the rear end of said drill bit, means for loosely holding said drill bit to permit the same normally to be moved endwise, and means to secure said drill bit to said holding means and having provision rendered effective by said drill-bit automatically to increase the holding power of said drill-bit securing means.

11. The combination, in a rock drilling machine, of means for loosely holding a drill bit to permit the same normally to be moved endwise, and means to secure said drill bit to said holding means and having provision rendered effective by said drill bit automatically to increase the holding power of said drill bit securing means.

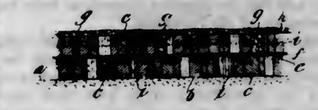
12. The combination, in a machine of the character described, of means for loosely holding a percussive tool to permit the same normally to be moved endwise, an axially movable wedge for securing said tool against endwise movement, and a spring for normally holding said wedge in non-securing position.

[Claims 2 to 10 not printed in the Gazette.]

1,275,165. PAVEMENT. WALTER E. HASSAM, Worcester, Mass., assignor to Hassam Paving Company, Worcester, Mass., a Corporation of Massachusetts. Filed Jan. 17, 1914. Serial No. 812,681. (Cl. 94—1.)

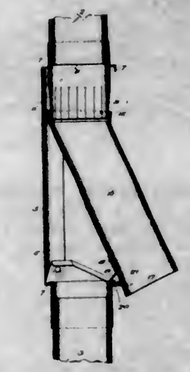
1. A pavement comprising a layer of pieces of wood, a reinforcement on the top of said layer, a second layer of pieces of wood on top of the first layer, and a binding material covering the open grain ends of the wood and sealing the same and extending down into the voids through the pieces and through the reinforcement.

2. A pavement comprising a layer of pieces of wood having the grain thereof vertical, a reinforcement on the top of said layer, a layer of paving material on top of the reinforcement, a binding material covering the open grain ends of said wood and sealing the same and extending down into the voids between the pieces.



3. A pavement comprising a layer of pieces of wood having the grain thereof vertical, a reinforcement on the top of said layer, a second layer of pieces of wood on top of the first layer having the grain thereof vertical, and a binding material covering the open grain ends of said wood and sealing the same and extending down into the voids between the pieces.

1,275,166. CUT-OFF. HERMAN KRIPPENE, Oshkosh, Wis., assignor of one-half to Benjamin J. Krippene and one-half to Otto B. Krippene, Oshkosh, Wis. Filed Mar. 29, 1917. Serial No. 158,342. (Cl. 137—9.)



1. A drain spout connector and cut-off including a back panel adapted to be secured to a contiguous support and having at its ends integral brackets carrying alined nipples engageable with the ends of sections of a line of spout-piping, side flanges bracing said brackets, and a detached, adjustable cut-off.

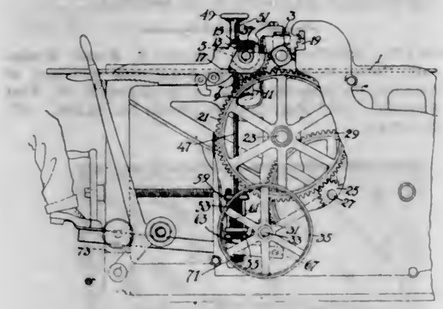
2. A drain spout connector and cut-off including a frame adapted to be secured to a contiguous support and having at its ends alined nipples engageable with a line of spout-piping, and a detached connecting joint telescopically adjustably engageable with the adjacent ends of the nipples in one position and adapted to be set in a cut-off position between said nipples, said frame having a lower bracket with an arcuate seat at its front edge to support the lowered joint in cut-off position.

3. A drain spout connector and cut-off comprising a frame having upper and lower brackets with alined nipples for connection with and supporting spout-piping ends, and a cut-off joint slidably and externally telescoping over the upper nipple to permit alined or angular relation thereto while associated, and adapted to telescope internally in the lower nipple to make a substantially tight joint while in connected relation with the nipples, the joint being freely removable to permit cleaning of the pipe.

4. A drain spout connector and cut-off comprising a frame with a back panel and upper and lower brackets having alined nipples for connection with and supporting spout-piping, and a detached cut-off joint having a flared upper end cut diagonally slidably and externally telescoping over the upper nipple to permit alined or angular relation thereto while associated, and adapted to telescope internally in the lower nipple to make a substantially tight joint while in connected relation with the nipples, the lower bracket having a seat at its edge, and means for supporting the joint in inclined position, and holding it to the seat.

5. A drain spout connector and cut-off comprising a frame attachable to a wall or other support having alined nipples in its ends for connection wtih and supporting spout-piping, and a freely removable cut-off joint slidably and externally telescoping over the upper nipple to permit alined or angular relation thereto while associated, and adapted to telescope internally in the lower nipple to make a substantially tight joint while in connected relation with the nipples, a seat on the lower end of the frame to engage the lower end of the joint when in inclined cut-off position, and hook means on the lower end of the spout joint to engage the lower portion of the frame to hold the joint to the seat.

1,275,167. WOOD-PLANING MACHINE. BYRON S. LOVELAND, Winchendon, Mass., assignor to William M. Whitney, Winchendon, Mass. Filed Dec. 10, 1917. Serial No. 206,387. (Cl. 144—247.)



1. In a machine of the character described, the combination with a frame, of a cutter thereon, and means to feed work relatively to said cutter including a presser roll; bearing boxes for said roll slidably mounted on said frame, means for maintaining a normal pressure on said boxes, and means to apply abnormal pressure on either of said boxes at will to distribute the pressure to work of irregular form.

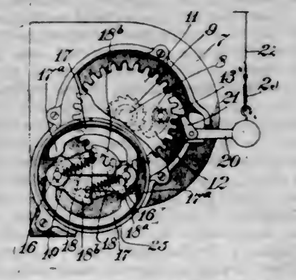
5. In a machine of the character described, the combination with a frame, of a cutter thereon, and means to feed work relatively to said cutter, including a presser roll; manually operable levers adjacent the opposite sides of the frame, and connections between said levers and the ends of said roll, whereby the pressure on the ends of said roll may be varied at will.

13. In a machine of the character described, the combination with a frame, of a cutter thereon, and means to feed work relatively to said cutter including a presser roll; bearing boxes for said roll slidably mounted on said frame, manually operable members adjacent opposite sides of said frame, and means to transmit movement from said members to said boxes, including rods, collars on said rods, and coil springs confined between said collars.

[Claims 2 to 4, 6 to 12, and 14 to 17 not printed in the Gazette.]

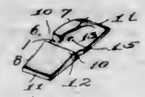
1,275,168. BRAKE FOR FIRE-SHUTTERS. EDWARD H. MCCLOUD, Columbus, Ohio. Filed July 23, 1915. Serial No. 41,532. (Cl. 189—58.)

1. In combination, a shutter or curtain mechanism normally operable for raising and lowering, a brake and mechanism for operating the same associated with but normally operably disconnected from the shutter or curtain, and thermally controlled means for operably connecting the shutter or curtain mechanism with the mechanism for operating the brake in the event of fire.



2. In combination with the shaft of a shutter or curtain, a brake mechanism to retard the closing movement of the curtain including a ratchet wheel fixed to said shaft, a driver loose with reference to said shaft, a pawl on said driver adapted to engage the ratchet, thermally controlled means for holding said pawl normally disengaged from said ratchet and a brake mechanism adapted to be actuated by the driver when the pawl is released to engage the ratchet.

1,275,169. PACKAGE-TIE. JOHN T. MELSON, Laurel, Del., assignor of one-eighth to William E. Valiant, one-eighth to Albert H. Phillips, and one-eighth to Wilber P. Ellis, Laurel, Del. Filed Sept. 17, 1917. Serial No. 191,787. (Cl. 24—18.)



5. A package tie consisting of a locking member having one extremity to which a binder is adapted to be attached, both extremities of the member on one side being regularly sloped or beveled toward opposite ends and the extremity to which the binder is attached being longitudinally recessed for a portion of its width, the sloped or beveled extremities extending from a central transverse ridge.

7. A locking member for a package tie having a flat side and the opposite side formed with a central transverse recessed ridge from which the extremities are beveled in reverse directions, the one beveled extremity having a longitudinal recess with an inner guard wall and an opening for attachment of a binder thereto, the side edges of the member at the opposite terminals of the recessed ridge having binder engaging depressions.

[Claims 1 to 4 and 6 not printed in the Gazette.]

1,275,170. COIL-CASE AND TERMINAL. JOHN LEWIS MILTON, Cleveland, Ohio, assignor to The Teagle Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 17, 1917. Serial No. 186,742. (Cl. 173—259.)



1. In a structure of the character described, the combination of a case having a wall of non-conducting material, and a binding post terminal comprising a metallic member having a stem part and a base part, the said

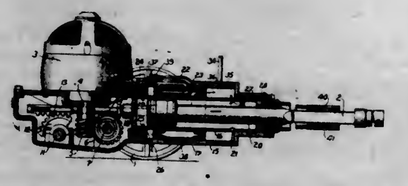
base part being formed with integral prongs which extend through and grip the wall of the case.

6. In a structure of the character described, the combination of a case having an apertured wall of none-conducting material, a binding post terminal comprising a metallic member having a screw-threaded stem part and a base part which is formed with integral prongs, the stem part extending through one of the wall apertures anad the base prongs extending through other apertures and gripping the wall, a resilient washer arranged on the stem next to the wall to cover the prong apertures therein, and a metallic washer and nut on the stem to clamp an electric conductor, the said resilient washer being pressed against the wall when the nut is tightetened.

7. In a structure of the character described, the combination of a case having an apertured wall of non-conducting material, a binding post terminal comprising a metallic member having a screw-threaded stem part and a base part which is formed with integral prongs, the stem part extending through one of the wall apertures and the base prongs extending through other apertures and gripping the wall, a resilient washer arranged on the stem next to the wall to cover the prong apertures therein, a molded insulating block aperture to pass over the threaded stem and to receive an electrical conductor, a metallic washer on the stem engaging a shoulder on the said block, and a nut on the stem adapted to clamp the said conductor against the metallic washer and simultaneously compress the resilient washer against the wall of the case.

[Claims 2 to 5 not printed in the Gazette.]

1,275,171. TOOL-ACTUATING DEVICE. THOMAS OFFICER and MORRIS P. HOLMES, Claremont, N. H., assignors, by mesne assignments, to Sullivan Machinery Company, Boston, Mass., a Corporation of Massachusetts. Filed Nov. 9, 1908. Serial No. 461,622. (Cl. 125—14.)

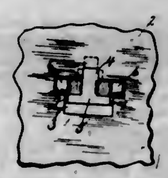


2. An apparatus of the class described having a reciprocating driving member, a driven member, a working cylinder, a piston movable within the same, a piston movable within the last named piston, said driven member being connected to one of said pistons and said driving member to the other, means coöperating with said driving piston for causing the compression of fluid, means for delivering the same to said driven piston to move the latter through the expansion of the compressed fluid and for thereafter returning the expanded fluid to the compressing side of the driving piston, and means for returning the driven piston.

[Claims 1, 3, and 4 not printed in the Gazette.]

1,275,172. MEANS FOR ATTACHING NAME-PLATES. HERMAN C. PAGE, Newark, N. J., assignor to The Whitehead & Hoag Company, Newark, N. J., a Corporation of New Jersey. Filed Aug. 22, 1917. Serial No. 187,621. (Cl. 40—20.)

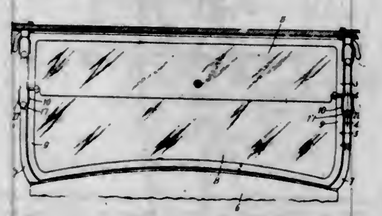
1. The combination of a name-plate and a supporting plate therefor, said plates having detachable interlocking connections at the back and wholly within the area of the name-plate, said connections including a pair of wings on the name-plate passed through an opening in the supporting plate and interlocked with the walls of said openings by sliding engagement in one direction, and a spring catch also on the name plate and tensioned to spring into engagement with one of the walls of the opening when the wings are moved to their locking positions to hold the name-plate against movement in a reverse direction.



6. In a device of the class described, a name-plate, a frame secured thereto and comprising a body portion formed with oppositely extending offset wings having end portions spaced from, but lying substantially parallel with, the plate, said body portion having a pair of spaced flanges extending at substantially right angles to the plate, and a catch extending from the body portion upon the side of the wings opposite that upon which said flanges are disposed.

[Claims 2 to 5 not printed in the Gazette.]

1,275,173. WIND-SHIELD. ANDREW L. RIKER, Bridgeport, Conn., assignor to The Locomobile Company of America, Bridgeport, Conn., a Corporation of West Virginia. Filed Mar. 6, 1916. Serial No. 82,294. (Cl. 21—148.)



1. A windshield comprising, in combination, a pair of standards, a shield interposed between and supported by said standards, and pivotal bearings for said shield comprising a pair of axially alined members secured to said shield and extending into said standards, respectively, the latter having provision for the removal of said members endwise through the outer sides of said standards and having provision for the subsequent removal of said shield without disturbing said standards.

2. A windshield comprising, in combination, a pair of stanchions, a shield interposed between and supported by said stanchions, pivotal bearings for said shield comprising a pair of axially alined trunnion members swiveled in said stanchions, respectively, and means to secure said trunnion members to said shield, said stanchions having provision for the removal of said means endwise through the outer sides of said stanchions and having provision for the subsequent removal of said shield without disturbing said stanchions.

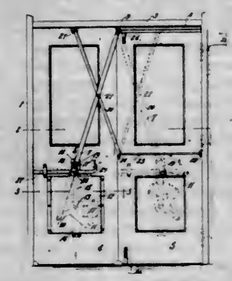
3. A windshield comprising, in combination a pair of stanchions provided with axially alined openings, a shield interposed between and supported by said stanchions, pivotal bearings for said shield comprising a pair of trunnion members located in said openings, respectively, and means distinct from said trunnion members to secure said trunnion members to said shield, said means being accessible through the outer sides of said openings.

5. A windshield comprising, in combination, a pair of stanchions provided with axially-alined openings, a shield interposed between and supported by said stanchions, pivotal bearings for said shield comprising a pair of trunnion members located in said openings, respectively, means to secure said trunnion members to said shield, said means being accessible through the outer sides of said openings, and removable cover plates for the outer sides of said openings, respectively.

9. A windshield comprising, in combination, a pair of stanchions provided each with a trunnion bearing and a cylindrical bore of two diameters, the larger intersecting said bearing, a shield interposed between said stanchions, pivotal bearings for said shield comprising a pair of axially alined trunnion members swiveled in said stanchions and secured to said shield, and means engaging the peripheries of said trunnion members to hold them against turning movement, said means each comprising a cylindrical clamping member provided with a head fitting the larger diameter of said cylindrical bore and having a cut-away portion constituting a wedge-like surface engaging the circumferential surface of the trunnion member, said clamping member being provided with a reduced threaded stem fitting the smaller diameter of said cylindrical bore, and a nut threaded onto said stem.

[Claims 4 and 6 to 8 not printed in the Gazette.]

1,275,174. SELF-CLOSING PENDULUM-HANGER FOR DOORS. JOHN H. STEWART, Jamaica, N. Y., assignor to The Coburn Trolley Track M'f'g Co., Holyoke, Mass., a Corporation of Massachusetts. Filed June 27, 1917. Serial No. 177,300. (Cl. 16—156.)



1. The combination with a doorway, of a pendulum supported door therefor, comprising a bar having a pivotal connection with a fixed support, a weight connected to one end of the bar and to the door, the bar being also connected to the door, a second bar connected to the door and to the first mentioned bar, and means for pivotally connecting the second bar to a fixed support, the pivotal connection of the first bar with the door permitting the door to travel in a straight line during its opening and closing movements.

3. In a sliding door the combination, bars for pivotally supporting the door, means connected to one of the bars and to a fixed support for controlling the movements of the bars and door, a weight connected to one of the bars and to the door for returning the door to its closed position.

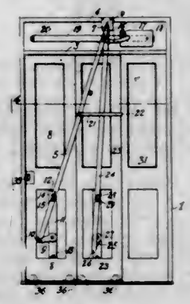
4. In a sliding door the combination, a bar pivotally and slidably connected to the door, one end of the bar having a weight pivotally connected thereto and to the door for normally retaining the door in its closed position, the other end of the bar being connected to a fixed support, a second bar connected to the door at one end, and to said bar, a link connected to the other or free end of the second bar and to a fixed support.

13. In a sliding door construction, the combination, of means for supporting the door to permit sliding movements to its open position and to automatically return to its closed position, said means including a pendulum bar pivotally connected to a fixed support near its upper end and a sliding and pivotal connection with the door near its lower end, a weight connected to the door and to the lower end of the pendulum bar, as described and means for maintaining the door in a vertical position during its movements.

14. In a sliding door construction, means for supporting the same to permit the door to be opened and to automatically return to its initial or closed position including a pendulum bar having a pivotal connection with a fixed support for operating the door and a sliding and pivotal connection with the door to permit lateral movement of the door, and a weight pivotally connected to the pendulum bar and to the door for returning the door to its closed position after the same has been opened and means for maintaining the door in a vertical position during its movements.

[Claims 2 and 5 to 12 not printed in the Gazette.]

1,275,175. SELF-CLOSING PENDULUM-HANGER FOR DOORS. JOHN H. STEWART, Jamaica, N. Y., assignor to The Coburn Trolley Track M'f'g Company, Holyoke, Mass., a Corporation of Massachusetts. Filed Dec. 5, 1917. Serial No. 205,586. (Cl. 268—8.)

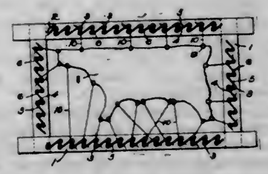


6. A sliding door construction, comprising, in combination, door sections, pendulum operating bars for said sections, means for moving one section from the other, means for returning the door sections to their initial positions comprising a rod having a pivotal connection with a fixed support, a weight on the rod, an arm on one of the pendulums for receiving the weight to cause the door sections to return to their initial position.

7. A sliding door construction comprising, in combination, a door section, a one-piece pendulum directly connected to the door section for operating the same, means arranged adjacent the pivotal point of the pendulum for returning the door section to its first position after being removed therefrom and comprising an arm on the pendulum and a weight movable on the arm.

[Claims 1 to 5 and 8 not printed in the Gazette.]

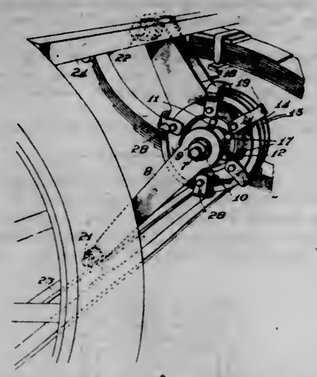
1,275,176. FASTENING OR SECURING MEANS. ALFRED J. THOMSON, Canton, Mass., assignor of one-half to George H. Capen, Canton, Mass. Filed July 28, 1917. Serial No. 182,186. (Cl. 24—131.)



6. A cord fastening device comprising a base, a resilient strip member fashioned to present a plurality of open ends, substantially parallel, tapering loops, one bar of each loop being secured to the base, thus providing a common free bar for each two loops, and oppositely directed cord receiving bights.

[Claims 1 to 5 and 7 not printed in the Gazette.]

1,275,177. REBOUND-CHECK SHOCK-ABSORBER. EDWARD A. TVERDAHL, Chicago, Ill., assignor of one-half to Joseph F. Davis, Chicago, Ill. Filed Feb. 21, 1917. Serial No. 150,214. (Cl. 21—105.)



1. A device of the character described comprising a pair of members mounted for relative swinging movement, means frictionally engaging a relatively large circumferentially disposed surface of one of said members, means for automatically locking said first-mentioned means to the other of said members upon relative movement of said members in one direction and for releasing said first-mentioned means upon relative movement of said members in the opposite direction, and means embracing said first-mentioned means and the member in frictional engagement therewith for adjusting the degree of friction therebetween.

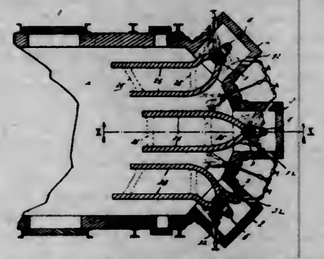
2. A device of the character described comprising a shaft, a radial arm extending from the shaft, a hub mounted on the shaft, a friction element carried by the hub, a radial arm extending in an angular direction with respect to the first-mentioned arm, a plurality of clamps embracing the second-mentioned arm and said element, screws carried by said clamps for adjustably securing the latter in operative position, and a clutch connection between the shaft and hub whereby the latter is freely movable in one direction with respect to said shaft.

3. A device of the character described comprising a shaft, a pair of radial arms fixed on the ends of the shaft, a hub on the shaft between said arms, a clutch connection between the hub and shaft, said connection being free to slip in one direction, a disk carried by the hub intermediate its ends and having friction surfaces on both sides, a pair of spaced radial arms having their inner ends in frictional engagement with said friction surfaces, and means for maintaining said frictional engagement.

4. A device of the character described comprising a shaft, a pair of radial arms fixed on the ends of the shaft, a hub on the shaft between said arms, a clutch connection between the hub and shaft, said connection being free to slip in one direction, a disk carried by the hub intermediate its ends and having friction surfaces on both sides, a pair of spaced radial arms having their inner ends in frictional contact with said friction surface, and means embracing said inner ends for maintaining and varying said frictional contact.

5. A device of the character described comprising a pair of members mounted for a relative swinging movement, an element carried by one of the members and having a frictional engagement with the other member, a clutch connection between the first-mentioned member and the element carried thereby, said connection being made upon relative movement of said members in one direction and broken upon relative movement of said members in the opposite direction, and means for varying the friction between said element and the member engaging therewith, comprising a plurality of clamps embracing said element and the member frictionally engaged therewith.

1,275,178. GLASS-WORKING. FRANK L. O. WADSWORTH, Pittsburgh, Pa., assignor to Ball Brothers Glass Manufacturing Company, Muncie, Ind., a Corporation of Indiana. Filed July 31, 1914. Serial No. 854,225. (Cl. 49—55.)



1. That improvement in the art of glass working, which comprises the maintenance of a dominant pool of molten glass, the intermittent segregation of comparatively small quantities thereof from a point below the surface of the pool, the ejection of a portion of each segregated quantity into a receptacle, the withdrawal of the filled receptacle, and the ejection of a subsequent portion of each segregated quantity to the dominant pool upon the surface thereof, and the guarding of the segregating point to a depth below the same and to a considerable distance toward the initial end of the dominant pool whereby the successive subsequently-ejected portions of molten glass which are returned to the dominant pool can not return to the segregating point for a considerable time.

3. That improvement in the art of glass working, which comprises the maintenance of a dominant pool of molten glass, the successive segregation of comparatively small quantities from the dominant pool at a point below the surface, the ejection of said segregated quantity by a heated gas applied directly thereto under pressure, a portion of said ejection being directed into a receptacle and a subsequent portion of said ejection returned to the dominant pool and the guarding of the segregation point to a point distant therefrom whereby the successively ejected quantities returned to the dominant pool can not return to the segregation point until after the lapse of considerable time.

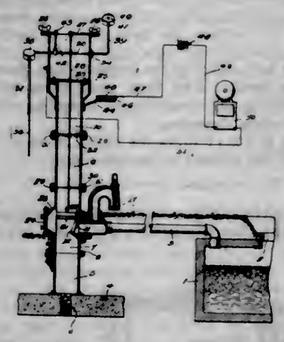
5. That improvement in the art of glass working, which comprises a furnace for the maintenance of a dominant pool of molten glass, a segregating chamber arranged in said furnace and provided with an inlet port below the normal level of glass in the furnace and an outlet port above the normal level of glass in the furnace and in position to discharge either to an applied receptacle or to the dominant pool, means for alternating communication between the segregating chamber and the dominant pool through the inlet port and through the outlet port, and means for applying a heated gas under constant pressure within the segregating chamber to eject the glass therefrom through the discharge port.

7. That improvement in the art of glass working, which comprises a furnace for the maintenance of a dominant pool of molten glass, a delivery receptacle arranged in said furnace, to be partially submerged in the glass therein, said delivery receptacle comprising a main chamber, an entry port leading into said main chamber from a point below the normal level of glass in the furnace, and a discharge passage communicating with the main chamber and having its discharge end above the normal level of glass in the furnace, a rotary hollow valve mounted in said main chamber and provided with a port arranged to alternately connect the interior of said valve with the aforesaid entry port and discharge passage, means for rotating the said valve, and means for injecting into said valve a heated gas under pressure when the port of said valve is in communication with the discharge passage, said last-mentioned means comprising a reservoir, means for highly heating the interior thereof, and a pump for injecting gas under pressure into said reservoir, and means for exhausting gas from the interior of the valve when the port thereof is in communication with the inlet port.

9. That improvement in the art of glass working, which comprises a furnace for the maintenance of a dominant pool of molten glass, a delivery receptacle arranged in said furnace, to be partially submerged by the glass therein, said delivery receptacle comprising a main chamber, an entry port leading into said main chamber from a point below the normal level of glass in the furnace, and a discharge passage communicating with the main chamber and having its discharge end above the normal level of glass in the furnace, a rotary hollow valve mounted in said main chamber and provided with a port arranged to alternately connect the interior of said valve with the aforesaid entry port and discharge passage, means for rotating the said valve continuously, and means for injecting into said valve a heated gas under pressure when the port of said valve is in communication with the discharge passage, said last mentioned means comprising a reservoir, means for highly heating the interior, and a pump for injecting gas under pressure into said reservoir.

[Claims 2, 4, 6, and 8 not printed in the Gazette.]

1,275,179. ELECTRIC SIGNAL. WILLIAM M. BOWLES, Sapulpa, Okla., assignor to International Crude Oil Storage Company, Inc., Sapulpa, Okla. Original application filed Dec. 31, 1915, Serial No. 69,609. Divided and this application filed Nov. 21, 1916. Serial No. 132,609. (Cl. 177—311.)

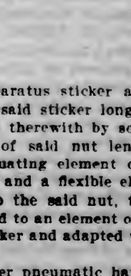


1. In a device of the class described, a vent pipe, a valve within the pipe having a normal tendency toward movement to closed position, a fusible element, means supporting the said element and engaged with the extremities thereof, connection between the said element and the valve normally holding the valve in open position, the said connection being engaged with the intermediate portion of the said element, a rotatable element, means carried by the said rotatable element and projecting in front of the said fusible element for normally holding the rotatable element against rotation, and a signal adapted to be rendered active upon movement of the said movable element.

[Claims 2 to 7 not printed in the Gazette.]

1,275,180. FLUID-PRESSURE GAGE. EVENIO ELLIS, Sheffield, England. Filed July 24, 1915. Serial No. 41,785. (Cl. 73—111.)

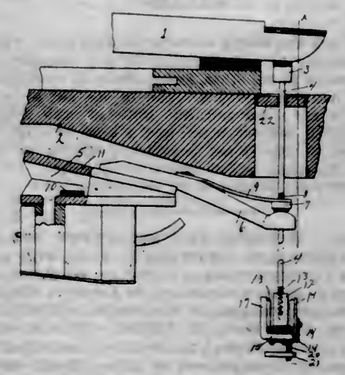
1. In fluid-pressure gages, the combination of a shell or cylinder provided with an end cap or closed end having an opening, a fixed scale-carrying part upon said cap or end, said part having one or more inside surfaces serving to hold and support a member, which constitutes a frictionally-retained indicating-piece or part of frictionally-retained indicator mechanism and is separate from, but actuated by, a piston-rod sliding directly in the opening in said cap or end, a piston working directly in said shell or cylinder, and a compression spring controlling the movement of said piston and piston-rod, said compression spring throughout its length being disposed directly and solely between the piston-rod and the shell or cylinder.



5. In fluid-pressure gages, the combination of a shell or cylinder provided with an end cap or closed end having an opening, a part upon said cap or end carrying a flat scale, said part having one or more inside surfaces serving to hold and support a member which constitutes a solid frictionally-retained indicating-piece or part of frictionally-retained indicator mechanism, including a solid indicating-piece and is separate from, but actuated by, a piston-rod sliding directly in the opening in said cap or end, a piston working directly in said shell or cylinder, and a compression spring controlling the movement of said piston and piston-rod, said compression spring throughout its length being disposed directly and solely between the piston-rod and the shell or cylinder.

[Claims 2 to 4 not printed in the Gazette.]

1,275,181. MUSIC-PLAYER STICKER-ACTION. ROBERT A. GALLY, Cincinnati, Ohio, assignor to The Baldwin Company, Cincinnati, Ohio. Filed Aug. 8, 1917. Serial No. 185,161. (Cl. 84—233.)



1. A musical apparatus sticker and means connected with and actuating said sticker longitudinally; a nut on said sticker engaged therewith by screw threads adapted for the regulation of said nut lengthwise of the said sticker, and an actuating element of the apparatus engaging the said nut and a flexible element having one of its ends attached to the said nut, the other end of the said element attached to an element of the apparatus other than said nut or sticker and adapted to prevent the revolution of the said nut.

6. A hinged striker pneumatic having a moving board and a lever fixed to said moving board and extended beyond the said hinges and having an arc-like movement of

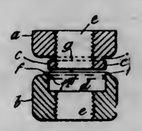
its said extended part; a sticker extended through the extended end of the said lever; a nut on the said sticker engaged therewith by screw threads and adapted for the regulation of the said nut lengthwise of the said sticker to and away from the said lever; and an actuating element of the apparatus engaging the said nut and a flexible element having one of its ends attached to the said nut and its other end attached to a moving part of the said pneumatic.

9. A vertical sticker having its upper end adapted to actuate a movable member of a musical apparatus; an actuating means engaging the said sticker intermediate its length and adapted to actuate said sticker vertically; a leveling support immediately below the lower end of the said sticker, screw threads at the lower end of the said sticker and a leveling button on the lower end of the said sticker and engaged by the said threads and adjustable thereon vertically of the said sticker; the lower end of the said button resting on the said leveling support, and means adapted to raise and lower the said leveling support.

10. A vertical sticker having its upper end adapted to actuate a movable member of a musical apparatus; a striker pneumatic having an actuating means engaging the said sticker intermediate its length and adapted to actuate said sticker vertically; a leveling support immediately below the lower end of the said sticker, screw threads at the lower end of the said sticker and a leveling button on the lower end of said sticker and engaged by the said threads and adjustable thereon vertically of the said sticker; the lower end of the said button resting on the said leveling support.

[Claims 2 to 5, 7, 8, and 11 to 30 not printed in the Gazette.]

1,275,182. LOCK-NUT. SIDNEY JOHN ROSS, London, England; Harry Schofield executor of said Sidney John Ross, deceased. Filed May 25, 1917. Serial No. 170,890. (Cl. 151—19.)



1. A lock-nut having eccentric locking parts, which are held together by keying means on one, engaging an annular groove in the other, substantially as described.

3. A lock-nut having a socket in one nut to receive a spigot in the other nut, the walls of such spigot and socket being without taper, and a bead or ridge around the edge of the socket engaging a groove or channel around the spigot, substantially as described.

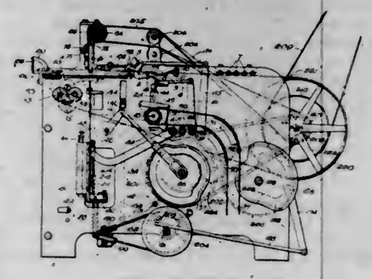
[Claim 2 not printed in the Gazette.]

1,275,183. MACHINE FOR SELECTING, SPOOLING, SHEARING, AND DRAWING IN YARN FOR AXMINSTER LOOMS. THOMAS P. WALSH, Boston, Mass., assignor, by mesne assignments, to American Warp-Drawing Machine Company, a Corporation of Maine. Filed Nov. 20, 1909. Serial No. 529,007. (Cl. 139—94.)

16. A machine of the kind described, comprising means for threading a complement of yarns through the tubes of a loom tube frame, means to cut even said yarns before they are threaded through said tubes, and means for positioning the projecting ends of the threads after being threaded through said tubes.

23. A machine of the kind described, comprising means to wind a spool with a complement of yarns, yarn-selecting mechanism for selecting said complement of yarns, including pattern-controlling mechanism, means for threading said selected yarns through the tubes of a tube frame, and means for cutting off even the yarns in proper relation to said tubes and spool.

29. In a machine of the kind described, means for holding a loom tube frame in position to be threaded, a pusher for pushing the yarn ahead of it through the tube from the rear or spool end thereof, said pusher having a notch in its end for holding the yarn at the end of the pusher, means causing the yarn to slip through said notch as the pusher moves forward until the yarn-end escapes from the pusher beyond the forward end of the tube, and deflecting means for then deflecting the outer end of the yarn over the edge of said forward end of the tube.

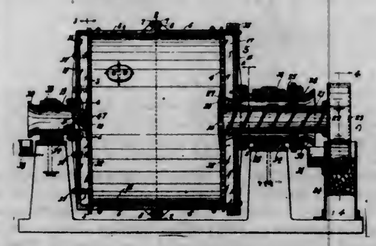


33. In a machine of the kind described, means for holding a loom tube frame in position to be threaded, and threading mechanism, including a threading device mounted for axial and longitudinal movement, having a laterally extending portion back of its thread-receiving end, and operating mechanism for said device, including means to engage and move laterally said projecting portion.

71. In a tube threading machine, a tube frame support and means for holding the yarn ends in position to be threaded, in combination with needles moving transversely to the yarns and engaging the yarns to loop them over the ends of the needles and then push them through the tubes, and means for combining or brushing out the ends of the yarn after threading.

[Claims 1 to 15, 17 to 22, 24 to 28, 30 to 32, 34 to 70, and 72 to 77 not printed in the Gazette.]

1,275,184. BALL-MILL. DONALD H. FAIRCHILD, Denver, Colo. Filed May 31, 1917. Serial No. 171,902. (Cl. 83—9.)

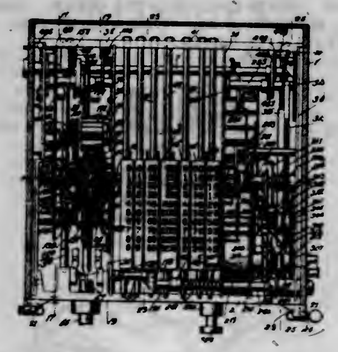


1. A ball or pebble mill having a central feed opening at one end and a central discharge opening at each end thereof, and segregating and delivering means for each discharge opening.

2. A ball or pebble mill having a central feed passage at one end and a central discharge passage at each end thereof, grates spaced inwardly from the outer heads of the mill, and means arranged between each grate and the corresponding head for elevating the pulverized material to the adjacent discharge passage.

3. A cylindrical ball or pebble mill having a central feed passage at one end and a central discharge passage at each end thereof, means at each end of the mill for segregating the pulverized material, and means adjacent each end for elevating such material to the corresponding discharge passage.

1,275,185. RECORDING-TAXIMETER. ALFRED G. F. KUROWSKI, Brooklyn, N. Y., assignor to himself, Henry Marx, August F. Marx, and Adolph L. Martin, Chicago, Ill. Filed Oct. 21, 1916. Serial No. 120,865. (Cl. 235—30.)



1. In a recording taximeter, the combination of a plurality of slidable frames, a shaft intermittently driven from gearing adapted to be continuously driven, said shaft being longitudinally shiftable, gears secured to said shaft adapted to engage said frames one at a time, and means operated by said continuously driven gearing for shifting said shaft to cause disengagement of one frame and the engagement of another.

5. In a taximeter of the character described, the combination of a worm gear, a worm driven by the vehicle and adapted to be moved into and out of mesh with said worm gear, a pinion adapted to be driven by said worm gear after a preliminary idle movement of the latter representing the minimum charge, and means for automatically restoring the worm gear to initial relation with said pinion when said worm is moved out of mesh with said worm gear.

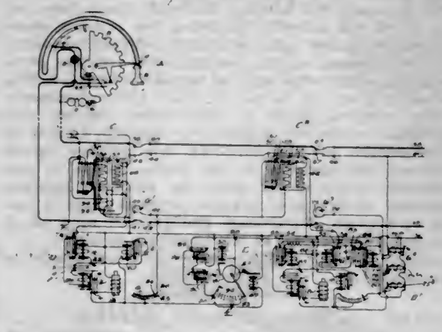
16. In a taximeter of the character described, the combination of a plurality of slidable register frames, a longitudinally slidable shaft adapted to be operated by the vehicle for advancing said frames one at a time step by step, cam disks for shifting said shaft longitudinally when tens are to be transferred and a spring for moving said shaft in opposition to said cams and holding it in position for advancing the units register frame.

19. In a taximeter of the character described the combination with means for making a record of amounts indicated, of a plurality of longitudinally slidable totalizer frames provided with type on one face and indicating characters on the other, gearing adapted to be continuously driven, intermediate mechanism whereby said continuously driven mechanism is adapted to advance said frames step by step one at a time, a shaft adapted to be shifted by said continuously driven gearing for automatically determining which of said frames is to be advanced step by step and means actuated by said step by step mechanism in advancing a frame for releasing and restoring to zero other of said frames already advanced nine steps.

24. In a taximeter of the character described, the combination of a plurality of longitudinally slidable register frames, a shaft transversely of said frames provided with a corresponding plurality of pinions for engaging and sliding the respective frames when said shaft is turned, said pinions being spaced to engage one frame at a time, gear mechanism adapted to be continuously driven, mechanism operated thereby for intermittently turning said shaft to advance the frame in gear therewith step by step and cam mechanism operated by said continuously driven gearing for shifting said shaft longitudinally to disengage one frame and engage an adjacent frame to the left during the tenth step by step movement of said shaft.

[Claims 2 to 4, 6 to 15, 17, 18, 20 to 23, and 25 to 27 not printed in the Gazette.]

1,275,186. AUTOMATIC TELEPHONE SYSTEM. WILLIS E. LAMB, Los Angeles, Cal., assignor to Automatic Electric Company, Chicago, Ill., a Corporation of Illinois. Filed June 26, 1912. Serial No. 705,908. Renewed Dec. 19, 1917. Serial No. 207,979. (Cl. 179—18.)



1. In a telephone system, primary line switches divided into groups, a master switch for controlling each group of line switches, secondary line switches divided into groups, trunk lines leading from said primary to said secondary line switches, secondary trunk lines leading out of said groups of secondary line switches, and means operable when all the secondary trunk lines leading out of a particular group are in use for causing any one of said master switches to sweep over all of the trunk lines of a particular group of primary switches while some of said last trunk lines are idle.

2. In a telephone system, a plurality of groups of primary line switches, a master switch for controlling each group, a plurality of groups of secondary line switches, a secondary master switch for controlling each group of secondary line switches, trunk lines leading from said primary to said secondary line switches, secondary trunk lines leading out of said secondary line switches, and means operable when all the secondary trunks leading out of a particular group of secondary line switches are in use for causing any one of said primary master switches to sweep over all of the trunk lines of a particular group of primary switches while some of said last trunk lines are idle.

6. In a telephone system, a plurality of groups of primary line switches, a master switch for controlling each group, a plurality of groups of secondary line switches, a secondary master switch for controlling each group of secondary line switches, trunk lines leading from said primary to said secondary line switches, secondary trunk lines leading out of said secondary line switches, and means for successively operating groups of said primary master switches when all the secondary trunk lines leading out of a group of secondary line switches are in use.

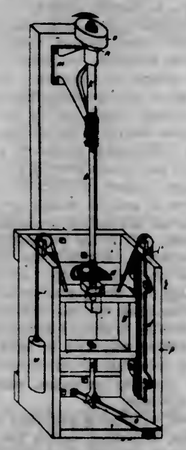
10. In a telephone system, a plurality of groups of primary line switches, each of said line switches including a plunger, a master switch for each group of primary line switches having a shaft with which said plungers are normally in engagement and adapted to be disengaged therefrom upon the operation of said line switches, a group of secondary line switches divided into groups, trunk lines leading from said primary to said secondary line switches, secondary trunk lines leading out of said groups of secondary line switches, means

for operating said primary master switches to connect all the plungers of the line switches with the corresponding shaft when all the secondary trunks leading out of a group are in use, and a rotary switch for successively bringing groups of said master switches into operation.

17. In a telephone system, a plurality of groups of primary line switches, each of said line switches including a plunger, a master switch for each group of primary line switches having a shaft with which said plungers are normally in engagement and adapted to be disengaged therefrom upon the operation of said line switches, a group of secondary line switches divided into groups, trunk lines leading from said primary to said secondary line switches, secondary trunk lines leading out of said groups of secondary line switches, means for operating said primary master switches to connect all the plungers of the line switches with the corresponding shaft when all the secondary trunks leading out of a group are in use, a rotary switch for successively bringing groups of said master switches into operation, means for delaying the operation of said rotary switch, bank contacts on said primary master switches corresponding to the trunks leading to said secondary switches, and means for placing a guarding potential on said bank contacts of trunk lines extending to a group of secondary line switches when all of the trunks leading out of said group are in use.

[Claims 3 to 5, 7 to 9, and 11 to 16 not printed in the Gazette.]

1,275,187. CLAY-POT-FINISHING MACHINE. CLARENCE W. MONTAGUE, Denver, Colo. Filed Oct. 29, 1917. Serial No. 199,219. (Cl. 25—24.)



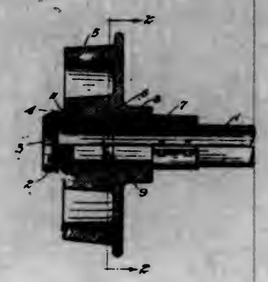
1. A machine for handling ware comprising a rotary member and a rod, one of whose ends is supported by the rotary member, whereby one of these members may be rotated through the medium of the other.

3. A machine for use in finishing unburned potter's ware comprising a turntable, a plurality of shoulders on the turntable to support ware of different diameters, a vertical removable sustaining rod adapted to pass through the ware and have the lower end seat in the turntable and rotate therewith, and means to engage and rotate the other end of the rod.

4. A machine for use in finishing unburned potter's ware comprising a horizontal turntable adapted to support the ware, a vertically reciprocable mounting for said turntable, a removable sustaining rod adapted to pass through the ware and extend vertically with its lower end seated in the turntable to rotate therewith, a clutch member on the upper end of the rod, and a companion clutch member mounted above the turntable and rod and adapted to engage the clutch member of the rod, and means to rotate said companion clutch member.

[Claims 2 and 5 to 7 not printed in the Gazette.]

1,275,188. MINE-CAR RUNNING-GEAR. CALVIN R. WAID, Birmingham, Ala. Filed Feb. 14, 1916. Serial No. 78,128. (Cl. 64—27.)



1. In combination, an axle having an oil chamber adapted to be filled with lubricant and a shallow circumferential oil groove surrounding the axle substantially at the center of its wheel bearing portion, there being an outlet port adapted to drain the lubricant leading from the said chamber into said groove, a wheel mounted on said bearing portion of said axle, and a shallow oil distributing channel cut lengthwise in the hub bore of the wheel and stopping just short of its ends, said channel being adapted to travel always in register with said groove from which it is charged with oil during a part of each rotation of the wheel proportionate to the speed of wheel rotation.

2. In combination, a wheel having a smooth bore with a narrow shallow longitudinal oil distributing groove extending lengthwise of and stopping just short of each end of the bore, an axle bearing for the wheel which is hollow and adapted to be filled with lubricant and which has an external circumferential channel which is of appreciable width but very shallow and which is disposed substantially opposite the center of the hub of the wheel, there being an oil port opening from the bottom part of the axle into said shallow circumferential groove, and means to hold the wheel in running position on its bearing, substantially as described.

1,275,189. MEANS OF RECORDING AND REPRODUCING SOUND AND MOTION IN SYNCHRONISM. AUGUST C. RUTZEN, Cleveland, Ohio. Filed July 6, 1914. Serial No. 849,235. (Cl. 88—16.2.)



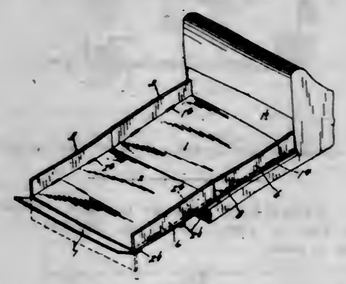
1. An apparatus for producing motion-pictures and sound simultaneously, comprising a motion picture machine and a sound reproducing device, in combination with a sound-amplifying chamber relatively above said machine and flared outwardly and having a screen at its outer end for the pictures projected by said machine, a tube to convey the sound to said chamber from said sound reproducing device, and a set of mirrors on different planes arranged to reflect the pictures onto said screen, one of said mirrors being in the rear end of said chamber.

4. In an apparatus for producing motion-pictures and sound, a motion-picture machine and a sound-reproducing device, in combination with a motion-picture film having a sound-wave record on one edge thereof and a flaring sound-amplifying chamber for said device having a mirror at its rear and a screen at its front for the motion-pictures and openings about the edge thereof for the passage of sound, and a tube from said sound-reproducing device to the inner and smaller end of said chamber.

[Claims 2 and 3 not printed in the Gazette.]

REISSUES.

14,500. COLLAPSIBLE VEHICLE-BOX. FRANK HEATH, San Diego, Cal., assignor of one-half to D. C. Benton, San Diego, Cal. Filed May 16, 1918. Serial No. 235,031. Original No. 1,209,577, dated Dec. 19, 1916, Serial No. 37,255, filed June 30, 1915. (Cl. 21—7.)



1. In a device of the class described, the combination of an automobile body frame, a stationary floor part for the rear end thereof secured thereto, side pieces foldable inwardly onto said stationary part, similar side pieces connected to the extended ends thereof by means of hinges, another floor part connected to said latter mentioned side pieces by hinges whereby when said side pieces are folded down, said latter mentioned piece will fold up over said stationary piece, an end-gate hinged to said latter mentioned floor part, and a rear seat frame provided with inwardly extending flanges adapted to slide between the side edges of said floor parts when they are in their folded position.

2. In a device of the class described, the combination with the rear end of the frame of a vehicle, of a bottom part rigidly secured thereto extending from the back of the front seat to near the rear end of said frame, side pieces mounted thereon foldable inwardly against said bottom part, similar side pieces with their ends hinged to the outwardly extending ends of said first mentioned side pieces so as to fold upon said side pieces when they are folded down on said bottom part, another bottom part hinged to said last mentioned side pieces adapted to fold with said pieces and when in its extended position said last mentioned body part is supported by the rear end frame of said vehicle.

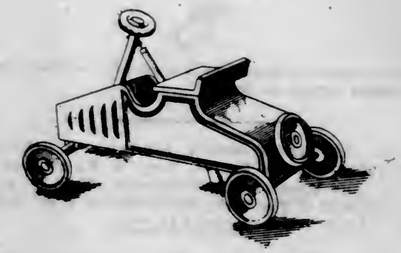
3. In a device of the class described, the combination with the rear end of the frame of a vehicle, of a bottom part rigidly secured thereto extending from the back of the front seat to near the rear end of said frame, side pieces mounted thereon foldable inwardly against said bottom part, similar side pieces with their ends hinged to the outwardly extending ends of said first mentioned side pieces so as to fold upon said side pieces when they are folded down on said bottom part, another bottom part hinged to said last mentioned side pieces adapted to fold with said pieces and when in its extended position said last mentioned body part is supported by the rear end frame of said vehicle and an end-gate hinged to said body part whereby it forms an end-gate when folded against the ends of said side pieces and a foot rest when in its folded position.

4. A vehicle body comprising a fixed main portion having a front seat, a collapsible delivery box supported therefrom, and a demountable rear seat, which seat when in working position conceals the collapsed delivery box, but which seat when removed renders said delivery box available for extension and usage, substantially as described.

5. A vehicle body comprising a fixed main portion having a front seat, a collapsible delivery box supported therefrom, and a demountable rear seat having parts adapted to telescope with parts available on the vehicle body when the box is in its collapsed position, and which seat when in working position conceals the collapsed delivery box but which seat when removed renders said delivery box available for extension and usage, substantially as described.

DESIGNS.

52,247. CHILD'S VEHICLE. JOHN W. ARNEY, Chicago, Ill., assignor to Alexander B. Leith, Chicago, Ill. Filed May 17, 1918. Serial No. 235,192. Term of patent 7 years.



The ornamental design for a child's vehicle, as shown.

52,248. LAMP. LOUIS V. ARONSON, Newark, N. J. Filed May 2, 1918. Serial No. 232,168. Term of patent 3½ years.



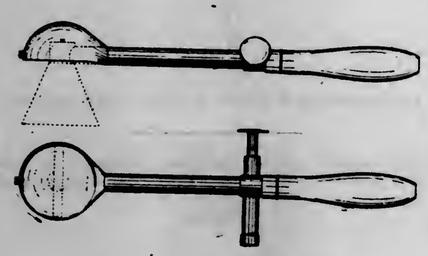
The ornamental design for a lamp, as shown.

52,249. HANDLE FOR A SPOON, FORK, OR SIMILAR ARTICLE. GEORGE E. BALL, Bridgeport, Conn., assignor to Whiting Manufacturing Company, New York, N. Y., a Corporation of New York. Filed Mar. 5, 1918. Serial No. 220,657. Term of patent 14 years.



The ornamental design for a handle for a spoon, fork, or similar article, as shown.

52,250. ICE-CREAM SPOON, DISHER, OR SIMILAR DEVICE. JOSEPH BLUHM, Troy, N. Y., assignor to The Dana Manufacturing Corporation, Troy, N. Y., a Corporation of New York. Filed Mar. 14, 1916. Serial No. 84,232. Term of patent 14 years.



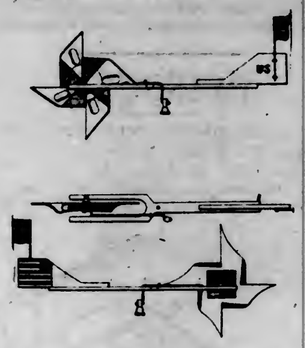
The ornamental design for an ice-cream spoon, disher, or similar device, substantially as shown.

52,251. ELECTRIC-LAMP FIXTURE. SIMON W. FARBER, Brooklyn, N. Y. Filed May 9, 1918. Serial No. 233,577. Term of patent 14 years.



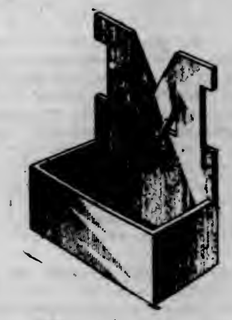
The design for an electric lamp fixture as shown.

52,252. WEATHER-VANE. JOHN KIBBLE, Richmond, Va. Filed May 1, 1918. Serial No. 231,960. Term of patent 3½ years.



The ornamental design for a weather vane as shown.

52,253. MATCH-BOX. ROBERT LABUDDE, Fellows, Cal. Filed Mar. 8, 1918. Serial No. 221,820. Term of patent 7 years.



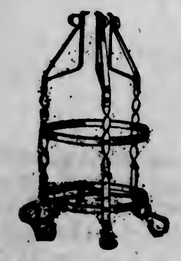
The ornamental design for a match box, as shown.

52,254. LIGHTING-POST. VICTOR H. ROEHRICK, St. Paul, Minn. Filed Nov. 13, 1917. Serial No. 201,852. Term of patent 14 years.



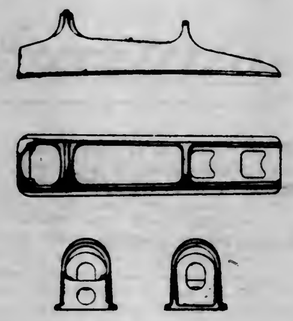
The ornamental design for a lighting post as shown

52,255. SUPPORT OR STAND. WILLIAM J. H. STRONG, Chicago, Ill. Filed May 21, 1917. Serial No. 170,066. Term of patent 14 years.



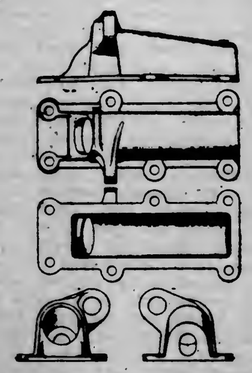
The ornamental design for a support or stand as shown.

52,256. BAND-FASTENER. EMIL C. TECKTONIUS, Racine, Wis., assignor to E. C. Tecktonius Manufacturing Co., Racine, Wis., a Corporation of Wisconsin. Filed Aug. 11, 1915. Serial No. 45,067. Term of patent 14 years.



The ornamental design for a band fastener, substantially as shown.

52,257. BAND-FASTENER. EMIL C. TECKTONIUS, Racine, Wis., assignor to E. C. Tecktonius Manufacturing Co., Racine, Wis., a Corporation of Wisconsin. Filed Aug. 13, 1915. Serial No. 45,437. Term of patent 14 years.



The ornamental design for a band fastener, substantially as shown.

52,258. BOW-HOLDER. GEORGE V. UPTON, Fitchburg, Mass. Filed Mar. 14, 1917. Serial No. 154,877. Term of patent 7 years.



The ornamental design for a bow holder as shown.

52,259. ELECTRIC LAMP. LESTER R. WELLMAN, Chicago, Ill., assignor to Friedley-Voshardt Co., Chicago, Ill., a Corporation of Illinois. Filed Mar. 11, 1918. Serial No. 221,855. Term of patent 7 years.



The ornamental design for an electric lamp substantially as shown.

TRADE-MARKS

OFFICIAL GAZETTE AUGUST 6, 1918.

(PUBLISHED AUGUST 24, 1918.)

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 14 of said act, a fee of ten dollars must accompany each notice of opposition.

Ser. No. 91,100. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) GROCETERIA STORES COMPANY, Seattle, Wash. Filed Dec. 2, 1915.

Groceteria

Said trade-mark consists of the word "Groceteria."

Particular description of goods.—Wheat-Flour, Hard-Wheat Flour, White Flour, Whole-Wheat Flour, Blended Flour, Oat-Flour, Graham Flour, Coarse Graham Flour, Rice-Flour, Pancake-Flour, Buckwheat-Flour, Rye-Flour, Cornmeal-Flour, White Cornmeal, Rolled Oats, Steel-Cut Oats, Rolled Oats and Wheat; Powdered, Cube, and Yellow Cane-Sugar; Nuts in Their Natural State and Candied, Peanut-Butter; Condiments—Namely, Mustard, Sage, Cinnamon, Cloves, Paprika, White Pepper, Black Pepper, Red Pepper, Mace, Ginger; Citron, Orange, and Lemon Peel; Lemon and Vanilla Extracts Used for Flavoring Food Products, Spices; Black Figs, White Figs, Fresh, Dried, and Preserved; Candies, Coffee, Tea, Cocoa; Ground, Bitter, and Sweet Chocolate; Jellies, Jams, Marmalades; Cane, Maple, and Sugar Syrups; Molasses Made from Cane, Beets, Sorghum, or Corn; Olive-Oil, Catsups; Fresh Fruits—Namely, Peaches, Apples, Oranges, Lemons, Bananas, Apricots, Prunes; Evaporated Fruits—Namely, Raisins, Apples, Apricots, Peaches, and Prunes; Canned Vegetables—Namely, Sweet Potatoes, Pumpkins, Squash, Spinach, Sweet Corn, Lima Beans, Pork and Beans, Baked Beans and Tomato Sauce, Sugar-Peas, Hominy, Succotash, Fresh Vegetables—Namely, Potatoes, Carrots, Beets, Parsnips, Cabbage, Cauliflower, Corn, Beans, Peas, Tomatoes, Squash, Turnips; Canned Soups; Canned Fruits—Namely, Grapes, Strawberries, Loganberries, Blackberries, Pineapple, Peaches, Prunes, Apricots, and Apples; Canned Salmon, Canned Lobster; Ripe, Plain, and Stuffed Olives; Pickles, Vinegar, Chow-Chow, Sweet Piccalilli Relish, India Relish, Oyster Cocktail; Sauces—Namely, Red Pepper, Green Red Pepper, Mustard, and Worcestershire Sauces; Mayonnaise Dressing, Butter, Cheese; Milk, Both Raw, Treated, and Condensed; Bread, Crackers, Yeast, Gelatin, Farina, Tapioca, Pearl-Barley; All Grades of Rice—Namely, Cracked Rice, Head-Rice, Extra Fancy Rice, Blue-Rose Rice, Broken Rice, and Jap Rice; Split Peas; Green Peas, Fresh and Dried; Popcorn, Candied and in Its Natural State; Hominy and Hominy-Grits; Large and Small White Beans, Canned and Dried; Lima Beans, Canned and Dried; Brown Beans, Canned and Dried; Cooking-Starch, Dried Fish; Poultry, Live, Dressed, and Canned.

Claims use since Nov. 6, 1915.

Ser. No. 97,182. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) JOHN BRAUN & SONS, Philadelphia, Pa., assignors to Pennsylvania Lawn Mower Works, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 29, 1916. Under ten-year proviso.

PENNSYLVANIA PONY MOWER

Particular description of goods.—Lawn-Mowers.

Claims use since the spring of 1891.

Ser. No. 97,186. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) JOHN BRAUN & SONS, Philadelphia, Pa., assignors to Pennsylvania Lawn Mower Works, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 29, 1916. Under ten-year proviso.

PENNSYLVANIA HORSE MOWER

Particular description of goods.—Lawn-Mowers.

Claims use since the spring of 1883.

Ser. No. 99,350. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) JABURG BROTHERS, New York, N. Y. Filed Nov. 17, 1916.

BLUE JAY

Particular description of goods.—Cocoanut, Corn-Starch, Egg-Whip, Almond-Paste, Egg-Noodles, Icing-Glacé, Catchup, Lemon-Peel, Citron, Orange-Peel, Baker's Cream, Raisins, Dried Currants, Marshmallow Topping, Spaghetti, Macaroni, Vermicelli, Gracéd Fruits, Bouillon-Cubes; Cooking or Baking Compound Composed of Cotton-Seed Oil, Substitute for Lard; Allspice, Powder Compound of Gum and Cereals for Use in Ice-Cream, Cinnamon, Cloves, Coffee, Molasses, Condensed Milk, Chocolate Liquor for Baking, Granulated Gelatin, Cooking-Oil Pressed from Cotton-Seed, Powdered Cocoa.
Claims use since 1913.

Ser. No. 99,556. (CLASS 15. OILS AND GREASES.) FRED C. ROEGGE, Cleveland, Ohio. Filed Nov. 25, 1916.

GASCOILINE

Particular description of goods.—Synthetic Liquid Hydrocarbon Fuel Similar to Gasolene or Kerosene.
Claims use since about Apr. 1, 1916.

Ser. No. 101,119. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) L. C. CHASE & COMPANY, Boston, Mass. Filed Feb. 2, 1917.

GOAT BRAND SANFORD MILLS

No claim being made to the exclusive use of the words "Brand" and "Made by Sanford Mills" apart from the mark as shown in the drawing.
Particular description of goods.—Pile Fabrics Made Wholly or in Part of Mohair or other Kinds of Cattle-Hair; Pile Fabrics Made Wholly or in Part of Mohair or other Cattle-Hair for Upholstery Purposes.
Claims use since Jan. 1, 1892.

Ser. No. 101,452. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) NORTH BRITISH RUBBER COMPANY, LTD., Edinburgh, Scotland. Filed Feb. 17, 1917.

HAWK

Particular description of goods.—Golf-Balls.
Claims use since 1905.

Ser. No. 101,651. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) IOWA GATE CO., Cedar Falls, Iowa. Filed Feb. 24, 1917.

CLAY

Particular description of goods.—Metal Gates and Metal Parts of Gates, Not Including Latches and Locks; Gate-Hinges, Gate-Braces, Gate-Stops, and Gate-Couplings; Metal Fence-Posts and Metal Gate-Posts, Metal Fencing, Stock-Pens Consisting of Metal Gates and Metal Partition-Sections Similar to Heavy Metal Fencing.
Claims use since Dec. 27, 1916.

Ser. No. 101,961. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) LAUTZ BROS. & CO., Buffalo, N. Y. Filed Mar. 7, 1917.

MYSTIC

Particular description of goods.—Soap.
Claims use since 1884.

Ser. No. 103,286. (CLASS 2. RECEPTACLES.) CLARK PAPER & MANUFACTURING CO., Rochester, N. Y. Filed Apr. 25, 1917.

SNO-BAK

Particular description of goods.—Corrugated Cover-Caps for Apple-Barrels.
Claims use since Oct. 2, 1911.

Ser. No. 103,657. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ADOLPH C. WOLMARK, New York, N. Y. Filed May 8, 1917.

FLORA

Comprising the word "Flora."
Particular description of goods.—Toilet Waters, Brilliantine, Smelling-Salts, Sachet-Powders, Perfumes, Hair-Tonics, Shampoos, Liquid and Solid Rouge, Face-Powder and Liquid Face-Powder, Tooth-Powders, and Face-Creams.
Claims use since May, 1898.

Ser. No. 104,467. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE MARWIN FOOD COMPANY, Marion, Ohio. Filed June 16, 1917.



Particular description of goods.—Peanut-Butter, Egg Substitutes and Compounds for Use in Cooking and Baking, Flavoring Extracts for Foods, Olive-Oil, Cream-Whipping Extracts and Ingredients.
Claims use since about May 1, 1917.

Ser. No. 104,682. (CLASS 48. MALT BEVERAGES, EXTRACTS, AND LIQUORS.) MILWAUKEE-WAUKESHA BREWING COMPANY, Waukesha, Wis. Filed June 25, 1917.

WAUKO

Particular description of goods.—A Non-Intoxicating Cereal Beverage Brewed from Malt and other Cereals, Containing Less Than One-Half of One Per Cent. Alcohol.
Claims use since May 1, 1917.

Ser. No. 104,866. (CLASS 10. FERTILIZERS.) JOHN JAMES DRAKING MAIN, Leicester, England. Filed July 5, 1917.

AN

Said mark consisting of the monogram "A N," said monogram being so formed as to read the same whether in the correct or the inverted position.
Particular description of goods.—Fertilizers.
Claims use since January, 1910.

Ser. No. 105,665. (CLASS 29. BROOMS, BRUSHES, AND DUSTERS.) PARALOID WORKS, INC., Yonkers, N. Y. Filed Aug. 15, 1917.

MARQUISE

Particular description of goods.—Hair-Brushes, Clothes-Brushes, and Hat-Brushes.
Claims use since May 15, 1916.

Ser. No. 105,952. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) MARY L. WENZ, Boston, Mass. Filed Aug. 29, 1917.



Particular description of goods.—Candy.
Claims use since July 21, 1917.

Ser. No. 106,822. (CLASS 28. JEWELRY AND PRECIOUS-METAL WARE.) ROBERT STOLL, New York, N. Y. Filed Oct. 17, 1917.

RS

Particular description of goods.—Stick-Pins, Brooches, Cuff-Buttons, Finger-Rings, Precious-Metal Button-Badges, and Precious-Metal Clasp-Pin Badges, Both in Heraldic and Modern Jewelry.
Claims use since Sept. 10, 1917.

Ser. No. 107,239. (CLASS 39. CLOTHING.) MARSHALL FIELD & COMPANY, Chicago, Ill. Filed Nov. 8, 1917.

Tiny Tot

Particular description of goods.—Infants' Knitted Underwear and Vests.
Claims use since about Jan. 1, 1912.

Ser. No. 107,540. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) ROBT. BUTTLAR & CO., New York, N. Y. Filed Nov. 23, 1917.

ARBEGO

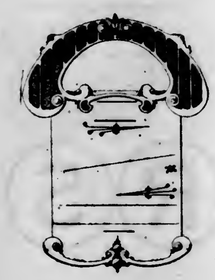
Particular description of goods.—Coffee, Tea, Ginger, White Pepper, Cloves, Cinnamon, Allspice, and Pepper.
Claims use since January, 1917.

Ser. No. 107,851. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) EDWARD C. REICK, Indianapolis, Ind. Filed Dec. 8, 1917.

PHENOTAN

Particular description of goods.—Gargle.
Claims use since Nov. 1, 1916.

Ser. No. 107,985. (CLASS 39. CLOTHING.) EMIL WEST, Washington, D. C. Filed Dec. 15, 1917.



The lining being intended to represent shading only, and not color.
Particular description of goods.—Sweaters.
Claims use since July 16, 1892.

Ser. No. 108,558. (CLASS 39. CLOTHING.) NATHAN TRIVERS & BRO., New York, N. Y. Filed Jan. 19, 1918.



Particular description of goods.—Coats, Pants, Vests, and Overcoats.
Claims use since Jan. 1, 1917.

Ser. No. 108,629. (CLASS 39. CLOTHING.) DICKER & GINSBERG, New York, N. Y. Filed Jan. 25, 1918.



Particular description of goods.—Women's and Misses' Dresses.
Claims use since about one year, (January, 1917).

Ser. No. 109,360. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) H. W. DOUGHTEN, New York, N. Y. Filed Mar. 4, 1918.

FREEDOM



Particular description of goods.—Grass and Field Seeds.
Claims use since Feb. 23, 1918.

Ser. No. 109,423. (CLASS 2. RECEPTACLES.) THE CELLULOID COMPANY, Newark, N. J., and New York, N. Y. Filed Mar. 7, 1918.



Particular description of goods.—Puff-Boxes, Powder-Boxes, Cold-Cream Boxes, Salve-Boxes, Tooth-Brush Shields or Guards, Tooth-Brush Cylinders, Tooth-Brush Racks, Tooth-Powder Boxes, Tooth-Paste Cylinders, Tooth-Paste Tubes, Soap-Boxes, Sponge-Boxes, Safety-Razor Boxes, Shaving-Brush Cylinders, Shaving-Powder Cylinders, Shaving-Soap Cylinders, Cosmetic-Stick Cylinders, Talcum-Powder Boxes, Talcum-Can Holders, Absorbent-Cotton Boxes, Hair-Receivers, Hair-Pin Cylinders or Holders, Hair-Pin Stands, Vanity-Boxes, Emery-Board Boxes, Glove-Boxes, Glove-Powder Boxes, Handkerchief-Boxes, Hat-Pin Holders, Jewel-Boxes, Perfume-Bottle Holders, Drinking-Cups, Flower-Vases, Playing-Card Boxes, and Trays for Toilet Use and for Small Articles. All of the Above-Enumerated Articles are Made of Compounds of Pyroxylin.
Claims use since Nov. 22, 1917, on puff-boxes, jewel-boxes, and perfume-bottle holders; since Nov. 23, 1917, on tooth-brush shields or guards; since Nov. 27, 1917, on salve-boxes and trays for toilet use or for small articles; since Dec. 3, 1917, on talcum-powder boxes and hair-receivers; since Dec. 11, 1917, on cold-cream boxes, safety-razor boxes, absorbent-cotton boxes, hair-pin cylinders or holders, glove-boxes, handkerchief-boxes, hat-pin holders, and flower-vases; since Dec. 20, 1917, on powder-boxes, tooth-brush cylinders, tooth-powder boxes, soap-boxes, shaving-brush cylinders, shaving-powder cylinders, shaving-soap cylinders, talcum-can holders, and drinking-cups; since Jan. 4, 1918, on tooth-paste cylinders, cosmetic-stick cylinders, vanity-boxes, emery-board boxes, glove-powder boxes, and playing-card boxes; since Jan. 5, 1918, on tooth-paste tubes, and hair-pin stands, and since Jan. 12, 1918, on tooth-brush racks and sponge-boxes.

Ser. No. 109,556. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) EMMA DEUTSCH, New York, N. Y. Filed Mar. 14, 1918.

THE GIPSY WONDER



The portrait being that of applicant.
Particular description of goods.—Hair-Tonic.
Claims use since December, 1917.

Ser. No. 109,655. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) JAMES A. MCATEER & SONS, INC., Pittsburgh, Pa. Filed Mar. 19, 1918.

LIBERTY

Particular description of goods.—Canned Hominy, Canned Spinach, Canned Pork and Beans with Tomato Sauce, Canned Wax-Beans, Canned Lima Beans, Canned Refugee-Beans, Canned Peas, Canned Cut Wax-Beans, Canned Red Beets, Canned Red Kidney-Beans, Canned Prepared Mixed Vegetables for Soup, Canned Tomatoes, Canned Succotash, Canned Corn, Canned Pumpkin, Canned Sauer-Kraut, Canned Salmon, Canned Peaches, Canned Apricots, Canned Pears, Canned White Cherries, and Canned Green-Gage Plums.
Claims use since the year 1897.

Ser. No. 109,807. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) CASSIDY & SON MANUFACTURING COMPANY, New York, N. Y. Filed Apr. 1, 1918.



Particular description of goods.—Electrical Lighting-Fixtures—Namely, Lamps and Lamp-Stands.
Claims use since Mar. 2, 1918.

Ser. No. 110,032. (CLASS 28. JEWELRY AND PRECIOUS-METAL WARE.) EDMUND R. NEBELING, New York, N. Y. Filed Apr. 6, 1918.

LECURE

Particular description of goods.—Bracelets, Watch-Bracelet Clasps, Wrist-Watch-Strap Clasps, and Brooch-Pin Clasps.
Claims use since Mar. 15, 1918.

Ser. No. 110,065. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) BIRMINGHAM MACARONI COMPANY, Birmingham, Ala. Filed Apr. 9, 1918.



Particular description of goods.—Macaroni, Spaghetti, and Macaroni-Paste.
Claims use since Mar. 20, 1918.

Ser. No. 110,172. (CLASS 38. PRINTS AND PUBLICATIONS.) KRIEBEL & CO., Chicago, Ill. Filed Apr. 13, 1918.

INVESTMENT

Particular description of goods.—A Publication Issued Monthly.
Claims use since Oct. 1, 1917.

Ser. No. 110,513. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) P. BALLANTINE & SONS, Newark, N. J. Filed Apr. 29, 1918.



Particular description of goods.—Ginger-Ale, Sarsaparilla, Root-Beer, Lemon-Soda, Club-Soda, Birch-Beer, Ginger-Beer, Carbonic Water, Soda-Water, Seltzer, and other Mineral Waters.
Claims use since Apr. 1, 1918.

Ser. No. 110,596. (CLASS 39. CLOTHING.) CARTER DRY GOODS CO., Louisville, Ky., and New York, N. Y. Filed May 2, 1918.



Particular description of goods.—Men's Outer Shirts; Underwear for Men, Women, Misses, and Children; Hosiery, Overalls, Collars, and Cuffs; Blouses and Dresses for Women, Misses, and Children; Aprons, Hats and Caps for Men and Boys; Clothing for Men and Boys, Consisting of Coats, Vests, and Trousers.
Claims use since Jan. 1, 1918.

Ser. No. 110,829. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) WM. A. YOUNG GASKET CO., New York, N. Y. Filed May 10, 1918.



Particular description of goods.—Gromets.
Claims use since Jan. 1, 1918.

Ser. No. 110,879. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) CHALLENGE COMPANY, Batavia, Ill. Filed May 14, 1918.

CHALLENGE

Particular description of goods.—Windmills, Gasolene-Engines, Hand-Pumps, Windmill-Pumps, Siphon-Pumps, and Horizontal Reciprocating Power-Pumps, Pump-Jacks; Feed-Grinders for Grinding Corn, Wheat, Barley, Rye, and Oats; Corn-Shellers, Ensilage-Cutters, Oil-Engines, and Well-Cylinder Working Heads.
Claims use since about Jan. 1, 1904.

Ser. No. 110,921. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) THE DE VRY CORPORATION, Chicago, Ill. Filed May 16, 1918.



Particular description of goods.—Moving-Picture Projectors.
Claims use since September, 1915.

Ser. No. 110,924. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) THE HAMILTON-LOW COMPANY, New York, N. Y. Filed May 16, 1918.

CHAMPION

Particular description of goods.—Dish-Washing Machines.
Claims use since Dec. 5, 1916.

Ser. No. 110,947. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) WILLIAM BEATTY JR. & COMPANY, Philadelphia, Pa. Filed May 17, 1918.

Kutie

Particular description of goods.—Candy.
Claims use since Apr. 23, 1918.

Ser. No. 111,037. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) CHALLENGE COMPANY, Batavia, Ill. Filed May 18, 1918.

DANDY

Particular description of goods.—Windmills, Gasolene-Engines, Hand-Pumps, Windmill-Pumps, Siphon-Pumps, and Horizontal Reciprocating Power-Pumps, Pump-Jacks; Feed-Grinders for Grinding Corn, Wheat, Barley, Rye, and Oats; Corn-Shellers, Ensilage-Cutters, Wood-Saws, Oil-Engines, and Well-Cylinder Working Heads.
Claims use since the 1st day of January, 1903.

Ser. No. 111,059. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) GUSTAVE WENZELMANN, Galesburg, Ill. Filed May 18, 1918.

PEP

The word "Pep" inclosed in an oval-shaped figure as shown in the drawing.
Particular description of goods.—A Chemical Compound Used in Water for Bathing Purposes.
Claims use since May 11, 1918.

Ser. No. 111,061. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) GEO. B. CARPENTER & CO., Chicago, Ill. Filed May 20, 1918.

BANNER

Particular description of goods.—Rubber and Composition Hose and Rubber, Leather, and Composition Belting and Packing.
Claims use since January, 1917.

Ser. No. 111,069. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) PERSIAN BALM TOILET COMPANY, INC., New York, N. Y. Filed May 20, 1918. Under ten-year proviso.

PERSIAN BALM

Particular description of goods.—A Healing Lotion or Balm for the Skin.
Claims use since Oct. 1, 1880.

Ser. No. 111,122. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) VAN CAMP SEA FOOD CO., San Pedro, Cal. Filed May 22, 1918.

COVE

Particular description of goods.—Canned Sardines.
Claims use since Jan. 22, 1918.

Ser. No. 111,133. (CLASS 19. VEHICLES, NOT INCLUDING ENGINES.) THE CELLULOID COMPANY, Newark, N. J., and New York, N. Y. Filed May 23, 1918.

IVALEUR

Particular description of goods.—Strap-Handles (Used in Railway-Cars) and Bicycle-Grips. Said Articles are Made of Compounds of Pyroxylin.
Claims use since Dec. 11, 1917, on strap-handles, and since Jan. 12, 1918, on bicycle-grips.

Ser. No. 111,144. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) THE CELLULOID COMPANY, Newark, N. J., and New York, N. Y. Filed May 23, 1918.

IVALEUR

Particular description of goods.—Sheet Material Composed of Compounds of Pyroxylin.
Claims use since Nov. 19, 1917.

Ser. No. 111,147. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) THE CELLULOID COMPANY, Newark, N. J., and New York, N. Y. Filed May 23, 1918.



Particular description of goods.—Sheet Material Composed of Compounds of Pyroxylin.
Claims use since Nov. 19, 1917.

Ser. No. 111,202. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) J. H. PARKER & SON, INC., Parkersburg, W. Va. Filed May 25, 1918.

TUSUM

Particular description of goods.—Electric Sockets.
Claims use since Apr. 30, 1918.

Ser. No. 111,205. (CLASS 27. HOROLOGICAL INSTRUMENTS.) THE E. INGRAHAM CO., Bristol, Conn. Filed May 25, 1918.

X-Ray

Particular description of goods.—Clocks.
Claims use since Apr. 15, 1918.

Ser. No. 111,293. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) AJAX RUBBER COMPANY, INC., Millbrook, N. Y. Filed June 1, 1918.



Consisting of the representation of the figure of a man rolling a tire.
Particular description of goods.—Rubber Gums—Namely, Combination-Gum, Combination Tube-Gum, Tube-Gum, Cushion-Gum, and Tread-Gum.
Claims use since Mar. 2, 1918.

Ser. No. 111,294. (CLASS 5. ADHESIVES.) AJAX RUBBER COMPANY, INC., Millbrook, N. Y. Filed June 1, 1918.



Consisting of the representation of the figure of a man rolling a tire.
Particular description of goods.—Pneumatic-Tire Accessories—Namely, Vulcanizing-Cement and Air-Drying Pure-Rubber Patching-Cement.
Claims use since Mar. 2, 1918.

Ser. No. 111,296. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) SAUL W. ADLER, New York, N. Y. Filed June 1, 1918.

RAT TAIL

Particular description of goods.—Dental Root-Canal Instruments.
Claims use since Oct. 22, 1917.

Ser. No. 111,361. (CLASS 43. THREAD AND YARN.) H. K. H. SILK CO. OF N. Y., INC., New York, N. Y. Filed June 4, 1918.

PILGRIM

Comprising the word "Pilgrim."
Particular description of goods.—Cotton and Woolen Yarn.
Claims use since Jan. 1, 1914.

Ser. No. 111,365. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) JOHN MINOR KROYER, Stockton, Cal. Filed June 4, 1918.

CLIFF

Particular description of goods.—Tractors.
Claims use since May 11, 1918.

Ser. No. 111,370. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) U. S. INPERIO MANUFACTURING COMPANY, Chattahoochee, Ga. Filed June 4, 1918.

NOHHO

Particular description of goods.—A Chemical Composition for Waterproofing Cotton, Silk, Woolen Yarns and Cloth and other Textile Fabrics, Also Paper.
Claims use since Apr. 15, 1918.

Ser. No. 111,384. (CLASS 5. ADHESIVES.) TUBO MFG. CO., St. Louis, Mo. Filed June 5, 1918.

TUBO

Particular description of goods.—A Puncture-Sealing Preparation for Pneumatic Tubes.
Claims use since May 1, 1918.

Ser. No. 111,462. (CLASS 2. RECEPTACLES.) SOLAR METAL PRODUCTS CO., INC., Columbus, Ohio. Filed June 10, 1918.

SOLAR

Particular description of goods.—Receptacles or Containers—Namely, Ice-Cream Cans and Milk-Cans.
Claims use since about June, 1912.

Ser. No. 111,557. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) WARD BAKING COMPANY, New York, N. Y. Filed June 13, 1918.

LUZIANNE

Particular description of goods.—Cakes.
Claims use since May 24, 1918.

Ser. No. 111,559. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) HENRY BLEWETT & SON, INC., Somerville, Mass. Filed June 14, 1918.



Particular description of goods.—Bread.
Claims use since May 12, 1918.

Ser. No. 111,560. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) HENRY BLEWETT & SON, INC., Somerville, Mass. Filed June 14, 1918.

BRANALAX

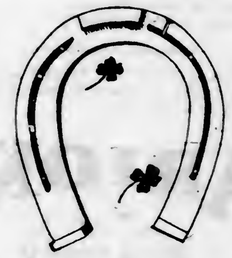
The word "Branalax."
Particular description of goods.—Bread.
Claims use since May 15, 1918.

Ser. No. 111,568. (CLASS 43. THREAD AND YARN.) LYON CARPET CO., Lowell, Mass. Filed June 14, 1918.

LUCKY

The word "Lucky."
Particular description of goods.—Yarns.
Claims use since Mar. 23, 1918.

Ser. No. 111,569. (CLASS 43. THREAD AND YARN.) LYON CARPET CO., Lowell, Mass. Filed June 14, 1918.



Particular description of goods.—Yarns.
Claims use since Mar. 23, 1918.

Ser. No. 111,570. (CLASS 39. CLOTHING.) A. LESSER & CO., New York, N. Y. Filed June 14, 1918.

ALCO

Particular description of goods.—Hats and Caps.
Claims use since on or about May 15, 1918.

Ser. No. 111,639. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE WOOLSON SPICE COMPANY, Toledo, Ohio. Filed June 17, 1918.

Old Glory

Particular description of goods.—Coffee.
Claims use since May 29, 1918.

Ser. No. 111,642. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) AMERICAN PACIFIC WHALING COMPANY, Tacoma, Wash. Filed June 18, 1918.

VICO

Particular description of goods.—Fresh and Frozen Whale-Meat.
Claims use since May 13, 1918.

Ser. No. 111,648. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) ROBERT F. HOWARD, Los Angeles, Cal. Filed June 18, 1918.

PAREX

Particular description of goods.—Canned Smoked Sardines and Canned Smoked Mackerel.
Claims use since May 15, 1918.

Ser. No. 111,659. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) ROUNDUP FISHERIES CO., Spokane, Wash. Filed June 18, 1918.

ARION



Particular description of goods.—Canned Salmon.
Claims use since Mar. 25, 1918.

Ser. No. 111,683. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) THE WEST GRAVITISER CORPORATION, New York, N. Y. Filed June 19, 1918.

GRAVITISER

Particular description of goods.—Exercising-Tables.
Claims use since June 13, 1918.

Ser. No. 111,793. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) MANUEL BETANCUR, New York, N. Y. Filed June 25, 1918.

Lotan

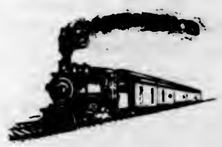
Comprising the word "Lotan."
Particular description of goods.—Coffee.
Claims use since June 14, 1918.

Ser. No. 111,808. (CLASS 38. PRINTS AND PUBLICATIONS.) MERRILL C. BLOSSER, Cleveland, Ohio. Filed June 26, 1918.

FRECKLES AND HIS FRIENDS

Particular description of goods.—A Series of Comic Drawings.
Claims use since Sept. 13, 1915.

Ser. No. 111,815. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) KLINDT-GEIGER CANNING CO., Cassville, Wis. Filed June 26, 1918.



Particular description of goods.—Canned Peas.
Claims use since August, 1903.

Ser. No. 111,824. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE PURE FOOD SPECIALTIES CO., Toledo, Ohio. Filed June 26, 1918.

URN GOLD

Particular description of goods.—Coffee.
Claims use since Apr. 24, 1918.

Ser. No. 111,836. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) SOUTH COAST CANNING CO., INC., Long Beach, Cal. Filed June 26, 1918.

PARAMOUNT

Particular description of goods.—Canned Sardines and Canned Tuna Fish.
Claims use since Mar. 15, 1918.

Ser. No. 111,850. (CLASS 38. PRINTS AND PUBLICATIONS.) INTERNATIONAL NEWS SERVICE, New York, N. Y. Filed June 27, 1918.

MIDGET MOVIES

Particular description of goods.—A Newspaper-Section.
Claims use since Apr. 8, 1918.

Ser. No. 111,861. (CLASS 38. PRINTS AND PUBLICATIONS.) STAR COMPANY, New York, N. Y. Filed June 27, 1918.

The Shenanigan Kids

Particular description of goods.—Newspaper-Sections.
Claims use since June 23, 1918.

Ser. No. 111,863. (CLASS 39. CLOTHING.) WALTON HOSIERY MILLS, Statesville, N. C. Filed June 27, 1918.

MOSE HIDE

Particular description of goods.—Half-Hose Made of Cotton, Wool, and Silk.
Claims use since about June 1, 1918.

Ser. No. 111,915. (CLASS 38. PRINTS AND PUBLICATIONS.) JOHN T. YATES, Omaha, Nebr. Filed July 1, 1918.

The Woodmen News

Particular description of goods.—A Monthly Publication.
Claims use since October, 1900.

LABELS

REGISTGRED AUGUST 6, 1918.

20,753.—*Title:* "BLUE WING BRAND CHERRY PHOSPHATE." (For a Soft Drink.) CHRIS ANDERSON, Minneapolis, Minn. Filed June 14, 1918.

20,754.—*Title:* "EXTRA KETTLE RENDERED LARD, S. BIRKENWALD CO. BUTCHER SUPPLIES, PORTLAND, OREGON." (For Lard.) S. BIRKENWALD Co., Portland, Oreg. Filed November 26, 1917.

20,755.—*Title:* "KETTLE RENDERED PURE LARD S. BIRKENWALD CO. BUTCHER SUPPLIES, PORTLAND, OREGON." (For Lard.) S. BIRKENWALD Co., Portland, Oreg. Filed November 26, 1917.

20,756.—*Title:* "KETTLE RENDERED OUR OWN MAKE PURE LARD S. BIRKENWALD CO. BUTCHER SUPPLIES PORTLAND, OREGON." (For Lard.) S. BIRKENWALD Co., Portland, Oreg. Filed November 26, 1917.

20,757.—*Title:* "KETTLE RENDERED PURE LARD PUT UP BY S. BIRKENWALD CO. BUTCHER SUPPLIES PORTLAND, OREGON." (For Lard.) S. BIRKENWALD Co., Portland, Oreg. Filed November 26, 1917.

20,758.—*Title:* "ROOKIES." (For Goober Kisses.) FRANK E. BLOCK COMPANY, Atlanta, Ga. Filed April 6, 1918.

20,759.—*Title:* "FRESH ROASTED PEANUTS." (For Roasted Peanuts.) F. D. CROCE & Co., New York, N. Y. Filed June 4, 1918.

20,760.—*Title:* "PURAQUA WATER." (For Distilled Water.) FAIR CITY BOTTLING WORKS, Huron, S. D. Filed May 9, 1918.

20,761.—*Title:* "555." (For Snap-Fastener.) ALFRED H. FRIEDMAN, New York, N. Y. Filed February 27, 1918.

20,762.—*Title:* "GIBBS' AROMATIC OIL." (For Aromatic Oil.) JOHN GIBBS, Terre Haute, Ind. Filed June 8, 1918.

20,763.—*Title:* "CORPORAL." (For Oranges.) GOLDENWEST CITRUS ASS'N, Tustin, Cal. Filed June 8, 1918.

20,764.—*Title:* "CAPTAIN." (For Oranges.) GOLDENWEST CITRUS ASS'N, Tustin, Cal. Filed June 8, 1918.

20,765.—*Title:* "COLONEL." (For Oranges.) GOLDENWEST CITRUS ASS'N, Tustin, Cal. Filed June 8, 1918.

20,766.—*Title:* "GENERAL." (For Oranges.) GOLDENWEST CITRUS ASS'N, Tustin, Cal. Filed June 8, 1918.

20,767.—*Title:* "THE TRI-FONT." (For Nursing-Nipples.) HARRIS & BERNTZ Co., Philadelphia, Pa. Filed June 8, 1918.

20,768.—*Title:* "MIKADO." (For Tea.) THE KEYSTONE Co., San Jose, Cal. Filed June 18, 1918.

20,769.—*Title:* "PEERLESS." (For Orange-Juice.) PEERLESS ORANGE JUICE COMPANY, Chicago, Ill. Filed June 18, 1918.

20,770.—*Title:* "FAMOUS BERT JOHNSON BRAND." (For Fresh Peaches.) T. H. PEPPERS, Los Angeles, Cal. Filed June 10, 1918.

20,771.—*Title:* "OLD DEERFIELD." (For Writing-Paper and Envelops.) THE TAYLOR-ATKINS PAPER COMPANY, Burnside and East Hartford, Conn. Filed June 13, 1918.

20,772.—*Title:* "BIRKSHIRE VALLEY." (For Printing-Paper and Envelops.) THE TAYLOR-ATKINS PAPER COMPANY, Burnside and East Hartford, Conn. Filed June 13, 1918.

20,773.—*Title:* "THORO." (For a Powdered Skin-Cleaner.) THE THORO CORPORATION, Chicago, Ill. Filed June 19, 1918.

20,774.—*Title:* "BRANOLA." (For "Health Gems.") THE BLU BISCUIT Co., Spokane, Wash. Filed June 18, 1918.

20,775.—*Title:* "WELCH'S GRAPELADE." (For Grapelade.) THE WELCH GRAPE JUICE Co., Westfield, N. Y. Filed March 15, 1918.

PRINTS

REGISTERED AUGUST 6, 1918.

4,919.—*Title:* "TRENCH TUBES." (For Trench-Tubes.) DAVIS & GECK, INC., Brooklyn, N. Y. Filed June 18, 1918.

4,920.—*Title:* "IN 1866 'THE BOY WHO PEGGED SHOES' DECIDES TO GO WEST." (For Shoes.) W. L. DOUGLAS SHOE Co., Brockton and Boston, Mass.; Portland, Me.; New York, N. Y.; Denver, Colo.; Buffalo, N. Y., and Philadelphia, Pa. Filed June 19, 1918.

4,921.—*Title:* "W. L. DOUGLAS LEARNED HOW TO DESIGN, DRAFT AND FIT SHOES." (For Shoes.) W. L. DOUGLAS SHOE Co., Brockton and Boston, Mass.; Portland, Me.; New York, N. Y.; Denver, Colo.; Buffalo, N. Y., and Philadelphia, Pa. Filed June 19, 1918.

4,922.—*Title:* "YANKEE." (For Cream-Cheese.) LOUIS KADANS, New York, N. Y. Filed April 6, 1918.

4,923.—*Title:* "GASOLINE TODAY." (For Gasolene and Electric Batteries.) NATIONAL CARBON COMPANY, INC., Cleveland, Ohio. Filed July 26, 1917.

DECISIONS

OF THE

COMMISSIONER OF PATENTS

AND OF

UNITED STATES COURTS IN PATENT CASES.

COMMISSIONER'S DECISIONS.

EX PARTE PEARSON.

Decided July 13, 1918.

1. APPEAL—REQUIREMENT OF CANCELLATION OF CLAIMS.

The recourse from a requirement of cancelation of claims, on the ground that they are to a different invention from that originally presented, is by appeal to the Examiners-in-Chief, not by petition.

2. REQUIREMENT FOR CANCELATION OF CLAIMS—REFERABLE TO LAW EXAMINER—RULE 42.

The basis of the requirement of cancelation of claims, on the ground that they are to a different invention from that originally prosecuted, is the same as that of the requirement of division—viz., that the inventions are independent or are of such a nature that they may not be joined in one application. Both requirements should be referred to the Law Examiner for approval, under Rule 42.

ON PETITION.

FOUNTAIN-BRUSH.

Messrs. Chandlee & Chandlee for the applicant.

NEWTON, *Commissioner:*

Applicant originally claimed the combination, with a reservoir and brush-body, of a specific valve means for admitting the air, so that the reservoir would feed more or less rapidly to the brush. He subsequently presented claims to the same specific valve, omitting the reservoir and brush. The claims were required by the Examiner to be canceled, on the ground that they were to a separate invention, separately classified and examinable, and that applicant was not entitled to shift his claims. This requirement was repeated by the Examiner, the repetition being named as a rejection for estoppel. The petition requests that the Examiner's rejection be overruled. Applicant's recourse from a requirement of cancelation, on the ground that the claims required to be canceled are to a different invention from that originally presented, is not by way of petition, but by way of appeal to the Examiners-in-Chief. (See *ex parte Lawley*, 113 O. G., 1967; *ex parte Fast*, 172 O. G., 552, and *ex parte Mitchell*, 196 O. G., 525.)

The real question in controversy in this case is the same as in questions of division—the proper joinder of two alleged inventions. A requirement of division is based upon the holding that applicant is presenting two inventions that are independent or are of such a nature that they may not be joined in one application and the Examiner requires that he elect one of his inventions. An Examiner's requirement of cancelation is based upon the same ground—*i. e.*, that the invention now claimed and required to be canceled is such an invention as may not be joined with that formerly presented and prosecuted. The Examiner holds that applicant in this case, having elected by his original presentation, has now no election and must cancel the new claims.

In either case the basis of the requirement is that the two inventions may not be joined, and the only difference is that applicant in one case has an election and in the other has no longer an election. If the inventions are, in fact, properly joinable, neither the requirement of division nor the requirement of cancelation are correct, and these questions should be referred to the Law Examiner, under Rule 42, and the requirement of cancelation, or, what in this case is the same, the rejection for estoppel, should be repeated or withdrawn, in accordance with his written decision.

The petition is dismissed and the case is referred to the Examiner for action in accordance herewith.

GAMMETER *v.* LISTER.

Decided August 24, 1917.

1. INTERFERENCE—SCOPE OF ISSUE—CONSTRUING THE CLAIMS.

While the claims in an interference must be construed as broadly as the state of the art will allow they cannot be construed so as to ignore the limitations which give them life in order to cover the disclosure of one of the parties.

2. SAME—PRIORITY—NO RIGHT TO MAKE THE CLAIMS.

Held that the tire-forming mechanism disclosed by Lister has no means for imparting to the fabric before its application a curvature of the outline of the core, as specified in the claims of the issue, and that Lister is therefore not entitled to make the claims.

3. SAME—SAME—SAME.

When the application of one of the parties to an interference does not disclose the subject-matter of the interference, *Held* that this lack of disclosure is sufficient ground for an award of priority to the other party. (*Gold & Gold* v. *Cosper*, 36 App. D. C., 302; 168 O. G., 787.)

APPEAL from Examiners-in-Chief.

MACHINE FOR MAKING TIRES.

Mr. Seward Davis and *Mr. Robert M. Pierson* for Gammeter.

Messrs. Thurston & Kwis for Lister.

CLAY, *Assistant Commissioner:*

Gammeter, the junior party in the interference, appeals from a judgment of priority against him, rendered on the files, no proofs having been taken. His alleged date of the conception of the invention in issue was after the filing of the application of his opponent, Lister, and being under order to show cause why judgment should not be entered against him he undertook to show that Lister did not disclose the invention of the issue.

The question of priority strictly has not arisen except in the sense that if one of the parties did not invent at all then the other must be the prior, because the only, inventor. The substantial contention of the appellant is that by reason of technical rules and rulings his invention has been taken from him and awarded to Lister, who never invented the thing defined by the claims at all.

As to the question whether the scope of the claims may be inquired into on appeal under the provisions of Rules 130 and 122 or otherwise, it may be said at once that no proper rule can prevent a just adjudication of the rights of the parties. If, as a matter of fact, it is plain that Gammeter is the only inventor of the issue, and this fact appears from a proper interpretation of the claims, the construction put on the claims by the Law Examiner must, of course, be reviewed.

The invention in issue is part of a machine for properly laying a sheet of fabric on a circumferential tubular core in the making of rubber-tire casings. It will be understood that such casings—

commonly comprise a main body portion composed of a number of layers of fabric laid one upon another and held together with a suitable binder, usually of rubber gum with which the fabric is impregnated.

The object of the invention is to stretch and shape the fabric—

prior to its actual incorporation in the tire and also at the moment when it is applied to the core upon which the tire is being built. (Gammeter's specification, page 1, line 19.)

The claims originated with Gammeter. He describes the "fabric shaping guide or shoe 100" in his drawing, Figure 1, as consisting of a single piece of metal "shaped to conform closely to the outer surface of the core," and says the fabric after passing over the small roller 28 and the large roller 30 slides over the guide and is thereby cupped to the approximate shape of the tire-section. The fabric is a strip of woven cloth cut on the bias, and the object of shaping, of course, is to so lay it on the core 4 that the part lying on the outer periphery is elongated and the parts lying on the sides are progressively contracted more and more as they approach the inner limit of the rim.

It will be obvious that when the fabric is forcibly drawn onto the revolving core 4 it would normally approach the core in a straight line, touching at the tangency of a line from the periphery of the roll 30—that is, as shown, near the beginning of the shoe; but the shoe 100 prevents its touching the core at this point of tangency and holds it off until it has been bent both longitudinally and laterally into a circular tubular shape, just as it must remain on the finished tire—that is to say, the fabric lying on the outer periphery of the shoe 100 must travel faster and be stretched more than the parts lying on the side of the shoe—and at the time the fabric reaches the farther end of the shoe it will have already assumed that shape into which it is literally cupped to the approximate form of the surface of the core.

It will be at once clear that the machine has to do with the forming of a woven fabric and that the entire function of the shoe 100 is to stretch and form the fabric so that it is bent simultaneously in two directions and so that the central portion is elongated and the side portions contracted. It is important to observe that the fabric could not possibly pass from the roller 30 to the point at which it leaves the shoe 100 without the central portion of the fabric having traveled faster than the edges and side portions.

In view of these facts there is no possibility of construing the claims in issue to read upon any device which does not manipulate a fabric so as to impart to it a curvature of the same general outline as the core, and this before its application to the core.

The law is, of course, well settled that the claims should be construed as broadly as the state of the art will allow and that, as stated in *Kirby* v. *Clements*, (216 O. G., 1319; 44 App. D. C., 12)—

we must give to claims the broadest interpretation which they will reasonably support. * * * The reasonable presumption is that an inventor intended to protect his invention broadly and, consequently, the scope of a claim in an interference proceeding should not be restricted beyond the fair and ordinary meaning of the words. The issue here is that of priority under the claims as drawn. * * *

But in the case at bar I agree with the contention of Gammeter that these claims cannot be read to cover the device of Lister at all. The only limitations in the claims which give them life are totally meaningless if it be attempted to read them on Lister's structure.

In Lister's structure a series of cords are drawn through the guide B^5 directly on a tangential line after the trough-forming roll D^2 to various parts of the core A. They touch nothing else until they reach the core, and they are not moved out of the straight line. A cord going to the outer periphery of the core A and being wound thereon must in the turn of the core travel a much greater distance than a cord going to the position indicated by the bottom of the roller A', for example. Unless it be supposed that the cords are under some kind of tension device, which allows them to be drawn onto the core at differential rates, sliding between the sheets of rubber, it is impossible that the Lister device would operate. On the scale of Lister's drawing the outer periphery of the core moves at a speed about one-seventh faster than the inner edge of the so-called "fabric" at the base of the roller A', and in a turn of the core the relative lengths of the cords would, in an ordinary-sized tire, be about as nine and a half feet to eight and a fourth feet—that is to say, a cord on the lower edge of the so-called "fabric" would have to be more than a foot shorter than the cord on the outer periphery.

It therefore is plain that even if the series of cords used by Lister could be called "fabric," which I think they could not, there is in Lister's construction no means whatever to distort the fabric before it is laid upon the core. Indeed, the guide E shown by Lister has nothing whatever to do with any modification of the shape of the supposed fabric B. Lister describes it in a casual and purely incidental manner as—

a guide horn E to prevent the soft fresh rubber from sagging against the revolving core A until the desired point is reached. (Specification, bottom of page 4.)

Lister makes no mention of any distortion of any fabric by any other means than the preliminary forming-rollers D' D^2, and it is important to observe that these, he says, give the group of cords a U shape "approaching the shape and size of the revolving core A," by which he of course means nothing except that it is given a trough shape, and which, of course, is not the shape of the core A. When he says at the middle of page 4 that the threads and rubber sheets—

will be brought together in approximately the form which they will occupy on the revolving core and in the finished tire—

it is perfectly obvious that this is entirely an erroneous statement. There is no problem in forming the threads into a straight trough form. The problem is to form them into a circular trough. It is this function which is performed by the shoe 100 of Gammeter, and this function, it is perfectly plain, the so-called "guide" E of Lister cannot accomplish and was not intended to accomplish.

Considering, then, the object, the function, and the operation of the device described by the claims, I think it plain that Lister can make none of the claims in issue. Specifically, he has no means for manipulating what is properly called a "fabric" in every one of the claims. He has no means for imparting to fabric or to anything else before application to the core of any curvature of the outline of the core, as called for by each of the claims except Nos. 4 and 5. I think the same structure is required by the words "convex" and "concentric" in claim 4 and the expression "surrounding a portion of said core and acting to cup the fabric" in claim 5. Lister has no means for holding the fabric out of contact with the core until it has been formed, as called for by claim 2. He has no guide-shoe concentric with the core, as called for by claims 10 and 11, and no means between the feed-roll and the core for shaping the fabric approximately to the shape it is to finally occupy, as called for by claim 12.

As to claim 15, while it is questionable whether Lister's rollers A' could operate to smooth the fabric, this might depend upon the degrees of pressures used, and the terms of the claim are broad enough to cover Lister's device. Assuming that claim 15 is patentable, it must be awarded to Lister.

It will be plain from the above discussion that Lister cannot make claims 38 and 39, added to the issue upon Lister's motion to amend, since even if Lister has what is properly a fabric his guide-shoe E has nothing whatever to do with shaping it, and it is, in fact, not shaped at all before being applied to the core, but is shaped by the core itself into the circular trough form.

If the holding that Lister never made the invention in issue at all is correct, there would be no interference—no contest as to who made it first; but if the holding that Lister did not have the invention should turn out on an *ex parte* appeal to be an error then an interference would exist and would have to be redeclared. The Court of Appeals of the District of Columbia has repeatedly held that the lack of disclosure by one party to an interference is a proper ground for an award of priority to the other party—*e. g.*, *Gold & Gold* v. *Cosper*, (36 App. D. C., 302; 168 O. G., 787.)

The decision of the Examiners-in-Chief is reversed as to all except claim 15, and priority is awarded to Gammeter on claims 1 to 12.

DECISIONS OF THE U. S. COURTS.

Court of Appeals of the District of Columbia.

GAMMETER v. LISTER. LISTER v. GAMMETER.

Decided May 27, 1918.

[Memorandum opinion.]

INTERFERENCE—PRIORITY.

Record reviewed and *Held* that priority was properly awarded to G. as to claims 1 to 12, inclusive, and to L., the senior party, as to claim 15.

Mr. H. A. Dodge and *Mr. R. M. Pierson* for Gammeter.

Mr. A. F. Kwis and *Mr. Robert Watson* for Lister.

SMYTH, *C. J.*:

This appeal and cross-appeal involve the right of priority as to an invention—

for properly laying a sheet of fabric on a circumferential tubular core in the making of rubber tire casings—

so that the fabric may be stretched and shaped—

prior to its actual incorporation in the tire and also at the moment when it is applied to the core upon which the tire is being built.

There were fifteen claims of the issue. Gammeter who is the junior party moved to dissolve the interference on the ground that Lister did not disclose the invention of the issue. His motion was sustained as to claims 13 and 14 but overruled as to the rest. Thereupon proceedings were resumed before the Examiner of Interferences as to the remaining claims. Gammeter offered no proof but stood on the files in the proceeding. Priority was awarded by the Examiner of Interferences to Lister as to all the claims before him for consideration. This action was affirmed on appeal by the Examiners-in-Chief. The Assistant Commissioner reversed the Examiners-in-Chief as to claims 1 to 12, inclusive, but affirmed them as to claim 15.

We have carefully examined the record and are clearly of the opinion that the Assistant Commissioner was right for the reasons given in his opinion (*ante*). No useful purpose would be served either by repeating here the arguments employed by him or by stating additional ones. His decision is affirmed.

Affirmed.

Applications Made to the Federal Trade Commission for Licenses Under Enemy-Controlled Patents and Trade-Marks Pursuant to the "Trading with the Enemy Act."

Patent No. 782,739, dated February 14, 1905, to Emil Fischer, Berlin, Germany, assignor to the Firm of E. Merck, Darmstadt, Germany, for "C-C-Dialkyl-barbituric acid and process of making same." License applied for by Fellows Medical Manufacturing Company, Inc., 26 Christopher street, New York city.

Patent No. 812,554, dated February 13, 1906, to Alfred Einhorn, of Munich, Germany, assignor to Farbwerke vorm. Meister Lucius & Brüning, of Höchst-on-the-Main, Germany, a corporation, for "Alkamin esters of para-aminobenzoic acid." License applied for by Fellows Medical Manufacturing Company, Inc., 26 Christopher street, New York city.

Patent No. 718,340, dated January 13, 1903, to Otto J. Graul, of Ludwigshafen-on-the-Rhine, Germany, assignor to Badische Anilin & Soda Fabrik, of Ludwigshafen-on-the-Rhine, Germany, a corporation of Germany, for "Process of making cyanmethyl derivatives of aromatic amids." License applied for by National Aniline & Chemical Company, Inc., 21 Burling Slip, New York city.

Patent No. 1,216,612, dated February 20, 1917, to Otto Schmidt, of Ludwigshafen-on-the-Rhine, Germany, assignor to Badische Anilin & Soda Fabrik, of Ludwigshafen-on-the-Rhine, Germany, a corporation, for "Producing soluble tanning agents." License applied for by E. C. Klipstein & Sons Company, 644 Greenwich street, New York city.

Patent No. 1,191,480, dated July 18, 1916, to Otto Schmidt, of Ludwigshafen-on-the-Rhine, Germany, assignor to Badische Anilin & Soda Fabrik, of Ludwigshafen-on-the-Rhine, Germany, a corporation, for "Tanning." License applied for by E. C. Klipstein & Sons Company, 644 Greenwich street, New York city.

Adverse Decisions in Interference.

PATENT No. 1,171,471.

On July 11, 1918, a decision was rendered that Martin V. Smith was not the first inventor of the subject-matter covered by claims 1, 7, and 10 of his Patent No. 1,171,471, subject, "Incandescent lamps," and no appeal having been taken within the time allowed such decision has become final.

PATENT No. 1,186,438.

On July 3, 1918, a decision was rendered that Karl Roder was not the first inventor of the subject-matter covered by claims 1 and 2 of his Patent No. 1,186,438, subject, "Steam or gas turbines," and no appeal having been taken within the time allowed such decision has become final.

PATENT No. 1,191,053.

On July 20, 1918, a decision was rendered that Homer T. Yaryan was not the first inventor of the subject-matter covered by claims 1 and 2 of his Patent No. 1,191,053, subject, "Process of concentrating metallic ores by flotation," and no appeal having been taken within the time allowed such decision has become final.

PATENT No. 1,211,072.

On August 8, 1918, a decision was rendered that Alanson P. Brush was not the first inventor of the subject-matter covered by claims 1, 2, 4, 5, 8, 9, and 10 of his Patent No. 1,211,072, subject, "Engine-starting and current-generating apparatus," and no appeal having been taken within the time allowed such decision has become final.

PATENT No. 1,221,346.

On July 8, 1918, a decision was rendered that Talbot G. Martin was not the first inventor of the subject-matter covered by claims 35, 36, 37, 38, 39, 40, 41, and 42 of his Patent No. 1,221,346, subject, "Automatic telephone-switching apparatus," and no appeal having been taken within the time allowed such decision has become final.

PATENT No. 1,229,107.

On June 20, 1918, a decision was rendered that Thomas F. McDonough was not the first inventor of the subject-matter covered by claims 2 and 3 of his Patent No. 1,229,107, subject, "Fly-traps," and no appeal having been taken within the time allowed such decision has become final.

Interference Notices.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., August 2, 1918.

Commercial Wood and Cement Company, its assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of The Great Western Portland Cement Company of Kansas, at Mildred, Kans., for registration of a trade-mark and trade-mark registered April 16, 1895, No. 26,430, to Commercial Wood and Cement Company, of Girard Building, northeast corner of Broad and Chestnut streets, Philadelphia, Pa., and a notice of such declaration sent by registered mail to said Commercial Wood and Cement Company at the said address having been returned by the post-office undeliverable, notice is hereby given that unless said Commercial Wood and Cement Company, its assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

R. F. WHITEHEAD,
First Assistant Commissioner.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., August 12, 1918.

Home Remedy Company, its assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of Geo. A. Deatel, Munsey Building, Baltimore, Md., for registration of a trade-mark and trade-mark registered March 10, 1908, No. 68,120, to the Home Remedy Company, of Fredonia, N. Y., and a notice of such declaration sent by registered mail to said Home Remedy Company at the said address having been returned by the post-office undeliverable, notice is hereby given that unless said Home Remedy Company, its assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

F. W. H. CLAY,
Assistant Commissioner.

THE
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Designs	None.		
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Total	868		

Amendment to the Rules of Practice.

(ORDER No. 2,417.)

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., July 31, 1918.

Acting under the provisions of section 483 of the Revised Statutes and with the approval of the Secretary of the Interior, Rule 17 of the Rules of Practice of the United States Patent Office is amended by adding thereto the following:

(h) Every attorney registered to practice before the United States Patent Office shall submit to the Commissioner of Patents for approval copies of all proposed advertising matter, circulars, letters, cards, etc., intended to solicit patent business, and if it be not disapproved by him and the attorney so notified within ten days after submission, it may be considered approved.

Any registered attorney sending out or using any such matter, a copy of which has not been submitted to the Commissioner of Patents in accordance with this rule, or which has been disapproved by the Commissioner of Patents, shall be subject to suspension or disbarment, so that the rule as amended will read as follows:

17. An applicant or an assignee of the entire interest may prosecute his own case, but he is advised, unless familiar with such matters, to employ a competent patent attorney, as the value of patents depends largely upon the skilful preparation of the specification and claims. The office can not aid in the selection of an attorney.

A register of attorneys will be kept in this office, on which will be entered the names of all persons entitled to represent applicants before the Patent Office in the presentation and prosecution of applications for patent. The names of persons in the following classes will, upon their written request, be entered upon this register.

(a) Any attorney at law who is in good standing in any court of record in the United States or any of the States or Territories thereof and who shall furnish a certificate of the clerk of such United States, State, or Territorial court, duly authenticated under the seal of the court, that he is an attorney in good standing.

(b) Any person not an attorney at law who is a citizen or resident of the United States and who shall file proof to the satisfaction of the Commissioner that he is of good moral character and of good repute and possessed of the necessary legal and technical qualifications to enable him to render applicants for patents valuable service and is otherwise competent to advise and assist them in the presentation and prosecution of their applications before the Patent Office.

(c) Any foreign patent attorney not a resident of the United States, who shall file proof to the satisfaction of the Commissioner that he is registered and in good standing before the patent office of the country of which he is a citizen or subject, and is possessed of the qualifications stated in paragraph (b).

(d) Any firm will be registered which shall show that the individual members composing the firm are each and all registered under the provisions of the preceding sections.

(e) The Commissioner may require proof of qualifications other than those specified in paragraph (a) and reserves the right to decline to recognise any attorney, agent, or other person applying for registration under this rule.

(f) Any person or firm not registered and not entitled to be recognized under this rule as an attorney or agent to represent applicants generally may, upon a showing of circumstances which render it necessary or justifiable, be recognized by the Commissioner to prosecute as attorney or agent certain specified application or applications, but this limited recognition shall not extend further than the application or applications named.

(g) No person not registered or entitled to recognition as above provided will be permitted to prosecute applications before the Patent Office.

(h) Every attorney registered to practice before the United States Patent Office shall submit to the Commissioner of Patents for approval copies of all proposed advertising matter, circulars, letters, cards, etc., intended to solicit patent business, and if it be not disapproved by him and the attorney so notified within ten days after submission, it may be considered approved.

Any registered attorney sending out or using any such matter, a copy of which has not been submitted to the Commissioner of Patents in accordance with this rule, or which has been disapproved by the Commissioner of Patents, shall be subject to suspension or disbarment.

J. T. NEWTON,
Commissioner.

Adverse Decisions in Interference.

PATENT No. 1,230,998.

On July 27, 1918, a decision was rendered that George H. Cramer was not the first inventor of the subject-matter covered by claims 1, 2, 3, and 4 of his Patent No. 1,230,998, subject, "Seat-actuating mechanism for carousels," and no appeal having been taken within the time allowed such decision has become final.

APPLICATIONS UNDER EXAMINATION.

Condition at Close of Business August 9, 1918.

Room No.	Divisions and subjects of invention	Oldest new application and oldest action by applicant awaiting office action. New.	Amended.	No. of applications awaiting action.
314	1. Closure Operators: Fences; Gates; Harrows and Diggers; Plows; Railway Gates; Planting; Scattering Unloaders; Trees, Plants, and Flowers.	June 26	July 3	128
128	2. Bee Culture; Curtains, Shades, and Screens; Dairy; Paper Files and Binders; Medicines; Pneumatics; Preserving; Presses; Tents, Canopies, Umbrellas, and Canes; Tobacco.	Apr. 22	May 24	382
175	3. Electric Heating and Rheostats; Electrochemistry; Heating; Metal-Founding; Metallurgical Apparatus; Metallurgy; Metal Treatment; Plastic Metal Working.	May 21	June 7	182
234	4. Conveyers; Elevators; Excavating; Hoisting; Material or Article Handling; Pneumatic Despatch; Pushing and Pulling Implements; Railway Mail Delivery; Store-Service; Traversing Hoists.	June 13	July 10	156
167	5. Book-Making; Books, Strips and Leaves; Harvesters; Jewelry; Manifolding; Music; Printed Matter.	May 14	June 14	227
318	6. Bleaching and Dyeing; Chemicals; Explosives; Fertilizers; Liquid Coating Compositions; Plastic Compositions; Substance Preparation.	Apr. 1	May 8	379
312	7. Educational Appliances; Games and Toys; Optics; Velocipedes	May 8	June 25	251
131	8. Beds; Chairs; Flexible-Sheet Securing Devices; Furniture; Kitchen and Table Articles; Store Furniture; Supports.	June 13	June 10	193
221	9. Air and Gas Pumps; Hydraulic Motors; Motors, Fluid; Motors, Fluid-Current; Pumps; Marine Propulsion.	Feb. 13	July 16	469
235	10. Carriages and Wagons; Motor Vehicles	Apr. 22	July 1	537
154	11. Boot and shoe Making; Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Spring Devices; Whips and Whip Apparatus.	June 3	July 23	188
322	12. Journal-Boxes, Pulleys, and Shafting; Machine Elements	Apr. 16	May 16	743
329	13. Ammunition and Explosive Charge Making; Bolt, Nail, Nut, Rivet, and Screw Making; Button Making; Chain, Staple, and Horseshoe Making; Driven, Headed, and Screw-Threaded Fastenings; Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Tools and Implements, Making; Metal Working; Needle and Pin Making; Nut and Bolt Locks; Turning.	Mar. 16	May 4	547
323	14. Compound Tools; Cutting and Punching Sheets and Bars; Farriery; Metal-Bending; Sheet-Metal Ware, Making; Tools; Wire Fabrics and Structure; Wire-Working.	Apr. 22	June 10	151
308	15. Bread, Pastry, and Confection Making; Coating; Fuel; Glass; Laminated Fabrics and Analogous Manufactures; Paper-Making and Fiber Liberation; Plastic Block and Earthenware Apparatus; Plastics.	June 24	July 12	268
112	16. Electric Signaling-A; Radiant Energy; Telegraphy; Telephony	Apr. 12	May 13	497
307	17. Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet Material Associating or Folding; Sheet Feeding or Delivering; Type Setting.	June 8	May 27	151
229	18. Fluid-Pressure Regulators; Injectors and Ejectors; Liquid Heaters and Vaporizers; Power Plants; Speed Responsive Devices; Steam and Vacuum Pumps: Steam-Engines; Steam-Engine Valves.	May 1	May 31	496
236	19. Dampers, Automatic; Furnaces; Heating Systems; Stoves and Furnaces; Domestic Cooking Vessels	May 2	May 31	312
179	20. Artificial Body Members; Builders' Hardware; Cutlery; Dentistry; Locks and Latches; Safes; Undertaking.	July 10	July 15	211
212	21. Brakes and Gins; Carding; Cloth-Finishing; Continuous-Strip Feeding; Cordage; Felt and Fur; Knitting and Netting; Silk; Spinning; Weaving; Winding and Reeling.	Apr. 8	May 8	289
249	22. Aeronautics; Firearms; Ordnance	May 2	July 9	327
217	23. Acoustics; Coin-Handling; Horology; Recorders; Registers; Sound Recording and Reproducing; Time-Controlling Mechanism.	June 3	May 8	237
144	24. Apparel; Apparel Apparatus; Garment Supporters; Sewing-Machines	June 18	June 14	238
315	25. Agitating; Butchering; Centrifugal Bowl Separators; Mills; Threshing; Vegetable Cutters and Crushers; Gas Separation.	July 5	June 15	101
105	26. Electricity, Generation; Motive Power	Jan. 5	Apr. 15	565
214	27. Brushing and Scrubbing; Grinding and Polishing; Laundry; Washing Apparatus	May 13	June 24	274
225	28. Internal-Combustion Engines	Apr. 22	May 17	492
147	29. Boring and Drilling; Chucks or Sockets; Coopering; Fire-Escapes; Ladders; Rod Joints or Couplings; Wheelwright-Machines; Wooden Buildings; Wood-Sawing; Wood-Turning; Woodworking; Wood-working Tools.	Feb. 26	May 1	468
152	30. Illuminating-Burners; Illumination; Liquid and Gaseous Fuel Burners; Type-Writing Machines	June 1	July 11	293
172	31. Alcohol; Ammonia, Water, and Wood Distillation; Charcoal and Coke; Gas, Heating and Illuminating; Hides, Skins, and Leather; Hydraulic Cement and Lime; Mineral Oils; Oils, Fats, and Glue; Sugar and Salt.	Apr. 29	May 31	276
278	32. Gas and Liquid Contact Apparatus; Heat Exchange; Packaging Liquids; Refrigeration	Feb. 8	June 12	644
70	33. Bridges; Hydraulic Engineering; Masonry and Concrete Structures; Metallic Building Structures; Paving; Roofs.	May 2	June 10	223
304	34. Railways; Railway Rails and Joints; Railway Rolling Stock; Railway Ties and Fasteners; Track-Sanders; Vehicle-Fenders.	July 5	June 27	53
57	35. Buckles, Buttons, Clasps, Etc.; Card, Picture, and Sign Exhibiting; Signals; Toilet	Mar. 6	June 11	469
107	36. Driers; Geometrical Instruments; Measuring Instruments; Photography; Force Measuring	June 19	June 17	479
378	37. Electric Lamps; Electricity, Circuit Makers and Breakers; Electricity, Conduits; Electricity, General Applications.	Apr. 1	Apr. 23	707
220	38. Animal Husbandry; Earth Boring; Fishing and Trapping; Stationery; Stone-Working; Wells	July 11	July 10	104
273	39. Joint Packings; Multiple Valves; Packed Shaft or Rod Joints; Pipe Joints or Couplings; Valved Pipe Joints or Couplings; Water Distribution.	Mar. 23	June 3	266
125	40. Baggage; Bottles and Jars; Check-Controlled Apparatus; Cloth, Leather, and Rubber Receptacles; Deposit and Collection Receptacles; Metallic Shipping and Storing Vessels; Package and Article Carriers; Paper Receptacles; Special Receptacles and Packages; Wooden Receptacles.	Apr. 5	May 3	422
114	41. Railway Draft Appliances; Resilient Tires and Wheels	Apr. 27	June 6	247
382	42. Electricity, Conductors; Electricity-Transmission to Vehicles; Electric Signaling	Jan. 23	Jan. 25	603
253	43. Baths and Closets; Dispensing; Dispensing Beverages; Electricity, Medical and Surgical; Fire-Extinguishers; Sewerage; Surgery; Water Purification.	Apr. 24	May 24	238
379	44. Air-Guns, Catapults, and Targets; Ammunition and Explosive Devices; Boats and Buoys; Ships	July 1	June 26	196
	45. Clutches; Lubrication; Motors; Railway Brakes	Mar. 16	Apr. 11	334

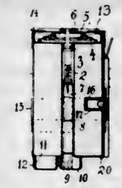
Oldest new case, Jan. 5; oldest amended, Jan. 25.
Total number of applications awaiting action 15,013

163	TRADE-MARKS, DESIGNS, LABELS AND PRINTS:			
	Trade-Marks	July 5	July 10	656
	Designs	May 25	June 12	355
	Labels and Prints	July 24	July 29	49

PATENTS

GRANTED AUGUST 13, 1918.

1,275,190. HAND-GRENADE WITH TIME-FUSE AND AUTOMATIC RELEASE. NIELS WALTERSEN AASEN, Christiania, Norway. Filed July 20, 1917. Serial No. 181,728. (Cl. 102—29.)



1. In a hand grenade with time fuse a spring actuated friction device for igniting the fuse of the grenade automatically when released, and a ribbon wound about the body of the grenade in such a manner as to keep the spring in a compressed condition, said ribbon being arranged to unwind itself, when the grenade is thrown, thereby releasing said spring.

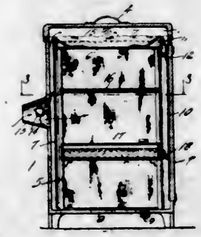
2. In a hand grenade with time fuse a spring actuated friction device for igniting the fuse of the grenade automatically when released, an angular member the short leg of which lies across one end of the grenade body and acts as a support for the spring of the friction device, the free end of said short leg being gripped by a hook fastened to the grenade body, the other leg of said angular member lying against the side of the grenade box, and a ribbon wound about the grenade body and leg for securing the said angular member in its position on the grenade.

3. In a hand grenade with time fuse a spring actuated friction device for igniting the fuse of the grenade automatically when released, an angular member the short leg of which lies across one end of the grenade body and acts as a support for the spring of the friction device, the free end of said short leg being gripped by a hook fastened to the grenade body, the other leg of said angular member lying against the side of the grenade box, a bolt with a flat head passing through a hole in said leg of the angular member, and a ribbon wound about the grenade body over said bolt and lock for securing the said angular member in its position on the grenade.

4. In a hand grenade with time fuse a spring actuated friction device for igniting the fuse of the grenade automatically when released, an angular member the short leg of which lies across one end of the grenade body and acts as a support for the spring of the friction device, the free end of said short leg being gripped by a hook fastened to the grenade body, the other leg of said angular member lying against the side of the grenade box, and a ribbon wound about the grenade body and leg for securing the said angular member in its position on the grenade, the leg of the angular member extending along the side of the grenade being bent inwardly at its lower end, so as to grip the edge of the grenade body in order to prevent axial displacement of the angular member even if the hook gripping the other leg of the same should be broken.

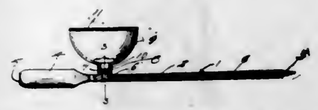
5. In a hand grenade with time fuse a spring actuated friction device for igniting the fuse of the grenade automatically when released, an angular member the short leg of which lies across one end of the grenade body and acts as a support for the spring of the friction device, the free end of said short leg being gripped by a hook fastened to the grenade body, the other leg of said angular member lying against the side of the grenade box, and a ribbon wound about the grenade body and leg for securing the said angular member in its position on the grenade, and a covering plate fastened to the side of the grenade body over the ribbon by means of ears of the grenade body and a pin through said ears.

1,275,191. REFRIGERATOR. CHARLES T. ADAIR, Tucumcari, N. Mex. Filed Feb. 20, 1918. Serial No. 218,264. (Cl. 45—133.)



In an air cooling refrigerator of the evaporator type, the combination with a casing, a suitable door provided, an air circulating system supplied, a supporting rack for shelves and pans provided in the casing and removable therefrom, cooling sheets of fabric depending from the sides and the rear of the casing and spaced apart from the walls of said casing to facilitate air circulation, feeder cloths attached to the cooling sheets of fabric and lying within a pan of water to transmit moisture, a cooling sheet fixed on the door, a feeder strip of fabric lying within the water pan and depending slightly below the upper edge of the door, a pressure bar fixed within the casing and positioned to support the lower edge of the feeder strip causing said strip to engage the cooling sheet on the door thus transmitting moisture to the said door sheet in a positive manner.

1,275,192. AUTOMOBILE-LEAF-SPRING OILER. HENRY F. ALEXIS, Grandy, Minn. Filed Oct. 18, 1917. Serial No. 197,324. (Cl. 221—56.)

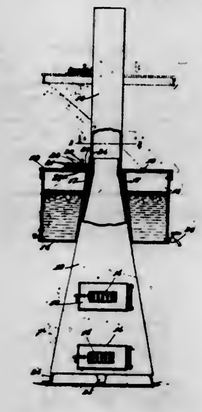


1. A lubricating tool for leaf springs comprising a blade having one end sharpened and the opposite end provided with a handle, said blade being provided with a longitudinally extending bore opening out of the sharpened end of the handle, and a lubricant holder carried by the upper surface of the blade and communicating with said bore, as and for the purpose specified.

2. A lubricating tool for leaf springs comprising a substantially flat blade having one end sharpened and the opposite end provided with a handle, said blade being provided with a longitudinally extending bore opening out

from the sharpened end and a removable flexible lubricant holder carried by the upper surface of the blade, and communicating with said bore, as and for the purpose specified.

1,275,193. WATER-HEATER. FRANCIS L. ALSOBROOK, Alamo, Tenn. Filed Apr. 9, 1918. Serial No. 227,478. (Cl. 126—364.)

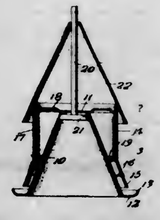


1. The combination with a suitable stove, of an annular water heating vessel supported thereon, a smoke pipe fitted to the upper part of said stove, said vessel having a removable cover provided with a spring-pressed retaining device acting against said smoke pipe and thus serving to frictionally retain said cover in position, to close said vessel, or to hold said cover in an elevated position on said smoke pipe when access to said vessel is desired.

3. The combination with an upwardly tapering stove, of an annular water heating vessel supported on the tapered upper part thereof, a smoke pipe fitted to the upper part of said stove, and a tapering sleeve or thimble interposed between the said vessel and said stove.

[Claims 2 and 4 not printed in the Gazette.]

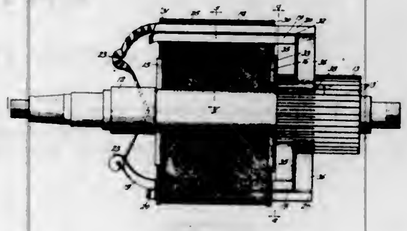
1,275,194. CHICKEN-FEEDER. LOUIS O. ANDERSON, Brunswick, Minn. Filed July 12, 1917. Serial No. 180,200. (Cl. 119—56.)



1. A feeder having a container member, a drum spaced therefrom and fixed relatively thereto, means movable through and by the material within the container at a rate proportional to the rate at which the material is removed to thus cut off the supply of material, and means projecting below the first mentioned means to prevent interference by those fed with automatic action of the first mentioned means.

[Claims 2 to 6 not printed in the Gazette.]

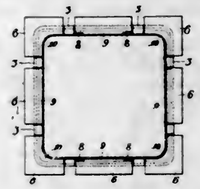
1,275,195. ARMATURE CONSTRUCTION FOR DYNAMO-ELECTRIC MACHINES. VINCENT G. APPLE, Dayton, Ohio. Original application filed Nov. 19, 1914, Serial No. 872,959. Divided and this application filed Jan. 22, 1917. Serial No. 143,832. (Cl. 171—206.)



1. An armature comprising a core axially perforated at circumferentially spaced intervals, said perforations being open at their ends only; legs of wish-bone conductors in said perforations, said wish-bones each comprising two legs and a connecting yoke, a leg of each occupying the outer portion of a perforation and the other leg occupying the inner portion of another perforation, said legs and joining yoke of each wish-bone being one integral piece; the yoke of one pair of conductors of a wish-bone overlying the yoke of an adjacent pair of conductors at a given end of the armature uniformly throughout.

2. A bar wound armature comprising a core, perforated at intervals and a plurality of wish-bone loops, each loop comprising two conductor bars, and an integral connecting yoke, said bars extending through different perforations in the core and the yoke of one pair of conductors overlying the yoke of an adjacent pair of conductors uniformly throughout the armature structure.

1,275,196. ZINC-MELTING APPARATUS. TAKEKICHI ARAMAKI, Kiku-Gun, Fukuoka-Ken, Japan. Filed Nov. 17, 1915. Serial No. 61,952. (Cl. 263—48.)



1. In zinc melting apparatus, an outer tank formed with comparatively acute corners, an inner jacket provided with flange members adapted to be positioned within said tank and to be supported thereby by means of said flange members engaging the upper edges of said tank, said jacket being constructed shorter, smaller, and with more rounded corners than the tank whereby a space is provided between the bottom and sides of the tank and jacket, the differences in their corners resulting in a widened space at these points.

[Claim 2 not printed in the Gazette.]

1,275,197. DRILL. JOHN AUER, Portland, Oreg. Filed Aug. 29, 1917. Serial No. 188,859. (Cl. 145—67.)

1. A hand drill comprising a frame, an operating shaft journaled in the frame having its upper end extending beyond the frame and squared for coöperation with a brace, and a breast member slidable upon the frame and adapted to be extended beyond the squared end of the operating shaft to permit the use of the frame for a breast drill.

3. In a drill, a frame, an operating shaft journaled in and extending beyond the frame and having its outer end squared for coöperation with a brace, bars slidable upon the frame, a breast member carried on the outer ends of the bars and adapted to lie in engagement with the frame when the drill is operated with a brace, said bars being extended to dispose the breast member beyond the outer end of the shaft to provide a breast drill, and spring pressed detents carried on the frame, said bars having notches therein to receive the detents to lock the bars in extended position.



4. A hand drill comprising a frame, a two piece operating shaft journaled in the frame having its upper section extending beyond the frame and squared for coöperation with a brace, gearing connecting the shaft pieces to one another and a breast member slidable upon the frame and adapted to be extended beyond the squared end of the operating shaft to permit the use of the frame for a breast drill.

[Claims 2 and 5 not printed in the Gazette.]

1,275,198. LOOSE-LEAF BINDER. WILLIAM H. AVERILL, Boston, Mass. Filed Oct. 25, 1916. Serial No. 127,592. (Cl. 129—13.)



1. A loose leaf binder comprising opposed plates or jaws, complemental post elements on said plates, a toothed locking bar secured to one of the plates projecting toward the other, a coöperating latch engaged with the other plate in a manner permitting oscillative motion, having a toe to engage a tooth of said bar and having an inclined operating finger, and a controller movably mounted on the last named plate and formed with a slot in which said finger lies, having a tongue at one end of said slot projecting under said finger to place the latch in locking relation with the bar when the controller is moved in one direction, and having an element at the other end of said slot arranged to ride over and release the latch when the controller is moved in the opposite direction.

2. A loose leaf binder comprising opposed plates or jaws having leaf-engaging members, a plurality of toothed locking members carried by one of said plates, a plurality of complemental latches carried oscillatively by the other of said plates each arranged to interlock with one of said locking members, and each having an operating finger, and a single controller having tongues arranged to engage the fingers of all said latches and swing the latter into locking position when moved in one direction and having other portions arranged to engage the fingers of all the latches simultaneously to disengage the latches from the locking members when the controller is moved in the opposite direction.

5. In a loose leaf binder comprising opposed plates with leaf-engaging elements and complemental locking members and latches, an endwise movable controller bar for actuating said latches mounted on one of said plates, and a controller bar latch connected to said bar and having a shoulder, the plate having a recess to receive said shoulder when the controller bar is in normal position.

[Claims 3 and 4 not printed in the Gazette.]

1,275,199. TIRE-TREAD PROTECTOR. CHARLES W. BAIN, Norfolk, Va. Filed Feb. 11, 1918. Serial No. 216,441. (Cl. 152—16.)

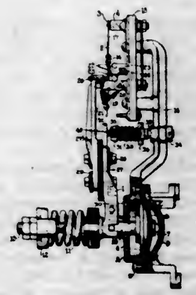


6. A device of the class described, having a carrier provided with a frame, a tread carried by the frame, a band upon which said carrier is mounted, said frame being spaced from the band at its ends, and resilient strut means extending from the frame and engaging the band.

7. In a device of the class described, a band, said band having a substantially curved portion, a carrier having a frame provided with a plate resting on said band at the center of the plate and being spaced from the band at the ends of the plate, a tread insertible between said arms, and resilient strut arms extending outwardly from said arms, and means to secure the strut arms to said band.

[Claims 1 to 5 not printed in the Gazette.]

1,275,200. ELECTRIC SWITCH. THOMAS E. BARNUM, Milwaukee, Wis., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Dec. 15, 1914. Serial No. 877,337. (Cl. 175—308.)

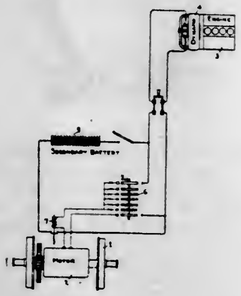


4. In a pressure actuated switch, in combination, an elongated frame, a switch including a pivoted contact member mounted at one end thereof, a pressure responsive device mounted on the other end of said frame, an

elongated operating member pivoted to said frame and having one end operatively connected to said device, an energy storing connection between said contact member and the free end of said switch operating member for effecting a delayed movement of the former in response to movement of the latter, a pivoted latch biased to automatically engage and lock said contact member in closed position, said latch being tripped by said operating member during movement thereof into one of its extreme positions, and a spring pressed device carried by said frame and arranged to oppose movement of said operating member toward said extreme position to reduce the sensitiveness of response of said operating member to said device, said spring pressed device being adjustable to vary such reduction in sensitiveness and being arranged to act on said operating member only after the same has moved through a part of its range.

[Claims 1 to 3 not printed in the Gazette.]

1,275,201. SELF-PROPELLED VEHICLE. RALPH H. BEACH, New York, N. Y., assignor to Maude E. Beach, New York, N. Y. Filed Sept. 15, 1914. Serial No. 861,755. (Cl. 171—315.)



1. In a self-propelled vehicle, a propeller, an electric means for driving said propeller, an electric generator for supplying current to said driving means, means for driving said generator, a secondary battery, and automatic means for connecting said battery and generator to coöperate in driving said propeller.

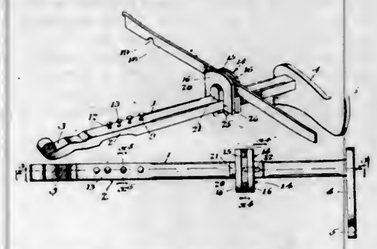
7. In a self-propelled vehicle, a propeller, an electric motor for driving said propeller, a secondary battery, an electric generator for supplying current to said motor, an internal combustion engine for driving said generator, and means for connecting said secondary battery with said motor when the driving force of the motor reaches a predetermined limit.

10. In a self-propelled vehicle, a propeller, an electric means for driving said propeller, an electric generator, means for driving said generator, a secondary battery, and means for connecting said battery and generator to coöperate in driving said propeller, said driving means being capable of delivering a driving force intermediate that required for producing rapid acceleration and that for maintaining the vehicle at a constant speed under normal running conditions, said secondary battery having a capacity intermediate that required for producing the required quick accelerations and that required for furnishing the complete driving force for the vehicle.

17. In a self-propelled vehicle, a propeller, an electric motor for driving said propeller, a secondary battery, an electric generator, means for driving said generator, and means for connecting said secondary battery with said motor when the driving force of the motor reaches a predetermined limit, said generator having a voltage which rapidly falls at a certain current strength.

[Claims 2 to 6, 8, 9, 11 to 16, and 18 to 22 not printed in the Gazette.]

1,275,202. VIOLINIST'S PRACTICE DEVICE. KARL A. BECKER, Los Angeles, Cal. Filed Oct. 8, 1917. Serial No. 195,250. (Cl. 84—76.)

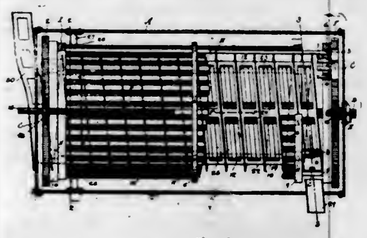


4. A violinist's practice device comprising a body, a neck connected with said body, a member projecting up from the body and shiftably mounted thereon and provided with a slot and with a shoulder, and means to hold the bow guide in different positions along the body so that a bow can be used in the slot or on the shoulder when the slot and shoulder occupy the same positions relative to the violinist's shoulder as he uses the device.

5. A violinist's practice device comprising a body, a neck connected with said body, a bow, a guide on the body for the bow, and yieldingly mounted keys in the neck for the stopping fingers of the student.

[Claims 1 to 3 and 6 not printed in the Gazette.]

1,275,203. COOKER. WILLIAM AUSTON BECKETT, Kingsville, Ontario, Canada. Filed Mar. 22, 1918. Serial No. 224,045. (Cl. 126—272.)



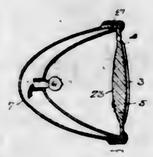
1. An apparatus of the class described comprising a suitable casing; an inner stationary drum therewithin provided with a continuous flanged spiral path on its outer perimeter extending from one end to the other; an axle extending longitudinally centrally through the drum and held therein at each end, and supporting said inner drum; an outer drum comprising a toothed gear-wheel loosely journaled on said axle near the intake end of the apparatus; a toothed-ring positioned at the discharge end of said apparatus; means carried by said casing whereby said toothed-ring is supported; a plurality of T-bars coupling said gear-wheel and toothed-ring together and secured thereto through the medium of their flanges and disposed with their webs as well as their flanges laterally spaced apart to form pockets; a plurality of bars positioned between said T-bars and journaled at one end of the apparatus in a flange carried by said toothed-ring; a bracing-ring positioned near the feed end of said apparatus and spaced apart from the said gear wheel, the other ends of said bars having bearing in said bracing-ring; the flanges of said T-bars being removed between said bracing-ring and said gear wheel to permit the entry of cans into the apparatus, and means for rotating said outer drum, for the purpose specified.

3. An apparatus of the class described comprising a suitable casing; an inner fixed drum therewithin provided with a continuous flanged spiral path on its outer perimeter extending from one end to the other; means supporting said drum against movement within said casing; an outer drum surrounding the said inner drum and provided with a plurality of pockets extending longitudinally thereof without interruption, and communicating with said spiral pathway, and coöperating with the flanges thereof so as to form individual pockets for the cans; means carried by said outer drum and extending into said pockets for the purpose of rotating said cans by frictional contact therewith at certain times; means for positively rotating said means extending into said pockets, and means whereby said outer drum is rotated so as to cause continuous movement of the cans from the intake end of said apparatus to the discharge end thereof, for the purpose specified.

5. An apparatus of the class described comprising a suitable casing provided at its intake end with a feed opening in its side, and further provided with a discharge opening in its discharge end; an inner fixed drum therewithin provided with a continuous spiral path on its outer perimeter coacting with said feed opening to receive the cans and also with said discharge opening to discharge the cans therethrough; means supporting said drum against movement within said casing; an outer drum surrounding said inner drum comprising a toothed-gear-wheel positioned near the intake end of the casing; a toothed-ring positioned at the discharge end of said casing; a plurality of T-bars coupling said gear-wheels and toothed-ring together and secured thereto through the medium of their flanges and disposed with their webs, as well as their flanges, laterally spaced apart to form pockets; the flanges of said T-bars being removed for a sufficient distance from said gear-wheel so as to permit the entry of cans through said feed opening into said spiral path; the cans ultimately discharging from said spiral path through said toothed-ring into said discharge opening; means for mounting said outer drum within said casing, and means for rotating said outer drum.

[Claims 2 and 4 not printed in the Gazette.]

1,275,204. ENDOTOROIDAL LENS. LOUIS BELL, Newton, Mass. Filed June 25, 1917. Serial No. 176,702. (Cl. 240—48.4.)

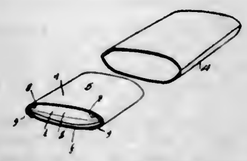


5. A refracting lens comprising a substantially plane base portion and a substantially rectangular refracting portion having upon a single surface combined plus and minus cylindrical curvatures of crossed axes.

11. A headlight lens comprising a base portion and a substantially rectangular area set within the margins thereof, said refracting area constituted of plus and minus substantially cylindrical surfaces of horizontal and vertical axes respectively.

[Claims 1 to 4, 6 to 10, and 12 to 15 not printed in the Gazette.]

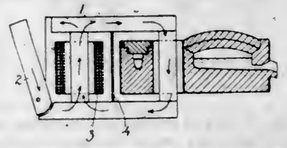
1,275,205. SANITARY PILLOW-COVERING. JAMES WILLIAM BIGHAM and WILLIAM JULIUS BARKER, Jacksonville, Fla. Filed Sept. 10, 1917. Serial No. 190,536. (Cl. 5—15.)



1. An auxiliary pillow covering disposed between the ticking of a pillow and the pillow casing, comprising an elongated member, adapted to be bent upon itself to form top and bottom sections to register with the top and bottom surfaces of a pillow and members carried by the sides of the sections adapted to overlap each other.

[Claims 2 to 4 not printed in the Gazette.]

1,275,206. ELECTRICAL INDUCTION-FURNACE. OLUF CHRISTIAN BÖCKMAN, Notodden, Norway. Filed May 3, 1918. Serial No. 232,272. (Cl. 204—64.)

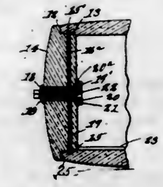


1. In an electric induction furnace the arrangement in parallel with the ordinary path of magnetic flux of a regulable magnetic flux path with the object of permitting regulation of the furnace temperature independent of the current and magnetic coils.

4. In an electric induction furnace an induction coil, a core forming a closed path for the magnetic flux created by the said coil an extension on said core outside the furnace, said extension comprising a pivoted member by means of which the path formed by the same may be closed or interrupted with the object of regulating the magnetic flux in the main core.

[Claims 2 and 3 not printed in the Gazette.]

1,275,207. BURIAL-CASKET. GEORGE A. BOCKOVEN, Whitehall, Mont. Filed July 13, 1917. Serial No. 180,394. (Cl. 27—12.)

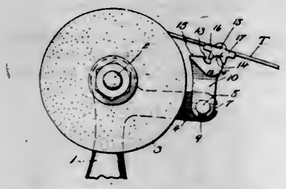


A burial casket having an inwardly tapering shoulder and inner wall at its end, a cap having a tapering flange and shoulder contacting with the end of the casket, the said cap having openings extending transversely and laterally therethrough, an internally threaded bushing mounted within the transverse opening and having one of its ends externally, threaded, a flange on the outer end of the bushing engaging the outer surface of the cap, a nut secured to the said screw threaded end and contacting with the inner surface of the cap to prevent dislodgment of the bushing, the said bushing having openings therein registering with the lateral openings in the cap, securing pins slidable within the lateral openings extending through the openings in the bushing, seats in the ends of the casket to receive the said securing pins, and means engaging the internal threads of the bushing for forcing the securing pins into said seats, thereby locking the cover in place.

1,275,208. TOOL-SUPPORT FOR GRINDERS. ELY ROCKSHIE, Milwaukee, Wis., assignor to Modern Grinder Manufacturing Co., Milwaukee, Wis. Filed Nov. 15, 1917. Serial No. 202,165. (Cl. 51—7.)

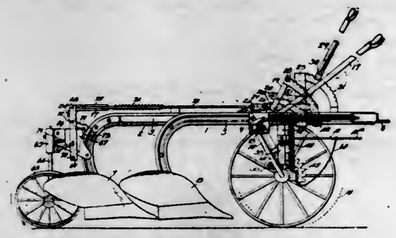
The combination with an abrading member, of a tool holder rest disposed adjacent thereto and including a bar having a longitudinally extending central groove in its upper face, the material on one side of said groove being semi-circular in cross section to form a longitudinal guide, the portion of the bar on the other side of the groove being flat, and a tool holder for coöperation with the rest and comprising a relatively thick plate having a longi-

tudinal substantially V-shaped groove cut in its bottom and extending throughout the length thereof to slidably receive said semi-circular guide, the portion of the plate



on one side of said V-shaped groove being disposed in the groove of said bar, and means on the top side of the plate to secure a tool thereto.

1,275,209. PLOW. JOHN C. BOHMKER and JOHN GRISTWHITE, Kankakee, Ill., assignors to Sears, Roebuck and Company, Chicago, Ill., a Corporation of New York. Filed Aug. 2, 1917. Serial No. 184,074. (Cl. 97—36.)



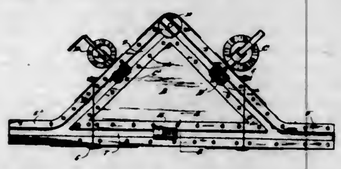
1. A plow having, in combination, a frame, a plow body on the frame, two cranks pivoted to opposite sides of the frame, supporting wheels carried by said cranks, a locking sector pivoted on the axis of one of said cranks, an adjusting lever rigidly connected to said crank and arranged to engage said sector, a link pivoted to the frame, a link connecting said link and the sector, a crank arm rigid with the other crank and linked to the first-mentioned link, a link having a longitudinal slot, a stud on the crank arm lying within said slot, an adjusting lever pivoted to the frame and connected to said slotted link, and a locking sector on the frame arranged to be engaged by the last mentioned adjusting lever.

5. A plow having, in combination, a frame, a plow-body on the frame, two cranks pivoted to the forward portion of the frame, supporting wheels carried by said cranks, two levers each rigid with one of said cranks, a member pivoted to the rear end of the frame, a furrow wheel carried by said member, means connecting said levers together whereby the cranks are rocked in unison when the levers are operated, a rod connecting said pivoted member and one of said levers and having a lost motion connection with said member, and a lock normally preventing movement of said member in one direction and adapted to be operated by the connecting rod to release said member for movement in the other direction, said lost motion connection between said member and said lever enabling the movement of the rod and the lever to which it is connected before releasing the lock.

7. A plow having, in combination, a frame, a plow body on the frame, cranks connected to the forward portion of the frame, supporting wheels carried by the cranks, a member pivoted on a horizontal axis to the rear end of the frame, a rear furrow wheel carried by said member, a lock for said member, mechanism for swinging said cranks, and a connection between said mechanism and the lock for operating the latter to permit the member to swing.

[Claims 2 to 4, 6, and 8 to 14 not printed in the Gazette.]

1,275,210. GAME. JOHN WALTER BRAUNSCHWEILER, Palo Alto, Cal. Filed Mar. 22, 1918. Serial No. 224,086. (Cl. 46—41.)



1. A game representing a fort consisting of a base triangular in shape and having its two corners adapted to be hingedly connected and turned so that same may be placed in a small receptacle, a main line track running across one of the straight sides of said fort having two branch tracks having a turn-table at their meeting ends, two smaller forts mounted on said base, one holding a large gun, the other a small gun, cars to hold ammunition for said guns adapted to be run on the said tracks, a locomotive for operating said cars, and means for holding said locomitive and cars on the tracks.

[Claim 2 not printed in the Gazette.]

1,275,211. VENTILATOR. GEORGE C. BREIDERT, Chicago, Ill., assignor to Auto Utilities Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Original application filed Apr. 23, 1913, Serial No. 763,047. Patent No. 1,104,472, July 21, 1914. Divided and this application filed June 25, 1914. Serial No. 847,201. (Cl. 98—22.)



1. In combination with a car or like vehicle, a ventilator secured to the exterior of the car so as to project from the same comprising a box-like structure having an opening communicating with the interior of the car and formed opposite said opening with an outwardly curved imperforate outer end wall and air-ramming faces disposed opposite to each other and transversely to the direction of travel of the car and with exhaust openings between said air-ramming faces, and louvers spaced apart in said exhaust openings.

5. In combination with a car or like vehicle, a ventilator secured to the exterior of the car so as to project from the same comprising a box-like structure having an outwardly curved, imperforate outer end wall, air-ramming faces disposed opposite to each other and transversely to the direction of travel of the car, a base having a central opening communicating with the interior of the car, a neck surrounding said opening, substantially parallel louvers arranged in the open sides of said structure and having an inclination toward said outer end wall, and an interior neck projecting from said base toward the imperforate outer end wall.

[Claims 2 to 4 and 6 to 10 not printed in the Gazette.]

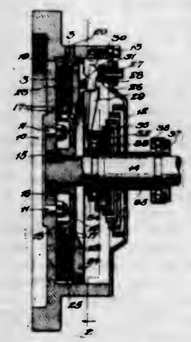
1,275,212. ICE-CHAMBER FOR REFRIGERATORS. JACOB BROEKEMA, Grand Haven, Mich., assignor to Challenge Refrigerator Company, Grand Haven, Mich., a Corporation of Michigan. Filed Feb. 15, 1917. Serial No. 148,715. (Cl. 220—113.)

1. A sheet metal ice chamber for refrigerators comprising a central portion and two end portions having their edges bent at right angles and overlapping the central portion which consists of a bottom and two sides, the margins of the bottom and of the sides next to the bottom being unbroken and bent inwardly to constitute horizontal and upright flanges, the metal at the corners between the horizontal and upright flanges being folded to form a water-tight joint.



2. A sheet metal chamber for refrigerators comprising a central portion and two ends, the central portion consisting of a bottom and two sides integral therewith, the upper portions of the sides extending from end to end, the margins of the lower portions of the sides and of the bottom being unbroken and bent inwardly to constitute continuous upright and horizontal flanges, the joint at the corners between the flanges being water-tight.

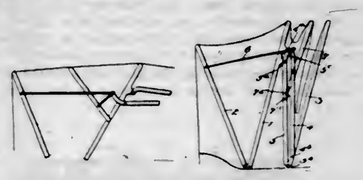
1,275,213. CLUTCH. VIVIAN R. BRUCE and RICHARD G. DICKENS, Elmira, N. Y., assignors to Hilliard Clutch and Machinery Company, Elmira, N. Y., a Corporation of New York. Filed Feb. 9, 1918. Serial No. 216,216. (Cl. 192—10.)



1. In a friction clutch, the combination of coaxially arranged driving and driven members, a series of friction disks whereby one of said members may drive the other, a pressure plate associated with said disks, a plurality of adjustable elements carried by one of said members, a plurality of substantially radially arranged levers, each cooperating with said pressure plate and one of said adjustable elements, a ring to which the inner ends of said levers are connected and an axially shiftable member having a ball and socket connection with said ring and adapted to actuate said ring to release said disks.

2. In a friction clutch, the combination of coaxially arranged driving and driven members, a series of friction disks whereby one of said members may drive the other, a pressure plate associated with said disks, a plurality of adjustable elements carried by one of said members, a plurality of substantially radially arranged levers, each cooperating with said pressure plate and one of said adjustable elements, a ring to which the inner ends of said levers are connected, a spring coöperating with said ring to compress said disks together, and an axially shiftable member having a ball and socket connection with said ring and whereby the pressure of said spring may be overcome.

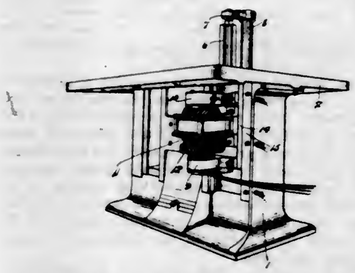
1,275,214. TOP FOR VEHICLES AND THE LIKE. MAX BUCH, Detroit, Mich. Filed Feb. 21, 1916. Serial No. 79,697. (Cl. 21—62.)



1. In a vehicle top a main bow standard, a main rear bow arm, an outrigger bow, a pair of links pivotally connected to said standard one above the other and to said outrigger bow, one in advance of the other, one of said links having a part extending in rear of its pivot, and a flexible link directly connecting said extended part with the main rear bow arm.

2. In a vehicle top a main bow standard, a main rear bow arm, a rear supplemental bow arm, an outrigger bow arm, a pair of links connecting said outrigger bow arm to the standard, one of said links having an extension, means connecting said extension to the rear supplemental bow arm, and a flexible connection from said extension to the main rear bow arm.

1,275,215. MOTOR-DRIVE FOR SHAPERS. WENDELL R. BUSS, Holland, Mich. Filed May 10, 1917. Serial No. 167,734. (Cl. 144—134.)

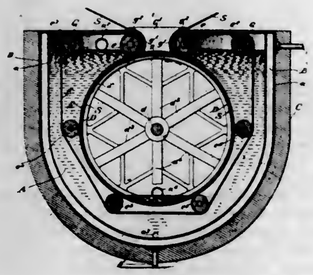


In a machine of the character described, a supporting base, a horizontal table carried by and above the base, a supporting member mounted for vertical sliding movements on the base, a vertical spindle extending above the table and rotatively mounted on said supporting member, a cutter head carried by the upper portion of the spindle, upper and lower brackets fixed on the supporting member and projecting laterally therefrom, a motor located between the brackets, the ends of the motor shaft having bearings in the brackets, a gear on the motor shaft, a pinion on the spindle meshing with the gear, and means for raising or lowering said supporting member and attached spindle and motor relative to said base and table, substantially as described.

1,275,216. MACHINE FOR SATURATING STOCK. ELISHA JESSE CADY, Oak Park, Ill. Original application filed Apr. 2, 1917, Serial No. 159,120. Divided and this application filed Apr. 15, 1918. Serial No. 228,528. (Cl. 91—46.)

1. In a saturating machine, a tank for a saturating solution, an endless stock-carrier having a body whose carrying run supports the stock against the solution in the tank and is spaced from the tank-wall to provide a pressure chamber for the solution between the wall and the stock on the carrier, and means to confine the solution in said chamber.

4. In a saturating machine, a tank for a saturating solution, an endless stock carrier having a perforated body whose carrying run supports the stock against the solution and is spaced from the tank to form a pressure chamber for the solution, an endless open apron, guides arranged to hold one run of the apron in working relation to the carrying run of the carrier, means to confine the solution in the pressure chamber, and means to simultaneously move the carrier and apron in the same direction.

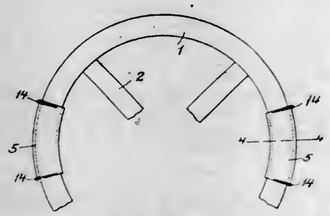


8. In a saturating machine, a tank for a saturating solution, a rotating drum in the tank having closed ends and a foraminous body to inclose a space from which the solution is excluded, said body and tank-wall being spaced apart to provide a pressure chamber for the solution, an endless foraminous apron in the chamber, guides arranged to hold one run of the apron in working relation to the drum, means to simultaneously move the carrier and apron in the same direction, and a draw-off pipe communicating with the lower portion of the interior of the drum.

9. In a saturating machine, a tank for a saturating solution, a rotating drum in the tank having closed ends and a perforated body to inclose a space from which the solution is excluded, said body and tank-wall being spaced apart to form a pressure chamber for the solution, an endless open apron in the chamber, guides arranged to hold one run of the apron in working relation to the drum, means to simultaneously move the carrier and apron in the same direction, a pipe communicating with the lower portion of the interior of the drum, and a pump connected with said pipe.

[Claims 2, 3, and 5 to 7 not printed in the Gazette.]

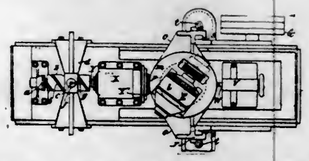
1,275,217. SAFETY-GRIP. JOHN O. CALDWELL, Jr., Boston, Mass. Filed Nov. 22, 1911. Serial No. 661,855. (Cl. 74—33.)



1. A friction grip consisting of a wrapping of frictional material shaped to fit the object upon which it is to be applied and of length sufficient to more than entirely surround the object, having a flap at one edge and a recess in the inner face extending from the opposite edge to receive such flap, and being at the same time flexible, whereby it may be turned about the object and thereby tightened thereupon.

[Claim 2 not printed in the Gazette.]

1,275,218. MACHINE FOR GRINDING WORM-THREADS. CHARLES H. CALKINS, Ludlow, Mass., assignor to Baush Machine Tool Company, a Corporation of Massachusetts. Filed Mar. 17, 1916. Serial No. 84,854. (Cl. 51—4.)



1. A machine for grinding the beveled side faces of worm threads including in combination means for advancing the work axially and a master worm for rotating it, a beveled abrading wheel adapted to be set at the angle of the threads to be ground, with its beveled face engaging the beveled faces of such threads and its diameter through the point of engagement lying at right angles to the axis of the work, and means for feeding such abrading wheel farther into the work in a direction normal to the axis thereof as the grinding progresses.

2. A machine for grinding the beveled faces of worm threads including in combination a bed and rotary means acting directly thereon to reciprocate the same, a master worm having the same lead as the work rotatably mounted on said bed, means for rigidly attaching the same to the work, a fixed device engaging the thread of said master worm and causing the same to rotate with the work as the bed is reciprocated and an abrading wheel adapted to simultaneously engage the side faces of the adjacent threads to be ground.

3. A machine for grinding the beveled side faces of worm threads including in combination a reciprocable bed T, a tail stock carried by said bed and adapted to engage one end of the worm to be ground and to permit rotation of the same, a head stock X also carried by said bed, a shaft Y mounted in said head stock and adapted to be fastened fixedly on the opposite end of the worm to be ground, a master worm fixedly fastened on the shaft Y, a fixed device engaging the thread of said master worm and causing the same to be rotated and advanced axially with the work at the same rate as the threads on the work, and an abrading wheel adapted to simultaneously engage the adjacent threads of the work.

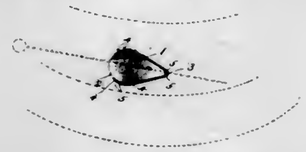
4. A machine for grinding the beveled side faces of worm threads including in combination a reciprocable bed T, a tail stock carried by said bed and adapted to engage one end of the worm to be ground and to permit rotation of the same, a head stock X also carried by said bed, a shaft Y mounted in said head stock and adapted to be fastened fixedly on the opposite end of the worm to be ground, a master worm fixedly fastened on the shaft Y, a fixed device engaging the thread of said master worm and causing the same to be rotated and advanced axially with the work at the same rate as the threads on the work, and an abrading wheel adapted to simultaneously engage the adjacent faces of the threads of the work, the means for fastening the shaft Y to the work being adapted to effect an angular adjustment between such parts.

5. A machine for grinding the beveled faces of worm threads including in combination a bed and rotary means acting directly thereon to continuously reciprocate the same, a master worm rotatably mounted on said bed, a fixed device engaging the thread of the master worm, said master worm being rotated solely by the reciprocation of the bed and the coöperation of the said fixed device, and means for rigidly attaching the work to the master worm.

[Claim 6 not printed in the Gazette.]

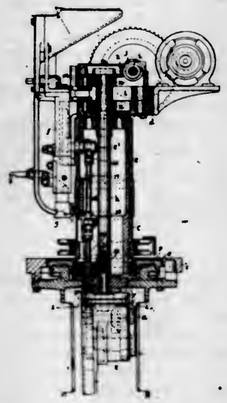
1,275,219. ATTACHMENT FOR LADES' HATS. WALLACE V. CALLENDER, Chicago, Ill. Filed July 23, 1917. Serial No. 182,113. (Cl. 132—25.)

1. An attachment for ladies' hats for the purpose described, the same consisting of a plate smooth upon its reverse side and curved longitudinally to fit the curvature of the hat-crown and adapted when in position to lie snugly thereagainst throughout its length, said plate being tapered toward one end and provided at said end with an aperture forming a passage for a hat-pin, and with marginal flanges at opposite sides of said plate converging and leading to said aperture and forming guides for the pin, and attaching means for the plate.



2. An attachment for ladies' hats for the purpose described, the same consisting of a plate smooth upon its reverse side and curved longitudinally to fit the curvature of the hat-crown and adapted when in position to lie snugly thereagainst throughout its length, said plate being tapered toward its opposite ends and provided at each of said ends with an aperture forming a passage for a hat-pin, and with marginal flanges at opposite sides of said plate converging and leading to said apertures and forming guides for the pin, and attaching means for the plate.

1,275,220. BOTTLE-CAPPING MACHINE. AMOS CALLESON, Brooklyn, N. Y., assignor to Adriance Machine Works, Inc., Brooklyn, N. Y., a Corporation of New York. Filed May 22, 1917. Serial No. 170,167. (Cl. 113—2.)



1. In a machine for assembling the body and closure parts of containers, coacting means for pressing said parts against each other, one of said means being a thrust member having thrust movement toward and from the other means and being movable transversely of its line of thrust movement, and means, including an up-and-down-motion transmitting rotary member journaled on a substantially horizontal axis in said other means, for moving said member up and down.

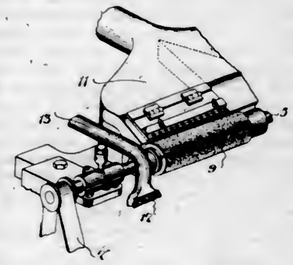
3. In a machine for assembling the body and closure parts of containers, coacting means for pressing said parts against each other, one of said means being a thrust member having thrust movement toward and from the other means and being oscillatory on an axis extending longitudinally of its line of thrust movement, and means, including an up-and-down-motion transmitting rotary member journaled on a substantially horizontal axis and a vertical shaft affording the axis of oscillation of said thrust member, for moving said member up and down.

6. In a machine for assembling the body and closure parts of containers, coacting means for pressing said parts against each other one of said means being a thrust member having thrust movement toward and from the other means and being oscillatory on an axis extending longitudinally of its line of thrust movement, an up-and-down reciprocating member, means to reciprocate the latter member, and a universal-joint connection between said reciprocating member and the thrust member.

7. In a machine for assembling the body and closure parts of containers, coacting means for pressing said parts against each other, one of said means being a thrust member having thrust movement toward and from the other means and being movable transversely of its line of thrust movement, and means for moving said thrust member up and down including an actuating member rotative on a substantially horizontal axis and an actuated member operatively connected with and adapted to be moved up and down by the actuating member, said thrust member being connected with the actuated member to move up and down therewith and being movable relatively to and transversely of said actuated member.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,275,221. METHOD OF AND APPARATUS FOR OPERATING UPON THE BOTTOMS OF BOOTS AND SHOES. JAMES CAVANAGH, Boston, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Sept. 6, 1917. Serial No. 190,047. (Cl. 12—1.)



1. A method of preparing the surface of a piece of stock to receive finishing material which consists in forming a nap on the surface thereof, raising the nap by force applied in one direction, removing the dust while the nap is raised, and finally laying the nap by force applied in another direction.

3. A method of preparing the surface of a piece of stock to receive finishing material which consists in buffing the stock to form a nap on the surface thereof, directing a current of air upon said surface to raise the nap and at the same time remove the dust generated by the nap forming operation, and finally laying the nap in a direction counter to that in which it was raised.

4. A machine of the class described, having, in combination, a buffing tool adapted to form a nap on the surface of a piece of work presented to it, and a suction conduit across the mouth of which the buffed surface may be drawn, said conduit being located adjacent to said tool and being constructed and arranged to raise the nap and to remove from it the dust generated by the buffing operation.

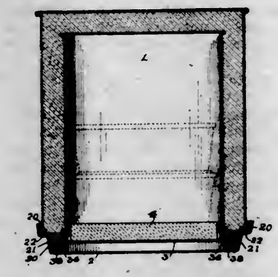
9. A method of preparing the surface of a piece of stock to receive finishing material which consists in buffing the surface and then drawing the buffed surface across the mouth of a suction conduit.

[Claims 2 and 5 to 8 not printed in the Gazette.]

1,275,222. FIRELESS COOKER. PERRY R. CHAMBERLEN, Seattle, Wash. Filed Apr. 5, 1917. Serial No. 159,896. (Cl. 53—11.)

1. In a fireless cooker, in combination, a heat insulating bell, a bottom composed of an outer and an inner

plate-like member, provided with engaging parts holding the bodies thereof separated and both having top surfaces extending about their peripheries and together providing supporting surfaces for the lower end of the bell.

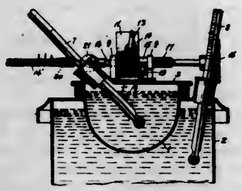


3. In a fireless cooker, in combination, a heat insulating bell, a pan-like bottom having an inwardly extending ledge below the top of its peripheral flange, a false bottom supported within the bottom to maintain its body separated from and above the true bottom, said false bottom having a top surface extending about its periphery and together with said ledge of the true bottom forming bell supporting surfaces.

6. In a fireless cooker, in combination, a base having an upstanding marginal flange, a substantially level ledge intermediate the upper and lower parts thereof, a removable false bottom having a marginal zone adapted for supporting engagement with the lower edge of an inverted bell, said zone having a trough-like depression or groove positioned to be covered by the inner part of the lower end of the bell when placed thereon, said false bottom being depressed just within said groove but being at a level which is above the corresponding part of the bottom, and a bell-like cover adapted to have its lower end rest upon the marginal zone of the false bottom, and the ledge of the bottom.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,275,223. BURNER FOR CLOSED OIL-TESTERS. CLOYD M. CHAPMAN, Douglaston, N. Y., assignor to C. J. Tagliabue Manufacturing Company, a Corporation of New York. Filed Mar. 13, 1916. Serial No. 83,757. (Cl. 158—11.)

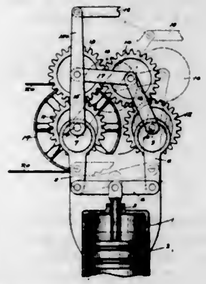


1. An oil tester comprising an oil cup for the oil to be tested, said cup having an opening in the top thereof, a closed receptacle having a burner tip opening therefrom, said receptacle being pivotally supported above the cup so as to permit the burner tip to be lowered into the receptacle opening, cotton saturated with oil within said receptacle, a wick in said burner tip, a pipe opening into said receptacle and adapted for the flow of either gas or air, and a valve in said pipe.

[Claim 2 not printed in the Gazette.]

1,275,224. VARIABLE-STROKE MECHANISM. EMIL CHRISTENSEN, Portland, Oreg. Filed Dec. 29, 1916. Serial No. 139,681. (Cl. 74—14.)

1. A variable stroke mechanism comprising in combination with an element to be moved, a pair of eccentrics with eccentric straps connected with said element, means for driving said eccentrics together, and means common to both for changing the relative positions of said eccentrics, whereby to vary the reciprocating movements of said eccentric straps relative to each other.

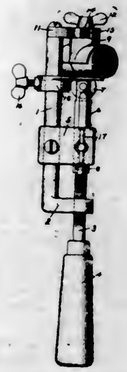


3. A variable stroke mechanism comprising in combination a reciprocating element, two eccentrics with eccentric straps connected therewith, driving gears for said eccentrics, intermediate gears connecting the gears of said eccentrics, and means for moving said intermediate gears relative to said eccentric driving gears, whereby one of said eccentric driving gears is rotated to change the position of its eccentric relative to the other eccentric.

5. A variable stroke mechanism comprising in combination with an element to be reciprocated, a cross beam, or lever, connected therewith, a pair of eccentrics with eccentric straps connected with the opposite ends of said cross beam, or lever, means for driving one of said eccentrics, connecting means therefrom to the other of said eccentrics, whereby said eccentrics are driven together, and means common to both for changing the positions of said eccentrics relative to each other without interrupting the driving connections therebetween, substantially as and for the purpose described.

[Claims 2 and 4 not printed in the Gazette.]

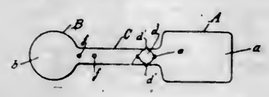
1,275,225. SHEATH-REMOVING TOOL. HENRY C. CLEVE, Washington, D. C. Filed Feb. 2, 1917. Serial No. 146,146. (Cl. 81—192.)



2. A tool for removing cable casing, comprising a body member, a longitudinally adjustable bar carried by said body member and having a cutter wheel for engaging the cable casing, an adjustable member adapted to be applied to one side of the cable for holding the cable and having one position in which the axis of the cable is parallel with the axis of the cutter wheel and another position in which the axis of the cable forms an oblique angle with the axis of the cutter wheel and a guide member movable on said body member and adapted to be applied to the opposite side of the cable.

[Claims 1 and 3 not printed in the Gazette.]

1,275,226. TAG. STEPHEN J. CLULEE, Attleboro, Mass. Filed Mar. 4, 1918. Serial No. 220,276. (Cl. 40—2.)

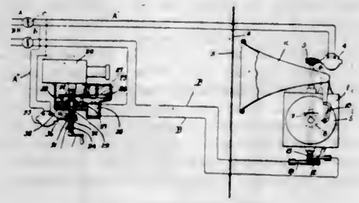


1. As an article of manufacture, a marking tag comprising non adhesive display tabs and a strap connecting the tabs, and means adjacent the tabs for engaging the ends of the strap to each other to form a loop.

2. As an article of manufacture, a marking tag comprising a strap, display tabs integral with both ends of the strap and disengaged from each other, and a member engaging the strap adjacent the tabs to form an engaging loop.

3. As an article of manufacture, a marking tag comprising a strap, tabs on both ends of the straps provided with four display faces, and a clamping member engaging the strap at points adjacent the tabs.

1,275,227. COMBINED KINETOSCOPIC AND PHONOGRAPHIC APPARATUS. CLYDE J. COLEMAN, New Rochelle, N. Y. Filed Aug. 21, 1915. Serial No. 46,628. (Cl. 88—16.2.)



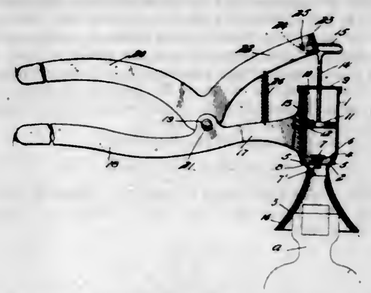
1. In an apparatus of the class described, the combination of a first machine, a source of power for said first machine, a second machine, a source of power for said second machine, an energy-storing device receiving energy from one of said sources of power and delivering it to said first machine, the other source of power being connected to said second machine, and means governed by said second machine for controlling the delivery of power from said energy-storing device to said first machine.

5. In an apparatus of the class described, the combination of a machine, a source of power for said machine, a transmission device comprising two members arranged for relative movement, the first of which receives energy from said source of power, and the second of which is connected to said machine, and means for imparting energy to said second member independently of said first member.

7. In an apparatus of the class described, the combination of a first machine, a source of power, a second machine, an escapement wheel controlling the delivery of power from said source to said first machine, a detent cooperating with said wheel and having a plurality of positions, means normally tending to place said detent in one of said positions, and means controlled by said second machine for moving said detent to the other of said positions.

[Claims 2 to 4, 6, and 8 not printed in the Gazette.]

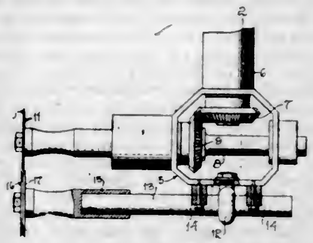
1,275,228. CORK-PULLER. FREDERIC C. CROWN and BENJAMIN H. DE HAVEN, Pittsburgh, Pa. Filed Aug. 4, 1916. Serial No. 113,152. (Cl. 65—46.)



3. A stopper extractor, including a cylinder having a cap arranged upon the lower portion thereof, a valved partition arranged between the cylinder and the cap, a valved piston working within said cylinder, a piston rod for said piston, the upper end of said rod provided with an elongated bearing element, a handle affixed to said cylinder, a lever pivotally mounted upon said handle and having the outer portion thereof engaged with said elongated bearing element whereby the piston may be operated to create a suction in said cap when applied to a bottle neck for removing a stopper therefrom, and resilient means connected to said handle and said lever for normally maintaining the piston in its lowermost position.

[Claims 1, 2, and 4 to 6 not printed in the Gazette.]

1,275,229. FISH-DRESSING MACHINE. CLYDE C. CURTIS and HOWARD J. SACKETT, Anacortes, Wash. Filed Nov. 14, 1917. Serial No. 201,963. (Cl. 17—10.)



1. In a fish dressing machine, a positively rotated circular cutting saw blade, a second smooth blade loosely mounted and supported to rotate in the plane of said first named saw blade and having a continuous kerf in its periphery to receive the cutting saw edge of said first named saw blade, said second named blade having a continuous gripping edge at each side of kerf thereon.

2. In a fish dressing machine, a circular saw blade and means for positively rotating said blade, a second circular blade loosely mounted and supported to rotate in the plane of the said first named saw blade and having a continuous kerf in its periphery to receive the cutting teeth of said first named blade, said second named blade having a continuous sharp edge at each side of the kerf therein.

3. In a fish dressing machine, a circular cutting blade and means for positively rotating said blade, a second smooth blade loosely mounted for rotation in the plane of said first named saw blade and having a continuous kerf in its periphery to receive the cutting edge of the first named saw blade, said second named blade having a continuous sharp edge at each side of the kerf therein.

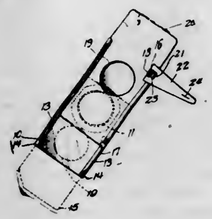
4. In a fish dressing machine, a circular saw blade and means for positively rotating said blade, a second circular

smooth blade mounted and arranged in the plane of said first named blade and having smooth, sharp gripping edges between which the saw teeth of the first named blade are adapted to move in the rotation of said blade.

5. In a fish dressing machine, a circular saw blade and means for positively rotating said blade, a second circular blade mounted and supported in the plane of said first named blade and having a continuous kerf in its periphery to receive the cutting teeth of the first named blade, said second named blade having a continuous sharp gripping edge at each side of the kerf therein.

[Claim 6 not printed in the Gazette.]

1,275,230. SHUTTER FOR CAMERAS. JESSE H. DOLBY, Elgin, Ill. Filed May 16, 1917. Serial No. 169,018. (Cl. 95—55.)



1. An auxiliary shutter for cameras adapted to coact with the camera lens-opening and comprising a slidable plate having an opening therein adapted to be moved past the lens-opening, a guide therefor consisting of a movable plate of substantially U-shaped cross-section and provided with longitudinal grooves in which said slidable plate is mounted, projections on said slide plate and said guide plate adapted to be brought into register with each other, and removable means coacting with said projections adapted to retain the latter in temporary registry.

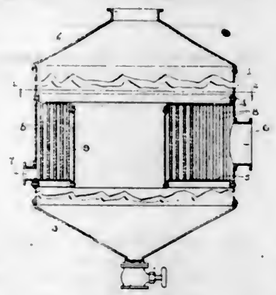
5. An auxiliary shutter for cameras adapted to coact with the camera lens opening and comprising a slidable plate having an opening therein adapted to be moved past the lens-opening, means for preventing the operation of said auxiliary shutter consisting of a strip of combustible material, constructed to temporarily retain relatively movable portions of said shutter in an adjusted position, said strip of material being provided with means for receiving another like strip of combustible material whereby the period of combustion before destruction is increased.

6. An auxiliary shutter for cameras consisting of a base, a slide adapted to move upon said base and provided with an aperture adapted to coact with the camera lens-opening, stops for limiting the movement of said slide, members projecting from said base and slide and a destructible element coacting with said members and adapted to hold said slide against movement with the aperture therein out of register with the camera lens-opening.

[Claims 2 to 4 not printed in the Gazette.]

1,275,231. APPARATUS FOR ABSORBING HEAT. HERBERT H. DOW and THOMAS GRISWOLD, Jr., Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed June 7, 1916. Serial No. 102,207. (Cl. 257—220.)

5. In apparatus of the character described, the combination with a chamber of approximately circular cross section, having incoming and outgoing openings in opposite sides for the heating medium to pass therethrough; of a plurality of conduits disposed approximately vertically in said chamber and designed for ascending currents of the medium being heated, and a relatively larger similarly disposed conduit for the descending current of such medium, the corresponding ends of said conduits freely connecting with each other, said descending conduit being located nearer such outgoing than said incoming opening, and said ascending conduits being distributed substantially uniformly throughout the remainder of said chamber, save immediately adjacent such incoming opening where a triangular space with sides converging inwardly, is left clear.



6. A vacuum evaporating pan, having incoming and outgoing openings, and two approximately wedge-shaped paths in the heating belt for the passage of the heating medium therethrough, such paths diverging from such incoming opening and uniting again at such outgoing opening substantially as described.

[Claims 1 to 4 not printed in the Gazette.]

1,275,232. PRODUCTION OF FINELY-DIVIDED METALS. THOMAS A. EDISON, Llewellyn Park, West Orange, N. J., assignor to Edison Storage Battery Company, West Orange, N. J., a Corporation of New Jersey. Filed Dec. 22, 1911. Serial No. 667,366. (Cl. 75—17.)

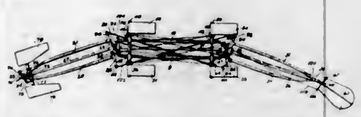
1. The method of producing finely divided metal, which consists in reducing the same from a suitable compound by hydrogen, and in displacing the hydrogen from the reduced mass by nitrogen before exposing the mass to the atmospheric air, substantially as set forth.

2. The method of producing finely divided iron, which consists in reducing the same from a suitable compound by hydrogen, and in displacing the hydrogen from the reduced mass by an inert gas, substantially as set forth.

10. A new composition of matter consisting of non-pyrophoric electrolytically active iron in finely divided highly porous condition, substantially as described.

[Claims 3 to 9 and 11 not printed in the Gazette.]

1,275,233. AIRCRAFT. JULIUS B. ELLINGER, Seattle, Wash. Filed June 20, 1917. Serial No. 175,952. (Cl. 244—29.)

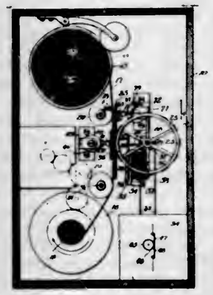


1. An air craft frame of the class described, which embodies a series of sections disposed end to end, the adjacent ends of which are articulated one to the other by vertical pivot rods; a rudder articulated to the rearward end of the rearward one of said sections by means of a universal joint, said rudder including a vertical plane and a horizontal plane; a vertical plane associated with the forward one of said sections and adapted to be swung in sidewise directions; a transverse shaft mounted to be rotatively movable in bearings attached to the forward end portion of the forward one of said sections to project from each of opposite sides thereof; a plane attached to each of the opposite end portions of said transverse shaft and adapted to swing to different angular positions with respect to a horizontal plane; a vertically disposed dorsal plane rigidly fastened to the upper end portion of each of said vertical pivot rods; a transverse rod rigidly associated with the forward end portion of the bottom portion of an intermediate one of said sections; a transverse rod rigidly associated with the rearward portion of the bottom portion of said intermediate one of said sections; a separate plane articulated with each of the opposite end portions of each of said transverse rods; a car suspended from said intermediate one of said sections; two controlling hand wheels rotatably mounted in bearings fixed in said car; cables operatively associated with one of said hand wheels, with said rudder and with said vertical plane that is associated with the forward end of said forward section whereby said vertical plane and said rudder may be turned in sidewise directions in response to rotative movements of said one of said hand wheels; other cables operatively associated with the other one of said hand wheels, with said rudder and with said transverse shaft that is disposed at the forward end of the forward one of said sections, whereby the planes of said shaft and said rudder may be swung to different angular positions with respect to a horizontal plane in response to rotative movements of said other one of said hand wheels; and other cables operatively associated with said vertical dorsal planes and with the several planes of said transverse rods whereby swinging sidewise movements of said dorsal planes will cause the planes of said transverse rods to move to different angular positions with respect to a horizontal plane.

2. An air craft frame comprising a series of sections disposed end to end, the adjacent ends of which are articulated one to the other by vertical pivot rods, and a rudder articulated to the rearward end of the rearward one of said sections by means of a universal joint, said rudder including a vertical plane and a horizontal plane.

[Claims 3 to 6 not printed in the Gazette.]

1,275,234. REGISTERING MECHANISM. JAMES D. ELSOM, Chicago, Ill., assignor to Railway Improvement Company, New York, N. Y., a Corporation of New York. Filed Mar. 1, 1912. Serial No. 680,807. Renewed June 7, 1916. Serial No. 102,351. (Cl. 234—12.5.)

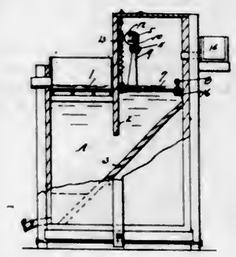


1. The combination of an electrically-driven car, an electric circuit in which the motor of said car and its switch-control is interposed, a shunt-circuit the opening and closing of which is controlled by said switch-control, a regenerative electric-circuit in which the motor is interposed, a car-register comprising, in combination, a record-sheet bearing markings indicating successive periods of time, an electrically-operated device operating to indicate on the sheet the number and length of stops made by the car, and successively-operated electrically-actuated means in said shunt-circuit and electrically-operated means in said regenerative circuit for controlling the action of said electrically-operated device.

5. The combination of an electrically-driven car, an electric circuit in which the motor of said car and its switch-control is interposed, a shunt-circuit the opening and closing of which is controlled by said switch-control, a regenerative electric-circuit in which the motor is interposed, a car-register comprising, in combination, a record-sheet bearing markings indicating successive periods of time, an electrically-operated device operating to indicate on the sheet the number of stops made by the car, and successively-operated electrically-actuated means in said shunt-circuit and electrically-operated means in said regenerative circuit for controlling the action of said electrically-operated device.

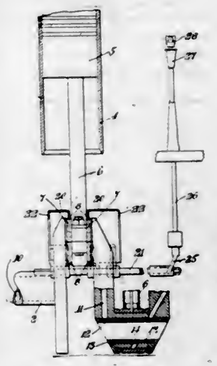
[Claims 2 to 4 and 6 to 8 not printed in the Gazette.]

1,275,235. CONCENTRATOR. HENRY W. FAUST, Seattle, Wash., assignor to Sybil B. Faust. Filed Feb. 17, 1916. Serial No. 78,884. (Cl. 83—79.)



In an ore jig, a hutch adapted to contain a screen, water pulsating means, and water admission means, said water pulsating means including a plunger means adjacent the hutch wall for pivotally supporting the plunger to permit a bodily movement of such plunger about the pivot, whereby to move one edge of such plunger toward the hutch wall in the operating stroke thereof and from the wall on the opposing stroke, a sealing strip on such plunger edge, means for positively moving the plunger on its operative stroke about its pivot, and independent spring means for returning the plunger.

1,275,236. OILING SYSTEM. JOSEPH B. FERGUSON, New York, N. Y. Filed Apr. 26, 1917. Serial No. 164,628. (Cl. 184—13.)



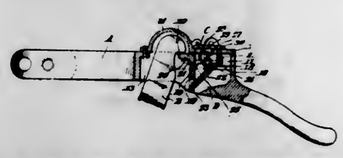
1. In an engine, a cylinder member, a piston member, a crank shaft member and connecting rod member, one of said last two members being arranged to throw oil toward one of said two first named members, and a deflector plate mounted for swinging in the path of said oil for controlling the amount of oil reaching said member toward which said oil is thrown.

2. In an engine the combination of two parts moving relatively to one another and in contact with each other, a third part of said engine moving relatively to one of said first parts, all of said parts being interconnected to cause said relative motion during the normal operation of the engine, a source of oil supply, said third part being arranged to throw oil from said supply toward one of said two first named parts and a deflector plate mounted for movement in the path of said oil thrown by said third part whereby the amount of oil reaching said part toward which the oil is thrown is controlled.

5. In an engine, a cylinder member, a piston member, a crank shaft member and connecting rod member, one of said last two members being arranged to throw oil toward one of said members, and a deflecting plate mounted for swinging adjustment in the path of said oil.

[Claims 3, 4, and 6 to 10 not printed in the Gazette.]

1,275,237. SELF-LOCKING RAILWAY-SWITCH HANDLE. CHARLES FORTH, Ottawa, Ontario, Canada, assignor to The Flexible Metal Hose Company, Limited, Ottawa, Ontario, Canada. Filed Mar. 6, 1917. Serial No. 152,751. (Cl. 104—25.)

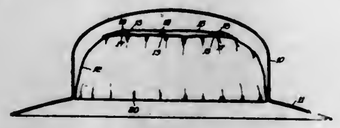


1. In a lock of the character described and in combination a casing, and guide flanges on the side walls thereof, a locking bolt having an end projecting through the casing and having rockers bearing on the guide flanges, said bolt having a forward portion of reduced diameter and a shoulder adapted to abut the side wall of the casing when the bolt is swung laterally after being moved inwardly a given amount.

2. In a lock of the character described and in combination a casing, and guide flanges on the side walls thereof, a locking bolt having an end projecting through the casing and having rockers bearing on the guide flanges, said bolt having a forward portion of reduced diameter and a shoulder adapted to abut the side wall of the casing when the bolt is swung laterally after being moved inwardly a given amount, and a spring extending from the bolt to the casing adapted to return the same to normal position and also adapted to swing the same laterally when forced inwardly a given amount.

[Claim 3 not printed in the Gazette.]

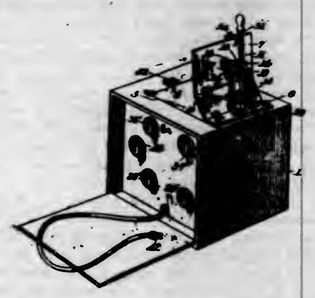
1,275,238. HAT AND HAT-LINING. LEON FREEDMAN, Chicago, Ill. Filed Dec. 29, 1917. Serial No. 209,382. (Cl. 2—113.)



1. A hat lining comprising in combination a part having a hand opening therein, catch elements spaced apart about said opening, a closure for said opening, catch elements spaced apart on said closure and adapted to cooperate with said first mentioned catch elements for holding the closure in closing position on said part having the opening, said catch elements being readily operable to release said closure to admit the hand to be passed through said opening.

2. A hat lining comprising in combination a side portion, a tip portion, and a plurality of spaced apart readily releasable interlocking catches positioned operatively between the tip portion and the side portion to hold the two portions in readily separable relation to each other, each of said catches comprising a pair of co-engaging members.

1,275,239. PHOTOGRAPHIC-PRINTING APPARATUS. WYATT RICHARD R. FRYE, Washington, D. C. Filed Feb. 17, 1916. Serial No. 78,874. (Cl. 95—73.)



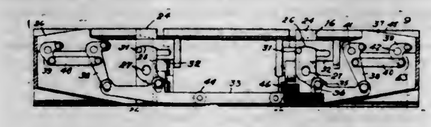
1. In a photographic printing apparatus, a frame, a platen carried thereby, said platen being composed of a plurality of sections, posts carried by each of said sections, compression springs surrounding each of said posts, a transverse bar carried by said frame and passing through said posts for operating the platen, and anti-friction means for said bar in each of said posts, said anti-friction means permitting said posts to change their angular relation to the transverse bar during opening and closing movements of the platen.

2. In a photographic printing device of the character specified a portable light proof box, a plurality of actinic electric lamps within said box and adapted to be lighted at the will of the operator, a non-actinic lamp also within said box and adapted to be continuously lighted, a light transmitting window on the top of said box, a manually operated platen adapted to cover said window, in combination with a plurality of light switches mounted on the side of said box, there being an independent switch for each actinic lamp, an automatic switch controlling the current to said switches, said automatic switch being operated by the closing of the platen, and a hand controlled switch also mounted on the side of said box and connected in parallel with the said automatic switch whereby current to the actinic lamps may be supplied independently of the automatic switch to enable the operator to visualize light conditions within the box when the platen is open.

3. A photographic printing apparatus of the character described comprising in combination a box carrying a plurality of actinic electric lamps, one side wall of said box being inset to provide a casing, a door for closing said casing, a window in the top of said box and adapted to support a suitable photographic negative, a platen constructed to cover said window, means for operating said platen, a plurality of manually controlled switches mounted on said side wall, there being a switch for each actinic lamp, an automatic switch for controlling the electrical current being supplied to the said manually operated switches, said automatic switch being operated by the platen closing means, and means for visualizing the effective light conditions of said actinic lamps when the platen is open.

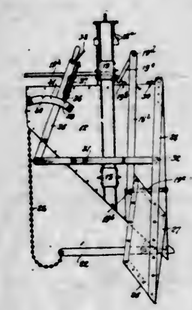
1,275,240. NOISELESS RAILWAY-CROSSING. MOTOI FUJIURA, Los Angeles, Cal. Filed Sept. 18, 1917. Serial No. 191,923. (Cl. 104—116.)

1. A railway crossing, comprising intersecting rails, vertically sliding blocks adapted to close the channels in the intersecting rails, tilting blocks adapted to support the bridging blocks, movable bars to actuate the tilting blocks to operative and inoperative position, toothed racks fixed to angularly disposed adjacent bars, and pinions in co-operative relation with said racks, whereby when one set of bridging blocks are supported in operative position, the set of bridging blocks for the crossing rails are depressed.



2. In a railway crossing, the combination with crossed rails having gaps in the treads at the intersections, of blocks adapted to bridge the gaps and provide tread surfaces, said bridging blocks being vertically slidable in slots in the rails, tiltable blocks pivotally mounted beneath the bridging blocks, and supporting the bridging blocks in the upright position, means operated by the wheels of a car to tilt the supporting blocks to an inoperative position, including depressible members, pivoted levers supporting the depressible members, bars slidably mounted beneath the tiltable blocks and pivoted levers and actuated thereby, and rack and pinion connections between angularly disposed actuating bars.

1,275,241. HOISTING APPARATUS. HOWARD S. GARDNER, East Orange, N. J. Filed Jan. 20, 1916. Serial No. 73,111. (Cl. 214—119.)



4. The combination of upright parallel guides, auxiliary chutes located at different levels adjacent to said guides, a bucket adapted to travel lengthwise of said guides and having an exit opening, a chute normally located beneath said bucket, means pivotally connected with said bucket for freely suspending said chute therefrom, means whereby said chute is swung pendulum-like from beneath said bucket over the end of an auxiliary chute to bridge the space between said exit opening and said auxiliary chute, a movable door for closing said exit opening, and means for controlling the movements of said door.

5. The combination of parallel guides, a bucket adapted to travel lengthwise thereof and provided with an exit opening, a movable door for closing said opening, means for locking said door in its closed position and means at the lower ends of said guides for engaging said locking means whereby the latter is prevented from being unintentionally released while said bucket is in its lowered position.

8. In a hoisting apparatus, a bucket having an exit opening, a movable door for said opening, a chute normally located beneath said bucket, means pivotally connected with said bucket for freely suspending said chute therefrom, and means whereby said chute is swung on its pivotal connections laterally of said bucket to an operative position in advance of said exit opening and back again.

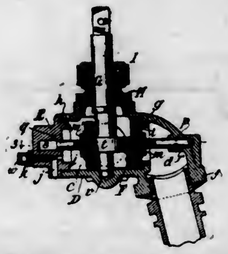
[Claims 1 to 3, 6, and 7 not printed in the Gazette.]

1,275,242. PROCESS FOR HARDENING STEEL. JOHN W. GILBERT, Windsor, Vt., assignor of one-half to Daniel H. Parker, Windsor, Vt. Filed May 8, 1916. Serial No. 96,043. (Cl. 148—13.)

1. The process of treating high speed steel, comprising slowly heating the steel to a temperature of about 700° Fahrenheit, then heating the steel at a more rapid rate to approximately 1500° Fahrenheit, then heating the steel at a still more rapid rate to a maximum of 2000° to 2500° Fahrenheit, cooling in a metal bath to between 700° and 1500° Fahrenheit and finally cooling in air to 200° or less Fahrenheit.

[Claims 2 and 3 not printed in the Gazette.]

1,275,243. TRAIN-PIPE VALVE. EDWARD E. GOLD, New York, N. Y., assignor to Gold Car Heating & Lighting Company, New York, N. Y., a Corporation of New York. Filed Dec. 21, 1917. Serial No. 208,316. (Cl. 137—4.)



1. A train-pipe valve of the type comprising a shell having a seat and a train pipe connection, and a plunger movable in the shell to close against the seat and a plunger operating stem at right angles to the train pipe connection, characterized in that the plunger is mounted to move out of line with the train-pipe, and the shell in addition to its connection with the train-pipe has an opening through which the plunger may be removed endwise, with a cap for closing such opening, whereby access is had to the plunger without disturbing the pipe connections.

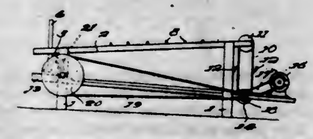
4. A train-pipe valve comprising a shell having a seat, and a plunger movable in the shell to close against the seat, and a cap for closing the shell, with a drip outlet formed in said cap.

5. A train-pipe valve of the type comprising a shell having a seat, and a plunger movable in the shell to close against the seat, characterized in that the shell has opposite seats, the one communicating with the hose outlet and the other for closing a drip outlet, a cap for closing the shell, formed with such drip outlet, and the plunger adapted at its opposite ends to close against said seats in its opposite positions respectively.

10. A train pipe valve comprising a shell formed with a drip outlet, an adjusting screw for varying such outlet and extending exteriorly beyond the shell, and a closed cap engaging the protruding end of the adjusting screw and also acting as a lock nut so as to both retain and protect the screw.

[Claims 2, 3, 6 to 9, 11, and 12 not printed in the Gazette.]

1,275,244. ADVERTISING DEVICE. HARVEY GODFREY, Pittsburgh, Pa. Filed Aug. 18, 1917. Serial No. 185,989. (Cl. 40—28.)

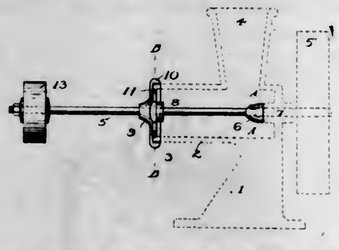


4. A device of the character described including an inclined platform having a plurality of staggeredly arranged

pins covering a portion of its surface, a plurality of pieces pivoted on the lower end of the platform, means movable over the surface of said platform and by the pins and engageable with the pieces for moving the same into vertical positions, return means arranged below said platform, an endless conveyer communicating with the return means and platform for elevating the movable means to their initiative starting positions, and means engageable with said pivotal pieces for automatically resetting the same.

[Claims 1 to 3 not printed in the Gazette.]

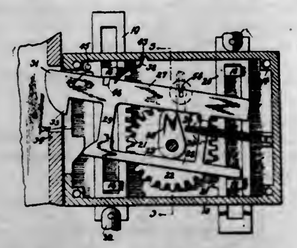
1,275,245. GRINDER ATTACHMENT FOR MEAT-CHOPPERS. REIMER N. GRAVERT, Minneapolis, Minn., assignor of forty-nine one-hundredths to Roxie Tremont, Minneapolis, Minn. Filed July 15, 1916. Serial No. 109,578. (Cl. 51—7.)



1. In a grinding attachment for a meat chopper having a hollow barrel and a shaft the combination of a grinding shaft, a coupling fastened at one end of said grinding shaft and having fastening means for engagement with said first named shaft, an end thrust collar carried by said grinding shaft, a cap for the end of said hollow barrel having a centrally located aperture therein smaller than the inside diameter of said barrel, and a flanged bearing having a diameter greater in one direction than in the direction 90 degrees therefrom so that said cap may, by tipping it angularly in respect to said shaft, be slipped over said flanged bearing and by screw engagement on said barrel position the end thrust collar carried by said grinding shaft.

2. In a grinding attachment for a meat chopper the combination, of a grinding shaft having means for engagement with the chopper shaft, a cap for the barrel of said chopper adapted to engage therewith by screw connection, and an end thrust collar carried by said grinding shaft and adapted to bear on the inner side of said cap to prevent the movement of said grinding shaft longitudinally.

1,275,246. LOCKING AND LATCHING MECHANISM. ISIDORE GREENFIELD, Brooklyn, N. Y. Filed May 18, 1918. Serial No. 235,346. (Cl. 70—31.)



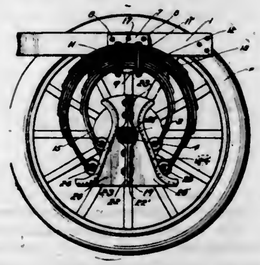
1. A lock for doors including a casing, bolts slidably arranged therein and extending through the opposite sides of the casing, the confronting sides of said bolts being provided with teeth, a rotatable shaft, a gear thereon in mesh with the teeth of the respective bolts, a latch bolt slidably extending across said sliding bolts, means on said shaft to raise said latch bolt when said sliding bolts are moved into unlocked poition, and means for positively locking said latch bolt when said sliding bolts are moved into locked position.

5. A lock for doors including a casing, bolts slidable through said casing in spaced-apart parallel relation and provided with teeth on their confronting sides, a shaft rotatably arranged in said casing midway between said bolts at right-angles thereto, a gear fast on said shaft in mesh with each of said bolts to actuate the same in opposite directions, a latch bolt arranged in said casing to slide across said sliding bolts and adapted to extend beyond the casing to engage a keeper, a tumbler on said shaft to impinge and raise said latch bolt from its keeper as said sliding bolts are moved into unlocked position, spring means engaged between said latch bolt and said casing to normally urge said latch bolt into extended position, said tumbler being arranged to operate against the tension of said spring means when the bolts are moved into unlocked position, spring means for guiding and tilting said bolt into engagement with its keeper as the sliding bolts are moved into locked position, and means for actuating said latch bolt independently of said sliding bolts when the latter are in unlocked position.

7. In a door lock, the combination of a sliding bolt provided with teeth on one side, a shaft, a gear mounted on said shaft in mesh with said sliding bolt to actuate the latter, a latch bolt arranged across said sliding bolt and adapted to engage a keeper, means on said shaft to raise said latch bolt from its keeper as said sliding bolt is moved into unlocked position, and means on said sliding bolt to engage said latch bolt whereby to hold the same positively locked with its keeper when the sliding bolt is moved into locked position.

[Claims 2 to 4 and 6 not printed in the Gazette.]

1,275,247. SHOCK-ABSORBING SPRING. SAMUEL GRIFFITHS, Kansas City, Kans. Filed Sept. 20, 1917. Serial No. 192,398. (Cl. 267—27.)



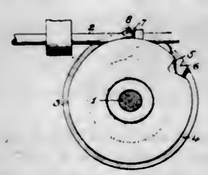
1. In combination with a vehicle body and a supporting axle, a block attached to the axle having inclined opposite edges, and a spring fixed to the vehicle body and having yieldable ends adapted for travel along the inclined edges of the block.

6. In combination with a vehicle body and a supporting axle, of a block comprising paired sections bolted together to inclose said axle, each of said sections having an outwardly and downwardly inclined edge curved outwardly at its upper and lower ends and having a groove therealong, a shoe attached to said body, spring leaves of practically circular form attached at their centers to said shoe, one of said springs being smaller than the other and contained therein, and rollers mounted at the ends of said spring leaves adapted for guided travel along the opposite grooved edges of the said block.

[Claims 2 to 5 not printed in the Gazette.]

1,275,248. MECHANISM FOR CONVERTING MOTION. RUDOLF F. HLAVATY, Chicago, Ill., assignor of one-half to Joseph Kanta, Chicago, Ill. Filed May 17, 1917. Serial No. 169,181. (Cl. 74—41.)

1. In an intermittent rotary movement mechanism, the combination of a driving wheel formed with an approximately V-shape peripheral channel ending in a space or gap and with a spirally arranged concave ridge disposed in said gap, and a driven wheel comprising a faceted hub and a plurality of radial prongs, the faceted hub being adapted for bearing engagement in the aforesaid peripheral channel and pairs of the radial prongs having serial straddling operative engagement with the aforesaid spiral ridge, substantially as set forth.

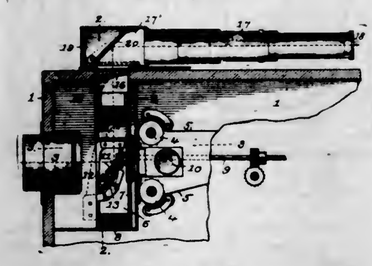


2. In an intermitten rotary movement mechanism, the combination of a driving wheel formed with an approximately V shape gapped peripheral channel ending in a pair of spiral branch channels extending in opposite directions, and with a spirally arranged concave ridge disposed between said branch channels, and a driven wheel comprising a faceted hub and a plurality of radial prongs, the faceted hub being adapted for bearing engagement in the V shape channel aforesaid and pairs of the radial prongs having serial straddling engagement with the aforesaid spiral ridge, substantially as set forth.

3. In an intermitten rotary movement mechanism, the combination of a driving wheel formed with an approximately V-shape peripheral channel ending in a space or gap and with a spirally arranged concave ridge of a rounded form in cross-section disposed in said gap, and a driven wheel comprising a faceted hub and a plurality of radial prongs having a cone shape, the faceted hub being adapted for bearing engagement in the aforesaid peripheral channel and pairs of the radial prongs having serial straddling operative engagement with the aforesaid spiral ridge, substantially as set forth.

[Claims 4 to 8 not printed in the Gazette.]

1,275,249. FINDING AND FOCUSING MEANS. RUDOLF F. HLAVATY, Chicago, Ill., assignor of one-half to Joseph Kanta, Chicago, Ill. Filed Aug. 27, 1917. Serial No. 188,303. (Cl. 88—16.)

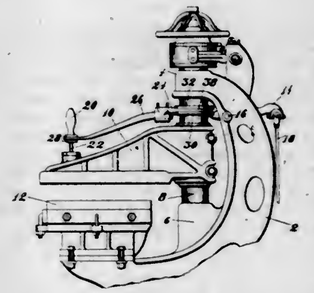


1. In a motion picture camera, the combination of a casing, an objective, a film feeding mechanism, a primary shutter controlling the light to the film in said feeding mechanism, an inclined reflector having movement through the light passage of the camera and adapted to intermittently deflect the passing light in a lateral direction, a view screen adapted to receive the laterally deflected light, a secondary shutter controlling the passage of light to said view screen, and means for operating the inclined reflector and shutters in unison, substantially as set forth.

5. In a motion picture camera, the combination of a casing, an objective, a light controlling shutter, a film feeding mechanism, an inclined reflector having movement through the light passage of the camera and adapted to intermittently deflect the passing light in a lateral direction, a view screen adapted to receive the laterally deflected light, a convex lens arranged beyond said view screen, a view tube arranged in right-angle relation to the axis of the convex lens aforesaid, a reflector hinged in said view tube and adapted in one position to close communication between the view tube and the light duct containing the aforesaid convex lens, and means for operating the first mentioned reflector and the shutters in unison, substantially as set forth.

[Claims 2 to 4 and 6 not printed in the Gazette.]

1,275,250. MACHINE FOR CUTTING SHEET MATERIALS. CARL F. HAMM, Beverly, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporaton, Paterson, N. J., a Corporation of New Jersey. Filed Aug. 13, 1917. Serial No. 186,017. (Cl. 164—19.)



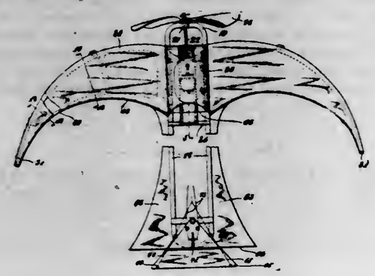
1. In a machine of the class described, the combination with a post and a presser member mounted thereon and movable laterally about the axis of the post, of controlling mechanism comprising a handle movable laterally with the presser member, and connections to said handle for controlling the operation of the machine including parts relatively movable about the axis of the post in bearing engagement with each other, said parts being constructed and arranged for relative assembling or disassembling movement thereof transversely of the post while the post remains in operative position.

4. In a machine of the class described, the combination with a post and a presser member mounted thereon and movable about the axis of the post, of clutch actuating mechanism comprising a controlling member movable laterally with the presser member, and connections between said controlling member and the clutch including a lever having a ring portion encircling the post and a part mounted to turn on said ring portion as a bearing, said part having two side portions partially embracing said bearing and terminating at a distance from each other less than the diameter of the bearing but no less than the diameter of the post.

7. In a machine of the class described, the combination with a post and a presser member mounted on the post for laterally swinging movement, of starting means comprising a lever having at one end a ring portion loosely encircling the post, said ring portion comprising two annular parts detachably secured together and cooperating to provide a circular bearing with a flange at each side of said bearing, a handle mounted to swing with the presser member and also to move in directions transverse to the path of its swinging movement, and means connecting said handle to the lever comprising an operating member mounted to turn on said ring portion of the lever, said operating member having two side portions partially embracing said bearing between said flanges and terminating at a distance from each other less than the diameter of said bearing but no less than the diameter of the post.

[Claims 2, 3, 5, 6, and 8 not printed in the Gazette.]

1,275,251. AUTOMATIC FLYING-MACHINE. ALFRED HARB, New York, N. Y., assignor to Louisa Harb, New York, N. Y. Filed Oct. 11, 1917. Serial No. 196,087. (Cl. 244—21.)



1. In a flying machine, the combination of a rectangular frame, fixed wing-like planes projecting therefrom at each side near the forward end, sustaining and stabilizing planes located aft of said fixed wing-like planes, a housing located upon the frame between said fixed wing-like planes, driving and steering mechanism located in said housing, a trackway beginning adjacent said steering mechanism and extending aft upon the frame, a pilot's chair operatively secured upon the trackway and adapted to travel aft thereupon whereby under the weight of the chair and its occupant to tilt the machine rearwardly, pocket wings adjustably combined with the wing-like planes, means for partially disconnecting the pocket wings from the wing-like planes so that the former may be extended and opened in response to air pressure when the machine is tilted rearwardly by the travel of said pilot's chair.

4. The combination with a flying machine including a bowed rectangular frame and elongated bowed wing-like planes projecting therefrom forward of its longitudinal center, of pocket wings co-extensive with said planes and combined therewith for coöperation in flying, said pocket wings being capable when partly detached of relative movement with respect to the planes and being adapted to open out in response to air pressure on the same under falling movement, and a chair carriage under the control of the pilot movable longitudinally of the frame and aft of said planes whereby to tilt the machine rearwardly bringing the said planes into vertical or oblique position with the openings of the pocket wings facing downwardly.

[Claims 2 and 3 not printed in the Gazette.]

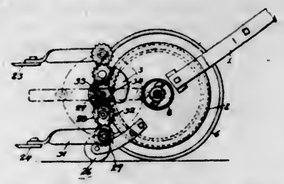
1,275,252. GAS FOR CUTTING PURPOSES. JOHN HARRIS, Lakewood, Ohio. Filed June 7, 1917. Serial No. 173,363. (Cl. 48—199.)

A gas for cutting metal with oxygen consisting of a mixture of hydrogen with not materially less than five (5) per cent. and not materially greater than ten (10) per cent. by volume of artificial illuminating gas of substantially the following composition:

Hydrogen	39.44 parts.	
Carbon monoxid	29.03 "	
Saturated hydrocarbons	16.88 "	
Unsaturated hydrocarbons	8.23 "	
Nitrogen	6.21 "	(variable)
Oxygen	0.21 "	

1,275,253. MOWER. GUSTAV P. HELFRICH, New York, N. Y. Filed Aug. 20, 1917. Serial No. 187,111. (Cl. 74—34.)

1. A device of the character described comprising a driving shaft, a pinion connected with said shaft, a master gear meshing with the pinion for rotating the same, an arm rigidly secured to said driving shaft, a stationary pinion surrounding said driving shaft, an idler pinion rotatably mounted on said arm and meshing with said stationary pinion, a rotatable shaft arranged on said arm, and a pinion rigidly secured to said rotatable shaft on



said arm, said last mentioned pinion meshing with said idler pinion, whereby when said arm is rotated the idler pinion will move around the stationary pinion and thereby communicating motion to the last mentioned pinion.

[Claim 2 not printed in the Gazette.]

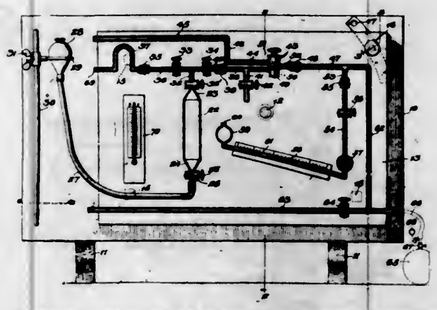
1,275,254. MANUFACTURE OF DRY EXTRACTS OF PARTLY-FERMENTED BEVERAGES. HERMAN HEUSER, Chicago, Ill. Filed Mar. 12, 1917. Serial No. 154,124. (Cl. 195—1.)

1. A dry compound of a partly fermented beverage for conversion into an alcohol-reduced beverage by dilution with water containing as its constituents a dry extract of a partly fermented beverage, and dry live yeast.

4. The process of making dry extracts of partly fermented wort for conversion into beverages by water-dilution which consists in partially fermenting the wort, and desiccating the partly fermented live yeast-containing wort at yeast preserving temperatures.

[Claims 2 and 3 not printed in the Gazette.]

1,275,255. GAS-MEASURING APPARATUS. HARVEY V. HIGLEY, Detroit, Mich., assignor, by mesne assignments, to The Isko Company, Chicago, Ill., a Corporation of Delaware. Filed May 7, 1918. Serial No. 233,049. (Cl. 23—3.)

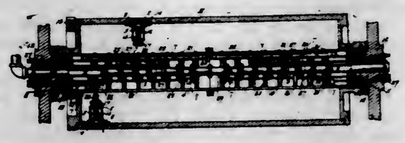


1. A gas measuring apparatus including in combination, a vertical measuring vessel, a horizontal T having its stem connected to the top of the vessel, a stop cock at the bottom of the vessel, a stop cock in each of the horizontal legs of the T, one leg having connections to a gas supply and the other leg connected to a discharge tube, all of the above mentioned parts being mounted on a support pivoted for swinging movement about a horizontal axis, a vertically adjustable liquid reservoir, and a flexible tube connecting the reservoir to the bottom of said vessel below the stop cock.

13. In apparatus of the class described, a vertically adjustable liquid reservoir, a support pivoted to tilt about a horizontal axis, gas measuring means secured to said support; and a flexible tube connecting said reservoir and measuring means.

[Claims 2 to 12 not printed in the Gazette.]

1,275,256. INKING MECHANISM FOR PRINTING-PRESSES. ROBERT HOE, New York, N. Y., assignor to R. Hoe and Co., New York, N. Y., a Corporation of New York. Filed May 9, 1914, Serial No. 837,378. Renewed July 7, 1916. Serial No. 107,975. (Cl. 101—350.)



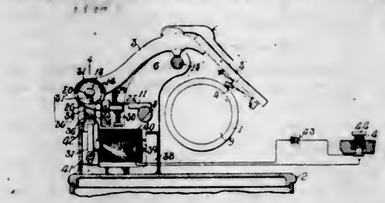
1. In an inking mechanism for printing presses, a rotating ink containing drum having openings in its periphery through which the ink is fed by centrifugal force, and valves acting to open and close said openings for intermittent feed of the ink.

13. An ink containing drum E having ink feed openings 1 and valves 2 controlling said openings, in combination with stationary cylinder 22 inside the frame, cams 21 adjustably mounted in said cylinder, hollow ink supply pipe 29 inside the cylinder, gears 25 loosely mounted to rotate on said pipe for adjusting the cams, pinions 26 for rotating the gears, and pinion shafts 27 extending to the outside of the drum for rotating the pinions, whereby the cams 21 may be adjusted independently of each other while the drum is rotating.

15. In an inking mechanism for printing presses, means for supplying ink under pressure, feeding openings through which ink is fed for different columns or sections of the matter to be printed, and intermittently operating valves controlling the feed of ink through the openings for the different columns or sections.

[Claims 2 to 12, 14, 16, and 17 not printed in the Gazette.]

1,275,257. PHONOGRAPH. NEWMAN H. HOLLAND, West Orange, N. J., assignor to New Jersey Patent Company, West Orange, N. J., a Corporation of New Jersey. Filed Feb. 26, 1914. Serial No. 818,892. (Cl. 274—21.)



1. In a phonograph, the combination of a support for a record, sound reproducing means comprising a stylus adapted to track the record, electrical means, and means directly actuated by said electrical means to shift said stylus back toward the beginning of the record while permitting the same to remain in contact with the record, substantially as described.

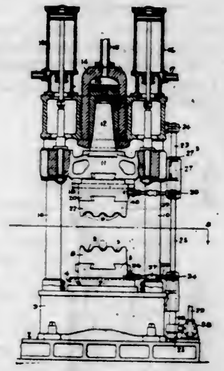
7. In a phonograph, the combination of a shaft, sound reproducing means supported thereby, and mechanism for moving said sound reproducing means along said shaft, said mechanism comprising a member carried by said shaft and adapted to be tilted into binding engagement therewith, substantially as described.

12. In a phonograph, the combination of an electromagnet having an armature, a record support, means for reproducing a record mounted on said support, means for energizing the magnet, and means directly actuated by the armature to shift the reproducing means back toward the beginning of the record while permitting said sound reproducing means to remain in engagement with the record, substantially as described.

21. In a phonograph, the combination of a support for a record, sound reproducing means comprising a stylus adapted to track a record, a source of energy, means directly actuated through the medium of said source of energy and predetermined to give to said stylus a rapid momentary movement back toward the beginning of the record while permitting the stylus to remain in contact with the record, and means for controlling the operation of said last mentioned means and said source of energy, substantially as described.

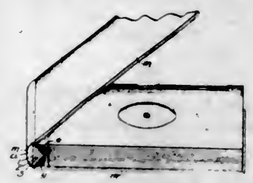
[Claims 2 to 6, 8 to 11, and 13 to 20 not printed in the Gazette.]

1,275,258. FORGING-PRESS. THOMAS EDMUND HOLMES, Nether Edge, Sheffield, England, assignor to United Engineering & Foundry Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Aug. 10, 1914. Serial No. 856,050. (Cl. 78—1.)



In a forging-press, or like machine, the combination of a stationary die movable at right angles to the movement of the press, a reciprocatory cross-head, a die supported by said cross-head and movable at right angles to the line of movement of said press, said dies having registering work forming depressions therein, a rotatable rod, a motor, connections between said motor and said rod, connections between said rod and the stationary die, a sleeve member on said cross-head engaging said rod and slidable thereon, a bushing in said sleeve rotatable with said rod, and connections between said bushing and said die on said cross-head.

1,275,259. ALBUM, SAMPLE-BOOK, OR SCRAP-BOOK. HARRY A. HOOKER, Wilmette, Ill., assignor to Rand McNally and Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 9, 1917. Serial No. 153,628. (Cl. 129—20.)



1. The combination in an album of covers, a wood backbone extending to outside edges of covers, sections telescoping into one another secured to wood backbone, each of said sections comprising two envelops, two strips of cloth forming a connection between said envelops, and a separator piece of pulp board secured between said strips of cloth, substantially as set forth.

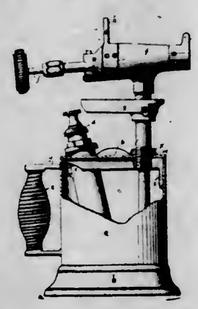
2. An album comprising a wood backbone, sections telescoped and fastened to wood backbone by wire staples,

each of said sections being composed of two envelops, and a separator piece of pulp board secured between two strips of cloth, said separator piece gradually decreasing in width from the outer to the inner sections, substantially as described.

3. In combination in an album a cover, a backbone of wood, sections each composed of two envelops, two strips of cloth, forming a connection between said envelops, and a separator piece of pulp board secured between said strips substantially as described.

4. The combination in an album of sections telescoping into each other, each section comprising two envelops, two strips of cloth forming a connection between said envelops, and a separator piece secured between said strips of cloth; said separator piece gradually decreasing in width from the outer to the inner sections, substantially as described.

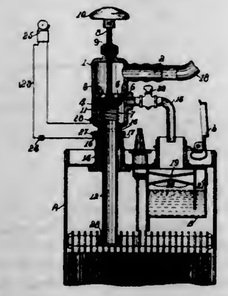
1,275,260. TORCH. EDWARD J. HOAN, Royal Oak, and FREDERICK LINDHORST, Detroit, Mich., assignors to Detroit Torch & Manufacturing Co., Detroit, Mich., a Corporation of Michigan. Filed Mar. 14, 1918. Serial No. 222,408. (Cl. 158—33.)



1. In a torch for the purpose specified, the combination of a tubular reservoir, a stem passing through the top of the reservoir and having a joint with the top of the reservoir in which is included a filled connection, and a reinforcing bridge having a beam portion adapted to lie under the top and a lip portion adapted to extend along the tubular side wall of the reservoir, for the purpose specified.

[Claims 2 and 3 not printed in the Gazette.]

1,275,261. FILLING DEVICE OR VALVE FOR STORAGE BATTERIES OR OTHER RECEPTACLES. MILLER REESE HUTCHISON, West Orange, N. J., assignor to Edison Storage Battery Company, West Orange, N. J., a Corporation of New Jersey. Filed July 18, 1914. Serial No. 851,765. (Cl. 204—53.)



1. A filling device for storage battery and other receptacles, comprising a chamber, and a plurality of pipes extending from said chamber for effecting communication of said chamber with the interior of the receptacle, said pipes and chamber being so arranged that the pipes, during normal operation of said device, simultaneously convey fluid from said chamber and introduce such fluid into said receptacle at different points, substantially as described.

2. A filling device for storage battery and other receptacles, comprising a chamber adapted to communicate with the supply source of liquid and provided with an aperture, a valve for said aperture, means for operating said valve, a second chamber communicating with the first chamber by means of said aperture, and a plurality of pipes extending from said second chamber for effecting communication of the latter with the interior of the receptacle, said pipes and second chamber being so arranged that the pipes, when said valve is fully opened, will simultaneously convey liquid from said second chamber into the receptacle, substantially as described.

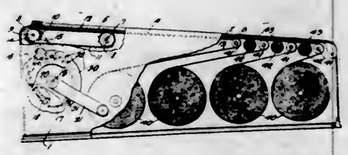
3. The combination with a container having a filling opening and a safety device or trap, of a filling device for said container comprising a chamber, means for conveying fluid from said chamber to the interior of the container through said filling opening, and means for simultaneously conveying fluid from said chamber to the interior of the container through said safety device or trap, substantially as described.

4. The combination with a container having a filling opening and a safety device or trap, of a filling device for said container, comprising a chamber and means for simultaneously supplying fluid from said chamber to the interior of said container through said filling opening and through said safety device or trap, substantially as described.

5. The combination with a container having a filling opening, of a filling device for said container comprising a chamber, a conduit leading from said chamber and adapted for insertion in the said container through said opening, and supporting means for said device secured to said conduit and arranged to rest on said container about said opening, said supporting means being provided with venting means for the container, substantially as described.

[Claims 6 to 8 not printed in the Gazette.]

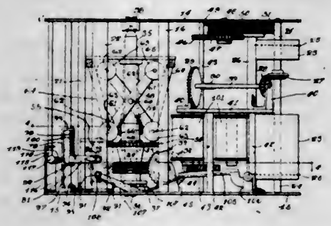
1,275,262. MANIFOLDING-REGISTER. PHILIP A. JACKSON Atlanta, Ga. Filed July 16, 1917. Serial No. 180,766. (Cl. 273.)



In a manifolding register, the combination of a casing, paper feeding means therein, an exterior handle, means intermediate the handle and the feeding means for actuating the latter on movement of the handle in one direction, means whereby the feeding means is left idle on movement of the handle in the opposite direction, a curvilinear, plate-like fixture arranged on and supported by the casing and interposed between the same and the handle and having a stop and also having a plurality of sockets arranged at different distances from said stop, and a pin removably arranged in one of said sockets.

1,275,263. RECORDING DEVICE. CHARLES A. JESKE and CLARENCE P. JESKE, Chicago, Ill.; assignors to The Auto-Speed Recorder Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 2, 1917. Serial No. 140,011. (Cl. 234—31.)

1. In a speed recorder for vehicles, a traveling record sheet, means for imparting motion to said sheet, a marker in contact with the sheet, and speed-controlled governor mechanism for shifting said marker transversely of the path of movement of said sheet comprising a primary governor for low speeds from initial movement to a predetermined speed and a secondary governor for higher speeds, and means to connect the primary and secondary governors at a predetermined speed of the former.



9. In a speed recorder for vehicles, a traveling record sheet, driving means for imparting motion to said sheet including a feeding drum, drive shaft and mechanical connections between said shaft and drum, a removable take-up roll for winding up said record sheet, and an elastic drive-belt between the take-up roll and driving means.

17. In a speed recorder for vehicles, a case having an elongated slot in its front wall provided with lateral notches, a traveling record sheet having speed-indicating marks corresponding with said notches, means for imparting motion to said sheet, a marker in contact with the sheet, and speed-controlled governor mechanism for shifting said marker transversely of the path of movement of said sheet, a control-frame adjustable to different positions transversely of said sheet corresponding to said speed-indicating marks, and a spring-arm on the frame having a knob projecting through said slot and a setting pin to enter any of said notches.

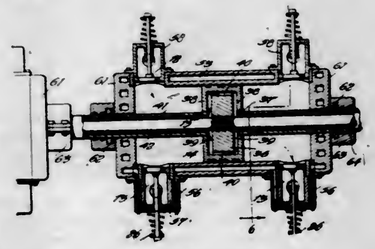
19. In a speed recorder for vehicles, a case having an elongated slot in its front wall provided with lateral notches, a traveling record sheet, means for imparting motion to said sheet, a marker, speed-controlled governor mechanism for shifting said marker transversely of the path of movement of said sheet, a control-frame adjustable to different positions transversely of said sheet, a spring arm on the frame having a knob projecting through said slot and a pin to enter any of said notches, a block movable into and out of the path of the arm, and means to move the block.

22. In a speed recorder for vehicles, a case having an elongated slot in its front wall provided with lateral notches, a traveling record sheet, means for imparting motion to said sheet, a marker, and speed-controlled governor mechanism for shifting said marker transversely of the path of movement of said sheet including a lever carrying a terminal of a normally open local electrical circuit, a control-frame adjustable to different positions transversely of said sheet, a second terminal of said circuit positioned in the path of said first terminal by said frame, and a spring arm on said frame carrying a knob projecting through said slot and a pin to enter any of said notches.

[Claims 2 to 8, 10 to 16, 18, 20, 21, and 23 to 25 not printed in the Gazette.]

1,275,264. INTERNAL-COMBUSTION ENGINE. LANSON B. JOYNER, St. Cloud, Minn. Filed Nov. 6, 1916. Serial No. 129,858. (Cl. 123—176.)

1. In an internal combustion engine of the type described, a cylinder having combustion spaces adjacent opposite ends thereof, and fuel intake and exhaust connections communicating with said spaces, an intermediate piston within the cylinder having a solid control portion and side walls spaced from the said control portion to form annular recesses adjacent the opposite sides of the piston, the said central portion having a series of openings communicating between the said annular recesses, whereby to provide for the circulation of a cooling fluid through the piston, a piston rod on which the central solid portion of the piston is secured, tubes surrounding the piston rod in spaced relation and connected to the side walls of the piston, said tubes forming annular channels around the piston rod, communicating with the spaces between the central solid portion of the side walls of the piston, and means for effecting a circulation of cooling fluid through the said channels around the piston rod and the said circulating spaces of the piston.



2. In an internal combustion engine of the type described, a cylinder having combustion spaces adjacent opposite ends thereof, and fuel intake and exhaust connections communicating with said spaces, an intermediate piston within the cylinder having a solid central portion and side walls spaced from the said central portion to form annular recesses adjacent the opposite sides of the piston, the said central portion having a series of openings communicating between the said annular recesses, whereby to provide for the circulation of a cooling fluid through the piston, a piston rod on which the central solid portion of the piston is secured, tubes surrounding the piston rod in spaced relation and connected to the side walls of the piston, said tubes forming annular channels around the piston rod communicating with the spaces between the central solid portion of the side walls of the piston, and means for effecting a circulation of cooling fluid through the said channels around the piston rod and the said circulating spaces of the piston, said side walls of the piston having threaded openings, and said tubes around the piston being threaded for engagement with the said threaded apertures of the piston side walls.

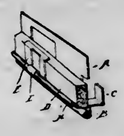
1,275,265. CHAIN-FASTENER. DANIEL KEIL, Sleepy Eye, Minn. Filed Nov. 9, 1917. Serial No. 201,115. (Cl. 24—241.)



In chain fasteners, a hook comprising a body portion and an inwardly directed bill carried by said body at one end thereof, a clip pivotally secured intermediate its ends on the body of the hook for movement toward and away from the bill thereof, said clip being provided with an element for guarding the opening of the bill when in closed position so as to prevent withdrawal of a chain link inserted into the bill, the body portion of the hook being provided at the other side of the axis of the clip from the bill with an arcuate slot concentric with the axis of movement of said clip, and the clip being provided with alined openings registering with said slot, the slot and openings of the clip being adapted to receive a securing member inserted therethrough for connecting the end link of a chain to the body of the hook and the clip, the other end link of the chain being inserted into

the bill of the hook, whereby when the chain is tensioned the clip will be rocked toward the bill of the hook into closed position and maintained in this position, said arcuate slot being of proper length to permit complete closing of the clip by tensioning of the chain.

1,275,266. TRIMMING-RAIL FOR CUSHION-SEATS AND SIMILAR STRUCTURES. FRED B. KING, Albion, Mich. Filed Sept. 20, 1917. Serial No. 192,350. (Cl. 155—25.)



6. The combination with a trim rail and a tacking strip secured thereto, of a wire extending along said strip, and a clip struck out from a portion of said rail having an angle flange for securing said tacking strip and a return bend for securing said wire.

7. The combination with a trim rail and a tacking strip secured thereto, of a wire extending along said tacking strip, a clip struck-out from a portion of said trim rail, bent to embrace said tacking strip, and a portion struck out from said clip bent to embrace said wire.

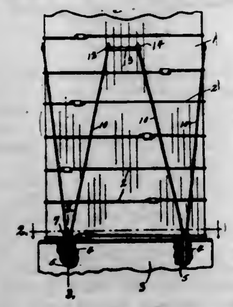
[Claims 1 to 5 and 8 not printed in the Gazette.]

1,275,267. NOISELESS RAILWAY-CROSSING. TORAKI KITAOKA, Los Angeles, Cal. Filed Feb. 25, 1918. Serial No. 218,986. (Cl. 104—116.)



The combination with a railway crossing having gaps at the points of intersection, vertically movable blocks adapted to bridge the gaps, spring-actuated bars normally supporting the filler blocks in operative position, actuating levers adapted to be depressed by the flanges of approaching car wheels, angularly disposed links supporting the actuating levers, horizontally disposed links connecting the angular links with the spring-actuated bars, compound bell-crank levers to actuate the horizontally disposed links, and interconnecting links for the compound bell-crank levers whereby simultaneous movement of the spring actuated bars is effected.

1,275,268. ANCHORING APPARATUS FOR SILOS. KNUT KLEVEN, Minneapolis, Minn. Filed Apr. 18, 1917. Serial No. 162,958. (Cl. 20—1.4.)



The combination with a silo wall formed of staves and a concrete foundation supporting the wall, of anchoring strips having their lower ends offset and embedded in the foundation at points outside of the wall, straps each secured to and extending across a plurality of staves of the wall and having terminal eyes, tie bolts extending horizontally from the wall and adjustably secured to the wall and to the upper ends of the anchoring strips, and rods having eyes at their lower ends engaged by the tie bolts, the upper ends of the rods being extended into and secured within the terminal eyes in the straps.

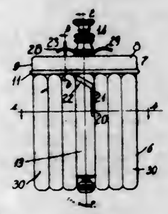
1,275,269. SPEED-COUNTER. ULRICH KOHLER and CHARLES STÖCKLIN, Berne, Switzerland, assignors to Hasler A. G. Vormals Telegraphen-Werkstätte Von G. Hasler, Berne, Switzerland, a Corporation of Switzerland. Filed Apr. 16, 1914. Serial No. 832,144. (Cl. 235—104.)



1. In a speed counter the combination with a driving mechanism of a pointer mechanism adapted to be driven thereby, a locking member normally holding said pointer mechanism at rest, a rotatable cam disk adapted to temporarily withdraw said locking member, and a clock-work controlling the rotation of said cam disk the said locking member being directly controlled by said cam disk so as to release the said pointer mechanism only after said cam disk has obtained its normal regulated speed, the said cam disk after the completion of one revolution causing the automatic arrest of the said clock-work.

[Claims 2 and 3 not printed in the Gazette.]

1,275,270. HYPODERMIC-SYRINGE CASE. JOHN L. KOZMOUSKI, Boston, Mass., assignor to The Randall-Faichney Company, Inc., a Corporation of Massachusetts. Filed Oct. 26, 1917. Serial No. 198,721. (Cl. 206—43.)



2. A hypodermic syringe case having, in combination, a holder, a cap for said holder, a tube fast to said cap and slidable in a compartment in said holder, said tube adapted to receive the barrel of a syringe, a spring in said compartment adapted to move said tube outwardly, an externally accessible locking device within said compartment adapted to engage and retain said barrel in said compartment against the action of said spring, and a stop on said cap comprising two arms extending at right angles to the top of said cap and between which an arm on said barrel is adapted to project, one of said arms on said cap

terminating in a lateral extension projecting toward the other of said arms, there being a space between the free ends of said arms through which the arm on said barrel may pass to disengage the same from said top.

[Claim 1 not printed in the Gazette.]

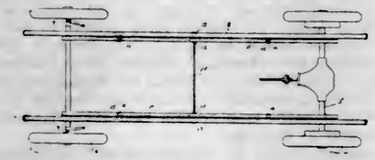
1,275,271. LOG-ROLLING DEVICE. EMIL C. KUESTER, Olney Springs, Colo. Filed Feb. 16, 1917. Serial No. 149,063. (Cl. 145—22.)



3. A cant dog including a handle, a pair of spaced parallel arms secured to the end of said handle, a body portion pivoted intermediate its ends between said arms, the lower end of said body portion projecting beyond the lower ends of said arms to form a foot, an arcuate toothed segment formed upon the longitudinal edge of said body portion, the teeth on said segment extending to the top of the body portion, a dog secured to the opposite edge of the body portion a substantial distance from the top thereof, and a driving pawl pivoted to the handle above the body portion for engagement with the toothed segment.

[Claims 1 and 2 not printed in the Gazette.]

1,275,272. FRAME AND BODY STRUCTURE FOR AUTOMOBILES. PETER S. LARSON, Williston, N. D. Filed Apr. 2, 1917. Serial No. 159,147. (Cl. 21—182.)



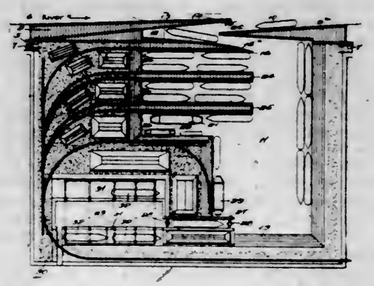
1. In an automobile or similar vehicle, the combination with a running gear including front wheels, rear wheels, front axle, rear axle, main frame, and main springs supporting said main frame from said front and rear axles, of a vehicle body intermediately pivoted to said main frame, and auxiliary springs connected between said main frame and body and exerting a yielding force tending to maintain said body in an intermediate position in respect to said main frame.

2. In an automobile, or similar vehicle, the combination of a running gear including the frame, of a body pivotally connected to said frome by an intermediate pivot located between front and rear wheels, and springs interposed between said frame and body at points both in front and at the rear of said pivot.

3. In an automobile, or similar vehicle, the combination with a running gear including front wheels, rear wheels, front axle, rear axle, main frame and main springs, the latter supporting said frame from said front and rear axles, of a vehicle body intermediately pivoted to said main frame, and auxiliary springs interposed between said frame and body on both sides of the vehicle and at points both in front and at the rear of said pivot.

4. In an automobile, or similar vehicle, the combination with a running gear including front wheels, rear wheels, front axle, rear axle, main frame and main springs, the latter supporting said frame from said front and rear axles, of a vehicle body intermediately pivoted to said main frame, the lower portion of said body being set below and inward of the side bars of said main frame, brackets secured to said side frames at front and rear of said pivot and having inturned lower ends, and springs interposed between said brackets and said body.

1,275,273. RIVERSIDE SILTLESS BASIN. PETER S. LAWTON, New Orleans, La. Filed May 1, 1917. Serial No. 165,683. (Cl. 61—8.)



1. An entrance for a basin located adjacent to a silt bearing river comprising two diverging wharves, said wharves diverging in the direction of the flow of the river, a third wharf projecting upstream having its end between said diverging wharves and in spaced relation thereto.

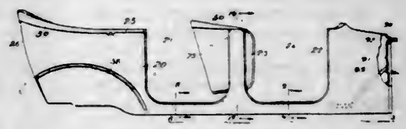
2. An entrance to a basin comprising a wharf projecting downstream and slightly outward into a silt bearing river, a wharf extending upstream and having its end overlapping said first mentioned, wharf, and protected from the river current by said first mentioned wharf, a third wharf diverging from said first wharf and overlapping said second wharf, and in spaced relation thereto.

3. A basin entrance comprising two diverging wharves and a third wharf projecting upstream between the said wharves and spaced from said wharves a sufficient distance to allow entrance by vessel between the wharves.

4. A basin entrance comprising two diverging wharves and a third wharf projecting upstream between the first mentioned wharves so that the water enters the basin in a V shaped course.

5. A basin entrance comprising two diverging wharves adapted to counteract the blowing in of silt laden water from the outer river through the pocketing of the wind and driven water from both the river and basin within the pocket formed by the diverging wharves, a third wharf projecting upstream and spaced away from but between said diverging wharves.

1,175,274. AUTOMOBILE-BODY. JOSEPH LEDWINKA, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 20, 1915. Serial No. 56,967. (Cl. 21—7.)



1. An automobile body shell built up of sheet metal stampings pressed to the shape and contour of the body lines to give external appearance to the body, said stampings being integrally united, and having an inturned flange at their lower edges, and a longitudinally extending stamping supported upon said inturned flange and secured thereto and to the vertical portions of the body shell stampings to form a box-girder with the body shell

whereby the body shell is reinforced to enable it to wholly take the strains of usage.

2. An automobile body shell built up of sheet metal stampings pressed to the shape and contour of the body lines to give external appearance to the body, said stampings being integrally united and having their upper edges formed into inverted reinforcing and upholstery receiving channels and having an inturned flange at their lower edges, and a longitudinally extending stamping supported upon said inturned flange, and secured thereto and to the vertically extending portions of the body shell stampings, to form a box-girder with the body shell, whereby the body shell is reinforced to enable it to wholly take the strains of usage.

5. An automobile body shell consisting of sheet metal stampings pressed to the required shape and contour and integrally united, and having an off-set inwardly extending channel or seat pressed in the outer surface thereof, and a mud guard having a downwardly extending flange at the inner edge of the crown thereof, said channel or seat being curved longitudinally into the line and contour of the inner flanged edge of the mud guard to receive and form a housing for the downwardly extended flange of the latter, said flange being secured in said seat.

6. An automobile body shell made up of sheet metal stampings pressed to the required shape and contour, and integrally united, said stampings having vertically extending channel shaped members with lateral flanges, to form part of a door post, and inner channel shaped members having flanges to engage over the lateral flanges of the vertical shell members to form door jamb shoulders.

14. An automobile body shell including sheet metal stampings, each having an integral vertical portion to form part of a door post, and a transversely extending reinforcing member connecting the side stampings and having integral vertically extending portions secured to the door post portions of the side stampings.

[Claims 3, 4, 7 to 13, and 15 not printed in the Gazette.]

1,275,275. MOUTH TOILET PREPARATION. SAMUEL LEVINSON, Brooklyn, N. Y. Filed June 19, 1915. Serial No. 35,120. (Cl. 167—9.)

1. A mouth toilet preparation including a substantial amount but not exceeding two per cent. of a free fruit acid of such character as to stimulate an increased flow of saliva, and a non-alkaline base inert to the action of acid.

2. A mouth toilet preparation as claimed in claim 1 in which the base is an unctuous clayey material.

1,275,276. PROCESS OF PRODUCING A PHOSPHORIC-ACID FERTILIZER CONTAINING UREA. EGIL LIE, Odda, Norway. Filed May 6, 1918. Serial No. 232,801. (Cl. 71—7.)

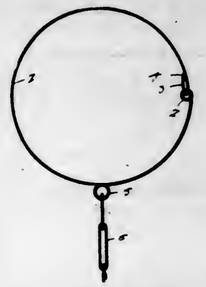
1. A process of producing a fertilizer containing available phosphoric acid and nitrogen in the form of urea derivatives, said process comprising mixing a cyanamid, superphosphate material and water, and allowing the mixture to react, whereby the nitrogen of the cyanamid is connected largely into urea compounds.

2. A process which comprises mixing a cyanamid, superphosphate and water, and adding an acid anhydrid thereto.

3. A process of making fertilizer which comprises mixing phosphate, acid, a cyanamid and water, and allowing the mixture to react.

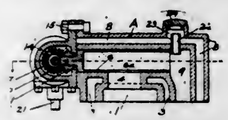
1,275,277. ANIMAL NOSE-YOKE. THEODOSIA E. LINFOOT, Lambert Okla. Filed July 14, 1916. Serial No. 109,323. (Cl. 119—136.)

A nose yoke for cattle including a ring constructed of a single strand of wire having one end sharpened for insertion through the cartilage of an animal's nose, a loop formed upon the opposite end of the wire, said pointed end being extended through the loop and bent back upon itself for connecting the ends of the wire together, said strand of wire being bent intermediate its ends to form an inclosed loop at the bottom portion thereof, and a flexible



chain connected to and extending through and downwardly from the loop, whereby the chain is prevented from moving circumferentially around the ring.

1,275,278. GAS-ENGINE. JAMES LINCOLN LOVELL, Astoria, Oreg. Filed Dec. 17, 1914. Serial No. 877,635. (Cl. 123—170.)



1. In a gas engine, an engine head having formed therein an exhaust chamber, a supply chamber and a water chamber or jacket, an exhaust valve member in said exhaust chamber having an open end discharge, a supply valve member in said supply chamber, means for operating said valve members, and means for discharging water from said water chamber or jacket across the open end of said exhaust valve member into said exhaust chamber, substantially as described.

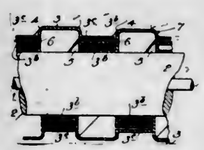
3. In a gas engine, in combination with a cylinder, a self-contained head adapted to be detachably secured to said cylinder and having formed therein an exhaust valve chamber, a supply valve chamber and water chamber, a cylindrical exhaust valve member in said exhaust valve chamber open at one end and driven at its other end, a cylindrical supply valve member in said supply valve chamber adapted at one end to be connected with a gas supply and to be driven at its opposite end, driving connections between said valve members with means for driving them together, and means for discharging water from said water chamber across the open end of said exhaust valve member and through said exhaust chamber for the purpose of cleansing and cooling the same, substantially as described.

[Claims 2 and 4 not printed in the Gazette.]

1,275,279. CONDUIT OR CONDUCTOR. GEORGE A. LUTZ, Cranford, N. J., assignor to American Circular Loom Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Jan. 25, 1915. Serial No. 4,089. (Cl. 173—267.)

1. The combination of an insulated conductor with a spiral winding thereon having its central portion projecting outwardly from the insulation and having interlocked marginal portions secured together and opposing and engaging one another in a lateral direction to prevent longitudinal displacement to permit bending without injuring the insulation.

4. The combination of an insulated conductor with a spiral winding, thereon having its central portion projecting outwardly from the insulation and its side portions extended toward each other providing spaces, the extended portion of one side of the winding entering such space of the adjacent side portion of the winding, the edge of one such extended side portion of the winding opposing and engaging the lateral portion of the adjacent side portion of the winding, the joints between windings being between the central projecting portions, the lateral portion of one winding opposing and engaging a lateral wall of an adjacent side portion of the winding to resist longitudinal movement of the winding and preventing injury to the insulation when the article is bent.



6. A tube comprising a spirally wound strip having its central portion projected outwardly and its side portions extended toward each other providing spaces, the extended portion of one side of the winding entering such space of the adjacent side portion of the winding, the edge of one such extended side portion of the winding opposing and engaging the corresponding lateral side of said projecting central portion of the winding to prevent longitudinal displacement of the winding in either direction.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,275,280. CONCRETE-CULVERT MOLD. JOSEPH STEVENS MCCABE, Minneapolis, Minn. Filed Dec. 19, 1917. Serial No. 207,872. (Cl. 25—131.5.)



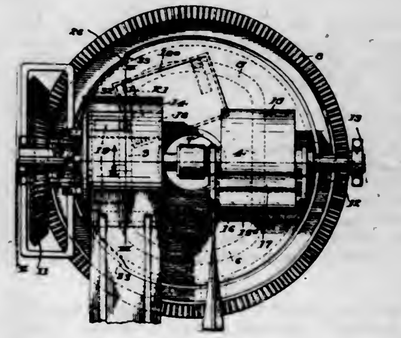
4. A concrete culvert mold comprising supporting arches, a plurality of mold plates supported by the arches, and a crown plate lapping certain of the mold plates and having its side edges provided with extensions bent inwardly and at an angle to the plates, said extensions having certain portions which parallel one another, and other portions which parallel the inner lower face of the crown plate, for the purpose described.

[Claims 1 to 3 not printed in the Gazette.]

1,275,281. PRINTING-PRESS. GEORGE B. MCCORMACK, Jersey City, N. J. Filed Oct. 31, 1916. Serial No. 128,697. (Cl. 101—268.)

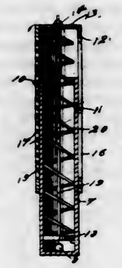
1. In a printing press, a rotatable member, a shaft extending diametrically across the member, a cylinder roller and an inking roller each mounted on said shaft and over the rotatable member, a type carrying bed mounted on said rotatable member, and means whereby said bed will partake of the rotary movement of said member and will be moved relative to the member so as to move in straight paths beneath each of the rollers.

2. In a printing press, a rotatable gear, a type carrier thereon, a shaft extending diametrically across the gear, a pinion on the shaft meshing with the gear to drive the latter, a cylinder roller and an inking roller each mounted on said shaft so as to be driven by said pinion,



and means whereby said carrier will be moved so as to travel in straight paths beneath each of said rollers.

1,275,282. PRESSURE-GAGE FOR AIR-PUMPS. RAYMOND C. MCGRATH, Okemah, Okla. Filed July 16, 1917. Serial No. 180,813. (Cl. 73—111.)

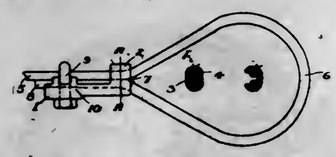


1. A pressure gage comprising an inner tubular member having one end opened and provided adjacent said end with a pin and an opening, the other end of said member having lateral extensions adapted to be connected to an air pump and tube thereof, and a second adjustable tubular member mounted over the first named member and having one end closed and provided with an opening, said second member being also provided with longitudinal slots, one edge of one slot having rack teeth adapted to be engaged by said pin to retain said second member in adjusted positions, a piston operable in the first named tubular member, a piston rod carrying said piston and extending through the opening in the closed end of the second named tubular member, and having a graduated scale readable at said closed end, and a spring interposed between said piston and said closed end of the second tubular member.

3. A pressure gage comprising relatively adjustable and telescoping tubular members, a piston operable under pressure in the inner member and relative to said members, pressure reading means movable with said piston, resilient means interposed between said piston and the outer member and against the tension of which said piston operates, teeth formed upon said outer member, and a pin carried by the inner member and engageable with said teeth to retain said members in adjusted positions whereby to vary the tension of said resilient means.

[Claim 2 not printed in the Gazette.]

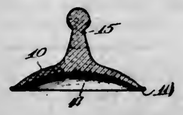
1,275,283. GUY-STRAND CLAMP. BENTON M. MATHIAS, Minneapolis, Minn. Filed Dec. 1, 1916. Serial No. 134,496. (Cl. 24—135.)



3. In a guy strand clamp the combination of a non-clamping body member, clamping means carried at one end of said body member, and a non-clamping retainer of a C shape carried at the other end of said body member to retain therein two guy strands, thereby preventing the spreading of said strands at said clamping means.

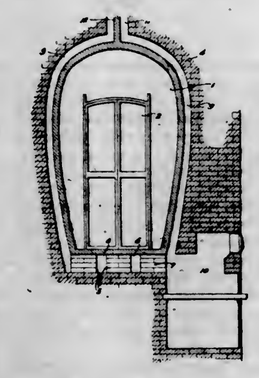
[Claims 1 and 2 not printed in the Gazette.]

1,275,284. AGITATING OR STIRRING DEVICE FOR BOILING LIQUIDS. JOHN L. MAYER, Chicago, Ill. Filed Oct. 2, 1914. Serial No. 864,644. (Cl 53—1.)



As an article of manufacture, a stirring device, comprising a circular shaped base of concavo-convex formation to provide a chamber within the bottom face thereof, and a central stem forming a handle rising from the convex side of the base, said base having a marginal edge forming a flat contacting rim surface concentrically of the chamber adapted when the base is at rest upon the bottom of a receptacle to form a closure therewith for the chamber and also to serve as a scraper when the base is in motion.

1,275,285. PORCELAIN-KILN. WILLIAM MELLOR, Sebring, Ohio. Filed Mar. 30, 1918. Serial No. 225,692. (Cl. 25—144.)

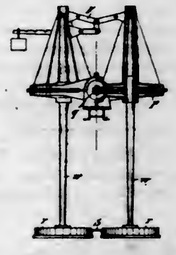


1. A kiln of the character described having a heating chamber, a plurality of fire boxes beneath said heating chamber and at one side thereof, a plurality of lateral flues communicating with said fire boxes, a plurality of substantially vertical flues upon one side of said heating chamber and communicating with said lateral flues and a plurality of substantially vertical flues upon the other side of said heating chamber and connected with said lateral flues and a separate stack for the vertical flues upon each side of said heating chamber.

4. A kiln of the character described, comprising a heating chamber or inner compartment and an outer shell, a plurality of fire boxes disposed beneath said heating chamber, flues communicating with said fire boxes and extending laterally beneath the floor of said heating chamber, a vertical flue extending upwardly from one end of each of said lateral flues, the said vertical flues being intermediate the heating chamber and outer shell, a vertical flue extending upwardly from the other end of each of said lateral flues and intermediate the said heating chamber and outer shell, a stack opening through the top of said outer shell, all of the vertical flues entering said stack and a partition arranged longitudinally of said kiln and within said stack and separating all of the vertical flues upon one side of said kiln from all of the vertical flues upon the other side thereof.

[Claims 2 and 3 not printed in the Gazette.]

1,275,286. TOWING SYSTEM FOR SHIPS. GEORG MEYER, Berlin-Charlottenburg, and EMIL WALTZ, Berlin-Steglitz, Germany, assignors to Siemens-Schuckertwerke, G. M. B. H., Berlin, Germany, a Corporation of Germany. Filed Apr. 21, 1914. Serial No. 833,385. (Cl. 115—8.)



2. In a towing system, the combination of a boat carrying a motor, a driving mechanism comprising a pair of shafts and rollers at the ends thereof adapted to grip a rail in the water, said shafts being mounted to rock about one common horizontal axis constituting a common fulcrum for the same and mounted to revolve horizontally about one common vertical axis, and means driven by the motor for driving the shafts.

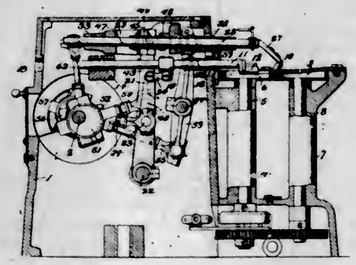
9. In a towing system, the combination of a boat carrying a motor, a plurality of driving mechanisms mounted to revolve about a common vertical axis and each comprising a pair of rollers adapted to grip a rail in the water, the rollers being mounted to rock laterally independently of one another about one common horizontal axis constituting a common fulcrum for the same, and means driven by the motor for rotating the rollers about their own axes.

13. In a tug-boat, the combination of a plurality of driving mechanisms which are arranged at some distance from each other, each of said driving mechanisms consisting of plurality of friction rollers adapted to grip a guide rail which is mounted on the water bed, and each of said driving mechanisms being mounted to permit it to rotate around a vertical axis and simultaneously to swing laterally around a horizontal axis, as a unit and independently of the other driving mechanisms.

[Claims 1, 3 to 8, and 10 to 12 not printed in the Gazette.]

1,275,287. OVERSEAMING-MACHINE. JAMES R. MOFFATT, Chicago, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 28, 1913. Serial No. 797,778. (Cl. 112—36.)

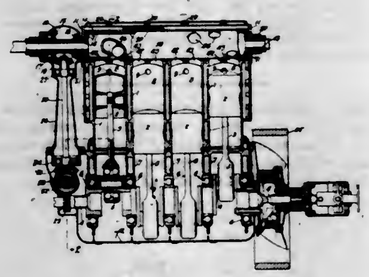
1. A sewing machine including in combination, a casing, devices for supporting a fabric in substantially a vertical plane, a horizontal reciprocating needle, a looper coöperating with said needle, a looper supporting rod for said looper, a carrier for said looper supporting rod, means for supporting said carrier at each side of the casing, devices for reciprocating said looper rod in said carrier, said carrier having a bearing sleeve at each side of the connection of the looper supporting rod to its reciprocating means, devices for oscillating said carrier about an axis at right angles to a vertical plane containing the axis of the looper supporting rod, and devices for oscillating the looper supporting rod in said carrier.



2. A sewing machine including in combination, a casing, devices for supporting a fabric in substantially a vertical plane, a horizontal reciprocating needle, a looper coöperating with said needle, a looper supporting rod for said looper, a carrier for said looper supporting rod, said carrier being in the form of a double yoke and having bearing sleeves projecting forwardly and rearwardly therefrom for said looper supporting rod, means for oscillating said double yoke, and devices for reciprocating and oscillating the looper supporting rod in said yoke.

[Claims 3 to 7 not printed in the Gazette.]

1,275,288. INTERNAL-COMBUSTION ENGINE. WILLIAM J. P. MOORE, New York, N. Y. Filed Oct. 21, 1915, Serial No. 57,044. Renewed July 5, 1918. Serial No. 243,466. (Cl. 123—59.)



1. In an internal combustion engine, the combination with a cylinder, having inlet and exhaust ports in one end thereof, of a piston in said cylinder, a rotary valve having an S-shaped transverse passage therein, and a sleeve surrounding said valve having ports communicating with the cylinder ports and also lateral exhaust and inlet ports, and supply and exhaust means connecting with said lateral ports in the sleeve, and a lubricant tube engaging a longitudinal groove in the valve sleeve and having outlet openings registering with openings in the sleeve for conveying the lubricating medium to the surface of the rotary valve.

2. In an internal combustion engine, the combination with a cylinder having inlet and exhaust ports in one end thereof, of a piston in said cylinder, a rotary inlet and exhaust valve having S-shaped ports therein adapted to register alternately with the cylinder inlet and exhaust ports, a ported sleeve surrounding said valve, and means for circulating cooling water through the valve, and a lubricant tube engaging a longitudinal groove in the valve sleeve.

7. In an internal combustion engine, the combination of the cylinders each having separate inlet and exhaust ports, pistons in said cylinders, a rotary inlet and exhaust valve having transversely-curved passages, each of which serves alternately to connect with the inlet and the exhaust ports of the cylinders and admit at one time the fuel supply and at another time permit the exhaust, and a ported lining interposed between the rotary valve and the cylinders and also between the rotary valve and the inlet and exhaust mechanism, and a lubricant tube, seated in a longitudinal groove in the ported lining, and engaging also a groove in the valve casing which surrounds the ported lining.

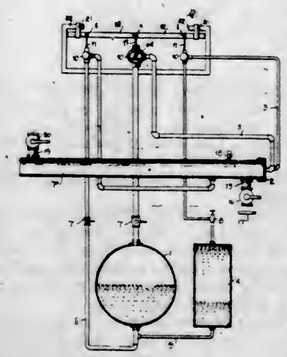
[Claims 3 to 6 not printed in the Gazette.]

1,275,289. METHOD OF REFINING FATS AND OILS. SEVERIN MORGENSTERN, Leipzig, Germany. Filed July 3, 1914. Serial No. 848,925. (Cl. 87—12.)

1. The herein described method of refining fats and oils, and particularly waste fats such as specified, which comprises mixing the material to be treated with a base, the proportion of the base being in excess of that required for saponification of the fat, heating the mixture, to effect saponification, and thereafter continuing the heating in a closed vessel at a temperature of over 150° C. while excluding air from the vessel and without permitting the gases or vapors generated to escape.

2. The improved method of refining fats and oils and particularly waste fat which consists in mixing the fat or oil with slaked lime in the proportion of about 500 parts by weight of fat to 50 parts by weight of caustic lime and heating the mixture in a closed autoclave for about six hours at a temperature of over 150° centigrade.

1,275,290. STEAM-GENERATOR. ROY L. NAUGLE, Blackstone, Va. Filed Dec. 24, 1917. Serial No. 208,672. (Cl. 60—46.)

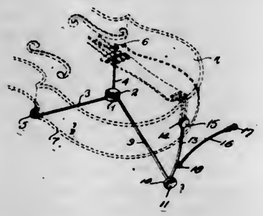


1. A steam generator comprising a tank adapted to contain a supply of water and air under pressure, a fuel tank, a conduit affording communication between both of the tanks through the lower portions thereof, a steam pipe having an end closed, a conduit leading from the upper portion of the fuel tank and in communication with the pipe at the closed end thereof, a conduit leading from the upper portion of the first named tank and communicating with the first named conduit at a point in close proximity to the pipe, a conduit leading from the lower portion of the first named tank and in communication with the pipe at a predetermined point inwardly of the closed end thereof, controlling valves interposed within each of said

conduits and provided with means for constantly urging said valves toward their seats, and means for causing said valves to move in unison and in the same general direction.

[Claims 2 to 4 not printed in the Gazette.]

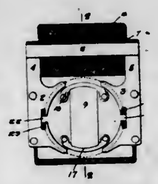
1,275,291. VIOLIN-SUPPORT. SWAN ALLEN NELSON, Tunnelhill, Pa. Filed Apr. 26, 1916. Serial No. 93,715. (Cl. 84—115.)



1. A violin support comprising a block, a pair of arms projecting from said block and adapted at their outer ends to engage the body of the violin; a brace arm projecting from said block adapted to rest upon the chest of the player a brace member projecting from the outer end of said brace arm and adapted to engage the violin body.

[Claims 2 to 4 not printed in the Gazette.]

1,275,292. IGNITION AND LIGHTING APPARATUS. ALFONS H. NEULAND, San Francisco, Cal. Filed Sept. 19, 1916. Serial No. 121,015. (Cl. 171—209.)



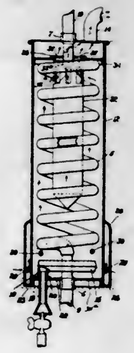
1. In a dynamo electric machine for ignition and lighting purposes, a rotatable magnet, a plurality of pole-pieces facing the magnet, a laminated core connecting said pole pieces, a high tension ignition winding on said core, and a low tension winding on the pole-pieces arranged in electrical space quadrature to said high tension ignition winding.

2. In a dynamo electric machine for ignition and lighting purposes, a rotatable magnet, pole-pieces facing said magnet, a laminated core connecting said pole-pieces, a high tension ignition winding on said core, said pole-pieces being provided at their centers with slots and a low tension winding arranged in said slots.

3. In a dynamo electric machine for ignition and lighting purposes, a rotatable magnet, pole-pieces facing said magnet, projections on said pole-pieces, a laminated core connecting said pole-pieces, low tension and high tension ignition windings arranged on said core, said pole-pieces being provided at the center of their faces with longitudinal slots and a low tension winding arranged in said slots.

1,273,293. WATER-HEATER. HENRY W. O'DOWD, Jersey City, N. J., assignor to William M. Crane Company, a Corporation of New York. Filed Aug. 30, 1912. Serial No. 717,922. (Cl. 122—250.)

1. A water heater including in combination a vertical coil, a casing therefor, a heating element under said coil within the lower end of said casing, a diaphragm traversing the upper end of the latter so as to form a separate chamber for products of combustion flowing around the outlet of the coil, and a coöperating member projected downwardly from said diaphragm with a passage leading the products of combustion from said element into said chamber.

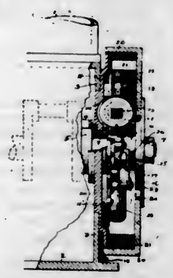


2. A water heater including in combination a casing, a coil therein, a heating element below said coil, a diaphragm above the latter forming a separate chamber between the upper end of the coil and the top of said casing, an outlet pipe leading off the casing top, a connection between said upper end of the coil and said pipe passing through said chamber, and means conveying heat from said element into said chamber centrally of said diaphragm and around said connection.

3. A water heater including in combination a vertical coil, a casing therefor, inlet and outlet pipes for said coil axially projecting from the opposite ends of said casing, a burner positioned in the lower part of the casing so as to throw heat around the inlet pipe, a diaphragm above the coil completely separating it by an intervening space from the casing top, a tubular deflector in the center of said diaphragm leading the products of combustion from said burner against the outlet pipe centrally of the space between the casing top and the diaphragm, and a flue having a peripheral communication with said space at a point remote from the outlet pipe.

[Claims 3 and 4 not printed in the Gazette.]

1,275,294. COMBINED INTERNAL-COMBUSTION ENGINE AND MAGNETO. RICHARD A. OGLESBY, South Bend, Ind., assignor to Quick Action Ignition Company, South Bend, Ind., a Corporation of Indiana. Filed Jan. 5, 1917. Serial No. 140,795. (Cl. 123—149.)



1. In internal combustion engines, a crank case, a shouldered end plate, a bearing therein central of the shoulder, a crank shaft in the bearing and projecting outside of the same, an armature coil supported adjacent the outer face of the plate, and a field magnet carried by the shaft external of the plate.

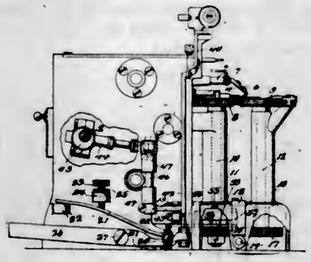
2. An internal combustion engine, comprising a cylinder and a crank case, a removable end plate to the crank case, a crank shaft having bearing in the said case and the end plate, means for retaining the plate in the case central of the shaft axis, a stationary armature supported to one side of the shaft on such plate, and a field magnet carried by the outer end of the crank shaft.

3. A prime mover, comprising a crank case, a bearing at one end thereof, a crank shaft therein, the case having an enlarged opening at the other end concentric with the shaft, a removable plate adapted to cover the opening, a bearing therein for the shaft, means for supporting the plate so as to maintain the bearing and opening in concentric relation, an armature coil supported by the plate to one side of the shaft, armature heads for said coil the other face of which is concentric with the shaft, and a field magnet carried by the shaft external of the plate the poles of which are also concentric with the shaft and adapted to function adjacent the armature heads.

5. In internal combustion engines, a crank case, and a removable end plate therefor adapted primarily to support a crank shaft and secondarily a stationary armature, and a rotating field magnet carried by the shaft.

[Claims 4 and 6 to 10 not printed in the Gazette.]

1,275,295. FEEDING MECHANISM FOR OVERSEAMING-MACHINES. LANSING ONDERDONK, New York, N. Y., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 28, 1913. Serial No. 797,774. (Cl. 112—36.)

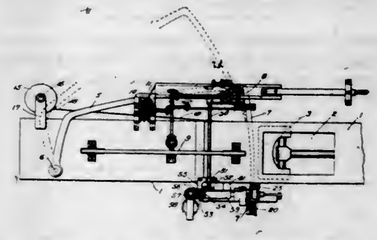


1. A sewing machine including in combination a casing, a main shaft extending into said casing, stitch forming mechanism, feed wheels for supporting and feeding a fabric in substantially a vertical plane to the stitch forming mechanism, and means for actuating said feed wheels including a vertically disposed rock shaft, an arm fixed to said rock shaft at the upper end thereof, means actuated by the main shaft for oscillating said arm, an arm connected to the lower end of said rock shaft, and devices actuated thereby for intermittently rotating the feed wheels, said last named devices being adjustable whereby the throw of the feed wheels may be varied.

2. A sewing machine including in combination a casing, a main shaft extending into said casing, stitch forming mechanism, feed wheels for supporting and feeding a fabric in substantially a vertical plane to the stitch forming mechanism, and means for actuating said feed wheels including a vertically disposed shaft, bearings on the outer face of said casing in which said shaft is journaled, an arm carried by the upper end of said shaft and extending through a slot in said casing to the inside thereof, an eccentric on the main shaft connected to said arm for oscillating said vertical shaft, an arm at the lower end of said vertical shaft extending in a direction substantially parallel to one wall of the casing, and devices operated by said last named arm for intermittently rotating said feed wheels.

[Claims 3 to 9 not printed in the Gazette.]

1,275,296. WIRE-TYING MECHANISM FOR BALING-PRESSES. EDWARD G. PADDECK, Kansas City, Kans. Filed July 21, 1917. Serial No. 182,053. (Cl. 100—20.)



1. The combination with a baling case, a means at one side of the case for holding a primary wire strand, a guide movable from the opposite side of the case to carry a secondary wire strand adjacent the held strand, a clamp for receiving the two strands, means for actuating the clamp to loop the clamped portions of the strands, and means for projecting the ends of the strands through the loop to form a knot.

4. The combination with a baling case having means at one side thereof for carrying baling strands transversely through the case, of a tying mechanism comprising a revoluble sleeve having means for gripping the ends of the baling strands, means for revolving the sleeve to form a loop in the strands and a needle for projecting a portion of the strands through the loop to form a knot.

5. The combination with a baling case having means at one side thereof for carrying baling strands transversely through the case, of a revoluble sleeve, a clutch on the sleeve for holding the ends of the strands, gears operable by a prime mover for revolving the sleeve to form a loop in the held portions, a needle adapted to project a portion of the strands through the loop to form a knot and a lift member for removing the knot from the sleeve clutch.

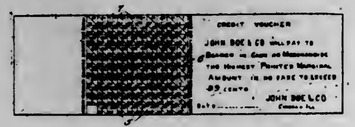
7. The combination with a baling case having a needle at one side thereof for carrying a baling strand transversely through the case, a wire tying mechanism comprising a clutch at the side of the case opposite the needle for holding the primary end of a wire strand, means for actuating the needle to carry a secondary part of the wire along the primary strand, a revolubly mounted and longitudinally movable sleeve having spaced hooks at its end, means operable by contact of the needle for releasing the primary strand and for severing the secondary strand and for moving the released ends back of said sleeve hooks, means for moving the sleeve longitudinally to bend the ends of the strands outwardly, a clutch for receiving the outturned ends of the strands, gearing for revolving the sleeve to form a loop in the strands, a needle operating within the sleeve to project the ends of the strands through the loop to form a knot and a lift bar operating after formation of the knot to lift the latter from the sleeve hooks.

9. The combination with a baling case having a needle on one side for carrying baling strands transversely through the case, of wire tying mechanism comprising a clutch mechanism at the side of the case opposite the needle for gripping the primary end of a baling strand, means for actuating the needle to carry a secondary part of the strand along the end of the primary strand, a bearing member having a socket at one side, a sleeve revolubly mounted and longitudinally movable in said bearing and having spaced hooks at its end extending from said bearing socket; said socket forming a channel about the sleeve, means operable by contact of the needle for releasing the primary strand and for severing the secondary strand and for moving the released ends back of said sleeve hooks, mechanism for moving the hooked end of the sleeve within the socket to bend the ends of the strands outwardly, a clutch for gripping the outturned ends of the strands, mechanism for revolving the sleeve to form a loop in the strands, a needle for pro-

jecting the ends of the strands through the loop to form a knot and a lift member for removing the knot from the sleeve hooks.

[Claims 2, 3, 6, and 8 not printed in the Gazette.]

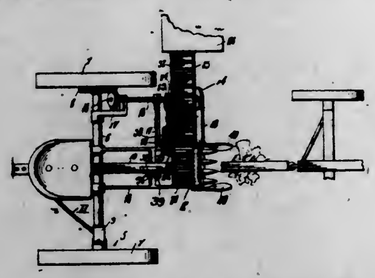
1,275,297. COMMERCIAL INSTRUMENT. CLINTON D. PALMER, Chicago, Ill., assignor to Sears, Roebuck and Company, Chicago, Ill., a Corporation of New York. Filed Oct. 31, 1914. Serial No. 869,500. (Cl. 283—12.)



1. A written instrument of the character described comprising a body portion and a stub portion, and having on one end face thereof crossing lines forming a plurality of columns of rectangular spaces, and lines bisecting said spaces, each space having a pair of duplicate numerals, the pairs of numerals being consecutively arranged in sets transversely of the sheet, the value of the denominations of each set being less than the denomination of the next adjoining set nearer the stub, the numerals of each pair being arranged on opposite sides of the bisecting line of their space, whereby the sheet may be divided along any one of the crossing lines running transversely thereof and along any of said bisecting lines to separate a rectangular space into halves, the numerals occupying the separated portions of such space being the highest of the series of numbers remaining on the body and the lowest of the series of numbers remaining on the stub.

[Claim 2 not printed in the Gazette.]

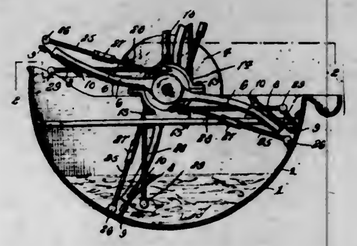
1,275,298. BEET-TOPPER. STANLEY F. PARKER, Milwaukee, Wis. Filed Oct. 8, 1917. Serial No. 195,382. (Cl. 55—107.)



In a beet topping machine, a truck including an axle, a bracket hinged at one end upon said axle and capable of swinging vertically, a cutter carried at the free end of said bracket and adjacent one side thereof, a conveyer supported by said bracket in the rear of said cutter and being disposed transversely of the said bracket, a shaft rotatably supported by said bracket at one side thereof, intermeshing bevel gears on the said shaft and axle, driving connections between the said shaft and cutter and between the said shaft and conveyer, and means for raising and lowering said bracket.

1,275,299. BULL-SCREEN CLEANER. ADAM PELLERIN, St. Flore, Quebec, Canada. Filed May 6, 1918. Serial No. 232,723. (Cl. 92—29.)

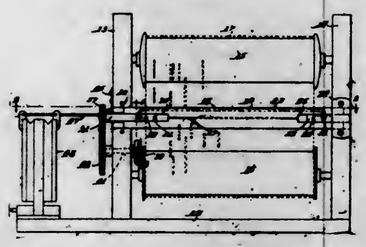
1. In a bull screen cleaner the combination of a screen, a driving shaft mounted above said screen, wipers carried by said shaft and adapted to contact with said screen, and sprayers arranged in front and in the back of each of said wipers substantially as and for the purpose specified.



4. The combination with a bull screen, of a driven shaft mounted above said bull screen, a plurality of arms carried by said shaft, a flexible wiper carried by the outer end of each of said arms, said wipers adapted to contact with said screen, sprayers carried by said shaft and adapted to rest adjacent said wipers, a supply pipe, a rotatable valve arranged within said supply pipe, means for operatively connecting said valve with said shaft, said sprayers being in communication with said supply pipe and means whereby upon the rotation of said shaft said valve will be opened and closed for supplying water to said sprayers substantially as and for the purpose set forth.

[Claims 2 and 3 not printed in the Gazette.]

1,275,300. TRACKING, TRANSPOSING, AND SUSTAINING DEVICE. GUST A. PETERSON, Rockford, Ill., assignor to Schumann Piano Company, Rockford, Ill., a Corporation of Illinois. Filed Nov. 29, 1915. Serial No. 64,026. (Cl. 84—161.)

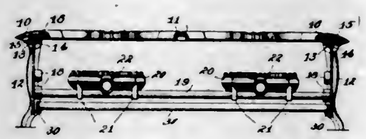


1. In an automatic musical instrument, the combination of a spool supporting frame, a tracker bar slidable transversely of said frame, said tracker bar comprising a pair of rigidly connected end portions provided with tracking-controlling apertures and an intermediate portion provided with note controlling apertures, means for adjusting said intermediate portion longitudinally with respect to said end portions for note transposition purposes, and means for automatically shifting said tracker bar bodily transversely of the frame to maintain registration between a note sheet and said tracker bar.

3. In an automatic musical instrument, the combination of a frame, a tracker bar slidable on said frame and comprising an intermediate portion provided with note-controlling apertures and rigidly connected end portions provided with tracking-controlling apertures, said intermediate and end portions being disposed in longitudinal alinement and slidably connected so as to permit longitudinal adjustment of the intermediate portion with respect to the end portions but to prevent transverse relative movement between said portions, means for manually adjusting said intermediate portion longitudinally with respect to said end portions, and means for automatically adjusting the tracker bar comprising said portions bodily, transversely of the frame to maintain tracking alinement between said tracker bar and overlying note sheet.

[Claim 2 not printed in the Gazette.]

1,275,301. GAS HOT-PLATE. GEORGE E. PICKUP, Newark, Ohio, assignor to The Wehrle Company, Newark, Ohio, a Corporation of Ohio. Filed Dec. 28, 1914. Serial No. 879,278. (Cl. 126—40.)



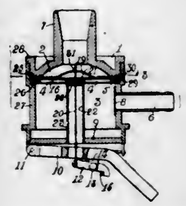
1. A gas hot plate comprising a top frame provided at each end with spaced apart loop-like bearing members, end frames each having top cross-bars provided with journals mounted to oscillate in said bearing members, means for limiting outward movement of said end frames, a brace rod having its ends detachably engaging said end frames, and one or more burners supported by said brace rod.

2. A gas hot plate comprising a top frame provided at each end with spaced apart loop-like bearing members, end frames each having top cross-bars provided with journals mounted to oscillate in said bearing members, stop lugs carried by said end frames to limit outward movement of the end frames, said top frame being provided with shoulders against which said end frames abut when in open position, and means for bracing said end frames in open position.

3. A gas hot plate comprising a top frame provided at each end with spaced apart loop-like bearing members, end frames each having top cross-bars provided with journals mounted to oscillate in said bearing members, means for limiting outward movement of said end frames, superposed sockets carried by the inner faces of the end frames, a brace rod constructed to be selectively engaged with said sockets, and one or more burners supported by said rod.

4. A gas hot plate comprising a top frame, end frames pivoted thereto at their upper ends, a brace rod for said end frames, a manifold having a plate portion and a pipe portion, means for detachably connecting said plate portion with the top frame, and one or more burners supported by said brace rod in operative relation with said manifold.

1,275,302. SOUND-REPRODUCER. ALEXANDER N. PIERMAN, Newark, N. J., assignor to New Jersey Patent Company, West Orange, N. J., a Corporation of New Jersey. Filed Jan. 19, 1914. Serial No. 812,906. (Cl. 274—6.)



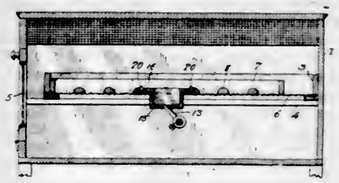
1. In a sound reproducer, the combination of a member having radially disposed slit-like ports therein converging to a point, valve strips seated upon said member covering said ports and being free at their inner ends to move away from said member opening said ports and a stylus connected to the inner ends of all of said strips and arranged to directly exert a force thereon along a line transversely thereto and coincident with said point to control the extent of opening of said ports in accordance with sound vibrations, substantially as described.

5. In a sound reproducer, the combination with a port plate having slit-like ports therethrough arranged with their axes converging to a point, of a valve seated upon said plate and comprising elongated relatively movable arms, each of said ports being covered by one of said arms, and means comprising a dome-like member applied to said arms and arranged with its axis passing through said point for actuating said valve for varying the extent of opening of said ports in accordance with sound vibrations, substantially as described.

8. In a sound reproducer, a hollow body having chambers communicating through a port and having also a passage communicating with but one of said chambers, and means for varying the extent of opening of said port in accordance with sound vibrations, said means comprising a valve arranged to cover said port, a stylus, and means connected with said stylus and passing through said passage for actuating said valve, substantially as described.

[Claims 2 to 4, 6, and 7 not printed in the Gazette.]

1,275,303. EGG-TURNING MECHANISM FOR INCUBATORS. ALFRED THRUSTON POPE, Louisville, Ky., assignor of one-half to Curran Pope, Louisville, Ky. Filed Dec. 28, 1917. Serial No. 209,339. (Cl. 119—44.)



1. In an incubator, the combination with an egg drawer, of an egg rolling frame operable therein, an oscillating actuating element therefor, means carried by the frame and capable of assuming two positions thereon, for connecting the oscillating element to the frame in one of its positions and for protecting the end of said oscillating element in its other position.

7. In an incubator, the combination with an egg drawer of an egg rolling frame operable therein, a movable actuating member, and a connecting member carried by the frame and having two openings therein into one of which openings the actuating member is adapted to extend to form a connection between itself and the frame, and beneath the other of which the actuating member is adapted to extend so that it will be permitted to move idly and the end thereof will be protected.

[Claims 2 to 6 and 8 not printed in the Gazette.]

1,275,304. HEADLIGHT-LENS. GEORGE W. PUFF, Jeannette borough, Pa. Filed Oct. 24, 1917. Serial No. 198,232. (Cl. 240—48.4.)



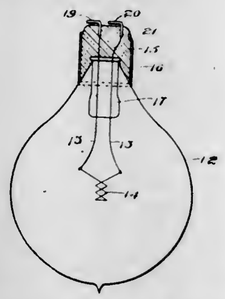
1. A headlight lens, one-half of the lens being formed to diffuse light, the other half of the lens being of clear glass, and a member extending across the lens and divid-

ing the clear portion of the lens from the other portion and interrupting rays directed upward and outward through the lens from a point below its axial center.

3. A concavo-convex headlight lens having an integral diametrically extending rib disposed on the convex face of the lens, the under face of the rib being upwardly and inwardly inclined, the other face of the rib being beveled, the lens on one side of the rib being clear and on the other side being frosted.

[Claims 2 and 4 to 7 not printed in the Gazette.]

1,275,305. ELECTRIC INCANDESCENT LAMP. HOWARD B. RAND, Merrimac, Mass. Filed Dec. 18, 1917. Serial No. 207,784. (Cl. 176—32.)



1. An electric incandescent lamp interchangeable from double to single contact and vice versa, comprising a bulb, a base attached thereto, and composed of an insulating body and a conducting sleeve embracing the body, the outer end of the body being exposed at the outer end of the sleeve, leading-in wires partially embedded in the body and supporting an incandescing filament, and conducting members connected with the leading-in wires and projecting from the outer end of the body, the projecting portions of said members being adapted to simultaneously form two contact terminals, both insulated from the sleeve, one of said members being flexible and adjustable to form either a contact terminal insulated from the sleeve and adapted to engage a contact terminal in a lamp socket, or a short-circuiting connection with said sleeve, and the other member being adapted to form at the same time a contact terminal insulated from the sleeve and adapted to engage a contact terminal in a lamp socket.

2. An electric incandescent lamp interchangeable from double to single contact and vice versa, comprising a bulb, a base attached thereto, and composed of an insulating body and a conducting sleeve embracing the body, the outer end of the body being exposed at the outer end of the sleeve, leading-in wires partially embedded in the body and supporting an incandescing filament, and flexible conducting members connected with the leading-in wires and projecting from the outer end of the body, the projecting portions of said members being adapted to be bent in one direction to simultaneously form two contact terminals, both insulated from the sleeve and located in position to engage two contact terminals in a lamp socket, and to be bent in a different direction to displace one member into short-circuiting connection with said sleeve, and locate the other member in position to form a single central contact terminal insulated from the sleeve and adapted to engage a single contact terminal in a lamp socket.

1,275,306. PNEUMATIC SUPPORT FOR STRETCHERS AND BEDS. MORRIS W. ROSENSHINE, San Francisco, Cal. Filed Oct. 24, 1917. Serial No. 198,220. (Cl. 21—80.)

1. The combination with the carrying bars of a stretcher and a canvas bottom secured thereto, of a canvas tube secured to each side of the canvas bottom in alinement with the top edges of the bars and extending from end to end thereof, and an inflatable, flexible tube adapted to be received by each canvas tube.



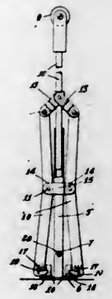
2. The combination with the carrying bars of a stretcher and a canvas bottom secured thereto, of a pneumatic tube interposed between the top edge of each bar and the canvas bottom, said tubes extending from end to end of the carrying bars, and means preventing lateral displacement of the tubes with relation to the bars.

3. A stretcher comprising a pair of carrying bars, said bars being concaved on their upper sides, a canvas bottom secured to the rails, and a pneumatic tube adapted to be received by the channel portions of the bars interposed between the bars and the canvas bottom.

4. The combination with a canvas bottom and a pair of rails for supporting same, of a pneumatic tube interposed between each rail and the canvas bottom, and a flexible protective covering for each tube.

5. The combination with a pair of bed rails, each having a groove formed in its upper edge, of a canvas bottom secured to the exterior sides of the rails and passing over the channeled upper edges of the rails, and a pneumatic tube adapted to be received by each channel groove and interposed between the canvas bottom and the top of each rail.

1,275,307. LAWN-TRIMMER. FREDERICK SAILE, Syracuse, N. Y. Filed Mar. 4, 1915. Serial No. 12,055. (Cl. 56—19.)



1. A lawn trimmer including a base including a foot and an upwardly extending part, a vertically movable handle, shears supported by the base and having the side portions thereof extending on opposite sides of the upwardly extending part of the base, levers pivoted to the upwardly extending part of the base on opposite sides thereof and having means at their lower ends for securement to the shears, and connections between the upper arms of the levers and the handle whereby upon compression of the handle toward the base the upper ends of the levers are moved outwardly and their lower ends inwardly to close the shears, substantially as and for the purpose described.

2. A lawn trimmer comprising shears, a holder for the shears including a base having a foot located below the shears, upwardly extending levers pivoted between their ends to the base above the foot and having the lower arms thereof connected to the opposite portions of the shears, a downwardly movable handle, and connections between the handle and the upper arms of said levers to move the same outwardly upon downward movement of the handle, substantially as and for the purpose specified.

3. A lawn trimmer comprising shears, a base comprising a foot located below the shears and an upright tubular portion located between opposite portions of the shears, a handle having a stem slidable in the upright portion of the base, levers pivotally connected between their ends to the said tubular portion on opposite sides thereof, means connecting the lower arms of the levers and opposite portions of the shears, and means connecting the handle and the upper arms of the levers to actuate the levers upon downward movement to the handle relatively to the foot, substantially as and for the purpose set forth.

4. A lawn trimmer comprising shears including opposing blades; and a bow spring connecting the blades, a base including a foot having an upright portion extending between the blades and a rearwardly extending arm having a socket in which the intermediate part of the bow spring of the shears is seated, a vertically movable handle, power transmitting members supported by the upright portion of the base on opposite sides thereof, clamping means for detachably connecting the lower ends of said power transmitting members to the blades, and means for transmitting the motion of the handle to the upper ends of the power transmitting members, substantially as and for the purpose described.

5. A lawn trimmer comprising shears, a holder for the shears including an upright base extending between sides of the shears in the rear of the blades, the base having a foot at its lower end, an arm projecting rearwardly from the base, and formed with a means for detachably engaging and supporting the intermediate part of the shears, said arm being adjustable forwardly and rearwardly, levers pivotally connected between their ends on the base on the opposite sides thereof and having clamping means at their lower ends for detachably engaging the sides of the shears on opposite sides of the base, a handle telescoping with the base and being movable vertically, and toggle links connecting the handle and the upper ends of the levers, substantially as and for the purpose set forth.

1,275,308. PROCESS OF MANUFACTURING VEGETABLE PROTEID SUBSTANCES. SADAKICHI SATOW, Sendai, Japan. Filed Nov. 25, 1916. Serial No. 133,308. (Cl. 99—11.)

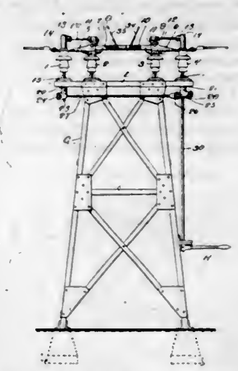
2. In the production of vegetable proteids, the process which consists in first removing the oil content from vegetable proteid containing material, then extracting with water the proteids contained in such oil freed material, then clarifying the extract into a clear transparent solution, and finally precipitating with lactic ferment the proteids contained in the clarified extract.

[Claim 1 not printed in the Gazette.]

1,275,309. SWITCH. JOHN SCHNEIDER, New York, N. Y., assignor to The Firm of Hickey and Schneider, consisting of James T. Hickey and John Schneider, New York, N. Y. Filed Apr. 13, 1914. Serial No. 831,556. (Cl. 175—282.)

1. A switch comprising a pair of contact blades projecting toward each other having their adjacent end portions contacting, the opposite ends of said contact blades being pivotally mounted, means for swinging said blades about their pivotal mountings to move their adjacent ends out of contacting relation, including arms formed upon said contact blades, links connected to said arms, a pair of rotatable members having crank arms to which said links are connected respectively, and means for simultaneously operating said rotatable members for simultaneously operating both of said contact blades.

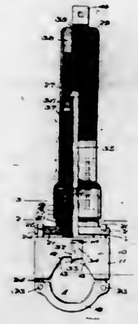
3. A switch, comprising a pair of contact blades projecting toward each other in a substantially horizontal plane having their adjacent end portions contacting, the opposite ends of the contact blades being pivotally mounted to permit the contact blades to swing in a vertical plane into and out of contacting relation, and means for swinging said contact blades about their pivotal mountings comprising laterally extending arms formed upon said contact blades, a pair of vertically arranged rotatably mounted operating shafts one adjacent each of said contact blades, crank arms carried by said operating shafts, links connecting said crank arms with the laterally extending arms of the contact blades, other crank arms carried by said operating shafts, a link connecting said last mentioned crank arms together whereby



rotary movement of one of said operating shafts will rotate the other operating shaft, and means whereby the first mentioned operating shaft may be manually rotated at will.

[Claim 2 not printed in the Gazette.]

1,275,310. TOOL FOR TRUING SHAFTS. PIERRE SCHON, Detroit, Mich. Filed June 18, 1917. Serial No. 175,455. (Cl. 82—4.)



1. In a tool for truing shafts, the combination of a jaw unit including a jaw adapted to engage against one side of a crank shaft, a second jaw slidable upon the unit for engagement against the opposite side of the shaft, means for yieldingly urging said jaws together, a cutter mounted in the second jaw, means for normally urging the cutter from contact with the crank shaft, and independent means carried by the first jaw engaging the cutter for positively advancing the same against the crank shaft interposed between the jaws.

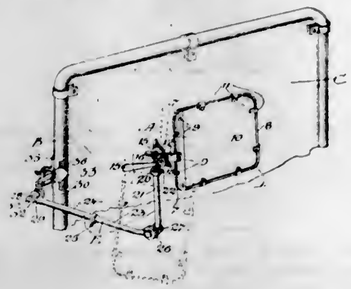
5. In a tool for truing shafts, the combination of a pair of jaws, spring means connecting the jaws and adapted to bind the same against the opposite sides of a shaft, a cutter slidably mounted in one of said jaws, independent spring means between the cutter and said jaw for urging the cutter out of contact with the shaft, and a positive adjustable connection between the opposite jaw and said cutter for advancing the latter toward the shaft against the tension of said spring means.

9. In a tool for truing shafts, the combination of a main jaw, a hollow shank projecting outwardly from the jaw, a second jaw, a pair of links detachably connected to the opposite ends of the second jaw, a connecting

element slidable upon said shank and adapted to detachably engage the free ends of said links, a handle adjustably connected to said connecting element and surrounding said shank, a spring interposed between the handle and the shank for urging the latter and the main jaw toward said second jaw, a stem slidable in the shank, a knife mounted upon the inner end of the stem and seated in the inner face of said main jaw, a spring arranged between the shank and the stem for normally urging the latter outwardly, and a set-screw carried by the handle and engaging the outer end of the stem for positively retaining the same from outward movement with respect to the handle and said second jaw.

[Claims 2 to 4 and 6 to 8 not printed in the Gazette.]

1,275,311. GLARE-SHIELD. CHARLES H. SCHUMACHER and ALBERT A. SCHMALZ, Dundee, Ill. Filed May 22, 1916. Serial No. 99,061. (Cl. 21—148.)



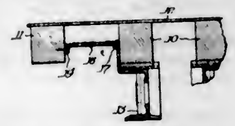
1. As a new article of manufacture an adjustable glare shield comprising a plurality of adjustable arms, means for adjustably attaching said arms to the frame of an automobile, a shield frame adjustably mounted on the end of said adjustable arm by means of a supporting plate, one member of said supporting plate being secured to the adjustable frame and the other secured to the shield frame, means rigidly secured to said frame whereby said frame may be thrown into operative or inoperative position and spring means mounted on said shield for locking said frame in either position.

2. As a new article of manufacture an adjustable glare shield comprising a plurality of adjustable arms, means for adjustably attaching said arms to the frame of an automobile, a shield frame adjustably mounted on the end of said adjustable arm by means of a supporting plate, one member of said supporting plate being secured to the adjustable frame and the other secured to the shield frame, means rigidly secured to said frame whereby said frame may be thrown into operative or inoperative position and means for locking said frame in either position, said means including a spring, one end of which is mounted on said shield and the other end on said supporting plate.

3. As a new article of manufacture, an adjustable glare shield comprising a plurality of adjustable extensible arms, means for adjustably attaching said arms to the frame of an automobile, a shield frame adjustably mounted on the end of said adjustable arm by means of a supporting plate, one member of said supporting plate being secured to the adjustable frame and the other secured to the shield frame, means rigidly secured to said frame whereby said frame may be thrown into operative or inoperative position and spring means mounted on said shield for locking said frame in either position.

1,275,312. CAR PART. OLIVER E. SHAW, Chicago, Ill. Filed Apr. 17, 1918. Serial No. 228,989. (Cl. 105—76.)

1. In a railway car, the combination with adjacent longitudinal sills of a metal reinforcing member for one of said sills, said member being provided with a laterally projecting ledge, and an insulating floor supported at one side on said ledge and at another side on the side of an adjacent sill, substantially as described.

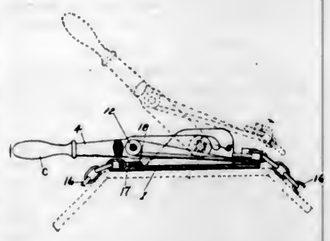


3. In a double floor car, the combination of wooden center and intermediate sills, a metal reinforcing member lying alongside of a center sill and extending rearwardly a substantial distance from the end of the car, said member being provided with an integral, laterally projecting ledge, the lower floor boards being supported on said ledge and the side of the adjacent intermediate sill, substantially as described.

5. In an insulated car, the combination of wooden center and intermediate sills, a floor laid thereon, a metal draft arm lying alongside of a center sill on the side toward an intermediate sill, said arm being in the form of a casting having an integral side ledge located at a point intermediate of its height and extending substantially from end to end thereof, and an insulating floor supported on said ledge and the adjacent intermediate sill, substantially as described.

[Claims 2 and 4 not printed in the Gazette.]

1,275,313. COLUMN-CLAMP. FRANK E. SHRINER, Detroit, Mich. Filed May 22, 1916. Serial No. 99,053. (Cl. 24—19.)



1. A clamp for concrete column forms comprising a base member adapted to engage against the form, a chain having one end secured to the base member, a pivotally mounted lever, and a hook member pivotally secured to the lever adapted to engage a link of the chain, the pivotal point of the lever being to one side of the line of strain thereon whereby said lever is held in locked position when under strain.

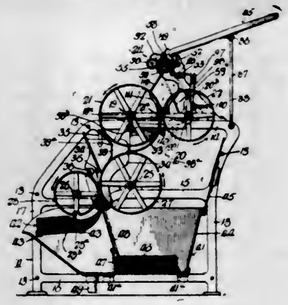
[Claims 2 to 4 not printed in the Gazette.]

1,275,314. NUT-BLANCHING MACHINE. VICTOR F. SIMON, Chicago, Ill. Filed Jan. 19, 1917. Serial No. 143,327. (Cl. 146—14.)

1. In a nut blanching machine, a pair of parallel rollers adapted to rotate in the same direction and placed with their peripheral surfaces a distance apart less than the thickness of the nuts to be blanched, means for delivering rows of spaced nuts at successive time intervals into the space between the said rollers, and means for discharging the nuts from said space at successive time intervals.

7. A nut blanching machine, comprising a hopper, a pair of skin breaking and loosening rollers, means for delivering rows of spaced nuts at successive time intervals to said rollers, and means for removing the broken and loosened skins from the nut bodies.

12. In a nut blanching machine, in combination with means for breaking and loosening the skins from the nuts, a hopper, means for delivering the nut bodies at successive time intervals to the said skin breaking means in rows of spaced nuts, comprising a plurality of upright tubes leading from said hopper, a roller associated with said tubes and adapted to direct the nut bodies into said tubes, a plurality of endless, flexible belts hung upon said roller, there being a belt for and extending through each tube, said belts being provided with spaced knots.

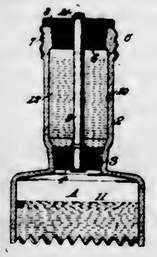


17. In a nut blanching machine, means for removing the broken and loosened skins from the nut bodies, comprising a pair of parallel, spaced, rollers, one of said rollers being provided with a longitudinal groove in its surface, means for successively delivering rows of spaced nuts into the space between said rollers, means for discharging a fluid blast against the nuts while being subjected to the action of said rollers, means for discharging a fluid blast against the surface of the grooved roller in a line above the nut receiving space, a receptacle adapted to receive the nuts discharged by said grooved roller, a deflecting device below the nut receiving space, and a receptacle to catch the skins deflected thereby.

23. In a nut blanching machine, comprising a hopper, means for vibrating said hopper, a pair of skin breaking and loosening rollers, means for delivering rows of spaced nuts at successive time intervals to said rollers, and means for removing the broken and loosened skins from the nut bodies.

[Claims 2 to 6, 8 to 11, 13 to 16, 18 to 22, and 24 to 33 not printed in the Gazette.]

1,275,315. BOTTLE. THOMAS O. L. SMITH, San Francisco, Cal. Filed Mar. 14, 1918. Serial No. 222,439. (Cl. 215—71.)

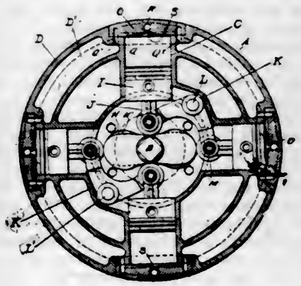


1. A bottle having spaced seats to provide a chamber for liquid to be kept separate from the main contents of the bottle, a stopper in each seat, means connecting the stoppers, and operating means secured to said connecting means and rendering the upper stopper inaccessible for removal until the lower stopper has been lifted from its seat.

6. A bottle having a part formed with spaced seats to provide a chamber between the seats, a stopper for each seat, a rod fixedly connected to the lower stopper and having its upper end extending through and beyond the upper stopper, said upper end of the rod being formed with an annular groove, and a cap engaged over the upper stopper and having a hole to receive said upper end of the rod, the wall forming said hole in the cap being bent to engage in the groove of the rod so that when the cap is raised the rod will be raised therewith.

[Claims 2 to 5 not printed in the Gazette.]

1,275,316. PNEUMATIC CLUTCH. JOHN SPRINGER, Batavia, N. Y. Filed Mar. 29, 1917. Serial No. 158,251. (Cl. 192—18.)



1. In a pneumatic clutch, the combination with rotary drive and driven members, of a series of radially arranged cylinders on one of said members, pistons in said cylinders, means carried by the other of said drive and driven members for actuating said pistons successively in an outward direction, and a connection between each piston and an adjacent piston to actuate one of the connected pistons inwardly when the other is actuated outwardly.

4. In a pneumatic clutch, the combination with rotary drive and driven members, of a series of radially-arranged cylinders on one of said members, pistons in said cylinders, piston rods, a bell-crank lever connecting adjacent piston rods, anti-friction rolls journaled on the pivotal connection between said rods and bell-crank lever, and cams on the other of said drive and driven members for engaging said rolls to actuate said adjacent pistons successively outward, the inward movement being effected by said bell-crank lever.

8. In a pneumatic clutch, the combination with rotary drive and driven members, of a series of cylinders on one of said members radially arranged to form opposed pairs having transverse axes in the same plane, pistons in said cylinders, connecting rods extending inward from said pistons and pivotally attached thereto, bell-crank levers connecting the rods of the pistons having transverse axes, rolls upon opposite ends of said bell-crank levers laterally offset in relation to each other, and cams upon the other of said drive and driven members respectively in the planes of said offset rolls and fashioned to reciprocate said pistons and maintain peripheral contact with said rolls during the entire movement.

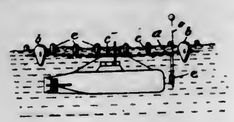
14. In a pneumatic clutch, the combination with rotary drive and driven members, of a series of radially arranged air compressors forming a plurality of opposed pairs, pistons therein and mechanism operated by a relative movement of said drive and driven members for simultaneously imparting to one pair of said pistons an outward movement and an inward movement to another pair.

[Claims 2, 3, 5 to 7, and 9 to 13 not printed in the Gazette.]

1,275,317. DEVICE FOR DESTROYING SUBMARINES. MARCUS C. STEARNS, New York, N. Y. Filed June 16, 1917. Serial No. 175,072. (Cl. 102—3.)

1. A device for destroying submarines comprising a running cable, means to float the cable, a mine secured to

the cable, and devices for releasing and setting the mine adapted to be actuated by engagement of a submarine with the running cable.



4. A device for destroying submarines comprising a running cable, means to float the cable, a mine secured to the cable, an air chamber formed in the mine to float it, devices for releasing the air from said chamber adapted to be actuated by engagement of a submarine with the running cable, thereby permitting the mine to sink below the cable for contact by the submarine, and a jacket incasing the mine and dislodged upon release of the mine from the cable.

10. A device for destroying submarines comprising a series of squares interlocked and each comprising four stout cables, running cables extending in each square from the stout cables to the center thereof, a ring through which the running cable passes at the center, floats to support all of the squares, mines attached to each running cable, and devices for releasing and setting the mines adapted to be actuated by engagement of a submarine with their respective running cables.

13. A device for destroying submarines comprising a series of squares interlocked and each comprising four stout cables, running cables extending in each square from the stout cables to the center thereof, a ring through which the running cable passes at the center, floats to support all of the squares, mines attached to each running cable, devices for releasing and setting a plurality of such mines adapted to be actuated by engagement of a submarine with their respective running cables, and means for recovering the unexploded mines.

[Claims 2, 3, 5 to 9, 11, and 12 not printed in the Gazette.]

1,275,318. CUSHION-SPRING. ROBERT L. STEVENS, Albion, Mich., assignor to National Spring & Wire Company, Albion, Mich., a Corporation of Michigan. Filed Dec. 2, 1916. Serial No. 134,560. (Cl. 5—29.)



1. In a cushion spring, the combination with lower and upper abutting deck springs, of a sheet-metal strip having struck-out tongue portions for embracing the coils of one of the decks, said tongues being also bent into engagement with the abutting coil of the other deck to secure said decks to each other.

3. A cushion spring, comprising lower and upper abutting deck coil springs, an intermediate frame comprising a border wire and cross-strips of sheet-metal arranged in alinement with rows of springs, said strips being provided with struck-out tongues for embracing the base coils of the upper deck springs and bent downward through the apertures in said strip and clenched about the abutting coils of the lower deck springs.

[Claims 2 and 4 not printed in the Gazette.]

1,275,319. STORING AND RECLAIMING APPARATUS. FRANCIS LEE STUART, Washington, D. C., assignor to International Conveyor Corporation, New York, N. Y. Filed Dec. 22, 1917. Serial No. 208,355. (Cl. 193—4.)

1. A system for storing material, comprising truck-supported unit conveyers, a track on which they are stored, a truck-supported transfer table provided with means for receiving and supporting the unit conveyers, a conveyer belt which receives material to be stored, a tripper coöperating with said belt and movable with the transfer table, means for conveying the material from the tripper to a unit conveyer, and means for delivering material from the unit conveyer.

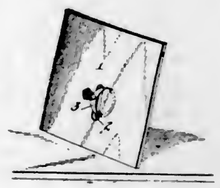


6. A system for storing material, comprising truck-supported unit conveyers, a track on which they are stored, a truck-supported transfer table provided with means for receiving and delivering to the unit conveyers, a conveyer belt which receives material to be stored, a tripper coöperating with said belt and movable with the transfer table, a shuttle conveyer on the transfer table receiving material from the tripper and delivering to a unit conveyer carried by the transfer table, and means for discharging from the unit conveyer.

8. A transfer table provided on its upper portion with an extensible or shuttle conveyer, a track below the shuttle conveyer for supporting a unit conveyer, and another track on the transfer table for supporting a reclaimer or a stacker.

[Claims 2 to 5 and 7 not printed in the Gazette.]

1,275,320. DEVICE FOR DISPLAYING FINGER-RINGS. JOHN R. SUNDEE, Buffalo, N. Y., assignor to Warner Jewelry Case Company, Buffalo, N. Y., a Corporation of New York. Filed May 21, 1915. Serial No. 29,541. (Cl. 211—24.)



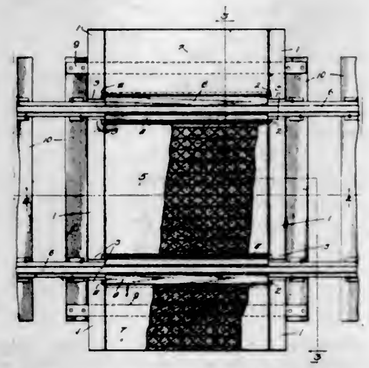
A display device, comprising a tablet having an aperture and opposing strips of resilient material secured transversely to the back of the tablet, the inner portions of said strips being bent rearwardly substantially at right angles to the tablet with their meeting faces in line with said aperture, said rearwardly-bent portions being arranged vertically and terminating near the lower edge of the tablet, forming a combined brace and article-holder.

1,275,321. FOOT OR ROAD CROSSING. OSCAR M. SUTER, Chicago, Ill. Filed Mar. 18, 1918. Serial No. 223,206. (Cl. 104—14.)

1. In a track crossing, a crossing section resting upon the ties of the track and equipped with downwardly directed formations engaging certain of the ties to prevent a movement of the said crossing section longitudinally of the track.

3. A track crossing portion comprising a slab or unit crossing section resting upon the ties, and a pair of guard rails interposed between opposite sides of the slab and the running rails of the track, the slab being equipped with downwardly sloping ends adapted respectively to engage two ties of the track, the said ends extending laterally beyond the slab so as to afford stops for preventing a relative longitudinal movement of the guard rails with respect to the slab.

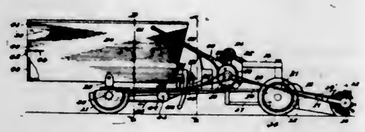
5. In a track crossing, a guard rail having a portion underhanging the head of one of the track rails, a substantially flat crossing portion resting upon ties of the track and laterally engaging the guard rail, means associated with the said crossing portion for preventing displacement of the latter both longitudinally and laterally of the running rail, and means upon the said crossing



portion for preventing a relative longitudinal movement of the guard rail with respect to the latter.

[Claims 2, 4, and 6 to 8 not printed in the Gazette.]

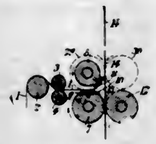
1,275,322. MOTOR STREET-CLEANER. ANDREW SIMKO, Passaic, N. J. Filed Aug. 6, 1917. Serial No. 184,646. (Cl. 15—17.)



1. In combination with a vehicle having a platform, a frame upon the rear portion of said platform, a collection box pivoted in said frame being normally horizontally arranged, a sweeping brush, a receiver for the sweepings arranged adjacent the brush, a fan operatively connected to the receiver, a telescopic pipe having swiveled connections with the box and hinged connections with the outlet of said fan and means for simultaneously operating the fan and brush.

[Claim 2 not printed in the Gazette.]

1,275,323. METHOD OF MAKING OPEN-FACE ENVELOPS. GEORGE W. SWIFT, Jr., Bordentown, N. J. Filed Apr. 1, 1915. Serial No. 18,611. (Cl. 93—61.)



2. The method of making open-faced envelops which consists in continuously progressing a web of transparent material, successively cutting from said web, at a predetermined rate, patches of said material of such dimensions as to form covers for the envelop openings and supplying individual envelop blanks having openings therein to said patches successively in a timed relation determined by the position of the openings, said timed relation being such that the distance between the openings always remains the same and the opening in each blank comes into registry with a patch and is covered thereby irrespective of the size of the blank.

[Claim 1 not printed in the Gazette.]

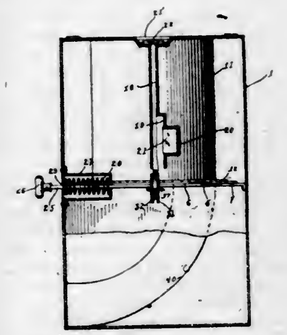
1,275,324. PROCESS OF OBTAINING PROTEID MATTER FROM CORN. JOKICHI TAKAMINE, New York, N. Y., and SADAKICHI SATOW, Sendai, Japan. Filed Nov. 25, 1916. Serial No. 133,310. (Cl. 99—11.)

1. In the production of vegetable proteids from corn, the method which consists in softening the corn grains, then roughly crushing them and removing the oil carrying germs from the mass, then grinding the mass with water, then bolting the resulting liquor and removing therefrom the starch contained therein, and separating the solid matter from the remaining liquid, in the form of a "meal," then passing the meal into a liquid solution, and finally separating the proteidal contents of the liquid solution.

7. In the production of vegetable proteids from corn the method which consists in softening the corn grains, then crushing the same and removing with water the germs of the corn grains, then grinding the mass with water and removing the bran and starch from the resulting liquor, then separating the solid substances remaining in the liquor, then passing the separated substances into a liquid solution and finally precipitating the proteidal contents of said liquid solution.

[Claims 2 to 6 not printed in the Gazette.]

1,275,325. VENDING-MACHINE. RENE E. TATRO, Kankakee, Ill. Filed Oct. 7, 1915. Serial No. 54,605. (Cl. 194—88.)

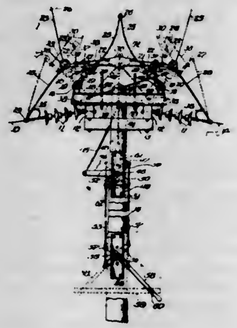


In a device of the class described, the combination of a housing, dispensing means carried within said housing, a coin chute carried by said housing, a coin holder positioned below the lower end of said coin chute, said coin holder comprising parallel spaced arms, a vertical opening formed adjacent the inner end of said arms, a pivot pin passing through said opening, thus pivotally supporting said coin holder for permitting the same to be swung in a horizontal plane, means for normally retaining said coin holder below the lower end of said coin chute, means for swinging said coin holder to one side for effecting the operation of the dispensing means by a coin carried by said coin holder, and means associated with said coin holder for temporarily retaining the coin therein until the coin holder has been swung to one side to a predetermined degree.

1,275,326. AIR-BREAK SWITCH. JOHN R. TOWNSEND, Chicago, Ill. Filed Nov. 26, 1915. Serial No. 63,659. (Cl. 175—282.)

1. In an electric switch, the combination of a pair of main contact members adapted to engage each other, means for separating said contact members from each other, a pair of auxiliary spring contact members each of which is carried by one of said main contact members, said auxiliary contact members adapted to engage each other during the engagement of said main contact members and to be separated from each other only after said main contact members have been separated from each

other, and a V-shaped guiding member carried by one of said auxiliary contact members, whereby the engagement of the other auxiliary contact member with said first-mentioned auxiliary contact member is insured.



2. In an electric switch, the combination of a shaft, means for rotating said shaft, an insulator carried by said shaft, a contact member carried by said insulator, said contact member having an end adapted to engage a companion contact member, a protector housing carried by and above the engaging end of said contact member, and means for maintaining said housing in covering position above said end during rotation of said shaft in moving said switch from closed to open position, whereby said end is covered in every position at all times.

6. In an electric switch, the combination of a pair of parallel shafts, a contact member carried by each of said shafts, said contact members adapted to be brought into engagement with each other when said switch is in closed position, means for simultaneously rotating said shafts in opposite directions from one predetermined position of said shafts to another at a rate of speed gradually increasing from the starting point to substantially the midpoint of the path of travel of said shafts and at a rate of speed gradually decreasing from substantially the midpoint to the end of said path of travel, and means for rotating said shafts synchronously.

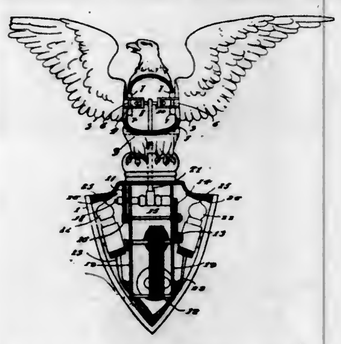
9. In an electric switch, the combination of a pair of parallel shafts, a contact member carried by each of said shafts, said contact members adapted to engage each other when said switch is in closed position, a toggle having a pair of arms pivotally connected with each other and forming a substantially straight line with each other when said switch is in closed position, a bell crank lever, a link extending from the pivotal point of connection of said toggle arms to one arm of said bell crank lever, said arm and said link adapted to be brought into substantially a straight line when the switch is in open position, means for actuating said bell crank lever, and a drag link connecting said shafts, whereby the latter will be moved synchronously.

[Claims 3 to 5, 7, and 8 not printed in the Gazette.]

1,275,327. DISPLAY NOVELTY FOR MOVING VEHICLES. WILLIAM A. UTTZ, Ardmore, Okla. Filed Jan. 28, 1918. Serial No. 214,042. (Cl. 46—40.)

1. A radiator novelty comprising a design and a casing for mounting the same on a radiator of a motor vehicle and operating mechanism for actuating said design including an electric motor mounted in said casing and to be operatively connected with the power plant of the vehicle.

2. A radiator novelty comprising a design and means for mounting the same on a radiator of a motor vehicle comprising a casing to be attached to the radiator, said design being provided with moving elements, and means including an electric motor mounted in said casing and operatively connected with said moving elements and to be electrically connected with the power plant of the vehicle for automatically operating said moving elements.



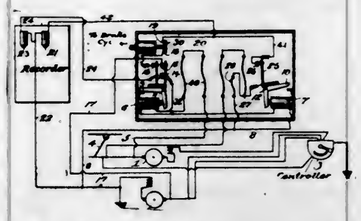
3. A radiator novelty comprising a design and means for mounting the same on a radiator of a motor vehicle comprising a casing to be attached to the radiator, said design being provided with moving elements, and a motor mounted in said casing and operatively connected with said moving elements and to be electrically connected to the power plant of the vehicle for automatically actuating said moving elements.

4. A novelty comprising a design and means for mounting the same on a motor vehicle comprising a casing to be attached to the vehicle, said design being provided with moving elements, and a motor mounted in said casing and operatively connected with said moving elements and to be electrically connected with the power plant of the vehicle to be actuated by the power plant of the vehicle for automatically actuating said moving elements.

5. A novelty comprising an eagle provided with movable wings and means for mounting the same on a vehicle comprising a casing attached to a vehicle, a motor mounted in said casing, actuating devices operatively connected with said motor and with said wings whereby said wings are moved by said motor, and means for making electrical connection of said motor with the power plant of the vehicle.

[Claims 6 to 11 not printed in the Gazette.]

1,275,328. INDICATING DEVICE. WILLIAM O. WADE, Los Angeles, Cal., and CHARLES C. CHAPPELLE, New York, N. Y., assignors to Railway Improvement Company, New York, N. Y., a Corporation of New York. Filed Aug. 26, 1915. Serial No. 47,540. (Cl. 161—15.)



1. The combination with a coasting indicating device for cars, of an indicating device for indicating, for the purpose of recording the same, only the stops of the car when the car comes to a full stop, and means for maintaining both of said devices inoperative while the car is being propelled by power.

2. The combination with a coasting indicating device for cars of an indicating device for indicating, for the purpose of recording the same, only the stops of the car when the car comes to a full stop, and means for rendering said coasting indicating device operative when the car propelling power is shut off and the car moves under its own momentum, said means maintaining said stop indicating device inoperative.

6. The combination with a coasting indicating device for cars, of an indicating device for indicating, for the purpose of recording the same, only the stops of the car when the car comes to a full stop, and means operated by the car motor employed as a generator for maintaining said stop indicating device inoperative while said coasting indicating device is operative.

[Claims 3 to 5 and 7 to 21 not printed in the Gazette.]

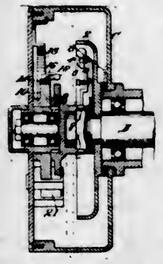
1,275,329. DRIVING-CHAIN. GEORGE WADHAMS and ARTHUR THOMAS BEST, Birmingham, England. Filed June 18, 1917. Serial No. 175,468. (Cl. 74—32.)



1. A driving chain comprising a plurality of links, including alternate pairs of inner and outer plates, an abutment plate provided with an elongated opening, carried by each pair of outer plates, a guide rod for each pair of abutment plates and a spring carried by each said rod, the ends of such rod being mounted in the openings formed in the abutment plates, in such a manner as to permit angular movement between the said guide rod and abutment plates but preventing lateral movement.

2. A driving chain comprising a plurality of links, including alternate pairs of inner and outer plates, an abutment plate, formed with an opening and being further provided with a flange around said opening, and carried by each pair of outer plates, a guide rod for each pair of abutment plates and a spring carried by each said rod, the ends of said rod passing through the openings formed in the abutment plates, the flanges formed around said openings of a pair of abutment plates providing extended bearings for the guide rod.

1,275,330. SPEED-LIMIT WARNING AND THEFT ALARM. GEORGE WAGNER, Oakland, Cal., assignor of one-half to Julius A. Borkman, Oakland, Cal. Filed Sept. 18, 1916. Serial No. 120,651. (Cl. 116—65.)



1. A speed limit warning attachment for vehicles, including a wheel and bearing axle, a fixed circular gong concentric with the axle spindle, a cam turnable upon the wheel axle and having a peripheral notch, centrifugally acting weights with arms connected with the cam, a second cam with projecting pins, a gong hammer having a trip arm in the line of revolution of the pins, and means controlled by the movements of the weights to cause the cams to turn in unison.

3. A speed limit alarm comprising in combination with a vehicle wheel, a stationary gong, a fulcrumed tiltable hammer, a cam having pin lugs adapted to engage and actuate the hammer when a certain speed of revolution is exceeded, a weight member extensible by centrifugal force in unison with the revolution of the wheel, a second cam to which the arm of the weight is pivoted provided with a notch and an incline leading down one side thereto, said first cam having a depression registrable with the cam notch, and an arm having a part for riding on the incline and down into the notch of the second cam and the depression of the first cam to connect the two cams.

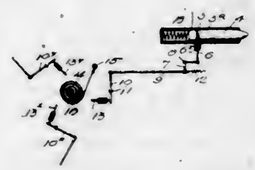
5. In a speed alarm attachment of the character described, a revoluble wheel, centrifugally expansible weight members revoluble in unison with the wheel, a cam, and arms connecting it with said members so that the movement of the weight members partially rotates the cam, a second parallel cam with a peripheral shoulder, a spring-pressed arm with a head contacting with the cams and engaging the incline of the first named cam to allow the head to depress and engage and rotate the second cam when the first cam face passes beneath the coacting head, pins projecting from the second cam, an oscillating hammer which is set in motion by the pins, and a fixed gong with which the hammer contacts.

7. In a speed limit alarm, rotary means having a relatively rotary member, centrifugally operated means for turning said member, a gong, means for sounding the latter including a member rotatable by said first member but normally inoperatively related thereto, said first member having a cam surface and the second member having a shoulder, and means adapted to ride on the cam surface, when said first member is turned by the centrifugal means, into the path of the shoulder to engage the same and connect the members.

8. In a speed limit alarm, a driving rotatable member, a driven rotatable member arranged adjacent the same and normally inoperatively related thereto, each member having a depression normally out of registry, centrifugal means for moving one member to bring the depressions into registry, means movable into the registered depressions for connecting the member, and a signal operable by said driven member.

[Claims 2, 4, and 6 not printed in the Gazette.]

1,275,331. TOY. ORMOND EDGAR WALL, Honolulu, Hawaii. Filed July 31, 1917. Serial No. 183,724. (Cl. 46—37.)



1. In a toy, a base, a plurality of movable devices mounted upon said base, means for normally locking said movable devices in position, and automatic means for releasing the locking means successively, said means comprising a coiled spring and means engaged by the spring when uncoiling for withdrawing the locking mechanism.

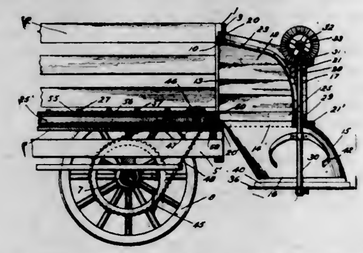
2. In a toy, a base, a plurality of guns carried thereby, and automatic means for firing the guns successively, said means comprising a coiled spring and means engaged by the spring when uncoiling for operating the firing means.

3. In a toy, a base, a plurality of guns carried thereby, each of said guns being provided with a spring, a projectile for each gun, arranged to engage the spring, and to compress the latter, a locking pin arranged to engage the projectile, a link and lever connection for each locking pin, and a coiled spring arranged to actuate each of the link and lever connections in succession, causing the release of the locking pin and the firing of the projectile.

4. In a toy, a base, a plurality of guns carried thereby, each of said guns being provided with a spring, a projectile for each gun arranged to engage the spring and to compress the latter, a locking pin arranged to engage

the projectile, a link and lever connection for each locking pin, and a coiled spring arranged to actuate each of the link and lever connections in succession, causing the release of the locking pin and the firing of the projectile, said link and lever connections being disposed at different distances from the center of the spring.

1,275,332. FERTILIZER-DISTRIBUTING MECHANISM. HALBERT C. WALLACE, Kansas City, Mo. Filed Nov. 6, 1916. Serial No. 129,705. (Cl. 275—3.)

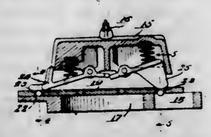


1. In a distributing device of the character described, a hopper comprising front intake and bottom discharge openings, an open bottom basket adapted for receiving material thereinto at one side, a rotatable shaft suspended vertically from the hopper and extending through the basket, agitator arms fixed to the shaft within the basket and a delivery disk adjustable in the lower end of the shaft toward or from the basket opening, and means for rotating the shaft.

3. The combination with a vehicle body having an end opening, of a distributing device comprising a hopper having front intake and bottom delivery openings, supporting rails fixed to the hopper and extending through said vehicle body opening to support the hopper to receive material therein from said vehicle, an open bottom basket fixed to the hopper and adapted to receive material therefrom, a rotatable shaft suspended vertically at the back of the hopper and extending through the hopper and centrally through the bottom opening thereof, agitator arms fixed on the shaft within the basket and a delivery disk adjustable on the end of the shaft toward or from the basket opening, and means for rotating the said shaft to actuate the agitator arms and delivery disk.

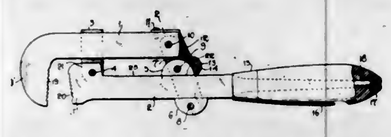
[Claims 2 and 4 not printed in the Gazette.]

1,275,333. PLANTER. LEWIS E. WATERMAN, Rockford, Ill., assignor to Emerson-Brantingham Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 16, 1915. Serial No. 67,203. (Cl. 221—125.)



Means for planting comparatively small round seeds, one at a time, comprising in combination, a suitable seed box having a discharge opening, a seed plate rotatably mounted in the bottom of the box and having an annular cell-containing portion of a thickness substantially equal to the mean diameter of the seeds to be planted, said cell-containing portion being formed with a plurality of circumferentially spaced seed cells, the top of which are substantially round and of a diameter slightly greater than the mean diameter of the seeds to be planted and which are tapered so as to diverge downwardly, the top surface of the seed plate being formed with an annular shallow groove connecting the seed cells, whereby to facilitate entrance of seeds thereto and also whereby a seed disposed in a cell will project into the groove-way, cut-off means arranged to allow carriage to the discharge opening of only those seeds disposed in the seed cells, and a yieldingly depressed knocker shaped to fit and ride in said groove, so that as each seed cell is moved past the knocker that portion of the seed projecting into the path of the knocker will be engaged and forced downwardly by the latter as the same passes over the cell, thereby insuring discharge of the seed from the cell.

1,275,334. PIPE-WRENCH. BEN WATTS, Jarbidge, Nev., assignor of forty-nine one-hundredths to Warren P. Godfrey, Jarbidge, Nev. Filed Apr. 24, 1918. Serial No. 230,510. (Cl. 81—134.)



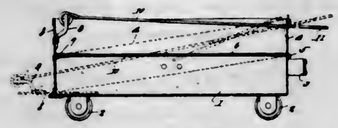
1. A pipe wrench comprising a shank having a fixed jaw at one end, a guide loop pivotally engaged with the shank adjacent the jaw and extending laterally therefrom, a second shank disposed through the guide loop and overlapping an edge face of the first named shank, said second named shank being provided with the jaw overlying the fixed jaw, a member pivotally engaged with the free end portion of the second shank and extending across the first named shank, dogs pivotally engaged with said member and coacting with the opposite edge faces of the shank, each of said dogs being substantially semi-circular in form and having its straight face engageable with an edge face of the first named shank, one of said dogs and the coacting edge face of the first named shank being provided with teeth adapted to interlock, a pin carried by the member and overlying the toothed face of the first named shank and rearwardly of the dog coacting with said face, and a flat spring carried by the second named shank and contacting with the pin carried by the member for normally maintaining the straight faces of the dogs in contact with the coacting edge faces of the first named shank.

2. A pipe wrench comprising a shank having a fixed jaw at one end, a guide loop pivotally engaged with the shank adjacent the jaw and extending laterally therefrom, a second shank disposed through the guide loop and overlapping an edge face of the first named shank, said second named shank being provided with a jaw overlying the fixed jaw, a member pivotally engaged with the free end portion of the second shank and extending across the first named shank, dogs pivotally engaged with said member and coacting with the opposite edge faces of the shank, each of said dogs being substantially semi-circular in form and having its straight face engageable with an edge face of the first named shank, one of said dogs and the coacting edge face of the first named shank being provided with teeth adapted to interlock, a pin carried by the member and overlying the toothed face of the first named shank and rearwardly of the dog coacting with said face, and a flat spring carried by the second named shank and contacting with the pin carried by the member for normally maintaining the straight faces of the dogs in contact with the coacting edge faces of the first named shank, said dogs being offset one relative to the other longitudinally of the first named shank when the straight faces of said dogs are in engagement with the coacting edge faces of the shank.

1,275,335. ASH-PAN. ALFRED F. WAY, Charlotte, Mich. Filed June 26, 1917. Serial No. 177,102. (Cl. 83—60.)

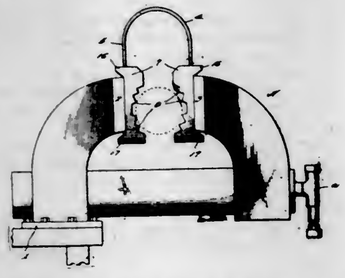
1. An ash pan, including a lower pan, a sieve mounted on the pan, means hinged to the rear end of the pan and normally closing the pan, and means for moving the closing means to a position upon the bottom of the pan to lower the sieve to inclined position.

2. An ash pan, including a lower pan, a sieve hinged to the pan at one end thereof, a plate hinged at the rear end of the sieve and normally closing the rear end of the pan and sieve, and a rod for rocking the plate on its hinge to rest upon the bottom of the pan and support the sieve in inclined position.



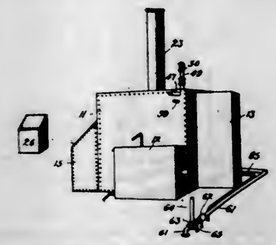
3. An ash pan comprising a support, a pan on the support, a wire mesh bottom for the pan, a pivotally mounted end for the pan, means for normally locking the end against pivotal movement, and means for rocking the end to contact the support and lower the pan to inclined position.

1,275,336. ATTACHMENT FOR VISES. HENRY G. WEATHERILL, Elgin, Ill. Filed Dec. 20, 1916. Serial No. 137,998. (Cl. 81—39.)



A device of the class described comprising gripping blocks, a resilient member provided with a plurality of opposed arms, dovetailed keys secured in transverse relation to the arms and corresponding key-ways in the blocks, the taper of the keys and key-ways being such as to frictionally retain the blocks in operative position upon the arms.

1,275,337. OIL-REFINING APPARATUS. FRANK E. WELLMAN, Kansas City, Kans., assignor to The Kansas City Gasoline Company, Kansas City, Kans., a Corporation of Kansas. Filed July 22, 1916. Serial No. 110,796. (Cl. 196—1.)



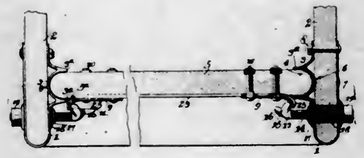
4. In apparatus of the class described, an inclosed still and a detached protected operator's observation and controlling position as herein described and illustrated.

5. In apparatus of the class described, a still or retort for high temperatures and pressures, a housing for said retort, bomb-proof vestibules adjacent said housing with observation connections between them and the interior of the housing, and an underground passage connecting said vestibules.

6. In apparatus of the class described, a still or retort for high temperatures and pressures, a housing for said retort, operators' vestibules adjacent said housing with observation connections between them and the interior of the housing, cleaners' vestibules adjacent said housing communicating therewith with bomb-proof closures between the said cleaners' vestibules and the interior of the housing, an underground passage communicating with all of said operators' vestibules, and a second underground passage isolated from said first passage and communicating with all of said cleaners' vestibules, surface entrances for said passages situated at a distance from said still or retort, and bomb-proof houses for said entrances.

[Claims 1 to 3 and 7 not printed in the Gazette.]

1,275,338. END-GATE FASTENER. LEVI P. WELLS, Gering, Nebr. Filed Dec. 22, 1917. Serial No. 208,459. (Cl. 21—21.)



1. In a device as described, the combination with the sides of a wagon, each side having a shallow vertical groove, of a sheath for the end of each side, each sheath including a semi-circular cleat occupying the adjacent groove, a securing member for holding each cleat in the groove, an end gate adapted to be set in position between the cleats, hook devices at the ends of the end gate, a clamp device journaled in each wagon side near each cleat, each clamp device being arranged to engage the companion hook device and upon operation thereof, to draw the end of the end gate into the adjacent cleat, the engagement of the cleat with the groove and the associated securing member, preventing the cleat from being displaced under pressure, and a brace rod reaching from one hook device to the other, with portions partly embracing the hook devices to strengthen said devices at the points of engagement of the clamp devices.

4. In a device as described, an end gate, having a rounded end, a hook plate including a hook located adjacent to said rounded end and provided with a recess, a combined sheath and cleat arranged to be secured on the end of a wagon side, the cleat including a semi-circular guide receiving the rounded end of the end gate, a bushing secured in said sheath and wagon side, a nut revoluble in said bushing and including means preventing longitudinal motion thereof, means for turning the nut, a clamp screw threaded in the nut and including a shank receivable by said recess, and a clamp head carried by said screw engaging said hook.

6. In a device as described, the combination with the hook having a recess on the edge, a clamp screw, including a shank receivable in said recess, a clamp head engageable with said hook and having beveled edges adapted to ride over the edge of the hook in moving said head to the locking or unlocking position and a lug formed on the head for rotating the head.

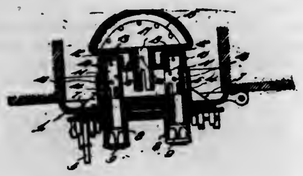
7. In a device as described, the combination with a wagon side having a shallow vertical groove, a metallic sheath binding the end of the wagon side to prevent breaking and splitting, a semi-circular cleat included in said sheath adapted to occupy said groove, and means passing through the wagon side from the semi-circular cleat to the adjacent sheath portion, to bind said semi-circular cleat in said groove and preventing it from springing out.

10. In a device as described, the combination with the sides of a wagon, of an end gate adapted to be fitted across the back of the wagon between the sides, hook plates on

the end gate, having hooks equal in height to that of the end gate, and clamping devices carried by the wagon sides and adapted to clamp said hooks at any point, to support the end gate at different heights.

[Claims 2, 3, 5, 8, and 9 not printed in the Gazette.]

1,275,339. SMOKE-ABATOR. LEONIDAS D. WEST, Denver, Colo. Filed Dec. 28, 1917. Serial No. 209,312. (Cl. 110—175.)



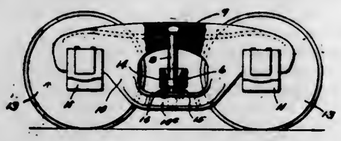
1. The combination with a furnace coaling door having at its inner side an air heater for continuously supplying hot air to the firebox and having adjacent said heater a dampered air inlet for supplying additional air after coaling; of a plurality of webs extending at an angle from said heater to said door and disposed in the path of the incoming air from said inlet.

5. A structure as specified in claim 3, together with a base bar to which one end of said webs is secured, said base bar having an integral ear, an additional ear on said heater with which said first named ear contacts, and a bolt passing through the two ears.

7. An air heater for furnaces comprising a hollow body having in its front side an air inlet opening and in its rear side an additional opening, an apertured air retarder in said body receiving the air from said inlet opening, and an air spray nozzle having a tubular apertured neck extending into said body through the opening in the rear side thereof.

[Claims 2 to 4, 6, and 8 to 10 not printed in the Gazette.]

1,275,340. CAR-TRUCK. CHARLES T. WESTLAKE, St. Louis, Mo., assignor to Commonwealth Steel Company, St. Louis, Mo., a Corporation of New Jersey. Filed Nov. 26, 1917. Serial No. 204,084. (Cl. 105—243.)



1. A car truck comprising truck side frames each supporting a hanger, said hangers in turn supporting a truck bolster, said bolster in turn yieldingly supporting a car body at points inside the car wheels of the truck and there being permitted a universal movement between said bolster and said truck side frames.

2. In a car truck, the combination of side frames, a bolster suspended therebetween and having a universal movement relative thereto, a car underframe, and supporting springs interposed between said underframing and said bolster.

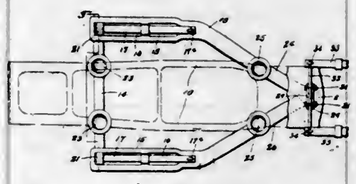
3. A car truck comprising two side frames, a bolster supported therebetween and capable of universal movement relative thereto, said bolster being provided with a spring seat, springs on said seat for supporting the underframing of the car, and telescopic connections between said spring seats and the underframing of the car.

7. In a car truck, a pair of side frames, a hanger pivotally connected to the central portion of each side frame and depending therefrom, a truck bolster supported by said hanger and having universal joint connections therewith, and a body bolster yieldingly supported by said truck bolster.

8. In a car truck, a pair of side frames, a truck bolster suspended from and arranged between said side frames, springs on said truck bolster at points between the wheels of the truck, and a body bolster supported by said springs.

[Claims 4, 5, and 6 not printed in the Gazette.]

1,275,341. TRAILER-TRUCK FOR LOCOMOTIVES. CHARLES T. WESTLAKE, St. Louis, Mo., assignor to Commonwealth Steel Company, St. Louis, Mo., a Corporation of New Jersey. Filed Jan. 15, 1918. Serial No. 211,940. (Cl. 105—226.)



1. A locomotive trailer truck having a pair of flexibly connected side frames, and a rear end frame flexibly connected to said side frames.

2. A locomotive trailer truck having a pair of flexibly connected side frames, a rear end frame flexibly connected to said side frames, and bearings on said frames for the locomotive frame.

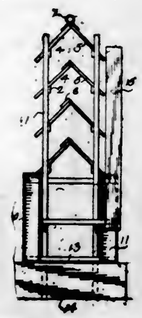
3. In a locomotive trailer truck, a pair of separately formed and independently acting side frames, and a rear end frame connected to the rear portions of said side frames.

4. In a locomotive trailer truck, a pair of separately formed and independently acting side frames, and a rear end frame flexibly connected to the rear portions of said side frames.

5. In a locomotive trailer truck, an articulated frame comprising separately formed and independently acting side members, and a rear end frame.

[Claims 6 to 21 not printed in the Gazette.]

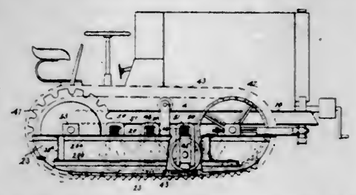
1,275,342. ROOST FOR FOWLS. LESLIE R. WETMORE, Okmulgee, Okla. Filed Mar. 13, 1918. Serial No. 222,151. (Cl. 119—22.)



2. In a roost for fowls, the combination with two pair of spaced supports; of a series of perches disposed one above the other in substantial parallelism and having notches in their extremities engaging said supports, each perch comprising a pair of boards standing at an angle to each other with their upper edges forming the ridge of a roof-shaped structure whose gables are adapted to shed the droppings off the fowls and perches below.

[Claims 1 and 3 to 5 not printed in the Gazette.]

1,275,343. TRACTOR-FRAME. ROLLIN H. WHITE, Cleveland, Ohio, assignor to The Cleveland Tractor Company, Euclid, Ohio, a Corporation of Ohio. Filed Oct. 29, 1917. Serial No. 198,936. (Cl. 21—150.)

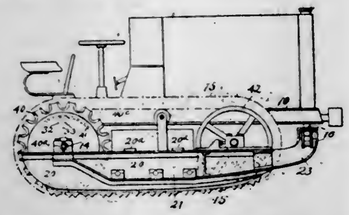


1. In a track laying tractor, the combination of a main frame, two traction frames pivotally connected therewith on transverse pivots located near the rear ends of said frames, springs interposed between the front ends of the traction frames and the front end of the main frame, two track wheels mounted in each traction frame, and an endless flexible track associated with each traction frame and embracing the two track wheels, with a plurality of inverted U-shaped members which are mounted in vertical guideways on each traction frame, a spring acting against each of said frames and yieldingly forcing it downward, and a wheel mounted on each of said frames for engagement with the upper surface of the ground reach of the associated track.

3. In a track laying tractor, a traction frame adapted to be pivotally connected with the main frame of the machine, which traction frame comprises two parallel beams each of which has a metal plate fixed to its inner face, combined with a plurality of inverted U-frames each of which is slidably mounted between said two metal plates, vertical guide bars associated with each U-frame and secured to said plates in position to guide said U-frame, a wheel rotatably mounted in each U-frame, and a spring acting on each U-frame to yieldingly press it downward relatively to said traction frame.

[Claim 2 not printed in the Gazette.]

1,275,344. TRACK-LAYING TRACTOR. ROLLIN H. WHITE, Cleveland Heights, Ohio, assignor to The Cleveland Tractor Company, Euclid, Ohio, a Corporation of Ohio. Filed Jan. 28, 1918. Serial No. 214,189. (Cl. 180—9.)



1. In a track laying tractor, the combination of a main frame, a nonrotating axle fixed thereto and extending transversely thereof, a traction frame comprising two connected side beams, a journal box fixed to each of said side beams and rotatably mounted on said axle, a driving sprocket wheel comprising an outside disk and a hub which extends inward therefrom and is rotatably mounted on said axle between said side beams and a concentric cylindrical flange, a disk which is fixed to a part carried by the main frame, means for making an oil and dust tight joint between said flange and disk, the inner journal box referred to having a cylindrical boss on its outer face, and said disk having a cylindrical central opening which nicely fits said cylindrical boss, and the outside journal box having a cylindrical boss on its inner face, means for making an oil and dust proof joint between said sprocket wheel and said last mentioned cylindrical boss, an internal gear ring fixed within the cylindrical flange of the sprocket wheel, a driving shaft mounted on the main frame and extending through said disk, and a pinion fixed to said driving shaft in mesh with said internal gear.

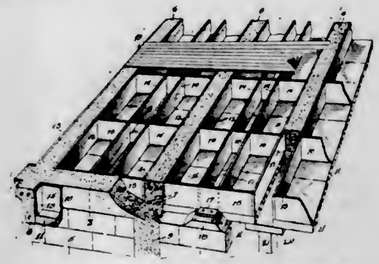
3. In a track laying tractor, the combination with a main frame, a transversely extended axle fixed thereto, a shaft housing fixed to said main frame, a driving shaft mounted within and projecting from said housing, a pinion fixed to the projecting end of said shaft, a driving sprocket comprising a hub which is rotatably mounted on said axle, a concentric cylindrical flange, and a disk which connects and closes the space between the outer end of said hub and the outer edge of said flange, an internal gear ring fixed within said flange in engagement with said pinion, an annular disk which is fixed to the end of said shaft housing and is fitted within and has an oil and dust proof joint within the cylindrical flange of said sprocket.

4. In a track laying tractor, the combination with the main frame, a transversely extended axle fixed thereto, a shaft housing fixed to said main frame, a driving shaft mounted within and projecting from said housing, a pinion fixed to the projecting end of said shaft, a driving sprocket comprising a hub which is rotatably mounted on said axle, a concentric cylindrical flange, and a disk which connects and closes the space between the outer end of said hub and the outer edge of said flange, an internal gear ring fixed within said flange in engagement with said pinion, an annular disk which is fixed to the end of said shaft housing and is within a cylindrical flange of said sprocket, a cupped felt washer fixed to said disk and formed with a substantially cylindrical outer portion which fits within said cylindrical flange, and a plurality of independently acting springs exerting outward pressure against the cylindrical part of said felt washer.

6. In a track laying tractor, the combination with the main frame, a transversely extended axle fixed thereto, a shaft housing fixed to said main frame, a driving shaft mounted within and projecting from said housing, a pinion fixed to the projecting end of said shaft, a driving sprocket comprising a hub which is rotatably mounted on said axle, a concentric cylindrical flange, and a disk which connects and closes the space between the outer end of said hub and the outer edge of said flange, an internal gear ring fixed within said flange in engagement with said pinion, an annular disk which is fixed to the end of said shaft housing and arranged within said cylindrical flange, a felt washer fixed to one of the last mentioned parts and engaging the other, and a plurality of springs fixed to the same part to which the felt washer is fixed and acting upon the washer to yieldingly press it into engagement with the part with which it engages.

[Claims 2 and 5 not printed in the Gazette.]

1,275,345. BUILDING CONSTRUCTION. ANDREW WICKEY, East Chicago, Ind. Filed Jan. 25, 1917. Serial No. 144,331. (Cl. 72—15.)

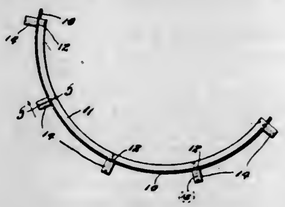


1. A building construction comprising walls or partitions having a course of concrete formed therein at the

floor, reinforced concrete girders located at said course of concrete, rows of ceiling tiles interlocked with said girders and flush with the lower edges thereof, floor supporting boards which extend parallel with the girders, certain of which are contiguous therewith and primarily form the sides of the forms for the girders, the other floor supporting boards being located between said boards, crosswise extending boards at the partitions and primarily forming sides for the molds for said course of concrete, other crosswise extending boards between said first mentioned crosswise extending boards, all of said boards being secured together to provide a frame, and floorings secured to said frame.

2. A building construction comprising walls or partitions having a course of concrete formed therein at the floor, reinforced concrete girders located at said course of concrete, rows of ceiling tiles interlocked with said girders and flush with the lower edges thereof, floor supporting boards which extend parallel with the girders, certain of which are contiguous therewith and primarily form the side of the forms for the girders, the other floor supporting boards being located between said boards, crosswise extending boards at the partitions and primarily forming sides for the molds for said course of concrete, other crosswise extending boards between said first mentioned crosswise extending boards, blocks on said walls or partitions, the upper faces of which are flush with the upper faces of the tiles, and horizontal, lengthwise extending boards between the intermediate lengthwise extending boards and resting on said tiles and blocks and secured to said blocks, all of said boards being secured together to form a frame, and flooring secured to said frame.

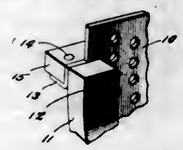
1,275,346. CAGE FOR REDUCING-MACHINES. MILTON F. WILLIAMS, St. Louis, Mo., assignor to Williams Patent Crusher and Pulverizer Company, St. Louis, Mo., a Corporation of Missouri. Filed Jan. 31, 1918. Serial No. 214,672. (Cl. 83—11.)



In a cage for reducing machine having revolving beaters or hammers, the combination with a foraminous plate curved throughout its length, of a combined frame and support for said plate, said frame comprising curved bars secured to the inner face of the said plate on top of the side edges thereof, portions of which bars project beyond the edges of the plate, said bars having lugs integral therewith positioned directly against the side edges of the said foraminous plate, a series of transversely disposed bars secured to the underside of the foraminous plate and bearing directly against the same, the ends of said transversely disposed bars bearing directly against the outer faces of the lugs on the bars, fastening means passing through the curved bars and through the foraminous plate adjacent to the edges thereof, and separate fastening means seated in and passing through the curved bars and the ends of the transversely disposed bars.

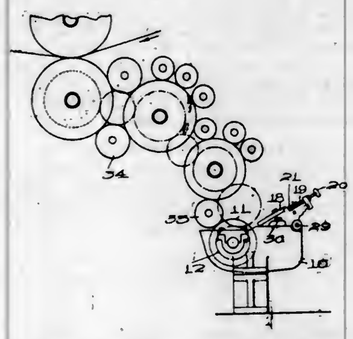
1,275,347. CAGE FOR REDUCING-MACHINES. MILTON F. WILLIAMS, St. Louis, Mo., assignor to Williams Patent Crusher and Pulverizer Company, St. Louis, Mo., a Corporation of Missouri. Filed Jan. 31, 1918. Serial No. 214,673. (Cl. 83—11.)

In a cage for reducing machines having revolving beaters or hammers, the combination with a foraminous plate curved throughout its length, of a supporting frame for said plate, said frame comprising a pair of curved bars arranged on the inner face of the plate at the side edges thereof, portions of which bars project beyond the edges of the plate, angle brackets secured to the undersides of said curved bars and spaced at substantially equal distances apart, the inner edges of the inner portions of which angle brackets bear directly against the side edges of the



foraminous plate, a series of transversely disposed frame reinforcing bars applied to the underside of the foraminous plate and bearing directly against the underface thereof, the ends of which transversely disposed bars bear directly against both legs of the angle brackets, and fastening means seated in the outwardly projecting portions of said angle brackets and in the ends of the transversely disposed bars.

1,275,348. APPARATUS FOR INKING PRINTING-PRESSES. HENRY A. WISE WOOD, New York, N. Y., assignor, by mesne assignments, to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Apr. 20, 1910, Serial No. 556,526. Renewed Jan. 28, 1918. Serial No. 214,254. (Cl. 101—363.)



1. In an ink fountain, in combination, a fountain roll, a blade therefor formed of separate parts mounted upon a plate, separate means for independently adjusting the separate parts of said blade toward said roll, a separate spring to force each part of said blade away from said roll, additional means to adjust the supporting plate toward the roll, and additional springs to resist said adjustment.

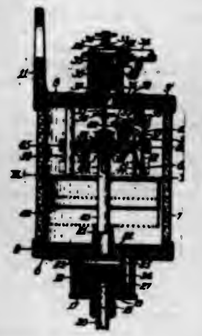
3. In a device of the character described, the combination of an ink fountain having a roll therein, a cover pivotally mounted on the fountain, a support adjustable along the cover toward the roll, a blade carried by said support and consisting of a plurality of parts, and means carried by said support for individually adjusting the several parts of the blade.

[Claim 2 not printed in the Gazette.]

1,275,349. LIQUID-FUEL-SUPPLYING APPARATUS. GEORGE W. WRIGHT, Lapel, Ind. Filed Dec. 8, 1916. Serial No. 135,796. (Cl. 158—36.)

1. Liquid-fuel supplying apparatus including a receptacle comprising a bottom and a side wall and also a top, the receptacle having an inlet and an outlet, the top of the receptacle being provided with a gravity-closed vent valve,

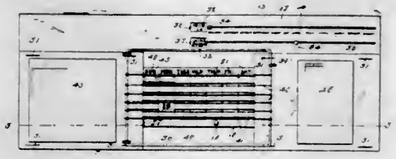
a float in the receptacle to rise and open the valve, and means in the receptacle automatically acting to hold the valve open on descent of the float and adapted to be controlled by the descending float to permit the valve to drop to closed position.



4. In liquid-fuel supplying apparatus, the combination of a receptacle bottom having outlet apertures therein, the under side of said bottom having a valve-casing thereon extending about the apertures and provided with an outlet duct, a transparent side wall secured upon said bottom, a top secured upon said wall and having a vent duct therein, a vent valve guided to close or open the vent duct and provided with an operating-rod, a float guided by means of said bottom and said top and provided with means enabling it to control the operating-rod, and a valve in the valve-casing adapted to float in liquid and having a top adapted to be seated on said bottom to close said outlet apertures.

[Claims 2, 3, and 5 to to 9 not printed in the Gazette.]

1,275,350. PERPETUAL CALENDAR. JOHN F. WYNNE, Atlanta, Ga. Filed Oct. 13, 1916. Serial No. 125,413. (Cl. 40—109.)



1. In a calendar, the combination of a body portion having day, month and year tables arranged thereon with key numbers, a year slide on the body portion having key numbers thereon corresponding to the years and to said tables and adapted to be adjusted accordingly, a month slide on the body portion having numbers thereon corresponding to the number of days in the respective months and adapted to be adjusted according to the tables, and a day slide having day numbers thereon adapted to be adjusted according to the table and month slide indications.

2. In a calendar, the combination of a body portion provided with tables thereon arranged according to key numbers, a year slide mounted on said body portion and bearing year numbers with corresponding key numbers arranged immediately therebeneath and adapted to be disclosed one at a time, said key numbers on the year slide being arranged in said tables to indicate the day of the week upon which the first of each month falls, and a day slide arranged on said body portion and bearing columns of consecutively arranged numbers indicating the days of a month and adapted to be adjusted according to the showing of said tables.

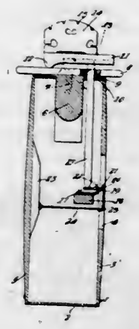
3. In a calendar, the combination of a body portion having rows of tables thereon arranged according to key numbers, a year slide mounted on said body portion and having various years marked thereon and key numbers beneath said years according to said tables, said body portion also having a column of consecutively arranged days of the week, and an adjustable slide having columns of consecutively arranged numbers indicating the days of a month and adapted for adjustment beneath said column of days of the week according to the showing of said tables.

4. In a calendar, the combination of a body portion provided with tables on the face thereof arranged according to key numbers, and having a column of days of the week arranged consecutively across the face of the body portion, a year slide mounted upon the body portion, said body portion having a sight opening therein adapted to disclose the years on said year slide one at a time, the years on the year slide each having a key number corresponding thereto and arranged therebeneath, and a day slide provided with columns of numbers indicating the days of the month and adapted for adjustment relatively to said days of the week column according to the showing of said tables as indicated by said key numbers.

7. In a calendar, a body portion having month and day tables thereon, a slide in the body having a plurality of horizontal row of consecutively increasing numbers indicating the days of a month and adapted to be adjusted according to said tables, a month slide mounted on said body portion and bearing the names of the months and the numbers of days beneath the name of each respective month and adapted to be adjusted according to said tables, a covering slide arranged at the right side of said first slide and adapted to cover an adjacent number in the second last row of the same, and a second covering slide adjustable at the left side of the body portion and adapted for adjustment over the two adjacent numbers of the last row of the same, said second covering slide being provided with an opening intermediate its ends adapted to close the adjacent end number of the last row and to cover the second adjacent number, said covering slides being adjustable according to the number of days indicated on said month slide.

[Claims 5, 6, and 8 not printed in the Gazette.]

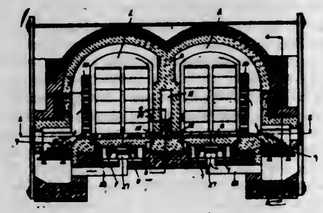
1,275,351. VIOLIN. ROBERT L. YEAKEY, Cave in Rock, Ill. Filed Aug. 22, 1917. Serial No. 187,628. (Cl. 84—44.)



1. In a stringed musical instrument, a hollow body having a sound board at one side and an apertured board at its other side, a bar within the body and close to the opening in the apertured board, a bearing plate secured upon said bar and having spaced knife edges, a bell crank engaging the knife edges, a link connecting one arm of the bell crank and the sound board, a bridge, and a rod supporting the bridge and engaging the other arm of the bell crank.

[Claim 2 not printed in the Gazette.]

1,275,352. KILN. CARL H. ZWERMANN, Kalamazoo, Mich. Filed June 8, 1918. Serial No. 239,066. (Cl. 25—142.)

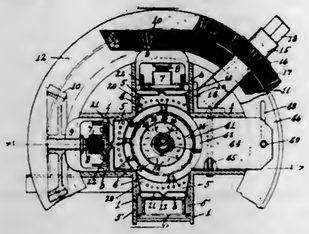


1. The combination of a pair of tunnel kilns disposed in reverse relation with the charging end of one at the discharge end of the other and having a common inner wall with relatively thin radiating portions toward each end, heating means, upright foraminated baffle walls through which the heating means deliver disposed centrally at the outer sides of the tunnels, the tops of the baffle walls being spaced from the tops of the tunnels, a central longitudinal outlet flue in said inner wall opposite said baffle walls and communicating with both tunnel chambers through a series of outlet openings at the bottoms thereof, heating flues leading from the ends of said central outlet flue over the tops of said tunnel chambers and downwardly at the outer sides thereof, said heating flues being disposed oppositely toward the charging ends of the tunnels and being of substantial width and constituting a heating means for a preheating zone in each tunnel chamber in advance of its said heating means, discharge flues to which said heating flues deliver, vertical circulating flues for such preheating zones open at their tops and bottoms, and disposed at the outer sides of the tunnels, the walls of said heating flues constituting walls for said circulating flues, and vertical circulating flues open at their tops and bottoms disposed on opposite sides of said radiating walls, said radiating walls constituting the inner walls of such flues whereby circulation is created in the charging and discharging ends of both tunnels.

16. The combination of a pair of tunnel kilns disposed in reverse relation with the charging end of one at the discharging end of the other and having a common inner wall, heating means delivering centrally to said tunnels, and vertical circulating flues open at their tops and bottoms disposed on opposite sides of said common wall whereby a cooling circulation is created in the discharge end of the tunnel and a heating circulation in the charging end thereof.

[Claims 2 to 15 not printed in the Gazette.]

1,275,353. CONCRETE-PIPE MACHINE. JULIUS G. ZWICKER, Berkeley, Cal. Filed June 13, 1916. Serial No. 103,394. (Cl. 25—30.)



1. A concrete-pipe machine comprising a frame composed of vertical angle members having their exterior angles symmetrically disposed about a mold-containing space; an outer mold in said space, composed of independent sections each provided on its back with a vertical series of spaced thrust plates lying between and guided by opposing faces of adjacent frame members; a reciprocative follower guided by the frame members and bearing against all the thrust plates of its corresponding mold-section, to move the latter inwardly; means connecting the followers with the thrust plates to retract the mold-sections; and an inner mold spaced from the outer mold.

10. A concrete-pipe machine comprising associated inner and outer molds; means for adjusting said molds, and relieving them from the molded pipe section; a longitudinally movable shaft in the axis of and carrying said inner mold; means for lowering said shaft and inner mold through the molded pipe section and lifting them again to place; a gripper associated with and accompanying the shaft to engage the lower end of the molded pipe section and lift it from the outer mold; means associated with and accompanying the gripper and dependent on its movement for operating it; and means for dis-associating the gripper with its pipe section load, from the shaft.

16. A concrete-pipe machine comprising associated inner and outer molds; means for adjusting said molds and for relieving them from contact with the molded pipe section; a longitudinally movable shaft in the axis of and carrying said inner mold; means for lowering said shaft and inner mold through the molded pipe section and lifting them again to place; a plunger member associated with the moving shaft for spreading upon the inner surface of the molded pipe section as it moves down therethrough a coating of cement from a body thereof placed and carried on top of the inner mold; a gripper associated with and accompanying the shaft to engage the lower end of the molded pipe section and lift it from the outer mold; means for disassociating the gripper with its pipe-section load, from the shaft; means operated by the moving shaft for spraying water upon the outer surface of the inner mold as said mold moves down; and means operated by and associated with the moving shaft for spraying water upon the inner surface of the outer mold as said shaft moves up.

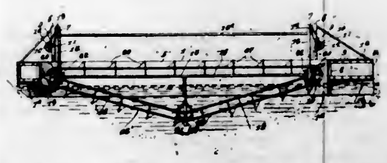
[Claims 2 to 9 and 11 to 15 not printed in the Gazette.]

1,275,354. REFRACTORY MATERIAL. JAMES M. ALLEN, St. Louis, Mo., assignor to Fellhauer-Allen Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed Nov. 10, 1917. Serial No. 201,250. (Cl. 106—10.)

3. The herein described refractory material consisting of 48¾ per cent. fire clay, 48¾ per cent. anthracite coal and 3 per cent galena.

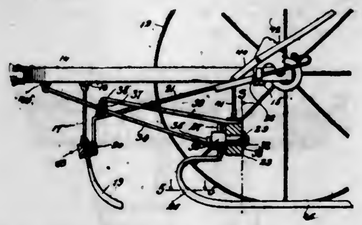
[Claims 1 and 2 not printed in the Gazette.]

1,275,355. WATER-MOTOR. ERICK G. ANDERSON, Spokane, Wash. Filed Aug. 21, 1916. Serial No. 116,114. (Cl. 170—84.)



In a water motor, a frame, pair of spaced sprocket wheels rotatably mounted at the center and each end of the frame in triangular arrangement, the sprocket wheels at the center being in a plane lower than those at the ends of the frame, a pair of chains passed about the sprocket wheels, a plurality of blades rockably mounted at their centers between the chains and disposed at right angles thereto, each of said blades being provided at its center with an integral eye extending the full length thereof, a rod inserted through said eye and secured between the chains so as to rockably support the blade and brace rods pivotally secured at their lower ends to the outer end of said blades and pivotally secured at their inner ends to said chains said rods acting to hold the blades at right angles to the chains, and permitting rocking movement thereof when passing about a sprocket wheel.

1,275,356. CULTIVATOR. THOMAS T. ANDERSON, Bement, Ill. Filed Aug. 19, 1915. Serial No. 46,272. (Cl. 97—34.)



In a cultivator, an elongated horizontal blade having a bottom cutting edge which is horizontal and extends in the direction of the length of the blade, the forward end of the blade having an upward bend terminating in a vertical attaching shank, and the cutting edge being continued along the front edge of the upward bend, the body of the blade being disposed at an oblique angle to the vertical, and a support in which the blade shank is rotatable about a vertical axis, the support being rotatable about a horizontal axis.

1,275,357. FASTENER. LOUIS ARKIN, Boston, Mass. Filed Dec. 6, 1917. Serial No. 205,734. (Cl. 24—211.)



1. A fastener comprising a stud, a casing having an aperture adapted to receive the stud member, holding means for retaining the stud in said aperture, and yielding means disposed outside said casing for separating the stud and casing when the holding means is released without manipulation of said stud.

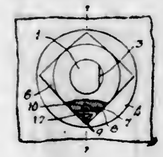
[Claims 2 to 7 not printed in the Gazette.]

1,275,358. CLOTHES-LINE HANGER. THERESA BACKOFF, San Francisco, Cal. Filed Mar. 18, 1918. Serial No. 223,054. (Cl. 68—3.)



A clothes line hanger comprising devices for supporting different portions of the clothes line, an arm provided with means upon one end to movably support one of said devices, an upwardly extending guideway, a guide movable on said guideway and to which the other end of said arm is pivoted to swing on a horizontal axis, means for limiting the upward movement of the guide upon the guideway, a cord attached to said arm between its pivot and the device connected to the arm, and a stationary pulley above said means, the cord extending from the arm first upwardly, then around the pulley and then downwardly.

1,275,359. NUT AND BOLT LOCK. MYRL E. BAILEY, Kane, Pa. Filed June 22, 1917. Serial No. 176,331. (Cl. 151—8.)



1. The combination with a bolt having a flat side, a washer fitted slidably upon the bolt and having a flat side for coöperation with the flat side of the bolt to hold the washer against rotation, said washer being provided with an annular series of openings, a nut threaded upon the bolt and provided at one side thereof with a longitudinal opening arranged parallel to the axis of the nut, and also with a transverse opening intersecting the longitudinal opening tangentially and opening through the sides of the nut, a locking plunger slidable within the longitudinal opening of the nut and adapted to be moved into engagement with a selected one of the openings of the washer to lock the nut against rotation, said locking plunger being provided at an intermediate point in its length with spaced grooved portions, and a retaining pin insertible through the transverse opening of the nut and adapted to engage either selected one of the grooved portions of the locking plunger to hold the latter in either a retracted or a projected position.

5. The combination with a bolt formed with a flat side, a washer fitted slidably upon the bolt and having a flat side for coöperation with the flat side of the bolt, said washer being provided with an annular series of openings, a nut threaded upon the bolt and provided at one side thereof with a longitudinal opening arranged parallel to the axis of the nut, and also with a transverse opening intersecting the longitudinal opening tangentially and opening through the sides of the nut, said sides of the nut being provided with short grooves communicating with the ends of the transverse opening in the nut, a locking plunger slidable within the longitudinal opening of the nut and adapted to be moved into engagement with a selected one of the openings in the washer, and a retaining pin inserted in the transverse opening of the nut for engagement with the locking plunger to hold the latter in position, the ends of the retaining pin extending beyond the sides of the nut to provide finger pieces for inserting and removing the pin, said ends being adapted to be returned into the before mentioned short grooves at the ends of the transverse opening to hold the retaining pin in position, the grooves providing protection for the ends of the retaining pin to prevent the same from being broken off or caught in adjacent objects.

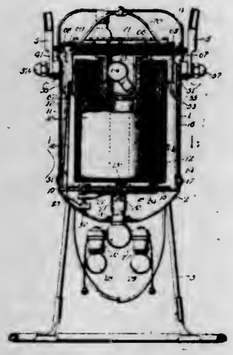
[Claims 2 to 4 not printed in the Gazette.]

1,275,360. ELECTRIC LANTERN. FRANK T. BAIRD, Blue Island, Ill. Filed Dec. 4, 1916. Serial No. 134,871. (Cl. 240—8.5.)

1. An electric lantern having a stationary casing for the battery, a bail pivoted thereto near the top, a rotatable arm actuated by said bail, a lamp socket at the bottom of the casing, terminals at the bottom of the casing for supporting the battery and being energized thereby, a switch in the casing for putting the socket and lamp in circuit, the switch being located at the bottom of the casing, and a vertically movable rod for operating said switch, said rod extending upward from said switch to and being operated by said rotatable arm.

4. An electric lantern having a lamp, a battery, a stationary casing adapted to hold the battery in substantially fixed position, a bail pivotally connected to the casing near the top for supporting it in vertical position, a switch near the bottom of the casing for illuminating and extinguishing the lamp, and vertically slidable means mounted in the casing and movable relatively to it and

the battery and actuated by the bail for operating said switch.

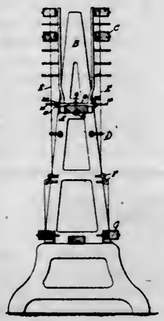


8. An electric lantern having a lamp, a battery, a stationary casing for holding the battery in fixed position, a bail pivotally connected to said casing, a switch for turning the battery current on to and off of the lamp, a switch-operating member operated by the swinging movement of the bail, and a screw adjustably mounted on said switch-operating member for engaging said switch to operate it.

9. An electric lantern having a casing, a battery within said casing, a lamp socket carried by the casing, a bail, means operated by the bail for switching current on and off of the socket, a cluster screwing into said socket, and a plurality of lamps of different colors in said cluster, said lamps having means for turning them on and off individually whereby the operator is, without changing lamps, afforded the option of exhibiting the different colors.

[Claims 2, 3, 5 to 7, and 10 to 12 not printed in the Gazette.]

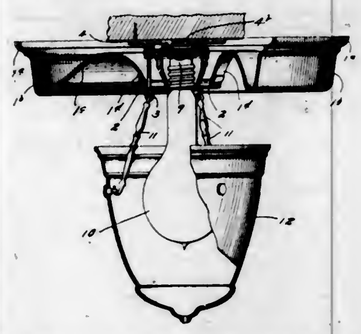
1,275,361. CLEANER ATTACHMENT FOR SILK-THROWING MACHINES. ANDREW BAKER, Spring Valley, N. Y. Filed Mar. 17, 1917. Serial No. 155,458. (Cl. 28—20.)



1. The combination with a silk-throwing machine, having a cross piece running through the throwing machine below the upper bobbin spindles, of a cleaner attachment having a member secured to said cross piece, and having laterally projecting end combs horizontally disposed beyond the said cross bar at the sides of the machine, in the path of movement of the silk threads.

2. A cleaner attachment for silk-throwing machines and the like, including a comb, a support carrying said comb, and means to secure the support to the machine, said comb comprising teeth each formed of a flat resilient metal strip, cross bars on the flattened teeth at the upper and lower sides thereof, spacing-wires laced about the said transverse bars and between the teeth, upper and lower plates on the teeth at the base thereof rearward of the wires and cross bars, and means uniting all the said elements of the comb together.

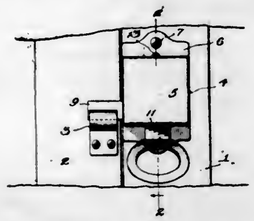
1,275,362. ELECTRIC-LAMP FIXTURE. FRANK A. BAKULA, St. Louis, Mo., assignor to Gross Chandelier Company, St. Louis, Mo., a Corporation of Missouri. Filed Aug. 18, 1917. Serial No. 186,995. (Cl. 240—78.)



1. In a fixture of the character described, the combination of a socket support adapted to receive a lighting element, a canopy supporting ring surrounding said support, threaded rods for supporting said ring from said support, a translucent canopy supported by said ring and having a central opening through which said threaded rods pass, bowl rods depending below said ring, and a translucent bowl supported by said bowl rods below the canopy, there being a space between said bowl and canopy.

[Claim 2 not printed in the Gazette.]

1,275,363. LATCH. CHARLES S. BARNARD, Bridgeport, Conn., assignor to The Bassick Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Nov. 28, 1917. Serial No. 204,447. (Cl. 70—42.)



1. A latch comprising a casing having slotted top, bottom and side walls, a latch-operating handle vertically slidable through the slot of the bottom wall and provided on its upper end with a reduced shank operating through the slot in the top wall for guiding the handle, the lower end of the latter being outwardly offset, a spring encircling the shank for exerting a downward pressure on the handle, and a horizontally disposed latch bolt carried by the handle and extending through a slot in the side wall of the casing.

2. A latch comprising a casing having slotted top, bottom and side walls, a latch-operating handle vertically slidable through the slot of the bottom wall and provided on its upper end with a reduced shank operating through the slot in the top wall for guiding the handle, the lower end of the latter being outwardly offset, and a latch bolt extending horizontally from the handle through the slot of the side wall and rigidly fixed to the handle.

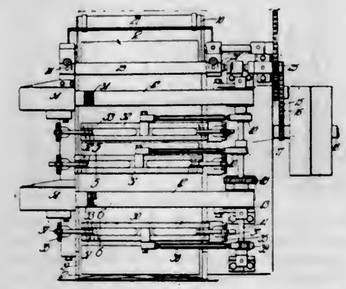
3. A latch comprising a casing having slotted top, bottom and side walls, a latch operating handle vertically slidable through the slot of the bottom wall and provided on its upper end with a reduced shank operating through the slot in the top wall for guiding the handle, the lower end of the latter being outwardly offset, and a latch bolt extending horizontally from the handle through the slot of the side wall and having its inner end upturned for passing through an aperture in the handle and being riveted thereto.

1,275,364. POCKET IMPLEMENT. MICHAEL S. BASSISTY, Philadelphia, Pa. Filed Aug. 29, 1917. Serial No. 188,721. (Cl. 7—15.)



In a device as described, in combination, a pair of channel-shaped members adapted together to form a rectangular casing, one side wall of each of said members being cut away longitudinally to provide an elongated recess, a series of divisional plates arranged in said rectangular casing, the edges of said side walls of the two members being secured together, so as to provide a lateral longitudinal slot, blocks arranged between said side walls and said plates and between the plates themselves, one of said plates being positioned close to one side wall, a narrow block arranged at one end of the passage between said last-named plate and the adjacent side wall, an elongated file arranged to slide in said last-named passage and carrying an operating pin projecting through the side slot, a similar narrow block secured to the other side wall and spaced away from the adjacent plate, an implement projecting into the passage containing the last-named block and being cut-away to provide a recess into which the last-named block projects, and means whereby said last-named implement may be actuated.

1,275,365. PLAQUE-CLEANING MACHINE. ALONZO LINTON BAUSMAN, Chicopee, Mass., assignor to National Equipment Company, Springfield, Mass., a Corporation of Massachusetts. Filed Sept. 12, 1917. Serial No. 190,911. (Cl. 107—7.)



1. In a machine of the class described, a conveying means for plaques or the like and means laterally movable with relation to the conveying means to engage particles on said plaques obliquely to the direction of travel of the conveying means, and loosen the particles from the plaques.

3. In a machine of the character described, a conveying means for plaques or the like, means to lightly engage the surface of the latter and subdivide relatively large particles of material adhering thereto, and means subsequently operable to loosen the subdivided particles.

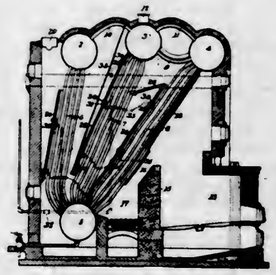
4. In a machine of the character described, a conveying means for plaques or the like, means to slightly engage the surface of the latter and subdivide relatively large particles of material adhering thereto, means subsequently operable to loosen the subdivided particles, and means to lightly brush the loosened particles from said plaques.

9. In a machine of the class described, a conveying means for plaques or the like, a member reciprocable laterally of said means, a set of substantially U-shaped devices carried by said member and adapted to engage said plaques, the plaque engaging portion of said devices being of corrugated shape, and constructed to break up and subdivide relatively large deposits or lumps of material adhering to said plaques, and means to subsequently loosen the deposits subdivided by said devices.

10. In a machine of the class described, a conveying means for plaques or the like, means to loosen particles of material adhering to the plaques, and a traveling brush movable across the conveying means to lightly engage the plaques and sweep the loosened particles therefrom.

[Claims 2, 5 to 8, and 11 to 18 not printed in the Gazette.]

1,275,366. WATER-TUBE BOILER. JOHN E. BELL, New York, N. Y. Original applications filed June 23, 1915, Serial No. 35,788, and July 21, 1915, Serial No. 41,089. Divided and this application filed Jan. 24, 1917. Serial No. 144,188. (Cl. 122—392.)

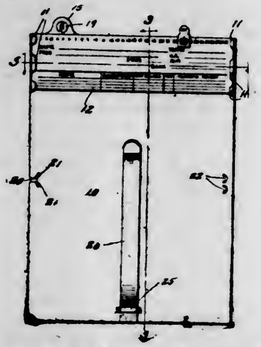


1. A boiler setting having a plurality of drums, sets of tubes connecting said drums, a baffle between the sets of tubes extending from one wall of the setting to a wall opposite thereto to form serial passes for the gases over the tubes, an outlet to the stack from the last pass, a blower pipe in said baffle extending approximately the full width thereof, a plurality of jets extending from the blower pipe on opposite sides thereof, said jets being spaced along the length thereof, and extending in the general direction of the path of the gases to assist the draft and blow the soot toward the outlet, substantially as described.

3. A boiler setting having a plurality of drums, sets of tubes connecting said drums, a plurality of baffles between said sets of tubes extending from one wall of the setting to a wall opposite thereto to form serial passes for the gases, an outlet leading from the last pass to the offtake flue or stack, a plurality of blower pipes in each baffle extending approximately the full width thereof, a plurality of nozzles extending in opposite directions from the blower pipe through one of the baffles, while the nozzles in some of the baffles merely extend in one direction, said nozzles being spaced along the length of the pipe and extending in the general direction of the path of the gases to assist the draft and blow the soot toward the outlet, substantially as described.

[Claim 2 not printed in the Gazette.]

1,275,367. INVOICE-HOLDER. ROBERT C. BENDER, St. Louis, Mo. Filed Feb. 9, 1918. Serial No. 216,198. (Cl. 129—1.)
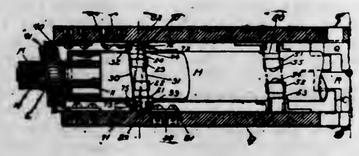


1. In a device of the class described, the combination with a plate adapted to receive invoice sheets, of an invoice sheet retaining device adapted to be removably applied to said plate, said retaining device comprising a pair of crossed elastic tapes, and plate engaging means carried by the ends of said tapes.

2. In a device of the class described, the combination with a plate adapted to receive invoices, of an invoice retaining device comprising a pair of crossed elastic tapes, securing means carried by the ends of said tapes, and portions of the plate being constructed so as to receive said securing means.

3. In a device of the class described, a plate adapted to receive invoices, and an invoice retaining device adapted to be detachably applied to said plate, said retaining device comprising a pair of crossed elastic members, means carried by the ends of said crossed members for engaging the side and end portions of the plate, and a keeper applied to said members at their crossing point, said keeper being loosely mounted on said members.

4. In a device of the class described, the combination with a plate adapted to receive invoice sheets, of an invoice sheet retaining device comprising a pair of crossed elastic members, and means on said members for detachably engaging the sides and ends of said plate.

1,275,368. STRETCH-ROLL. OLIVER A. BENOIT, Lawrence, Mass. Filed Jan. 14, 1918. Serial No. 211,823. (Cl. 26—8.)



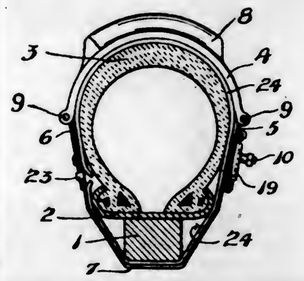
1. In a cloth stretching roll, the combination of revoluble shafts, and a cylinder axially mounted between them having one or more series of oppositely disposed slots, with sections forming the periphery of the roll, and flexible radial supports each fixed at one end to the cylinder and extending through oppositely disposed slots and fixed at its other end to a section located diametrically opposite to the first mentioned end.

5. In a cloth stretching roll, the combination of a central revoluble member, with sections forming the periphery of the roll, and flexible supports each fixed at one end to a section and at its other end to the revoluble member.

7. In a cloth stretching roll, the combination of revoluble shafts, and a cylinder axially mounted between them having one or more series of oppositely disposed slots, with sections forming the periphery of the roll, inner slotted brackets each fixed to the cylinder, outer slotted brackets each fixed to a peripheral section, and flexible radial supports each fixed at one end in the slot of a cylinder bracket and at the other end in the slot of a section bracket, each support extending through oppositely disposed slots, together with means outside the sections to cause them to move longitudinally back and forth as the roll revolves.

[Claims 2 to 4 and 6 not printed in the Gazette.]

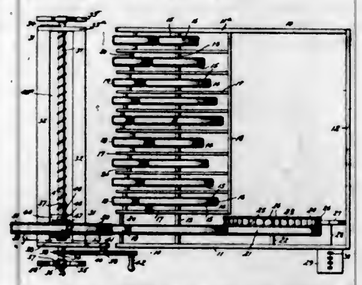
1,275,369. TRACTION DEVICE FOR VEHICLE-WHEELS. LOUIS BERG, Taylor Falls, Minn., assignor, by direct and mesne assignments, to Harm Rose, Rosemont, Nebr. Filed Sept. 7, 1916. Serial No. 118,851. (Cl. 152—14.)



1. A traction device for vehicle wheels comprising a lug-equipped tread plate, two clamping plates hinged to the sides of the tread plate, a felly yoke overlapping the clamping plates, and means adjustably and independently connecting the clamping plates to the felly yoke.

2. A traction device for vehicle wheels comprising a lug-equipped tread plate, a clamping plate hinged to the tread plate, a felly yoke secured to the tread plate and overlapping the clamping plate, and means adjustably connecting the overlapped clamping plate and felly yoke, said means comprising a clamping bolt secured to the felly yoke and having sliding movement in a longitudinal slot in the clamping plate, and a lock plate for securing the clamping bolt in different adjustments in said slot.

1,275,370. LUMBER-MEASURING INSTRUMENT. JAMES E. R. BEST, Boyceville, Wis. Filed Oct. 30, 1916. Serial No. 128,577. (Cl. 33—142.)



1. A machine of the class described comprising a scaling wheel rotatable by the transverse movement of boards in contact therewith, a register, a plurality of trains of gearing of different sizes, all of said trains being each connected to said register for operating the same, and means for moving said scaling wheel directly into engagement with any one of said trains of gearing to operate said register upon the passage of a board over and in contact with the scaling wheel.

8. A machine of the class described comprising a rigid frame, a shaft mounted transversely in said frame, a plurality of wheels of different diameters fixed on said shaft, a register mounted on said frame, intermediate gearing between said shaft and said register for operating the latter, a plurality of pinions of different diameters each operatively engaged with one of the wheels on the transverse shaft, the outer side of the periphery of each of said pinions alining, a rocking frame adjacent said pinions, a block slidable longitudinally therein, a scaling wheel mounted in bearings on said block, a worm shaft extending longitudinally of the rocking frame and adapted to move the block endwise therein for the purpose of alining the scaling wheel with any one of said pinions, and means for moving said scaling wheel into engagement with the alined pinion and maintaining such engagement.

[Claims 2 to 7 not printed in the Gazette.]

1,275,371. ROLL-HOUSING FOR ROLLER-BEARINGS AND METHOD OF FORMING THE SAME. JEREMIAH BINGHAM, Toledo, Ohio, assignor to The Bock Bearing Company, Toledo, Ohio, a Corporation of Ohio. Filed Sept. 28, 1917. Serial No. 193,715. (Cl. 29—148.)

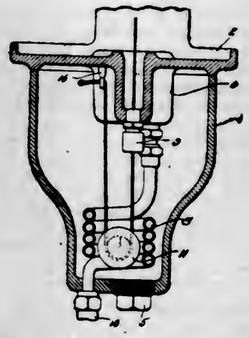


5. The method of forming roll housings, comprising the advancing of a sheet-metal blank to successive points of operation, blanking said trip at one point to form thereof centrally connected sections of predetermined external contour, pressing each section at another point to form a central recess therein for receiving and fitting about the roll, the metal for forming the depression being drawn from the margin of the blank while still attached to the strip and leaving a flat marginal flange, and trimming said flange at another point in the advancement of said strip to form separate side and end flanges and to sever the housings from the strip.

7. A roll housing, comprising a pressed sheet-metal member forming a recess for receiving and fitting about one side of a roll, the bottom of said recess being cut-away to expose a segment of the roll, one end of said housing being enlarged to receive the enlarged head of the roll and being of a segmental spherical form, the ends of the housing having laterally-extending flanges and the sides having substantially parallelly extending flanges adapted to be closed around the opposite side of the roll when in the recess to retain the same from displacement.

[Claims 1 to 4 and 6 not printed in the Gazette.]

1,275,372. WAX-POT FOR SEWING-MACHINES. WILLIAM R. BLAIR, St. Louis, Mo., assignor to Landis Machine Company, St. Louis, Mo., a Corporation of Missouri. Filed Jan. 26, 1916. Serial No. 74,383. (Cl. 91—32.)



1. A wax pot for thread-handling machines comprising a closed container having its lower portion of lesser area than its upper portion, a closed coil disposed in said lower portion, a stripper disposed in the upper portion of the container, means for supplying heating fluid to said coil, and a movable door portion whereby wax may be introduced into said container for deposit adjacent said coil.

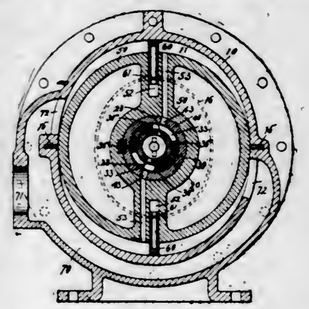
2. In a thread handling machine, a wax pot, a heating coil disposed in said wax pot in the form of a vertical helix, and a revoluble member disposed in the space within said coil, which revoluble member serves as a bearing for the thread passing through the wax pot.

8. In combination with a wax pot, a cover therefor, a stripper bracket formed integral with said cover and disposed within the wax pot, said stripper bracket being formed with a chamber, a stripper supported by the stripper bracket adjacent said chamber within the pot, and means for conducting heating fluid into and out of said chamber.

11. In a thread-handling machine, a wax pot, a heating coil disposed in said wax pot in the form of a vertical helix, and means for guiding thread through a portion of said helix longitudinally thereof.

[Claims 3 to 7 and 9 to 10 not printed in the Gazette.]

1,275,373. ROTARY STEAM-ENGINE. HENRY W. BOGART, Cleveland, Ohio, assignor to The McMyler Interstate Company, Bedford, Ohio, a Corporation of Ohio. Filed Oct. 29, 1914. Serial No. 869,185. (Cl. 121—75.)



1. In a rotary engine, the combination of a cylinder containing an elliptoid chamber, and the following parts therein arranged concentrically one within another, viz., a centrally placed cut-off sleeve, which sleeve rotates with the engine shaft and may be moved angularly with respect to the said shaft, means for turning the said sleeve, a fixed steam inlet sleeve, an engine shaft, and a rotor fixed to the shaft, radially movable blades carried by said rotor, and a steam inlet pipe connected with said fixed sleeve,—the said four concentric parts having steam ports through which steam may pass from the cut-off sleeve into the space between the rotor and the cylinder, and means connecting the shaft and cut-off sleeve.

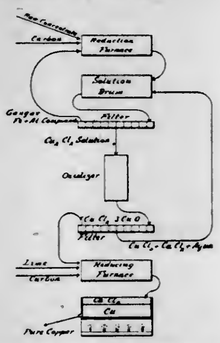
[Claims 2 to 6 not printed in the Gazette.]

1,275,374. METHOD OF PRODUCING COMMERCIALLY-PURE COPPER. CHARLES S. BRADLEY, New York, N. Y. Filed Oct. 25, 1913. Serial No. 797,161. Renewed Dec. 20, 1917. Serial No. 208,148. (Cl. 75—18.)

1. The method of producing copper, which comprises reducing a chlorin compound of copper at low red heat by means of a base forming a chlorid which is fusible but nonvolatile at the melting point of copper, and subsequently fusing the reduced copper in a fused bath of the chlorid.

2. The method of producing copper, which comprises reducing a chlorin compound of copper by means of a base and carbon below the melting temperature of copper, and subsequently fusing the reduced copper in a fused bath of the chlorid produced in the reduction.

3. The method of producing copper, which comprises reducing a chlorin compound of copper by means of a base and carbon below the melting temperature of copper, and introducing the finely divided reduced copper associated with chlorid of the said base into a fused bath of the chlorid whereby the copper is fused and freed from the chlorid of the base.

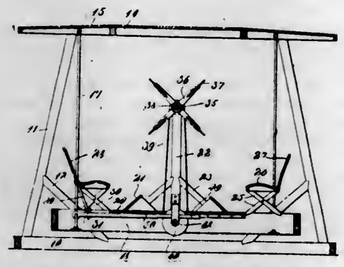


4. The method of producing copper, which comprises reducing a chlorin compound of copper by means of lime and carbon at a temperature below the melting point of copper, and subsequently introducing the reduced copper, associated with resulting calcium chlorid into a fused calcium chlorid bath, whereby the copper is fused and freed of calcium chlorid.

5. The method of producing copper, which comprises reducing trioxychlorid of copper at a temperature below the fusion point of copper, by means of a base forming a chlorid which is fusible, but non-volatile at the melting point of copper, and subsequently fusing the reduced copper in a fused bath of the resulting chlorid.

[Claims 6 to 24 not printed in the Gazette.]

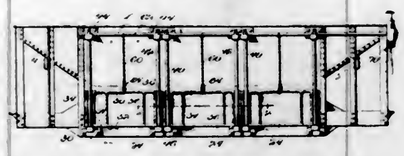
1,275,375. PORCH-SWING. ANDREJ BRONSKI, East St. Louis, Ill. Filed Dec. 30, 1916. Serial No. 139,812. (Cl. 230—7.)



1. In a device as described, in combination, a base member, standards secured thereupon, an awning frame secured to the upper ends of said standards, pivotal rods secured to said awning frame, a swinging frame suspended upon said rods and carrying a platform, central standards secured in transverse spaced apart relation upon said platform, a shaft journaled at the upper ends of said central standards, a fan secured for rotation upon said last-named shaft, means for rotating said shaft, a longitudinally-movable member adapted to actuate said means, a chair secured upon one end of said platform, a chair back pivotally connected between its ends to one pair of said pivotal rods, said pivoted back engaging with said swinging frame so as to turn upon its pivot, and a connection between said last-named rods and said member whereby said member obeys the movement of said rods.

2. In a device as described, in combination, a base member, vertical standards secured thereupon, an awning frame secured upon said standards, pairs of rods pivotally mounted upon said awning frame, a swinging frame suspended upon said rods, said frame including a platform, a chair secured at one end of said platform, a back pivotally mounted upon one pair of said rods and having lower extending arms formed with elongated slots therein, a pair of central standards secured upon said platform, a shaft journaled upon the upper ends of said standards, a series of fan blades fixed upon said shaft, a second shaft arranged below said platform upon said swinging frame, a chain drive from the second shaft to the first shaft, a pinion also fixed upon the second shaft, a rack bar meshing with said pinion and guided against the underside of said platform, an eye formed at one end of said rack bar in which one of the pivotal rods project, a pin secured to the side of said swinging frame and projecting into the slot in the extending arm of said chair back, said chair back being inclined with respect to the vertical when said pivotal rods are arranged parallel and vertically.

1,275,376. CAR. PERRY BROWN, Coraopolis, Pa. Filed Aug. 4, 1917. Serial No. 184,524. (Cl. 105—14.)



1. The combination in a car of a side wall having a discharge opening, and a vertically slidable door closing said opening by having its lower portion sliding over the outside edge forming the bottom of said discharge opening without having any part resting thereon, whereby nothing can lodge between the bottom of the door and the bottom of the opening.

2. The combination in a car having an inverted V-shaped bottom, of a side wall having a discharge opening, the lower edge of said opening being formed by the edge of the inverted V-shaped bottom, and a vertically slidable door closing said opening by having its lower portion sliding over the outside edge of said inverted V-shaped bottom whereby nothing can lodge between the bottom of the door and the bottom of the opening.

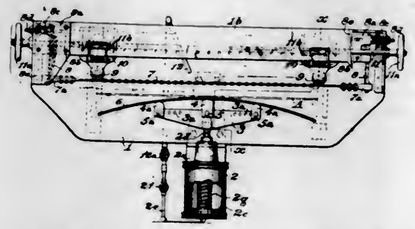
3. The combination in a car of a side wall having a discharge opening, a vertically slidable door closing said opening and having vertical ribs near each end of the door projecting from the face thereof, and antifriction rollers carried by said ribs and located between the face of said door and vertical supports carried by said side wall.

4. The combination in a car of a side wall having a discharge opening, brackets secured to said side wall above and below said discharge openings, bars carried by said brackets, a vertically slidable door closing the aforesaid opening, and anti-friction rollers carried by and located between the face of said door and bearing against said vertical bars.

5. The combination in a car of a side wall having a plurality of discharge openings, vertically slidable doors closing said openings, brackets secured to said side wall above and below said openings, bars secured in said brackets, anti-friction rollers carried by and located between the face of said doors and said bars, said brackets also carrying a shaft, and chains connecting said shaft with said doors.

1,275,377. SPRING-FORMING MACHINE. THOMAS F. BUCKLEY and SAMUEL S. RIEGEL, Scranton, Pa. Filed Apr. 18, 1916. Serial No. 91,886. (Cl. 153—51.)

1. In a spring forming machine, the combination of a fixed flexible resistance member, means for imparting tension thereto; adjustable means for limiting the length of the operative flexible portion of said member; a curved formation plate which is movable toward and from said member; and fluid pressure actuated means for imparting movement to the formation plate.



4. In a spring forming machine, the combination of a fixed flexible resistance member; means for imparting tension thereto; means for varying the length of the operative flexible portion of said member; a cross head which is movable toward and from said member; means, connected to said cross head, for maintaining the normal curvature of a formation plate; a curved formation plate fitting against said maintaining means; and fluid pressure actuated means for imparting movement to the cross head.

8. In a spring forming machine, the combination of a fixed flexible resistance member; springs exerting tensile strain on said member; adjustable supplemental springs for increasing such tensile strain; rollers bearing on said member at different points in its length; means for varying the longitudinal spacing of the rollers on said member; a curved formation plate which is movable toward and from said member; and fluid pressure actuated means for imparting movement to the formation plate.

[Claims 2, 3, 5 to 7, and 9 not printed in the Gazette.]

1,275,378. CEMENT-DUMP BAILER FOR OIL-WELLS. ROBERT LEE BURNS and GEORGE IRWIN KENISTON, Taft, Cal. Filed May 20, 1918. Serial No. 235,683. (Cl. 57—13.)

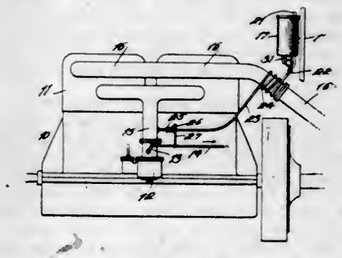


1. A cement dump-bailer for the described purpose comprising a body-member; a container-member fitted to one end of the body-member; a barrel member fitted to the other end of the body-member, said barrel-member having a discharge outlet; a valve-member adapted to control said outlet; a valve-stem connected with the valve-member and disposed by contact with the well bottom to move said valve member to open the discharge outlet; and a latch acting on the valve-member to hold it open.

2. A cement dump-bailer for the described purpose comprising a body-member; a container-member fitted to one end of the body-member; a barrel-member fitted to the other end of the body-member, said barrel-member having a discharge outlet; a sleeve-valve fitted to and slidable upon the barrel-member to cover and uncover the discharge outlet thereof; a stem member connected with the sleeve-valve and extending beyond the barrel member, adapting it by contact with the well bottom to lift the sleeve-valve, to uncover the barrel outlet; and a latch acting on the sleeve-valve to hold it open.

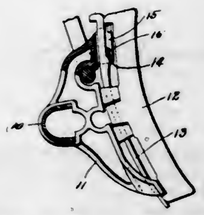
3. A cement dump-bailer for the described purpose comprising a body-member; a container-member fitted to one end of the body-member; a barrel-member fitted to the other end of said body-member, said barrel member having a closed bottom projecting peripherally, and having also a discharge outlet in its wall above said closed bottom; a sleeve-valve fitted to and slidable upon the barrel-member between its bottom and the body-member, to cover and uncover the discharge outlet; a stem-member connected with the sleeve-valve and extending beyond the bottom of the barrel-member adapting it, by contact with the well bottom, to lift the sleeve-valve to uncover the barrel outlet; and a spring latch carried by the barrel-member and acting on the sleeve-valve to hold it open.

1,275,379. GAS-MOISTENING APPARATUS. ELI J. BUSHEY, New York, N. Y. Filed Aug. 19, 1914. Serial No. 857,520. (Cl. 261—13.)



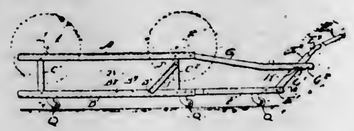
A gas moistening apparatus comprising a gas supply conduit, a heating drum, a water tank, a pipe connected at its outlet end with said gas conduit and passing upwardly through said water tank and having an open intake end located above said tank, said pipe being provided with a series of perforations communicating with the interior of said water tank and being coiled about said heating drum at a point between said perforations and the outlet end of the pipe, a sleeve of porous material fitting about said pipe within the tank and extending over the perforations in the pipe, means for creating a suction through said pipe, and a valve in said pipe for controlling the passage of moistened air therethrough to the gas supply conduit.

1,275,380. BRAKE-SHOE-KEY LOCK. EDWIN G. BUSSE, Chicago, Ill., assignor to Chicago Railway Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 4, 1917. Serial No. 194,679. (Cl. 188—28.)



In a brake shoe key lock, the combination of a brake head and a brake shoe adapted to be secured in position on the brake head, a key for locking said parts together, said key extending approximately parallel to the face of the brake shoe and being provided with an integral transversely disposed shoulder intermediate its length, and a removable transversely disposed locking member mounted in the walls of one of said parts and adapted to engage, or be engaged, by said shoulder, to prevent the withdrawal of said key.

1,275,381. VEHICLE-JACK. HARRY J. BUTLER, VALENTINE J. STEVENS, and MICHAEL D. WALSH, Maple Park, Ill. Filed Nov. 19, 1915. Serial No. 62,319. (Cl. 254—91.)

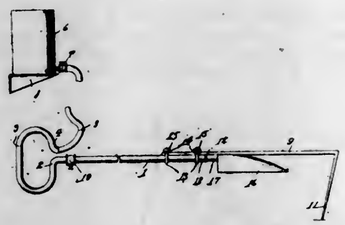


2. A jack for the purpose indicated, comprising a base, parallel posts pivoted thereon, rails pivotally connecting the upper ends of said posts, means for swinging said posts toward upright position, a pawl pivoted to one of said posts, the base being provided with an abutment for engagement by said pawl when the posts have been moved to approach upright position, a pivoted trip device having an abutment over which the pawl is drawn by the continuance of said movement and with which abutment the pawl becomes engaged on its subsequent return movement when the posts are lowered, said engagement causing the trip to swing about its pivot to carry the pawl clear of the abutment of the base.

5. A jack for the purpose indicated, comprising a base, parallel posts pivoted thereon, rails pivotally connecting the upper ends of said posts; means for swinging the posts toward upright position; a pawl pivoted to one of the posts, the base being provided with an abutment for engagement by said pawl to support the rails in elevated position, and a trip device positioned to engage and support the end of the pawl when the latter is drawn beyond said abutment, said trip device being pivoted to carry the end of the pawl in an arc clear of said abutment when the pawl is allowed to move in reverse direction, the pivot aperture of said trip device being vertically elongated, and said trip having a slanted side positioned to engage the side of the pawl as the latter approaches the abutment, whereby said trip device may tip laterally out of the path of the pawl, together with yielding means adapted for restoring said trip device to its normal position.

[Claims 1, 3, 4, and 6 not printed in the Gazette.]

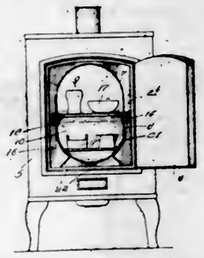
1,275,382. SPRINKLING APPARATUS. CLAUDE W. CAMP, Petoskey, Mich. Filed Mar. 17, 1917. Serial No. 155,549. (Cl. 55—16.)



1. The herein described sprinkling apparatus consisting of a tubular member bent laterally at one end and then formed into a loop-shaped handle, a hose connection between this handle and a source of liquid supply, a sprayer carried by the other end of said member, and an implement whose shank overlies said sprayer and is secured to said member.

2. In a sprinkling apparatus the combination with a rake comprising upright teeth, a cross head, and a shank; of a tubular member underlying and clipped to said shank, a sprayer plate carried by the forward end of said member beneath the shank and at a higher level than the tips of the rake teeth, and means for supplying liquid to the other end of said tubular member.

1,275,383. CHINA-KILN ATTACHMENT. DOMENIC M. CAMPANA, Chicago, Ill. Filed Oct. 29, 1917. Serial No. 199,215. (Cl. 25—144.)

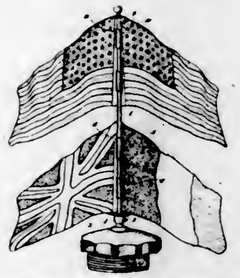


1. In combination, a china kiln having a door at one side thereof; a housing in the kiln having an opening in its side adjacent the door; and an extension on the housing intermediate the top and bottom of the latter adapted to engage the inner wall of the kiln opposite the door and hold the housing in a position with its open side substantially against the door of the kiln to close said opening.

4. An attachment for china kilns comprising a sheet metal housing having one side open and made up of upper and lower portions; means holding the engaging edges of the upper and lower portions against relative lateral displacement; ledges on the inner walls of one of said portions extending along the adjacent edges of said portions and terminating close to the open side of the housing; hook members on the ledges at the open side of the housing; and a shelf resting on the ledges and having parts engaging said hook members.

[Claims 2 and 3 not printed in the Gazette.]

1,275,384. ORNAMENT FOR THE RADIATOR-CAPS OF AUTOMOBILES. AMOS G. CANBY, Detroit, Mich. Filed June 18, 1917. Serial No. 175,357. (Cl. 46—14.)

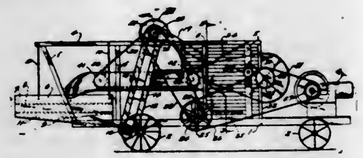


1. An ornament comprising an upright spindle adapted to be secured to the cap of an automobile radiator, a symmetrically disposed lower blade journaled on the spindle and provided with oppositely extending wings, and an upper blade rotatable on the spindle and provided with oppositely extending wings, the wings of the blades being curved to cause the blades to rotate in opposite directions under the influence of air through which the blades are moved.

2. An ornament comprising an upright spindle adapted to be secured to the cap of an automobile radiator, a pair of blades mounted to revolve on the spindle under the influence of air moving past the spindle, each provided with oppositely disposed and convexed wings, corresponding sides of the wings of the blade having similar designs whereby the blades present different designs on the sides of the spindle when the blade is spinning, and the blades being disposed to turn in opposite directions under the influence of air through which the blades are moved.

3. An ornament comprising an upright spindle, a base forming a thrust bearing on the lower end portion of the spindle, there being a reduced upper portion on the spindle forming an upper thrust bearing, a lower blade having oppositely disposed and curved wings extending in either direction from the medial line thereof, an apertured lug on the lower margin of the blade engaging over the spindle and riding on the face of the thrust bearing, hinged portions on the blade formed by transverse slits in the body thereof, curved to form bearings on the spindle, an upper blade having oppositely disposed equal wings, the curved surfaces of which are disposed oppositely to the corresponding lower blades whereby the upper blades rotate in opposite direction to the lower blades, an upper inturned apertured lug on the upper blade engaging over the reduced portion of the spindle and bearing against the upper thrust shoulder formed thereby, and hinged portions in the blade body formed by transverse slits, and thrust out and bent to engage over the spindle.

1,275,385. BEAN-CLEANER. JOHN DAVID CARLSON, Turlock, Cal. Filed Nov. 5, 1917. Serial No. 200,352. (Cl. 130—15.)



1. In a cleaner, superimposed shaking screens, a conveyer housing contiguous to said shaking screens, a floor arranged beneath said shaking screens and communicating with said conveyer housing and spaced away from the adjacent wall thereof, a conveyer within said housing, a conveyer chute, a fan contiguous to the mouth of said conveyer chute, a trough contiguous to said fan and communicating with said superimposed screens, and a return conveyer operative in said trough.

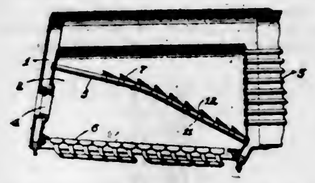
2. In a cleaner, superimposed shaking screens, a conveyer housing contiguous to said shaking screens, a stationary floor arranged beneath said shaking screens and communicating with said conveyer housing and spaced away from the adjacent wall thereof, a conveyer within said housing, a conveyer chute, a fan contiguous to the mouth of said conveyer chute, a trough contiguous to said fan and communicating with said superimposed screens, and means operative in said trough whereby the contents thereof may be advanced therethrough in the direction of the said superimposed screens.

3. In a cleaner, superimposed shaking screens, a conveyer housing contiguous to said shaking screens, a stationary floor arranged beneath said shaking screens and communicating with said conveyer housing and spaced away from the adjacent wall thereof, a conveyer within said housing, a conveyer chute, a fan contiguous to the mouth of said conveyer chute, and bean-receiving and transporting means contiguous to said fan and communicating with the said superimposed screens.

1,275,386. LOCOMOTIVE ARCH-BRICK. EDWARD M. CARROLL, Port Tampa City, Fla. Filed Oct. 8, 1917. Serial No. 195,338. (Cl. 110—87.)

1. A brick comprising a body provided at its under side with a concaved surface and at its upper side with a convexed surface, said surfaces being disposed at an acute angle with relation to each other longitudinally of the body, the under portion of the body being chamfered at one end, and the upper convexed surface having a depression formed therein.

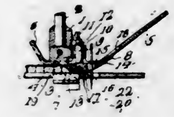
3. A brick comprising a body provided at its under side with a concaved surface and at its upper side with a convexed surface, said surfaces being disposed at an acute angle with relation to each other longitudinally of the body, the under portion of the body being chamfered at its thicker end, the body being further provided at its edge portions with recesses which communicate with the chamfered portion.



5. A brick comprising a body provided at its under side with a concaved surface and at its upper side with a convexed surface, said surfaces being disposed at an acute angle with relation to each other longitudinally of the body, the under portion of the body being chamfered at one end and between its side edges, the body being further provided at its edge portions with recesses which communicate with the chamfered portion and provided at its side edges with longitudinally disposed grooves.

[Claims 2 and 4 not printed in the Gazette.]

1,275,387. PRESSER-FOOT FOR SEWING-MACHINES. JOHN E. CHALMAN, Chicago, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed May 6, 1914. Serial No. 836,710. (Cl. 112—13.)



1. A presser foot for sewing machines, including in combination, a main foot, having a slot formed therethrough, centrally thereof, an auxiliary foot located in said slot, a stem slidably mounted on said main foot to which said auxiliary foot is pivotally attached, means for yieldingly depressing said auxiliary foot, whereby the same may be moved a limited distance beneath the work engaging surface of the main foot, and means for limiting the downward movement of the auxiliary foot, said auxiliary foot having a needle opening therethrough.

4. The combination with a work support having a needle opening therethrough and a solid portion in rear of the needle opening, a feed dog having a section thereof located in rear of the needle and said solid portion of the work support, a main presser foot, means for supporting said main presser foot, said main presser foot having a slot therethrough centrally thereof and extending from a point in rear of the solid portion of the work support to a point in front of the needle, an auxiliary presser foot located in the slot in the main presser foot and bodily movable below the work engaging surface of the main presser foot, said main presser foot being connected to its supporting means, whereby the same may tilt upward at the forward end thereof when the material passes underneath said foot.

[Claims 2, 3, 5, and 6 not printed in the Gazette.]

1,275,388. ROTARY PUMP. PETER CHRISTMAN, Green Bay, Wis. Filed Feb. 19, 1917. Serial No. 149,511. (Cl. 103—44.)

1. In a rotary pump, an upright cylinder provided with a row of inlet openings along one side and being eccentrically bored; a plug closing the lower end; an outlet pipe leading upward from said cylinder; an eccentric pin upstanding from the plug; a concentric rotary piston inclosing said pin and contacting with the

cylinder wall in advance of said row of openings, said piston being provided with upright slots; means leading to the outlet pipe for rotating said piston; and wings hinged on said pin and projecting through said slots in contact with the cylinder wall, said piston and cylinder being arranged and formed to permit the flow of the fluid interiorly and exteriorly of said piston.



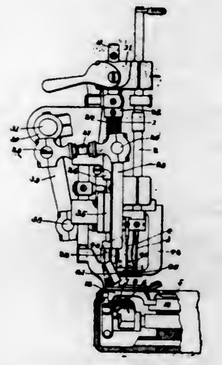
4. In a rotary pump, an upright cylinder provided with a row of ports along one side and being eccentrically bored, said cylinder being closed at its lower end; an outlet pipe connected to the upper end of said cylinder; a concentric rotary tubular piston contacting with the cylinder wall in advance of said ports, said piston communicating at its upper end with said outlet pipe and having upright slots; wings loosely projecting through said slots and being rotatable about an axis interior of but eccentric to said piston, said wings being dished at their front faces and in contact with the cylinder wall, the cylinder wall being bored out to provide a fluid passage exteriorly of said piston; and means for preventing the return flow of the raised fluid.

10. In a rotary pump, an upright cylinder provided with a row of ports along one side and being eccentrically bored, the cylinder being closed at its lower end; an outlet pipe connected to the upper end of said cylinder; a concentric rotary piston contacting with the cylinder wall in advance of said ports, said piston communicating at its upper end with said outlet pipe and having upright slots; wings projecting through said slots in contact with the cylinder wall and being rotatable about an axis interior of but eccentric to said piston, said wings being dished at their front faces and spacing off finid passages in said piston, said cylinder being bored out to provide an additional passage exterior of said piston; an oscillating valve controlling said piston passages; roller bearings interposed between the piston and cylinder at the upper and lower end; and means for returning the rollers in operative position, said means being constructed to permit the passage of the fluid at the upper end between said piston and cylinder, substantially as described.

[Claims 2, 3, and 5 to 9 not printed in the Gazette.]

1,275,389. CROSS-THREAD-LAYING MECHANISM FOR SEWING-MACHINES. NELSON D. CLARK, Chicago, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed May 18, 1916. Serial No. 98,387. (Cl. 112—7.)

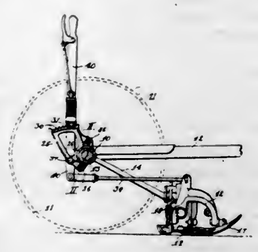
1. The combination of a work support, a presser bar, feeding mechanism, a pair of needles arranged in a plane at an angle to the line of feed, a stationary thread guide disposed at one side of the needles and in rear of the adjacent needle, a thread hook movable across the line of feed and adapted to engage the thread extending through the thread guide and form a loop therein for the entrance of the needle farthest removed from said guide, means for supporting said thread hook whereby the same may swing about the center of the presser bar as an axis, said hook moving directly underneath the thread guide well in front of the needle adjacent the thread guide and to a position at one side of and in front of the needle farthest removed from the thread guide whereby the loop formed by the thread hook is properly positioned for the entrance only of the needle farthest from said thread guide.



7. The combination of a work support, feeding mechanism, a pair of needles arranged in a plane at an angle to the line of feed, a stationary thread guide disposd at one side of the needles and in rear of the plane of the needles, a thread hook movable across the line of feed and adapted to engage the thread extending through said thread guide and form a loop therein for the entrance of the needle farthest removed from said guide, a supporting arm for said thread hook, said supporting arm having an eye for the thread engaged by the thread hook and devices for guiding said thread to the arm, said devices being so disposed that a backward movement of said arm draws the thread around the needle.

[Claims 2 to 6 not printed in the Gazette.]

1,275,390. ATTACHMENT FOR MOWERS AND THE LIKE. SANFORD LOCKWOOD CLUETT, Hoosick Falls, N. Y. Filed July 23, 1917. Serial No. 182,209. (Cl. 74—39.)

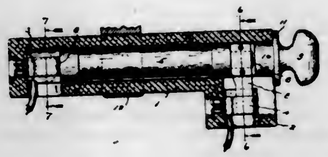


1. An attachment for mowers or the like having in combination with a main frame provided with a plurality of ears projecting from the same, a lever quadrant, said ears and quadrant having inter-engaging lugs and recesses, and means for holding the ears and quadrant in engagement.

3. An attachment for mowers or the like having in combination with a main frame having a circular cross-section and provided with a plurality of ears projecting from and integral with the same, a lever quadrant having an arcuate-shaped recess in which said main frame is seated, said ears and quadrant having inter-engaging wedge-shaped lugs and recesses, and means for holding the ears and quadrant in engagement and the main frame in the arcuate-shaped recess.

[Claims 2 and 4 to 8 not printed in the Gazette.]

1,275,391. CUT-OUT. ROBERT C. COLE, Hartford, Conn., assignor to The Johns-Pratt Company, Hartford, Conn., a Corporation of Connecticut. Filed Oct. 3, 1917. Serial No. 194,468. (Cl. 175—277.)



1. A cut-out comprising an insulating tubular casing having one end closed and the other end open with spring fingers fastened in the casing near the closed end and extending toward the open end, and spring fingers fastened in the casing near the open end and extending in the same direction as the first mentioned spring fingers but out of line therewith, and an inclosed fuse having a longitudinally extending knife blade at each end with a transversely projecting blade fastened to one knife blade, whereby the fuse may be thrust into the casing and said blades and fingers connected and drawn from the casing and said blades and fingers disconnected, by a straight longitudinal movement.

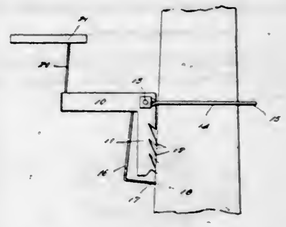
3. A cut-out comprising an insulating tubular casing having one end closed and the other end open with spring fingers fastened in the casing near the closed end and extending toward the open end and spring fingers fastened in the casing near the open end and extending in the same direction as the first mentioned spring fingers but out of line therewith, and an inclosed fuse having a longitudinally extending knife blade at each end with a handle and a transversely projecting blade clamped to one knife blade, whereby the fuse may be thrust into the casing for engaging and drawn out of the casing for disengaging said blades and fingers by a straight longitudinal movement.

5. A cut-out comprising an insulating tubular casing having one end closed and the other end open with spring fingers fastened in the casing near the closed end and extending toward the open end and spring fingers fastened in the casing near the open end and extending in the same direction as the first mentioned spring fingers but out of line therewith, a removable inclosed fuse having a longitudinally projecting blade at one end adapted to engage the spring fingers at the closed end of the casing and a transversely projecting blade at the other end adapted to engage the spring fingers at the open end of the casing, a handle attached to the fuse at the end adjacent to the transverse blade, a band clamped about the tubular casing, and a bracket pivoted to said band.

[Claims 2 and 4 not printed in the Gazette.]

1,275,392. LINEMAN'S DEVICE. DAN COLLINS, Baker, Oreg. Filed Dec. 1, 1916. Serial No. 134,456. (Cl. 20—84.)

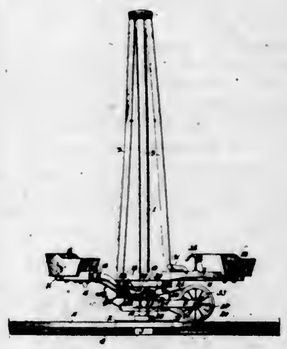
1. A device of the character described including a frame, serrated legs depending therefrom and adapted for biting engagement with an upright support, a pintle extending through the frame, hanger jaws pivotally connected on opposite sides of the frame and adapted for biting engagement with the opposite side of a support, a lever swingingly mounted on the pintle, a grab jaw formed on the lower end of the lever and adapted for biting engagement with a support at a point beneath



the frame, a seat support formed on the upper end of the lever, and a seat mounted on the seat support.

[Claim 2 not printed in the Gazette.]

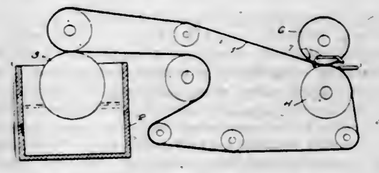
1,275,393. CAROUSEL. JOHN W. B. COLLINS, Baltimore, Md., assignor to Lawrence E. Davis, Baltimore, Md. Filed Aug. 31, 1917. Serial No. 189,222. (Cl. 46—27.)



4. In a carousel, a central mast, a hanger rotatably mounted upon said mast, outwardly extending arms attached to the lower end of said hanger, a passenger carrying frame at the outer end of said arms, an auxiliary frame connected to said carousel below said passenger carrying frame, a driving wheel journaled upon said auxiliary frame, a motor also mounted upon said auxiliary frame and having a driving connection with said wheel, a track mounted below said carousel with which said wheel engages, and electrical conductors connecting said motor through the mast with a source of energy outside of the carousel.

[Claims 1 to 3 not printed in the Gazette.]

1,275,394. WET-MACHINE. HENRY A. CONSTANTINE, Niagara Falls, N. Y. Filed Aug. 15, 1916. Serial No. 114,955. (Cl. 92—67.)

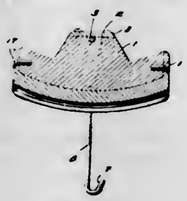


1. In a wet machine of the usual type comprising a roll adapted to accumulate a deposit thereon, a flexible

cutter carried by said roll, and means for operating said cutter to facilitate discharge of the deposit from said roll in the usual manner.

[Claims 2 to 9 not printed in the Gazette.]

1,275,395. SPUDDING-SHOE. JAY R. CORBETT, New Wilson, Okla. Filed Apr. 18, 1918. Serial No. 229,300. (Cl. 255—33.)

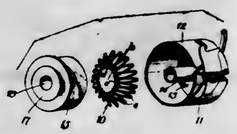


1. A spudding shoe including a body, and an arcuate removable bearing face carried by the body.

2. A spudding shoe including a body, and a removable arcuate face carried by the body, said arcuate face having a cable receiving groove formed therein, and rearwardly projecting lugs on the ends of the face for attachment to the body.

3. A spudding shoe including a body, a clevis carried by the body, said clevis having legs overlying the sides of the body and extending forwardly therefrom and terminating in open hooks and a rope holding element having trunnions engageable with said open hooks.

1,275,396. STABILIZING-SPRING FOR BOBBINS. EDWARD W. CORCORAN and FREDERICK W. PUND, Cincinnati, Ohio. Filed Apr. 17, 1917. Serial No. 162,695. (Cl. 267—10.)



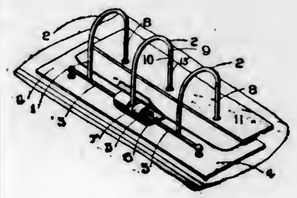
1. A spring formed from a single length of resilient wire successively bent and rebent upon itself to provide a series of outer open bends, the adjacent sides of adjacent bends crossing each other to provide a corresponding inner series of closed loops and the ends of the wire being joined whereby an annular resilient body is provided, the surface of which is inclined to its axis.

6. A spring for use in bobbin cases to engage between the thread bobbin and closed end of the case, said spring being formed with an inner series of loops and an outer series of bends with its bends disposed in a plane spaced from the plane of its loops, the bends being adapted to engage the closed end of the case and the loops the thread bobbin.

[Claims 2 to 5 not printed in the Gazette.]

1,275,397. PAPER-FILE. THOMAS CHARLES COULL and WILLIAM ELLISON MCLEAN, Dunedin, New Zealand. Filed Aug. 21, 1916. Serial No. 116,139. (Cl. 129—11.)

A paper file, comprising in combination a plate, a pair of hollow pillars rising from said plate, another pillar located midway between said hollow pillars and extending from the plate in the same direction as the outside pillars, a bar pivotally secured to said plate and at a distance from the same, arches, secured to said bar and adapted for coöperation with said pillars to close the file, a cam mounted centrally on said bar, one of said arches extending from said cam, a spring mounted on the plate and projecting through the interspace between said bar and the plate, said spring being provided with a bifurcated ex-



tension embracing the cam and in engagement therewith, the two drums of said bifurcated extension being located at opposite sides of one of the arches on said bar.

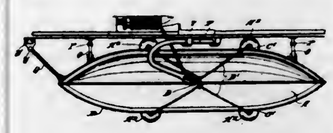
1,275,398. CHAIN-TIGHTENER. THOMAS S. COURTNEY, East Moline, Ill., assignor to Marseilles Company, East Moline, Ill., a Corporation of Illinois. Filed Nov. 22, 1916. Serial No. 132,788. (Cl. 64—5.)



7. A chain tightener including a sleeve mounted on a tubular shaft and turnable thereon to varying positions, the shaft having a smaller diameter than the interior of the sleeve to provide a space between the shaft and the sleeve, an arm on said sleeve movable therewith and carrying a roller, said sleeve having diametrically opposite slots, and a bolt extending through said slots and the shaft and operative to expand the shaft laterally against the sleeve and to hold the latter and the shaft rigidly together.

[Claims 1 to 6 not printed in the Gazette.]

1,275,399. MEANS FOR LAUNCHING BOATS FROM SHIPS. MOFFAT CROOKS, Enfield Wash, Ponders End, England. Filed Mar. 16, 1915. Serial No. 14,709. (Cl. 9—22.)

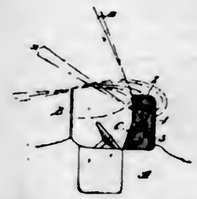


1. Launching mechanism for ship's boats including a drum and a boat supporting cable connected with the drum, in combination with means constructed and arranged to hold the drum against rotation and acting automatically to permit rotation of the drum when a predetermined weight is applied to the cable.

6. An apparatus for launching boats, in combination with a ship having a vertically extending guide way on the exterior thereof, of a drum, a boat supporting cable connected therewith, a boat supporting cradle arranged to embrace the sides of a boat and connected with said supporting cable, a member slidably engaging the said vertical guide and a link pivotally connected with the said boat supporting frame and with the said member, substantially as described.

[Claims 2 to 5 not printed in the Gazette.]

1,275,400. BACK-DRAFT SHIELD FOR VEHICLES. WILLIAM DE F. CROWELL, St. Louis, Mo. Filed May 9, 1917. Serial No. 167,409. (Cl. 21—219.)



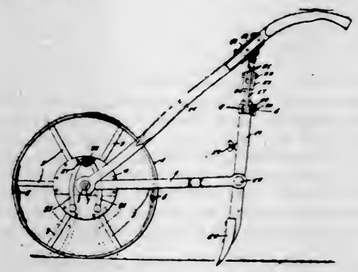
1. The combination of a wind shield, a seat and a draft shield having a back wall, relatively narrow side walls and a relatively narrow top portion, whereby the occupant of the seat is protected from the back draft produced by the wind shield without materially cutting off the view of the occupant of the seat upward or side wise.

2. In an automobile, motor boat or other conveyance, the combination of a seat, a front wind shield arranged in front of said seat, and a draft shield arranged at the rear of said seat adjacent the upper edge of the back of the seat and comprising a back wall, relatively narrow side walls and a relatively narrow top portion whereby the occupant of the seat is protected from the back draft currents produced by the vortex created at the rear side of the wind shield without materially cutting off the view of said occupant upward or sidewise.

3. In an automobile, motor boat or other conveyance, the combination of a seat, a front wind shield, and a back draft shield arranged at the rear of the seat, said back draft shield consisting of a housing open at its front side and provided at its top and sides with forwardly-projecting portions which are relatively narrow so that the front edges of same will terminate on a line substantially flush with the face of the occupant of said seat and thus protect said occupant from the back draft produced by the front wind shield without materially cutting off the view of said occupant upward or sidewise.

[Claim 4 not printed in the Gazette.]

1,275,401. FOLDING CULTIVATOR. JOSEPH R. CROYL, Altoona, Pa. Filed Jan. 25, 1918. Serial No. 213,761. (Cl. 97—42.)

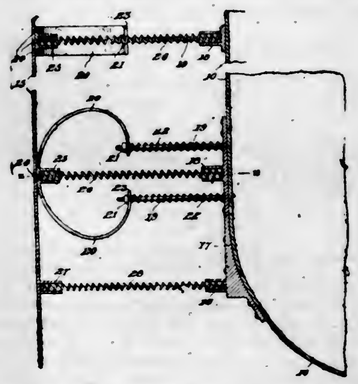


1. A folding cultivator including a wheel composed of hinged sections, means for locking the sections in extended position, there being a spindle for the wheel, links pivoted to the spindle, a standard pivoted to the links, a cultivator blade on the standard, handles, links pivoted to the handles, means for detachably securing the links to the standard, other links pivotally secured to the handles, and means for adjustably and detachably securing the said links to the standard.

4. A folding cultivator, including a wheel, links pivotally secured to the wheel, a standard having a central longitudinal bore secured to the links, handles, a rod carried by the handles and adapted to enter the bore, and means for clamping the rod in the standard.

[Claims 2 and 3 not printed in the Gazette.]

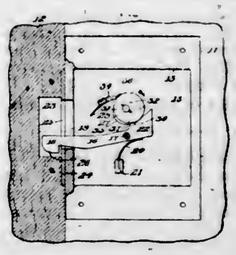
1,275,402. SHIP-PROTECTOR. KAZIMIRZ CWIKLIŃSKI, Blue Island, Ill. Filed Dec. 29, 1917. Serial No. 209,466. (Cl. 114—240.)



3. In combination with a hull, spaced brackets secured thereto, an outwardly projecting pair of posts carried by each of said brackets, a bow spring for each bracket having its free end portions slidably mounted upon the posts of said bracket, an armor plate vertically secured centrally to a plurality of said bow springs, springs encircling said posts contacting the said brackets and the adjacent sides of said springs, regulating nuts threaded adjacent the free ends of said posts, sockets carried by said bow springs and brackets in substantial alinement with each other, helical springs arranged with their opposite ends secured in the said sockets, horizontally arranged alining sockets carried by the said brackets and plates in a plane beneath the aforementioned sockets and helical springs having their opposite ends secured within the said lower sockets.

[Claims 1 and 2 not printed in the Gazette.]

1,275,403. LOCK. KAZIMIRZ CWIKLIŃSKI, Blue Island, Ill. Filed Dec. 29, 1917. Serial No. 209,467. (Cl. 70—31.)

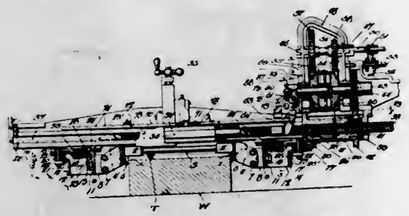


1. A lock comprising a casing, a latch pivoted therein having a triangular-shaped heel at its inner end and an outer hooked end projecting from the casing, a normal positioning spring for the latch engaging the lower side of the heel, a key operated disk journaled within the casing adjacent the heel, a spring carried by the disk having depressing wiping engagement with the adjacent upper side of the heel during the rotation of the disk, a sliding door having a socket in the adjacent edge thereof, a keeper plate overlying said socket having a slot therein

adapted for the reception of the said hook when the door is closed, the said disk having a hub portion arranged with notches and a detent secured within the casing adapted for engaging the said notches for preventing a reversal of movement of the said disk.

[Claim 2 not printed in the Gazette.]

1,275,404. PORTABLE SHAPER. MARK H. DAMERELL, Detroit, Mich. Filed June 29, 1917. Serial No. 177,674. (Cl. 90—42.)



1. A shaper or the like including a main support comprising a pair of spaced beams, each of said beams having a longitudinally extending shoulder, a slide in the form of a plate disposed on said beams and straddling the same, one side of said slide having a laterally extending portion adjacent the shoulder of one of the beams, a plate secured to the laterally extending portion to engage the adjacent shoulder, an L-shaped clamping plate secured to the slide and engaged with the shoulder of the other beam, a bridge secured to the slide, and a cutter carried by the bridge.

3. A portable shaper or the like including a main support comprising a pair of spaced beams connected together, a pair of clamped dogs each having a sleeve, a rod slidably disposed in said sleeves, means on one end of the rod for moving one of the dogs toward the other whereby to clamp said support to work material, a bridge slidably movable on said support, a cutter carried by the bridge, means for shifting the bridge with respect to said support comprising a feed screw rotatably mounted between said spaced beams, a nut carried by the bridge and connected with said feed screw, and means for rotating the feed screw.

19. A shaper comprising a main support, a bridge slidable on the support, a cutter carrying member mounted on the bridge, means for shifting the bridge longitudinally of the main support, means for actuating the shifting means including a rock shaft, a second shaft, a lever extending from the rock shaft, a rod pivoted to the lever, an adjustable connection between the rod and the second shaft, a feed rocker on the second shaft having one end forked, and means carried by the cutter carrying member for engagement with said forked end of the feed rocker for rocking the same during movement of said cutter carrying member.

[Claims 2 and 4 to 18 not printed in the Gazette.]

1,275,405. HYDROGENATION OF FATS AND OILS. JAMES DEWAR, London, and ADOLF LIEBMANN, Weybridge, England, assignors to The Procter and Gamble Company, Cincinnati, Ohio, a Corporation of Ohio. Filed June 2, 1914. Serial No. 842,538. (Cl. 87—12.)

1. For use in the hydrogenation of fats and oils, a mixture of compounds of different catalytic metals, one at least of which is a heavy metal catalyst, said mixture reducible by hydrogen in the hydrogenation process.

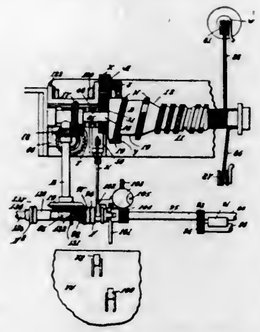
3. The method of preparing a mixed catalyzer and hydrogenating fats or oils in one operation, which consists in treating the heated fat or oil with hydrogen in presence of a mixture of compounds of different catalytic metals, one at least of which is a heavy metal catalyst.

4. The method of preparing a mixed catalyzer and hydrogenating fats or oils in one operation, which consists in treating the fat or oil with hydrogen in presence of a mixture of compounds of different catalytic metals, one at least of which is a heavy catalyst, at a temperature not exceeding 200° C.

7. For use in the hydrogenation of fats and oils, a mixture of compounds of nickel and copper, said mixture reducible by hydrogen in the hydrogenation process.

[Claims 2, 5, and 6 not printed in the Gazette.]

1,275,406. SLOWING MECHANISM FOR ROVING-ROLLERS OF WOOLEN-MULES. ABRAHAM L. DUNHAM, Chelmsford, Mass. Filed Dec. 3, 1917. Serial No. 205,208. (Cl. 118—29.)



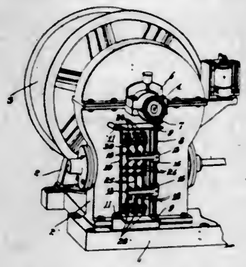
1. In a spinning mule having a head which includes roving delivery rollers, a delivery roller clutch, means to engage and disengage the delivery roller clutch, and a main driving means, and a carriage adapted to advance toward and to recede from the head, the combination of a driving roll having a head, a shank, and a conical neck connecting them, a driven roll, a chain so attached at each end that when winding on the driving roll it will be unwinding from the driven roll and the reverse, connections between the driven roll and the delivery roller clutch, a clutch between the driving roll and the main driving means, means to engage said clutch thereby to rotate the driving roll when the carriage starts to recede from the head, means to disengage said clutch when the carriage has receded to a predetermined point, and means to return the driving and driven rolls to their normal positions.

4. In a spinning mule having a head which includes roving delivery rollers and main driving means, and a carriage adapted to advance toward and to recede from the head, the combination of reversible driving and driven rolls each having a head, a shank, and a conical neck connecting them, such rolls being located parallel to and head to shank with each other, flexible means so attached at each end to a roll that when winding up on one it will be unwinding from the other, reversible connections between the driven roll and the roving rollers, revoluble connections between the driving roll and the main driving means, means to make operative such revoluble connections adjustable to make them inoperative at a predetermined point, means to return the driving and driven rolls to their normal positions, and means to alter such normal positions.

6. In a spinning mule having a head which includes roving delivery rollers and main driving means, and a carriage adapted to advance toward and to recede from the head, together with means to cause the carriage to so advance and recede, the combination of means to stop the roving rollers, reversible means operated independent of the means to cause the carriage to advance and recede, positively and adjustably to reduce the speed of the roving rollers before they stop, between them and the main driving means, mechanism to start, stop, and return the reversible means to normal position, and means to alter the slowing down point and the stopping point.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,275,407. AUTOMATIC LIMIT-SWITCH. EDWARD L. DUNN, Worcester, Mass., assignor, by mesne assignments, to Standard Plunger Elevator Company, Worcester, Mass., a Corporation of Massachusetts. Filed Sept. 18, 1913. Serial No. 790,455. Renewed Nov. 8, 1917. Serial No. 200,995. (Cl. 200—21.)



1. The combination of a base carrying a threaded shaft, a crosshead engaged therewith so as to be reciprocated thereby, a guide for said crosshead, a plurality of independently adjustable strikers carried by said crosshead, and a plurality of switches disposed parallel to said shaft and disposed to be actuated independently by said strikers at times determined by the respective adjustments of said strikers relatively to said crosshead.

3. The combination of a base, a mechanically driven screw shaft, a plurality of crossheads engaged with said screw shaft and reciprocated thereby, said crossheads embodying a releasable connection whereby to permit longitudinal adjustment relatively to the screw shaft, a plurality of pairs of alined lever switches arranged longitudinally of said shaft and between said base and said crossheads, the switches of each pair at the ends adjacent the end of said shaft having each an actuating projection disposed in the path of one of said crossheads, and having each a contact at their adjoining ends, and an adjustable striker for each switch carried by said crossheads, whereby the switches of each pair can be variably actuated as the crossheads approach the respective ends of said screw.

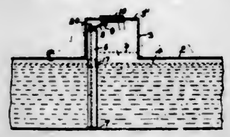
[Claims 2 and 4 not printed in the Gazette.]

1,275,408. ART OR METHOD OF ETCHING STEEL OR OTHER LIKE PLATES. WILLIAM S. EATON, Sag Harbor, N. Y. Filed Nov. 28, 1916. Serial No. 133,874. (Cl. 204—1.)

1. A method or art of etching steel or other like plates consisting in submmerging a plate having the portion of the surface thereof to be etched exposed and other portions thereof protected by a resist in an electrolytic bath composed of a chlorid solution of a strength having little or no corrosive action upon the metal of the plate, said plate constituting the anode of an electric couple and passing the electric current through the electrolytic cell so formed, the voltage of said current being below the decomposition voltage of the electrolyte but sufficiently high to disassociate the chlorin from the liquid of the solution to cause the etching to be done by said chlorin while in a nascent state.

[Claims 2 to 4 not printed in the Gazette.]

1,275,409. OUTAGE-GAGE. CHARLES F. EHRENTRAUT, Pittsburgh, Pa. Filed Aug. 27, 1917. Serial No. 188,302. (Cl. 73—82.)



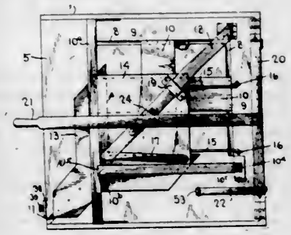
1. A level indicator consisting of a casing having a vertically and freely movable indicating float, a device for engaging, arresting and holding the float, and a lever adapted to engage and actuate said device.

10. A level indicator consisting of a casing having a vertically movable indicating float, a device for arresting and holding the float, a lever adapted to engage and actuate said device, and a movably mounted abutment adapted to engage said lever.

11. A level indicator consisting of a casing having a vertically movable indicating float, a device for arresting and holding the float, a lever adapted to engage and actuate said device in one direction and to be ineffective in a reverse direction, and a rotatably mounted abutment adapted to engage said lever in either direction of movement.

[Claims 2 to 9 not printed in the Gazette.]

1,275,410. PRINTING-MACHINE. CARL A. ERICKSON, Burwell, Nebr. Filed July 24, 1916. Serial No. 111,042. (Cl. 95—79.)



1. In an electric printing machine, a cabinet provided with an opening, a mask plate slidably mounted along each of two sides of the opening and located at right angles to each other, and a slidably mounted angular mask plate coöperating with the two before-mentioned mask plates to vary the size of the opening and to provide a marginal edge on the paper to be printed.

2. In an electric printing machine, a cabinet provided with an opening, a groove extending along each of two sides of the opening and located at right angles to each other, a pair of mask plates each having a block secured to one end thereof, said blocks being received within said grooves whereby the mask plates are slidably mounted, and a slidably mounted angular mask plate coöperating with the two before-mentioned mask plates to vary the size of the opening and to provide a marginal edge on the paper to be printed.

3. In an electric printing machine, a cabinet provided with an opening, a mask plate slidably mounted along each of two sides of the opening and located at right angles to each other, a diagonally extending groove formed at one corner of the opening, an angular mask plate, a block secured to the mask plate and sliding in said groove whereby said angular mask plate can be adjusted to cooperate with the two before-mentioned mask plates to vary the size of the opening and to provide a marginal edge on the paper to be printed.

4. In an electric printing machine, a cabinet provided with an opening, a mask plate slidably mounted along each of two sides of the opening, a slidably mounted angular mask plate coöperating with the two before-mentioned mask plates to vary the size of the opening, and a guide bar extending along each of two sides of the opening whereby a white margin of any size can be provided on the edge of the paper to be printed.

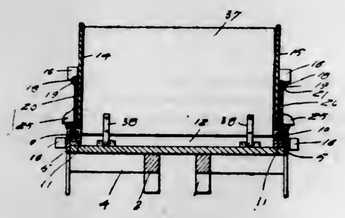
7. In a printing machine, a cabinet provided with an opening, two intersecting mask plates movable over said opening, and a slidably mounted Y-shaped mask plate cooperating with the aforesaid mask plates to vary the size of the opening and to provide a marginal edge on the paper to be printed.

[Claims 5 and 6 not printed in the Gazette.]

1,275,411. FREIGHT-CAR. NICHOLAS FENDER, Gary, Ind. Filed Sept. 15, 1917. Serial No. 191,565. (Cl. 105—15.)

6. In a freight car structure, a body provided with a recessed upper surface, a pair of shafts extending longi-

tudinally along each side of said recessed body, side boards, means connecting said side boards and said shafts whereby when said shafts are rotated said side boards will be swung inwardly and downwardly into a horizontal position and have their normally inner surfaces positioned upwardly for forming the flat upper surface to the car body.



7. In a freight car structure, a body provided with a recessed upper surface, a pair of shafts extending longitudinally along each side of said recessed body, side boards, means connecting said side boards and said shafts whereby when said shafts are rotated said side boards will be swung inwardly and downwardly into a horizontal position and have their normally inner surfaces positioned upwardly for forming the flat upper surface of the car body, and means carried by said car body and said shafts for interengagement to prevent accidental rotation of the shafts.

8. In a freight car structure, a body provided with a recessed upper surface, a pair of shafts extending longitudinally along each side of said recessed body, a plurality of bars attached to said shaft at spaced intervals, side boards, said bars being pivotally connected to said side boards substantially equi-distant to their upper and lower edges whereby when said shafts are rotated the side boards will be swung inwardly and downwardly into horizontal positions, and have their normally inner surfaces positioned upwardly for forming the flat upper surface of the car body, and gates hingedly connected to said body and adapted to fold inwardly into the recess formed in the upper surface of the body beneath said side boards when the latter are in folded position, angled plates attached to the ends of said side boards for limiting the outward hinged movement of said end gate, and means carried by said end gates for engagement with said angle plate for locking the end gates against accidental movement.

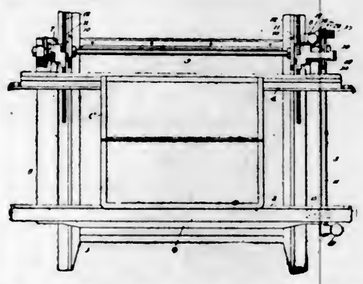
9. In a freight car structure, a body provided with a recessed upper surface, a pair of shafts extending longitudinally along the sides of said recessed body, a plurality of bars attached to said shafts at spaced intervals, side boards, said bars being pivotally connected to said boards substantially equi-distance of their upper and lower ends whereby when said shafts are rotated said side boards will be swung inwardly and downwardly into horizontal positions, pins carried by the ends of said side boards, slots formed in the inner ends of said recessed body, said pins traveling in said slots for guiding the movement of said side boards into horizontal or vertical positions, and means carried by said car body and said shafts for inter-engagement to prevent accidental rotation of the shafts.

[Claims 1 to 5 not printed in the Gazette.]

1,275,412. FLUX FOR USE IN BRAZING CAST-IRON AND OTHER METALS. ARCHIBALD FIGGINS, Richmond, Victoria, Australia, assignor to Jacob Hyam Nathan, St. Kilda, Victoria, Australia. Filed Jan. 18, 1917. Serial No. 143,106. (Cl. 75—187.)

A flux for brazing cast iron and other metals comprising an intimate mixture, sodium bi-borate 38%, sodium carbonate 19%, sodium chlorid 38%, soda ash 4.96% and chlorid of gold .04%.

1,275,413. LINE-SPACING MECHANISM. HARRY ARTHUR FOOTHORAP, Harrisburg, Pa., assignor to Elliott-Fisher Company, Harrisburg, Pa., a Corporation of Delaware. Filed Dec. 14, 1914. Serial No. 877,214. (Cl. 197—124.)

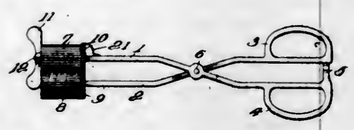


1. In a machine of the class described, the combination with a support and a line space frame movable thereon, of a line space shaft extended across the rear of the frame, a line space driving shaft extending along one side of the frame, line spacing mechanism assembled on the line space shaft, a connection between said line spacing mechanism and the rear end of the line space driving shaft, and an operating device carried by the line space driving shaft and located at the front of the line space frame.

5. In a line spacing mechanism, the combination with a line spacing wheel, a pawl carrier and a stop carrier both mounted to swing from the axis of the wheel, a pawl pivoted on the pawl carrier and disposed to engage the periphery of the wheel, means for retaining the stop carrier in different positions, a stop in the form of a swinging arm mounted on the stop carrier and coacting with the pawl to determine the extent of movement thereof, and means for retaining the stop in its adjusted positions on the stop carrier.

[Claims 2 to 4 and 6 to 11 not printed in the Gazette.]

1,275,414. SURGICAL CLAMP. GILBERT D. FORBES, Kendall, N. Y. Filed Aug. 28, 1917. Serial No. 188,569. (Cl. 128—28.)



1. In a device of the character described, a plurality of arms having pivotal connection, rollers carried by said arms, and means connected with the rollers for rotating the same.

2. In a device of the character described, a plurality of arms having pivotal connection, handles to manipulate the same, rollers carried by said arms, means for rotating the rollers, and gear connections between the rollers so that motion can be imparted from one to the other.

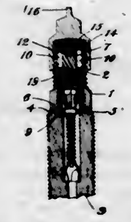
3. A surgical clamp, comprising a plurality of arms, grooved rollers carried by the same, means for revolving the rollers, means for braking the rollers when operated, and means for locking the arms when operated.

[Claim 4 not printed in the Gazette.]

1,275,415. [WITHDRAWN.]

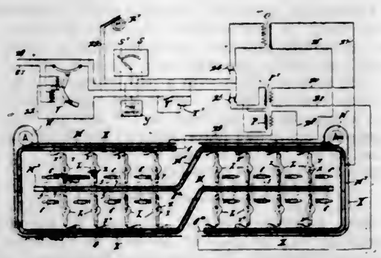
1,275,416. TIRE-VALVE CONTROL. WILLIAM S. GEDNEY, Belleville, N. J. Filed Dec. 29, 1917. Serial No. 209,425. (Cl. 152—12.)

1. The combination with a sleeve-like member having interior and exterior screw threads and a valve stem extending longitudinally of said sleeve, of a rider having threads to coöperate with said interior threads of the sleeve thereby adapted to be screwed against said valve stem for opening the same so as to deflate the tire, one of said threaded parts having a longitudinal passage for the flow of air from end to end of said rider, said rider remaining within said sleeve both during inflation and deflation of the tire, and said exterior threads of the sleeve adapted to receive either an inflating tube or a cap independent of the rider.



2. A device of the character described comprising a nipple having interior screw threads for attaching the nipple to a valve, a rider within said nipple having threads adapted to coöperate with said threads of the nipple for moving said rider longitudinally and having a passage for air permitting flow of air from one end to the other thereof, said rider remaining within the nipple during both inflation and deflation of the tire, and means for applying either a cap or inflating tube to the exterior of said nipple independent of the rider, whereby said nipple may remain permanently upon the valve and the rider within the nipple.

1,275,417. APPARATUS FOR PRESERVING ORGANIC MATERIALS BY THE USE OF X-RAYS. DAVID COLLINS GILLETT, Tampa, Fla. Filed Apr. 14, 1917. Serial No. 162,068. (Cl. 250—34.)



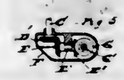
1. Apparatus for the treatment of organic materials by X-rays, comprising a closed chamber having its walls impervious to X-rays, and containing a central treatment chamber, with a tube chamber at each side thereof with partitions highly permeable to X-rays separating the treatment chamber from the tube chambers, a plurality of X-ray tubes mounted in each of said tube chambers, a source of alternating current of electricity, transformers connected thereto, and conductors from said transformers to said X-ray tubes, substantially as described.

10. Apparatus for the treatment of organic materials by X-rays, comprising a closed chamber having its walls impervious to X-rays, and containing a treatment chamber, with a tube chamber at one side thereof with a partition highly permeable to X-rays separating the treatment chamber from the tube chamber, a plurality of X-ray tubes mounted in said tube chamber, a source of alternating current of electricity, transformers connected thereto, and conductors from said transformers to said X-ray tubes, substantially as described.

18. Apparatus for the treatment of organic materials by X-rays, comprising a closed chamber having its walls impervious to X-rays, and containing a treatment chamber, with a tube chamber at one side thereof, with a partition highly permeable to X-rays separating the treatment chamber from the tube chamber, a door normally closing said treatment chamber, a plurality of X-ray tubes mounted in said tube chamber, a source of alternating current of electricity, transformers mounted in said tube chamber and connected thereto, conductors from said transformers to said X-ray tubes, a circuit breaker located in the main low tension line and operated by overload, a shunt circuit for also operating said circuit breaker, and a switch automatically operated on the opening of the door for closing said shunt circuit, with a relief switch mounted on the interior of said chamber and adapted to close said shunt circuit, and an automatic time switch adapted to break the main electric circuit by closing the shunt trip of the circuit breaker after the lapse of a predetermined period of time, substantially as described.

[Claims 2 to 9, 11 to 17, and 19 to 34 not printed in the Gazette.]

1,275,418. SAFETY-GATE. CARLO GIUFFRÈ, Detroit, Mich. Filed Mar. 4, 1918. Serial No. 220,185. (Cl. 105—31.)



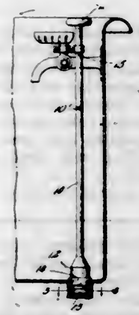
1. In a device of the character described, a car, a transversely swinging arm or gate pivoted to a shaft supported by journals secured to the car frame, said arm being adapted to project from the side of the car across the driveway between the car and the street curb, whereby the driveway may be closed against vehicular traffic, and manually operated means for actuating said arm or gate.

3. In a device of the character described, a car, a swinging arm adapted to project across the driveway adjacent to the car to close the street, a rock shaft to which said arm is secured supported in journals secured to the car frame, a warning lamp mounted in said arm, and means for manually operating the rock shaft.

4. In a device of the character described, a car, a swinging arm adapted to close the driveway between the car and the street curb, a bracket having an upstanding wall to limit the movement of the arm in one direction and a horizontal wall to serve as a support for the arm when lowered, means for securing the bracket to the car frame, and means for manually actuating said swinging arm.

[Claim 2 not printed in the Gazette.]

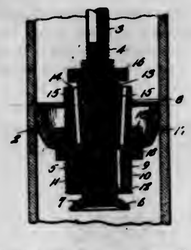
1,275,419. DRAIN-PIPE PLUG. WILLIAM W. GOOD and FRED H. BUCKMAN, Chicago, Ill. Filed Nov. 7, 1916. Serial No. 130,057. (Cl. 4—24.)



The combination with a vertically movable outlet valve in a bath tub or the like, and a fixture disposed within said tub above the valve; of a rod rising from said plug

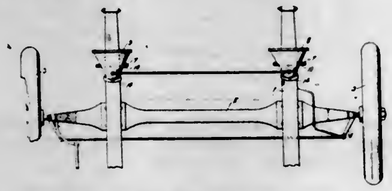
and having a radial pin, a pair of complementary bracket sections whereof each has two substantially semi-circular portions and two straight portions at opposite sides of one of them, and bolts through the straight portions of said sections whereby the intervening semi-circular portions are clamped to opposite sides of said fixture and the remaining semi-circular portions are caused to loosely surround said rod, leaving an opening between their extremities through which said pin may pass, as described.

1,275,420. PLUNGER-VALVE. WILLIAM E. GRAVES, Bloomfield, Nebr. Filed Apr. 26, 1917. Serial No. 164,730. (Cl. 103—63.)



A plunger of the character described comprising a sleeve having a valve disk mounted at one end, a plunger rod adjustably connected to the sleeve, a sliding tube mounted for longitudinal sliding movement on the said sleeve and provided with an adjustable cup packing on its exterior, the interior of the said sleeve being provided at one end with a relatively large passageway, the said sleeve also having a plurality of openings extending from one end of the sleeve to the inner end of the said passageway, the said openings being extended inwardly at an angle with respect to the longitudinal center line of the sleeve and having their interior curved walls merging with the curved wall of the said passageway.

1,275,421. AUTOMOBILE-HEADLIGHT. LOUIS W. HAYNES, Grand Rapids, Mich. Filed Dec. 17, 1917. Serial No. 207,602. (Cl. 240—62.)

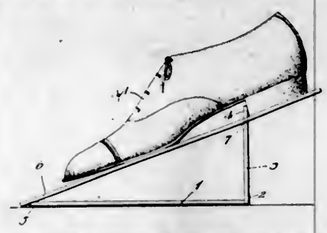


1. A headlight comprising a lamp, a supporting standard, means for turning said lamp, a tilting bracket provided with a guiding rib having upwardly curved ends, supporting arms supporting said guiding rib and holding the same in spaced relation with respect to said supporting standard, a guiding yoke carried by said lamp, and a bifurcated foot carried by said yoke and fitting over said guiding rib for tilting said lamp as said foot travels over said guiding rib.

[Claims 2 and 3 not printed in the Gazette.]

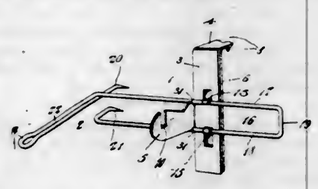
1,275,422. DISPLAY-STAND. ALEXANDER L. HENDERSON, Cambridge, Mass. Filed Aug. 16, 1917. Serial No. 186,584. (Cl. 211—24.)

An article support comprising a normally horizontal base plate, an article-supporting plate movably secured to one end of said base plate and being inclined upwardly therefrom and provided with a transversely extending slot between its inclined edges and a normally vertical plate having its lower end movably secured to the end of the base plate opposite to the first said end and having its upper end formed with a tongue that fits snugly in said slot and extends above said article supporting plate so as to prevent the slipping down of an article supported



on the latter, said normally vertical plate being provided with means adjacent to said tongue for supporting said article-supporting plate in its normally inclined position, said tongue being immovable laterally and longitudinally of said slot and being movable out of said slot so as to allow the article support to be collapsed.

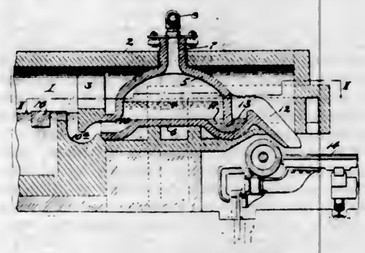
1,275,423. COMBINATION SHADE AND CURTAIN HANGER. GUY V. HIATT, Attica, Ind. Filed Feb. 25, 1916. Serial No. 80,449. (Cl. 156—24.)



1. A combined shade and curtain support comprising a vertical body, a horizontally disposed attaching arm formed integrally with one end of the body, a shade supporting arm formed integral iwth one side edge of the body, said body provided with a pair of spaced lugs bent to provide bearings, and a curtain rod support including spaced arms slidably mounted in the bearing lugs and engaging the upper and lower edges of the shade supporting arm, as and for the purpose specified.

[Claim 2 not printed in the Gazette.]

1,275,424. FEEDING GLASS. HALBERT K. HITCHCOCK, Tarentum, Pa., assignor of one-half to Hitchcock Experiment Company, a Corporation of New Jersey. Filed Sept. 26, 1913. Serial No. 792,010. (Cl. 49—77.)



1. The method of feeding molten glass to shaping mechanism, which consists in drawing a predetermined quantity of the glass from a receptacle containing molten glass into a displacement chamber through an opening below its top, and then discharging the glass so withdrawn to the shaping mechanism, while maintaining the particles composing the mass in substantially the same relative order of flow.

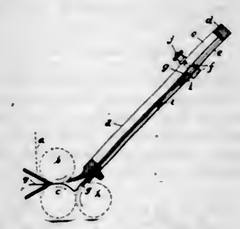
2. The method of feeding molten glass to shaping mechanism, which consists in drawing a predetermined quantity of the glass from a receptacle containing molten glass into a stationary displacement chamber then discharging the glass so withdrawn to the shaping mechanism and substantially emptying the displacement chamber, and then drawing off and discharging a second quantity of glass.

3. The method of feeding molten glass to shaping mechanism, which consists in causing a quantity of the glass to flow from a receptacle containing molten glass into a stationary inclosed displacement chamber, then uninterruptedly discharging the glass from the displacement chamber directly to the shaping mechanism and substantially emptying the displacement chamber, and then repeating the operation.

4. The method of feeding molten glass to shaping mechanism, which consists in causing a quantity of the glass to flow from a receptacle containing molten glass, through a passage of relatively high resistance, into a displacement chamber, and then discharging the glass from the displacement chamber, through a passage of relatively low resistance, to the shaping mechanism, while maintaining the particles composing the mass in substantially the same relative order of flow.

5. The method of feeding molten glass to shaping mechanism, which consists in drawing by suction a predetermined quantity of the glass from a receptacle containing molten glass into a stationary inclosed displacement chamber, applying fluid pressure to the glass in the displacement chamber and thereby discharging it to the shaping mechanism and substantially emptying the displacement chamber, and then repeating the operation.

1,275,425. FOLDING-MACHINE. REUBEN HITCHCOCK, Cleveland, Ohio, assignor to The Cleveland Folding Machine Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 15, 1914. Serial No. 831,957. (Cl. 270—68.)

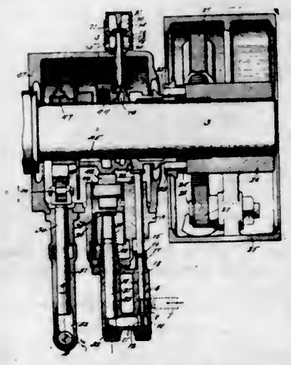


1. In a folding machine, the combination with co-acting buckling and folding rolls, of a vertically positioned side-plate associated therewith, comprising opposing grids spaced apart to permit the passage of the paper, an adjustable paper stop with which the sheets are adapted to engage, and an adjustable bowed spring extending through registering openings in the grids, adapted to engage and deflect the sheets for maintaining their edges in alinement while traveling in the side-plate, substantially as set forth.

[Claims 2 to 7 not printed in the Gazette.]

1,275,426. OIL-ENGINE-FEEDING DEVICE. FRANKLIN G. HOBART, Beloit, Wis., assignor to Fairbanks, Morse & Company, Chicago, Ill., a Corporation of Illinois. Filed May 19, 1915. Serial No. 29,045. (Cl. 123—140.)

1. In an internal combustion engine, the combination, with the engine cylinder, of a shaft rotating in proportion to the speed of the engine, a cam rigidly secured to said shaft, a pump having a plunger for introducing fuel into said cylinder, a slide operated by said cam and abutting the end of said plunger for forcing said plunger in a direction to send fuel to the cylinder, a spring engaging said plunger for retracting it and holding it in engagement with said slide, and manually operated means for reciprocating said slide independently of said cam.



2. In an internal combustion engine, the combination, with the engine cylinder, of a shaft rotating in proportion to the speed of the engine, a cam rigidly secured to said shaft, a pump having a plunger for introducing fuel into said cylinder, a slide having a longitudinal slot therein, said slide being operated by said cam and contacting said plunger for forcing the latter in a direction to deliver fuel to the engine cylinder, a spring for retracting said plunger and holding it in contact with the slide, and a lever having a finger projecting into said slot for engaging the slide and operating it independently of said cam, said slot being long enough to permit the slide to reciprocate under the action of the cam under normal conditions without engaging said finger.

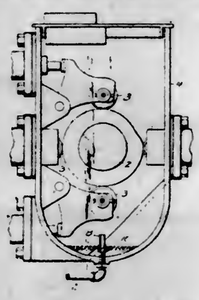
3. In an internal combustion engine, the combination, with the engine cylinder, of a shaft rotating in proportion to the speed of the engine, a cam rigidly secured to said shaft, a pump having a plunger for introducing fuel into said cylinder, a slide having a longitudinal slot therein, said slide being operated by said cam and contacting said plunger for forcing the latter in a direction to deliver fuel to the engine cylinder, a spring for retracting said plunger and holding it in contact with the slide, and a lever having a finger projecting into said slot for engaging the slide and operating it independently of said cam, said slot being elongated to permit the cam to reciprocate the slide when said lever is in neutral position, said lever when in one acting position holding said slide retracted and out of the range of the cam.

1,275,427. LUBRICATOR. FRANKLIN G. HOBART and CHARLES B. JAHNKE, Beloit, Wis., assignors to Fairbanks, Morse & Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 10, 1917. Serial No. 195,675. (Cl. 184—6.)

1. A lubricator having a container for lubricating oil, a pipe leading up through the bottom of the container to a point above the level of the oil, the pipe having an aperture in the side for admitting oil, and means for producing an intermittent blast of air upward in said pipe.

4. The combination, with an internal combustion engine having a closed crank case and a piston producing alternately suction and compression in the crank case, of cam mechanism operated by the engine shaft, a housing inclosing said cam mechanisms, said housing being adapted to contain fuel oil, a pipe leading from the inside of the crank case to the inside of the housing and passing upward through the lubricating oil in the housing and pointing in the general direction of the cam

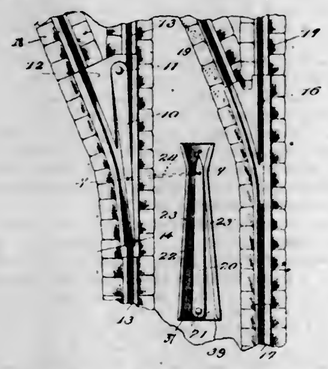
mechanism, the upper end of the pipe being open and above the level of the oil, and the pipe having a small hole in the side below the level of the oil whereby a



small quantity of oil is first sucked into the pipe and then forcibly ejected upward in the housing to lubricate the cam mechanism.

[Claims 2 and 3 not printed in the Gazette.]

1,275,428. SWITCH-OPERATOR. JOHN F. HOLSCLAW, Albia, Iowa. Filed Nov. 7, 1917. Serial No. 200,817. (Cl. 104—24.)



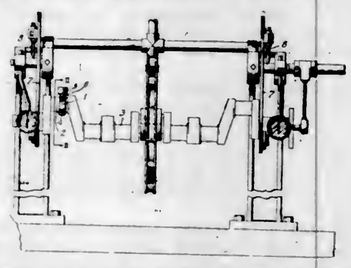
1. In a switch operating device, a base member, guide ribs rising from the base in spaced relation and approaching each other intermediate the ends, and a switch bar adapted to be coupled to a switch point and pivoted at one end between the terminals of the ribs with its free end pointed and terminating near the nearest approach of the ribs, whereby converging approaches are provided at both ends of the bar.

2. The combination with a railway switch including a movable point member, of a base member, guide ribs rising from the base in spaced relation and approaching each other intermediate the ends, and a switch bar adapted to be coupled to a switch point and pivoted at one end between the terminals of the ribs with its free end pointed and terminating near the nearest approach of the ribs, whereby converging approaches are provided at both ends of the bar.

1,275,429. BALANCING-CLIP FOR SHAFTS. HENRY HOPKINS, Detroit, Mich., assignor to Continental Motors Corporation, Detroit, Mich., a Corporation of Virginia. Filed June 25, 1917. Serial No. 176,721. (Cl. 73—51.)

1. Balancing means for shafts comprising a weight of the same specific gravity as the shaft to which the means is to be applied and of the form and dimensions of a countervailing recess to be drilled in such shaft, and means for adjustably securing the weight detachably on a shaft.

2. A balancing clip for shafts comprising a spring member adapted to yieldingly embrace a shaft, and a weight on the spring member made of material of the same specific gravity as the material of the shaft for which the clip is to be used, and of the form and the dimensions of a countervailing recess to be drilled in such shaft.



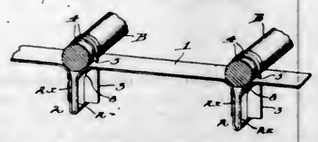
3. A balancing clip for shafts comprising a spring member adapted to frictionally embrace a crank pin portion of a shaft and a weight mounted thereon of material of the same specific gravity as the material of the shaft to which the clip is to be applied and of the shape and dimensions of the countervailing recess to be formed in permanently balancing such shaft.

5. A balancing clip for shafts comprising a spring band bent to frictionally embrace the crank pin portion of a crank shaft, a link detachably connecting the end portions of the spring member when in position on a shaft, and a weight secured to the spring member between the ends thereof of the same specific gravity as that of the material of the shaft for which the clip is adapted, and having the shape and dimensions of a standard recess forming tool.

6. The combination of a spring band bent between its ends to form a substantially circular loop and a link adapted to detachably connect the end portion of the band and close the loop, with a weight having the cylindrical form and conoidal end of a standard drill attached to the band between the ends thereof.

[Claim 4 not printed in the Gazette.]

1,275,430. REINFORCED CONCRETE CONSTRUCTION. WILLIAM B. HOUGH, Chicago, Ill., assignor to Patented Devices Company, Portland, Me., a Corporation of Maine. Continuation of application Serial No. 638,683, filed Nov. 6, 1911. This application filed Apr. 24, 1916. Serial No. 93,116. (Cl. 72—122.)



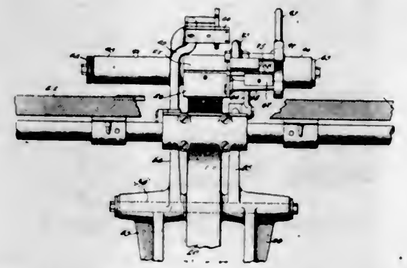
1. Reinforced-concrete construction comprising a plurality of reinforcing bars, a member extending transversely of said bars, said member having a plurality of bends therein, each bend being adapted to space one of said bars from a formwork, a sheet-metal member for each bend, said member being shaped to embrace a portion of the bend, said bend being slotted to receive a portion of said sheet metal member, said member lying at opposite sides of the unslotted portion of said bend to restrain said bend from unfolding, the first mentioned member having openings at opposite sides of the bend, and the sheet-metal member having two arms extending through the openings and being adapted to be bent into engagement with the bar to secure the bar in place.

4. A combined tie and gage member for reinforced concrete construction, consisting of a longitudinal member bent to form a leg or gage adapted to support a reinforcing bar at the upper end of the gage, and a tie member having its middle portion extending between the sides of the gage and securely attached to said sides to prevent spreading thereof, the ends of said tie member being free and extending upwardly and being adapted to be bent about a reinforcing bar to prevent displacement of the latter.

6. In reinforced-concrete construction, a reinforcing bar, a member extending transversely of the bar, said member being bent to provide a gage or supporting leg below the bar, and a member formed separate from the transverse member and rigidly secured at points between its ends to opposite sides of the bend to prevent spreading, the ends of the second mentioned member being free and constituting bar-embracing arms.

[Claims 2, 3, 5, and 7 not printed in the Gazette.]

1,275,431. SPLICING APPARATUS FOR CINEMATOGRAPHIC FILMS. ALBERT S. HOWELL, Chicago, Ill., assignor to Bell & Howell Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 27, 1916. Serial No. 133,770. (Cl. 154—42.)



1. A film splicing machine comprising two pairs of film clamping jaws, and a common film registering device carried by one of said jaws and adapted to locate both ends of the film with respect to each of said pairs of jaws.

5. A film splicing machine comprising two pairs of clamping members each comprising suitable supports, oppositely disposed plates mounted thereon, and means for adjusting said plates with respect to each other.

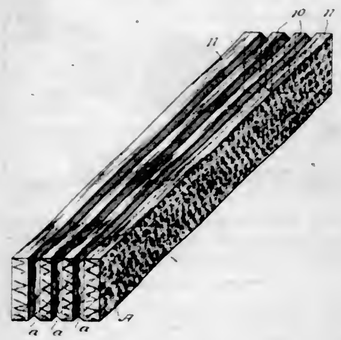
7. A film splicing machine comprising a pair of clamping jaws adapted to retain one end of a strip of film to be spliced, a second pair of clamping jaws adapted to retain the end of the other strip of film to be spliced, means for moving said second pair of jaws independently of the first pair, and locking devices carried by said second pair of jaws whereby the respective jaws are capable of movement both simultaneously and independently of each other.

9. A film splicing machine comprising a suitable support, a jaw mounted thereon and stationary therewith, a coacting jaw movable with relation thereto, a second pair of clamping jaws movable independently of said first pair and constituting with said first pair of jaws independent shearing members for the ends of the respective film, said second pair of jaws being capable of movement independently of each other, and a film registering device carried by one of said jaws and adapted to locate film with respect to each of said pairs of jaws.

10. A film splicing machine comprising a suitable support, a jaw mounted thereon and stationary therewith, an arbor on said support, a reciprocable arm fulcrumed on said arbor, a coacting jaw carried on one end of said arm, an actuating lever operatively connected to said arm, a second arm fulcrumed on said lever, a clamping jaw carried on said second arm, a clamping jaw coacting with said last mentioned jaw, and an actuating lever operatively connected to said last mentioned arm.

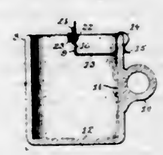
[Claims 2 to 4, 6, 8, and 11 to 20 not printed in the Gazette.]

1,275,432. CONCRETE BUILDING-BLOCK. OLIVER T. HUNGERFORD, Belleville, N. J. Filed Oct. 2, 1914. Serial No. 864,649. (Cl. 72—37.)



A concrete building block formed with a series of V-shaped grooves in its contacting surfaces extending completely around the block and uniformly spaced apart to provide therebetween a series of contacting surfaces of uniform width, said intervening spaces and the V-shaped grooves being of equal width throughout, the contacting surfaces between the endmost grooves and the edges of the block being of greater width than the width of the contacting surfaces between the grooves, and the several contacting surfaces on each face of the block lying in the same plane, substantially as set forth.

1,275,433. CONVERTIBLE SOAP-HOLDER. ERNEST HUNOLD, Providence, R. I. Filed May 8, 1918. Serial No. 233,213. (Cl. 45—24.)



3. A convertible soap holder having a semi-circular base plate, a spring clip on the base plate adapted to go over the edge of a mug or the like, a front plate bent up from the base plate, two sidewise extending arms on the front plate, each arm having a slot adjacent its inner end, a hook-shaped outer end and a slotted guide-way adjacent the hook-shaped ends, a bolt extending through a hole, in the front plate and through the slots in the arms, a knurled nut on the bolt and T shaped guides on the front plate extending through the slotted guide-ways in the arms, for the purpose, as described.

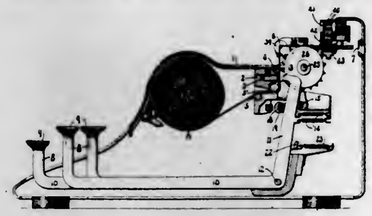
[Claims 1 and 2 not printed in the Gazette.]

1,275,434. TYPE-WRITING MACHINE. WARD S. IRELAND, St. Louis, Mo., and WALTER E. LIPPERT, Cincinnati, Ohio, assignors, by direct and mesne assignments, to National Shorthand Machine Company, St. Louis, Mo., a Corporation of Delaware. Filed Nov. 18, 1916. Serial No. 132,073. (Cl. 197—151.)

1. In an inking device for typewriting machines, a web holder in the form of a lever, an inking web securely attached to said lever, and means for shifting said lever.

17. In an inking device for typewriting machines, a web holder, an inking web secured to said web holder, and means for shifting said web holder, said means including a drive lever connecting to said web holder, a cam for

operating said drive lever, a ratchet wheel for operating said cam, a pawl carrier having a pawl which engages



said ratchet wheel, a universal bar, and a yieldable link connecting said universal bar to said pawl carrier.

[Claims 2 to 16 not printed in the Gazette.]

1,275,435. VEHICLE-WHEEL. SAMUEL H. JENKINS, Chattanooga, Tenn., assignor of one-fourth to Lovrick P. Barnes, Chattanooga, Tenn. Filed Oct. 11, 1913. Serial No. 794,654. (Cl. 152—10.)



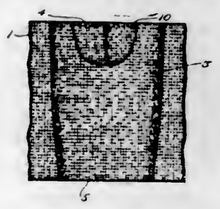
1. A wheel provided with a plurality of coöperating rim plates adapted to be rigidly secured to the felly of a wheel, each of said rim plates being provided with inturned retaining flanges at the upper edges thereof, a plurality of wedge-shaped tread blocks positioned between said rim plates and adapted to move radially on the wheel, each of said blocks being provided on each side thereof with channeled retaining plates substantially U-shaped in cross section, one arm of which is shorter than the other to abut against the side of the respective rim plates when the retaining flanges engage the channeled retaining plates, resilient guard plates adapted to be positioned against the rim plates to cover the U-shaped channeled retaining plates, and means passing through the tread blocks, the rim-plates and the guard plates to retain the parts in operative position.

2. A wheel provided with a plurality of coöperating rim-plates adapted to be secured to the felly thereof, a plurality of wedge-shaped blocks positioned between said rim-plates and adapted for radial movement on the wheel, each of said blocks being provided with a channeled retaining plate on each side thereof, retaining flanges carried by each of said rim-plates and adapted to engage said channeled plates of the said blocks to permit of limited radial and transverse movements of said blocks, circumferential resilient guard plates secured to and extending beyond the peripheral edge of said rim-plates and adapted to limit the transverse movement of said tread blocks at a point beyond the channeled retaining plates, said guard plates housing the channeled retaining plates during radial movements, and means to retain the resilient guard plates and tread blocks in position on the rim-plates.

[Claims 3 to 5 not printed in the Gazette.]

1,275,436. WOVEN CARRIER. VICTOR H. JENNINGS, Worcester, Mass., assignor to Universal Patents Company, Woonsocket, R. I., a Corporation of Rhode Island. Filed May 7, 1917. Serial No. 167,092. (Cl. 224—23.)

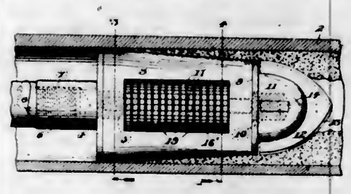
1. A carrier furnished with a woven pocket having its bottom closed in the weaving, and also having a flat transverse partition of double or two-ply thickness dividing the pocket into front and rear compartments above the closed bottom, with such partition formed of intermediate portions of the pocket side-walls, which respec-



tively are doubled inwardly upon themselves in vertically-extending folds having the two sides of each thereof secured together flatwise, and with the inner portions of the two opposite folds secured together.

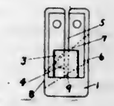
[Claim 2 not printed in the Gazette.]

1,275,437. BOILER-TUBE CLEANER. LEE E. JILLSON, Hartford, and ELIJAH WILLIAMS, New Haven, Conn. Filed July 12, 1917. Serial No. 180,190. (Cl. 83—64.)



A cleaner comprising an elongated externally tapered and internally chambered body, the chamber of which is unobstructed, said body having slots leading from the chamber and extending to the periphery thereof, groups of independently rotative toothed cleaning members, independent shafts on which the groups of cleaner members are respectively mounted, the shafts extending longitudinally of the body and converging forwardly on lines agreeing approximately with the angularity of the taper of the body, each of said shafts being movable transversely of the body at both ends thereof and the cleaner members being located practically wholly within the body of their toothed portions extending a short distance across the periphery thereof.

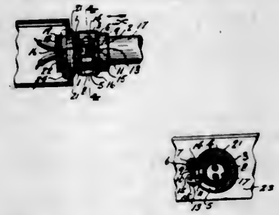
1,275,438. BUTTON-STRIPPER. EMIL JOHANSON, Minneapolis, Minn. Filed Dec. 15, 1917. Serial No. 207,388. (Cl. 218—27.)



1. In a button stripper the combination of a forked knife holder having a tapered flattened aperture extending transversely thereof, a tapered knife positioned in said aperture and across the space between the forks of said forked knife holder, and a button container socket carried by said forked knife holder to receive therein a button container and pass buttons stripped by said knife into a container placed in said socket.

2. In a button striper the combination of a forked knife holder, and a knife carried by said knife holder, the space between the forks of said knife holder being enlarged just forward of the cutting edge of said knife.

1,275,439. COUPLING DEVICE FOR ELECTRIC-WIRE CONDUITS, &c. GUSTAVE A. JOHNSON, Irvington, N. J. Filed Apr. 25, 1918. Serial No. 230,688. (Cl. 285—20.)
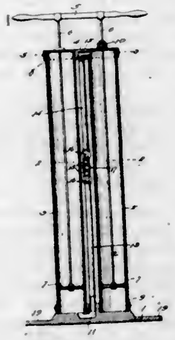


1. In a device of the kind described, a longitudinally open body-portion having an open circular free end, an annularly enlarged portion adjacent to said open end and providing an interiorly disposed annular recess, a part of the wall of said annularly enlarged portion being cut away to provide an opening therethrough communicating with said recess, an outwardly extending perforated lug at one end of said opening, a contractible strap seated in said annular recess so as to leave the bore of said body-portion normally unobstructed, said strap having alined ends projecting outwardly through said opening, and means supported by said perforated lug and engaging said strap ends for contracting said strap.

2. In a device of the kind described, a body-portion having an open end, an annular enlarged portion adjacent to said open end and providing an interiorly disposed annular recess, a part of the wall of said annularly enlarged portion being cutaway to provide an opening therethrough communicating with said recess, an outwardly extending perforate lug at one end of said opening, a contractible strap seated in said recess, said strap having alined perforated ends normally spaced apart and projecting exteriorly through said opening beneath said lug, a clamp-screw, the shank of said clamp-screw passing through the perforations of said lug and said strap ends, the head of said clamp-screw bearing upon the upper surface of said lug, and a nut on said clamp-screw beneath said strap ends, said nut being embraced by the side edges of said opening so as to be maintained against turning whereby the turning of said clamp-screw will cause said nut to rise on said clamp-screw to draw together the strap ends between said lug and said nut and thereby contract said strap.

3. In a device of the kind described, a body-portion having an open end, an annularly enlarged portion adjacent to said open end and providing an interiorly disposed annular recess, a part of the wall of said annularly enlarged portion being cutaway to provide an opening therethrough communicating with said recess, an outwardly extending perforate lug at one end of said opening, a contractible strap seated in said recess, said strap having alined perforated ends normally spaced apart and projecting exteriorly through said opening beneath said lug, a clamp-screw, the shank of said clamp-screw passing through the perforations of said lug and said strap ends, the head of said clamp-screw bearing upon the upper surface of said lug, and a nut on said clamp screw beneath said strap ends, said nut being embraced by the side edges of said opening so as to be maintained against turning whereby the turning of said clamp-screw will cause said nut to rise on said clamp-screw to draw together the strap ends between said lug and said nut and thereby contract said strap, said body portion being engaged at its opposite end with the walls of an outlet box so as to communicate with the interior of the latter.

4. In a device of the kind described, a body-portion having an open end, an annularly enlarged portion adjacent to said open end and providing an interiorly disposed annular recess, a part of the wall of said annularly enlarged portion being cutaway to provide an opening therethrough communicating with said recess, an outwardly extending perforate lug at one end of said opening, a contractible strap seated in said recess, said strap having alined perforated ends normally spaced apart and projecting exteriorly through said opening beneath said lug, a clamp-screw, the shank of said clamp-screw passing through the perforations of said lug and said strap ends, the head of said clamp-screw bearing upon the upper surface of said lug, and a nut on said clamp-screw beneath said strap ends, said nut being embraced by the side edges of said opening so as to be maintained against turning whereby the turning of said clamp-screw causes said nut to rise on said clamp-screw to draw together the strap ends between said lug and said nut and thereby contract said strap, an exteriorly threaded portion at the opposite end of said body-portion, an annular exterior stop-shoulder in the rear of said threaded portion, and a nut adapted to screw upon said threaded portion.

1,275,440. AIR-PUMP. HARRY O. JOHNSON, Calhan, Colo. Filed Aug. 8, 1917. Serial No. 185,146. (Cl. 230—27.)



An air pump comprising a pair of cylinders disposed in parallel relation, a base plate to which one end of each of said cylinders is attached, a cover plate for the opposite ends of said cylinders, a piston in each of said cylinders, a conduit formed in the base plate and opening into the lower end of one of said cylinders, a conduit in the cover plate opening into the top of the other cylinder, a pipe connected to each of said conduits disposed in alinement between the cylinders and parallel thereto, a valve casing connected to the opposed ends of said pipes, non-return valves in said valve casing, a flexible tube also connected to said valve casing, and manual means for reciprocating said pistons.

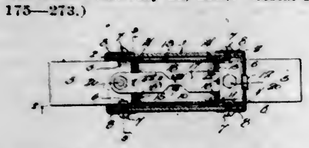
1,275,441. ATTACHMENT FOR AUTOMOBILE-RADIATORS. WILLIAM R. JOHNSTON, Eagle Rock, Cal. Filed June 2, 1916. Serial No. 101,389. (Cl. 220—120.)



1. The combination with an automobile radiator provided with a large vent opening to the atmosphere, of a plurality of materially separated foraminous diaphragms extending across said opening and having their numerous passages of such size as to bar material escape of liquid from the radiator while allowing steam and vapor to pass out as fast as they may be formed therein, whereby steam and hot vapor are never long retained and hot water is never permitted to escape in any material quantity.

[Claims 2 to 4 not printed in the Gazette.]

1,275,442. CARTRIDGE-FUSE. OSCAR H. JUNG, Milwaukee, Wis., assignor to Arrow Fuse & Mfg. Co., Milwaukee, Wis. Filed May 19, 1917. Serial No. 169,638. (Cl. 175—273.)



1. A device of the class described comprising an open end casing, a slotted cap for closing one end of the casing, an attaching blade extending through the slot of the cap, a U-shaped plate having a slot in its base receiving said blade, the arms of the plate being secured to the casing, means carried by the arms for engaging the inner end of said blade, and a fusible link secured to said blade.

6. A device of the class described comprising an open end casing, a slotted cap for closing one end of the casing, an attaching blade extending through the slot in the cap, the opposite edges of said blade being notched, a U-shaped plate having a slot in its base receiving said blade, screws extending through the cap and the arms of said U-shaped plate and engaged with said notched blade to limit every movement thereof, and a fusible link secured to the inner end of the blade.

7. An electrical fuse unit comprising, in combination, a non-conducting open ended casing, metallic caps covering the ends thereof and provided each with a central elongated slot and relatively smaller slots disposed one on each side of said central slot, an attaching blade carried by each cap and projecting through the central slots into the casing, a yoke clamp having lugs engaging the smaller slots and having their ends inturned to clamp the inner ends of said blades and a fuse cartridge disposed within said casing and having its fuse strip in connection with the inner ends of the attaching blades.

8. A device of the class described comprising an open end casing, a slotted cap for closing one end of the casing, an attaching blade extending through the slot in the cap, the opposite edges of said blade being notched, a U-shaped plate having a slot in its base receiving said blade, the inner ends of the arms of said plate being inturned and bifurcated to receive the inner end of said blade, screws extending through said caps and the arms of said U-shaped plate and engaged with said notches in the blade to limit outward movement of the latter, and a fusible link secured to the inner end of the blade.

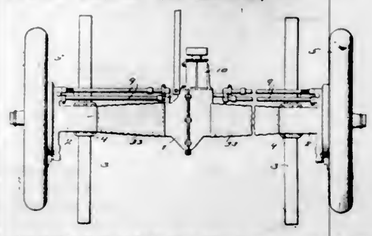
[Claims 2 to 5 not printed in the Gazette.]

1,275,443. SASH-LOCK. JOHN KELLER, Houston, Tex. Filed Feb. 18, 1918. Serial No. 217,977. (Cl. 16—18.)



In a device of the character described the combination with a window frame of a sash movable therein, a flexible member attached to the sash at one end and whose other end is free and bent over at right angles thereto, said member being provided with slots along one side thereof, an engaging member carried by the adjacent side of the window frame and adapted to engage with said slots to lock the sash in position in the frame and a guard provided to limit the range of movement of the free end of said member.

1,275,444. DRIVING-AXLE FOR MOTOR-VEHICLES. HARMON J. KLINE, Lansing, Mich. Filed July 17, 1917. Serial No. 181,094. (Cl. 180—88.)



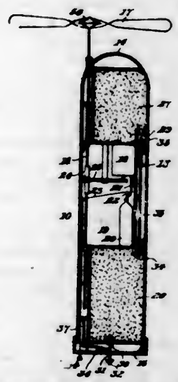
1. An axle of the class described comprising a tube having means for non-rotatably mounting wheels on the ends thereof and having an intermediate portion of increased diameter, and means for applying power to the intermediate portion of the tube to turn the same.

3. A driving axle for motor vehicles comprising a tube having means at its ends for keying a pair of wheels thereon and flaring in directions from its ends toward its center, and means connected to the intermediate portion for applying driving power thereto.

5. An axle for motor vehicles comprising a pair of tubular axle sections, each section adapted to receive a wheel at one end and having a progressively increasing diameter toward its opposite end, the trickness of the wall of the section diminishing as its diameter increases, and the sections being connected at their larger ends.

[Claims 2, 4, and 6 not printed in the Gazette.]

1,275,445. AERIAL TORPEDO. GEORGE J. KOCIALEK, Avoca, Pa. Filed Mar. 22, 1918. Serial No. 223,941. (Cl. 244—1.)

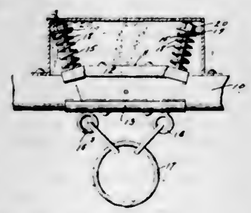


1. An aerial torpedo comprising a casing, a shaft journaled through the casing adapted for inward-longitudinal movement upon striking an object, a propelling fan for the device upon the outer end of the shaft, a driving motor for said shaft arranged within the casing, starting means for the motor rearwardly of the casing, an explosive charge within the casing and means adapted for igniting the said charge upon the inward reciprocation of the said shaft.

3. An aerial torpedo comprising a casing, a shaft journaled through the casing adapted for inward longitudinal movement upon striking an object, a propelling fan for the device upon the outer end of the shaft, a driving motor for said shaft arranged within the casing, starting means for the motor rearwardly of the casing, an explosive charge within the casing, a firing pin for said charge extending rearwardly of the casing adapted for igniting the charge upon an inward movement of the pin arranged within the inward path of movement of said shaft whereby the said charge is exploded when the outer end of the shaft strikes an object during the forward movement of the device, a second and forwardly positioned explosive charge within the casing, an explosive cap for said forward charge, an exploding rod for the said cap having a foot portion arranged within the first named explosive charge whereby the forward charge is adapted for automatic ignition subsequent to the igniting operation of the said firing pin.

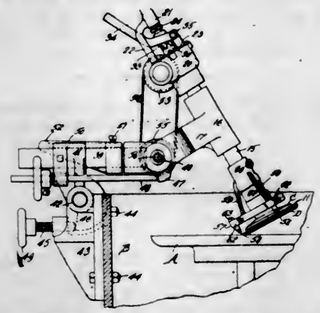
[Claims 2 and 4 not printed in the Gazette.]

1,275,446. NECK-YOKE. HENRY J. KOELSCH, Milwaukee, Wis. Filed Oct. 3, 1917. Serial No. 194,532. (Cl. 21—77.)



The combination with a neckyoke, of independent eye bolts spaced from each other and slidable through the yoke in forward convergent relation to one another, coiled springs mounted and acting directly upon the eye bolts to resist their movement in one direction and a housing completely inclosing the springs and the ends of the bolts carrying the same.

1,275,447. MACHINE FOR BEVELING MIRRORS AND FOR ANALOGOUS PURPOSES. WILLIAM LA HODNY and FRANK X. KIBITZ, Buffalo, N. Y., assignors to Standard Mirror Co., Buffalo, N. Y. Filed Dec. 7, 1916. Serial No. 135,546. (Cl. 51—3.)



1. The combination with an abrading wheel for a plate, of a rotary chuck for holding the plate, and a device for centering the plate on the chuck having parts with which the edge of a plate held against the chuck is adapted to be engaged for centering the plate on the chuck, said chuck and centering device being relatively movable for engaging the plate with and holding it away from said centering parts.

2. The combination with an abrading wheel for a plate, of a rotary chuck for holding the plate, and a device for centering the plate on the chuck having beveled centering members against which the edge of a plate held against the chuck is adapted to be engaged for centering the plate on the chuck, said chuck and centering device being relatively movable for engaging the plate with and holding it away from said beveled centering members, said chuck and centering device having a variable relative movement whereby the plate can be engaged with different parts of said beveled centering members for centering plates which vary in diameter.

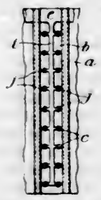
3. The combination with an abrading wheel for a plate, of a rotary chuck for holding the plate, and a device for centering the plate on the chuck having beveled centering members located outwardly beyond the periphery of the chuck against which the edge of a plate held against the chuck is adapted to be engaged for centering the plate on the chuck, said chuck and centering device being relatively movable for engaging the plate with and holding it away from said beveled centering members.

4. The combination with an abrading wheel for a plate, of a rotary chuck for holding the plate, and a device for centering the plate on the chuck having parts with which the edge of a plate held against the chuck is adapted to be engaged for centering the plate on the chuck, said chuck being movable relatively toward and from the centering device for engaging the plate with said parts of the centering device and for holding the plate out of contact with the centering paris.

5. The combination with an abrading wheel for a plate, of a chuck for holding the plate, and a centering device having parts with which the edge of the plate held against the chuck is adapted to be engaged for centering the plate on the chuck, said parts being adjustable to suit plates of different diameters, said chuck and centering device being relatively movable for engaging the plate with and holding it away from said parts of the centering device.

[Claims 6 to 11 not printed in the Gazette.]

1,275,448. ELECTRIC ACCUMULATOR. HENRY LEITNER, Westminster, London, and WILLIAM HERBERT EXLEY, Maybury Hill, Woking, England. Filed Feb. 1, 1918. Serial No. 214,978. (Cl. 204—29.)



1. An element for electric accumulators comprising a non-conducting support provided with grooves separated by solid portions of the support, and an electric conducting strip having tongues extending through apertures in said support and embedded in active material.

[Claim 2 not printed in the Gazette.]

1,275,449. METAL PACKAGE. HERBERT L. LEMON, Chicago, Ill. Filed Feb. 1, 1918. Serial No. 214,905. (Cl. 206—47.)



1. A metal ingot having a core consisting of a body of fluxing material, said body having a moisture-proof covering.

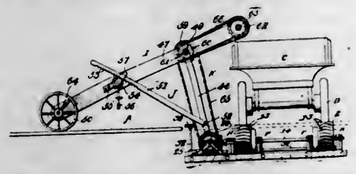
4. A metal ingot having a core consisting of a body of fluxing material, said body having a fusible moisture-proof covering and being entirely surrounded by metal.

6. A metal ingot having a recess, a body of fluxing material having a fusible moisture-proof covering, placed

within the recess, and a metal plug of the same material as the ingot closing said recss and completing the inclosure of said body of fluxing material.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,275,450. POWER-JACK. WILLIAM H. LEPREVOST, Niles, Ohio. Filed July 20, 1916. Serial No. 110,358. (Cl. 74—106.)



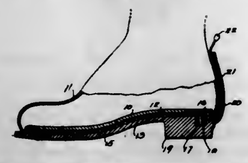
1. In a power jack of the character described, two sets of friction wheels, each set comprising two wheels in spaced relation laterally, and said sets arranged to have their axes of rotation in parallel relation with wheels of one set alined with wheels of the other set, each wheel provided with a plurality of ribs on its circumference, said ribs extending from the side portions of the wheel and converging at substantially the central plane of the wheel, and the ribs of all wheels converging in the same direction.

2. In a power jack, the combination of two sets of friction wheels, each set comprising two wheels in spaced relation laterally, and said sets arranged with their axes of rotation in parallel relation, with wheels of one set arranged in alinement with wheels of the other set, a base, a shaft rigid with the wheels of each set, and means for supporting said shafts of said wheels from said base, said means including a beam at each side of coacting alined wheels, and two two-part bearings rigid with said beams, one bearing disposed with its front concavity centered in a plane substantially 45° to the horizontal, and the said planes of said bearings converging above said base.

5. In a power jack of the character described, the combination of a base, two sets of friction wheels, each set comprising two wheels in spaced relation laterally, and said sets arranged with their axes of rotation in parallel relation with wheels of one set alined with wheels of the other set, a shaft rigid with the wheels of each set, means for supporting said shafts from said base, means for causing said shafts to rotate in unison and in the same direction, a drum adjacent each friction wheel rigid with its respective shaft, a third shaft parallel with the first shafts between the same and supported by said base, bands about said drums and operatively connected with said shaft to be drawn tightly about said drums when said shaft is moved circumferentially in one direction and to release said bands when said shaft is rotated in a counter direction, and means for operating said third shaft.

[Claims 3, 4, 6, and 7 not printed in the Gazette.]

1,275,451. WARMER FOR FOOTWEAR. WILLIAM W. LILLARD, Irvington, N. J., assignor of one-half to Ernest John King, Jersey City, N. J. Filed Nov. 2, 1917. Serial No. 199,877. (Cl. 219—46.)



1. A warmer for footwear, comprising an insole, an electric heating medium embedded in the said insole, electric conductors extending through the heel of the footwear to the outside thereof, and sets of contacts in the said heel and the said insole and in detachable engagement with each other, one of the sets of contacts being held on the insole and being connected with the said electric heating medium, and the other set of contacts being held in the heel and being connected with the said conductors.

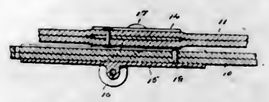
2. A warmer for footwear, comprising an insole, an electric heating medium embedded therein and provided with contact plugs, contact sockets embedded in the heel of the footwear and engaged by the said contact plugs, and conductors connected with the said contact sockets and extending to the outside of the heel for connection with a source of electrical energy.

3. A warmer for footwear, comprising an insole made in two superimposed parts, of which one is provided with a recess, an electric resistance wire in the said recess, spaced contact plugs connected with the terminals of the said wires and extending through the lower part of the insole and projecting downward a distance from the bottom of the said lower insole part, contact sockets embedded in the top of the heel of the footwear and engaged by the said contact plugs, and conductors connected with the said contact sockets and extending through the rear of the heel to the outside thereof for connection with a source of electrical energy.

4. A warmer for footwear, comprising an insole made in two superimposed parts, of which one is provided with a recess, an electric resistance wire in the said recess, spaced contact plugs connected with the terminals of the said wire and extending through the lower part of the insole and projecting downward a distance from the bottom of the said lower insole part, contact sockets embedded in the top of the heel of the footwear and engaged by the said contact plugs, conductors connected with the said contact sockets and extending through the heel to the outside thereof, the outer ends of the conductors terminating in coupling members, and a pocket on the footwear and through which extend the outer portions of the said conductors.

5. A warmer for footwear, comprising an insole, an electric resistance wire in said insole, a source of electric current external to the footwear, a pocket on the footwear and means for connecting electric resistance wire with said source, said means extending from a connection with said electric resistance wire to the outside of said footwear and then through the said pocket to a point near the top thereof.

1,275,452. CLAMP. JAMES V. LISY, Ravenna, Nebr. Filed Mar. 29, 1918. Serial No. 225,584. (Cl. 24—180.)



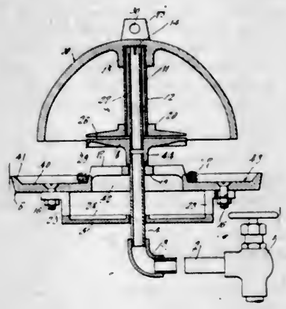
In a device for the purpose set forth, the combination with a tug strap comprising two strips and a trace strap, of a clamp for said straps comprising an eye plate and a channeled plate, said eye plate receiving the strips of the tug strap on the webs thereof, means passing through said strips and said web for securing the tug strap to the eye plate, the trace strap received in the channeled plate, a lug in said channeled plate passing through said trace strap, trunnions arranged centrally of the eye plate, a shaft arranged centrally and on the under face of the channeled plate, and links connecting said shaft and trunnions.

1,275,453. OIL-BURNER. WILLIAM R. MCHILL, Moran, Kans. Filed Apr. 23, 1918. Serial No. 230,304. (Cl. 158—91.)

3. In a device of the class described, a pan having a tube; a wick carried by the pan and surrounding the tube; a fuel supply conduit passing upwardly through the tube; a first spreader plate mounted on the conduit and disposed above the tube, the spreader plate having a depending flange located above the wick; a vaporizing tube surrounding the conduit above the spreader plate; means for establishing communication between the upper ends of conduit and the vaporizing tube; and a second spreader plate carried by a vaporizing tube and disposed above the first spreader plate.

[Claims 1, 2, and 4 not printed in the Gazette.]

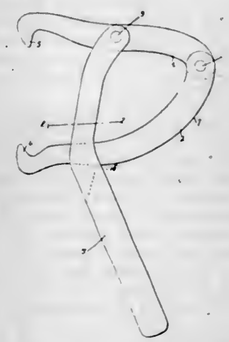
1,275,454. TIRE-CHAIN TIGHTENER. ALBERT L. MCLAIN, Wetmore, Kans. Filed Jan. 11, 1917. Serial No. 141,841. (Cl. 254—78.)



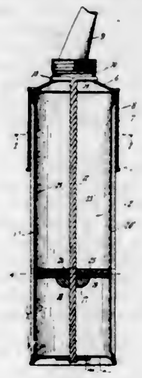
2. A chain tightener including a pair of jaws, a pin by which said jaws are pivotally connected together, said jaws having hooks on the free ends thereof extending inwardly and one of the jaws being provided with a cam face on the outer side and rounded out from the point of pivotal mounting, the remaining jaw being substantially straight, a handle bifurcated at its end and pivotally connected with the straight jaw member to embrace that jaw having the cam portion formed thereon and to be disposed in such relation that upon swinging movement of the handle from the point of pivotal mounting of the jaws, the handle bears upon the cam portion and the hooked ends of the jaws are consequently drawn together.

[Claims 1 and 3 not printed in the Gazette.]

1,275,455. GREASE-GUN. JOHN G. MACGREGOR, New York, N. Y. Filed Dec. 31, 1917. Serial No. 209,625. (Cl. 221—79.)



1. A grease gun comprising a completely closed receptacle, a helix extending longitudinally therethrough, a follower adapted to be advanced in said receptacle by rotation of said helix, and co-acting devices provided on said follower and said receptacle whereby retraction of said follower by said helix is prevented.



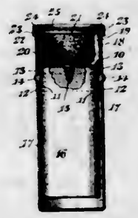
4. A grease gun comprising a receptacle having a helix extending therethrough, a piston device in threaded engagement with said helix, said piston device presenting a shoulder and a wedge member, and co-acting means on said receptacle adapted to be engaged respectively by said shoulder and wedge member upon rotation of the helix in opposite directions, for the purpose set forth.

5. A grease gun comprising a receptacle having a helix extending therethrough, a piston device in threaded engagement with said helix, said piston device presenting a shoulder and wedge member, and co-acting means on said receptacle adapted to be engaged respectively by said shoulder and wedge member upon rotation of the helix in opposite directions, for the purpose set forth, said means comprising a rib extending longitudinally of the receptacle on the wall thereof and having formed thereon a series of spaced projections.

11. In a grease gun, in combination, a receptacle having a rib extending longitudinally thereof from one end to a point adjacent the opposite end, a piston positioned in said receptacle and adapted to be moved longitudinally therein in engagement with said rib, a helix operatively engaging said piston and adapted to move said piston longitudinally in said receptacle while said piston is in engagement with said rib but rendered inoperative to move said piston in either direction longitudinally when the piston passes out of engagement with said rib.

[Claims 2, 3, and 6 to 10 not printed in the Gazette.]

1,275,456. COMBINATION SOAP AND APPLICATOR HOLDER. CHARLES A. MAHER, Wallowa, Oreg. Filed Nov. 24, 1917. Serial No. 203,869. (Cl. 132—83.)



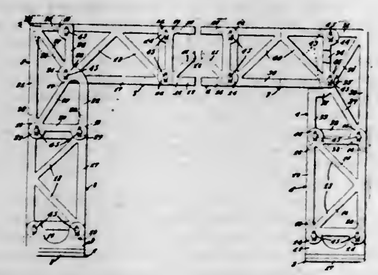
1. The combination with a connector forming a support for a soap stick, of caps removably fitted on the connector at opposite ends thereof, one of the caps being designed to house an applicator, and the other the soap stick, and a clamping collar carried by one of the caps for detachably fastening said applicator thereto on its removal from the cap.

3. A holder of the character describer comprising a connector of substantially cup-shape having external screw threads at its opposite ends, caps detachably engaged with the threaded ends of the connector, means for fastening a soap stick fn the connector and inclosed by one of the caps, an applicator removably held in one of the caps, a clamping collar engaged exteriorly on one of the caps for fastening the applicator thereon for use, and a marginal flange on the applicator and engaged by the clamping collar to detachably fasten said applicator to the cap.

5. A holder of the character described comprising a connector of substantially cup-shape having external screw threads at its opposite ends, caps detachably engaged with the threaded ends of the connector, means for fastening a soap stick in the connector and inclosed by one of the caps, an applicator removably held in one of the caps, a clamping collar engaged exteriorly on one of the caps for fastening the applicator thereon for use, and a marginal flange on the applicator and engaged by the clamping collar to detachably fasten said applicator to the cap, the collar being formed with an opening to permit the encircling thereof about the applicator when fastening it to the cap, the applicator being formed with a rubber sponge body and a relatively hard sponge base.

[Claims 2, 4, and 6 not printed in the Gazette.]

1,275,457. CULVERT-FORM. FRED PAYNE MARTIN, Ottawa, Kans. Filed Jan. 8, 1918. Serial No. 210,927. (Cl. 25—131.5.)



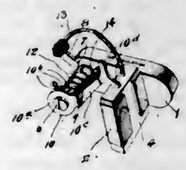
2. A device of the class described, of rectangular outline, and including feet, corner members, supports detachably uniting the feet with the corner members, and other supports detachably connected with each other, the supports being in the form of open frames, the corner members each including an inner side bar comprising a lower part, an upper part, and an arm connecting said parts, the upper part being set outwardly with respect to the lower part, the terminal ones of said other supports being detachably connected with the upper parts of the inner side bars of the corner members to bring the downward thrust within the contour of the feet.

[Claim 1 not printed in the Gazette.]

1,275,458. BRUSH-HOLDER FOR COMMUTATOR MECHANISMS. CHARLES R. MESTON and HERBERT I. FINCH, St. Louis, Mo., assignors to The Emerson Electric Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed May 16, 1917. Serial No. 168,961. (Cl. 200—24.)

2. In a brush holder, the combination of a brush box, a pressure member pivotally and adjustably mounted adjacent thereto and having brush engaging members extending in opposite directions for coöperation with either end of a brush in said box, and adjustable means for urging the pressure member for coöperation with the brush.

4. A brush holder comprisig a base member of insulating material, a brush box supported thereon and coöperating therewith to form a container for the brush, a pressure member pivotally and adjustably mounted on the base member, and attaching means for the brush holder cooperating with the base member and insulated from the brush box and the pressure member.

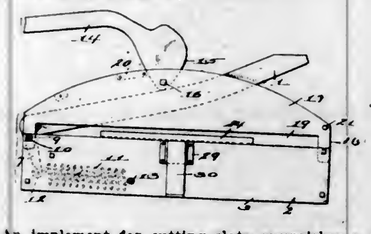


6. A brush holder comprising a base member, a brush box mounted thereon, and an adjustable pressure member pivotally mounted on said base member and provided with a pair of oppositely disposed brush engaging portions.

8. In a device of the class described, a base, a brush box carried thereby, and a spring-pressed member pivotally mounted on the base to one side of the brush box and adapted to be swung from one side of the base to the other so as to engage the rear end of the brush positioned in said brush box.

[Claims 1, 3, 5, and 7 not printed in the Gazette.]

1,275,459. IMPLEMENT FOR CUTTING SLATE. LEWIS A. MILLER, Scottdale, Pa. Filed Feb. 25, 1915. Serial No. 10,541. (Cl. 125—5.)



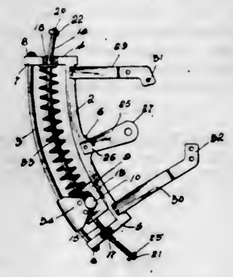
1. An implement for cutting slate comprising a stand having a longitudinal slot, a knife working through the slot and of substantially less thickness than the width of the slot, the knife being arranged centrally of the slot and having a pivotal mounting at one end of the stand, the knife having at its rear end an extension projecting downwardly adjacent and below its pivot, an operating lever pivotally mounted above the knife for movement in a plane common to the plane of movement of the knife, the operating lever having its pivotal end formed as a cam for coöperation with the knife and engaging the knife midway of its length and a spring having an end secured to the stand and an end secured to said extension and acting to hold the knife at all times in contact with the cam end of said lever, the lever having its cam end formed whereby when the lever is fully depressed the said cam end holds the knife against upward movement consequent to the force of the spring, the knife and cam thus being self-locking in their lowered positions.

2. An implement for cutting slate comprising a stand composed of a pair of angle irons, having horizontal portions which project toward one another in co-planar relation, thereby to provide a slate supporting table, bolts connecting the angle irons, elements on the bolts to hold the angle irons in definitely spaced relation whereby to provide a slot between them, a knife working through the slot, a pivot pin associated with one end of the knife and having conical ends, and conical bearings for the ends of said pivot pin, said bearings being threaded through said angle irons, as and for the purpose set forth.

[Claims 3 to 8 not printed in the Gazette.]

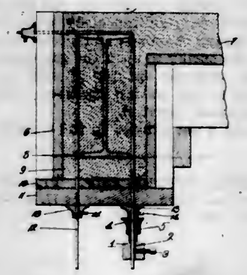
1,275,460. SHOCK-ABSORBER FOR BICYCLES AND MOTOR-CYCLES. ROY D. NEWBERRY, Bronte, Tex. Filed Oct. 16, 1915. Serial No. 56,290. (Cl. 208—101.)

An attachment of the class described comprising a frame, said frame having an arcuate bar, outwardly extending end members formed integrally with each end of the bar and provided with central apertures, an arcuate rod having its ends removably secured to the free terminals of the end members of the bar, a bearing block slidably fitted against the inner side of the arcuate bar and provided with a central aperture adapted to receive the axle of a rear wheel, an arcuate rod slidably fitted through each opening of each end member of the bar, the inner end of



each arcuate rod being screw threaded and fitted into the opposite ends of the bearing block, means on the outer end of each rod for limiting the movement of the rods with relation to the end members of the bar, a coiled spring surrounding one of said rods and bearing against the block and one end member, and a guide secured to the opposite side faces of the bearing block and embracing the first named arcuate rod to guide the bearing block in its movement in the frame.

1,275,461. COLLAR-ADJUSTING CLAMP. GEORGE F. NEWTON, Kansas City, Kans., assignor, by mesne assignments, to Universal Form Clamp Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 4, 1912. Serial No. 729,543. (Cl. 254—29.)



1. In a mold clamping device, a tie-rod, two clamping collars mounted on said rod, each collar having means for being secured tightly to said rod, one of the collars being longitudinally adjustable on said rod, and a tightening device adapted for longitudinal expansion and contraction and for longitudinal adjustment on and having means for being releasably locked to said rod, and adapted to engage and longitudinally move and to be detached from said adjustable clamping collar.

2. In a clamping device, a tie rod, a clamping collar longitudinally adjustable on said rod and having means for being releasably locked thereto, and a tightening device adapted for longitudinal expansion and contraction, and longitudinally adjustable on said rod independently of said clamping collar and adapted for longitudinally moving said collar, and provided with means for being releasably locked to said rod.

1,275,462. CARTRIDGE FOR CLEANING WELL-STRAINERS. VICTOR HALL NICKERSON, Cotuit, Mass. Filed June 5, 1917. Serial No. 172,893. (Cl. 102—4.)

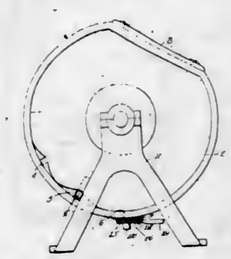


1. In a cartridge for cleaning well strainers, a tube having a wall serving as an electric conductor connecting the exterior with the interior of the tube, a conductor connected with the wall, an explosive in the tube, a wire secured to the tube and extending therein to form a spark gap with the last conductor, the wire serving to lower the tube in a well and to remove the tube after the explosive has been fired to clean the strainer in the well.

4. In a cartridge for cleaning well strainers a tube having a wall serving as an electric conductor connecting the exterior with the interior of the tube and an extending member with an orifice, a weight secured to the tube, an explosive in the tube, a plug closing the upper end of the tube and having an orifice extending therethrough, a conductor secured to the plug and having contact with said wall of the tube and provided with a terminal in the tube, and a wire extending through the orifices in the extending member of the tube, and in the plug and provided with a terminal forming a spark gap with the first terminal.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,275,463. COMBINED FAUCET AND STRAINER. WILLIAM R. NICOLL, Owatonna, Minn., assignor, by mesne assignments, to Davis-Watkins Dairymen's Manufacturing Company, a Corporation of Delaware. Filed May 7, 1915. Serial No. 26,465. (Cl. 137—21.)

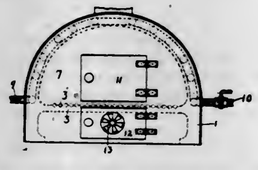


1. The combination with a receptacle having a surface curved about a horizontal axis; of a combined strainer and faucet comprising a plate fixed to the receptacle having one side curved to conform to the outside thereof and with a perforated hub extending from this side of the plate through the wall of the receptacle and terminating flush with the inside thereof, and having a flat outer side; a strainer attached to the outside of the hub and

extending within the receptacle; and a handled plate flat on one side eccentrically pivoted to the outside of the other plate with an integral perforated hub extending from the other side and rotatable to register with the perforation of the other hub.

2. The combination with a cylindrical receptacle having a door in its curved surface, of a standard for supporting the receptacle upon a horizontal axis, means in connection with the standard to engage and hold the receptacle in any one of a plurality of fixed positions, a combined strainer and faucet comprising a plate conforming to the outer curved surface of the receptacle with a perforated projection extending therefrom through the wall and flush with the inside thereof, and a handled plate eccentrically pivoted to the outside of the first-named plate with an integral perforated hub extending outwardly therefrom and rotatable to register with the perforation of the projection of the first-mentioned plate, the strainer and faucet being located in such a position that the said door will be at the top slightly inclined to the horizontal when the strainer and faucet is held in one position at the lowermost point by said holding means so that the handle of said handled plate can be operated from the same side of the receptacle as that upon which the door is located to completely drain the receptacle.

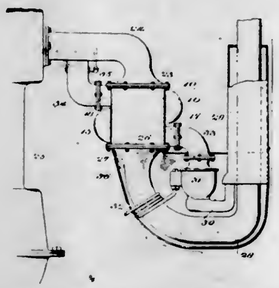
1,275,464. SAND AND WATER HEATER. ANDERS OLSON, Minneapolis, Minn. Filed Jan. 28, 1918. Serial No. 214,236. (Cl. 122—494.)



1. In a sand and water heater the combination of multiple arches having apertures therein for the positioning of water pipes, a series of water pipes positioned in said apertures and adapted to drain at each end when opened, a shell positioned over said series of arches, and a fire box positioned in said shell.

[Claims 2 and 3 not printed in the Gazette.]

1,275,465. VAPORIZER. WILLIAM PETZ, Firth, Nebr. Filed Mar. 20, 1917. Serial No. 156,159. (Cl. 257—241.)



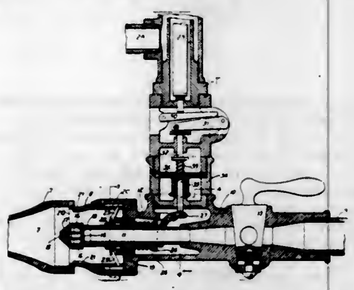
1. A device of the character described including a casing having top and bottom walls and provided with inlet and outlet passages, a partition within the casing and defining a tortuous fuel passage therein between said first mentioned passages, an exhaust tube fitted through the top and bottom walls of the casing and through said partition to project into the fuel passage, and a fuel cup at the lower extremity of said exhaust tube.

3. In a device of the character described, the combination with a vaporizer having an exhaust pipe provided with an elbow, of a carbureter mounted in said elbow and communicating with the vaporizer, an open ended sleeve surrounding the exhaust pipe and communicating with the air inlet passage of the carbureter, and a hood connected with the vaporizer and arranged to inclose the said elbow and surround the carbureter.

4. In a device of the character described, the combination with a vaporizer having an exhaust pipe provided with an elbow, of a carbureter mounted in said elbow and communicating with the vaporizer, and a hood connected with the vaporizer and coacting with the said elbow to surround the carbureter.

[Claim 2 not printed in the Gazette.]

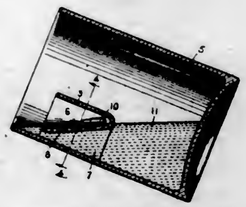
1,275,466. GAS-MIXING CHAMBER FOR BURNERS. JOSEPH W. PIATT, New York, N. Y., assignor to L. H. Piatt, New York, N. Y. Filed Dec. 9, 1916. Serial No. 135,930. (Cl. 158—119.)



1. The combination of a mixing chamber having air inlet ports; a valve to open and close said ports; a tube connected to a source of gas supply extending into said chamber having an outlet into the chamber; a valve to control the opening and closing of said outlet; a spring operating to normally urge the gas control valve to a closed position; means operable by the movement of the gas outlet valve to simultaneously close the air inlet valve for the mixing chamber; and means operable against the action of the spring to open the gas control valve and simultaneously with the opening of said valve open the air inlet valve to the mixing chamber, substantially as and for the purpose specified.

[Claims 2 and 3 not printed in the Gazette.]

1,275,467. DEGLUTITORY CUP. FRANCIS N. POULALION, Des Moines, Iowa, assignor to H. S. Magel, Omaha, Nebr. Filed Jan. 7, 1916. Serial No. 70,753. (Cl. 128—28.)



1. In an article of the class described, a liquid-holding cup having substantially vertical walls, a pair of spaced vertical ribs extending inwardly from one side of said cup near the top thereof, and a secondary receptacle carried by and connecting the inner edges of said ribs and being thereby held in spaced relation to said side of the cup and forming a vertical liquid-passage between said ribs, for the purpose set forth.

2. An article of the class described comprising an outer cup and a receptacle of greater depth than width positioned within said cup below the rim and adjacent to but spaced from one side thereof, said receptacle opening toward the rim of the cup, and means for connecting the cup and receptacle fixedly in the relation set forth, said means being substantially unobstructive of a vertical space around the receptacle between the same and the sides of the cup.

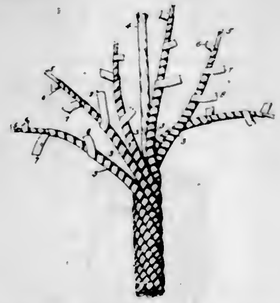
1,275,468. CONDENSER AND METHOD OF MAKING THE SAME. ALBERT PRUESSMAN, Berwyn, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed July 27, 1917. Serial No. 183,131. (Cl. 250—41.)

1. The method of treating a condenser comprising an impregnated unit, which consists in heating said impregnated unit to a temperature greater than the melting point of the impregnating compound, and maintaining the unit at such temperature for a period of time sufficient to allow the unit to assume its natural shape.

2. The method of treating a condenser comprising a unit impregnated with a paraffin compound, which consists in heating the impregnated unit to a temperature of not less than 120° F., and maintaining said unit at this temperature for a period of not less than three hours.

3. The method of treating a condenser comprising a unit impregnated with a paraffin compound, which consists in placing the impregnated unit in an upright position in an oven heated to a temperature of 140° F., and maintaining it at this temperature for a period of substantially four hours.

1,275,469. FLEXIBLE CONDUCTOR. ALBERT PRUESSMAN, Berwyn, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 17, 1917. Serial No. 197,042. (Cl. 173—13.)



1. A flexible composite electrical conductor, comprising a large number of very thin and flexible strands of conducting material, a smaller number of strands of a non-conducting material with high flexibility and tensile strength, a plurality of such strands of conducting material being wound upon each of said non-conducting strands to form a composite strand, and the resultant composite strand being twisted into a rope-lay.

2. A flexible conductor comprising a plurality of conducting strands twisted together, each of said strands comprising a textile core about which are wound a plurality of thin conducting tapes, said tapes being wound in individual layers and in a direction opposite to the twist of the strands.

1,275,470. APPARATUS FOR SETTING PILES. FRANCIS L. PRUYN, New York, N. Y. Filed Aug. 5, 1913. Serial No. 783,062. (Cl. 189—23.1.)

2. The combination of a driving member and a surrounding shell, the latter having a plurality of longitudinal sections, flanges extending along the edges of the sections, said driving member having grooves for



holding said flanges and thereby preventing displacement of the sections.

[Claims 1 and 3 to 6 not printed in the Gazette.]

1,275,471. SANITARY SOAP-CONTAINER. JOHN H. PURCELL, Ono, Cal. Filed Feb. 1, 1917. Serial No. 145,992. (Cl. 45—28.)



A soap container comprising a receptacle provided with a plurality of openings in its sides disposed in spaced relation and at a spaced distance from the bottom of the receptacle whereby a fluid may be poured into the receptacle and the soap agitated into a solution, the receptacle being then tipped to drain the solution therefrom, and overhanging guards on the inside of the receptacle projecting toward the bottom thereof to act as stops and prevent the soap from falling out of the receptacle when same is tipped to drain the solution therefrom.

1,275,472. ADJUSTABLE SUPPORTING DEVICE FOR TYPE-HOLDING SEGMENTS. GABRIEL ADAM REICHERT, Chicago, Ill., assignor to The American Multigraph Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 5, 1917. Serial No. 166,627. (Cl. 276—1.)



1. In a device of the character described, the combination of a base, a standard carried thereby, a head adapted to support a type engaging segment, said head being provided with a downwardly extending, centrally located tongue, and means pivoting the tongue to the standard.

6. The combination of a base, a standard rotatably connected therewith on a vertical axis, a member having a curved top and a radial tongue pivotally connected with the standard, and shoulders limiting the movement of said member in either direction.

[Claims 2 to 5 and 7 to 14 not printed in the Gazette.]

1,275,473. SNAP-FASTENER. HERMAN RIGERT, Waterbury, Conn. Filed Aug. 12, 1914, Serial No. 856,374. Renewed Feb. 18, 1918. Serial No. 217,992. (Cl. 24—68.)

1. A snap fastener comprising two coöperative separable members attachable to opposite meeting margins of

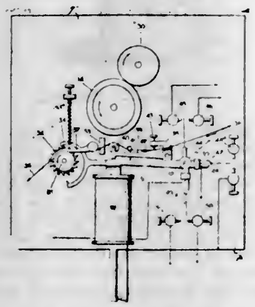
a garment or the like, one of said members being formed from wire and having opposite, elastic side-arms connected integrally by a stress-bar, and normally contracting the space between and at the free end-portions thereof, and the other of said members having a tongue and a stud at opposite marginal points at one and the same face thereof, said tongue turned rearwardly away from



said stud and adapted to engage and rock on said stress-bar, and said stud being adapted to enter, with a snap action, and occupy at the point of its greatest contraction, the space aforenamed between the free end-portions of said side-arms, when said separable members are being connected.

[Claims 2 and 3 not printed in the Gazette.]

1,275,474. TELEGRAPHIC PRINTING APPARATUS. MATIAS BALSERA RODRIGUEZ, London, England. Filed Mar. 20, 1916. Serial No. 85,463. (Cl. 178—35.)



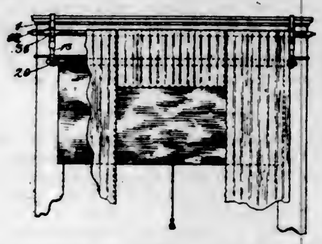
1. A telegraphic printing apparatus serving for the transmission and reception of messages for signals, comprising a lever and means coöperating therewith for effecting its oscillation to effect the printing impression, the forward end intermittent feed of the strip material upon which the impression is made and the discharge of the line conductor after the transmission of each sign or letter, substantially as described.

3. A telegraphic printing apparatus serving for the transmission and reception of messages or signals, comprising a spring operated lever formed as the armature of an electro-magnet having a number of contact arms one of which serves for discharging the line conductor after each transmission of a sign or letter, a second lever mounted upon the first and adapted to carry an impression roller for effecting the printing impression and the forward end intermittent feed of the strip material upon which the impression is made, substantially as described.

[Claims 2 and 4 to 7 not printed in the Gazette.]

1,275,475. SHADE AND CURTAIN SUPPORT. HARVEY S. RORICK, Detroit, Mich. Filed Oct. 9, 1916. Serial No. 124,538. (Cl. 156—24.)

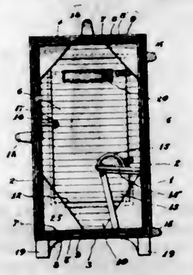
1. In a device of the class described, a multipart clamping device including an upper vertically disposed clamping member, a right angle bracket vertically secured to the front face of said upper clamping member to have one end extend horizontally outwardly from the casing when in position, a horizontally adjustable curtain pole supporting member having one end formed to receive a curtain pole and having its other end flat and provided with an elongated longitudinal slot, the slotted flat end of the pole supporting member lying against the horizontal end of the angle bracket, and a clamping screw passing through the slot of the pole supporting member and the horizontal end of the angle bracket to secure said member in adjusted positions.



2. In a device of the class described, a multipart clamping device including an upper vertically disposed clamping member, a right angle bracket vertically secured to the front face of said upper clamping member, an outwardly horizontally adjustable curtain pole supporting member attached to said bracket, a second outwardly horizontally adjustable curtain pole supporting member mounted on the first named supporting member, and a single means for uniting both supporting members and the bracket and for securing both of the supporting members in adjusted positions relative to the bracket and relative to each other.

3. A device of the class described including an upper vertical clamping member having its upper end bent to engage over a casing, the other end portion thereof being provided with inturned side edges forming a channel, a lower vertical member having its upper end provided with an elongated longitudinal slot and slidably mounted in said channel, a clamping screw extending through the upper member and the slot of the lower member to secure the lower member in adjusted positions, said lower member having a shade bracket rigid with the lower end thereof, and a cross bar clamping member transversely adjustably connected with the lower end of said lower member and having one end bent to engage a side of a casing.

1,275,476. CYCLONE-PROTECTOR. JACKSON L. ROY, De Queen, Ark. Filed June 12, 1917. Serial No. 174,338. (Cl. 20—1.)

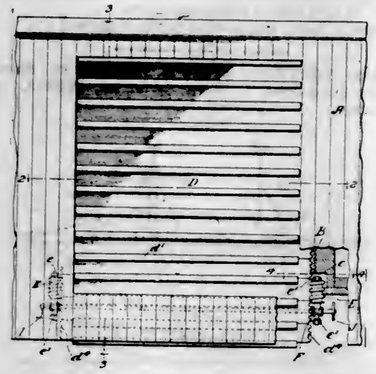


1. The herein described cyclone protector comprising a box-like structure whose walls, top, and bottom are formed of a plurality of thicknesses, each thickness consisting of strips disposed edge to edge and running at an angle to those in the next thickness the strips in the outside thickness of each panel running transverse to the length of that panel, and bumpers secured to the outer faces of said panels and running longitudinally thereof.

2. The herein described cyclone protector comprising a box-like structure whose end walls have door openings, doors therein, an internal seat secured to one side wall and running from end to end, an internal brace rod opposite said seat and connected at its extremities with the ends, and eye-bolts connecting this rod between its ends with the other side wall.

3. The herein described cyclone protector comprising a box-like structure having door openings in its ends, right-angular triangular braces secured in the corners of the structure against said ends and with the hypotenuse of each crossing a corner of the opening therein, and a door movably mounted in each opening and contacting with said braces when closed.

1,275,477. GRAIN-CAR DOOR. WILLIAM P. RUBLE and WILLIAM B. STEVENS, Esmond, N. D. Filed Feb. 27, 1917. Serial No. 151,248. (Cl. 189—60.)

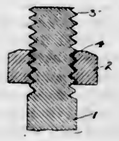


1. A car door provided on each opposite side edge with a vertically arranged series of teeth, in combination with worms mounted to turn about vertical axes and which engage the two series of teeth for raising and lowering the door.

2. A car door provided on each opposite side edge with a vertical series of teeth, worms mounted to turn about vertical axes and engaging the two series of teeth for raising and lowering the door, and means for simultaneously operating said worms.

[Claims 3 and 4 not printed in the Gazette.]

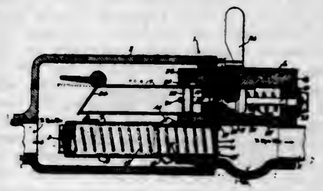
1,275,478. LOCK NUT AND BOLT. CATHERINE C. RYAN, St. Paul, Minn. Filed Nov. 11, 1916. Serial No. 130,825. (Cl. 151—14.)



In combination, a threaded bolt and a threaded nut, the threaded bolt having a uniform thread thereon, except that the outer diameter of the thread decreases uniformly from the free end of the bolt, thus forming an ever-widening "flat" on the outer diameter, the thread of the nut having a uniform short diameter, and having a tapering long diameter with a "flat" at the root of the thread increasing toward the side of the nut having the shortest long diameter.

1,275,479. SAFETY-VALVE FOR AIR-BRAKES. MICHAEL H. RYAN, San Bernardino, Cal. Filed June 12, 1917. Serial No. 174,324. (Cl. 188—1.)

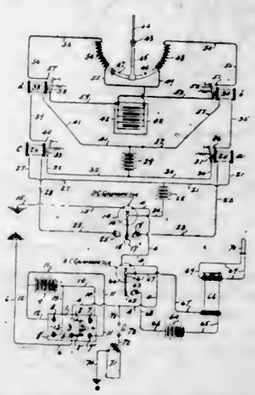
1. A device of the character described having two chambers, one to communicate with a triple valve and the other to communicate with a train pipe, means for restricting the flow of air from the second mentioned to the first mentioned chamber, permitting of the unrestricted flow of air in the opposite direction and momentarily permitting unrestricted flow in the first mentioned direction after the flow of air in the second mentioned direction, means between said chambers adapted to move by an abnormal reduction in pressure in the first mentioned chamber, a signal controlled by the second mentioned means, and



means operable after the flow of air from the first to the second mentioned chamber and during the forcing of air from the second mentioned to the first mentioned chamber for preventing the operation of the second mentioned means.

[Claims 2 and 3 not printed in the Gazette.]

1,275,480. ELECTRICAL SYSTEM FOR CONTROLLING BOATS OR TORPEDOES. JAMES M. SEYMOUR, Jr., Newark, N. J. Filed Apr. 26, 1917. Serial No. 164,605. (Cl. 172—283.)



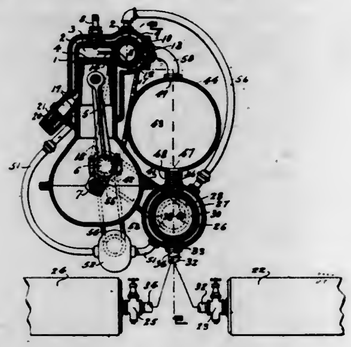
3. An electrical system for the purposes described comprising a comparatively weak control circuit including a control conductor leading from a control station out to a boat or torpedo, an alternating current galvanometer and a direct current galvanometer located on said boat or torpedo and connected in series in the line of said control conductor, electrical steering apparatus, power circuits within said torpedo for operating said electrical steering apparatus, circuit closing means governing said power circuits operated by said direct current galvanometer, electrical detonating means within said torpedo, a circuit for operating said electrical detonating means, circuit closing means governing said detonating circuit operated by said alternating current galvanometer, and selective means for sending direct current or alternating current over said control conductor.

4. An electrical system for the purposes described comprising a control circuit including a control conductor leading from a control station out to a boat or torpedo, a direct current galvanometer on said boat or torpedo and connected in the line of said control conductor, starboard electrical steering apparatus, port electrical steering apparatus, a source of power current, power circuits leading from said source to said respective steering apparatus, a

set of step up relay circuits operating in conjunction with one power circuit, a second set of step up relay circuits operating in conjunction with the other power circuit, circuit closing means operating one set of relay circuits and controlled by said galvanometer when the latter is influenced by a positive direct current, circuit closing means operating the other set of relay circuits and controlled by said galvanometer when the latter is influenced by a negative direct current, means at the station end of said control conductor for sending at will over the same either positive or negative direct currents, an alternating current galvanometer connected in the line of said control conductor at its boat or torpedo end, electrical detonating devices, a circuit for operating the same, circuit closing devices therefor, said circuit closing device being controlled by said alternating current galvanometer when the latter is influenced by an alternating current, and means at the station end of said control conductor for sending at will over the same alternating current in place of direct current.

[Claims 1 and 2 not printed in the Gazette.]

1,275,481. INTERNAL-COMBUSTION ENGINE. JAMES M. SEYMOUR, Jr., Newark, N. J. Filed Apr. 28, 1917. Serial No. 165,056. (Cl. 123—120.)

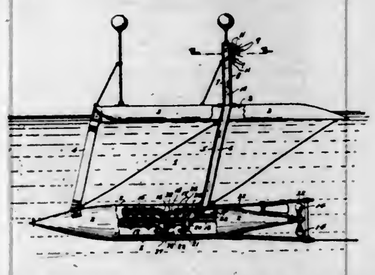


1. The combination with an engine cylinder having a piston mounted to reciprocate therein of a rotary admission valve comprising a housing connected with said engine cylinder, a valve drum rotatably mounted in said housing, transmission means for driving said valve-drum in timed relation to the engine piston movements, said housing having an inlet port and an outlet port, the latter communicating with the interior of said cylinder, said valve drum having a valve port alternately registering with said inlet and outlet ports of said housing, a measuring mechanism for simultaneously and proportionally measuring a plurality of fuel elements, a mixing retort communicating with the outlets of said measuring mechanism, and means of communication between the outlet of said mixing retort and the inlet port of the housing of said rotary admission valve.

4. The combination with an engine cylinder of a water-jacket enveloping said cylinder, a piston mounted to reciprocate in said cylinder, a crank-shaft with which said piston is connected, an exhaust valve mechanism in communication with the interior of said cylinder, a rotary admission valve comprising a housing, a rotary valve drum mounted within said housing, a driving shaft connected with said valve drum and projecting exteriorly from said housing, transmission means between said valve driving shaft and said crank shaft, said housing having an inlet port and an outlet port, the latter communicating with the interior of said cylinder, said valve drum having a valve port alternately registering with said inlet and outlet ports of said housing, a rotary measuring valve for simultaneously and proportionally measuring a plurality of fuel elements, comprising a water-jacketed valve-casing having gas inlet ports and outlet ports, means interconnecting said engine cylinder water-jacket with the water-jacket of said valve-casing, a pump for circulating the water through said water-jackets, a rotary measuring drum having a plurality of compartments each provided with a valve-port for communication with an inlet and outlet port of said valve-casing, a driving shaft connected with said measuring drum and projecting exteriorly of said valve-casing transmission means said measuring drum shaft and said engine crank shaft, a mixing retort communicating with the outlet ports of said valve-casing, and means of communication between the outlet of said mixing retort and the inlet port of the housing of said rotary admission valve.

[Claims 2 and 3 not printed in the Gazette.]

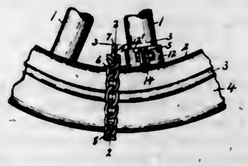
1,275,482. TORPEDO. JAMES M. SEYMOUR, Jr., Newark, N. J. Filed June 2, 1917. Serial No. 172,403. (Cl. 114—21.)



1. In a submerged torpedo, a hydrocarbon engine for propelling the same, a fuel supply for said engine, means projecting above the water level for admitting air into said torpedo, a carbureter for mixing said fuel and said air for delivery to said engine, and means connected in mutual communication between said air admission means and said carbureter for separating water which may accompany the air through said air admission means.

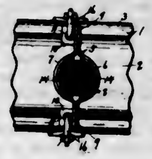
2. In a submerged torpedo, a hydrocarbon engine for propelling the same, a fuel supply for said engine, means projecting above the water level for admitting air into said torpedo, a carbureter for mixing said fuel and said air for delivery to said engine, means connected in mutual communication between said air admission means and said carbureter for separating water which may accompany the air through said air admission means, comprising a cylindrical drum having a conical bottom, an air nozzle communicating with said air admission means and adapted to enter the side of said drum tangentially, a pump connected with the conical bottom of said drum, a discharge-pipe connected with said pump and projecting externally of said torpedo, a check-valve in said discharge-pipe, and an air supply pipe leading out of the top of said drum to the air intake of said carbureter.

1,275,483. ANTISKIDDING DEVICE FOR VEHICLES. PATRICK DANIEL SKAHEN, Syracuse, N. Y., assignor, by mesne assignments, to Henry H. Simpson, Brooklyn, N. Y. Filed Jan. 22, 1917. Serial No. 143,767. (Cl. 152—2.)



In an anti-skid device for vehicle wheels, the combination with the spokes, felly and tire, of a clamp attached to one of the spokes near the felly, one of the clamping members being provided with a circumferentially extending base plate adapted to rest upon the inner face of the felly, and a chain passed transversely around the tread of the tire and having its ends attached to said plate.

1,275,484. ANTISKIDDING ATTACHMENT. PATRICK D. SKAHEN, Syracuse, N. Y., assignor, by mesne assignments, to Henry H. Simpson, Brooklyn, N. Y. Filed Apr. 9, 1917. Serial No. 160,679. (Cl. 24—73.)



3. A clamp comprising two sections, one of which is provided with slots, the other being provided with laterally projecting apertured lugs normally extending through said slots, and means adapted to pass through said apertured lugs to lock said sections together, and to connect an additional element to said lugs.

[Claims 1 and 2 not printed in the Gazette.]

1,275,485. ANTISKIDDING DEVICE. PATRICK D. SKAHEN, Syracuse, N. Y., assignor, by mesne assignments, to Henry H. Simpson, Brooklyn, N. Y. Filed Jan. 12, 1918. Serial No. 211,544. (Cl. 152—14.)



1. In an anti-skidding device for vehicle wheels, the combination with the spokes, felly and tire, of a clamp secured to one of the spokes and provided with a circumferentially extending base plate resting against the inner face of the felly, a bolt on the base plate for attachment to a cross chain, and a cross chain attached to the bolt, said clamp having a hinged member for holding the cross chain on the bolt against inward displacement.

2. In an anti-skidding device for vehicle wheels, the combination with the spokes, felly and tire, of a base plate lying against the inner face of the felly, means for clamping the base plate to one of the spokes, a volt secured to the base plate and extending radially and inwardly therefrom, a brace plate attached to the clamping means and movable into and out of engagement with the free end of the bolt, and a cross chain attached to said bolt.

[Claims 3 and 4 not printed in the Gazette.]

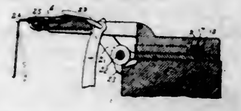
1,275,486. CENTRIFUGAL EXTRACTOR. ROBERT M. SMITH, San Francisco, Cal. Filed Aug. 21, 1916. Serial No. 115,968. (Cl. 210—25.)



1. In combination with a centrifugal extractor having a stationary open topped curb and an open topped basket rotatably mounted therein, a removable cover hinged at one side to said basket and for insertion through the opening in said curb and for seating upon said basket for closing the open top thereof and means for coöperating with the cover to close the same during the rotation of said basket.

[Claims 2 to 6 not printed in the Gazette.]

1,275,487. FILLING STOP-MOTION. ISAAC SNOW, Lawrence, Mass. Filed July 27, 1917. Serial No. 183,174. (Cl. 139—54.)



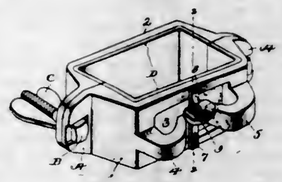
1. A filling stop motion having, in combination, a stand, a filling fork pivoted thereto, a slide movable independently of said stand and fork, connections through which such movement of said slide is effective to stop the loom, an actuator, a connection between said actuator and said slide, and means associated with said fork and normally effective to render said connection inoperative, but permitting said connection to become operative to move the slide and thereby stop the loom on breakage of filling and also when the path of the filling fork is obstructed at the time when the adjacent shuttle box is empty.

3. A filling stop motion having, in combination, a stand, a filling fork pivoted thereto, a movable member, loom stopping mechanism controlled through said member, an actuator, a single connector from said actuator to said member, and a device operated by said filling fork effective to place said connector in operative and inoperative positions, whereby said actuator is rendered operative to move said member and stop the loom upon breakage of filling and also when the fork is raised with the adjacent shuttle box empty.

5. A filling stop motion having, in combination, a filling fork, a slide, loom stopping mechanism controlled through said slide means controlled by said fork effective to actuate said slide, and a stand comprising fixed and movable parts, said fixed part forming a guideway for said slide, and said movable part supporting said filling fork normally in operative position, but permitting removal thereof under abnormal conditions independently of said slide.

[Claims 2 and 4 not printed in the Gazette.]

1,275,488. FASTENING MEANS. EUGENE C. SOUTHWORTH, Southington, Conn., assignor to The Steel Products Company, Plantsville, Conn., a Corporation of Connecticut. Filed May 3, 1918. Serial No. 232,264. (Cl. 24—241.)

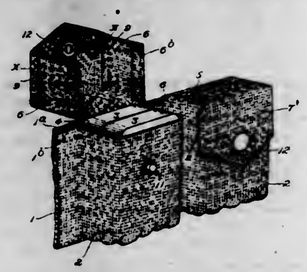


1. Two opposed hooks fixedly located with relation to each other, in combination with a guard mounted on a fixed object and adapted to move in a plane at right angles to the plane of said hooks and between the tips of said hooks and said fixed object and adjacent the tips of said hooks to guard the same.

2. A plate provided with two opposed integral hooks and having an opening between the shanks of said hooks and lying under their tips to facilitate the application of chain links thereto, in combination with a keeper mounted pivotally on said plate, adapted to move between said plate and the tips of said hooks, normally lying equi-distant from the

tips of said hooks, and provided with a lug which is so located and of such dimensions that in normal position it will be adjacent to the tips of said hooks preventing the passage of a chain link between it and either of the tips of said hooks, while allowing the movement of the keeper to both of its extreme open positions, and means carried by said keeper and engaging said plate to hold said keeper in normal position.

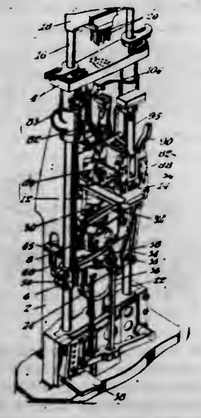
1,275,489. WOVEN CARRIER. GEORGE W. SPALDING, Worcester, Mass., assignor to Universal Patents Company, a Corporation of Rhode Island. Filed Apr. 11, 1917. Serial No. 161,110. (Cl. 224—23.)



2. A pocketed woven carrier having a box-cover or hood comprising essentially a one-piece blank formed with a selvaged rear section which is attached to the back of the pocket, an intermediate section comprising a top and selvaged side-wings, and a front section with opposite lateral widenings which are folded in the form of flanges outwardly around the forward margins of the said side-wings and secured against the outer faces of the side-wings.

[Claim 1 not printed in the Gazette.]

1,275,490. MACHINE FOR OPERATING ON HEELS. JOHN F. STANDISH, Winthrop, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Oct. 4, 1915. Serial No. 53,948. (Cl. 1—36.)



1. A machine for operating on heels, having, in combination, relatively movable work pressing members, means for moving one of said members to apply a measuring pressure to the work, and automatically acting mechanism for subsequently moving one of said members through greater and lesser distances alternately in successive cycles of the machine for applying additional pressures.

2. A machine for operating on heels, having, in combination, relatively movable work pressing members, means for presenting successively in operative position a plurality of heel parts, and mechanism for automatically imparting pressure applying movements of different amounts to one of the work pressing members.

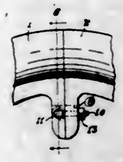
3. A machine for operating on heels, having, in combination, relatively movable work pressing members, means for presenting a leather heel part and then a rubber heel part in operative position, and mechanism acting automatically on one of the pressing members to move said member through a small distance after the leather heel part is positioned and then through a greater distance after the rubber heel part has been positioned.

4. A machine for operating on heels, having, in combination, a die plate and jack arranged for relative movement, means for moving one of said members toward the other, to measure the work, and power driven mechanism for further moving the same member alternately greater and lesser distances in successive cycles of the machine.

14. In a heel attaching machine, a spanker plate having a rigidly attached holder shaped to embrace the periphery of a rubber heel section, and separate drivers set in the spanker plate, each having a reduced shank shaped to fit into an opening in the spanker plate and an enlarged head adapted to drive the attaching nails below the surface of the rubber heel section.

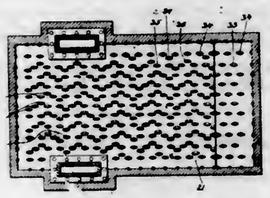
[Claims 5 to 13 not printed in the Gazette.]

1,275,491. COLLAPSIBLE CORE. CHARLES STEIN, Akron, Ohio. Filed Nov. 22, 1915. Serial No. 62,684. (Cl. 18—45.)



In a collapsible core of the class described, the combination of a series of segmental sections adapted to be assembled end to end, the abutting faces of the segmental ends and flanges located in the same plane, a clamping bolt pivotally connected to one of the abutting flanges and the opposite flange provided with an open recess adapted to receive said pivoted clamping bolt.

1,275,492. STEAM-GENERATOR. ALBERT A. E. STEHZING, New York, N. Y. Filed July 17, 1915. Serial No. 40,357. (Cl. 257—263.)



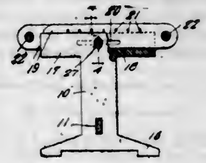
1. An element of the character described including a plurality of superposed plates, and rivets therefor having oblong heads the major axes whereof lie longitudinally of said plates.

5. An element of the character described including a set of three plates to be maintained apart in superposed relation, and rivets therefor having stem enlargements capable of holding the middle plate in its assigned position.

7. An element of the character described including a plurality of plates arranged in superposed relation, and rivets therefor annularly expanded adjacent to the inner surfaces of said plates.

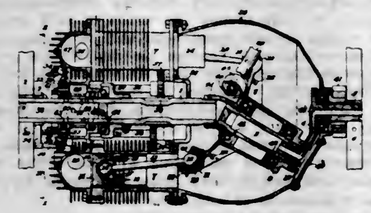
[Claims 2 to 4 and 6 not printed in the Gazette.]

1,275,493. QUILTING-FRAME. GEORGIANA STEWART, Shawnee, Okla. Filed Aug. 15, 1917. Serial No. 186,376. (Cl. 45—24.)



In a quilting frame, end members having opposed lateral extensions at their upper ends forming cross heads which are longitudinally grooved in their upper edges and have centrally disposed transverse openings intersecting the said grooves, a pair of plates in the grooves of each cross head, and having longitudinal slots in register with each other and with the transverse opening of the cross head, rollers at the outer ends of the plates, a supplemental roller having its ends passing through the longitudinal slots of the plates and the transverse openings of the cross heads, and means for securing the plates in relative adjusted position.

1,275,494. INTERNAL-COMBUSTION ENGINE. OLE O. STORLE, Tacoma, Wash., assignor to The Storle Engine Company, Kewaunee, Wis. Filed Nov. 12, 1913. Serial No. 800,652. (Cl. 123—43.)



1. In an internal combustion engine the combination of a bearing shaft having an extension at an oblique angle thereto, a number of cylinders rotatably mounted on said shaft with their axes parallel therewith, a rotary thrust head mounted on said extension, a link connecting said thrust head and cylinders and compelling them to rotate together, reciprocating pistons fitted in said cylinders, and rods connecting the pistons with said head.

2. In an internal combustion engine the combination of a hollow stationary shaft forming a fuel inlet conduit, an internally recessed sleeve rotatably mounted on said shaft and forming therewith an annular chamber communicating with the inlet conduit through a lateral opening in said shaft, said sleeve being formed with stuffing boxes at the ends of said chamber, spaced and connected packing supporting rings fitted in said boxes, an adjustable gland fitted in the outer end of the outer box, and cylinders rotatably mounted with said sleeve on said shaft and provided with inlet valve chambers connected by passages with said annular chamber.

3. In an internal combustion engine the combination of a stationary supporting shaft provided with a pinion, a number of cylinders rotatably mounted on said shaft with their axes parallel therewith and provided with exhaust valves and chambers and with spring retracted electric contact levers and valve actuating levers, rotary shafts mounted on said cylinders parallel therewith and provided with cams and with gears meshing with said pinion, and a contact arm mounted and angularly adjustable on said shaft in the path of the contact parts of the contact levers when the latter are turned by the cams into operative position, the cams and their actuating gears being adapted to shift the contact lever and the valve actuating lever of each cylinder into position to produce a spark and to open the exhaust valve in proper rotation once to every two revolutions of the cylinders.

1,275,495. COLLAPSIBLE PASTE-TUBE. SIMON S. TAINTER, Weld, Me., assignor of one-half to Guy O. Gardner, Dixfield, Me. Filed Apr. 11, 1918. Serial No. 228,045. (Cl. 221—60.)



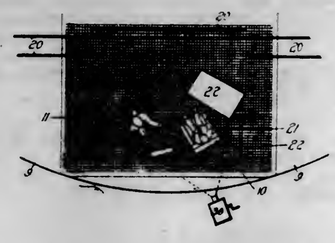
1. A collapsible paste tube having a neck formed with a discharge passage from the interior of the tube through the neck, a cap having a screw threaded connection with said neck, the top of the cap being formed with a discharge orifice, and a plug having one end connected with said neck in such manner that it is rotatable on its axis with relation to the neck, the outer end of said plug being shaped and arranged to close the said orifice in the cap when the cap is screwed down upon the neck.

4. A collapsible paste tube having a neck formed with a discharge passage from the interior of the tube through said neck, a cap having an orifice in the outer end and being connected with said neck in such manner that it is axially movable with relation thereto, a plug connected at one end with said neck in such manner that it is rotatable on its axis with relation to said neck, the outer end of said plug being constructed in such form as to be adapted to close the orifice in the cap, a passageway leading from the passageway in the neck to said orifice in the cap, said cap being axially movable with relation to the plug whereby the cap may be set in position so that the plug will close the orifice in the cap and may also be moved so that the said orifice will be opened to the said discharge passage from the interior of the tube, and means whereby the rotation of the cap causes the rotation of the plug and at the same time permits axial movement of the cap with relation to the plug.

6. A collapsible paste tube having a neck formed with a discharge passage from the interior of the tube and formed with exterior screw threads, a cap having a screw thread on a portion of its inner periphery to engage with the threads on said neck, the top of the cap being formed with a discharge orifice elongated in a direction transversely of the axis of the cap, a plug having one end connected with the said neck in such manner that it is rotatable on its axis with relation to the neck, means for preventing the said plug from axial movement with relation to the neck, the outer end of said plug being formed as a closure which is adapted to close the said orifice in the cap, means for connecting the said cap with said plug in such manner that when the cap rotates the plug is caused to rotate with it, but which permits the cap to move axially with relation to the plug, said connecting means being so located and arranged that the longitudinal median line of the end of the plug is always parallel with the longitudinal median line of the orifice in the cap, said plug being formed with a passageway connecting with the passageway in the neck and with the outlet passage from the cap.

[Claims 2, 3, and 5 not printed in the Gazette.]

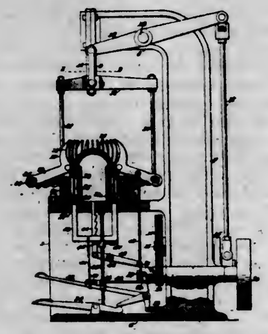
1,275,496. APPARATUS FOR PRODUCING MOTION-PICTURE PUPPET-PLAYS. RIDLEY F. TAYLOR and WILKINS W. WHEATLY, Los Angeles, Cal., assignors, by mesne assignments, to William Horsley, Los Angeles, Cal. Filed Nov. 10, 1915. Serial No. 60,760. (Cl. 88—16.)



1. Apparatus for production of motion picture puppet plays, embodying a plane of support and reference, movable objects and a plurality of object holding means in coördinate arrangement on the plane into coöperative relation with any of which the movable objects may be placed, the objects having means for engaging said holding means whereby the object may be held successively in different positions which are made definite and known by the coördination of the holding means.

[Claims 2 and 3 not printed in the Gazette.]

1,275,497. METAL-BASKET CORRUGATOR. FRANK DANIEL TELLIN, Kalona, Iowa. Filed Apr. 8, 1918. Serial No. 227,198. (Cl. 153—68.)



1. In a metal basket corrugating machine, a radially fluted matrix, a gang of coinciding corrugators, means to impart to them intermittent motion in and out of said flutes, and means adapted to hold a cylindrical blank in position around said matrix, and to advance it endwise intermittently, and between the strokes of the corrugators.

3. In a metal basket corrugating machine, a radially fluted matrix, a support therefor, a surrounding, lever-carrying ring spaced away from the matrix, a gang of corrugators pivotally mounted thereon, means adapted to actuate said corrugators, grippers to engage the lower edges of a cylindrical blank, and feed mechanism adapted to advance said grippers and blank between crimping impulses of the corrugators step by step, and successively widen the crimped zone.

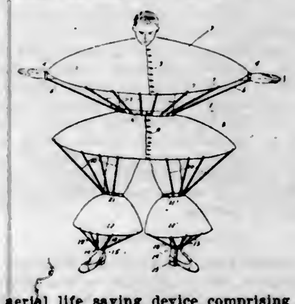
4. In a metal basket corrugating machine, a matrix having radial flutes converging toward one end, a gang of coinciding corrugators, means to impart intermittent radial movement thereto, and feed mechanism to advance the basket blank intermittently between the strokes of the corrugators, and a less distance than the space covered by their working faces, whereby the impressions of the corrugators are made to progressively overlap.

6. In a metal basket corrugating machine having a matrix and corrugators substantially as described, a feed device provided with grippers to hold one end of the basket blank, means adapted to close said grippers on the metal and to support the feeding device frictionally, means to advance the feed device step by step, and means adapted to forcibly strip the grippers from the blank when in its advanced position.

7. In a metal basket corrugating machine having a matrix radially fluted and a gang of coöperating pivoted levers surrounding the matrix, a feed mechanism adapted to advance the basket blank step by step, and a connection of said feed mechanism with one of the corrugating levers.

[Claims 2 and 5 not printed in the Gazette.]

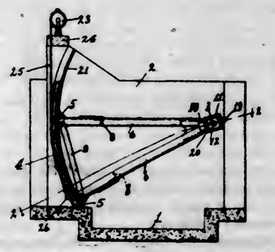
1,275,498. AERIAL LIFE-SAVING DEVICE. JOHN E. THOROUGHGOOD, Sr., Edgecomb, Wash. Filed Jan. 3, 1918. Serial No. 210,217. (Cl. 244—21.)



2. An aerial life saving device comprising a series of encircling garments adapted to be expanded with air, one of which garments secured around the neck of an aviator and having its lower extremity secured at opposite points to belts around the wrists of said aviator, straps secured to said wrist belts and connecting with a belt secured around the waist of said aviator, other straps connecting said garment with said waist belt, an encircling garment connected to said waist belt, and straps connecting the lower portion of said last named garment with belts secured around the legs of said aviator, and encircling garments connected to said leg belts respectively and connecting at their lower ends with straps secured to ankle belts, and means for preventing displacement of said ankle belts.

[Claim 1 not printed in the Gazette.]

1,275,499. RADIAL HEAD-GATE. KARL JOHAN THORSEN, Oakland, Cal., assignor to California Corrugated Culvert Company, Oakland, Cal., a Corporation of California. Filed Dec. 19, 1916. Serial No. 137,918. (Cl. 61—47.)

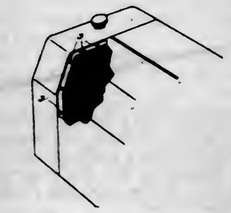


1. A head-gate of the radial type comprising a face formed as a segment of a cylinder; a skeleton frame for carrying said face comprising radially disposed end members; a supporting bracket to which the inner ends of the radial members of each end are connected; a pivot block carried by each bracket and adjustable radially thereof; and a means for pivotally supporting said blocks in the axis of said face.

3. A head-gate of the radial type comprising a face formed as a segment of a cylinder; a skeleton frame for carrying said face comprising radially disposed end members; a supporting bracket to which the inner ends of the radial members of each end are connected; a pivot block carried by each bracket and adjustable radially thereof; inter-engaging flanges formed on said block and said bracket to prevent the inward removal of the former; a fixed socket member mounted adjacent to each block and preventing its outward removal; and a pin pivotally connecting said block and said socket member in the axis of said face.

[Claim 2 not printed in the Gazette.]

1,275,500. BUFFER. ERNEST TIMMERHOFF, Elkhart, Ind., assignor of one-half to Charles E. Teed, Elkhart, Ind. Filed July 26, 1917. Serial No. 182,950. (Cl. 74—56.)



1. The combination with the engine-hood supporting flanges, of independent resilient bumpers secured at spaced points in openings in said flanges, said bumpers being independently variable as to projection beyond the flange.

2. An anti-rattler for automobile engine-hoods, comprising a metallic support for the hood, and a resilient block to be secured frictionally in an opening formed in the metallic support, said opening being punched to provide an edge wall below the opening to support the block.

3. An anti-rattle for juxtaposed members comprising a supported member, a supporting member having an opening therein, and a resilient bumper secured in said opening and variable as to projection beyond said member, said opening being of a size to constrict the bumper at the point of contact with the edge forming the opening, and the bumper overlapping both sides of its supporting member beyond said opening.

4. An anti-rattle for juxtaposed members comprising a supported member, and a supporting member having an opening therein, and a resilient bumper secured in said opening and variable as to projection beyond said member, said opening being of a size to constrict the bumper at the point of contact with the edge forming the opening.

1,275,501. APPARATUS FOR STRINGING WIRES. THEODORE TURANYCZ, Goodeve, Saskatchewan, Canada. Filed Apr. 19, 1917. Serial No. 163,265. (Cl. 247—23.)

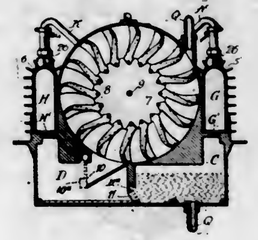


1. The combination with a movable carrier, of a plurality of reel supports arranged transversely of the carrier, a swinging crane on the carrier, a guide arm carried by the swinging crane and having a plurality of guides to carry the wire strands fed from reels carried on the reel supports, means to control said guide arm, and a bank of guide devices interposed between the reel supports and the crane, said guide devices also acting as compressing devices to compact the splices in the wire strands.

3. In combination, a telegraph pole, a cross arm on said pole, wire clamps fixed in spaced relation on the cross arm, and adapted to be operated by the action of pulling wire strands downwardly thereacross, a traveling crane, a guide arm carried by the crane and provided with wire guides spaced equally with the wire clamps, and means to raise and lower the guide arm to bring wires passing through the guides on said arm above and below the wire clamps.

[Claim 2 not printed in the Gazette.]

1,275,502. MOTOR OR ENGINE. HAROLD H. TURNER, Chicago, Ill. Filed Sept. 22, 1915. Serial No. 52,017. (Cl. 123—19.)



1. A motor of the character described and including a casing formed with a turbine chamber having inlet and outlet openings, a turbine wheel within said chamber arranged to be operated by a liquid flowing therethrough, a pressure chamber adapted to receive a body of liquid and having a bottom opening, a passage connecting said bottom opening and the inlet opening of the turbine chamber, a return passage connecting said outlet opening and the pressure chamber, a valve governing communication through said outlet opening, a valve governing communication between said return passage and said pressure chamber, means for periodically igniting charges of an explosive in the pressure chamber, and means for synchronously relieving pressure in said turbine chamber.

5. A motor of the character described and including a casing formed with a turbine chamber having inlet and outlet openings, a turbine wheel within said chamber arranged to be operated by a liquid flowing therethrough, a pressure chamber adapted to receive a body of liquid and having a bottom opening communicating with the inlet opening of the turbine chamber, a collecting chamber having valve-governed communication with the outlet opening of the turbine chamber and also having valve-governed communication with the pressure chamber, means for periodically exploding charges of an explosive in the pressure chamber to drive the body of liquid therefrom through the turbine passages into the collecting chamber, and means for periodically exploding charges of an explosive in said collecting chamber to expel such liquid therefrom back into said pressure chamber alternately with the explosions in such pressure chamber.

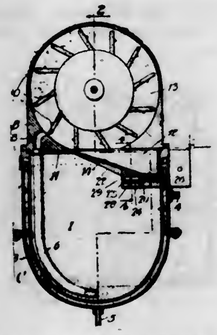
8. A motor of the character described and including a casing formed with a turbine chamber having inlet and outlet openings, a turbine wheel arranged within said chamber and adapted to be operated by a liquid, a passage connecting said openings and providing with the turbine passages of the motor a passageway for the flow of a body of liquid in a closed circuit therethrough, and means for driving such liquid through said passageway.

17. A motor of the character described comprising a frame and casing formed with a passage way for the circulation of a body of liquid and including a turbine

chamber and an explosion chamber, a body of liquid in said passageway, an electric circuit including an igniter arranged in said explosion chamber, a reservoir for explosive vapor, a pump arranged to pump explosive vapor into said reservoir and bring it to high pressure, a distributing valve for admitting charges of gas periodically into said explosion chamber, and a switch contact member mounted on said valve and coöperating with a fixed switch contact member to interrupt the electric circuit and produce explosions in said explosion chamber to drive the body of fluid through said turbine chamber.

[Claims 2 to 4, 6, 7, and 9 to 16 not printed in the Gazette.]

1,275,503. MOTOR OR ENGINE. HAROLD H. TURNER, Chicago, Ill. Filed Dec. 7, 1915. Serial No. 65,482. (Cl. 123—19.)



1. A motor of the character described and including casing members formed with a pair of separate turbine chambers, a turbine wheel in each chamber, both wheels being connected to a common motor shaft, a pair of explosion chambers respectively communicating with inlets to said turbine chambers, a pair of separate cross passages leading respectively from the outlet of the two turbine chambers to the opposite explosion chambers, a body of liquid arranged to circulate through said chambers and passages successively in one direction, and means for exploding charges of fuel alternately in said explosion chambers.

2. A motor of the character described and including casing members formed with separate turbine chambers arranged in pairs, turbine wheels in said chambers operatively connected to a common motor shaft, pairs of explosion chambers corresponding to said turbine chambers respectively communicating with the inlets to said turbine chambers, pairs of separate cross passages leading respectively from the outlet of each turbine chamber to the opposite explosion chamber of its pair, a body of liquid in each pair of chambers and passages arranged to circulate successively in one direction therethrough, and means for exploding charges of fuel alternately in the members of each pair of explosion chambers.

3. A motor of the character described and including casing members formed with a pair of turbine chambers, a turbine wheel in each chamber, both wheels being connected to a common motor shaft, a pair of explosion chambers respectively communicating with inlets to said turbine chambers, a valve-governed cross passage leading from the outlet of each turbine chamber to the opposite explosion chamber, a body of liquid arranged to circulate through said chambers and passages, and means for exploding charges of fuel alternately in said explosion chambers.

4. A motor of the character described and including casing members formed with a pair of turbine chambers, a turbine wheel in each chamber, both wheels being connected to a common motor shaft, a pair of explosion chambers, passages respectively leading from the bottoms of said chambers to the inlets to said turbine chambers, a valve-governed cross passage leading from the outlet of each turbine chamber to the opposite explosion chamber, a body of liquid arranged to circulate through said chambers and passages, and means for exploding charges of fuel alternately in said explosion chambers.

5. A motor of the character described and including casing members formed with a pair of parallel vertically-disposed turbine chambers, a turbine wheel in each chamber, both wheels being mounted on a common motor shaft, a pair of parallel vertically-disposed explosion chambers arranged below said turbine chambers, an upwardly extending tubular conduit arranged in each explosion chamber with its open lower end adjacent the bottom of said chamber and forming a passage communicating with the inlet to the turbine chamber thereabove, a valve-governed cross passage between the outlet of each turbine chamber and the opposite explosion chamber, a body of liquid arranged to circulate through said chambers and passages, and means for exploding charges of fuel alternately in said explosion chambers.

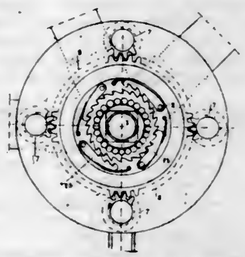
[Claims 6 to 13 not printed in the Gazette.]

1,275,504. PICKLE-SPEAR. PHILIP H. UNSINGER, Fremont, Ohio. Filed Dec. 30, 1916. Serial No. 139,763. (Cl. 30—5.)



A pickle spear comprising a single rod forming a handle at one end and having its other end tapering to reduce its size and terminating in a single spiral bend of decided pitch which is pointed at its free end with the point transversely offset from the axial line of the handle and formed with a spear head.

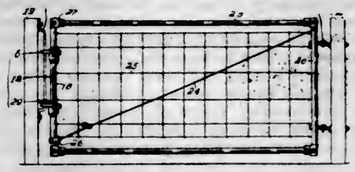
1,275,505. BACK-PEDALING CHANGE-SPEED GEAR APPLICABLE TO BICYCLES. LOUIS VEYRET, Paris, France. Filed Oct. 22, 1917. Serial No. 197,892. (Cl. 74—59.)



In a change speed gear for a bicycle of the character described, the combination of a driving shaft with two ratchet gears acting in opposite directions, a pinion adapted to be driven by one of said ratchets in the direction of pedaling, other pinions to which the rotation of said pinion is transmitted and a central pinion rotating loosely on the second of said ratchet gears in a direction opposite to that of said shaft, and adapted to transmit rotation to the first named pinion in the direction of motion with a speed reduced at the same ratio as the difference between the radii of the first and second named pinions, substantially as described.

1,275,506. FASTENING DEVICE FOR GATES. WALTER K. VOORHEES, Cedar Falls, Iowa, assignor to Standard Manufacturing Company, Cedar Falls, Iowa, a Corporation of Iowa. Filed July 30, 1917. Serial No. 183,507. (Cl. 70—28.)

1. In combination, in gate fastening means, a support, a forked clip rotatably mounted on said support, stops mounted on said support, fastening-means movably mounted on said clip and adapted for detachable engagement with said stops, and yieldable resilient means contacting with and exercising pressure against said clip to overcome the inertia of the latter when moved in either direction.

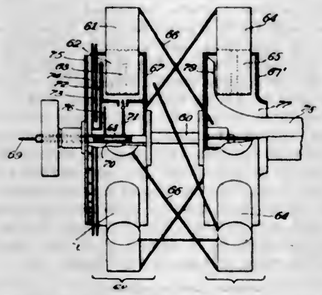


2. In combination in gate fastening means, a fixed upright standard, a gate stile adapted to swing to and from said standard, a sleeve fixed on said stile having oppositely-located stops, a forked clip rotatably mounted on said stile above said stops, a compression spring engaged between said sleeve and said clip, means for limiting the longitudinal movement of said clip along the stile away from said spring, and catches mounted on said clip, adapted to be engaged with said stops to prevent rotation of the clip, or be singly disengaged to permit rotation of the clip in one direction.

3. In combination in gate fastening means, a support, forked clips longitudinally spaced apart on said support and rotatably mounted thereon, stops longitudinally spaced apart on said support and fixedly mounted thereon, and a fastening rod having its upper part offset with its extremity depending into movable engagement with the upper clip and in detachable engagement with the upper stop, and having its lower end positioned in movable engagement with the lower clip and in detachable engagement with the lower stop.

[Claims 4 and 5 not printed in the Gazette.]

1,275,507. METHOD AND APPARATUS FOR INDUCING HEAT CHANGES. RUDOLPH VUILLEUMIER, New Rochelle, N. Y. Filed Jan. 29, 1917. Serial No. 145,252. (Cl. 62—170.)



1. The method of obtaining useful temperature-effects, which consists of confining a fluid within inclosed communicating spaces, and then alternately heating and cooling one portion of the fluid and thereby inducing secondary heat and cold respectively in other portions of the fluid, while separately abstracting the induced secondary heat or the induced secondary cold.

17. The method of obtaining useful temperature-effects, which consists of subjecting a fluid to primary heat-changes, and cumulatively inducing therefrom a temperature-differential in another body of fluid, and abstracting the temperature-effects obtained by such cumulation.

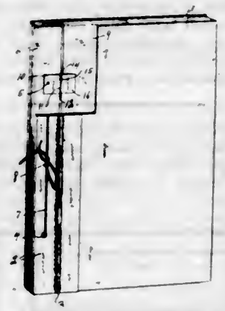
27. The method of obtaining useful temperature-effects, which consists of transferring an inclosed body of fluid alternately between sources of different temperature while in pressure-interchanging relation with another inclosed body of fluid, and thereby inducing secondary heat-effects in the second body, and passing a suitable medium in temperature-interchanging relation with the latter body and thereby abstracting the induced temperature-effects thereof.

38. In combination, means to alternately subject a fluid to heating and cooling influences, means to subject fluid in pressure-interchanging relation therewith alternately to the secondary heating and cooling effects induced by the primary heat changes, and means to abstract separately from the last-named fluid the secondary heat or cold thus induced.

49. In combination, means to displace a fluid alternately between two positions, means to subject said fluid to heating and cooling influences respectively in said two positions, a regenerator through which said fluid passes in being displaced from one position to the other, means to displace fluid in pressure-interchanging relation with said first-mentioned fluid alternately between two positions, a regenerator through which said last-mentioned fluid passes in being displaced from one position to the other, and means to abstract the heating and cooling effects induced in said last-mentioned fluid, in its different positions, by the primary heat changes in said first-mentioned fluid.

[Claims 2 to 16, 18 to 26, 28 to 37, 39 to 48, and 50 not printed in the Gazette.]

1,275,508. FILING DEVICE. JOHN H. WAGNER, Aspinwall, Pa. Filed July 23, 1917. Serial No. 182,225. (Cl. 129—19.)



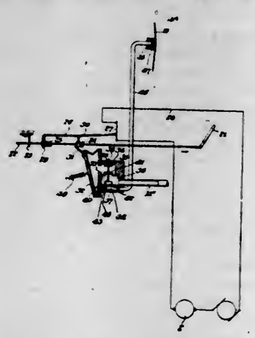
A filing device comprising, in combination, an insert, a flexible member extending beyond a margin of the insert, a sheet, a flexible loop extending beyond a margin of the sheet, and a member engaged with one of the loops and insertible in the second loop for engaging the sheet with the insert.

1,275,509. AUTOMATIC MUSICAL INSTRUMENT. WAYNE D. WAMBSLEY, Lester, Pa., assignor to Lester Piano Company, a Corporation of Pennsylvania. Filed Dec. 30, 1916. Serial No. 139,875. (Cl. 84—166.)

1. In an automatic musical instrument, the combination of a music sheet, means for feeding and rerolling said music sheet, motor mechanism comprising an electric circuit containing a controlling device for operating said means, mechanism for connecting said motor mechanism alternately with said feeding and rerolling means, a pneumatic controlled by said music sheet, and mechanism operated by said pneumatic for operating said mechanism second named and said controlling device alternately.

3. In an automatic musical instrument, the combination of a music sheet, means for feeding and rerolling said music sheet, motor mechanism for operating said means and comprising a circuit containing switching mechanism, clutching mechanism for connecting said motor mechanism alternately with said feeding and rerolling means, and a pneumatic having a device which

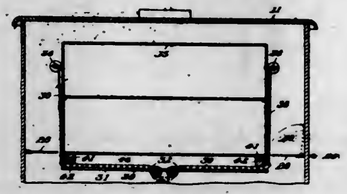
on one movement thereof engages and operates said clutching mechanism and on a second movement thereof engages and operates said switching mechanism.



6. In an automatic musical instrument, the combination of means for feeding and rerolling a music sheet, a pneumatic motor for operating said means, clutching mechanism for alternately connecting said motor with said feeding and rerolling means, means comprising an electric motor having a circuit containing a switch for operating said pneumatic motor, mechanism comprising a manually operated lever for simultaneously closing said switch and clutching said motor and feeding means, and means comprising a pneumatic controlled by said means second named and said music sheet for effecting the clutching of said pneumatic motor with said rerolling means and thereafter opening said switch.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,275,510. KITCHEN-STOVE. GEORGI E. WASON, Sault Ste. Marie, Ontario, Canada, assignor of one-third to Panko Wenger, Sault Ste. Marie, Ontario, Canada. Filed Mar. 8, 1918. Serial No. 221,145. (Cl. 126—22.)

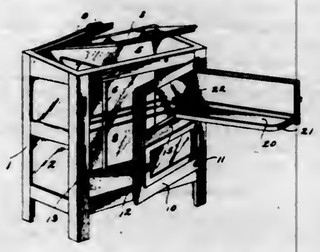


1. In combination with a stove having a burning grate and an outlet flue at the top of the stove, an oven arranged within the stove about the grate, dampers at the opposite sides and rear end of the oven adapted for controlling the products of combustion from the grate to the flue, flexible heat-shields shiftably arranged adjacent the lower opposite edges of the oven adapted for substantially horizontal arrangement beneath the oven and above the grate when in their operative arrangement and operating means for the said shields.

2. In combination with a stove having a burning grate and an outlet flue in the top of the stove, an oven arranged substantially centrally within the stove above the grate having an approach portion connected to the front of the stove, depending portions at the opposite sides of the oven arranged with inwardly projecting guides, flexible heat-shields normally adjustably mounted upon the said guides between the grate and oven adapted for movement around the lower opposite edges of the oven, winding drums journaled within the stove at points substantially centrally beneath the oven and similar drums arranged adjacent the opposite sides of the stove, connecting means between the opposite ends of said shields and the said drums, and operating means for the drums terminating forwardly of the stove front.

3. In combination with a stove having a burning grate and an outlet flue in the top of the stove, an oven arranged substantially centrally within the stove above the grate having an approach portion connected to the front of the stove, depending portions at the opposite sides of the oven arranged with inwardly projecting guides, flexible heat-shields normally adjustably mounted upon the said guides between the grate and oven adapted for movement around the lower opposite edges of the oven, winding drums journaled within the stove at points substantially centrally beneath the oven and similar drums arranged adjacent the opposite sides of the stove, connecting means between the opposite ends of said shields and the said drums, operating means for the drums terminating forwardly of the stove front whereby the shields may be shifted in and out of their operative positions beneath the oven, dampers hinged within the stove between the opposite sides and rear end of the oven and the adjacent walls of the stove, and operating means for the said dampers whereby the products of combustion are adapted to be controlled in their passage from the grate to said flue.

1,275,511. REFRIGERATOR. JAMES WELCH, Waterbury, Conn. Filed Feb. 23, 1918. Serial No. 218,760. (Cl. 45—71.)



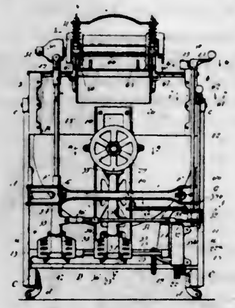
1. A refrigerator having an open front, and a series of rollers mounted across the body of the refrigerator on a single horizontal plane; combined with a hinged door to close said front, a panel movably mounted within an opening in said door, and a shelf carried by said panel and adapted to be moved inwardly over and to be supported by said rollers when the panel is closed.

2. A refrigerator having an open front, and a series of rollers mounted across the body of the refrigerator on a single horizontal plane; combined with a door hinged at one side within said opening and latched at its other side when it is closed, the door having a transverse opening through its body, and a small door hinged at one end within said opening adjacent the hinges of the main door and having along its inner face a horizontal shelf adapted to be moved over and supported by said rollers when said doors are closed.

1,275,512. DRIVING MECHANISM FOR WASHING-MACHINES. SAMUEL T. WHITE, Davenport, Iowa. Filed Aug. 14, 1915. Serial No. 45,467. (Cl. 74—58.)

1. In a device of the class described, a rotatable spindle, and a gear on the outer end of said spindle, in combination with a pendulous hanger the upper end of which is pivotally mounted on said spindle, a vertical shaft journaled in said hanger, pinions on the ends of said vertical shaft the uppermost one of which engages said gear, a transverse main shaft suitably geared to the lower pinion of said vertical shaft, a motor, and speed reducing means for imparting the motion of said motor to said main-shaft.

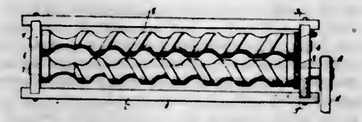
6. In a device of the class specified, the combination of a supporting frame comprising legs, oppositely disposed rails each connecting the lower ends of a separate pair of said legs, a transverse plank connecting the rear portions of said rails, a transverse platform one end of which is supported on the forward portion of one rail, an inverted L-shaped hanger to the lower edge of the vertical portion of which the adjacent opposite end of said platform is secured, in combination with a transverse drive-shaft journaled in bearings projecting from the rear edge of said platform near said hanger, a concaved pulley arched over by said hanger, a transverse main-shaft journaled in bearings projecting from the



front edge of said platform, speed reducing gearing connecting said shafts, a pendulous vertical shaft, and hanger in which the same is journaled pivotally mounted on said spindle, gearing connecting the upper end of said vertical shaft and spindle, a beveled pinion on the lower end of said vertical shaft, two beveled pinions secured to the main-shaft and facing each other on either side of the pinion on the vertical shaft, and means for swinging said hanger laterally.

[Claims 2 to 5 and 7 to 12 not printed in the Gazette.]

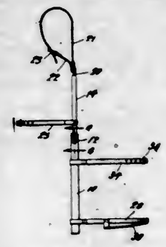
1,275,513. SIZING-MACHINE. ALBERT H. WHITEHEAD, Hood River, Oreg. Filed Oct. 15, 1917. Serial No. 196,675. (Cl. 130—32.)



In a device of the class described, a pair of spirals arranged in spaced parallel relation with their outer peripheries close together and spaced apart an equal distance throughout the length of the said spirals, the threads of said spirals having an even pitch, the grooves of said spirals being of decreasing depth throughout the length of the spirals, providing oval-shaped openings between the said spirals having their major axes of equal length and the minor axes of increasing length from one end to the other of the spirals, and means for rotating said spirals.

1,275,514. STRETCHER. PIOTR WOLAK, Shelton, Conn. Filed Dec. 4, 1917. Serial No. 205,354. (Cl. 224—6.)

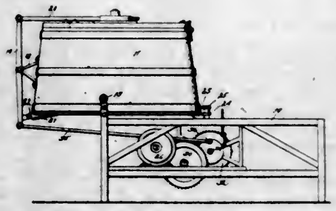
2. In a device for carrying invalids, the combination with a pair of cylindrical bars having an axial bore at one end and a transverse recess extending through said bore, of means for supporting a person at the lower ends of said bars, means by which a person may be held in an upright position, rods engageable in the mentioned bores, shoulder straps secured to the upper ends of said rods, said shoulder straps having means of adjustment, a partial belt engaged with said rods and means for adjusting said belt to the body of the carrier, springs having one of their ends affixed at the lower end of said rods and their other ends at the bottom of said axial bores, and springs engaged between said rods and bars within the



mentioned recesses, so as to form a resilient connection therebetween.

[Claim 1 not printed in the Gazette.]

1,275,515. WASHING-MACHINE. OLIVER B. WOODROW, Newton, Iowa. Filed Mar. 13, 1916. Serial No. 83,802. (Cl. 68—15.)



In a device of the class described, a frame, a tub pivoted on an axial line substantially at one end of the frame and transversely of the tub in such position that the greater weight of the tub is disposed on the side of such line adjacent to the frame, a driven mechanism mounted in the upper part of the tub, a reciprocating rod disposed above the tub and extending outwardly therefrom on the side opposite the frame, said rod being adapted to drive said driven mechanism, an outwardly extending bracket fixed to the tub below said rod, a walking beam pivoted to said bracket and having its upper end operatively connected with said reciprocating rod, an operating mechanism disposed on the frame in such position as to counter-balance the weight of the overhanging portion of the tub, a pitman operatively connected with the operating means and the lower end of the walking beam, and means for locking the tub in its horizontal position from pivotal movement.

1,275,516. FOUNTAIN SHAVING-BRUSH. WILLIAM F. WREN, Spokane, Wash. Filed July 25, 1917. Serial No. 182,687. (Cl. 15—50.)

2. In a fountain shaving brush device, a hollow handle structure provided with a lathering brush, said structure having a soap discharging tube delivering interiorly of said brush, means for forcing the soap contents from said structure through said tube into said brush, and freely movable means actuated by lathering flexure of the brush for closing the discharge end of said tube, substantially as described.

3. In a fountain shaving brush device, a hollow handle structure provided with a lathering brush, said structure having a soap discharging tube projecting interiorly of the brush and beyond the point of mount of the bristles of said brush, and a freely movable valve normally unrestrained against opening or closing movement and adapted to seat against the discharge end of said tube and projecting into the path of the bristles, whereby lathering flexure of the bristles will seat said valve closure, substantially as described.

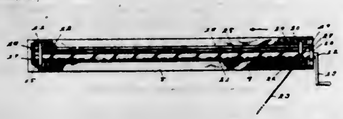
5. In a fountain shaving brush device, a hollow handle structure provided with a lathering brush, said structure having a soap discharging tube projecting interiorly of the brush and beyond the point of mount of the bristles of said brush, a valve closure freely movable longitudinally of said tube and seating against the end of said tube and projecting into the path of the bristles whereby flexure of the latter will seat said valve closure, said valve closure being provided with means for guiding the same interiorly of said tube to limit said closure to a linear path of travel, substantially as described.



6. In a fountain shaving brush device, a hollow handle structure provided with a lathering brush and said structure having a soap discharging tube terminating in a valve seat outlet located beyond the juncture of the bristles with the handle structure to lie within the flexing or bending zone of the bristles, a valve for engaging said seat and projecting from the seat into the path of the bristles when the same are bent to thereby seat the valve, said valve having a stem of reduced size with respect to said tube and projecting therein whereby the soap will flow through said tube along said stem, said stem having guiding portions engaging said tube on the interior thereof to hold the valve to a linear path of movement, and said stem also having a stop for limiting opening movement of said valve but said valve being otherwise free and unrestrained to move longitudinally of said tube, substantially as described.

[Claims 1 and 4 not printed in the Gazette.]

1,275,517. MACHINE FOR MAKING FENCE-STAYS. STEPHEN AMES and THOMAS LOVELADY, Oklahoma, Okla. Filed July 31, 1916. Serial No. 112,260. (Cl. 140—90.)



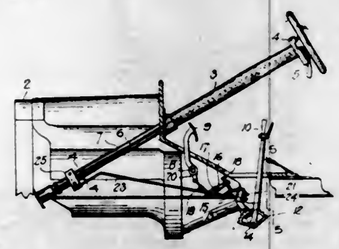
1. In a fence stay machine, a tubular member adapted to receive internally one portion of a wire, means to rotate said member to coil externally the other portion of the wire about said first portion to produce a stay, a slidably mounted block provided with guide means receiving the outer portion of the wire and directing it as it is coiled upon the tubular member, and means coöperating with the wire to slide the block.

3. In a fence stay machine, a tubular member adapted to receive internally one portion of a wire, means to rotate said member to coil externally the other portion of the wire about said first portion to produce a stay, and a slidably mounted block arranged to move parallel to the tubular member and provided with guide means for directing the wire in position upon the tubular member, said block being moved longitudinally of the tubular member by the action of the wire as it is wound thereon.

5. In a fence stay machine, a base, a tubular member supported above said base and adapted to receive internally one portion of a wire and coil externally the outer or other portion about said first portion to produce a stay, a carriage provided with means to adjust said outer portion of the wire in position to be coiled by said tubular member, guide means upon which said carriage is reciprocably mounted, a screw shaft also supported above said base, means operably connecting said shaft and said carriage to cause movement of the latter, and gear mechanism positioned adjacent the end of the base and connected to said tubular member and shaft for rotating the same.

[Claims 2 and 4 not printed in the Gazette.]

1,275,518. SPARK-CONTROLLING ATTACHMENT FOR AUTOMOBILES. EDWARD M. ANDRES, Denver, Colo., assignor of one-half to Cecil I. Stokley, Denver, Colo. Filed Dec. 29, 1917. Serial No. 209,598. (Cl. 123—186.)



1. In a motor-vehicle, the combination with a clutch-controlling lever and a spark-timing element of an internal-combustion engine, of mechanism for the adjustment of said element to a spark-retarding condition by the movement of said lever to its clutch-releasing position.

3. In a motor-vehicle, the combination with a clutch-controlling lever and a rod connecting the spark-lever with the timer of an internal-combustion engine, of mechanism for converting a movement of the controlling-lever to a clutch-releasing position, into a spark-retarding movement of said rod.

4. In a motor-vehicle the combination with a clutch controlling lever and a rod connecting the spark-lever with the timer of an internal-combustion engine, of mechanism for converting a movement of the controlling-lever to a clutch-releasing position, into a rotary movement of said rod.

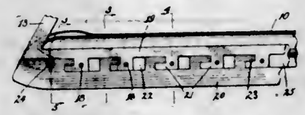
5. In a motor-vehicle the combination with a clutch-controlling lever and a rod connecting the spark-lever with the timer of an internal-combustion engine, of mechanism for converting a movement of the controlling-lever to a clutch-releasing position, into a spark-retarding movement of said rod, said mechanism including an adjustment for varying the extent of the movement of said rod relative to a determinate movement of said lever.

10. In a motor-vehicle, the combination with a clutch-controlling lever and a rod connecting the spark-lever with the timer of an internal-combustion engine, of an attachment for converting a movement of said controlling-lever to a clutch-releasing position into a spark-retarding movement of said rod, including a crank secured on the rod, a bracket connected for movement in conjunction with the controlling-lever, a rod loosely supported on said bracket in connection with the crank, and an adjustable nut on the rod, engaging the bracket for their conjunctive movement in one direction.

[Claims 2 and 6 to 9 not printed in the Gazette.]

1,275,519. SKATE. FREDERICK W. BECKER, New York, N. Y. Filed June 6, 1917. Serial No. 173,088. (Cl. 46—50.)

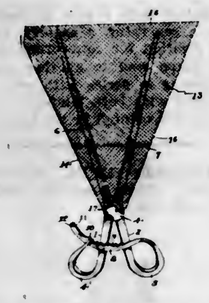
1. A convertible skate comprising a horizontal tubular frame member having an opening at the bottom thereof, a plate having a plurality of hooked portions disposed in said opening, a blade having corresponding hooked portions adapted to engage with said first mentioned hooked



portions, and means for locking the blade to the tubular member when the hooked portions are interengaged.

[Claims 2 and 3 not printed in the Gazette.]

1,275,520. GAUZE-DAM SURGICAL INSTRUMENT. WILLIAM L. BELL, Santa Cruz, Cal. Filed June 14, 1917. Serial No. 174,713. (Cl. 128—24.)



1. A surgical instrument including a spreader having two jaws joined by a pivot; a gauze member attached to said spreader; a notched detent formed integral with one of said jaws and engaging said other jaw.

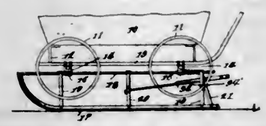
2. A surgical instrument including a pivoted spreader, and a gauze member attached to said spreader.

6. A surgical instrument including a gauze bag substantially triangular in plan and means for extending said bag taut.

8. A surgical instrument including a pivoted spreader; handles on said spreader at an angle to said spreader, a gauze member attached to said spreader; and means for holding said spreader in the extended position and said gauze taut.

[Claims 3 to 5 and 7 not printed in the Gazette.]

1,275,521. BABY-CARRIAGE ATTACHMENT. JOHN E. BOWES and LAWRENCE P. SEARFOSS, Laporte, Ind. Filed Sept. 14, 1917. Serial No. 191,443. (Cl. 21—96.)



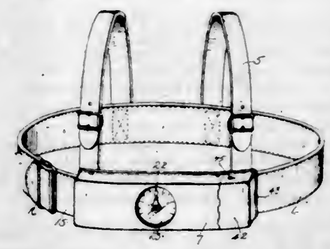
1. A folding sled comprising a pair of runners, a pair of bolsters to which said runners are pivotally connected, a pair of springs coöperative with said bolsters for moving said runners from inoperative position to operative position, means coöperative with said bolsters for preventing movement of said runners beyond operative position, and means for returning the runners from operative position to inoperative position against the tension of said springs.

2. A folding sled comprising a pair of runners, a pair of bolsters to which said runners are pivotally connected, a pair of springs coöperative with said bolsters for moving said runners from inoperative position to operative position, means coöperative with said bolsters for preventing movement of said runners beyond operative position, means for returning the runners from operative position to inoperative position against the tension of said springs, and means coöperative with the last said means for locking said runners in said inoperative position.

3. A folding sled comprising a pair of ground-engaging runner members, a pair of rectilinear rods secured respectively to said ground-engaging members, a pair of bolsters having their ends curved to form cylindrical bearings in which said rods are pivotally mounted respectively, a pair of springs coöperative with said bolsters and rods for moving the ground-engaging members from inoperative position to operative position, means for preventing movement of the ground-engaging members beyond operative position when moved from inoperative position, and means coöperative with said rods for moving said ground-engaging members from operative position to inoperative position and retaining them in said inoperative position against the tension of said springs.

4. A folding sled comprising a pair of ground-engaging runner members, a pair of rectilinear rods secured respectively to said ground-engaging members, a pair of bolsters having their ends curved to form cylindrical bearings in which said rods are pivotally mounted respectively, a pair of springs coöperative with said bolsters and rods for moving the ground-engaging members from inoperative position to operative position, means for preventing movement of the ground-engaging members beyond operative position when moved from inoperative position, and means coöperative with said rods for moving said ground-engaging members from operative position to inoperative position and retaining them in said inoperative position, the last means also being operable to prevent accidental movement of said ground-engaging member from operative position toward inoperative position.

1,275,522. INCORRECT-POSITION INDICATOR. GEORGE T. BOYLAN, Hartford, Conn. Filed Feb. 13, 1917. Serial No. 148,456. (Cl. 33—179.)



15. In indicating device including a base, means for attaching said device to the body of a person, a train of gears mounted on the base, means operatively connected with said attaching means to operate said gears by reason of movement of the body of a person to whom the device is attached, an indicator mounted on the base and having an indicating hand operatively connected with said gears, a second indicator mounted on the base, a contact stud carried by one of said gears, and a controlling member operatively connected with the last mentioned indicator and having an arm located in the path of movement of said stud.

16. In indicating device including a base, an indicator mounted on the base, actuating mechanism mounted on the base and operatively connected with said indicator, said mechanism including a contact member, a source of electric energy located within the case to be controlled by said contact member, means operatively connected with said contact member and to attach the base to a

person, and means for preventing electrical connection of said contact member with said source of electric energy.

17. In indicating device including a base, an indicator mounted on the base, actuating mechanism mounted on the base and operatively connected with said indicator, said mechanism including a contact member, a source of electric energy located within the case and controlled by said contact member and including movable terminals, means for attaching the device to a person, said means being movably connected with said actuating mechanism, and means for moving one of said terminals to break the electrical circuit.

18. An indicating device including a base, means for attaching the device to a person, an operating member movably mounted on the base and operatively connected with said attaching means, a contact device including two members movable one with respect to the other, a controlling member operatively connected with said operating member, means for changing the relative position of said controlling member and the members of said contact device, and an indicator operatively connected with said contact device.

[Claims 1 to 14 not printed in the Gazette.]

1,275,523. AUTOMOBILE-TIRE AND METHOD OF MAKING THE SAME. FREDERICK A. BRAGG, Springfield, Mass. Filed Nov. 12, 1917. Serial No. 201,429. (Cl. 154—14.)



1. A pneumatic tire having inner layers of fabric and separate layers of strips of friction cloth, the strips of friction cloth being arranged at an angle to each other and secured to the inner layers of fabric by stitching, said separate layers serving to distribute the strains and stresses incident to use over a large area of the tire body.

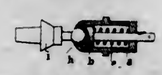
4. In a pneumatic tire, a casing having layers of strips of fabric that are secured together by stitching, some of said strips having finished edges and ends for locking the stitches thereto, and also having their edges arranged at an angle to the threads of the fabric.

6. A tire comprising a body made up of a plurality of layers of flexible fabric and layers of strips of friction cloth arranged at an angle to each other and all of said layers being stitched through and through with a thread, or the like, saturated with a rubber solution to make the layers permanently adherent to the layers after vulcanization.

9. A tire composed of layers of flexible fabric and layers of strips of friction cloth with finished edges and disposed over the layers of fabric, and stitches passed through and through all of said layers to bind the whole together, the finished edges serving to firmly retain the stitches and lock them in place and bind the whole mass together.

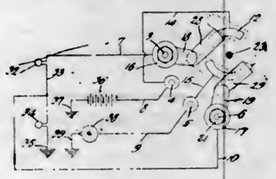
[Claims 2, 3, 5, 7, 8, and 10 not printed in the Gazette.]

1,275,524. ELECTRIC CONNECTOR FOR SECURELY RETAINING PLUGS. VICTOR HENRI BROC, Levallois-Perret, France. Filed Apr. 13, 1918. Serial No. 228,430. (Cl. 173—328.)



A metallic body or housing constituting a fastening having a threaded part presenting a central cylindrical groove and a guiding opening, a connecting piece, said guiding opening permitting the displacement of said connecting piece, said body or housing also being provided with a side inlet and a notch ending in a circular opening.

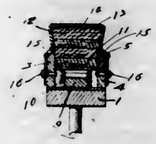
1,275,525. AUTOMOBILE-LIGHT CONTROLLER. HOWARD F. BUCKLEW, Kingwood, W. Va. Filed Mar. 16, 1917. Serial No. 155,275. (Cl. 171—97.)



1. The combination with a pair of electric lamps connected in series, a generator, a battery, and a controller movable to one position for connecting the generator in series with the lamps, and to another position for connecting the generator in series with only one lamp and the battery in series with both lamps.

[Claims 2 and 3 not printed in the Gazette.]

1,275,526. RESILIENT WHEEL. SANDERS CAMPBELL, Carrollton, Miss. Filed June 12, 1917. Serial No. 174,312. (Cl. 152—38.)



1. In an automobile wheel, the combination with the wheel structure, of a rim having outwardly extending marginal flanges, one of said flanges being of less height than the other and having a marginal groove, a locking ring seated on the margin of the grooved flange within said groove, a plurality of coil springs mounted upon the rim, a secondary rim seated upon the springs and between the flanges, removal of the locking ring permitting the removal of the secondary rim, and a tire structure on said rim.

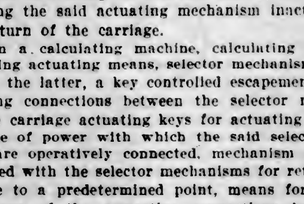
3. In a wheel structure, the combination of a rim having outwardly extending flanges, one of said flanges being of less height than the other and also having a marginal groove, and a locking ring seated in said groove, said locking ring having abutting ends, and a right angular lock plate, one face of the lock plate having inwardly extending lugs socketed into the abutting ends of the ring and means fastening the other face to the rim flange to secure the plate in locking position.

[Claim 2 not printed in the Gazette.]

1,275,527. DRAFT-GEAR. JAMES R. CARDWELL, Chicago, Ill., assignor to Union Draft Gear Company, Chicago, Ill., a Corporation of Illinois. Filed July 3, 1914. Serial No. 848,743. (Cl. 213—64.)

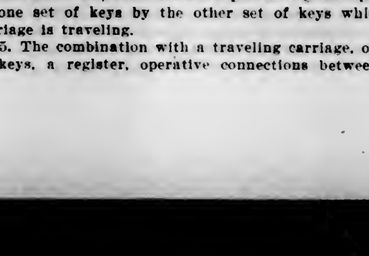
1. A draft gear comprising central and outer frictional elements, a rod extending through such elements, and springs mounted upon the rod and bearing against the outer frictional elements, the central and the outer frictional elements being longitudinally movable and being capable of relative longitudinal movement, one of said sets of friction elements holding the rod against lateral movement independently of said elements.

2. A draft gear comprising central and outer frictional elements both capable of longitudinal movement, a rod extending through such elements, and springs mounted upon the rod and bearing against the outer frictional elements,



the central frictional elements having an elongated aperture for the reception of the rod, such rod fitting snugly in the apertures in the outer frictional elements.

1,275,528. CALCULATING-MACHINE. SAMUEL E. CARLIN, Chicago, Ill., assignor, by mesne assignments, to Underwood Computing Machine Company, New York, N. Y., a Corporation of New York. Filed May 10, 1910. Serial No. 560,444. (Cl. 235—62.)



1. In a calculating machine, calculating mechanism including actuating mechanism, means connecting the actuating mechanism with a key controlled escapement carriage for advancement thereby, selector mechanisms for controlling the operation of the said actuating mechanism and also the actuation of the keys, and means also controlled by said selector mechanisms for returning the carriage to a predetermined point from any point of its advancement.

12. In a calculating machine calculating mechanism including actuating mechanism, a key controlled escapement carriage, selector mechanisms for controlling the operation of the said actuating mechanism, operating connections between the selector mechanisms and the said keys for operating the latter, means coöperating with the said selector mechanisms for returning the carriage to a predetermined point from any point of its advancement, means for controlling the last said means, and means for rendering the said actuating mechanism inactive during such return of the carriage.

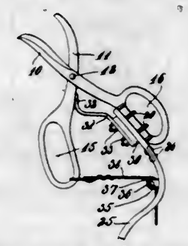
23. In a calculating machine, calculating mechanism embodying actuating means, selector mechanisms for controlling the latter, a key controlled escapement carriage, operating connections between the selector mechanisms and the carriage actuating keys for actuating the latter, a source of power with which the said selector mechanisms are operatively connected, mechanism operatively connected with the selector mechanisms for returning the carriage to a predetermined point, means for rendering active one of the respective connections between the source of power and the selector mechanisms and the first said actuating means and the other inactive, and means for controlling the said source of power at will.

34. The combination with typewriting mechanism including a set of numeral keys and a traveling carriage, of calculating mechanism including a set of numeral keys, connections for enabling one set of numeral keys to operate the other set, and means for preventing the operation of one set of keys by the other set of keys while said carriage is traveling.

55. The combination with a traveling carriage, of a set of keys, a register, operative connections between said keys and said register, connections enabling said keys to cause a travel of said carriage in one direction, connections to enable the same keys to cause a travel of said carriage in the opposite direction, and means to interfere with the travel of the carriage by said keys in one direction, when said keys are acting to control the travel of the carriage in the other direction.

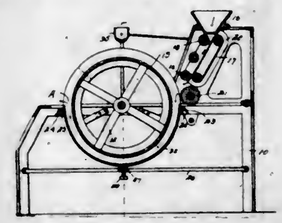
[Claims 2 to 11, 13 to 22, 24 to 33, 35 to 54, and 56 not printed in the Gazette.]

1,275,529. TREE-TRIMMING SHEARS. MARTIN CHLADEK, Shamokin, Pa. Filed July 20, 1917. Serial No. 181,722. (Cl. 30—11.)



The combination with a pair of shears, of a plate, forks formed on said plate adjacent the ends thereof and engaging one of the handles of said shears, said plate having openings therein, hooks carried by the plate and passing through certain of the openings and engaging the same handle of the shears as that engaged by the plate, one end of the plate being offset, a third handle secured to the offset of said plate, a spring carried by the plate for forcing the shears to open position, and means for closing the shears.

1,275,530. COMBINATION ROUNDING AND MOLDING MACHINE. BENJAMIN CLARK, Des Moines, Iowa. Filed Jan. 11, 1918. Serial No. 211,435. (Cl. 107—9.)

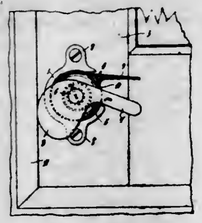


1. A combination rounding and molding machine comprising a wheel having a substantially flat rim, formed with spaced outwardly extending flanges, a drum casing for closing the space between said flanges for a portion of the circumference of the wheel, said drum casing being fixed, means for feeding dough into the space between said casing and said rim, a V-shaped trough fixed adjacent to the outside of one of said flanges, with its open portion adjacent to the flange, said trough being curved and conforming to the shape of the wheel, means for feeding dough into one end of said trough, said trough terminating at its other end at a point spaced from said last means.

2. A combination rounding and molding machine, comprising a frame, a wheel mounted thereon having a rim with spaced, outwardly extending flanges, a drum casing member arranged adjacent to the lower portion of said wheel for forming a smooth passage for receiving bread for molding, a trough arranged adjacent to the outer surface of one of said flanges, said trough being curved to conform to the shape of the wheel and being angular in cross section, means adjacent to one end of said

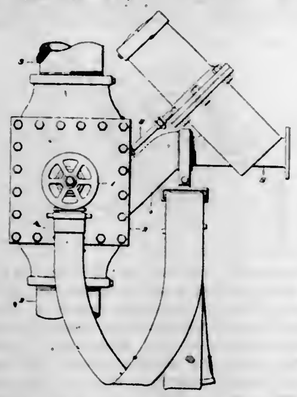
trough at the upper part of the wheel for feeding dough into said trough, said trough terminating at its other end short of said last described means, and means for adjustably mounting said trough on the frame.

1,275,531. COMBINED WINDOW-SASH FASTENER, LIFTER, AND ANTIRATTLER. CHARLES EDMUND CLEWS, Paeroa, Auckland, New Zealand. Filed Nov. 11, 1915. Serial No. 60,894. (Cl. 16—19.)



A device of the class described, consisting of a casing comprising a hollow boss having a portion of its side cut away to provide an opening, and having lugs for securing it to a window sash, a stud passing through said boss, a member exteriorly pivoted on said stud, having an operating handle and having a cam surface adapted to engage the surface of a window jamb, a lifting member integral with said boss, a helical spring coiled around said stud within the boss, having one end held by the stud and the other end extending through said opening in said boss and engaging said operating handle.

1,275,532. FITTING FOR STAND-PIPE SYSTEMS. WILLIAM F. CONRAN, Brooklyn, N. Y. Original application filed Mar. 26, 1917, Serial No. 157,558. Divided and this application filed Oct. 10, 1917. Serial No. 195,732. (Cl. 137—75.)



1. As a new article of manufacture, a Y-fitting for stand-pipes, comprising an open U-shaped body section tapering at both ends into circular sections and arranged for attachment to pipe sections, a branch projecting from the body section, a covering plate for the open U-section, means for securing said plate, a pair of retaining plates within the body section, means for securing said plates in position, and expansion-joints carried by said plates for coupling and supporting small pipes carried through the fitting, substantially as set forth.

2. As a new article of manufacture, a Y-fitting for stand-pipes, comprising an open U-shaped body section tapering at both ends into circular sections and arranged for attachment to pipe sections, a branch projecting from the body section, a covering plate for the open U-section, means for securing said plate, a pair of retaining plates within the body section, lugs projecting from the interior of the body and between which said plates are held, a large central perforation in each plate, a series of small perforations in each plate and in vertical alinement, and a series of expansion-joints carried between said plates and projecting through said small perforations, said joints being adapted to couple small pipes carried through said fitting, and said plates and joints serving to support and hold said small pipes against lateral displacement, substantially as set forth.

3. As a new article of manufacture, a Y-fitting for stand-pipes, comprising an open U-shaped body section tapering at both ends into circular sections and arranged for attachment to pipe sections, a branch projecting from the body section, a covering plate for the open U-section, means for securing said plate, means within the body section for supporting small pipes carried through the fitting, and a stuffing-box through which one such pipe passes to the exterior, substantially as set forth.

4. As a new article of manufacture, a Y-fitting for stand-pipes, comprising an open U-shaped body section tapering at both ends into circular sections and arranged for attachment to pipe sections, a branch projecting from the body section, a covering plate for the open U-section, means for securing said plate, means within the body section for supporting small pipes carried through the fitting, and a stuffing-box located in the angle above the branch and through which one such pipe passes to the exterior, substantially as set forth.

5. As a new article of manufacture, a Y-fitting for stand-pipes, comprising an open U-shaped body section tapering at both ends into circular sections and arranged for attachment to pipe sections, a branch projecting from the body section, a covering plate for the open U-section, means for securing said plate, a pair of retaining plates within the body section, lugs projecting from the interior of the body and between which said plates are held, a large central perforation in each plate, a series of small perforations in each plate and in vertical alinement, a series of expansion-joints carried between said plates and projecting through said small perforations, said joints being adapted to couple small pipes carried through said fitting, and said plates and joints serving to support and hold said small pipes against lateral displacement, and a stuffing-box located in the angle above the branch and through which one such pipe passes to the exterior, substantially as set forth.

1,275,533. CLOTHES-FASTENER. CARL F. COOPER, Pesotum, Ill. Filed Dec. 11, 1917. Serial No. 206,684. (Cl. 24—109.)

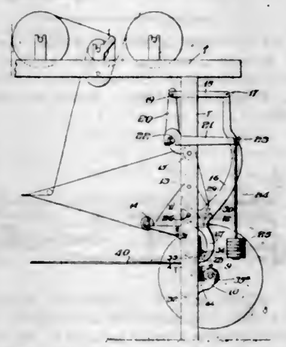


1. A fastening member comprising a base member and an attaching member, complementary segmental sleeves formed on the members and adapted for mutual cooperation to maintain the members in assembled relation, and means for preventing accidental displacement of the members.

[Claims 2 to 4 not printed in the Gazette.]

1,275,534. WARP-LET-OFF CONTROL. JOSEPH P. COSTELLO, Philadelphia, Pa., assignor of one-half to George J. Costello, Philadelphia, Pa. Filed Feb. 23, 1917. Serial No. 150,368. (Cl. 139—59.)

1. In combination with pawl and ratchet let-off actuation for warp beams, an automatic control comprising a pair of compound lever elements, the first element pivotally connected with one end to the loom frame and having an extension beyond said connection for controlling the pawl and ratchet actuation and provided with journal bearings near said pivot connection, a vibrating roller mounted in said bearings, a second lever element of bell crank formation linked as to one extension to the free end of the first element and a weight connected with the other extension, the axis of the vibrating roller positioned between vertical lines passing through the axis of the first lever element and the point of weight connection.

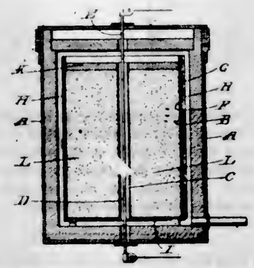


3. In combination with pawl and ratchet let-off actuation for warp beams, an automatic control, comprising a pair of compound lever elements having the longest element vertically extending and pivoted near one end directly to the loom frame and provided with journal bearings near said pivot connection, a vibrating roller supported in said bearings, a bell lever element having a horizontal extension provided with a weight, a link connecting the two lever elements, and an extension beyond the pivot support of the first element operating to render the pawl and ratchet ineffective.

7. In combination with a pawl and ratchet actuation for warp beams, a control therefor comprising a pair of vertically extending parallel levers pivotally mounted directly on the loom frame and provided with journal bearings for a vibrating roller, said bearings located close to the axis of said levers, a pair of bell levers having vertical and horizontal extensions, links connecting said vertical extensions with the free ends of the first mentioned levers, weights connected near the outer ends of said horizontal extensions, an extension beyond the pivot support of the first mentioned lever operating to render the pawl and ratchet actuation inoperative.

[Claims 2 and 4 to 6 not printed in the Gazette.]

1,275,535. PROCESS OF IMPROVING THE GRADE OF CALCIUM CYANAMID. GEORGE E. COX, Niagara Falls, N. Y., assignor to American Cyanamid Company, New York, N. Y., a Corporation of Maine. Filed Dec. 3, 1917. Serial No. 205,217. (Cl. 23—13.)

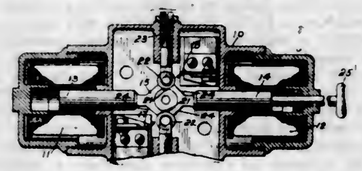


1. The process of producing calcium cyanamid from calcium carbid which consists in introducing into a cyanamid furnace a removable supporting form; inserting in said form a tube of combustible material; charging finely ground carbid into said tube; removing said supporting form; and proceeding with the nitrification of said carbid, substantially as described.

5. The process of producing calcium cyanamid from calcium carbid which consists in introducing into a cyanamid furnace a suitable removable form; inserting in said form a sleeve of perforated paper; charging finely ground carbid into said sleeve; covering the mass of carbid with a heat insulating cover; removing said form; and proceeding with the nitrification of said carbid, substantially as described.

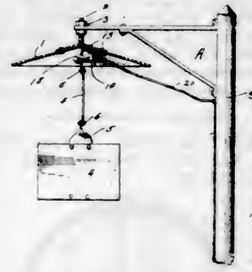
[Claims 2 to 4 not printed in the Gazette.]

1,275,536. PROTECTIVE DEVICE FOR MOTOR-COMPRESSORS. PHILIP L. CRITTENDEN, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Apr. 21, 1915. Serial No. 22,797. (Cl. 175—281.)



A switch device comprising opposed solenoid magnets, a switch for closing a circuit upon energization of both magnets, and means adapted upon deënergization of either magnet to first yieldingly resist and then assist the movement of said switch to open said circuit.

1,275,537. ILLUMINATED SIGN. KYLE J. DENNISON, Youngstown, Ohio. Filed Feb. 14, 1918. Serial No. 217,143. (Cl. 40—130.)



5. In a sign of the type described, the combination with a support and a supporting arm, a conical canopy, and means for supporting its apex from said arm; of a plate bent at less than a right angle with one arm riveted within the canopy and the other arm alining with the apex of the same and hanging therefrom, this arm having an opening through its body, a light supported within said opening, and a pair of sign plates standing on edge in planes at right angles to each other and supported by said lower arm whereby rays of light from the said light shine on all faces of both plates, for the purpose set forth.

6. In a sign of the type described, the combination with a support and a supporting arm, a conical canopy, a stud bolt rising from its apex through said arm, and nuts on the bolt above and below the arm; of a bracket comprising a plate bent at its mid-length at less than a right angle with its upper arm riveted within said canopy and its lower arm alining with said stud bolt, the bracket having an opening through its body, an electric bulb supported within said opening, and a plurality of sign plates standing one above the other and in different planes and carried by said lower arm of the bracket whereby the rays of light from the bulb shine on all faces of all plates, for the purpose set forth.

[Claims 1 to 4 not printed in the Gazette.]

1,275,538. CLOTHES-LINE AND LOCKING CLOTHES-PIN THEREFOR. WILLIAM R. DEAR, New York, N. Y., assignor of one-half to William J. Lillie, New York, N. Y. Filed Jan. 23, 1918. Serial No. 213,323. (Cl. 68—3.)

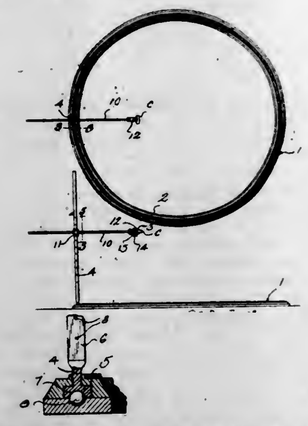


5. In a device of the class described, a suitable support; a clothes-line located adjacent and extending along said support; a plurality of clothes-pins carried by said support and each of which comprises a tubular body portion, a clasping member movable within said body portion and having a pair of coöperating jaws at its lower end adapted to clasp clothes or similar articles and hold them upon said line, a spring located within said body portion and adapted to move said clasping member upwardly, and means whereby said jaws are forced toward each other as upward movement is imparted to said clasping member; a wire located adjacent and movable longitudinally of said support; and a plurality of locking members carried by said wire and adapted to lock said clasping members against movement within said tubular members.

11. In a device of the class described, a clothes-pin comprising a tubular body portion; a clasping member movable within said body portion and having a guide portion at its upper end, and two oppositely located depending portions one of which is connected with said guide portions through and by means of a resilient metallic strip, so that the depending portion in question may swing relative to said guide portion, the lower ends of said depending portions having a pair of coöperating jaws so shaped as to be forced toward each other by engagement between them and the lower end of said tubular member when said clasping member is moved upwardly within said tubular member; and a spring located within said tubular member and operatively connected with said clasping member, and which spring is adapted to move said clasping member upward within said tubular member.

[Claims 1 to 4 and 6 to 10 not printed in the Gazette.]

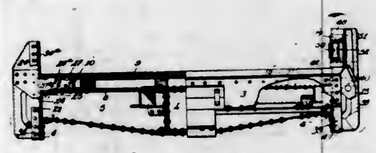
1,275,539. SKIRT-MARKER. HANNAH MARY DIXON, Kittanning, Pa. Filed Feb. 27, 1918. Serial No. 219,461. (Cl. 33—10.)



2. A skirt marker comprising an annular member having a flat lower face and a ball race in its upper face, bearing balls in said race, said member having a recess above said balls of inverted T-shape in cross section, the stem portion thereof opening through the upper face of said annular member, an upright having an inverted T-shaped lower end to fit said recess, and to move freely therein with a ball groove in the lower face of its head, the upper end of said upright being bifurcated with the furcations thereof parallel, and one provided with longitudinally spaced apertures for the reception of a set screw, a slide adjustable on said furcations, and a chalk holder carried by said slide.

[Claim 1 not printed in the Gazette.]

1,275,540. CAR CONSTRUCTION. GEORGE BINET DOREY, Montreal, Quebec, Canada, assignor to Rodger Ballast Car Company, Chicago, Ill., a Corporation of Maine. Filed June 4, 1914. Serial No. 842,922. (Cl. 105—76.)



1. In a ballast car, the combination with the underframe, of a stake and means for securing the stake to the underframe including a brace secured to the stake and extending inwardly therefrom over the underframe, the inner extension of the brace being secured to the underframe and a wear plate secured upon the top of such inward extension.

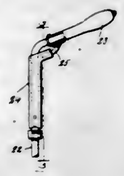
6. In a ballast car, the combination with the underframe including a cross-beam and a side sill, of a stake secured at the bottom to the side sill, a vertical gusset secured to and located between the stake and side sill in the longitudinal line of the car, such gusset having a slot therethrough, and a transverse vertical gusset secured to the stake, passing through said slot and secured to the diaphragm of the cross-beam.

10. In a ballast car, a corner stake having an inner beveled surface with an aperture therein and a roller mounted upon the stake and projecting through said aperture.

11. In a ballast car, a stake and means for fastening the stake including two gusset plates, one of which passes through the other.

[Claims 2 to 5, 7 to 9, and 12 to 14 not printed in the Gazette.]

1,275,541. CIRCUIT-CONTROLLER. MERRITT DRANE, Louisville, Ky. Filed Dec. 23, 1916. Serial No. 138,605. (Cl. 175—366.)

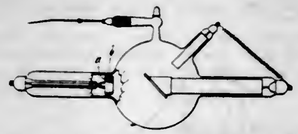


A circuit controller comprising a support, a rotatable member on the support, a rigid finger projecting from said member, a pair of resilient members between which said finger extends, and switch units positioned adjacent to the resilient members on the outside thereof, and adapted to be actuated by said members.

1,275,542. CATHODE FOR X-RAY TUBES. FRANCIS J. FARRELLY and ALFRED GREINER, Hartford, Conn. Filed Dec. 28, 1914. Serial No. 879,263. (Cl. 250—35.)

1. A cathode for use in X-ray tubes cylindrical in shape and formed from two metals of different characteristics.

6. The combination in X-ray tubes with the glass envelop and anode of usual construction mounted in one end of said envelop, of a cathode mounted in the other end of said envelop and operatively positioned



relative thereto, said cathode comprising a cylindrical body of aluminum, and an inclosing shell formed from a metal of higher atomic weight mounted thereon and connected therewith by a path of electrical conduction.

[Claims 2 to 5 not printed in the Gazette.]

1,275,543. IGNITION-TAPE FOR MINERS' SAFETY-LAMPS. FREDERICK FEAR, Brooklyn, N. Y., and ALBERT E. NALDRETT and WILMER C. NICODEMUS, Bloomsburg, Pa., assignors to Fred Fear Match Co., Bloomsburg, Pa., a Corporation of Pennsylvania. Filed Oct. 22, 1915. Serial No. 57,248. (Cl. 52—5.)



An ignition tape composed of a strip of fibrous material of an absorbent flexible nature, the same being saturated with sulfur and having continuous coatings upon the margins and the respective surfaces of said strip, and pellets of ignitible material imposed upon the sulfur coating on one surface of the strip, said sulfur coating on one surface of the strip being exposed intermediate the pellets positioned upon said surface and the sulfur coating on the margins and the other surface of the strip being exposed continuously, said pellets of ignitible material being free from coatings and exposed for frictional contact.

1,275,544. RAIL TIE AND FASTENER. THOMAS W. FELTON, San Gabriel, Tex. Filed Feb. 18, 1918. Serial No. 217,836. (Cl. 238—5.)



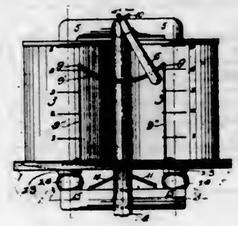
1. A rail tie having an outer rail brace, and an inner shoulder, and a removable inner rail brace having a fulcrum edge to seat against said shoulder and means engageable with the tie to prevent displacement of said inner rail brace.

2. A rail tie having an outer rail brace, and an inner undercut shoulder, and a removable inner rail brace having a fulcrum edge to fit said shoulder and swing against the rail, and having lugs to overlap the tie and prevent sliding.

3. A rail tie having a pair of braces for clamping a rail therebetween, one being swingable downwardly and having an inclined face, and securing means extending through the braces and engaging said face.

4. A rail tie having a brace, a shoulder and a seat for the rail therebetween, a second brace having a fulcrum edge to seat against said shoulder and swing toward the first named brace and seat for clamping a rail, the second named brace having an inclined face, and securing means extending through the braces and bearing against said inclined face.

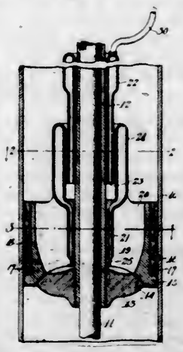
1,275,545. MEASURING APPARATUS. JACKSON FLECKENSTEIN, Ionia, Mich.; ADELAIDE J. FLECKENSTEIN, guardian of said JACKSON FLECKENSTEIN, a minor, assignor to Fleckenstein Visible Gasometer Company, Chicago, Ill., a Corporation of Delaware. Filed Dec. 28, 1916. Serial No. 139,364. (Cl. 221—112.)



1. In a measuring apparatus, a common base, a plurality of independent containers seated at their lower ends on the base, supply means including branches connecting the upper ends of the containers for supplying liquid thereto, a valve admitting the flow of liquid through but one branch at a time, a common discharge pipe connecting the lower ends of the containers, valved means in the discharge pipe admitting the discharge of liquid from the containers one at a time, and a connection between the valve of the supply means and said second valved means for opening the discharge to the container closed from the supply means.

[Claim 2 not printed in the Gazette.]

1,275,546. BUCKET FOR DEEP-WELL PUMPS. NORMAN O. FLEMING, Los Angeles, Cal. Filed July 30, 1917. Serial No. 183,625. (Cl. 103—58.)

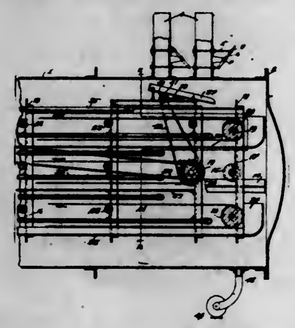


1. In a pump, a pump rod; a valve rigidly fixed to said pump rod; a bucket having an opening therethrough and having a small sliding movement on said rod, said bucket having a valve face adapted to contact with a valve face on said valve at the lower end of said opening for the purpose of preventing water flowing through said opening; and walls forming an air chamber integral with said bucket and with a single opening near the bottom of said bucket.

2. In a pump, a combination as in claim 1 to which is added walls forming an air chamber fixed to the pump rod with a single opening close to said bucket.

3. In a pump, a bucket; a valve for said bucket; walls forming an air chamber located above said bucket; and walls forming an air passage in open communication with said air chamber and having an opening inside said bucket near said valve.

1,275,547. APPARATUS FOR DRYING FRUIT. THOMAS W. W. FORREST, Oakland, Cal. Filed Apr. 1, 1918. Serial No. 225,879. (Cl. 34—12.)



1. A drier comprising a closed shell provided with valve controlled material feed and outlet passages, means for maintaining a vacuum within said shell, a longitudinally disposed conveyer for receiving the material to be treated and for conveying the same therein from the feed to the outlet passage, means for agitating the material as transported on said conveyer, baffle plates providing a chamber through which said conveyer passes, and heating members within said chamber for heating the material to dry the same as transported in said conveyer under vacuum.

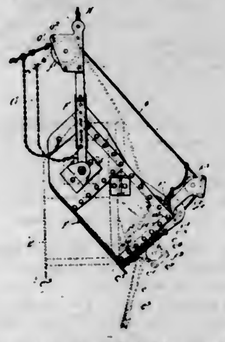
5. A drier comprising a closed shell provided with valve controlled material feed and discharge passages, means connected with said shell for maintaining a vacuum therein, a frame removably positioned within said shell, an endless conveyer of flexible open mesh material carried by said frame and onto which the material as fed into said shell is deposited, means carried by said frame for operating said conveyer, baffles carried by said frame and providing an open ended chamber through which said conveyer operates, heating members within said chamber for heating the material as conveyed therethrough under vacuum, said frame being capable of removal from within said shell.

[Claims 2 to 4 not printed in the Gazette.]

1,275,548. DRAG-LINE BUCKET EXCAVATOR. JAMES C. FRENCH, Kenosha, Wis., assignor to Frederick C. Austin, Chicago, Ill. Filed Dec. 2, 1914. Serial No. 875,083. (Cl. 37—54.)

1. An excavating machine of the class in which a bucket is operated by a drag-line and raised by a hoist line, substantially as shown and described, characterized by this, to-wit:—that said bucket is pivoted so that it tilts backward when the drag-line is slacked off, and has a pivoted rear end gate for dumping the load, said gate being arranged to be opened by the pressure of the load, a latch for said gate, and means connected with the drag-line and arranged for unlatching said gate by tilting the bucket backward while suspended in dumping position, and so that if the bucket tilts without dumping the load a jerk on the drag-line will then unlatch the gate.

4. An excavating machine of the class in which a bucket is operated by a drag-line and raised by a hoist line, substantially as shown and described, characterized by this, to-wit:—that said bucket is pivoted so that it tilts backwnrd when the drag-line is slacked off, and has a pivoted rear end gate for dumping the load, said gate being arranged to be opened by the pressure of the load, a latch for said gate, and means connected with the drag-line and arranged for unlatching said gate by tilting the bucket backward while suspended in dumping position, said means including a hitch extending from the drag-line to the rear portion of the bucket, a sheave engaging said hitch, a bail supporting said sheave, a connection



from said hitch to said latch, a sheave engaging said connection, supported on the bucket, a stop on said bail, and means on said hitch for engaging said stop to exert a pull on said connection and thereby unlatch the gate when the bucket is tilted backward.

[Claims 2, 3, 5, and 6 not printed in the Gazette.]

1,275,549. DOOR FOR FIREPROOF CHAMBERS. RAOUL FRÈRE, Paris, France. Filed Jan. 27, 1914. Serial No. 814,792. (Cl. 189—50.)

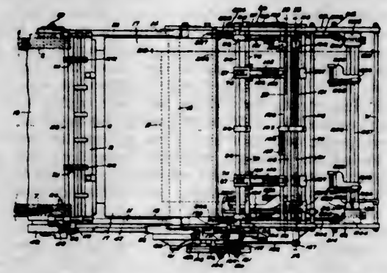


1. In a door for fireproof chambers having an opening therein and a movable shutter for said opening so mounted that it tends to assume its closed position, the combination of a flexible holding member arranged on the inside of the door and having one end connected to the shutter, a ring on the other end of the flexible member, and a fusible pin provided with a shank portion and a handle portion, the shank portion being adapted to be passed through an aperture in the door to be engaged by the ring, the door being provided with such an aperture, whereby the fusible pin may coact with the flexible member and the ring to hold the shutter against assuming its closed position and the pin may then have its handle portion on the opposite side of the door to that of the flexible member to permit the pin to be withdrawn manually when desired to cause closing of the shutter before a fire.

[Claim 2 not printed in the Gazette.]

1,275,550. SHEET-FEEDING MECHANISM. WILLIAM C. GLASS, Woonsocket, R. I., assignor to United Printing Machinery Company, Boston, Mass., a Corporation of Maine. Original application filed Nov. 8, 1912, Serial No. 730,165. Divided and this application filed Nov. 28, 1914. Serial No. 874,550. (Cl. 271—3.)

11. A sheet-feeding mechanism for presses having, in combination, sheet-gripping means including a pair of grippers having a main closing spring and an auxiliary closing spring, both acting on one of said grippers, means to impart a carrying movement to said sheet-gripping means, means to take a sheet from said sheet-gripping means and feed the sheet, and means automatically to render said auxiliary closing spring ineffective, while still maintaining the pressure of said main spring upon the sheet, while the sheet is being taken from said sheet-gripping means.

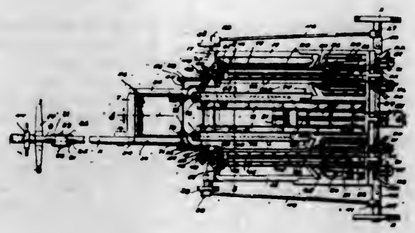


26. The combination with a press having a press-member, of a pair of slides carried by said press-member, gripping means carried by said slides, a pair of racks fixed on said press-member, a pair of pinions meshing with said racks, a shaft connecting said pinions to cause the same to rotate in unison, means for positively advancing and retracting said slides to cause said gripping means to carry the sheet into and out of the press, and a spring connected to said shaft and arranged to be placed under tension by the rotation of said shaft during the advance of said slides.

46. A sheet-feeding mechanism for presses having, in combination, sheet-gripping means, a pair of slides by which said sheet-gripping means is carried, a pair of chains, means for driving said chains in unison continuously in one direction, a pair of arms on said slides, respectively, a pair of links swingingly connected to said arms and to said chains, respectively, and means for limiting the swinging motion of said links relatively to said arms.

[Claims 1 to 10, 12 to 25, 27 to 45, and 47 to 66 not printed in the Gazette.]

1,275,551. CORN PICKING AND HUSKING MACHINE. HENRY GODBERSEN, Charter Oak, Iowa, assignor to Corn Huskers Investment Co., Ute, Iowa, a Corporation of Iowa. Filed July 11, 1916. Serial No. 108,634. (Cl. 56—113.)

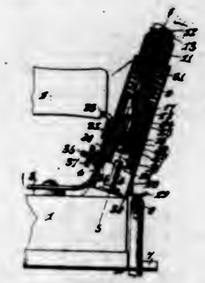


1. In a corn picking and husking machine, the combination with a plurality of coöperating polygonal picking rollers located in a forwardly and laterally inclined plane, each roller having flat faces intersecting at an angle of more than ninety degrees to form cutting edges and having their adjacent faces moving in the same direction, of a plurality of overlying husking rollers lying in a forwardly inclined plane, and having their adjacent faces moving in opposite directions.

4. In a corn picking and husking machine, the combination with a plurality of oppositely rotating polygonal rollers having their axes located in a forwardly and laterally inclined plane, of a plurality of overlying husking rollers coöperating therewith, said husking rollers rotating in the same direction and having their axes lying in a forwardly inclined plane.

[Claims 2, 3, and 5 to 7 not printed in the Gazette.]

1,275,552. AUTOMATIC SWITCH FOR ELECTRIC IRONS. JOHN C. GRIESSEL, Pottsville, Pa. Filed Feb. 20, 1918. Serial No. 218,271. (Cl. 219—25.)



1. The combination with an electric iron provided with circuit terminals, of a device carried by the iron and in turn carrying other circuit terminals movable toward and from the first-named circuit terminals, and a stand on which the iron is supported in a substantially horizontal position, said stand and device having coacting parts for causing the second-named circuit terminals to move away from the first-named circuit terminals when the iron is placed on the stand.

4. An electric iron provided with exposed circuit terminals, a casing secured to the iron, an insulating block within the casing and movable lengthwise thereof, a spring within the casing having a constant tendency to move the block toward the circuit terminals on the iron, contacts carried by the block in position to engage the contacts on the iron, and a member on the block projecting through the casing to the exterior thereof for engaging a relatively fixed part to move the block in opposition to the spring to separate the circuit terminals on the block from those on the iron.

5. An electric iron provided with circuit terminals, a casing for covering the circuit terminals, other circuit terminals within the casing insulated from and movable lengthwise of said casing into and out of engagement with the first-named circuit terminals, elastic means for constraining the second-named circuit terminals into engagement with the first-named circuit terminals, and means for rigidly connecting the casing to the iron to hold said casing in position on the iron and for releasing said casing for removal thereof from the iron.

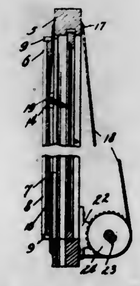
6. An electric iron provided with circuit terminals, a casing secured to the iron in position to cover the circuit terminals, an insulating block within the casing, circuit terminals carried by the block in position to engage the circuit terminals on the iron, a spring within the casing tending to move the circuit terminals on the block into engagement with the circuit terminals on the iron, means on the block in position to engage a fixed object for moving the block against the action of the spring to separate the circuit terminals of the block from those of the iron, electric conductors connected to the circuit terminals on the block and extending to the exterior of the casing, and an elastic coil fast to the casing and to the conductors exterior to the block for resisting strains on the conductors tending to pull them loose from the circuit terminals to which they are connected.

7. An electric iron provided with exposed circuit terminals, and having a handle with supporting means therefor connecting it to the body of the iron, a casing

inclosing the circuit terminals on the iron and provided with yieldable circuit terminals having a constant tendency to engage the circuit terminals on the iron, and connections for securing the casing to the holding means for the handle of the iron, including a bolt entering the casing and extending through the handle support to clamp the casing to the handle support or to release it therefrom.

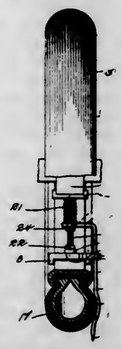
[Claims 2 and 3 not printed in the Gazette.]

1,275,553. WINDOW-CLEANER. DAVID E. HAIN, New Cumberland, Pa. Filed Apr. 9, 1917. Serial No. 160,731. (Cl. 15—59.)



In a device of the character described, vertical guide members adapted to be mounted on opposite sides on a window frame, blocks slidably mounted in the guides, one of said blocks having a series of holes therein, a shaft journaled horizontally in said blocks, a wiper carried by said shaft, levers on said shaft, guide pulleys adapted to be mounted in the window frame above and below the guide members, flexible cables trained over the pulleys and each cable having its ends connected to one of the levers, means for operating the cable, and adjusting pins engaged in the holes in one of the blocks on opposite sides of the lever for the contact thereof with the same.

1,275,554. AUTOMOBILE NON-SKID DEVICE. EDGAR G. HAKEMAN, Hartwick, Iowa. Filed Nov. 24, 1917. Serial No. 203,791. (Cl. 21—212.)



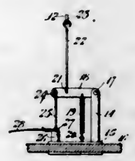
1. An automobile non-skid device comprising a rim engaging clamp, a hub engaging clamp, means provided upon said clamps for fitting over the edges of the hub and rim of a wheel for holding the clamps against lateral shifting movement upon said wheel, an adjusting bolt interposed between said clamps, means for locking said bolt in an adjusted position for holding said clamps in firm engagement with the hub and rim of a wheel, guiding means formed in one of said clamps, a spike slidably mounted through said guiding means and provided with a laterally extending inner end, means adjustably secured to said bolt for limiting the outward movement of said spike thereon, and yieldable means for engaging the laterally extending end of said spike and yieldably holding the same in an extended position.

3. An automobile non-skid device comprising an inner clamp adapted to engage the hub of a wheel, an outer clamp adapted to engage the rim of a wheel, each of said clamps provided with laterally extending lugs adapted to fit upon opposite sides of respective hub and rim above mentioned for resisting lateral shifting movement of said clamps relative to said wheel, a spacing bolt interposed between said inner and outer clamps, said outer clamp provided with a lug formed upon the inner face thereof, said bolt provided with a threaded end fitting in said lug, means for locking said bolt within said lug, a spike carried by said outer clamp and movable therethrough, said spike provided with a laterally extending end having an enlarged aperture formed at the inner extremity thereof, said bolt extending through said enlarged aperture, an adjusting nut threaded upon said bolt and engaging the under face of said laterally extending end for limiting the outward movement of said spike relative to said bolt, and a coil spring interposed between said inner clamp and said laterally extending end of said spike for yieldably and normally forcing said spike in an outwardly extended position.

6. A non-skid device of the class described comprising a clamp, said clamp comprising an inner section, an adjustable section adjustably secured thereto, said adjustable section provided with an enlarged aperture formed therein, a spike slidably mounted through said aperture and provided with a laterally extending end formed upon the inner portion thereof, a securing bolt carried by said clamp, an inner clamp carried by one end of said securing bolt, the lower end of said spike being shaped to conform to the contour of a tire, and a spring carried by said bolt and yieldably engaging the inner end of said spike for yieldably and normally urging said spike in an outwardly extended position.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,275,555. SHUTTER-TRIP. HAROLD M. HALL, Los Angeles, Cal. Filed July 5, 1917. Serial No. 178,870. (Cl. 74—93.)



1. A shutter trip comprising a trip lever; means for connecting said trip lever to the shutter trip lever of the camera; a spring for actuating said trip lever; a latch universally pivoted at one end to said trip lever; a member against which the lower end of said latch may rest thus holding the spring in a tensed condition; and a cord detachably secured to said latch.

3. In a shutter trip, a tripping mechanism; spring means for actuating said mechanism; and a latch for holding said mechanism in a position to operate; said latch being so formed that it may be tripped by a string which thereafter pulls free from the latch.

[Claim 2 not printed in the Gazette.]

1,275,556. PHOTOGRAPHIC-PRINT WASHER. LEWIS B. HALL, Pittsburgh, Pa. Filed June 28, 1917. Serial No. 177,578. (Cl. 95—97.)

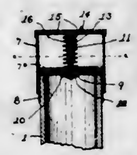
1. In apparatus for washing photographic prints, the combination with an open container, of a flat bottomed conical shaped nozzle, having an annular rib about its smaller end adapted to engage a hose and having a closed base at the larger end, with a plurality of lateral alined openings near the base.



2. Apparatus for washing photographic prints, comprising an integral conical shaped nozzle adapted to be attached at its smaller end to a hose and having a closed base at the larger end with a row of lateral horizontally alined openings spaced around the nozzle near the base.

[Claim 3 not printed in the Gazette.]

1,275,557. VALVE-CLOSURE FOR VENTILATORS. WILLIAM L. HAMILTON and GEORGE MCCULLOUGH, Austin, Tex. Filed Dec. 20, 1917. Serial No. 208,017. (Cl. 4—21.)



1. A valve ventilating cap for plumbing systems, including a cap fitted upon the end of the ventilating pipe and having an opening in the top thereof, an inwardly opening valve plate normally closing the opening, a spring yieldably holding the valve in a closed position, and means actuated by adjustment of the cap on the ventilating pipe to regulate the tension of the spring.

2. A valved ventilating cap for plumbing systems, including a collar fitted upon the end of the ventilating pipe, a guide pin carried by the collar, a cap mounted upon the collar and having an opening in the top thereof, an inwardly opening valve plate normally closing the opening in the top, guide means pendent from the guide-plate and slidably engaging the guide pin of the collar, and a spring yieldably holding the valve plate in a closed position.

3. A valved ventilating cap for plumbing systems, including a collar fitted upon the ventilating pipe, an axially disposed guide member carried by the collar, a cap adjustably applied to the collar and having an opening in the top thereof, an inwardly opening valve plate normally closing the opening in the top, guide means pendent from the valve plate and slidably engaging the guide member of the collar, and a spring yieldably holding the valve plate in a closed position, the tension of the spring being regulated by adjusting the cap upon the collar.

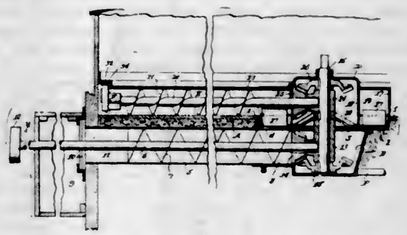
[Claim 4 not printed in the Gazette.]

1,275,558. SILO. JULIUS H. HOLMGREEN, San Antonio, Tex. Filed Mar. 1, 1916. Serial No. 81,444. (Cl. 214—17.)

1. In a silo, a receptacle for storing the silage having a floor provided with an approximately central outlet, a conveyer pivoted at its inner end adjacent to the floor outlet, and a tractor mounted on the outer end of said conveyer and operated thereby to propel the conveyer around the receptacle.

6. In a silo, a receptacle for storing the silage having a floor provided with an approximately central outlet, a conveyer pivoted at its inner end adjacent to the floor outlet, said conveyer being a rotating spiral, and a reciprocating tractor on the outer end of the conveyer and operated thereby.

7. In a silo, a receptacle for storing silage having a floor provided with an outlet located at one side only of the center of the floor, a fixed discharging conveyer leading from said outlet beneath the floor to the exterior of said receptacle, a traveling conveyer movable radially over the floor in close proximity thereto, and a housing at the inner end of said traveling conveyer and movable therewith, said housing forming a chamber which is in communication with said outlet at all times, the walls of said housing serving to guide the material from the traveling conveyer to the outlet when said traveling conveyer is out of alinement with the outlet.

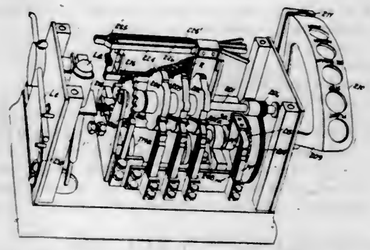


11. In a silo, a receptacle for storing the silage having a floor provided with an outlet, a fixed discharging conveyer leading from the outlet to the exterior of the receptacle, a casing having an annular chamber in communication through the floor outlet with the inner end of the fixed conveyer, scrapers movable around the annular chamber to propel the contents thereof to the outlet, and a traveling conveyer extending from the casing and communicating with the annular chamber therein movable over the floor in close proximity thereto for removing the bottom layer of stored material and conducting it to the annular chamber.

21. In a silo, a receptacle for storing the silage having a closed lower part except a discharge outlet, means for forcing the material from the interior of the receptacle through the discharge outlet, a conveyer having a closed conduit leading from the discharge outlet to the exterior of the receptacle, said conduit having a chamber at its outer end, and means for closing the outer end of the chamber so that the material will be packed by the conveyer in the chamber to seal the conduit to the outside air.

[Claims 2 to 5, 8 to 10, 12 to 20, and 22 not printed in the Gazette.]

1,275,559. AUXILIARY SIGNAL ARRANGEMENT FOR PRINTING-TELEGRAPH SYSTEMS. WALTER A. HOUGHTALING, Dunellen, N. J., assignor to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed May 8, 1915. Serial No. 26,812. (Cl. 178—4.)



1. A printing telegraph system comprising in combination a line conductor, automatic transmitting means therefor, a receiving printer, and auxiliary signal receiving means and auxiliary transmitting means arranged to operate the auxiliary signal receiving means through the receiving printer.

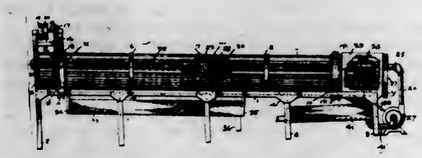
7. A printing telegraph system comprising in combination a line conductor, main automatic transmitting means therefor, a receiving printer, and auxiliary signal receiving means for said line conductor, and auxiliary signal transmitting means comprising contact means and operating means therefor, itself comprising a movable member having a predetermined code-signal formed thereon and arranged to operate such contact means according to such code signal.

9. A printing telegraph system comprising in combination a line conductor, main automatic transmitting means therefor, a receiving printer, and auxiliary signal receiving means for said line conductor, and auxiliary signal transmitting means comprising contact means and operating means therefor, itself comprising a movable member having a predetermined code-signal formed thereon and arranged to operate such contact means according to such code signal, said auxiliary signal transmitting means further comprising means whereby the main transmitter is functionally disconnected from the line conductor when such auxiliary signal transmitting means is operated.

18. A signaling system comprising a current controller adapted to selectively provide different current combinations, mechanism for interrupting the normal operation of said controller and providing a characteristic current combination, and a member for selecting a desired current combination and initiating the operation of said mechanism.

[Claims 2 to 6, 8, 10 to 17, and 19 to 23 not printed in the Gazette.]

1,275,560. WASHING AND BLANCHING MACHINE. FRANK O. HUTTON, Sacramento, Cal., assignor to Libby, McNiel & Libby, Chicago, Ill., a Corporation of Maine. Filed June 14, 1917. Serial No. 174,718. (Cl. 146—14.)



1. A washing and blanching machine including a rotatable perforated cylinder; spray means at different portions of said cylinder and fed from independent sources.

2. A washing and blanching machine including a rotatable corrugated cylinder spray means at different portions of said cylinder and fed from independent sources.

3. A washing and blanching machine including a rotatable cylinder; perforated portions in the opposite ends of said cylinder; and independent spray means within said cylinder adjacent each of the said perforated portions.

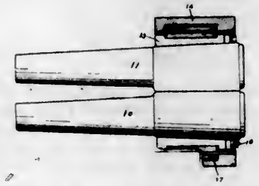
4. In a washing and blanching machine of the character disclosed of a rotatable, corrugated cylinder; perforated portions in the opposite ends of said cylinder; and independent spray means within said cylinder within each of said perforated portions.

5. In a washing and blanching machine of the character disclosed of a rotatable, corrugated cylinder; perforations in the opposite ends of said cylinder in said corrugations farthest from the axis of said cylinder; independent spray means within said cylinder within each of the said perforated portions; and means beneath each of said perforation portions for carrying away the sprayed water.

[Claims 6 and 7 not printed in the Gazette.]

1,275,561. GUN FOR DESTROYING WIRE ENTANGLEMENTS. JESSE M. JENNINGS, Des Moines, Iowa. Filed Apr. 6, 1918. Serial No. 227,124. (Cl. 89—1.)

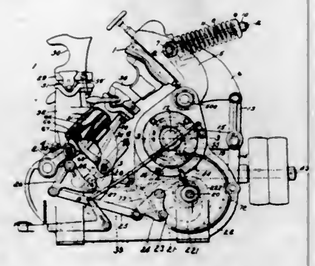
1. A device for destroying wire entanglements comprising a pair of gun barrels mounted adjacent to each other, said barrels having grooves opening into their bores, means on said gun barrels for supporting a flexible device at their muzzles, projectiles, and engaging devices on said



projectiles adapted to travel in said grooves and engage the flexible devices when the projectiles leave the barrels.

[Claims 2 and 3 not printed in the Gazette.]

1,275,562. LEVELING-MACHINE. ARTHUR ERNEST JERRAM and JOSEPH GOULDBOURN, Leicester, England, assignors, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed May 22, 1917. Serial No. 170,321. (Cl. 12—36.)



1. A sole leveling machine, having in combination, a shoe supporting member, a coöperating sole pressing member, mechanism for relatively moving the two members toward one another into leveling position and for relatively actuating the two members when in leveling position to shape the shoe sole under pressure constructed and arranged to impart a movement of variable extent to the shoe supporting member to bring the tread surface of the sole to a predetermined leveling position controlled by the pressing member, and means for locking the shoe supporting member against the thrust of the sole pressing member after the shoe supporting member has been located in leveling position.

7. A sole leveling machine, having in combination, a lever, a pair of sole pressing forms carried by the lever, a pair of shoe supporting jacks, means under the control of the operator for moving the jacks in opposite directions into and out of alinement with the pressing forms and for actuating the lever to move the forms away from and toward the jacks, and mechanism for oscillating the jack which is supported in leveling position in alinement with the coöperating pressing form.

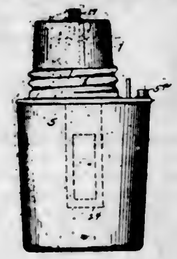
12. A sole leveling machine, comprising a shoe supporting jack, two links pivotally connected to the jack, means for causing the jack to initially rock from a vertical into an inclined position about the pivotal connection of one of the links, and means for oscillating the jack when supported in inclined position by both of the links.

18. A sole leveling machine, having in combination, a pressing member, a coöperating shoe supporting member, a crank shaft, connections between the crank shaft and pressing member for moving the latter toward and from the shoe supporting member, a cam operated from the crank shaft at one-half the speed of the crank shaft and arranged to impart a movement to the shoe supporting

member from work receiving into leveling position and return during one complete rotation, and means under the control of the operator for causing the crank shaft to make one complete rotation and stop.

[Claims 2 to 6, 8 to 11, 13 to 17, and 19 to 26 not printed in the Gazette.]

1,275,563. DEVICE FOR AUTOMATICALLY DILUTING CHARGES FOR INTERNAL-COMBUSTION ENGINES WITH MOISTENED AIR. JOHN H. JONES, Oakland City, Ind. Filed June 1, 1917. Serial No. 172,346. (Cl. 261—99.)

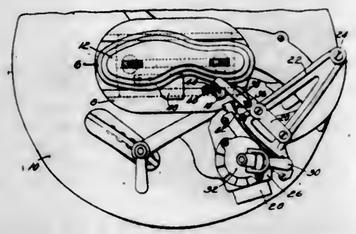


1. The combination with a water receptacle of a filter bed carrying element mounted thereupon, an air filtering and moistening means mounted in said element, means for supplying moisture to said bed from the receptacle, one side of the filter bed being in communication with the atmosphere and means for conducting air from the other side thereof.

3. A device of the character described, comprising a water receptacle, a division plate spanning the same, a wick depending into said receptacle and passing through the division plate and having a part disposed above said division plate, a cap mounted upon the receptacle, a bed of granular material in said cap, a wick engaged with said bed of granular material and contacting with the first named wick, one side of said material being exposed to the atmosphere and means for conducting the moistened air from the other side thereof.

[Claims 2 and 4 to 7 not printed in the Gazette.]

1,275,564. SOLE-TRIMMING MACHINE. GIDEON JULIAN, Beverly, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Nov. 5, 1917. Serial No. 200,291. (Cl. 12—25.)

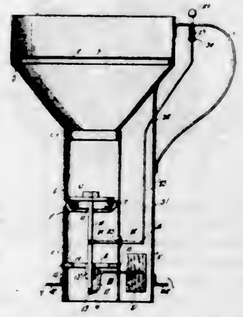


1. In a sole trimming machine, the combination with a pattern and means for clamping a sole thereon, a knife arm having a knife mounted thereon, and means for transferring the point of operation of the knife around the pattern, of a guard plate sustained on the knife arm and extending over the knife.

5. In a sole trimming machine, the combination with a sole pattern, a knife arm, and a swinging knife holder thereon carrying a knife, of a guard plate movably mounted on the arm, and means on the guard plate adapted to be engaged by the knife when its holder swings away from the pattern and cause the guard plate to move with the holder.

[Claims 2 to 4, 6, and 7 not printed in the Gazette.]

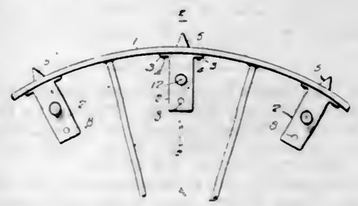
1,275,565. AUTOMATIC FUNNEL. FRANK JUNEK, Jr., Cable, Wis. Filed Aug. 11, 1916. Serial No. 114,446. (Cl. 226—33.)



1. The combination with a funnel, of a valve in the outlet of said funnel, a stem depending from said valve, a bell crank lever pivoted in said outlet and having one of its arms normally disposed in horizontal position and projecting beyond the said outlet, the extremity of the opposite arm of said lever being bent laterally so as to be parallel with said horizontal arm, a roller on the end of said bent arm adapted to pass beneath and to support the said stem to hold said valve open when the said arm is in horizontal position, and a float on the extremity of the horizontal arm of said bell crank lever, substantially as described.

2. The combination with a funnel, of a valve arranged in the outlet of said funnel, a bearing portion beneath the said valve, a stem connected to said valve and extending through said bearing portion, a bell crank lever pivoted to said bearing portion and having one of its arms disposed horizontally, a roller at the end of the other arm for engagement beneath said stem to hold the valve in open position, the said roller being adapted to move from beneath said stem to allow said valve to seat when said horizontal arm moves upwardly, and a float on said arm, substantially as described.

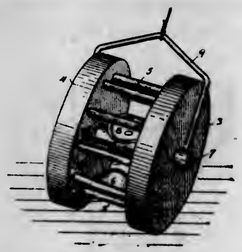
1,275,566. TRACTOR. WALLACE R. KEMPSTER, Whiteside county, Ill. Filed Nov. 1, 1916. Serial No. 128,913. (Cl. 21—211.)



In combination with the rim of a wheel having radial openings, of casings secured to the rim at the openings, spuds in the casing adapted to be extended beyond the periphery of the rim or to be contracted within the rim, a pair of levers connecting each spud with its casing, each pair of levers being pivotally connected at their adjacent ends and pivoted to the spud and to the casing, a hook at

the joint of each pair of levers, the casing having a slot through which the hook extends, and a lock for holding each spud extended.

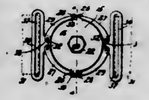
1,275,567. TOY. JOHN KOCH, Jr., Brookline, Mass. Filed Aug. 21, 1917. Serial No. 187,337. (Cl. 46—47.)



1. In a toy, a cage comprising a pair of wheels mounted on an axle and a plurality of bars extending from one to the other of said wheels, combined with a ball loosely confined within said cage.

2. In a toy, a cage comprising a pair of wheels mounted on an axle and a plurality of bars extending from one to the other of said wheels, combined with a ball loosely confined within said cage, a receptacle adapted to receive and retain said ball mounted on said axle, and means whereby said toy may be drawn about.

1,275,568. YIELDABLE COUPLING. WALTER W. LAFLAME, Pittsburgh, Pa. Filed June 12, 1917. Serial No. 174,252. (Cl. 267—10.)

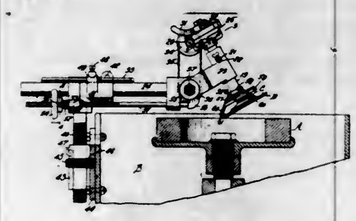


In a device of the character described, a pair of circular plates pivotally connected together, each having a flanged marginal edge, said flanges contacting and forming an inclosed chamber, a pintle fixed to one of said plates and rotatable relatively to the other plate, a spiral spring in said chamber surrounding said pintle and connected at one end to the same, the other end being connected to the relatively rotatable plate, a pair of lugs, diametrically disposed on the exterior of each of said plates, opposite members for attachment of tensioning devices, a link pivoted to each lug on one of said plates and to each tension member, and like links pivoted to the lugs on the other plate and to the same tension members, for rotating said plates in opposite directions and tightening said spring, said links being curved in the direction of their length to conform to the circular contour of the plates.

1,275,569. MACHINE FOR BEVELING MIRRORS AND FOR ANALOGOUS PURPOSES. WILLIAM LA HODNY and FRANK X. KIBITZ, Buffalo, N. Y., assignors to Standard Mirror Co., Buffalo, N. Y. Filed July 14, 1916. Serial No. 109,284. (Cl. 51—11.)

1. The combination with an abrading wheel for a plate, of a rotary chuck for the plate, a device for centering the plate on the chuck, said chuck and centering device being relatively movable endwise toward and from each other for centering the plate on the chuck and holding the plate clear of the centering device, driving means for the chuck, and means for stopping the rotation of the chuck to enable the plate to be secured thereon.

2. The combination with an abrading wheel for a plate, of a rotary chuck for the plate, a device for centering the plate on the chuck, said chuck and centering device being relatively movable endwise toward and from each other for centering the plate on the chuck and holding the plate clear of the centering device, driving means for the chuck, and means for stopping the rotation of the chuck for securing the plate thereon, said stopping means also moving the chuck toward the centering device.



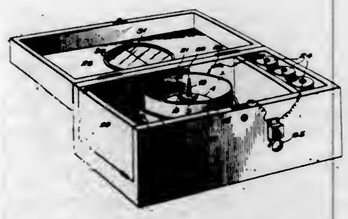
4. The combination with an abrading wheel for a plate, of a rotary chuck for the plate, a device for centering the plate on the chuck, said chuck and centering device being relatively movable endwise toward and from each other for centering the plate on the chuck and holding the plate clear of the centering device, driving means for the chuck, and means operated by moving the chuck away from the abrading wheel for stopping the rotation of the chuck to enable the plate to be secured thereon, said stopping means also moving the chuck toward the centering device.

6. The combination with an abrading wheel for a plate, of a rotary chuck mounted to swing toward and from the abrading wheel, a device for centering the plate on the chuck, driving means for the chuck, and means operated by swinging the chuck away from the abrading wheel for stopping the rotating of the chuck to enable the plate to be centered on the chuck .

17. The combination with an abrading wheel for a plate, of a rotary chuck for the plate, a support on which the chuck is journaled and which is mounted to move the chuck toward and from the abrading wheel, said support being held loosely with the chuck in operative relation to the abrading wheel and being free to move away from the abrading wheel, and a spring between the chuck and the support which presses the chuck toward the abrading wheel and holds the plate yieldingly against the abrading wheel.

[Claims 3, 5, and 7 to 16 not printed in the Gazette.]

1,275,570. TELLTALE COMPASS. RAFAEL ANDRADE-LALAMA, Quito, Ecuador. Filed Dec. 27, 1917. Serial No. 209,104. (Cl. 33—222.)



1. A mariner's compass embodying a box adapted to occupy a fixed position with relation to the keel line or longitudinal axis of the vessel and having an indication thereon conforming to said keel line or longitudinal axis, a compass bowl and card mounted in gimbal supports in said box, said gimbal supports and bowl being adjustable about a vertical axis substantially in line with the axis of the card, whereby the bowl and card may be set at the proper angle with relation to the predetermined course and longitudinal axis of the vessel, and an alarm circuit including a generator, an alarm and contacts carried respectively by the bowl and card, the contacts carried by the bowl being so located that a radial plane midway between them bears a fixed relation to the bowl, said contacts being spaced from each other a distance corresponding to the permissible deviation of the vessel from its course, whereby the circuit will be closed and the alarm sounded when excessive deviation occurs.

[Claims 2 to 5 not printed in the Gazette.]

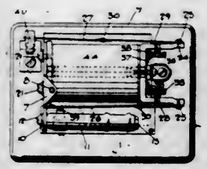
1,275,571. DEVICE FOR REMOVING OBSTRUCTIONS FROM TUBES. FRANKLIN JULIAN LESLIE, New York, N. Y. Filed Mar. 30, 1917. Serial No. 158,773. (Cl. 137—70.)



1. A device of the character described comprising a cylindrical member, a reduced portion formed integral therewith, a second cylindrical member, a reduced portion formed integral therewith, means for securing said members in alinement, a passage in one said member to receive a cartridge and a pin operable through the other said member for discharging said cartridge.

[Claims 2 to 4 not printed in the Gazette.]

1,275,572. ELECTROMAGNETIC STRUCTURE. ALBION D. T. LIBBY, East Orange, and EDWARD J. TOMLINSON, Newark, N. J., assignors to Splitdorf Electrical Company, Newark, N. J. Filed Nov. 11, 1916. Serial No. 130,833. (Cl. 175—336.)



1. An electro-magnetic structure comprising in combination, a base member, a punched core, windings for said core, and armatures to be actuated by said windings, said core serving as a means whereby the same is supported at both ends by the base member and also as a supporting means for said armatures.

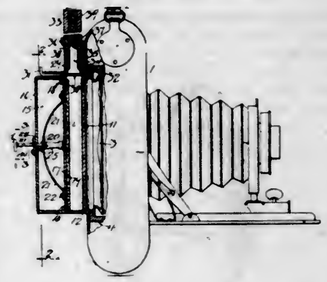
9. An electro-magnetic structure comprising in combination, a non-magnetic base, a punched core, armature members, said core being formed at one end to provide a support for said armatur members, and integral flanges at the other end thereof serving as pole pieces for the armature members and also as a means whereby said core is supported upon said base.

15. An electro-magnetic structure comprising in combination, a base member, a punched core having integral flanges at one end thereof, armature members and means to adjust the tension on said armature members, means supported by said core for locking said adjusting means in position, the integral flanges on said core serving as a support for said armature members and also as a support for the adjusting means, and means including brackets punched from said base and arranged at each end of said core whereby all the above mentioned parts are supported upon said base member.

19. An electro-magnetic structure comprising in combination, a base member, a punched core formed to give flanges at both ends thereof, a coil upon said core, said flanges serving as a means of supporting said core upon the base member and also serving as heads for the spool upon which said coil is wound.

[Claims 2 to 8, 10 to 14, and 16 to 18 not printed in the Gazette.]

1,275,573. PHOTOGRAPHIC APPARATUS. HENRY E. LICHTENSTEIN, Woodmere, N. Y., assignor of one-half to Charles G. Hensley, Brooklyn, N. Y., and Solomon K. Lichtenstein, New York, N. Y. Filed July 6, 1914. Serial No. 849,030. (Cl. 95—2.)

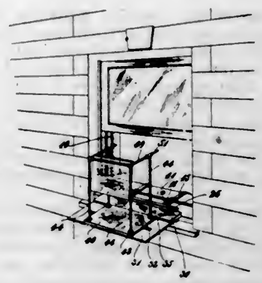


1. A camera comprising a receptacle and a lens, a colored taking screen through which the rays from said lens pass, said receptacle having an opening to receive a sensitive medium, a shutter for closing said opening, means for pressing the sensitized medium into surface contact with said screen, and means operable from without the camera for applying and releasing the pressure.

3. A camera comprising a receptacle and a lens, a colored taking screen through which the rays from said lens pass, means for pressing a sensitized medium into surface contact with said screen and being movable away from the screen to permit of the insertion of a sensitized medium, means accessible from without the camera for operating said pressure means, a throat adapted to receive a sensitized medium and to permit its insertion between said screen and said pressure screen and light tight means for closing said throat.

[Claim 2 not printed in the Gazette.]

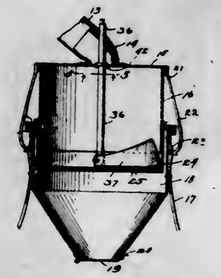
1,275,574. REMOVABLE WINDOW-BRACKET. DESIDER LIPP, New York, N. Y. Filed Apr. 20, 1917. Serial No. 163,388. (Cl. 20—87.)



1. A window bracket, comprising a pair of hooks adapted to be engaged with the sill of a window, a frame adjustably engaged with said hooks, a platform carried by said frame, means for supporting said platform outwardly of said hooks, a plate secured to said platform, and means for adjusting said plate laterally on said frame.

2. An extensible window bracket, comprising a pair of hooks engageable with the sill of a window, shanks formed on said hooks, arms engageable with said shanks, said arms having a longitudinally disposed through-slot, a slotted bar integral with said arms and disposed transversely thereof, a support for said arms, said support being adapted to rest upon the sill of a window, a platform engageable with said arms, said platform having a longitudinal recess registerable with the mentioned slot in said arms, a plate slidable lengthwise upon said platform, and means for clamping said plate and platform in engagement.

1,275,575. ASH-SIFTER. KATHERINA LIWACZ, Philadelphia, Pa. Filed Jan. 26, 1917. Serial No. 144,709. (Cl. 83—60.)



1. In an ash sifter of the class described, a hopper, an oscillatory shaker member supported within the hopper and having a foraminous bottom, a closure casing removably carried by the hopper structure and telescoping within the shaker member, means suspended from the closure casing to rotate independently of the shaker member to throw the cinders to the side of the shaker, an outlet through the walls of the hopper and shaker to lead the cinders away and a closure in the bottom of said hopper.

2. In an ash sifter, a hopper having a flanged seat formed around its top edge, an oscillatory shaker having an outturned flange upon its upper edge and resting on said flanged seat, so that the shaker is supported within the hopper solely from said seat, said shaker furthermore having a sifter bottom, a closure casing removably carried by the hopper structure and telescoping within the shaker member, means suspended from the closure casing to rotate independently of the shaker member to throw the cinders to the side of the shaker, and an outlet through the walls of the hopper and shaker to lead the cinders away.

3. In an ash sifter, a hopper having a flanged seat formed around its top edge, an oscillatory shaker having its upper edge outwardly flanged and resting on said flanged seat, so that the shaker is supported within the hopper solely from said seat, a closure casing carried by the hopper structure and telescoping within the shaker member, a series of spring arms carried by the casing and overlying the outside of the hopper structure and locking elements on the hopper structure to be engaged by the casing whereby the latter is removably held and locked.

4. In an ash sifter, a hopper having a flanged seat formed around its top edge, a shaker structure having a cylindrical wall whose upper edge is outturned into a supporting flange bearing on said seat and rotatable thereon, a closure casing removably carried by the hopper and telescoping closely within the cylindrical wall of the shaker structure, a rotary blade removable with said closure casing, and active above the bottom of the shaker structure to throw the cinders to the side of the latter, a cinders removing chute entered into the wall of the hopper and communicative with an outlet in the wall of the shaker structure, and a door vertically removable from one of said outlets.

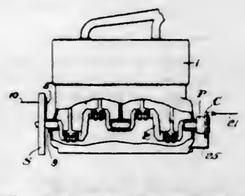
1,275,576. MORTISE-RIVETING. CHARLES S. LOCKWOOD, Newark, N. J., assignor to Hyatt Roller Bearing Division, United Motors Corporation, Harrison, N. J., a Corporation of New York. Filed May 9, 1917. Serial No. 167,552. (Cl. 29—148.)



2. The process of engaging a rod or bar with a plate having a mortise extended through the same, which consists in shouldering down the said bar to form a tenon with a shoulder at the base of the same, the tenon being proportioned to fit in and extend beyond the said mortise and having an annular groove adapted to be located within the mortise, supporting the rod or bar against end thrust during the entire engagement of thme same with the plate, then forcing inward the metal of the plate surrounding the outer end of the mortise, thereby pressing the plate firmly against the shoulder and crowding the metal of the plate inwardly around the tenon and then heading over the outer end of the tenon into the depression thus formed.

[Claim 1 not printed in the Gazette.]

1,275,577. POWER PLANT. OTIS K. LUSCOMB, Allston, Mass. Filed Dec. 31, 1917. Serial No. 209,648. (Cl. 123—149.)



1. A power-plant for use in automobiles and other restricted places comprising an engine, a shaft extending from opposite sides of the engine and arranged to be driven by the engine, and means for producing unidirectional current, said means being mounted in part on said shaft on one side of the engine and in part on said shaft on the other side of the engine, whereby the current producing means extends from the engine approximately equal distances on opposite sides thereof.

2. A power-plant adapted for use in automobiles and other restricted places comprising an engine, a shaft extending from opposite sides of the engine and arranged to be driven by the engine, means for generating alternating current including a rotary element mounted on said shaft on one side of and in proximity to the engine, and means for rendering the alternating current unidirectional including a rotary element mounted on said shaft on the other side of and in proximity to the engine.

6. In a power-plant adapted for use in automobiles and other restricted places, the combination of a pulley and commutator integrally united, the commutator being disposed on one side of the pulley with its contact face disposed transversely of the axis of the pulley.

[Claims 3 to 5 not printed in the Gazette.]

1,275,578. BUCKLE. ELMER B. MCCONAHY, Mulino, Oreg. Filed Mar. 18, 1916. Serial No. 85,109. (Cl. 24—178.)

1. In a buckle, a rectangular frame formed with parallel side bars convexly curved toward the outer face of the buckle, a U-shaped yoke centrally pivoted at its ends to the concave sides of said side bars, and a tongue rigid with the cross bar of said yoke and projecting outwardly therefrom in a plane passing through the pivotal axis of the yoke.

2. In a buckle, a rectangular frame formed with parallel side bars convexly curved toward the outer side of the buckle, a yoke formed with a straight bar extending across the buckle for the attachment of a strap and having parallel arms on the ends and perpendicular to said cross bar pivotally connected by said arms to the center of said side bars, and a tongue rigidly connected



to said cross bar projecting outwardly from the center thereof in a plane passing through the pivotal axis of the yoke and in opposite direction to said arms, said yoke and tongue adapted to swing as a unit to bring the tongue into contact with the opposite ends of the rectangular frame and shift the position of the attached strap to tighten or loosen said strap.

1,275,579. BALLOT-BOX. EDWARD J. MCGOWAN, New York, N. Y. Filed Mar. 8, 1918. Serial No. 221,132. (Cl. 232—2.)



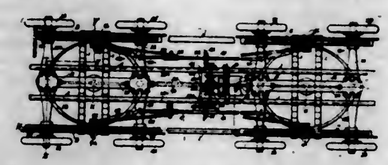
1. A ballot box having a lid with a ballot-receiving aperture therein, means carried by said lid adapted to close said aperture, and means adapted to lock both said closing means and said lid in closed positions, said closing means and said locking means being located wholly within the box, said locking means becoming automatically operative upon the closing of the lid.

2. A ballot box having a lid hinged thereto with a ballot-receiving-slot therein, closing means located wholly within the box adapted to be moved to close said slot, and when so moved to be locked in closed position, and locking means located wholly within the box adapted to be operated by shutting the lid and to coöperate with said closing means to lock simultaneously both said closing means and said lid in closed positions.

6. A self-contained ballot box adapted to be stacked and having a flat lid, said lid having a ballot-receiving slot therein, means within said lid adapted to close said slot, and means within said box adapted to maintain said slot closed while the lid is closed, said means being adapted to operate automatically upon and by the closing of the lid.

[Claims 3 to 5 not printed in the Gazette.]

1,275,580. MOTOR-VEHICLE. JAMES W. MCLAREN, Columbus, Ohio. Filed June 19, 1916. Serial No. 104,604. (Cl. 180—81.)



1. In a motor vehicle having three or more axles, wheels rigidly mounted thereon and having a power plant thereon, provision for associating said axles in groups and provision for associating said groups, controlling means adapted to actuate said axles individually and by groups comprising a pair of longitudinal shafts actuated from the power plant, means connecting said shafts with the said axles individually, and means connecting the said shafts with said groups.

2. In a motor vehicle having three or more axles with wheels mounted thereon arranged in two groups, a steering shaft on each side of said vehicle, means connecting said shaft with each axle on that side, and means adapted to position the wheels in each of said groups on one side of said vehicle in an arc and the wheels on the opposite side in a concentric arc.

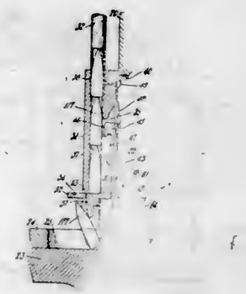
3. In a motor vehicle having three or more axles with wheels mounted thereon arranged in two groups, a steering shaft on each side of said vehicle, means connecting said shaft with each axle on that side, and means adapted positively to position the wheels in each of said groups on one side of said vehicle in an arc and the wheels on the opposite side in a concentric arc.

4. In a motor vehicle having three or more axles with wheels mounted thereon arranged in two groups, a steering shaft on each side of said vehicle, means connecting said shaft operatively with the axles on that side and adapted to be manipulated to shorten the interval between the wheels on one side to position said wheels in an arc and to lengthen the interval between the wheels on the opposite side to position said wheels in a concentric arc.

5. In a motor vehicle having three or more axles with wheels mounted thereon arranged in two groups, a frame for each group, a steering shaft on each side of said vehicle, means connecting said shaft with each of said axles, means connecting said shaft with the frame of the group of axles, and means for actuating each of said steering shafts to change the positions of the wheels and the frame on its respective side to alter the direction of travel of said vehicle.

[Claims 6 to 13 not printed in the Gazette.]

1,275,581. FEED-CONTROL DEVICE. WILLIAM I MACOMBER, Cranston, R. I., assignor of one-half to Frank G. Rowley, Pawtucket, R. I. Filed May 9, 1917. Serial No. 167,505. (Cl. 86—45.)



1. In a feed mechanism, the combination with a hopper adapted to contain articles, and a guide member through which they are delivered from said hopper, means adapted to close the exit from said guide member and to support an article and movable to admit of the passage of the article through an opening in said guide member, oscillatory means loosely connected with said means, and means coöperable with a succeeding article to control said oscillatory means.

7. In a feed mechanism, the combination of a guide member provided with a vertical bore and with a vertical opening in its lower portion extending to the bore, a reciprocating plate slidably mounted in the member across the bore in the upper portion of said opening and provided with an opening adapted to register with the bore at one position of the plate, a projection upon the lower face of the plate adjacent the opening to engage and tilt

a discharged article, a vibratory lever mounted in the member above the plate movable to and from the bore, means for actuating the plate, and means coöperating with the plate for vibrating the lever.

[Claims 2 to 6 not printed in the Gazette.]

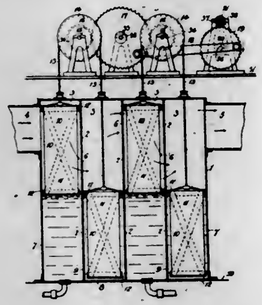
1,275,582. CLOTHES-PIN. ADOLPH F. MASCELLINO, North Bergen, N. J. Filed Sept. 24, 1917. Serial No. 192,983. (Cl. 24—137.)



1. In clothes pins, a body having a central slot and spaced arms inclosing said slot, a securing grip secured in the body at the upper end of the slot and adapted to engage about a clothes line so as to secure the pin thereon, and a securing member rockably mounted in one arm of the body and extending across the slot thereof so as to releasably grip an article to be suspended between the inner end of said member and the other arm of the body.

[Claim 2 not printed in the Gazette.]

1,275,583. APPARATUS FOR COOLING AND OTHERWISE TREATING GASES WITH LIQUIDS. ALBERT WILLIAM MATHYS, Catford, London, England. Filed Nov. 8, 1916. Serial No. 130,246. (Cl. 261—81.)

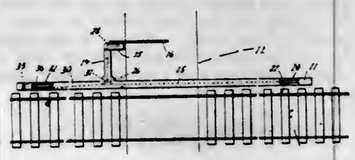


1. Apparatus for treating gases with liquids, comprising a tank for liquid, a series of members each comprising a number of thin plates spaced apart to form narrow passages, a partition between each pair of the adjacent members, said partition having an opening therein above the level of liquid in the aforesaid tank, and means for alternately raising and lowering the members situated on opposite sides of said partition, substantially as and for the purpose hereinbefore set forth.

[Claims 2 to 4 not printed in the Gazette.]

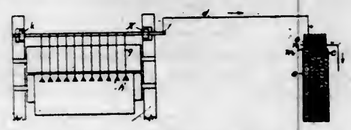
1,275,584. RAILROAD-CROSSING. JONAS MATULAITIS, Scranton, Pa. Filed May 3, 1918. Serial No. 232,331. (Cl. 269—5.)

The combination of a pivoted gate, a counterweight operator therefor, including a hollow rectangular column, a guide casing provided with a longitudinal slot secured therein, rollers rotatably engaged in the walls of said casing, a counterweight block slidable within said casing,



contacting with said rollers, and a pin on said counterweight block extending into said longitudinal slot whereby the motion of said block is limited.

1,275,585. MEANS AND APPARATUS FOR EXTRACTING STATIC ELECTRICITY. JOHN H. MORGAN and CHARLES W. HUNTLEY, Holyoke, Mass. Filed Feb. 25, 1915. Serial No. 10,463. (Cl. 175—264.)

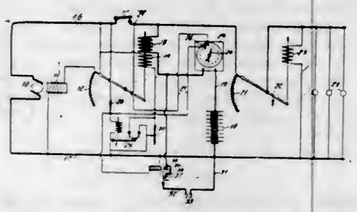


1. An apparatus for removing static electricity comprising a collector positioned in the static field, an absorbing member consisting of positive and negative plates immersed in a fluid of low resistance and suitable conductors from the collector to the absorbing element and from the latter to the ground.

5. An apparatus for removing static electricity comprising a collector positioned in the static field, an absorbing member consisting of a series of lead plates immersed in a sulfuric acid solution and suitable conductors from the collector to the absorbing element and from the absorbing element to the ground.

[Claims 2 to 4 not printed in the Gazette.]

1,275,586. SYSTEM FOR CHARGING CAR-LIGHTING BATTERIES. THOMAS L. MOUNT, New York, N. Y. Filed June 23, 1917. Serial No. 176,464. (Cl. 171—313.)

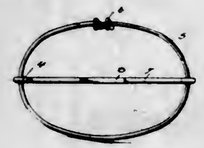


1. In a car lighting system, a generator adapted to be driven from the car axle, a regulator therefor, a storage battery, circuit connections whereby said battery may be charged from said generator when the car is in motion, means associated with said circuit connections whereby the battery may be charged from an external source when the car is not in motion, a circuit breaker associated with said means, means for measuring the charge and discharge of said battery, and means under the control of said measuring means for modifying the action of said regulator when the battery is being charged from the generator and for causing the operation of said circuit breaker when the battery is being charged from an external source.

4. In a car lighting system, a generator adapted to be driven from the car axle, a storage battery, main conductors between the generator and the battery, an automatic switch for controlling the main conductors, auxiliary conductors associated with the main conductors whereby the battery may be charged from an external source, a circuit breaker associated with the auxiliary conductors and having its coil connected between the main conductors on the generator side of the automatic switch, means for measuring the charge and discharge of the battery, and means controlled by the measuring means for establishing a circuit for the circuit breaker coil when the automatic switch is open and the battery is being charged from an external source.

[Claims 2 and 3 not printed in the Gazette.]

1,275,587. EGG-BEATER GUARD. GEORGE R. MUSSER, Kingman, Ariz. Filed July 13, 1917. Serial No. 180,387. (Cl. 259—1.)



1. A supporting device for egg beaters, comprising a loop for surrounding the beaters and a supporting member for the loop and for said beaters.

2. A device of the class described comprising a loop of wire, a supporting member made of wire and having its ends curving upwardly and outwardly and engaging said loop, said supporting member having a cut out part forming a seat for the egg beater.

3. A device of the class described comprising, a pair of egg beaters, a support for said beaters, a wire guard surrounding said beaters, a supporting member made of wire and having its ends curved upwardly and outwardly to engage the guard member centrally thereof, and said supporting member having a cut out part forming a seat for the egg beaters.

4. A supporting device for egg beaters comprising, a loop for surrounding the beaters, and a supporting member for the loop having a seat thereon for the egg beaters.

1,275,588. CULTIVATOR. FREDERICK H. MYERS, Barberton, Ohio. Filed Apr. 24, 1917. Serial No. 164,149. (Cl. 97—10.)



2. A cultivator comprising a slotted beam, cultivator teeth carried thereby, a gage runner below said beam, a plurality of links connecting said beam and runner, said links arranged when moved to their vertical position to raise said beam and teeth to their inoperative position, a lever pivotal on said beam and arranged in parallelism with said links and engaging said runner and adapted when shifted to change the vertical position of said runner, and means for holding said lever in a predetermined position and thereby control the relative position of the under face of said runner.

3. A cultivator comprising a slotted beam, an arm pivotally connected with each side of the front end of said beam, cultivator teeth carried by each arm, a slide embodying a laterally-projecting plate mounted on said beam, pivots on said plate, links connecting said pivots with the free ends of said arms, an interiorly-threaded nut mounted on said plate, a bearing mounted at the rear end of said beam, a threaded shaft mounted in said bearing and extending through said nut and arranged when rotated to shift the position of said slide and thereby oscillate said arms, a member secured to the under face of each link, the outer ends of which are provided with means to constitute a bearing for pivotal connection with the end of said tooth bearing arms the inner ends of said members having engagement with said plate for permitting horizontal movement of said links for preventing vertical movement of said link and arms.

[Claim 1 not printed in the Gazette.]

1,275,589. DIPPER-TOOTH. WESLEY G. NICHOLS, Chicago Heights, Ill., assignor to American Manganese Steel Company, Augusta, Me., a Corporation of Maine. Continuation of application Serial No. 168,074, filed May 12, 1917. This application filed May 24, 1918. Serial No. 236,259. (Cl. 37—56.)



2. In a dipper tooth, a supporting base having a wedge-shaped nose provided with oppositely disposed faces inclined with reference to one another, and two recesses having inclined side walls whereby a dove-tailed cross-section is secured; said recesses being formed one in each of said inclined faces and extending longitudinally thereof, and the same being substantially arcuate in form so that a circular grinding wheel may be introduced thereinto to grind the side walls of said recesses, said nose having also a slot extending from its free end into said recesses.

[Claim 1 not printed in the Gazette.]

1,275,590. DENTAL PLATE. WILLIAM M. NORWOOD, Greenville, S. C. Filed Jan. 10, 1917. Serial No. 141,655. (Cl. 32—4.)



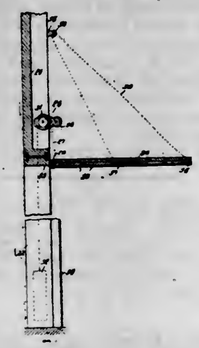
In a device of the class described, a plate shaped to conform to the interior of the mouth, the central portion of said plate being depressed, the said depressed portion being substantially surrounded by a plurality of spaced relatively small depressions, and the said plate having a continuous depressed portion adjacent its edges.

1,275,591. DOOR. JOHN EDWARD OGDEN, Mountainville, N. Y., and CHARLES C. TOMKINSON, Plainfield, N. J.; said Tomkinson assignor to said Ogden. Filed Sept. 20, 1916. Serial No. 121,106. (Cl. 20—19.)

1. The combination with a frame having a door opening, of a door having a vertically guided pivotal axis, hoisting mechanism connected to the door near its pivotal axis operating to exert a pull in the vertical plane of movement of said axis, a freely rotatable sheave affixed above the door opening, and a flexible supporting member independently of the hoisting mechanism extending over the sheave and connected with the door at more than one point above said pivotal axis.

4. The combination with a frame having a door opening, of a door having a vertically guided pivotal axis, means for vertically guiding the door near its lower end, a hoisting mechanism connected to the door near the bottom operating to exert a pull in the vertical plane of movement of said axis, a freely rotatable sheave affixed above the door opening, a sheave mounted on the door near the top, a second sheave mounted on the door at an intermediate point, and a flexible member extending over the aforesaid sheaves and arranged to support the

upper end of the door in its intermediate and open positions.

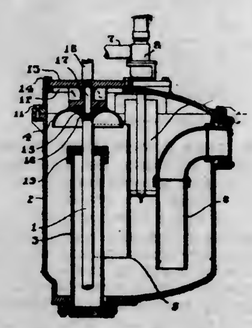


11. The combination with a frame having a door opening, of a door having a vertically guided pivotal axis, a freely rotatable sheave affixed above the door opening, a pair of spaced sheaves mounted on the door, a flexible member extending over the fixed sheaves on the frame and the spaced sheaves on the door, and a pair of spaced stops on the flexible member between the fixed sheave and one of the door sheaves.

14. The combination with a frame having a door opening, of a door adapted to swing away from the door opening at the top, a plurality of freely rotatable spaced pulleys above the door opening in substantial alinement vertically, a flexible member extending over the pulleys and connected to the door at spaced points above the bottom of the door, and a hoisting mechanism independently connected to the door near the bottom operating to exert a vertical pull thereon.

[Claims 2, 3, 5 to 10, 12, and 13 not printed in the Gazette.]

1,275,592. AIR-LIFT BOOSTER. JOHN OLIPHANT, Chicago, Ill., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed June 28, 1917. Serial No. 177,604. (Cl. 103—84.)



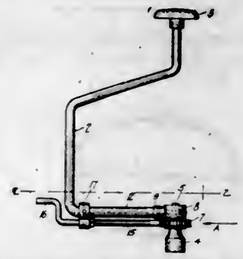
1. In an air lift booster, a booster casing, an eduction pipe therein, a cover for said casing, and a removable cover carried by said first mentioned cover and permitting access to said eduction pipe.

3. In an air lift booster, a booster casing, an eduction pipe therein, a cover for said casing, a removable cover disposed over said pipe, an umbrella top bodily removable with said removable cover, and a down pipe likewise bodily removable therewith.

7. In an air lift booster, a booster casing, an eduction pipe therein, a cover for said casing, a removable cover carried by said cover and disposed over said eduction pipe, an umbrella top removable with said cover, and means for connecting back-blowing mechanism to said pipe.

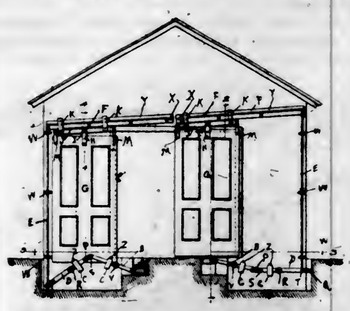
[Claims 2, 4 to 6, and 8 to 12 not printed in the Gazette.]

1,275,593. BRACE. GUY M. OVERTREE, Fort Collins, and VOLLEY V. MCMILLEN, Lafayette, Colo. Filed Feb. 21, 1917. Serial No. 150,149. (Cl. 145—67.)



A brace comprising a crank including a laterally projecting arm and a bearing at the end thereof, a worm gear mounted for rotation in said bearing, a holder connected for rotation with said worm wheel, a rotary shaft extending along said arm, a worm at one end of said shaft, in mesh with said gear, and a crank at the opposite end of the shaft to effect its rotation.

1,275,594. AUTOMATIC GARAGE-DOOR. FRED S. PETERSON, Sebastopol, Cal., assignor of one-half to William S. Borba, Sebastopol, Cal. Filed Aug. 20, 1917. Serial No. 187,105. (Cl. 268—8.)

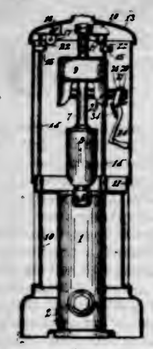


1. An automatically operated door for buildings, comprising a suspended door, a tiltable track from which the door is suspended, a vertically disposed rod connected to the outer end of the aforesaid track, pivotally mounted adjustably weighted members positioned beneath the door and connected with each other, one of said members being connected with the lower end of the aforesaid vertical rod, and a pivoted runway to which the other of the aforesaid weighted members is operatively connected, whereby depression of the runways will cause the door to open.

[Claim 2 not printed in the Gazette.]

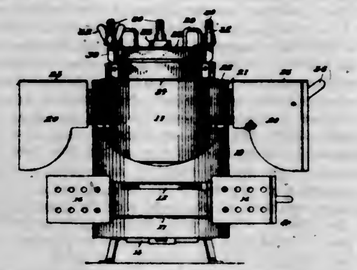
1,275,595. CASING FOR MEASURING-PUMPS. AUGUSTINE J. POCOCK, Dayton, Ohio. Filed Nov. 15, 1916. Serial No. 131,367. (Cl. 221—81.)

1. In a pump of the type specified, the combination with a lower stationary casing inclosing the lower portion of a pump structure, and a cap mounted upon the upper portion of said pump structure, of a slidable casing adapted to inclose the upper portion of the pump structure and to telescope over the lower casing when lowered, vertical guide rods mounted on the uper portion of the pump structure, guide projections secured to the upper portion of the slidable casing and coöperating with said guide rolls in the movements of said slidable casing, and a series of spring-controlled tape-connections mounted on said cap and connected to the slidable casing whereby said casing is maintained in its elevated position with its upper end within the circumference of said cap and may be lowered against the tension of said tape connections, substantially as specified.



2. In a measuring pump, the combination of a lower stationary casing inclosing the pump cylinder, a stationary cap mounted upon the upper portion of the pump structure, a slidable case adapted to inclose the upper portion of the pump structure between the stationary casing and the cap and to thus form a continuation of the stationary casing when elevated, a series of guides arranged between the lower stationary casing and the cap and the movable casing respectively for centering the movement of said movable casing, housings on the interior of said cap, windable springs mounted in said housings, and band connections between said springs and the upper portion of the slidable casing, substantially as specified.

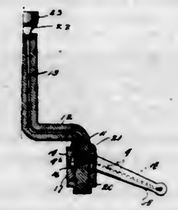
1,275,596. BOILER. LAWRENCE PODLAREK, Berlin, Conn. Filed Sept. 28, 1917. Serial No. 193,749. (Cl. 126—349.)



1. A device of the class described comprising a stove having a cut-away front portion and an open top, an inwardly projecting rim at the top of the stove, swinging doors carried by the stove for the said cut-away portion arranged with rim sections forming a continuation of the rim of the stove when the doors are closed, inwardly projecting opposite sockets carried by the above adjacent the cut-away portion, a container adapted for arrangement within said rim, oppositely projecting axles upon the container removably journaled in the said sockets, a rim upon said container adapted for overlying said stove top rim when the container is arranged upright.

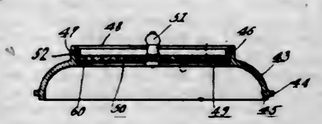
2. A device of the class described comprising a stove having a cut-away front portion and an open top, an inwardly projecting rim at the top of the stove, swinging doors carried by the stove for the said cut-away portion arranged with rim sections forming a continuation of the rim of the stove when the doors are closed, inwardly projecting opposite sockets carried by the stove adjacent the cut-away portion, a container adapted for arrangement within said rim, oppositely projecting axles upon the container removably journaled in the said sockets, a rim upon said container adapted for overlying said stove top rim when the container is arranged upright and overlying the rim sections of the doors, the container being arranged with its rim out of contact with the rim of said stove top and forwardly inclined through the cutaway portion of the stove with said doors open when the container is in its emptying position.

1,275,597. COLTER-OILER. HARRY W. POWELL, Paton, Iowa. Filed Jan. 24, 1917. Serial No. 144,220. (Cl. 184—6.)



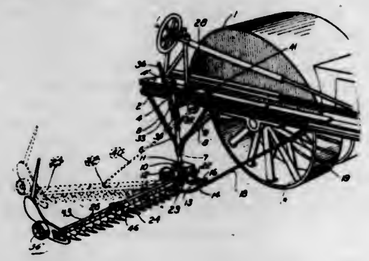
An oiling device for a caster wheel, colter, or like swiveled wheel, including a pintle having a longitudinal oil conduit formed therein and having lateral branches in the lower end thereof, a hollow member rotatably engaged on the said lower end of the pintle and having a downwardly inclined arm formed thereon, said arm having a longitudinal oil conduit therethrough the upper end of which communicates with the interior of the hollow member, the interior wall of the hollow member being formed with an oil receiving groove surrounding the lower end of the pintle and receiving oil from said branches.

1,275,598. COOKING UTENSIL. GEORGE WASHINGTON PROBST, Lock Haven, Pa. Filed July 13, 1915. Serial No. 39,642. (Cl. 53—8.)



A pot lid including a base of dome-like form, terminating at its upper end in a reduced neck equipped adjacent its lower end with an inwardly projecting annular shoulder and provided above the shoulder with an internal circumscribing groove forming a top rib; an L-shaped packing ring including a base flange resting on the annular shoulder, and a side flange disposed within the neck; a cap plate resting on the base flange of the packing ring and disposed within the side flange of the packing ring; and an expansible ring located in the groove and engaged between the cap plate and the annular top rib, the ring lying directly above the side flange of the packing and engaging the same to cover the upper edge of said flange, the shoulder coöperating with the base flange to prevent the packing ring from moving downwardly, and the expansible ring coöperating with the side flange of the packing ring to prevent the packing ring from moving upwardly.

1,275,599. MOWING-MACHINE. ANDREW H. REED, Kansas City, Mo., assignor of one-half to H. Sahler, Kansas City, Mo. Filed Apr. 11, 1917. Serial No. 161,155. (Cl. 56—33.)



1. The combination with a tractor having a frame and a motor driven shaft, of a bracket mounted on the frame, a bearing rigidly suspended from the frame vertically below the bracket, a shaft revolubly carried by the bracket and bearing and longitudinally movable therein, a mowing device carried at the lower end of said shaft and operatively connected therewith, a bevel gear wheel on the motor driven shaft, a bevel gear wheel slidably keyed on the vertical shaft and retained by the bracket in mesh with the gear wheel on the motor shaft, and means for raising or lowering the vertical shaft to raise and lower the mowing device.

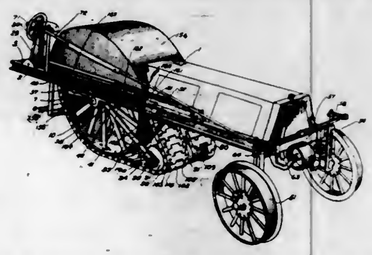
2. The combination with a tractor having a frame and a motor driven shaft, of a bracket mounted on the frame, a bearing suspended from the frame vertically below the bracket, a shaft revolubly and longitudinally movable in said bracket and bearing and having a threaded portion between the bracket and bearing, a mowing device carried at the lower end of said shaft and operatively connected therewith, means for operatively connecting the vertical shaft with the motor shaft, and a threaded member movable into and from engagement with the threaded portion of the vertical shaft for raising or lowering the vertical shaft to effect corresponding movement of the mowing device.

4. The combination with a tractor having a frame and a motor driven shaft, of a bracket mounted on the frame, a bearing rigidly suspended from the frame vertically below the bracket, a shaft revolubly carried by the bracket and bearing and longitudinally movable therein, a bevel gear wheel on the motor driven shaft, a bevel gear wheel slidably keyed on the vertical shaft and retained by the bracket in mesh with the first-named gear wheel, a mowing device mounted at the lower end of said shaft comprising a carrying bracket revolubly mounted on the shaft, a shoe suspended from the bracket, a sickle bar pivotally mounted on the said shoe, a sickle mounted on said sickle bar and operatively connected with the vertical shaft, a rod flexibly connected with the tractor frame and said shoe to retain the mowing parts in functional position, and means for moving the vertical shaft longitudinally, for the purpose set forth.

[Claim 3 not printed in the Gazette.]

1,275,600. TRACTOR. ANDREW H. REED, Kansas City, Mo., assignor of one-half to H. Sahler, Kansas City, Mo. Filed Apr. 11, 1917. Serial No. 161,156. (Cl. 180—6.)

1. In a tractor, the combination with a suitable frame, of an axle mounted on the frame, drive wheels revolubly mounted in spaced relation on the axle, a differential drive mechanism revolubly mounted on said axle intermediate the drive wheels and operatively connecting the same, arms pivotally supported from said axle exteriorly of said drive wheels, a transverse axle carried by the free ends of said arms, belt wheels revolubly mounted on said axle in alinement with said drive wheels, endless traction belts operating over said paired drive and belt wheels and presenting extended traction surfaces, and means for yieldingly resisting lifting of the belt wheels.



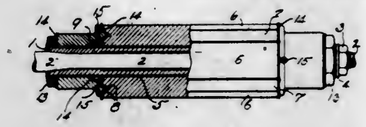
2. In a tractor, the combination with a suitable frame, of an axle mounted on the frame, drive wheels revolubly mounted in spaced relation on the axle, a differential drive mechanism revolubly mounted on said axle intermediate the drive wheels and operatively connecting the same, arms pivotally supported from said axle exteriorly of said drive wheels, and adapted to extend either rearwardly or forwardly thereof, a transverse axle carried by the free ends of said arms, belt wheels revolubly mounted on the said axle in paired alinement with the drive wheels, and normally resting on the same horizontal plane, traction belts operating over said paired belt, and drive wheels to present an extended traction surface, and means for yieldingly resisting upward movement of said belt wheels.

3. In a tractor, the combination with a suitable frame, of an axle mounted on the frame, drive wheels revolubly mounted in spaced relation on the axle, a differential drive mechanism revolubly mounted on said axle intermediate the drive wheels and operatively connecting the same, arms pivotally supported from said axle exteriorly of said drive wheels and adapted to extend either rearwardly or forwardly thereof, a transverse axle carried by the free ends of said arms, belt wheels revolubly mounted on the said axle in paired alinement with the drive wheels, and normally resting on the same horizontal plane, traction belts operating over said paired belt, and drive wheels to present an extended traction surface, means for yieldingly resisting upward movement of said belt wheels, and means for adjusting the radial length of said arms to adjust the tension of said belts.

4. In a tractor, the combination with a suitable frame of an axle mounted on the frame, ground wheels mounted in spaced relation on the axle, a differential drive mechanism revolubly mounted on said axle intermediate the ground wheels and operatively connecting the same, arms pivotally supported from said axle and adapted to extend either rearwardly or forwardly thereof and having yoke portions at their inner ends, bearing members slidably mounted within the yoke portions of said arms for receiving said axle and adjustable within the yoke portions to determine the radial length of said arms, a transverse axle mounted at the free ends of said arms, belt wheels revolubly mounted on the said axle in paired alinement with the ground wheels and traction belts operating over said paired belts and ground wheels to prevent extended traction surfaces, for the purpose set forth.

5. In a tractor the combination with a suitable frame of an axle mounted transversely across the frame and adjustable longitudinally therealong, ground wheels mounted in spaced relation on said axle, means for differentially driving said ground wheels, removable arms pivotally supported from said axle at opposite sides of said ground wheels and adapted to extend either rearwardly or forwardly thereof and having yoke portions at their inner ends, bearing members slidably mounted within said yoke portions of said arms for receiving said axle and adjustable therein to determine the radial length of said arms, a transverse axle removably supported by the free ends of said arms, belt wheels revolubly mounted on the said axle in paired alinement with the ground wheels, traction belts operating over said paired ground and belt wheels and means fixed to the frame for yieldingly resisting upward movement of the belt wheels.

1,275,601. CURRENT-RECTIFYING COMMUTATOR. FREDERICK W. REEVES, Pittsburgh, Pa. Filed Aug. 23, 1917. Serial No. 187,898. (Cl. 175—364.)



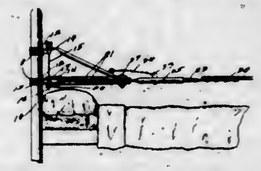
1. The combination with a shaft having a tapered shoulder formed thereon, of a supporting sleeve engaging over said shaft and provided with a correspondingly tapered end to engage over the shaft shoulder, a plurality of longitudinally interlocking commutator bars disposed about said sleeve in cylindrical form the ends thereof being provided with a groove, a pair of rings, disposed one on each end of said sleeve, the inner face of each being provided with a tapered portion corresponding to and engaging within the commutator bar ends, means carried by each end of said sleeve to forcibly retain said rings against said commutator ends, and means carried by the shaft to secure said sleeve to said shaft.

2. The combination with a shaft having a tapered shoulder formed thereon, of a supporting sleeve engaging over said shaft and provided with a correspondingly tapered end to engage over the shaft shoulder, a plurality of longitudinally interlocking commutator bars disposed about said sleeve in cylindrical form the ends thereof being provided with a groove, a pair of collector rings, disposed one on each end of said sleeve, the inner face of each being provided with a tapered portion corresponding to and engaging within the commutator bar ends, every other one of said commutator bars being connected at one end to one of said rings and the remaining bars to the other rings, means carried by each end of the sleeve to forcibly retain said rings against said commutator ends, and means carried by the shaft to secure said sleeve to said shaft.

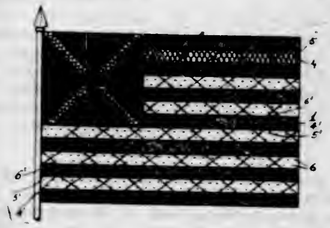
3. The combination with a shaft having a tapered shoulder formed thereon, of a supporting sleeve engaging over said shaft and provided with a correspondingly tapered end to engage over the shaft shoulder, a plurality of longitudinally interlocking, alternative live and dead commutator bars disposed about said sleeve in cylindrical form the ends thereof being provided with a groove, a pair of collector rings, disposed one on each end of said sleeve, the inner face of each being provided with a tapered portion corresponding to and engaging within the commutator bar ends, every other one of said live commutator bars being connected at one end to one of said rings and the remaining bars to the other rings, means carried by each end of the sleeve to forcibly retain said rings against said commutator ends, and means carried by the shaft to secure said sleeve to said shaft.

1,275,602. BED-TABLE. CHARLES C. REMO, Brooklyn, N. Y. Filed Jan. 31, 1918. Serial No. 214,733. (Cl. 45—82.)

An attachment of the class described comprising clamps adapted to be secured to a bed post and including supporting arms, a vertically disposed rod extending through said arms, a clamping member of substantially U-shaped formation associated with said rod and disposed in a horizontal position, the sides of said member having openings through which said rod extends and the bight portion having an enlarged opening therein, supporting arms extending through said enlarged opening and between the sides of said clamping member and pivotally connected to said rod on each side of the arm of one of the first named clamps, means on said rod and engaging said clamping member for retaining the last named supporting arms in horizontally disposed positions, a brace connecting said last named supporting arms with the upper end of said vertically disposed rod, and a table supported by the opposite ends of said last named arms.



1,275,603. PRESERVATION OF FLAGS. ISABEL RIVES, Washington, D. C. Filed July 8, 1914. Serial No. 849,797. (Cl. 2—187.)



1. A method of preserving old flags, consisting in first basting all parts of the flag to a backing sheet by alternating long stitches running first in one direction and then in another direction in staggered manner to flatten and spread all parts of the flag to original or normal position, and between each two adjacent long stitches making a short catch stitch to tie and hold all parts of the flag so flattened in original or normal position, said alternating long stitches being made from the lower edge of the flag toward the upper edge thereof, and, secondly, securing all parts of the flag to said backing sheet by alternating permanent stitches made first in one direction and then in another direction in staggered manner, and a short catch stitch between and connecting each two adjacent longer stitches.

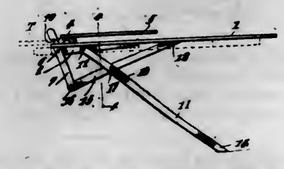
4. A restored flag, having a backing sheet of about the same size as the flag, and alternating long stitches made first in one direction and then in another direction in staggered relation, and a short catch stitch between each two adjacent longer stitches to connect the flag to the backing sheet, the stitches being made of different colored threads according to the color of the underlying design or field, the short stitches appearing mainly upon the front face of the flag and the longer stitches upon the backing, the more delicate or worn parts of the flag having the longer stitches upon the front face thereof in lines close together and overlapping to hold the worn material to the backing sheet.

[Claims 2 and 3 not printed in the Gazette.]

1,275,604. IRONING-BOARD. WILLIAM A. ROWE, Springfield, Mo. Filed Feb. 16, 1918. Serial No. 217,667. (Cl. 68—10.)

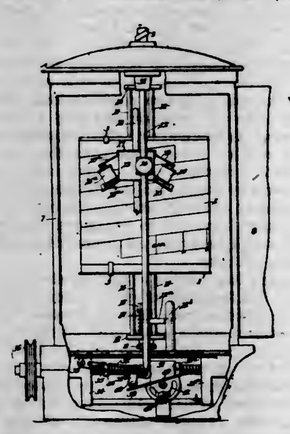
1. The herein described ironing board comprising a table, jaws pivoted to one end thereof and notched to engage the edge of an adjacent table top, a leg hinged beneath said table and made in two parts slotted intermediate their ends, and a brace pivoted at its lower end to said jaws and passing between said parts with its upper end resting against said table, its body having a pin engaging said slots.

2. The herein described ironing board comprising a table, a cleat secured beneath the same at its head end, a pair of jaws pivoted astride said cleat and notched where they project above the table, a leg pivoted astride said cleat and made in two parts having alined slots intermediate their ends and an extension foot at their lower ends, and a brace pivoted between the lower ends of said jaws and passing between said parts with its upper end resting beneath said table and its body bearing a pin moving in said slots.



3. In an ironing table, the combination with the table top and a cleat secured beneath the head end of said table top; of a pair of jaws pivoted astride said cleat and notched on their under side to engage the edge of an adjacent table top, a two-part leg pivoted astride said cleat and leading thence downward to the floor, a brace pivoted between the lower ends of said jaws and passing between said parts with its upper end resting beneath said table, and connections between the mid-length of this brace and the leg, for the purpose set forth.

1,275,605. RECORDING APPARATUS FOR MINE-HOISTS. GEORGE F. ROYER, Wilkes-Barre, Pa., assignor of two-thirds to Jennie H. Webb, Pittsburgh, Pa. Filed Oct. 26, 1917. Serial No. 198,675. (Cl. 234—1.)

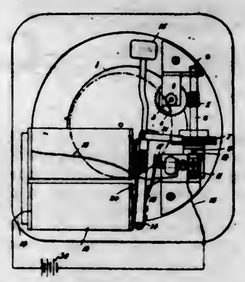


1. In an apparatus for recording the movements of mine hoists, the combination of a chart holding drum, a recorder adapted to coöperate with a chart on the drum, clock controlled means for rotating the chart drum and moving it bodily longitudinally of its axis, means controlled by movement of the hoist for moving the recorder longitudinally of the drum, and means controlled by the hoist signal devices for imparting an independent lateral movement to the recorder, for the purpose described.

8. In an apparatus for recording the movements of mine hoists, the combination of a chart holding drum adapted to rotate about a vertical axis, clock actuated means for controlling rotation of the drum, means for automatically feeding the drum axially as it is rotated, a recorder adapted to coöperate with a chart on the drum and having a supporting rod that extends downwardly therefrom, a lever on which the lower end of said rod rests, a screw shaft adapted to be rotated by the hoist, a nut mounted on but held against rotation by said shaft, and means on the nut for effecting a rocking of said lever as the screw rotates.

[Claims 2 to 7 and 9 to 14 not printed in the Gazette.]

1,275,606. ELECTRIC CLOCK. THOMAS RUSHTON, Tollington Park, London, England, assignor to Coventry Electric Clock Company Limited, London, England. Filed Apr. 18, 1914. Serial No. 832,966. (Cl. 58—41.)



1. In an electric clock the combination of a train of wheels, a worm engaging one member of said train and formed at one end as an electrical contact, a fixed contact serving as an abutment for the contact end of said worm, a spring pressing said worm longitudinally to close said contacts an electro-magnetic means for rotating said worm in order to wind the clock, and conducting means for electricity including a source of electricity from the contact to the electro-magnetic means.

2. In an electric clock the combination of a train of wheels, a worm engaging with one member of said train, an electro-magnet for rotating said worm in step-by-step fashion, a fixed contact serving as an abutment for one end of said worm and a spring pressing upon the other end of said worm to close said contact and to drive said train, and of such dimensions as to be fully stressed by a single stroke of said electro-magnet, and conducting means for electricity including a source of electricity from the contact to the electro-magnetic means.

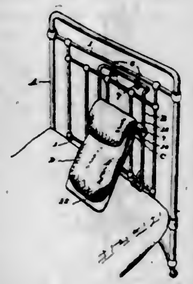
3. In an electric clock, the combination of a train of wheels, a worm engaging one member of said train, electro-magnetic means for rotating said worm to wind the clock, an electrical contact in the circuit of said electro-magnetic means operated by longitudinal motion of said worm, and a spring pressing upon one end of said worm, adapted both to control said electrical contact and to serve as the driving spring for said train, and conducting means for electricity including a source of electricity from the contact to the electro-magnetic means.

5. In an electric clock the combination of a train of wheels, a worm engaging one member of said train and formed at one end as an electrical contact, electro-magnetic means for rotating said worm in order to wind the clock including a ratchet wheel in the worm, a pawl engaging the ratchet wheel, and an armature of an electro-magnet carrying the pawl, a fixed contact in the circuit of said means serving as an abutment for the contact end of said worm, a spring pressing said worm longitudinally to bring said contact members into contact, in order to close the circuit of said electro-magnetic means, and a further contact in said circuit in operative connection with said electro-magnetic means for opening the circuit of the latter.

6. In an electric clock the combination of a train of wheels, a worm engaging with one member of said train, an electro-magnet for rotating said worm in step by step fashion, including a ratchet wheel on the worm, a pawl engaging the worm and an armature of the electro-magnetic means carrying the pawl, a fixed contact serving as an abutment for one end of said worm and a spring pressing upon the other end of said worm to close said contact and to drive said train, and of such dimensions as to be fully stressed by a single stroke of said electro-magnet.

[Claim 4 not printed in the Gazette.]

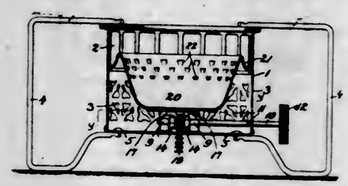
1,275,607. HEAD-REST. PERCY R. SAUNDERS, Antigonish, Nova Scotia, Canada. Filed Apr. 18, 1918. Serial No. 229,238. (Cl. 5—41.)



3. A head rest attachment for bedsteads, including an upright frame, means for rigidly securing the frame to the head of a bedstead, a cross bar adjustably mounted upon the upright frame, an inclined pillow supporting frame pivotally connected at its upper end to the cross bar, and a transverse pillow clamping bar having the extremities thereof bent laterally, one of the laterally bent ends being pivotally connected to the cross bar, while the other end is provided with latch means for detachably engaging the cross bar.

[Claims 1, 2, and 4 to 7 not printed in the Gazette.]

1,275,608. APPARATUS FOR CONSUMING FUEL. JACOB SCHAUB, Newark, N. J., assignor to American Linseed Company, a Corporation of New Jersey. Filed May 19, 1917. Serial No. 169,632. (Cl. 158—97.)



1. Apparatus for consuming fuel comprising in combination a casing, air ports in the casing, a fuel basket mounted in said casing, air ports in the fuel basket, and means for longitudinally adjusting the fuel basket in the casing, constituting means for regulating the rate of combustion of the fuel contained in the fuel basket.

[Claims 2 to 4 not printed in the Gazette.]

1,275,609. REVERSING-VALVE. HERMANN E. SCHILD, Pittsburgh, Pa. Filed Mar. 15, 1918. Serial No. 222,779. (Cl. 277—6.)

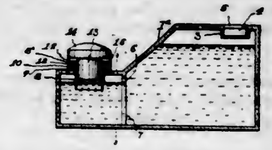


1. In a reversing valve mechanism, the combination of a horizontal valve seat provided with three ports opening from below, a sliding valve coöperating with said seat and comprising a dome arranged to connect two of said ports in each position, a water pan carrying said dome, and mechanism for reciprocating said valve.

6. In reversing valve mechanism, the combination of two horizontal valve seats each provided with a gas, a regenerator, and a stack port, all opening from underneath, a plate mounted to reciprocate on each of said seats and of a length sufficient to cover all three ports in all operative positions, connections between said plates whereby they move in unison, reciprocating mechanism operatively connected to said plates, and members carried by each plate and forming a conduit arranged in one position to connect the central port with one of the end ports of each seat and in its opposite position to connect the central port with the other end port of each seat.

[Claims 2 to 5 not printed in the Gazette.]

1,275,610. DISPENSING INK-BOTTLE. GEORGE SCHRODER, Berkeley, Cal. Filed Jan. 12, 1918. Serial No. 211,569. (Cl. 120—59.)



1. A dispensing ink bottle including a sealed main compartment and a comparatively small dipping well arranged at one side of the main compartment and having a mouth at the top thereof, said mouth being surrounded by an upstanding flange provided with laterally projecting short cam ribs, a tubular shell fitted in the mouth of the dipping well and extending downwardly to a point normally below the surface of the liquid therein, the upper end of the tubular shell being returned and provided with hooked lugs adapted to be rotated into a locking engagement with the before mentioned cam ribs of the flange, a stopper fitted in the upper end of the tubular shell, and locking means carried by the stopper for detachably engaging the tubular shell to hold the stopper in position.

[Claim 2 not printed in the Gazette.]

1,275,611. COOKING UTENSIL. WILLIAM C. SCHWAB, Canton, Ohio. Filed Nov. 26, 1917. Serial No. 203,894. (Cl. 53—8.)

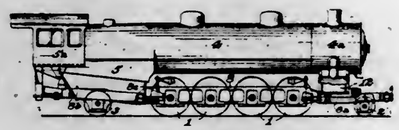


1. In a cooking utensil, a lid adapted to cover the said utensil having a centrally located knob on its upper side, one end of a supporting member inserted through the said knob and the said lid, the said supporting member being secured upon the under side of the said lid and being bent substantially at right angles at the point where it emerges from the top of said knob, the said bent portion extending substantially parallel to the upper surface of the said lid to a point opposite the periphery thereof, an aperture formed in the handle of the said utensil at a point adjacent the body of the said utensil,

the free end of the said supporting member being adapted to be inserted within the said aperture, the said free end of the said supporting member being bent near its free extremity to form a stop to limit the insertion of the said free end into the said aperture.

2. In a cooking utensil, a lid adapted to cover the said utensil having a centrally located knob upon its upper side, one end of a supporting rod inserted through an apertune in the said knob and the said lid, a nut secured upon the threaded inner end of the said supporting rod, the said rod being bent substantially at right angles at the point where it emerges from the said knob extending radially from the said knob toward the periphery of the said lid and terminating at a point substantially in a line with the periphery of the said lid and being bent slightly upward near its free end, a substantially horizontal portion extending from the side of the said utensil at a point adjacent its upper rim, a conical depression formed in the said horizontal portion, the said conical depression terminating in an elongated collar having an aperture therethrough adapted to receive the upturned end of the said supporting rod and the periphery of the said lid at the point opposite the said up-turned end of the said supporting rod being adapted to lie within the utensil when the said up-turned portion of the supporting rod is inserted in said aperture.

1,275,612. LOCOMOTIVE-ENGINE. FRANK F. SCOVILLE, Schenectady, N. Y. Filed Apr. 5, 1918. Serial No. 226,943. (Cl. 105—226.)



1. The combination, in a locomotive engine, of a main frame; wheels supporting said frame; a boiler, connected, at each of its ends, to said frame; a supplemental frame, articulated to the main frame, adjacent to one of its ends; an axle journaled in said supplemental frame, independently of the main frame; wheels fixed on said axle; and a draft appliance, connected to said supplemental frame.

2. The combination, in a locomotive engine, of a main frame; wheels supporting said frame; a boiler, connected, at each of its ends, to said frame; supplemental frames, articulated to the main frame, adjacent to its front and rear ends, respectively; axles journaled in said supplemental frames, independently of the main frame; wheels fixed on said axles; and draft appliances, connected to said supplemental frames.

3. The combination, in a locomotive engine, of a main frame; wheels supporting said frame; a boiler, connected, at each of its ends, to said frame; an integral supplemental frame, articulated to the main frame, adjacent to one of its ends; an axle journaled in said supplemental frame, independently of the main frame; wheels fixed on said axle; and a draft appliance, connected to said supplemental frame.

4. The combination, in a locomotive engine, of a main frame; wheels supporting said frame; a boiler connected, at each of its ends, to said frame; a supplemental frame, articulated to the main frame, adjacent to one of its ends; a truck, supporting said supplemental frame, and having its axle or axles journaled therein, independently of the main frame; and a draft appliance, connected to said supplemental frame.

5. The combination, in a locomotive engine, of a main frame; wheels supporting said frame; a boiler, connected, at each of its ends, to said frame; a supplemental frame, articulated to the main frame, adjacent to one of its ends; wheels supporting said supplemental frame; means for effecting the transmission of imposed weight between said wheels and the wheels supporting the main frame; and a draft appliance connected to the supplemental frame.

[Claims 6 to 12 not printed in the Gazette.]

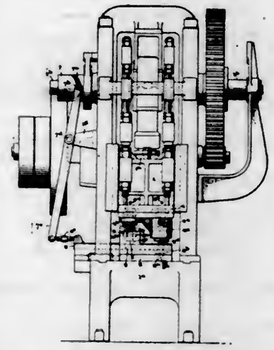
1,275,613. GAME. JOHN P. SEDLAK, JR., Winburne, Pa. Filed July 13, 1917. Serial No. 180,480. (Cl. 46—61.)



3. A game apparatus comprising a casing having an inlet opening in its upper end to receive marbles, obstructions in said casing, a series of compartments in the bottom of said casing, a runway arranged below said compartments, and means for retaining the marbles in said compartments before being allowed to enter said runway.

[Claims 1, 2, 4, and 5 not printed in the Gazette.]

1,275,614. DOUBLE-ACTING DRAWING-PRESS. HOWARD B. SHERMAN, Battle Creek, Mich. Filed Oct. 5, 1917. Serial No. 194,903. (Cl. 113—46.)



1. In a double acting drawing press, the combination of slides, a member carried by one of the slides and having a depending portion, a male blanking die attached to said member, and an inner male blank holder attached to the depending portion, a plurality of drawing punches attached to the other slide and operating through said member, one punch passing through the male blanking die and the other punch through the male blank holder, another member having a redrawing die, said redrawing die being positioned beneath and adapted to coöperate with the male blank holder carried by the depending portion, a projection on said last named member, a blanking and a drawing die attached to said projection, said blanking die being adapted to coöperate with the male blanking die of the first named member, said drawing dies being located in position on said last mentioned member to coöperate with the drawing punches.

2. In a double-acting press, the combination of slides; a member attached to one of the slides and having a depending portion; a blanking die carried by said member beside the depending portion; a blank holder attached to said depending portion; another member having a projection; a redrawing die on said member beside the projection and coöperating with the blank holder on the depending portion of the first named member; a blanking die and a drawing die attached to said projection, the blanking die coöperating with the blanking die on the first member; and drawing punches attached to the other slide one punch operating through the blanking dies with the drawing die and the other punch operating through the blank holder with the redrawing die.

3. In a double acting drawing press, the combination of slides, a member attached to one of the slides and having a depending portion, a blanking die attached to said member, a blank holder carried by the depending portion, a plurality of drawing punches attached to the other slide and operating through said member, another member having a redrawing die located beneath and adapted to coöperate with the blank holder, a projection on said member being provided with a drawing die adapted to coöperate with the die of the first named member, said last named member having a guide way therein extending beneath the drawing die of the projection and over the redrawing die, and a reciprocating slide operable in said guideway for transferring cups from the drawing to the redrawing die.

4. In a double acting drawing press, the combination of slides, a member carried by one of the slides and having a depending portion, a blanking die attached to said member beside the depending portion, and blank holder attached to the depending portion of said member, a plurality of drawing punches attached to the other slide and operating through said member, one punch passing through the blanking die and other punch through the blank holder; a second member having a projection, a redrawing die on said second member positioned beneath and adapted to coöperate with the male blank holder carried by the said depending portion; a blanking and a drawing die on said projection, said blanking die being adapted to coöperate with the blanking die of the first member, and said drawing dies being located in position on said second member to coöperate with the drawing punches.

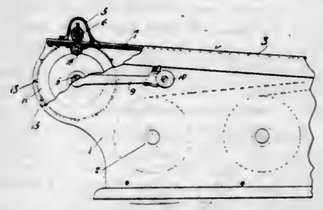
6. In a double acting drawing press, the combination of slides, a casting attached to one of the slides and having a depending portion, a blanking die attached to said casting beside the depending portion, a blank holder carried by the depending portion; a plurality of drawing punches attached to the other slide and operating through said member; another casting supported beneath the first and having a redrawing die located beneath and adapted to coöperate with the blank holder, said second casting having a projection, a drawing die on said projection adapted to coöperate with the blanking die of the first named casting, said last named casting having a guide way therein extending beneath the drawing die of the projection and over the redrawing die, and a reciprocating slide operable in said guideway for transferring cups from the drawing die to the redrawing die.

[Claim 5 not printed in the Gazette.]

1,275,615. AUTOGRAPHIC REGISTER. JOHN Q. SHERMAN, Dayton, Ohio. Filed Jan. 26, 1917. Serial No. 144,735. (Cl. 282—21.)

1. In a machine of the character described, the combination with a sprocket feeding device, of idler rolls mounted adjacent said sprocket feeding device so that one extends below the points and the other above the base of the paper engaging portion of the sprockets, said rolls being spaced apart so as to exert no tension on the paper engaged by said sprockets.

6. In an autographic register, the combination with an operating mechanism for feeding paper, of an operating handle therefor, a casing for the machine, and means on the casing and on the handle for coming into locking position to lock the handle at the close of each operation, until said means are positively released, said means comprising a hole in the handle and a spring pin on the casing with a camming surface on the handle to force said pin into hole-engaging position when moving the handle in one direction only.

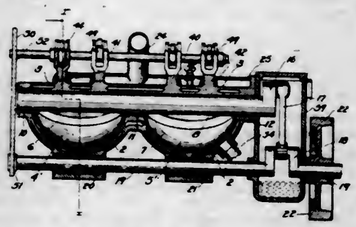


7. In an autographic register, the combination with sprockets for feeding perforated strips of paper in perfect registry, of a roll located over the sprockets and spring-pressed toward the same, and means controlled by the sprocket for maintaining said roll at all times at a position below the points of the sprockets but not as low as the full engaging point of said sprockets, and not so as to clamp the paper.

8. In an autographic register, the combination with a pair of metallic sprockets having radial pins thereon cut to a taper, a common metallic shaft for mounting said sprockets whereby great accuracy can be obtained, a stripper device for paper to lead such paper past the sprockets, said sprockets adapted to engage successive perforations in the paper to feed the same, and means independent of the sprockets and the common connecting shaft between them for providing a rolling surface beneath the paper as it is engaged by the said sprockets.

[Claims 2 to 5 not printed in the Gazette.]

1,275,616. INTERNAL-COMBUSTION ENGINE. BYRON O. SHORT, Pierce City, Mo., assignor of one-third to Joe J. Manlove and one-third to James A. Wright, Pierce City, Mo. Filed Sept. 8, 1915, Serial No. 49,587. Renewed June 3, 1918. Serial No. 238,036. (Cl. 123—18.)



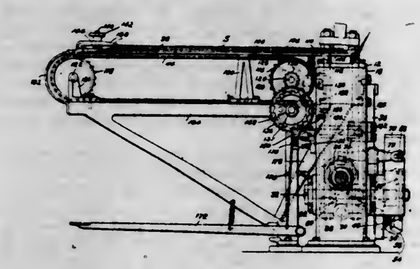
1. The combination with a housing having semi-spherical portions containing independent semi-spherical piston chambers, each of said portions having a protuberance, the said protuberance forming a journal bearing and each of said semi-spherical portions comprising water jackets, a rocker shaft journaled in the housing, pistons fixed to said rocket shaft and operable in the separate chambers, a crank shaft journaled in the protuberance bearings, and a rod connecting the rocker shaft and crank shaft.

3. The combination with a piston housing comprising semi-spherical piston chambers arranged in longitudinal alinement and having longitudinally alining bearing seats therein at the open side of the chambers and longitudinally alining protuberances extending from the base of the housing, forming journal bearings, a rocker shaft mounted in said bearing seats, a cover plate mounted on said housing having longitudinal channel seats on its under face for receiving and inclosing said rocker shaft and having standards thereon, a cam shaft revolubly mounted in said standards in parallel alinement with the rocker shaft, pistons fixed on the rocker shaft and pro-

jecting into said chambers in longitudinal alinement relative to the shaft, exhaust and intake valve mechanism operatively connected with the cam shaft mounted on said cover and opening therethrough to the piston chambers at both sides of said pistons, a crank shaft revolubly carried in the housing protuberances, an actuating rod connecting the rocker shaft with the crank shaft and a belt operatively connecting the crank shaft with the cam shaft, for the purpose set forth.

[Claim 2 not printed in the Gazette.]

1,275,617. BLANK-CUTTING MACHINE. RALPH C. SIMMONS, Beverly, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Feb. 7, 1916. Serial No. 76,640. (Cl. 164—24.)



1. A blank cutting machine having, in combination, a cutting die, a stationary bed for the die, means for automatically shifting the die to different positions on the bed, a movable cutting block, and means for actuating the block.

4. A blank cutting machine having, in combination, a cutting die, a stationary bed for the die, means for automatically shifting the die step by step across the bed to set the die for making a row of cuts transversely of a sheet of stock, means for automatically advancing the sheet longitudinally after the completion of a transverse row of cuts, a movable cutting block, and means for actuating the block.

9. A blank cutting machine having, in combination, a cutting block, a cutting die, a die positioning cam, a continuous connection between the die and cam, means to intermittently actuate the cam to shift the die step by step transversely of the machine, means to control the movement of the cam to prevent an under-feed or an over-feed of the die, and means to relatively move the die and cutting block to cut blanks.

19. A blank cutting machine having, in combination, a cutting block, a cutting die, means for moving the die back and forth transversely to the machine to make transverse rows of cuts, a conveyer for advancing sheet stock to the die, means for moving the conveyer, a ratchet and pawl escapement for controlling the movement of the conveyer, means to actuate the block to make a cut, devices on the block actuating means for engaging the pawl to operate the escapement, and means to place said devices in position to actuate the pawl after the die has completed the transverse row of cuts.

[Claims 2, 3, 5 to 8, and 10 to 18 not printed in the Gazette.]

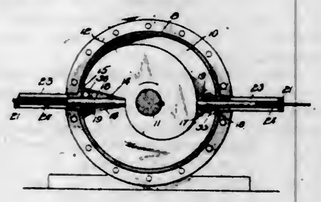
1,275,618. DAMPER. WILLIAM W. SLOCUM, Muskegon, Mich. Filed Aug. 22, 1916. Serial No. 116,826. (Cl. 126—296.)

A stove flue comprising a plurality of longitudinal partitions radiating edgewise from the center of the flue and spaced approximately 120° from each other, one of the said partitions being longer than the others, the shorter partitions having adjacent ends longitudinally spaced apart to provide passage-ways between the spaces embraced by the partitions, a damper plate arranged at each end of the said partitions, each damper plate being provided with trunnions extending in different planes containing the axis of the pipe and pivotally mounted whereby the axis of one damper plate is disposed diagonally



with respect to the axis of the other plate, and a connecting rod loosely connected to the damper plates and movable in the space between two of the partitions for opening both of the damper plates when one of the plates is actuated.

1,275,619. ROTARY GAS-ENGINE. CHARLES C. SMILEY, Gary, Ind. Filed Feb. 13, 1917. Serial No. 148,350. (Cl. 123—14.)



1. In a machine of the class described, the combination of a central cylindrical working chamber, a cylindrical compression chamber adjacent to each end thereof, a common shaft extending axially through all of the chambers, a cam shaped driving member mounted on the shaft within the working chamber and having a radial working face, a pair of diametrically opposite blades slidably mounted in the walls of the working chamber, springs tending to carry said blades inwardly toward the axis of the chamber, a cam shaped member mounted on the shaft within each of the compression chambers, a radial blade slidably mounted in the wall of each of said chambers, springs tending to carry said blades inward toward the axis of rotation, gas pressure connections from the compression chambers to diametrically opposite portions of the working chamber, and valves in said connections operable according to the rotation of the shaft for momentarily establishing communication between the gas pressure connections and the working chamber.

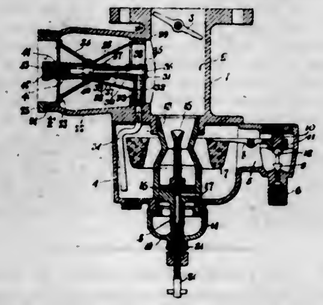
[Claims 2 and 3 not printed in the Gazette.]

1,275,620. CARBURETER. CHARLES D. SMITH, Dayton, Ohio, assignor to the Firm of Morner and Smith, Dayton, Ohio, a Copartnership consisting of Louis Morner and Charles D. Smith. Filed July 3, 1916. Serial No. 107,239. (Cl. 261—50.)

1. In a carbureter having a passageway leading to the intake of an engine and having an air opening communicating with said passageway, a valve to control said air opening, said valve being arranged to be opened by the suction in said passageway and having surfaces converging in the direction of its opening movement, and resilient fingers acting on said surfaces to resist the movement of said valve toward its fully open position.

2. In a carbureter having an air opening provided with a valve seat, a valve normally in engagement with said seat and having surfaces converging away from said seat, and a plurality of resilient fingers converging toward the inner portion of said valve and having their inner ends arranged to normally engage the converging surfaces of said valve and to ride over the same as said valve moves away from its seat.

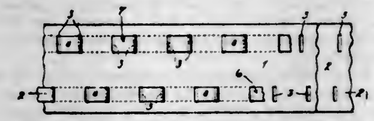
6. In a carbureter, a casing having a laterally extending opening and having a valve seat surrounding said opening, an inwardly opening valve in said casing to engage said valve seat, said valve having a cone-shaped portion extending away from the valve seat, a supporting structure mounted in said casing in alinement with said opening, and resilient devices carried by said structure to engage the cone-shaped portion of said valve to resist its inward movement, said supporting structure and said valve having parts coöperating to guide the valve in its movement toward and from its seat.



9. In a device of the character described, a casing having a lateral extension open at one end and provided with a valve seat, a valve mounted in the extension of said casing and having surfaces converging away from said valve seat, a collar mounted at a point remote from said valve seat, resilient devices carried by said collar to engage the converging surfaces of said valve, a supplemental gasolene nozzle carried by said collar, a valve to control said nozzle, and means carried by said air valve to actuate the last-mentioned valve to open said gasolene nozzle.

[Claims 3 to 5, 7, 8, and 10 to 16 not printed in the Gazette.]

1,275,621. BELT FOR TRANSMISSION OF POWER. ELTA CLIFTON SMITH, Springfield, Mo., assignor, by direct and mesne assignments, of one-half to Frederick Burton Cook and Martin William Ryan and one-half to Arthur Carson Lucas and Everett Vellesle Horner, Springfield, Mo. Filed Oct. 4, 1917. Serial No. 194,710. (Cl. 74—63.)



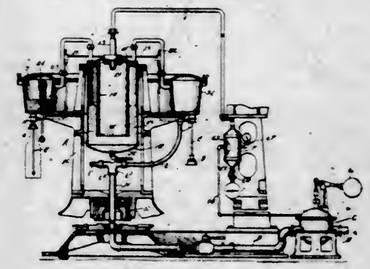
1. A belt comprising a plurality of layers provided with longitudinal rows of openings, the openings in one row being out of transverse alinement with the openings in the other row, and thongs serpentinely threaded through the openings in each row.

2. A belt comprising a plurality of layers provided with longitudinal rows of transversely extending openings therethrough, the openings in one row being out of alinement with the openings in the other row, and thongs serpentinely threaded through the openings in each row, the convolutions of said thongs being in staggered relation.

3. A belt comprising a plurality of layers in superposed relation, said superposed layers being provided with longitudinal rows of transversely arranged openings extending diagonally therethrough, and thongs serpentinely threaded through the openings in each row.

4. A belt comprising a plurality of superposed layers provided with longitudinal spaced rows of transverse openings extending transversely through the layers, and a thong laced through the openings in each row, the convolutions of one thong alternating with those of the other thong, said thongs lying in planes parallel with the edges of said layers, and the convolutions of each thong being free from one another.

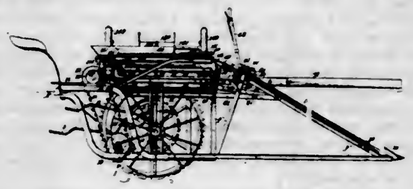
1,275,622. METHOD OF FILLING CARBONATED BEVERAGES IN RECEPTACLES. HORACE M. SMITH, Chicago, Ill., assignor to Liquid Carbonic Company, Chicago, Ill., a Corporation of Illinois. Filed May 18, 1916. Serial No. 98,299. (Cl. 226—15.)



1. A process of carbonating and filling liquids which consists in carbonating the liquid under a pressure higher than that ultimately desired, passing the liquid continuously through a pressure reducer and into the receptacles to be filled in a smooth stream of such minimum diameter at every point of its course as to avoid release of the dissolved gas and maintaining the amount of gas dissolved substantially undiminished thereby producing supersaturation, and maintaining pressure upon the liquid throughout its passage from the pressure reducer to the receptacle.

2. A process of carbonating and filling carbonated liquids which consists in carbonating the liquid at a pressure in excess of that ultimately required, maintaining a counter-pressure in the receptacles to be filled by continuously supplying counter-pressure gas thereto, passing the carbonated liquid through a pressure reducer to the receptacles to be filled, thereby reducing the pressure to that desired, and controlling the extent of pressure reduction from the pressure of the counter-pressure gas.

1,275,623. HARVESTING-MACHINE. WALTER P. SMITH, Phoenix, Ariz. Filed Nov. 2, 1916. Serial No. 129,145. (Cl. 56—131.)

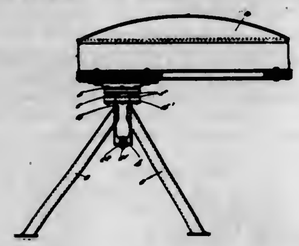


1. In a grain-heading machine, in combination, a gaging device, a grain-stalk feeding mechanism, means for kinking the grain-stalks until the grain-heads are forced downwardly into contact with said gaging device, and grain-stalk severing means.

12. In a grain-heading machine, automatic means for severing grain-stalks, projecting from the ground, at a substantially uniform distance from the grain-heads including grain-stalk severing means, gaging means, and means for relatively moving the grain-stalks and the gaging means lengthwise of said stalks.

[Claims 2 to 11 not printed in the Gazette.]

1,275,624. ADJUSTABLE SEAT FOR GUNNERS IN ARMED AEROPLANES AND THE LIKE. THOMAS OCTAVE MURDOCK SOPWITH, Kingston-upon-Thames, England. Filed Aug. 14, 1917. Serial No. 186,233. (Cl. 155—22.)



4. In a seat for a gunner in an aeroplane or the like, the combination of a seat *a*, of a plate *b* fixed eccentrically on the under side of said seat, of a pin *c* carried by said plate, of a stand *e* adapted to be fixed to the aeroplane or the like, of a socket *d* carried by said stand and adapted to receive the pin *c*, of a series of serrations *f* on the plate on the seat, of a series of similar serrations on the socket carried by the stand, of a reduced extension c^1 of the pin *c* passing through the bottom of the socket *d*, of a collar or enlargement c^2 on said extension exterior to the socket *d*, and of a spring *h* acting between the socket *d* and the pin *c*.

[Claims 1 to 3 not printed in the Gazette.]

1,275,625. STEERING DEVICE FOR AUTOMOBILES. BURTON P. STEDMAN, Peoria, Ill. Filed May 26, 1917. Serial No. 171,150. (Cl. 21—200.)



1. In combination with the axle, steering knuckles and tie-rod of a motor vehicle chassis, an operating rod clamped to the steering knuckle to move therewith, a clamping member connected to said operating rod and slidably mounted on said tie-rod, and a resilient member connected to said axle and to said clamping member, whereby, when the steering knuckles are moved in one direction, the resilient member will be compressed.

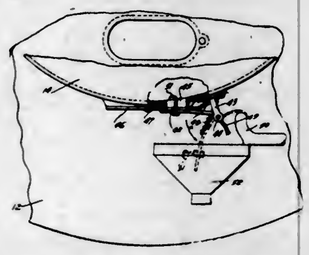
2. In combination with the axle, steering knuckles and tie-rod of a motor vehicle chassis, an operating rod connected to each steering knuckle, a clamping member connected to each operating rod and slidably mounted on said tie-rod, a resilient member connected to each clamping member, each resilient member being connected to the axle, whereby when the steering knuckles are moved in one direction, one resilient member will be compressed and when moved in the other direction, the other resilient member will be compressed so as to return the steering knuckles to their normal position when the turning pressure is released.

3. In combination with the axle, steering knuckles and tie-rod of a motor vehicle chassis, an operating rod connected to each steering knuckle, a clamping member mounted on each operating rod, said clamping member being composed of two parts and slidably mounted on the tie-rod, a resilient member connected to each clamping member and also to the axle, said resilient member including a casing, a rod member slidably mounted therein, and a coil spring embracing said rod and engaging a stop on the end thereof, said coil spring also bearing against one end of the casing so that when the steering knuckles are moved in either direction, one of the springs will be compressed.

4. In combination with the axle, steering knuckles and tie-rod of a motor vehicle chassis, a clip secured to said axle, a pair of resilient members detachably connected to said clip and diverging outwardly therefrom, a clamping member for each resilient member slidably mounted on the tie-rod of each of said clamping members being detachably connected to an operating rod, each of said operating rods being detachably secured to one of said steering knuckles so that when the steering knuckles are moved in either direction, one of said resilient members will be compressed.

5. In combination with the axle, steering knuckles and tie-rod of a motor vehicle chassis, a clip detachably secured to the axle, a pair of resilient members detachably connected to said clip and diverging outwardly therefrom, each of said resilient members including a casing, a rod having a stop on one end with a spring embracing the rod, and having one end engaging the stop and the other end engaging one end of the casing, a pair of clamping members slidably mounted on the tie-rod, one of said resilient members being connected to each clamping member, an operating rod connected to each clamping member and secured to one of said steering knuckles, whereby, when the steering knuckles are moved, one of said springs will be compressed.

1,275,626. COTTON-PLANTER. OTTO J. SWENSON, Los Angeles, Cal., assignor of one-half to Urbane C. Swenson, Los Angeles, Cal. Filed Sept. 4, 1917. Serial No. 189,672. (Cl. 221—123.)

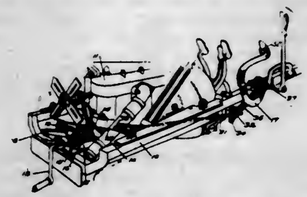


1. In a cotton planter, a cylindrical seed container having discharge openings through its periphery, brackets extending from the container adjacent the openings, plates pivotally connected to the brackets in position to close the openings, trip fingers extending from the plates, a trip arm fixed in the path of travel of the trip fingers, springs connected to the plates for closing the plates, and hooks carried by the plates and extending through the discharge openings for pulling the seed through the openings.

2. In a cotton planter, a cylindrical seed container having discharge openings in its periphery, plates pivotally mounted in position to cover the openings; said plates having graduated openings adapted to register with the discharge openings so as to vary the sizes of the outlets; escape plates pivotally mounted in position to close the outlet openings, springs for holding the escape plates closed, trip fingers extending from the escape plates, a trip arm mounted in the path of travel of the trip fingers, and hooks carried by the escape plates and extending through the outlet openings to pull the seed through the openings.

1,275,627. RATCHET MECHANISM FOR ENGINE-STARTERS. JOHN F. TEEL, Los Angeles, Cal. Filed July 26, 1917. Serial No. 182,990. (Cl. 74—54.)

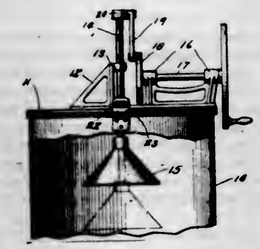
1. A starter for internal combustion engines, comprising a ratchet wheel fixed upon the crank shaft of an engine, a bifurcated cranking lever having bearing portions rotatably mounted upon the crank shaft at opposite sides of the ratchet wheel, a pawl pivotally mounted in the bifurcation of the cranking lever in position to engage the ratchet wheel, a cam finger extending from the pawl and adapted to engage a rigid part of the engine when the cranking lever swings backwardly to its normal position, so as to raise the pawl out of engagement with the ratchet wheel, a link fitting between the bifurcated portions of the cranking lever, and a link pin pivotally connecting the link to the cranking lever; the link pin,



the pawl pivot, and the contacting face of the pawl being substantially in a straight line and the contacting face being at substantially a right angle to this straight line and the contacting faces of the ratchet wheel teeth being at substantially right angles to the straight line when in contact with the pawl.

[Claim 2 not printed in the Gazette.]

1,275,628. WASHING-MACHINE. NATHAN D. THOMPSON, Jr., St. Louis, Mo., assignor to The Almetal Manufacturing Company, Maplewood, Mo., a Corporation of Missouri. Filed Sept. 6, 1917. Serial No. 189,981. (Cl. 68—19.)



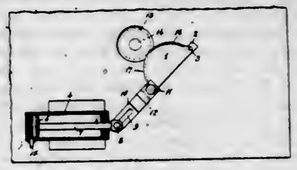
1. The combination with a washing machine having a lid, a shaft reciprocating therethrough, and a member on the body of the washing machine adjacent to the edge of the lid, of a locking member arranged for sliding movement on the lid and adapted when in one position to engage the member on the body of the washing machine to lock the lid in closed position and when in another position to directly engage the reciprocating shaft to lock the same in an elevated position.

3. The combination with a washing machine having a hinged lid, a shaft arranged for reciprocation through said lid, and a keeper on one side of the body of the machine, of a locking bar arranged on the lid, one end of which bar is adapted to engage in said keeper to lock the lid in closed position and the opposite end of said bar being adapted to engage a shoulder on the shaft to lock it against movement.

[Claim 2 not printed in the Gazette.]

1,275,629. SHEARS FOR GLASS BLANKS. PARKE H. THOMPSON, Millville, N. J., assignor to Millville Machine Company, Millville, N. J., a Corporation of New Jersey. Filed Feb. 16, 1915. Serial No. 8,448. (Cl. 49—14.)

1. Apparatus for cutting off parison blanks comprising, in combination with a table, a flat edged shear having one end in contact with the table, a link having one end in contact with the table but recessed upon its lower side to receive the shear end, and a pin through both link and shear end uniting them together the end of said pin being detachably inserted in the table top.



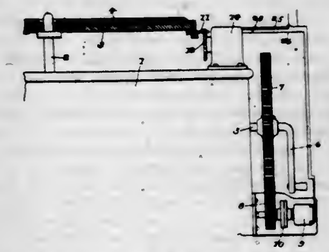
2. Apparatus for cutting off parison blanks comprising, in combination with a table, a semi-circular shear of sheet metal having half of its curved contour provided with an edge on the upper surface and the other half with an edge on the lower surface and having its diametrally opposite portions shaped as square ended lugs, a link having one end in contact with the table and its lower surface recessed to receive an end of the shear, registering holes in the engaged ends of link and shear, and a pin adapted to drop easily through said holes and into a bearing in the table top.

3. A semi-circular shear for glass provided with diametrically opposite attaching lugs half of the curved contour having a cutting edge on the lower surface of the shear and the other half having a cutting edge on the upper surface of the shear.

4. A shear member for use in glass cutting apparatus, said member having a curved contour at its cutting edge, one portion of the cutting edge being on the lower surface of said member and another portion of such cutting edge being on the upper surface of the member, together with means for holding the said member in either one of two reversed positions, substantially as described.

5. A shear member for use in glass cutting apparatus, said member having a convex contour at its cutting edge, one portion of the cutting edge being on the lower surface of said member and another portion of such cutting edge being on the upper surface of the member, together with means for holding the said member in either one of two reversed positions, substantially as described.

1,275,630. AUTOMATIC WINDING MEANS FOR TALKING-MACHINES. HARRY RANDOLPH VAN DEVENTER, Sumter, S. C., assignor to Splitdorf Electrical Company, Newark, N. J., a Corporation of New Jersey. Original application filed Oct. 12, 1914, Serial No. 866,270. Divided and this application filed Mar. 22, 1918. Serial No. 223,907. (Cl. 185—40.)



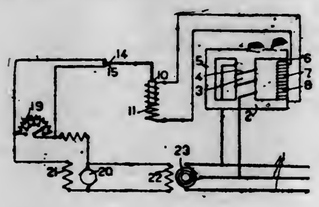
1. An attachment for spring motor operated talking machines of the motor inclosed type, including in combination, an inclosed electric motor located outside of the casing of the talking machine, driving connections between the electric motor and the normal spring winding shaft, and controlling means located outside of the casing for controlling the operation of the electric motor whereby said electric motor automatically maintains said spring motor wound, said controlling means including a controlling wheel, devices whereby said controlling wheel is moved in one direction by a moving part of the talking

machine for establishing the electric circuit leading to the electric motor and devices whereby said controlling wheel is automatically moved in the opposite direction for breaking said circuit.

3. An attachment for spring motor operated talking machines of the motor inclosed type including in combination, an inclosed electric motor located outside of the casing of the talking machine, driving connections between the electric motor and the normal spring winding shaft and controlling means located outside of the casing for controlling the operation of the electric motor whereby said electric motor automatically maintains said spring motor wound, said controlling means including a star wheel operated in one direction by a moving part of the machine, a shaft having a ratchet connection with said star wheel whereby it is moved with the star wheel when operated by the talking machine, a controlling wheel operated by said shaft and devices whereby said controlling wheel makes and breaks the electric circuit for the electric motor and means for turning the controlling wheel independent of the movements of the talking machine for breaking the electric connection to the motor.

[Claim 2 not printed in the Gazette.]

1,275,631. DEVICE FOR TRANSMITTING FLUCTUATIONS IN THE VOLTAGE OR CURRENT OF AN ALTERNATING-CURRENT SYSTEM TO ELECTRO-RESPONSIVE OR MAGNETICALLY-OPERATED DEVICES. GERARDUS JACOBUS VAN SWAAY, Delft, and HENRI ISAÄC KNUS, Hengelo, Netherlands. Filed Jan. 23, 1915. Serial No. 3,869. (Cl. 171—119.)



In an electric current system, an alternating current generator, a direct current exciting generator adapted to supply the magnet field coils of said alternating current generator with direct current, a transformer comprising a core having three legs of different magnetic resistances so aarnged and connected that a magnetic flux induced in one of said legs can divide and pass through the remaining legs with different magnetic resistances, a primary winding on said first mentioned leg so proportioned and connected that under normal conditions one of said remaining legs is saturated with lines of force and the other of said remaining legs is unsaturated, conductors connecting said primary winding to the mains of said alternating current generator, a secondary winding arranged on said unsaturated leg only for producing a secondary electromotive force, fluctuating disproportionately with fluctuations in the voltage impressed upon said primary winding, conductors leading from said secondary winding, an electro-responsive device connected to said conductors, contacts adapted to be opened and closed in rapid succession by said electro-responsive device, conductors leading from said contacts, and a field resistance of said exciting generator connected to said conductors and in the field windings of said exciting generator.

1,275,632. FOLDING CRIB. HOMER VIDRINE, Houston, Tex., assignor of one-half to L. L. Broussard, Houston, Tex. Filed Feb. 9, 1918. Serial No. 216,204. (Cl. 5—58.)

2. A device of the character described including a pair of legs, spaced apart, a fixed side member supported by said legs, an arm attached at one end to each leg and projecting therefrom, said arms being arranged underneath said side member, a mattress retainer pivoted at its respective ends to the free ends of said arms, legs hinged to and supporting said retainer, end members hinged to the respective ends of said retainer, a front side member hinged to the front side of said retainer, said end members and front side member being foldable upon the re-



tainer, means whereby the ends of said front side member may be interlocked with the corresponding end members, lugs carried by the upper ends of the first mentioned legs, each lug being provided with an orifice, and tying cords passing through said orifices, and provided to be secured around said retainer to secure the device in collapsed position.

[Claim 1 not printed in the Gazette.]

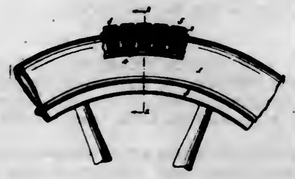
1,275,633. TIRE-PROTECTOR. GUY B. WAITE, New York, N. Y. Filed Feb. 3, 1916. Serial No. 75,989. (Cl. 152—16.)



1. A tire-protector comprising a plurality of tread-blocks, each thereof consisting of a case extending transversely of the tire and having a seat conforming substantially with the tread portion thereof, outwardly extending side flanges formed along the opposite side edges of said seat and constituting retaining and wearing members, a spring metal strip secured to said case and extending from the opposite ends thereof, a resilient traction member confined in said case between the side flanges thereof and consisting of fabric layers disposed to present an edgewise wearing surface, and means for detachably securing the free ends of said spring metal strip to the tire.

2. A tire tread block consisting of a case extending transversely of the tire and having a seat conforming substantially with the tread portion thereof, outwardly extending side flanges formed along the opposite side edges of said seat and constituting retaining and wearing members, a spring metal strip secured to said case and extending from the opposite ends thereof, a resilient traction member confined in said case between the side flanges thereof and consisting of fabric layers disposed to present an edgewise wearing surface, and means formed on the free ends of said spring metal strip for detachable connection to the tire.

1,275,634. WHEEL-TIRE. GUY B. WAITE, New York, N. Y. Filed July 15, 1916. Serial No. 109,487. (Cl. 152—16.)



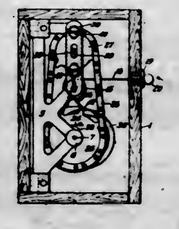
1. In a shoe for a pneumatic tire, a flexible outer cover section connected to the shoe, a plurality of transverse

tread members cemented to said cover section, channel retainers inclosing said tread members for side and vertical support, and wear-plates extending vertically through said tread members and seated upon the bottom wall of said retainers.

4. In combination, a flexible cover section, a plurality of transverse tread members secured to said cover section, each of said tread members consisting of a plurality of fabric strips disposed to present an edgewise traction surface, channel retainers inclosing said tread members for side and vertical support, and wear-plates extending through said tread members and seated upon the bottom wall of said retainers.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,275,635. ATTACHMENT FOR PHONOGRAPHS. WILLIAM H. WEAVER, Pittsfield, Mass. Filed Mar. 26, 1918. Serial No. 224,828. (Cl. 185—39.)



1. In a sound reproducing machine, the combination with a driving mechanism, including a winding shaft, for rotating the sound record, of means for revolving said winding shaft, and including oppositely arranged supports, a separate shaft revolubly mounted on the supports, a drum mounted to rotate with said last-mentioned shaft and carrying a flexible pull member secured thereto at one end and having a free end wound peripherally thereon, means for adjusting the relative position of said shafts, and means movably connecting said drum shaft with said winding shaft for rotating the winding shaft when the drum is revolved through the medium of the pull member.

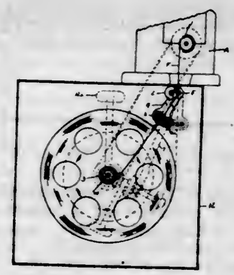
4. In a sound reproducing machine, the combination with driving mechanism, including a main winding shaft, for rotating the sound record, of means for revolving the main winding shaft, and including oppositely arranged supports, an auxiliary winding shaft adjustably mounted on the supports, means for movably connecting said auxiliary winding shaft with the main winding shaft for rotating the same, a sprocket mounted to rotate with the auxiliary winding shaft, a drum shaft mounted to rotate on said supports and arranged in parallel relation to the auxiliary winding shaft, a separate sprocket of larger circumference than the sprocket before mentioned and movably mounted on the drum shaft, means including a pull member for rotating said last-mentioned sprocket with the drum shaft in one direction, an endless belt carried on said sprockets, and means for automatically rewinding the pull member on the drum after being unwound.

[Claims 2 and 3 not printed in the Gazette.]

1,275,636. FILM-TAKE-UP DEVICE. WILLIAM WENDERHOLD, New York, N. Y., assignor to Cru Patents Corporation, a Corporation of New York. Filed July 20, 1915. Serial No. 40,961. (Cl. 242—55.)

2. In a motion picture apparatus, a film take up reel, a guide arm for the film, a friction disk for driving said reel, means for controlling the friction disk by said guide arm, the frictional engagement of said disk being controlled by the change in position of the film when passing through the guide arm to the film take up reel.

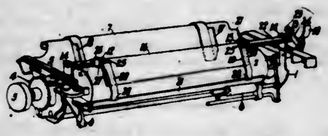
4. In a motion picture apparatus, a film take up reel, a pivotally mounted guide arm for the film, a variable speed drive for the film take up reel, a pivoted arm controlled by the movement of said guide arm, a connection between said arm and said variable speed drive, and means actuated by the movement of said arm relative to its connection with said variable speed drive for controlling the speed of said variable speed drive.



6. In a motion picture apparatus the combination with a take up reel, of means for rotating said take up reel comprising a friction disk, means for rotating said friction disk, a pivotally mounted guide for the film and positioned in the path of travel thereof leading to said take up reel, an arm associated with said guide to move coincidently therewith and means controlled by the movement of said arm for controlling the movement of said friction disk.

[Claims 1, 3, and 5 not printed in the Gazette.]

1,275,637. TYPE-WRITING MACHINE. LESTER A. WEAVER, Brooklyn, N. Y., assignor to Underwood Typewriter Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 4, 1917. Serial No. 140,512. (Cl. 197—140.)



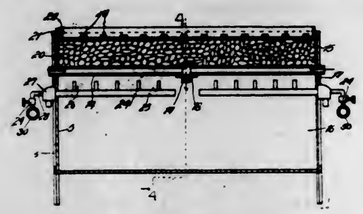
1. In a bookkeeping equipment, the combination with a typewriting machine, having alining pins shiftable to ineffective position, of a work-sheet having perforations so as to form a removable shoulder adapted to be positioned against said pins, when portions of the sheet are removed along said perforations.

3. In a bookkeeping equipment, the combination with a typewriting machine, having alining pins shiftable to ineffective position, of work-sheets of various types having shoulders adapted to be positioned against said pins, to aline said sheets simultaneously, said shoulder on at least one sheet being formed as part of a detachable perforated extension of said sheet.

5. In a typewriting machine, the combination with a rotatable platen and a paper guide adapted to receive paper which has been passed already around said platen, of feed rolls adapted to be cast off from said platen, alining pins adjacent the ends of said paper guide, a shaft on which said alining pins are mounted to project them substantially vertically from the surface of said guide or rotate them backwardly beneath its surface, a sleeve supporting said guide and surrounding said shaft, and projections from said paper guide forming edge guides therefor, and continued and extended to form overlying guide fingers therefor.

[Claim 2, 4, and 6 to 24 not printed in the Gazette.]

1,275,638. APPARATUS FOR HEATING CASTINGS. ROBERT W. WIEDERWAX, Atlantic City, N. J., assignor of one-half to Carlton Geist, Atlantic City, N. J. Filed Feb. 11, 1918. Serial No. 216,659. (Cl. 263—9.)



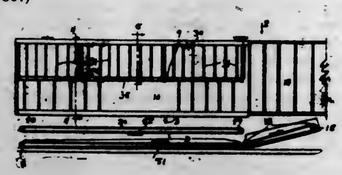
1. In apparatus of the character described, a casing having an upper chamber and a substantially closed lower chamber, a filling of refractory material arranged within the upper chamber, approximately horizontal pipes arranged within the top of the lower chamber to supply air therein and serving to support said filling, a plurality of burners arranged within the lower chamber beneath the pipes, and spacing bars arranged above and in proximity to the filling.

2. In apparatus of the character described, a casing having an upper chamber and a substantially closed lower chamber, a filling of refractory material arranged within the upper chamber, an open frame disposed within the upper chamber, spacing bars supported by the open frame, approximately horizontal pipes arranged within the top of the lower chamber to supply air therein and serving to support said filling, a plurality of burners arranged within the lower chamber beneath the pipes, and means to supply a fluid fuel to the burners.

6. In apparatus of the character described, a casing, horizontal air supply pipes arranged therein and dividing the casing into upper and lower chambers and having outlet openings disposed between the ends of the pipes, beams arranged within the upper chamber, transverse elements carried by the beams and disposed upon the tops of the pipes, spacing bars disposed upon the top of the beams and secured thereto, a filling of refractory material arranged within the upper chamber, and gas burners disposed within the lower chamber beneath said filling.

[Claims 3 to 5 not printed in the Gazette.]

1,275,639. FEED DEVICE FOR HARVESTING-MACHINES AND THE LIKE. ELMER C. WOODWARD, Hatton, Wash. Filed Nov. 11, 1916, Serial No. 130,881. Renewed June 17, 1918. Serial No. 240,564. (Cl. 56—89.)

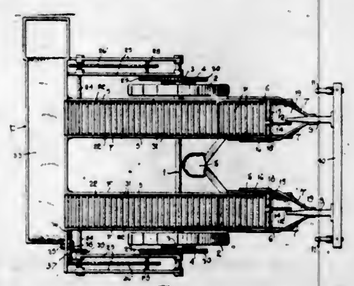


1. In combination with a harvesting machine platform draper, a draper frame supported above said platform, a secondary draper mounted within said frame and extending the full length of said platform, said secondary draper lying in a plane substantially parallel with the plane of said platform, cleats secured to said secondary draper, and clips mounted on said cleats, said clips extending over and engaging said draper frame for scraping said frame and causing material cast on the upper face of said secondary draper to be carried to and dumped on said platform.

3. In combination with a harvesting machine platform draper, a reel positioned above and extending in front of said platform draper, a screen support, a screen carried by said support and disposed at the rear of said draper, a cutter bar extending along the front of said draper, a draper frame secured to said support, a secondary draper positioned in superposed relation with said platform draper, for causing that grain cut by said cutter bar and thrust against said screen by said reel to be compressed between said platform draper and said secondary draper, cleats secured to said secondary draper, and clips mounted on said cleats, said clips extending over and engaging said draper frame for cleaning said frame and causing material cast on the upper face of said secondary draper to be carried to and dumped on said platform.

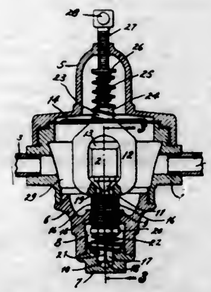
[Claim 2 not printed in the Gazette.]

1,275,640. BEAN-HARVESTER. WILLIAM A. WYNANT, Deertrail, Colo. Filed Dec. 26, 1917. Serial No. 208,951. (Cl. 55—137.)



A device of the character described comprising a wheel supported axle, a frame mounted thereon, a ground engaging element carried by one end of the frame, transversely disposed shafts carried by the opposite end portions of the frame, an endless conveyer disposed around said shafts, one of said shafts extending beyond the side of the frame, a member interposed between the extended portion of the shaft and the axle, a shaft supported by said member and operatively connected with the axle, and an operative connection between the shaft of the member and the extended portion of the shaft of the frame.

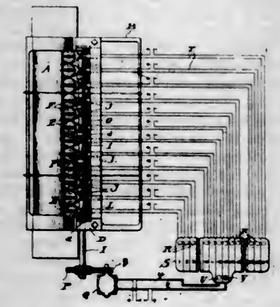
1,275,641. PRESSURE-REGULATOR. HARRY H. ARMSTRONG, Chicago, Ill., assignor to Fidelity Brass Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed July 16, 1915. Serial No. 40,265. (Cl. 50—23.)



1. A pressure regulator comprising a casing, a valve in said casing, a diaphragm for controlling said valve, said casing being recessed to form chambers, and a plunger attached to said diaphragm and coöperating with said chambers to form a compound dash-pot.

[Claim 2 not printed in the Gazette.]

1,275,642. INK-FOUNTAIN-ADJUSTING DEVICE. HENRY F. BECHMAN, Battle Creek, Mich., assignor to Duplex Printing Press Company, Battle Creek, Mich., a Corporation of Michigan. Filed July 24, 1914. Serial No. 852,840. (Cl. 101—365.)



1. In combination a fountain having supply regulating devices, electrically controlled means for adjusting the said devices, and means for throwing said electrically controlled means into or out of action located at a point remote from the fountain.

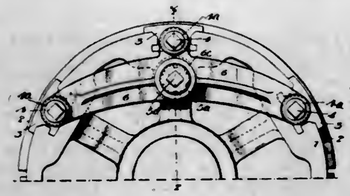
3. In combination with an ink fountain having an ink regulating plate and screws for adjusting said plate; of electrically controlled means for independently operating said screws to increase or diminish the amount of ink supplied from the fountain, and means for controlling said electrical means located at a point remote from the fountain.

13. In combination with an ink fountain having a roll, a scraper, and a series of adjusting screws, a gear on each screw, a clutch for locking the gear to the screw, a drive shaft carrying gears meshing with the gears on the screw, means for operating said shaft, means for throwing the clutch of any screw into engagement with its gear to cause said screw to be operated; and electro-magnets controlling the clutch operating means, a series of push buttons and electrical connections whereby said magnets may be controlled from a point remote from the fountain; an electrical motor for operating said drive shaft, and connections for controlling the operation of said motor.

14. In combination a fountain having supply regulating devices, means for adjusting the said devices, and means for throwing said adjusting means into or out of action located at a point remote from the fountain.

[Claims 2 and 4 to 12 not printed in the Gazette.]

1,275,643. PLATE-CLAMPING MEANS FOR ROTARY CYLINDERS. HENRY F. BECHMAN, Battle Creek, Mich., assignor to Duplex Printing Press Company, Battle Creek, Mich., a Corporation of Michigan. Filed May 3, 1915. Serial No. 25,525. (Cl. 101—378.)

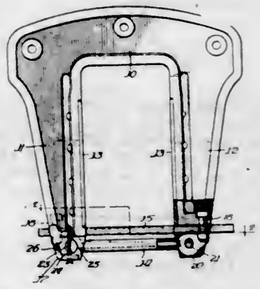


1. In combination with a plate cylinder having a plurality of plate clamps; of a yoke adjustably attached to the end of the cylinder and having outwardly projecting radiating arms; clamp adjusting screws engaged with the extremities of said arms; and a threaded member extending axially parallel with the cylinder and rotatably connected with said yoke at the junction of the arms thereof and nearer the axis of the cylinder than any of the clamps; there being a threaded engagement between the cylinder and the member, whereby by turning said threaded member the yoke may be adjusted to or from the end of the cylinder to simultaneously shift the clamps.

5. In combination with a plate cylinder having a threaded member at its end; plate clamps, and plate clamp adjusting bolts; of a yoke connected with the clamp adjusting bolts, and a sleeve bolt having a threaded engagement with said yoke and having an internally threaded portion engaging the threaded member attached to the cylinder.

[Claims 2 to 4 not printed in the Gazette.]

1,275,644. TRUCK-PEDESTAL. FREDERIC H. BENDER, Chicago, Ill., assignor to American Steel Foundries, Chicago, Ill., a Corporation of New Jersey. Filed June 18, 1917. Serial No. 175,404. (Cl. 105—113.)



1. A car truck pedestal including associated jaws with spaced projections, a tie strap and a bar mounted between said projections serving to close the opening between the jaws, said tie strap and bar being secured to said jaws independently of each other.

2. A car truck pedestal including associated jaws, a tie strap closing the openings between said jaws, means for securing the tie strap to the jaws, and a bar extending between and secured to said jaws forming a lock for the tie strap securing means.

[Claim 3 not printed in the Gazette.]

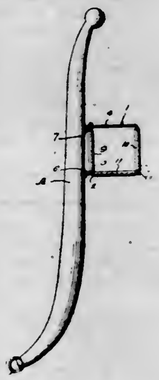
1,275,645. POTATO-PLANTER. PAOLO DI BENEDETTO, Fair Haven, Vt., assignor of one-fourth to Charles Richard Horten and one-fourth to Augusta Duri, Fair Haven, Vt. Filed Aug. 8, 1917. Serial No. 185,203. (Cl. 193—1.)



1. A potato planter including a platform, a shallow hopper arranged upon said platform, a potato dropping tube depending from said hopper, a potato engaging finger centrally journaled within said hopper, operating means for said finger, a potato feeding pipe having its lower outlet end arranged slightly spaced above the bottom of said hopper out of alinement with said tube, the path of movement of said finger being between said pipe and the bottom of the hopper and over said tube and a feed-controlling device for said pipe having a part lying in the path of said finger for actuating the device by the movement of the finger.

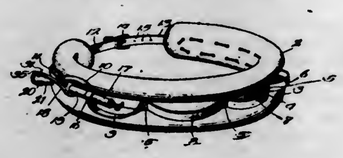
[Claim 2 not printed in the Gazette.]

1,275,646. HAME ATTACHMENT. EDDY R. BILDERBACK, Buffalo, Tex. Filed Apr. 11, 1918. Serial No. 227,925. (Cl. 54—63.)



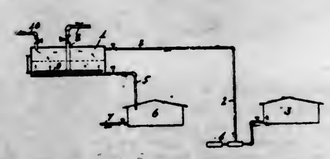
In a device of the character described, a substantially rectangular frame consisting of two opposed substantially L-shaped members detachably secured together at their ends, and anti-friction members carried by said frame on the end and bottom bars of the same so as to support and guide a hand line inserted through the frame.

1,275,647. LIFE-BELT. SWAN P. BJERRE, Chicago, Ill. Filed July 2, 1917. Serial No. 178,076. (Cl. 9—17.)



The combination with an air-buoyed life-belt consisting of a pair of layers with a depression or space therebetween, of an air-valve for said belt, a strip having a series of hand-holds thereon and secured in said depression, an air-pump removably mounted in said depression, a flexible connection between said air-pump and said air-valve, and a valve-adjusting instrument adjustably mounted on said flexible connection.

1,275,648. PROCESS OF PRODUCING GASOLENE. JOHN C. BLACK, Los Angeles, Cal., assignor to Standard Oil Company, Richmond, Cal., a Corporation of California. Filed Feb. 21, 1916. Serial No. 79,525. (Cl. 196—27.)



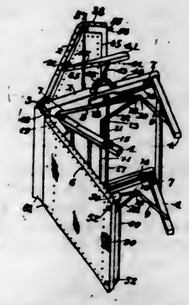
1. The process of producing gasolene which consists in a conversion of a cut in the fractional distillation of petroleum whose boiling points lie within the final boiling point of the gasolene cut and whose Baumé gravity lies below that of said gasolene cut, by absorbing in said low gravity cut a hydrocarbon gas at approximately normal temperature, and subsequently distilling said gas-treated cut and recovering therefrom a cut identical in its gravity, its boiling-point range, and its vapor tension with gasolene obtained from the natural distillation of petroleum.

2. The process of producing gasolene which consists in a conversion of a cut in the fractional distillation of petroleum whose boiling points lie within the final boiling point of the gasolene cut and whose Baumé gravity lies below that of said gasolene cut, by absorbing in said low gravity cut natural gas at approximately normal temperature, and subsequently distilling said gas-treated cut and recovering therefrom a cut identical in its gravity, its boiling-point range, and its vapor tension with gasolene obtained from the natural distillation of petroleum.

3. The process of producing gasolene which consists in taking that cut in the fractional distillation of petroleum, whose initial boiling-point range overlaps the final boiling-point of the gasolene cut of said distillation, and whose Baumé gravity lies below that of said gasolene cut, and converting those fractions of the cut so taken which are identical in boiling point with certain fractions of said gasolene cut, by causing the absorption of a hydrocarbon gas at approximately normal temperature by the cut so taken, and then fractionally distilling said gas-treated cut and recovering therefrom the converted fractions in a cut identical in its gravity, boiling-point range and vapor tension with gasolene obtained from the natural distillation of petroleum.

4. The process of producing gasolene which consists in taking that cut in the fractional distillation of petroleum, whose initial boiling-point range overlaps the final boiling-point of the gasolene cut of said distillation, and whose Baumé gravity lies below that of said gasolene cut, and converting those fractions of the cut so taken which are identical in boiling point with certain fractions of said gasolene cut, by causing the absorption of natural gas at approximately normal temperature by the cut so taken, and then fractionally distilling said gas-treated cut and recovering therefrom the converted fractions in a cut identical in its gravity, boiling-point range and vapor tension with gasolene obtained from the natural distillation of petroleum.

1,275,649. FOLDING CHAIR. FRANK BLANDO, New York, N. Y. Filed July 12, 1916. Serial No. 108,871. (Cl. 155—27.)



4. In a folding chair the combination with a seat frame, of a back frame hinged thereto, latches at the sides of the back frame for securing said frame in a predetermined position with respect to the seat frame, depending headed bolts near the top of the back frame, a cross bar mounted on said bolts, springs coiled about said bolts for normally holding the cross bar down against the heads of the bolts, and wires connecting the latches with said cross bar whereby said latches will be retracted when the cross bar is raised.

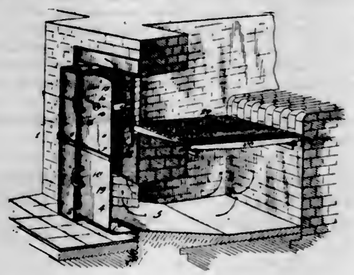
6. In a folding chair the combination with a seat frame, of a back frame hinged thereto, a latch for holding the back frome at a predetermined position with respect to the seat frame, an extension frame hinged to the upper end of the back frame and adapted to be turned at right angles thereto, means carried by said extension frame for operating the latch, and flexible connections between said latch and operating means.

8. In a folding chair the combination with a back frame, of an extension frame hinged to its upper end and adapted to be turned at right angles thereto, lugs on one frame, hasps pivoted on the other frame and adapted to engage said lugs for holding the extension frame in line with the back frame, and oppositely bent finger pieces on the ends of said hasps for the purpose specified.

14. In a folding chair the combination with a seat frame of a back frame hinged to the rear edge thereof, folding legs carried by the seat frame, an inclosing frame also hinged to the rear edge of the seat frame and adapted to cover the legs when folded, an extension frame hinged to the free end of the back frame, perforated keepers on the extension frame, there being sockets on the inclosing frame to receive said keepers when the chair is folded, latches on the sockets for interlocking with said keepers for securing the chair in folded position, an operating wire attached to said latches and extending across the inclosing frame, and a covering for said inclosing frame having a plaited portion opposite said wire to permit access thereto for operating the latches.

[Claims 1 to 3, 5, 7, 9 to 13, 15, and 16 not printed in the Gazette.]

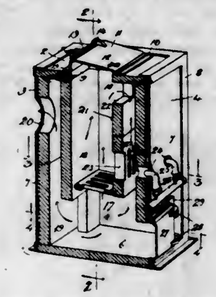
1,275,650. FURNACE-DOOR. JOHN BORGE, New York, N. Y., assignor to Borge Incinerator Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 6, 1916, Serial No. 89,297. Renewed Jan. 11, 1918. Serial No. 211,453. (Cl. 110—175.)



In a device of the class described, a furnace having ash pit and fire box openings, a door in two sections, the upper section covering the fire box opening, the lower section covering the ash pit opening, and the upper section overlapping the lower section, a rear plate secured to the upper section and spaced therefrom to form an air passage between said upper section of the door and said rear plate, means for regulating the air flow through said passage, said air passage being open to the atmosphere at its upper end and extending downwardly between the lower section of the door and the front wall of the furnace to the ash pit opening.

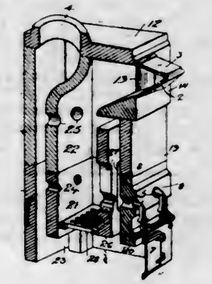
1,275,651. INCINERATOR. JOHN BORGE, New York, N. Y., assignor to Borge Incinerator Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 6, 1916, Serial No. 89,299. Renewed Jan. 11, 1918. Serial No. 211,454. (Cl. 110—18.)

In a device of the class described, a chamber having a top, a bottom, a pair of side walls, a front wall and a rear wall, a pair of vertical partitions extending from side wall to side wall within the chamber forming a garbage receiving chamber between them and also forming flues between them and the front and rear walls respectively, the top having an opening leading to the garbage chamber, the front partition terminating above the bottom of the furnace and having an opening adjacent its upper end, a garbage supporting grating extending between the partitions, the front partition being provided with a grated portion, the front wall having openings directed toward the grated portion in the front partition, burners adapted to force flames through the openings in the front wall and through the grated portion of the front partition, the



rear partition having an opening adjacent its lower end, leading into the rear flue and the rear wall having an opening adjacent its upper end.

1,275,652. INCINERATOR. JOHN BORGE, New York, N. Y., assignor to Borge Incinerator Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 6, 1916, Serial No. 89,300. Renewed Jan. 11, 1918. Serial No. 211,455. (Cl. 110—18.)

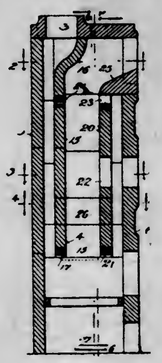


In a device of the class described, a chamber having a top, a bottom, a pair of side walls, a front wall and a rear wall, a pair of vertical partitions extending from side wall to side wall within the chamber forming a garbage receiving chamber between them and also forming flues between them and the front and rear walls respectively, the front wall having an opening leading to the garbage chamber, the front partition having its upper end terminating below said garbage receiving opening and having its lower end terminating above the bottom of the furnace, a garbage supporting grating extending between the partitions, the front partition being provided with a grated portion, the front wall having openings directed toward the grated portion in the front partition, burners adapted to force flames through the openings in the front wall and through the grated portion of the front partition, the rear partition having a plurality of openings above the garbage supporting grate and having an opening below said grate leading to the rear flue and the top of the chamber having an outlet opening leading from said rear flue.

1,275,653. INCINERATOR. JOHN BORGE, New York, N. Y., assignor to Borge Incinerator Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 6, 1916, Serial No. 89,302. Renewed Jan. 11, 1918. Serial No. 211,456. (Cl. 110—18.)

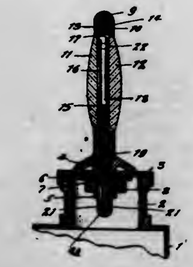
A device of the class described comprising a chamber having a top, front, rear and side walls, a pair of vertical interior partitions extending from side wall to side wall within the chamber forming a garbage receiving chamber

between them and also forming flues between them and the front and rear walls respectively, a horizontal garbage supporting grate extending between said partitions adjacent their lower ends, a fire grate below the lower ends of said partitions, the front partition having an opening intermediate its ends and a garbage receiving opening leading to the garbage receiving chamber adjacent its upper end, both of said openings being above the garbage supporting grate, the front wall of the first named chamber having an opening above the upper end of the front



partition registering with the garbage receiving opening in the front partition, said front wall also having an opening registering with the opening in the front partition intermediate its ends, said front wall also having a pair of additional openings, one situated above the fire grate and the other below said grate, said top being provided with an outlet flue in communication with the flue adjacent the rear wall, and said rear partition having an opening near its upper end.

1,275,654. INDICATING MEANS FOR MOTOR-PROPELLED VEHICLES. HARRISON HURLBERT BOYCE, Oyster Bay, N. Y. Filed Oct. 17, 1912. Serial No. 726,270. (Cl. 73—52.)



1. An indicator adapted to be attached to the radiator of an automobile, comprising movable indicating means influenced by varying conditions of the water within the radiator, a dial provided with scale indications for indicating the movement of the indicating means, said dial being provided with a sight-opening, and crystals in front and rear of said dial-plate and indicating means.

4. Means for indicating the thermal condition of the engine of an automobile having an internal combustion engine provided with a liquid circulation cooling system, comprising the combination with the cooling system, of an indicating device having an indicating part readable from the driver's seat of the automobile, and having a temperature responsive element located in a position to be influenced by changes of temperature within the cooling system.

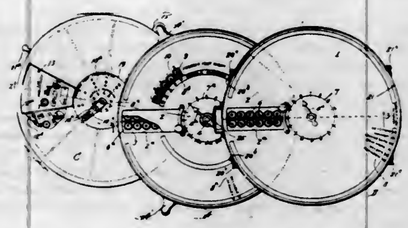
14. The combination with a cap for the filler spout of an automobile radiator, of a frame mounted on said cap and having a glass tube thermometer mounted therein with its bulb adapted to project into the radiator, the tube part of the thermometer projecting partly above said cap; a portion of said frame forming a guard for protecting said projecting part of the thermometer against breakage, said frame being open at the front and rear to permit vision through the instrument.

19. In an instrument adapted to be mounted on an automobile radiator, the combination with a frame or casing of annular form, much thinner than its diameter, means for securing the said frame edgewise upon the radiator in a plane substantially vertical and at right angles to the axis of the automobile, a temperature change indicating device carried by said frame and including a temperature responsive element projecting into the radiator, and a temperature indicating part extending across the frame and a circular dial plate of substantially the outlines of said frame attached to said frame in the rear of said temperature indicating means.

25. In combination with a vehicle, having an internal combustion propelling motor, a fluid containing means associated therewith so as to be influenced by temperatures of the motor structure and means for showing normal and undesirable conditions of the power-plant, comprising a part mounted in temperature-responsive relationship to the fluid-containing means to be controlled by the changes in the temperature of said motor structure, and a sight indicator part associated with said first mentioned part, adapted to be affected by the changing temperature conditions of the latter and located to be read by the operator of the vehicle while driving the same, said indicator part being adapted to present varying indications normally to serve as a guide for the operator in driving the motor at proper temperatures and abnormally as a warning to prevent or overcome udesirable conditions in the power plant.

[Claims 2, 3, 5 to 13, 15 to 18, and 20 to 24 not printed in the Gazette.]

1,275,655. COMBINATION CHART AND COMMODITY-CABINET. JAMES H. BOYE, Chicago, Ill., assignor to The Boye Needle Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 5, 1916. Serial No. 89,232. (Cl. 211—7.)

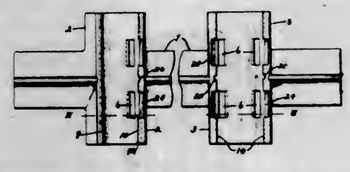


3. In means of the character set forth, the combination of a commodity-cabinet comprising a casing having its top equipped with a closure and a rotary carrier in said casing, a second commodity-cabinet comprising a casing shiftably mounted on said first named casing and having its top equipped with a closure, a rotary carrier in said second-named casing, and a parts-chart normally housed beneath said first named casing and adapted to be withdrawn to an exposed position, the parts-chart comprising a housing provided with a segmental opening and equipped with a dial, and a rotary disk in said housing having segments bearing illustrations of parts of different machines, said disk equipped with an index pointer, and the tops of the casings of said commodity-cabinets having reference characters corresponding with the characters on the dial of said parts-chart housing.

5. In means of the character set forth, the combination of a commodity-cabinet casing having its top equipped at one side with a closure and equipped at the opposite side with guide brackets, and a surmounting commodity-cabinet casing having its base equipped with guide-rods engaging said guide-brackets and having its top equipped with a closure.

[Claims 1, 2, 4, and 6 not printed in the Gazette.]

1,275,656. RAILWAY-TIE AND RAIL-FASTENER. HENRY J. BUBENHEIM, Pittsburgh, Pa. Filed Jan. 31, 1916. Serial No. 75,228. (Cl. 238—5.)



1. A railway tie and rail fastener having laterally extending rail seats of a channel formation, one wall of said channel being tapered longitudinally, the opposite wall being bent inwardly to form an overhanging flange for contact with the rail base, apertures in the bottom of said rail seats, and pockets in the channel wall which register with the bottom apertures.

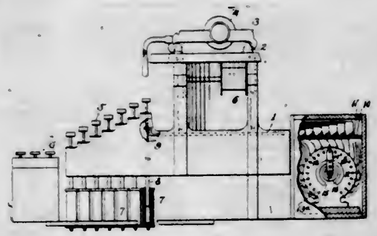
3. A railway tie and rail fastener having laterally extending rail seats of a channel formation, one wall of said channel being tapered longitudinally and provided with a recess, the opposite wall being bent inwardly to form a contact flange and receptive recess for the rail base, apertures in the bottom of said chair, pockets in the channel wall which register with the bottom apertures, a removable bar member seated in the chair and engaging one side of the rail base, said bar being provided with lugs which enter the bottom apertures, also with a longitudinal marginal ledge, and a tapered key member adapted to be driven in between the tapered wall and bar, said key having means formed thereon and cooperating with the tapered wall and bar member for locking said key in position.

5. A railway tie and rail fastener having laterally extending rail seats of a channel formation, the walls of said channel being tapered longitudinally and each being provided with a longitudinal recess; apertures in the bottom of said chair; pockets in the channel wall which register with the bottom apertures, removable splice-bars seated in the chair and engaging the rail sections, said bars being provided with lugs designed to enter the bottom apertures, also with a marginal ledge; and tapered keys adapted to be entered and wedge between the said splice bars and walls of the chair, said keys having means formed thereon for an interlocking engagement with the wall recess and ledge provided on the abutting splice bar.

7. A railway tie and rail fastener having laterally extending rail seats of a channel formation, the walls of said channel being tapered longitudinally in opposite directions to each other and each wall being provided with a longitudinal recess; apertures in the bottom of said chair; pockets formed in the channel walls in registering alinement with the bottom apertures; removable splice bars seated in the chair and engaging the rail sections said bars carrying depending lugs designed to enter the bottom apertures, also having additional lugs for entry through the rail web, said bars each being further provided with a marginal ledge; tapered keys adapted to be entered and wedge between the said splice bars and walls of the chair, said keys each being provided on one side with a flange to enter the wall recess, and on the opposite side with a second flange to seat on the ledge formed in the contacting splice bar; a groove formed in the side wall of said tapered key member designed to register with a similar shaped groove formed in the channel wall; and a removable locking member designed to seat in said registering grooves.

[Claims 2, 4, and 6 not printed in the Gazette.]

1,275,657. ELECTRICALLY-OPERATING PRINTING DEVICE. ARTHUR R. BULLOCK, Cleveland, Ohio. Filed Apr. 24, 1913. Serial No. 763,200. (Cl. 197—12.)

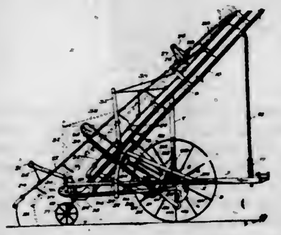


1. In a machine of the character described, the combination with a plurality of symbol carrying members of electrical means, including a movable contact member for automatically selecting and operating in proper sequence a plurality of said symbol carrying members.

2. In an automatic printing machine, a plurality of symbol carrying members, electrically actuated means for operating said symbol carrying members individually, a legend member having a series of contacts, each of said contacts being electrically connected to a separate means for operating the symbol carrying member, a contact member adapted to successively engage the aforesaid contacts, and a source of electrical energy connected in circuit with the contact member, and aforesaid electrically actuated means for operating the symbol carrying member.

[Claims 3 to 18 not printed in the Gazette.]

1,275,658. HAY-LOADER. EDWARD W. BURGESS, Chicago, Ill., assignor to International Harvester Company of New Jersey, a Corporation of New Jersey. Filed Dec. 10, 1915. Serial No. 66,170. (Cl. 56—64.)



1. A hay loader including, in combination, an elevator frame, yoke members disposed transversely above said frame, separate gangs of rake bars carried by said yokes, rollers journaled upon the side members of said yokes, rotatable double cranks journaled upon said frame, cams adjacent to and rotatable with said cranks, pitmen connecting said gangs with said cranks, and rising and falling track rails controlled by said cams and upon which said rollers travel.

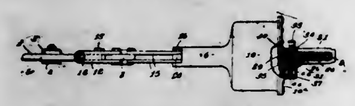
2. A hay loader including, in combination, an elevator frame, yoke members disposed transversely above said frame, separate gangs of rake bars carried by said yokes, rollers journaled upon the side members of said yokes, rotatable double cranks journaled upon said frame, cams rotatable with said cranks, pitmen connecting said gangs with said cranks, and track rails pivotally mounted upon said frame, said rollers traveling upon one end of said tracks and the opposite end of said tracks engaging with said cams.

4. A hay loader including, in combination, an elevator frame, reciprocatory rake bars mounted above said frame,

means for reciprocating said bars, and a spring mechanism connected to the bars and to said frame operable in a manner to balance a movement of said bars.

[Claims 3, 5, and 6 not printed in the Gazette.]

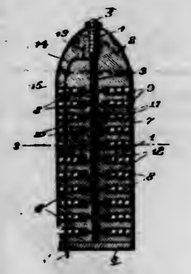
1,275,659. POWER-SHEARS. BURR M. CARTWRIGHT, Syracuse, N. Y. Filed Sept. 14, 1916. Serial No. 120,074. (Cl. 81—199.)



1. A power cutter comprising a frame, a pair of jaws pivoted between their ends, actuating means including a rod reciprocally movable in the frame, means connecting the rear ends of the jaws to the rod including levers pivoted at corresponding ends to the rod and pivotally connected between their ends to the jaws, and means connecting the levers and the frame to hold the pivotal connection between the levers and the jaws from fore and aft movement, substantially as and for the purpose described.

[Claims 2 to 5 not printed in the Gazette.]

1,275,660. SHELL. ARCHIE PAUL CLARK, Alvaston, British Columbia, Canada. Filed Apr. 23, 1917. Serial No. 164,058. (Cl. 102—29.)



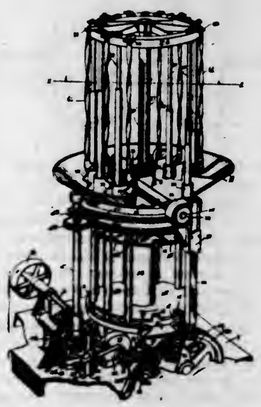
1. A projectile of the class described comprising a solid body member having a bore extending longitudinally throughout with firing chambers radiating therefrom at right angles thereto and communicating therewith and adapted to receive explosive material and small projectiles, a fuse disposed in said bore and connected with the firing chambers, and a fuse house in one end of said body member connected with the fuse in said bore in advance of said chambers and extending through one side wall of said body member, and countersunk therein to prevent cutting off of the fuse when the projectile enters a solid object.

[Claims 2 and 3 not printed in the Gazette.]

1,275,661. APPARATUS FOR PACKING GROUND OR COMMINUTED MATERIAL. ROBERT G. CLARK, Brooklyn, N. Y. Filed Sept. 27, 1916. Serial No. 122,341. (Cl. 100—57.)

1. An apparatus of the class specified, comprising a support for a tube, a hopper, a measuring device to receive material from the hopper, means to intermittently place said measuring device in register with the outlet of the hopper and the tube, and means to eject the material from the measuring device into the tube and compress it therein, substantially as and for the purpose specified.

12. An apparatus of the class specified, comprising a turret to carry a series of open end tubes in spaced apart relation; a hopper having a plurality of outlets; a rotatable head having a series of pockets with inlets and outlets to receive material from the hopper; means to intermittently rotate the turret and pocket head to cause the inlets of the successive pockets to alternately register with the hopper outlets and to cause successive tubes to register with the outlets of alternate pockets; a series of plungers, one for each tube; and means to support said plungers in line with the tubes and with alternate pockets, said support being operable to force the plungers into the tubes to compress the material therein and to permit the plungers to rest by gravity on the material in the tubes, substantially as and for the purpose specified.



16. In a device of the class specified, the combination of a hopper having a plurality of outlets; plungers; a plurality of pockets to receive material from the hopper outlets, means to successively place the pockets alternately in register with the hopper outlets and plungers, and a support and carrier for a series of spaced apart tubes intermittently operable to place successive tubes in register with alternate pockets in register with the plungers, substantially as and for the purpose specified.

19. In a device of the class specified, the combination of a hopper having a plurality of outlets; a rotatable head having gear teeth on the periphery and a plurality of pockets having inlets and outlets to receive material from the hopper; a rotatable carrier for a series of open end tubes including a head supported in juxtaposed relation to the pocket head, said head having gear teeth on the periphery and perforations in which the open ends of the tubes engage; means to intermittently rotate the pocket head to cause the inlets of alternate pockets to successively register with the hopper outlets and to cause the open ends of successive tubes to register with the outlets of the pockets alternate with the pockets having the inlets in register with the hopper outlets, comprising a rotatable shaft, gears on said shaft to mesh with the teeth of the pocket head and the head of the tube carrier, a rotatable shaft, and a Geneva gear to impart movement intermittently from said latter shaft to the first shaft; and plungers to aline with the tubes and pockets alternate with the pockets in register with the hopper outlets during the periods of rest to eject the material from the pockets into the tubes and compress it therein, substantially as and for the purpose specified.

21. In a device of the class specified, the combination of a hopper having a plurality of outlets; a rotatable head having gear teeth on the periphery and a plurality of pockets having outlets and inlets to receive material from the hopper; a rotatable carrier for a series of open end tubes including a head supported in juxtaposed relation to the pocket carrier, said head having gear teeth on the periphery and perforations in which the open ends of the tubes engage; a pair of pinions to mesh with the gear teeth of the pocket head and the head of the tube carrier; and means to impart intermittent movement to said pinions and thereby to the tube carrier and pocket head, comprising a star wheel having transverse guideways in one face thereof and curved portions between the projections, a continuously rotating shaft, a pawl mounted on the shaft to rotate therewith and have sliding movement thereon to engage in the guideways of the star wheel, means to slide said pawl on the shaft to throw the same into and out of operative engagement with the guideways in the star wheel at a predetermined time, and a disk rotatable with the shaft to engage with the curved portions of the star wheel to lock the latter against movement and having a recessed portion for the passage of the projections of the star wheel, substantially as and for the purpose specified.

[Claims 2 to 11, 13 to 15, 17, 18, and 20 not printed in the Gazette.]

1,275,662. PICTURE-FRAME. JOHN P. CLARY VON CARLSBERG, Worcester, Mass. Filed Apr. 4, 1918. Serial No. 226,611. (Cl. 40—148.)



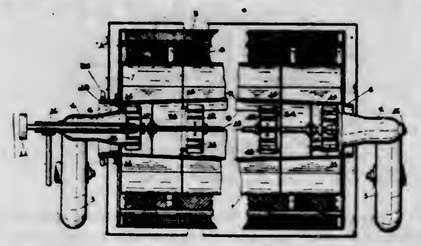
3. A picture frame of the class described including a frame body having end rails, top and bottom rail, the bottom rail provided with a longitudinal extending transverse slot opening out through the outer side thereof, a retaining member having a vertical tongue formed from one end thereof, said tongue adapted to be located between the side walls of the slot formed in the bottom rail of the frame, means for securing the retaining member to the frame, and a supporting means for the retaining member as for the purpose specified.

5. In combination, a picture frame including end rails, a top and bottom rail, the opposing faces of said rails provided with a continuous communicating groove, the groove in the bottom rail opening out through the outer side thereof forming an entrance slot, a combined retaining and supporting member having a cylindrical body provided adjacent one end with an exteriorly arranged annular flange, the opposite end of said body provided with a bead having formed thereon at diametrically opposite points frame engaging lugs, a penetrating tongue formed centrally on and rising vertically over the beaded end of the body and the terminal of said tongue extending beyond the ends of the lugs, said tongue adapted to be arranged between the walls of the slot in the bottom rail of the frame and positioning the lugs against the exterior side faces of said rail, means for removably connecting said tongue in said slot and a supporting member rotatably secured to the free end of the body whereby said frame may be moved in various positions with relation to the support.

[Claims 1, 2, 4, and 6 not printed in the Gazette.]

1,275,663. DUST-COLLECTOR. WILLIAM J. P. CLOAKEY, Brantford, Ontario, Canada. Filed Jan. 5, 1918. Serial No. 210,538. (Cl. 183—13.)

2. In a dust collector, the combination of a rotatable screen drum having radial longitudinal screen partitions arranged therein extending from the periphery part way toward the center; a stationary dusty air conveying cylinder about which the screen drum rotates; and a plurality of wings connected to and extending lengthwise of the cylinder having arc-shaped outer surfaces, the arcs being of greater length than the distance between any two of the partitions aforesaid, a port being formed in the side of the cylinder between the wings.

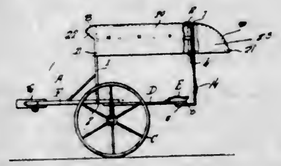


5. In a dust collector, the combination of a rotatable screen drum having radial longitudinal partitions arranged therein extending from the periphery part way toward the center; a stationary dusty air conveying cylinder about which the screen drum rotates; a plurality of wings connected to and extending lengthwise of the cylinder having arc-shaped outer surfaces, the arcs being of greater length than the distance between any two of the partitions aforesaid, a port being formed in the side of the cylinder between the wings; a rotary beater located within said cylinder into which the dust laden air is led and from which it escapes into the cylinder; and means for leading water into the beater adjacent its axis.

6. In a dust collector, the combination of a rotatable horizontal screen drum; a dusty air conveying cylinder extending axially of the drum and having an air port formed in its side; a rotary beater located within the cylinder co-axial therewith and out of alinement with the port into which beater the dust laden air is led and from which it escapes into the cylinder; means for leading water into the beater adjacent its axis; and a tank of water into which said screen drum dips.

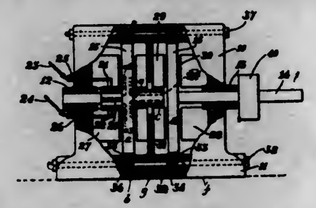
[Claims 1, 3, 4, 6, and 7 not printed in the Gazette.]

1,275,664. CULTIVATOR-CANOPY. OWEN DAVIS, Waelder, Tex. Filed Aug. 16, 1916. Serial No. 115,322. (Cl. 21—62.)



A canopy attachment for cultivator frames comprising a front support disposed vertically and having an arched top portion, an upright centrally disposed supporting standard mounted at the rear of the frame, a ridge bar having its forward portion attached to the arched portion of the front support, and its rear end connected to the said rear supporting standards, the front end of the said ridge bar being bent downwardly in front of the said arched support to form a front coping, the rear end of the ridge bar being also curved to substantially semi-circular formation, a rearwardly disposed semi-circular stay bar having its intermediate portion connected to the rear end of the said ridge bar, a semi-circular brace bar disposed vertically and having its center fixed to the ridge bar at the point where the latter is joined to the said rear support, parallel side bars having their terminals fixed to the front support and the said brace bar, and guy rods having two ends joined on the said rear standards and diverging therefrom and having their opposite ends joined to the ends of the said brace bar.

1,275,665. DYNAMO-ELECTRIC MACHINE. HERMAN W. EICHBAUM, Venice, Cal. Filed June 25, 1917. Serial No. 176,788. (Cl. 172—36.)



1. A dynamo electrical machine comprising armature and field coil units mounted in independent case sections separable on transverse lines; said armature units having terminals, so that units may be inserted or removed to make a machine of the desired capacity; the terminals of one armature unit contacting with the terminals of another armature unit so as to complete the circuits.

2. In a dynamo electrical machine, independent case sections carrying field coils and armature units having terminals adapted to butt to complete the circuits; so that units may be removed or inserted to make a machine of the desired capacity.

3. A dynamo electrical machine comprising a sectional case separable on transverse lines, field coil and armature units mounted in the sections and the armature units having terminals adapted to abut together, an armature shaft extending through the armatures, and a commutator upon one end of the shaft; so that field coil and armature units and case sections may be removed or inserted to increase or decrease the capacity of the machine.

1,275,666. PREPARATION OF HIGHER OXID-OF-MANGANESE DEPOLARIZING MATERIAL. CARLETON ELLIS and ALFRED A. WELLS, Montclair, N. J., assignors, by mesne assignments, to National Carbon Company, Inc., Long Island City, N. Y., a Corporation of New York. Filed Dec. 6, 1916. Serial No. 135,406. (Cl. 23—13.)

1. The process of making manganese dioxid from a soluble manganous salt which comprises precipitating a solution of a manganous salt with an alkaline reagent, in drying the product without washing; whereby saline bodies are left in the mass and in exposing the product to heated air and moisture at a temperature of about 200° C.

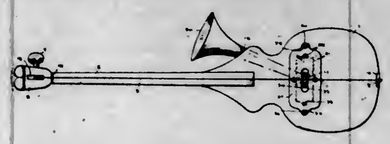
5. The process of making a higher oxid of manganese depolarizing material which comprises precipitating a solution of manganous sulfate with sodium carbonate, in collecting the precipitate and drying without complete removal of sodium sulfate, in grinding the product, in exposing the dried product to a current of air and water vapor at a temperature of about 200° C., in maintaining the heating conditions uniform and in agitating the mass during such period of exposure and in washing and drying the product.

10. The process of making a higher oxid of manganese depolarizing material which comprises drying a precipitate of manganous carbonate containing saline bodies without complete removal of said saline bodies, in exposing the product to oxygen and water vapor at an oxidizing temperature, in agitating the material at some time during such period of exposure and in washing and drying the product.

[Claims 2 to 4, 6 to 9, and 11 not printed in the Gazette.]

1,275,667. STRINGED MUSICAL INSTRUMENT. JOSEPH FERRETTI, Jersey City, N. J. Filed June 7, 1917. Serial No. 173,400. (Cl. 84—44.)

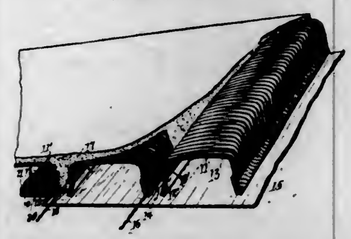
2. A stringed musical instrument comprising a hollow body thereon, a string upon said hollow body and said neck, a sound box disposed within said body, an apertured cover plate for said box secured to the body, clamping means extending from said cover plate to said box for retaining the same in position, packing rings at the edges of said box, a diaphragm disposed within said box be-



tween said ridges, a bridge carried by said diaphragm and extending through said cover plate for supporting said string, and a horn upon said hollow body communicating with said sound box.

[Claim 1 not printed in the Gazette.]

1,275,668. CONCRETE FLOOR AND CEILING CONSTRUCTION. PETER FILIPPONE, Newark, N. J. Filed Mar. 7, 1918. Serial No. 220,951. (Cl. 72—66.)



1. A mold member for concrete floor construction comprising top and side walls of foraminous metallic material, and an outer covering of light substantially impervious material extending over the top and at least part way down on the sides.

5. A concrete floor having a plurality of downwardly directed recesses formed in its lower portion, the walls and the surface thereof about and at the upper parts of said recesses being formed substantially entirely of concrete, sections of foraminous metallic material permanently embedded in the concrete about the margins of the recesses and having portions thereof which have served as molds for forming the recess extending across the mouths of the recesses, and plastic material beneath the floor and keyed in said foraminous material.

9. The process of constructing concrete floors which comprises the provision of a mold comprising deformable foraminous material covered in part with substantially impervious material, putting concrete in place about such mold and permitting it to set, whereby uncovered portions of the foraminous material are permanently secured to the concrete and deforming the foraminous material by pulling it downwardly, leaving a hollow space above it, and applying cementitious material to the deformed foraminous material to form a ceiling beneath the floor.

[Claims 2 to 4 and 6 to 8 not printed in the Gazette.]

1,275,669. PROJECTILE. HARRY BENJAMIN FORBES, Ogden, Utah. Filed Mar. 5, 1915. Serial No. 12,250. (Cl. 102—26.)



1. A projectile having an outer casing and internal irregularities of configuration capable of producing a skiagraph or fluoroscope image of distinctive characteristics.

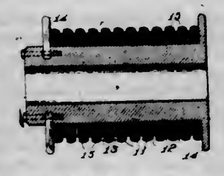
5. A projectile composed of a core and a part surrounding the core composed of a material possessing a greater degree of permeability than the core to the passage of the Röntgen ray.

10. A projectile composed of a plurality of materials one of which possesses a greater degree of permeability to the passage of the Röntgen ray than the other, that material having the less degree of permeability presenting a characteristic silhouette when viewed from three planes.

15. A projectile having a casing of conventional form, said casing being formed of aluminum, and a core formed of a material containing lead, said core being of such configuration as to produce a skiagraph or fluoroscope image of distinctive characteristics.

[Claims 2 to 4, 6 to 9, 11 to 14, 16, and 17 not printed in the Gazette.]

1,275,670. PULLEY. WILLIAM G. FRY, Milwaukee, Wis., and VICTOR A. SEUBERTH, Chicago, Ill. Filed Oct. 12, 1917. Serial No. 196,301. (Cl. 64—43.)



1. A pulley comprising a core, a plurality of metal members and a plurality of leather members mounted in series on the core, the leather members projecting outward beyond the metal members to form grooves for the escape of air beneath the belt traveling on the pulley, and means for holding all the said members in place on the core.

2. A pulley comprising a core, a plurality of metal parts and a plurality of leather parts mounted in series on said core and having beveled ends, collars mounted on the core and having beveled surfaces to engage the beveled ends of said parts, and means for securing the collars on the core to lock the said parts in place.

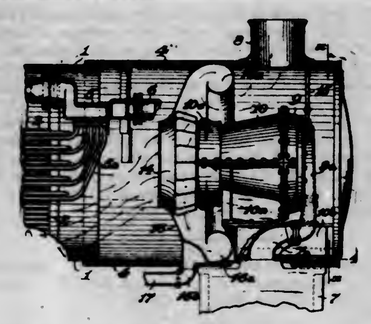
1,275,671. PIANO-STOOL MUSIC-CABINET. FLORINDA GARDNER, Salt Lake City, Utah. Filed Jan. 23, 1918. Serial No. 213,321. (Cl. 45—64.)



In a piano stool music cabinet, two bottom boards spaced apart to form a slot, a follower board adapted to fit endwise upon the bottom boards and having an ear extending downwardly from its center into the slot, a spring metal attaching portion secured to the side of the follower board, a bent spring portion extending horizontally from the lower end of the attaching portion, a second bent spring portion extending downwardly from the first bent spring portion and slightly inclined toward the follower board, a clutching portion extending from the lower end of the second bent spring portion into the slot and into the plane of the ear; there being a gripping opening through the clutching portion substantially in line with the opening through the ear; and a rod mounted in the slot and extending through the opening in the ear and through the gripping opening.

1,275,672. LOCOMOTIVE-ENGINE. WILLIAM F. M. GOSS, Urbana, Ill. Filed May 21, 1918. Serial No. 235,778. (Cl. 110—162.)

1. The combination, with a locomotive boiler, of means, located in the smoke box thereof, for exhausting products



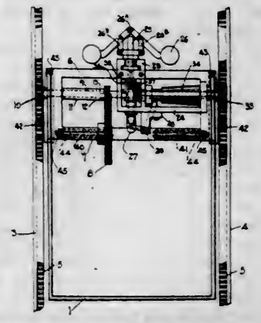
of combustion from the boiler tubes; means for conducting the exhaust steam from the cylinder exhaust passages of the locomotive to said exhausting means; and a partition in the smoke box, having a passage through which the products of combustion are drawn by the exhausting means, in their traverse to an atmospheric discharge passage.

10. The combination, with a locomotive boiler, of two longitudinally extending standards fixed in the smoke box thereof; a casing or hollow turbo-muffler, having downwardly projecting legs, connected detachably to said standards, an operating shaft journaled in said casing; a turbine casing fixed to one end of the turbo-muffler; a steam turbine fixed on one end of the operating shaft and rotatable in the turbine casing; a draft fan fixed on the opposite end of the operating shaft; an exhaust connection elbow, communicating with the cylinder exhaust passages of the locomotive; an exhaust supply passage casting attached to the turbine casing and connected detachably to said elbow; and a smoke box front, having a door controlled opening of diameter sufficient to permit the passage through it of the turbo muffler and connected members.

11. The combination, with a locomotive boiler, of a partition extending across the smoke box thereof, between the front tube sheet and the stack, and having a through passage; means, located in the smoke box, forward of said partition for exhausting products of combustion from the boiler tubes through said passage; means for conducting the exhaust steam from the cylinders of the locomotive to said exhausting means; and means for discharging said exhaust steam into the smoke box, forward of said partition.

[Claims 1 to 9 not printed in the Gazette.]

1,275,673. SAFETY ELEVATOR DEVICE. JOSEPH HAJEK, North Braddock, Pa. Filed Feb. 15, 1917. Serial No. 148,855. (Cl. 187—78.)

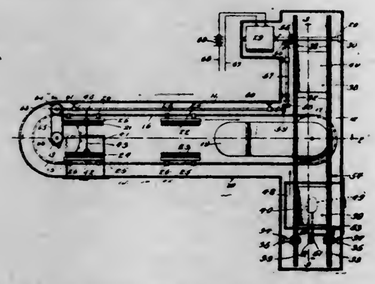


1. In an elevator traveling in a pair of vertical guides, an automatic brake comprising a frame mounted on said elevator, a governor adapted to revolve during the travel

of said elevator, a pair of shoes pivotally mounted on said frame and registering with said guides, a rotatable threaded sleeve, a pair of oppositely threaded pins mounted within said rotatable sleeve, a gear rigidly mounted on said sleeve, a shaft having a pinion meshing with said gear, a clutch mounted on said shaft, and means operated by said governor at a predetermined high speed for operating said clutch to rotate said pinion and gear whereby said oppositely threaded pins will be moved outwardly by the screwing action of said sleeve, to wedge said shoes between said guides and elevator.

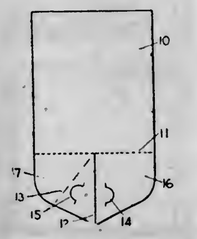
[Claim 2 not printed in the Gazette.]

1,275,674. SHOE-BRUSHING MACHINE. GEORGE G. HALL, Los Angeles, Cal. Filed Jan. 3, 1918. Serial No. 210,118. (Cl. 15—61.)



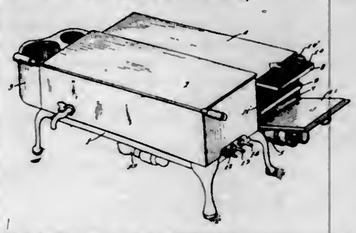
A machine comprising, a substantially horisontal foot support, a pair of horizontal sprocket wheels arranged beneath the foot support and rotatably connected therewith, a vertical spindle disposed at a substantial distance from the foot support, a second pair of horizontal sprocket wheels secured to the vertical spindle, a pair of sprocket chains engaging the horizontal sprocket wheels and having their edges arranged in horisontal planes, said pair of sprocket chains traveling longitudinally about the foot support, a plurality of brushes arranged on edge in vertical planes, means connecting the brushes with the pair of sprocket chains, pairs of vertical sprocket wheels arranged upon opposite sides of the foot support, a pair of sprocket chains engaging the vertical sprocket wheels and having portions thereof arranged upon opposite sides of the foot support, the last named sprocket chains having their edges arranged in vertical planes, a plurality of horizontal brushes spanning the space between the last named sprocket chains and connected therewith, and means to drive one pair of vertical sprocket wheels and the vertical spindle in unison.

1,275,675. CARDBOARD CAN-HOLDER. TOM HALL, New York, N. Y. Filed Feb. 5, 1918. Serial No. 215,479. (Cl. 211—24.)



A can holder comprising a back, two flaps integral with said back and each flap having the entire length of one of its sides adjacent to a side of said back and separated therefrom by a weakened line, each of said flaps having a tag cut thereon whereby, when the back is folded substantially at right angles to the flaps, the flaps may be partially folded, one over the other, and the said tags may be brought into locking contact.

1,275,676. STERILIZER. JOSEPH O. HALVERSON and ADOLPH A. DEKUM, Portland, Oreg. Filed Oct. 29, 1917. Serial No. 199,010. (Cl. 167—3.)



1. A sterilizing device comprising a structure having a sterilizing liquid-holding chamber, a hinged lid therefor, adapted to fully cover said chamber, means for heating said chamber, an extension supported at one end thereof with a common wall therebetween, whereby said extension is heated interiorly from said liquid-holding chamber, said extension being provided with a top having holes therein adapted to fit around a drinking glass and receptacle, whereby both are heated within said extension from said liquid-holding chamber, substantially as shown and described.

2. In a device of the character shown and described, a structure having a bath sterilizing chamber with cover therefor, a hot air sterilizing chamber open at its end, and an open chamber adapted to receive a glass or the like, means for heating said several chambers, and removable trays adapted to be inserted by a horizontal movement into the open end of said hot air sterilizing chamber, substantially as described.

3. A device of the character shown and described, comprising in combination, a box with cover, a box mounted along one side thereof and open at one end and having openings through its bottom, means for heating the same through said openings, removable trays adapted to be inserted through said open end, a closure for said open end, and an open extension mounted on said first box and adapted to receive a drinking glass or the like, substantially as described.

4. A device of the character referred to comprising a structure having a box portion with cover therefor and a box portion with an end door therefor, removable trays for said box portion adapted to be inserted into the end thereof, and a glass-holding extension mounted on said box portion and adapted to be heated therefrom, for holding a drinking glass or the like, substantially as described.

1,275,677. THREAD-CUTTING DEVICE. WILLIAM J. HAMPTON, Pittsburgh, Pa., assignor to Spang, Chalfant and Co., Incorporated, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Dec. 24, 1917. Serial No. 208,581. (Cl. 10—146.)

2. A thread cutting tool comprising a member having a cylindrical head portion, a plurality of removable segments secured to said head portion, each of said segments being disposed at an angle to the longitudinal axis of said head and extending in the direction of travel of said member and at an angle to the radii of said head, clearance spaces formed along one side of each of said segments, and each of said segments having a concave portion formed in its cutting face, and a removable disk adapted for engaging the bottom ends of said segments to secure the same in place, substantially as shown and described.

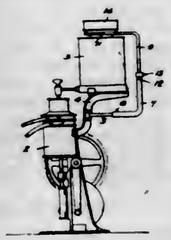
4. A thread cutting tool comprising a member having a plurality of removable segments each of said segments being disposed at an angle to the longitudinal axis of said member and extending in the direction of travel of said member and at an angle to the radii of said member, said segments having their one face undercut on a curve, each of said segments presenting a lead portion, cutting thread



portion and a threading portion, and a removable clamping plate adapted to engage one end of each of said segments to secure the same in position.

[Claims 1 and 3 not printed in the Gazette.]

1,275,678. SUPPORT FOR CREAM-SEPARATOR STRAINERS. THEODORE S. HANSON and OLIVER KNUTSON, Northwood, Iowa. Filed Nov. 24, 1917. Serial No. 203,773. (Cl. 248—20.)



1. A strainer support for a cream separator comprising a rod projecting outwardly form the separator, an angular member mounted to slide horizontally on said rod and having an upright portion, and a strainer supporting rod mounted for rotary and vertical movement in said angular member and having a part to project over the milk receptacle and support a strainer thereon.

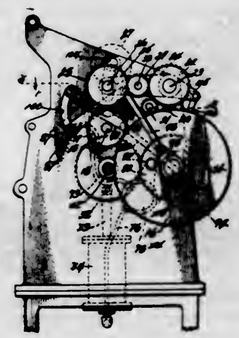
[Claims 2 and 3 not printed in the Gazette.]

1,275,679. SHEET-FEEDER. CHARLES W. HARROLD, Warren, Ohio, assignor to The Harris Automatic Press Company, Niles, Ohio, a Corporation of Ohio. Filed Feb. 28, 1916. Serial No. 80,937. (Cl. 271—29.)

1. In a sheet-feeder, the combination with a support for a pile of sheets on edge, comprising a series of vertically movable hold-back fingers engaging the upper margins of the pile, of a pair of flexible clips bearing against the side margins of the pile, means for detaching the outermost sheet from the clips, when the fingers are raised, and withdrawing same from the pile, and means for lowering said fingers when said sheet is detached from the pile.

20. In a sheet-feeder, the combination with a support for a pile of sheets, of means for detaching one end of the outer sheet from the pile, separate vertically reciprocatable means for engaging said detached end and drawing the sheet from the pile, and means for simultaneously and momentarily relieving the inherent weight of the pile upon the detached sheet during its withdrawal from the pile.

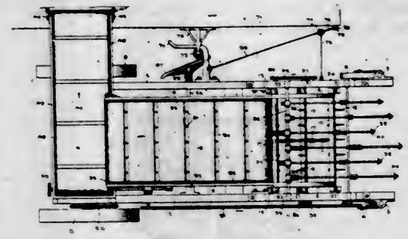
32. In a sheet-feeder, the combination with a support for a pile of sheets, of means comprising a pneumatic sucker for detaching one end of the outer sheet from the pile, means for moving said sucker toward and from the pile, means comprising a rock-arm and link connection with the feeder, for oscillating said sucker in unison with said sucker-moving means, means carried by said sucker to support the body of the pile while said sucker is in action, an air-exhausting means to produce a partial



vacuum in the sucker, means for breaking said vacuum, vertically reciprocatable rotary means for engaging said detached end and drawing the sheet from the pile, and means for operating said vacuum-breaking means when said rotary means has engaged the detached sheet.

[Claims 2 to 19, 21 to 31, and 33 to 72 not printed in the Gazette.]

1,275,680. BUNDLE-LOADER. HOWARD HARSH, Osakis, Minn. Filed Mar. 12, 1918. Serial No. 221,955. (Cl. 214—42.)

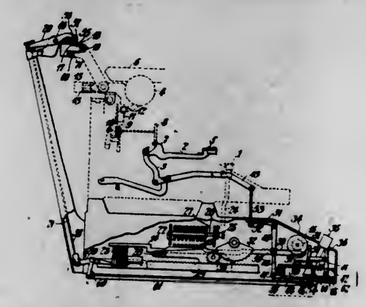


1. The combination with a wagon or other vehicle, of a bundle loader, power means for operating and propelling said bundle loader, means for throwing said power means into and out of gear with the propelling means for the bundle loader, and wagon carried means adapted when the wagon is positioned along beside of the bundle loader, to actuate said last-named means.

4. The combination with a wagon or other draft vehicle, of a bundle loader, power means for operating and propelling the loader, means for throwing said power means into and out of gear with the propelling means for said loader, said last-named means including a push rod projecting laterally from the loader, a shoe carried by said push rod, means carried by the wagon adapted to engage and push said shoe and rod inwardly of the loader when the wagon is drawn up into operative position beside of the loader, means carried by the loader adapted to limit the forward movement of said wagon carried means, and flexible means connecting the forward ends of the wagon and loader.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,275,681. COMBINED TYPE-WRITING AND COMPUTING MACHINE. FREDERICK A. HART, Newark, N. J., assignor, by mesne assignments, to Underwood Computing Machine Company, New York, N. Y., a Corporation of New York. Filed Nov. 6, 1913. Serial No. 799,433. (Cl. 235—60.)

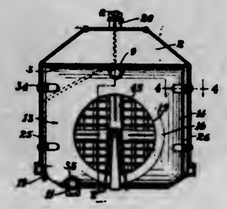


1. In a combined typewriting and computing machine, the combination with computing mechanism, of a traveling carriage, a special printing type, and a single member serving, as determined by said carriage during its travel, as a denominational selector, and to control said special printing type.

6. In a combined typewriting and computing machine, the combination with computing wheels and a denomination selector, of a special printing key, a lock for said special printing key under the control of a cam on a computing wheel, and a lock for said key under the control of a cam on said denomination selector, said key being operative on the release of both said locks at the same time.

[Claims 2 to 5 and 7 to 37 not printed in the Gazette.]

1,275,682. FAN-HOUSING COOLING EXTENSION. HERBERT H. HART, Orcutt, Cal. Filed Aug. 14, 1917. Serial No. 186,234. (Cl. 123—170.)

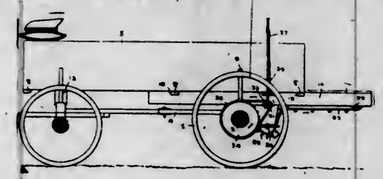


1. A fan-housing cooling extension comprising the combination with a radiator and fan, of a seat extending around the rear face of the radiating field, a dished plate having an opening in its center, a rim upon the dished plate, a non-metallic packing and cushion upon the rim and fitting the seat, and hinges secured to the rim and screwed to the radiator to hold the rim tight against the cushion and the cushion tight against the seat.

2. A fan housing cooling extension comprising the combination with a radiator and fan, of flanges extending inwardly from the rear edges of the sides of the radiator in transverse alinement with the rear flat face of the bottom of the radiator, second integral flanges extending backwardly from the sides of the radiator beyond the first flanges, a body formed of sheet metal and having a circular central opening; the margin around the opening being substantially flat in a transverse plane, the intermediate portion surrounding the flat portion being dished, and the rim around the intermediate portion fitting the first flanges and the rear flat face, there being cushions secured to the rim between the flanges and flat face; hinges secured to the sides of the intermediate portion and engaging the second flanges, and means securing the hinges to the second flanges.

[Claim 3 not printed in the Gazette.]

1,275,683. MANURE-DISTRIBUTER. ROBERT H. HAWKINS, Crocker, Mo. Filed Feb. 8, 1918. Serial No. 216,014. (Cl. 275—2.)

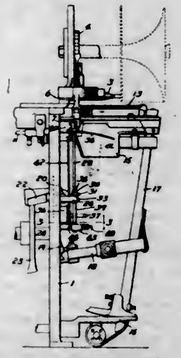


1. The combination with a wagon running gear and wagon body, of a manure distributer embodying a main frame mounted on the running gear beneath the wagon body, a platform mounted on said main frame between the rear end of the wagon body and the rear end of the main frame and provided centrally with an opening, an endless apron mounted below said opening, and disintegrating means mounted below the discharge end of said apron.

2. The combination with a wagon running gear and wagon body, of a manure distributer attachment embodying a main frame mounted on the rear end of the wagon running gear beneath said wagon body, a platform mounted on said main frame between the rear end of the wagon body and the rear end of the main frame and provided centrally with a longitudinally extending opening, an endless apron mounted below said platform opening, disintegrating means mounted below the discharge end of said apron, means for revolving the disintegrating means at a greater rate of speed than said apron, and means for revolving said apron from the rear wheel of the wagon running gear.

[Claims 3 and 4 not printed in the Gazette.]

1,275,684. FILLING-END CONTROLLER. HENRY J. HEDLER, Taftville, Conn., assignor, by mesne assignments, to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Mar. 18, 1915. Serial No. 15,301. (Cl. 139—85.)



1. In a filling replenishing loom, the combination of the lay and shuttle-boxes, a thread catcher having a thread guiding portion over which the discharged carrier may pass and a toothed thread engaging portion, and means for moving the thread catcher to cause the guiding portion to deliver the thread to the toothed portion and withdraw it from the shuttle-box.

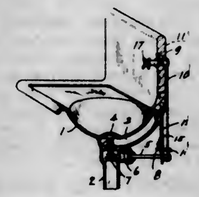
5. In a filling replenishing loom, the combination of the lay and shuttle-boxes, a thread catcher comprising an arm having a portion to engage a thread extending from an abandoned filling carrier to the shuttle-box, means for supporting the arm for movement of the thread engaging portion in a downward direction in a plane transversely of the loom to withdraw the thread of the abandoned filling carrier from the shuttle-box, and means acting yieldingly to restore the arm to initial position.

9. A loom comprising a lay and shuttle boxes, filling replenishing mechanism, a thread catcher having teeth to engage the filling positively between the shuttle box and a discharged filling holder, and means set in operative condition upon call for filling replenishment for causing the thread catcher to move downwardly and toward the adjacent end of the lay to draw the filling from the shuttle.

12. In a loom, the combination of filling replenishing mechanism, a thread catcher to engage the filling between the shuttle and a discharged filling carrier, picking mechanism, means to move the thread catcher in a direction opposed to the picking movement to withdraw the filling thread from the shuttle, and mechanism for rendering said means operative to effect such movement only on call for filling replenishment.

[Claims 2 to 4, 6 to 8, 10, 11, and 13 to 19 not printed in the Gazette.]

1,275,685. DEVICE FOR OPERATING WASTE-PLUGS. WILLIAM R. HELSLEY, Los Angeles, Cal. Filed May 15, 1918. Serial No. 234,755. (Cl. 4—24.)



In a device for operating waste plugs, the combination with a bowl, a gravity plug in the outlet of the bowl, a rock shaft mounted below the bowl, a cam upon the inner end of the rock shaft for raising the plug, and a counter shaft mounted above the bowl and parallel with the rock shaft, of a crank arm on the rear end of the counter shaft, a crank arm on the rear end of the rock shaft, a link connecting the outer ends of the crank arms and stops extending from one of the crank arms to engage the link and limit the swing of the crank arm.

1,275,686. ULTRA-DISTANCING PROJECTILE. ARTHUR H. HILL, New York, N. Y. Filed Apr. 30, 1917. Serial No. 165,420. (Cl. 102—29.)



1. In a projectile of the character described, a main shell having a chamber with a communicating bore leading through its contacting end, a second shell within the bore of the main shell adapted to be fired from the main shell at a time subsequent to the main shell being fired from a gun has traveled a given distance, and a collapsible cap removably mounted in the mouth of the bore of the gun.

3. In a projectile of the character described, a main shell having a chamber for an explosive with a communicating bore leading through its contacting end, a second shell within the bore of the main shell, means on the main shell for exploding the explosive at a predtermined time subsequent to the main shell being fired from a gun, a destructible retainer for releasably holding the second shell in the main shell, and a collapsible cap removably mounted in the mouth of the bore of the gun.

[Claim 2 not printed in the Gazette.]

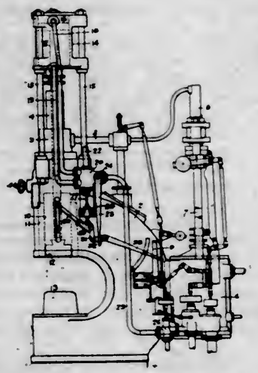
1,275,687. ELECTRICAL CONNECTION AND ART OF MAKING THE SAME. WILFRED D. HODGSON, Akron, Ohio. Filed May 16, 1917. Serial No. 168,927. (Cl. 204—8.)



8. The process of forming an interconnecting member for the conductors on an element of electric apparatus which consists in applying a partially protective covering to said element, making the unprotected portion of said element of predetermined form, immersing said partially protected element and the extremities of said conductors in a chemical bath and electrolytically depositing an interconnecting member upon said conductors and upon said unprotected portion of said element, whereby said member is given said predetermined form.

[Claims 1 to 7 and 9 to 13 not printed in the Gazette.]

1,275,688. COMBINED STEAM-HAMMER AND FORGING-PRESS. THOMAS EDMUND HOLMES, Nether Edge, Sheffield, England, assignor to The United Engineering & Foundry Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Feb. 14, 1914, Serial No. 818,750. Renewed Apr. 18, 1918. Serial No. 229,417. (Cl. 138—10.)

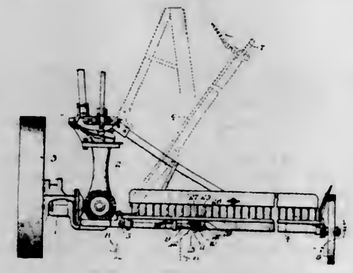


1. A machine of the character described, comprising a suitable frame, a lower die, a tool-holder, a cylinder, a ram in said cylinder above and in line with said tool-holder said ram having a reduced portion extending out of and above said cylinder, a cylinder above and in line with said first-named cylinder, a piston in said last-named cylinder, a piston rod extending down through said ram, connections between said piston rod and said tool-holder, and a releasable support for said ram for holding same in its elevated position, means for supplying motive fluid alternately to opposite ends of said second-named cylinder whereby said tool-holder may be raised and lowered independently of said ram.

2. In a machine of the character described, comprising a suitable frame, a lower die, a tool-holder, a cylinder, a ram in said cylinder in line with said tool-holder, said ram having a reduced portion extending through the upper end

of said cylinder, means for supplying fluid pressure to said cylinder, a lifting cylinder, a piston therein, a piston rod connected to said piston passing down through said ram and connected to said tool-holder, means for supplying motive fluid alternately to opposite ends of said lifting cylinder, and a key in said frame adapted to engage said ram in its elevated position whereby said tool-holder may be moved up and down independently of said ram.

1,275,689. PLATFORM-LATCH FOR REAPERS. LUD HOLLAND-LETZ, Oak Park, Ill., assignor to International Harvester Company of New Jersey, a Corporation of New Jersey. Filed Mar. 22, 1916. Serial No. 85,909. (Cl. 56—33.)



1. In a reaper, a frame, a reaper platform thereon, a stub axle disposed beneath said platform, means for attaching said axle to said platform and operating means therefor carried on the upper surface of said platform.

2. In a reaper, a frame, a reaper platform thereon, a stub axle disposed beneath said platform, a reciprocating axle engaging member carried beneath said platform, and operating means therefor carried on the upper surface of said platform.

6. In combination, a frame, an adjustable platform thereon, a support extending beneath said platform, a movable attaching member on said platform engageable with said support, and means for positively operating said attaching member to lock said platform in operative position on said support, said operating means having a predetermined movement and being completely operable to attach said platform to said support only when said support and said attaching member are in register with each other.

9. In a reaper, a frame, a stub axle thereon, a platform carried on said frame, a rack member having a sleeve portion projectable longitudinally of said axle, a pinion engageable with said rack member and having an upwardly extending body portion, and an operating member pivoted thereto and rotatable therewith normally disposed substantially flush with the upper surface of said platform.

[Claims 3 to 5, 7, 8, and 10 to 12 not printed in the Gazette.]

1,275,690. FLUSH RECEPTACLE. HARVEY HUBBELL, Bridgeport, Conn. Filed June 17, 1915. Serial No. 34,630. (Cl. 247—6.)

1. A device of the character described comprising a body, a base plate secured thereto and shaped to overhang a wall recess, said base plate having a central opening, a removable top block of a size to be passed through said opening without disturbing the base plate, and means for detachably connecting said top block to said body.

2. A device of the character described comprising a body, a base plate secured thereto and shaped to overhang a wall recess, said base plate having a central opening and being provided with inwardly extended flanges engaging said body, a removable top block of a size to be passed through said opening without disturbing the base plate, and means for detachably connecting said top block to said body.



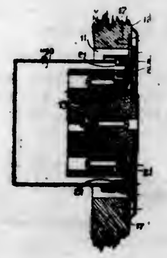
3. A device of the character described comprising a body, a base plate secured thereto and shaped to overhang a wall recess, said base plate having a central opening, a removable top block of a size to be passed through said opening without disturbing the base plate, means for detachably connecting said top block to said body, and means for adjustably supporting said base plate to permit the same to rest flat against the surface surrounding said wall recess.

4. A device of the character described comprising a body, a base plate lying separated from the body and having an opening and inwardly extending flanges engaging the body, arms extending from the flanges and slots in said arms and flanges, adjusting screws in said plate, adjusting ears engaged by said screws and provided with shanks passing through the slots and with attaching ears, and a removable top block adapted to be passed through the opening in the base plate and secured to the body.

5. A device of the character described comprising a body, a base plate lying separated from the body and having an opening and inwardly extending flanges engaging the body, arms extending from said flanges and having angle lugs secured to the body, said arms and flanges being provided with slots, adjusting screws in said plate, adjusting ears engaged by said screws and provided with shanks passing through the slots and with attaching ears, and a removable top block adapted to be passed through the opening in the face plate and secured to the body.

[Claims 6 to 8 not printed in the Gazette.]

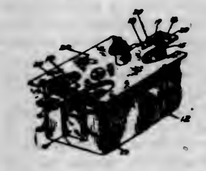
1,275,691. MEANS FOR LEVELING AND ALINING FACE-PLATES. HARVEY HUBBELL, Bridgeport, Conn. Filed Nov. 17, 1915. Serial No. 61,923. (Cl. 247—6.)



3. The combination with a box and an electric device therein, of adjusting ears connected with said device, an alining plate adjustably connected with said ears to permit said plate to rest flat against the surface of a wall irrespective of the relative angle of the wall and the box, said alining plate having inturned tongues, means for connecting said adjusting ears to said box, and a face plate having spring fingers for removably engaging said tongues.

[Claims 1 and 2 not printed in the Gazette.]

1,275,692. ADJUSTABLE SUPPORTING DEVICE FOR SWITCHES AND RECEPTACLES. HARVEY HUBBELL, Bridgeport, Conn. Filed June 22, 1917. Serial No. 176,313. (Cl. 247—6.)



1. A device of the character described, comprising a member adapted for attachment to an outlet box and provided with ways, a carrying member having a depending arm engaging said ways, and a set screw in the first mentioned member placed obliquely to the depending arm and adapted to clamp said arm between itself and the inner face of the ways.

2. A device of the character described, comprising a member adapted for attachment to an outlet box and having a lug struck out therefrom and ways, a carrying member having a depending arm engaging the ways, and an obliquely placed set screw having threaded engagement with the first mentioned member and also with the lug, and adapted to engage the depending arm, for the purpose set forth.

1,275,693. CONVERTIBLE CAP FOR ATTACHMENT-PLUGS. HARVEY HUBBELL, Bridgeport, Conn. Filed Dec. 17, 1917. Serial No. 207,419. (Cl. 173—343.)



1. In a convertible cap for attachment plugs, the combination of an insulating block having slots with diametrical and transverse arms and recesses contiguous thereto, and shiftable contact blades each adapted to engage either arm of a T-slot and having a lug adapted to engage one of the recesses when seated in either arm of a slot.

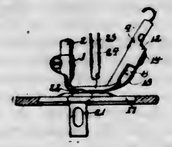
3. In a convertible cap for attachment plugs, the combination of shiftable contact blades having heads provided with retaining lugs, a blade carrying block having T-slots placed diametrically with the transverse arms of said slots toward each other, said blade carrying block having contiguous to each T-slot a recess adapted to receive the retaining lug when a contact blade is in the diametrical arm of the T-slot and another recess adapted to receive the retaining lug when the contact blade is in the transverse arm of the T-slot.

5. In a convertible cap for attachment plugs, the combination of an insulating block having an alined contact blade and a slot with diametrical and transverse arms and recesses contiguous thereto, and a shiftable contact blade adapted to engage either arm of said slot and having a lug adapted to engage one of the recesses when seated in either arm of the slot.

[Claims 2 and 4 not printed in the Gazette.]

1,275,694. PRESSER-FOOT FOR SEWING-MACHINES. ROBERT R. HUGHES, Jr., New York, N. Y., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 19, 1914. Serial No. 862,537. (Cl. 270—33.)

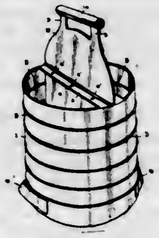
1. A presser foot for sewing machines comprising a foot portion having a groove in its under face and needle openings extending through the foot portion into said groove, said needle openings being located adjacent the side edges of the groove, and a yielding member carried by said foot and adapted to engage a folded strip in rear



of each needle, whereby said folded strip is held in the groove until stitched.

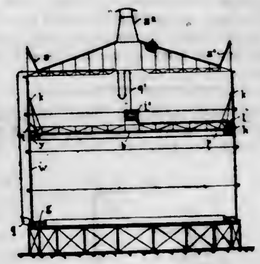
[Claims 2 to 9 not printed in the Gazette.]

1,275,695. FEED-BUCKET. BARNEY IVERSON, Arnegard, N. D. Filed June 21, 1917. Serial No. 176,101. (Cl. 220—22.)



A feed bucket comprising a cylindrical vessel, a strip arranged diametrically across the top of said vessel and provided with a longitudinal row of spaced slots, a diametrical partition disposed vertically within the vessel and having a right angular flange at its upper end secured to the underside of said cross strip, hinge straps positioned through said slots and secured to the partition, a semi-circular cover hingedly mounted at its diametrical edge to said hinge straps, integral arms projecting outwardly from the edge of said cover, a handle integral with said arms, and grips mounted at diametrically opposite points on said vessel adjacent the bottom thereof.

1,275,696. GAS-RESERVOIR. KONRAD JAGSCHITZ, Mainz, Germany, assignor to Maschinenfabrik Augsburg-Nürnberg, A. G., Nürnberg, Germany, a Corporation of Germany. Filed July 31, 1914. Serial No. 854,243. (Cl. 48—176.)



1. The combination of a reservoir, a closure slidable along the inner surface thereof and a fluid seal in said reservoir having no effective portion below the sealing point whereby the joint is sealed between said closure and said inner surface.

2. The combination of a reservoir, a closure movable therein and a fluid sealing medium carried entirely by said closure and having no effective portion below the sealing point, said sealing medium engaging the inner surface of said reservoir whereby the joint between said closure and said inner surface is sealed.

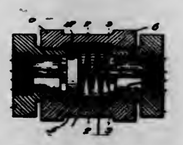
3. The combination of a reservoir, a closure movable therein, an annular peripheral trough carried by said closure and slidable along the inner surface of said reservoir, and a fluid sealing medium carried entirely by said trough and engaging the inner surface of said reservoir whereby the joint between said closure and said inner surface is sealed.

4. The combination of a reservoir, a closure slidable along the inner surface thereof, a fluid sealing medium carried entirely by said closure and engaging said inner surface and means for collecting the fluid medium which trickles through the space between the closure and said inner surface below the sealing point.

5. The combination of a reservoir, a closure slidable along the inner surface thereof, a fluid sealing medium carried entirely by said closure and engaging said inner surface, a collecting channel located at the bottom of said reservoir for collecting the fluid medium which trickles through the space between the closure and said inner surface and an outlet leading from said collecting channel.

[Claims 6 to 23 not printed in the Gazette.]

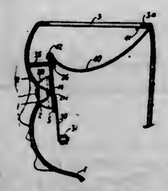
1,275,697. CHECK-VALVE. PATRICK H. JOYCE, Rushville, Ind. Filed Sept. 29, 1917. Serial No. 194,046. (Cl. 137—32.)



1. A check valve comprising a chamber having its inlet and outlet ports internally threaded, threaded plugs adapted to be received in said ports and having a passage therethrough, the inner ends of each of these plugs forming a valve seat, a strip bridging each of the inner ends of said plugs and having a central opening therein, a valve stem adapted to pass through the openings in said strips, a valve disk secured to said stem, and a spiral spring adapted to surround the valve stem and bear against one plug and the valve disk, to normally hold the disk in engagement with the inner end of the other plug.

2. A check valve comprising a chamber having its inlet and outlet ports, valve seats detachably connected to said ports, spiders carried thereby, a valve stem adapted to pass through said spiders, a valve disk secured to said stem, a coil spring surrounding said stem and normally urging said disk into engagement with the inlet port, and said spring and disk being diametrically smaller than said ports to facilitate the removal of these parts from said chamber.

1,275,698. EYE MECHANISM FOR DOLLS. LOUIS KALVIN, New York, N. Y. Filed May 25, 1918. Serial No. 236,492. (Cl. 46—40.)



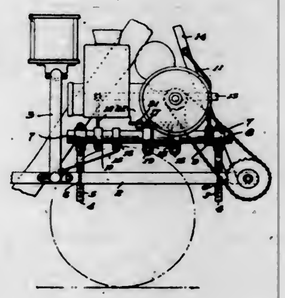
8. The combination with a hollow doll's head formed with eye sockets, of an eye-supporting plate, devices upon said plate engaging the inner surface of the head to support the plate in proper relation to said eye sockets, and locking means engaging said plate and the inner surface of the head for detachably securing the plate in place.

9. The combination with a hollow doll's head formed with eye sockets, of a supporting plate for eyes and eyelids removably mounted in the head in proper relation to said eye sockets, means adjustably securing the eyes to said plate, and a removable spring locking member detachably securing the plate in place.

18. The combination with a hollow doll's head having eye sockets, cup shaped members formed with segmental lower lid members adapted to engage the eye sockets of the head, the eye members, means for securing the eye members in said cup-shaped members, a slotted supporting plate, tongues projecting from said cup-shaped members and engaging the slots in said supporting plate, and means for detachably securing the supporting plate in position within the head.

[Claims 1, 2, 4 to 8, 10 to 17, and 19 to 21 not printed in the Gazette.]

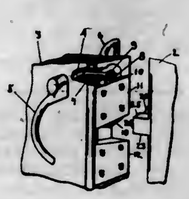
1,275,699. ATTACHMENT FOR BINDERS. WALTER F. KASPER, Fairmont, Minn., assignor to Fairmont Gas Engine & Railway Motor Car Co., Fairmont, Minn., a Corporation. Filed Aug. 18, 1916. Serial No. 115,701. (Cl. 248—30.)



3. The combination, with a binder frame, of brackets mounted thereon, boxes carried by said brackets, a shaft having bearings in said boxes and mounted for longitudinal or rotary adjustment therein, braces connecting said shaft with said frame, and a motor base mounted on said shaft and having an upper surface adapted to receive a motor.

[Claims 1 and 2 not printed in the Gazette.]

1,275,700. MOTOR-VEHICLE-DOOR HOLDER. THOMAS J. KEHOE, Toledo, Ohio, assignor to The Willys-Overland Company, Toledo, Ohio, a Corporation of Ohio. Filed Apr. 22, 1916. Serial No. 92,883. (Cl. 70—42.)



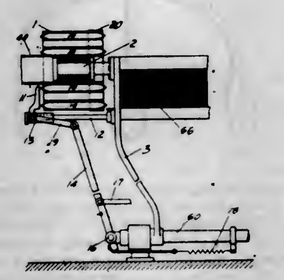
1. In a carriage door latch, the combination of a face plate having an inturned flange at its upper end, and having the central portion thereof struck in to form a wedge shaped recess, guide flanges struck up from the upper wall of said recess, a latch bolt moving parallel to said face plate with its upper end guided in said upper flange and its head projecting through the upper wall of said recess and guided by the flanges thereon, means for reciprocating said latch bolt, and a keeper member adapted to be secured to the door jamb and having its central portion struck out to form a tapered projection adapted to fit into the tapered recess of said face plate, the upper wall of said projection being provided with a notch adapted to be engaged by the head of said latch bolt.

2. In a carriage door latch, the combination of a face plate having a tapering recess, a latch bolt carried by said face plate parallel thereto and projecting through the upper wall of said recess, means for reciprocating said latch bolt and a keeper member adapted to be secured to the door jamb and having a tapering projection adapted to fit said tapering recess, the upper wall of said projection being provided with a notch adapted to be engaged by the head of said latch bolt.

4. In a carriage door latch, the combination of a keeper member adapted to be secured to the door jamb and provided with a projection having upper and lower converging walls, a plate adapted to be secured to the edge of the door and provided with a recess having upper and lower converging walls, said projection being adapted to snugly engage in said recess, the upper end of said plate being inturned, a latch bolt slidably mounted in said inturned portion of the latch plate and having its head extending through and guided by the upper wall of said recess, the upper wall of said projection being provided with a notch engageable by the head of said latch bolt, a spring on said latch bolt disposed between the head thereof and the inturned portion of said latch plate, a rock bar extending transversely through said door, an arm rigidly secured to said rock bar and provided with a forked end engaging the upper end of said latch bolt, and means for oscillating said rock bar.

[Claim 3 not printed in the Gazette.]

1,275,701. SHUTTLE-BOX FOR LOOMS. ALVIN KINOSBACHER and WALTER W. MACFARREN, Pittsburgh, Pa. Filed Apr. 3, 1913. Serial No. 758,650. (Cl. 139—28.)



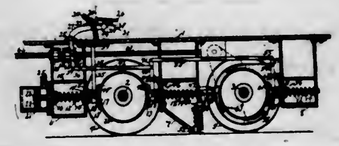
3. In a loom, means for forming two sheds in the warp, a rotary shuttle box containing a number of shuttles arranged in pairs, a picker arranged to engage a pair of shuttles and send them together across the warp, a pair of oppositely rotating friction wheels, means for pressing either of said wheels against a part connected to the shuttle box to rotate the same, and a latch for registering a pair of shuttles with the picker.

7. In a loom, means for forming two sheds in the warp, a rotary shuttle box containing a number of shuttles arranged in pairs, a picker, a drum having its width divided into as many spaces as there are pairs of shuttles, a notch for each space, said notches being set around the circumference of the drum in the same angular relation as the shuttle pockets, a series of latches, a pattern chain and means for setting the latches to engage the notches whereby a certain pair of shuttles is registered with the picker.

8. In a loom, means for weaving two pieces of fabric at once, comprising several shuttles arranged in sets of two for simultaneous picking, each set of said shuttles containing threads of one kind or color, and dissimilar from the threads in the other sets of shuttles, a rotatable shuttle box for supporting the shuttles, automatic means for rotating the shuttle box for substituting one set of shuttles for another set to suit the fabric being woven, and a picker arranged to operate a set of shuttles across the lay, in combination with means for forming two sheds in the warp, whereby two separate fabrics may be simultaneously woven each having a pattern containing dissimilar threads in the filling.

[Claims 1, 2, and 4 to 6 not printed in the Gazette.]

1,275,702. SAFETY BRAKE APPARATUS FOR VEHICLES. AUGUST J. KLONECK, New York, N. Y. Filed Sept. 23, 1914. Serial No. 863,152. (Cl. 21—8.)



1. In a vehicle, a driving means, a driven means and a clutch for connecting the same, a plurality of brakes and a lever operating said clutch and connected with said brakes, certain of said brakes being shoe brakes and levers controlling each of said shoe brakes.

2. In a vehicle, normally operated brakes and a starting mechanism, the operation of the latter releasing said brakes, a plurality of levers for controlling said brakes.

17. In a wheeled vehicle, a driven means therefor, shoe, band, and surface brakes therefor, and means whereby said brakes and means are simultaneously operated, whereby the brakes are thrown out of operation as said driven means is started, and whereby said brakes are thrown into operation as said driven means is stopped.

35. In a vehicle, a plurality of brakes therefor, a driving means and a driven means therefor, a fluid control and a manual control for said brakes and means for connecting the driving and driven means, said connecting means being operable by either of said controls.

42. In a vehicle, the combination, of driving means, driven means and brakes, levers, links and a clutch for connecting said driving and driven means for propelling of said vehicle and for operating said brakes, said brakes being spring controlled, a ratchet for manually locking said clutch and brakes and springs for automatically unlocking said locking ratchet, adapted to permit operation of said brakes by said brake springs if the same are not kept manually in operative condition for the operation of said vehicle.

[Claims 3 to 16, 18 to 34, 36 to 41, 43, and 44 not printed in the Gazette.]

1,275,703. CONVERTIBLE CAP FOR ATTACHMENT-PLUGS. GEORGE P. KNAPP, Bridgeport, Conn., assignor to Harvey Hubbell, Incorporated, Bridgeport, Conn., a Corporation of Connecticut. Filed Dec. 5, 1917. Serial No. 205,631. (Cl. 173—343.)

3. A convertible cap for attachment plugs, comprising a body, movable contact blades having angle arms, and

contact plates covering the angle arms and having apertures through which the blades are passed, each aperture having a straight wall, a curved wall, a backing wall, a rounded projection and a notch, the rounded projection serving as a fulcrum for the blade in swinging from parallel to alined position, or vice versa, and the straight wall serving as a stop for the blade in the parallel position.

7. An attachment plug cap having movable contact blades provided with angle arms, springs bearing on the



angle arms, and stops for the blades in either the alined or parallel position.

[Claims 1, 2, and 4 to 6 not printed in the Gazette.]

1,275,704. SEAT ATTACHMENT. JOHN P. KYLE, Aredale, Iowa. Filed Oct. 9, 1917. Serial No. 195,588. (Cl. 155—25.)



A seat attachment comprising a pair of spaced bars, another pair of bars pivoted at points removed from their forward ends to said first bars, a hook rod having its shank extending through each of the forward ends of said second bars and its lower hook end engaging the adjacent first bar, an adjusting nut carried by the upper end of each hook rod, a cushion spring on each hook rod between said adjusting nut and second bar, and a seat carried by the rear ends of said second bars.

1,275,705. PROCESS OF HYDRATING CLAY. JOSEPH S. LAIRD, Ann Arbor, Mich. Filed Dec. 24, 1917. Serial No. 208,625. (Cl. 25—156.)

1. A process of increasing the plasticity of clayey material which comprises subjecting the same to the action of H_2O at a temperature materially above 100° C.

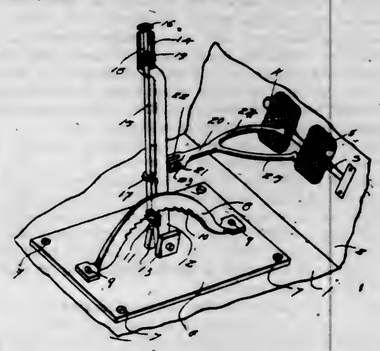
2. A process of increasing the plasticity of clayey material which comprises subjecting clay previously heated to a calcining temperature, to the action of H_2O at a temperature materially above 100° C.

3. The process of treating clay having a low plasticity to increase the plasticity thereof which comprises subjecting the same to the action of steam at a temperature above 100° C. under super-atmospheric pressure, until the plasticity has materially increased.

4. The process which comprises treating clay which has previously been deferruginized by a method involving the heating of said clay to a temperature approaching a glowing heat, which comprises subjecting the same to steam at a temperature above 100° C. under superatmospheric pressure for a protracted period.

5. The process which comprises subjecting clay material to steam at a temperature above 100° C. while working the mass.

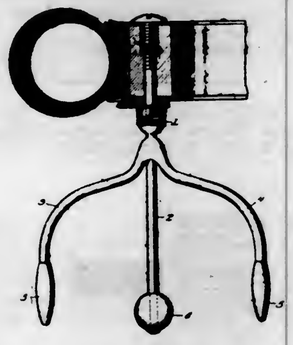
1,275,706. AUTOMOBILE-CONTROLLING DEVICE. FRED T. LANGOLF, Elwood, Ind., assignor of one-half to William A. Rauch, Elwood, Ind. Filed Sept. 28, 1917. Serial No. 193,739. (Cl. 74—39.)



1. An automobile controlling device comprising a controlling lever, and means connecting the controlling lever to the clutch and foot pedals of an automobile, said means operating the clutch pedal prior to the foot pedal.

[Claims 2 to 4 not printed in the Gazette.]

1,275,707. DEMOUNTABLE-RIM WRENCH. FREDERICK K. LAWRENCE, Chicago, Ill. Filed Nov. 12, 1917. Serial No. 201,437. (Cl. 81—121.)



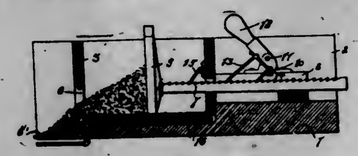
1. A wrench having a head for engaging the nut, and a plurality of branches for rotating it, the inner end of said branches forming handles and one of them being coincident with the axis of the wrench and the others equally distant from the axis and arranged parallel to the axis.

2. A wrench having a head for engaging the nut and a plurality of branches for rotating it, the inner end of said branches forming handles and one of them being coincident with the axis of the wrench and the others equally distant from the axis and arranged parallel to the axis, all of said handles being approximately at the same distance back of the head.

1,275,708. COAL-PUSHER. JOSEPH LEMAY, Sault Ste. Marie, Ontario, Canada. Filed Nov. 26, 1917. Serial No. 203,916. (Cl. 105—260.)

1. In a coal feeding device the combination with a storing bin, a piston arranged within said storing bin, a rack bar connected to said piston, a pivotally mounted lever,

and pawls carried by said lever for engaging the teeth of said rack bar whereby upon the reciprocating movement of said lever said rack bar will be moved intermittently in a forward direction.



2. In a coal feeding device of the character described the combination with a supply bin, a piston mounted therein for reciprocating movement, a rack bar secured to said piston, a pivotally mounted pawl for engaging the teeth of said rack bar, a pivotally mounted lever, a pair of pawls pivotally connected to said lever and arranged one at each side of its pivoted connection, said pawls adapted to engage the teeth of said rack bar whereby upon the reciprocating movement of said lever said piston will be caused to move in a forward direction.

3. In a coal feeding device the combination with a supply bin, comprising a pair of end walls, one of the end walls having a discharge opening, a piston mounted for reciprocating movement within said bin, a rack bar connected to said piston and extending through the other of said end walls, a pivotally mounted pawl carried by one of said end walls and adapted to engage the teeth of said rack bar, means for intermittently moving said rack bar in a forward direction, and heating coils arranged below said bin substantially as and for the purpose specified.

1,275,709. ARCH CONSTRUCTION FOR FURNACES. WILLIAM LEMB, Brooklyn, N. Y. Filed Oct. 24, 1917. Serial No. 198,847. (Cl. 110—99.)



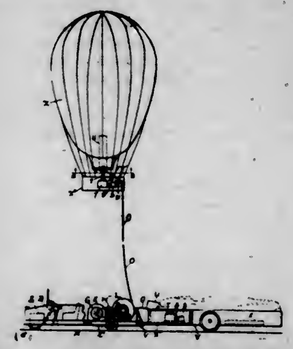
1. In a boiler furnace, the combination with a pair of opposed supporting walls, of a series of parallel spaced beams flanged at the lower edge and extending between the walls, sets of hangers between the beams, each comprising a flat web with a rib on the top and bottom edge projecting beyond the web at the ends, said projecting ribs resting on the beam flanges whereby the hangers are suspended in alining rows transverse to the beams, and blocks each having a slot in the upper edge that is enlarged in the block whereby each block may slide on the lower rib of the hanger and be suspended thereby to form a closed top wall for the furnace.

3. In a boiler furnace, the combination with a pair of opposed supporting walls, of a series of parallel spaced beams flanged at the lower edge and extending between the walls, sets of hangers between the beams, each comprising a flat web with a rib on the top and bottom edge projecting beyond the web at the ends, said projecting ribs resting on the beam flanges whereby the hangers are suspended in alining rows transverse to the beams, blocks each having a slot in the upper edge that is enlarged in the block whereby each block may slide on the lower rib of the hanger and be suspended thereby to form a closed wall for the furnace, and a special hanger comprising a web having a hook portion at the top adapted to rest on the beam flange and a bar at the lower portion arranged to aline with said hanger bars, whereby to support a slotted block substantially as set forth.

7. In a furnace arch construction, the combination with a series of wedge-shaped blocks arranged in the form of an arch, and supporting means for the extremities of the arch, of an end block for each end of the arch, that is composed of complemental sections engaging on their radial faces of the sections, one section having a cylindrical engaging face, and the other section being similarly inwardly curved on its engaging face, whereby the sections may have a relative movement in a radial direction.

[Claims 2, 4 to 6, 8, and 9 not printed in the Gazette.]

1,275,710. CAPTIVE-BALLOON CONTROLLER AND CONVEYER. JAMES N. LEWIS, Detroit, Mich., assignor to Owen H. Fay, trustee, Chicago, Ill. Filed Nov. 8, 1917. Serial No. 200,048. (Cl. 244—4.)



1. A lighter than air construction comprising means to contain heated air, said means open at the lower end thereof, a heater, means, comprising a fan, arranged to discharge air therefrom on to said heater and into said open end, said heater and fan respectively adapted to be energized by an electric current, a source of electrical supply and electric conductors connecting said source of supply and said heater and fan.

[Claims 2 to 8 not printed in the Gazette.]

1,275,711. METHOD OF PREPARING FOOD PRODUCTS OF STARCHY MATERIAL. FREDERICK G. LORENZEN, Battle Creek, Mich., assignor to Kellogg Toasted Corn Flake Company, Battle Creek, Mich., a Corporation of Michigan. Filed Mar. 30, 1918. Serial No. 225,815. (Cl. 99—18.)



1. The process of forming a puffed food product from globules of starchy material such as described which consists in subjecting said globules to the action of dry steam at an initial low pressure and increasing said pressure during the cooking operation whereby adhesion of globules to each other is diminished, afterward separating and drying said globules, and then subjecting them to a sharp dry heat whereby they are puffed.

2. A process according to claim 1 in which the initial pressure is less than two pounds per square inch and the final pressure between ten and twenty pounds and the time of cooking is between two and four hours.

3. The process of forming a puffed food product from globules of starchy material such as described which consists in subjecting said globules to the action of dry steam at an initial low pressure and increasing said pressure during the cooking operation whereby adhesion of globules to each other is diminished, then initially drying said globules in the mass, then separating them, then subjecting them to gradual drying at a warm temperature, and then subjecting them without cooling to a sharp dry heat whereby they are puffed.

4. A process according to claim 3 in which the final drying temperature is gradually brought up to a point of from 100 to 110 degrees.

9. The process of forming a puffed food product from globules of starchy material such as described which consists in subjecting said globules to the action of dry steam until they are completely gelatinized, then cooling and slightly drying the mass of cooked globules, then subjecting the mass to the grinding action of a pair of separated crumbling plates whereby the globules are separated, and then drying and puffing the globules.

[Claims 5 to 8 not printed in the Gazette.]

1,275,712. COMPARTMENT-KILN. ROY H. MCELROY, Dayton, Ohio, assignor to The International Clay Machinery Co., Dayton, Ohio. Filed Sept. 1, 1917. Serial No. 189,399. (Cl. 25—136.)



1. A kiln provided with a plurality of compartments, a bag wall in each compartment, perforated floors for said compartments, the side of the floors adjacent to the bag walls being less perforated than the other side, and said kiln being provided with flues which connect said compartments.

2. A kiln provided with a plurality of compartments, a bag wall arranged at the side of each compartment, a perforated floor for each compartment, said floor having non-perforated portions at one side and adjacent to the bag walls, and said kiln being provided with flues which connect said compartments.

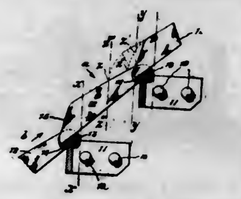
3. A kiln provided with a plurality of compartments, feather walls forming communicating flues between said compartments, division walls separating said compartments, said division walls being mounted above said feather walls and extended downwardly between the feather walls of alternate flues thereby stopping off said alternate flues, the said feather walls being of continuous form and extending through the division walls.

4. A kiln provided with a plurality of compartments, communicating flues between said compartments, a draft flue connected to said communicating flues, a draft appliance connected with said draft flue, gas ports in said compartments, a gas duct connected to said gas ports, and a hood connecting said gas duct to said draft appliance.

5. A kiln provided with a plurality of compartments, communicating flues between said compartments, a main draft flue connected with said communicating flues, a draft appliance connected with said main draft flue, gas ports in said compartments, a gas duct connected with said gas ports, said draft appliance and said gas duct being provided with ports, and a hood adapted to connect said last named ports.

[Claims 6 to 8 not printed in the Gazette.]

1,275,713. COKE-SCREEN. ARTHUR G. MCKEE, Cleveland, Ohio. Filed June 16, 1916. Serial No. 104,110. (Cl. 83—60.)



1. In a cascade screen for coke or the like, the combination of a frame; a series of cross-bars secured to the frame; and a plurality of staggered series of screen-bars loosely mounted on the cross-bars, the construction being such that each screen-bar is provided with a clear path for its removal.

2. In a screen for coke or the like, the combination of a frame; a series of cross-bars secured to the frame and arranged to occupy successively lower levels; and a plurality of series of screen bars loosely mounted on the cross-bars, the same cross-bar supporting the lower ends of one series of screen-bars and the upper ends of the next lower series of screen-bars.

3. In a screen for coke or the like the combination with a support comprising in its structure a plurality of transverse parallel supporting bars having their upper surfaces in different and succeeding horizontal planes; of a plurality of series of screen bars, each series comprising a plurality of downwardly extending and laterally adjacent bars, each of the latter having its upper end engaging one of said supporting bars so as to be upwardly removable therefrom but secured against displacement in the direction of inclination of the screen and its lower end loosely resting upon the next lower supporting bar, the bars of any given series being laterally staggered with reference to the bars of an adjacent series, the construction being such that each screen-bar is provided with a clear path for its removal.

4. In a screen for coke or the like, the combination with transverse supporting bars arranged to occupy successively lower levels; of a plurality of series of screen-bars, each bar being hooked at one end over an upper supporting bar and resting at the other end upon a lower supporting bar, the same bar supporting the lower ends of one series of screen-bars and the upper ends of the next lower series of screen-bars.

5. In a screen for coke or the like, the combination with a plurality of longitudinally extending side bars, and a plurality of transverse supporting bars formed with angularly bent ends, said ends being secured to side bars; of a plurality of staggered series of spaced screen-bars loosely mounted upon said supporting bars, the construction being such that each screen-bar is provided with a clear path for its removal.

[Claims 6 and 7 not printed in the Gazette.]

1,275,714. TRAP-DOOR FOR GRADE-LEVEL VESTIBULE-CARS. LEO F. MCNALLY, Brooklyn, N. Y., assignor to David W. Pye, Red Bank, N. J. Filed June 6, 1917. Serial No. 173,079. (Cl. 105—84.)

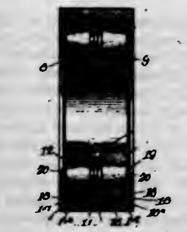


1. In a device of the class described, a cylindrical housing; a trap door carried by said housing; a supporting bracket located adjacent one end of said housing; a removable supporting member supported by said supporting bracket and extending therefrom, and adapted to provide a pivotal support for one end of said housing; a pivot bracket located adjacent the other end of said cylindrical housing; a removable pivot carried by said pivot bracket and extending therefrom, and adapted to provide a pivotal support for the other end of said housing; means for securing said removable pivot in place relative to said pivot supporting bracket; and a torsional spring located within said housing, one end of said spring being connected with said supporting member and the other end thereof being operatively connected with said housing.

2. In a device of the class described, a cylindrical housing; a trap door carried by said housing; a supporting bracket located adjacent one end of said housing; a supporting member supported by said supporting bracket and extending into one end of said housing, and having a longitudinally extending groove formed in its periphery and adjacent its inner end; a pivot bracket located adjacent the other end of said cylindrical housing; a pivot carried by said pivot bracket and adapted to provide a pivotal support for the adjacent end of said housing; a spring seat located within said housing and secured thereto, and having a longitudinally extending groove formed in its periphery; and a helical torsional spring located within said housing and the ends of which are provided with straight portions adapted to lie within the grooves aforesaid of said spring seat and of said supporting member.

3. In a device of the class described, a cylindrical housing; a trap door carried by said housing; a supporting bracket located adjacent one end of said housing; a supporting member supported by said supporting bracket and extending therefrom, and adapted to provide a pivotal support for one end of said housing; a series of ratchet teeth upon said supporting member intermediate the ends thereof; a pivotally supported pawl carried by said supporting bracket and the free end of which is adapted to engage said teeth; a locking screw adapted to hold the free end of said pawl in engagement with said teeth; means for providing a pivotal support for the other end of said housing; and a torsional spring located within said housing and the ends of which are connected, respectively, with said supporting member and with said housing.

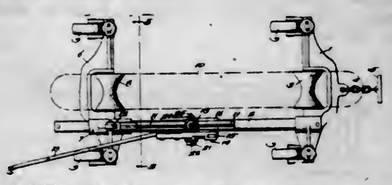
1,275,715. ROLLER-BEARING. WILLIAM H. MAKUTCHAN, Chicago, Ill., assignor to Makutchan Roller Bearing Company, Chicago, Ill., a Corporation of Arizona. Filed Dec. 4, 1916. Serial No. 135,015. (Cl. 64—62.)



1. In a device of the class described, a series of rollers tapered at their opposite ends and provided each with an intermediate groove, an integral internal track member having tapered bearing surfaces and an intermediate rib engaging the grooves in the rollers, and an integral outer track member having tapered bearing surfaces, and an intermediate rib engaging the grooves of the rollers.

2. In a device of the class described, an inner annular track member having tapered end portions and an intermediate rib, a series of rollers surrounding the track member, the ends of said rollers being tapered to correspond to said track member, and the intermediate portion of the rollers being grooved to receive said rib, an integral outer track member having tapered end portions corresponding to the taper of the rollers, and a separator for the rollers comprising a pair of ring members engaging the opposite ends of the rollers respectively, and connecting bars between said ring members extending between adjacent rollers.

1,275,716. LIFTING-JACK. HENRY E. MAURER, Jr., Springfield, Ill., assignor of one-half to Harry L. Ide, Springfield, Ill. Filed Jan. 21, 1918. Serial No. 212,940. (Cl. 21—118.)



1. A lifting jack including two load supporting members; a side piece connecting said load supporting members and along which one of the load supporting members is movable toward and from the other load supporting member; a rack bar connected with said movable load supporting member and extending longitudinally of the side piece; a lever having a fulcrum supported by the side piece; and a pawl engageable with the teeth of the rack bar and operable by said lever to draw the rack bar longitudinally of the side piece and thereby effect movement of said movable load supporting member longitudinally of the side piece.

2. A lifting jack including two load supporting members; a side piece connecting said load supporting members and along which one of the load supporting members is movable toward and from the other load supporting member; a rack bar pivotally connected with said movable load supporting member and extending longitudinally of the side piece; a lever having a fulcrum supported by the side piece; and a pawl engageable with the teeth of the rack bar and operable by said lever to draw the rack bar longitudinally of the side piece and thereby effect movement of said movable load supporting member longitudinally of the side piece.

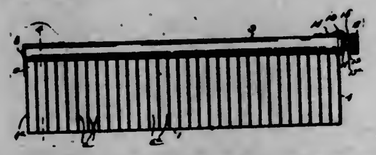
3. A lifting jack including two load supporting members; a side piece connecting said load supporting members and along which one of the load supporting members is movable toward and from the other load supporting member; a rack bar connected with said movable load supporting member and extending longitudinally of the side piece; a lever having a fulcrum supported by the side piece; a pawl engageable with the teeth of the rack bar and operable by said lever to draw the rack bar longitudinally of the side piece and thereby effect movement of said movable load supporting member longitudinally of the side piece; and a pawl disengaging device adjusted to function by said lever when in idle position to normally disengage the pawl from the rack bar to permit said movable load supporting member to be moved longitudinally of said side piece independently of the lever.

4. A lifting jack including two load supporting members; a side piece connecting said load supporting members and along which one of the load supporting members is movable toward and from the other load supporting member; a rack bar pivotally connected with said movable load supporting member and extending longitudinally of the side piece; a lever having a fulcrum supported by the side piece; a pawl engageable with the teeth of the rack bar and operable by said lever to draw the rack bar longitudinally of the side piece and thereby effect movement of said movable load supporting member longitudinally of the side piece; and a pawl disengaging device adjusted to function by said lever when in idle position to normally disengage the pawl from the rack bar to permit said movable load supporting member to be moved longitudinally of said side piece independently of the lever.

5. A lifting jack including two load supporting members; a side piece connecting said load supporting mem-

bers and along which one of the load supporting members is movable toward and from the other load supporting member; a bar connected with said movable load supporting members, a lever having a fulcrum supported by the side piece; and a bar engaging member operable by said lever to draw said bar longitudinally of the side piece and thereby effect movement of said movable load supporting member longitudinally of the side piece.

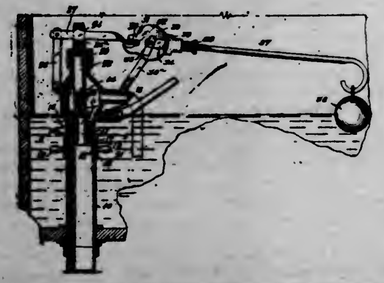
1,275,717. TICKET-DISTRIBUTER. FRED C. MUNDECK, Haskell, Tex. Filed Jan. 18, 1917. Serial No. 143,117. (Cl. 45—4.)



1. A ticket distributer having a rectangular body formed from a continuous piece of material and provided with a cylindrical casing at the upper edge of the back wall of said body and extending the full length thereof and having a longitudinally extending slot, a plurality of spaced partition members secured in said body and forming a series of ticket receiving compartments, an indicating cylinder mounted in said casing and provided with a series of indicating characters adapted to be brought into register with said compartments, and means carried by the casing and engaging with said cylinder for securing the cylinder in rotary adjustment and normally preventing axial movement of the same in either direction.

2. A ticket distributer having a rectangular body formed from a continuous piece of sheet material, the upper edge portion of the back of said body being turned downward and inward to provide a cylindrical casing at the upper edge of the back and extending the full length of the body, said casing having a slot extending the full length thereof and positioned in the front of the casing, a plurality of spaced partition members secured in said body and forming a series of ticket receiving compartments, an indicating cylinder mounted in said casing for rotary adjustment and provided with a series of indicating characters of such size as to be visible through said slot and so spaced as to be brought into register with the ticket compartments when the cylinder is rotated, and means for securing said cylinder in rotary adjustment.

1,275,718. WATER-SUPPLY VALVE. CHARLES T. MILLER, Macon, Ga. Filed Apr. 16, 1917. Serial No. 162,467. (Cl. 137—104.)

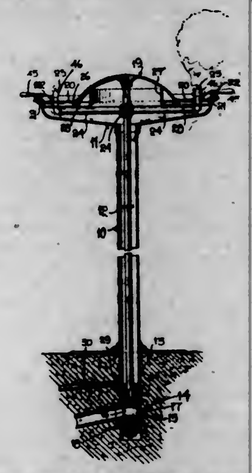


1. A valve mechanism of the character described including a pipe having an extension of reduced diameter, providing an annular shoulder at its junction with the body of the said pipe, the end of said extension forming a valve seat, a valve casing swiveled on the extension for free rotation thereabound and carrying an outwardly projecting flange concentric to the extension, a nut screw-threaded on the pipe and having an inwardly projecting flange extending over the outwardly projecting flange and holding the outwardly projecting flange of the valve casing in proximity to said shoulder, means preventing the nut from binding said flange of the casing against the shoulder to thereby permit free rotation of the casing, and a valve in the casing coacting with said seat.

3. In a valve mechanism of the character described, a pipe section having a reduced upper end, a valve casing into which the reduced upper end of the pipe section projects, a sleeve surrounding the reduced portion of the pipe section and fitting thereon and having exterior screw-threads engaging interior screw-threads on the valve casing, said sleeve having an annular flange on its lower end, and a coupling having an inwardly extending annular flange on its upper end overlapping and rotatably engaging the annular flange on the sleeve, said coupling having screw-threaded engagement with the upper end of the pipe section below the reduced portion thereof, and means limiting the inward movement of said coupling upon the pipe section and preventing binding of the coupling upon the flange of the sleeve.

[Claim 2 not printed in the Gazette.]

1,275,719. BUBBLER DRINKING-FOUNTAIN. CHARLES T. MILLER, Macon, Ga. Filed June 2, 1917. Serial No. 172,476. (Cl. 137—109.)



1. A drinking fountain comprising a waste pipe forming a standard, a bowl supported upon the upper end of the waste pipe and draining thereinto, a supply pipe extending upward centrally through the waste pipe and rotatably mounted therein and having a discharge nozzle, a rotatable valve carried by and rotatable with the supply pipe and disposed at the lower end of the waste pipe and having a vertical bore discharging into the supply pipe, and a transverse bore coacting with a receiving opening in the lower end of the discharge pipe whereby when the supply pipe is rotated in one direction, water will be admitted thereto and when rotated in the opposite direction, water will be cut off, and a drain pipe extending from the waste pipe just above said valve, the valve fitting the lower end of the waste pipe.

2. A drinking fountain comprising a waste pipe forming a standard, a bowl supported upon the upper end of the waste pipe, a supply pipe extending upward through the waste pipe and rotatably mounted therein and having a radially disposed nozzle with an upwardly extending extremity disposed within the limits of said bowl, a valve carried upon and rotatable with the supply pipe and when the supply pipe is rotated in one direction admitting water thereto, and when rotated in the opposite direction cutting off the supply of water thereto, a spring urging the supply pipe toward a position to cut off the water, and

means for adjustably limiting the range of movement of the supply pipe to thereby limit the amount of water discharged from the supply pipe when it is fully opened and limit the closing movement of the valve.

3. A drinking fountain including a waste pipe, a bowl supported upon the upper end of the waste pipe, a supply pipe extending centrally through the waste pipe and rotatable therein, a valve carried by the supply pipe and controlling the flow of water therethrough, said supply pipe at its upper end within the bowl having a radially extending branch with an upwardly extending nozzle, a spring urging the supply pipe in a direction to close said valve and cut off the supply of water, and a cap detachably engaged with the bowl extending over the central portion of the bowl and forming a bearing for the upper end of the supply pipe.

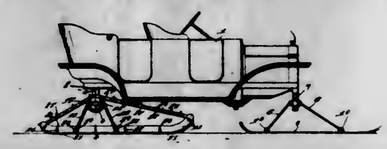
[Claims 4 to 9 not printed in the Gazette.]

1,275,720. TRACTION ATTACHMENT FOR AUTOMOBILES. GEORGE R. MILLIGAN, Los Angeles, Cal. Filed Jan. 2, 1918. Serial No. 210,078. (Cl. 180—9.)



In a traction attachment, a traction frame adapted to be mounted below the body of an automobile and secured to the axle housings, traction wheels supporting the rear end of the frame, traction idlers in line with the traction wheels, traction belts running upon the traction wheels and idlers, friction wheels adapted to be driven by contact with the drive wheels of the automobile, and connections between the friction wheels and the traction wheels for driving the traction wheels.

1,275,721. AUTOMOBILE-SLEIGH RUNNER. FLOYD A. MOFFITT and ROSS MOFFITT, Albion, Mich. Filed Mar. 20, 1917. Serial No. 156,155. (Cl. 180—5.)



1. In a device of the class described, the combination of a runner, comprising a pair of spaced sections, means for attaching said runner to a stub axle, said sections being provided with alined slots, shafts projecting through said slots, rollers loosely mounted upon said shafts and spanning the distance between said sections, means carried upon the projecting ends of said shafts for holding the same from slipping through said rollers, coil springs connected to the ends of said shafts, means for connecting said coil springs to said sections, whereby said shafts will normally be urged downwardly, an endless chain passing around said rollers and projecting below the lower surface of said rollers, means for driving said chain and said rollers being adapted to move inwardly and allow the chain to move inwardly against the tension of said springs when the chain engages a hard surface.

2. In a device of the class described, the combination of a runner comprising a pair of sections, said sections being L-shaped in cross section, the upwardly extending portions of said sections having alined slots formed therein, means for attaching said runner to the axle of an automobile, shafts passing through said slots, rollers loosely mounted upon said shafts between said sections, loops fixedly mounted upon the horizontal portions of said sections, coil springs connected to the ends of said shafts and to said loops, whereby said axles will be normally urged downwardly, an endless chain bearing upon said rollers and projecting below the lower surface of said sections, thereby allowing the chain to grip a surface, means for driving said chain and said chain being adapted to move inwardly so as to move said rollers upwardly against the tension of said springs when the runner is passing over a hard surface thereby preventing the chain from jarring the runner.

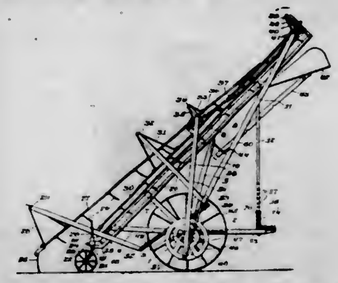
3. In a device of the class described, the combination of a runner comprising a pair of spaced sections, means for attaching said runner to a driving axle terminal, said sections having alined slots, shafts projecting through said slots, rollers loosely mounted upon said shafts, nuts carried upon the projecting ends of said shafts, for holding said shafts against displacement, means for urging said shafts in one direction, an endless chain passing around said rollers, and means for driving said chain.

4. In a device of the class described, the combination of a runner comprising a pair of spaced sections, means for attaching said runner to a driving axle terminal, said sections having alined slots, shafts projecting through said slots, rollers loosely mounted upon said shafts, nuts carried upon the projecting ends of said shafts, for holding said shafts against displacement, springs carried by said sections and engaging said shafts for urging said shafts in one direction, an endless chain passing around said rollers and means for driving said chain.

5. In a device of the class described, the combination of a runner comprising a pair of sections, said sections being L-shaped in cross-section, the upwardly extending portions of said sections having alined slots formed therein, means for attaching said runner to a driving axle terminal, shafts passing through said slots, rollers loosely mounted upon said shafts between said sections, means for holding said shafts against displacement, means for urging said shafts in one direction, an endless chain passing around said rollers, and means for driving said chain.

[Claims 6 and 7 not printed in the Gazette.]

1,275,722. HAY-LOADER. EDWARD MOWRY, Sterling, Ill., assignor to International Harvester Company of New Jersey, a Corporation of New Jersey. Filed Dec. 29, 1915. Serial No. 69,144. (Cl. 56—64.)



1. In a hay loader, the combination of an elevator frame, rakes carried thereby and slidably supported at their upper ends, a cam member rotatably mounted on said frame, members guided by said cam member, and means connecting said guided members to said rakes, said connecting means forming the sole supports for the lower ends of said rakes.

3. In a hay loader, the combination of an elevator frame, rakes movable relatively thereto, an actuated cam member having two cam races, members guided by said cam races and directly connected, respectively, to said rakes for transmitting a rising and falling motion thereto, and means including a crank directly connected with said cam member and to said rakes for reciprocating said rakes over said elevator frame.

5. In a hay loader, the combination of a rotatable shaft, wheels supporting the same, an elevator frame carried thereby, rakes movable relatively to said elevator frame, a cam member mounted on and actuated by said shaft having two cam races, levers having one end of each guided respectively by said cam races and being operatively connected to said rakes for transmitting motion thereto, and means including a crank member secured to said cam member and arms from the crank member to the rakes for transmitting a reciprocatory movement to said rakes over said elevator frame.

[Claims 2 and 4 not printed in the Gazette.]

1,275,723. COLOR-COMPARING ROD. LOUIS F. NAFIS and MABEL SILLER NAFIS, Evanston, Ill. Filed Feb. 1, 1918. Serial No. 214,807. (Cl. 88—14.)

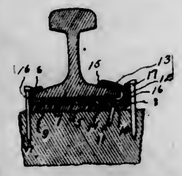


1. A color comparing rod comprising a hand rod having a plurality of colors at different points of its length and separately visible for comparison purposes.

7. A butter color comparing rod comprising a hermetically sealed glass tube, and a plurality of butter colors in said tube.

[Claims 2 to 6 and 8 not printed in the Gazette.]

1,275,724. BOLTLESS RAILROAD-SPLICE. CLIFFORD L. NEAT, Yelm, Wash. Filed Apr. 15, 1918. Serial No. 228,661. (Cl. 239—2.)



1. The combination with a pair of rails arranged end to end, of a splicer comprising a base plate lying beneath the rail ends and engaged therewith at one side thereof, a rounded flange on the base plate at the other side of the rail ends and a key insertible in said flange and having a curved portion engaged with the bottoms of the rail ends, and an opposite curved portion engageable with the tops of the base flanges of said rail ends.

2. The combination with a pair of rails arranged end to end, of a splicer comprising a base plate lying beneath the rail ends and engaged therewith at one side thereof, a rounded flange on the base plate at the other side of the rail ends and a key insertible in said flange and having a curved portion engaged with the bottoms of the rail ends, an opposite curved portion engageable with the tops of the base flanges of said rail ends, and means for leveling the base plate.

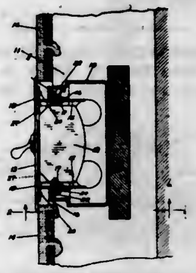
3. The combination with a pair of rails arranged end to end, of a splicer comprising a base plate lying beneath the rail ends and engaged therewith at one side thereof, a rounded flange on the base plate at the other side of the rail ends and a key insertible in said flange and having a curved portion engaged with the bottoms of the rail ends, an opposite curved portion engageable with the tops of the base flanges of said rail ends, and means for fastening the plate against displacement.

4. The combination with a pair of rails arranged end to end, of a base plate disposed beneath the bases of the rail ends and having a laterally inclined major portion, a flange at one side edge of the plate and engageable with the bases of the rail ends, a downwardly and upwardly rounded flange at the opposite edge of said side plate, and means forming a locking key arranged within the last named flange and forming a fulcrum for the bases of the rails to automatically cause the gripping of the key with the tops of the bases of said flanges when the rail ends are subjected to a load.

5. The combination with a pair of rails arranged end to end, of a base plate disposed beneath the bases of the rail ends and having a laterally inclined major portion, a flange at one side edge of the plate and engageable with the bases of the rail ends, a downwardly and upwardly rounded flange at the opposite edge of said side plate, means forming a locking key arranged within the last named flange and forming a fulcrum for the bases of the rails to automatically cause the gripping of the key with the tops of the bases of said flanges when the rail ends are subjected to a load, and means for fastening the plate against longitudinal and lateral displacement.

[Claim 6 not printed in the Gazette.]

1,275,725. ADJUSTER FOR ELECTRICAL ATTACHMENTS. WILLIAM J. NEWTON, Bridgeport, Conn., assignor to Harvey Hubbell, Incorporated, Bridgeport, Conn., a Corporation of Connecticut. Filed June 22, 1917. Serial No. 176,360. (Cl. 247—6.)



1. A device of the character described, comprising an L-shaped member adapted for attachment to an outlet box and having in its vertical arm an outwardly sprung lug provided with a threaded hole, an L-shaped member adapted for attachment to a switch and having in its vertical member a slot, and a screw passing through the slot and engaging the hole in the lug, whereby the switch carrying member may be locked at any required adjustment.

2. A device of the character described, comprising an attaching member having an outwardly sprung lug with a threaded hole, a switch carrying member having a slot, and a screw passing through said slot and engaging the hole in the lug, whereby a switch may be locked at any required adjustment.

1,275,726. SURFACE TOGGLE-SWITCH. WILLIAM J. NEWTON, Bridgeport, Conn., assignor to Harvey Hubbell, Incorporated, Bridgeport, Conn., a Corporation of Connecticut. Filed Aug. 11, 1917. Serial No. 185,721. (Cl. 175—287.)

1. In a switch of the character described, the combination with a base having contacts and a frame secured to the base, of a swinging arm, a contact carried thereby and comprising a strip having wings adapted to engage the base contacts, insulation on opposite sides of the strip, and a clamp securing the strip and the insulation to the swinging arm, and a spring controlled toggle by which the swinging arm is operated, one arm of said toggle passing through the contact on the swinging arm.

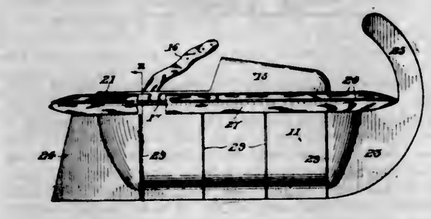


3. In a switch of the character described, the combination with a base having contacts and a frame secured to the base, of a swinging arm and a contact carried thereby, said contact comprising a strip having wings adapted to engage the base contacts, insulation on opposite sides of the strip, and a clamp securing the strip and the insulation to the swinging arm, and a spring controlled toggle by which the swinging arm is operated, one arm of said toggle passing through the contact strip and insulation on the swinging arm.

4. In a switch of the character described, the combination with a base, and a frame and pivot members secured to the base, said frame having holes, and said pivot members having lugs passing through said holes, and stop lugs, of a contact arm comprising branches pivoted on said lugs and engaging the stop lugs to limit its movement in either direction.

[Claim 2 not printed in the Gazette.]

1,275,727. WATER-SKATE. MICHAL NIEĆ, St. Catharines, Ontario, Canada, assignor of one-half to Jan Kolaczynski, St. Catharines, Ontario, Canada. Filed Apr. 13, 1918. Serial No. 228,507. (Cl. 9—21.)



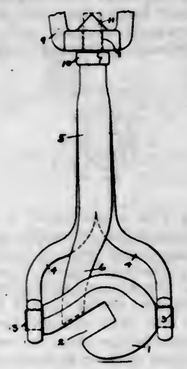
1. A water skate comprising a boat-shaped shoe adapted for wearing upon the foot of a person, an outwardly projecting arcuate flange surrounding the shoe adjacent the top thereof, a pneumatic cushion surrounding the said flange adapted for flat positioning upon the water when the shoe is positioned therein, and a resilient tube carried by the cushion seated against the side of the shoe beneath the said flange.

3. A water skate comprising a shoe in the form of a hull, a partition within the shoe providing a lower air-chamber and an upper foot-receiving inclosure, a toe covering and restraining straps carried by the top of the shoe, a keel arranged upon the exterior of the shoe longitudinally thereof having a rear rudder portion and a forward stem portion, outwardly projecting ribs upon the shoe attached to said keel, and a pneumatic float surrounding the shoe resiliently attached to the exterior thereof.

[Claims 2 and 4 not printed in the Gazette.]

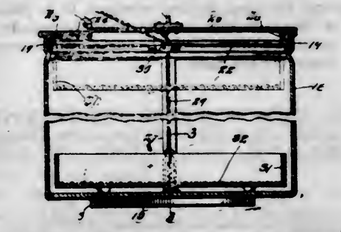
1,275,728. SUCKER-ROD ELEVATOR. FRANK H. NORRIS, Robinson, Ill., assignor of one-half to Daniel E. Norris, Robinson, Ill. Filed Feb. 11, 1918. Serial No. 216,496. (Cl. 57—9.)

In a sucker rod elevator, the combination of a swiveled supporting wrench plate; a body having arms in which said plate is swiveled; a retaining finger; a shank formed by united integral extensions of said arms and finger;



and a supporting ring swiveled on the shank, the extensions from the arms and finger extending into and forming an engaging part of the swivel.

1,275,729. WASHING-MACHINE. NEVVENS N. NUNN, Maplewood, Mo., assignor to The Almetal Manufacturing Company, Maplewood, Mo., a Corporation of Missouri. Filed Feb. 21, 1917. Serial No. 150,062. (Cl. 68—19.)



1. In a washing machine, a container, a ring secured to the upper end thereof, a plate formed integral with said ring at one side thereof, a cover hinged to said plate, a clothes receptacle arranged to move vertically within the container, flexible connections secured to the hinged cover and extending downwardly into the container, and L-shaped members secured to the lower ends of said flexible connections, which L-shaped members engage beneath the clothes receptacle.

2. In a washing machine, a container, a hinged cover therefor, a clothes carrier arranged for vertical movement within said container, guides on opposite sides of the container, an L-shaped member mounted for sliding movement in each of said guides, which L-shaped members engage the clothes carrier, and flexible connections from said members to the hinged cover plate.

3. In a washing machine, a container, a hinged cover plate therefor, a clothes carrier arranged for vertical movement within the container, L-shaped hooks adapted to engage said clothes carrier, pulleys secured to the upper portion of the container on opposite sides thereof, and flexible members secured to the hooks and to the hinged cover plate, which flexible connections pass over the pulleys.

1,275,730. RIFLE-SIGHT ATTACHMENT. PIOTR PASZNICKI, Toronto, Ontario, Canada. Filed Mar. 30, 1918. Serial No. 225,689. (Cl. 33—47.)

1. In combination with a gun barrel, a sight mounted thereon having substantially triangular front and rear walls and a sharp upper edge inclined toward the muzzle of the barrel and a sharpened upper corner, a resilient

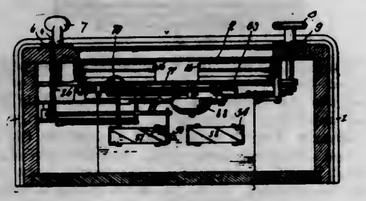
split ring encircling the barrel adjacent said sight, outwardly projecting parallel plates carried by the ring of greater length than the sight and arranged at opposite sides thereof, inturned flanges upon the outer free edges of said plates rearwardly inclined with rear terminal sighting points positioned equidistant from the said rear corner of the sight.



2. In combination with a gun barrel, a sight mounted thereon having substantially triangular front and rear walls and a sharp upper edge inclined toward the muzzle of the barrel and a sharpened upper corner, a resilient split ring encircling the barrel adjacent said sight, outwardly projecting parallel plates carried by the ring of greater length than the sight and arranged at opposite sides thereof, inturned flanges upon the outer free edges of said plates rearwardly inclined with rear terminal sighting points positioned equidistant from the said rear corner of the sight, the said ring being substantially semi-circular in cross section and of gradually increasing dimensions from the said plates to a point in the ring opposite thereof adapted for strengthening a barrel when the device is operatively mounted thereon.

3. In combination with a gun barrel, a blade sight carried thereby having a sharpened outer edge inclined toward the muzzle of the barrel, plates arranged upon the barrel in parallel relations at opposite sides of the sight having inturned flanges arranged in a plane outwardly of the said edge and inclined rearwardly with sighting points at their rear extremities equidistant from the rear corner of the sight.

1,275,731. COIN-CONTROLLED VENDING-MACHINE. JOSEPH PAUPA and GUSTAV F. HOCHRIEM, Chicago, Ill. Filed Mar. 8, 1916. Serial No. 82,927. (Cl. 46—57.)



1. In a machine of the class described, the combination with a coin controlled vending mechanism, of an additional ball released free sample supplying mechanism, a ball catching mechanism, manually operated means for accurately positioning said ball catching mechanism, and elements constituting a runway for leading a caught ball to said ball released mechanism.

6. In a machine of the class described, the combination with a suitable supporting and inclosing case, of a coin controlled vending mechanism in said case, of a curved nearly vertically disposed ball incasing tube, a plurality of balls filling said tube, means for elevating said balls, in said tube, a device for catching a ball as it is dropped from the upper end of said tube and a free sample supplying mechanism released by a caught ball.

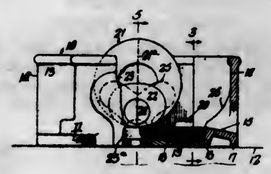
9. In a machine of the class described, the combination with a suitable supporting and inclosing case, of a coin controlled vending mechanism in said case, a ball incasing tube, a plurality of balls filling said tube, means for elevating said balls in said tube, a device for catching a ball as it is dropped from the upper end of said tube, a plurality of independent merchandise chutes, an ejecting mechanism for one of said chutes released for operation upon the dropping of a coin, an independent ball operated ejecting mechanism for another chute, a ball catching mechanism, and elements constituting a ball runway from said ball catching mechanism to said ball operated ejecting mechanism.

22. In a machine of the class described, the combination with a coin controlled vending mechanism, of an additional mechanism, a ball actuated trigger for initiating the operation of the additional mechanism, a ball catching mechanism, manually operated means for accurately positioning said ball-catching mechanism, and elements constituting a run-way for leading a caught ball to said ball actuated trigger.

29. In a machine of the character described, the combination of a suitable supporting and inclosing case; a delivery slide movable into charging and discharging position; yielding means to maintain the slide in discharging position; manually operable means to move the slide to charging position; a latch device to hold it in charging position; an impositive means to move the slide to discharging position when released, to prevent injury to the vended article in case of a jam and means operable by return of the manually operable means to trip the latch.

[Claims 2 to 5, 7, 8, 10 to 21, 23 to 28, and 30 not printed in the Gazette.]

1,275,732. SIDE BEARING. HUBERT M. PERRY, Chicago, Ill., assignor to Albert G. Welch, trustee under the will of Edwin S. Woods, deceased. Filed Oct. 22, 1917. Serial No. 197,759. (Cl. 64—64.)



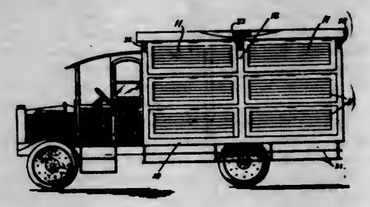
1. In an antifriction bearing comprising a casing with upright side and end walls, a horizontal bearing plate adapted to be applied through the bottom of said casing, a roller longitudinally movable in said casing and mounted on said bearing plate, said roller being provided with an overbalance adapted to return it to a predetermined position within said casing and with eccentrically placed trunnions, and the side walls of said casing having grooves for engagement with said trunnions, said grooves having upwardly inclined, divergent branches adapted to co-act with said trunnions, and with a downwardly extending branch opening through the bottom edges of the side walls of said casing.

3. In a side bearing, a casing having upright side and end walls, said casing being open at the top, means providing a bearing plate in the bottom of said casing, and a roller mounted on said bearing plate and movable in the direction of the length of said casing, said roller being provided with overbalance extensions at its ends.

6. In a side bearing, a casing having upright side and end walls and being open at the top and bottom, means providing a horizontal bearing plate within and closing the open bottom of said casing, a roller mounted on said bearing plate and movable in the direction of the length of said casing, said roller being inserted into said casing through said open bottom and having overbalance extensions at its ends, trunnions projecting beyond said extensions, the side walls of the casing each having diverging grooves adapted to guide said trunnions in the movement of said roller in said casing, said diverging grooves in each side wall merging into a single upright groove which extends downwardly to the bottom edge of its respective side wall, the said end walls having ribs adapted to limit the movement of the roller upon said horizontal bearing plate.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,275,733. AMBULANCE. HENRY PRESSETTI, Philadelphia, Pa. Filed June 5, 1917. Serial No. 173,088. (Cl. 21—80.)



1. In combination an ambulance body provided with a side opening, pivoted brackets within said body each having an upwardly opening socket for supporting a swinging stretcher, and a stretcher provided at each end with a centrally located pintle adapted to engage said socket.

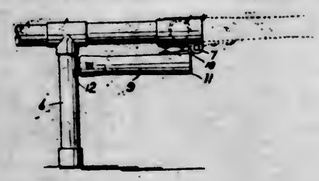
4. The combination of an ambulance body provided with a side opening and a detachable stretcher carried by the body and adapted to pass through said opening, brackets pivoted within the body for supporting said stretcher and adapted to be turned outwardly to project through the side opening, and means located vertically above each of said brackets for hoisting the stretcher, said means being adapted to be moved out and in, in line with the bracket beneath it.

5. An ambulance body provided with an opening, brackets adapted to project through the opening pivotally supported inside the body, a shaft carrying the brackets, means inside the body to prevent the shaft from turning when the brackets are in a given position inside the body, said brackets being adapted to be held by the body when projected through said opening.

7. In combination an ambulance body with side openings in vertical alinement, stretcher supporting brackets pivoted within each end of said openings and adapted to be projected therethrough, a hoist within the body above each vertical line of brackets, and means for sliding said hoist outwardly in the same vertical plane that the bracket beneath it is turned into outward position, whereby stretchers may be hoisted conveniently to said brackets to be readily mounted therein.

[Claims 2, 3, 6, 8, and 9 not printed in the Gazette.]

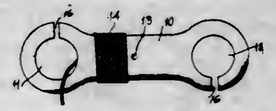
1,275,734. STRETCHER. HENRY PRESSETTI, Philadelphia, Pa. Filed Apr. 1, 1918. Serial No. 225,925. (Cl. 21—80.)



In a stretcher the combination of a legged frame provided with spring catches and handles hinged to the frame and provided with keepers for the catches and with detents for coöperation with the legs, substantially as described.

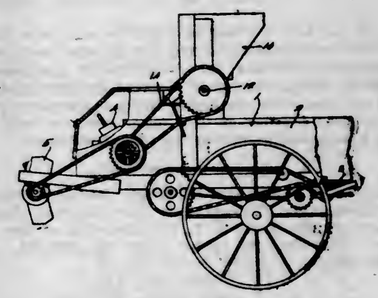
1,275,735. CHALK-LINE HOLDER. WILEY GREEN PHILLIPS, Littleton, Colo. Filed May 8, 1918. Serial No. 233,281. (Cl. 242—96.)

A device of the character described comprising a body having relatively large eyes at its ends, the middle portion of the body forming a reel, the wall of each eye being formed with a notch or opening extending into the eye, and a chalk-line attached to the body between the eyes, the



middle of the body having a perforation to receive an attaching pin on the end of the chalk-line.

1,275,736. FERTILIZER CHEMICAL AND COMPOSITE DISTRIBUTER. HURDIE B. PICKETT and FREDERICK A. PICKETT, Baltimore, Md. Filed Nov. 15, 1915. Serial No. 61,575. (Cl. 275—3.)



1. The combination with a manure spreader including a conveyer delivering manure to a beater, of means to deposit dry chemicals upon manure prior to action upon the manure by the beater.

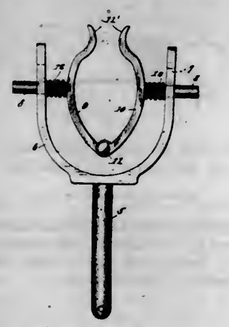
6. The combination with a manure spreader including a conveyer delivering manure to a beater, of depositing means to effect an even distribution of dry chemicals over the entire load prior to action upon the manure by the beater, and to pulverize the chemicals prior to deposit upon the load, and controlling means to regulate said depositing means whereby a predetermined quantity of chemicals may be deposited upon the load of manure.

13. The combination with a manure spreader including a conveyer delivering manure to a beater, of depositing means to effect an even distribution of dry chemicals over the entire load prior to action upon the manure by the beater, controlling means to regulate the deposit of the chemicals, said depositing means and said controlling means coacting to pulverize the chemicals prior to the deposit of the chemicals upon the manure, and means to prevent the accumulation of the chemicals upon said depositing means.

17. The combination with a manure spreader including a conveyer delivering manure to a beater, of means to deposit dry chemicals upon manure prior to action upon the manure by the beaters, including a retaining hopper, a rotary distributing roller carried by said hopper, adjustable means positioned within the hopper for regulating the quantity of chemical distributed by the roller, said roller arranged to effect an even distribution of the chemical over the entire load of manure, scraping means carried by said hopper and engaging said depositing roller to prevent accumulation of chemical upon the roller, and controlling means for regulating said quantity controlling means whereby a predetermined quantity of chemicals may be deposited upon a load of manure.

[Claims 2 to 5, 7 to 12, 14 to 16, 18, and 19 not printed in the Gazette.]

1,275,737. OAR-LOCK. CHARLES H. PIERCE, ARTHUR E. OVERSTREET, and ROYAL L. MCCUNE, Savannah, Ga. Filed May 2, 1918. Serial No. 232,089. (Cl. 9—26.)



In an oar lock, a shank having arms, said arms having slots therein, trunnions having rotary, axial and vertical movement in said slot, jaws to which the trunnions are connected, springs interposed between the jaws and said arms and encircling the said trunnions, means for pivoting the jaws together at their lower ends, the said jaws being free to oscillate across the axis of the shank.

1,275,738. CIGARETTE-PACKAGE. HENRY J. PINNEY, Worcester, Mass., assignor to The American Tobacco Company, New York, N. Y., a Corporation of New Jersey. Filed Oct. 29, 1917. Serial No. 198,974. (Cl. 229—87.)

1. A wrapped package containing cigarettes, including a flexible, pliable wrapper-sheet wrapped to inclose the contents of the package, said sheet having a continuous unbroken edge provided with creased and overlapping interfolds constituting a closure for one end of the package, certain of the creased and overlapping interfolded portions of the wrapper sheet being weakened on a line extending transversely thereof and of the end of the package to provide a tearing section adapted to be torn away to form an opening of less dimensions than the area of the closed end of the package, but large enough to expose a plurality of cigarettes for the escape thereof, a substantial portion of the wall of the opening being coextensive with and formed by the adjacent end edge of the package, and means for retaining the remaining creased and overlapping interfolded portions intact after removal of the said tearing section.

2. A wrapped package containing cigarettes including a flexible, pliable wrapper sheet wrapped to inclose the contents of the package, said sheet having a continuous unbroken edge provided with creased and overlapping interfolds to constitute a closure for one end of the package, certain of the said overlapping interfolded portions being weakened on a line extending transversely thereof and of the end of the package to provide a tearing section adapted to be torn away to form an opening of less dimensions than the area of the closed end for the escape of the contents of the package, and a seal overlying the creased and overlapping interfolds at such end of the package to maintain the major portion of such end in closed relation after the opening has been formed.

[Claims 3 and 4 not printed in the Gazette.]

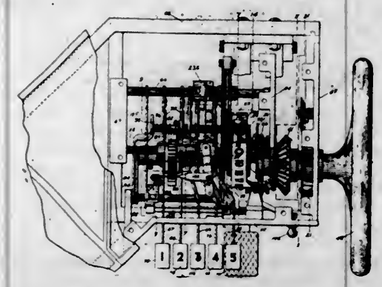
1,275,739. SWING. ETHEL R. PITTI, Boyd, Mont. Filed Apr. 10, 1918. Serial No. 227,659. (Cl. 155—35.)



1. A swing consisting of a normally vertical rigid swing bar pivotally mounted at its upper end to swing in opposite directions, a seat frame connected to the lower end of the swing bar at one side and normally disposed in horizontal position, and an upright secured to the opposite side of the lower end of the swing bar and having a lower angular extension provided with laterally projecting foot rests offset from the swing bar.

2. A swing comprising a normally vertical swing bar pivotally mounted at its upper end to swing in relatively opposite directions and having vertically spaced bearing brackets adjacent its lower end at one side thereof, a seat having an angular seat iron one extension of which is engageable with the bearing brackets to normally support the seat in connection with the swing bar, and at upright detachably connected to the opposite side of the swing bar adjacent its lower end, having a lower angular extension provided with laterally projecting foot rests, and having an upper hand wheel, all for the purpose described.

1,275,740. TURNSTILE MECHANISM. THOMAS IRVING POTTER, Portland, Oreg., assignor to Coin Machine Manufacturing Company, Portland, Oreg., a Corporation of Oregon. Filed Apr. 2, 1915. Serial No. 18,785. (Cl. 235—93.)



1. In turnstile mechanism, the combination, with a turnstile, of indicator mechanism actuated thereby, double locking means for locking the turnstile against rotation when the indicator mechanism is not set for actuation by the turnstile, and means for retaining both locking means released when the indicator mechanism is set for actuation by the turnstile.

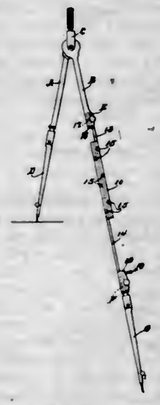
2. In turnstile mechanism, the combination, with a turnstile, of indicator mechanism adapted to be actuated thereby, a register, register actuating means for setting the indicator mechanism preparatory to actuation by the turnstile, and means for locking the turnstile releasable upon setting of the indicator mechanism.

3. In turnstile mechanism, the combination, with a turnstile, of indicator mechanism adapted to be actuated thereby, a register, register actuating means for setting the indicator mechanism preparatory to actuation by the turnstile, means for locking the turnstile releasable upon setting of the indicator mechanism, and releasable means for locking both the turnstile and the register actuating means against movement.

4. In turnstile mechanism, the combination, with a turnstile, of indicator mechanism adapted to be actuated thereby, a register, register actuating means for setting the indicator mechanism preparatory to actuation by the turnstile, means for locking the turnstile releasable upon setting of the indicator mechanism, releasable means for locking both the turnstile and the register actuating means against movement, and means for holding the two locks in their released position during an operative movement of the turnstile.

[Claims 5 to 60 not printed in the Gazette.]

1,275,741. EXTENSION-LEG FOR COMPASSES. LOUIS PRICE, Brooklyn, N. Y. Filed Aug. 2, 1917. Serial No. 184,079. (Cl. 33—152.)



1. In an extension leg for compasses, the combination with a leg, and a removable scriber section for the leg, of a pair of slidably connected members, means for securing the members in various positions of extension, means for attaching one of said members to said leg in lieu of the scriber section, and means for securing the other member to the scriber section.

3. In an extension leg for compasses, the combination with a leg, and a removable scriber section for the leg, of a body bar having guides on its opposite sides, slides adjustably mounted in said guides and adapted to be extended from the opposite ends of the body bar, means for securing said slides in various positions of extension, an attaching means carried upon the opposite outer ends of said slides adapted for detachable engagement with said leg and said scriber section.

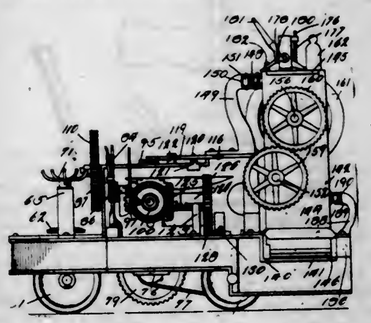
4. In an extension leg for compasses, the combination with a leg, and a removable scriber section for the leg, of an elongated body bar provided with recesses extending longitudinally in the opposite sides thereof, slides mounted in the recesses of the body bar and adapted to extend longitudinally from the opposite ends thereof, means for binding said slides in the recesses to hold the slides in adjusted position, and heads mounted upon the opposite outer ends of said slides adapted for detachable engagement with said leg and said scriber section respectively.

5. In an extension leg for compasses, the combination with a leg, and a removable scriber section for the leg, of a body bar substantially rectangular in cross-section and provided with longitudinal extending dove-tailed grooves in the opposite sides thereof, a pair of slides of dove-tail cross-section fitting in said grooves and adapted to be adjusted longitudinally through the bar and extending beyond the opposite ends thereof, set screws threaded in one side of the bar adapted to engage the adjacent edge portion of said slides to bind the latter in adjusted position, and attaching heads mounted upon the opposite outer ends of said slides adapted for engagement respectively with said leg and said scriber section.

6. In an extension leg for compasses, the combination with a leg, and a removable scriber section therefor, of a body bar provided in opposite sides with guiding recesses extending longitudinally of the bar, a pair of slides fitting in said recesses and adapted to be extended from the opposite ends of the bar, a scale on the bar coöperating with the slides to determine the positions of adjustments thereof, means carried by the body bar for securing the slides when adjusted, and attaching means carried upon the opposite outer ends of said bar for engagement respectively with said leg and said scriber section.

[Claim 2 not printed in the Gazette.]

1,275,742. POWER RAMMING-MACHINE. JOHN E. PRITCHARD, New York, N. Y., assignor of one-half to Thomas Rock, New York, N. Y. Filed Apr. 25, 1917. Serial No. 164,481. (Cl. 94—4.)



1. A device of the character described comprising a main frame, a tamper frame movable transversely of the main frame, a driving means for the main frame, means operated by the driving means for moving the tamper frame transversely of the main frame, a plurality of reciprocating tampers carried by the tamper frame, and means operated by the said driving means for reciprocating the tampers in the tamper frame.

2. A device of the character described, comprising a main frame, a tamper frame supported on and movable transversely of said main frame, a plurality of vertically arranged reciprocating tampers in the tamper frame, a rack fixed to the tamper frame, a rack gear meshing with the rack to move the tamper frame, a movable rack on the main frame, a pinion meshing with the movable rack and connected with the gear, an eccentric having connection with the movable rack, and mechanism for actuating the tampers and having connection with the eccentric for driving the same.

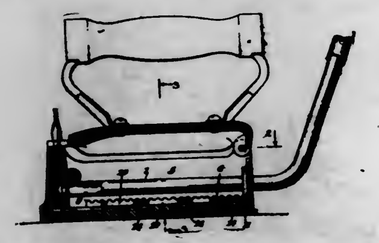
3. A device of the character described, comprising a main frame, a vertically disposed tamper frame supported on and movable transversely of the main frame, a plurality of reciprocating tampers vertically supported in the tamper frame, driving means for the tampers, means operated by the driving means for moving the tamper frame, and means on the tamper frame for selectively holding any one of the tampers in inactive position.

4. A device of the character described comprising a main frame, wheels movably supporting the main frame, a tamper frame supported on and movable transversely of said main frame, a plurality of reciprocating tampers carried by the tamper frame, a rack fixed to the tamper

frame, a rack gear rotatably supported on the main frame and meshing with said rack, a movable rack on the main frame, a pinion meshing with the movable rack and connected with the gear, an eccentric having connection with the movable rack, mechanism for actuating the tampers and having connection with the eccentric for driving the same, and means for controlling said mechanism to render all of the tampers inactive or to hold the tamper frame passive.

5. A device of the character described comprising a main frame, wheels movably supporting the main frame, a tamper frame supported on and movable transversely of said main frame, a plurality of reciprocating tampers carried by the tamper frame, a rack fixed to the tamper frame, a rack gear rotatably supported on the main frame, a pinion meshing with the movable rack and connected with the gear, an eccentric having connection with the movable rack, mechanism for actuating the tampers and having connection with the eccentric for driving the same, means for controlling said mechanism to render all of the tampers inactive or to hold the tamper frame passive, and connections between certain of the wheels and said mechanism for driving said wheels.

1,275,743. SAD-IRON. JULIUS PURETZ, Brooklyn, and BARNEY COHEN, New York, N. Y. Filed Nov. 10, 1917. Serial No. 201,320. (Cl. 158—23.1.)



3. A sad iron comprising a hollow casing having an internally corrugated bottom, said bottom having a longitudinal slot and apertures to each side of the longitudinal slot, a bottom plate adapted to contact with the bottom of the hollow casing, lugs on said plate adapted to project into the hollow of the casing through the apertures in the bottom of the hollow casing, said lugs having a corrugated top, and a burner in said hollow casing adapted to play its flames on the corrugations on the bottom and the corrugations of the lugs, said bottom plate having longitudinal and transverse grooves for supplying air to the central slot of the bottom of the hollow casing.

[Claims 1, 2, 4, and 5 not printed in the Gazette.]

1,275,744. VEHICLE-SPRING. HARVEY S. RADEB, Palmerton, Pa. Filed Nov. 5, 1917. Serial No. 200,296. (Cl. 267—34.)

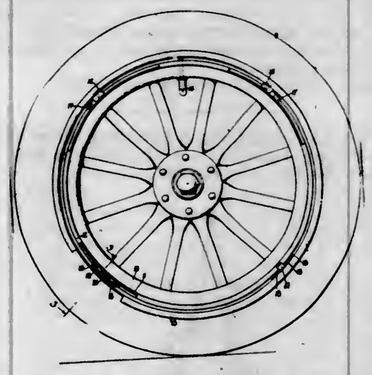


1. A vehicle spring comprising superimposed leaves having lateral offsets, and a U-shaped one piece spring holding member embracing said leaves and having a depending stud for engagement with a socket in a vehicle axle, said member being also grooved to receive said offsets.

2. A vehicle spring comprising superimposed leaves having lateral offsets between the ends thereof, and a spring holding member embracing said leaves and recessed to receive said offsets, said spring holding member having a depending axle-engaging stud, a saddle plate on which the spring rests, clips embracing the leaves at opposite sides of said spring holding member and extending through the saddle plate, and a clip retainer on top of the spring having upturned clip retaining lips, the saddle plate having a transverse slot to receive the spring holding member.

[Claim 2 not printed in the Gazette.]

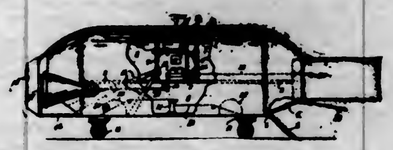
1,275,745. DEMOUNTABLE RIM. CHARLES R. RAGSDALE, St. Louis, Mo. Filed June 21, 1917. Serial No. 176,074. (Cl. 152—21.)



1. In a demountable rim construction, the combination of a wheel having a felly rim thereon, a pair of outwardly projecting plates carried by the rim, an endless unbroken tire rim surrounding the felly rim, a pair of blocks carried upon the inner surface of the tire rim and spaced circumferentially from each other approximately 90 degrees and projecting into engagement with the felly rim and also abutting against said plates to prevent relative circumferential movement between the rims in either direction, the felly rim being so constructed that portions of the blocks coöperate therewith to prevent lateral movement of the tire rim, and means coöperating with other portions of the two rims to lock the same in place and to make the interlocking engagement between the blocks and felly rim positive and secure.

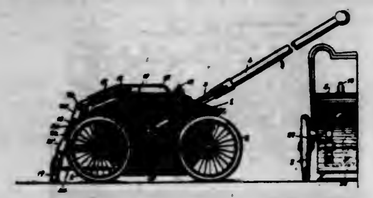
[Claims 2 and 3 not printed in the Gazette.]

1,275,746. AIRSHIP. JAMES E. J. RAINEY, Dallas, Tex. Filed July 30, 1917. Serial No. 183,635. (Cl. 244—3.)



In a ship of the lighter-than-air type, the combination with a suitable stream line body provided with landing chassis and propelling means, of a gas containing envelop, said envelop compartmented into front and rear gas containing chambers, of an engine room located between the two compartments, a gas circulating duct connecting each compartment, a centrifugal pump connecting with the duct, and valves included in the duct for the purpose of controlling the passage of the gas from one compartment to the other.

1,275,747. AUTOMATIC VACUUM-CLEANER. GEORGE V. RASMUSSEN, New York, N. Y. Filed Feb. 16, 1911. Serial No. 609,007. (Cl. 15—60.)



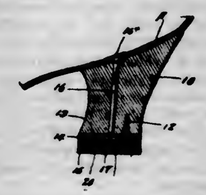
1. In a vacuum cleaner the combination of a casing provided with a suction chamber, wheels supporting said casing, a cleaning tool carried by said casing and adapted to be turned with respect thereto about an upright axis, springs for resisting said turning movement, a suction pump attached to said casing, a dust bag within the suction chamber between the cleaning tool and the suction pump and means connected with the wheels and the suction pump for operating said pump.

2. In a vacuum cleaner of the class described the combination of a casing, a cleaning tool carried by said casing and rotatably and vertically movable relatively thereto, resilient means for pressing said tool downwardly and resilient means for resisting a rotative movement thereof.

8. In a vacuum cleaner a support, a cleaning tool movably carried thereby, means for positioning said tool at varying distances from the surface on which said tool is operating, a spring exerting a downward pressure on said tool and means for adjusting the tension of said spring to vary the degree of pressure upon said tool.

[Claims 3 to 7 not printed in the Gazette.]

1,275,748. BOOT OR SHOE HEEL. JOHN P. REILY, St. Louis, Mo. Filed Mar. 23, 1918. Serial No. 224,200. (Cl. 36—42.)



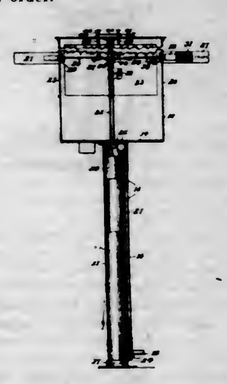
1. The herein described heel comprising a heel body, a plate secured to the underside of said heel body, a continuous L-shaped flange depending from the marginal edge of said plate, a lift applied to the underside of said flange, a plug integral with said lift, which plug occupies the space within said flange and overlies the horizontally disposed portion thereof, the top of which plug is flat and bears directly against the underside of the plate, and the edge of said plug being beveled so as to facilitate its entrance into the space within the flange.

4. A heel comprising a heel body, a plate applied to the underside of said heel body, a lift removably applied to said plate, the top of said lift being provided with a recess, a bolt passing vertically through the central portion of the heel body, a nut on the threaded lower end of said bolt, which nut is adapted to occupy the recess in the top of the lift, and a disk pivotally connected to the upper end of said bolt, which disk is adapted to overlie the heel portion of the shoe sole to which the heel is applied.

[Claims 2 and 3 not printed in the Gazette.]

1,275,749. TRAFFIC SIGNAL-TOWER. SOREN CHRISTIAN REPSHOLDT, Omaha, Nebr. Filed Sept. 2, 1916. Serial No. 118,282. (Cl. 40—65.)

1. In a traffic signal tower, the combination of a column, an inclosure supported upon the upper end of the column, casings radiating from the inclosure from all sides thereof, slides mounted in the casings and having opposite indicia near opposite ends, the casings having transparent portions adapted to disclose the indicia one at a time, the opposite indicia being arranged alternately on opposite ends of the slides in adjacent casings, a rotary member mounted in the inclosure, and connections between all of the slides and said rotary member, the rotary member being adapted to be turned in one direction for simultaneously shifting all of the slides for disclosing opposite indicia successively about the inclosure and to be turned in an opposite direction for disclosing the opposite indicia in reversed order.



2. In a traffic signal tower, the combination of a column, a tower mounted on the upper end of the column and having four sides adapted to be positioned to face in opposite directions of intersecting streets, each side of the tower having a pair of windows thereat divided by a parting strip, a hollow casing projecting outward from each parting strip and opening therethrough to the interior of the tower, each casing having a transparent panel in one side of less length than the casing and adapted to face toward oncoming traffic at said side of the tower, a slide in each casing provided with spaced indicia regulating the movements of the traffic and the slides in the opposed casings being similar with the intermediate slides having the indicia oppositely arranged thereon, and a central controlling member arranged in the tower and connected to all of said slides for simultaneously operating the same.

3. In a traffic signal for intersecting streets, the combination of a tower having a side facing each radiating street from the intersection, a signal at each side of the tower, and a common operating means connected to all of said signals for simultaneously operating oppositely disposed signals for directing traffic to proceed and for simultaneously operating other oppositely disposed signals for directing traffic to stop.

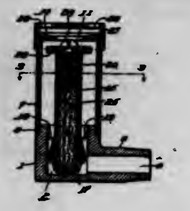
7. In a traffic signaling device for intersecting roadways, the combination of a tower, a shaft vertically mounted in the tower, a disk carried by the shaft to turn therewith, indicating elements movably mounted upon the sides of the tower and facing the radiating roadways, and links connecting the indicating elements to said disk for simultaneously moving the indicating elements when the disk is turned, to indicate by oppositely-disposed indicating elements for traffic to proceed and to indicate by other oppositely-disposed indicating elements for traffic to stop.

[Claims 4, 5, and 6 not printed in the Gazette.]

1,275,750. AIR-VALVE FOR RADIATORS. VAN VECHTON RIDGWAY, Philadelphia, Pa., assignor of one-half to FRANK H. DOUGHERTY, Philadelphia, Pa. Filed Mar. 3, 1917. Serial No. 152,176. (Cl. 236—24.)

1. In a device of the class described, the combination of an outer casing adapted to be secured to a radiator and

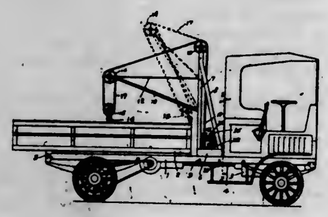
having an opening adjacent its upper extremity for permitting the escape of air from said radiator, an open ended tube within said casing maintained in operative fixed relation with said casing, said tube adapted to contain an expansible liquid, a piston slidable in said tube and a floating valve operated by said piston for controlling the opening in said casing in conformity with the height of the liquid in said tube, said valve adapted to rest on and be directly supported by the tube when in position to maintain open the opening in said casing.



5. In a device of the class described, the combination with a hollow base adapted for attachment to a radiator, means for establishing communication between said base and the interior of the radiator, a casing surrounding said base, a tube for containing an expansible liquid, means carried by said tube operative to control the opening in the casing in conformity with the expansion or contraction of the liquid in said tube, and means for supporting said tube in operative fixed removable relation with said casing including a plurality of flexible fingers so bent as to contact with the outer wall of the tube and the inner wall of the base.

[Claims 2, 3, and 4 not printed in the Gazette.]

1,275,751. HOIST FOR MOTOR-VEHICLES. HARRY F. RIOPELLE, Detroit, Mich., assignor, by mesne assignments, of one-half to Antoinette T. Sanscrainte, Ecorse, Mich. Filed Aug. 24, 1917. Serial No. 187,974. (Cl. 74—26.)

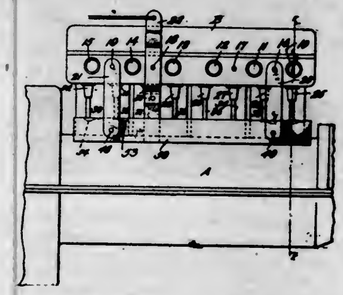


1. In a hoist mechanism, a drum, a member pivoted adjacent said drum at a point substantially in line with the axis thereof, a friction wheel for driving said drum, mechanism carried by said pivoted member for actuating the drum from said friction wheel including a friction wheel engaged with or disengaged from the driving friction wheel through rocking of said pivoted member, and means for rocking said pivoted member.

2. In a hoist mechanism, a drum, an internal gear concentrically carried by said drum, a member pivoted adjacent said gear at a point substantially in line with the axis thereof, a shaft journaled in said member, a gear carried by said shaft, adapted to drive said internal gear, means for rocking said pivoted member, and a pair of friction drive wheels, one of which is mounted upon said shaft, said wheels being engaged or disengaged through rocking of said member.

[Claims 3 to 5 not printed in the Gazette.]

1,275,752. ENGINE ATTACHMENT. ARTHUR L. ROBERTS, Jackson, Tenn. Filed Oct. 12, 1917. Serial No. 196,239. (Cl. 123—52.)



1. An engine attachment comprising a movable bar, a plurality of spaced removable elements carried by the bar and continuously engageable between the ends of the tappets and the valve stems of an internal combustion engine, and means for moving the bar and therewith the elements for varying the valve operation of said engine.

2. An engine attachment for internal combustion engine which comprises a movable bar member, a plurality of spaced L-shaped elements carried by the member, the horizontal limb of each element being formed to have different thicknesses vertically, each of which is insertible at will in the valve actuating devices so as to control the operation of the valves, and means to move said member.

8. An engine attachment, which comprises a movable bar having sockets and guide ways, a slidable element for said guide ways, L-shaped elements removably placed in the sockets, means for moving the bar, and means for moving the slidable element independently of the bar moving means.

9. An engine attachment, which comprises a movable bar, a plurality of pivotally mounted links secured thereto, means for moving said bar, a plurality of spaced L-shaped elements removably secured to the bar, each of said elements being provided with its transverse portion formed of different thicknesses, each thickness being adapted for continuous insertion between the end of a valve stem and a push-rod or tappet, said bar moving means serving to place one of the thicknesses in position to render the valve continuously operative, and also to place the other thickness in position to render the valve continuously inoperative.

[Claims 3 to 7 not printed in the Gazette.]

1,275,753. FILM-DEVELOPING APPARATUS. JOHN A. ROBERTSON, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed May 5, 1917. Serial No. 166,557. (Cl. 95—90.5.)



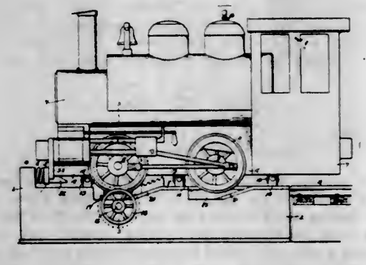
5. In a film developing apparatus, the combination with a tank having a roll holder at one end and a sliding cover, of a film securing device at the advance end of the cover comprising a transverse bridge piece spaced from the cover and around which the extremity of the film is adapted to be looped.

6. In a film developing apparatus, the combination with a tank having a roll holder at one end and a sliding cover for the tank, of a depending light guard and film guide on the advance end of the cover comprising a flange coextensive with the interior cross section of the tank and having a curved lower edge traveling close to the bottom of the tank as the cover is applied.

7. In a film developing apparatus, the combination with an elongated tank, of a cover for the latter having a sliding engagement therewith longitudinally of the tank and means for unrolling a film roll contained in the tank through the relative movement of the cover and tank.

[Claims 1 to 4 not printed in the Gazette.]

1,275,754. LOCOMOTIVE POWER-TRANSMITTER. ENRIQUE LESLIE ROCKWOOD, Bogotá, Colombia, assignor to John P. S. Harrison, New York, N. Y. Filed Jan. 14, 1918. Serial No. 211,811. (Cl. 74—106.)



1. The combination of a base; a shaft mounted on the base and having a power transmitting wheel thereon; supporting means on the base adapted to support a locomotive independently of the driving mechanism; a locomotive; and a power transmitting wheel on the locomotive arranged to impart movement to the transmitting wheel on the base.

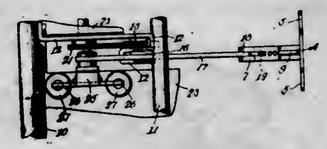
3. The combination of a base having recesses therein; rails at each side; inclined rails mounted in the recesses; a shaft having a gear wheel; an inclined fixed rack on a longitudinal line with the gear wheel; a locomotive having two sets of wheels adapted to the rails and having a gear wheel arranged to mesh first with the rack and then with the gear wheel on the shaft; movable rails adapted to close one of the recesses on each side so as to allow the forward set of wheels of the locomotive to pass over the first recesses, the rails being moved out of line to allow the second set of wheels to enter the recesses; and means for supporting the frame with the gear wheel of the locomotive meshing with the gear wheel of the shaft.

5. The combination of a base; a shaft thereon, a gear wheel on the shaft; a locomotive having an axle; a gear wheel on the axle arranged to mesh with the gear wheel on the base when the locomotive is in position on the base; a bumper and a latch for holding the locomotive in position; automatic means for releasing the latch when the locomotive is reversed; and a fixed rack on the base with which the gear wheel on the locomotive engages as it moves into and out of position on the base.

7. The combination in a locomotive power transmitter, of a base; a transverse shaft mounted in the base with a gear wheel on the said shaft, said base having two recesses at each side adapted to receive the two driving wheels of the locomotive; rollers on the base upon which the frame of the locomotive rests when the driving wheels are in the recesses; a gear wheel on the front axle of the locomotive arranged to mesh with the gear wheel on the shaft when the locomotive is in position on the base; movable rails for closing the rear recesses of the frame to allow the front wheels of the locomotive to pass over; a trip lever arranged to be actuated by one of the front wheels of the locomotive; a lever engaging said trip lever; a rod connected to the last mentioned lever; and two bell crank levers connected to the rod and to the rails so that, when the locomotive is moving forward into position, the front wheels will move the short rails laterally out of position and, when the engine is reversed, the front wheels will throw the rails into position.

[Claims 2, 4, and 6 not printed in the Gazette.]

1,275,755. RIBBON HOLDER AND VIBRATOR. ALVAH C. ROEBUCK, Park Ridge, Ill., assignor to Woodstock Typewriter Company, Woodstock, Ill., a Corporation of Illinois. Filed Mar. 13, 1916. Serial No. 83,719. (Cl. 197—157.)

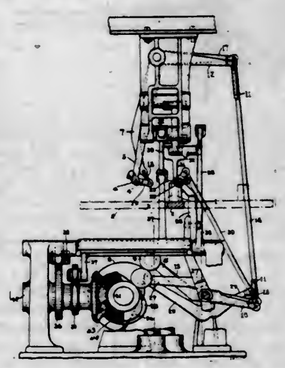


1. In an adjustable ribbon vibrator, the combination with a vertically reciprocable vibrator having a horizontal slot at the lower end, and a horizontally adjustable vibrator lever having a pin on one arm engaging in the slot.

13. The combination with a vertically reciprocable ribbon vibrator having a horizontal slot at its lower end, of a ribbon vibrator lever having a pin connection with said slot, means for adjusting the horizontal position of the lever and pin in the slot, and separate means for adjusting the vertical position of the lever and said vibrator.

[Claims 2 to 12 not printed in the Gazette.]

1,275,756. MECHANISM FOR FOLDING AND CLOSING THE ENDS OF BAGS OR WRAPPERS. WILLIAM ROSE, Gainsborough, England. Filed Mar. 8, 1916. Serial No. 82,992. (Cl. 93—6.)



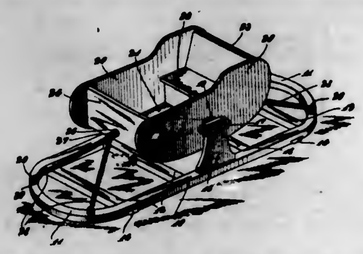
1. In folding and closing mechanism of the type described, a swinging arm, a movable folder carried thereby, a coöperating swinging arm, an operative connection between the latter and the folder for turning the latter down, and cams operating on said arms to first bring the folder up to its work and then turn it down, together with pins carried by said folder, fingers carried by said pins for temporarily engaging the work, and means for causing said fingers to move apart to open out the work, preparatory to the operation of a succeeding folder.

2. In folding and closing mechanism of the type described, a series of folders for operating on the work while the latter is in stationary position, certain of the last operating folders having together a less area than the end of the packet and means for causing the same to press the work, after the folding movement is completed, to indent the end of the packet and thus make the folded end more secure.

1,275,757. EXERCISER. ABRAHAM ROSENBERG, Brooklyn, N. Y. Filed Jan. 17, 1918. Serial No. 212,329. (Cl. 46—22.)

1. In an exerciser the combination with a platform having cushioned contacts adapted to rest upon a sub-

stantially level surface, of a pair of standards arranged centrally on the sides of said platform, spindles rotatably mounted in said standards, means permitting said spindles to move limitedly to and fro in their bearings, a car supported by said spindles, and a plurality of springs



attached at one end to the front and rear of said car, and to the front and rear of said platform at their other ends whereby said car is resiliently held in a normally central position.

[Claim 2 not printed in the Gazette.]

1,275,758. VEHICLE-LAMP. EDWIN M. ROSENBLUTH, Philadelphia, Pa. Filed Aug. 16, 1917. Serial No. 186,514. (Cl. 240—46.)



3. The combination with an incandescent electric lamp; of a casing for said lamp including a cup shaped shell, having an annular flange and an annular seat; a socket in said shell having means to detachably engage said lamp; a flexible annular reflector detachably fitted between said lamp and said socket and resiliently bearing upon said shell; a circular series of projections on said shell, each consisting of a wire having one end fitted in a perforation in the body of said shell and extending through a perforation in the flange of said shell, and having a hook at its free end; and a translucent panel capable of refracting light in both directions of the axis of said casing, detachably engaged by said hooks in spaced relation with said shell; said panel being of larger diameter than said shell; whereby said panel is visible in both directions of the axis of said shell to afford both a front signal and a rear signal with respect to said shell.

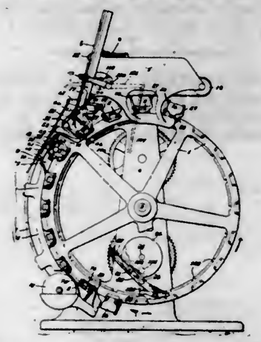
7. The combination with an incandescent electric lamp; of a casing for said lamp including a shell; a socket in said shell having means to detachably engage said lamp; a series of projections on said shell, each having a hook at its free end; a translucent panel detachably engaged by said hooks in spaced relation with said shell; and a web forming a light shield between two of said projections.

[Claims 1, 2, 4 to 6, 8, and 9 not printed in the Gazette.]

1,275,759. CARTON-FORMING MACHINE. CLARENCE H. RUSSELL, Syracuse, N. Y. Filed Apr. 12, 1915. Serial No. 20,809. (Cl. 93—55.)

1. A carton forming machine comprising a carriage having a receiver for the flat folded carton form, separating means movable between opposing walls of the flat carton when on the receiver, said means being movable at an angle to the plane of the flat carton and toward the receiver, substantially as and for the purpose described.

2. A carton forming machine comprising a carriage having a receiver for the flat folded carton form, separating means movable into opposite ends of the receiver between opposing walls of the flat carton when on the receiver, said means being movable at an angle to the plane of the flat carton and toward the receiver, substantially as and for the purpose specified.



3. A carton forming machine comprising a carrier having a receiver for the flat, folded carton form, separating means movable between opposite walls of the flat carton form for starting the opening thereof, said means including a pair of pivoted members having portions movable toward and from each other into opposite ends of the carton form, to separate the opposing walls thereof, and means for completing the opening of the carton form, substantially as and for the purpose specified.

4. A carton forming machine comprising a carrier having a receiver for the flat, folded carton form, a pair of separating members movable between the opposing walls of the flat carton form, said separating members being movable on pivots arranged at inclined angles to the plane of the flat carton form, whereby the separating members move into opposite ends of the carton form at an inclined angle to the plane thereof, and means for completing the opening of the carton form, substantially as and for the purpose set forth.

5. A carton forming machine comprising a carrier having a receiver for the flat, folded carton form, means movable b tween opposite walls of the flat carton form for starting the opening thereof, said means including substantially parallel levers having fingers at their ends extending toward each other and movable into opposite ends of the carton form, the axes of the levers being at inclined angles to the plane of the carton form, and means for completing the opening of the carton form after the opening has been started by the fingers, substantially as and for the purpose described.

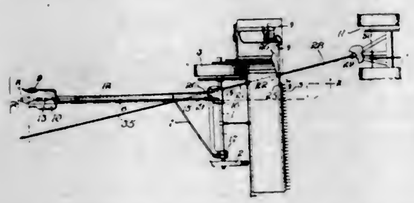
[Claims 6 to 23 not printed in the Gazette.]

1,275,760. NON-REFILLABLE BOTTLE. FERDINAND RUSTANT, Manila, Philippine Islands. Filed July 23, 1917. Serial No. 182,316. (Cl. 215—65.)



In a device of the class described, the combination with a bottle provided with a neck, of a supporting stopper inserted in said neck, means for holding said stopper in said neck, said stopper provided with a vertical, conical-shaped bore, a conical-shaped valve casing having a closed dome-shaped top in said conical-shaped bore of said stopper, said valve casing provided with a closed bottom and with an annular groove near the lower end thereof, said casing provided with a plurality of oval-shaped openings formed in its side above the bottom and below the annular groove, a curved outlet pipe integral with the side of said casing contiguous to the dome-shaped top, a solder in said annular groove and bearing against the bottom face of said stopper, and a ball-valve in said casing.

1,275,761. TRACTOR-HITCH. FRANK A. RYTHER, Chicago, Ill., assignor to International Harvester Company of New Jersey, a Corporation of New Jersey. Filed Jan. 31, 1916. Serial No. 75,202. (Cl. 56—33.)



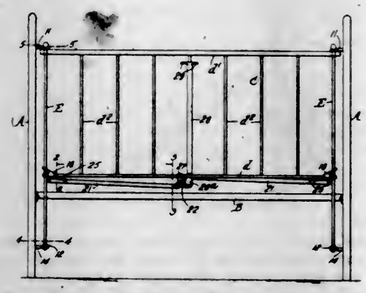
1. In combination, a header having a platform and a rearwardly disposed steering element including a wheeled support for the rear end thereof, and means connected to said steering element and disposed beneath said platform whereby the header may be drawn forward in the field.

3. In combination, a header having a rearwardly disposed steering element and a grain platform, a draft connection extending longitudinally of said element and beneath said platform whereby said header may be drawn forward in the field, and means for limiting the movement of said draft connection.

4. In combination, a header having a rearwardly disposed steering element and a grain platform, a draft connection extending longitudinally of said element and diagonally beneath said platform whereby said header may be drawn forward in the field, and a depending swinging connection between the front end of said draft connection and said grain platform.

[Claims 2 and 5 to 11 not printed in the Gazette.]

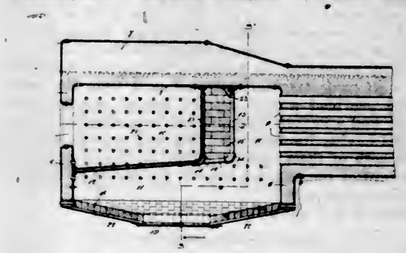
1,275,762. CHILD'S CRIB AND THE LIKE. LEWIS A. SAFFORD, Buffalo, N. Y., assignor to Barcalo Mfg. Co., Buffalo, N. Y. Filed Oct. 14, 1916. Serial No. 125,576. (Cl. 5—58.)



1. In a crib, the combination of a side composed of upper and lower longitudinal rails and upright connecting rods, guides on which the side is arranged to slide up and down, holding devices movably mounted at the end portions of said side and arranged to engage said guides for holding the side from downward movement at different desired elevations, and a one-hand operating mechanism for said holding devices arranged between the ends of the side and comprising a tubular actuating rod surrounding and adapted to slide vertically on one of said vertical rods between said upper and lower longitudinal rails, and operative connections between said actuating rod and said holding devices.

[Claims 2 to 5 not printed in the Gazette.]

1,275,763. FIRE-BOX FOR LOCOMOTIVE-ENGINES. HOWARD DE WOLFE SAWYER, Revere, Mass., assignor, by direct and mesne assignments, to William H. Kimball, Boston, Mass., as trustee for William H. Kimball, Boston, Mass., fifteen thirty-seconds; Howard De W. Sawyer, Revere, Mass., fifteen thirty-seconds; and Herbert B. Newton, Brookline, Mass, two thirty-seconds. Filed Jan. 13, 1911. Serial No. 602,432. (Cl. 122—97.)



1. In combination with a firebox having water walls at its front, sides and top, a fuel grate consisting of water tubes lying in substantially the same plane and close to each other, certain of which are of greater length than the remaining tubes, two series of upright water tubes coupled to the grate tubes and arranged in planes which are parallel from their upper to their extreme lower ends, said series extending transversely completely across the fire box, the upright tubes being connected to the crown sheet and the grate tubes to the front water wall, and a solid barrier of independent fire brick filling the space between the series of upright tubes and having a flat bottom or base resting on and supported by the extended parts of the longer tubes of the fire grate.

2. In a down draft locomotive fire-box having tubular grate bars and upright tubular extensions thereof, for water circulation as described, the combination therewith of the tubular manifold 17, adapted for water communication through the crown sheet and provided with threaded depending arms to receive said extensions, substantially as set forth.

3. In a down draft locomotive fire-box a single tubular fuel grate and upright tubular extensions thereof and a transverse barrier connected to and depending from the crown sheet, serving to deflect the caloric current between the grate bars, in combination with a fire brick heat reflecting bottom arranged to deflect the heat beyond the barrier.

1,275,764. SOUND-BOX. FREDERICK W. SCHAEFER, Cranford, N. J., assignor to The Aeolian Company, a Corporation of Connecticut. Filed Aug. 9, 1917. Serial No. 185,331. (Cl. 274—28.)



1. In a sound-box, a stylus bar having its playing arm provided with a pair of separate stylus sockets, and with

a channel crossing both of them; and a clamping member fitted in said channel with its ends overlying said sockets, so as to control both of them, and arranged for movement inward or outward of the channel, thereby to engage or release a stylus in either socket.

2. In a sound-box, a stylus bar having its playing arm provided with a pair of stylus sockets arranged in spaced, parallel relation, and with a channel intersecting both sockets at right angles; and a clamping member fitted in said channels, with its opposite ends extending across said sockets, so as to control both of them, and arranged for movement inward or outward of the channel, thereby to engage or release a stylus in either socket.

3. In a sound-box, a stylus bar having an H-shaped playing arm, each vertical member of which is provided with a longitudinal stylus socket; the cross-piece of said arm being provided with a channel which is continued at its opposite ends across said sockets; and a movable clamping member fitted in said channel with its ends overlying said sockets, so as to control both of them, and arranged for movement inward or outward of the channel, thereby to engage or release a stylus in either socket.

4. In a sound-box, an L-shaped stylus bar having its lower arm projecting laterally outward from the sound-box and provided with a pair of spaced, parallel stylus sockets; and a narrow clamping bar extending across said arm and having its ends overlying said sockets, so as to control both of them, and arranged for movement inward or outward of the channel, thereby to engage or release a stylus in either socket.

[Claims 5 to 7 not printed in the Gazette.]

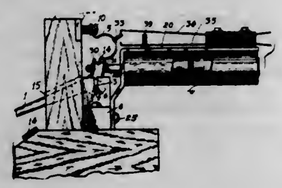
1,275,765. STABLE HYDROGEN PEROXID AND METHOD OF MAKING THE SAME. ALOIS SCHAIDHAUF, Frankfort-on-the-Main, Germany, assignor to Roessler & Hasslacher Chemical Co., New York, N. Y. Filed Aug. 2, 1912. Serial No. 712,852. (Cl. 23—10.)

2. The method of rendering a solution containing hydrogen peroxid stable which consists in submitting a non-acid solution of hydrogen peroxid to the action of an insoluble aluminium compound.

4. A stabilized solution of hydrogen peroxid comprising as an end product a solution of hydrogen peroxid of non-acid reaction and sensible proportions of an insoluble aluminium compound.

[Claims 1 and 3 not printed in the Gazette.]

1,275,766. COMBINED ELECTROMAGNETICALLY AND MANUALLY OPERABLE ORGAN STOP-KEY. FRED SCHOENWOLF, Chicago, Ill., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 6, 1915. Serial No. 54,295. (Cl. 175—281.)

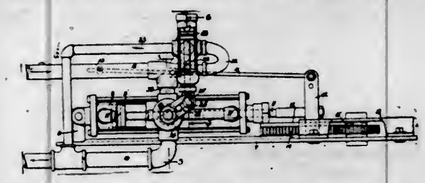


1. A device of the character described comprising a stop key having normal and actuated positions and adapted to be manually moved from either position to the other, a double wound solenoid, operating means connecting said stop key with said solenoid, one of said windings operating to move said stop key from its normal to its actuated position when energized, and the other of said windings operating to move said stop key from its actuated to its normal position when energized, and a spring for effecting a continued relative movement of said stop key when being operated manually and for yieldingly holding said stop key in either of its positions when moved thereto.

5. A stop key of the character described comprising an actuating lever having a normal and an actuated position, a spring for yieldingly holding said lever in either of its positions, a solenoid provided with a plunger for moving said lever from either of its positions to the other, a pair of contact springs secured to said solenoid for coöperation with a contact carried by said first spring, and an adjustable mechanical link connecting said solenoid to said actuating lever.

[Claims 2 to 4, 6, and 7 not printed in the Gazette.]

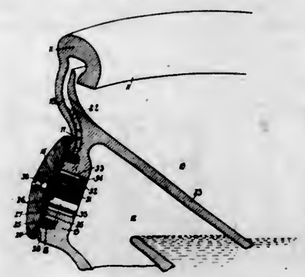
1,275,767. MOTOR. JOHN SCHROEDER, Davenport, Iowa. Filed Apr. 30, 1917. Serial No. 165,433. (Cl. 121—45.)



1. A motor comprising a cylinder, a piston in the cylinder, a piston rod, a cross-head for the rod, a valve for controlling the admission and exhaust of the motive fluid to both ends of the cylinder, an arm connected to move with the valve, a piston connected to the arm, a cylinder for the piston, a valve for controlling the inlet and exhaust of the live motive fluid to the ends of the second cylinder, an arm for said valve, and means for actuating said arm from the crosshead.

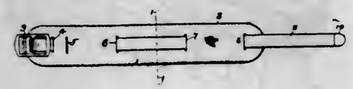
2. A motor comprising a cylinder, a piston in the cylinder, a piston rod, a crosshead for the rod, a valve controlling the admission and exhaust of motive fluid to the ends of the cylinder, an arm constrained to move with the valve, a second cylinder, a piston therein having a rod projecting out of the cylinder to engage the arm of the valve, said arm having a slot, means in said slot engaging said piston rod of the second cylinder, a valve controlling the admission and exhaust of motive fluid to the ends of said second cylinder, an arm connected to move with the last-mentioned valve, and means for operating said arm from the crosshead near the end of stroke of the first-mentioned piston.

1,275,768. CLEAN-OUT. FRANK SCHUH, Trenton, N. J. Filed Sept. 21, 1917. Serial No. 192,575. (Cl. 4—18.)



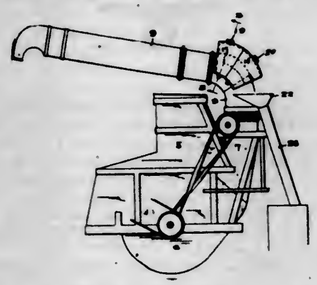
A clean-out for water closet bowls having an opening in the wall of the bowl at the water seal thereof, a cover closing the said opening, an annular water jacket formed in the said wall and surrounding the wall of the said opening, the water jacket being open to the inner face of the said cover, a water inlet chamber formed in the said wall above the water jacket, the upper end of the said inlet chamber connecting with the flushing rim of the bowl, a port connecting the bottom of the said water inlet chamber with the top of the said water jacket, an outlet chamber formed in the said wall adjacent the said inlet chamber, a port connecting the top of the said water jacket with the bottom of the said outlet chamber, and a port connecting the said outlet chamber with the interior of the bowl and located above the port connecting the outlet chamber and the water jacket.

1,275,769. WRIST-WATCH STRAP. ARTHUR H. SCOTT, South Portland, Me., assignor to National Khaki Watch Strap Company, Portland, Me., a Corporation of Maine. Filed Jan. 24, 1918. Serial No. 213,479. (Cl. 224—4.)



A wrist watch strap consisting of a pair of oblong pieces of flexible fabric fastened together at their edges to form a bearing strap, one of said pieces having a series of transverse slots therein, two of said slots being located adjacent to the ends of the bearing strap, a holding strap narrower than the bearing strap threaded through said slots and extending longitudinally through the interior of said bearing strap and on the outside surface of the slotted piece and a buckle secured to the end of said holding strap.

1,275,770. GRAIN-SAVING DEVICE FOR THRESHING-MACHINES. JOHN A. SCOTT, Oklahoma, Okla. Filed July 31, 1916. Serial No. 112,247. (Cl. 130—17.)



1. In a grain saving device for threshing machines, two pipe sections telescopically connected and having openings in their upper sides registering with each other, and a grain trap carried by one of said sections and sliding over the opening in the other of said sections.

3. In a grain saving device for threshing machines, a straw chamber, a stacker fan communicating therewith, a discharge pipe leading from said fan and having an opening in its upper side, a series of bars spanning said opening and spaced apart to permit the discharge of grain therebetween, said bars having openings between their ends to permit the withdrawal of straws therethrough, and means for securing said bars over said opening.

5. In a grain saving device for threshing machines, a fan, a chute embodying a discharge outlet in its outer end communicating with said fan and provided with an elbow having an opening in its upper side, a grain trap in said opening by which grain separated from other material is intercepted and through which said grain is discharged and prevented from passing to the outer end of said chute, a deflector over said trap for deflecting such grain, means beneath said deflector for receiving said grain, and means for conveying said grain from said receiving means.

7. In a grain saving device for threshing machines, a curved pipe having an opening in its upper side, and a grain trap in said opening comprising a series of spaced triangular shaped bars having openings therebetween through which straw is withdrawn.

8. In a grain saving device for threshing machines, a pipe having an opening in its upper side, and a grain trap in said pipe comprising a plurality of converging guides along which straw may travel in its movement through the pipe and by which grain may be separated from such straw.

[Claims 2, 4, and 6 not printed in the Gazette.]

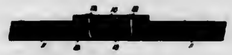
1,275,771. PROCESS OF MAKING FABRIC. WILLIAM HENRY SCOTT, Jr., New York, N. Y., assignor to Susquehanna Silk Mills, New York, N. Y., a Corporation of New York. Filed Jan. 21, 1918. Serial No. 213,029. (Cl. 41—26.)



1. The process of producing a new fabric of manufacture, comprising the treating of only one surface of colored silk-warp ribbed piece goods to a minute application of evenly-distributed color.

[Claim 2 not printed in the Gazette.]

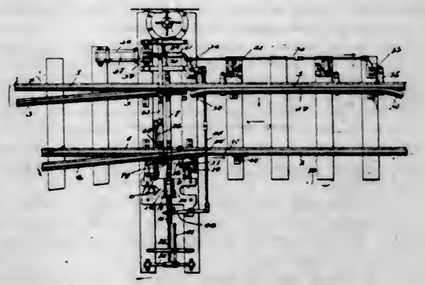
1,275,772. BELT-FASTENER. EUGENE SEAVEY, New York, N. Y. Filed Feb. 9, 1917. Serial No. 147,586. (Cl. 24—36.)



1. A belt fastener, comprising a plate provided with struck-up apertured bosses having ragged edges and projecting from the under surface of the plate, the said bosses being adapted to be driven into the belt material, and tacks driven through the said bosses and clenched on the under side of the belt, the tacks having heads and shanks, the portions of the shanks adjacent the heads being somewhat larger in diameter than the openings in the bosses to spread the walls of the bosses sidewise in the belt material on driving the tacks home.

[Claim 2 not printed in the Gazette.]

1,275,773. RAILWAY-SWITCH MECHANISM. MARSHALL L. SHEPHERD, Montgomery, Ala., assignor, by mesne assignments, to United States Switch Company of Delaware, Eau Claire, Wis. Filed Mar. 22, 1916. Serial No. 85,917. (Cl. 104—77.)



1. In a railway switch, the combination, with main and branch line rails, of a switch, switch operating mech-

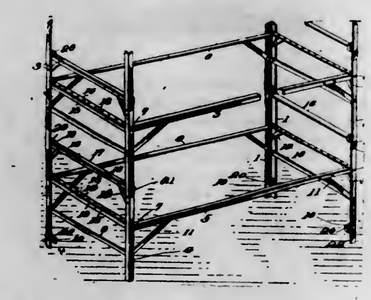
anism, a means connected with the switch, independent of said operating mechanism, for shifting the switch if split to a fully thrown position, means operative in movement of the switch and controlled by the switch for being acted upon by the first-named means to shift the switch in one direction or the other from the split position, and wheel operated means for actuating the second-named means.

2. In a railway switch, and in combination with main and branch line rails, a switch, a switch throwing mechanism, a controller bar connected with the switch, a cam upon said bar having reverse inclined surfaces, a movable cam having reverse inclined surfaces for coöperation with the surfaces of the first-named cam, said cams being adjusted by the throwing of the switch in one direction or the other to position their surfaces for a positive closing action in one direction or the other of said switch, a wheel operated element, and motion transmitting means between said wheel operated element and said movable cam for actuating the latter.

3. In a railway switch, in combination with main and branch line rails, a switch movable laterally to control communication between the main and branch tracks, a switch throwing mechanism including a latch for holding the switch in thrown position, wheel operated means for releasing the latch, and means actuated by said wheel operated means for shifting the switch to alined position with one or the other of the main rails in the event of the switch being in split position.

[Claims 4 and 5 not printed in the Gazette.]

1,275,774. SUPERIMPOSABLE BED. JOSEPH SILVESTER, Pittsburgh, Pa., assignor to Fort Pitt Bedding Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed May 8, 1918. Serial No. 233,239. (Cl. 5—60.)



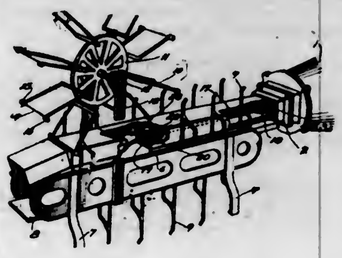
5. Superimposable structures comprising a pair of angle-irons, one face of one angle-iron support having a slot formed therein and one face of the other angle-iron support provided with a lug adapted to register with said slot, a rest or brace secured inside the angle of one support and a stop secured inside the angle of the other support, the brace or rest and the stop being positioned on their respective supports with respect to the lug and the slot so as to be in engagement when the lug registers in the slot and to assist in holding the parts in alined position when assembled.

[Claims 1 to 4, 6, and 7 not printed in the Gazette.]

1,275,775. TILE-CUTTER. JOHN J. SIMMONDS, Lawrence, Kans. Filed June 17, 1918. Serial No. 240,300. (Cl. 25—110.)

1. In a machine for cutting hollow tile, a wall sustaining means receivable within the tile to oppose the tendency of the wall of the tile column to give, under the pressure of the cutter.

3. In a hollow tile machine, a cutter for severing the tile column into lengths, a wall sustaining table receivable within the hollow portion of the tile column to bear against the under side of the upper wall of the tile column during the cutting operation, means bearing against the upper side of the under wall of the tile column and a conveyer upon which the tile column rests.



6. In a hollow tile machine, a cutter for severing the tile column into lengths, a die at the extruding end of the tile machine and wall-sustaining means receivable within the hollow tile and secured to the die within its perimeter.

[Claims 2, 4, 5, and 7 not printed in the Gazette.]

1,275,776. TELEPHONE-TRANSMITTER. JOHAN SKINDERVIKEN, Chicago, Ill., assignor to said Johan Skinderviken, trustee. Filed Nov. 7, 1917. Serial No. 200,676. (Cl. 179—124.)



1. In a telephone transmitter, the combination with a diaphragm of a pair of concentric electrodes separated from each other to provide therebetween a circular space, granules of electrically conducting material within said space, and a rigid connection from the diaphragm to both of said electrodes, the electrodes being formed on curved surfaces, and the convex portion of one of said surfaces lying opposite to the concave portion of the other surface for the purpose specified.

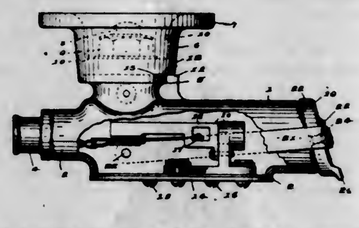
2. A telephone transmitter comprising a diaphragm and a pair of electrodes in conjuction therewith, a rigid connection from the diaphragm to the electrodes, and granular conducting material between the electrodes, the electrodes having curved surfaces, and the convex surface of one electrode lying opposite to the concave portion of the other electrode for the purpose specified.

3. A telephone transmitter comprising, in combination, a diaphragm, a pair of electrodes rigidly connected thereto, and granular conducting material between the electrodes, the electrodes having complementary curved surfaces, the protruding portion of one surface lying opposite to the receding portion of the other surface, for the purpose specified.

4. A telephone transmitter comprising, in combination, a diaphragm, a pair of electrodes rigidly connected thereto, and granular conducting material between the electrodes, the electrodes being formed on complementary curved surfaces, for the purpose specified.

1,275,777. HOUSING FOR ELECTRICAL APPLIANCES. ELDA G. SMITH and JOHN J. DOSSERT, Syracuse, N. Y., assignors to Crouse-Hinds Company, Syracuse, N. Y., a Corporation of New York. Filed June 18, 1914. Serial No. 845,800. (Cl. 173—338.)

1. A housing for electrical appliances comprising an elongated box having a lengthwise opening in one of its long sides through which the electrical appliance is inserted and removed, a cover for the opening, the box being also formed with a wire opening in one end and an opening in its other end for permitting the movement of an electrical appliance into and out of co-action with the appliance in the box when the cover is in its operative position, substantially as and for the purpose specified.



7. A housing for an electrical appliance comprising a box having an opening for the insertion and removal of an electrical appliance into and out of engagement with an appliance in the box, the box having the edge wall around such opening arranged at an incline, a closure movable over the inclined edge of the box, and a movable carrier or support for the closure, the closure being connected to the support by a joint having a universal action, substantially as and for the purpose described.

[Claims 2 to 6 and 8 to 10 not printed in the Gazette.]

1,275,778. PAINT AND METHOD OF MAKING SAME. FREDERICK W. SPERR, Jr., Oakmont, Pa., assignor to H. Koppers Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Jan. 18, 1917. Serial No. 143,040. (Cl. 134—52.)

3. As a new composition of matter, a paint having as its essential constituent a colloidal solution of coal tar pitch in solvent naphtha and which will readily dry to form a smooth glossy surface, the coal tar pitch having been derived from a tar containing not over six per cent. of free carbon.

5. The method of making a colloidal solution of coal tar pitch in solvent naphtha, consisting of mixing melted pitch with solvent naphtha at a temperature of between 100 degrees and 200 degrees centigrade, the solvent naphtha being added in a proportion less than that which will produce precipitation of the pitch.

[Claims 1, 2, and 4 not printed in the Gazette.]

1,275,779. DENTIFRICE AND METHOD OF MAKING THE SAME. WILLIAM F. SPIES, New York, and HERBERT D. PEASE, Richmond Hill, N. Y., assignors to Leland V. Slaight, New York, N. Y. Filed Dec. 20, 1917. Serial No. 208,068. (Cl. 167—9.)

1. A frictional cleaning medium comprising finely comminuted non-structural cellulose hydrate.

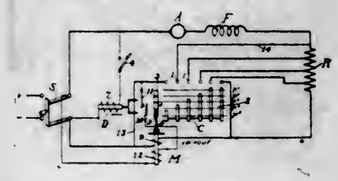
4. A dentrifice comprising non-structural cellulose in the form of small, non-abrasive, water absorbent, oil adsorbent particles impregnated with xylenol.

10. A chemically neutral and stable non-structural cellulose hydrate precipitated from viscose solution by action of an acid salt including sodium bisulfite, thoroughly washed while in gelatin-like condition, then further dried and powdered substantially as described.

16. The method of making a dentifrice powder comprising translucent horn-like particles of substantially non-structural cellulose hydrate, which method consists in changing viscose to a gelatin-like mass, expelling water from the gelatin-like material and breaking up the mass to form a finely sub-divided precipitate, washing the precipitate to purify the material and render it approximately neutral or slightly alkaline, drying the particles until no longer definitely wet to the touch, and impregnating the material with the desired antiseptic or medicament.

[Claims 2, 3, 5 to 9, 11 to 15, and 17 to 20 not printed in the Gazette.]

1,275,780. ELECTRIC CONTROLLER. EDGAR A. SPERR, Euclid, Ohio, assignor to The Electric Controller & Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 5, 1914. Serial No. 843,168. (Cl. 172—288.)



1. In a motor-control system, a motor, a circuit therefor, resistances in the circuit, a controller having contacts in the circuit and movable step by step to vary at each step the resistance in the circuit, a magnet, means moved by the magnet for advancing the controller step by step only when the current in the motor circuit is below a certain value, and means for neutralizing the effect of the magnet when the controller has completed a step to permit the first means to be moved to its initial position.

3. In a motor-control system, a motor, a circuit therefor, resistances in the circuit, a controller, a magnet, having an energizing winding, a movable member operable by the magnet for advancing the controller to vary the resistance step by step, and means operable by the magnet for causing the movable member to be retracted to its initial position without deënergizing the winding when the controller has completed a step.

5. In a controller for electric circuits, a plurality of stationary contacts, movable contacts coöperating therewith, a ratchet and pawl mechanism for moving the contacts step by step, a magnet energized by current through the contacts for operating the said mechanism, means for holding the ratchet and pawl mechanism in operating engagement, and means operated when the mechanism has completed a stroke for rendering the magnet ineffective to hold the said mechanism in the position to which the magnet has operated the same.

7. In a controller for electric circuits, a movable contact mechanism, a magnet for advancing the movable mechanism in successive steps, and a circuit closed by the movable mechanism when the controller has completed a step for rendering the magnet ineffective whereby it may, when again made effective, advance the said member another step.

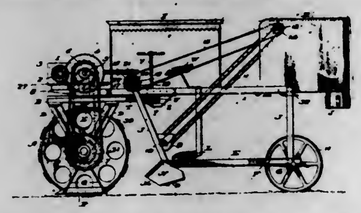
14. In a controller for electric circuits, a plurality of contacts arranged to be operated progressively, means for operating the contacts step by step, and a single magnet winding energized by the current through the contacts for delaying the operation of the means when the current in the winding is above a predetermined value, and for permitting its operation when the current falls to the predetermined value.

[Claims 2, 4, 6, and 8 to 13 not printed in the Gazette.]

1,275,781. COTTON-HARVESTER. ALVIN E. STARK and MYERS A. GARRETT, Brazoria, Tex.; said Myers A. Garrett assignor to Carlton M. Garrett, Detroit, Mich. Filed Feb. 18, 1918. Serial No. 217,899. (Cl. 214—83.)

1. The combination in a cotton harvester, of a frame mounted upon wheels spaced to move between rows of cotton plants, one of said wheels being a traction wheel, means for pivotally connecting the traction wheel to one end of the frame, means for turning said traction wheel about its pivotal center and relative to the frame, seats for pickers supported by said frame and located between the rows of plants, a bin or receptacle on the frame, a hopper supported adjacent each seat, an inclosing casing extending from each hopper to the bin one end of said casing being open into the bin and the other end open to the hopper, devices located within the hoppers, casings and bin for transferring the cotton picked by hand from

the hoppers to the bin, gearing for operating said transferring devices, and means for transmitting motion from said pivoted traction wheel to said gearing.

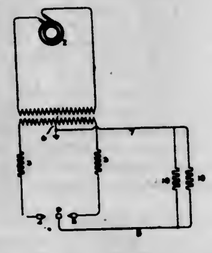


3. A cotton harvester having a frame supporting seats for pickers and mounted upon wheels, a bin, devices for transferring the cotton picked by hand to the bin, a traction wheel and platform to which the front end of the platform is pivoted, means for steering the wheel and platform, a motor on the platform for propelling the harvester, and transmission mechanism between the platform and the said transferring devices.

6. A cotton harvester comprising a frame mounted upon wheels spaced to move between rows of cotton plants, said frame being provided with deflecting plates or devices for bending over the tops of the taller plants so as to avoid detaching or injuring the blossoms and bolls upon said tops.

[Claims 2, 4, 5, and 7 to 9 not printed in the Gazette.]

1,275,782. ALTERNATING-CURRENT RECTIFIER. CHARLES P. STEINMETZ, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Aug. 24, 1914. Serial No. 858,190. (Cl. 175—363.)



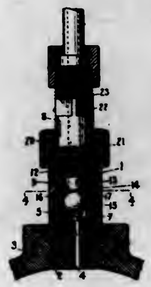
1. The method of rectifying an alternating current which consists in supplying the current to be rectified to suitable electrodes to produce successive corona discharges therefrom, positioning a collector element within striking distance of a positive corona discharge and beyond striking distance of a negative corona discharge, and collecting thereby the positive corona discharges to produce a unidirectional current.

2. The method which consists in applying an alternating current potential to suitable electrodes to produce successive corona discharges therefrom and collecting the discharges from said electrodes only when the electrodes are positive.

4. The combination in a system for the rectification of alternating currents, of a high voltage transformer, a source of alternating current connected thereto, electrodes connected to the terminals of the secondary of said transformer, one or more stationary electrodes so positioned with respect to the first-named electrodes as to receive the positive corona discharges therefrom, but not the negative, and a pair of conductors one of which is connected to a neutral point in the secondary of the transformer, and the other of which is connected to the last-named electrode or electrodes.

[Claims 3 and 5 to 7 not printed in the Gazette.]

1,275,783. VALVE. JOSEPH A. STEINMETZ, Philadelphia, Pa. Filed Apr. 5, 1918. Serial No. 226,966. (Cl. 137—4.)

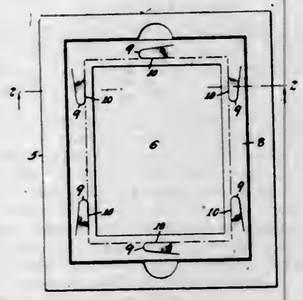


1. A valve comprising a housing having a chamber formed therein, a sealing member mounted in the said chamber in the housing for controlling the passage therethrough, a valve stem movably mounted in said housing adapted to control the sealing member, a stripper ring secured in a fixed position in the housing for separating the sealing member from the valve stem when the latter is withdrawn, and said stripper ring having means formed thereon to form a passageway between the sealing member and the stripper ring when the sealing member is against the stripper ring.

3. A valve comprising a housing having a central chamber formed therein, a valve seat formed in the housing, a valve stem movably mounted in the housing and having an opening therethrough, a valve seat formed upon the inner end of the valve stem, a sealing member adapted to be engaged between the valve seat of the housing and said valve seat of the valve stem, and means for holding the sealing member from closing the opening in the valve stem when the sealing member is in open position relative to the valve seat in the housing.

[Claim 2 not printed in the Gazette.]

1,275,784. PHOTOPRINT-ADJUSTER. LEMUEL LESTER STEVENSON, Emporia, Kans. Filed Mar. 2, 1917. Serial No. 152,040. (Cl. 95—79.)



1. A photo print adjuster, comprising a mask having a plurality of photo print adjusting members, each consisting of a flat resilient strip secured at one end to the mask and flexed on a line transversely inclined to its contact edge toward the free end of the tongue to normally present an edge at its opposite free end gradually inclined with respect to the face of the mask, said inclined free end being yieldable flatwise against the mask under pressure.

3. A photo print adjuster, consisting of a sheet of material having tongues, said tongues being flexed on lines transversely inclined to their contact edges toward the free ends of the tongues to present edges to a sheet gradually inclined with respect to the face of said sheet and yielding into flat form under pressure.

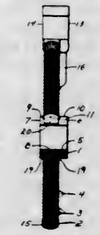
5. A photo print adjuster comprising mask having a plurality of photo print adjusting members, each including a normally upstanding tongue of flat resilient material secured at one end to the mask and intermediately flexed on a line transversely inclined to its contact edge toward the free end of the tongue, whereby to shift slightly in a lateral direction when flattened under pressure.

6. A photo print adjuster comprising a mask having an opening and a series of resilient tongues adjacent said opening, each of said tongues having a portion thereof secured to said mask and being flexed transversely so that the other part lies normally inclined to the face of the mask and with one edge inclined with respect to the adjacent edge of the opening, and is yieldable so that it lies parallel to said edge of said opening when the tongue is pressed flatwise against the mask.

8. A photo print adjuster tongue, comprising a plate provided at one end with an adhesive substance for securing it to a support and bent intermediate of its ends on a line transversely inclined to its contact edge toward the end of the tongue opposite that having the adhesive substance.

[Claims 2, 4, and 7 not printed in the Gazette.]

1,275,785. RESISTANCE UNIT. HARRY F. STRATTON, Cleveland, Ohio, assignor to The Electric Controller & Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 9, 1915. Serial No. 60,514. (Cl. 219—74.)



1. A resistance unit containing a spirally-wound insulated resistance strip, the convolutions thereof resting one on another in an equitant manner and thereby preventing the convolutions from dishing.

2. A resistance unit containing a spirally-wound insulated resistance strip, the convolutions thereof resting one on another in an equitant manner and thereby preventing the convolutions from dishing, a spool in the center of the unit and a hing within which the periphery of the wound strip is confined, the inner surface of the ring fitting the shape of the periphery of the wound strip to prevent its lateral movement in the ring.

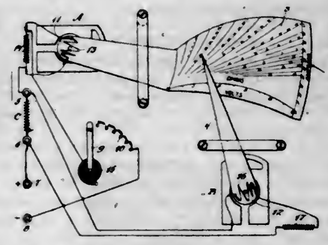
3. In a resistance unit, an insulated resistance strip, a spool on which the strip is wound to form a flat spiral, and a continuous one-piece ring within which the strip is wound, the spiral being wound to compactly fill the ring, which has a slot through which the strip is fed while being wound.

6. In a resistance unit, a spool, an insulated resistance strip wound spirally thereon, and a continuous ring within which the spiral is wound, so compactly filling the ring that frictional engagement between the last convolution and the ring prevents the unwinding of the spiral.

8. In a resistance unit, a spool, an insulated resistance strip secured thereon, and wound spirally thereon, and a continuous ring within which the spiral is wound, filling the ring so compactly that the frictional engagement between the last convolution and the ring prevents the unwinding of the spiral, and the ring and the spool being adapted by their engagement with the strip to serve as electrical terminals for the unit.

[Claims 5 and 7 not printed in the Gazette.]

1,275,786. OHMMETER. HARRY GOULD STUART, Paterson, N. J. Filed Feb. 24, 1917. Serial No. 150,721. (Cl. 171—95.)



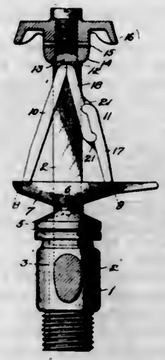
1. A direct reading ohm-meter comprising a voltmeter unit, an ammeter unit, each unit having a movable element, a dial on the movable element of one unit, and a hand connected with the movable element of the other unit and movable over the dial, said dial and hand extending approximately at right-angles to each other when in zero position.

2. A direct reading ohm-meter comprising a voltmeter unit, an ammeter unit, each unit having a movable element, a dial on the movable element of the ammeter, and a hand connected with the movable element of the voltmeter and movable over the dial, said dial and hand extending approximately at right-angles to each other when in zero position.

5. A dial for a direct reading ohm-meter adapted to swing about an axis and having a series of curves, the zero curve being approximately concentric with the axis of movement and the curves successively changing in angle to approximately a radial position at the opposite limit of the scale from zero, an ampere scale on one edge of the dial and concentric with the zero curve, and a volt scale on the dial struck from a radius at approximately right-angles from the radius from which the ampere scale is struck.

[Claims 3 and 4 not printed in the Gazette.]

1,275,787. AUTOMATIC FIRE-EXTINGUISHER. PATRICK J. SULLIVAN, Boston, Mass. Filed Nov. 11, 1916. Serial No. 130,753. (Cl. 169—5.)



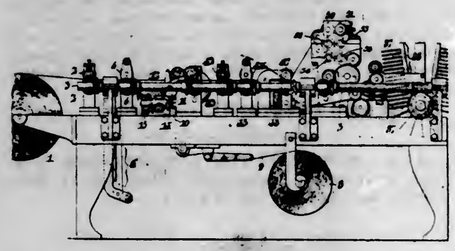
1. In a fire extinguisher, the combination with the port closure and the oppositely disposed abutment, of means for normally holding said closure in port closing position, said means being supported by and transmitting thrust between said closure and said abutment and comprising a rocker pivotally supported near its middle by one of said parts, and two struts each abutting at its one end against the rocker and having its opposite end supported by the other of said parts, with the rocker engaging ends of said struts disposed at opposite sides of the pivot of

said rocker, and solder fusible at a predetermined temperature normally maintaining one of said struts in operative conditions but with provision for its collapse when said solder is softened by heat.

2. In a fire extinguisher, the combination with the port closure and the oppositely disposed abutment, of means for normally holding said closure in port closing position, said means being supported by and transmitting thrust between said closure and said abutment and comprising a rocker pivotally supported by one of said parts and two separate struts, each abutting at its one end against the rocker and at its opposite end against the abutment, with the rocker engaging ends of said struts disposed at opposite sides of the pivot of said rocker, and solder fusible at a predetermined temperature normally maintaining one of said struts in operative condition but with provision for its collapse when said solder is softened by heat.

3. In a fire extinguisher, the combination with the port closure and the oppositely disposed abutment, of means for normally holding said closure in port closing position, said means being supported by and transmitting thrust between said closure and said abutment and comprising a rocker pivotally mounted on one of said parts and two separate struts each abutting at its one end against the rocker and at its opposite end against the abutment, with the rocker engaging ends of said struts disposed at opposite sides of the pivot of said rocker and with one of said struts made up of two sections having their ends overlapped and soldered together so as to collapse endwise under pressure from said closure when the solder is softened by heat.

1,275,788. WINDOW-ENVELOP MACHINE. GEORGE W. SWIFT, Jr., Bordentown, N. J. Filed July 17, 1917. Serial No. 180,961. (Cl. 93—61.)



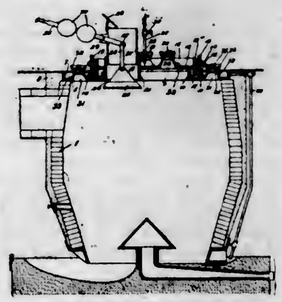
1. In a window envelop machine, the combination of means for applying window patches to running envelop material at successive intervals; means for subsequently cutting apertures in the envelop material; means for supplying adhesive for permanent attachment of the window patch in the region of the apertures; and means for folding the envelop material, whereby during the formation of the envelop the patch is brought into proper registration with the aperture.

9. In a window envelop machine, the combination of means for applying a temporary adhesive to a patch web, subdividing the same into patches, and applying the patches to a running envelop web; means for cutting apertures in said envelop web and for applying permanent adhesive around the region of said apertures; and means for subdividing the envelop web into envelop blanks and folding the same into envelops, whereby during the process of envelop formation, the patch is transferred into position to permanently adhere to the region of the aperture.

[Claims 2 to 8 not printed in the Gazette.]

1,275,789. GAS-PRODUCER. ALVIN M. TAYLOR, Hegewisch, Ill., assignor to General Chemical Company, New York, N. Y., a Corporation of New York. Filed Feb. 10, 1916. Serial No. 77,372. (Cl. 48—86.)

1. The combination of a gas producing furnace, a rotatable top member at the upper end of said furnace, a coal distributer carried by said rotatable member, an upright tube carried by said member and forming a movable poke hole communicating with the interior of the furnace, a movable cover carried by said member and provided with openings through which said hopper and tube extend, a stationary annular top member surrounding said rotatable member, a plurality of tubes carried by said stationary top member and forming poke holes communicating with the interior of said furnace and movable cover sections located in registry with said stationary top member and provided with openings through which said stationary tubes extend.



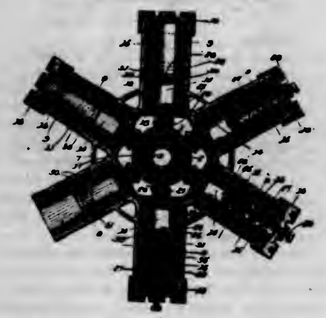
2. The combination of a gas producing furnace, a stationary annular top member located upon said furnace, and provided with a plurality of poke holes located at spaced intervals, a movable top member mounted on said stationary member and provided with a poke hole, adjustable by an actuation of said movable member to bring various portions of said furnace within range of said poke hole and a coal distributer carried by said movable member whereby coal may be distributed over the entire horizontal area of said furnace.

3. The combination of a gas producing furnace, a stationary top member having an axial opening and provided with a plurality of poke holes arranged at intervals about said axial opening, a circular track on said stationary member surrounding said axial opening, a movable top member rotatable on said track and provided with a poke hole adjustable by an actuation of said rotatable member to bring various portions of said furnace within range of said poke hole, a coal distributer carried by said rotatable member whereby coal may be distributed over the entire horizontal area of said furnace, a valve for controlling the discharge of coal from said distributer and movable means for closing said poke holes.

1,275,790. HYDRAULIC VEHICLE-WHEEL. HORACE HOUGHTON TAYLOR, Oakland, Cal., assignor of one-third to Frank J. Mayhew, San Francisco, Cal. Filed Dec. 19, 1916. Serial No. 137,917. (Cl. 152—44.)

1. In a hydraulic vehicle wheel, a hub, a frame surrounding said hub and mounted to move laterally with relation thereto, a plurality of cylinders on said frame, a plurality of hollow pistons fixed in said cylinders, a plurality of other cylinders reciprocatively mounted in said first cylinders, said pistons being reciprocatively mounted in said second cylinders, means on said hub for reciprocating said second cylinders as said hub and frame move with relation to each other, the heads of said pistons being provided with ports through which liquid may pass from said second cylinders into said hollow pistons or vice versa, as the pistons reciprocate in said second cylinders under slow running conditions of the wheel over irregularities, and means for allowing a greater amount of liquid to pass through the piston head when the speed of the wheel increases.

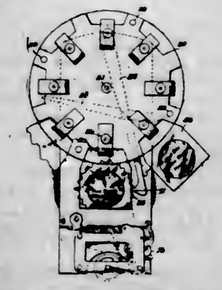
2. In a hydraulic vehicle wheel, a hub, a frame surrounding said hub and mounted to move laterally with relation thereto, a plurality of cylinders on said frame, a plurality of hollow pistons fixed in said cylinders, a plurality of other cylinders reciprocatively mounted in said first cylinders, said pistons being reciprocatively mounted in said second cylinders, means on said hub for reciprocating said second cylinders as said hub and frame move with relation to each other, the heads of said pistons being provided with ports through which liquid may pass from said second cylinders into said hollow pistons or vice versa as the pistons reciprocate in said second cylinders under slow running conditions of the wheel over irregularities, said piston heads being provided with other ports, valves for closing said ports when the wheel is running slowly, and means whereby said valves are opened automatically to allow a greater amount of liquid to pass through said other ports from the second cylinders into the hollow pistons or vice versa, as the speed of the wheel is increased, and means for automatically closing said valves and ports when the speed of the wheel decreases from its higher speed.



15. In a hydraulic vehicle wheel, a hub, a frame surrounding said hub and mounted to move laterally with relation thereto, a plurality of cylinders reciprocatively mounted on said frame, a plurality of hollow pistons fixed on said frame and mounted to reciprocate in said cylinders as the hub and frame move with relation to each other, a collar secured to said hub, a flange on said collar, having surfaces extending transversely with relation to the axis of the respective cylinders, cams on the ends of said pistons for engaging said collar whereby the cylinders are moved outwardly and their inward movement limited, and pins on said cams for engaging said flange whereby said cylinders are moved inwardly and their outward movement limited, as the wheel travels over irregularities, said pistons and cylinders being constructed and arranged to absorb shocks as the wheel travels over irregularities.

[Claims 3 to 14 not printed in the Gazette.]

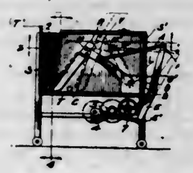
1,275,791. CLOCK MECHANISM. ADRIEN J. THERAULT, Amityville, N. Y., assignor, by mesne assignments, to Fred R. Kalck, Amityville, N. Y. Filed Feb. 12, 1917. Serial No. 148,110. Renewed July 2, 1918. Serial No. 243,090. (Cl. 58—139.)



1. A clock mechanism comprising a train of clock gearing having a hollow center arbor, time indicating hands carried by said arbor, a plurality of display devices, and means for successively advancing said devices into alinement with said arbor.

[Claims 2 and 3 not printed in the Gazette.]

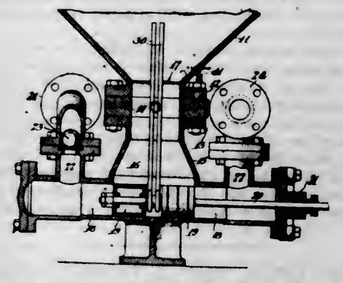
1,275,792. POUNDER-WASHING-MACHINE. LUTHER C. THOMPSON, Washington, D. C. Filed June 24, 1916, Serial No. 105,686. Renewed Apr. 6, 1918. Serial No. 227,133. (Cl. 68—19.)



1. A suds-box having a horizontal bottom, a pressure board, a pair of brace blocks rigidly supported on the said horizontal bottom, a pair of oscillating brace bars, the lower ends thereof pivoted to the brace blocks, the opposite ends pivoted to the pressure board, all connected in a manner to provide the oscillating and vertical movements of the pressure board as herein set forth, and for the purpose herein specified.

2. In a pounder washing machine, a rectangular suds-box having a horizontal bottom, brace blocks fixed at the rear end of said bottom, a cleansing board at the front end, forming a suds pocket between same and the adjacent end board, a reciprocating pressure board supported upon the horizontal bottom of the suds-box, a rearwardly extending bracket fixed thereon, a pair of oscillating side bars pivoted at the upper ends thereof to said bracket of the pressure board, and also pivoted at the opposite ends on the side brace blocks, and means for reciprocating said pressure board, all connected in a manner to produce a vertical oscillating movement of the pressure board as shown and described and for the purpose set forth.

1,275,793. PUMP. NELSON W. THOMPSON, Oakland, and FRANK J. MCGRAW, Martinez, Cal., assignors, by mesne assignments, to Shell Company of California, San Francisco, Cal., a Corporation of California. Filed July 2, 1917. Serial No. 178,269. (Cl. 103—61.)



1. In combination; a cracking still; a pump taking liquid from said still through an opening in the bottom of said still; stirring rods projecting into said opening; and means by which said pump actuates said rods.

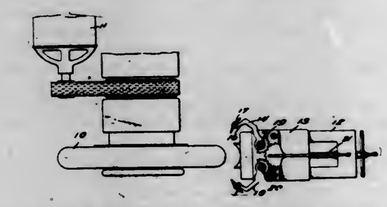
2. In combination; a cracking still having a discharge opening therein; a pump taking liquid from said still through said opening; and pipe means connected to the pressure side of said pump and so arranged that oil from said pump is injected under pressure into said opening to prevent carbon deposits therein.

3. In combination; a cracking still having a discharge opening therein; a pump taking liquid from said still through said opening; stirring rods projecting into said opening; mechanism by which said pump actuates said

stirring rods; and pipe means connected to the pressure side of said pump and so arranged that oil from said pump is injected under pressure into said opening to prevent carbon deposits therein.

4. In combination; a cracking still having a discharge opening therein; a pump casing having walls inclosing a pump inlet opening registering with and forming a continuation of said discharge opening; walls forming two cylinders coaxial with each other and in open communication with said pump inlet opening; pistons moving in said cylinders; stirring means attached to said pistons and projecting through said pump inlet opening into said discharge opening; and a discharge valve in the end of each cylinder.

1,275,794. TIRE-MACHINE. JAMES D. THOMSON, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Jan. 12, 1918. Serial No. 211,521. (Cl. 154—10.)



1. A tire machine including a revoluble core, a driving mechanism for rotating the core, means whereby the direction of rotation of the core may be reversed at will, a pair of stitching elements for laying a ply of fabric down upon the core and means for controlling the position of the stitchers whereby either but not both of the stitchers may be operatively engaged with the core.

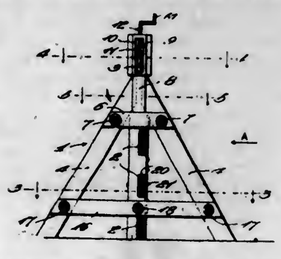
2. In a tire building machine, a revoluble core, a pair of carrying members mounted for swinging movement with respect to the core, fabric forming elements carried by the carrying members and adapted to be disposed through swinging of the members into engagement with the core, and a controlling means copulating the members in such a manner that the movement of one member to dispose its fabric forming element in operative position is automatically accompanied by a movement of the other member which disengages the fabric forming element thereof from the core, rendering said element inoperative with respect to the core.

3. A tire building machine including a revoluble core, a driving mechanism for rotating a core, means whereby the direction of rotation of the core may be reversed at will, a plurality of stitching elements operable for forming and shaping a ply of fabric upon the core, and means controlling the stitchers whereby they may be selectively engaged with the core but whereby they are positively prevented from being simultaneously engaged with the core and whereby the stitchers may further be simultaneously disposed in inactive position with respect to the core.

1,275,795. FENCE. ALLEN J. TINGLEY, Owosso, Mich. Filed Apr. 19, 1917. Serial No. 163,121. (Cl. 256—64.)

1. A support for use in a barricade, having a plurality of horizontally-disposed timber-receiving apertures at intervals in its height and extending in the same direction, a plurality of horizontally-disposed timber-receiving apertures at intervals in its height and extending at right angles to the first-named apertures, and means complementary to one of said apertures for securing a timber therein.

2. A support for use in a barricade, having a head in which are oppositely-extending horizontally-disposed apertures, and a device common to said apertures for securing a timber therein, and also having a plurality of horizontally-disposed timber-receiving apertures at intervals in its height and extending in the same direction, and a plurality of horizontally-disposed timber-receiving apertures at intervals in its height and extending at right angles to the second-named series of apertures.



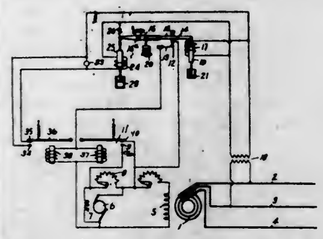
4. A transverse support for use in a barricade, comprising upwardly converged timbers connected together and having mitered upper portions, an upright portion, of I-form in horizontal-section, interposed and supported between said mitered portions, an apertured head arranged on and fixed with respect to said portion, clamping means carried by said head and an upright member fixed between the upwardly converged timbers and having portions disposed at right angles to each other in which are horizontally-disposed apertures for the reception of runners extending at right angles to each other.

9. In a fence of the character described, upwardly converging timbers having their upper ends mitered; a member arranged between and having grooves receiving the mitered ends of the timbers; a pair of substantially horizontal strips disposed upon opposite sides of the upper end portions of the timbers in proximity to the member and secured to the timbers; a lower pair of substantially horizontal strips disposed upon opposite sides of the timbers and secured thereto; an upright timber arranged between the upper and lower pairs of strips with its upper end contacting with the lower end of said member, said upright timber having rail receiving openings and being secured to the lower pair of strips; a head rigidly secured to the upper end of the member and having a bar receiving socket; and clamping means operating within the socket.

10. A support for use in a barricade, having a head in which are oppositely-extending horizontally-disposed apertures, and a device common to said apertures for securing a timber in the head.

[Claims 3, 5 to 8, and 11 not printed in the Gazette.]

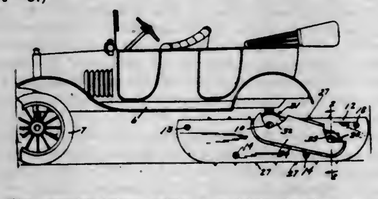
1,275,796. ELECTRICAL REGULATOR. ALLEN A. TIRRILL, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Original application filed Oct. 5, 1911, Serial No. 653,010. Divided and this application filed June 19, 1915. Serial No. 35,118. (Cl. 171—229.)



1. An electrical regulator comprising a pair of coöperating stationary and movable contact terminals, a substantially straight and horizontal lever carrying the movable contact terminal, another substantially straight and horizontal lever having a stationary fulcrum, the contact-carrying lever being fulcrumed upon and entirely supported thereby, and electromagnetic means for separately actuating each of said levers.

2. An electrical regulator comprising a pair of coöperating stationary and movable contact terminals, a substantially straight and horizontal lever carrying the movable contact terminal, another substantially straight and horizontal lever having a stationary fulcrum at one end, the contact-carrying lever being fulcrumed upon and entirely supported thereby, and electro-magnetic means for separately actuating each of said levers.

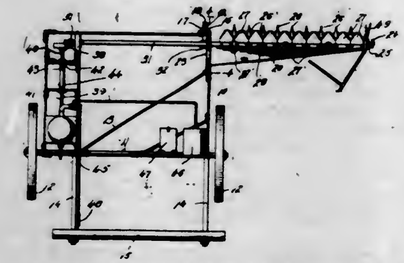
1,275,797. RUNNER ATTACHMENT FOR MOTOR-DRIVEN VEHICLES. GILBERT TOLLEFSON, Bagley, Minn. Filed Mar. 9, 1918. Serial No. 221,345. (Cl. 180—5.)



1. The combination with a vehicle having a motor driven axle and a casing therefor, of a pair of runners supporting said casing and intermediately secured thereto for vertical oscillatory movement, each of said runners comprising a pair of shoes, a wheel journaled to the shoes, a vertical oscillatory frame pivoted to the shoes at the axis of its wheel, a second wheel journaled to the free end of the frame, a traction belt arranged to run over said two wheels, and connections for driving the first noted wheel from one of the journals of the axle.

[Claims 2 to 8 not printed in the Gazette.]

1,275,798. LAWN-MOWER. WILLIAM F. TOSCH, Kansas City, Mo. Filed Nov. 24, 1916. Serial No. 133,216. (Cl. 56—19.)



In a mower, a wheeled frame, a yoke pivoted at the extremities of its arms to said frame and being capable of swinging laterally thereof, a cutting mechanism supported at one end by said yoke, said mechanism including a reciprocable cutter bar, the end of said bar being disposed in said yoke, a ball on the end of said bar, a motor, a pitman connected at one end to said motor, clamp arms on the outer end of said pitman engaging said ball, and a bolt for holding said arms against said ball.

1,275,799. VEGETABLE GLUE OR ADHESIVE. RAYMOND WELCH TUNNELL, Philadelphia, Pa. Filed Dec. 22, 1917. Serial No. 208,463. (Cl. 87—17.)

1. The process of making adhesive from starch compounds which consists in mixing starch with barium hydroxid.

2. The process of making adhesive from starch compounds which consists in mixing starch of high and low grade of the same origin and adding thereto an hydroxid of the alkaline earth metals.

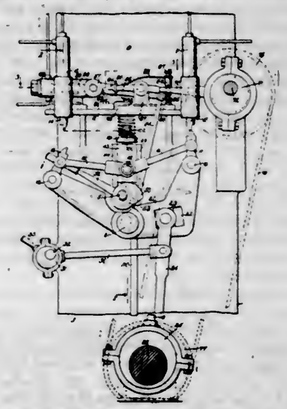
4. The process of making adhesive from starch compounds which consists in blending tapioca of high and low grade, the quantity of the low grade exceeding the quantity of the high grade, and adding thereto barium hydroxid.

5. The process of making adhesive from starch compounds which consists in blending eighty per cent. of low grade tapioca with twenty per cent. of high grade tapioca, and adding an alkaline earth hydroxid thereto so that the proportions of the hydroxid by weight is from one-tenth to one-quarter of one per cent. of the amount of the starch used.

7. An adhesive formed by eighty per cent. of low grade tapioca, twenty per cent. of high grade tapioca, and one-tenth to one-quarter of one per cent. by weight of barium hydroxid.

[Claims 3 and 6 not printed in the Gazette.]

1,275,800. ACTUATING AND REVERSING MECHANISM FOR PUMPS. JOHANNES P. ULDERUP, New York, N. Y. Filed Apr. 27, 1917. Serial No. 164,912. (Cl. 123—41.)



1. A reversing mechanism for an internal combustion engine, comprising a main feed pump adapted to supply the engine cylinder with liquid fuel to periodically effect explosions during normal running of the engine, a reversing pump adapted to supply the said engine cylinder with fuel to effect an explosion for reversing the engine, independent actuating mechanisms driven from rotatable parts of the engine, one for actuating the said main feed pump and the other the said reversing pump, connecting mechanism connected with both actuating mechanisms and under the control of an operator to temporarily throw the actuating mechanism for the main feeed pump out of action and simultaneously throwing the actuating mechanism for the reversing pump temporarily into action, and means connected with the said connecting mechanism to return the actuating mechanism to normal running position after a single pumping action of the reversing pump.

2. A reversing mechanism for an internal combustion engine, comprising a main feed pump having a spring-pressed plunger and adapted to supply the engine with liquid fuel to periodically effect the explosions in the engine cylinder during normal running of the engine, a reversing pump having a spring-pressed plunger and adapted to supply the said engine cylinder with fuel to effect a single explosion for reversing the engine, a rocking lever actuated from a movable part of the engine, an arm pivoted on the said lever and adapted to actuate the plunger of the said main feed pump, a crosshead, a link connecting the crosshead with the said lever arm, a cam lever controlling the said crosshead, an actuating mechanism for the plunger of the said reversing pump, and a connection connected with the said cam lever and adapted to connect the said plunger of the reversing pump with its actuating

mechanism to throw the latter into action at the time the main feed pump is thrown out of action.

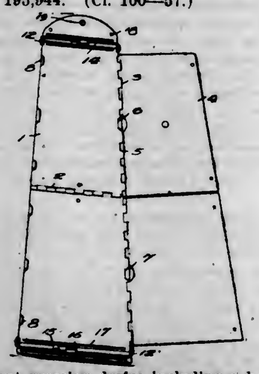
3. A reversing mechanism for an internal combustion engine, comprising a main feed pump having a spring-pressed plunger and adapted to supply the engine with liquid fuel to periodically effect the explosions in the engine cylinder during the normal running of the engine, a reversing pump having a spring-pressed plunger and adapted to supply the said engine cylinder with fuel to effect a single explosion for reversing the engine, a rocking lever actuated from a movable part of the engine, an arm pivoted on the said lever and adapted to actuate the plunger of the said engine feed pump, a crosshead, a link connecting the crosshead with the said lever arm, a cam lever controlling the said crosshead, an actuating mechanism driven from a movable part of the engine, and connecting means connected with the said cam lever and adapted to connect the said actuating mechanism with the plunger of the said reversing pump.

4. A reversing mechanism for an internal combustion engine, comprising a main feed pump having a spring-pressed plunger and adapted to supply the engine with liquid fuel to periodically effect the explosions in the engine cylinder during normal running of the engine, a reversing pump having a spring-pressed plunger and adapted to supply the said engine cylinder with fuel to effect a single explosion for reversing the engine, a rocking lever actuated from a movable part of the engine, an arm pivoted on the said lever and adapted to actuate the plunger of the said main feed pump, a crosshead, a link connecting the cross head with the said lever arm, a cam lever controlling the said cross head, a slide reciprocated from a movable part of the engine, an arm pivoted on the said slide and adapted to engage the said plunger of the reversing pump, a cam lever engaging the said plunger of the reversing pump to hold the said plunger normally out of reach of the said slide arm, and a link connecting the said cam levers with each other.

5. A reversing mechanism for internal combustion engines provided with an auxiliary reversing pump having a plunger, a pivot mounted to turn and provided with a slidable member adapted to engage the said plunger, a reciprocating slide having an arm adapted to engage the said slidable member, and means for rocking the said pivot to move the slidable member thereof into or out of the path of the said slide arm.

[Claims 6 to 9 not printed in the Gazette.]

1,275,801. GARMENT-PRESSING DEVICE. ROBERT W. VAN BUREN, White Plains, N. Y. Filed Oct. 11, 1917. Serial No. 195,944. (Cl. 100—57.)



1. A garment pressing device including a body portion, leaves hinged to said body portion, clamping means carried by the leaves and engageable with the body portion, and arms pivotally engaged with the body portion and arranged transversely of the same.

3. A garment pressing device, including a foldable body portion, leaves hinged to said body portion, resilient clamping means carried by the leaves and engageable with the body portion, lugs formed integral with the body portion adjacent the opposite extremities thereof having curved bearing slots formed in the same, and arms pivotally engaged in said slots and disposed transversely of the body portion.

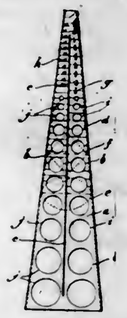
4. A garment pressing device, including a body portion, leaves hinged to said body portion, spring clamping means carried by the leaves and engageable with the body portion, rotatable buttons carried by said leaves and engageable with the body portion, arms pivotally engaged with the body portion at points in proximity of the opposite extremities thereof, those portions of the body adjacent the arms being serrated, as and for the purpose set forth.

5. A garment pressing device, including a body portion having rolled flanges formed upon the opposite marginal edges thereof, leaves hinged to said body portion, spring clamping means carried by the leaves and engageable under said rolled flanges, and arms pivotally engaged with the body portion at points in proximity of the opposite extremities thereof and arranged transversely of the same, said arms having depressions formed in the intermediate portions thereof.

6. A garment pressing device, including a hingedly connected sectional body, rolled flanges formed upon the opposite marginal edges of said body, leaves hinged to the body, spring clamping means carried by the leaves engageable under said rolled flanges, adjustable arms pivotally engaged with the body portion at points in proximity of the opposite extremities of the same, said arms having depressions formed in the intermediate portions thereof.

[Claim 2 not printed in the Gazette.]

1,275,802. MEASURING AND MARKING GAGE. GEORGE WALLACE. High Holborn, London, England. Filed Apr. 18, 1918. Serial No. 229,426. (Cl. 33—191.)



1. A center marking gage comprising a tapered trough provided with a central scribing slot.

2. A measuring and center marking gage comprising a tapered trough provided with a longitudinal scribing slot and having markings on its upper surface to show the size of the trough at the corresponding part of the undersurface of the gage.

[Claims 3 to 7 not printed in the Gazette.]

1,275,803. CARTRIDGE-SHELL EXTRACTOR. HERBERT WALLACE, Springfield, Mass., assignor, by mesne assignments, to United States Machine Gun Company, Boston, Mass., a Corporation of Massachusetts. Filed Feb. 9, 1918. Serial No. 216,146. (Cl. 42—93.)

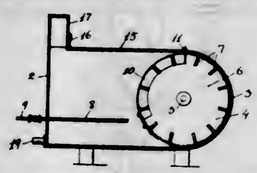
1. A device for extracting broken cartridge shells from firearms, said device being adapted to be inserted into the broken shell lodged in the cartridge chamber, and comprising, in combination, resilient means adapted to pass through the broken cartridge shell, when the device is inserted into the latter, and to engage the front edge of said broken cartridge shell; means to lock said resilient means in engagement with the front edge of the cartridge shell; guide means to fit within the barrel in advance of the cartridge chamber to guide and center said device when the latter is operated, and means to be engaged by the automatic extractor of the firearm whereby when said automatic extractor is operated it will extract said device and broken shell from the cartridge chamber.



2. A device for extracting broken cartridge shells from firearms, said device being adapted to be inserted into the broken shell lodged in the cartridge chamber and comprising, in combination, resilient means adapted to pass through the broken cartridge shell when said device is inserted into the latter, and to engage the front edge of said shell, means to lock said resilient means against contraction when moved into engagement with the front edge of the cartridge shell without further expanding said resilient means; guide means to fit within the barrel in advance of the cartridge chamber to guide and center said device when the latter is operated, and means to be engaged by the automatic extractor of the firearm whereby when said automatic extractor is operated it will extract said device and cartridge shell from the cartridge chamber without further expanding said device.

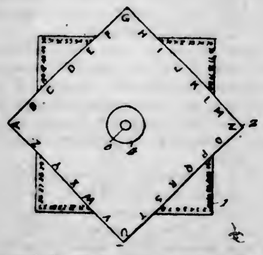
[Claims 3 to 6 not printed in the Gazette.]

1,275,804. STEAM WASHING-MACHINE. SYLVESTER C. WALTER, Malone, Wash. Filed May 14, 1917. Serial No. 168,524. (Cl. 68—18.)



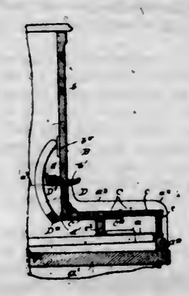
In a washing machine, a casing having a semi-cylindrical end wall, a rotary cylindrical perforated drum in said casing working closely against said end wall, said drum having circular ends and radial blades connecting said ends together, said blades extending inwardly from the peripheries of said ends, and steam pipes located in said casing and directed toward said drum and said end wall of the casing.

1,275,805. GAME. HARVEY L. WATKINS, Philadelphia, Pa. Filed Sept. 18, 1917. Serial No. 191,957. (Cl. 46—56.)



In a device of the character described the combination of a pair of rectangular members arranged in superposed spaced relation, the lower member having numerals arranged on the outer edges thereof, the upper member having letters of the alphabet arranged along the outer edges thereof, and the upper member being adapted to rotate on the lower member for a purpose specified.

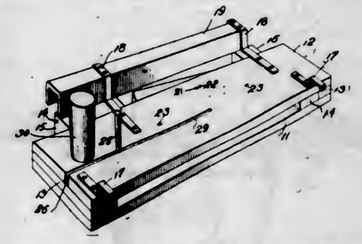
1,275,806. PIANO. FRANK J. W. WEISER, Elmhurst, Ill. Filed June 21, 1916. Serial No. 104,880. (Cl. 84—118.)



2. In a device of the class described, the combination of a piano music-desk pivotally mounted to swing outwardly, a fall-board horizontally movable into projected and retracted positions below the desk, a cross-guide mounted in the piano above the fall-board, levers pivoted on the cross-guide and having their upper ends forwardly curved to bear on the music-desk, hinged connections between the lower ends of the levers and the fall-board, and a synchronizing cross-brace rigidly connecting the lower ends of the levers below their pivots to move the levers in unison to preserve the alinement of the fall-board in its movements.

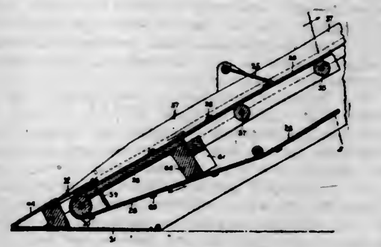
[Claim 1 not printed in the Gazette.]

1,275,807. WEDGE-CUTTING MACHINE. NEWTON C. WELLS, Globe, Ariz. Filed Oct. 9, 1917. Serial No. 195,592. (Cl. 143—13.)



A device of the class described, comprising a guide track adjustable toward and from the plane of a saw, a sliding gage engaging the track and guided thereby, and a gage member having limited pivotal movement mounted on the sliding gage.

1,275,808. CONVEYER. JEBB LESTER WENTZ, Passaic, N. J. Filed Aug. 11, 1917. Serial No. 185,759. (Cl. 193—4.)



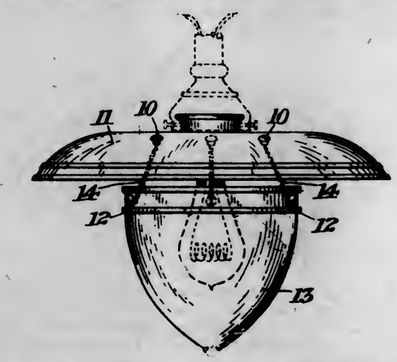
1. A conveyer as characterized comprising an endless belt; a frame therefor embodying an idler roll for supporting said belt at the lower end of said frame; and a

plate engaging said belt for supporting said belt adjacent said roll and for a distance therefrom, said plate having a sharpened edge adjacent the roll for removing accretions thereon for delivery of said accretions between said belt and plate.

2. A conveyer as characterized comprising an endless belt; a frame therefor embodying an idler roll for supporting said belt at the lower end of said frame; a plate engaging said belt for supporting said belt adjacent said roll and for a distance therefrom, said plate having a sharpened edge adjacent the roll for removing accretions thereon for delivery of said accretions between said belt and plate; and means for removing accretions from the inner surface of said belt adjacent said roll and on the belt-advancing side of said roll.

3. A conveyer as characterized comprising an endless belt: a frame therefor embodying an idler roll for supporting said belt at the lower end of said frame; a plate engaging said belt for supporting said belt adjacent said roll and for a distance therefrom, said plate having a sharpened edge adjacent the roll for removing accretions thereon for delivery of said accretions between said belt and plate; and means for removing accretions from the inner surface of said belt adjacent said roll and on the belt-advancing side of said roll, said means embodying a bolster for supporting said plate, said bolster having a sharpened edge disposed adjacent the lower reach of said belt and the inner surface thereof; and means for delivering accretions deposited on the inner side of said belt, laterally from the path of said conveyer.

1,275,809. HANGER FOR LIGHT-TRANSMITTING BOWLS. EDWIN L. WHITE, Brooklyn, N. Y. Filed Feb. 20, 1918. Serial No. 218,192. (Cl. 240—115.)



2. In a lighting fixture and in combination, a reflector provided with a plurality of spaced openings, a bowl provided with spaced openings adjacent its open end, hangers within said openings in both the reflector and bowl consisting of a sheet of metal shaped to form a hollow cylinder having a longitudinal split at one side, an annular flange at one end, and a transverse strip at the other end, and flexible connections between such strips on the hangers connected with the reflector and the hangers attached to the bowl.

4. In a lighting fixture and in combination, a reflector provided with spaced openings, a bowl provided with spaced openings adjacent its open end, hangers within said openings in both the reflector and bowl comprisng a hollow plug formed from a single piece of sheet metal open at one end and provided with an annular flange at said open end, the other end being provided with a transverse strip, flexible connections between such strips on the hangers connected with the reflector and bowl, and a cap provided with a flexible shank for closing the open end of said plug.

[Claims 1 and 3 not printed in the Gazette.]

1,275,810. SCREW-DRIVER. FREDERICK H. WHITE, New York, N. Y. Filed Aug. 30, 1917. Serial No. 189,024. (Cl. 145—50.)

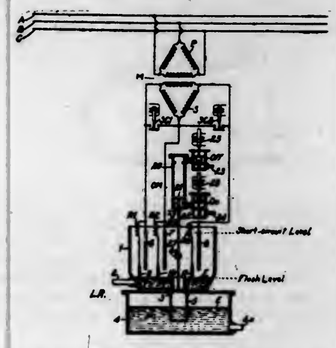


1. A screw driver having relatively movable blades adapted to enter the screw slot, one blade being slidable upon the other upon a plane oblique to the external acting surfaces of the blades.

8. A screw driver having a shank rigidly fastened to the handle, the outer end of the shank being flattened to form a blade, a movable blade pivoted to the shank and movable in the plane of its width and forming a complement to the stationary blade, whereby movement in the plane of its width causes movement in the direction of its thickness, means for normally holding the blades spread, and a sleeve slidable upon said shank and over the major portion of said blades for bringing them into alinement, said sleeve having a knurled boss at its inner end whereby it may be more readily grasped by the fingers of the user.

[Claims 2 to 7 not printed in the Gazette.]

1,275,811. SYSTEM OF CONTROL. CHARLES C. WHITTAKER, Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed May 27, 1916. Serial No. 100,289. (Cl. 172—179.)



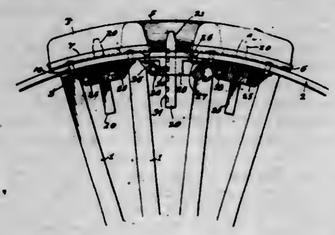
1. In a system of control, the combination with a dynamo-electric machine and an electrolyte-employing rheostat for governing the operation thereof, of means other than the electrolyte for varying the effective resistance of the rheostat under predetermined conditions.

3. In a system of control, the combination with a dynamo-electric machine and an electrolyte-employing rheostat for governing the operation thereof, of means other than the electrolyte for varying the effective resistance of the rheostat under predetermined conditions, said means being rendered inoperative by a predetermined variation of electrolyte level.

7. In a system of control, the combination with a dynamo-electric machine and an electrolyte-employing rheostat for governing the operation thereof and embodying a plurality of main electrodes, of a plurality of auxiliary electrode circuits of materially different resistance value from said main electrodes, and means for utilizing said auxiliary electrode circuits under predetermined conditions, said circuits being rendered inoperative by a predetermined variation of electrolyte level.

[Claims 2, 4 to 6, and 8 to 12 not printed in the Gazette.]

1,275,812. TRACTION-WHEEL. NEWTON K. WILCOX, Providence, R. I. Filed June 15, 1916. Serial No. 103,800. (Cl. 21—211.)



In a wheel of the character described, the combination of a rim, box-like guides secured to the inner face thereof, spurs slidably mounted within the box-like guides and adapted to project through the rim of the wheel, said spurs being provided with two rows of recesses, two screws mounted in the wall of each guide, said screws being adapted to enter the recesses of the spur and being each provided with eyes, and a pin adapted to extend through the eyes of the two screws to prevent their rotating.

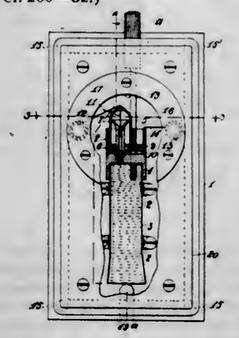
1,275,813. TIME OR DATE STAMP. ROBERT WILDAY, New York, N. Y. Filed Apr. 30, 1918. Serial No. 231,632. (Cl. 101—373.)



8. A stamp of the class described comprising a handle formed of a knob, shank and head and having a bore; a type cushion rigidly fastened to the head and having a central opening; a shaft disposed in the bore; and means on the shaft for holding type within the opening of the cushion, the said shank having openings exposing the shaft and permitting the same to be gripped for turning.

[Claims 1 to 7 not printed in the Gazette.]

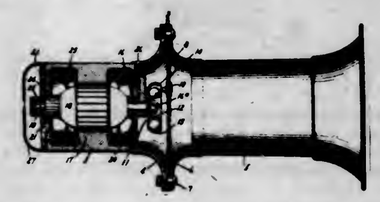
1,275,814. THERMAL SWITCH. GEORGE WILKINSON, Harrogate, England. Filed Nov. 24, 1915. Serial No. 63,278. (Cl. 200—32.)



8. A thermal switch comprising the combination of a base provided with supports, a reservoir filled with mercury mounted on said supports, a capillary tube connected to the reservoir, a transparent hood filled with inert gas mounted over the capillary tube and sealed with mercury, an electric terminal sealed in the hood and terminating in the capillary tube, an adjusting screw entering the reservoir for changing its capacity and a cover mounted on the base having a window opposite the hood.

[Claims 1 to 7 and 9 to 12 not printed in the Gazette.]

1,275,815. DIAPHRAGM-HORN. JAMES WILKINSON, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Jan. 15, 1916. Serial No. 72,231. (Cl. 116—1.)



1. The combination with a diaphragm, of an actuator having an annular race therein, and balls loosely mounted in the race for vibrating the diaphragm.

10. In a motor driven electric horn, the combination of an amplifier, a diaphragm across one end thereof, a casing to which the amplifier is fastened, a motor journaled in the casing, an actuator carried by the motor comprising means forming an annular race, balls therein, the edges of the race projecting well around said balls, said race being of such depth that the balls may fall back therein from the edges of the race, the number of balls in the race being such as not to entirely fill it circumferentially, and a projection on the diaphragm located at the upper side of the race.

[Claims 2 to 9, 11, and 12 not printed in the Gazette.]

1,275,816. CLOSURE FOR CONTAINERS. SAMUEL S. WILLIAMSON and HARRISON D. BOYER, Philadelphia, Pa. Filed Aug. 24, 1917. Serial No. 187,924. (Cl. 215—80.)



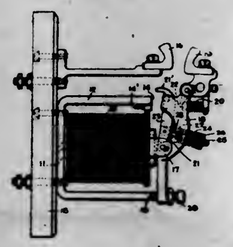
4. In combination, a container undercut below its mouth, a top having lugs adapted to be alternately and diametrically inserted in the undercut and resilient means to permit said insertion and then center the top to maintain the lugs in said undercut.

[Claims 1 to 3 and 5 to 10 not printed in the Gazette.]

1,275,817. ELECTROMAGNETIC SWITCH. JAMES J. WOOD, Fort Wayne, Ind., assignor to General Electric Company, a Corporation of New York. Filed Nov. 20, 1914. Serial No. 873,212. (Cl. 175—281.)

1. An electromagnetic switch comprising an electromagnet, a movable switch member normally in open position, an element movable by said magnet, and a tension device interposed between said element and said switch member to force them together, said device comprising a spring having a rocker bearing upon the switch member causing the spring to shift as the member moves under

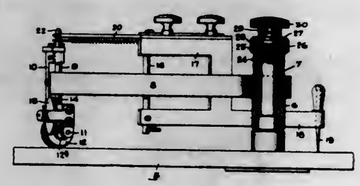
the influence of the spring and increase the leverage at which it acts upon the switch member to close it, and means for holding the member against said closing tendency when the magnet is energized above a predetermined value.



4. An electromagnetic switch comprising an electromagnet, a movable switch member normally in open position, an element movable by said magnet, a spring interposed between said element and said switch member to give the latter a tendency to close when the magnet is energized, means whereby the spring is caused to act upon the switch member as it closes so as to increase the leverage, means for holding the member in open position against said closing tendency when the magnet is energized by a current above a predetermined value, and a pole piece for pulling the member into closed position when released.

[Claims 2 and 3 not printed in the Gazette.]

1,275,818. MEASURING INSTRUMENT. REW E. WOOLLEY, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Aug. 30, 1917. Serial No. 189,000. (Cl. 33—122.)



1. The combination with a sleeve member and a post member which telescope one within the other, of a measuring device carried by one of said members and adapted to be brought to an operative position when said members are telescoped one within the other, and means carried by one member and coöperating with the other by means of which the two members are positively moved during a portion of the movement by which they are brought into telescoping relation.

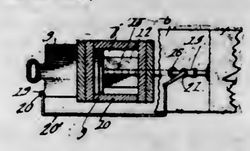
2. In a measuring instrument, the combination with a sleeve member and a post member which telescope one within the other to bring the measuring instrument to operative position, of means carried by one member and engaging the other and through which the latter part of the telescoping movement is effected by a turning movement of the members whereby injury of the instrument due to the two members being quickly telescoped to final position is prevented.

3. In a measuring instrument, the combination with a post, and a sleeve which fits over it, of a threaded member carried by the sleeve which engages the post before the sleeve reaches its final position thereon, said post having a threaded part for engagement with said threaded member whereby the sleeve may be lowered therethrough to its final position.

4. The combination with a base having a pivot post thereon, of a measuring instrument having a sleeve which fits over the post and a pivot wheel which engages the base, and means for preventing the wheel from being brought forcibly into engagement with the base when the sleeve is placed over the pivot post comprising a screw thread by means of which the sleeve is lowered during its final movement.

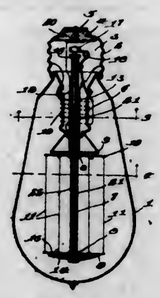
5. The combination with a base having a pivot post thereon, of a measuring instrument having a sleeve which fits over the post and a pivot wheel which engages the base, and means for preventing the wheel from being brought forcibly into engagement with the base when the sleeve is placed over the pivot post comprising a threaded member swiveled in the top of the sleeve, and which engages the top of the post before the wheel engages the base, said post having a threaded part which coöperates with said threaded member and by means of which the sleeve is lowered during its final movement.

1,275,819. GRAIN-PICKLING MACHINE. ELSIE WRIGHT, Condon, Oreg. Filed Mar. 6, 1916. Serial No. 82,410. (Cl. 83—28.)



In a device of the kind described, in combination, a support, a depending grain-receiving chamber arranged below said support, a liquid-receiving tank mounted upon said table and having a faucet extending outwardly from its lowermost portion, a valve carried by said faucet, a horizontally-slidable gate arranged to move transversely of said chamber so as to bar the inlet of grain thereinto, a crank carried by said faucet valve, a depending link arm secured to the outer end of said crank, and a connecting rod extending alongside of said feed chamber and having its inner end pivotally secured to said link arm and its outer portion extending angularly toward one corner of said gate and being pivotally secured to said corner of the gate, whereby when said gate is opened said connecting rod is shifted to operate said faucet valve.

1,275,820. INCANDESCENT LAMP. FRANCIS M. A. WYBAILLIE, New York, N. Y., assignor of one-half to August Peyman, Jersey City, N. J. Filed Jan. 26, 1917. Serial No. 144,701. (Cl. 176—24.)



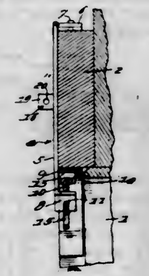
1. In an incandescent lamp, the combination with a filament-supporting stem; of spaced contact rings on said stem, radiating spring filament-carrying arms mounted on said stem and normally maintained out of contact with the rings by the tensile strength of the filament, and means connected with said rings for establishing connection between the terminals of the lamp when said arms contact with said rings.

3. In an incandescent lamp, the combination with a filament; of a contact, a spring filament-carrying arm normally maintained out of engagement with said contact by the tensile strength of the filament, a fuse connected by said contact and adapted to be cut into the lamp circuit by engagement of said arm with said contact, a spring contact arm connected to one terminal of the lamp and adapted for establishing contact with the other terminal of the lamp, said contact arm being normally prevented from establishing contact with the last mentioned terminal of the lamp by said fuse, and a resistance included in the connection between the first mentioned terminal and said arm.

4. In an incandescent lamp, a filament, sets of supporting arms carrying said filament, and connected by straight portions of said filament, certain of the arms in each set being flexible and adapted to move upon the destruction of the filament, and means coöperating with said movable arms and adapted to be engaged thereby upon the destruction of the filament to close the circuit independently of the filament, said arms being normally held from engagement with said means by the tensile strength of the filament.

[Claim 2 not printed in the Gazette.]

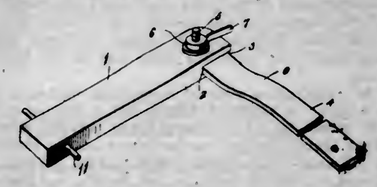
1,275,821. CURTAIN-BRACKET. OREN E. WYLIE, Washington, Kans. Filed June 1, 1917, Serial No. 172,247. Renewed June 22, 1918. Serial No. 241,438. (Cl. 156—24.)



In a curtain bracket comprising a body formed from a piece of strap metal adapted to be disposed diagonally across the outer face of one cap of a window casing and having the outer portion bent at right angles and twisted so as to be arranged diagonally of the plane of the body, a stationary angle clamp carried by the outer bent portion of the body and adapted for engagement with the outer corner of the cap of a window casing, an inwardly extending flange formed on the inner end of the body and having a threaded opening therein, a movable angle clamp adapted for engagement in the inner corner of the window casing, a socket carried by the inner surface of the movable angle clamp adjacent the point of distortion thereof, a screw adjustably mounted in the opening in the flange and universally connected in the flange in the socket, a wing head formed on the screw for facilitating adjustment, and a curtain rod support carried by the outer face of the body.

1,275,822. ADJUSTABLE TRY-SQUARE. JAMES M. ZUMWALT, Buena Vista, Fla., assignor of one-half to Lilla M. Zumwalt, Buena Vista, Fla. Filed Aug. 22, 1917. Serial No. 187,661. (Cl. 33—118.)

An adjustable square comprising a stock or handle and a blade shaped to conform to the configuration of irregular material and pivoted to the stock or handle at one end thereof to swing to either side of the same, and projections extending laterally from the stock or handle at the opposite end thereof and arranged to rest upon the material in spaced relation with the blade when the blade is in either position, whereby the blade will be adapted



to be placed perfectly flat against the material without liability of turning while the material is being marked.

1,275,823. REPEATING AND STOPPING ATTACHMENT FOR DISK PHONOGRAPHS. FRANK H. ADAMS, Cleveland, Ohio. Filed Mar. 23, 1914, Serial No. 826,489. Renewed Oct. 5, 1917. Serial No. 195,000. (Cl. 274—15.)



1. In combination with a phonograph having a turntable adapted to receive a disk record, a driving spindle therefor, a tone arm and sound box, of a repeating attachment comprising a track arm pivoted at its outer end beyond the turntable and projecting inwardly toward the center of the latter, and means for inclining said track arm, comprising an elevating device having a grooved upright portion provided with a socket adapted to receive the upper end of the driving spindle and having a substantially flat base which is entirely above the surface of the record when the latter is in position on the turntable and is adapted to normally support the inner end of the track arm.

2. In combination with a phonograph having a turntable adapted to receive a disk record, a driving spindle therefor, a tone arm and sound box, of a repeating attachment comprising a track arm pivoted at its outer end beyond the turntable and projecting inwardly over and toward the center of the latter, and means for inclining the track arm comprising a device having a grooved upright portion, a substantially flat base which is above and rests on the surface of the record when the latter is in position on the turntable and a socket in said base adapted to receive the upper end of the driving spindle, and means carried by said track arm adapted to be shifted into engagement with the groove of said upright portion, said means normally supported by said base.

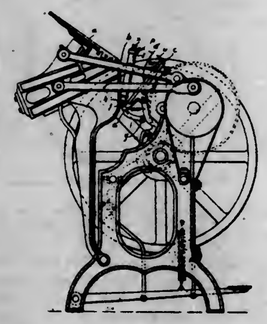
3. In combination with a phonograph having a turntable adapted to receive a disk record, a driving spindle for the turntable, a tone arm and a sound box provided with a needle, of a repeating attachment, comprising a single arm pivoted at its outer end beyond the periphery of the turntable and projecting inwardly and toward the center of the latter, said arm projecting over the turntable wholly to one side of the path of movement of the needle, an elevating device secured to the upper end of the driving spindle, means supported on the lower side of said arm adapted to be engaged by a part movable with

the sound box to cause operative engagement between the track arm and the elevating device, said means projecting beyond that edge of the track arm which is adjacent the path of movement of the needle, and a roller movable with the sound box adapted to engage the upper surface of said track arm when the inner end of the latter is elevated.

4. In combination with a phonograph having a turntable adapted to receive a disk record, a driving spindle for the turntable, a tone arm, a sound box, and a spring actuated brake adjacent the periphery of the turntable, of a repeating and stopping attachment, comprising a track arm pivoted at its outer end beyond the turntable and extending inwardly over and toward the center of the latter, means for elevating the inner end of said track arm so as to incline the same and cause the tone arm and sound box to be returned to starting position whereby the playing of the record will be repeated, and an adjustable device carried by said track arm and having a portion adapted to be shifted adjacent a part of said brakes so that when the inner end of the track arm is elevated, said device will engage and shift said brake and permit the spring to throw the brake to braking position.

[Claims 5 to 20 not printed in the Gazette.]

1,275,824. ATTACHMENT FOR PRINTING-PRESSES. REED ADAMS, Lapeer, Mich. Filed Apr. 7, 1916. Serial No. 89,518. (Cl. 101—336.)



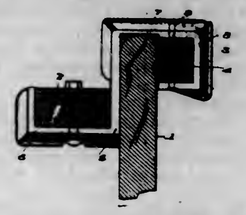
2. The combination of a printing block, a platen, the two being movable relative to each other, a shifting inking ribbon, a gripper bar frame provided with a pair of upstanding gripper bars and a frisket sheet adapted to fit over the gripper bars and engage between the ribbon and the paper to be printed upon to prevent the smudging of portions of the paper upon which no impression is to be made.

3. The combination of a printing block, a platen, a pair of upstanding spindles at the ends of the platen and the block, ribbon spools rotatably mounted on the same, a shifting ribbon winding on the spools, and means for engaging the spindles when the ribbon is shifted to hold the spools in rigid position.

[Claims 1 and 4 not printed in the Gazette.]

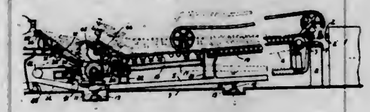
1,275,825. WAGON-SEAT CONNECTION. WATSON H. ALLEN, Marseilles, Ill., assignor of one-half to Benjamin E. Hepner, Marseilles, Ill. Filed July 26, 1916, Serial No. 111,423. Renewed Jan. 11, 1918. Serial No. 211,457. (Cl. 21—41.)

1. The combination of the side wall of a wagon body, a body constructed and arranged to rest on and at either side of said side wall and adapted at one side of the wall for connection with a seat; the said body being movable or adjustable on the said side wall in the direction of the length of the wall, a seat portion connected to the body at the side stated, and an upright cam roller mounted in the portion of the body at the opposite side of the side wall, in position for its perimeter to engage said side wall; the pivot of the said cam roller being disposed at right angles to the length of the side wall of the body; and the cam roller being therefore adapted to automatically engage and hold the body in the event of the latter tending to casually slide in the direction of the length of the side wall of the wagon body.



2. A seat connection comprising a clip adapted to straddle the side wall of a wagon body and having a U-shaped portion at the inner side of the said side wall for connection with a seat and also having a U-shaped portion at the outer side of the side wall and open toward the latter, and an upright corrugated cam roller mounted in the last-named U-shaped portion and having its perimeter opposed to the said side wall and disposed at right angles to the length thereof.

1,275,826. FOURDRINIER MACHINE. JOHN ALPINE, Stevens Point, Wis. Filed June 2, 1917. Serial No. 172,395. (Cl. 92—44.)



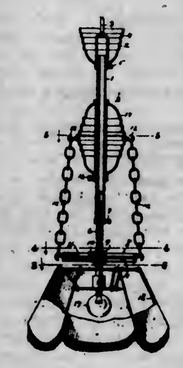
1. In a Fourdrinier machine, the combination with the wire cloth apron, and a set of rollers over which said apron travels, of a relatively fixed bed, a support pivotally connected with the bed at the receiving end of the machine, and adjustably connected with the bed at other points, whereby its rear end may be raised and lowered, a set of couch rolls carried by the rear end of said support and between which said wire cloth travels, and supporting bearings for said rollers carried by said support.

10. In a Fourdrinier machine, the combination with a bed, of a platform pivotally connected with a bed, a breast roll supported from the pivoted end of the platform, a couch roll supported from the platform distant from its pivoted end, a set of suction boxes also supported from the platform between said rolls, another suction box supported from the platform beyond the couch roll, a take off roll supported from the platform between the couch roll and said last mentioned suction box, a pulp receiving cloth arranged to travel over the breast roll, the first mentioned suction box and couch roll, and a take off carrier arranged to travel over the take off roll and the suction box with which said roll is associated, and means for raising and lowering the end of the platform distant from its pivotal connection with the bed, together with means for maintaining the tension of the take off conveyer in various positions of platform adjustment, said take off conveyer having supporting rolls in fixed relation to the bed, and the take off roll being adapted for swinging movement in correspondence with the movement of the platform.

[Claims 2 to 9, 11, and 12 not printed in the Gazette.]

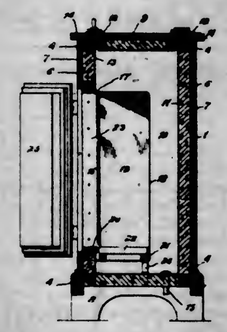
1,275,827. ADJUSTABLE ELECTROLIER. FREDERICK C. ANKELE, Philadelphia, Pa. Filed Aug. 1, 1917, Serial No. 183,949. Renewed May 28, 1918. Serial No. 237,176. (Cl. 240—68.)

2. An adjustable electrolier, comprising two telescoping tubes, a thumb screw for holding the tubes in different adjusted positions, a shell adjustably held upon one of said tubes, hooks secured to the shell, a skeleton disk having a hub portion adjustably held upon the inner of said tubes, rods radiating from said hub portion and extending through the periphery of the disk and terminating in hooks, a link chain adjustably connected to said hooks, a bulb connected to the lower end of said inner tube, and a shade about said bulb, as set forth.



[Claim 1 not printed in the Gazette.]

1,275,828. REFRIGERATOR. PHILIP H. BAKER, Cleveland, Ohio. Filed June 16, 1916. Serial No. 104,103. (Cl. 62—68.)

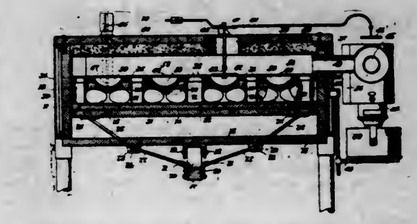


A refrigerator comprising an inclosing structure having a top opening and a side opening; closures for said openings; an interior lining of sheet metal for said structure having an opening registering with said top opening; an open sided sheet metal structure secured to said lining with its opening registering with the side opening in said casing, said sheet metal structure projecting within said lining; a metal facing secured to the top edge of said lining with its upper portion disposed under and secured by the top of the inclosing structure; and a metal lining for the side opening of said inclosing structure, projecting into said sheet metal structure; and secured by side members of said inclosing structure.

1,275,829. INCUBATOR. FRANCIS BALL, Glenside, Pa. Filed Dec. 13, 1916. Serial No. 136,764. (Cl. 119—36.)

1. In an incubator, an egg containing chamber, a tank adapted to contain a quantity of fluid capable of being heated supported in said chamber and provided on the bottom thereof with spaced conduits to act upon the eggs, a tray movably supported within the incubator, and curtains secured within the incubator at a point below the tank and at opposite sides of the conduits for providing between the conduits aisle-ways.

2. In an incubator, a tank containing a fluid capable of being heated, conduits below the tank and having openings communicating therewith, brackets on the tank one surrounding each of the conduits, depending curtains on the sides and ends of the brackets providing egg chambers, heat transmitting elements supported on the brackets and contacting with the outer surfaces of the conduits, and a removable egg receiving plate below the egg chambers.



[Claim 3 not printed in the Gazette.]

1,275,830. VACUUM-INSULATED VESSEL. WALTER G. BARKER, Meriden, Conn., assignor to Manning Bowman & Company, Meriden, Conn., a Corporation of Connecticut. Filed Nov. 13, 1917. Serial No. 201,771. (Cl. 215—118.)



3. A vacuum insulated vessel comprising a container, a vertical-walled casing therefor composed of a bottom portion, and a separately formed screw-threaded top ring secured thereto, said ring having at its upper end an internal flange and a plurality of downwardly and inwardly projecting projections engaging the outer surface of the vessel and spacing said vessel away from the vertical wall of said casing.

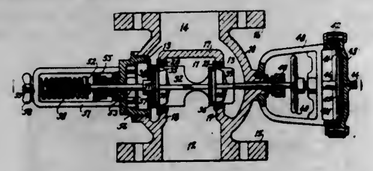
[Claims 1 and 2 not printed in the Gazette.]

1,275,831. VALVE. JOSEPH M. BARRETT, Fostoria, Ohio, assignor to The "S-C" Regulator Company, Fostoria, Ohio, a Corporation of Ohio. Filed Mar. 14, 1917. Serial No. 154,666. (Cl. 137—4.)

1. In a valve of the character described, the combination with a casing having an interior separator with a pair of partition walls having alined openings therein, a pair of rings mounted at said openings to provide valve seats, a valve body having two heads and wings connected with each of said heads, each of said heads having a grooved edge in which a ring having a conical exterior is placed, and conical filling portions between the wings of the valve body.

2. In a valve, the combination of an annular valve seat, a valve plug having an annular groove, a conical faced seating ring occupying said groove, and a conical filler on the valve plug extending from said seating ring and

slightly overhanging the portion of the seating ring of smallest outer diameter.



3. In a valve, the combination of an annular valve seat, a valve plug having an annular groove, a conical faced seating ring occupying said groove, and a conical filler on the valve plug extending from the small edge of the seating ring and having a more acute cone-angle than said seating ring.

4. The combination of a valve casing having an annular valve seat, an integral valve plug having a head overhanging the seat, wings extending through the seat, a conical filler lying between the wings and extending from the head, and an annular groove about the head adjacent to the large end of the filler, and a continuous metal seating ring of different material from the plug occupying said groove and held in place between said head and filler and having a conical exterior coacting with the valve seat.

1,275,832. ENVELOP-SEALING DEVICE. WALTER E. BARTLETT, Lowell, and JOHN H. TRAYNE, Groton, Mass. Filed Oct. 19, 1917. Serial No. 197,397. (Cl. 120—6.)

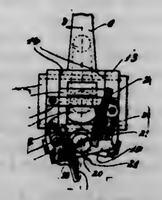


1. An envelop sealing device having, in combination, a receptacle for liquid, a perforated top for said receptacle, a pad extending across said perforated top and projecting therethrough into the interior of said receptacle, a folder blade extending upwardly along one edge of said receptacle and an envelop supporting table extending from the upper edge of said folder blade away from said pad.

5. An envelop sealing device having, in combination a receptacle for liquid, a flat horizontal moistening pad extending over the top of said receptacle and arranged to be moistened by the liquid in said receptacle, a stationary folder blade extending upwardly from the rear side of said receptacle and at an acute angle thereto and a horizontal envelop supporting table extending from the upper edge of said folder blade away from said pad.

[Claims 2 to 4 not printed in the Gazette.]

1,275,833. KNIFE-SHARPENER. HENRY BARTHOLD BÄTJER, New York, N. Y., assignor to H. Maimin Co., Inc., a Corporation of New York. Filed Apr. 11, 1917. Serial No. 161,196. (Cl. 51—7.)



1. A knife sharpener comprising a support, a frame reciprocable on the support, a second frame reciprocable on the first frame, stone supports pivotally mounted on one frame, means for rocking the stone supports on their pivots actuated by the other frame, and means for reciprocating both frames to apply the stones alternately to opposite sides of the knife for sharpening; substantially as described.

2. A sharpener comprising a fixed support, a shaft journaled in the support, cam-means on the shaft, a pair of stones, and means for supporting the stones actuated by the cam-means to apply the stones alternately to the opposite sides of the knife to sharpen the same; substantially as described.

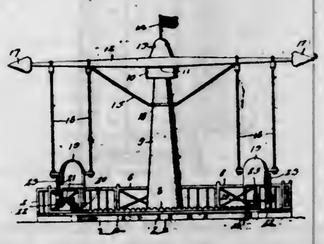
3. A sharpener comprising a support, a cam pivoted on the support, a plurality of yokes movable on the support and adapted to be actuated by the cam, a pair of stones, and a pair of stone supports therefor movably mounted on one of the yokes and operatively connected to the other yoke, whereby rotation of the cam moves the yokes to apply the stones alternately to opposite sides of the knife to be sharpened; substantially as described.

4. A sharpener comprising a support, frames on the support arranged for reciprocation in different directions, stone carriers and stones thereon adapted to be arranged on opposite sides of the knife, operative connections between the frames and the stone carriers whereby the stones are applied alternately to the opposite sides of the knife when the frames are reciprocated, and means for reciprocating the frames; substantially as described.

5. A knife sharpener comprising a support, a frame horizontally reciprocable on the support, stone carriers pivoted on the frame, stones on the carriers adapted to be arranged on opposite sides of the knife, a frame vertically reciprocable on the support operatively connected to the stone carriers, and rotary means for reciprocating the frames in timed relation to apply the stones alternately to opposite sides of the knife for sharpening; substantially as described.

[Claims 6 to 10 not printed in the Gazette.]

1,275,834. CAROUSEL. JOHN BOLYKI, Bruceville, Ind. Filed Mar. 8, 1918. Serial No. 221,209. (Cl. 46—27.)



A carousel comprising a base member, a platform fixed with relation to the base member, teeth mounted upon the platform and arranged in the form of a circle, a standard mounted upon the base member, a beam journaled upon the standard, hangers depending from the beam, a chair carried by the hangers, a crank shaft journaled upon the frame of the chair and having pedals, a gear wheel mounted upon the crank shaft and meshing with the teeth upon the platform, ratchet wheels mounted upon the crank shaft and levers having pawls mounted upon the crank shaft the pawls of the said levers adapted to engage the ratchet wheels when the levers are swung in one direction and escape the teeth of the ratchet wheels when the levers are swung in an opposite direction.

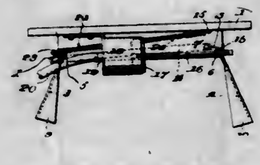
1,275,835. RULE-HOLDER. HOMER C. BOSTIAN, Lyons, N. Y. Filed Nov. 3, 1917. Serial No. 200,188. (Cl. 24—3.)

1. A rule holder comprising a plate of elastic metal bent upon itself and having at the edges of one side portion inwardly disposed teeth and an elastic band applied to the side of the said plate, and eyelets passing transversely through the plate and the band and adapted to receive the points of the teeth.



[Claims 2 and 3 not printed in the Gazette.]

1,275,836. SHUTTER FOR CAMERAS. JOSEF BRANDSTETTER, Rochester, Minn., assignor to Conley Camera Company, Rochester, Minn., a Corporation of Minnesota. Filed Nov. 20, 1917. Serial No. 202,899. (Cl. 95—58.)



1. In a mechanism of the character described, the combination with a frame having an opening therein, and a shutter normally closing said opening, of an air cylinder secured to the frame, a piston in said cylinder, a rod secured to the piston and projecting from one end of the cylinder, mechanism between said rod and said shutter, whereby when said rod is moved in one direction, the shutter will be opened, and a spring normally closing said shutter, said spring being connected to an oscillating part of the shutter and having its anchorage adjusted with respect thereto so that when the shutter is open the spring will be past the center of oscillation in one direction, and when the shutter is closed the spring will be past the center of oscillation in the other direction.

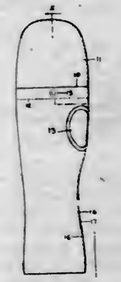
3. The combination with a lens board carrying shutter leaves and means for opening and closing the same, of pneumatic cushioning devices disconnected from but operating to prevent noise and absorb jars and vibrations incident to the operation of the leaves, and a spring connected at one end to the lens board and at the other end to an oscillating portion of the leaves, the point of securing to the lens board being so adjusted with respect to the oscillating point that the spring will go past center in opposite directions when the shutter is closed and when it is open.

5. The combination with a lens board and shutter leaves carried thereby, of pneumatic cushioning means disposed to one side of and at an angle to the lens board and disconnected from the leaves, means connecting the leaves for opposite but simultaneous movement, a crank on one leaf, and a spring connecting said crank to the lens board at a point so adjusted that the spring will move past the center of oscillation of the crank in opposite directions when the shutter is open and when it is closed.

6. In a mechanism of the character described, the combination with a frame or lens board having an opening therein, and a shutter normally closing said opening, of a pneumatic controlling device secured to the frame, means for operating said pneumatic device, a connection from said device to the shutter, pneumatic cushioning means disconnected from but operating to prevent noise and absorb jars and vibrations incident to the operation of the shutter, and mechanical operating means for the shutter so operating as to move past center in each direction when the shutter is opened and closed by the pneumatic controlling device.

[Claims 2 and 4 not printed in the Gazette.]

1,275,837. WRIST-MITT. FLORENCE BROWNING BIGGS, New York, N. Y. Filed Jan. 16, 1918. Serial No. 212,075. (Cl. 2—102.)



An article as characterized comprising a full-length back portion, an abbreviated palm portion extending to the base of the fingers of the wearer, a flap shaped in correspondence with the end of said back portion for supplementing said palm portion in covering the palm of the hand, said palm portion having a fingerless thumb opening formed therein adjacent to the end thereof and adjacent to the side seam of said article, and means for preventing ripping of the seam between said palm portion and back portion, said means embodying a plurality of bar stitches disposed in spaced relation for encompassing a section of the seam in the wristlet end of said article, said seam when opened being adapted to form a passage for the thumb when the article is worn as a wristlet.

1,275,838. HELMET-CAP. FLORENCE BROWNING BIGGS, New York, N. Y. Filed Feb. 9, 1918. Serial No. 216,301. (Cl. 2—107.)

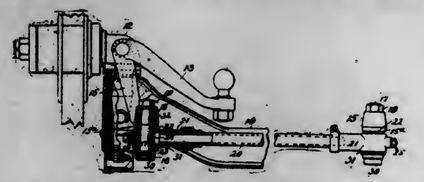


A cap as characterized comprising a tip; a side crown having an apron and throat extensions at the bottom of said apron, said side crown, apron and throat extensions being integrally formed, one of said extensions being shortened to overlie the chin of a wearer, the other extension being elongated to overlie the first-mentioned extension to hold the same in service position, and to cover the throat and back of the neck; means for securing the last-mentioned extension in position to contract the extension upon the neck of the wearer, said means embodying a loop formed at the end of said last-mentioned extension; and a fastening member disposed at the rear of said side crown.

1,275,839. AUTOMOBILE STEERING MECHANISM. ALANSON P. BRUSH, Detroit, Mich. Filed Nov. 27, 1916. Serial No. 133,543. (Cl. 21—197.)

1. In an automobile, the combination of a front axle, a steering knuckle pivoted to each end thereof on a vertical axis and provided with a steering arm, a cross tie rod for connecting said steering arms,—which cross tie rod has adjacent each end a vertical sleeve which is closed at its lower end, a bearing stud which is rigid with and projects from each steering arm downward into the bearing sleeve in the adjacent end of the cross tie rod and is rotatably mounted therein, and each stud being provided within the vertical sleeve into which it projects with an annular flange, and each sleeve being

provided with an annular shoulder which rests upon said flange.

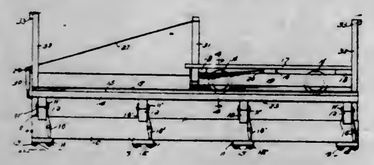


2. In an automobile, the combination of a front axle, a steering knuckle pivoted to each end thereof on a vertical axis and provided with a steering arm, a hollow cross tie rod for connecting said steering arms,—which cross tie rod has adjacent each end a vertical sleeve which is closed at its lower end and which communicates with the hollow interior of the cross tie rod, a bearing stud which is rigid with and projects from each steering arm downward into the bearing sleeve in the adjacent end of the cross tie rod and is rotatively mounted therein, and means to hold the stud in said bearing sleeves.

3. In an automobile, the combination of the two steering knuckles each having an arm, a pivot stud fixed to and projecting down from each of said arms, a tubular cross rod having vertically disposed bearing sleeves at its ends which sleeves embrace and serve as bearings for said studs, an annular flange on the lower end of each stud upon which said bearing sleeves are supported, and a cap removably fixed to each end of said cross rod closing the lower end of the associated bearing sleeve and there being an oil passage leading from the interior of each bearing sleeve to the interior of said cross rod.

4. The combination with an arm fixed to the steering knuckle of an automobile, of a stud removably fixed to said arm and extending downward therefrom and having an annular flange at its lower end, a tubular cross rod, two vertical bushings fixed in the end of said cross rod and rotatably mounted upon said stud with the lower end of the lower bushing resting upon the flange on said stud, and a cap removably fixed to the cross rod and covering and inclosing the projecting lower end of said stud, and there being an annular groove around said stud between said two bushings which is in communication with the hollow interior of the tubular cross rod.

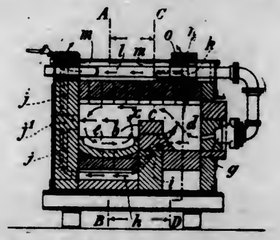
1,275,840. HAY-BED. LAWRENCE BUDDE, Chickasaw, Ohio. Filed Feb. 13, 1917. Serial No. 148,427. (Cl. 21—74.)



1. In a device of the kind set forth, an elongated bed frame, a shiftable platform mounted upon the bed frame for movement to either end thereof, the elongated bed having sockets formed at specified points from either end, a locking member carried by the shiftable platform and adapted for engagement in either of the sockets, a sheave pulley carried at one end of the elongated frame, and a cord in engagement with the locking member, trained over the pulley and carried to the shiftable platform, whereby the exertion of a pulling force upon the cord will release the latch member and move the shiftable platform toward that end of the bed frame on which the pulley is mounted.

2. In a device of the kind set forth, an elongated bed frame, a shiftable platform mounted upon the bed frame for movement to either end thereof, the elongated bed having sockets formed at specified points from either end, a bell crank lever mounted upon the shiftable platform below the bottom of the latter, a bolt having pivotal connection at one end with the bell crank lever, the other end being adapted for engagement in either of the said sockets, a pulley carried at the forward end of the elongated frame, and a cord having one end attached to the remaining end of the bell crank lever, the cord being trained over the pulley and carried back to the shiftable platform, whereby, when the shiftable platform is at the rear end of the elongated frame, a pulling force exerted on the cord will remove the bolt from the socket member and thereafter result in moving the shiftable platform to the front end of the elongated frame.

1,275,841. LIQUID-FUEL FURNACE. WILLIAM M. BURDON, Bellshill, Scotland, assignor to Burdons Limited, Bellshill, Scotland. Filed Nov. 3, 1917. Serial No. 200,027. (Cl. 158—5.)

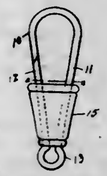


1. A liquid fuel furnace of the type referred to, made with a primary combustion chamber and a melting chamber the chambers being partially separated from one another by a cross wall having an inclined face, a chamber below the floor of the melting chamber and heated by hot gases from the primary combustion chamber, the gases passing downward through the cross wall, then through the lower chamber and thence to the outlet flue.

2. A liquid fuel furnace of the type referred to, made with a primary combustion chamber and a heating chamber the chambers being partially separated from one another by a cross wall, having a bottom heating chamber arranged below the floor of the heating chamber and heated by hot gases from the primary combustion chamber, a passage extending from the primary chamber through the cross wall to the said bottom chamber and a passage extending from thence to the outlet flue.

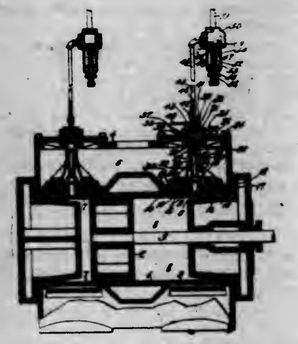
[Claims 3 and 4 not printed in the Gazette.]

1,275,842. SNAP-HOOK. CHARLES J. CALLAHAN, Attleboro, Mass., assignor to Freeman-Daughaday Co., Chartley, Mass., a Corporation of Massachusetts. Filed Feb. 1, 1918. Serial No. 214,795. (Cl. 24—240.)



A watch chain snap hook comprising an elongated hook-shaped body having a rigid back member and a spring tongue front member, said back member being provided with recesses formed therein at a point substantially opposite said tongue, a sleeve in closing a portion of said body and having inwardly extending lips engaging said recesses, the fingers engaging the inner face of said member to lock said lips in said recesses and prevent movement of said sleeve on the hook.

1,275,843. UNLOADING MECHANISM FOR COMPRESSORS. WILLIAM H. CALLAN, Franklin, Pa., assignor to Chicago Pneumatic Tool Company, Chicago, Ill., a Corporation of New Jersey. Filed Jan. 4, 1916. Serial No. 70,116. (Cl. 230—24.)



1. Unloading mechanism for compressors, comprising the combination with the valves controlling communication between the piston chamber and air inlet of the compressor, of valve lifters to actuate said valves, pistons to actuate said valve lifters, plungers contacting with said pistons, and means to actuate said plungers.

2. Unloading mechanism for compressors, comprising the combination with the valves controlling communication between the piston chamber and air inlet of the compressor, of valve lifters to actuate said valves, pistons to actuate said valve lifters, plungers contacting with said pistons, and manually controlled cams to actuate said plungers.

4. Unloading mechanism for compressors, comprising in combination with the receiver and valve mechanism controlling communication between the piston chamber and air inlet of the compressor, of a cylinder for securing said valve mechanism in position, a piston in said cylinder, said cylinder and piston having means common to them to prevent rotation of the piston, a valve lifter actuated by said piston, means controlled by the receiver pressure to actuate said piston, and manually actuated means to move said piston to actuate the valve lifter.

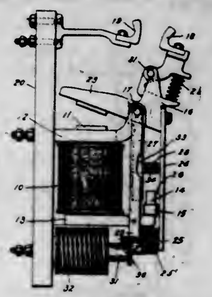
5. Unloading mechanism for compressors, comprising in combination with valve mechanism controlling communication between the compression chamber and air inlet of the compressor, of a cylinder having an extension contacting with said valve mechanism to fix it in position, a valve lifter to actuate the valve of the valve mechanism, a piston within said cylinder and guided by said extension, resilient means to retain the valve lifter in operative engagement with said piston, and means to effect the movement of said piston.

[Claims 3 and 6 not printed in the Gazette.]

1,275,844. ELECTROMAGNETIC SWITCH. EUGENE R. CARICHOFF, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Sept. 25, 1916. Serial No. 121,967. (Cl. 175—281.)

1. An electromagnetic switch comprising an energizing winding and a magnetic structure therefor, a switch arm normally in open position and held in said position by magnetism set up by said winding, a member moved upon the energization of said winding to set up a force tending to release the switch arm and move it in a closing direction, a holding out winding and means for restraining the said releasing force until the current in the holding out winding drops to a predetermined value.

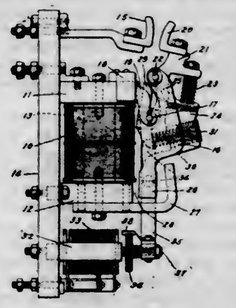
3. An electromagnetic switch comprising a switch arm, an energizing winding and a magnetic structure therefor which holds it in open position and moves it to closed position, a member moved by the magnetic force set up by said winding to store energy for releasing the switch arm from the open position in which it is held by the winding, a holding out winding and means whereby the stored energy causes a hammer blow to be



delivered to the switch arm to permit the latter to be closed by the operating winding when the current in the holding out winding drops to a predetermined value.

[Claims 2, 4, 5, and 6 not printed in the Gazette.]

1,275,845. ELECTROMAGNETIC SWITCH. EUGENE R. CARICHOFF, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Sept. 25, 1916. Serial No. 121,966. (Cl. 175—281.)



1. An electromagnetic switch comprising an energizing winding and a magnetic structure therefor, a switch arm normally in open position and held in closed position by a direct magnetic pull thereon set up by said winding, a member moved by the said winding to set up a force in a direction to move the switch arm to closed position, and a holding-out winding for preventing the force from becoming effective to move the switch arm in a closing direction until the current in said holding-out winding drops to a predetermined value.

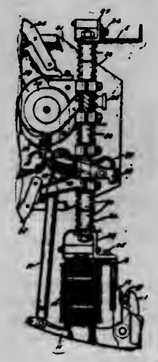
8. An electromagnetic switch comprising an energizing winding and a magnetic structure therefor, a switch arm normally in open position and held in closed position by a direct magnetic pull thereon set up by said winding, a spring, a member moved by said winding to place said spring under strain and set up a force in a direction to move the switch arm to closed position and a holding-out winding for preventing the force from becoming effective to move the switch arm in a closing direction until the current in said holding-out winding drops to a predetermined value.

[Claims 2 to 7 and 9 not printed in the Gazette.]

1,275,846. SWITCH STRUCTURE. FRANK E. CASE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Dec. 14, 1917. Serial No. 207,022. (Cl. 175—281.)

1. In a circuit controlling mechanism, in combination a supporting upright frame including parallel longitudi-

nal members, a plurality of electromagnets arranged along one of said members, contact mechanisms for said electromagnets arranged along a parallel member, and an operating mechanism connecting each magnet with its contact mechanism.

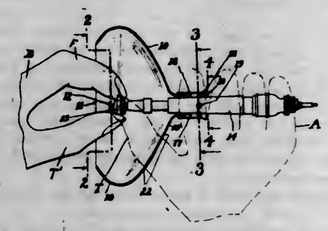


3. In a circuit controlling mechanism, in combination a supporting upright frame including parallel longitudinal members, a plurality of electromagnets arranged along one of said members in such wise that said member forms a part of the magnetic circuit for each electromagnet, a plurality of transverse supports secured along a parallel member, a plurality of contact mechanism secured to said transverse supports, and an operating connection between each electromagnet and a corresponding contact mechanism.

12. In switch construction, the combination with a frame having supporting rails, of an electromagnetic winding and an armature therefor secured to one of said rails so that said rail forms a part of the magnetic circuit for said winding, a pair of uprights having supports secured to two of said rails, terminals clamped to said uprights but insulated therefrom, a stationary contact member supported from one of said terminals, a movable contact member pivotally supported by another of said terminals, a magnetic blow-out including an arc chute supported from said terminals in operative relation to said contact members, spacing members slipped over the intervening portions of said uprights, and an operating rod connecting said armature to said movable contact member.

[Claims 2, 4 to 11, and 13 to 16 not printed in the Gazette.]

1,275,847. RECEIVING-HOPPER FOR METAL SCRAPS AND FILINGS. MOSES A. CHERTOK, Roxbury, Mass. Filed Dec. 8, 1916. Serial No. 135,805. (Cl. 32—5.)

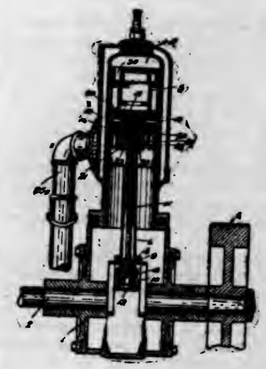


1. In a receiving hopper of the character described, a transparent hood-member surrounding the working tool on all sides provided with a retaining trough; and means for engaging the same with the working element associated therewith.

2. In a receiving hopper of the character described, an annular transparent hopper member forming a troughlike compartment therein, provided with an opening for the insertion of the work within the hopper; and an auxiliary opening for the insertion of the operator's finger in the hopper; and means for engaging said hopper member with the instrument or apparatus with which the same is to be associated.

3. In a receiving hopper of the character described, an annular transparent hopper member forming a troughlike compartment therein, provided with a main opening for the insertion of the work within the hopper and an auxiliary opening for the insertion of the operator's finger therein; a yielding washer member adapted to be secured about said auxiliary opening; and means for engaging said hopper member with the instrument or apparatus with which the same is to be associated.

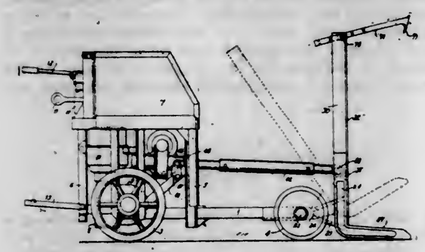
1,275,848. INTERNAL-COMBUSTION ENGINE. LOUIS FRANCIS CLARK, Wilmington, Del., assignor of one-half to Irving A. Anderson, Grand Rapids, Mich. Filed Aug. 2, 1916. Serial No. 112,874. (Cl. 123—47.)



1. In combination, a piston, a universal joint construction carried by the piston including one member pivotally connected to the piston and a second member pivotally connected to the first member to turn about an axis at right angles to the axis of pivotal connection of the first member to the piston, a shaft connected to and depending from said second member, a sleeve open at its lower end depending from the second member, a crank shaft, a connecting rod connected to the crank shaft and loosely entering into the lower end of the sleeve, the upper end of the connecting rod and the lower side of the second member being formed with conical bearing surfaces, tapered rollers interposed between the upper end of the connecting rod and lower side of the second member, and means to turn the shaft about its axis on rotation of the crank shaft, substantially as described.

2. In combination, a piston, two members pivotally connected together, a pivotal connection between one member and the piston, the axis of which lies at right angles to the axis of the pivotal connection between the two members, a sleeve open at its lower end and depending from the other member, a crank shaft, a connecting rod attached at its lower end to the crank shaft and extending at its upper end into the sleeve, antifriction bearings between the upper end of the connecting rod and the lower side of said second member, a shaft lying alongside the connecting rod, passing loosely through the same at its upper end and connecting to said second member, and means operatively connecting the lower end of the shaft to the crank shaft whereby said shaft is rotated with the rotation of the crank shaft.

1,275,849. INDUSTRIAL TRUCK. CLYDE E. COCHRAN, Cleveland, Ohio, assignor to The Elwell-Parker Electric Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 8, 1917. Serial No. 153,374. (Cl. 254—3.)



1. The combination with a wheeled truck, of a load support having an extension adapted to be thrust beneath the load and having an upright portion for positioning the load, means pivotally attaching the support to the truck frame adjacent to the angle of the two portions of the support, a motor oscillatingly supported, a pull rod pivoted to said support, means rigidly carried by the motor casing for guiding the pull rod, and gearing between the armature and pull rod adapted to move the latter axially.

2. In a truck, the combination of a frame, a tilting support pivotally secured thereto, a screw connected with the support a nut for the screw, a motor geared with the nut, and an oscillating frame on which the nut and motor are mounted, said oscillating frame being carried by the truck frame.

5. In a truck, the combination of a frame, an axle housing having laterally extending ears, a pivot pin extending through said ears, L-shaped support members having extensions pivoted to said ears, the lower arms of said L-shaped support being adapted to stand adjacent to the ground and to be projected under a load, the upper arms being adapted to position the load when picked up by the support, and transversely extending members connecting the L-shaped members, and mechanism for tilting the support members.

6. The combination of a wheeled truck, an L-shaped load support pivoted adjacent to its angle substantially at one end of the truck, a rod adapted to be pulled to tilt said support, and a nut and screw for operating said rod.

[Claims 3, 4, and 7 not printed in the Gazette.]

1,275,850. CREEL. HOWARD D. COLMAN, Rockford, Ill., assignor to Howard D. Colman, Luther L. Miller, and Harry A. Severson, Copartners doing business as Barber-Colman Company, Rockford, Ill. Filed July 30, 1913. Serial No. 781,919. (Cl. 242—131.)

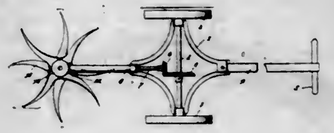


6. A creel having, in combination, a creel section consisting of an elongated base and a plurality of spindles, a horizontal support having a socket to receive one longitudinal edge of said base, and means to support the tips of the spindles.

8. A creel having, in combination, a frame comprising a plurality of horizontal superposed shelf-like structures, a series of creel sections removably supported upon each shelf-like structure, said series extending longitudinally of the shelf-like structures, each creel section comprising a base and a plurality of horizontal spindles, said spindles extending transversely of the series of creel sections, and each spindle being of sufficient length to support a plurality of yarn carriers, the running threads of the yarn carriers extending longitudinally of and between the shelf-like structures.

[Claims 1 to 5 and 7 not printed in the Gazette.]

1,278,851. LAWN-MOWER. MICHAEL COMFORT, Southington, Conn. Filed Oct. 29, 1917. Serial No. 198,985. (Cl. 56—19.)



A lawn mower comprising a frame, an axle journaled on the frame, wheels supporting the axle, a tube attached to the frame and extending forwardly therefrom, a head fixed to the tube, a shaft journaled in the tube, means for rotating the shaft from the axle, a second tube supported by and journaled in the head and disposed at an angle to the first mentioned tube, a shaft journaled in the second mentioned tube, means for transmitting rotary movement from the first mentioned shaft to the last shaft and for transmitting opposite rotational movement to the tube, and blades carried by the last mentioned shaft and by the tube located below the frame and head and in advance of the wheels.

1,275,852. HEATING SYSTEM. JESSE C. COOGAN, Milwaukee, Wis. Filed Jan. 8, 1912. Serial No. 669,979. (Cl. 137—75.)



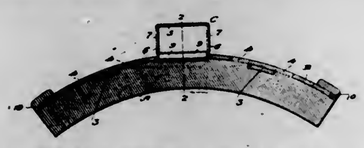
1. A fitting for a radiator inlet pipe of a circulatory heating system, comprising a casing positioned at a point inaccessible to the user provided with an inlet and an outlet and having an intermediate chamber provided with a removable plate partition having a port of nonvariable predetermined capacity therethrough adapted for fluid delivery from the inlet to the outlet, said casing having an opening through which the partition may be inserted into said chamber, and a plug normally closing said casing opening and the passage around said partition.

2. A fitting for circulatory heating systems comprising the combination with a casing provided with a fluid passage therethrough having a central transversely extending tapered cavity, the walls of said cavity being provided with a channeled receiving seat, a set of nonadjustable regulating members adapted to be interchangeably applied to said seat, each of said regulating members being provided with an opening of different capacity from the openings in the other members, whereby the fitting may be adapted to suit the requirements of any given installation and a removable closure plug for said cavity seated upon the enlarged end of one of said regulating members when the device is in its closed assembled arrangement.

1,275,853. BRAKE-SHOE. JUDSON COOK, Albany, N. Y. Filed Oct. 25, 1917. Serial No. 198,530. (Cl. 188—82.)

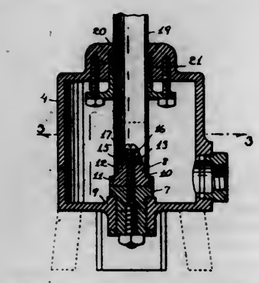
1. A brake-shoe comprising a cast metal body or tread, a reinforcing back provided with slots centrally and longitudinally thereof, a key-lug being substantially box-

shaped in form consisting of a back, side members projecting therefrom, and provided with registering openings therein, the extreme ends of said side members bent inwardly toward each other forming substantially a rectangular frame at opposite ends of the back, and locking-wings extending laterally from the extreme ends of the side members and inwardly toward each other and adapted to be received in the slots in the reinforcing members, and having their ends bent and rigidly held by the metal of the body or tread portion.



2. A brake-shoe comprising a cast-metal body or tread, and reinforcing back provided with anchoring lugs seated in the cast metal and having slots, a key-lug being substantially box-shaped in form consisting of a back, side-members projecting therefrom and provided with registering openings therein, the extreme ends of said side members bent inwardly toward each other, forming substantially a rectangular frame at opposite ends of the back, and locking-wings extending laterally from the extreme ends of the side members and inwardly toward each other and adapted to be received in the slots in the reinforcing members, and having their ends bent and rigidly held by the metal of the body or tread portion.

1,275,854. HOLLOW-PISTON WATER-VALVE. WILLIAM I. COOLEY, Saltville, Va., assignor to William R. Dawson, Roanoke, Va. Filed Mar. 1, 1917. Serial No. 151,841. (Cl. 137—4.)



In a valve, a stationary base, a perforated frusto-conical resilient member resting upon said base, a perforated frusto-conical washer, a bolt extending through the perforations of said resilient member and said washer and securing the same to said base, said bolt having an upper tapered head, and a hollow reciprocatory cylindrical member of rigid material having an internal diameter less than the diameter of the lower end portion of said resilient member and greater than that of the upper portion thereof, the resilient member adapted to assume cylindrical form under engagement with the reciprocatory member to plug the end of the latter over an extended area of surface, the side walls of said washer merging into the side walls of the resilient member and the side walls of said head merging into those of said washer to facilitate the passage of fluid into the reciprocatory member when the valve is open.

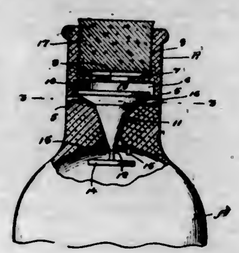
1,275,855. MONKEY-WRENCH. JOHN L. COPPING, New Orleans, La. Filed Mar. 29, 1918. Serial No. 225,541. (Cl. 81—167.)

In a wrench, the combination with a stationary jaw having a shank provided with a handle extension, said shank having a substantially rectangular passage communicating with the head thereof, said handle having a reduced and round bore communicating with the passage, said shank, at the juncture of the passage with the bore having a transverse opening, longitudinal walls provided thereby, adjacent the end walls thereof having parallel lugs directed into the opening, a movable jaw having a rectangular shank received in the passage and having a round threaded extension on said shank designed to be received in the bore of the stationary member of the wrench, a nut for engaging the threaded extension and



the shank of the stationary jaw, said nut comprising a cross sectionally round member including a central portion having its periphery milled and annular flanges spaced outward from the ends of the said milled portion, and the space between the milled portion and the flanges adapted to receive the referred to lugs, and the said transverse opening in the shank of the stationary jaw being deepest between the inner sides of the lugs, whereby the milled portion of the nut will be retained out of contact with the longitudinal walls provided by the opening in the said shank of the stationary jaw.

1,275,856. NON-REFILLABLE BOTTLE. JOSEPH J. CORY, Rochester, N. Y. Filed Feb. 2, 1918. Serial No. 215,104. (Cl. 215—69.)



1. A bottle having a valve in its neck adapted to control the passage of fluid therethrough and means comprising a part of the bottle neck adapted to be engaged with said valve at the time the bottle was filled to support the valve in position in the bottle neck to allow liquid to pass through the neck into the bottle.

[Claims 2 to 4 not printed in the Gazette.]

1,275,857. MACHINE-DRILL. CHARLES EUGENE COX, San Pedro, Cal. Filed Apr. 2, 1918. Serial No. 226,210. (Cl. 77—25.)

1. In a machine drill, a chuck carrier, a chuck vertically movable in said carrier, a drill spindle adapted for vertical movement to engage or disengage the chuck, a latch pivoted on the chuck and swingable from an inner position to an outer position into engagement with the carrier when said chuck is in the raised position and supported on the carrier and disengaged from the spindle, a transverse spring-pressed pin on the chuck, said pin normally tending to throw the latch to said outer position, and being movable laterally inward in the chuck with an inward movement of the latch, and a member on the lower end of the spindle adapted to be locked by said pin in the inner position of the latter.

4. The combination with a chuck carrier, a chuck vertically movable in the carrier, a latch pivoted on the chuck to swing outward and engage the carrier and thereby support the chuck, a drill spindle above the chuck and movable axially to engage or disengage the chuck,

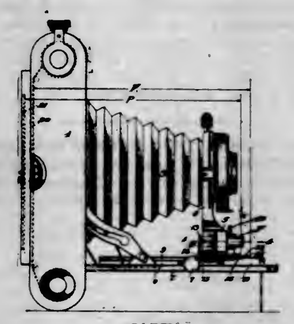
and a spring-pressed pin normally tending to swing the latch to the outer position and movable into engagement



with said spindle by an inward swinging of the latch upon a downward movement of the chuck in the carrier.

[Claims 2 and 3 not printed in the Gazette.]

1,275,858. FOCUSING MECHANISM FOR CAMERAS. FRANCIS JAMES CROSS, Charlton, England, assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Apr. 19, 1918. Serial No. 229,478. (Cl. 95—44.)



1. In the focusing mechanism of a camera, the combination with means for supporting plates and films in different focal planes in the camera, a bed, a lens carriage movable thereon and a stop on the bed for limiting outward movement of the carrige when the lens is focused on one of said planes, of a detachable advance stop adapted to be interposed between the abutting faces of the first mentioned stop and the carriage to halt the lens in focus on the other plane.

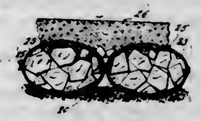
3. In the focusing mechanism of a camera, the combination with means for supporting plates and films in different focal planes in the camera, a bed having tracks thereon, a lens carriage movable on the tracks, and a stop on the bed between the tracks for limiting outward movement of the carriage when the lens is focused on one of said planes, of an advance stop embodying a bar having notched ends adapted to be applied to the tracks between the first mentioned stop and the carriage to halt the lens in focus on the other plane, and a spring finger for holding the bar in position.

6. In the focusing mechanism of a camera, the combination with means for supporting plates and films in different focal planes in the camera, a main bed, an extension bed and a lens carriage movable on the latter, of optical elements on the carriage one of which is movable relatively to the other and to the carriage to determine the distance of an object to be photographed, a stop on the extension bed for limiting outward movement of the carriage when the lens is focused on one of said planes, a stop on the main bed adapted to detain the movable optical element as the carriage is moved relatively to the main bed, and advance stops slidably mounted upon each other and adapted to be interposed, respectively, between the first mentioned stops and their engaging elements when the lens is focused on the other focal plane, said stops comprising, respectively, a transverse bar carried by the extension bed and having an arm extending longitudinally of the latter, and a slide mounted on the arm.

7. A stop attachment for cameras comprising a bar having down-turned flanges notched at each end to engage the tracks of a camera bed.

[Claims 2, 4, 5, and 8 not printed in the Gazette.]

1,275,859. PROTECTING SHORES. ANDREW O. CUNNINGHAM, St. Louis county, Mo. Filed Jan. 17, 1916. Serial No. 72,415. (Cl. 61—30.)



1. A sectional mattress for shore protection comprising a flexible portion below water and a rigid portion extending above water, each section of said flexible portion consisting of loose material inclosed in a strip of webbing with its edges secured together, and said rigid portion consisting of webbing connected to the webbing in the flexible portion and covered with concrete.

3. A sectional mattress for shore protection comprising strips of webbing extending crosswise of the stream down the bank into the water, brush and stones inclosed in said strips of webbing below low water, and stones inclosed in said strips of webbing above low water, adjacent strips of webbing being loosely tied together at intervals below low water.

5. A mattress for shore protection comprising sections extending transversely of the bank, each of said sections comprising a stuffing of loose materials inclosed in a strip of webbing with its edges secured together, said sections being connected by strands woven alternately over and under them crosswise of their length, the portions of said sections above low water being covered with concrete placed over and between the inclosed materials, and said sections being anchored to the bank at their shore ends.

6. The process of protecting the bank and bed of a stream which comprises placing strips of webbing along the bank, transversely thereto, extending down the bank and onto a barge, wrapping said strips of webbing around brush and stones, securing the edges of each strip together to form a pillow, loosely securing the pillows as formed together at intervals, lowering said pillows from the barge onto the bed and covering the portions of the pillows above the low water line with concrete.

7. The process of protecting the bank and bed of a stream which comprises placing strips of webbing along the bank, transversely thereto, extending down the bank and onto a barge, wrapping said strips of webbing around brush and stones, securing the edges of each strip together to form a pillow, loosely securing the pillows as formed together by weaving strands alternately over and under them, lowering said pillows from the barge into water, guiding them into position on the bottom by means of the free ends of said strands and covering the portions of the pillows above the low water line with concrete.

[Claims 2 and 4 not printed in the Gazette.]

1,275,860. MATTRESS FOR SHORE PROTECTION. ANDREW O. CUNNINGHAM, St. Louis county, Mo. Filed Jan. 17, 1916. Serial No. 72,416. (Cl. 61—30.)

1. A mattress for shore protection consisting of a flexible stream portion composed of a lower and an up-

per web of open-work and a filling comprising brush between said webs, said webs being held together at intervals by ties, the shore edges of said webs extending above the low water line and being secured to the bank, and a filling of stones between said webs above the low water line, said webs and filling being embedded in concrete to form a rigid bank portion of said mattress.



3. A mattress for shore protection consisting of a lower and an upper web of open-work and a filling comprising brush between said webs, said webs being held together at intervals by ties, the shore edges of said webs extending above the low water line and being secured to the bank, the web above the low water line being covered over with concrete to protect it from rust and the part below water being flexible whereby the mattress can accommodate itself to changes in the bed.

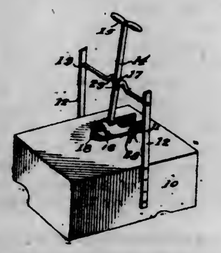
5. A mattress for shore protection comprising strips of webbing of metal extending from the upper edge to the lower edge of the mattress and secured to the bank along their upper ends and a filling between said webs comprising brush and stones below low water, and stones above low water, said strips of webbing being embedded in concrete above the low water line to form a rigid slab pavement, and loosely connected below the low water line to form a flexible mattress.

7. A mattress for shore protection consisting of a lower and an upper web of metal open-work, and a filling comprising stones and brush between said webs, said webs being held together at intervals by ties, one of said webs extending above the low water line and being embedded in concrete to form a shore pavement, the upper edge of said web being turned down into a trench and embedded in concrete to form an anchor.

9. The method of protecting banks and shores which comprises placing sheets of webbing along the bank, extending down the bank and onto a barge, placing stones on said webbing from the shore edge thereof to the edge of the stream, placing stones and brush on the remaining portion of said webbing, covering the whole with a top layer of metal webbing, tying said webbing and top layer together to form a strong flexible mattress, covering the portion of the mattress above the low water line with concrete, anchoring the shore edge of said mattress to the bank, and dropping the barge downstream, thereby allowing said mattress to drop from the barge into position to protect the bank and bed from scour.

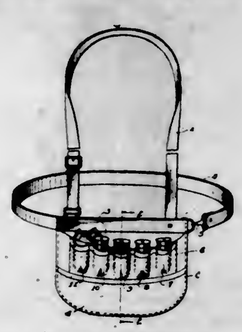
[Claims 2, 4, 6, and 8 not printed in the Gazette.]

1,275,861. SHOE-POLISHING DEVICE. JOHN DANIELSON, Port Huron, Mich. Filed May 26, 1917. Serial No. 171,123. (Cl. 15—2.)



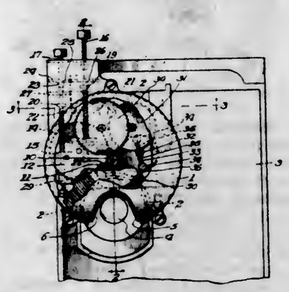
A device of the character described comprising a support including a foot rest, a lever pivotally mounted upon the support above the foot rest and provided with means for vertical adjustment relatively to the pivot, and for oscillation longitudinally and laterally with respect to said foot rest, and a polisher element carried at the lower end of the lever conforming to the shape of the forward part and sides of a shoe, for the purposes described.

1,275,862. SHELL-BAG. JACOB DANZ, 2d, Los Angeles, Cal. Filed Apr. 2, 1917. Serial No. 159,312. (Cl. 224—26.)



An ammunition bag, comprising a container for ammunition formed of canvas, open at its upper end for the reception of ammunition and having a plurality of separate shell compartments disposed along its upper front edge, a wire distender secured to the upper front edge of said shell compartments adapted to maintain the mouths of said compartments in a distended condition, a body securing belt attached to said container, and a suspension means detachably secured to said container adapted to relieve the weight on the body securing belt when said container is filled with ammunition.

1,275,863. DISSOLVING APPARATUS. ERNEST W. DAVIS, Chicago, Ill., assignor to Universal Camera Company, Chicago, Ill., a Corporation of Illinois. Filed June 14, 1917. Serial No. 174,692. (Cl. 88—16.)



1. A dissolving apparatus comprising a screen of increasing transparency from one end to the other, means for supporting said screen to control the aperture of a camera, means for moving said screen transversely relative to said aperture and means for arresting the movement of said screen at either limit of its movement.

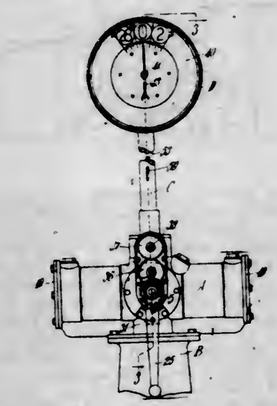
2. A dissolving apparatus comprising a circular member having a screen at its periphery of increasing transparency from one end to the other, means for supporting said screen to control the aperture of a camera, means for moving said screen transversely relative to said aperture and means for arresting the movement of said screen at either limit of its movement.

6. A dissolving apparatus comprising a screen of increasing transparency from one end to the other, means for supporting said screen to control the aperture of a camera, a rotatable member and a pair of opposed springs

coöperating with said member adapted to rotate said member in opposite directions and manually operable means for compressing either of said springs and releasing the other for moving said screen transversely relative to said aperture and means for arresting the movement of said screen at either limit of its movement.

[Claims 3 to 5 and 7 to 11 not printed in the Gazette.]

1,275,864. DISPENSING AND MEASURING PUMP. JOHN B. DAVIS, Springfield, Mass., assigner to Gilbert & Barker Manufacturing Company, West Springfield, Mass., a Corporation of Massachusetts. Filed Nov. 13, 1915. Serial No. 61,397. (Cl. 221—103.)



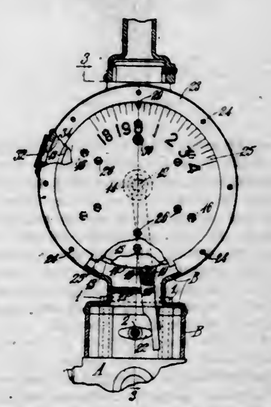
7. A dispensing and measuring pump, comprising, in combination, a casing formed with opposed cylinders and a common outlet chamber, pistons in said cylinders, a rod connecting said cylinders, a shaft mounted transversely in said casing, an actuating device on the shaft outside the casing, a crank on the shaft within the chamber, a worm wheel rotable in the crank having a pin eccentrically mounted thereon, a link connecting the pin and said rod and means to turn said worm wheel, whereby the throw of the crank may be varied to change the stroke of the pistons, said means comprising a worm rotatably mounted in the crank and in mesh with the worm, all constructed and arranged for adjustment of the pistons to deliver a definite accurately measured unit quantity for each revolution of said shaft, said means and associated mechanism arranged entirely within said chamber in a position not readily accessible from without the casing.

8. The combination, in a double acting dispensing and measuring piston pump with the frame and pistons thereof, of a crank shaft operatively connected with the pistons to reciprocate the latter on rotation of said shaft, a crank handle to return the latter and means whereby the resistance to turning of the shaft is made substantially uniform throughout the cycle of operation of said pistons, said means comprising coöperating members one on said frame and one on said shaft arranged to periodically engage as the pistons approach the ends of their strokes, one of said members being yieldable and arranged to exert a gradually increasing and then a gradually decreasing frictional resistance on the other member, whereby said crank handle may turn smoothly under a constant effort throughout the cycle of operation of the pistons.

9. The combination in a double acting dispensing and measuring piston pump with the pistons thereof, of means operable by continuous rotation in one direction to reciprocate the pistons, an adjustable device associated with said means to vary the stroke of said pistons to effect the delivery of an accurately measured unit quantity for each cycle of operation of the pump, a registering device geared up to said means to turn in unison therewith, said registering device arranged to indicate the quantities dispensed from the pump, a device to interrupt the driving connections between said means and registering device, and automatic means associated with the latter to reset the register to zero, all constructed and arranged so that measurement is commenced immediately on movement of the pistons irrespective of the position thereof in the cycle of operation.

[Claims 1 to 6 not printed in the Gazette.]

1,275,865. REGISTERING APPARATUS. JOHN B. DAVIS, Springfield, Mass., assignor to Gilbert & Barker Manufacturing Company, West Springfield, Mass., a Corporation of Massachusetts. Filed Mar. 6, 1916. Serial No. 82,458. (Cl. 235—91.)



1. In a counting apparatus, a substantially cylindrical casing having an open face and provided with spaced annular rims adjacent said face, a dial rotatably mounted within the casing to move between said rims and close said face, mechanism entirely within the casing and rendered inaccessible by said dial to move the latter, an indicator on the casing adjacent the dial, and means on the dial accessible from without the casing to reset said dial to zero position with relation to the pointer.

2. In a counting apparatus, a substantially circular casing having an open face, spaced annular rims projecting from the interior of said casing and disposed adjacent said open face, a dial rotatably mounted in the casing and movable between said spaced rims in overlapping relation thereto, whereby an annular pocket is formed to prevent the entrance of water into the casing, and an opening formed in the latter at the base of said pocket, whereby water entering therein may drain from the casing.

3. In a counting apparatus, a substantially cylindrical casing having an open end face and an opening formed in its periphery, a dial rotatably supported within the casing and arranged to close said face, graduations provided on the outer face and the periphery of said dial, indicators on the casing adjacent the face and periphery of the dial, whereby the indications of the latter may be observed, transparent means to entirely close said opening, a cumulative register housed within the casing, an opening in the latter to permit observation of the register, a cover to close said opening and prevent observation of the register except by authorized persons, means to lock the cover to the casing, and means entirely concealed within the casing and completely inaccessible from without the casing to operate said dial and register.

1,275,866. MEASURING-PUMP FOR OIL AND THE LIKE. JOHN B. DAVIS, Springfield, Mass., assignor to Gilbert & Barker Manufacturing Company, West Springfield, Mass., a Corporation of Massachusetts. Filed July 17, 1916. Serial No. 109,834. (Cl. 221—103.)



2. The combination with a main piston pump operable to deliver liquid from a supply tank, of a secondary cylinder communicating at one end with the pump cylinder and arranged to receive part of the lifted charge for delivery on the return stroke of the pump, a secondary piston slidable in the secondary cylinder and movable with the pump piston, the secondary cylinder having its other end entirely closed to the atmosphere, and means adapted to connect the upper portion of the secondary cylinder to the air space of the supply tank, all constructed and arranged so that air may surge back and forth from the upper portion of the secondary cylinder through said connecting means.

3. The combination in a measuring pump with a piston rod thereof, spaced supports between which said rod is arranged to travel, a crank-shaft rotatable in one of said supports, a link connecting the crank-shaft and rod to reciprocate the latter on rotation of the crank-shaft, a counting apparatus mounted on the other support, and an actuating member for the apparatus, said member connected to said link and bent in U-form to clear said rod.

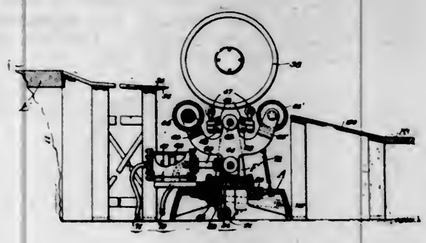
4. The combination in a measuring pump with the piston rod thereof, spaced supports between which said rod is arranged to travel, a pump-actuating shaft rotatable in one of the supports, a register-operating shaft alined with the actuating shaft and rotatable in the other support, cranks on each shaft, means to connect said cranks one to the other and to said rod so that a rotation of one will reciprocate said rod and will rotate the other shaft without interfering with the reciprocatory movement of said rod.

[Claims 1 and 5 to 7 not printed in the Gazette.]

1,275,867. METAL-WORKING APPARATUS. HENDERSON G. DAVIS, Springfield, Mass., assignor to Gilbert & Barker Manufacturing Company, West Springfield, Mass., a Corporation of Massachusetts. Filed Apr. 30, 1917. Serial No. 165,399. (Cl. 113—23.)

1. In a metal working apparatus, a frame, a rotatable chuck, die members to successively work the metal held by said chuck, a pivoted frame in which said dies are mounted, one on each side of the pivot, means actuated by fluid pressure to swing said frame on its pivot, and a device to control the last-named means so that first one and then the other die may be forced against the work and so that both dies may be held away from the work when desired.

2. A barrel machine, comprising in combination, a frame, a reciprocable horizontally arranged bearing shaft, an alined rotatable shaft, a chuck rotatably mounted on the bearing shaft, and a like chuck fixed on the rotatable shaft, power means to reciprocate the first-mentioned shaft and power means to rotate the second mentioned shaft, means to strip the barrel from each of said chucks, movable into and out of barrel stripping position by said shaft, and means to automatically connect and disconnect said shaft and stripping means so that the stroke of the latter is less than that of said shaft.



6. A barrel machine, comprising, a frame, rotatable chucks therein having their axes arranged in a common horizontal line, supporting rolls adapted to hold a barrel body and assembled heads in line to be gripped by said chucks, means to move one chuck toward and away from the other, means to rotate the chucks, crimping rolls, means to force the latter against the work to join the heads and barrel body, means to strip the work from the chucks, means to feed the assembled work to the supporting rolls, and means to lift the finished barrel from the latter and eject it from said machine.

8. A barrel machine, comprising in combination, a frame, a reciprocable horizontally-arranged bearing shaft, an alined rotatable shaft, a chuck rotatably mounted on the bearing shaft, and a like chuck fixed on the rotatable shaft, power means to reciprocate the first-mentioned shaft and power means to rotate the second-mentioned shaft, means to strip the barrel from each of said chucks, operatively connected to said reciprocable shaft to act in timed relation to the movement of the latter, and operable devices between said reciprocable shaft and stripping means to cause the latter to strip the barrel first from the chuck on the rotatable shaft.

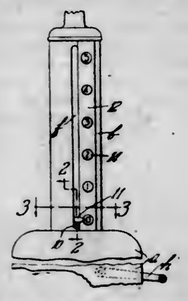
12. A barrel machine, comprising, a frame, axially alined chucks therein, one of which is axially movable and the other held from axial movement, an axially shiftable series of supporting rolls adapted to hold a barrel body and assembled heads in line to be gripped by said chucks, means to move one of the latter toward and away from the other to grip and release the barrel, said rolls being axially movable with the barrel during the gripping operation, means to strip the barrel from the chuck, and means to axially move the rolls in an opposite direction after the barrel has been stripped from said chucks.

[Claims 3, 4, 5, 7, 9, 10 and 11 not printed in the Gazette.]

1,275,868. SCALE-INDICATOR FOR DISPENSING-PUMPS. JOHN B. DAVIS, Springfield, Mass., assignor to Gilbert & Barker Manufacturing Company, West Springfield, Mass., a Corporation of Massachusetts. Filed Sept. 26, 1917. Serial No. 193,269. (Cl. 116—50.)

1. An indicating scale, comprising, a suitable supporting member, a plurality of disks each provided with means to indicate a scale graduation, means to independently clamp the disks to said member in various positions of adjustment, and a sealable device to hold said several means to said member.

2. An indicating scale, comprising, a scale plate having a plurality of spaced holes therethrough located substantially at the points where graduations are required, a plurality of pairs of disks, at least one disk of each pair provided with means to indicate a scale graduation, each pair arranged to be applied to opposite faces of said plate to cover a hole, an interiorly-threaded member on one disk of each pair, and a screw passing through the other disk of each pair into said threaded member, whereby each pair of disks may be clamped to the scale plate, said members being smaller than the holes, whereby the disks may be moved relatively to the scale plate.



3. An indicating scale, comprising, a scale plate having a plurality of spaced holes therethrough located substantially at the points where graduations are required, a plurality of pairs of dish-shaped disks of spring material, at least one disk of each pair provided with means to indicate a scale graduation, each pair arranged to be applied to opposite faces of said plate to cover a hole, an interiorly-threaded member on one disk of each pair, and a screw passing through the other disk of each pair into said threaded member, whereby each pair of disks may be clamped to the scale plate, said members being smaller than the holes, whereby the disks may be moved relatively to the scale plate, a transverse hole provided in each screw, and a wire extending through all the last-named holes and adapted to be sealed to the scale plate.

4. An indicating scale, comprising, a suitable scale plate, a plurality of devices each provided with means to indicate a scale graduation for said plate, rotatable means to independently clamp each device to said plate in various positions of adjustment, an aperture in each clamping means arranged substantially parallel to said plate, said devices being constructed and arranged to permit said means to be turned with limits after the devices have been clamped to the plate to permit all the apertures to be brought into alinement, and a member extending through all said alined apertures to hold each clamping means against movement, said member being arranged to be sealed to said plate.

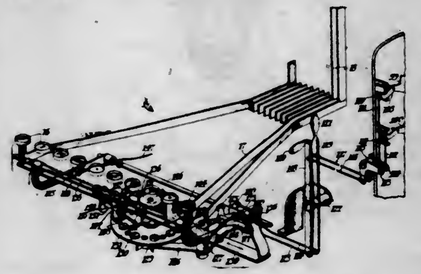
1,275,869. PLAYING-CARDS. WINNIE D. DEAL, Spencer, N. C. Filed June 5, 1918. Serial No. 238,317. (Cl. 46—25.)



4. In a pack of playing-cards, a major-flat suit, a major-sharp suit, a minor-flat suit, and a minor-sharp suit, each suit comprising a series of cards bearing designations of the musical scale of the class to which the suit pertains, a card bearing a representation showing by its parts the correct intervals of the scale, and a card bearing in progressive order the designations of other cards of the suit.

[Claims 1 to 3 not printed in the Gazette.]

1,275,870. COMBINED TYPE-WRITING AND COMPUTING MACHINE. GUSTAVE O. DEGENER, New York, N. Y., assignor to Underwood Computing Machine Company, New York, N. Y., a Corporation of New York. Filed May 27, 1913. Serial No. 770,111. (Cl. 235—62.)



5. The combination with a traveling carriage, of motive means for traversing said carriage, one or more computing heads, computing mechanism for running up numbers on said computing heads, motive means for said computing mechanism, automatic mechanism for governing the state of said computing heads according to a predetermined sequence, and motive means for said automatic mechanism separate from both said first-mentioned motive means.

8. The combination with a typewriting mechanism including a traveling carriage and escapement mechanism therefor, of a computing mechanism, automatic mechanism for determining the state of said computing mechanism to accord with different typewriter columns as written by said typewriting mechanism, an escapement for said automatic mechanism, and key means for operating said escapement.

44. The combination with computing mechanism, of a typewriting mechanism including a traveling carriage, an automatic mechanism for controlling the state of said computing mechanism, means for controlling the movements of said carriage and said automatic mechanism so that the movements of said automatic mechanism correspond with the traveling movements of said carriage, and means to prevent a relative movement of said carriage by said controlling means after said automatic mechanism has reached the limit of its effectiveness.

62. The combination with a traveling carriage, of one or more computing heads, a controlling mechanism for governing the state of said computing heads according to a predetermined plan or sequence, and to accord with the position of said carriage, said controlling mechanism including a rotatable disk, tabulating mechanism, and means, independent of the position of said carriage, brought into action by said tabulating mechanism for controlling the rotation of said disk.

64. The combination with computing mechanism, of an automatic state-controlling mechanism for governing the action of said computing mechanism according to a predetermined plan, said state-controlling mechanism having a variable capacity with different numbers of zones to a cycle of computing operations, and an adjustable lock for determining the capacity of said state-controlling mechanism and thus the number of zones in a cycle of computing operations.

[Claims 1 to 4, 6, 7, 9 to 43, 45 to 61, 63, 65, and 66 not printed in the Gazette.]

1,275,871. ILLUMINATING DEVICE. ETHAN I. DODDS, Pittsburgh, Pa., and ROBERT S. FERGUSON, Washington, D. C., assignors to Flannery Bolt Company, Pittsburgh, Pa. Filed July 25, 1917. Serial No. 182,782. (Cl. 240—1.)

1. An illuminating device, comprising a globe, a carrier supported therein, phosphorescent material carried

by the upright wall of said carrier and permanently luminous material supported by the bottom of said carrier.



2. An illuminating device, comprising a globe, a cage inclosed by and supported therein, phosphorescent material supported by the wall of said inclosed cage, and a source of light within the cage.

[Claims 3 and 4 not printed in the Gazette.]

1,275,872. PORTABLE LAMP. ETHAN I. DODDS, Pittsburgh, Pa., assignor to Flannery Bolt Company, Pittsburgh, Pa. Filed July 25, 1917. Serial No. 182,746. (Cl. 240—1.)



1. A portable lamp comprising a casing, electric lighting means carried thereby, a globe mounted on said casing and containing phosphorescent material and inclosing the source of light of said lighting means, means for closing and opening the circuit of said electric lighting means, and means for retarding the opening of said circuit.

3. A lamp comprising a globe containing a coating of phosphorescent material, an electric lighting device within the globe for activating said coating, an electric circuit for said lighting device, a circuit closer comprising yielding fingers included in said electric circuit and a movable spring-actuated connector for said fingers, and an air-pot structure for retarding the movement of said connector when the same moves toward position to open the circuit of the lighting device.

[Claim 2 not printed in the Gazette.]

1,275,873. PORTABLE LAMP. ETHAN I. DODDS, Pittsburgh, Pa., assignor to Flannery Bolt Company, Pittsburgh, Pa. Filed July 25, 1917. Serial No. 182,747. (Cl. 240—1.)

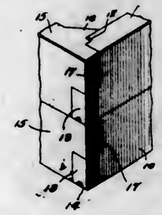


1. A lamp comprising a globe and a source of electric light within said globe, phosphorescent material within said globe, and a time operated circuit closer in the circuit of said source of electric light for periodically closing and opening said circuit.

3. A lamp comprising a casing, a globe mounted thereon, phosphorescent material in said globe, an electric light device within said globe for activating said material, a battery in said casing, an electric circuit including said battery and electric light device, a manually operable switch in said circuit, and a time operated circuit closer comprising a movable member and a plurality of stationary contacts coöperable therewith, mounted in said casing and included in said circuit.

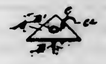
[Claim 2 not printed in the Gazette.]

1,275,874. CONCRETE LINING FOR SHAFTS. ALLEN B. DOWELL, St. Louis, Mo. Filed Oct. 10, 1917. Serial No. 195,696. (Cl. 61—16.)



The hereindescribed lining for shafts, which lining is laid in courses and each course comprising a pair of side slabs and a pair of end slabs, portions of each side slab on the inner face thereof being cut away immediately adjacent to their ends to form vertically disposed shoulders which are inset with respect to the end faces of said side slabs, substantially rectangular blocks projecting outwardly from the lower portions of the ends of each side slab, the upper faces of which blocks constitute horizontally disposed shoulders, and a pair of end slabs, the inner corners at the ends of which are adapted to bear against the vertically disposed inset shoulders, vertically disposed ribs formed integral with the inner faces of the end slabs, the outer end faces of which ribs are inset with respect to the end faces of said end slabs and which faces form vertically disposed shoulders which bear directly against the inner faces of the side slabs adjacent to the vertically disposed shoulders thereon, and substantially rectangular blocks projecting outwardly from the upper portions of the ends of said end slabs, which last mentioned blocks are adapted to overlie the blocks projecting outwardly from the lower portions of the ends of the side slabs.

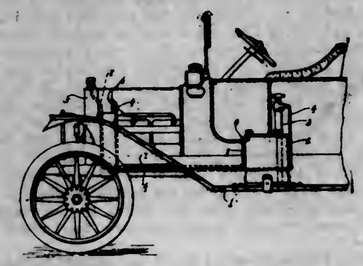
1,275,875. RUG-HOLDER. JOHN DOYLE, Hoboken, N. J. Filed Mar. 13, 1918. Serial No. 222,190. (Cl. 16—71.)



1. The rug holder described comprising a plate, a tack secured to said plate and projecting downwardly from the under face thereof and adapted to be driven into a floor, a perforation in said plate between said tack and an adjacent edge of said plate, a curved pin thrust through such perforation from the under face of said plate, said pin extending upwardly from the upper face of said plate and thence outwardly at a right angle to such edge and beyond the latter and terminating in a downwardly projected point adapted to penetrate and engage a rug, and an arm on said pin secured to and projecting upon such lower face and serving to attach said pin to said plate and to hold such edge of said plate out of contact with the floor.

2. The rug holder described comprising a plate having a perforation, a tack thrust through such perforation from the upper face of said plate and having a head secured to such upper face, a second perforation in said plat between said tack and an adjacent edge of said plate, a curved pin thrust through said second perforation from the under face of said plate and having an arm secured to such under face, said pin extending upwardly from such upper face and thence outwardly at a right angle to and beyond such edge and terminating in a downwardly projected point adapted to penetrate and engage a rug, said tack adapted to serve the double function of holding said plate to a floor and as a gage in locating the point of engagement of said pin with such rug, and said arm adapted to serve the double function of securing said pin to said plate and holding said edge out of contact with the floor.

1,275,876. DEVICE FOR COOLING ENGINES. ROBERT A. DRAIS, Halleck, Cal. Filed Aug. 20, 1915. Serial No. 46,504. (Cl. 123—174.)



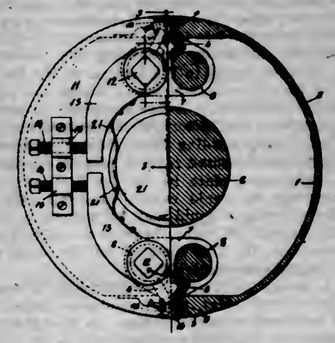
1. The combination with a motor vehicle having a radiator, of an independent receptacle, a pump operable to discharge from the bottom of said receptacle, a pipe connected with the pump and leading to and being connected with the radiator, another pipe leading from the radiator and discharging into the top of the receptacle whereby, with the action of the pump, water from the receptacle may be pumped from the bottom thereof into the radiator and from the radiator into the top of the receptacle, as described.

2. The combination with a motor vehicle having a radiator, of an independent receptacle, a hand pump operable from a point at or near the seat of the vehicle and arranged to discharge material from the bottom of the receptacle, a pipe leading from the pump and being connected with the radiator, and a pipe leading from the radiator and discharging into the upper part of the receptacle, as described.

3. In combination with the circulation system for internal combustion engines, including a radiator, of an independent receptacle, a pump, operable independently of the engine to discharge from the bottom of said receptacle, a pipe connected with the pump and leading to and being connected with the circulation system, an overflow pipe leading from the radiator and discharging into the upper portion of the receptacle whereby water from the receptacle may be pumped from the bottom thereof into the circulation system and flow from the top of the radiator into the top of the receptacle.

1,275,877. PLATE-PRINTING MACHINE. CARL EBERHARD DRANOE, Plainfield, N. J., assignor to Isabella Scott and David J. Scott, executors of Walter Scott, deceased, Plainfield, N. J. Filed Dec. 4, 1915. Serial No. 64,956. (Cl. 272.)

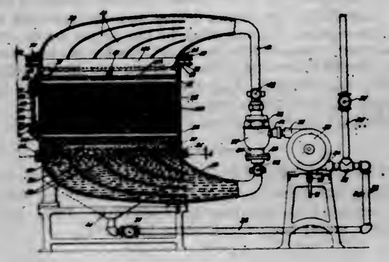
5. A printing member comprising: a cylindrical supporting member having a slot in its surface adjacent to the underside of which is a fulcrum member, a flexible member, means for securing one end of said flexible member to the cylinder, reinforcing means at the other end of the plate loosely entering said slot and having an angular portion which is in position to rock on the fulcrum member when said reinforcing means enter said slot, and rotatable means on the supporting member for engaging the reinforcing means to cause the latter to rock on said fulcrum member to strain the flexible member on the supporting member.



8. A printing machine cylinder comprising: a cylindrical supporting member having a relatively large opening terminating in a narrow slot on the surface of said supporting member, a flexible member having rigid reinforcing members clamped to the ends thereof and arranged to cover said cylindrical surface and to have the attached reinforcing members extended through said slot into said opening each of said members being adapted to engage an edge of said slot intermediate the edges of the member, and means in said opening for rocking said members about said edges as fulcrums to strain the flexible member.

[Claims 1 to 4, 6, 7, and 9 not printed in the Gazette.]

1,275,878. DYEING-MACHINE. HOWARD M. DUDLEY, Philadelphia, Pa. Filed Aug. 3, 1917. Serial No. 184,240. (Cl. 8—18.)



1. In a dyeing machine, in combination, a receptacle having imperforate sides, two foraminous plates having extended members across the receptacle, openings between the extended members, means for maintaining the plates at any position of separation with respect to each other, a fiber chamber between the plates and the sides of the receptacle, two foraminous plates spaced outwardly from the first two plates, and means for forcing a liquid in opposite directions through the outer plates and then inwardly through the device.

2. In a dyeing machine, in combination, a receptacle having imperforate sides, two foraminous plates within and extending across the receptacle, a fiber chamber between the plates and the sides of the receptacle, means for increasing and decreasing the size of the fiber chamber curved tubular members above and below the receptacle and means for forcing a liquid in opposite directions through the curved members into and through the fiber chamber.

5. In a dyeing machine, in combination, a receptacle having imperforate sides, two inner foraminous plates

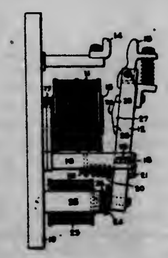
having extended members within the receptacle, openings between the extended members, means for maintaining the two inner plates at any position of separation with respect to each other, two outer foraminous plates spaced respectively from the two inner plates, a revoluble top to the receptacle, means for permitting the revolution of said top to allow access to the interior of the receptacle, a series of curved tubular members within the top opening into the receptacle, a series of curved tubular members opening into the bottom of the receptacle, a liquid supply tank, a pipe leading from above the upper inner plate to the liquid reserve tank, a pipe leading from below the lower inner plate to the liquid reserve tank, a pipe connecting the liquid reserve tank with the pump, and means whereby a liquid may be pumped in opposite directions through an outer foraminous plate, an inner foraminous plate, the fiber chamber and the liquid reserve tank for continuous circulation.

6. In a dyeing machine, in combination, a receptacle having imperforate sides, two foraminous plates having extended members extending across the receptacle, openings between the extended members, means for maintaining the plates at any position of separation with respect to each other, a fiber chamber between the plates and the sides of the receptacle, two foraminous plates spaced outwardly from the first two plates, a testing device exterior of the larger device, means whereby the contents of the testing device may be examined without interrupting the operation in the larger device, liquid connecting means below the fiber chambers of the two devices, liquid connecting means above the fiber chamber of the two devices and means for passing a liquid through the two devices in opposite directions.

9. In a dyeing machine, in combination, a receptacle having imperforate sides, two inner foraminous plates having extended members within the receptacle, openings between the extended members, means for maintaining the two inner plates at any position of separation with respect to each other, two outer foraminous plates spaced respectively from the inner plates, curved tubular members respectively above and below the outer plates, a testing device exterior of the larger device, means whereby the contents of the testing device may be examined without interrupting the operation in the larger device, liquid connecting means below the fiber chamber of the two devices, liquid connecting means above the fiber chambers of the two devices and means for passing a liquid through the two devices in opposite directions.

[Claims 3, 4, 7, and 8 not printed in the Gazette.]

1,275,879. ELECTROMAGNETIC SWITCH. JOHN EATON, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed May 2, 1916. Serial No. 94,990. (Cl. 175—281.)



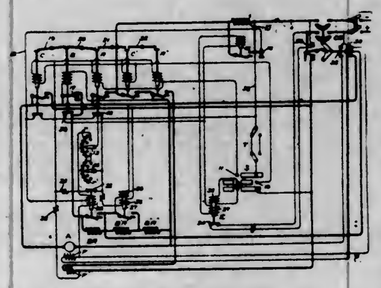
2. An electromagnetic switch comprising a switch member, an actuating winding therefor, means whereby upon the energization of said winding the switch member is moved to a magnetically balanced position with reference to said winding and an independent force set up tending to disturb said balance and cause a magnetic force to prevail and move the switch member to closed position, and an electromagnet for holding the switch member in balanced position.

7. An electromagnetic switch comprising a switch member, an actuating winding for moving the same to closed position, an electromagnet energized by current independent of the current in the actuating winding for holding the switch member against movement to closed position when the energizing current is above a predetermined value, and means whereby upon the energization of the actuating winding its pull upon the switch member is neutralized and a constant force set up to oppose the holding-out magnet until the current in the latter drops to the predetermined value whereupon the actuating coil moves the switch member to closed position.

13. An electromagnetic switch comprising a switch member, an actuating electromagnet for moving the same to closed position, an electromagnet energized by current independent of the current in the actuating winding for holding one end of the switch member against movement when the energizing current is above a predetermined value, an armature for the switch member having two pole faces which engage with the pole piece of the magnet at equal angles before the switch member reaches closed position so as to exert a closing force and a holding-out force which are equal and opposite, and means whereby an independent force is set up by the initial movement of the switch member tending to overpower the holding magnet and force the switch member to rock on the pole piece and close the switch by the magnetic pull between the pole piece and pole face which approaches it.

[Claims 1, 3 to 6, and 8 to 12 not printed in the Gazette.]

1,275,880. CONTROL SYSTEM FOR ELECTRIC MOTORS. JOHN EATON, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed May 11, 1915. Serial No. 27,433. (Cl. 172—240.)



1. In combination an electric motor, a controlling switch therefor, a braking circuit for dynamically braking the motor when the switch is operated, a circuit breaker provided with means whereby when it opens, it causes the motor to quickly stop and means for causing the circuit breaker to open in case the dynamic braking circuit does not close upon the operation of the switch.

3. In combination, an electric motor, a braking circuit for dynamically braking the motor, an electromagnetic switch for controlling the braking circuit, a circuit breaker provided with means whereby when it opens, it causes the motor to quickly stop, and means for causing the circuit breaker to open in case of failure of the electromagnetic switch to operate and apply the dynamic brake.

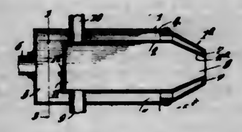
6. In combination, an electric motor, a reversing mechanism therefor, a braking circuit for dynamically braking the motor, an electromagnetic switch controlled by the reversing mechanism for controlling the braking circuit, an automatic circuit breaker provided with means whereby when it opens it causes the motor to be braked, and a relay controlled by the reversing mechanism and by the electromagnetic switch so as to cause the circuit breaker to open when the electromagnetic switch fails to properly function upon the actuation of the reversing switch.

8. In combination, an electric motor, a reversing mechanism therefor, a braking circuit for dynamically braking the motor, an electromagnetic switch controlled by the reversing mechanism for closing the braking circuit, a circuit breaker having a no-voltage release coil and provided with means whereby when it opens it causes the motor to be braked and means for opening the circuit breaker when the electromagnetic switch fails to close, said means comprising a relay which deenergizes the no-voltage coil of the circuit breaker when the reversing switch is operated in case the electromagnetic switch does not close the dynamic braking circuit.

9. In combination, an electric motor, a reversing mechanism therefor, a braking circuit for dynamically braking the motor, an electromagnetic switch controlled by the reversing mechanism for controlling the braking circuit, an automatic circuit breaker provided with means whereby when it opens it causes the motor to be braked and a relay controlling the tripping of the circuit breaker having differential windings one of which has its energizing current reversed by the reversing mechanism and the other by the counter electromotive force of the motor through contacts on the electromagnetic switch so that each winding will have its polarity reversed upon each reversal of the motor and thereby render the relay normally inoperative.

[Claims 2, 4, 5, 7, 10, and 11 not printed in the Gazette.]

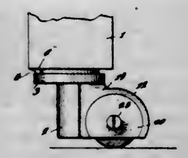
1,275,881. BURNER. EVAN A. EDWARDS, Prescott, Ariz. Filed Mar. 4, 1918. Serial No. 220,310. (Cl. 158—74.)



2. A burner of the class described comprising a mixing chamber having a discharge at one end and an inlet opening at its other end, an adjustable slide for controlling the size of said inlet opening, a steam chamber surrounding the end of said mixing chamber having the inlet opening therein, means for supplying steam to said steam chamber, steam channels leading from said steam chamber on opposite sides of the mixing chamber and having their front ends converging, and fuel and hot air pipes opening into said mixing chamber at the end having the inlet.

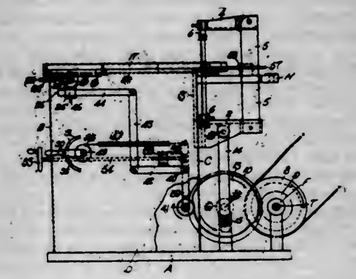
[Claim 1 not printed in the Gazette.]

1,275,882. CASTER. FORREST L. ELLISON, Exeter, N. H. Filed Aug. 18, 1914. Serial No. 857,388. (Cl. 16—4.)



In a caster, the combination of a body having a roller receiving hood, said hood having a substantially circular chamber formed therein, said chamber having a reduced opening at the lower portion of the hood, said hood having one side portion thereof removed and being provided with an annular recess adjacent the open side thereof, an unthreaded cylindrical stud carried by said hood and terminating in a plane even with said annular recess, a roller carried upon said stud, said stud having central bore therein, a closure plate positioned upon said hood to fit within said recess and bear upon the end of said stud, and a retaining screw passed through said plate and into said bore for removably retaining said closure plate in a set position, whereby said hood will shield said roller by extending to a point adjacent the support of the roller and preventing foreign objects from engaging the roller.

1,275,883. HACKSAW AND BROACHING MACHINE. HERBERT EMBREE, Hamilton, Ontario, Canada, assignor of one-half to Wilfred Hutchinson, Hamilton, Ontario, Canada. Filed Sept. 29, 1917. Serial No. 194,030. (Cl. 29—74.)



1. In a machine of the class described, the combination with a frame, of a cam rotatable in the frame and actuating means therefor, a vertically operative tool holder slidable in the frame and actuated from the cam, a table slidable on the frame and adapted to maintain means for holding the work and actuated from the cam in such manner as to position the work in contact with the tool during the active stroke of the tool holder and to disengage the work therefrom during the idle strike, and means for tensioning the work against the tool.

10. In a machine of the class described, the combination with a frame, of a cam rotatable in the frame and actuating means therefor, a vertically operative tool holder slidable in the frame and actuated from the cam, a table slidable on the frame with means for holding work thereon, a rack secured to the table, a shaft having bearing in the frame and carrying a pinion meshed with the rack, a hub rigid on the shaft, rings loose on said hub and provided each with an eccentric groove in its core and one with a slot, an end cap rigid on said shaft adjacent to the hub and to one of said rings and provided with a pin extending into the groove in the adjacent ring, a collar rigid on said shaft adjacent to the opposite end of said hub, and to the other ring and provided with a pin extending into the groove in the adjacent ring, rollers sleeved one on each said pin and occupying the grooves in said rings, a pin rigid with the frame and extending into said slot, a handle rigid with said end cap, a handle rigid with said collar, a block integral with one of said rings, an arm carried by and rigid with said block, and means connecting said arm and actuated by said cam, a second shaft having bearing in the frame, a lever rigidly secured intermediate of its ends to the second shaft, a roller journaled to one end of the lever and engaging said cam, an arm rigid with the second shaft, and a link connecting said arm with the arm carried by said block, a drum having bearing in the frame, a spring connecting the opposite end of said lever with said drum, and means for actuating the drum, a third shaft having bearing in the frame and threaded through a bracket therein, and carrying actuating means on one end thereof, the opposite end engaging an integral part of said lever. A bracket secured to the rear of the frame and adapted to carry an arm for holding a key-seating tool, a rod threaded through an integral boss on said bracket, as and for the purpose specified.

[Claims 2 to 9 and 11 not printed in the Gazette.]

1,275,884. PREPARATION OF CELLULOSE ACETATE. GUSTAVUS J. ESSELEN, Jr., Swampscott, and HARRY S. MORK, Brookline, Mass., assignors to Chemical Products Company, Cambridge, Mass., a Corporation of Maine. Filed Mar. 6, 1918. Serial No. 220,821. (Cl. 23—24.)

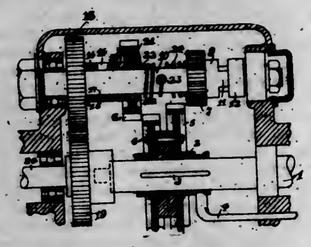
1. The process of preparing granular cellulose acetate, which consists in acetylating cellulose without destroying its fibrous form, and thereafter converting the fibrous acetate into the granular variety by a process of solution and precipitation.

2. The process of preparing granular cellulose acetate, which consists in acetylating cellulose without destroying its fibrous form, separating from the acetylated product the excess of acetic anhydrid employed in its preparation, and thereafter converting the fibrous acetate into the granular variety by a process of solution and precipitation.

3. The process of preparing granular cellulose acetate of the acetone-soluble variety, which consists in acetylating cellulose without destroying its fibrous form, separating from the acetylated product the excess of acetic anhydrid employed in its preparation, dissolving the fibrous acetate and further treating it until the desired degree of solubility is obtained, and then precipitating the product in granular form.

4. The process of preparing granular cellulose acetate of the acetone-soluble variety, which consists in acetylating cellulose without destroying its fibrous form, separating from the acetylated product the excess of acetic anhydrid employed in its preparation, dissolving the fibrous acetate and further treating it in an acetic acid solution containing a catalyst until the desired degree of solubility is obtained, and then precipitating the product in granular form.

1,275,885. YIELDABLE CHANGE-SPEED GEARING. EDGAR FAIRWEATHER, London, England. Filed Nov. 17, 1917. Serial No. 202,572. (Cl. 74—58.)

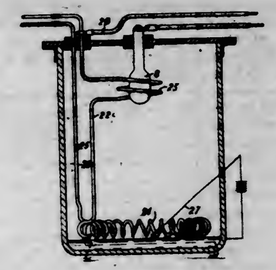


A yieldable change speed gearing comprising a shaft, a single clutch dog on said shaft, a gear wheel loose on said shaft, a single clutch dog on said gear wheel, a helical spring surrounding said shaft attached at one end to said shaft, and at the other end to said gear wheel to maintain the single clutch dog upon it in a position midway between either side of the clutch dog on the shaft to allow substantially a complete relative movement of the gear wheel to the shaft.

1,275,886. ARC-CONTROLLING MEANS FOR VAPOR-CONVERTERS. SIDNEY W. FARNSWORTH, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 6, 1915. Serial No. 44,001. (Cl. 175—354.)

1. The combination with electric apparatus embodying means for producing an arc between two electrodes, of a solenoid bent into the form of a ring and disposed adjacent to one of said electrodes so that said arc traverses said ring, and means for producing current flow through said solenoid having such direction, with respect to the direction of said arc, as to maintain said arc upon a predetermined portion of said electrode.

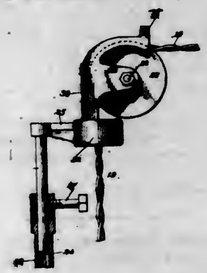
3. In a vacumm-type converter, the combination with an anode, of a cathode, means for producing an arc therebetween, a winding disposed to produce a toroidal shaped bundle of magnetic flux adjacent to one of said electrodes, the lines of said field individually surrounding said arc, whereby the zone of impact of said arc upon said electrode is defined, and means for energizing said winding by the load current of said converter.



6. In a vacuum-type converter system, the combination with an evacuated container, of an anode, a cathode, current leads thereto, and means for producing current flow in said leads and between said electrodes, a portion of the cathode lead being disposed within said container and being formed into a toroidal-shaped solenoid, adjacent and substantially parallel to the arc-receiving surface of said cathode, whereby the zone of arc-impact of said cathode is defined.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,275,887. PULLEY FOR FLOOR-SCRUBBING MACHINES. WALTER S. FINNELL, Hannibal, Mo., assignor to Finola Manufacturing Company, Hannibal, Mo., a Corporation of Missouri. Filed Dec. 29, 1914, Serial No. 879,428. Renewed Jan. 7, 1918. Serial No. 210,797. (Cl. 242—157.)



1. The combination with a tubular support, of a rod adjustably sustained in and projecting from said support; a bracket arm carried by said rod and projecting laterally therefrom said arm being provided with a ring; a tubular device carried by and rotatable on said ring,—said tubular device being provided at one side with an upwardly projecting curved guide and a grooved guide-pulley sustained from the guide above said bracket ring.

[Claim 2 not printed in the Gazette.]

1,275,888. SHAPING FIBER ARTICLES. OTTO FISCHER, Stuttgart, Germany, assignor to Firm of Robert Bosch, Stuttgart, Germany. Filed Jan. 6, 1913. Serial No. 740,554. (Cl. 18—56.)

1. The method of treating tubes composed of dense brittle fibrous insulating material such as that known as "fiber" to shape them, which consists in immersing a portion of the tube in a heated bath of a waxy material such as paraffin to soften it and make the material of the tube pliable then bending the tube to the desired shape while it is in the softened pliable condition and while impregnated with the material of the bath, and maintaining the tube in the new shape until, as a result of drying and cooling, it stiffens and sets with the pores thereof containing the material of the bath in a hardened form; substantially as described.

[Claims 2 and 3 not printed in the Gazette.]

1,275,889. AUGER. ERVIN J. FLANDER, Oneida, N. Y. Filed Mar. 9, 1917. Serial No. 153,725. (Cl. 145—126.)



An auger, including, in combination with a shank having an enlarged flat head, a plurality of cutter blades detachably secured to the opposite sides of said head and projecting beyond the ends of the same, one of said blades having a centering point and an obliquely disposed lifting cutter provided with a curved cutting edge formed integral therewith, and the remaining blade having a scoring cutter formed on the outer end of the same.

1,275,890. ILLUMINATING MEANS. JAMES J. FLANNERY and ETHAN I. DODDS, Pittsburgh, Pa., assignors to Flannery Bolt Company, Pittsburgh, Pa. Filed July 25, 1917. Serial No. 182,731. (Cl. 240—1.)



2. An illuminating device, comprising a bulb, a filament bracket and filament therein, a phosphorescent coating within said globe, and permanently luminous material carried by said filament bracket.

[Claims 1 and 3 not printed in the Gazette.]

1,275,891. LAMP STRUCTURE. JAMES J. FLANNERY and ETHAN I. DODDS, Pittsburgh, Pa., assignors to Flannery Bolt Company, Pittsburgh, Pa. Filed Sept. 13, 1917. Serial No. 191,200. (Cl. 240—1.)

1. A lamp structure comprising a comparatively heavy globe, an inner globe, a coating of phosphorescent material between said globes, a transparent filling between said globes, and a source of light within the inner globe.

4. A lamp structure comprising an outer globe having a thick wall, an inner globe, a coating of phosphorescent material between said globes, a plastic filling between said globes, an electric lamp within the inner globe, and means for sealing said electric lamp within said inner globe.



6. The herein described method of making a lamp consisting in coating the inner surface of a globe having a thick wall with phosphorescent material, partly filling the globe with a transparent plastic material, forcing an inner globe into the outer globe whereby a transparent filling will be provided between said globes, and securing means providing a source of light within the inner globe.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,275,892. STAY-BOLT STRUCTURE. JOHN ROGERS FLANNERY, BENJAMIN E. D. STAFFORD, and ETHAN I. DODDS, Pittsburgh, Pa., assignors to Flannery Bolt Company, Pittsburgh, Pa. Filed Oct. 25, 1917. Serial No. 198,481. (Cl. 85—1.5.)

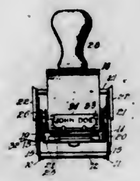


1. The combination with a stay bolt having a tell-tale bore, of a container removably supported within said bore and in communication therewith, and soluble material within said container.

2. The combination with a staybolt having a tell-tale bore, of a tube within said bore and communicating therewith, means for removably supporting said tube and closing the end of the bore, and soluble material within said tube.

[Claims 3 and 4 not printed in the Gazette.]

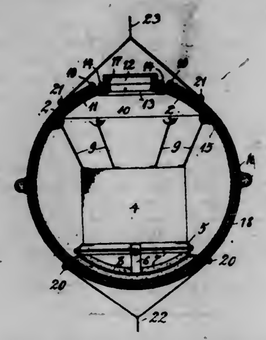
1,275,893. SELF-INKING HAND-STAMP. HARRY S. FOLGER, Chicago, Ill., assignor to R. D. Swisher Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 11, 1915. Serial No. 13,572. (Cl. 101—333.)



1. In a hand stamp, a box formed of sheet metal, said box being closed above and on its four sides by the metal from which the box is formed and providing a narrow opening below, and a bridge inserted in the opening and secured to the box, the front and rear sides of the box at the opening serving as the sides of a type holding channel, and the bridge serving as the bottom of such channel.

[Claims 2 to 5 not printed in the Gazette.]

1,275,894. SEA-MINE OF STEEL-CONCRETE. NICOLAY KNUDTSON FOUGNER, Christiania, Norway. Filed Dec. 6, 1917. Serial No. 205,877. (Cl. 102—3.)



1. Sea-mine the walls of which consist of metal lathing, covered by watertight mortar or concrete and further provided with a suitable armament of steel rods, the mine containing a charge box and having fastening bolts for the anchor and carrying cables, the charge box and bolts being fastened to the mine body without perforating the same.

3. Sea-mine the walls of which conists of metal lathing, covered by watertight concrete and further provided with a suitable armament of steel rods, a charge box mounted on hoops cast to the interior of the mine wall, said hoops being provided with cross rods in order to prevent lateral expansion of the same and distribute the pressure equally over the whole length of the hoops.

10. The herein described process of producing mines, consisting in applying a series of metal rods upon a metal lathing with the ends of the rods projecting above the lathing to form the body of the mine, applying a metal cover upon the body, bending the rods on the cover, and applying concrete upon the whole.

[Claims 2 and 4 to 9 not printed in the Gazette.]

1,275,895. SHOE-TONGUE PAD. RAPHAEL A. FOX, New York, N. Y. Filed May 13, 1918. Serial No. 234,299. (Cl. 36—54.)

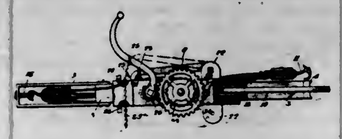


1. A shoe tongue pad comprising two plies of soft pliable material, one longer and wider than the other, and both secured permanently together along their centers.

[Claims 2 and 3 not printed in the Gazette.]

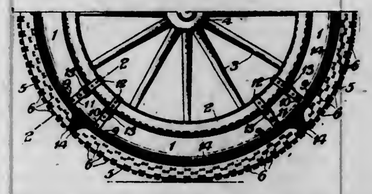
1,275,896. FENCE-WIRE STRETCHER. ROBERT E. LEE FREEMAN, Fayette, Mo. Filed Oct. 19, 1916. Serial No. 127,182. (Cl. 254—65.)

In a fence wire-stretcher of the type described the combination with a tubular body, and a ratchet bar adapted to slide therein, of a lever pivoted to said body and having a pivoted feed and locking dog engaging the



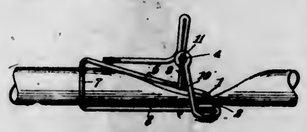
ratchet proper, and means attached to the body and adapted for engaging the free end of the lever, as and for the purpose specified.

1,275,897. NON-SKIDDING ATTACHMENT FOR WHEEL-TIRES. ABRAHAM FREIRICH, Demarest, N. J. Filed Oct. 12, 1916. Serial No. 125,135. (Cl. 152—16.)



A non-skidding attachment for tires, comprising a metallic plate applicable to the tread portion of a tire and having openings scattered throughout its area and also having outwardly-extending flanges grouped about and adjacent to each opening and pointed; the openings and their complementary flanges being arranged in series lengthwise and crosswise of the plate and being also arranged in staggered relation whereby they are disposed close together.

1,275,898. WIRE COMPRESSION-CLAMP FOR TUBING AND THE LIKE. AUGUST J. FREY, Brooklyn, N. Y., assignor to Brass Goods M'f'g Co., Brooklyn, N. Y., a Corporation of New York. Filed July 27, 1916. Serial No. 111,580. (Cl. 137—6.)



1. A compression clamp for tubing comprising a jaw actuating cam combined with a piece of wire bent to form an upper jaw, a base and cam supporting ears rising from said base, said jaw, base and cam supporting ears being integral, and said ears terminating in eyes formed in the wire, as and for the purpose described.

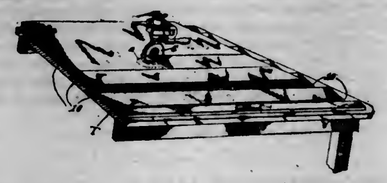
5. A compression clamp for tubing and the like constructed from a piece of wire looped to form an upper compression jaw, arms for supporting said jaw, a base and ears rising from said base, the ends of said wire terminating in eyes and a compression clamp having pintles mounted in said eyes and adapted to engage the portion of wire carrying said upper jaw.

[Claims 2 to 4 not printed in the Gazette.]

1,275,899. APPARATUS FOR CUTTING CLOTH OR OTHER FABRICS. AARON FREYDBERG, New York, N. Y. Filed May 2, 1918. Serial No. 232,039. (Cl. 164—77.)

1. A cloth-shearing table having a cloth supporting surface of greater length than width provided with a plurality of spaced parallel guideways for guiding a cutting

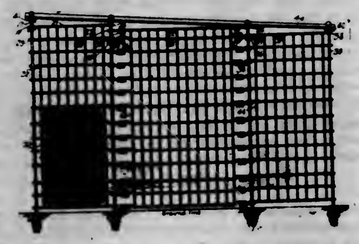
tool, the ends of the table being cut on a bias and the said guideways extending parallel with the long sides of the table.



2. A table or support for lay-cutting or slitting operations having a supporting surface of greater length than width and the ends thereof cut on a bias, said surface being provided with a plurality of spaced parallel guiding elements extending in the direction of length of the said surface, said guiding elements being laterally adjustable to vary the distance therebetween and the width of the slitted product, and means for retaining the elements in adjusted position.

3. A cloth cutting or slitting table having a supporting surface of rhomboidal contour, said surface being provided with a plurality of spaced guiding elements extending substantially parallel to the long sides of the surface.

1,275,900. ROD OR WIRE PANEL FENCE. WESLEY C. GAY, Augusta, Ga. Filed Feb. 16, 1918. Serial No. 217,634. (Cl. 256—26.)

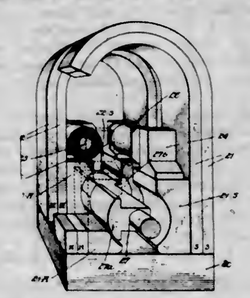


1. In a fence of the character described, the combination with posts, of first and third panels having cross-pieces provided with an eye at each end, each of the said cross-pieces having its said eye engaging a post, an intermediate panel having cross-pieces spaced correspondingly with the said cross-pieces of the first and third panels, the said cross-pieces of the first and third panels having coupling devices projecting from one set of said eyes which engage the posts at the end of the said cross-pieces, and the ends of the cross-pieces of the said intermediate panel being provided with means for engaging the said coupling devices.

2. In a fence of the character described, the combination with posts, of first and third panels having cross-pieces each provided with a single eye at one end and a double eye at the other end, each crosspiece having its said single eye engaging a post, an intermediate panel having crosspieces provided with hooks at the ends engaging one of the said double eyes of the said crosspieces of the said first and third panels, and the remaining eyes of the said double eyes of the crosspieces engaging certain of the said posts.

1,275,901. MAGNETO-MACHINE. HARRY F. GEIST, Racine, Wis., assignor, by mesne assignments, to Webster Electric Company, Racine, Wis., a Corporation of Wisconsin. Filed May 20, 1916. Serial No. 98,903. (Cl. 171—209.)

1. A magneto machine comprising a pair of horse shoe magnets disposed side by side with their poles extending in the same direction, a pole piece located on the inner face of each magnet at each pole thereof, two coil carrying cores, one connecting the pole pieces of one polarity and the other core connecting the pole pieces of the opposite polarity, a generating winding in inductive relation to each of said cores, and a rotor operating in the space between the magnet poles arranged when operated to afford a path for magnetic flux between the north pole of one of the said magnets and the south pole of the other magnet, and then to provide a path for magnetic flux between the south pole of the first magnet and the north pole of the second magnet.

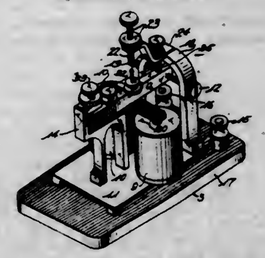


10. A magneto machine comprising in combination with a pair of permanent horse shoe magnets disposed side by side, with their poles extending in the same direction, each magnet pole provided with a pole piece having a concave polar face, an unwound rotor arranged to be rotated in the space between the magnet poles and provided with two arms 180 degrees apart, one of said arms arranged to sweep past the pole pieces of one magnet and the other arm arranged to sweep past the pole pieces of the other magnet, a pair of coil carrying cores, each core connecting pole pieces of similar polarity and a generating winding in inductive relation to each of said cores.

11. A generator comprising a pair of U shaped magnets disposed side by side with their poles extending in the same direction, a core piece connecting the pole of one magnet with the corresponding pole of the other magnet, and means for alternately completing and interrupting the magnetic path between one pole of one magnet and the pole of opposite polarity of the other magnet.

[Claims 2 to 9 not printed in the Gazette.]

1,275,902. ELECTRIC SIGNALING APPARATUS. JOHN J. GHEGAN, East Orange, N. J. Filed Dec. 20, 1916. Serial No. 137,934. Renewed July 3, 1918. Serial No. 243,250. (Cl. 175—338.)



1. In an electro magnetic signaling device the combination of an electromagnet, a pivoted, rigid contact bar, a retractor therefor, a rigid, resonant back stop for said bar, an actuator for said bar, means whereby said actuator under closed circuit conditions, moves with said bar and a fixed contact stop in position to arrest said bar and permit said actuator to disengage itself.

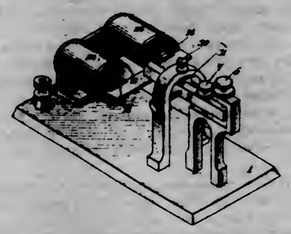
5. The combination with an alternating current circuit and means for making and breaking said circuit, of an electromagnet, a pivoted, reciprocating, resonant bar, a reciprocating actuator for said bar, and means whereby actuator and bar move together under open circuit conditions and move together and separate when said bar engages a fixed contact stop, under closed circuit conditions.

6. In a code telegraph receiving magnet the combination with an alternating current circuit and a circuit breaker therefor of an electromagnet in said circuit, a reciprocating member; fixed, up and down contacts therefor; an actuator to control said member in response to both open and closed circuit conditions, and means whereby actuator and bar move in engagement on open circuit and move together and then separate on closed circuit.

7. In a code telegraph receiving magnet the combination with an alternating current circuit and a circuit breaker therefor of an electromagnet in said circuit, a reciprocating bar, a reciprocating actuator, two opposite stops therefor, and means whereby said bar and actuator move together to engage one stop when circuit is open, and move together but separate when said bar engages its opposite stop and circuit is closed.

[Claims 2 to 4, 8, and 9 not printed in the Gazette.]

1,275,903. ELECTRIC SIGNALING APPARATUS. JOHN JOSEPH GEHEGAN, East Orange, N. J. Filed Apr. 12, 1917. Serial No. 161,416. (Cl. 178—96.)



1. In a Morse sounder the combination of an electromagnet, a pivotally supported armature adapted to reciprocate through the polar field, an armature bar, a retractor for said bar and up and down contact stops for said bar fixed in position to permit said armature and bar to reciprocate through the polar field, impact on the stop, and then take an intermediate position in the maximum polar field.

[Claims 2 and 3 not printed in the Gazette.]

1,275,904. WRAPPER. SIDNEY S. GROTTA, Hartford, Conn. Filed July 17, 1916. Serial No. 109,730. (Cl. 206—46.)

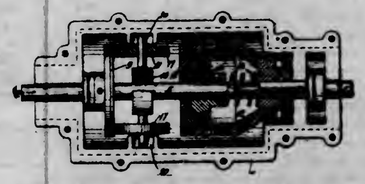


1. A wrapper for gum and confections comprising a wide and thin paper tube that is open at both ends, is oblong in transverse section, and that for a short distance back from one end has its narrow side walls and also portions of its wide front and back walls adjacent to the side walls, cut away so that the edges and small sections of the top and bottom near the edges of a thin article inclosed by the tube will be exposed and may be grasped for withdrawal from the tube without gripping the wrapper forming the tube.

2. A series of wrappers formed of a series of sheets, and folded into tubes, each around an article, one end of each tube having two oppositely cut away notches, and two intermediate flaps between the notches; combined with a second outer sheet folded into a tube around said series of wrapped articles, said latter tube having two oppositely cut away notches and two intermediate flaps between the notches, said notches and flaps being placed opposite to and endwise of the notches of the inner wrapped articles; the cut away notches of the inner wrapped articles being covered by the uncut end of the outer tube.

[Claim 2 not printed in the Gazette.]

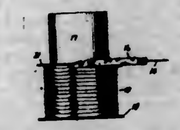
1,275,905. REVERSIBLE CLUTCH. ADAM HENRY GRUNTLER, Hartford, Conn. Filed Mar. 2, 1918. Serial No. 220,079. (Cl. 74—26.)



3. A reversible clutch comprising a driving member, a driven member, a friction disk constrained to revolve with the driving member, a friction cone constrained to revolve with the driving member, a second friction cone constrained to revolve with the driven member between the friction disk and the friction cone, a friction disk movable with the second friction cone, friction rollers, a support for said friction rollers mounted to float on the driving member, and means for moving said second friction cone whereby the same can be thrown into engagement with the friction cone on the driving member, or the disk on said second friction cone can be brought into engagement with the friction rollers and, therefore, with the friction disk on the driving member.

[Claims 1 and 2 not printed in the Gazette.]

1,275,906. GEAR, BLANK FOR GEARS, ROLLS, &c., AND METHOD OF MANUFACTURING THE SAME. EMILE J. GUAY, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed Nov. 9, 1917. Serial No. 201,015. (Cl. 74—41.)



1. The method of manufacturing blanks which comprises winding a cylindrical body from loose textile fibers, said fibers being arranged to extend generally in a radial direction from the center to the outside of said body, and subjecting the body thus formed to pressure to consolidate it.

2. The method of manufacturing blanks which comprises winding a cylindrical body from loose unwoven textile fibers, said fibers being arranged to extend generally in a radial direction from the center to the outside of said body and in predetermined definite positions with respect to each other, and subjecting the body thus formed to pressure to consolidate it.

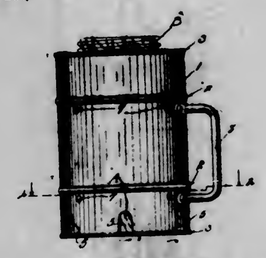
3. The method of manufacturing blanks which comprises forming textile fibers into a sliver, winding said sliver into a narrow strip with fibers extending crosswise thereof, assembling the material into cylindrical form with the fibers occupying definite positions with respect to each other, and subjecting the body to and confining it under pressure.

4. The method of manufacturing blanks for gears, rolls, etc., which comprises forming textile fibers into a long, narrow strip, winding said strip into a cylindrical body, said fibers being arranged to extend outwardly from the axis of said body and at different angles so that the fibers cross each other, and mounting the body in a holder under compression.

5. The method of manufacturing blanks for gears, rolls, etc., which comprises forming a cylindrical body of loose textile fibers, said fibers being arranged to extend outwardly from the axis of the body and at different angles so that the fibers cross each other, subjecting the body thus formed to the action of a softening agent, driving out the agent by the application of pressure, and mounting the body in a holder under its final compression.

[Claims 6 to 37 not printed in the Gazette.]

1,275,907. KITCHEN UTENSIL. RUDOLPH J. HAAS, Milwaukee, Wis. Filed Feb. 25, 1918. Serial No. 219,035. (Cl. 65—26.)



A jar holder of the class described comprising an open ended flexible shell provided with a longitudinal slit throughout its length and a series of U-shaped openings therein at its bottom edge to form side wall vents, the cut-out material from the U-shaped openings being bent inwardly from the walls to form spaced tongues that serve as supports for a container, a pair of handles secured to the casing near its slit edges, and two series of spaced rows of resilient buttons extending inwardly from the shell walls to form gripping points for the wall of a container, whereby an uninterrupted air space is formed between the shell walls and container throughout, to permit a current of air to travel about the aforesaid container from end to end in conjunction with the side wall vents, whereby the said container is quickly and uniformly cooled to prevent breakage.

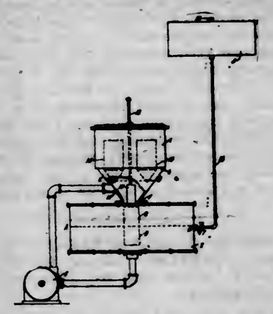
1,275,908. LIQUID RHEOSTAT. ARTHUR J. HALL, Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 17, 1915. Serial No. 8,870. (Cl. 219—57.)

1. The combination with a liquid rheostat, a main reservoir, a body of electrolyte of a predetermined density of solution contained therein, and means for circulating said electrolyte throught said rheostat, of means for automatically supplying fresh water to said electrolyte to maintain a substantially constant density of solution, irrespective of evaporation.

2. The combination with a liquid rheostat, a main reservoir, a body of electrolyte of a predetermined density of solution contained therein, and means for circulating said electrolyte through said rheostat, of means for supplying fresh water to said reservoir in accordance with the evaporation.

3. The combination with a liquid rheostat, a main reservoir, a body of electrolyte contained therein, and means for circulating said electrolyte through said rheostat, of means for supplying fluid to said reservoir in accordance with the evaporation of said electrolyte.

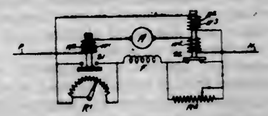
4. The combination with a liquid rheostat, a main reservoir, a body of electrolyte of a predetermined density of solution contained therein, and means for circulating said electrolyte through said rheostat, of a fluid-containing tank disposed above said reservoir and communicating therewith at a predetermined height and adapted to automatically maintain the level of electrolyte within said reservoir above said predetermined height.



5. The combination with a liquid rheostat, a reservoir for containing an electrolyte of a predetermined density of solution, and means for circulating said electrolyte through said rheostat, of an auxiliary fresh-water tank disposed above said reservoir, and a pipe communicating between said tank and said reservoir at a height substantially equal to the minimum allowable height of electrolyte within said reservoir whereby fresh water is supplied to said reservoir in accordance with the evaporation of the electrolyte to maintain a substantially constant density of solution of said electrolyte.

[Claim 6 not printed in the Gazette.]

1,275,909. MOTOR-CONTROL SYSTEM. JAY H. HALL, Cleveland, Ohio, assignor to The Electric Controller & Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 7, 1917. Serial No. 205,948. (Cl. 172—179.)



1. In a motor control system, a motor, a shunt field circuit therefor, a variable speed-changing resistance and a fixed resistance in the field circuit, a switch for cutting the variable resistance out of and into the field circuit to increase the speed of the motor, and a switch for cutting the fixed resistance into and out of the field circuit to reduce the speed of the motor.

2. In a motor control system, a motor, a shunt field circuit therefor, a rheostat in the field circuit for varying the speed of the motor, a fixed resistance in the field circuit, a switch for cutting the rheostat out of and into the field circuit to increase the speed of the motor when the rheostat is moved to an increased speed position, and a switch for cutting the fixed resistance into and out of the field circuit to decrease the speed of the motor when the rheostat is moved to a decreased speed position.

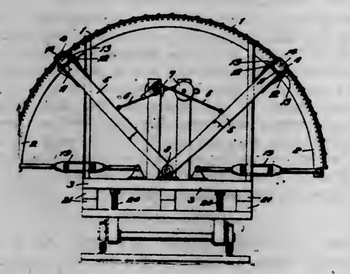
5. In a motor control system, a source of supply voltage, a motor, a motor circuit and a shunt field circuit therefor, a speed changing rheostat and a fixed resistance in the field circuit, a switch for cutting the rheostat out of and into the field circuit to increase the speed of the motor when the rheostat is moved to an increased speed position and responding to the main motor current, and a switch for cutting the fixed resistance into and out of the field circuit to decrease the speed of the

motor when the rheostat is moved to a decreased speed position and responding to electrical conditions of the motor circuit caused by the greater-than-source voltage at the motor terminals during the slowing down of the motor.

8. In a motor control system, a source of supply voltage, a motor, a motor circuit and a shunt field circuit therefor, a speed changing rheostat and a fixed resistance in the field circuit, a switch for cutting the rheostat out of and into the field circuit to increase the speed of the motor when the rheostat is moved to an increased speed position and responding to the main motor current, and a second switch for cutting the fixed resistance into and out of the field circuit to decrease the speed of the motor when the rheostat is moved to a decreased speed position and responding only when the first switch is closed to electrical conditions of the motor circuit caused by the greater-than-source voltage at the motor terminals during the slowing down of the motor.

[Claims 3, 4, 6, 7 and 9 not printed in the Gazette.]

1,275,910. METHOD OF AND APPARATUS FOR CONSTRUCTING TUNNELS. JAMES W. HAMILTON, Brooklyn, N. Y. Filed Aug. 31, 1916. Serial No. 117,966. (Cl. 61—44.)



1. A tunneling apparatus comprising a shield formed of a plurality of independently movable longitudinal sections, a horizontally arranged power hammer for driving said sections, and means for shifting said hammer to adapt it to engage each of said sections.

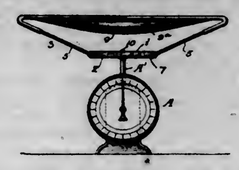
16. A tunneling apparatus comprising a movable truck, an arcuate form mounted on said truck, a shield comprising independently movable longitudinal sections flexibly and slidably connected together and supported on said form, a power hammer, and a swinging support for the power hammer pivotally mounted on the truck at a point coincident with the axis of the arc of the form.

18. A tunneling apparatus comprising a movable truck, an arcuate form mounted on said truck, a shield comprising independently movable longitudinal sections supported on said form, two power hammers, independently shiftable supports for said hammers pivotally mounted on the truck at a point coincident with the axis of the arc of the form, independent means for swinging said supports to position each of the hammers to drive sections of the shield, and means for maintaining each hammer support in its adjusted position.

[Claims 2 to 15 and 17 not printed in the Gazette.]

1,275,911. NURSERY-SCALE. MARIUS H. HANSEN, Chicago, Ill. Filed Sept. 23, 1914. Serial No. 863,068. (Cl. 5—58.)

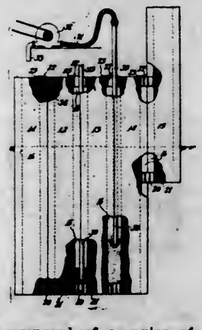
1. In a nursery scale, a base, two side frames each consisting of a side bar and two downwardly inclined arms, the lower end of each arm being bent to extend through an opening in said base, means for securing said bent ends to the base, and a hammock the side edges of which engage said side bars, the end portions of the hammock being narrower than the middle portion of the hammock so as to conform to the inclination of said



arm, said end portions of the hammock having tubular hems that inclose the upper portions of said arms.

[Claims 2 to 4 not printed in the Gazette.]

1,275,912. METHOD OF FORMING WATER-TIGHT BULKHEADS. FOSTER W. HARDING, Santa Ana, Cal. Filed June 1, 1916. Serial No. 101,194. (Cl. 72—76.5.)



1. In a wall composed of a series of piling members having registering grooves cut in the edges thereof, an upper key adapted to fit into the registering grooves of two adjacent piles, said key being provided with means to prevent it from being entirely forced into said registering grooves, and being provided with a central opening through which a jet pipe may be inserted in said registering grooves.

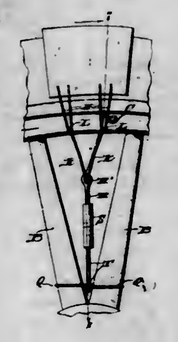
2. In a wall, a series of piling members, each piling member having a locking groove formed on each edge thereof in such a position that the grooves on adjacent piling members register to produce a key groove, a lower locking key secured to the lower end of one pile and projecting into the locking groove of another, and an upper locking key resting on the top of and in the locking groove of one pile and projecting into the locking groove of another.

3. In a wall, a series of piling members, each piling member having a locking groove formed on each edge thereof in such a position that the grooves on adjacent piling members register to produce a key groove, a lower locking key secured to the lower end of one pile and projecting into the locking groove of another, and an upper locking key resting on the top of and in the locking groove of one pile and projecting into the locking groove of another, said upper locking key having a central opening therein through which a jet pipe may be inserted in said key groove.

4. In a wall, a series of piling members, each piling member having a locking groove formed on each edge thereof in such a position that the grooves on adjacent piling members register to produce a key groove, tongues projecting from said pile on either side of said locking key groove and fitting tightly into grooves formed on an adjacent pile, a lower locking key secured to the lower end of one pile and projecting into the locking groove of another, and an upper locking key resting on the top of and in the locking groove of one pile and projecting into the locking groove of another.

5. In a wall, a series of piling members, each piling member having a locking groove formed on each edge thereof in such a position that the grooves on adjacent piling members register to produce a key grove, tongues projecting from said pile on either side of said locking key groove and fitting tightly into grooves formed on an adjacent pile, a lower locking key secured to the lower end of one pile and projecting into the locking groove of another, and an upper locking key resting on the top of and in the locking groove of one pile and projecting into the locking groove of another, said upper locking key having a central opening therein through which a jet pipe may be inserted in said key groove.

1,275,913. PROTECTING DEVICE FOR TIRES. WILLIAM OLIVER HARMON, La Pryor, Tex. Filed Mar. 30, 1918. Serial No. 225,806. (Cl. 152—24.)



A device for protecting tires, comprising in combination with a wheel and pneumatic tire, a pad about the tire, V-shaped wires having hooked ends engaging the marginal edege of the pad, a turn buckle having threaded rods mounted therein, means secured to the spokes of the wheel near their inner ends and to which one of said rods is connected centrally between the spokes and an angle wire connected to the other rod, and having flaring arms bent at their ends into hooks engaging said V-shaped wire.

1,275,914. SOUND-BOX. ROBERT HEAD, New York, N. Y., assignor to The Aeolian Company, a Corporation of Connecticut. Filed Aug. 9, 1917. Serial No. 185,317. (Cl. 274—28.)



1. In a universal sound-box, a stylus bar having a laterally-projecting lower arm provided with two separate stylus sockets, and a single clamp for similarly controlling both sockets in unison.

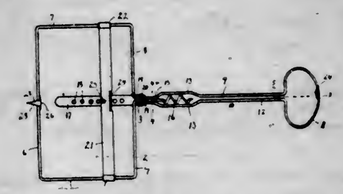
2. In a universal sound-box, a stylus bar having a laterally-projecting playing arm formed with two stylus sockets disposed in spaced, parallel relation, and a single clamp for similarly controlling both sockets in unison.

3. In a universal sound-box, an L-shaped stylus bar having its playing arm enlarged and thickened and formed with two separate stylus sockets, and a single clamp for controlling both sockets simultaneously and in the same manner.

4. In a universal sound-box, a stylus bar having a pair of separate stylus sockets, and a single clamping jaw for alternatively opening or closing both sockets simultaneously.

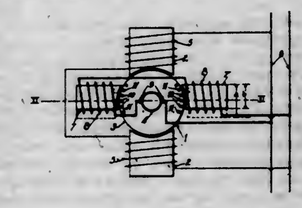
[Claims 5 to 9 not printed in the Gazette.]

1,275,915. CAN-OPENER. SAMUEL HEATH, Roxborough, Pa. Filed Mar. 3, 1917. Serial No. 152,241. (Cl. 30—3.)



In a device of the character stated, a frame and handle made from a single piece of material, a fulcrum pin carried by the frame, a cutter strip slidably mounted upon the frame and a tongue carried by the handle and projecting forwardly therefrom and coacting with a portion of the cutter strip to hold the same in its adjusted position.

1,275,916. DYNAMO-ELECTRIC MACHINE. RUDOLF E. HELLMUND, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed June 4, 1915. Serial No. 32,156. (Cl. 171—228.)



1. In a dynamo-electric machine, the combination with a plurality of equi-spaced exciting field poles, of a like number of interpoles interposed therebetween, respectively, a portion of said interpoles being angularly displaced from the mid-position, determined by the immediately adjacent exciting poles, in one direction and the remaining interpoles being similarly displaced in the other direction.

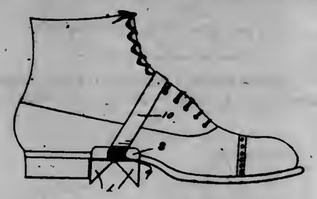
6. A dynamo-electric machine of the commutator type comprising a plurality of main polar projections and a plurality of interpolar projections, the diametrically opposite interpolar projections having a preponderance of magnetic material on one side of the corresponding plane of commutation.

[Claims 2 to 5 not printed in the Gazette.]

1,275,917. ICE-CREEPER. FRED HERMAN, Shenandoah, Pa. Filed Dec. 11, 1917. Serial No. 206,679. (Cl. 36—62.)

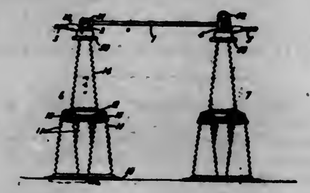
A device of the class described comprising a base plate adapted to engage under the instep of a shoe and having spurs at each end, a pair of coöperating clamping elements adjustably mounted upon the top of said base plate and interposed between the same and the sole of the shoe and having aperture disk sole engaging flanges at the outer ends thereof, the combined areas of said clamping elements being substantially equal to that of the top of the base plate, each of said clamping elements also having slots extending transversely of said flanges, fastening de-

vices extending through said slots and engaging said base plate for retaining said clamping elements in adjusted



positions, and a fastening strap having its intermediate portion extended through the apertures in said flanges and across the top of said clamping elements.

1,275,918. SWITCH. EDWARD M. HEWLETT, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed May 9, 1914. Serial No. 837,596. (Cl. 173—318.)



2. An insulating supporting structure for high voltage electrical apparatus comprising a plate, a plurality of hollow externally ribbed insulator posts mounted thereon and each secured thereto by means externally engaging its end next the plate, a platform superstructure overlying the other ends of said insulator posts and secured thereto at its side next the base, another hollow externally ribbed insulator post mounted on the other side of said superstructure and secured thereto by means externally engaging its end next the same, means for securing the element to be supported to the end of the post externally engaging the same, and a rounded, smooth-surfaced metal corona hood surrounding said last-mentioned securing means and the end of the insulator post.

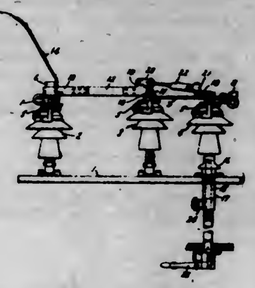
3. The combination of an insulator, means on its end for securing the element to be supported, means externally engaging the insulator for securing said means thereto, and a metal corona hood having a rounded, hat-like form and having its edge or brim portion turned over and inward interposed between the supporting means and the securing means aforesaid and extending down over said securing means and the end of the insulator.

[Claim 1 not printed in the Gazette.]

1,275,919. DISCONNECTING-SWITCH. EDWARD M. HEWLETT, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Dec. 15, 1914. Serial No. 877,344. (Cl. 175—282.)

1. In a disconnecting switch, the combination with a fixed contact carried on a fixed insulator, and a coöperating movable contact blade mounted to move in a vertical plane and carried on a second fixed insulator, of an actuating insulator held in rigid alinement with said fixed insulators and mounted to rotate about a fixed axis, and connections between said contact blade and said actuating insulator for moving said contact blade in said vertical plane in response to the rotation of said actuating member.

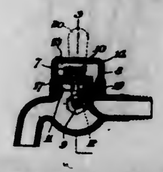
9. In combination with a fixed contact mounted on a fixed insulator, a coöperating movable contact member pivotally mounted on a second fixed insulator, and a third insulator rotatable about a fixed axis, of actuating means for said contact member comprising a crank arm mounted on said rotatable insulator and movable thereby in an actual path, and connections between said crank arm and said contact member for moving said contact member in



an arcual path in response to rotation of said crank arm, the plane of movement of said contact member being at right angles to the plane of movement of said crank arm.

[Claims 2 to 8, 10, and 11 not printed in the Gazette.]

1,275,920. VALVE. FREDERICK B. HIBBARD, Philadelphia, Pa. Filed Aug. 1, 1917. Serial No. 183,819. (Cl. 137—4.)



4. A chambered body having an intake and a discharge port and a flat valve seat surrounding the discharge port, a flat valve slidable on said seat having peripheral grooves as means for automatically rotating the valve member as it is moved to uncover the port.

11. A chambered body having a port and a flat valve seat surrounding the port, a valve member adapted to lie loosely by force of gravity upon its seat, and means for moving the valve member forward and backward and also rotatively, including a rocking member having a ball and socket connection therewith which also forms a pivot bearing for its rotative movement, said valve member having inclined grooves upon its periphery and the inlet port being so arranged relatively to said periphery that the impinging fluid flowing therethrough shall cause a rotative movement of the valve member.

12. A faucet comprising a chambered body provided with inlet and discharge ports and a flat valve seat for the discharge port, a sliding valve member therefor, mechanical means engaging the middle portion of the valve for actuating the same to open and close the discharge port, and means whereby the passage of fluid from said inlet to the discharge causes a rotative movement of said valve member.

13. A chambered body provided with inlet and discharge ports and a flat valve seat surrounding one of said ports, a sliding valve member, ball and socket means for operating said member to open and close the port surrounded by the seat, the inlet so disrected as to cause the fluid to flow tangentially to the valve member to cause its rotative movement.

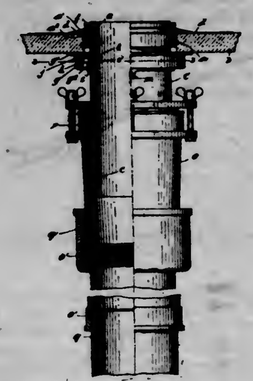
17. A chambered body provided with inlet and discharge ports, and a flat valve seat surrounding one of said ports, a sliding valve member having peripheral grooves and adapted to lie by gravity upon said seat, a lever having a loose ball and socket connection with the center of the valve member as means for operating same to open and close the port surrounded by the seat, the ports arranged

to cause a flow tangentially to said member to cause it to rotate on its ball and socket connection when the valve is in open position.

[Claims 1 to 3, 5 to 10, and 14 to 16 not printed in the Gazette.]

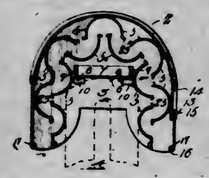
1,275,921. [WITHDRAWN.]

1,275,922. ROOF CONNECTION FOR DRAIN-PIPES. CHARLES L. HOLT, Lawrence, Mass., assignor to Holt Roof Connection Co., Lawrence, Mass., a Corporation of Massachusetts. Filed May 15, 1916. Serial No. 97,506. (Cl. 285—37.)



A roof connection comprising a roof-collar, adapted to be inserted in the roof opening and having a flange adapted to rest on the upper side of the roof, to hold the collar against downward movement therein, a pipe rigidly connected to said collar, a clamping collar, for the under side of the roof, of substantially greater internal diameter than the external diameter of the pipe and adjustable on the pipe to different positions and inclinations relative thereto, a locking wedge adapted to be forced upwardly in the space between said pipe and clamping collar, to hold the latter against downward movement on the pipe from the position to which it may be adjusted, and a yielding connection for the lower end of said pipe.

1,275,923. COVER FOR RADIATORS. JACOB HOOK, Reno, Nev. Filed May 4, 1917. Serial No. 166,442. (Cl. 237—79.)

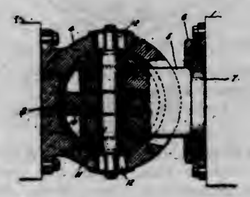


1. A cover for a radiator comprising a body, said body comprising a pair of end plates, said end plates provided with a plurality of substantially arc shaped channels struck from the inner faces thereof, said channels arranged in staggered relation with respect to each other, and a plurality of deflector plates interposed between said end plates and having their ends seated within said channels of said end plates.

4. A cover for a radiator comprising a body, said body comprising a plurality of vertical end plates, deflector plates carried by said body, a plurality of horizontal tray supporting tracks carried by said body, each track comprising a vertically extending side flange and a horizontal flange, said horizontal flange provided with a depending vertical lip at each end thereof, said lips being secured to the inner faces of said end plates, and a water containing tray slidably mounted upon said tracks.

[Claims 2 and 3 not printed in the Gazette.]

1,275,924. ELECTRIC LOCOMOTIVE. FRED B. HOWELL, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 20, 1918. Serial No. 229,695. (Cl. 105—259.)



1. In a locomotive, the combination with two trucks, of a universal joint comprising a cup-shaped member attached to the end of one truck, a cylinder rotatably mounted in said cup-shaped member, and a forked member rotatably mounted on the adjacent end of the second truck, said forked member having a hinge connection with said cylinder.

2. In a locomotive, the combination with two trucks, of a universal joint comprising a cup-shaped member attached to the end of one truck, a cylinder rotatably mounted in said cup-shaped member and provided with a central lug, and a forked member rotatably mounted on the adjacent end of the second truck, said forked member projecting through an opening wider than itself in the wall of said cup-shaped member and having a hinge connection with said lug on said cylinder.

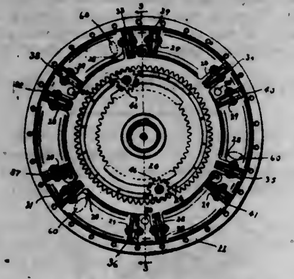
3. In a locomotive, the combination with two trucks, of a universal joint comprising a cup-shaped member attached to the end of one truck, a cylinder rotatably mounted in said cup-shaped member and provided with a central lug, and a forked member rotatably mounted on the adjacent end of the second truck, said forked member projecting through an opening wider than itself in the wall of said cup-shaped member, and a pin passing through said cylinder at right angles to the axis thereof, on which said forked member is hinged.

4. In a locomotive, the combination with two trucks, of a universal joint comprising a cup-shaped member attached to the end of one truck, a cylinder rotatably mounted in said cup-shaped member and provided with a central lug, and a forked member rotatably mounted on the adjacent end of the second truck, said forked member projecting through an opening wider than itself in the wall of said cup-shaped member and a pin passing through said cylinder at right angles to the axis thereof, on which said forked member is hinged, the ends of said pin extending into openings in the cup-shaped member, said openings permitting movement of said pin with reference to said cup-shaped member.

1,275,925. INTERNAL-COMBUSTION ENGINE. MALCOLM H. HUBBACK, Seattle, Wash., assignor of one-sixth to Nelson Sparks, Seattle, Wash. Filed Dec. 26, 1917. Serial No. 209,176. (Cl. 123—11.)

1. An internal combustion engine comprising a fixed shaft, an engine casing rotatably mounted thereon, an annular cylinder in said casing, a plurality of pistons disposed within said cylinder and movable therein with respect to each other, means for admitting fuel to said cylinder, means for igniting said fuel at predetermined points

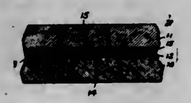
to cause certain of said pistons to be moved apart, and gear means coöperating with said pistons and said casing



and said fixed shaft to rotate said casing in response to explosions between said pistons.

[Claims 2 to 6 not printed in the Gazette.]

1,275,926. METHOD OF SHAPING WIRE. DALE C. HUGHES, Cleveland, Ohio, assignor to General Electric Company, a Corporation of New York. Filed Nov. 13, 1915. Serial No. 61,408. (Cl. 140—105.)



1. The method of shaping a coiled metal filament which consists in compressing the same between a substantially rigid member and a resilient member, said members being suitably shaped to produce the desired effect upon the wire.

3. The method of forming a bend in a metal filament which consists in compressing the same between two members, one of which has a rigid sharp-edged projection thereon, and the other of which has a slot disposed opposite to and adapted to receive said projection.

5. The method of forming a bend in a closely coiled metallic filament which consists in compressing the said filament between a substantially rigid member and a member composed of a resilient material.

7. The method of forming a bend in wire which consists in compressing the wire between a substantially rigid member and a member composed of resilient material.

[Claims 2, 4, 6, and 8 not printed in the Gazette.]

1,275,927. WATER-LEVEL GAGE. GEORGE L. HUNTRESS, Jr., Winchester, and CARL EIBYE, East Boston, Mass. Filed Sept. 5, 1913. Serial No. 788,348. (Cl. 73—54.)



1. A gage comprising, in combination, a container, a frame, a glass interposed between said container and frame, and yoke means having provision permitting its swinging transversely to the length of the gage to permit the insertion of a glass in the gage.

4. A gage comprising, in combination, a container having a lateral aperture and provision for attachment with pipe connections, a glass seated over said aperture, a frame superposed over said glass and container, and yoke means for connecting said frame with said container and having provision permitting a swinging adjustment thereof transversely to said container to uncover the same and permit insertion of a glass in the gage.

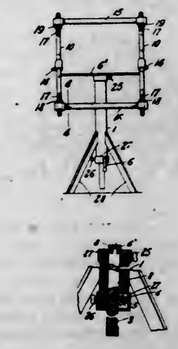
[Claims 2, 3, and 5 to 11 not printed in the Gazette.]

1,275,928. SUPPORT FOR FISHING-RODS. HENRY A. HUPPERTZ, Cincinnati, Ohio. Filed May 9, 1917. Serial No. 167,531. (Cl. 248—37.)



In a fishing rod support, the combination with a staff having a pointed end, of a holder comprising a substantially U-shaped frame formed with reversely disposed hook ends for the engagement of a fishing rod therein, that hook end with the open side of the hook at the top being provided with terminal lugs on oposite sides of which are formed inner and outer shoulders for engagement with different widths of reels carried by the rod, and means for attaching the frame to the staff so that it may be angularly adjusted thereon, whereby the reel may be made to secure the rod in the frame irrespective of the angle of inclination of the latter.

1,275,929. EMBROIDERY-FRAME. CHARLES N. HYDER, Springfield, Mass. Filed May 7, 1918. Serial No. 233,033. (Cl. 45—24.)



1. In an embroidery frame, the combination with a hollow vertical standard, an adjustable member mounted in said standard, to the upper end of which is secured a transversely located supporting bar to which the embroidery frame proper is secured by means of a pivotal connection for permitting the tilting of the frame into different positions with respect to a vertical plane passing through the axis of the standard,, the hollow standard having strengthening ferrules or clamping rings at its upper and lower ends respectively, clamping screws passing through these ferrules and the hollow standard with their inner ends engaging the vertically adjustable member for the purpose of retaining the adjustable member in different positions, said vertical member having a rack and the hollow member having a pinion supported thereon for engaging the rack for operating the vertical member.

[Claim 2 not printed in the Gazette.]

1,275,930. DUMP-CAR-DOOR-RAISING MECHANISM. FRANK S. INGOLDSBY, West Bloomfield township, Oakland County, Mich., assignor to The Ingoldsby Automatic Car Company, Cleveland, Ohio, a Corporation of West Virginia. Filed May 7, 1917. Serial No. 166,803. (Cl. 105—14.)



1. The combination with a series of hinged members, of a closing device therefor comprising a torsional rock shaft having offset sections adapted to engage the hinged members, the rock shaft having an enlarged journal block transmitting the torsion between the offset sections.

3. A rock shaft closing device for a series of hinged members comprising a series of axially alined journal blocks, laterally extending crank sections connecting the same, means connected with one of the journal blocks for rotating the shaft, the journal blocks being successively smaller in diameter, the largest diameter of block being at the actuating point.

4. A closing device for a series of hinged members comprising a series of alined journal blocks, offset crank sections connecting adjacent blocks, said sections being tubular and the end portions of adjacent sections extending into openings in one of said journal blocks, and means for actuating the offset rock shaft thus formed.

8. A dump car door closing device consisting of a plurality of axially alined journal blocks adapted to be secured to the car frame, adjacent the doors, but out of the paths thereof, a U-shaped tubular section having its opposite ends fitted into transverse openings in adjacent journal blocks and adapted to engage a door, there being several of such sections throughout the car, the journal blocks providing sufficient torsion to swing the U-shaped section while the journal block at one end of the shaft is provided with a connecting member for rocking the shaft.

[Claims 2, 5 to 7, and 9 not printed in the Gazette.]

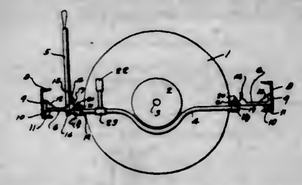
1,275,931. COMBINED COLLAR BUTTON AND BUTTONER. WILLIAM M. ISAACS, Cleveland, Ohio. Filed June 30, 1916. Serial No. 106,746. (Cl. 24—101.)



1. As a new article of manufacture, a collar button comprising a base, a neck projecting therefrom, and a combined head and buttoning member permanently carried by the neck and extending laterally therefrom toward the plane of the base and beyond the edge thereof, as and for the purpose specified.

[Claims 2 to 6 not printed in the Gazette.]

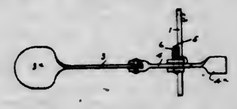
1,275,932. SUPPORT FOR BRAKE-RIGGING IN MOTOR-VEHICLES. ISIDOR M. JACOBS, Kansas City, and WILLIAM CRAMER, St. Louis, Mo., assignors, by mesne assignments, to Truck, Tractor, and Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed Oct. 26, 1917. Serial No. 198,647. (Cl. 21—8.)



1. In a device of the character described, the combination of a channel member having a flange, a bracket having a lug adapted to be supported by the said flange, a vertical part of the said bracket adapted for attachment to the said channel member, means for such attachment, a bearing borne by the said bracket, a control shaft, and a brake lever passing through the said bracket and fixed to the said control shaft.

[Claims 2 to 4 not printed in the Gazette.]

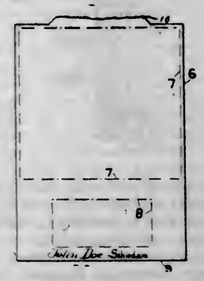
1,275,933. SPECTACLES. ROBERT J. JAMES, Seattle, Wash. Filed Oct. 15, 1917. Serial No. 196,758. (Cl. 88—41.)



1. In a device of the class described the combination of a pair of spectale bows connected together by a nose piece, a pair of similar levers, pivot pins pivotally connecting the said levers intermeditae their ends to the extreme ends of the said bows, clamp arms pivotally connected to the inner ends of the said levers and having a limited movement with respect thereto, coil springs wrapped around the said pivot pins and hooked over the outer ends of the said levers, whereby the levers and clamp arms are swung inwardly, up-turned thumb catches on the outer ends of the said levers, whereby the levers and clamp arms may be moved without taking hold of the bows.

[Claim 2 not printed in the Gazette.]

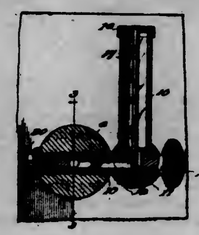
1,275,934. STATIONERY. HERMAN JANSEN, Schiedam, Netherlands. Filed Apr. 18, 1918. Serial No. 229,457. (Cl. 229—92.1.)



A letter sheet comprising at one end a correspondence field extending substantially the full width of the sheet, and an address field on the same face at the opposite end of the sheet but of materially less width than the sheet,

said sheet being longitudinally folded zigzag to leave exposed only that portion of said face which contains the address field and having the side margins of the correspondence field folded upon the mid portion of the correspondence field after the first zigzag fold is made, together with an end flap at the end of the correspondence field adapted to be folded on and secured to the exposed face of the address field, substantially as described.

1,275,935. OIL-GAGE. HOWARD FIELD JONES, Warrenton, N. C. Filed Nov. 26, 1917. Serial No. 203,983. (Cl. 73—54.)



1. In a gage of the character described, in combination, a member having a passage adapted to communicate with the interior of a receptacle, a tubular valve stem communicating with said passage and a gage mounted upon said stem, the interior of which is adapted to communicate through said passages with the interior of said receptacle when said valve member occupies a predetermined position, and means for draining said gage of its contents when turned from said predetermined position.

2. In a gage of the character described, in combination, a member having a passage adapted to communicate with the interior of a receptacle, a tubular valve stem passing through said member and communicating with said passageway, a gage glass removably mounted upon said valve stem and communicating through said tubular valve-stem with said passageway when the stem occupies a predetermined position with respect thereto, and a handle for turning said valve stem, said device having means whereby it may be conveniently drained of its contents when moved from said predetermined position.

1,275,936. SOUND-BOX FOR TALKING-MACHINES. ALVA D. JONES, Philadelphia, Pa. Filed Nov. 23, 1914. Serial No. 873,500. (Cl. 274—35.)



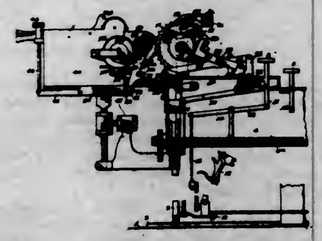
1. In a sound-box, a rear wall comprising a thickened disk of non-metallic material, an extension of softer material on the rear wall of said disk adapted to engage a tone arm, a sound conveying passage in said extension open at its rear and closed at its front portion, and a plurality of sound conveying passages converging from the front face of said disk to said passage in said extension.

2. In a sound box, a rear wall, comprising a disk of hardened rubber, an integral extension of softer rubber on said disk adapted to engage a tone arm, a sound conveying passage in said extension, open at its rear and closed at its front portion, and a plurality of sound conveying passages converging from the front face of said disk to said passage in said extension.

3. In a sound box, a rear wall, comprising a disk of hardened rubber, an integral extension of softer rubber on said disk adapted to engage a tone arm, a sound conveying passage in said extension, open at its rear and closed at its front portion, and a plurality of sound conveying passages converging from the front face of said disk to said passage in said extension, the area of said plurality of sound conveying passages being substantially the same as the area of said passage in said extension.

4. In a sound box, a rear wall, comprising a disk of hardened rubber, an integral extension of softer rubber on said disk adapted to engage a tone arm, a sound conveying passage in said extension, open at its rear and closed at its front portion, and a plurality of sound conveying passages converging from the front face of said disk to said passage in said extension, the area of said plurality of sound conveying passages being substantially the same as the area of said passage in said extension, in combination with a diaphragm and means for securing said diaphragm in juxtaposition to said front face of said disk.

1,275,937. COMBINED TYPE-WRITING AND ADDING MACHINE. LOUIS G. JULIHN, Washington, D. C., assignor to Elliott-Fisher Company, New York, N. Y., a Corporation of Delaware. Filed June 4, 1906. Serial No. 320,153. (Cl. 235—59.)



1. The combination with a typewriter including a frame, a carriage, carriage propelling mechanism, keys, and printing mechanism, of an item receiving mechanism, an operating mechanism therefor, said last named mechanisms being relatively movable by the carriage propelling mechanism to change their denominational relation, an item accumulating mechanism, and means for resetting the item receiving mechanism to cause item values to be transferred to the accumulating mechanism from the item receiving mechanism.

25. In a calculating machine, the combination with a total register, an item register, and means for operating the item register, of a traveling carriage, and an item carrier operated by the traveling carriage to shift the item register into coöperative relation with the total register.

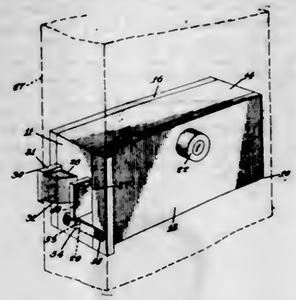
75. In a combined typewriting and calculating machine, the combination with a typewriter including printing mechanism, keys, and a movable carriage, of an item register, means for setting up an item on the item register, a total register, a transfer motor operative to reset the item register and to transfer the item value to the total register, and means operated by the typewriter carriage to move the item register into cooperative relation with the total register and to bring the motor into action.

115. In a computing device, the combination with a series of wheels, of a series of spring actuated transfer levers, a transfer lock common to the levers, and a wheel resetting lever operative to reset the wheels and to cause the transfer lock to be moved for the purpose of releasing the levers to allow the same to move into engagement with the wheels.

134. In a calculating machine, the combination with a total register, of an item register including a series of denominational members, each bearing a series of digits, means for operating said members one at a time to set up an item, a transfer motor common to the several denominational members of both registers and operative to transfer the item value to the total register, and automatic means for establishing a coöperative relation between the item and total registers and for bringing the motor into action.

[Claims 2 to 24, 26 to 74, 76 to 114, and 116 to 133 not printed in the Gazette.]

1,275,938. LOCK. ERLAND JUSELIUS, Brooklyn, N. Y. Filed Aug. 11, 1917. Serial No. 185,706. (Cl. 70—16.)



1. The combination, in a lock, with a bolt and a shield plate both being yieldingly movable in a casing adapted to be applied to a door in opposition to two sockets whereby one end of the bolt normally protrudes beyond the casing for insertion in one of the sockets, and said bolt and plate coacting whereby the shield plate will be moved interiorly of the casing when the bolt is likewise moved, of a spring actuated pawl in the casing, releasably engaging the shield plate for normally holding the plate within the casing, a rod movable inwardly and outwardly of the casing in contact with the pawl, and a spring on the casing, operable by the closing of the door to move the rod for operating said pawl whereby the shield plate will be moved outwardly of the casing into the second socket.

2. The combination, in a lock, with a bolt and a shield plate both being yieldingly movable in a casing adapted to be applied to a door in opposition to two sockets whereby one end of the bolt normally protrudes beyond the casing for insertion in one of the sockets, the bolt and plate coacting whereby the shield plate will be moved interiorly of the casing when the bolt is likewise moved, and a spring actuated pawl in the casing, releasably holding the shield plate normally within the casing, of a rod movable inwardly and outwardly of the casing in contact with the pawl, and a spring on the casing, operable by the closing of the door to move the rod for operating said pawl whereby the shield plate will be moved outwardly of the casing into the second socket.

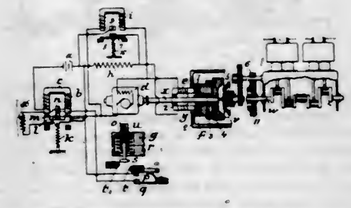
3. The combination, in a lock, with a bolt and a shield plate both being yieldingly movable in a casing adapted to be applied to a door in opposition to two sockets whereby one end of the bolt normally protrudes beyond the casing for insertion in one of the sockets, of a flange on the plate contacting with the bolt whereby the shield plate will be moved interiorly of the casing when the bolt is likewise moved, a spring actuated pawl in the casing, releasably holding the shield plate normally within the casing, a rod movable inwardly and outwardly of the casing in contact with the pawl, and a spring on the casing, operable by the closing of the door to move the rod for operating said pawl whereby the shield plate will be moved outwardly of the casing into the second socket.

1,275,939. SPRING-CLIP FOR STORAGE BATTERIES. CHARLES H. KAY, Los Angeles, and CHARLES F. HARTUNG, Alhambra, Cal. Filed Dec. 11, 1917. Serial No. 206,707. (Cl. 173—269.)



A spring clip for storage battery testing comprising a single sheet of metal punched out to form a spring portion, terminating at either end in an extension arm, each of said arms terminating in a clamping jaw, said sheet being then bent to place the jaws in coöperating relationship with each other; a connector formed of sheet metal bent to form a cylindrical socket adapted to receive a wire and having an eye with a central hole therein; a bolt and nut securing said eye to said sheet of metal; and a small projection formed on the outer edge of said eye opposite said socket and extending through an opening in said sheet so that said connector is prevented from turning with relation to said sheet.

1,275,940. STARTING APPARATUS FOR INTERNAL-COMBUSTION ENGINES. AUGUST KAZENMAIER and EUGEN BAUER, Stuttgart, Germany, assignors to the Firm of Robert Bosch, Stuttgart, Germany. Filed Mar. 6, 1914. Serial No. 822,877. (Cl. 172—239.)



1. In apparatus for starting internal combustion engines from rest, a source of electric current, a rotatable element designed to be connected with and disconnected from the engine, an electric starting motor for driving the rotatable element, an electromagnetically operated clutch which, when energized, holds the rotatable element out of connection with the engine, and which, when the motor reaches a speed appropriate for starting the engine, connects the rotatable element with the engine, and an electromagnetic switch having contacts in the circuit of the motor and the electromagnetically operated clutch and having an energizing winding calibrated to open said contacts when the current to the motor reaches a predetermined low value corresponding to the speed appropriate for starting the engine.

4. In apparatus for starting internal combustion engines from rest, a source of electric current, a rotatable element designed to be connected with and disconnected from the engine, an electric starting motor for preliminarily driving the rotatable element, a circuit breaker having an energizing winding and contacts in the circuit of the motor, a manually operated switch and connections arranged to momentarily energize the winding of the circuit breaker to engage said contacts in order to complete the circuit of the motor, and means for connecting the rotating element to the engine to start it, substantially as described.

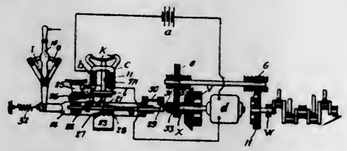
5. In apparatus for starting internal combustion engines from rest, a source of electric current, an electric

starting motor, means for connecting the motor to the engine to start it, and a circuit breaker having an energizing winding and contacts connected in the electrical circuit of the motor armature and having manually-operated means for engaging said contacts to complete the circuit to the motor and to energize said winding, the energizing winding being calibrated to release the circuit breaker and thereby open the circuit to the motor armature when the motor attains a predetermined speed appropriate for starting the engine, substantially as described.

6. In apparatus for starting internal combustion engines from rest, a source of electrical current, an electric starting motor, means for connecting the motor to the engine to start it, electrically controlled contacts in the circuit of the motor, and a starting switch for effecting the engagement of said contacts to close the circuit to the motor, said starting switch comprising two contacts spring-pressed apart and a contact closing member adapted to first engage the contacts and in the same stroke to immediately thereafter permit the separation of said contact, substantially as described.

[Claims 2 and 3 not printed in the Gazette.]

1,275,941. STARTING APPARATUS FOR INTERNAL-COMBUSTION ENGINES. AUGUST KAZENMAIER and EUGEN BAUER, Stuttgart, Germany, assignors to the Firm of Robert Bosch, Stuttgart, Germany. Original application filed Mar. 6, 1914, Serial No. 822,877. Divided and this application filed Feb. 4, 1916. Serial No. 76,205. (Cl. 172—239.)



1. In apparatus for starting internal combustion engines from rest, a source of electric current, a rotatable element designed to be connected with and disconnected from the engine, an electric starting motor for driving the rotatable element, an electromagnetic swich having contacts in the circuit of the motor and having an energizing winding calibrated to open said contacts when the current to the motor reaches a predetermined low value corresponding to a motor speed appropriate for starting the engine, mechanism, including a manually-operated lever, for connecting the rotatable element to the engine, and means preventing said mechanism from connecting the rotatable element to the engine until said contacts are opened.

2. In apparatus for starting internal combustion engines from rest, a source of electric current, a rotatable element designed to be connected with and disconnected from the engine, an electric starting motor for driving the rotatable element, an electromagnetic switch having contacts in the circuit of the motor and having an energizing winding calibrated to open said contacts when the current to the motor reaches a predetermined low value corresponding to a motor speed appropriate for starting the engine, mechanism, including a manually-operated lever for connecting the rotatable element to the engine, means preventing said mechanism from connecting the rotatable element to the engine until said contacts are opened, and automatic means for disconnecting the rotatable element from the engine after the engine starts into operation under its own power.

3. In apparatus for starting internal combustion engines from rest, a source of electric current, a rotatable element, an electric starting motor for driving the rotatable element, a clutch for mechanically connecting the rotatable element with the engine, an automatic circuit breaker having contacts in the circuit of the motor and having an energizing winding calibrated to open said contacts when the current to the motor reaches a predetermined low value corresponding to a motor speed appropriate for starting the engine, a starting lever having means to close said contacts, a member slidably mounted on the starting lever so as to be movable relatively thereto and being adapted to close the clutch, and locking mechanism arranged, when the circuit breaker is closed, to hold the slidable member in such position that the clutch is open, and arranged, when the circuit breaker is open, to permit the movement of the slidable member to close the clutch.

4. In apparatus for starting internal combustion engines from rest, a source of electric current, a rotatable element designed to be connected with and disconnected from the engine, an electric starting motor for driving the rotatable element, an electromagnetic switch having contacts in the circuit of the motor and having an energizing winding calibrated to open said contacts when the current to the motors reaches a predetermined low value corresponding to a motor speed appropriate for starting the engine, a reciprocatory starting lever having means, when moved in one direction, to close said contacts, and a guide preventing said means from closing said contacts when the starting lever is moved in the opposite direction.

1,275,942. RING-CORE. KARL B KILBORN, Akron, Ohio, assignor to The Goodyear Tire and Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed June 3, 1916. Serial No. 101,561. (Cl. 18—45.)



1. A ring core for use in building pneumatic tire carcasses including an annular body having an internal annular neck; means movable radially outwardly on each side of the neck member and adapted to be forced into engagement with the wrinkled fabric at the head of a tire built upon the core; and means for moving said first means radially to force it against the fabric for ironing out the wrinkles therein.

10. A ring core including a neck-portion, annular wedging members disposed at opposite sides of the neck-portion and movable laterally in relation thereto, expansible members encompassing said wedging members, means active on the wedging members for effecting their movement one toward the other and also the expansion of said expansible members, and means carried by the neck-portion for guiding the movement of the wedging members.

[Claims 2 to 15 not printed in the Gazette.]

1,275,943. DOOR-FRAME AND DOOR STRUCTURE FOR FURNACES. LUTHER L. KNOX, Bellevue, Pa., assignor to Blaw-Knox Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Dec. 31, 1917. Serial No. 209,635. (Cl. 122—498.)



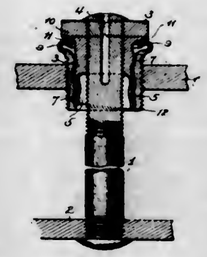
1. The combination with a door frame having vertical water cooled members, each of which is formed with a guiding offset at the inner corner of its outer side, of a hollow water cooled door having its end walls extended inwardly in the edgewise plane of said walls and beyond its seating faces, said extensions co-acting with said offsets to form guiding means for the door, the door and door frame having abutting seating portions adjacent to the end-wall guiding extensions; substantially as described.

2. The combination with a door frame having vertical water cooled members, each of which is formed with a guiding offset at the inner corner of its outer side, of a hollow water cooled door having its end walls extended inwardly beyond its seating faces, said extensions co-acting with said offsets to form guiding means for the door, the frame also having a top member formed with reduced end portions lying above the guiding recesses formed by the offsets in said vertical members; substantially as described.

4. In a door frame structure for furnaces, a hollow water cooled member whose body portion is formed from a metal sheet or plate bent upon itself to form a generally rectangular hollow section with an angular hollow offset at the inner corner of its outer side, one edge portion of said sheet or strip being extended outwardly to form a vertical attaching flange; substantially as described.

[Claim 3 not printed in the Gazette.]

1,275,944. STAY-BOLT FOR BOILERS. HARRY ANTHONY LACERDA, Schenectady, N. Y., assignor to Flannery Bolt Company, Schenectady, N. Y. Filed Oct. 25, 1917. Serial No. 198,459. (Cl. 85—1.5.)



2. A stay bolt for boilers comprising a bolt, a nut secured to the outer end of the bolt and helically grooved on its outer face and a tubular plug provided on its inner face with a helical rib which coacts with the groove in the nut, and also provided at its outer end with a resilient seat for the head of the nut.

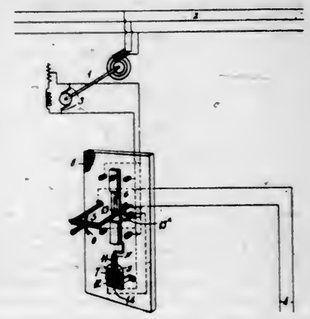
3. A stay bolt for boilers comprising a bolt, a nut secured to the bolt and provided with an inwardly projecting integral sleeve, the outer surface of the nut and its sleeve being helically grooved, and a tubular plug having a rib intermeshing with the groove in the nut and sleeve, the coöperating ribs and grooves making a loose fit so as to permit of a limited longitudinal movement of the nut and plug relative to each other.

[Claims 1 and 4 to 6 not printed in the Gazette.]

1,275,945. SWITCHING DEVICE. BENJAMIN G. LAMME, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 2, 1913. Serial No. 782,553. (Cl. 171—118.)

1. The combination with a dynamo-electric machine, of a direct-current circuit, a switching device connected thereto and having a plurality of operative positions, and automatic locking means for said switching device adapted to permit impressing only a predetermined polarity upon said circuit, irrespective of the relative polarity of said machine.

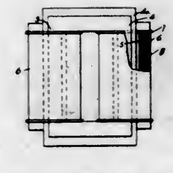
7. The combination with a dynamo-electric machine, of a direct current circuit adapted to be connected thereto, a reversing switch for impressing upon said circuit a predetermined polarity irrespective of the relative polarity of said machine, a movable stop for selectively preventing closing said switch in an incorrect position, and electromagnetic means dependent upon the relative polarity of



said machine for automatically moving said stop to the temporarily desired position.

[Claims 2 to 6 not printed in the Gazette.]

1,275,946. HIGH-REACTANCE CORE-TYPE TRANSFORMER. CHARLES S. LAWSON, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 4, 1916. Serial No. 88,806. (Cl. 175—361.)



1. A transformer comprising a core member, primary and secondary concentrically disposed and spaced coils embracing the same core leg of said member, a cylindrical insulating barrier separating said coils from each other throughout their entire length and severally providing ventilating passageways between them, and magnetizable shunts secured to said barrier and placed to increase the leakage flux between said coils.

2. A transformer comprising a core member, concentrically disposed and spaced primary and secondary coils embracing a core leg thereof, an insulating barrier interposed between said coils, and a plurality of magnetizable shunts secured to said barrier and disposed in parallel relationship to the core legs.

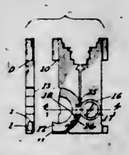
3. A transformer comprising a rectangular core member having core legs and yoke portions, primary and secondary nested coils embracing the core legs, and a plurality of magnetizable shunts interposed between said nested coils which bridge the spaces subtended by the yoke portions only of the core.

5. A core-type transformer comprising a core member having core legs and yoke portions, primary and secondary coils embracing the core legs thereof, cylindrical insulating barriers interposed between the primary and secondary coils having magnetizable shunts attached to opposite sides thereof and bridging the spaces subtended by the yoke portions only.

6. A core-type transformer comprising a core member having core legs and yoke portions, the yoke portions extending laterally beyond the core legs, primary and secondary coils embracing the core legs, and magnetizable shunts extending between the laterally projecting yoke portions to increase the leakage flux between the primary and secondary coils.

[Claim 4 not printed in the Gazette.]

1,275,947. MATRIX FOR LINE-CASTING MACHINES. FRANK D. LEA, Los Angeles, Cal., assignor of one-half to Francis M. Buck, Los Angeles, Cal. Filed Sept. 4, 1917. Serial No. 189,534. (Cl. 199—63.)

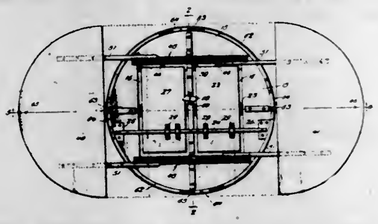


1. The combination of a mold, a matrix coöperating therewith, said matrix comprising a projectable finger construction, said finger construction being movable into and out of said mold and having an actuating part disposed at a rear lug, and means on said mold coöperating with said finger construction to project the latter.

3. A matrix comprising a projectable finger construction, said finger construction being movable into and out of a mold and having an actuating part disposed at a rear lug.

[Claims 2 and 4 not printed in the Gazette.]

1,275,948. EXTENSION-TABLE. LOUIS LENARD, Chicago, Ill. Filed Apr. 28, 1917. Serial No. 165,130. (Cl. 45—112.)



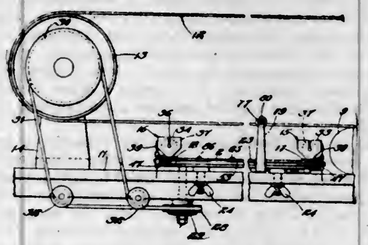
1. An extension table comprising two oppositely slidable outwardly movable top sections; parallel slide bars connected to the underside of each section and extending inwardly; a top-skirt normally in the path of said bars, movable from said path to permit extension of said top sections, and leaves folded normally under said sections adapted to be raised and fill the space between said separated sections.

3. An extension table comprising two slidably movable top sections; parallel slide bars connected to the under side of each section extending inwardly and normally within the table-skirt when the table is closed; a rotatable top-skirt normally in the path of said bars, and guides to lower the skirt out of the path of said bars when said skirt is rotated, and leaves normally folded together and located below said sections, adapted to be unfolded and raised to fill the space between said sections.

5. In combination in an extension table, having a table top base, which is centrally open and longitudinally movable top sections supported on said base; a pack of four extension leaves hinged together and foldable, one upon the other, in a stack, and contained within the open part of said top base when folded, and means at one side of the axis of the table extending across said opening to which one leaf of said pack is hinged and upon which it is longitudinally slidable, whereby each leaf of the pack lies in a plane below the longitudinal plane of the longitudinal movable section when the table is closed and in the same horizontal plane with the outwardly movable top section when the pack is unfolded, and said hinge means permitting the extension leaves of the pack to be bodily slid when the table top sections are moved into contact therewith.

[Claims 2 and 4 not printed in the Gazette.]

1,275,949. THREAD-APPLYING MECHANISM FOR CAN-LABELING MACHINES. LEVI W. LOMBARD, Waltham, Mass., assignor to John A. Moir, Boston, Mass. Filed Feb. 13, 1917. Serial No. 148,406. (Cl. 216—2.)



1. In combination with mechanism for applying labels to an object such as a can, a support for the label, a thread feed, one of said members having a movement relatively to the other to cause a thread to be laid across the label, and thread severing mechanism adjacent the path of the movable member.

2. In combination with mechanism for applying labels to an object such as a can, a thread holder at one end of the label, a traveling thread feed movable across the label, and thread serving mechanism at the side of the label opposite to said holder.

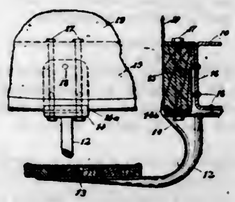
5. In a machine of the character described, label applying mechanism, a label supporting member, and a thread feeding member, one of said members having a movement at intervals relatively to the other, said movement being governed by the can to which a label is being applied.

9. In a machine of the character described, a run-way, a label holder therein, means for rolling cans along the run way, a thread feed movable over the labels in the holder, means for actuating said thread feed, and a member controlling said actuating means which projects over said run-way in a position to be engaged by a can.

17. In a machine of the character described, the improved thread holding and cutting device comprising a pair of movably mounted knives, a rock lever to which one of said knives is connected, a second lever operated by said rock lever, a link connecting said second lever to the other of said knives, and a thread holding member operatively connected to one of said knives.

[Claims 3, 4, 6 to 8, and 10 to 16 not printed in the Gazette.]

1,275,950. MOTOR-VEHICLE. ALLEN LOOMIS, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Oct. 17, 1912. Serial No. 726,298. (Cl. 21—7.)



1. In a motor vehicle, the combination with the frame side members and step brackets secured thereto, of a body resting on said step brackets and secured to the frame.

2. In a motor vehicle, the combination with the frame side members and step brackets secured thereto and having body supporting parts, of a body resting on said supporting parts, and means for securing said body to the frame.

3. In a motor vehicle, the combination of a frame side member, a body, a supporting bracket, and a foot board thereon, said bracket being fastened to the side of said frame member and supporting said body.

4. In a motor vehicle, the combination of a frame side member, a body, a supporting sill therefor, a supporting bracket, and a foot board thereon, said bracket being attached to the side of said frame member and supporting said sill.

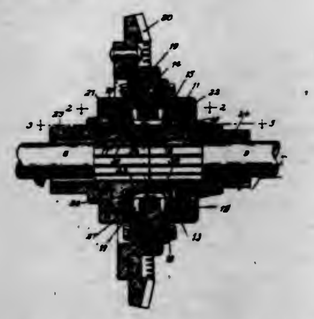
5. In a motor vehicle, the combination with the frame side members and supporting brackets secured thereto, said brackets having supporting faces arranged below the upper edge of the frame members, lips on said supporting faces, of a body having sills resting on the supporting faces of said brackets in contact with said lips.

1,275,951. CURRENT WATER-WHEEL. FRANK J. LUICK, Belding, Mich. Filed May 3, 1916. Serial No. 95,208. (Cl. 170—109.)



In an under current water wheel, a shaft, a pair of heads mounted axially on said shaft and having radial arms, the arms of one head being directly opposite the arms of the other head, a pair of blades carried by each pair of oppositely disposed arms, the ends of one blade adjacent one of the longitudinal edges thereof having angular cutaway portion, offset pins adjacent said cutaway portions pivotally mounted in said opposite pair of arms said cutaway portions having shoulders adapted to engage said pair of oppositely disposed arms to limit the blade having cutaway portions at an obtuse angle with relation to said oppositely disposed arms, whereby the current of the stream will act first against the under side of the blade, the other blade being carried pivotally by the outer ends of said oppositely disposed arms, and means to limit the outer blade at obtuse angles to said arms.

1,275,952. VEHICLE DRIVING MECHANISM. WILLIAM LUXMORE, Chicago, Ill. Filed Mar. 22, 1915. Serial No. 15,995. (Cl. 74—7.)



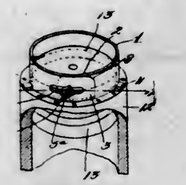
1. A device of the class described comprising a rotatable driving element, a pair of cylindrical driven members disposed concentric therewith, a spring sleeve disposed around each cylindrical member for frictionally engaging the convex wall thereof, and a clutch member angularly fixed to each of the spring sleeves for connecting the driving element with its associated driven member.

3. Differential mechanism comprising a driving member having major clutch teeth on both sides thereof, shiftable clutch members having major clutch teeth on one side in mesh with teeth of the driving member, each shiftable clutch member having minor clutch teeth on one side thereof, means carried by the shiftable clutch members to permit and to limit relative rotative movement of the shiftable clutch members and to allow said members to move toward and from the driving member, driven members each formed with minor clutch teeth on one side for operative engagement with the minor clutch teeth of the respective shiftable clutch members, each of said driven members being provided with a cylindrical portion, and a split spring sleeve disposed around each cylindrical portion for frictionally engaging the convex wall thereof, the split portion of the sleeve being provided with an extension connected with one of the shiftable clutch members.

5. A device of the class described comprising a driving part having major clutch teeth on both sides thereof, driven members mounted concentric with the driving part, each having minor clutch teeth and a cylindrical portion, a spring sleeve disposed around the cylindrical portion of each driven member, a shiftable clutch member mounted around each of the spring sleeves, each clutch member having major clutch teeth on one side thereof for engagement with the teeth of the driving part, and minor clutch teeth for engagement with the teeth of one of the driven members, and means carried by the shiftable clutch members to permit and to limit relative rotative movement of the clutch members and to allow said clutch members to move toward and from the driving part.

[Claims 2 and 4 not printed in the Gazette.]

1,275,953. CLAMP FOR HOLDING PISTON-RINGS WHEN REMOVING PISTONS. HARRY W. MCCLELLAN and OSCAR W. HANSON, Jr., Altoona, Pa. Filed Oct. 16, 1914. Serial No. 866,958. (Cl. 81—3.)



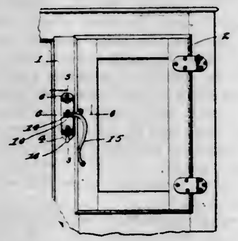
1. A device as set forth comprising a metallic strap bent to form an annular band, one end overlapping the other, one of said ends having an elongated slot, the other end carrying a bolt passing through said slot and provided with a nut to adjustably connect said overlapping ends, one of the peripheral edges of the band having a plurality of integral lugs, extending laterally and designed to lie in the path of and engage the end of a non-pressure head of a pressure cylinder, to prevent said non-pressure head from slipping over said band.

[Claim 2 not printed in the Gazette.]

1,275,954. DOOR-LATCH. GEORGE J. MCGOWAN, Grand Rapids, Mich., assignor to Grand Rapids Refrigerator Co., Grand Rapids, Mich., a Corporation of Michigan. Filed Nov. 23, 1915. Serial No. 63,112. (Cl. 70—119.)

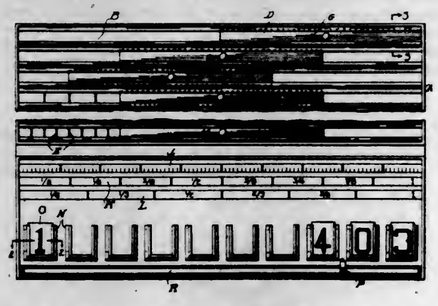
In combination with a door and door jamb therefor, a casing open at its outer end and inserted partially through the jamb, a spring in the casing, a disk positioned against the spring, a trigger pivotally mounted between the sides of said casing at the onter end thereof, said trigger including an inner shank, and an outer overhanging bill at one side of the pivot therefor and a projecting portion provided with an outer cam surface adapted to bear against said disk, a lever pivotally mounted between its ends adjacent said trigger, one end of the lever extending under the shank of the trigger, and a striker connected to the door and adapted to pass across the meeting edges of the door and jamb to thereby engage against the shank of

the trigger and turn the same as the door is closed to bring the bill over said striker and hold the same against



outward movement, substantially as and for the purposes described.

1,275,955. EDUCATIONAL APPLIANCE. JOHN F. MCGRATH, Dorchester, Mass. Filed Dec. 26, 1916. Serial No. 138,706. (Cl. 35—2.)

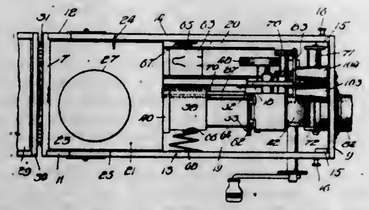


1. In a device of the class described, a plurality of contiguous elements provided with different graduations, and selectively exposable to afford comparison of equivalent portions of said elements.

5. In a device of the class described, a frame having a plurality of slideways including areas of indication denoting fractional parts of a unit, and a plurality of independently adjustable slides representing a unit of length equal to substantially half the length of the slideways and adapted to coöperate with said indications to visually indicate the relation of fractional parts of a unit to the unit.

[Claims 2 to 4 and 6 to 8 not printed in the Gazette.]

1,275,956. MOVING-PICTURE MACHINE. FRANK MCMILLAN, Glenellyn, Ill., assignor of nine-tenths to Hartley L. Replogle, Chicago, Ill. Filed Sept. 10, 1917. Serial No. 190,547. (Cl. 88—18.)



In a moving picture machine, the combination of a cabinet having on its interior a vertical longitudinally extending partition serving to divide the cabinet into a pair of vertical reel chambers, a horizontal film reel support in each chamber, a film reel on each of said supports, a door in the side wall of each chamber giving access to the interior of the same, a spring on each door in position to engage the corresponding reel, a suitable lamp housing and suitable intermittent mechanism in the upper portion of one of the chambers, and a suitable lens in the front wall of said chamber for the purpose of directing the beam of light onto the screen, substantially as described.

1,275,957. FEEDING DEVICE FOR PENCILS. WILLIAM P. MANUEL, Los Angeles, Cal. Filed Jan. 3, 1918. Serial No. 210,202. (Cl. 120—38.)



1. A pencil attachment comprising a shell having a display opening, and a holder for detachably carrying sheets on its face removably mounted within said shell so as to display said sheets.

[Claims 2 to 10 not printed in the Gazette.]

1,275,958. DRIVING-BOX SIDE-MOTION PLATE. CHARLES MARKEL, Clinton, Iowa. Filed Mar. 14, 1918. Serial No. 222,377. (Cl. 64—25.)



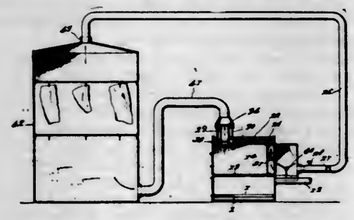
1. The combination of an axle or driving box having its hub side planed down and provided with lower dovetail seats at the lower edges of the legs thereof, a one-piece plate of vulcanized fiber secured to said hub side of said box and conforming to the contour thereof, said plate having its lower terminals beveled to fit into said seats and having also beveled spots on its upper edge, fastening bolts located between the upper portions of said plate and box, and clamps on said bolts bearing on said beveled spots and the top of said box for securing said plate in position.

2. As an improved article of manufacture, a one-piece side motion plate constructed of vulcanized fiber and having depending legs whose terminals are beveled, the top of said side plate having beveled spots on each side of the center line thereof, and a curved internal wall substantially conforming to the curvature of the brass bearing of an axle box.

1,275,959. SMOKE AND HEAT GENERATOR. JAMES N. MARTIN and ASHER SENOR BRAGAN, Birmingham, Ala. Filed June 8, 1917. Serial No. 173,573. (Cl. 34—19.)

1. The combination with a smoke house, of an improved smoke generator therefor including a fire-box, a primary smoke chamber above said fire-box, a secondary smoke chamber partly surrounding said first-named chamber, means for conveying smoke from both the primary and secondary chambers to said smoke house, and a flue for returning the smoke from the smoke house to said secondary chamber, substantially as described.

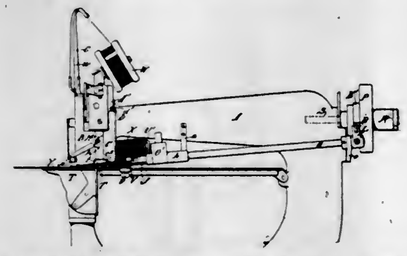
2. The combination with a smoke house, of an improved smoke generator therefor including a fire-box, a primary smoke chamber located above and non-communicating with respect to said fire-box, a secondary smoke chamber, means for conveying smoke from said primary and secondary chambers to said smoke house, a flue for returning the smoke from the smoke house to said secondary chamber, and means for introducing air to said



secondary chamber whereby to thin the smoke to the required density, substantially as described.

[Claims 3 and 4 not printed in the Gazette.]

1,275,960. AUTOMATIC FEEDING MECHANISM FOR WIRE-STITCHERS AND LIKE MACHINES. ARTHUR H. MAYNARD, Warwick, R. I., assignor to Boston Wire Stitcher Company, Portland, Me., a Corporation of Maine. Filed Mar. 15, 1916. Serial No. 84,329. (Cl. 271—44.)



1. In a feeding-mechanism for wire-stitchers or similar machines, the combination with means for supporting a stack of blanks, of a reciprocating four-motion separator operating beneath the stack to engage a plurality of the blanks at their rearward edges to feed them forward in series in overlapped relation with a step-by-step motion to bring them successively into position to be operated upon.

10. In a feeding-mechanism for feeding blanks from a pile or stack, the combination with reciprocable means operating beneath the blanks to engage them at their edges to feed them forward from the stack, of means for reciprocating the feeding-means to maintain a continuous step-by-step movement of the blanks in series to cause them to advance in overlapped relation whereby they are delivered into position one at a time.

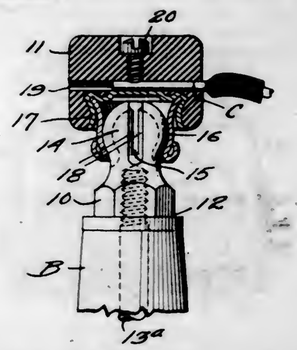
16. In a feeding-mechanism for feeding blanks from a pile or stack, the combination in a reciprocating four-motion separator, of means operating beneath the stack for engaging a plurality of the blanks at their rearward edges, and means for operating the feeding-means to select the blanks from the stack one at a time to feed them progressively forward into overlapped relation and to advance a plurality of the overlapping blanks in series with a step-by-step motion to maintain a continuous feeding of the blanks from the supply.

[Claims 2 to 9, 11 to 15, and 17 to 40 not printed in the Gazette.]

1,275,961. SNAP BINDING-POST. NICHOLAS MAYNARD, Sabetha, Kans. Filed May 4, 1917. Serial No. 166,460. (Cl. 173—259.)

1. In a binding post, the combination of a ball part, a socket part adapted to yieldably engage over the ball part, and wire-retaining means in one of said parts to clamp a wire between the parts when interfitted.

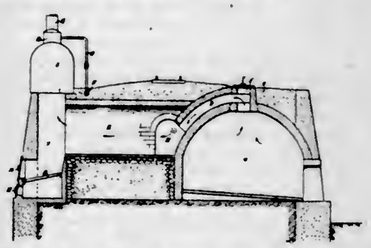
3. In a binding post, the combination of a pair of members, a slotted ball part carried by one of said members, and having shoulders within the slots thereof adapted to receive and retain the end of a wire between the sections of the ball member, a socket carried by the opposite member and adapted to engage over said ball and bind the wire against the shoulders and between the sections of the ball member.



6. In a binding post, the combination of a fixed member provided with a yieldably separable fastener part, a removable member of insulating material provided with the other part of the separable fastener, and a wire-receiving seat formed between the parts of the separable fastener adapted to crimp and bind a wire between the same.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,275,962. PLANT FOR UTILIZING WASTE HEAT. RICHARD D. MARTIN, El Reno, Okla. Filed June 20, 1917. Serial No. 175,786. (Cl. 122—7.)



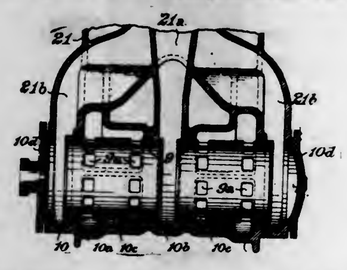
1. A plant for utilizing waste heat from coke ovens, comprising a bank of coke ovens arranged in two parallel rows, each oven having in its top a tubular neck closed by a cover, a main flue extending between the rows of ovens and in engagement with the several ovens intermediate their tops and bottoms, a curved branch flue for each oven, said flue leading from the neck of the oven below the cover thereof over the top of the oven into the main flue, a steam generating unit mounted on the bank of ovens, a furnace having a flue and arranged below the steam generating unit and between a pair of the ovens, and a flue leading from the main flue into the furnace flue.

2. A plant for utilizing waste heat from coke ovens, comprising a plurality of ovens arranged in parallel rows, each oven having in its top a tubular neck closed by a cover, a main flue extending between the rows of ovens, a branch flue for each oven, leading from the neck of the oven below its cover, to the main flue, a steam generating unit, a furnace having a flue and arranged below the said unit and between the outer portions of two ovens, and a flue leading from the main flue between the two said ovens into the furnace flue.

1,275,963. STEAM-ENGINE VALVE-CHEST. CARL J. MELLIN, Schenectady, N. Y., assignor to American Locomotive Company, New York, N. Y., a Corporation of New York. Filed Jan. 4, 1918. Serial No. 210,281. (Cl. 136—5.)

1. The combination of a motor cylinder; a valve chest communicating with each end thereof through a pair of

port openings; a bushing fitted in the valve chest and communicating by ports therewith and with the cylinder port openings; longitudinal passages formed in the valve chest and connecting the members of each pair of the bushing ports; circumferentially extending steam guide partitions interposed in said pasages; and a piston valve fitted to reciprocate in the bushing and control said ports.

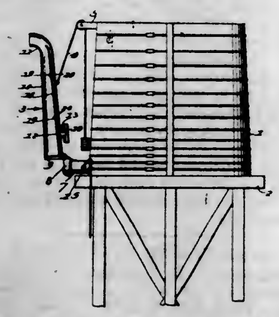


2. The combination of a motor cylinder; a valve chest communicating with each end thereof, through a pair of port openings; a bushing fitted in the valve chest and communicating by ports therewith and with the cylinder port openings; longitudinal passages formed in the valve chest and connecting the members of each pair of the bushing ports; means, interposed in said passages, betwee the members of each pair, for directing the passage of currents of steam into and out of said longitudinal passages; and a piston valve fitted to reciprocate in the bushing and control the ports thereof.

3. The combination of a motor cylinder; a valve chest communicating with each end thereof, through a pair of port openings; a bushing fitted in the valve chest and communicating by ports therewith and with the cylinder port openings; longitudinal passages formed in the valve chest and connecting the members of each pair of the bushing ports; a circumferential steam guide partition partially surrounding the bushing between the members of each pair of bushing ports; and a piston valve fitted to reciprocate in the bushing and control the ports thereof.

4. The combination of a motor cylinder; a valve chest communicating with each end thereof through a pair of port openings; a bushing fitted in the valve chest and communicating by ports therewith and with the cylinder port openings; longitudinal passages formed in the valve chest and connecting the members of each pair of the bushing ports; a circumferential steam guide partition, partially surrounding the bushing between the members of each pair of bushing ports and having its sides inwardly and downwardly tapered; and a piston valve fitted to reciprocate in the bushing and control the ports thereof.

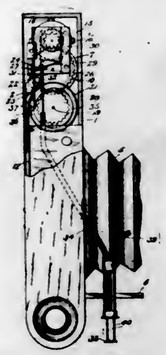
1,275,964. SPOUT FOR RAILROAD WATER-TANKS. FREDERICK METZGER, Hondo, Tex. Filed Sept. 7, 1917. Serial No. 190,204. (Cl. 137—21.)



1. A spout for railroad tanks including a hollow body having an opening adjacent one end thereof, a cowl mounted in the opening, a partition extending longitudinally throughout the body and providing an air passage, and deflecting tongues struck out from the partition and inclined in the direction of the flow of water through the body so as to assure of a creation of suction through the cowl and the air passage into the body.

2. A spout for railroad tanks including a tubular body having an elbow end and a frusto-conical valve seat mounted in the inner end of the body and adapted to be universally connected to a water tank, the body being provided with an opening adjacent the inner end, a T-joint fitted in the opening and acting as a cowl, a partition arcuate in cross section and secured longitudinally of the inner surface of the body approximately throughout the length thereof and providing an air passage, and deflecting tongues struck downwardly from the partition and arranged at an inclination in the body and in the direction of the flow of water through the spout to assure of the creation of suction through the T-joint and the air passage subsequent to shutting off the flow through the spout and preparatory to moving the spout in a raised position.

1,275,965. CAMERA. EDWIN C. MEYER, Thane, Alaska. Filed Aug. 14, 1916. Serial No. 114,737. (Cl. 242—71.)



1. The combination with a camera, of a spring-motor therein, motion transmitting means between the same and the receiving roll of the camera, a film feeding means, motion transmitting means between the same and the spring-motor, means for locking said feeding means, means operating to release the locking means and to be engaged thereby, and means for releasing said lock releasing means from such engagement.

2. The combination with a camera, of a spring-motor therein, a film feeding roll, a film receiving roll, gearing between the same and the spring-motor, a shouldered locking-cam on the shaft of the feed roll, a vibratory locking-pawl for engaging said shoulder and locking the feed-roll against the influence of the motor, means operating to disengage said pawl from the shoulder of the cam and permit rotation of the feed roll and for interlocking with and being detained by said pawl, and means for disengaging said interlocking parts.

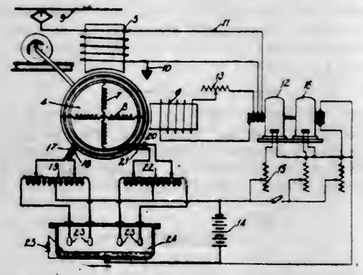
4. The combination with a camera, of a spring-motor therein, a feed roll, gearing between the spring-motor, the feed roll and the receiving roll of the camera, a shouldered locking-cam located on the feed roll shaft, a vibrator pawl for engaging and holding the same, a plunger located in the wall of the camera-case and disposed at an angle to the pawl and having a cam-projection for operating and subsequently engaging with the pawl, a return spring for the plunger, means for rotating the plunger to disengage the lug from its locking engagement with the pawl, and means for operating said rotating means.

6. The combination with a camera, of a spring-motor therein, a feed roll, a shouldered cam mounted on the shaft with the same, a vibratory spring locking-pawl for engaging the shouldered cam, gearing between the feed roll shaft and the spring-motor and between the latter and the receiving roll of the camera, a plunger mounted in the wall of the camera-case and disposed at an angle to the vibratory pawl and provided with a cam-projection adapted to vibrate the pawl and subsequently at its opposite side interlock therewith, a return-spring for the plunger, an arm extending from the plunger, a spring for normally depressing the same, a releasing-rod extending under the arm and serving when reciprocated to tilt the same against the action of its spring for the purpose of rocking the plunger and disconnecting the cam-projection from locking engagement with said pawl, and an operating cable leading to the releasing-rod.

8. The combination with a camera, of a receiving-roll, a feeding-roll, means for turning said rolls simultaneously, a locking-cam on the feeding-roll, a spring-actuated pawl engaging said locking-arm for limiting the rotation of the feeding-roll, a spring-projected plunger-rod, means carried by said plunger-rod for releasing the pawl and subsequently engaging therewith to hold the plunger-rod depressed against the action of its spring, and means for releasing the plunger-rod from the pawl.

[Claims 3, 5, and 7 not printed in the Gazette.]

1,275,966. SYSTEM OF CONTROL FOR INDUCTION-MOTORS. FRIEDRICH W. MEYER, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 24, 1915. Serial No. 16,675. (Cl. 172—274.)



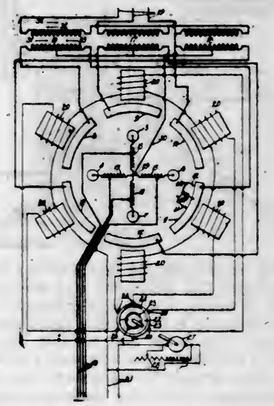
1. The combination with a polyphase induction motor provided with main and auxiliary primary windings and with a phase-wound secondary winding, of means for supplying said auxiliary winding with current displaced in phase from that supplied to the main primary windings, and means for substantially preventing the flow of watt current to said auxiliary winding.

2. The combination with a polyphase induction motor provided with main and auxiliary primary windings and with a phase-wound secondary winding, of means for supplying said auxiliary winding with current displaced in phase from that supplied to the main primary windings, and means associated with the secondary winding for substantially preventing the flow of watt current to said auxiliary winding.

6. The combination with a polyphase induction motor comprising main and auxiliary primary windings and a wound polyphase secondary member, of means for energizing said auxiliary winding with current displaced in phase with respect to that supplied to the main field winding, means for adjusting the strength of the auxiliary field to a value less than that of the main field, a source of substantially constant back electromotive force, and means for rectifying the current generated in each of the phases of said secondary member and for supplying said rectified current to said source of back electromotive force, the magnitude whereof corresponds in value to the secondary voltage that would be generated by a primary field intermediate in strength between the main and the auxiliary fields.

[Claims 3 to 5 and 7 not printed in the Gazette.]

1,275,967. FREQUENCY-CHANGER. FRIEDRICH W. MEYER, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 24, 1915. Serial No. 16,679. (Cl. 172—281.)



1. The method of supplying energy from one polyphase system to another of different and variable frequency which comprises connecting said systems by a mobile conducting member which may make contact, at one end, with each phase of one system in succession and, at the other end, with each phase of the other system in succession, and causing said conductor to make contact with the terminals of one system at a different rate than with the terminals of the other system, said rate of making contact with the second system being adjustable.

7. The combination with a polyphase system of supply, of a polyphase consumption circuit having a different number of phases, each of said systems being provided with a neutral point, a connection between said neutral points, a mobile vapor conductor adapted to make contact, at one end, with each phase of said supply system in succession and, at the other end, with each phase of said consumption circuit in succession, and means for producing an actuating magnetic field across the path of said vapor conductor at the end adjacent the terminals of said consumption circuit for the movement of said vapor conductor at any desired speed, whereby said consumption circuit is supplied with energy from said supply circuit at a different frequency and phase number.

10. The combination with an evacuated container, of an anode and a plurality of cathodes therein, means tending to establish an arc between said anode and all of said cathodes, and means for extinguishing said arc if established at some of said cathodes.

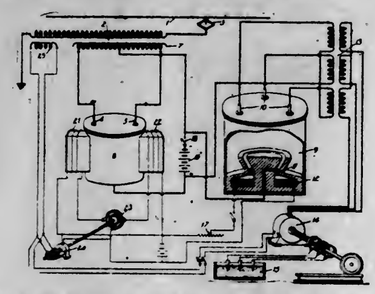
[Claims 2 to 6, 8, 9, and 11 to 13 not printed in the Gazette.]

1,275,968. SYSTEM OF DISTRIBUTION. FRIEDRICH W. MEYER, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 24, 1915. Serial No. 16,682. (Cl. 172—238.)

1. In an electric distributing system, the combination with a single-phase source, of a rectifier, a de-rectifier, a battery, and a polyphase motor, so connected that energy from said line is rectified in said rectifier, is reconverted into polyphase current in said de-rectifier, energy being derived from said battery during times of deficient energy in the single-phase system, and is delivered to said motor.

2. In an electric distributing system, the combination with a single-phase source, of a single-phase rectifier energized therefrom, a polyphase de-rectifier receiving unidirectional current from said rectifier, a polyphase motor deriving energy from said derectifier, and a battery con-

nected to supply energy to said de-rectifier when the instantaneous voltage of said unidirectional current is below the effective voltage of the derectifier output.

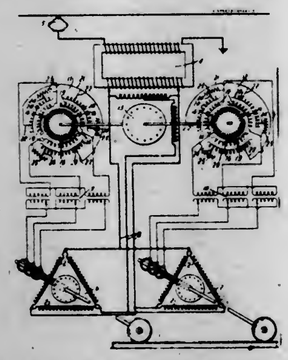


5. A system for transferring energy from a single-phase line to a polyphase line comprising a rectifier adapted for connection to a single-phase line, a polyphase de-rectifier adapted for connection to a polyphase line, a unidirectional current circuit connecting said rectifier and said de-rectifier, and a battery floating across said circuit.

6. In an electrical distributing system, the combination with a single-phase source, of a mechanical load capable of either absorbing or giving out energy, a combined single-phase rectifier and de-rectifier, a combined polyphase rectifier and de-rectifier, a polyphase motor coupled to said load, and an energy-storing device, all of said elements being so connected that, in normal operation, said single-phase converting device delivers unidirectional current to said polyphase converting device for supply to said polyphase motor as polyphase current, said energy-storing device operating to tide over instaneous periods when the energy supply of said single-phase system is less than the polyphase demand, and so that, in regenerating, said motor supplies polyphase current to said polyphase converting device for conversion into unidirectional current for supply to said single-phase converting device where it is de-rectified for supply to said single-phase line.

[Claims 3 and 4 not printed in the Gazette.]

1,275,969. SYSTEM OF LOCOMOTIVE CONTROL. FRIEDRICH W. MEYER, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 24, 1915. Serial No. 16,683. (Cl. 172—274.)



2. In an alternating-current system of distribution, the combination with a source of alternating current of one phase-number, of an induction motor of another phase-number, a rotary phase-converter for deriving currents from said source suitable for application to said motor, an alternating-current commutator machine mechanically coupled to the shaft of said phase-converter, and an adjustable transformer connected between the secondary winding of said induction motor and said commutator machine, whereby energy may be interchanged between said induction motor and said phase-converter.

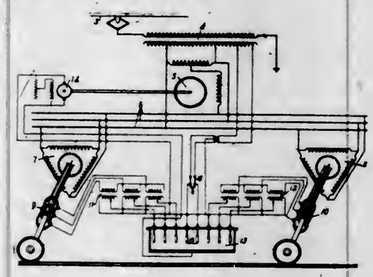
3. In an alternating-current system of distribution, the combination with a source of single-phase alternating current, of a poly-phase induction motor, a phase-converter for deriving current from said source suitable for application to said motor, and means for deriving energy from the secondary member of said induction motor in the speed variation thereof and for returning said energy to the system through said phase-converter.

6. In an alternating-current system of distribution, the combination with a source of single-phase alternating-current, of a plurality of polyphase induction motors, a phase-converter for deriving currents from said source suitable for application to said motors, and means for interchanging energy between the secondary members of said induction motors for load equalization therebetween, said last-named means being further arranged for interchanging energy between said motors and said phase-converter.

8. The method of operating a plurality of induction motors subject to unequal loads and deriving energy from a source of alternating current through a dynamo-electric phase-converter, both the primary and secondary members of said motors being dynamically connected to said phase-converter, which comprises transferring energy from the secondary member of an underloaded motor to the secondary member of an overloaded motor, when said motors are operating near synchronism, and transferring unequal amounts of energy between the secondary members of said two motors and said source through said phase-converter when operating away from synchronism, whereby the loads on said motors may be substantially equalized.

[Claims 1, 4, 5, and 7 not printed in the Gazette.]

1,275,970. SYSTEM OF LOCOMOTIVE CONTROL. FRIEDRICH W. MEYER, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 24, 1915. Serial No. 16,684. (Cl. 172—274.)



1. In a single-phase motor aggregate, the combination with a polyphase induction motor and a phase-splitting device of the rotary type for converting single-phase energy into a form suitable for said polyphase induction motor, of a direct-current motor mechanically connected to said phase-splitter and a rectifying device connected to derive energy from the secondary circuit of said induction motor and to supply said energy to said direct-current motor, whereby energy derived from the secondary member in the speed regulation thereof may be returned to the primary member thereof.

3. A system of electrical distribution comprising a source of alternating current, a converting dynamo-electric machine, an induction motor, connections from said source to said converting machine and to the primary winding of said motor, part, at least of said connections traversing said converting machine, a direct current motor mechanically coupled to said converting machine, and means for deriving energy in the form of alternating current from the secondary member of said motor, for rectifying said current, and for supplying the same to said direct current motor.

5. A system of electrical distribution comprising a source of alternating current, a converting dynamo-electric machine, an induction motor, connections from said source to said converting machine and to the primary winding of said motor, part, at least, of said connections traversing said converting machine, a direct current motor mechanically coupled to said converting machine, a rectifier, and connections for deriving alternating current from the secondary winding of said induction motor, for rectifying the same in said rectifier and for supplying the same to said direct current motor.

[Claims 2, 4, and 6 not printed in the Gazette.]

1,275,971. JACK FOR AUTOMOBILES. ANDRÉ JULES MICHELIN, Paris, France, assignor to Michelin & Cie., Clermont-Ferrand, France, a Corporation of France. Filed Dec. 27, 1917. Serial No. 209,092. (Cl. 254—103.)



1. A lifting jack comprising a substantially dust tight casing, a lifting screw journaled in said casing, gearing operable from the exterior of said casing for turning said screw, a lower nut mounted upon said screw, a tube fast to said lower nut and vertically movable in said casing, an upper nut fast to said tube, a lengthening member in the form of a hollow screw mounted over said lifting screw and engaging said upper nut, and a head carried by said lengthening member, substantially as described.

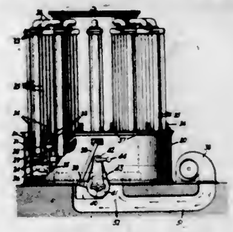
4. A lifting jack comprising a substantially dust tight casing, a lifting screw journaled in said casing, gearing operable from the exterior of said casing for turning said screw, comprising a pinion shaft projecting through said casing, a pinion driven thereby, a gear wheel driven by said pinion, and a lower nut mounted over said screw and fast to said gear wheel, a tube fast to said lower nut and vertically movable in said casing, an upper nut fast to said tube, a lengthening member in the form of a hollow screw mounted over said lifting screw and engaging said upper nut, anti-friction thrust bearings mounted in said casing and supporting said screw, and a head carried by said lengthening member, substantially as described.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,275,972. COOLING ELECTRICAL APPARATUS. VINCENT M. MONTSINGER, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed June 28, 1917. Serial No. 177,573. (Cl. 257—199.)

1. The combination with a tank for electrical appartus having a medium therein for transferring heat from said apparatus to the walls of said tank for dissipating it therefrom, of a deflector permanently disposed about said tank for directing the flow of a cooling gas along and substantially in contact with the surface of the tank, and means for supplying a cooling gas to the interior of said deflector, said deflector extending along the tank surface such distances as to interfere to but a small extent with the natural dissipation of heat therefrom when the cooling gas is not forced to flow thereover from said deflectors.

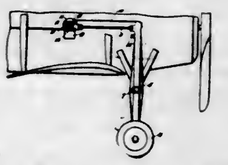
5. The combination with a tank for electrical apparatus provided on its exterior with cooling elements, having a medium in said tank for transferring heat from said apparatus to the walls of said cooling elements for dissipating it therefrom, of a deflector outside said tank and extending between adjacent cooling elements for directing the flow of a cooling gas along and substantially



in contact with the surfaces of said cooling elements, said deflector extending vertically from adjacent the bottom of said tank substantially only sufficiently far to initially direct the cooling gas into such paths, and means for supplying a cooling gas to the interior of said deflector.

[Claims 2 to 4 and 6 to 11 not printed in the Gazette.]

1,275,973. RUNNING-GEAR FOR FLYING-MACHINES. GEORGE C. MOORE, Westerly, R. I. Filed Mar. 23, 1918. Serial No. 224,281. (Cl. 244—2.)

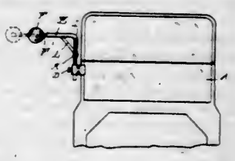


1. In a flying machine, a swinging running gear, yielding means for resisting the swinging movement of the gear, means for limiting the swinging movement of the gear, and for rendering said yielding means inoperative whereby the gear is prevented from swinging, substantially, as and for the purpose set forth.

3. In a flying machine, a running gear having a frame pivoted between the ends thereof, wheels revolubly mounted at the lower ends of the frame, yielding means connecting the upper ends of the frame to the machine, inelastic bands associated with the upper ends of the frame, and means for winding and unwinding said bands whereby said frame may be prevented from swinging and the swinging movement of the frame varied substantially as and for the purpose set forth.

[Claims 2 and 4 to 6 not printed in the Gazette.]

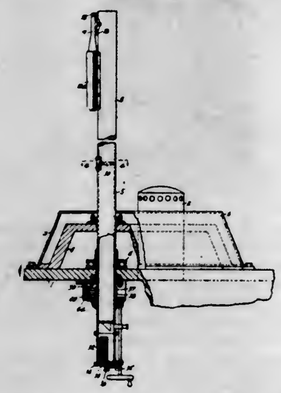
1,275,974. AUTOMOBILE-MIRROR. HARVEY G. MOSHER, Birmingham, Mich. Filed June 4, 1917. Serial No. 172,641. (Cl. 88—67.)



In an automobile mirror, the combination with the windshield frame or like support, of a bracket member connected to said support, a mirror supporting rod slidably mounted in said bracket, a mirror mounted on the end of said rod, an adjusting member movably mounted in said bracket and a connection between said last-mentioned member and the rod whereby the sliding move-

ment of said adjusting member can be utilized for quickly adjusting the mirror away from or toward the supporting frame.

1,275,975. PERISCOPE. GEORGE J. MURDOCK, Newark, N. J. Filed Jan. 18, 1916. Serial No. 72,843. (Cl. 88—1.)



1. A protecting device for periscopes having a light opening, comprising a shutter movable across such opening and when across the same covering and protecting said opening, in combination with motor means arranged at will to move such shutter over such light opening and to hold the same there or to retract the shutter so as to expose such light opening, such motor means comprising controlling means adapted for location in, and operation from within, a vessel or other inclosure to which the periscope may be fitted.

6. The combination with a periscope having a light aperture, of an inclosure for such light aperture comprising a shutter guide, a shutter arranged to move in such guide and in one position to close such light aperture tightly, and means for operating such shutter, such shutter operating means comprising controlling means adapted for location in, and operation from within, a vessel or other inclosure to which the periscope may be fitted.

10. The combination with a periscope having a light aperture, of an inclosure for such light aperture comprising a seating ring beveled on one face, a sliding shutter movable across the light aperture and in one position closing the same and having a beveled face, which, in the closing position, substantially contacts with the beveled face of said seating ring, and means for operating said shutter.

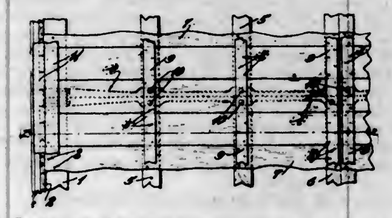
14. The combination with a periscope having a light aperture, of a shutter arranged at will to close or open such aperture, electrically controlled means for operating such shutter, and controlling means therefor comprising a rheostat having resistance within the periscope and arranged to heat the air therein and having also contacts exterior to the periscope for adjusting the resistance.

17. The combination with a periscope having a perforate lens mounting permitting air heated in the lower part of that periscope to rise to the upper portion of the periscope, of heating resistance located in heating relation to the lower portion of the periscope and means for regulating the action of such heating resistance.

[Claims 2 to 5, 7 to 9, 11 to 13, 15, and 16 not printed in the Gazette.]

1,275,976. CAR-ROOF. WALTER P. MURPHY, Chicago, Ill., assignor to P. H. Murphy Company, Parnassus, Pa., a Corporation of Pennsylvania. Filed Sept. 28, 1917. Serial No. 193,646. (Cl. 108—5.)

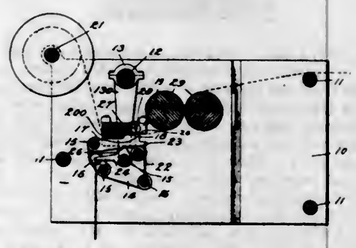
1. In an outside metal roof comprising wooden sheathing nailed to the substructure, metal roof sheets above said sheathing, and cover strips located between the metal roof sheets and the wooden sheathing in position to cover the securing nails.



2. In an outside metal roof comprising wooden sheathing nailed to the substructure, metal roof sheets above said sheathing, and strips of metal located between the metal roof sheets and the wooden sheathing in position to cover the securing nails.

3. In an outside metal roof comprising carlines, purlins, and wooden sheathing nailed to the purlins and metal roof sheets, strips of metal interposed between the metal sheets and the wooden sheathing in position to cover the nails, and bolts extending through said strips, sheathing, purlins and carlines.

1,275,977. MACHINE FOR PERFORATING SHEET MATERIAL. EDGAR W. MYERS, San Jose, Cal., assignor to Filmusic Company, a Corporation of California. Filed June 19, 1914. Serial No. 846,178. (Cl. 164—114.)



1. In a machine for perforating sheet material, a series of cutters past which the sheet to be perforated is fed, means for constantly moving said cutters to and fro, and means to selectively operate said cutters while being moved to and fro to place them in a position in advance of the point to which they are moved by said to and fro moving means.

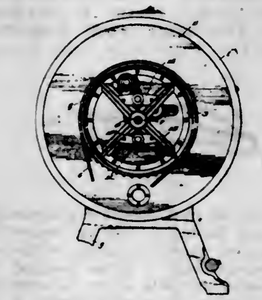
3. In a machine for perforating sheet material, the combination of a series of cutters, each having a pointed blade, a bar having a series of slots alining with said blades, a frame supporting the cutters, means for constantly vibrating said frame to move the blades to and from the slotted portion of the bar, and means for actuating each cutter separately to project its blade into an alining slot.

4. In a machine for perforating sheet material, the combination of a series of cutters having each a blade, a series of levers, one for each cutter and engaging the same, springs for holding the cutters yieldingly in engagement with their respective levers, and a vibratory frame supporting said cutters and levers, and means to rock the levers to move the cutters in the same direction in which they move with the vibratory frame.

[Claim 2 not printed in the Gazette.]

1,275,978. BUTTER-MAKING MACHINE. WILLIAM R. NICOLL, Owatonna, Minn., assignor to Davis-Watkins Dairymen's Mfg. Co., North Chicago, Ill., a Corporation of Delaware. Filed Apr. 27, 1916. Serial No. 93,818. (Cl. 259—84.)

1. In a butter making machine, a rotatable receptacle, a roller drive therefor, comprising a driving spider secured to the end thereof with radial arms spaced from the end of the receptacle, a bearing bracket secured to the arms, and a butter-working roller having a shaft extending through the end of the receptacle and with its end mounted in the bracket.



2. In a butter making machine, a rotatable receptacle, a roller drive comprising a spider secured to the end thereof with radial arms spaced from the end of the receptacle, a bearing bracket secured at its ends to the arms, a butter working roller having a shaft extending through the end of the receptacle and mounted in the bracket, and a driving gear secured at to the shaft adjacent the said bearing bracket.

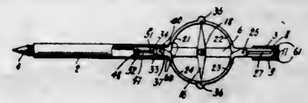
3. In a butter making machine, a rotatable receptacle, a roller drive comprising a spider secured to the end thereof with radial arms spaced from the end of the receptacle and with a central hub, a bearing bracket secured to the arms at a distance from the hub, a butter working roller having a shaft extending through the end of the receptacle and with its end mounted in the bracket, a gear secured to the shaft between the arms and the end of the receptacle, a shaft extending through the hub with a gear secured thereto in line with the other gear, and a driving chain extending around the gears.

4. In a butter making machine, a rotatable receptacle, a roller drive comprising a driving spider secured to the end of the receptacle with radial arms spaced from the receptacle, a bearing bracket secured at its ends, to adjacent arms, a butter working roller having a shaft extending through the end of the receptacle and with its end mounted in the bracket, a driving shaft mounted in the spider but not extending through the end of the receptacle, a gear secured thereto, an idler gear, means for adjustably mounting the idler gear on the end of the receptacle in line with the other gears, and a driving chain extending around all of the gears for moving them at the same time.

5. In a butter making machine, a rotatable receptacle, a roller drive therefor comprising a driving spider secured to the end of the receptacle with radial arms spaced from the end of the receptacle, a bearing bracket secured to the arms, and a butter working roller within the receptacle having a shaft extending through the end of the receptacle with its end mounted in the said bracket, a driving gear secured to the shaft adjacent the bracket, and a fluid tight connection at the end of the receptacle for the shaft which passes through it.

1,275,979. COMPASSES. MAGNUS NIELL, Stockholm, Sweden. Filed July 13, 1917. Serial No. 180,341. (Cl. 33—222.)

2. In a device of the character described, in combination, a casing, comprising two longitudinally relatively movable parts, a needle frame comprising a collapsible ring and upper and lower needle supporting members mounted to slide into said casing parts and connected thereto, a compass needle loosely supported between said members, and means for collapsing said ring upon relative movement of said casing parts toward each other.



4. In a device of the character described, in combination, a split casing, the parts of which are relatively longitudinally movable, a compass needle frame mounted within said casing comprising upper and lower needle supporting members and a collapsible ring, a magnetic needle pivotally mounted on one of said supporting members, means on the other of said members for positioning said needle for closure of said casing, and means for extending or collapsing said ring upon relative longitudinal movement of said casing parts.

5. In a device of the character described, in combination, a split casing, the parts of which are relatively longitudinally movable, a compass needle frame mounted within said casing and connected thereto and comprising upper and lower needle supporting members and a collapsible ring, a magnetic needle pivotally mounted on one of said supporting members, means on the other of said members for positioning said needle for closure of said casing, means for extending or collapsing said ring upon relative longitudinal movements of said casing parts, and locking means for holding the needle frame in extended position.

[Claims 1, 3, and 6 to 10 not printed in the Gazette.]

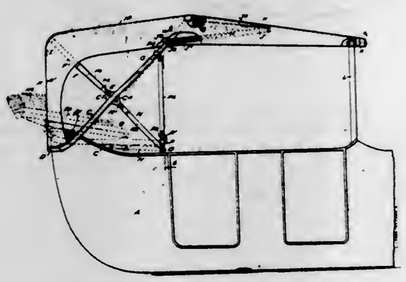
1,275,980. DOOR STOP AND HOLDER. LEWIS C. NORTON, Chicago, Ill., assignor to Norton Door Check Company, Chicago, Ill., a Corporation of West Virginia. Filed May 3, 1916. Serial No. 95,263. (Cl. 16—88.)



1. In a door holder, the combination with a door and its casing, of a shoe secured to the door and provided with a head having a friction face, a bracket secured to the door casing, a door check sustained by said bracket, an arm pivotally connected to the door check, a link pivotally connected at one end to the arm and having at its other end a head provided with a friction face, one of said heads having a non-circular aperture therein, a stud having a non-circular portion fitting said aperture and provided with a screw-threaded portion, having screw-threaded engagement with the other head whereby opening movement of the door will move said friction faces toward each other and closing movement of the door will separate said faces from each other.

2. In a door holder, the combination with a door and its door casing, of a door-holding device connecting the door and door casing and comprising two members, each having a head provided with a friction face, one of said heads having a non-circular opening extending therethrough at right angles to said face, a stud having a central non-circular portion fitting said opening and provided with screw-threaded portions at each end projecting beyond said head, one of said screw-threaded portions having screw-threaded engagement with the other head, and a nut on the other screw-threaded end of the stud whereby opening movement of the door will bring the frictional faces into frictional engagement and the stud will be maintained at all times at right angles to the friction faces.

1,275,981. VEHICLE-TOP. DOCTOR FRANKLIN OLIVER, Oakland, Cal.; Lillie F. Oliver executrix of said D. Franklin Oliver, deceased. Filed July 21, 1915, Serial No. 41,083. Renewed Apr. 26, 1918. Serial No. 230,998. (Cl. 21—62.)



1. A vehicle top, comprising side arms mounted to swing on the sides of the vehicle, a middle bow mounted to swing on the said arms at a point intermediate one end of the arms and the fulcrums thereof, the middle bow being adapted to rest on the said ends of the side arms, a rear top bow fulcrumed on the said side arms, a back bow rigidly attached to the said arms, and a covering attached at one end to the said back bow and extending over the said rear top bow to connect with the said middle bow.

2. A vehicle top, comprising side arms mounted to swing on the sides of the vehicle, a middle bow mounted to swing on the said arms at a point intermediate one end of the arms and the fulcrums thereof, the middle bow being adapted to rest on the said ends of the side arms, a rear top bow fulcrumed on the said side arms, a back bow rigidly attached to the side arms, braces pivotally connecting the said side arms with the vehicle body at points forward of the fulcrums of the said side arms, approximately vertical braces connecting the said middle bow with the vehicle body, and a covering attached at one end to the said back bow and extending over the said rear top bow to connect with the said middle bow.

3. A vehicle top, comprising side arms mounted to swing on the sides of the vehicle, a middle bow mounted to swing on the said arms at a point intermediate one end of the arms and the fulcrums thereof, the middle bow being adapted to rest on the said ends of the side arms, a rear top bow fulcrumed on the said side arms and made in sections yieldingly connected with each other, a back bow rigidly attached to the said arms, and a covering attached at one end to the said back bow and extending over the said rear top bow to connect with the said middle bow.

4. A vehicle top, comprising side arms mounted to swing on the sides of the vehicle, a middle bow mounted to swing on the said arms at a point intermediate one end of the arms and the fulcrums thereof, the middle bow being adapted to rest on the said ends of the side arms, a rear top bow fulcrumed on the said side arms and made in sections yieldingly connected with each other, a spring plate attached to the said rear top bow and extending beyond the same in a forward and rearward direction, a back bow rigidly attached to the said side arms, and a cover made in sections, of which one is the back section and the other the top section, the said back section of the cover being attached at one end to the said back bow and at the other end to the said spring plate and the said top section of the cover being attached at one end to the said spring plate and at its other end to the middle bow.

5. A vehicle top, comprising side arms pivoted intermediate their ends on the sides of the vehicle body, a back bow attached to the rear ends of the said side arms, a middle bow attached to the forward ends of the said side arms, a yielding rear top bow fulcrumed on the said side arms, and a cover extending from the said back bow over the rear top bow to the said middle bow.

[Claims 6 to 14 not printed in the Gazette.]

1,275,982. COMBINED PENCIL-SHARPENER AND ATTACHING CLIP. PERLEY L. ORMISTON, Days Creek, Oreg. Filed Apr. 17, 1918. Serial No. 229,132. (Cl. 120—93.)

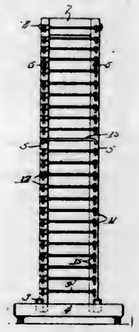


1. A device of the class described comprising a pencil encircling sleeve having a cutting element pivotally mounted on one end thereof, a casing encompassing said sharpening element, and a spring engaged with said sharpening element and said sleeve to exert its tension for holding the cutting element normally in alinement with the sleeve.

5. A device of the class described comprising a pencil encircling member, a forwardly projecting cutter pivotally mounted thereon, and a shell-like casing fixed to and encircling said cutter and having a lever to allow movement of the shell on its pivot.

[Claims 2 to 4 not printed in the Gazette.]

1,275,983. DRYING AND TRANSPORTATION TRUCK. HOLGER A. W. RASMUSSEN, Rockford, Ill. Filed Apr. 9, 1917. Serial No. 160,753. (Cl. 34—26.)

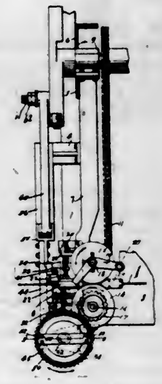


1. A drying rack of the character described comprising an upright standard, and a tier of racks mounted on the standard, each rack having horizontally spaced upper supporting surfaces each of which is centrally depressed providing downwardly inclined surfaces so that when a freshly coated article is positioned, coated side down, on a rack the article will rest on said surfaces at only spaced points of contact and the intermediate portions of the supporting surfaces will not mar the coated surface of the article.

2. In a drying rack comprising an upright standard, a plurality of drying racks, each formed of a single rod shaped to provide a pair of spaced arms joined by a cross portion, means pivotally securing the cross portions of the arms to the standard in vertically spaced relation so as to present a tier of racks, the arms of each rack being shaped to provide centrally depressed upper supporting surfaces so that a freshly coated article may be positioned, coated side down, on the supporting arms of a rack and will rest thereon only at spaced points of contact, whereby the intermediate portions of the rack arms will not mar the coated surface, and means whereby the pivoted racks may be swung into and out of operative position.

[Claims 3 to 7 not printed in the Gazette.]

1,275,984. WIRE-FEEDING MECHANISM. CHARLES F. BAILEY, Peoria, Ill., assignor to Keystone Steel & Wire Company, Peoria, Ill., a Corporation of Illinois. Filed Oct. 6, 1916. Serial No. 124,110. (Cl. 140—129.)



1. In a fence machine, in combination, a pair of feeding wheels, a driving means for one of said wheels which will alternately rotate said wheel in opposite directions, and means for moving said other feeding wheel into operative relation with said first feeding wheel as it is rotated in one direction and for moving said feeding wheel out of operative relation with said first feeding wheel as it is rotated in an opposite direction.

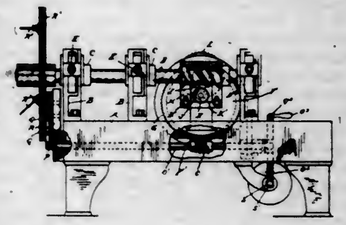
5. In a fence machine, in combination, a pair of feeding wheels, means for rotating one of said wheels in a feeding direction and alternately in a reverse direction, and means for moving said other wheel into wire coacting relation with said first-mentioned feeding wheel coincidently with the rotation of said feeding wheel in a feeding direction, and for moving said second wheel out of wire coacting relation with said first-mentioned feeding wheel coincidently with the reversing of the same.

6. In a fence machine, in combination, a pair of feeding wheels, a gear wheel connected to one of said wheels, a shaft, a gear wheel on said shaft in mesh with said feeding wheel gear, a rack-bar geared to said shaft, a crank-shaft, connections between said crank-shaft and said rack-bar for reciprocating said rack-bar, and means for moving said other feeding wheel into and out of wire coacting relation with said first feeding wheel, the movement of said second feeding wheel out of wire coacting relation with said first feeding wheel occurring coincidently with the reversing of said first feeding wheel.

[Claims 2 to 4 and 7 not printed in the Gazette.]

1,275,985. MACHINE FOR CUTTING WORMS. WILLIAM EMIL BOCK, Toledo, Ohio, assignor to The Bock Worm Gear Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 4, 1914. Serial No. 836,307. (Cl. 90—3.)

2. The combination with a frame, of a rotary blank-carrying arbor mounted thereon, a rotary head having its axis transverse to that of said arbor, a cutter arbor mounted eccentrically in said head, a cutter on said cutter arbor for engaging the blank, adapted to rotate partially on opposite sides of the horizontal plane passing through the longitudinal axis of the blank, and a change-gearing intermediate said rotary head and work-holding arbor for obtaining a predetermined ratio of movement thereof.

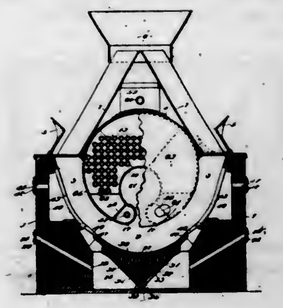


5. The combination with a frame, of a rotary blank-holding arbor mounted thereon, a rotary head having its axis transverse to that of said arbor, a cutter arbor eccentrically journaled in said head and parallel to the axis thereof, connecting mechanism between said rotary head and work-holding arbor, including a change-gear, and means for rotatively adjusting said blank-holding arbor independent of said connecting mechanism.

7. The combination with a frame, of a rotary blank-holding arbor adjustably mounted thereon, means for adjusting said arbor, a cutter arbor extending transversely to said rotary blank-holding arbor, a rotary member in which said cutter arbor is adjustably radially journaled, means for adjusting said cutter arbor, a cutter on said arbor for engaging the blank, and means for relatively rotating said rotary member and rotary blank-holding arbor in timed relation to each other.

[Claims 1, 3, 4, 6, and 8 not printed in the Gazette.]

1,275,986. FURNACE. THOMAS F. F. LEE, Brooklyn, N. Y., assignor to Gertrude M. Lee, New York, N. Y. Filed Sept. 28, 1906. Serial No. 336,629. Renewed Jan. 18, 1918. Serial No. 212,535. (Cl. 110—29.)



1. In a fuel burning apparatus, a combustion chamber through which the fuel is given a traveling movement, said combustion chamber having fuel confining walls, a refuse discharging area and a gas outlet for the escape of products of combustion, means to substantially confine the combustion supporter and gases to the body of the fuel and to cause them to travel in the direction of movement of said fuel to the said outlet and discharging area, means for feeding the combustion supporter in regulable quantities to the fuel at intervals along the path of movement thereof, the quantites of the said fuel and of the combustion supporter being so regulated and proportioned relative to each other that the fuel is substantially completely burned.

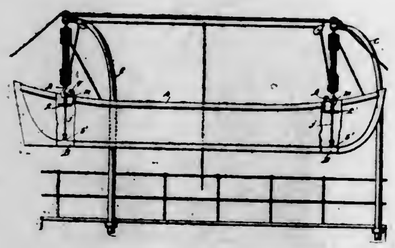
16. In a fuel burning apparatus, a boiler having tubes, a stack, a combustion chamber through which the fuel is given a traveling movement, said combustion chamber

having fuel confining walls, a refuse discharge area and an outlet for the products of combustion; means to cause the said fuel and products of combustion to move through the combustion chamber in the same general direction to the gas outlet, means for feeding the combustion supporter to said moving fuel bed in quantities so regulated as to effect a proper admixture of same, at intervals along the path of movement thereof, the quantities of said fuel and of the combustion supporter being so regulated and proportioned, relative to each other that the fuel is substantially completely burned, and means to vary the quantity of combustion supporter supplied; said gas outlet being constricted in area to effect the flow of the required volume of gases through said combustion chamber; said boiler tubes having a combined area sufficient to allow the free passage of gases from said outlet, and said stack so proportioned in its area and height as to effectually coöperate with the other essential parts of said fuel burning apparatus.

24. In a fuel burning apparatus, a combustion chamber having fuel retaining walls, containing a refuse outlet, an outlet for the gaseous products of combustion, located in the neighborhood of said refuse outlet, one of said walls consisting of a water cooled surface, an auxiliary chamber for the reception of combustion products within it, an inlet for supplying fuel and inlets for the supplying of combustion supporter, means to cause the fuel, combustion supporter and gaseous products of combustion to move in the same general direction as a substantially commingled body of solid and gaseous matter from the supplying sources of both to said refuse and gas outlets, means to so distribute the combustion supporter to said fuel column, from the fuel supply source to and through the refuse discharging area, that the decreasing solid carbon content of the fuel column and the increasing volume of gaseous products are constantly supplied with combustion supporter, each in the quantity required for substantially complete combustion.

[Claims 2 to 15, 17 to 23, and 25 not printed in the Gazette.]

1,275,987. DEVICE FOR SUSPENDING SHIPS' BOATS FROM DAVITS. OWEN J. MCGOWAN, Brooklyn, N. Y. Filed May 22, 1918. Serial No. 236,043. (Cl. 9—22.)

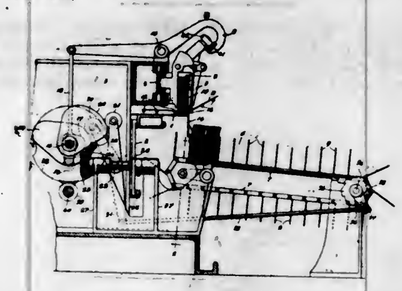


2. In life-boat davit apparatus, the combination of a metal life-boat having a metal keel, automatic releasing device for suspending and releasing said life-boat, a suspending shackle and a suspension rod movably connected at the upper end with said shackle, and a clevis on the lower end of said suspension rod connected with said keel of said life-boat.

5. In life-boat suspending apparatus, the combination of a life-boat having a metal keel, davits and blocks and falls for raising and lowering said life-boats, automatic releasing hooks, a loose swiveled connection of said hooks with said blocks, shackles engaging said hooks, metal suspension rods having a hinged connection at their upper ends with said shackles and clevises on the lower ends of said suspension rods connected with said keel.

[Claims 1, 3, and 4 not printed in the Gazette.]

1,275,988. DELIVERY MECHANISM. CHARLES A. JUENGST, Croton Falls, N. Y., assignor to American Assembling Machine Company, a Corporation of Delaware. Filed Oct. 31, 1916. Serial No. 128,704. (Cl. 193—48.)



1. A book covering machine comprising: a horizontally disposed and continuously moving book conveyer having a delivery point, clamps on said conveyer for clamping the sides of books to carry them in an upright position with their backs lowermost and exposed, means for opening a clamp at the delivery point of said conveyer, and a device extraneous of the book conveyer and located at the delivery point thereof for receiving a book on the run from said conveyer, said device including means movable in the same direction as the book conveyer for engaging the back of a book substantially at the moment of its release from the clamp and for supporting it in an upright position.

5. A book covering machine comprising: a book conveyer having a delivery point, clamps on said hook conveyer for clamping the sides of the books to carry them in an upright position with their backs lowermost and exposed, means for opening a clamp at the delivery point of book conveyer, a delivery conveyer below said book conveyer adapted to receive a book in an upright position with its back lowermost, and transfer means including a shelf at said delivery point having an opening cut therein, for engaging the back of a book as it is released from the clamp of the book conveyer, and means for moving said shelf with its cut out portion into straddling position with respect to the delivery conveyer to place the book with its back lowermost on said delivery conveyer.

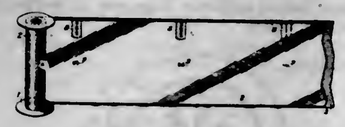
7. A book covering machine comprising: a continuously moving book conveyer including book holding clamps, a movable cam operated at intervals to open a plurality of said clamps to release a plurality of books, and means for delivering the plurality of books received from said clamps.

8. A book covering machine comprising, a movable book conveyer having clamps supporting a book in an upright position with its back lowermost, a delivery conveyer in a plane different from that of the book conveyer, supporting means which when in book receiving position moves substantially in the plane of the back of the book carried by clamps of the book conveyer, and substantially at the same speed and in the same direction as the book conveyer, means for opening a clamp thereby releasing a book from the book conveyer when said supporting means is in book receiving position, and means for moving said supporting means into the plane of the delivery conveyer.

[Claims 2 to 4, 6, and 9 to 12 not printed in the Gazette.]

1,275,989. PHOTOGRAPHIC FILM. FRANK W. LOVEJOY, Rochester, N. Y. Filed Apr. 8, 1918. Serial No. 227,404. (Cl. 95—1.1.)

1. As an article of manufacture, a sensitive photographic film sheet having an area thereon to receive a picture and a backing strip for said film, said backing strip having a visible symbol thereon for identifying said area, and said film sheet having therein adjacent said area a latent developable symbol corresponding to said visible symbol on said strip.



2. As an article of manufacture a sensitive photographic film sheet having areas to receive a series of pictures, and a backing strip for said film, said backing strip having thereon a series of visible identifying symbols and said film sheet having therein adjacent said areas a series of latent developable symbols corresponding to said symbols on said strip.

1,275,990. METHOD OF APPLYING RAIL-BONDS. CHARLES R. STURDEVANT, Worcester, Mass., assignor to The American Steel and Wire Company of New Jersey, Hoboken, N. J., a Corporation of New Jersey. Filed June 1, 1918. Serial No. 237,742. (Cl. 22—204.)



1. The method of uniting separate metallic members which consists in applying a carbon mold to the surface of one member, electrically heating the mold and opposite surface of the member in contact therewith, adding a fusible flux to the mold cavity to prevent oxidation of the heated surface of said metallic member and assist in the conduction of heat thereto, fusing metal within the mold cavity and thereby displacing the molten flux, inserting an end of the second metallic member in the molten metal within the mold cavity, and then permitting the parts to cool, and thereby welding said separate metallic members.

3. The method of bonding rails which consists in applying a carbon mold to the rail at the point of attachment of the bond terminal, electrically heating the mold and opposite surface of the rail, adding a fusible flux to the mold cavity to prevent oxidation of the heated surface of the rail, fusing sufficient metal in the mold cavity to form a bond terminal, inserting the end of a bond conductor within the molten metal in the mold cavity, and then allowing the parts to cool, and thereby simultaneously forming the bond terminal and uniting the rail and conductor to the terminal.

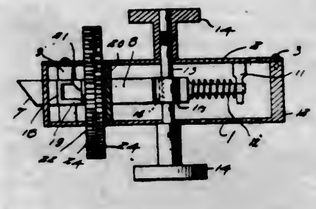
4. The method of bonding rails which consists in applying a carbon mold to the rail at the point of attachment of the bond terminal, heating the mold and adjacent rail surface, adding a fusible flux within the mold cavity to aid in heating the rail surface opposite the mold cavity and prevent oxidation thereof, fusing metal in the mold cavity and thereby displacing the fused flux with sufficient molten metal to form a bond terminal, inserting an end of the bond conductor in the molten metal and permitting the heated parts to cool, and thereby simultaneously forming the bond terminal and uniting the terminal, rail and bond conductor.

6. The method of bonding rails which consists in applying a carbon mold to the rail at the point of attachment of the bond terminal, electrically heating the mold and contacting surface of the rail, melting a fusible flux within the mold cavity to thereby prevent oxidation and assist in conducting heat from the mold to the rail, fusing metal in the mold cavity and thereby displacing fused flux in supplying molten metal in the mold cavity, inserting an end of the bond conductor in the molten metal, allowing the molten metal to solidify and thereby attach the bond conductor to the rail, and then removing the carbon mold.

8. The method of bonding rails which consists in applying a carbon mold to the rail at the point of attachment of the bond terminal, electrically heating the mold and contacting surface of the rail and raising the temperature of the mold to incandescence in the heating operation, melting a fusible flux within the mold cavity to thereby assist in conducting heat from the mold to the rail, fusing a metal pencil in the mold cavity and thereby displacing fused flux therein, inserting the end of the bond conductor in the molten metal within the mold cavity, and then allowing the molten metal to cool and solidify and thereby weld the bond conductor to the rail, and then removing the carbon mold.

[Claims 2, 5, and 7 not printed in the Gazette.]

1,275,991. COMBINATION-LOCK. FRANCISCO L. TAYLOR, Monclova, Mexico. Filed June 2, 1917. Serial No. 172,464. (Cl. 70—53.)



1. A lock comprising a casing having an opening in one end wall, a locking bolt slidable in said casing and opening and having its inner end bifurcated, a lug formed on said casing and disposed in the bifurcated end to act as a stop and guide to the locking bolt, means urging the bolt outwardly of the casing, means for retracting the bolt, a wall in said casing, a pin secured to said wall, disks journaled on said pin and having notches in the peripheries thereof and the unequally spaced notches of one disk being smaller than the notches of the other disk, and a substantially U-shaped dog formed on the locking bolt and having one arm portion longer than the other and tapered, the arm portions adapted to extend through a certain pair of notches in the disks when properly alined and the tapered arm portion adapted to extend into the smaller notch of the pair of alined notches.

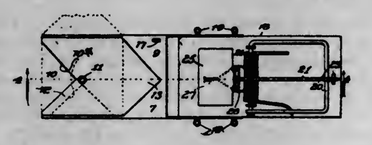
2. A permutation lock including a sliding bolt, bolt retracting means, rotatably mounted disks provided in their peripheries with unequally spaced notches, certain of the notches in one of said disks being narrower than the others in said disk and than those in the other disk, and a lug carried by said bolt and having a pair of arms of unequal lengths, said arms being spaced apart a distance equal to the distance between a pair of notches in each of said disks, and said longer arm having a reduced extension to enter one of the narrower notches when the disks are not properly set.

1,275,992. [WITHDRAWN.]

1,275,993. ANIMAL-TRAP. ERNEST L. SPANGLER, Chicago, Ill. Filed June 15, 1918. Serial No. 240,129. (Cl. 43—21.)

5. An animal-trap comprising an open-bottomed housing, a runway extending from the forward end of the housing, a spring-pressed striker-arm on the runway provided with a latch for securing it in the tensioned condi-

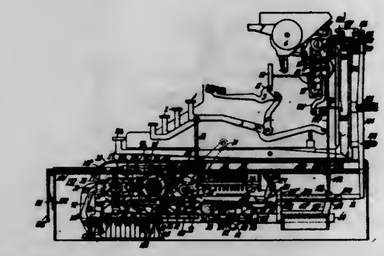
tion of the spring, a catch pivotally supported on the runway in position to be engaged by said latch when extended across the striker-arm, and a light spring bearing



against said catch to maintain it normally in forwardly tilted position.

[Claims 1 to 4 and 6 not printed in the Gazette.]

1,275,994. COMBINED TYPE-WRITING AND COMPUTING MACHINE. BURNHAM C. STICKNEY, Elizabeth, N. J., assignor, by mesne assignments, to Underwood Computing Machine Company, New York, N. Y., a Corporation of New York. Filed Oct. 21, 1913. Serial No. 796,426. (Cl. 235—60.)



1. In a computing machine, the combination, with a plurality of registers, and actuating means therefor; of state-control mechanism individual to each register; a lock for each state-control mechanism; a set of releasing devices, one for each lock, grouped close together on the frame of the machine; a traveling carriage; and carriage-carried means arranged to selectively engage and operate any or all of said releasing devices at a given point in the traverse of the carriage.

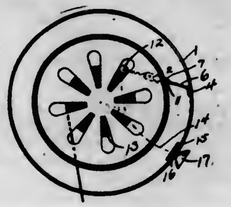
11. The combination, with a plurality of registers normally performing addition, and actuating means therefor; of mechanism individual to each register for causing the same to perform subtraction; a lock for each of said mechanisms; a set of releasing devices, one for each lock, grouped close together on the frame of the machine; a traveling carriage; and carriage-carried means arranged to selectively engage and operate any or all of said releasing devices at a given point in the traverse of the carriage.

22. The combination with a series of registers; of actuating means therefor; a carriage; means controlled by the carriage to determine whether addition or subtraction shall be performed on each register; and separately-operable manual means individual to each register and operable manually independently of the other registers, for silencing the associated carriage-controlled determining means.

[Claims 2 to 10, 12 to 21, and 23 to 45 not printed in the Gazette.]

1,275,995. AUTOMATIC CHANGE-OVER SIGNAL FOR MOTION-PICTURE MACHINES. VICTOR WOOD, Fort Worth, Tex., assignor of one-half to De Witt C. Feegles, Forth Worth, Tex. Filed May 9, 1918. Serial No. 233,543. (Cl. 33—169.)

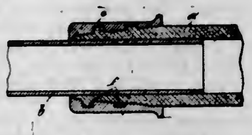
1. A signaling device for motion picture machines comprising in combination with a film reel and its casing, an extensible striking member hingedly connected to the interior of said casing and provided with a roller adapted to bear against the film, and a sounding member attached to said casing and provided with a plunger having an impact face of relatively large area to receive the impact of said roller.



2. A signaling device for motion picture machines comprising in combination with a film reel and its casing, a striking member hingedly connected to said casing and consisting of a sleeve having right and left interior threads and two rod or shaft members engaging said threads and a roller carried by one of said members adapted to bear against the film, and a sounding member attached to said casing and adapted to receive the impact of said roller.

3. A signaling device for motion picture machines comprising in combination with a film reel and its casing, a striking member hingedly connected to said casing and consisting of a sleeve having right and left interior threads and a rod or shaft in two parts engaging the threads of said sleeve and held in place thereby and jam nuts bracing said parts against said sleeve and a roller carried by said striking member adapted to bear against the film, and a sounding member consistinf of a bell attached to said casing and a plunger for striking said bell provided with an impact member adapted to receive the impact of said roller.

1,275,996. REMOVABLE COUPLING-SLEEVE. EDMOND JULES FRANÇOIS AUDEMARS, Paris, France. Filed June 5, 1917. Serial No. 173,061. (Cl. 285—84.)



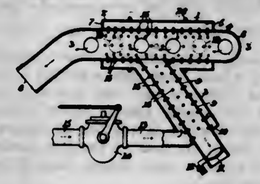
1. A detachable pipe coupling for detachably assembling a tube of hard material and a tube of elastic material consisting in the combination of a tube of hard material, a tube of elastic material whose end is fitted upon the end of the tube of hard material, and a coupler with an internal conical surface designed to be fitted upon the end of the tube of elastic material and provided with sunken portions upon the internal conical surface, the outer parts of these sunken portions being laid out according to a cylindrical surface; substantially as described and for the purpose set forth.

2. A detachable pipe coupling for detachably assembling a tube of hard material and a tube of elastic material, consisting in the combination of a tube of hard material; a tube of elastic material whose end is fitted upon the end of the tube of hard material; and a coupler with an internal conical surface designed to be fitted upon the end of the tube of elastic material and provided with sunken portions upon the internal conical surface, the outer parts of these sunken portions being laid out according to a cylindrical surface coaxial with the conical surface, substantially as described and for the purpose set forth.

[Claim 3 not printed in the Gazette.]

REISSUES.

14,501. KEROSENE-VAPORIZER. ALEXIS L. LAMAR, Pittsburg, Kans., assignor, by direct and mesne assignments, to Charles F. Dike, Joplin, Mo. Filed Mar. 28, 1918. Serial No. 224,348. Original No. 1,222,548, dated Apr. 10, 1917, Serial No. 109,437, filed July 15, 1916. (Cl. 257—241.)



1. An engine manifold comprising an intake manifold consisting of a horizontally disposed manifold pipe, and an extension pipe extending downwardly from the horizontal section, a hydrocarbon intake pipe connected to the lower end of said depending extension, said intake manifold being provided with outlet openings, an exhaust manifold disposed through and within the intake manifold in spaced relation to the walls thereof, an exhaust pipe extension disposed through and in spaced relation to the walls of the depending section of the intake manifold, and a valve arranged in the lower end of said exhaust pipe extension adapted to control the heat transmitting efficiency of the exhaust manifold within the intake manifold.

2. An engine manifold comprising an intake manifold having outlet openings therein, an extension pipe projecting from said intake manifold, a hydro-carbon supply pipe connected to said extension, an exhaust manifold disposed through and in spaced relation to the walls of the intake manifold inlet, arms projecting laterally from the exhaust manifold through said intake manifold, and exhaust pipe extension extending through and in spaced relation to the walls of the intake extension, and heat transmitting means carried by said exhaust manifold and exhaust extension pipe.

3. An engine manifold comprising an intake manifold, consisting of a horizontally disposed manifold, and an extension pipe extending downwardly from said horizontal manifold, a hydrocarbon intake pipe connected to the lower end of said depending extension, said intake manifold being provided with outlet openings, an exhaust manifold disposed through and in spaced relation to the walls of the intake manifold, an exhaust pipe extension disposed through and in spaced relation to the walls of the depending section of the intake manifold, heat transmitting pins disposed on the inner and outer surfaces of the exhaust manifold and the exhaust depending section, and a valve arranged in the lower end of said exhaust pipe depending section, adapted to be actuated to control the heat transmitting efficiency of said exhaust manifold, exhaust depending section, and heat transmitting pins carried thereby.

4. An engine manifold comprising an intake manifold consisting of a horizontally disposed manifold pipe, and an extension pipe extending downwardly from the horizontal section, a hydrocarbon intake pipe connected to the lower end of said depending extension, said intake manifold being provided with outlet openings, an exhaust manifold disposed through and within the intake manifold in spaced relation to the walls thereof and formed with a main exhaust outlet, a branch exhaust pipe extension disposed through and in spaced relation to the walls of the depending section of the intake manifold, and a valve arranged in the lower end of said exhaust pipe extension adapted to afford a variable auxiliary outlet for escape of exhaust gases and thereby to control the heating effect of the exhaust manifold within the intake manifold.

5. An engine manifold comprising an intake manifold consisting of a horizontally disposed manifold pipe, an inclined extension pipe extending downwardly from the horizontal section, an air and fuel intake passage leading into the lower end of said depending extension, said intake manifold being provided with outlet openings adapted to communicate with the cylinders of the engine, an exhaust manifold disposed through and within the horizontal section of the intake manifold in spaced relation to the walls thereof and formed with a main exhaust outlet for one end thereof, a branch exhaust extension disposed through and in spaced relation to the walls of the depending section of the intake manifold and means for permitting and controlling escape of exhaust gases from the lower end of said exhaust pipe extension.

6. An engine manifold comprising an intake manifold consisting of a horizontally disposed manifold pipe, an inclined extension pipe extending downwardly from the horizontal section, an air and fuel intake passage leading horizontally into the lower end of said depending extension, said intake manifold being provided with outlet openings adapted to communicate with the cylinders of the engine, an exhaust manifold disposed through and within the horizontal section of the intake manifold in spaced relation to the walls thereof and formed with a main exhaust outlet for one end thereof, a branch exhaust extension disposed through and in spaced relation to the walls of the depending section of the intake manifold and having an auxiliary exhaust outlet at the lower end thereof.

7. An engine manifold comprising an intake manifold and an exhaust manifold, one of said manifolds being disposed through and within the other manifold in spaced relation to the walls thereof, said intake manifold consisting of a horizontally disposed manifold pipe, an inclined extension pipe extending downwardly from the horizontal section at an acute angle thereto, an air and fuel intake passage leading to the lower end of said depending extension at an acute angle thereto, said intake manifold being provided with outlet openings adapted to communicate with the cylinders of the engine, and said exhaust manifold consisting of a horizontally disposed manifold pipe provided with a main exhaust outlet and disposed in spaced relation to the walls of the intake manifold, a branch exhaust extension disposed in spaced relation to the walls of the depending section of the intake manifold, and a valve arranged in the lower end of said exhaust pipe extension adapted to afford a variable auxiliary outlet for escape of the exhaust gases and thereby to control the heating effect of the exhaust manifold upon the intake manifold.

8. An engine manifold comprising an intake manifold and an exhaust manifold, one of said manifolds being disposed through and within the other manifold in spaced relation to the walls thereof, said intake manifold consisting of a horizontally disposed manifold pipe, an inclined extension pipe extending downwardly from the horizontal section, an air and fuel intake passage leading to the lower end of said depending extension at an acute angle thereto, said intake manifold being provided with outlet openings adapted to communicate with the cylinders of the engine, and said exhaust manifold consisting of horizontally disposed manifold pipe provided with a main exhaust outlet and disposed in spaced relation to the walls of the intake manifold, a branch exhaust extension disposed in spaced relation to the walls of the depending section of the intake manifold and means for permitting and controlling escape of exhaust gases from the lower end of said exhaust pipe extension.

9. An engine manifold comprising an intake manifold and an exhaust manifold, one of said manifolds being disposed through and within the other manifold in spaced relation to the walls thereof, said intake manifold consisting of a horizontally disposed manifold pipe, an inclined extension pipe extending downwardly from the horizontal section, an air and fuel intake passage leading

to the lower end of said depending extension at an acute angle thereto, said intake manifold being provided with outlet openings adapted to communicate with the cylinders of the engine, and said exhaust manifold consisting of a horizontally disposed manifold pipe provided with a main exhaust outlet and disposed in spaced relation to the walls of the intake manifold, a branch exhaust extension disposed in spaced relation to the walls of the depending section of the intake manifold and having an auxiliary exhaust outlet at the lower end thereof.

14,502. ACCOUNT DEPOSIT-BOOK. FRIEND W. SMITH, Jr., Bridgeport, Conn., assignor, by mesne assignments, to George E. Carhart, New York, N. Y. Filed July 5, 1918. Serial No. 243,478. Original No. 1,252,961, dated Jan. 8, 1918, Serial No. 125,115, filed Oct. 11, 1916. (Cl. 283—59.)



1. A deposit book adapted, by the validation of each sheet by a bank official, to indicate that the previous payments have been made and likewise to indicate the date of the next payment, said sheet thus validated being adapted to be removed from the book and retained by the bank as a record of payment as the next succeeding sheet is validated, comprising a plurality of detachable leaves, said leaves throughout having a common designation and an indicia of the amounts to be paid and also being sequentially marked, each leaf having a space for the validation thereof by the marking thereon of the date when the deposit becomes payable.

2. A deposit book adapted, by the validation of each sheet by a bank official, to indicate that the previous payments have been made, said sheet thus validated being adapted to be be removed from the book and retained by the bank as a record of payment as the next succeeding sheet is validated, comprising a plurality of detachable leaves which throughout have a common designation and an indicia of the amounts to be paid and also are sequentially marked and have a space for the validation thereof

3. An installment account book which comprises a plurality of leaves each consisting of a blank binding stub and a detachable sheet bearing a sequential mark, a mark common to all of the sheets, and an indicia of the amount to be paid thereon and also providing a place for a suitable validating mark, said book being adapted, on the removal of the sheets at intervals and the validation of the first of the sheets remaining, to serve as a receipt for the payment of the amount called for by the sheet or sheets which have been removed.

4. The method of installment payment accounting which comprises issuing to the person who is to make the payments of a book with detachable sheets, removing therefrom and retaining the first and each succeeding sheet in turn on payment of the amount called for thereby, and placing on the first of the sheets remaining after each payment a suitable mark to serve as a receipt for the holder of the book that the amount called for by the sheet or sheets removed has been paid.

5. The method of installment payment accounting which comprises issuing to the person who is to make the payments, to be presented with each payment and retained until the account is closed, a coupon book containing a series of detachable sheets each bearing a serial number, a mark common to all of the sheets, and an indicia of the amount to be paid, removing therefrom and filing the first and each succeeding sheet in turn on the payment of the amount called for thereby, and receipting for the amount paid on the sheet or sheets removed by placing a suitable mark on the first of the sheets remaining in the book.

14,503. HOSE-CLAMP. ALBIN P. SWAIDMARK, Hackensack, N. J., assignor to Universal Industrial Corporation, Hackensack, N. J., a Corporation of Delaware. Filed May 15, 1918. Serial No. 234,799. Original No. 1,219,882, dated Mar. 20, 1917, Serial No. 98,587, filed May 19, 1916. (Cl. 24—19.)

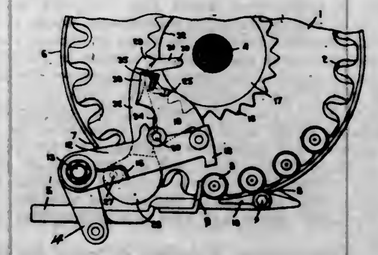


1. A hose clamp, comprising a ribbon adapted to be wrapped around a hose, said ribbon having a perpendicular loop formed adjacent one end thereof, and a bolt seated in said loop, said ribbon being provided with spaced holes each of which is adapted to receive said bolt to adjust said ribbon to hose of varying diameters, and being weakened between said spaced holes to permit the removal of excess ribbon.

2. As an article of manufacture, a ribbon having a perpendicular loop formed adjacent one end, and a bolt seated in said loop, said ribbon being provided with spaced holes at its other end, with scorings between said holes, and with edge recesses at the ends of each line of scoring.

3. A hose clamp, comprising a metal ribbon adapted to be wrapped around a hose, having a perpendicular loop formed adjacent one end thereof, with the portion between the loop and the end extending forwardly about the hose, and a bolt extending through an opening in said loop, said ribbon being provided with holes spaced lenghtwise thereof from the other end thereof, each of which is adapted to receive said bolt to adjust said ribbon to hose of varying diameters, the ribbon being arranged to have its last-named end portion overlap the first-named end, extend upwardly past the bolt, and to then be bent forwardly above said bolt, to facilitate removal of excess ribbon.

14,504. BATTERY-FEED FOR LOOMS. EDWARD S. STIMPSON, Hopedale, Mass., assignor, by mesne assignments, to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed July 12, 1918. Serial No. 245,148. Original No. 1,269,975, dated June 18, 1918, Serial No. 114,682, filed Aug. 14, 1916. Renewed Mar. 11, 1918, Serial No. 221,863. (Cl. 139—85.)



1. An automatic weft replenishing loom comprising a rotary hopper provided with equi-distant peripheral bobbin seats, an abutment to guide the bobbins in their discharge from the hopper seats during transfer, a ratchet wheel connected to and rotating with the hopper and having the same number of teeth as there are bobbin seats, a transferrer pivotally mounted adjacent the hopper, an da dog pivotally mounted on the transferrer and provided with two teeth acting upon each upward movement of the transferrer successively to engage the teeth of the ratchet wheel and rotate said ratchet wheel to bring a bobbin into discharging position against said abutment.

2. An automatic weft replenishing loom comprising a rotary hopper provided with equi-distant peripheral bobbin seats, a ratchet wheel connected to and rotating with the hopper and having the same number of teeth as there art bobbin seats, a transferrer pivotally mounted adjacent the hopper, and a dog pivotally mounted on the transferrer and provided with two teeth to coöperate with the teeth of the ratchet wheel, the first of said teeth acting upon each upward movement of the transferrer to engage a tooth of the ratchet wheel and rotate said ratchet wheel and the second of said teeth acting upon the conclusion of the effective movement of the first tooth to engage the next successive tooth of the ratchet wheel and give a further rotation to said ratchet wheel thus to bring a bobbin into proper discharging position.

3. An automatic weft replenishing loom comprising a rotary hopper provided with equi-distant peripheral bobbin seats, a ratchet wheel connected to and rotating with the hopper and having such a number of teeth that the number of bobbin seats is divisible therein without remainder, a transferrer pivotally mounted adjacent the hopper, and a dog pivotally mounted on the transferrer and provided with a plurality of teeth acting upon each upward movement of the transferrer successively to engage the teeth of the ratchet wheel and rotate the said ratchet wheel to bring a bobbin into discharging position.

TRADE-MARKS

OFFICIAL GAZETTE, AUGUST 13, 1918.

(PUBLISHED SEPTEMBER 5, 1918.)

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 14 of said act, a fee of ten dollars must accompany each notice of opposition.

Ser. No. 95,590. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) ELDRIDGE, BAKER COMPANY, Boston, Mass. Filed June 2, 1916.

VALLEY ROSE

Particular description of goods.—Tea and Coffee.
Claims use since May 4, 1916.

Ser. No. 97,249. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) PETER A. FRASSE & Co. INC., New York, N. Y. Filed Aug. 10, 1916.



No claim is made to the shape of the label.
Particular description of goods.—Steel Bearing-Balls, Drill-Rods, Hammers, Chisels, Screw-Drivers, Wrenches, Taps, Dies, Lathe-Tools, Milling-Cutters, Drills, Reamers, Hacksaw-Blades, and Files.
Claims use since August, 1915.

Ser. No. 98,049. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ANNA KLEIN, Iowa City, Iowa. Filed Sept. 18, 1916.

Akici

Particular description of goods.—Hair-Dressing.
Claims use since June 1, 1916.

Ser. No. 101,272. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE NEOSHO GROCERY CO., Neosho, Mo. Filed Feb. 9, 1917.

OUR MILL

Particular description of goods.—Canned Fruits and Vegetables, Rolled Oats, and Rice and Tea.
Claims use since January, 1913.

Ser. No. 101,382. (CLASS 32. FURNITURE AND UPHOLSTERY.) THE CUSSINS & FEARN CO., Columbus, Ohio. Filed Feb. 15, 1917.

KING KUMFORT

Particular description of goods.—Mattresses.
Claims use since about Aug. 1, 1914.

Ser. No. 101,383. (CLASS 32. FURNITURE AND UPHOLSTERY.) THE CUSSINS & FEARN CO., Columbus, Ohio. Filed Feb. 15, 1917.

KING-KUMFORT

Particular description of goods.—Bed-Springs.
Claims use since about Jan. 1, 1915.

Ser. No. 101,387. (CLASS 12. CONSTRUCTION MATERIALS.) THE CUSSINS & FEARN CO., Columbus, Ohio. Filed Feb. 15, 1917.

RUBBEREDY

Particular description of goods.—Flexible Roofing Consisting of Flexible Sheets of Felt Saturated with Asphalt Waterproofing Material.
Claims use since about Jan. 1, 1909.

Ser. No. 101,820. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) BETTY L. POSCH, New York, N. Y. Filed Mar. 1, 1917.

SUNELIFE

Particular description of goods.—A Medicinal Compound for Asthma, Catarrh, and Bronchitis.
Claims use since November, 1915.

Ser. No. 102,394. (CLASS 5, ADHESIVES.) WILSON & Co., INC., Chicago, Ill. Filed Mar. 23, 1917.

The mark consists of a stenciled outline of a panel or bar extending across the stenciled outline of the letter "W."
Particular description of goods.—Glue.
Claims use since 27th day of July, 1916.

Ser. No. 103,199. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE BARTON SALT CO., Hutchinson, Kans. Filed Apr. 23, 1917.

WHITE STAR

Particular description of goods.—Table-Salt.
Claims use since Feb. 28, 1917.

Ser. No. 103,584. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE ARISTA CORPORATION, New York, N. Y. Filed May 7, 1917.

ARISTA

Particular description of goods.—Tooth-Paste or Dental Cream.
Claims use since Apr. 19, 1917.

Ser. No. 104,602. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS, NOT INCLUDING ELECTRICAL APPARATUS.) THE P. WALL MANUFACTURING SUPPLY CO., Pittsburgh, Pa. Filed June 21, 1917.

DREADNAUGHT

Particular description of goods.—Blow-Torches and Plumbers' and Tinners' Fire-Pots.
Claims use since December, 1911.

Ser. No. 104,631. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) SOCIETY OF CHEMICAL INDUSTRY IN BASLE, Basel, Switzerland. Filed June 22, 1917.

FOLAN

Particular description of goods.—Pharmaceutical Preparations—Namely, Patent Medicines to be Used as Anesthetics, Hypnotics, Narcotics, Sedatives, Cardiacs, Diuretics, Nerve-Tonics, Analgesics, Styptics, and Antipyretics—for Combating the So-Called Avitaminous Complaints, Such as Beriberi, Scurvy, Polyneuritis, Pellagra, Rickets, and other Morbid Conditions Due to Malnutrition and for the Treatment of Diseases—Namely, Cancer and Tuberculosis; Dietetic Patent Foods for Primarily Medicinal Uses, Disinfectants, Perfumes, Coal-Tar Colors; Indigo, Artificial; Alizarin, Artificial; Synthetic Tanning Agents.
Claims use since the 30th day of January, 1917.

Ser. No. 104,835. (CLASS 39. CLOTHING.) JOHN H. CROSS, INC., Haverhill, Mass. Filed July 5, 1917.

NOVELTIES

Particular description of goods.—Boots and Shoes Made Wholly or in Part of Leather.
Claims use since June 22, 1917.

Ser. No. 104,952. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE S. S. WHITE DENTAL MANUFACTURING COMPANY, Philadelphia, Pa. Filed July 9, 1917. Under ten-year proviso.

SS.WHITE

Consisting of the name "S. S. White."
Particular description of goods.—Tooth-Powder, Tooth-Paste, Precipitated Chalk, Prepared Chalk, Tooth-Soap, Mouth-Wash, Cold-Cream, Almond-Cream, Talcum Powder, Bay-Rum, Cologne-Water, Violet Water, Violet Ammonia, Nerve-Paste, Nerve-Devitalising Fiber, Soldering Fluid, and Soldering-Flux Paste.
Claims use since or prior to the year 1880.

Ser. No. 106,669. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) HENRY D. MILES, Butte, Mont. Filed Oct. 8, 1917.

Joy O

Consisting of the representation of a human foot with the words "Joy O."
Particular description of goods.—A Foot-Lotion for Sore, Tired, or Aching Feet.
Claims use since June 15, 1917.

Ser. No. 106,977. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) THE S. S. WHITE DENTAL MANUFACTURING COMPANY, Philadelphia, Pa. Filed Oct. 26, 1917.

DIAMOND

Consisting of the word "Diamond."
Particular description of goods.—Dental Chairs.
Claims use since about the year 1908.

Ser. No. 107,008. (CLASS 12. CONSTRUCTION MATERIALS.) ADAM A. MCPHEETERS, Ajo, Ariz. Filed Oct. 29, 1917.

COKEPHALT

Particular description of goods.—A Coating Compound for Preserving Concrete Pipes, Piles, Tanks, Poles, Posts, &c., in the Nature of a Paste or Plaster to be Applied as a Coating.
Claims use since Mar. 1, 1907.

Ser. No. 107,014. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) ALBIN SCHUMANN, Omaha, Nebr. Filed Oct. 29, 1917.

C Q P

Particular description of goods.—A Furniture-Polish.
Claims use since Oct. 1, 1917.

Ser. No. 107,169. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) QUALO DRUG COMPANY, Knoxville, Tenn. Filed Nov. 5, 1917.

QUALO

The lining on the drawing does not symbolize color. Color is not a feature of the mark.
Particular description of goods.—Tonics Intended to be Used Medicinally for Malaria to Stimulate Liver Action, to Facilitate Assimilation, and Facilitate Elimination of Impurities from the Blood.
Claims use since about June 15, 1917.

Ser. No. 107,256. (CLASS 12. CONSTRUCTION MATERIALS.) BROOKS & DOWD, San Francisco, Cal. Filed Nov. 9, 1917.

WATERLX

Particular description of goods.—Waterproofing, a Liquid Preparation to be Applied to Stone, Brick, Concrete, and Stucco Surfaces or Added to a Cement-Plaster Mix.
Claims use since Oct. 31, 1917.

Ser. No. 107,667. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) ALBERT R. WALKER, St. Louis, Mo. Filed Nov. 28, 1917.

SUGAR PUFF

Particular description of goods.—Machinery for Making Waffles, and More Particularly a Complete Self-Contained Portable Apparatus for Producing Waffles Commercially.
Claims use since May, 1916.

Ser. No. 107,682. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) HAWKINS AND STUBBLEFIELD, Rogers, Ark. Filed Nov. 30, 1917.

"SAM-ME"

Particular description of goods.—Toy Dolls.
Claims use since Oct. 1, 1917.

Ser. No. 107,788. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) GATES MANUFACTURING COMPANY, Indianapolis, Ind. Filed Dec. 6, 1917.



The trade-mark comprises two spaced parallel white stripes on the tread portion of the tire-cover, which stripes are spaced substantially symmetrically on opposite sides of and parallel to the center line of the tread portion and extend circumferentially around the tire-cover on such tread portion, leaving between them a con-

tral stripe of the same color as the body of the tire-cover, no claim being made to the representation of the tire or tire-cover apart from the mark shown in the drawing.

Particular description of goods.—Tire-Covers.
Claims use since June 1, 1917.

Ser. No. 108,114. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) AFFINITY SPARK PLUG COMPANY, Omaha, Nebr. Filed Dec. 24, 1917.

LIBERTY

Particular description of goods.—Spark-Plugs.
Claims use since Dec. 1, 1917.

Ser. No. 108,393. (CLASS 39. CLOTHING.) J. E. PECKHAM CO. INC., Boston, Mass. Filed Jan. 9, 1918.

NOBRAKUM

Particular description of goods.—Boot and Shoe Shanks.
Claims use since April, 1917.

Ser. No. 108,458. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) MENDEL R. MENDELSOHN, East Orange, N. J. Filed Jan. 14, 1918.

FER-O-LYF

Particular description of goods.—A Tonic for Diseases of the Nerves, Anemia, and Impoverishment of the Blood.
Claims use since Jan. 5, 1918.

Ser. No. 108,615. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) LEO LIEBER, Philadelphia, Pa. Filed Jan. 24, 1918.



Particular description of goods.—Candies.
Claims use since Nov. 19, 1914.

Ser. No. 108,875. (CLASS 28. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) THE HENRY G. THOMPSON & SON CO., New Haven, Conn. Filed Feb. 7, 1918.

TIGER



Particular description of goods.—Hacksaw-Blades.
Claims use since 1906.

Ser. No. 108,913. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) ACME-EVANS COMPANY INCORPORATED, Indianapolis, Ind. Filed Feb. 9, 1918.

D-Light-U

Particular description of goods.—Bolted Meal, Rolled Oats, Mixed Feed for Live Stock, Scratch Feed for Poultry; Alimentary Paste Foods—Namely, Macaroni, Spaghetti, Fine Noodles and Wide Noodles, Wheat-Flour, Self-Rising Cake and Biscuit Wheat-Flour, Self-Rising Pancake Wheat-Flour, Self-Rising Graham Flour, Self-Rising Cornmeal-Flour, Self-Rising Blended Buckwheat, Corn, and Wheat Flour, and Breakfast Food Made of Wheat.
Claims use on bolted meal since Jan. 8, 1915; rolled oats since Feb. 18, 1916; mixed feed for live stock since Feb. 18, 1916; scratch feed for poultry since Apr. 15, 1916; macaroni, spaghetti, fine noodles, and wide noodles since Oct. 10, 1916; wheat-flour since Feb. 1, 1917; self-rising biscuit wheat-flour since October, 1911; on self-rising cake wheat-flour and self-rising Graham flour since May, 1914, and on self-rising cornmeal-flour, self-rising blended buckwheat, corn, and wheat flour, self-rising pancake wheat-flour, and breakfast food made of wheat since August, 1914.

Ser. No. 109,011. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) JOHN W. MASURY & SON, Brooklyn, N. Y. Filed Feb. 15, 1918.



The trade-mark is a fanciful picture of a paint salesman, the background within the circle being lined for the color red.

Particular description of goods.—A Varnish.
Claims use since Feb. 5, 1918.

Ser. No. 109,113. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) ANGELUS SHOE POLISH COMPANY, Los Angeles, Cal. Filed Feb. 19, 1918.



Particular description of goods.—Tan Cleaner for Shoes, Black Cleaner for Shoes, Whiting for Shoes, White Shoe-Dressing, Black Sole and Heel Polish for Shoes, Tan Sole and Heel Polish for Shoes.
Claims use since about the 1st of February, 1918.

Ser. No. 109,290. (CLASS 9. EXPLOSIVES, FIREARMS, EQUIPMENTS, AND PROJECTILES.) FEDERAL CARTRIDGE COMPANY, Minneapolis, Minn. Filed Mar. 1, 1918.



No claim being made for the shell *per se*.
Particular description of goods.—Shotgun-Shells.
Claims use since Feb. 8, 1918.

Ser. No. 109,458. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) G. W. EMMONS COMPANY, San Francisco, Cal. Filed Mar. 9, 1918.

DIABLO

Particular description of goods.—Fresh Pears.
Claims use since September, 1916.

Ser. No. 109,577. (CLASS 39. CLOTHING.) ALFRED L. SIMON & CO., New York, N. Y. Filed Mar. 15, 1918.



Namely, the letter "S" and representation of a leaf.
Particular description of goods.—Boas, Feather Boas, Women's, Misses', and Children's Hats, Bonnets, Hoods, Caps, Hat-Bodies, Hat-Frames, and Plateaux.
Claims use since August, 1917.

Ser. No. 109,578. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) ALFRED L. SIMON & CO., New York, N. Y. Filed Mar. 15, 1918.



Namely, the letter "S" and representation of a leaf.
Particular description of goods.—Velvets, Velveteens, Silks, Satins, Ribbons, Mallnes, Crapes, Chiffons, and Laces.
Claims use since August, 1917.

Ser. No. 109,605. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) ALEXANDER RICE, Montgomery, Ala. Filed Mar. 16, 1918.

Sammy

Particular description of goods.—Paper Hats.
Claims use since Feb. 1, 1918.

Ser. No. 109,683. (CLASS 28. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) WILMORT MANUFACTURING COMPANY, Chicago, Ill. Filed Mar. 20, 1918.

Wilmort

Particular description of goods.—A Crumb-Sweeper.
Claims use since Nov. 1, 1917.

Ser. No. 109,761. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) DAVID DROKER, Spokane, Wash. Filed Mar. 25, 1918.

DROKER

Particular description of goods.—Prepared Doughnut-Flour.
Claims use since Jan. 1, 1918.

Ser. No. 109,810. (CLASS 3. BAGGAGE, HORSE EQUIPMENTS, PORTFOLIOS, AND POCKET-BOOKS.) WILLIAM MAROLF, Iron River, Mich. Filed Mar. 26, 1918.

REFRIGO

Particular description of goods.—Automobile-Chests.
Claims use since Mar. 5, 1918.

Ser. No. 109,907. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) FRANK ARANOW, New York, N. Y. Filed Apr. 2, 1918.

VELORA

Particular description of goods.—Face Creams and Lotions.
Claims use since on or about Mar. 1, 1918.

Ser. No. 109,913. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) BAHR BROS. MANUFACTURING CO., Marion Ind. Filed Apr. 2, 1918.

Positive

Particular description of goods.—Jordan Fillings, Beater Bed-Plates, Plugs, and Shell-Linings for Beating and Refining Engines Used in Paper, Powder, and Pulp Mills.
Claims use since 1912.

Ser. No. 109,944. (CLASS 2. RECEPTACLES.) S. LANGSDORF & Co., New York, N. Y. Filed Apr. 3, 1918.

XLO

Particular description of goods.—Sewing Boxes and Baskets, Toilet and Manicure Set Boxes, Khaki Kits for Toilet Articles, and Vanity-Boxes.
Claims use since Mar. 9, 1918.

Ser. No. 110,004. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THOMAS E. CONNOR, Lynn, Mass. Filed Apr. 5, 1918.

HERBINE

Particular description of goods.—Preparation for Treatment and Relief of Piles.
Claims use since January, 1904.

Ser. No. 110,039. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) BALTIMORE PEARL HOMINY COMPANY, Baltimore, Md. Filed Apr. 8, 1918.



No claim is made to the representation of an ear of corn shown on the drawing except in connection with the other features of the mark.
Particular description of goods.—Refined Corn-Oil for Use for Cooking, Baking, and Confectionery Purposes and in the Preparation of Salad-Dressings and Condiments.
Claims use since June 15, 1916.

Ser. No. 110,099. (CLASS 5. ADHESIVES.) NASHUA GUMMED AND COATED PAPER COMPANY, Nashua, N. H. Filed Apr. 10, 1918.

RHINO

Particular description of goods.—Gummed Paper-Box Stays.
Claims use since the fall of 1912.

Ser. No. 110,119. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) EUGENE JACKSON, Thonotosassa, Fla. Filed Apr. 11, 1918.

Eugene Jackson

Which is a facsimile of my signature.
Particular description of goods.—Antiseptics—viz., Catarrh-Powder, Plaster-Powder, Mouth-Wash, and Eye-Lotion.
Claims use since July 1, 1915.

Ser. No. 110,140. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE CONTINENTAL CHEMICAL COMPANY, Denver, Colo. Filed Apr. 12, 1918.



Particular description of goods.—A Preparation to be Mixed with Coal to Increase the Heating Efficiency of the Coal and at the Same Time Decrease Its Consumption and to Eliminate Clinker, Soot,, and Poisonous Fumes, the said Preparation Being Adapted also to be Mixed with Slack Coal or Coal-Dust to Produce a Lump-Coal Product.
Claims use since Nov. 14, 1917.

Ser. No. 110,150. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) SEA ISLAND COTTON OIL COMPANY, Charleston, S. C. Filed Apr. 12, 1918.

"VICTORY"

Particular description of goods.—Peanut-Flour.
Claims use since Jan. 15, 1918.

Ser. No. 110,151. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) SEA ISLAND COTTON OIL COMPANY, Charleston, S. C. Filed Apr. 12, 1918.

SICOLA

Particular description of goods.—Peanut-Oil.
Claims use since Feb. 25, 1918.

Ser. No. 110,173. (CLASS 2. RECEPTACLES.) LEGERTON & CO. INC., Charleston, S. C. Filed Apr. 18, 1918.



Particular description of goods.—Sea-Grass and Palmetto Baskets.
Claims use since Aug. 15, 1917.

Ser. No. 110,227. (CLASS 17. TOBACCO PRODUCTS.) PETER W. TOZZI, Weehawken, N. J. Filed Apr. 15, 1918.



The male figure in the drawing is fanciful.
Particular description of goods.—Cigars, Cigarettes, Cheroots, and Smoking-Tobacco.
Claims use since Mar. 25, 1918.

Ser. No. 110,233. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE COLORADO MILLING & ELEVATOR COMPANY, Denver, Colo., and Weiser, Idaho. Filed Apr. 16, 1918.



The picture being fanciful.
Particular description of goods.—Wheat-Flour.
Claims use since Dec. 3, 1917.

Ser. No. 110,267. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) CHICAGO FEED & FERTILIZER CO., Chicago, Ill. Filed Apr. 6, 1918.

MAGIC

Particular description of goods.—Hog Feed and Meat Scraps for Chickens.
Claims use since Dec. 15, 1914.

Ser. No. 110,396. (CLASS 32. FURNITURE AND UPHOLSTERY.) STEWART HARTSHORN CO., East Newark, N. J. Filed Apr. 23, 1918. Under ten-year proviso.

ERMINIE

Particular description of goods.—Window Shades and Shade Rollers.
Claims use since January, 1888.

Ser. No. 110,447. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) THE LEMOLA CO., Indianapolis, Ind. Filed Apr. 26, 1913.

Lemola

Particular description of goods.—Maltless Non-Alcoholic Soft Drinks and Maltless Non-Alcoholic Syrups for Making the Same.
Claims use since Mar. 30, 1918.

Ser. No. 110,549. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE UYRATIS CO., Cleveland, Ohio. Filed Apr. 29, 1918.

UYRATES

Particular description of goods.—A Medicinal Preparation Especially Adaptable for the Treatment of Rheumatism, Pyorrhea, Neuritis, and Those Diseases Resulting from a Vitiated Condition of the Blood.
Claims use since on or about Oct. 16, 1916.

Ser. No. 110,562. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) CRABBS REYNOLDS TAYLOR CO. INCORPORATED, Crawfordsville, Ind. Filed Apr. 30, 1918.



Particular description of goods.—Alfalfa-Seed, Clover-Seed, Timothy-Seed, and Grass-Seed.
Claims use since Jan. 26, 1918.

Ser. No. 110,626. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ETABLISSEMENTS POULENC FRÈRES, Paris, France. Filed May 3, 1918.

DMÈTYS

Particular description of goods.—Dioxydiaminoarsenobenzol Methylene Sulfo-Oxalate of Soda.
Claims use since about July, 1912.

Ser. No. 110,628. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ETABLISSEMENTS POULENC FRÈRES, Paris, France. Filed May 3, 1918.

DMESTA

Particular description of goods.—Curative Vaccins.
Claims use since about March, 1915.

Ser. No. 110,630. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ETABLISSEMENTS POULENC FRÈRES, Paris, France. Filed May 3, 1918.

DMÈCON

Particular description of goods.—Curative Vaccins.
Claims use since about October, 1913.

Ser. No. 110,635. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) VOORHEES RUBBER MFG. CO., Jersey City, N. J. Filed May 3, 1918.

CONQUEROR

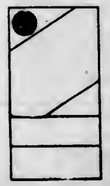
The trade-mark consists of the word "Conqueror."
Particular description of goods.—Rubber Hose and Hose Made of a Composition of Rubber or Rubber and Fabric.
Claims use since October, 1914.

Ser. No. 110,647. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) JOSEPH T. LANTAGNE, Lowell, Mass. Filed May 4, 1918.



Particular description of goods.—A Preparation in Tablet Form. This Preparation is Sold and Used for Cases of General Weakness, Anemia, Lack of Iron in the Blood, Nervousness, Malnutrition, and in Cases of General Run-Down Conditions.
Claims use since November, 1917.

Ser. No. 110,649. (CLASS 17. TOBACCO PRODUCTS.) STANDARD TOBACCO COMPANY, INC., Richmond, Va. Filed May 4, 1918.



Particular description of goods.—Cigars, Cigarettes, Smoking and Chewing Tobacco.
Claims use since Feb. 28, 1918.

Ser. No. 110,752. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) MAGNOLIA PROVISION COMPANY, Houston, Tex. Filed May 7, 1918.



Particular description of goods.—An Oleaginous Compound Produced from Peanuts for Cooking Purposes.
Claims use since Feb. 22, 1918.

Ser. No. 110,753. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) MAGNOLIA PROVISION COMPANY, Houston, Tex. Filed May 7, 1918.

The Fat of the Land

Particular description of goods.—An Oleaginous Compound Produced from Peanuts for Cooking Purposes.
Claims use since Feb. 22, 1918.

Ser. No. 110,769. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) MCLOUGHLIN BROTHERS, INCORPORATED, Brooklyn, N. Y. Filed May 8, 1918.

UP AND AT 'EM,.

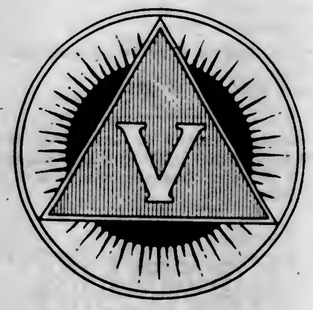
Particular description of goods.—Games. The Game Comprises a Toy Cannon, Together with Soldiers, Over Which the Projectile of the Cannon may be Shot.
Claims use since June 15, 1917.

Ser. No. 110,772. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) USIT MANUFACTURING CO. OF AMERICA, INC., Buffalo, N. Y. Filed May 8, 1918.

UL-IK-IT

Particular description of goods.—Remedy for Treating Tired, Aching, and Burning Feet and Sunburn.
Claims use since about Apr. 18, 1918.

Ser. No. 110,790. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) VOIGT BEVERAGE CO., Detroit, Mich. Filed May 9, 1918.



The triangle being printed in red.
Particular description of goods.—Non-Alcoholic Malt-less Beverages Sold as Soft Drinks.
Claims use since Apr. 19, 1918.

Ser. No. 110,895. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) FRANCIS JOSEPH STOKIEN, Brooklyn, N. Y. Filed May 14, 1918.

PEP-O-DINE

Particular description of goods.—An Ointment to be Applied Externally in the Treatment of Sprains, Lumbago, and the Various Forms of Rheumatism.
Claims use since Apr. 1, 1917.

Ser. No. 110,956. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) LANDERS, FRARY & CLARK, New Britain, Conn. Filed May 17, 1918.

UNIVERSAL

Particular description of goods.—Electrically-Heated Pads for Therapeutic Use.
Claims use since May, 1912.

Ser. No. 111,036. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) CHALLENGE COMPANY, Batavia, Ill. Filed May 18, 1918.



Particular description of goods.—Windmills, Gasolene-Engines, Hand-Pumps, Windmill-Pumps, Siphon-Pumps, and Horizontal Reciprocating Power-Pumps, Pump-Jacks; Feed-Grinders for Grinding Corn, Wheat, Barley, Rye, and Oats; Corn-Shellers, Ensilage-Cutters, Wood-Saws, Oil-Engines, and Well-Cylinder Working Heads.
Claims use since the 1st day of January, 1903.

Ser. No. 111,045. (CLASS 28. JEWELRY AND PRECIOUS-METAL WARE.) L. HELLER & SON, INC., New York, N. Y. Filed May 18, 1918.

QUAD-RO-GEM

No claim being made to any exclusive rights in the word "Gem" except in the association shown in the accompanying drawing.
Particular description of goods.—Cut Stones—Namely, Precious, Semiprecious, or Synthetic Stones or Imitations Thereof.
Claims use since the 6th day of February, 1918.

Ser. No. 111,056. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE PHENOL CHEMICAL COMPANY, Chicago, Ill. Filed May 18, 1918.

ENOZ

Particular description of goods.—A Moth Preventive and Exterminator.
Claims use since Apr. 16, 1918.

Ser. No. 111,091. (CLASS 39. CLOTHING.) THE BECKMAN COMPANY, Cleveland, Ohio. Filed May 22, 1918.



The lining in the drawing is merely for shading.
Particular description of goods.—Bed-Blankets.
Claims use since May 8, 1918.

Ser. No. 111,116. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) THE MONTELAISE MERCANTILE CO., Detroit, Mich. Filed May 22, 1918.



BETSY ROSS

The picture shown being fanciful.
Particular description of goods.—A Non-Alcoholic Maltless Non-Intoxicating Beverage Sold as a Soft Drink.
Claims use since Mar. 21, 1918.

Ser. No. 111,119. (CLASS 2. RECEPTACLES.) NEW ENGLAND TANK & TOWER COMPANY, Everett, Mass. Filed May 22, 1918.



Particular description of goods.—Wire-Pickling Tanks and Water-Tanks.
Claims use since on or about Apr. 2, 1917.

Ser. No. 111,197. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) CORNELIA P. EVANS, Riverside, Iowa. Filed May 25, 1918.



Particular description of goods.—Rolled Oats.
Claims use since on or about Jan. 1, 1897.

Ser. No. 111,201. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) W. H. MINER CHOCOLATE COMPANY, Springfield, Mass. Filed May 25, 1918.

TRENCH BAR

No claim is made for the word "Bar" apart from the mark shown in the drawing.
Particular description of goods.—Eating-Chocolate.
Claims use since the early part of January, 1918.

Ser. No. 111,209. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) EVE BECKTEL, New York, N. Y. Filed May 27, 1918.



Particular description of goods.—Preparation for Treating Eyelashes.
Claims use since Feb. 15, 1918.

Ser. No. 111,214. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) THE B. F. GOODRICH COMPANY, New York, N. Y. Filed May 27, 1918.

LEGRAIN

Particular description of goods.—Conveyer-Belts Made of Rubber Reinforced with Fabric.
Claims use since about Apr. 15, 1918.

Ser. No. 111,237. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) MITCHEL BECK, New York, N. Y. Filed May 28, 1918.

Starry Circle



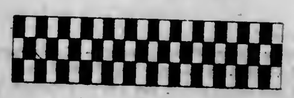
Particular description of goods.—Canned Salmon.
Claims use since Nov. 30, 1917.

Ser. No. 111,241½. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) JOHN FERNSLER, Philadelphia, Pa. Filed May 28, 1918.

RUBMOR

Particular description of goods.—Hair-Tonics.
Claims use since January, 1918.

Ser. No. 111,242. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) MULTIKRAFT INCORPORATED, Rochester, N. Y. Filed May 28, 1918.



Is made up of alternate (horizontally and vertically) red, white, and blue rectangles in the nature of an oblong checker-board.
Particular description of goods.—Games and Toys—Namely, Horses, Wagons, Sleds, Automobiles, Cannon, and Cannon and Target, Battleships, Forts, Encampments, Wooden Animals, Metal Animals, Building-Blocks, Metal and Wood Savings-Banks, and Games of Skill in Which Targets, Cannon, and Guns are Employed, Ring-Toss, and Throwing-Bombs.
Claims use since Feb. 5, 1918.

Ser. No. 111,325. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) WRIGHT & DITSON, Boston, Mass. Filed June 1, 1918.

VICTOR

Particular description of goods.—Golf-Balls.
Claims use since Feb. 15, 1918.

Ser. No. 111,372. (CLASS 39. CLOTHING.) JULIUS GARFINKLE, Washington, D. C. Filed June 4, 1918.

ROSEMARY

Particular description of goods.—Ladies' Dresses.
Claims use since Sept. 5, 1917.

Ser. No. 111,380. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) SUNBEAM CHEMICAL COMPANY, Chicago, Ill. Filed June 5, 1918.

RIT

Particular description of goods.—Dyes Combined with Soap.
Claims use since on or about Dec. 1, 1916.

Ser. No. 111,401. (CLASS 39. CLOTHING.) ADAIR & ANHALT, Scarsdale, N. Y. Filed June 7, 1918.

OVER THE TOP

Particular description of goods.—Women's and Children's House, Outing, Garden, and Play Dresses.
Claims use since Jan. 2, 1918.

Ser. No. 111,412. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) JOHN FRITZ, Buffalo, N. Y. Filed June 7, 1918.

OVER THE TOP

Particular description of goods.—A Game in Which Markers are Moved Progressively Over a Board.
Claims use since May 15, 1918.

Ser. No. 111,446. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) PACIFIC COMMERCIAL CO., San Francisco, Cal.; New York, N. Y., and Manila, Philippine Islands. Filed June 8, 1918.

P.C.C.

Particular description of goods.—Baking-Powder.
Claims use since July 1, 1912.

Ser. No. 111,461. (CLASS 11. INKS AND INKING MATERIALS.) OLD TOWN RIBBON & CARBON CO., New York, N. Y. Filed June 10, 1918.

"OLD-TOWN"

Particular description of goods.—Carbon-Paper.
Claims use since Apr. 1, 1918.

Ser. No. 111,463. (CLASS 12. CONSTRUCTION MATERIALS.) SOLAR METAL PRODUCTS CO. INC., Columbus, Ohio. Filed June 10, 1918.

SOLAR

Particular description of goods.—Metal Fireproof Doors.
Claims use since about June, 1912.

Ser. No. 111,468. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE WATERLOO AND CEDAR FALLS UNION MILL COMPANY, Waterloo, Iowa. Filed June 10, 1918.



Particular description of goods.—Wheat-Flour.
Claims use since on or about Jan. 1, 1911.

Ser. No. 111,484. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) CHAMPION SPARK PLUG COMPANY, Toledo, Ohio. Filed June 11, 1918.



Particular description of goods.—Spark-Plugs and Parts of Spark-Plugs.
Claims use since April, 1914.

Ser. No. 111,536. (CLASS 39. CLOTHING.) AURORA CORSET COMPANY, Aurora, Ill. Filed June 13, 1918.

La Voga

Particular description of goods.—Corsets.
Claims use since May 1, 1918.

Ser. No. 111,539. (CLASS 14. METALS AND METAL CASTINGS AND FORGINGS.) DARWIN & MILNER, INC., New York, N. Y. Filed June 13, 1918.

C O C R O M

Particular description of goods.—Bar-Steel and Steel Castings.
Claims use since May 15, 1918.

Ser. No. 111,566. (CLASS 37. PAPER AND STATIONERY.) HARMON PAPER COMPANY, Brownville, N. Y. Filed June 14, 1918.

HARMONELLA

Particular description of goods.—Wall-Paper.
Claims use since Apr. 19, 1918.

Ser. No. 111,600. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) ROW & DAVIS, ENGINEERS, INC., New York, N. Y. Filed June 15, 1918.

PARACOIL

"Paracoil."
Particular description of goods.—Condensers, Evaporators, and Grease-Extractors for Feed-Water.
Claims use since about the 1st of January, 1917.

Ser. No. 111,611. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) GINGO SOAP COMPANY, Greenville, S. C. Filed June 17, 1918.

GINGO

Particular description of goods.—Soap.
Claims use since Dec. 1, 1917.

Ser. No. 111,626. (CLASS 15. OILS AND GREASES.) PETROLEUM PRODUCTS CO., San Francisco, Cal. Filed June 17, 1918.

GOLDEN FLEECE

Particular description of goods.—Gasolene.
Claims use since Sept. 27, 1917.

Ser. No. 111,650. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) CONRAD KREIDT, Chandler, Ariz. Filed June 18, 1918.

KREIOTONE

Particular description of goods.—A Medicine for the Treatment of Rheumatism and Catarrh.
Claims use since June 1, 1918.

Ser. No. 111,680. (CLASS 10. FERTILIZERS.) UNITED OIL MILLS, Hope, Ark. Filed June 19, 1918.

COTTO-PHOS

Particular description of goods.—A Mixed Fertilizer.
Claims use since Feb. 1, 1915.

Ser. No. 111,688. (CLASS 39. CLOTHING.) THE ACME RUBBER HEEL & SOLE CO., Elyria, Ohio. Filed June 20, 1918.

ACCO

Particular description of goods.—Fibrous Heels and Soles.
Claims use since Apr. 29, 1918.

Ser. No. 111,777. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) FLORENCE N. LEWIS, New York, N. Y. Filed June 24, 1918.

CRYSTALLINE

"Crystalline."
Particular description of goods.—Eye-Lotion.
Claims use since the year 1910.

Ser. No. 111,778. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) FLORENCE N. LEWIS, New York, N. Y. Filed June 24, 1918.

ADONA

The trade-mark "Adona."
Particular description of goods.—Toilet Cream.
Claims use since the year 1910.

Ser. No. 111,781. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) FLORENCE N. LEWIS, New York, N. Y. Filed June 24, 1918.

ELECTRA

"Electra."
Particular description of goods.—Depilatory.
Claims use since the year 1910.

Ser. No. 111,816. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ELMER ROBERT KELLOUGH, Cumberland, Md. Filed June 26, 1918.



Particular description of goods.—Chocolate-Coated Pills for Treatment of Liver Disorders.
Claims use since June 15, 1918.

Ser. No. 111,831. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) RED LINE INC., Grand Rapids, Mich. Filed June 26, 1918.

RED LINE

Particular description of goods.—Carbon-Remover or Chemicals for Removing Carbon from Auto-Cylinders.
Claims use since Oct. 17, 1915.

Ser. No. 111,837. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ROSA WOODS, Chicago, Ill. Filed June 26, 1918.



The portrait being that of myself.
Particular description of goods.—A Hair Preparation and Dandruff-Remover.
Claims use since Feb. 20, 1918.

Ser. No. 111,841. (CLASS 39. CLOTHING.) ZELENKO & MOSKOWITZ, New York, N. Y. Filed June 26, 1918.

Miss Manhattan

Particular description of goods.—Women's and Misses' Cloaks, Suits, Dresses, Skirts, and Outer Waists.
Claims use since Jan. 25, 1918.

Ser. No. 111,894. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) MICHAEL C. CONLEY, Spokane, Wash. Filed July 1, 1918.



Particular description of goods.—A Liniment for Rheumatism, Sprains, Bruises, Sore Muscles, Neuralgia, Stiff Neck, Lumbago, Chilblains, Bunions, Swellings, Tired and Sore Feet, or Any Severe Pain.
Claims use since May 1, 1918.

Ser. No. 111,909. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ARTHUR L. SNEED, Kansas City, Mo. Filed July 1, 1918.

MITE-CIDE

Particular description of goods.—Insecticides.
Claims use since May 6, 1918.

Ser. No. 111,910. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ARTHUR L. SNEED, Kansas City, Mo. Filed July 1, 1918.

S-N-D

Particular description of goods.—Insecticides.
Claims use since May 6, 1918.

Ser. No. 111,938. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) JOHN P. KILLMER, Gouverneur, N. Y. Filed July 3, 1918.

J.P.K.

Particular description of goods.—Ointment for Relief of Piles, Relieving Irritation, Inflammation of Skin Eruptions, Such as Eczema, Itching, Raw Spots, Sores, Ulcers, Salt-Rheum, Ringworm, Tetter-Rash, Insect-Bites, Cuts, Sunburn, and an Ointment for General Use.
Claims use since May 28, 1917.

Ser. No. 111,992. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) D. K. LESH, Los Angeles, Cal. Filed July 8, 1918.

U-Q-U-O

Particular description of goods.—An Antiseptic Germ-Destroying Liquid to be Vaporized for Vapor Treatment for Colds, Coughs, Sore Throat, Spasmodic Croup, Asthma, Catarrh, Bronchitis, Hay-Fever, Whooping-Cough, Bronchial and Tubercular Complications.
Claims use since the 11th day of June, 1918.

Ser. No. 112,008. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) PHILIP G. EBBECKE, Mobile, Ala. Filed July 9, 1918.

MEN-TO-TAR

Particular description of goods.—Medical Preparation for Coughs, Colds, Hoarseness, Sore Throat, Bronchitis, and Diseases of the Throat and Lungs.
Claims use since Jan. 10, 1917.

Ser. No. 112,029. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) JOHN F. LAWLER, Boston, Mass. Filed July 10, 1918.

Melazo

Particular description of goods.—Anilin Colors.
Claims use since Feb. 7, 1918.

Ser. No. 112,030. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) JOHN F. LAWLER, Boston, Mass. Filed July 10, 1918.

Zylamine

Particular description of goods.—Anilin Colors.
Claims use since Feb. 21, 1918.

Ser. No. 112,031. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) JOHN F. LAWLER, Boston, Mass. Filed July 10, 1918.

Cuirine

Particular description of goods.—Anilin Colors.
Claims use since May 22, 1918.

Ser. No. 112,036. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) YARDLEY & Co., LIMITED, London, England. Filed July 10, 1918.

CARICIA

Particular description of goods.—Perfumes.
Claims use since July 31, 1917.

Ser. No. 112,037. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) YARDLEY & Co., LIMITED, London, England. Filed July 10, 1918.

GAGE D'AMOUR

Particular description of goods.—Perfumes.
Claims use since Jan. 27, 1913.

Ser. No. 112,038. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) YARDLEY & Co., LIMITED, London, England. Filed July 10, 1918.

SANS SOUCI

Particular description of goods.—Perfumes.
Claims use since July 31, 1917.

Ser. No. 112,040. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) YARDLEY & Co., LIMITED, London, England. Filed July 10, 1918.

ENCHANTRESS

Particular description of goods.—Perfumes.
Claims use since Mar. 29, 1912.

Ser. No. 112,043. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) YARDLEY & Co., LIMITED, London, England. Filed July 10, 1918.

LE BEAU MONDE

Particular description of goods.—Perfumes.
Claims use since Jan. 29, 1914.

Ser. No. 112,044. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) YARDLEY & Co., LIMITED, London, England. Filed July 10, 1918.

LE SECRET DES DIEUX

Particular description of goods.—Perfumes.
Claims use since Sept. 9, 1913.

Ser. No. 112,045. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) YARDLEY & Co., LIMITED, London, England. Filed July 10, 1918.

LADY GAY

Particular description of goods.—Perfumes.
Claims use since July 31, 1917.

Ser. No. 112,046. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) YARDLEY & Co., LIMITED, London, England. Filed July 10, 1918.

SOURCE D'OR

Particular description of goods.—Perfumes.
Claims use since Oct. 28, 1910.

Ser. No. 112,048. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) YARDLEY & Co., LIMITED, London, England. Filed July 10, 1918.

NELL GWYNNE

Particular description of goods.—Perfumes.
Claims use since December, 1910.

Ser. No. 112,049. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) YARDLEY & Co., LIMITED, London, England. Filed July 10, 1918.

LOVE'S SECRET

Particular description of goods.—Perfumes.
Claims use since July 31, 1917.

Ser. No. 112,051. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) YARDLEY & Co., LIMITED, London, England. Filed July 10, 1918.

GARDEN WHISPERS

Particular description of goods.—Perfumes.
Claims use since Aug. 3, 1912.

Ser. No. 112,052. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) YARDLEY & Co., LIMITED, London, England. Filed July 10, 1918.

CHARME DE CUPIDON

Particular description of goods.—Perfumes.
Claims use since June 31, 1917.

Ser. No. 112,102. (CLASS 48. MALT BEVERAGES, EXTRACTS, AND LIQUORS.) BIRK BROS. BREWING Co., Chicago, Ill. Filed July 13, 1918.

Superb

Particular description of goods.—A Non-Intoxicating Malt Beverage to be Sold as a Soft Drink.
Claims use since June 26, 1918.

TRADE-MARK REGISTRATIONS GRANTED

AUGUST 13, 1918.

122,406. CERTAIN NAMED FOODS. BATCHELOR FLOUR MILL CO., Waterville, Me.
Filed June 15, 1917. Serial No. 104,449. PUBLISHED MAY 7, 1918.

122,407. CERTAIN NAMED PHARMACEUTICAL PREPARATIONS FOR TOILET PURPOSES. ELLA R. BERRY, St. Louis, Mo.
Filed April 28, 1917. Serial No. 103,201. PUBLISHED MAY 7, 1918.

122,408. PAPER OR PAPER-PULP CUPS, BOWLS, AND DISHES. THE DAISY CUP COMPANY INC., New York, N. Y.
Filed December 22, 1917. Serial No. 108,095. PUBLISHED MAY 14, 1918.

122,409. NON-INTOXICATING ARTIFICIALLY FLAVORED AND COLORED BLACKBERRY BEVERAGE SOLD AS A SOFT DRINK. THE MIHALOVITCH CO., Cincinnati, Ohio.
Filed April 2, 1918. Serial No. 109,928. PUBLISHED MAY 14, 1918.

122,410. ADHESIVE PASTE. THE PATENT CEREALS CO., Geneva, N. Y.
Filed March 6, 1917. Serial No. 101,987. PUBLISHED MARCH 19, 1918.

122,411. GINGER-ALE. WILLIAM E. TANNER, Lewiston, Me.
Filed March 22, 1918. Serial No. 109,780. PUBLISHED MAY 14, 1918.

122,412. COTTON CHEVIOTS. TUPELO COTTON MILLS, Tupelo, Miss.
Filed January 22, 1918. Serial No. 108,590. PUBLISHED APRIL 30, 1918.

122,413. BELT-CEMENT. THE ULMER LEATHER CO., Norwich, Conn.
Filed March 16, 1918. Serial No. 109,614. PUBLISHED MAY 14, 1918.

TRADE-MARK REGISTRATIONS RENEWED.

15,700. COLLARS AND CUFFS. REVERSIBLE COLLAR COMPANY, Boston, Cambridge, Mass.
Registered July 17, 1888. Renewed July 17, 1918.

16,053. MALT LIQUORS. SAMUEL ALLSOPP & SONS, (LIMITED,) Burton-on-Trent, county of Stafford, England.
Registered December 4, 1888. Renewed December 4, 1918.

TRADE-MARK REGISTRATIONS CANCELED.

105,748. GELATIN. PLYMOUTH ROCK GELATINE CO., Boston and Brighton, Mass.
Registered August 17, 1916. Canceled August 9, 1918.

LABELS

REGISTERED AUGUST 13, 1918.

20,776.—*Title:* "SACRED HEART OF JESUS." (For Wax Tapers.) GUSTAVE J. BUISSON, New Orleans, La. Filed May 8, 1918.

20,777.—*Title:* "CALDWELL'S 33 CENTS THE WORLD ROUND." (For Coffee.) HENRY L. CALDWELL, Jr., Minneapolis, Minn. Filed July 11, 1918.

20,778.—*Title:* "CLEANEM." (For Preparation for Cleaning Woodwork, Metal, and Glassware.) D. O. CHESSMORE & COMPANY, Atwood, Kans. Filed February 11, 1918.

20,779.—*Title:* "GUARANTEED CLINTON BED SPRINGS." (For Wire Bed-Springs.) CLINTON FURNITURE COMPANY, Clinton, Iowa. Filed April 10, 1918.

20,780.—*Title:* "BUG-O-LESS." (For Insect-Poison.) COLE & REED, Alcester, S. D. Filed July 13, 1918.

20,781.—*Title:* "BIG 'K' BRAND." (For Apples.) HERBERT H. DAVIS, Kennewick, Wash. Filed July 9, 1917.

20,782.—*Title:* "DUFFY'S BITTER GUM." (For Chewing-Gum.) JOHN A. DUFFY, Sioux City, Iowa. Filed July 22, 1918.

20,783.—*Title:* "PERSONAL SCALE." (For Scales.) CLINTON ELLIOTT, New York, N. Y. Filed July 1, 1918.

20,784.—*Title:* "TRENCH PROOF." (For a Waterproofing Compound.) ERWA CHEMICAL MANUFACTURING COMPANY, Needham, Mass. Filed July 17, 1918.

20,785.—*Title:* "FORD'S AUTO POLISH." (For Polish for Automobiles.) ELMER A. FORD, New York, N. Y. Filed July 10, 1918.

20,786.—*Title:* "GALE'S PLACE-O-EGG." (For a Baking and Cooking Compound.) GALE-EVANS COMPANY, INC., Minneapolis, Minn. Filed May 18, 1918.

20,787.—*Title:* "JERSEY CREAMERY CREAMERY BUTTER." (For Creamery-Butter.) HENRY GRAFFENBERG, Dayton, Ohio. Filed July 19, 1918.

20,788.—*Title:* "KURRANT." (For Raisins.) WILLIAM A. HIGGINS, New York, N. Y. Filed February 11, 1918.

20,789.—*Title:* "POLKA." (For Laundry Bluing.) GEORGE W. HODGKINS, Washington, D. C. Filed July 13, 1918.

20,790.—*Title:* "BUTTERMILK." (For Toilet Creams.) HOWARD BROS. CHEMICAL CO., Buffalo, N. Y. Filed June 22, 1918.

20,791.—*Title:* "LA MEDA COLD CREAMED POWDER." (For a Toilet Preparation.) ARTHUR M. HULL, Chicago, Ill. Filed April 19, 1918.

20,792.—*Title:* "LA MEDA COLD CREAMED POWDER." (For a Toilet Preparation.) ARTHUR M. HULL, Chicago, Ill. Filed April 19, 1918.

20,793.—*Title:* "GOLF CLUB." (For Canned Sardines.) INTERNATIONAL PACKING CORPORATION, Los Angeles, Cal. Filed June 26, 1918.

20,794.—*Title:* "NOVELTY FASHIONED." (For Hosiery.) JUNIATA HOSIERY MILLS, Mifflintown, Pa. Filed July 22, 1918.

20,795.—*Title:* "OXFORD." (For Oranges.) JACK MCINNES, Orange, Cal. Filed July 16, 1918.

20,796.—*Title:* "SUNRISE." (For Oranges.) JACK MCINNES, Orange, Cal. Filed July 16, 1918.

20,797.—*Title:* "YOUNG FOLK'S STANDARD LIBRARY." (For Books.) MCLOUGHLIN BROTHERS, INC., New York and Brooklyn, N. Y. Filed July 3, 1918.

20,798.—*Title:* "NAVAL MANEUVERS." (For a Game.) MCLOUGHLIN BROTHERS, INC., New York and Brooklyn, N. Y. Filed July 3, 1918.

20,799.—*Title:* "STAR GAME." (For a Game.) MCLOUGHLIN BROTHERS, INC., New York and Brooklyn, N. Y. Filed July 3, 1918.

20,800.—*Title:* "GAME OF SKIRMISHERS." (For a Game.) MCLOUGHLIN BROTHERS, INC., New York and Brooklyn, N. Y. Filed July 3, 1918.

20,801.—*Title:* "ANTI-PNEUMONIA." (For a Medicine.) FRANK W. MILLER, New York, N. Y. Filed July 17, 1918.

20,802.—*Title:* "MOORHEAD." (For Orange Marmalade.) EDWIN S. MOORHEAD, Los Angeles, Cal. Filed July 11, 1918.

20,803.—*Title:* "ALFOINA." (For an Antipyretic and Sedative Medicine.) ORIENTAL DRUG CO. INC., New York, N. Y. Filed April 11, 1918.

20,804.—*Title:* "FULTON PILLS." (For Cathartic Remedies.) ORIENTAL DRUG CO. INC., New York, N. Y. Filed April 11, 1918.

20,805.—*Title:* "CINCHONAL." (For Antimalarial Pills.) ORIENTAL DRUG CO. INC., New York, N. Y. Filed April 11, 1918.

20,806.—*Title:* "PACKARD BONNY BROWN." (For Shoe and Leather, Kid, Calf, and Cordovan Dressing.) PACKARD DRESSING CO., Stoughton, Mass. Filed April 15, 1918.

20,807.—*Title:* "EXTRA FERMENTATI SIGARI ITALIANI." (For Cigars.) A. & S. RAUCCI, Pittsburgh, Pa. Filed July 19, 1918.

20,808.—*Title:* "LE MIETITRICI." (For Macaroni.) RONZONI MACARONI CO. INC., Long Island City, N. Y. Filed May 27, 1918.

20,809.—*Title:* "REGATTA." (For Cigars.) JOHN J. SCHAAB, St. Louis, Mo. Filed June 24, 1918.

20,810.—*Title:* "NILO-LAGER." (For Beer.) A. SCHREIBER BREWING CO., Buffalo, N. Y. Filed July 5, 1917.

20,811.—*Title:* "SCHWARZENBACH NEW NATIONAL BEVERAGE." (For a Non-Intoxicating Beverage.) SCHWARZENBACH BREWING CO., Hornell, N. Y. Filed July 11, 1918.

20,812.—*Title:* "SCHWARZENBACH 'BREWING CO.' NEW NATIONAL BREW." (For a Non-Intoxicating Beverage.) SCHWARZENBACH BREWING CO., Hornell, N. Y. Filed July 11, 1918.

20,813.—*Title:* "GRAND PRIZE BRAND P. P. I. E. 1915." (For Fresh Mountain Bartlett Pears.) JOHANN F. SIEMS, Colfax, Cal. Filed July 11, 1918.

20,814.—*Title:* "AVALON." (For Canned Bonita.) SOUTH COAST CANNING CO. INC., Long Beach, Cal. Filed July 11, 1918.

20,815.—*Title:* "AVALON." (For Canned Mackerel.) SOUTH COAST CANNING CO., INC., Long Beach, Cal. Filed July 11, 1918.

20,816.—*Title:* "PARAMOUNT." (For Canned Sardines.) SOUTH COAST CANNING CO., INC., Long Beach, Cal. Filed July 11, 1918.

20,817.—*Title:* "AVALON." (For Canned Yellowtail.) SOUTH COAST CANNING CO. INC., Long Beach, Cal. Filed July 11, 1918.

20,818.—*Title:* "RED FOX BRAND." (For Oranges.) JESSE D. SPENNETTA, Orange, Cal. Filed May 22, 1918.

20,819.—*Title:* "DOCTOR STARR'S MANHOOD, LIVER AND KIDNEY PILLS." (For Pills.) FRANK MILTON STARR, Birmingham, Ala. Filed April 19, 1918.

20,820.—*Title:* "THREE MINUTE NOODLES." (For Noodles.) THREE MINUTE NOODLE CO., New York, N. Y. Filed July 2, 1918.

20,821.—*Title:* "THE VOGUE BEACH ATTIRE." (For Beach Attire.) LEONARD C. ASCH, New York, N. Y. Filed March 26, 1918.

PRINTS

REGISTERED AUGUST 13, 1918.

4,924.—*Title:* "OPEN YOUR PACKAGE THIS WAY." (For Cigarettes.) THE AMERICAN TOBACCO CO., New York, N. Y. Filed November 2, 1917.

4,925.—*Title:* "OUR CIGARS ALWAYS IN THE LEAD 'THE LEADER.'" (For Cigars.) KAUFMANN & STRAUSS COMPANY, New York, N. Y. Filed June 25, 1918.

4,926.—*Title:* "LIBERTY AXLES." (For Axles.) OSLENREIDER ADVERTISING CORPORATION, Chicago, Ill. Filed June 20, 1918.

DECISIONS

OF THE

COMMISSIONER OF PATENTS

AND OF

UNITED STATES COURTS IN PATENT CASES.

COMMISSIONER'S DECISIONS.

EX PARTE SCHNEIDER.

Decided June 18, 1918.

1. REISSUE—DELAY IN APPLYING FOR—BROADER CLAIMS.
Where two years and eight months after the grant of a patent an application for reissue is made with broader claims, *Held* that the reissue was properly refused.

2. SAME—SAME—INTERVENING RIGHTS.
Where there is a delay of two years in filing a reissue application after the grant of the original patent, *Held* that intervening rights will be presumed, in accordance with the trend of recent decisions.

3. SAME—SAME—INSUFFICIENT EXCUSE.
Where it appears that a patentee did not discover that the claims of his patent were unduly limited until his attention was called to it more than two years after the grant of the patent, *Held* that this did not constitute a sufficient excuse for the delay in filing his reissue application.

APPEAL from Examiners-in-Chief.

GEARING.

Messrs. Fay, Oberlin & Fay for the applicant.

NEWTON, *Commissioner:*

This is an appeal from the decision of the Examiners-in-Chief affirming the action of the Primary Examiner refusing this reissue for broadened claims.

The essential facts in this case are that applicant delayed two years and eight months after the issue of his patent to ask for claims admittedly broader than are the claims of the original patent.

Since the decision of the Supreme Court in *Topliff* v. *Topliff et al.* (59 O. G., 1257; 145 U. S., 156) it has become settled law that a reissue applied for more than two years after the issue of the original patent merely to broaden the claims should not ordinarily be allowed.

Justice Brown in that decision, after a most careful review of the authorities on this point, and particularly the case of *Mahn* v. *Harwood*, (30 O. G., 657; 112 U. S., 354,) in which the Supreme Court had held void a reissue for broader claims granted nearly four years after the issue of the original patent and which discusses the reason why a period of more than two years is ordinarily fatal, held as follows:

> That due diligence must be exercised in discovering the mistake in the original patent, and that, if it be sought for the purpose of enlarging the claim, the lapse of two years will ordinarily, though not always, be treated as evidence of an abandonment of the new matter to the public to the same extent that a failure by the inventor to apply for a patent within two years from the public use or sale of his invention is regarded by the statute as conclusive evidence of an abandonment of the patent to the public.

This decision has been followed in practically all of the recently-decided cases. See, for example, *Felbel* v. *Aguilar*, (121 O. G., 1012,) which held the delay of three and one-half years fatal; *Rawson et al.* v. *C. W. Hunt Co.*, (140 Fed. Rep., 716,) holding a delay of two years and three months fatal; *ex parte Tilden*, (182 O. G., 971;) *in re Starkey*, (104 O. G., 2150; 21 App. D. C., 519;) *in re Ams*, (125 O. G., 347, and 127 O. G., 3644; 29 App. D. C., 91;) *Milloy Electric Co.* v. *Thomson-Houston Electric Co.*, (148 Fed. Rep., 843,) and *American, etc., Co.* v. *Porter*, (232 Fed. Rep., 456, 463.)

It is true that in *in re Heroult* (127 O. G., 3217; 29 App. D. C., 42) there was a delay of slightly more than two years; but the record of that case shows that this matter of delay was never raised and presumably never considered. The point in the case was that Heroult, having originally been granted a patent for an apparatus, should be allowed to reissue and cover a process.

Applicant in his brief seems to have assumed that the Office has taken the position that it would never allow a reissue where there had been a delay of two years; but this is not true. The Supreme Court in *Topliff* v. *Topliff*, *supra*, only held that the lapse of two years—

> will ordinarily, though not always, be treated as evidence of an abandonment of the new matter to the public.

This necessitates a close scrutiny of applicant's reason for his delay to see if applicant's excuse for delay is "ordinary."

Applicant's reasons for the delay are as follows:

> Affiant further deposes and says that the original specification and claims of his patent do not cover an important feature of his invention and his patent is therefore narrower than it should be to properly cover the invention.
>
> Affiant further deposes and says that he had no occasion to review his patent from the date of its issue until the present time, and that the insufficiencies in his original specification and claims only came to his attention through others; namely, Mr. Burton W. Sweet, who is employed by him, and his attorneys, Messrs. Fay, Oberlin and Fay, within the past few weeks, and that he did not delay after he had knowledge of the insufficiency of his original patent.

These reasons are not unusual. They are the ordinary reasons for asking a reissue. These are the reasons given by four-fifths of the applicants for reissue—namely, that after receiving their patent they relied on their attorney's skill and there was nothing to call their attention to the limited nature

of the claims until some circumstance, like the sale of the patent or a charge of infringement or something of that nature, awakened the patentee to the fact that his patent was unnecessarily limited.

To grant this reissue to broaden the claims after the two years' delay under such circumstances as outlined by applicant in his reissue oath would be to ignore the Supreme Court decisions in *Topliff* v. *Topliff* and *Mahn* v. *Harwood, supra.*

Applicant at the hearing seemed to rely on the decision of the Supreme Court in *Abercrombie et al.* v. *Baldwin et al.*, decided December 10, 1917, (245 U. S., 198; 246 O. G., 567;) but that decision rather affirms than modifies *Topliff* v. *Topliff*, since the pertinent part of the decision turns on whether the original and reissue were substantially the same invention. The arguments in that case were that the reissue should be held invalid under *Topliff* v. *Topliff* because it broadened the invention; but the Court in effect said the invention was not broadened, their holding being:

> In the reissue after the words "comparatively large size" it was added "extend the tube which forms the duct downward so that its end will be always embedded in the carbid."
>
> In other words the tube is explicitly described as extending to and its end embedded in the carbid, and this, it is contended, was an enlargement of the original patent.
>
> The contention is untenable if there was in the original patent an implication of such length and termination of the tube, and we think there was.

This decision therefore does not modify *Topliff* v. *Topliff*. Indeed, the trend of recent decisions is that—

> intervening rights will be presumed after a delay of two years. (*American, etc., Co.* v. *Porter, supra.*)

I find no error in the decision of the lower tribunal, and it is affirmed.

DECISIONS OF THE U. S. COURTS.

Court of Appeals of the District of Columbia

HENGGI *v.* DALLMEYER.

Decided May 27, 1918.

1. INTERFERENCE—PRIORITY.
   Record reviewed and *Held* to establish that Henggi was entitled to an award of priority.
2. SAME—SUFFICIENCY OF DISCLOSURE TO OTHERS.
   Held that ordinarily a disclosure to others to be sufficient must so describe the purported invention as to make its nature clear to persons competent to understand it. (*Eastman* v. *Houston*, 18 App. D. C., 135, 140; 95 O. G., 2064.)

Mr. C. T. Milans for the appellant.

Mr. R. D. Totten for the appellee.

SMYTH, *C. J.:*

The controversy in this case is in respect to which one of the parties originated the device of the issue, called in brief "wing-dies" for making "creep-checks" which are used to prevent—

> railroad rails from moving along the tracks in the direction of the length of the rails.

The Acting Examiner of Interferences awarded priority to Henggi. On appeal his decision was reversed by the Examiners-in-Chief and their action was affirmed by the First Assistant Commissioner. All the transactions referred to herein occurred in 1913. Dallmeyer at the dates given was the secretary and treasurer of the Valley Forging Company and exercised a general management over the manufacturing operations of the company. Henggi, until a few days previous to the taking of the testimony, was employed by the same company as factory superintendent.

Henggi claims conception and disclosure in June and reduction to practice in September, while Dallmeyer asserts that he conceived the invention October 5, disclosed it October 6 and reduced it to practice October 25.

Dallmeyer is the junior party and therefore has the burden of proof. (*Hunt* v. *McCaslin*, 10 App. D. C., 527; 79 O. G., 861; *Smith* v. *Smith*. 31 App. D. C., 518; 136 O. G., 850.) He testified that his company having received an order for creep-checks, an article which had not been manufactured by it before, a certain method for making them was adopted, but this proved to be too slow and was soon rejected; that on Sunday, October 5, he conceived the invention of the issue, made drawings, only part of which was offered in evidence, the other part—that which covered the main features of the device—having been lost, he said; that on Monday, October 6, he disclosed the invention to McVey, vice-president of his company, and to Henggi; and that immediately afterward he and Henggi prepared drawings of the dies. Testimony corroborating his statements is essential to his case. (*Malcom* v. *Richards*, 47 App. D. C., ——; 250 O. G., 1000, and cases there cited.) But he has failed to produce any. His wife testified that she saw him at work upon sketches, but she could give no description of them further than that they were for the purpose of reducing the cost of manufacturing creep-checks. McVey said that Dallmeyer stated on Monday morning, October 6, that he had worked out a scheme which would reduce the operations on the creep-checks; that he had a small sketch which he wanted the witness to examine but that the latter only glanced at it and told him that he would look at it later. It does not appear that he did so. McVey also testified that at the same time Dallmeyer said he would go over to the shop and see what Mr. Henggi thought of it, referring to the sketch. This is all the corroborating testimony adduced by Dallmeyer and it falls very far short of answering the law's requirements. Ordinarily a disclosure to be sufficient must so describe the purported invention as to make its nature clear to persons competent to understand it. (*Eastman* v. *Houston*, 18 App. D. C., 135, 140; 95 O. G., 2064.) it is manifest that the foregoing testimony does not establish any such disclosure by Dallmeyer.

Henggi contends that he conceived the invention in June and made drawings some weeks later, fixing the date by the birth of his younger child; that some time in August he disclosed the invention to Dallmeyer who rejected it because, as stated by him, it was too expensive; that Dallmeyer tried two methods for making the creep-checks but found them unsatisfactory, and then fell back on Henggi's idea. This, according to Henggi, was some time in September, when, as he asserts, he made drawings, which have been offered in evidence and embody the issue. He also says that the dies were complete, and were operated, early in October, and that as a reward for his services in inventing them he was given a raise in salary by McVey about November 1. He denies disclosure of the invention by Dallmeyer to him.

Henggi's wife and son testified that he was working on drawings in June for a tool or die which would bend both ends of a piece of metal at the same time. This is one of the things accomplished by the invention. Yute, a pressman, employed by the Valley Forging Company, upon whose press the first dies were installed, says that Henggi told him that he, Henggi, had disclosed to Dallmeyer a set of dies which would increase the speed of manufacturing the creep-checks but that Dallmeyer rejected them as too expensive. He describes the dies by calling them wing-dies, which appears to reveal only two of the distinguishing features of the invention. Jones, another machinist in the employ of the same company, testifies to the same effect as Yute. They also support Henggi with respect to other things touching which he and Dallmeyer differ; *e. g.*, Henggi says there were two experiments made before the wing-dies were adopted, and Dallmeyer says there was but one, while Yute and Jones agree with Henggi. Yute also said that the wing-dies, without the "kicker," an important but not an indispensable part, were tried out by him just before September 30, the date of his marriage, and that when he returned from his wedding tour about two weeks later the dies were complete. If this be true then the greater part of the device was manufactured and in a condition to be tried out before Dallmeyer thought of it. Yute and Jones were in a position to know the facts about which they testified. They are still in the employ of the Forging Company, and this circumstance gives added weight to their testimony in favor of Henggi. McVey admits that Henggi's salary was increased at the time mentioned by the latter, but does not admit that it was done on account of the success of the invention. With regard to that McVey says he gave both Dallmeyer and Henggi credit for the device. Dallmeyer also admits the raise in Henggi's salary.

We have thus given the testimony in outline. A more detailed analysis of it might be made but we deem it unnecessary in view of the exhaustive opinion of the Acting Examiner of Interferences whose conclusions we adopt. It is true that the corroborating testimony of neither party concerning conception and disclosure is as complete as it might be, but the position of Dallmeyer in this respect is worse than that of his opponent, and as the burden is on him he cannot prevail over Henggi. Therefore the decision of the Commissioner is reversed and priority of invention of the subject-matter of the interference is awarded to Henggi, the senior party.

Reversed.

Summary of Supplemental List of Employees Who Have Entered the Military or Naval Service, as Reported Since July 13.

DEPARTMENT OF THE INTERIOR.
Washington, D. C., August 13, 1918.

(For the Honor Roll; total, 153.)

Office of the Secretary	9
Office of Indian Affairs	5
Pension Office	1
Patent Office	22
Geological Survey	14
Reclamation Service	68
Bureau of Mines	22
Alaskan Engineering Commission	7
National Park Service	1
St. Elizabeths Hospital	4
Total	153

OFFICE OF THE SECRETARY (9).

Banks, Herbert, Va., U. S. A.
Clark, Virgil W., Ky., U. S. A.
Curran, John J., N. Y., U. S. A.
Cutshaw, Floyd H., Iowa, Casual Detachment, U. S. A.
Dismukes, Henry D., Ala., M. C., U. S. A.
Grooms, Foster N., Va., U. S. A.
Plummer, Lester, D. C., Depot Brigade, U. S. A.
Smith, Chester R., Pa., U. S. A.
Tler, Irving E., N. J., Sanitary Corps, U. S. A.

OFFICE OF INDIAN AFFAIRS (5).

Gardner, Gordon L., Ariz., Infantry, U. S. A.
Quinn, Isaac, S. D., Machine Gun Battalion, U. S. A.
Rocque, Leo F., Mich., Depot Brigade, U. S. A.
Simon, Joseph, S. D., Infantry, U. S. A.
Teahan, Joseph A., Nev., M. C., U. S. A.

PENSION OFFICE (1).

Bain, Frank J., Tex., Casual Detachment, U. S. A.

PATENT OFFICE (22).

Berman, Harry C., Minn., U. S. A.
Blesterfeld, Chester H., Kans., U. S. A.
Blakely, Charles F., Nebr., Coast Artillery, U. S. A.
Bland, William A., D. C., U. S. N.
Brown, Wager S., D. C., U. S. A.
Casler, Raymond C., W. Va., U. S. A.
Chapman, David E., Ill., U. S. A.
Davis, Leo H., Okla., U. S. A.
Dodson, Fred W., D. C., U. S. N. R.
Douglas, George R., N. Y., U. S. A.
Dowell, Edgar F., Va., Coast Artillery, U. S. A.
Freeman, Hadley F., Ohio, Signal Corps, U. S. A.
Gallo, David T., Pa., U. S. A.
Hailer, Edward J., D. C., U. S. N. R.
Jacobs, Harold H., Mass., U. S. A.
Krafft, Carl F., Wash., U. S. A.
Nolte, Albert C., Pa., U. S. N. R.
Phillips, William L., Va., U. S. N.
Price, Towson, N. J., U. S. N.
Reynolds, Marvin J., N. Y., U. S. N. R.
Silver, Charles, N. Y., U. S. A.
Taylor, Edward C., Mass., U. S. A.

GEOLOGICAL SURVEY (14).

Bell, Charles R., Cal., Aviation School, U. S. A.
Dewhirst, Harold H., Ill., Training Camp, U. S. A.
Druhot, George S., Ohio, Engineer Corps, U. S. A.
Grosbach, Homer E., Nebr., Aviation Corps, U. S. A.
Harrington, George L., Minn., E. O. R. C., U. S. A.
McCulloch, Robert E., D. C., U. S. N.
Mayer, Victor E. J., N. Y., U. S. A.
Miller, Ezekiel H., D. C., U. S. A.
Montford, Arthur H., Kans., U. S. A.
Morgan, Robert E., Wis., U. S. A.
Parker, Sidney L., Ohio, E. O. R. C., U. S. A.
Reed, Frank S., D. C., Depot Brigade, U. S. A.
Stewart, Eugene F., Utah, U. S. A.
Tryon, Frederick G., Minn., Ordnance Department, U. S. A.

RECLAMATION SERVICE (68).

Abildskov, Peter, Utah, U. S. A.
Anderson, Harry, Wyo., U. S. N.
Anderson, William A., S. D., U. S. A.
Andreas, William, Wyo., U. S. A.
Arnspiger, G. P., Idaho, U. S. A.
Bahr, W. H., Mont., U. S. A.
Bate, D. Y., Idaho, M. C., U. S. A.
Beaughn, Mark A., Wyo., Infantry, U. S. A.
Berry, Ralph, Wyo., U. S. N.
Betts, Frank, Mont., U. S. A.
Boogni, Mack, Mont., U. S. A.
Briggs, Leslie, Mont., U. S. A.
Brigham, L. H., Nev., U. S. A.
Brim, C. R., Utah, U. S. A.
Cain, Tom, Idaho, U. S. A.
Campbell, H. E., Nebr., U. S. A.

RECLAMATION SERVICE—Continued.

Carter, Charles L., Nev., Engineer Corps, U. S. A.
Carter, Dave, Wyo., U. S. N.
Chapline, J. S., Idaho, Depot Brigade, U. S. A.
Cockriel, E. C., Wyo., U. S. A.
Coleman, W. J., Utah, U. S. A.
Coon, H. J., Nebr., U. S. A.
Cullington, H. J., Ariz., U. S. A.
Davis, Ray H. O., Ariz., Casual Detachment, U. S. A.
Dawson, James F., Mont., Depot Brigade, U. S. A.
De Berry, Frank, Ariz., U. S. A.
Engle, G. F., Nev., U. S. A.
Exner, H. E., Wyo., U. S. A.
Fisher, H. E., Wyo., U. S. A.
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Gray, A. L., Wyo., U. S. A.
Halley, Mike M., Nebr., U. S. A.
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Hoffman, Richard F., Nebr., U. S. A.
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McCauley, V. B., Ariz., U. S. N.
McGinnis, Ed, Mont., U. S. A.
McGraw, Walter, Mont., U. S. A.
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Mills, R. E., Mont., U. S. A.
Neahr, Sam, Ariz., U. S. A.
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Pender, P. P., N. Mex., U. S. A.
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Turcott, George L., Mont., U. S. A.
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Goldsmith, Chester H., D. C., Chemical Service Section, U. S. A.
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Jelaca, Mike, Servian Army.
Varcar, Steve, Servian Army.
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ST. ELIZABETHS HOSPITAL (4).

Blank, Harry, N. Y., Training Camp, U. S. A.
Casey, Elmer B. M., Mo., M. R. C., U. S. A.
Fowler, Ernest B., Md., U. S. A.
Taylor, William B., Va., U. S. A.

Interference Notice.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., August 12, 1918.

Home Remedy Company, its assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of Geo. A. Deatel, Munsey Building, Baltimore, Md., for registration of a trade-mark and trade-mark registered March 10, 1908, No. 68,120, to the Home Remedy Company, of Fredonia, N. Y., and a notice of such declaration sent by registered mail to said Home Remedy Company at the said address having been returned by the post-office undeliverable, notice is hereby given that unless said Home Remedy Company, its assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

F. W. H. CLAY,
Assistant Commissioner.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., August 21, 1918.

W. H. Ketzeback & Co., their assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of the Centennial Mill Co., of 1002–6 Hoge Building, Seattle, Wash., for registration of a trade-mark and trade-mark registered May 17, 1898, No. 31,556, to W. H. Ketzeback & Co., of Mapleton, Minn., and because of *prima facie* evidence in the record to the effect that W. H. Ketzeback & Co. are no longer using the mark and have no successor in business who is doing so, notice is hereby given that unless said W. H. Ketzeback & Co., their assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

F. W. H. CLAY,
Assistant Commissioner.

THE
OFFICIAL GAZETTE
OF THE
United States Patent Office.

Vol. 253—No. 3. TUESDAY, AUGUST 20, 1918. Price—$5 per year.
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Issue of August 20, 1918.

Patents	705—No.	1,275,997 to No.	1,276,701, inclusive.
Designs	37—No.	52,260 to No.	52,296, inclusive.
Trade-Marks	149—No.	122,414 to No.	122,562, inclusive.
Labels	None.		
Prints	None.		
Reissues	5—No.	14,505 to No.	14,509, inclusive.
Total	896		

Errata.

PATENT NO. 1,229,107.

Under date of August 6, 1918, a notice of decision was published that Thomas F. McDonough was not the first inventor of the subject-matter covered by claims 2 and 3 of his Patent No. 1,229,107, subject, "Fly-Traps." Such publication was an error, and it is hereby recalled.

Changes in Classification.

(ORDER NO. 2,418.)

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., August 20, 1918.

The following changes in the classification of inventions are hereby directed, to take effect immediately:

In class 16, Builders' Hardware, (Division XX.) abolish subclasses—

24. Shutter-workers—
57. Combined slat,
134. Cord or chain,
135. Levers,
136. Rotary shaft,
137. Sliding shaft,
138. Sliding shutter.
28. Transom-lifters.

The patents formerly contained in subclass 24, Shutter-workers, and the subclasses indented thereunder, above abolished, have been placed in similarly-entitled subclasses numbered 10 to 16, inclusive, hereinafter established in class 268, Closure-Operators, and those formerly contained in subclass 28, Transom-lifters, have been placed in class 268, Closure-Operators, subclass 17, Transom-lifters, and the subclasses indented thereunder, hereinafter established.

(Note.—Attention is called to the fact that the subclass title "Transom-lifters," in class 16, Builders' Hardware, still controls the subclass title 142, Pivots, indented thereunder.)

In class 268, Closure-Operators, (Division I,) establish subclasses—

10. Shutter-workers—
11. Combined slat,
12. Cord or chain,
13. Levers,
14. Rotary shaft,
15. Sliding shaft,
16. Sliding shutter.
17. Transom-lifters—
21. Chain or cord,
19. Gear and rack,
23. Latches,
22. Links,
18. Multiple,
24. Pivoted bar,
20. Worm-gear.

The patents contained in subclasses 10 to 16 above have been taken from class 16, Builders' Hardware, subclass 24, Shutter-workers, and the subclasses indented thereunder, hereinbefore abolished, and those contained in subclasses 17 to 24 above have been taken from class 16, Builders' Hardware, subclass 28, Transom-lifters, hereinbefore abolished.

J. T. NEWTON,
Commissioner.

Changes in Classification.

(ORDER NO. 2,419.)

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., August 26, 1918.

The following changes in the classification of inventions are hereby directed, to take effect immediately:

Transfer class 247, Electricity—Conduits, from Division XXXVII to Division XLII.

Abolish class 177A, Electric Signaling, (Division XVI,) and transfer the subclasses contained therein to class 177, Electric Signaling, (Division XLII.)

(Note.—The subclasses in class 177A abolished above were separated from class 177 by Order No. 2,340, July 30, 1917, and Order No. 2,344, August 10, 1917, and are now restored to that class.)

J. T. NEWTON,
Commissioner.

APPLICATIONS UNDER EXAMINATION.

Condition at Close of Business August 16, 1918.

Room No.	Divisions and subjects of invention.	Oldest new application and oldest action by applicant awaiting office action. New.	Amended.	No. of applications awaiting action.
314	1. Closure Operators; Fences; Gates; Harrows and Diggers; Plows; Railway Gates; Planting; Scattering Unloaders; Trees, Plants, and Flowers.	July 10	July 10	123
128	2. Bee Culture; Curtains, Shades, and Screens; Dairy; Paper Files and Binders; Medicines; Pneumatics; Preserving; Presses; Tents, Canopies, Umbrellas, and Canes; Tobacco.	Apr. 22	May 27	371
175	3. Electric Heating and Rheostats; Electrochemistry; Heating; Metal-Founding; Metallurgical Apparatus; Metallurgy; Metal Treatment; Plastic Metal Working.	May 21	June 7	216
234	4. Conveyers; Elevators; Excavating; Hoisting; Material or Article Handling; Pneumatic Despatch; Pushing and Pulling Implements; Railway Mail Delivery; Store-Service; Traversing Hoists.	June 13	July 10	156
167	5. Book-Making; Books, Strips and Leaves; Harvesters; Jewelry; Manifolding; Music; Printed Matter.	May 14	June 14	222
318	6. Bleaching and Dyeing; Chemicals; Explosives; Fertilizers; Liquid Coating Compositions; Plastic Compositions; Substance Preparation.	Apr. 1	May 8	368
312	7. Educational Appliances; Games and Toys; Optics; Velocipedes	May 8	July 16	263
131	8. Beds; Chairs; Flexible-Sheet Securing Devices; Furniture; Kitchen and Table Articles; Store Furniture; Supports.	July 1	June 10	185
221	9. Air and Gas Pumps; Hydraulic Motors; Motors, Fluid; Motors, Fluid-Current; Pumps; Marine Propulsion.	Feb. 13	July 16	490
235	10. Carriages and Wagons; Motor Vehicles	Apr. 29	July 8	525
154	11. Boot and Shoe Making; Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Spring Devices; Whips and Whip Apparatus.	June 3	July 23	198
322	12. Journal-Boxes, Pulleys, and Shafting; Machine Elements	Apr. 24	May 16	743
329	13. Ammunition and Explosive Charge Making; Bolt, Nail, Nut, Rivet, and Screw Making; Button Making; Chain, Staple, and Horseshoe Making; Driven, Headed, and Screw-Threaded Fastenings; Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Tools and Implements, Making; Metal Working; Needle and Pin Making; Nut and Bolt Locks; Turning.	Mar. 22	May 4	582
323	14. Compound Tools; Cutting and Punching Sheets and Bars; Farriery; Metal-Bending; Sheet-Metal Ware, Making; Tools; Wire Fabrics and Structure; Wire-Working.	Apr. 22	June 10	150
308	15. Bread, Pastry, and Confection Making; Coating; Fuel; Glass; Laminated Fabrics and Analogous Manufactures; Paper-Making and Fiber Liberation; Plastic Block and Earthenware Apparatus; Plastics.	June 25	July 16	290
112	16. Electric Signaling-A; Radiant Energy; Telegraphy; Telephony	Apr. 16	May 20	496
307	17. Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet Material Associating or Folding; Sheet Feeding or Delivering; Type Setting.	June 8	May 27	156
229	18. Fluid-Pressure Regulators; Injectors and Ejectors; Liquid Heaters and Vaporizers; Power Plants; Speed Responsive Devices; Steam and Vacuum Pumps; Steam-Engines; Steam-Engine Valves.	May 6	May 31	500
236	19. Dampers, Automatic; Furnaces; Heating Systems; Stoves and Furnaces; Domestic Cooking Vessels	May 2	May 31	309
179	20. Artificial Body Members; Builders' Hardware; Cutlery; Dentistry; Locks and Latches; Safes; Undertaking.	July 17	July 15	203
212	21. Brakes and Gins; Carding; Cloth-Finishing; Continuous-Strip Feeding; Cordage; Felt and Fur; Knitting and Netting; Silk; Spinning; Weaving; Winding and Reeling.	Apr. 13	May 8	324
249	22. Aeronautics; Firearms; Ordnance	May 2	July 12	337
217	23. Acoustics; Coin-Handling; Horology; Recorders; Registers; Sound Recording and Reproducing; Time-Controlling Mechanism.	May 31	June 18	233
144	24. Apparel; Apparel Apparatus; Garment Supporters; Sewing-Machines	June 18	June 22	246
315	25. Agitating; Butchering; Centrifugal Bowl Separators; Mills; Threshing; Vegetable Cutters and Crushers; Gas Separation.	July 13	July 11	97
105	26. Electricity, Generation; Motive Power	Jan. 5	Apr. 15	569
214	27. Brushing and Scrubbing; Grinding and Polishing; Laundry; Washing Apparatus	June 15	June 28	287
225	28. Internal-Combustion Engines	May 3	June 3	465
147	29. Boring and Drilling; Chucks or Sockets; Coopering; Fire-Escapes; Ladders; Rod Joints or Couplings; Wheelwright-Machines; Wooden Buildings; Wood-Sawing; Wood-Turning; Woodworking; Woodworking Tools.	Feb. 26	May 1	460
152	30. Illuminating-Burners; Illumination; Liquid and Gaseous Fuel Burners; Type-Writing Machines	June 1	July 11	337
172	31. Alcohol; Ammonia, Water, and Wood Distillation; Charcoal and Coke; Gas, Heating and Illuminating; Hides, Skins, and Leather; Hydraulic Cement and Lime; Mineral Oils; Oils, Fats, and Glue; Sugar and Salt.	Apr. 29	June 8	273
278	32. Gas and Liquid Contact Apparatus; Heat Exchange; Packaging Liquids; Refrigeration	Feb. 9	July 8	643
70	33. Bridges; Hydraulic Engineering; Masonry and Concrete Structures; Metallic Building Structures; Paving; Roofs.	May 2	June 10	241
304	34. Railways; Railway Rails and Joints; Railway Rolling Stock; Railway Ties and Fasteners; Track-Sanders; Vehicle-Fenders.	July 5	June 19	49
57	35. Buckles, Buttons, Clasps, Etc.; Card, Picture, and Sign Exhibiting; Signals; Toilet	Apr. 9	May 13	441
204	36. Driers; Geometrical Instruments; Measuring Instruments; Photography; Force Measuring	July 5	June 21	419
107	37. Electric Lamps; Electricity, Circuit Makers and Breakers; Electricity, Conduits; Electricity, General Applications.	Apr. 4	May 6	691
378	38. Animal Husbandry; Earth Boring; Fishing and Trapping; Stationery; Stone-Working; Wells	July 20	July 22	125
220	39. Joint Packings; Multiple Valves; Packed Shaft or Rod Joints; Pipe Joints or Couplings; Valved Pipe Joints or Couplings; Water Distribution.	Mar. 25	June 3	260
273	40. Baggage; Bottles and Jars; Check-Controlled Apparatus; Cloth, Leather, and Rubber Receptacles; Deposit and Collection Receptacles; Metallic Shipping and Storing Vessels; Package and Article Carriers; Paper Receptacles; Special Receptacles and Packages; Wooden Receptacles.	Apr. 5	May 11	411
125	41. Railway Draft Appliances; Resilient Tires and Wheels	Apr. 27	June 6	232
114	42. Electricity, Conductors; Electricity-Transmission to Vehicles; Electric Signaling	Jan. 23	Jan. 25	602
382	43. Baths and Closets; Dispensing; Dispensing Beverages; Electricity, Medical and Surgical; Fire-Extinguishers; Sewerage; Surgery; Water Purification.	Apr. 24	May 24	233
253	44. Air-Guns, Catapults, and Targets; Ammunition and Explosive Devices; Boats and Buoys; Ships	July 2	June 26	190
379	45. Clutches; Lubrication; Motors; Railway Brakes	Mar. 16	Apr. 11	316

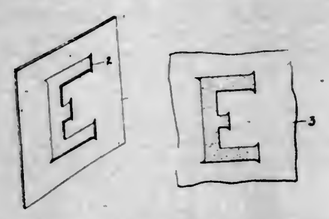
Oldest new case, Jan. 5; oldest amended, Jan. 25.
Total number of applications awaiting action 15,021

163	TRADE-MARKS, DESIGNS, LABELS AND PRINTS:			
	Trade-Marks	July 5	July 27	634
	Designs	May 25	June 12	435
	Labels and Prints	July 24	July 29	87

PATENTS

GRANTED AUGUST 20, 1918.

1,275,997. TOY. MILTON D. ADLER, New York, N. Y. Filed Dec. 9, 1916. Serial No. 135,994. (Cl. 46—37.)

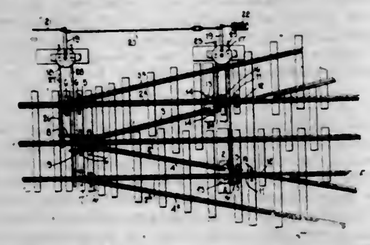


1. A toy comprising a card of suitable sheet material having a design cut therein, a backing sheet having an adhesive surface, a quantity of comminuted material sufficient to fill the design to the depth and thickness of the card whereby a replica of the design may be formed on said backing with the comminuted material by filling the design with the material and removing the surplus with the card.

2. A toy comprising a card of suitable sheet material having the outline of a design cut therein, the part of the cardboard within the design being connected to the outline portion of the card by narrow uncut bridges, a quantity of comminuted material sufficient to fill the design to the depth and thickness of the card whereby a replica of the design may be formed with the comminuted material by filling the design with the material and removing the surplus with the card, said connecting bridges being sufficiently narrow in proportion to the depth and thickness of the card for their spaces to be filled by the flow of the comminuted material when the card is raised.

[Claims 3 and 4 not printed in the Gazette.]

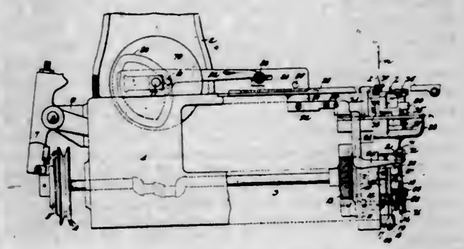
1,275,998. RAILWAY-SWITCH. JOHN ALEXANDER, Oak Creek, Colo. Filed July 7, 1916. Serial No. 108,015. (Cl. 104—12.)



1. The combination with a three-rail track comprising a middle rail and two outer rails, and two turnout tracks, of throw rails disposed at the intersection of the inner rails of the turnout tracks with the outer rails of the main track, switch points pivotally engaged with the ends of the inner turnout rails, pivoted switch points forming part of the outer rails of the main track and shiftable into or out of alinement therewith, and means for simultaneously shifting one pair of switch points in opposite direction relative to the other pair of switch points and simultaneously shifting the throw rails in relatively opposite directions.

2. The combination with a three-rail track comprising a middle rail and two outer rails, and two turnout tracks, of throw rails disposed at the intersection of the inner rails of the turnout tracks with the outer rails of the main track, switch points pivotally engaged with the ends of the inner turnout rails, pivoted switch points forming part of the outer rails of the main track and shiftable into or out of alinement therewith, means for simultaneously shifting one pair of switch points in opposite direction relative to the other pair of switch points and simultaneously shifting the throw rails in opposite directions, said means including rotatably mounted members, one for the throw rails and one for the switch points, the throw rails being respectively connected to diametrically opposite points of the corresponding member, and the switch points being connected respectively to diametrically opposite points of the corresponding member, arms extending from said members, connections between said arms, and means for normally urging the parts to a position where the main tracks are open.

1,275,999. THREAD-CONTROLLING MECHANISM. EDWARD B. ALLEN and BENJAMIN F. CROSBY, Bridgeport, Conn., assignors to The Singer Manufacturing Company, a Corporation of New Jersey. Filed June 30, 1916. Serial No. 106,761. (Cl. 112—4.)



1. In a sewing machine, the combination with overseaming stitch-forming mechanism including a reciprocating needle and a loop-presenting element coöperating therewith for concatenation of thread-loops at opposite sides of the work, of means for preventing seizure of a thread-loop by the needle during its initial thrust at the beginning of a stitching operation, whereby to secure the initial concatenation of thread-loops at the underside of the work.

3. In a sewing machine, in combination, stitch-forming mechanism comprising a reciprocating needle and a coöperating loop-presenting element, means acting, during an initial thrust only of said needle for seizure of a thread-loop from said loop-presenting element, to prevent the seizure of said loop, but ineffective to perform such function in a succession of needle-thrusts thereafter.

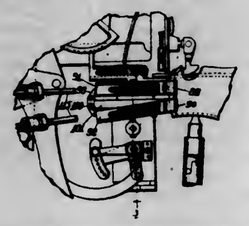
16. In a buttonhole sewing machine, in combination, stitch-forming mechanism comprising a reciprocating needle and a coöperating loop-presenting element, and buttonhole cutting mechanism, means acting, during an initial thrust only of said needle for seizing a thread-loop from said loop-presenting element, to prevent the seizure of said loop, but ineffective to perform such function in a succession of needle thrusts thereafter, and means operatively connected with said cutting mechanism for setting the first-named means in action.

24. In a sewing machine, the combination with looper mechanism comprising a toggle device and a reciprocating rod actuated thereby, of an intermittently acting thread-

nipping device, a thread-guide spaced therefrom, and a pull-off member movable intermediate said nipping device and thread-guide and deriving operative movements from said reciprocating rod.

[Claims 2, 4 to 15, 17 to 23, and 25 not printed in the Gazette.]

1,276,000. TACKING MECHANISM. ORRELL ASHTON, deceased, Swampscott, Mass., by Hannah Ashton, executrix, Swampscott, Mass.; said Orrell Ashton assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Original application filed July 11, 1912. Serial No. 708,848. Divided and this application filed Feb. 15, 1916. Serial No. 78,516. (Cl. 1—18.)



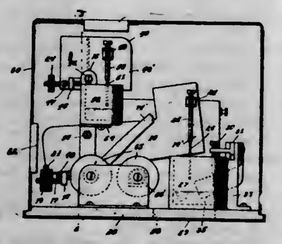
1. In a machine of the class described, the combination of a plurality of tacking devices arranged to contact with the work and mounted for movement in directions perpendicular to the face of the work which they engage and into which the tacks are to be driven, and means for permitting relative movement of either of the devices by pressure of the work upon the other device until both devices come into bearing upon the work, and then supporting both devices rigidly against pressure of the work.

8. In a machine of the class described, the combination of a work support, a plurality of tacking devices spaced apart and arranged to be engaged by the surface of the work into which the tacks are driven when the work is moved toward the devices in the direction in which the tacks are inserted, equalizing connections for adjusting the tacking devices to the surface of the work engaged thereby irrespectively of its contour, means for automatically moving the work support toward the tacking devices and holding it there during the operation of the tacking devices.

11. In a machine of the class described, the combination of a slotted V-block for centering the rear end of a shoe, a tacking mechanism located to insert tacks through the V-block, and means for effecting lateral adjustment of the tacking mechanism relatively to the block to vary the location of the tack relatively to the rear end of the shoe.

[Claims 2 to 7, 9, and 10 not printed in the Gazette.]

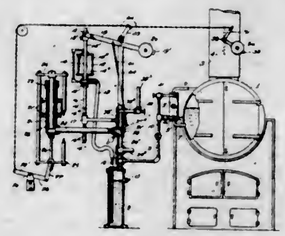
1,276,001. FRAUD-PREVENTING DEVICE FOR COIN-CONTROLLED APPARATUS. SEID G. BACK and BERT L. DOLLOFF, Portland, Oreg. Filed Sept. 22, 1917. Serial No. 192,764. (Cl. 194—101.)



1. In a device of the class described, a pivoted weighing chute normally inclined and discharging coins from the end normally elevated and discharging rejected objects from the opposite end, a pivoted receiving device, a magnet, and means for energizing the magnet by the movement of the pivoted receiving device for deflecting a check capable of being magnetized and causing it to drop into the inclined weighing chute at a predetermined point with reference to its pivotal mounting and without operating said weighing chute, the check being discharged from the chute by gravity.

[Claims 2 and 3 not printed in the Gazette.]

1,276,002. BOILER-PRESSURE REGULATOR. ISAAC ALFRED BACKLUND, Chicago, Ill., assignor to Carrick Engineering Co., Chicago, Ill., a Corporation of Illinois. Filed May 24, 1915. Serial No. 29,987. (Cl. 236—8.)



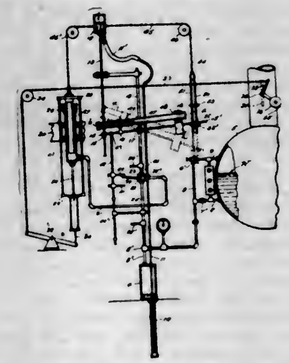
In apparatus of the class described, the combination with a steam boiler, a draft-regulating device therefor, means tending to maintain the latter in inoperative position, and a hydraulic motor operatively connected with said device, of means influenced by an increase and decrease, respectively, of steam pressure within the boiler for rendering said motor operative and inoperative to actuate said draft-regulating device, said last-named means comprising a stationary liquid containing tank communicatively connected from its upper end with the steam space in said boiler, a vertically movable liquid receptacle having communicative connection with the lower end of the tank, adjustable means tending to yieldingly retain the receptacle in its uppermost position, a water supply pipe and a water waste pipe communicatively connected with said motor, a valve for controlling the flow of water from and to the respective pipes in relation to said motor, and connections between said adjustable means and said valve whereby the latter is caused to be positively moved and proportionately to the movements of the receptacle due to the flow of liquid into or from the same due to variations in steam pressures obtaining in said tank.

1,276,003. BOILER-PRESSURE REGULATOR. ISAAC A. BACKLUND, Chicago, Ill., assignor to Carrick Engineering Co., Chicago, Ill., a Corporation of Illinois. Filed May 3, 1916. Serial No. 95,140. (Cl. 236—1.)

1. In apparatus of the class described, a steam boiler, a draft-regulating device, a hydraulic cylinder, a plunger therefor, water pipe connections, a valve therefor, a lever operatively connected to said valve and influenced by steam pressures obtaining within said boiler whereby water is caused to be admitted to or discharged from the cylinder to actuate said plunger, a member containing liquid operating with said lever, and a slotted bar operatively connected to said plunger and engageable with the lever and coöperating with the weight of the liquid within said member to accelerate the action of the valve in controlling the flow of water to and from said cylinder.

2. In apparatus of the class described, the combination with a steam boiler, a draft-regulating device therefor, a liquid-containing tank, pipe connections between the upper end of the tank and the steam space within the boiler, a liquid receptacle, connections including a flexible

member making communication between the lower end of said tank and the receptacle, a lever supporting said receptacle for vertical movements, and means tending to elevate said receptacle, a cylinder, a plunger therefor, operative connections between the plunger and said draft device, a three-way valve, a pipe connecting the cylinder with the valve, a water-supply pipe and a water-waste pipe connected with the valve, and operative connections between said lever and the valve whereby the latter is influenced to admit a quantity of water into the cylinder to start the action of said plunger for operating said draft devices when an increase of the steam pressure within the boiler affects the receptacle to cause the same to descend and serving to influence the valve to start the release of water from the cylinder when the boiler pressure decreases below what is necessary to retain the liquid in said receptacle, of means operatively connected with said plunger and engageable with said lever and serving to supplement the power afforded by the weight of liquid which is supplied by the boiler pressure to said receptacle.



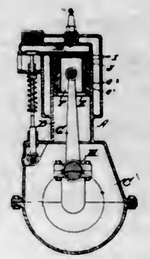
3. In a boiler pressure regulator, the combination with a boiler and combustion regulating apparatus, of gravity operated means and means which acts against said gravity operated means, an element displaceable by steam pressure of the boiler for moving the gravity operated means, a power supplying medium control shifted by the gravity operated means, the movement of which supplies the said medium for moving the combustion regulating apparatus and the means which act against said gravity operated means to restore said gravity operated means to approximately its position before it was shifted whereby a predetermined variation in the boiler pressure will shift said power supply medium control in the opposite direction, thereby releasing said medium.

4. In a boiler pressure-regulator, the combination with a boiler and combustion regulating apparatus, of gravity operated means and means which acts against said gravity operated means, an element displaceable by steam pressure of the boiler for moving the gravity operated means, a power supplying medium control shifted by the gravity operated means, the movement of which supplies the said medium for moving the combustion regulating apparatus and the means which act against said gravity operated means to restore said gravity operated means to approximately its position before it was shifted whereby a predetermined variation in the boiler pressure will shift said power supplying medium control in the opposite direction thereby releasing said medium, and means for accelerating said movement.

5. A regulator for controlling combustion in steam boiler furnaces comprising means displaceable by pressure of steam in a boiler, gravity operated elements moved by said means, a combustion controlling member, a device for moving the combustion controlling member, a power supplying medium for said device, a control for the power supplying medium actuated by said elements whereby power is supplied and released, means operated by the device for moving the combustion controlling member acting against gravity of said elements for restoring said elements to approximately the position they occupied prior to their first mentioned movement and means for restoring said gravity operated elements to their first mentioned position when the boiler pressure is reduced beyond a predetermined degree.

[Claims 6 to 9 not printed in the Gazette.]

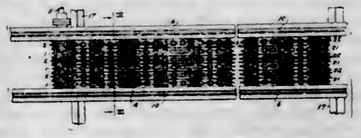
1,276,004. INTERNAL-COMBUSTION ENGINE. JOHN S. BARNES, Detroit, Mich. Filed May 28, 1917. Serial No. 171,421. (Cl. 123—75.)



3. In an internal combustion engine, a piston comprising two telescoping sleeves, a piston rod connecting the inner sleeve with the crank shaft of the engine, and an expanding ring fitted to the inner sleeve adapted to enter an inclined recess in the outer sleeve, whereby the sleeves while free to move independently of each other for a portion of the piston stroke are adapted to interlock that they may operate as a unit for the remainder of the piston stroke.

[Claims 1 and 2 not printed in the Gazette.]

1,276,005. CHAIN GRIZZLY. JOSEPH C. BARR, Riverton, Minn., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed May 27, 1916. Serial No. 100,738. (Cl. 83—56.)



1. In combination, a plurality of spaced stationary material-supporting elements, and movable conveying elements in the spaces between said stationary elements, one of said conveying elements being movable at a different speed than that of another.

2. In combination, a plurality of spaced stationary material-supporting elements, and movable conveying elements in the spaces between said stationary elements and having projections extending upwardly beyond said stationary elements, one of said conveying elements being movable at a different speed than that of another.

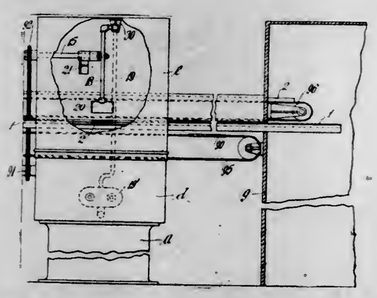
3. In combination, a plurality of spaced stationary material-supporting elements, and movable conveying elements in the spaces between said stationary elements, one of said conveying elements on one side of a stationary element being movable at a different speed than that of said conveying element on the opposite side of said stationary element.

4. In combination, a series of spaced parallel stationary material-supporting bars, and movable conveying chains in the spaces between said bars, one of said chains being movable at a different speed than that of another.

5. In combination, a series of spaced parallel stationary material-supporting bars, and movable conveying chains in the spaces between said bars and having projections extending upwardly beyond said bars, said chains on opposite sides of each of said bars being relatively longitudinally movable and being movable at different speeds.

[Claims 6 to 9 not printed in the Gazette.]

1,276,006. APPPARATUS FOR MAKING CONFECTIONS. ALONZO LINTON BAUSMAN, Springfield, Mass., assignor to National Equipment Company, Springfield, Mass., a Corporation of Massachusetts. Filed Apr. 17, 1915. Serial No. 21,994. (Cl. 107—1.)



1. A molding machine comprising, a series of open ended molds, means to feed said molds into the machine, means to fill the molds with coating material, a turn over device to turn the molds upside down whereby the coating material is drained therefrom except molded containers, a second turn over device to turn the molds right side up, means to successively deposit suitable fillings in said containers, and mechanism successively operable on each mold during an interval of rest to lay a covering sheet of coating material over said filling, whereby said containers are closed.

3. A confectionery machine, comprising, a conveyer, a sheet forming nozzle, continuously operable measuring means to positively force confectionery from said nozzle in a measured substantially unbroken sheet, and mechanism to move said nozzle with respect to said conveyer at a speed substantially equal to the formation of said sheet.

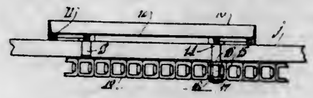
6. In a molding machine, a series of mold boards having recesses, means for forming an open shell of coating material in said recesses, means to fill said shells and means to cover the open ends of the shells with a layer of coating material, said last-named means comprising a sheet forming nozzle, conveying means to move the boards successively beneath the nozzle, means to move the latter across the conveying means, a stencil plate and automatic means for applying the stencil plate to each mold successively, whereby a sheet of coating material may be laid on said plate leaving separate coverings for the filled shells when the plate is removed.

9. A confectionery coating machine, comprising, a container for coating material, a confectionery conveying means movable step by step above said container, a sheet forming nozzle connected to the latter, means to positively force material from the nozzle in a measured unbroken sheet, and means to move the nozzle back and forth across the conveyer, said conveying means arranged to operate at the end of each stroke of the nozzle, and the latter being arranged to overile said container at the end of each stroke.

10. In a confectionery machine, a series of molds, means to fill the latter with coating material, a conveyer to move the molds past said means, a second conveyer in line with but spaced rom the first conveyer, a turn over device arranged to receive a mold from the first conveyer and transport it to the second conveyer, means to reciprocate the device constructed to gradually start and gradually stop the device from the first to the second conveyer, and means operable during the reciprocating movement to turn the mold upside down, whereby the material may be drained from the mold except for hollow molded containers.

[Claims 2, 4, 5, 7, 8, 11, and 12 not printed in the Gazette.]

1,276,007. PACKING-TABLE. ALONZO LINTON BAUSMAN, Chicopee, Mass., assignor to National Equipment Company, Springfield, Mass., a Corporation of Massachusetts. Filed Feb. 12, 1917. Serial No. 148,281. (Cl. 193—2.)



1. The combination in a packing table, of a plurality of trays mounted therein for travel in a substantially horizontal plane, guiding means arranged to form a closed loop path, spaced devices on each tray engageable with said means to guide the tray in a definite path, and driving means to move the trays in said path, said last-named means having a swiveled engagement with that one of the devices of each tray which is foremost in the direction of its travel, all constructed and arranged so that the trays are constrained to move in a predetermined manner without binding.

4. A packing apparatus, comprising in combination, a table having an upper horizontal surface and provided with a continuous slot therein to form a closed loop path, a driving and a driven sprocket rotatable on vertical axes below said surface, a chain carried by said sprockets and arranged to move in parallel relation to the slot, a plurality of trays movable along said surface, a pair of guide pins depending from each tray into said slot, and a device connecting one pin of each pair to said chain at spaced intervals, all constructed and arranged so that said trays may be moved in a closed loop path upon the table and maintained in a common horizontal plane.

[Claims 2 and 3 not printed in the Gazette.]

1,276,008. SNAP-HOOK. JOHN BROWN BAXTER, Watervliet, N. Y., assignor to Covert Manufacturing Co., Watervliet, N. Y., a Corporation of New York. Filed May 16, 1917. Serial No. 169,088. (Cl. 24—241.)



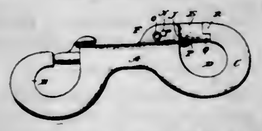
3. A device of the character described comprising a shank provided with an eye including a hook portion carried by the shank, and means for closing the space between the end of the hook portion and the shank including an outwardly-opening bar engaged at one end with the shank and at its other end adjoining the end of the hook portion, and an inturned hook on the bar projecting laterally into the eye opening adapted to interlock with a part carried by the shank for the purpose described, the shank of the inturned hook being interposed between its interlocking part and the outer end of the eye to protect the latter from contact with devices attached to the eye.

5. In a device of the character described, an eye portion including a hook carried by a shank, and means for closing the space between the end of the hook and the shank comprising a bar, and a substantially concealed latch adapted to engage a part on said bar to prevent opening thereof, said latch being releasable only by the interposition of an extraneous tool, as the blade of a pen-

knife, to force the same from engagement with the bar, and to prevent accidental release of the latch by engagement with exterior objects in service.

[Claims 1, 2, 4, and 6 not printed in the Gazette.]

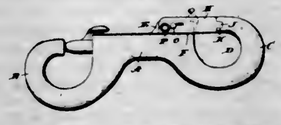
1,276,009. SNAP-HOOK. JOHN BROWN BAXTER, Watervliet, N. Y., assignor to Covert Manufacturing Co., Watervliet, N. Y., a Corporation of New York. Filed May 16, 1917. Serial No. 169,089. (Cl. 24—241.)



3. A device of the character described comprising a hook part carried by a shank, and means for closing the space between the end of the hook part and the shank including a separate bridging bar adjoining at its opposite ends the end of the hook part and a portion of the shank, and means connecting the said bar to the shank to prevent relative movement thereof in any direction save by destroying the connection between the bar and the shank, the connecting means comprising a pin uniting adjacent portions of the bar and shank and an interfitting lug and recess engagement between the bar and shank at a point spaced from said pin.

[Claims 1 and 2 not printed in the Gazette.]

1,276,010. SNAP-HOOK. JOHN B. BAXTER, Watervliet, N. Y., assignor to Covert Manufacturing Co., Watervliet, N. Y., a Corporation of New York. Filed May 16, 1917. Serial No. 169,090. (Cl. 24—241.)



1. A device of the character described comprising a hook carried by a shank, and means for closing the space between the end of the hook and the shank including a separate bar adjoining at one end the end of the hook and having an elongated portion at its opposite end overlying the shank, in combination with detachable means for removably securing adjacent portions of the bar and shank together to prevent relative movement thereof in any direction.

[Claims 2 and 3 not printed in the Gazette.]

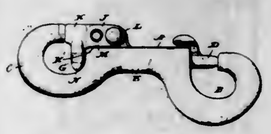
1,276,011. THIMBLE. JOHN B. BAXTER, Troy, N. Y., assignor to Covert Manufacturing Co., Troy, N. Y., a Corporation of New York. Filed Dec. 17, 1917. Serial No. 207,530. (Cl. 24—125.)



1. A thimble of the character described comprising separated eyes occupying a divergent relation merged together at their upper sides to provide an elongated bottom opening extending a substantial distance upwardly of said sides, and the upper ends of the eyes merging into an interiorly threaded stem portion, in combination with a clamping bolt in said stem portion adapted to project at its end into the interior of the thimble at a point approximately centrally of said divergent eyes.

[Claim 2 not printed in the Gazette.]

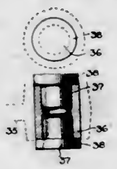
1,276,012. SNAP-HOOK. JOHN B. BAXTER, Troy, N. Y., assignor to Covert Manufacturing Co., Troy, N. Y., a Corporation of New York. Filed Feb. 20, 1918. Serial No. 218,276. (Cl. 24—241.)



3. The combination with a shank and eye portion spaced apart, means for closing the space between the shank and eye portions including a closure, and an integral rivet and aperture engagement between the closure and the shank portion, said closure and shank portion having alined apertures for the reception of other securing means, substantially as described.

[Claims 1 and 2 not printed in the Gazette.]

1,276,013. PROCESS FOR RENDERING WORN BUSHINGS USABLE. CHARLES P. BEACH, Littleton, N. H. Original application filed June 6, 1916, Serial No. 104,056. Divided and this application filed Apr. 27, 1917. Serial No. 164,915. (Cl. 29—148.)



1. The herein described method of refinishing the bore of worn bushings consisting of placing a rigid filler in the bore of the bushing of less diameter than the desired diameter of the bushing, then compressing the bushing longitudinally until its bore conforms in diameter to the diameter of the filler, and then reboring the bushing to a desired diameter.

9. The improvement in the art of refitting worn bushings which consists in placing in each end of the bushing a headed filler the diameter of the headed portions approximating the diameter of the bearing and the diameter of the filler portions being less than the diameter of the bushing, applying pressure to the fillers longitudinally of the bushing thereby reducing the internal bore of the bushing while maintaining its external diameter substantially constant, and thereafter reboring the bushing to a desired diameter.

[Claims 2 to 8 not printed in the Gazette.]

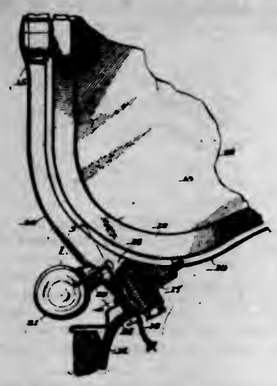
1,276,014. MOTOR-VEHICLE. EDWARD H. BELDEN, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Dec. 14, 1917. Serial No. 207,123. (Cl. 180—89.)

1. In a motor vehicle, the combination with the cowl and a windshield support mounted thereon, of a lamp secured to said support, and wires for the lamp extending through the cowl and the windshield support.

2. In a motor vehicle, the combination with the cowl and a windshield support mounted thereon, said cowl and support having registering conduits therethrough, of a lamp secured to said support and having wires extending through said conduits.

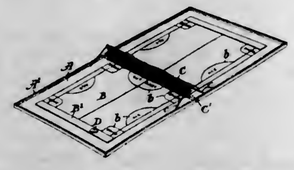
3. In a motor vehicle, the combination with the cowl and a windshield support mounted thereon, of a lamp mounted on the vehicle and having wires extending through the cowl and the windshield support.

4. In a motor vehicle, the combination with the cowl and a windshield support detachably connected thereto,



said cowl and support having registering conduits, of a lamp detachably secured to the support and having wires extending through said conduits.

1,276,015. GAME. CHARLES H. BELKNAP, Brooklyn, N. Y. Filed Mar. 10, 1916. Serial No. 83,262. (Cl. 46—59.)

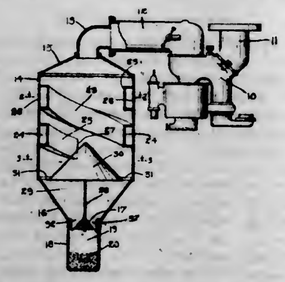


1. As a new article of manufacture, a game-board having a hinge, a net, and supports for the net adjacent to the hinge, the supports mounted to fold when the board is closed, and means for restoring the supports to erect positions when the board is opened.

4. A game comprising a board having marked thereon the scoring shots of the game of lawn tennis, a net near the middle of the board, one or more rackets, and a disk or disks to be operated by the racket, as described.

[Claims 2, 3, and 5 not printed in the Gazette.]

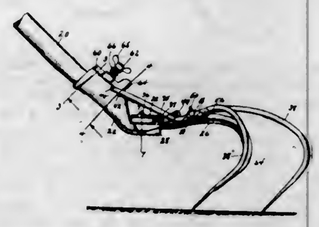
1,276,016. AIR-CLEANER. ASHLEY C. BENNETT, Minneapolis, Minn. Filed Feb. 28, 1917. Serial No. 151,563. (Cl. 183—90.)



3. An air cleaner comprising a cylindrical casing, having means for securing the same in vertical position in communication with an air-current inducing means, means inside said casing for directing said air current in the form of a cyclone or whirl within and at the lower part of the casing, and a conical baffle-plate located within the casing with its lower edge spaced from the lower portion of the casing and with its apex extended through the center of said cyclone in the plane where the cyclone is produced within the casing.

[Claims 1, 2, and 4 not printed in the Gazette.]

1,276,017. CULTIVATOR. ADELBERT S. BEYMER, Kansas City, Mo. Filed Sept. 4, 1917. Serial No. 189,450. (Cl. 97—41.)



1. A cultivator construction comprising a shank member, a removable cultivating member formed with a tine portion, and means for detachably securing said cultivating member in fixed relation to said shank member, said means including a latch provided with a loose operative connection with said shank member.

5. A cultivator construction comprising a shank member, a plurality of cultivating tines rigidly connected to form a removable set of tines adapted to be bodily applied to or detached from said shank member, and means for detachably securing said set of tines to said shank member with the tines extending into working position on opposite sides of the middle longitudinal line of the cultivator, said means including a latch element having a loose operative connection with said shank member.

6. A cultivator construction comprising a shank member, a removable cultivating member formed with a cultivating tine, said shank member being provided with integrally connected and relatively immovable upper and lower bearings adapted to embrace opposite sides of said tine, and arranged to permit the insertion of said tine between said bearings, and means for detachably securing said cultivating member in position with its tine extending between said bearings.

23. A cultivator construction comprising a shank member, a central cultivating member carried by said shank member, a plurality of sets of removable cultivating members, each set comprising an even number of integrally connected tines, means for detachably interlocking said sets of cultivating members, and means for detachably connecting said sets of cultivating members to said shank member with an equal number of said tines extending in position on opposite sides of said central cultivating member.

26. A cultivator construction comprising a shank member, a plurality of sets of removable cultivating tines, means for detachably interlocking said sets of tines together in relatively fixed relation to each other, and means for removably securing said sets of tines to said shank member in working position, said securing means including a latch having a loose operative connection with said shank member.

[Claims 2 to 4, 7 to 22, 24, 25, 27, and 28 not printed in the Gazette.]

1,276,018. SPOON-HOLDER FOR CUPS, &c. EVANGELOS BLAETUS, Scranton, Pa. Filed Nov. 28, 1917. Serial No. 204,352. (Cl. 65—13.)

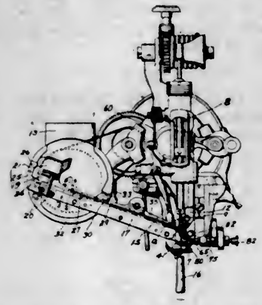
2. A vessel of the type described provided with an integral spoon-holding pocket on its outside, said pocket consisting of a wall curved away from the imperforate side of the vessel and provided with a notch in its upper



edge adjacent to the wall of the vessel, the upper and lower side of the pocket being open.

[Claim 1 not printed in the Gazette.]

1,276,019. FASTENING-INSERTING MACHINE. WILLIAM HERBERT BORDEN, Winchester, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Dec. 16, 1914. Serial No. 877,596. (Cl. 1—34.)



1. In a machine for driving protectors, a throat having a driver passage, a driver, means for supporting a protector in the driver passage, and a yielding device in said driver passage for guiding the protector while it is being driven.

2. In a machine for driving winged protectors, a driver, a movable device for sustaining the protector, and a yielding guide adapted to enter the space between the wings of the protector and guide the protector while it is being driven.

6. In a machine for inserting fastenings, a throat having a driver passage, a driver, means for supporting a fastening in the driver passage, and a device projecting into the driver passage below the said support constructed and arranged yieldingly to engage one side of the fastening along its length and maintain it against the wall of the driver passage while it is being driven.

13. In a machine for driving winged protectors having depending shanks, an awl for cutting a hole in the stock to receive a portion of the protector, a throat having a driver passage, a protector guide located in said passage, means to deliver a protractor into said passage, a driver adapted to straddle said guide, and means to actuate said awl and driver.

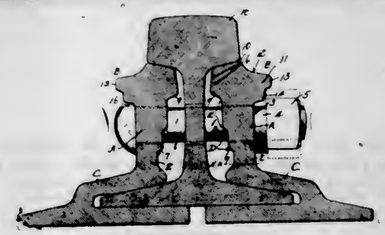
14. In a machine for inserting fastenings, the combination with a fastening inserting mechanism, of an awl for making a fastening receiving incision in stock, the awl having a hollow stem and a cutting edge lying substantially in a plane oblique to the axis of the stem.

[Claims 3 to 5, 7 to 12, and 15 not printed in the Gazette.]

1,276,020. SPLICE-BAR FOR RAIL-JOINTS. BANCROFT G. BRAINE, New York, N. Y., assignor to The Rail Joint Company, New York, N. Y., a Corporation of New York. Filed Mar. 23, 1916. Serial No. 86,212. (Cl. 239—9.)

1. A splice bar of uniform section having a step formation at the inner side of its web.

3. A splice bar having a foot member, a web member of downwardly diminishing thickness connected with the foot member, and a laterally enlarged head member provided at its outer side with stepped projections arranged at progressively increasing distances from the outer side of the bar.



7. A splice bar of uniform section having a straight vertical outer face, and a plurality of inner straight faces substantially parallel with said outer face and spaced from the latter at progressively increasing distances toward the head of the bar.

12. A splice bar provided with a web member and a laterally enlarged head member, the web member having an outer vertical bolting face and a plurality of inner straight faces spaced at progressively increasing distance from the outer face toward the head, and the latter having at its outer side a plurality of projections at progressively increasing distance from the vertical plane of said outer vertical face.

[Claims 2, 4 to 6, and 8 to 11 not printed in the Gazette.]

1,276,021. ANCHOR-ROD. WILLIAM R. BRASHEAR, Dayton, Ohio. Filed June 4, 1917. Serial No. 172,739. (Cl. 189—90.)



1. In a land anchor, an anchor rod having an integral terminal head, a longitudinally disposed cam surface adjacent to the head, an engagement plate having jaws adapted to engage said rod adjacent to the head, the cam surface upon said rod being brought into engagement with the jaws to force said jaws apart a distance greater than the width of the head by a longitudinal movement of the rod whereby the rod head may be disengaged from said jaws.

2. In a land anchor, an anchor rod, a detent member normally limiting the reciprocatory movement of the rod in one direction, and means for disengaging the rod from said member by an initial longitudinal movement of the rod in the opposite direction thereby permitting said rod to be subsequently withdrawn independent of the detent member.

[Claims 3 to 7 not printed in the Gazette.]

1,276,022. COMBINATION SAFETY-RAZOR AND HAIR-TRIMMER. WILLIAM HARRY BRASIER, Corpus Christi, Tex. Filed May 25, 1917. Serial No. 170,929. (Cl. 30—12.)

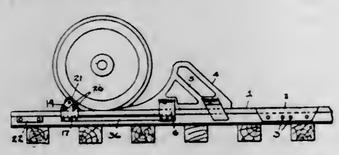
In a device of the class described, a head comprising a flat table having a transverse elongated slot, the table having upstanding sides provided with inwardly projecting guides, at the inner edges of which, upstanding

walls are fashioned, the upper edges of the walls being downwardly and forwardly inclined, and carrying outwardly extended blade supports, the outer edges of which are supplied with inwardly extended blade grips;



a blade held between the grips and the supports; a guard plate on the table beneath the guides; and a handle abutting against the table, the handle having a reduced stem extended through the slot and threaded into the guard plate.

1,276,023. CAR-STOP. EDWARD W. BREYLEY and JAMES U. DUFFY, Cleveland, Ohio. Filed Nov. 22, 1917. Serial No. 203,331. (Cl. 104—229.)



1. In a car stop, the combination of a stop block attached to the rail, a shoe slidably mounted on said rail in advance of said block and adapted to engage the car wheel, and means mounted on said shoe and adapted to engage the car wheel to return said shoe to its original position upon return movement of the car.

7. In a car stop, the combination of a stop block attached to the rail, a shoe slidably mounted on the rail ahead of said block, said shoe being adapted to receive a car wheel thereon, a resilient arm attached to said shoe and extending along the rail, a wheel mounted in said arm and adapted to ride on the rail, a second wheel mounted above said first wheel and adapted to be engaged by the car upon return movement to move said shoe back to its original position, and a cam block adapted to be attached to the rail and to be engaged by said arm during its return movement to disengage said wheel from the car wheel and stop said shoe in its original position.

8. In a stop for railway cars and the like, the combination of a permanent stop block adapted to be secured to the rail, and a portable shoe adapted to be slidably mounted on the rail, said shoe being adapted to receive a car wheel thereon and to move therewith until stopped by said block.

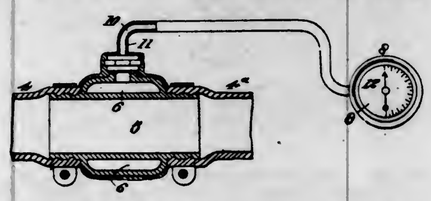
11. In a stop for railway cars and the like, the combination of a permanent stop block adapted to be secured to the rail, a shoe adapted to be removably clamped on the rail and slidable along, said shoe being spaced ahead of said block, said shoe being adapted to receive a car wheel thereon and move therewith to stop the car when in contact with said block.

[Claims 2 to 6, 9, and 10 not printed in the Gazette.]

1,276,024. TEMPERATURE-INDICATOR. WALTER S. BRITTIN, Vallejo, Cal. Filed Dec. 4, 1917. Serial No. 205,291. (Cl. 73—52.)

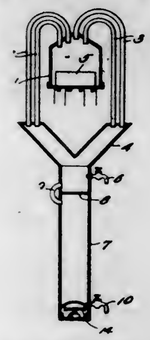
1. The combination with the jacket surounding the cylinders and the radiator on an automobile, of a hose connecting the jacket with the radiator to permit water to circulate therethrough, a nipple member in the hose through which the water passes, said nipple having a chamber formed thereround adapted to contain an expansible liquid, a temperature dial on the dashboard of the autombile, a movable hand on the dial, and means actuated by expansion of the liquid for moving the hand, said means being connected to said chamber by a tube.

2. The combination with the jacket surrounding the cylinders and the radiator on an automobile, of a hose connecting the jacket with the radiator to permit water to circulate therethrough, a nipple member in the hose through which the water passes, said nipple having a



chamber formed therein, a temperature indicating gage on the dashboard of the automobile, a tube connecting the gage with the chamber on the nipple, and an expansible liquid forming a filler for the gage, the tube and the chamber to operate the gage according to the changes of the temperature of said liquid.

1,276,025. APPARATUS FOR PURIFYING WATER. EDNA E. BUSCHER, Indianapolis, Ind. Filed June 28, 1917. Serial No. 177,554. (Cl. 203—5.)



An apparatus of the class described comprising a water receiving tank having a dome-shaped top, heating means for said tank, a Y-shaped water receptacle disposed in a plane below said tank with a horizontal partition intermediate the ends of the body portion thereof, forming a receiving and a storage chamber, a plurality of pipes leading from the top of said tank extending in opposite directions, and opening through the upper ends of the arms of said Y-shaped receptacle, a pipe connecting said receiving compartment and said storage compartment leading from the receiving compartment near its bottom and opening into the storage compartment near its top, a faucet in said receiving compartment above its bottom, cooling means arranged in the lower end of said storage compartment, and a faucet leading from said storage compartment adjacent said cooling means.

1,276,026. SHOE-FASTENER. THEODORE BUTLER, Detroit, Mich. Filed Apr. 6, 1918. Serial No. 227,075. (Cl. 24—73.)



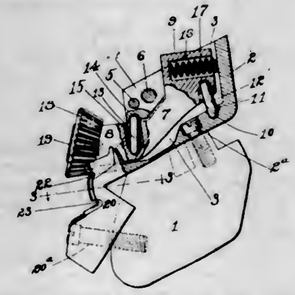
5. In a securing device of the class described, a central supporting body comprising a plurality of links connected

together end to end, and hook members on each link projecting laterally therefrom.

6. In a securing device of the class described, a central supporting body comprising a plurality of plates pivoted together end to end, a hook at the free end of one of the links of said body, each link being provided adjacent its longitudinal edges with slots, and hook members secured at their inner ends in said slots.

[Claims 1 to 4 and 7 not printed in the Gazette.]

1,276,027. COMBINED EDGE-SETTING AND INDENTING DEVICE. FRANK BYCROFT KEALL, ALFRED HARRINGTON, and RICHARD WILLIAM CHARLES BASSETT, Leicester, England, assignors, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Nov. 27, 1914. Serial No. 874,240. (Cl. 12—103.)



1. A device of the character described, comprising a holder, an indenting wheel carrier mounted in said holder for motion substantially parallel to the tread face of a shoe sole, and a hinge connection between said holder and said carrier.

2. A combined edge setting and indenting tool comprising a holder, an indenting wheel carrier slidably carried by said holder, a thrust pin connecting said carrier and said holder, and an edge setting iron carried by said holder.

3. A device of the class described comprising a holder, an indenting wheel carrier mounted to slide loosely on said holder, and pivoted stress-taking members mounted between said carrier and said holder.

4. A combined edge setting and indenting device comprising a holder, an indenting wheel carrier in slidable connection with said holder, said connection comprising oscillating stress-taking members, and an edge setting iron adjacent to said carrier.

5. A combined edge setting and indenting device comprising a holder, an indenting wheel carrier mounted in said holder, oposed bearings on said holder and indenting wheel carrier, stress-taking members mounted in said bearings, and an edge setting iron mounted on said holder.

[Claims 6 to 19 not printed in the Gazette.]

1,276,028. WELL-CLEANING DEVICE. JARRETT L. CAMERON, Edgerley, La., assignor of one-half to Evangeline Iron Works, Ltd., Vinton, La., a Corporation of Louisiana. Filed Mar. 2, 1918. Serial No. 220,020. (Cl. 166—5.)

1. In combination with a coupling and a well strainer engaged therewith, an annular member mounted within the coupling and provided with a cage extending in a direction away from the strainer, a washer pipe engaged with said member and extending inwardly of the strainer, the inner end portion of the washer pipe being of bell formation, a valve arranged within the cage and coacting with the connected end portion of the washer pipe, a wash pipe insertible within the strainer and extending within the inner portion of the washer pipe and terminating below the bell thereof, said wash pipe inwardly of its end insertible within the washer pipe being provided with an annular enlargement, and a gasket surrounding the wash pipe and carried thereby below the enlargement,



said gasket engaging the inner wall of the bell portion of the washer pipe when the wash pipe is inserted within the washer pipe.

[Claim 2 not printed in the Gazette.]

1,276,029. PENCIL. FRED M. CARROLL, Dayton, Ohio. Filed Sept. 18, 1912. Serial No. 721,030. (Cl. 120—18.)



1. In a writing instrument, the combination of a hollow casing, an internally threaded tube rotatively mounted in the casing, a sleeve on the exterior of the casing and connected with the tube whereby the latter may be rotated in the casing by turning the sleeve, a screw threaded plug in the tube engaging the threads thereof, a lead in the tube non-rotatively connected with the plug, and means for normally preventing the rotation of the lead relative to the casing.

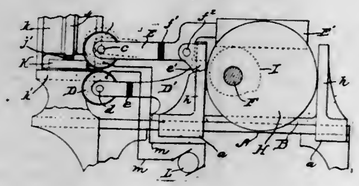
3. In a writing instrument, the combination of a hollow casing, an internally threaded tube mounted for rotation in the casing, means for rotating the tube, an externally threaded plug in the tube engaging the threads thereof and having a non-circular recess in one of its ends, a lead in the tube and casing having a non-circular end for engaging the recess in the plug, and means for normally preventing the rotation of the lead relative to the casing.

5. In a pencil, the combination with a casing having a longitudinal opening therethrough, of an internally threaded tube mounted for rotation in said opening and having an exposed finger piece whereby the tube may be turned, a plug having threads in engagement with the threads in the tube, a lead mounted in the tube and non-

rotatively connected at one of its ends with the plug, and means for preventing the rotation of the lead relative to the casing.

[Claims 2, 4, and 6 not printed in the Gazette.]

1,276,030. ELECTRIC WELDER. SPENCER C. CARY, Brooklyn, N. Y. Filed May 1, 1916. Serial No. 94,554. (Cl. 219—4.)



1. Electric welding mechanism embodying a plurality of work holders spaced relatively to each other and operable for fixedly retaining the juxtaposed pieces to be welded, current-carrying welding electrodes one of which is a roll positioned for movement in a path intermediate said work holders, and means for imparting movement to said welding electrode roll in the direction of the resulting seam which joins said juxtaposed pieces.

7. Electric welding mechanism embodying means for fixedly retaining juxtaposed pieces in lapping contact at the marginal portions thereof, a plurality of current-carrying welding electrodes one of which is a roll positioned for movement in the direction of the resulting seam or weld between the juxtaposed pieces, pressure means whereby the welding electrode roll acts to forcibly apply pressure to the lapped metal softened by heat supplied through said electrodes, and means for imparting a traversing movement to the welding electrode roll, said pressure means and said movement imparting means acting simultaneously with the feeding of electric current by the agency of said welding electrodes.

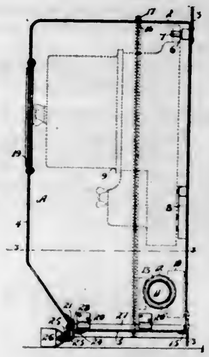
12. Sheet metal welding mechanism embodying a relatively stationary work-retaining means, a pivotally mounted current-carrying pressure roll and a coöperating element mounted for movement in the direction of the line of the resulting weld between the pieces to be welded, a counterpoise for said roll and cam means for imparting motion to said roll and element and for actuating said counterpoise.

[Claims 2 to 6 and 8 to 11 not printed in the Gazette.]

1,276,031. METER-BOX. ALBERT CASPER, Vallejo, Cal., assignor of one-third to William W. Weir, Vallejo, Cal. Filed Apr. 17, 1917. Serial No. 162,693. (Cl. 247—12.)

2. In a meter box, a casing, a removable front, a bottom, means to support the bottom so as to enable removal thereof by downward movement of the bottom and independent of any movement of the front, locking means on the front, locking means on the bottom engageable with the locking means of the front, and means to lock the locking means of the front and bottom to each other.

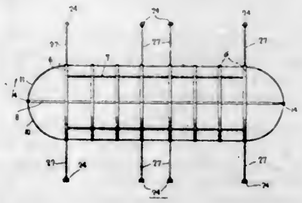
4. A meter box comprising a stationary casing section consisting of an integral back, sides and top, an inwardly turned flange formed on the lower end of the back section, a continuous outwardly turned flange formed on the front edge of the sides and top, a removable front section comprising an integral front, sides and top, a continuous hook-shaped flange formed on the rear edge of the sides and top adapted to interlock with the flange on the stationary casing, a removable bottom plate adapted to be supported at the rear end by the inwardly turned flange on the lower end of the stationary casing section, a lug secured on the lower end of the removable front casing section, a pivoted latch mounted on the bottom plate adapted to be swung into interlocking engagement with the lug to support the front end of the bottom plate, and means for locking said latch against disengagement and the front casing and bottom plate against removal with relation to the stationary casing section.



6. A meter box composed of a casing, a removable front therefor, a bottom having downward movement, means to engage the bottom to prevent upward movement thereof, and means to lock the front and bottom against movement and to allow the bottom to be removed without disturbing the front.

[Claims 1, 3, 5, 7, and 8 not printed in the Gazette.]

1,276,032. FLYING-MACHINE. GREGORY CHMIELINSKI, Chicago, Ill. Filed Dec. 14, 1917. Serial No. 207,151. (Cl. 244—30.)



1. In a flying machine, a fuselage frame comprising a fore and aft series of circular hoops, longitudinal frame bars to which all of said hoops are fastened, and other longitudinal frame bars to which said hoops are fastened, the last named frame bars extending beyond the front and rear hoops and having front end portions curved inwardly and fastened at their extremities to provide hemispherical bow and stern portions for said fuselage frame.

3. In a flying machine, a fuselage frame comprising a fore and aft series of circular hoops, longitudinal frame bars to which all of said hoops are fastened, other longitudinal frame bars to which said hoops are fastened, the last named frame bars extending beyond the front and rear hoops and having front end portions curved inwardly and fastened at their extremities to provide hemispherical bow and stern portions for said fuselage frame, the said curved end portions of the last named longitudinal frame bars being overlapped in bifurcated formation, and a single fastener inserted through said overlapping extremities.

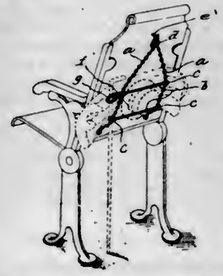
[Claim 2 not printed in the Gazette.]

1,276,033. FOLDING COT. ALFRED NORVELL CLOUGH and CHARLES WILLIAM CLOUGH, Chowchilla, Cal. Filed June 20, 1917. Serial No. 175,774. (Cl. 5—5.)

In a folding cot, side members, legs pivoted to the side members to fold therebeneath, transverse spacing bars pivoted to the respective legs and each having a knee-joint at its center, and diagonal braces having knee-joints at their centers connected to the spacing bars and to the legs, all of the knee joints breaking outwardly whereby to allow all of the bars and braces to fold outwardly in the shape of an outwardly pointing V with the knee joints of the spacing bars located in spaced relation to the side members and the knee joints of the braces in the spaces between the knee joints of the spacing bars and the respective side members.



1,276,034. GARMENT-HOLDER. ST. GEORGE CRAIG, Henderson, Ky. Filed June 13, 1918. Serial No. 239,733. (Cl. 45—13.)



1. In a device of the class set forth, a pair of flexible members adapted to be attached at their lower ends to a support, a pair of separated hat-holding bars attached at their ends to said flexible members, and a device secured to the support above adapted to adjustably engage the upper ends of said flexible members to thereby clamp a garment against the support and a hat against the garment.

[Claim 2 not printed in the Gazette.]

1,276,035. TRACTOR ATTACHMENT FOR MOTOR-CARS. NEWTON CRANE, Boston, Mass. Filed July 13, 1917. Serial No. 180,314. (Cl. 180—5.)



1. A tractor attachment for automobiles comprising a frame, a bearing sleeve secured to said frame and adapted to be mounted on the housing of an automobile axle with freedom to turn about the same, guiding rolls mounted at the opposite ends of said frame, a tractor belt passing around said rolls and under the frame, having a width at least substantially as great as that of the frame and forming the sole and entire ground support for said tractor attachment, and means for driving said belt.

9. A tractor comprising separated guide members, leaf springs connected at their ends to opposite sides of said guide members and spread apart at their intermediate portions, said springs being under permanent set resisting approach of such intermediate members toward one another, a retractile spring connected to said members tending to draw them together, and a belt passing around said members.

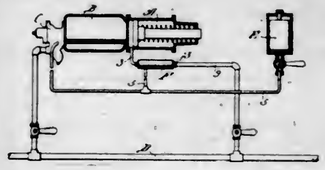
14. A tractor attachment for automobiles comprising a frame, guide rolls on said frame, a tractor belt surrounding said frame having a botton stretch which forms the entire ground support for the tractor, a demountable connection for attaching said frame to an automobile, and an external wheel connected to one of said rolls for receiving power from the power plant of the automobile, said frame being composed essentially of thin wide strips and holders for said rolls to which said strips are connected at their ends, the strips being spread apart intermediate their ends and said connection being attached to one of them.

15. A tractor attachment according to claim 14 distinguished by the fact that the width of said strips is less than the width of the tractor belt and the location of the strips is between the vertical planes in which the opposite edges of the belt run.

16. A tractor attachment according to claim 14 distinguished by the fact that said strips are sufficiently thin to be springy and thereby afford resilience vertically, and at the same time are sufficiently wide to afford lateral stiffness resisting lateral forces which tend to distort the tractor.

[Claims 2 to 8 and 10 to 13 not printed in the Gazette.]

1,276,036. AIR-BRAKE FOR RAILROAD-TRAINS. MERRITT A. CULLING, Louisiana, Mo., assignor to Frank W. Buffum, Louisiana, Mo. Filed Nov. 12, 1917. Serial No. 201,525. (Cl. 188—10.)



2. An attachment for air brake systems for railroad trains, consisting of a device comprising a body portion having longitudinally-extending bores formed in same, which bores are separated from each other by means of a partition, a bushing in one of said bores provided with a tapered valve seat, a cylindrical member in the other bore that forms the side wall of a cylinder, a spring-actuated exhaust valve provided with a stem of substantially cruciform shape in cross section that is reciprocatingly mounted in said bushing, said stem having a disk provided with an opening and a spring-pressed piston in said cylinder provided with a stem that projects through the partition in said body portion and engages the stem of said exhaust valve and moves it in a direction to unseat said valve when said piston moves in one direction.

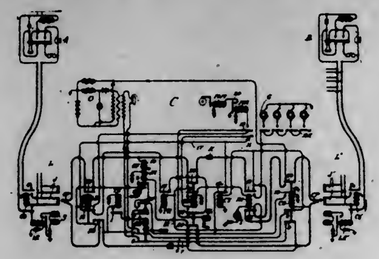
[Claim 1 not printed in the Gazette.]

1,276,037. AUTOMATIC RINGING SYSTEM. HIRAM D. CURRIER and MICHAEL B. STAZAK, Chicago, Ill., assignors to Kellogg Switchboard & Supply Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 9, 1915. Serial No. 1,307. (Cl. 179—51.)

1. An automatic ringing system including a link circuit having calling terminals for connection with a called line, a grounded source of ringing current and a grounded trip relay having their ungrounded terminals connected, a calling tip relay, means for alternately connecting the tip relay and the generator and trip relay in circuit with the calling terminal to intermittently apply ringing current to a connected called line, and means whereby one or the other of said relays will operate according to which one is connected at the time a response is secured to prevent further application of ringing current.

8. A telephone system including a called subscriber's line, a trip relay and a ringing current generator having

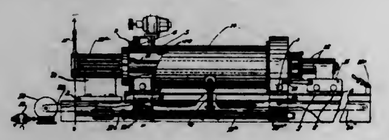
terminals connected together, a second trip relay, means for alternately connecting said relays to said called line whereby ringing current is intermittently connected to said called line, and means controlled over said called line for operating one of said relays depending upon which one is connected at the time a response is secured to prevent further application of ringing current to the called line.



15. A telephone system including a subscriber's line, a source of ringing current, means for connecting said current to said subscriber's line, a relay adapted to be connected to said subscriber's line each time said ringing current is connected thereto, a second relay adapted to be connected to said subscriber's line each time said ringing current is disconnected therefrom, and subscriber controlled means for energizing either of said relays to prevent a reapplication of said ringing current to said subscriber's line.

[Claims 2 to 7 and 9 to 14 not printed in the Gazette.]

1,276,038. CENTRIFUGAL CASTING-MACHINE. DIMITRI SENSAUD DE LAVAUD, New York, N. Y. Filed Oct. 20, 1917. Serial No. 197,560. (Cl. 22—65.)



1. In a centrifugal casting machine, the combination of a rotary mold, a rotatable trough, supporting means for the rotary mold whereby the mold may be moved lengthwisely of the trough to expose the trough, and means for rotating the trough to spill a charge of molten metal into the rotary mold when the mold is arranged overlappingly of the trough, and means for dumping a charge of molten metal into the trough intermediate its ends.

3. In a centrifugal casting machine, in combination, a rotatable trough immovable lengthwisely of the machine, a rotary mold movable lengthwisely of the machine to house the trough or to completely uncover the same, a removable end piece for the mold movable lengthwisely of the machine, and means for temporarily coupling the mold and the removable end piece whereby the rotary mold and the end piece may as one unit be moved to uncover the trough, and thereafter the rotary mold may be moved relative to the end piece to cover the trough and uncover a pipe just previously cast in the rotary mold and now attached to the end piece.

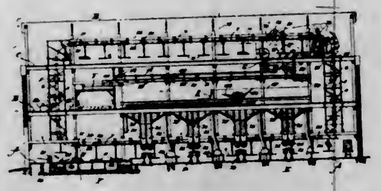
7. In a centrifugal casting machine, in combination, a rotatable trough immovable lengthwisely of the machine, a rotary mold movable lengthwisely of the machine to house the trough or to completely uncover the same, a removable end piece for the mold movable lengthwisely of the machine, and means for temporarily coupling the mold and the removable end piece whereby the rotary mold and the end piece may as one unit be moved to uncover the trough, and thereafter the rotary mold may be moved relative to the end piece to cover the trough and uncover a pipe just previously cast in the rotary mold and now attached to the end piece, there being provided a wheeled vehicle on which the rotary mold is mounted and a separate wheeled vehicle on which the removable end piece of the rotary mold is mounted, there being also provided and mounted on the wheeled vehicle first-mentioned an electric motor and driving connections for the rotary mold.

9. In a centrifugal casting machine, in combination, a rotatable trough, a rotary mold, a mounting for the mold whereby the mold may be moved relative to the trough to cover and uncover the same, a sleeve surrounding the mold and to provide a water-jacket chamber around the mold, and connections for maintaining a water-cooling circulation through said chamber at all times irrespective of the position of the mold relative to the trough, said connections including a pair of telescoping conduits, one fixed to the machine and the other moving with the mold when the mold is moved relative to the trough.

17. In a centrifugal casting machine, in combination, a pouring trough, means for rotating said trough when desired, and means for feeding water to the interior of the trough and for withdrawing water from said interior to cool the trough, the trough being constructed of a plurality of spaced substantially concentric annular members including an inner member, an intermediate member and an outer member, thus establishing between said member an inner chamber and an outer chamber through which water may be circulated, the inner and the outer chamber being in communication at one end of the trough, the outer chamber being in communication with a water passage independently of the inner chamber at the opposite end of the trough, and the inner chamber being in communication with a second water passage independently of the first-mentioned water passage and of the outer water chamber at the last-mentioned end of the trough.

[Claims 2, 4 to 6, 8, 10 to 16, and 18 to 22 not printed in the Gazette.]

1,276,039. FOUNDRY SYSTEM. OLIVER L. DOSCH, Elizabeth, N. J., assignor to The Singer Manufacturing Company, a Corporation of New Jersey. Filed Dec. 8, 1916. Serial No. 135,752. (Cl. 22—20.)



1. In a foundry machine, an endless carrier having a horizontal run whereon the molds are placed and poured, a vertical upward run whereon they are elevated to a higher floor, a second horizontal run whereon the molds are removed and shaken out, and a vertical downward run whereon the flasks and castings are lowered, forming a counterpoise to the flasks and castings on the vertical upward run.

8. In a continuous foundry system, in combination, lower and upper floors, an endless conveyer traveling in a rectangular path and including lower and upper horizontal runs disposed at said lower and upper floors, respectively, and further including ascending and descending runs, mold-forming equipment at the lower floor adjacent the lower horizontal run, pouring equipment at the lower floor adjacent that end-portion of the lower horizontal run which joins the ascending run, shake-out equipment at the upper floor adjacent that end-portion of the upper horizontal run which joins the descending run, a sand tempering floor between said lower and upper floors and between said ascending and descending runs, means for distributing the sand from the shake-out equipment along the sand tempering floor, and means whereby the tempered sand may be delivered to the lower floor.

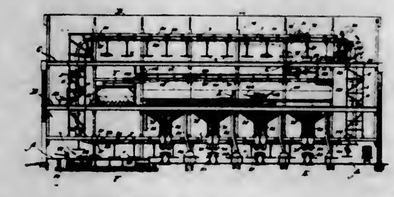
11. In a foundry system, in combination, a lower floor, an upper floor, mold-forming and pouring equipments on the lower floor, an endless conveyer including suspended carriers and having a lower horizontal run adjacent the mold-forming and pouring equipments, said conveyer also having ascending and descending runs leading to and from said upper floor, said pouring equipment including a moving platform paralleling a portion of the horizontal run, and means for maintaining the suspended carriers in fixed angular relation with said platform while passing the latter.

18. A homogenizing apparatus for reused foundry sand comprising, in combination, a shake-out hopper, a riddle disposed below said hopper, a horizontal belt conveyer disposed below said riddle, an elongated homogenizing floor extending lengthwise of and below said belt, a plow for scraping the sand from said belt and permitting it to fall to said floor, means for moving said plow back-and-forth along the length of said belt, a series of storage bins disposed below and at one side of said floor, a wetting equipment, and a screw conveyer bodily movable lengthwise of said floor for moving the wetted sand transversely into said bins.

31. In a foundry system, a device for transferring a traveling sand conveyer from one to another of two adjacent and parallel track-ways comprising, a pivot post disposed midway between and at the end of said track-ways, a semi-circular overhead track supported concentrically with said post, a truck adapted to run on said semi-circular track, a frame supported at one end by said pivot post, said frame being suspended from said truck at a point spaced from said post, and track-ways carried by and extending transversely of said frame, said track-ways being on the same side of said post and adapted to register with either of said parallel track-ways.

[Claims 2 to 7, 9, 10, 12 to 17, and 19 to 30 not printed in the Gazette.]

1,276,040. CONTINUOUS FOUNDRY PROCESS. OLIVER L. DOSCH, Elizabeth, N. J., assignor to The Singer Manufacturing Company, a Corporation of New Jersey. Original application filed Dec. 8, 1916, Serial No. 135,752. Divided and this application filed Dec. 7, 1917. Serial No. 205,949. (Cl. 22—190.)



1. The process of handling molds and their accessories which consists, in placing and pouring the molds on a horizontal run of an endless conveyer, in elevating the poured molds to a higher floor on a vertical upward run of said conveyer, in removing the molds from a second horizontal run, in shaking out said molds, and in lowering the mold accessories and castings on a vertical downward run of said conveyer.

3. The process of handling molds and their accessories which consists, in forming the molds, in placing the molds and their accessories on the lower horizontal run of an endless conveyer disposed in a vertical plane, in pouring the molds while they are moving horizontally, in elevating the poured molds to an upper horizontal run, in removing the poured molds from said conveyer at the upper horizontal run, in breaking up said molds, and in replacing the mold accessories and castings on the upper horizontal run, whereby they are returned to the lower floor and form a counterpoise to the flasks and castings on the upward run.

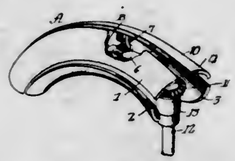
4. The process of handling molds and their accessories which consists, in forming the molds, in placing the molds and their accessories on the lower horizontal run of a continuously moving endless conveyer, in pouring the molds while they are moving horizontally, in conveying the poured molds to an upper floor by a vertical upward run of said conveyer, in removing the molds from an upper horizontal run of said conveyer, in shaking out said molds, in replacing the mold accessories and castings on said conveyer, and in conveying said accessories and castings to the lower floor by a vertical downward run of said conveyer, whereby said accessories and castings form a counterpoise to the flasks and castings on the upward run.

6. The continuous foundry process which consists in forming the molds at a lower station, in pouring the molds, in elevating the poured molds to a shake-out station, in breaking up the molds, in depositing the used sand upon a conveyer, in dislodging the sand from said conveyer and permitting it to fall to a tempering floor in the form of a thin sheet, in wetting different portions of the distributed sand in varying amounts as required by its condition, and in conveying the sand across said floor and into a storage space adjacent the molding station.

7. The continuous foundry process which consists in forming the molds at a lower station, in pouring the molds, in elevating the poured molds to a shake-out station, in breaking up the molds, in riddling the sand and depositing it in a relatively thin sheet upon a belt conveyer, in scraping the sand from the belt and permitting it to fall to a tempering floor in a thin sheet and form a ridge lengthwise of said floor, in wetting the sand as required by its condition, in allowing the sand to rest, exhale, cool and absorb the supplied moisture, and in conveying the sand across said floor and into a storage space adjacent the molding station.

[Claims 2, 5, and 8 not printed in the Gazette.]

1,276,041. EXPANSIBLE MANDREL. JOHN L. G. DYKES, Chicago, Ill. Filed Mar. 12, 1917. Serial No. 154,102. (Cl. 18—45.)



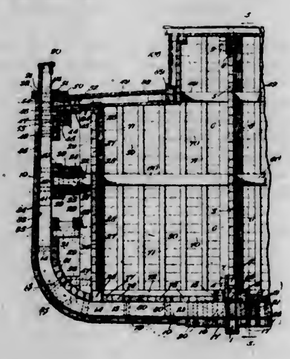
3. In a mandrel, a plurality of separable mandrel sections curved to fit the interior of a pneumatic tire, so that the mandrel as a whole is curved in side elevation and practically cylindric when viewed in cross-section, a rod provided with right and left screw-threads, threaded sleeves on said rod, toggle-links connecting said sleeves with the mandrel sections, whereby the middle portion of the rod is eccentric to the cross-sectional circumference of the mandrel, and so that the threaded end-portions of the rod are substantially concentric to said circumference, and mechanism carried on the end of one of said sleeves to operate said rod to move the sections apart with spaces between them, and toward each other to reduce said spaces, thereby to expand and contract the mandrel.

[Claims 1, 2, and 4 to 6 not printed in the Gazette.]

1,276,042. WOODEN TANK VESSEL. WILLIAM A. EBSEN, Montclair, N. J., assignor, by mesne assignments, to The National Oil Company, a Corporation of Delaware. Filed Nov. 22, 1917. Serial No. 203,420. (Cl. 114—82.)

1. In a wooden vessel for carrying a liquid cargo the combination of continuous transverse frames; a keel below said frames; a keelson above said frames; a con-

tinuous, center line, longitudinal bulkhead forming a continuation of said keelson and constituting a wall of a plurality of tanks; a continuous, wooden outboard, longitudinal bulkhead on each side of said center line bulkhead each also constituting a wall of a plurality of tanks; transverse wooden partitions forming a plurality of wooden tanks extending between said outboard and center line bulkheads; and a transverse steel bulkhead extending from side to side in the bow and stern portions of the vessel and spaced from said wooden tanks, substantially as described.



3. In a wooden vessel for carrying a liquid cargo the combination of continuous transverse frames; a keel below said frames; a keelson above said frames; a continuous, center line, longitudinal bulkhead forming a continuation of said keelson and constituting a wall of a plurality of tanks; a continuous, outboard, longitudinal bulkhead on each side of said center line bulkhead each also constituting a wall of a plurality of tanks; longitudinal stiffening members near the upper ends of said frames; longitudinal stiffening members at the top edges of said outboard bulkheads; tie rods passing through said stiffening members and said frames; tie rods passing through said keel, said frames and said keelson; and transverse partitions forming a plurality of tanks extending between said outboard and center line bulkheads.

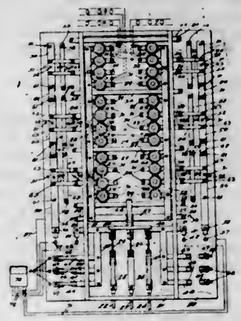
6. In a wooden vessel for carrying a liquid cargo the combination of a framework comprising transverse frames, a keel and a keelson, and provided with additional longitudinal stiffening members at the juncture of its upper deck and sides as well as on the inside of its bilges, and on each side of its keel; a centerline longitudinal bulkhead constituting one wall of a plurality of tanks; an outboard longitudinal bulkhead on each side of said center line bulkhead also constituting walls of a plurality of tanks; a continuous layer of sheeting material on the ontside of said frames; an outer skin outside of said sheeting material; fastenings between said outboard bulkheads and said first named stiffening members; and connections between said outboard bulkheads and said stiffening members located on the inside of the bilges, substantially as described.

[Claims 2, 4, 5, 7, and 8 not printed in the Gazette.]

1,276,043. METERING-PANEL. EDWARD F. EDGECOMBE, Jr., La Grange, Ill. Filed Nov. 6, 1916. Serial No. 129,679. (Cl. 247—13.)

2. A metering panel, comprising a plurality of connecting bars for the several circuits, said connecting bars being arranged in a row, meter bars arranged in a row parallel to said row of connecting bars, totalizing straps whereby adjacent meter bars may be interconnected, and circuit straps for interconnecting the connecting bars and the meter bars.

4. A metering panel, comprising a plurality of connecting bars for the several circuits, said connecting bars being arranged in a row, meter bars arranged in rows parallel to and flanking said row of connecting bars, transfer bars transverse to said row of connecting bars, and circuit straps for interconnecting connecting bars to said transverse transfer bars or said meter bars, the same circuit straps being interchangeable for producing either interconnection.



7. A metering panel, comprising a plurality of connecting bars for the several circuits, said connecting bars being arranged in a plurality of rows, meter bars arranged in rows parallel to and flanking said rows of connecting bars, transfer bars transverse to said rows of connecting bars, circuit straps for interconnecting connecting bars to said transverse transfer bars or said meter bars, the same circuit straps being interchangeable for producing either interconnection, other transfer bars parallel to the rows of connecting bars, and transfer straps for interconnecting said last-named transfer bars and other bars.

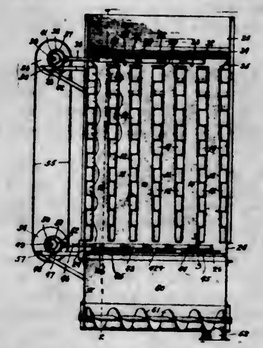
26. A metering panel, comprising a plurality of connecting bars for the several circuits, said connecting bars being arranged in a row, meter bars arranged in rows parallel to and flanking said row of connecting bars, transfer bars transverse to said row of connecting bars, circuit straps for interconnecting connecting bars to said transverse bars or said meter bars, the same circuit straps being interchangeable for producing either interconnection, two rows of other transfer bars parallel and flanking the row of connecting bars, binding screws on the meter bars and on transfer bars on both kinds, the binding screw on a parallel transfer bar being equidistant from those on the adjacent meter bar and the adjacent transverse transfer bars and also from those on the next parallel transfer bar, and transfer straps for joining said binding screws.

[Claims 1, 3, 5, 6, 8 to 25, and 27 to 32 not printed in the Gazette.]

1,276,044. COTTON-SEED DRIER. HUBERT C. ELLIS and NORMAN C. ELLIS, Evanston, Ill., assignors to Ellis Drier and Elevator Company, Chicago, Ill., a Corporation of Wisconsin. Filed Sept. 12, 1914. Serial No. 861,340. (Cl. 34—34.)

1. In apparatus of the character described, the combination of a series of transversely extending vertical shafts formed to hold material in a columnar mass and provided with continuous foraminous sides flared from top to bottom to adapt the shafts for the passage of cotton seed, transversely extending supply and exhaust ducts between the flared sides of the shafts, and means for controlling the flow of material through the shafts.

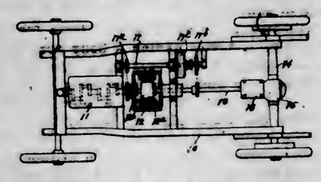
2. In apparatus of the character described, the combination of a series of transversely extending vertical shafts formed to hold material in a columnar mass and provided with continuous foraminous sides flared from top to bottom to adapt the shafts for the passage of cotton seed, transversely extending supply and exhaust ducts between the flared sides of the shafts, bars below the shafts and means for displacing the material laterally



from the shafts and the bars to control the flow of material through the shafts.

[Claims 3 to 11 not printed in the Gazette.]

1,276,045. TRANSMISSION AND CONTROL FOR MOTOR-VEHICLES. JUSTUS B. ENTZ, Cleveland, Ohio. Filed June 22, 1914. Serial No. 846,473. (Cl. 171—315.)



2. In combination with a prime mover and driven part, of an electric clutch between the same, comprising a dynamo electric machine having rotary field and armature elements, one connected to the prime mover and the other to the driven part, a counter-shaft, gearing connecting the counter-shaft with the shaft of the prime mover, gearing connecting the counter-shaft with the driven part, and a clutch for making the connection through the counter-shaft effective.

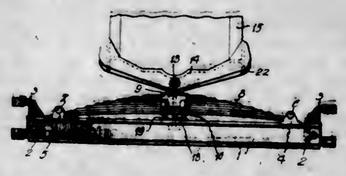
3. In combination with a prime mover and driven shaft, a power transmitting means between the same, comprising an electric clutch, consisting of a dynamo electric machine having rotary field and armature elements, one connected to the prime mover and the other connected to the driven shaft and adapted to be rotated by the first, and mechanical means whereby said shaft may be driven by the prime mover at a speed higher than that of the prime mover.

7. In combination with a driven part, a prime mover, a variable speed transmission between the prime mover and the driven part comprising a generator having one element connected to the prime mover and the other element connected to the driven part whereby the second element is rotated at a lesser speed than the first element, and means whereby the driven part may be driven by the prime mover independently of the generator with the second element rotating at a higher speed than the first.

[Claims 1, 4 to 6, and 8 to 13 not printed in the Gazette.]

1,276,046. FRONT-AXLE CONSTRUCTION. EDWIN R. EVANS, Detroit, Mich. Filed June 4, 1917. Serial No. 172,579. (Cl. 21—182.)

1. A front axle construction and bearing for a vehicle frame, comprising channel bars, arranged in parallelism, a leaf spring having one end thereof held on said channel bars and the opposite end thereof loose on said channel bars, a fulcrum member intermediate the ends of said spring and adapted to pivotally support a vehicle frame, and means carried by said fulcrum member adapted to limit the flexure of said spring in one direction relative to said channel bars.



2. The combination of an axle, a leaf spring on said axle having an end thereof held by said axle and the other free on said axle, and means adapted to engage said axle to limit the upward flexing of said spring.

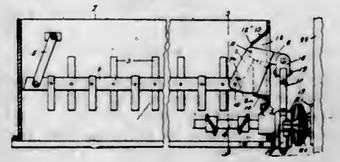
3. A front axle construction and bearing for a tractor frame, comprising channel bars, knuckle bearings between the ends of said bars, a leaf spring having one end thereof fixed adjacent to one of said knuckle bearings and the other end thereof loose adjacent the other knuckle bearing, a fulcrum member carried by said spring, and adapted for pivotally holding the front end of the tractor frame, and means carried by said fulcrum member extending between said channel bars and adapted to limit the flexure of said spring in one direction.

4. The combination with a tractor frame, of a front axle a leaf spring having one end thereof fixed relative to said axle and the other end thereof loose and adapted to have flexure thereof limited in one direction by said axle, a fulcrum member carried by said spring and pivotally connected to said tractor frame, and means carried by said fulcrum member having a limited movement relative to said axle adapted to limit the flexure of said spring in the opposite direction.

6. The combination of a front axle, a spring thereon, a member intermediate the ends of said spring, a tractor frame having the front end thereof pivotally connected to said member, and means carried by said member having a limited movement relative to said axle to limit the flexure of said spring away from said axle.

[Claim 5 not printed in the Gazette.]

1,276,047. FEED-REGULATOR FOR FERTILIZER-SOWERS. HENRY N. FAAS and WILLIAM L. BRALEY, Springfield, Ohio, assignors to The American Seeding Machine Company, Springfield, Ohio, a Corporation of Ohio. Filed Nov. 8, 1915. Serial No. 60,294. (Cl. 83—44.)



1. In a machine of the character described, a hopper having a slotted opening, a vibratable agitator in said hopper, and vibrating devices for vibrating said agitator, one part of which devices extends through said slotted opening and is pivotally connected to the walls thereof so as to oscillate therein and is also pivotally connected to said agitator, said part being so constructed and arranged as to maintain the opening closed in all of its positions therein.

2. In a machine of the character described, a hopper, one end of said hopper having a vertically extending slotted opening, a vibratable agitator in said hopper, and vibrating devices for vibrating said agitator, one

part of which extends through said slotted opening and is pivotally connected to the walls thereof so as to oscillate therein in a direction at right angles to the verticle plane of said hopper end, said part being also pivotally connected to said agitator, said part being so constructed and arranged as to maintain said opening closed in all positions thereof.

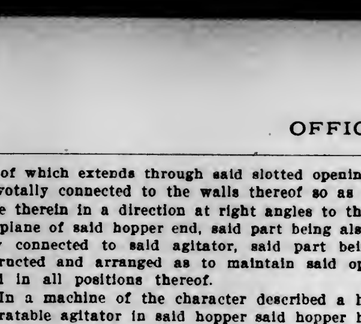
3. In a machine of the character described a hopper a vibratable agitator in said hopper said hopper having a slotted opening, a pivoted bell crank lever extending through said opening and having an operative connection with said hopper, and means for oscillating said bell crank lever, the construction and arrangement of said opening and bell crank lever being such as to maintain said opening closed in all the different positions of operation of said bell crank lever.

4. In a machine of the character described, a hopper, a vibratable agitator in said hopper, said hopper having a slotted opening, a pivoted bell crank lever extending through said opening and operatively connected with said agitator, together with means for operating said bell crank lever, and walls on the sides of said bell crank lever fitted snugly to the walls of said opening so as to close said opening in all the different positions of said lever.

5. In a machine of the character described, a hopper having a slotted opening, a vibratable agitator in said hopper, a pivoted bell crank lever extending through said opening and having an operative connection with said agitator together with means for operating said lever, and plates secured to said lever and fitted snugly to the walls of said opening, one arm of said lever extending between said plates, for the purpose specified.

[Claims 6 and 7 not printed in the Gazette.]

1,276,048. AIR-BRAKE FOR RAILROAD-TRAINS. ERNEST D. FINLEY, Louisiana, Mo., assignor of one-half to Frank W. Buffum, Louisiana, Mo. Filed Aug. 17, 1917. Serial No. 186,708. (Cl. 188—1.)

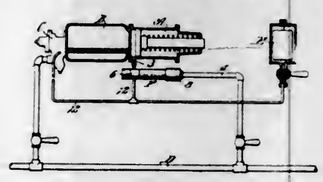


3. An air brake system for railroad trains, comprising a brake cylinder, a train pipe, and two separate and distinct means for causing air to be admitted to the brake cylinder when the pressure in the train pipe is reduced under ordinary operating conditions to set the brakes, one of said means being governed by the pressure in the train pipe and so constructed that it operates automatically.

18. An air brake system, comprising a brake cylinder, an auxiliary air tank, a train pipe, a device that is adapted to be rendered operative by the reduction of air in the train pipe for permitting air to pass from said tank into the brake cylinder and also rendered operative by the increase of the pressure of the air in the train pipe for permitting air to escape from the brake cylinder, a pressure-retaining valve, an air line leading from the train pipe to the brake cylinder and provided with a branch that leads to the atmosphere, a spring-pressed admission valve in said branch, and cylinders communicating with said train pipe and provided with means that govern the operation of said admission valve and said discharge valve.

[Claims 1, 2, and 4 to 17 not printed in the Gazette.]

1,276,049. AIR-BRAKE FOR RAILROAD-TRAINS. ERNEST D. FINLEY, Louisiana, Mo., assignor of one-half to Frank W. Buffum, Louisiana, Mo. Filed Nov. 6, 1917. Serial No. 200,491. (Cl. 188—12.)

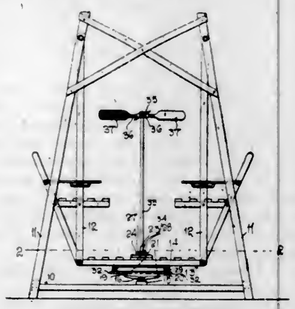


1. An attachment for air brake systems for railroad trains, comprising a reciprocating exhaust valve separate and distinct from the usual triple valve that moves automatically into a position to permit the air to escape from the brake cylinder when the pressure in the train pipe is increased to release the brakes, and a valve casing for said valve provided with a discharge orifice, said valve casing being so constructed that it can be adjusted so as to vary the position of said discharge orifice with relation to the stroke of said valve.

10. An attachment for air brake systems for railroad trains, comprising a device having a body portion formed by a tubular member that serves as a cylinder, a head piece that closes one end of said member, a closure for the opposite end of said member, a pipe leading from said closure to the train pipe of the system, a spring actuated piston reciprocatingly mounted in said cylinder, an air reducing element arranged in said cylinder between the piston and the supply of air in the train pipe, a stop on said element that limits the movement of the piston in one direction, a reciprocating exhaust valve connected to said piston, a casing for said exhaust valve adjustably mounted in said head piece and provided with an air port, and an air duct in said head piece that communicates with said port and with a pipe that leads to the brake cylinder of the system.

[Claims 2 to 9 not printed in the Gazette.]

1,276,050. FAN ATTACHMENT FOR LAWN-SWINGS. JOHN GEHBAUER, St. Louis, Mo. Filed Aug. 8, 1917. Serial No. 185,110. (Cl. 230—7.)



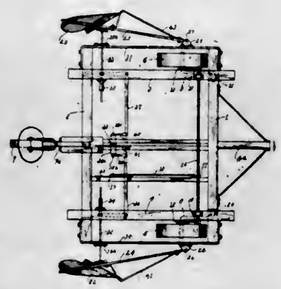
1. The combination with a lawn swing including a supporting frame and an oscillatable body, of a fan shaft mounted upon the body, a ratchet wheel mounted upon the fan shaft and supported by the body, and oppositely directed pawls mounted upon the base and engageable with said ratchet wheel as the body is oscillated past it to thereby cause an intermittent rotation of the ratchet wheel in one direction.

4. The combination with a lawn swing including a base, standards mounted thereon, and a body swingingly supported upon the standards, of a cross bar on the base, bearing members mounted on the cross bar, a rock shaft supported in said bearing members and having laterally, upwardly inclined pawls, each formed with an upwardly extending tooth at its outer end, the outer end face of the tooth being beveled, a bushing extending through and mounted upon the bottom of the body, a shaft section passing through said bushing and rotating therein, antifriction bearings between the bushing and the shaft section, a ratchet wheel carried upon the lower end of the shaft section and having radially directed teeth, all of the teeth on one face being inclined and being disposed to operatively engage said pawls alternately as the body is swung past the first named shaft, the upper end of the shaft section being provided with a socket, a fan shaft detachably engaged with said socket, and a fan having a body and radial blades disposed on said fan shaft and vertically adjustable thereon, the blades of the fan being inclined to the plane of rotation of the fan.

6. An attachment for lawn swings comprising bearing members, a rock shaft rotatably supported therein and having oppositely directed pawls disposed in divergent planes, each pawl having a tooth at its extremity, the outer end faces of the teeth being beveled, said bearing members being adapted to be attached to the base of a swing, a bushing adapted to be attached to the body of the swing, a fan shaft passing through said bushing and having a ratchet wheel detachably mounted on the lower end of the shaft, the wheel being provided with radially extending teeth having faces intersecting in the same direction and adapted to be engaged by the pawls, and a fan operatively mounted upon said shaft.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,276,051. VINEYARD-PLOW. CHARLES GEIRMANN, Lodi, Cal. Filed Apr. 10, 1916, Serial No. 90,148. Renewed June 29, 1918. Serial No. 242,671. (Cl. 97—36.)

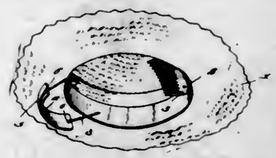


1. A vineyard plow comprising a frame, beams hinged to the side of the frame and arranged for horizontal movement with respect thereto, plowing devices carried by the beams, guides on the frame, links pivotally connected with the beams and being freely movable through the guides and a freely swinging lever fulcrumed on the frame and connected with the links.

3. A vineyard plow comprising a frame, a pair of beams hinged on the frame and arranged for horizontal swinging movement with respect thereto, plowing devices carried by the beams, fixed guides on the frame, links hinged to the beams and having free movement through the guides in either direction to allow the beams to swing at will, a freely swinging lever fulcrumed on the frame, a cross head on the lower end of the lever, a pair of bell cranks fulcrumed on the frame, a link connecting the cross head with one end of each bell crank, the opposite ends of the bell cranks being slotted, and pins on the first named links projecting into the slots.

[Claim 2 not printed in the Gazette.]

1,276,052. HAT-RETAINER. HERMANN GENSCH, Bonita, Ariz., assignor of one-half to A. J. Mills, Bonita, Ariz. Filed May 25, 1917. Serial No. 171,016. (Cl. 132—25.)

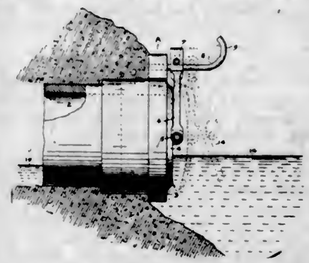


1. A hat retainer comprising a horizontally extending comb rigidly secured within the front portion of a hat, an elastic member having its ends secured within the hat, and an arcuate plate provided with spaced holes through which said elastic member is trained whereby said plate will be adjustable longitudinally of said elastic member.

3. A hat retainer comprising a comb rigidly secured in horizontal position within the front portion of a hat, an elastic member having its ends secured upon the inner sides of the hat, an arcuate plate disposed at the rear portion of the hat and slidably connected with said elastic member, and a pair of combs disposed at the sides of the hat with their teeth in inwardly extending relation and provided with holes through which said elastic member is trained whereby said comb members may be longitudinally adjustable of said elastic member.

[Claims 2 and 4 not printed in the Gazette.]

1,276,053. DRAINAGE-GATE. WILLIAM GOTTSCHALK, San Francisco, Cal., assignor to Dutton Dredge Co., San Francisco, Cal., a Corporation of California. Filed July 23, 1917. Serial No. 182,210. (Cl. 61—47.)

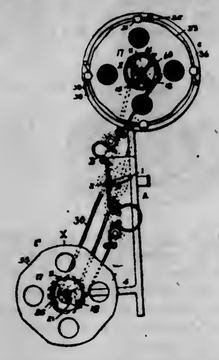


1. In combination with a conduit and gate therefor, a pair of spaced outer horizontal bars extending outwardly from the conduit mouth, an intermediate horizontal bar between the outer bars and also extending outwardly from the conduit mouth, a pair of links having their upper ends formed with supports engaging over said outer bars so as to be supported by the latter, said links being pivoted at their lower ends to the gate, a link pivoted at its lower end to the top of the gate and having its upper end formed with a support engaging over the intermediate bar, all of the links being slidable along the lengths of said bars.

4. In combination with a conduit and a gate therefor, a pair of tracks carried by the conduit and extending outwardly therefrom in a substantially horizontal plane, supporting means engaged with said tracks so as to swing transversely thereof and pivoted to the gate so as to allow the latter to swing vertically with respect to the plane of the conduit mouth, and means connected to the gate to restrict swinging movement thereof in both directions toward and away from the plane of the conduit mouth.

[Claims 2 and 3 not printed in the Gazette.]

1,276,054. MOVING-PICTURE MACHINE. CLARENCE G. GRANN, Wilkinsburg borough, Pa., assignor of three-ninths to Leo A. Parish, Port Allegany, Pa., and two-ninths to Karl P. Fuhrmann, Sault Ste. Marie, Ontario, Canada. Filed Mar. 20, 1917. Serial No. 155,966. (Cl. 88—18.7.)



1. In a motion picture film reel, a film coil carrier, power-means for rotating said carrier, a film guide mounted axially of said carrier and extending beyond the vertical plane of the latter in the form of a helical curve, whereby the film is led out of the interior of the film coil on said carrier to the traction devices of the machine, and means whereby the pull of the film on said guide operatively connects said carrier and said power-means, for the purpose described.

6. In combination with the traction devices of a moving picture machine, a film coil carrier, a driven element adapted to rotate said carrier, a split drum mounted axially of said carrier, a helical guide adapted to lead the film from the interior of said drum to said traction devices, said drum and guide rotating independently of said carrier, and means whereby the movement of said drum and guide controls the operative connection between said carrier and said element.

9. In a moving picture film coil carrier, a pair of disks, a drum located axially of said disks, and means for locking said disks rigidly together, said means being provided with seats which are engaged by the perimeters of said disks, for the purpose described.

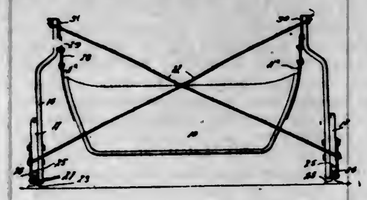
12. In a moving picture film coil carrier, a pair of disks having flattened perimetal portions, a support, and a plurality of pins extending from said support and adapted to encircle said disks, said disks being freely insertible between said pins when said flattened portions are turned in registration with said pins, and said pins being provided with grooves which are engaged by the curved perimeters of said disks when the latter are partially rotated, whereby said disks may be locked stationary, for the purpose described.

13. In a moving picture machine, a film reel comprising a pair of face disks, an annular holder engaging the perimeters of said disks and adapted to lock them in rigid relationship, and an expansible centering ring surrounding the outside of the film coil and supported from said holder, for the purpose described.

[Claims 2 to 5, 7, 8, 10, 11, and 14 not printed in the Gazette.]

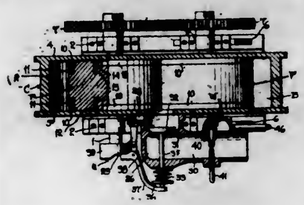
1,276,055. LIFE-SAVING DEVICE. WILFRED S. GROLEAU, La Salle, Ill. Filed Sept. 7, 1917. Serial No. 190,201. (Cl. 9—22.)

1. A life boat carrying device, comprising members for engaging the heads of track rails, carrying frames attached to one side of said members and projecting to overlap the sides of the track rails, guide elements attached to the opposite side of said members and projecting along the sides of the track rails, keepers on the projecting ends of the carrying frames and guide elements to engage under the heads of the track rails, boat supporting members having bifurcated engaging hooks, and elements on the carrying frames to pivotally and detachably engage the said bifurcated hooks.



2. A life boat carrying device comprising a pair of members each having its end portions bent downward and adapted to rest upon a track and to move thereslong, a pair of supporting members each secured to one of the first said members and extending thereabove and therebelow, a pair of pivotal supports for the life boat, a pair of hooks for connecting the carrying device with a crane or the like and means coöperative with the lower extensions of said supporting members for securing said carrying device on a railway track while allowing said carrying device to move along said track.

1,276,056. ENGINE. ARTHUR E. GUMPRECHT, Steamboat Springs, Colo. Filed Apr. 9, 1917. Serial No. 160,766. (Cl. 123—12.)



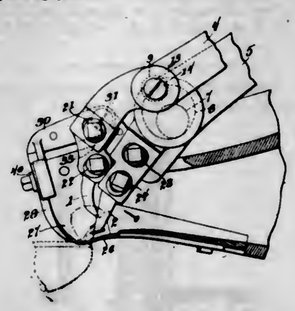
1. A device of the character described comprising a casing, a compression chamber in communication therewith, a valve for controlling the communication between the casing and the compression chamber, a conduit in communication with the casing and the compression chamber, a piston within the casing, a valve interposed within the conduit, said casing being provided with an air intake, a gas intake and an exhaust, valves coacting with said gas intake, air intake and exhaust, and means for intermittently opening said valves.

[Claims 2 to 4 not printed in the Gazette.]

1,276,057. TACK-PULLING MACHINE. JOHN B. HADAWAY, Swampscott, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Apr. 5, 1916. Serial No. 89,156. (Cl. 12—16.)

1. A tack pulling machine, having in combination, a pair of levers, a tack pulling jaw secured to the end of each lever, a rocker arm supporting both levers between their ends, a continuously rotated shaft, and connections between the shaft and the opposite ends of the levers for oscillating the rocker arm to move the jaws toward and from a shoe and for oscillating the levers about the rocker arm to move the jaws toward and from one another.

7. A tack pulling machine, comprising, a tack pulling jaw, mechanism for actuating the jaw, a work support engaging with the upper of the shoe outside of the line of tacks, a second work support engaging with the shoe inside of the line of tacks, and means for permitting the second support to yield laterally away from the path of the tack pulling jaw.



11. A tack pulling machine, having in combination, a pair of coöperating tack pulling jaws, and actuating mechanism constructed and arranged to first move the jaws to grip and pull the tack, to next move the jaws to relieve the pressure upon the tack, and to finally move the jaws to discharge the tack whereby the tack discharging movement of the jaws takes places after the pressure upon the tack has been relieved.

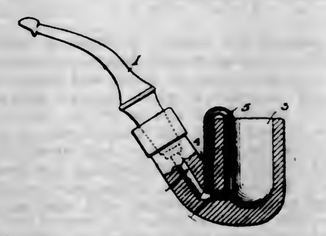
[Claims 2 to 6 and 8 to 10 not printed in the Gazette.]

1,276,058. PROCESS OF CONCENTRATING ORES. ROBERT G. HALL, St. Louis, Mo. Filed Sept. 15, 1916. Serial No. 120,396. (Cl. 75—17.)

1. The process of concentrating ores which consists in mixing oxidized ores containing zinc, lead, and other valuable metals with a reducing material, and with a small amount of material containing sulfur sufficient to form a matte with the other valuable metals of the ores, and without further treatment, subjecting the same to the heat of a reverberatory furnace, thereby reducing and volatilizing the zinc and lead, and concentrating the other valuable metals as copper, silver, and gold, in the form of a matte, and eliminating the waste material as a slag in a molten condition, free from the valuable metals of the charge.

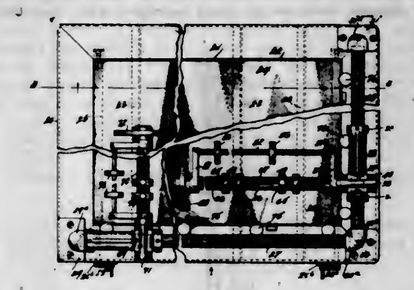
2. The process of concentrating ores, which consists in partially roasting ore containing zinc, lead, and other valuable metals, then mixing with the roasted ore a reducing material, the charge containing sulfur in the form of sulfid in amount sufficient to form a matte, and without further treatment subjecting the same to the heat of a reverberatory furnace, thereby reducing and volatilizing the zinc and lead, and concentrating the other valuable metals as copper, silver and gold, in the form of a matte, and eliminating the waste material as a slag in a molten condition, free from the valuable metals of the charge.

1,276,059. PIPE. ROBERT A. HAMILTON, New York, N. Y. Filed Aug. 3, 1917. Serial No. 184,217. (Cl. 131—12.)



In a pipe the combination with a stem and a bowl, a substantially U-shaped tube inverted over the edge of said bowl with one end thereof inserted in the passage in the stem and the other end thereof projecting down into the approximate bottom of said bowl substantially as shown and described.

1,276,060. LINING APPARATUS. HARRY H. HANCOCK, Swampscott, Mass., assignor of one-half to Arthur S. Webster, Halifax, Mass. Filed Jan. 20, 1916. Serial No. 73,133. (Cl. 33—32.)



4. In a lining apparatus, the combination of supporting means, a gang of markers supported thereon for movement in one direction, additional supporting means, another gang of markers supported on said additional means and movable in a direction at right angles to the direction of movement of aforesaid gang, and means associated with the individual markers for independently and adjustably holding any one of said markers upon its said supporting means and at various points lateral of said marker, whereby either one of any given two of said angularly disposed markers may be adjusted to cross the path of the other at an infinite number of points of intersection.

11. In a lining apparatus, the combination of a sheet-imposing plate, a support having a position substantially parallel with the surface of said plate, an arm guided transversely on said support across said plate, a guide roller journaled upon the outer end of said arm, adapted to travel upon said plate, said arm being oscillatable on its axis, a marker on said arm, and means extending laterally of said arm for so oscillating it.

12. In a lining apparatus, the combination of a sheet imposing plate, a support having a position substantially parallel with the surface of said plate, a swingable arm guided transversely on said support across said plate, a marker on said arm, a second support arranged at right angles to aforesaid support, another swingable arm guided transversely on said second support in a direction at right angles to the direction of movement of aforesaid arm, and a marker on said other arm, both of said arms being pivotally mounted at their inner ends on their said supports.

39. In combination, a marker shank having an index member provided with parallel surfaces, a marker, and means for positioning said marker on either side of said shank so as to place its marking edge approximately in the plane of either of said surfaces and also out of the plant of either of said surfaces.

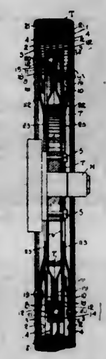
40. In combination, a marker shank having an index member provided with parallel surfaces, a rotary marker-wheel, and means for positioning said marker on either side of said shank so as to place its marking edge approximately in the plane of either of said surfaces and also out of the plane of either of said surfaces.

[Claims 1 to 3, 5 to 10, 13 to 38, and 41 to 47 not printed in the Gazette.]

1,276,061. RESILIENT WHEEL. WILLIS W. HARVEY, Malad City, Idaho. Filed Dec. 3, 1917. Serial No. 205,079. (Cl. 152—28.)

2. A resilient wheel comprising a central portion provided in its outer margin with a plurality of circum-

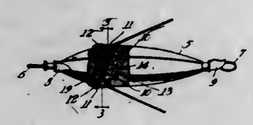
ferentially spaced recesses in opposite faces thereof, annular members positioned at opposite sides of the central portion and provided with recesses adapted to register with the recesses of the central portion, members seated within said registering recesses and adapted for rolling contact with the walls thereof, a rim disposed around the central portion and the annular members and spaced therefrom and concentric thereto when free of load, the marginal portions of the rim being provided with inwardly directed flanges, spring plates secured to said flanges, said plates being provided with inwardly



directed resilient arms, the extremities of said arms being engaged with the annular members, said plates and arms serving to constantly urge the annular members inwardly, the resilient arms of each plate being arranged in divergence, the outer end portions of the arms being inwardly directed, the adjacent annular member at opposite sides of a recess therein being provided with recesses to receive the inwardly directed end portions of the arms.

[Claim 1 not printed in the Gazette.]

1,276,062. FISH-LURE. CHARLES HEDDON, Dowagiac, Mich. Filed May 20, 1915. Serial No. 29,254. (Cl. 43—30.)

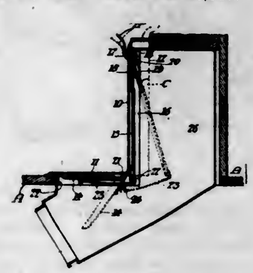


2. A fishing bait comprising a body, means for attaching a line to the front end of the body, said body having a recess in its side, a metal cup-shaped member fitting in said recess, a fish hook having an eye, and means for securing said hook to said body comprising a screw-eye member having a threaded shank portion extending through said cup-shaped member and screwed in to said body portion, a U-shaped loop portion located in said cup member and extending rearwardly from said shank portion and passing through the eye of the hook, and a portion extending forwardly from said U-shaped portion and secured to said body portion to prevent rotation of said screw-eye member to keep it from screwing out of said body member, said cup-shaped member engaging the shank of the hook for holding the hook away from the body.

5. A fish bait comprising a body provided with a socket, a fish-hook having an eye, and means for securing said hook-eye in such position with respect to said socket that the socket member will hold the hook away from the body, comprising an elongated one-piece member having a bend located substantially within said socket for engagement with said hook-eye, and a second bend extending up over the edge of said socket, the end beyond said second bend being secured to said body.

[Claims 1, 3, 4, and 6 to 13 not printed in the Gazette.]

1,276,063. REGISTER. CYRUS S. HOOD, Corning, N. Y. Filed Aug. 21, 1915. Serial No. 46,627. (Cl. 98—54.)

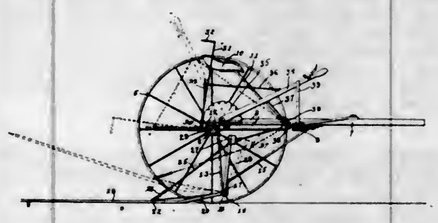


1. A register including a wall register face, a floor register face, a damper pivotally supported in the rear of the wall register face adjacent the upper edge of the latter and of substantially the same size as said first mentioned face, a damper pivotally supported adjacent the rear edge of the floor register face and of substantially the same size as said second mentioned face, and means for opening or closing said dampers simultaneously.

6. A register including a wall register face, a floor register face, a damper pivotally supported adjacent to the upper edge of the wall register face, a second damper pivotally supported adjacent to the rear edge of the floor register face, a member connected to said first mentioned damper adjacent to its upper edge for swinging the lower edge toward and from the wall register face, and a member carried by the first mentioned damper adjacent to its lower edge and projecting forwardly beneath the second mentioned damper to swing the latter to closed position as the first mentioned damper is moved to closed position.

[Claims 2 to 5 not printed in the Gazette.]

1,276,064. TRANSPORTING-VEHICLE FOR GRAIN-SHOCKS. WALTER L. HOPKINS, Sutton, W. Va. Filed Aug. 6, 1915. Serial No. 44,086. (Cl. 214—78.)



1. A transporting vehicle including a plurality of rearwardly extending parallel fingers for carrying grain shocks, a rocking shaft to which said fingers are connected and by means of which they are adapted to be raised and lowered, an arm projecting upwardly from each end of said shaft and fixed thereto, a cross bar connected to the upper ends of said arms, brace rods connected to said fingers and diverging therefrom to the shaft and fastened thereto, lifting rods extending between the outermost fingers and said cross bar, a rocking lever, and a flexible connection between said rocking lever and said cross bar to raise and lower the grain carrying fingers.

[Claim 2 not printed in the Gazette.]

1,276,065. WATER-HEATER. CHARLES L. HUDLER, St. Louis, Mo., assignor, by mesne assignments, to Jiffy Water Heater Company, St. Louis, Mo., a Corporation of Missouri. Original application filed July 6, 1915, Serial No. 38,381. Divided and this application filed Dec. 6, 1915. Serial No. 65,272. (Cl. 122—167.)



A water heater comprising a double walled shell open at its bottom and damper controlled at its top, the walls of said shell being spaced apart so as to form an unobstructed water chamber, a water supply pipe connected to the lower end of the shell, a plurality of hollow bodies connected in train and of progressively decreasing size from the upper to the lower end of the train, each body being spaced apart from each other and from the shell and provided with parallel uppper and lower walls and a side wall comprising an arcuated portion and a plane portion and a partition connecting the upper and lower walls and plane wall and spaced from the arcuated wall, tubular connections connected with the upper and lower walls and on opposite side to said partition, a valve controlled outlet connected to the lowermost one of the heating bodies, a connection between the uppermost one of the heating bodies and the water chamber of the shell, and a gas burner positioned beneath the shell and arranged to discharge heat upwardly through the shell and around the heating bodies.

1,276,066. CARTON OR CONTAINER FOR INCANDESCENT MANTLES. GEORGE E. HULSE, Newark, N. J., assignor to The Safety Car Heating & Lighting Company, a Corporation of New Jersey. Filed July 16, 1915. Serial No. 40,152. (Cl. 206—68.)



4. In combination with an incandescent mantle, a shield coiled about the mantle out of touch therewith, means between the shield and mantle for supporting the latter, a carton for receiving the shield and mantle, said shield having means whereby, when the mantle is removed from the carton, it may be stripped from the mantle.

5. In combination with a carton for receiving incandescent mantles, a shield having a form enabling it to encompass the mantle out of touch with the latter, and having means for retaining it within the carton, and also having means for suspending the mantle within the carton.

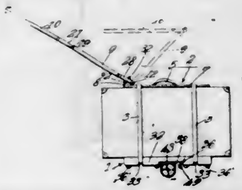
6. In combination with a carton for receiving incandescent mantles, a shield surrounding the mantle and having means enabling it to normally free itself from the mantle and for retaining it within the carton, and also having means for supporting the mantle against movement in the carton.

7. A shield for incandescent mantles having means for engaging and supporting the mantle, and also having means by which it may be automatically stripped from the mantle.

10. In combination with a carton for incandescent mantles, a shield formed to normally expand into frictional engagement with the carton when placed in the latter, said shield having means by which to support a mantle holder, a mantle suspended within the shield through the medium of its holder and said holder having means cooperating with the shield for suspending the mantle within the latter, the characteristic of the shield enabling it to expand into frictional engagement with the carton, also enabling it to strip itself from the holder and mantle when removed from the carton, substantially as described.

[Claims 1 to 3, 8, and 9 not printed in the Gazettee.]

1,276,067. TRANSPORTING DEVICE. CHAUNCEY M. HURD, San Jose, Cal. Filed May 26, 1917. Serial No. 171,241. (Cl. 21—65.)



1. A transporting device embodying a wheel mounted section, an upper section adjustably connected thereto, said sections being adapted to hold an article therebetween, and a sectional propelling handle connected to and extending beyond one end of the upper section, said handle being collapsible onto said section there being an opening in the upper section for the handle of an article held between the sections.

3. A transporting device embodying a member to be secured to an article, and a handle embodying pivotally connected sections pivotedly connected with said member, said handle sections being foldable together and swingable onto said member, the handle sections having interengageable means for holding them rigidly relatively to one another, and one handle section and said member having interengageable means for holding the handle rigid relatively to said member.

5. A transporting device embodying a top section, comprising longitudinal hinged plates to fit upon and conform to the top of an article, and a handle connected to one of said plates.

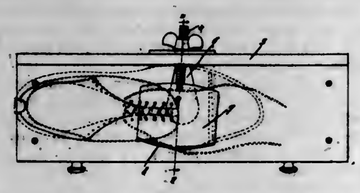
7. A transporting device embodying a carrier, members hingedly connected thereto, spindles carried by said members, flanged nuts engaging the spindles for attaching them to said members, wheels rotatable upon said spindles, and a stay hingedly connected with the carrier and having portions engageable between said nuts and members for holding the members in place when swung downwardly.

[Claims 2, 4, 6, and 8 not printed in the Gazette.]

1,276,068. SHOE-VISE. CHARLES JAECKEL, Warmsprings, Mont. Filed Nov. 8, 1917. Serial No. 200,954. (Cl. 12—128.)

A shoe vise including a base having an upstanding flange at one side thereof, there being a recess in the top of the base, a plate slidably mounted on the base and extending over the recess, an upstanding shoe engaging flange at the outer edge of the plate, a bolt extending from said plate and through the upstanding flange on the

base, said bolt being seated in and adjustable angularly in the recess, and means engaging the bolt for adjusting



the plate toward and from the upstanding flange on the base, said plate being adjustable angularly with the bolt.

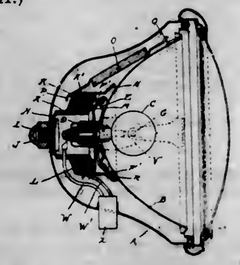
1,276,069. DRY CLOSET. FRANK PAVLIK, Jr., Westminster, Colo. Filed Oct. 22, 1917. Serial No. 197,867. (Cl. 4—32.)



1. In dry closet fixtures, a container provided with the usual seat and a foul air outlet aperture, in combination with a fixedly secured trough-like female coupling element, comprising a base plate having wedge-shaped side walls, terminating in upper inturned guide strips, and also an aperture registering with said outlet aperture; a vent pipe; and a male coupling element, comprising a flange plate having wedge-shaped side walls and also an aperture coincident with the lower open end of said vent pipe, said coupling elements functioning in the manner set forth as the same are moved into closed connected relation, with all of said apertures in open alinement, substantially as described.

[Claim 2 not printed in the Gazette.]

1,276,070. TILTING LAMP. THEODOR M. MUELLER, Detroit, Mich. Filed June 15, 1917. Serial No. 174,851. (Cl. 240—41.)

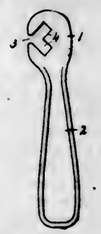


1. In a lamp, the combination with an outer casing, of a reflector pivotally mounted therein, a lamp socket mounted on said reflector, an annular electro-magnet surrounding said lamp socket with a clearance for movement thereof and secured to said outer casing in the space between the same and the reflector, and an armature mounted on said reflector coöperating with said magnet when energized to cause the tilting of the reflector.

2. In a lamp, the combination with the outer casing and an inner reflector pivotally mounted therein, of a lamp socket mounted on said reflector and extending in the space between the same and said outer casing, an electro-magnet having annular poles surrounding and spaced from said lamp socket and mounted upon the outer casing and an armature mounted on said reflector cooperating with said magnet to effect the tilting of the reflector.

[Claims 3 to 8 not printed in the Gazette.]

1,276,071. WRENCH. WALTER L. RINGLING, Geneva, N. Y., assignor to National Wire Wheel Works, Inc., Geneva, N. Y., a Corporation of New York. Filed Mar. 30, 1917. Serial No. 158,585. (Cl. 81—119.)

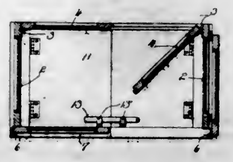


1. A wrench of the character described having a head provided with an opening in one edge, and a plurality of recesses leading from said opening at an angle to each other, the opposite sides of each recess forming a pair of nut-engaging members.

5. A wrench of the character described having a head provided with an opening in one edge, and a pair of recesses extending inwardly from said opening at substantially right angles to each other, the sides of each recess being substantially parallel and having one side shorter than the other, the outer sides being the longer, said sides being spaced apart to form nut-engaging members.

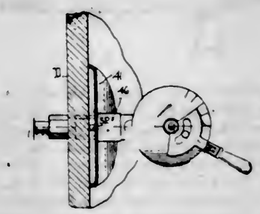
[Claims 2 to 4 not printed in the Gazette.]

1,276,072. COLLAPSIBLE CABINET. JOHN JELENC, Port Washington, Wis., assignor of one-half to Martin Jelenc, Milwaukee, Wis. Filed May 11, 1918. Serial No. 233,891. (Cl. 211—7.)



A collapsible cabinet comprising side walls, front doors hinged to said side walls and adapted to be swung outwardly of the cabinet, rear doors hinged to said side walls and adapted to be swung inwardly, projections provided at the top and bottom of said side walls, collapsible top and bottom closures hinged to said projections and adapted to be folded inwardly, an apron depending from said top closure and adapted to extend over said side walls, stops secured to said top and bottom closures to prevent outward movement of said rear doors, and means for locking the top and bottom closures against collapsing.

1,276,073. INSTRUMENT-SUPPORTING DEVICE. CHARLES W. JENKINS, Ellerson, Va., assignor of one-half to Lee B. Hancock, Richmond, Va. Filed July 28, 1917. Serial No. 183,317. (Cl. 248—30.)

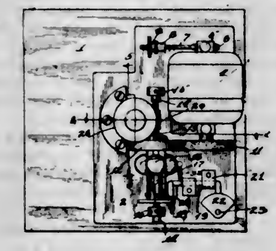


2. A device of the character described including a body member, a face plate adapted to be engaged upon an instrument board, a wedge-shaped block adapted to be interposed between the body and said face plate when the instrument board is disposed in an inclined plane, and means for detachably securing the body member, the spacing block and the plate together.

3. A device of the character described including a body member, a face plate adapted to be engaged upon an instrument board, said plate having a channel to receive one edge of the body when the instrument board is vertically disposed, a wedge-shaped block adapted to be interposed between the body and said face plate and also seating in the channel of said plate when the instrument board is disposed in an inclined plane, said block being provided with a stud on one end and said face plate having an aperture to receive said stud, a removable fastening bolt to detachably secure the plate, the block, and the body member together.

[Claim 1 not printed in the Gazette.]

1,276,074. DRIVING MECHANISM. JAY M. JOHNSON, Chicago, Ill. Filed Nov. 17, 1916. Serial No. 131,848. (Cl. 74—26.)



1. A driving mechanism of the class described comprising a pivoted adjustable motor, a drive wheel thereon, a countershaft, a friction wheel secured thereon and driven by the drive wheel of the motor, a hooked rod for adjusting the motor on its pivot whereby the bearing pressure between said wheels may be changed by adjustment of the motor, governing mechanism on said countershaft, and a shaft journaled transversely and adjacent to said countershaft and driven thereby.

5. A driving mechanism comprising a counter shaft, a friction wheel thereon, a governor mechanism on said shaft, a pivotally mounted motor, a bearing at one end thereof, an adjusting rod having a hooked end engaging the bearing, means for adjusting the rod to swing the motor, and a friction wheel carried by the motor adapted to engage the friction wheel on the counter shaft.

[Claims 2 to 4, 6, and 7 not printed in the Gazette.]

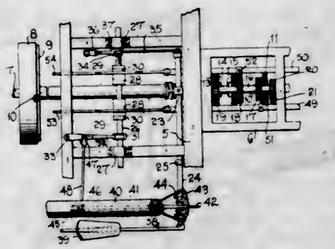
1,276,075. BUNSEN BURNER. FRANCIS B. JOY and CHRISTIAN H. VOGEL, Detroit, Mich., assignors to The Detroit Heating & Lighting Company, Detroit, Mich., a Corporation of Michigan. Filed May 4, 1918. Serial No. 232,430. (Cl. 158—111.)



1. In a gas burner, the combination with a base, of a barrel vertically mounted and spaced above said base, a valve casing carried by said barrel and formed with an axial passage, a valve engaging in said passage to close the same and projecting below said barrel, means for establishing a gas connection through the barrel and casing with said passage, and an air mixing chamber having screw-threaded engagement with a projecting portion of said casing and having an outlet for the gaseous mixture, said chamber having a circumferential series of triangular openings for admitting air, said openings being variably closed through rotative adjustment of the mixing chamber relative to the casing.

[Claim 2 not printed in the Gazette.]

1,276,076. GEAR-SHIFTING MECHANISM FOR MOTOR-VEHICLES. DANIEL J. KELLER and FARRELL A. WATERS, Malden, Mo.; said Waters assignor of one-sixth of the whole right to said Keller. Filed Sept. 25, 1916. Serial No. 122,108. (Cl. 74—58.)



3. In combination with a sliding gear transmission having shiftable gears for establishing a plurality of driving relations, a power shaft and a driven shaft clutched thereto, pedal operated means for disconnecting the driven shaft from the power shaft, a slide connected to each of the shiftable gears, a rotary member associated with each slide, means for axially shifting said members independently of the pedal operated means to dispose said members in predetermined positions with relation to the respective slides, and an operative connection between said members and the pedal operated means, whereby said members are operated simultaneously with the disconnection of the driven shaft from the power shaft, portions of said members co-acting with the respective slides to shift the gears and establish the desired driving relation, said members returning to their normal positions upon the release of the pedal operated means independently of the slides.

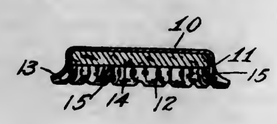
8. The combination with a sliding gear transmission comprising shiftable gears for establishing a plurality of driving relations, slides connected to said gears, a cam shaft disposed at right angles to the slides, spaced

cam multiples on said shaft, said slides each having means with which the respective cam multiples co-act, manually operable means to axially shift said shaft and position the cam multiples at the same time in operative relation to the slides, and additional means for rotating the cam shaft whereby the slides are actuated and the gears shifted to establish the desired driving relation.

13. In combination with a sliding gear transmission having shiftable gears for establishing a plurality of driving relations, a slide connected to each of the shiftable gears, spaced members having a common rotary axis and each provided with cam portions disposed in different rotary planes to co-act with the respective slides, means for axially shifting said members as a unit to position certain of the cam portions thereof at the same time in operative relation with the associated slide, and means for rotating said members to shift the gears and establish the desired driving relation.

[Claims 1, 2, 4 to 7, 9 to 12, and 14 to 18 not printed in the Gazette.]

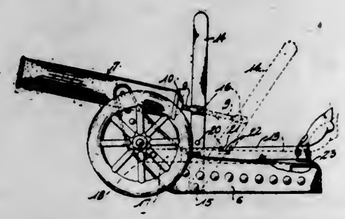
1,276,077. CLOSURE. GEORGE M. KELLER, Baltimore, Md., assignor to The Crown Cork and Seal Company of Baltimore City. Filed Nov. 11, 1916. Serial No. 130,728. (Cl. 215—10.)



1. In a closure for bottles and the like, a metal shell having a corrugated skirt, a sealing disk, a plurality of tongues formed by punching in the metal of said shell for engaging the face of said sealing disk in a plurality of points, said tongues being replaceable in their original position by the bottle during the capping operation.

[Claim 2 not printed in the Gazette.]

1,276,078. TOY CANNON. EMIL KESSLER, Brooklyn, N. Y. Filed Oct. 31, 1917. Serial No. 199,410. (Cl. 124—12.)



1. A toy cannon comprising a gun barrel, a carriage mounting said barrel, a spring operated plunger working in said barrel, a cocking lever pivoted on the carriage and connected with the plunger, a trigger lever pivoted on the carriage and provided with a notch in its edge, a lug on the cocking lever for engagement in said notch, and a spring for yieldingly holding the trigger lever with the notched portion thereof engaged with the lug on the cocking lever.

6. In a toy cannon, a barrel, a piston working therein, a rod connected with said piston and extending through the end of the barrel, a tubular member within the barrel surrounding the rearward portion of the rod and bearing against the end of the barrel, said tubular member having an abutment shoulder at its forward end, a spring encircling the rod bearing against the piston at its forward end and against the abutment at its rearward end and cocking means engaged with the rod.

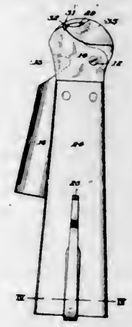
[Claims 2 to 5 not printed in the Gazette.]

1,276,079. OIL-COLLECTOR. WILLIAM KOVNAT, New York, N. Y. Filed Apr. 10, 1918. Serial No. 227,727. (Cl. 184—106.)



A drip tray having an opening therein, a collar depending from the tray in line with said opening, the opening having its walls flared in the direction of the collar and slightly extended thereinto, the tray having portions inclined toward said opening, a filtering screen extending over the collar at its point of connection with the tray, and a receptacle detachable from the collar and provided with a neck adapted to snugly fit against the collar beneath the screen.

1,276,080. WIRE-CUTTER. JOSEPH KOWNACZKI, Tamaroa, Ill. Filed June 4, 1918. Serial No. 238,185. (Cl. 42—90.)



2. A wire cutter comprising pivoted jaws having wire receiving cutting portions, shanks carried by said jaws adapted for the reception of a bayonet and rifle barrel, locking means for said shanks, and a closure retaining spring carried by one of said jaws adapted for resiliently engaging the other jaw when the device is closed, with the cutting edge of the last named jaw protectingly positioned beneath the said retaining spring.

5. In combination with pivoted jaws having concaved sharpened cutting edges, a flattened longitudinally split shank projecting from one of said jaws adapted for receiving a bayonet therein, means adapted for drawing the parts of said shank toward each other for locking the same upon a bayonet, a contracting tubular shank for the other jaw, one of said jaws having a notch in the end thereof, a retaining spring upon the other jaw adapted for the resilient reception of the notched jaw therebetween during the closing operation, the said spring having a terminal finger seated within said notch when the jaws are closed, a curved stop shoulder beneath said spring against which the coöperating jaw is adapted to engage when the device is closed, and belt engaging means upon one of said shanks.

[Claims 1, 3, 4, and 6 not printed in the Gazette.]

1,276,081. DEVICE FOR TURNING AND PLANING METALS, WOOD, AND THE LIKE. HERMANN KUHN, Turbenthal, Switzerland, assignor to the Firm of Gebrüder Kuhn, Turbenthal, Switzerland. Filed Apr. 5, 1915. Serial No. 19,359. (Cl. 29—96.)

1. In a device for turning and planing metal, wood and the like, a round cutting tool having a spiral groove provided at one of its peripheral edges with a channel which

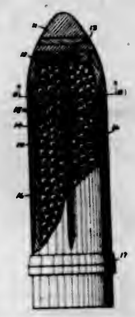
forms a fixed and permanent lip, a tool-holder coöperating with said tool and consisting of two resilient shells, one



of said shells being shorter than the other and having a curved, beveled end coöperating with said groove.

[Claims 2 and 3 not printed in the Gazette.]

1,276,082. PROJECTILE. JACOB KUHN, Connellsville, Pa., assignor of one-third to Henry C. Norton and one-third to Robert Norris, Connellsville, Pa. Filed Sept. 21, 1917. Serial No. 192,605. (Cl. 102—29.)



1. In a projectile, a cylindrical body provided with longitudinal grooves extending from near the base to near the point of the body to uniformly weaken the body at all sides, the grooves having outwardly curved end walls gradually merging into the exterior surface of the body and the longitudinal sections of the body between the grooves having uninterrupted smooth exterior surfaces to reduce the resistance of the projectile in flight.

2. In a projectile, a cylindrical body having longitudinal grooves therein extending from a point near the base of the body to near the point thereof, said grooves gradually increasing in depth from the base to the point of the shell.

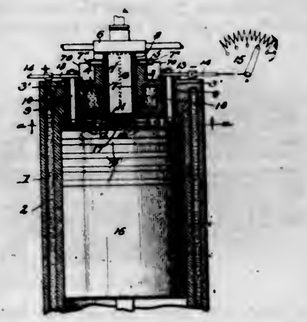
3. In a projectile, a body of cylindrical form provided with longitudinal circumferentially spaced apart grooves increasing in depth from the base to the point of the body to provide a body less capable of resistance near its point to internal pressure than at its base.

[Claim 4 not printed in the Gazette.]

1,276,083. INTERNAL-COMBUSTION ENGINE. SIMON LAKE, Milford, Conn. Filed Nov. 20, 1915. Serial No. 62,549. (Cl. 123—30.)

3. In an internal combustion engine, a power cylinder having a multi-jet igniter of high resistance material arranged in the combustion chamber of said cylinder, means to supply fuel to the combustion chamber within the zone of influence of said igniter, a power piston operating in said cylinder and having a fuel distributer at its upper end relatively arranged with respect to said igniter to distribute the fuel to said igniter, and means to supply electric current to said igniter to heat it sufficiently to cause combustion of the fuel so supplied to it.

5. In an internal combustion engine, a power cylinder, a flanged ring of high resistance material supported in the combustion chamber of the cylinder, said flanged ring having a plurality of perforations or openings providing ignition points, means to supply electric energy to said flanged ring, means to supply fuel to said cylinder, and a power piston operating in said cylinder and having a distributer at the upper end thereof to receive the fuel, said distributer having a plurality of fuel distributing slots to direct the fuel upon the flanged ring there to be ignited.



12. In an internal combustion engine, a power cylinder having an axial opening disposed in its head, a power piston in said cylinder, a fuel injector disposed in the axial opening, a fuel distributer arranged below said axial opening and in line therewith and comprising a radially slotted projection on the piston head, and an electrically heated igniter provided with a plurality of igniting points and interposed between the distributer and the injector.

[Claims 1, 2, 4, and 6 to 11 not printed in the Gazette.]

1,276,084. LOOM-SHUTTLE. ARISTIDE LAVERDIERE, Gilbertville, Mass. Filed Jan. 31, 1916. Serial No. 75,324. (Cl. 139—46.)



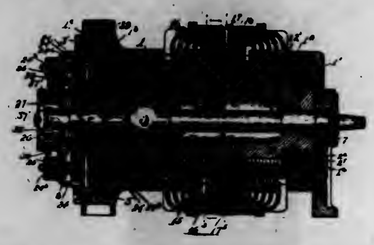
1. A tension device for loom shuttles, comprising a cylindrical body member having throughout its entire length a longitudinal bore which is intersected by an open sided transverse chamber that has one of the walls thereof on the same plane as the thread engaging portion of the longitudinal bore, a presser-block maintained entirely within the chamber and having in line with the longitudinal bore a flat centrally located thread engaging portion one end of which is curved, means on the opposite side of the presser-block from its thread engaging face for attaching thereto one end of a coiled spring, a coiled spring attached to the presser block and engaging with one of the walls of the chamber, and a casing which encompasses the body member.

[Claims 2 and 3 not printed in the Gazette.]

1,276,085. COMBINED IGNITION AND LIGHTING GENERATOR. LEON J. LE PONTOIS, Lakewood, Ohio, assignor, by mesne assignments, to The Teagle Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 28, 1915. Serial No. 36,672. (Cl. 171—252.)

1. A single unit combined direct current and high tension ignition current generator, comprising a unitary field structure, separate exciting windings for the direct and ignition currents, respectively, separate generating windings for the direct current and high tension ignition current, respectively, and a single rotor for expending mechanical energy in the fields interlinking with said generating windings for the production of electro-motive force therein.

4. In a single unit direct current and high tension ignition current generator, the combination of a unitary field structure, exciting windings therefor, separate generating windings for direct current and high tension ignition current, respectively, and a rotor common to all of said windings and having at one end a flux distributing section for distributing the flux of the field first through and then outside of said high tension generating winding.



10. In a single unit direct current and high tension ignition current generator, the combination of a unitary field structure, exciting windings therefor, separate generating windings therein for direct current and high tension ignition current, respectively, a shaft rotatably mounted in said field structure and common to all of said windings and carrying iron sections which constitute parts of the magnetic circuits for the fields in inductive relation with said generating windings, respectively, and circuit opening and closing mechanism for said high tension generating winding actuated by said shaft.

19. In a single unit direct current and high tension ignition current generator, the combination of a unitary field structure, exciting windings therein, a shaft rotatably mounted in said field structure, an armature including a low tension generating winding carried by said shaft near one end thereof, a flux distributer carried by said shaft near its other end, and a normally stationary high tension ignition current generating winding disposed in inductive relation in the magnetic circuit in which said flux distributer operates.

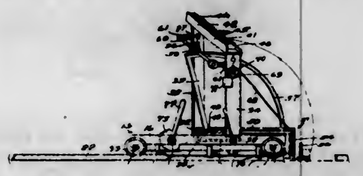
20. In a single unit combined low tension current and high tension ignition current generator, the combination of a unitary field structure, a low tension generating winding, a separate high tension generating winding for the ignition current comprising a coarse section and a fine section, electrical exciting means adapted in conjunction with said low tension generating winding to produce in said field structure magnetic fields inductively related to said low tension and high tension generating windings, means for periodically opening and closing the circuit through the coarse section of said high tension winding, and rotatable means inductively related to the said generating windings and adapted in operation to expend mechanical energy in the fields which interlink with the low and high tension generating windings for the production of electromotive forces therein.

[Claims 2, 3, 5 to 9, and 11 to 18 not printed in the Gazette.]

1,276,086. PAVING-MACHINE. NATHANIEL M. LIDDELL, Danville, Ill. Filed Dec. 1, 1917. Serial No. 204,885. (Cl. 94—6.)

1. In a machine of the character described, a support for holding a row of bricks in an elevated position, a transfer-carrier adapted to be moved to an upper position in proximity to the support and to a lower position in proximity to the road-bed, and means to effect a relative vertical movement between the support and the transfer-carrier when the transfer-carrier is in the upper position.

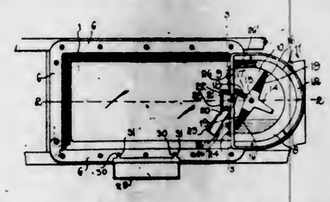
11. In a machine of the character described, a wheeled support adapted to travel upon the curbing as a track, an elevated support connected with the wheeled support to receive a row of brick thereon, a vertically movable transfer-carrier adapted to be shifted to an upper position to receive the row of bricks from the elevated support and to descend to transfer the bricks to a position



in proximity to the road-bed, and means to remove the bricks from the transfer-carrier, such means also serving to effect the longitudinal movement of the machine.

[Claims 2 to 10 not printed in the Gazette.]

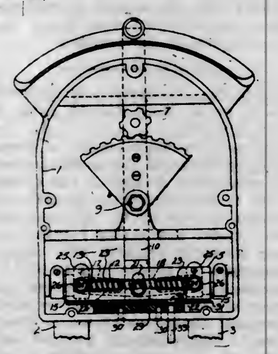
1,276,087. FEEDING-TROUGH. PHAREZ B. LILLEY, Prosser, Nebr. Filed Mar. 16, 1918. Serial No. 222,911. (Cl. 119—53.)



1. In combination with an animal feed trough having its base wall at one end upwardly inclined, of a feed receiving chamber mounted above the inclined end of said base wall and having a feed outlet opening, an oscillatable feed member mounted upon the inclined base wall of the trough and of a diameter substantially equal to the width of said base wall, a lever pivotally mounted upon said base wall in the feed outlet opening and operatively connected at one of its ends to said member, said lever at its other end having an upstanding flange for engagement by the lip of the animal in collecting the grain, whereby said member is oscillated to feed the grain through said opening and into the trough.

[Claim 2 not printed in the Gazette.]

1,276,088. ELEVATOR-CONTROLLER INTERLOCK. HARRY B. LOCKWOOD and GEORGE W. BRINKMAN, Chicago, Ill. Filed May 13, 1918. Serial No. 234,320. (Cl. 187—46.)



1. An electric controller of the class described, comprising a casing having a controller arm journaled there-

in, a plate mounted within the lower part of said casing and having a slot and pin connection to said arm whereby said plate is reciprocated upon oscillating motions of the arm, an aperture in said plate, and a movable rod forming part of the door lock operating mechanism in position to be projected through said aperture when the controlling arm is in its neutral or off position.

4. An electric controller of the class described, comprising a casing having a controller arm journaled therein, a plate mounted within the lower part of said casing and having a slot and pin connection to said arm whereby said plate is reciprocated upon oscillating motions of the arm, an aperture in said plate, a movable rod forming part of the door lock operating mechanism in position to be projected through said aperture when the controlling arm is in its neutral or off position, and guides for said plate arranged to prevent any but straight reciprocating motion of the plate.

[Claims 2 and 3 not printed in the Gazette.]

1,276,089. PRESSURE-GAGE. EVARTS G. LOOMIS, Newark, and ARTHUR V. DA COSTA, Arlington, N. J. Filed July 27, 1915. Serial No. 42,175. (Cl. 152—12.)



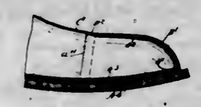
5. A pressure gage for tires, said gage having a cylinder, means for securing said cylinder to a tire valve stem, an inner tube within said cylinder through which tube air for the tire can pass, means for adjusting said tube along said cylinder whereby said tube can force a valve within the stem to open position, a piston within said cylinder and surrounding said inner tube, and means for cooperating with said piston whereby a reading can be had of the pressure exerted against the end of the piston.

9. In combination with a stem of a pneumatic tire, which stem has therein an air valve that normally closes the passageway of the stem, a pressure gage comprising a casing which is connected to the stem, an inner member within said casing, a spring-pressed plunger fitting the interior of the casing and the exterior of said inner member, and means carried by said casing, said means in turn carrying the inner member, said inner member being mounted so that it is longitudinally adjustable toward the air valve so as to effect an opening of the passageway and also being movable away from said air valve whereby the air valve can assume the position that it occupies when normally closing said passageway.

[Claims 1 to 4 and 6 to 8 not printed in the Gazette.]

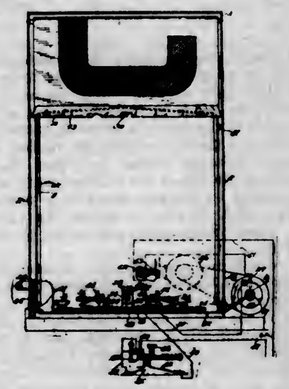
1,276,090. PROCESS OF MAKING SHOES. JOHN R. MCLAUGHLIN, Holbrook, Mass., assignor of one-half to George E. Rollins, Brockton, Mass. Filed Feb. 10, 1917. Serial No. 147,926. (Cl. 12—142.)

That improvement in the art of making shoes comprising the steps of forming a lining and retainer so that it may be fitted to a shoe stiffener piece, cementing the lining and retainer to the stiffener piece, then simultaneously molding the lining and retainer and the stiffener piece into any desired contour in such manner as to form a bottom flange and leave a margin of the lining and retainer extending beyond the upper edge portion of the stiffener, thereby making a flange for engagement with the upper of the shoe, and having the bottom edge of the



lining and retainer coincide with the edge portion of the bottom flange of the shoe stiffener, then stitching said flange of the lining and retainer to the upper of the shoe, and then lasting the bottom portion of the lining and retainer together with the flange of the shoe stiffener.

1,276,091. DAY AND NIGHT SIGN. ARTHUR E. MAIDEN and CARL SCHINDLER, Oakland, and WILLIAM D. NEWHOUSE, San Francisco, Cal. Filed Feb. 16, 1914. Serial No. 818,941. (Cl. 40—53.)



1. A changeable sign structure, comprising in combination, a series of automatically disappearing display sheets, means governable to select the sheets in any order and spread the same, a normally set locking device for engaging any spread sheet to hold it in open position, and means for releasing the first sheet when a second sheet is in process of extension.

2. A changeable sign structure, comprising in combination, a series of disappearing display sheets, a guide bar carried by each sheet, means to spread said sheets, means to be engaged by said guide bar to lock the sheet in extended position, an illuminating circuit for the display sheets, and means also to be engaged by said bar to complete said circuit, when the sheet is locked in extended position.

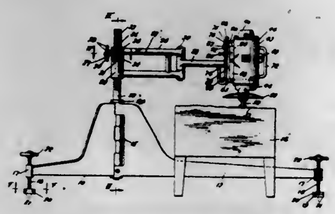
4. A sign display apparatus, comprising in combination with a casing, a plurality of curtains rolled into the upper portion of said casing, a rotative shaft mounted in the latter, means for driving said shaft, a series of normally idle take-up devices on said shaft, cords connecting said take up devices and said curtains, and a plurality of clutch elements carried by the shaft driving means for selective rigid connection of said take-up devices with said shaft.

7. In a display apparatus, movable, disappearing display members each with a lock member which is an electrical conductor, a locking device coöperable with said member, and an electrical illuminating system connected to said device and closable by said member when engaging said device.

13. In a display sign apparatus, a plurality of automatically disappearing members, each having a pulley cord with a bight which runs loosely through a portion of the curtain for the equalizing of pulley effect thereupon, and a winding mechanism whereby any one of the curtains may be drawn into exposed position.

[Claims 3, 5, 6, 8 to 12, and 14 to 31 not printed in the Gazette.]

1,276,092. RESURFACING-MACHINE. SEWARD W. MANN, New York, N. Y. Filed Mar. 10, 1917. Serial No. 154,015. (Cl. 144—2.)



1. In a resurfacing machine, the combination with a frame composed of hinged wings adapted to be swung toward and from each other including means to raise and lower each of the wings to various heights, of a vertical shaft journaled in the frame, a circumferentially rotatable and longitudinally movable arm on the vertical shaft, having manually operative means to adjust the arm upwardly and downwardly on the vertical shaft, a casing removably mounted on the arm so as to be manually movable in unison with the arm, an upright shaft journaled in the casing, a saw on the shaft, and means for driving the upright shaft.

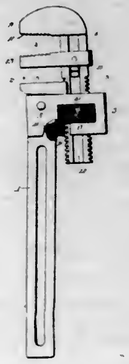
5. In a resurfacing machine, the combination with a frame composed of hinged wings adapted to be swung toward and from each other, including means to raise and lower each of the wings to various heights, of a hinged sectional circumferentially rotatable and longitudinally movable arm on the frame, a casing removably mounted on the sectional arm so as to be manually moved in unison with the arm, an upright shaft journaled in the casing, a saw on the upright shaft, means for driving the upright shaft, and means to adjust the casing on an incline relative to the arm.

10. In a resurfacing machine, the combination with a frame composed of hinged wings adapted to be swung toward and from each other, means to raise and lower each of the wings to various heights, of a vertical shaft journaled and also adjustable in the frame, a hinged sectional arm on the vertical shaft, a casing removably mounted on the sectional arm so as to be manually moved in unison with the arm, an upright shaft journaled in the casing, an electrically operative motor in the casing for driving the upright shaft, means to adjust the casing on an incline relative to the arm, a fender removably mounted on the casing, and a cutter adapted to be removably mounted on the shaft for beveling the edge of a block.

[Claims 2 to 4 and 6 to 9 not printed in the Gazette.]

1,276,093. COMBINATION-WRENCH. JOHN J. A. MILLER, Denver, Colo. Filed Dec. 21, 1917. Serial No. 208,251. (Cl. 81—184.)

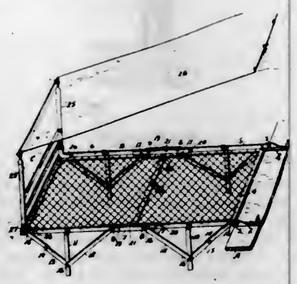
1. In a wrench, the combination with a handle having a jaw on its upper end, a support pivotally mounted on said handle, an interiorly toothed nut mounted in said support, and a jaw having a threaded shank portion slidably mounted in said support and extending through and in threaded engagement with said nut, said shank having a shallow groove in one of its sides, of a jaw slidably mounted on said shank between the other jaws and having a slot through which said shank passes, said jaw having a spring secured thereto, the free end of which bears frictionally against the bottom of said groove, the upper



face of said slidable jaw and the lower face of the upper jaw being toothed, while the lower face of the slidable jaw and the upper face of the lower jaw are untoothed.

[Claim 2 not printed in the Gazette.]

1,276,094. FOLDING BED. SIGFRID A. MILLER, Oakland, Cal. Filed Sept. 24, 1917. Serial No. 192,887. (Cl. 5—9.)

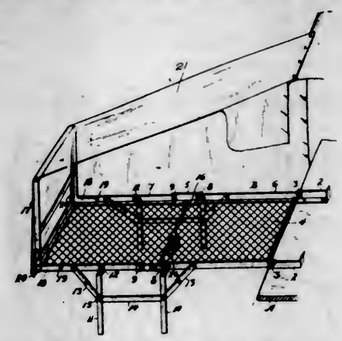


1. A folding bed comprising a mattress frame consisting of an intermediate section and a pair of pivotally connected main sections, said intermediate section and main sections being constructed of angle iron, a continuous flexible wire mattress carried by the intermediate and the main sections, a pair of locking bars pivotally mounted on the inside of the angle iron frame of one of the main sections, said bars adapted to swing in a vertical arc to lie on top of the intermediate section and the other main section, and a pair of inwardly turned lugs on the main intermediate section under which the bars are adapted to lie when they are folded over the intermediate and the other main section, said lugs adapted to hold the bars in position and secure same against vertical movement when the bed frame sections assume a horizontal plane.

[Claims 2 to 4 not printed in the Gazette.]

1,276,095. AUTO-BED. SIGFRID MILLER, Oakland, Cal. Filed Mar. 14, 1918. Serial No. 222,469. (Cl. 5—9.)

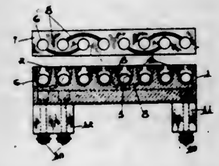
1. A folding bed for automobiles, comprising a mattress-carrying frame, a pivotal connection between the frame and the running board, a bar extending crosswise of the frame, a locking member carried by said bar adapted to secure the frame against movement when folded up on the running board, said locking member comprising a bar turnably and slidably mounted on the rod, and a



hook-shaped member formed on the outer end of said bar adapted to straddle the side of the automobile.

[Claims 2 to 5 not printed in the Gazette.]

1,276,096. SECTIONAL ELECTRIC HEATING ELEMENT. FREDERICK W. MOFFAT, Weston, Ontario, Canada. Filed Apr. 12, 1918. Serial No. 228,229. (Cl. 219—70.)



1. In a sectional electric heating element, the combination of a slab of insulating material having parallel grooves for the reception of resistance wire formed in its upper surface and extending through its ends; and separate end bars of insulating material in length substantially equal to the width of the slab, fitted closely thereto, and having holes formed therein adapted to aline with the grooves of the slab, grooves being formed in the outer surface of each bar connecting alternate holes, said grooves passing alternately above and below alternate holes, and the grooves in one bar being in staggered relationship to those in the other bar.

2. In a section electric heating element, the combination of a slab of insulating material having an even number of, and at least four, parallel grooves for the reception of resistance wire formed in its upper surface and extending through its ends; and separate end bars of insulating material in length substantially equal to the width of the slab, fitted closely thereto, and having holes formed therein adapted to aline with the grooves of the slab, grooves being formed in the outer surface of each bar connecting alternate holes, said grooves passing alternately above and below alternate holes, and the grooves in one bar being in staggered relationship to those in the other bar.

3. In a sectional electric heating element, the combination of a slab of insulating material having parallel grooves for the reception of resistance wire formed in its upper surface and extending through its ends; separate end bars of insulating material in length substantially equal to the width of the slab, fitted closely thereto, and having holes formed therein adapted to aline with the grooves of the slab, grooves being formed in the outer surface of each bar connecting alternate holes, said grooves passing alternately above and below alternate holes, and the grooves in one bar being in staggered relationship to those in the other bar; an outwardly extending flange formed on one of the end bars below the holes; terminal posts secured through said flange, holes for the passage of the ends of the resistance wire being formed through said flange from top to bottom.

4. In a sectional electric heating element, the combination of a slab of insulating material having parallel grooves for the reception of resistance wire formed in its upper surface and extending through its ends; separate end bars of insulating material having holes formed therein adapted to aline with the grooves of the slab, grooves being formed in the outer surface of each bar connecting alternate holes, said grooves passing alternately above and below alternate holes, and the grooves in one bar being in staggered relationship to those in the other bar; an outwardly extending flange formed on one of the end bars below the holes; terminal posts secured through said flange, holes for the passage of the ends of the resistance wire being formed through said flange from top to bottom; and a filling piece of insulating material adapted to fit above the flange.

7. In a sectional electric heating element, the combination of a slab of insulating material having parallel grooves for the reception of resistance wire formed in its upper surface and extending through its ends; separate end bars of insulating material having holes formed therein adapted to aline with the grooves of the slab, grooves being formed in the outer surface of each bar connecting alternate holes, said grooves passing alternately above and below alternate holes, and the grooves in one bar being in staggered relationship to those in the other bar; an outwardly extending flange formed on one of the end bars below the holes; integral bosses depending from the flange, terminal posts secured through said flange and bosses, holes for the passage of the ends of the resistance wire being formed through said flange and bosses from top to bottom; a metal pan into which the slab and bars are fitted; insulating material in the bottom of the pan on which the slab and bars rest; and a metal cover plate resting on the edges of the pan, holes being formed in the bottom of the pan for the passage of the lower ends of the bosses aforesaid.

[Claims 5 and 6 not printed in the Gazette.]

1,276,097. NUT-LOCK. WILLIAM M. MOORE, Newark, Ohio. Filed Sept. 20, 1917. Serial No. 192,369. (Cl. 151—31.)

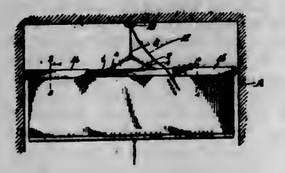


The combination with a bifurcated bolt and a nut threaded upon the bolt; of a bar having a wedge shape head at one end and a relatively narrow lug at its other end; said wedge shape head being thicker than the remaining portion of the bar and thicker than the primary distance between the furcations of said bolt, said bar being disposed between said furcations so that its head spreads said furcations apart but allows their ends to be drawn toward one another; and a cap member threaded so as to engage the spreading furcations of said bolt, said cap having an opening of a size to permit the reception of the body of said bar but being capable of receiving said lug, said lug extending through and beyond said opening for receiving the impact of a driving tool.

1,276,098. WINDOW-SHADE HOLDER. BENJAMIN F. MOORMAN, Cincinnati, Ohio, assignor to The Gilbert Shade Holder Company, Cincinnati, Ohio, a Corporation of Ohio. Filed May 25, 1917. Serial No. 170,800. (Cl. 156—27.)

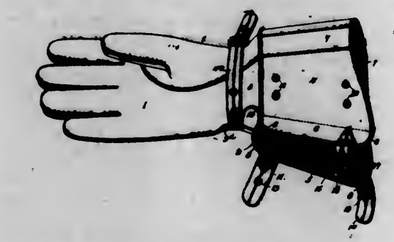
A shade holder comprising a main section, slidable end members mounted thereon, means for supporting a shade

roller in said end members, flanges on said end members engaging said main section, the flanges on one end member being larger than those on the other, lips formed on the top of said main section, clips adapted to engage



said lips, a flexible connection between said clips and a T-shaped tubular member mounted on said flexible connection and adjustable therealong, and a cord attached to said tubular member for suspending the device in a window frame.

1,276,099. GAUNTLET-GLOVE. SAMUEL B. MORRELL, Gloversville, N. Y. Filed Nov. 13, 1917. Serial No. 201,804. (Cl. 2—9.)



1. A gauntlet glove having a cuff with separated ends having reinforced parts extending crosswise of the length of the cuff, one reinforced end being wider and longer than the other and arranged to overlap the second-named end portion when the cuff is closed, and fastening means on the cuff for holding the longer and wider end in overlapping relation to the narrower and shorter end, the fastening means at the wrist end of the cuff having coacting elements, one fast to the wider end and the other fast to the cuff adjacent to the narrower end thereof, and the other fastening means being fast to the narrower end of the cuff and threaded through the wider end thereof.

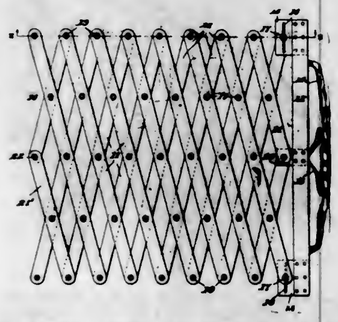
4. A gauntlet glove having a cuff portion with freely separated ends, one of the ends having a strap fast at one end thereto, and fastening means for the strap adjacent to said end, and the other end portion of the cuff having a slot therethrough, and a tab fast to the cuff adjacent to the slot and provided with a loop matching the slot and through which the strap is threaded, whereby the two ends of the cuff may be drawn together by the strap without strain upon the portion of the glove pierced by the slot, said loop being provided with a roller where engaged by the strap to facilitate the movement of the strap through the loop.

[Claims 2 and 3 not printed in the Gazette.]

1,276,100. PORTABLE BARRIER. PAUL NIZNIK, Binghamton, N. Y. Filed Dec. 22, 1917. Serial No. 208,439. (Cl. 256—1.)

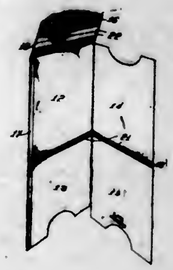
1. A portable barrier comprising a lazy-tongs frame having pivot bolts sharpened and projecting from one side thereof, a cross-piece at one end of the frame, limiting means for the lazy-tongs carried by said cross-piece, a retaining strap for the lazy-tongs when closed centrally carried by the cross-piece and a carrying strap attached to the latter.

2. A portable barrier for army use comprising a cross-piece, plates carried by the ends of the cross-piece arranged with vertical slots therein, a frame of lazy-tongs construction slidably attached within the slots of said plates for limited opening movement, the said frame hav-



ing pivot members, pointed extensions carried by said pivot members at one side of the frame projecting upwardly when the device is operatively positioned upon the ground, and retaining and carrying straps provided upon said crosspiece.

1,276,101. ENVELOP. THEOPHIELD D. OAKLEY, Chicago, Ill. Filed Dec. 29, 1917. Serial No. 209,484. (Cl. 229—72.)



1. A tri-pocket envelop provided with a sealing flap which includes two parts for respectively sealing two of the pockets of the envelop and a breakable connection between said parts constituting a closure for the third pocket, whereby the third pocket may be opened by breaking said connection while preserving the seals of the other pockets.

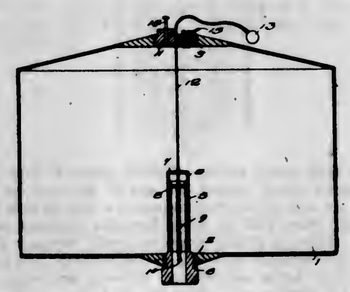
4. In a tri-pocket envelop, the combination of a pair of superposed pockets separable from each other to form independent pockets and suitably united together in said superposed position to form a third inner pocket, and sealing means comprising two parts for closing, respectively, the two outer pockets, independently of each other, said parts being normally connected together and forming a seal for the inner pocket but being separable from each other when it is desired to open the said inner pocket.

6. A triplex envelop formed from a single paper blank folded longitudinally and transversely to provide a series of four superposed substantially four-sided parts, the outer pairs of parts being integrally connected together along an adjacent side and constituting the walls of outer pockets, the two parts of each of said pairs being connected together along three sides, including that side which constitutes the integral connection between the pairs of parts, and the two inner parts of the series being connected together along three sides to constitute a third inner pocket, each of said pockets having an open end and said open ends being superposed in stepped re-

lation, and a flap integrally connected by a folding line to one of the outer parts of the series for sealing all of said pockets, said flap comprising two separable sealing parts for closing independently the two outer pockets, and the connection between said sealing parts constituting a closure for the inner pocket, whereby the inner pocket may be opened by breaking said connection while preserving the seals of the outer pockets.

[Claims 2, 3, and 5 not printed in the Gazette.]

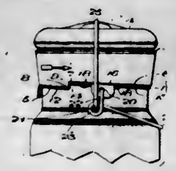
1,276,102. RESERVE-STORAGE VALVE. ALDEN C. OLANDER, Billings, Mont. Filed Oct. 11, 1917. Serial No. 195,948. (Cl. 158—46.5.)



1. In combination with a receptacle having an outlet opening therein, a cage over said opening, a hollow cylindrical valve slidably received in the cage, the upper end of said cage being flanged for limiting movement of said valve therein, and means engaged with the valve for normally maintaining the same over said outlet opening for reserving a predetermined quantity of fuel in said receptacle.

[Claims 2 and 3 not printed in the Gazette.]

1,276,103. FRUIT-JAR CLOSURE. JAMES H. PAIGE, Manchester, N. H. Filed Aug. 8, 1917. Serial No. 185,013. (Cl. 215—37.)



2. A fruit jar closure comprising a plurality of inclined cam shoulders on the jar, abutments connecting the beginning of one shoulder with the terminus of another shoulder, a yoke or band rotatably mounted around the jar having a plurality of inclined parts corresponding to, and coöperating with the respective cam shoulders, the band having shoulders connecting its inclined parts which are adapted to engage the abutments on the jar, and a releasable top fastener carried by said yoke or band.

4. A fruit jar closure comprising a plurality of inclined cam shoulders on the jar, a yoke or band rotatably mounted around the jar having a plurality of inclined parts corresponding to the shoulders and adapted to coöperate with them, and a releasable top fastener pivoted to and carried by said yoke or band at points on opposite sides of the jar which lie in a line of less length than a diameter, being nearer to each other around one side of the jar than the other side of the jar.

[Claims 1, 3, and 5 not printed in the Gazette.]

1,276,104. ELECTRICALLY-OPERATED HAMMER. GEORGE M. PAINTER, Chicago, Ill. Filed Jan. 2, 1917. Serial No. 140,055. (Cl. 172—126.)



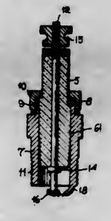
1. An electro-magnetic motor comprising a plurality of solenoids arranged in longitudinal succession with a common longitudinal axis and connected in series, a core constituting a hammer, movable in the common longitudinal axis of said solenoids, a commutator bar provided with a plurality of commutator rings, each ring being connected to one of said solenoids, a commutator block normally movable with said core, but capable of a limited, independent movement, said commutator block having brushes engaging the commutator rings associated with the solenoids, and positive means for shifting said commutator at the ends of the path of travel of said core, to shift the magnetic field of said solenoids to a point in the reverse direction from that in which said core has been traveling.

4. An electro-magnetic motor comprising a plurality of annular solenoids arranged in longitudinal succession with a common longitudinal axis and connected together in series, a core having an extension member, reciprocable in the common longitudinal axis of said solenoids, a commutator bar comprising a plurality of commutator members, each of which is connected to one of said solenoids, a commutator block carried by said core extension, but capable of a limited, independent movement thereon, said commutator block having brushes engaging the commutator members associated with the solenoids, means automatically locking the said commutator block to said core extension at the limit of its movement on said extension, means releasing said automatic locking means of said block on said core extension as the core approaches the ends of its movement, and means for shifting said block at the ends of the path of travel of said core, to shift the magnetic field of said solenoids to a point in the reverse direction from that in which the core has been traveling.

9. An electro-magnetic motor comprising a casing having front and rear end walls, and an intermediate wall dividing said casing into two compartments, a plurality of annular solenoids arranged in longitudinal succession in one of said compartments, said solenoids being connected together in series, a supporting member extending substantially the full length of the casing in the longitudinal axis of said solenoids, a tube slidably mounted on said supporting member, a core fixed to the front end of said tube and associated with said solenoids, spaced bars in the other of said compartments, fixed at their ends in said intermediate wall and said rear end wall, commutator members arranged in pairs on said spaced bars, each pair being connected to one of said solenoids, conductor rods in said commutator compartment and fixed at their end in said intermediate wall and said rear end wall of the casing, a commutator block mounted on the rear end of said tube but capable of a limited, independent movement thereon, rotative brushes on said commutator blocks engaging upon said commutator members on said bars and upon said conductor rods, means for holding said brushes in proper contact engagement with said commutator members and with said conductor rods, and spring pressed plungers acting to shift said commutator block on said tube at the ends of the path of travel of said core on said supporting member, to shift the magnetic field of the solenoids to a point in the reverse direction from that in which the core has been traveling.

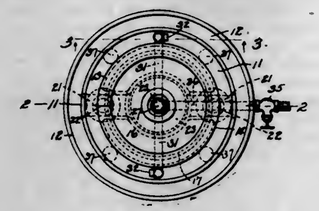
[Claims 2, 3, 5 to 8, and 10 not printed in the Gazette.]

1,276,105. SPARK-PLUG. HARRY R. PEARSALL, Binghamton, N. Y. Filed Oct. 18, 1917. Serial No. 196,441. (Cl. 123—169.)



In a spark plug, a shell having an inwardly projecting lug formed upon its wall at one end and constituting the secondary electrode, said lug having a sharpened edge and extending in a single horizontal plane throughout its length and at right angles to the axis of the shell, and a central primary electrode having a flat metal plate fixed to one of its ends and also disposed in a horizontal plane, said plate having a sharpened edge disposed in opposed relation to the sharpened edge of the lug on said shell and gradually diverging therefrom from one end to the other of said lug to provide a spark gap varying in width throughout its length.

1,276,106. CAR-WHEEL-QUENCHING DEVICE. OSCAR D. A. PEASE and JOHN F. FETTERLY, Altoona, Pa. Filed Feb. 28, 1917. Serial No. 151,620. (Cl. 266—6.)



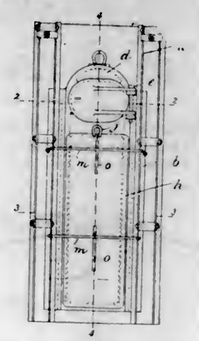
1. A device for quenching car wheels including in combination with a wheel, an annular cup-shaped stationary receptacle, an annular supporting ring for the wheel in said receptacle, an overflow receptacle positioned beneath the quenching receptacle, and means for introducing a jet of quenching medium into the said quenching receptacle between the inner wall thereof and the periphery of the wheel support tangential to the latter.

[Claims 2 to 9 not printed in the Gazette.]

1,276,107. COKE-OVEN DOOR. ROBERT PEEL and THOMAS FREDERICK SHEVELS, New Brancepeth Colliery, England. Filed Sept. 19, 1917. Serial No. 192,067. (Cl. 202—6.)

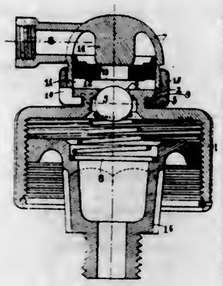
1. In coke ovens having dividing walls, a door frame permanently fitted against the end of the oven so as to inclose the end of the dividing walls, a web to said frame extending from wall to wall, inwardly inclined reveals to said frame, a lifting door, inwardly inclined flanges to said door adapted to hold a firebrick lining, said flanges and reveals being sandwiched between brickwork, and means for lifting said door in and out of position.

2. In coke ovens having dividing walls, a door frame permanently fitted against the end of the oven so as to inclose the ends of the dividing walls, a web to said frame extending from wall to wall, an aperture in said web, means for closing said aperture, inwardly inclined webs to said frame, a lifting door, inwardly inclined flanges to said door adapted to fit said reveals, and adapted to hold a firebrick lining, said flanges and reveals being sandwiched between brickwork, and means for lifting said door in and out of position.



3. In coke ovens having dividing walls, a door frame permanently fitted against the end of the oven so as to inclose the end of the dividing walls, a web to said frame extending from wall to wall, inwardly inclined reveals to said frame, a lifting door, inwardly inclined flanges to said door adapted to hold a firebrick lining, said flanges and reveals being sandwiched between brickwork, and means for lifting said door in and out of position, standards in front of said door frame, cross rods between said standards, inclined planes in said lifting door adapted to coact with said cross rods.

1,276,108. LUBRICATOR. EMILE PIQUERES, St.-Ursanne, Switzerland. Filed Mar. 15, 1918. Serial No. 222,542. (Cl. 184—105.)



1. A device for use in filling lubricators comprising a cylinder adapted to be attached to the lubricator with its interior communicating with the interior of the lubricator, a supply pipe for the cylinder, a piston movably mounted in the cylinder, a passage for permitting the lubricant to pass by the piston, and means for normally closing said passage, whereby on lubricant being forced with pressure through the supply pipe into said cylinder, said piston will be forced away from the means normally closing the passage so as to allow the charged lubricant to pass through the passage and enter the lubricator.

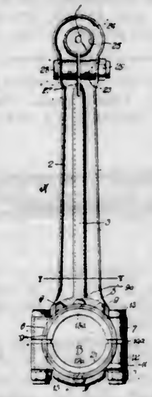
2. A device for use in filling lubricators combrising a cylinder adapted to be attached to the lubricator with its interior communicating with the interior of the lubricator, a supply pipe for the cylinder, a piston movably mounted in the cylinder, and provided with a passage for permitting the lubricant to pass the cylinder, and a plug located in the cylinder for narmally closing said passage, whereby on semi-solid lubricant being forced with pressure through the supply pipe into the cylinder, said piston will be moved away from the plug

so as to allow the charged lubricant to pass through the passage in said piston and enter the lubricator.

3. A device for use in filling lubricators comprising a hood having a supply pipe; a cylinder carried by the hood and provided with means for connecting the cylinder to the hood, the interior of the cylinder and the interior of the lubricator being in communication when the parts are connected, a piston movably mounted in said cylinder and provided with a centrally disposed passage, and a centrally disposed plug carried by the hood and normally closing the passage in the piston.

[Claim 4 not printed in the Gazette.]

1,276,109. CONNECTING-ROD. ALEXIS R. PRIBIL, Wilkinsburg, Pa. Filed Dec. 26, 1916. Serial No. 138,955. (Cl. 74—17.)



1. A connecting rod having a shank portion and drive and driven ends, the shank portion being composed of channel members arranged back to back with the flanges of one member in a plane with the flanges of the other member, said members having pressed alining sleeves at the driven end with flanges on said members surrounding said sleeves, and pressed out ribs extending longitudinally and transversely of the sleeve adjacent said members with some of said ribs joining said members.

2. A connecting rod comprising a shank portion having drive and driven ends, said shank portion being composed of channel members arranged back to back and having piston pin sleeves at the drive end of said rod and surrounded by flanges of said channel members, registering sleeves at the drive end of said shank portions having the axis thereof at a right angle to the axis of the piston pin sleeves of said members, said members having a bifurcation separating the piston pin sleeves thereof, and means abutting flanges of said channel members and extending through the bifurcation thereof adapted for contracting the piston pin sleeves of said members.

3. A connecting rod comprising a shank composed of members stamped out at one end thereof to provide sets of registering sleeves with the axes of the set of sleeves at right angles to each other and to the longitudinal axis of the connecting rod, said members having a bifurcation extending from one set of sleeves between the sleeevs of the other set, and means between said members and transversely of the bifurcation thereof adapted for contracting said sleeves.

[Claims 4 to 9 not printed in the Gazette.]

1,276,110. CIRCUIT MAKER AND BREAKER. CHRISTIAN RASMUSSEN, Cleveland, Ohio, assignor of one-half to Clark S. Somers, Cleveland, Ohio. Filed Feb. 18, 1918. Serial No. 217,760. (Cl. 200—24.)

1. A contact finger for electric apparatus, having a screw-threaded stem and a renewable contact member in screw-engagement therewith, and means to lock said member against independent rotation as thus screw-engaged.



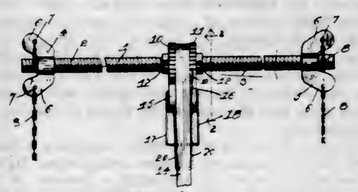
2. A pivoted contact finger for electrical apparatus, having a spring to place it under tension, a renewable contact member in screw connection with said finger and rotatable and movable longitudinally in respect thereto, and a lock nut to fix said member rigidly in adjusted position.

3. In a device of the kind described, a bracket, a finger pivotally mounted upon said bracket, a helical spring to control said finger, sleeved bearing parts for said bracket and finger inclosing said spring, screw means uniting said parts separably together, and a reversible contact member rotatably affixed at the free end of said finger.

5. In a device as described, a bracket having a bearing extension, a finger having a recessed bearing portion sleeved upon said extension, a pivot bolt to secure said parts together, a spacing bushing sleeved over said bolt, a coiled spring encircling said bushing and engaged at its opposite ends with said bracket and finger, a set screw carried by said finger providing an adjustable stop, a renewable contact member having double contact faces, and means to secure said member in reversed positions upon said finger.

[Claim 4 not printed in the Gazette.]

1,276,111. WIRE-STRETCHER. OSCAR B. REED, Mountpleasant, Tenn. Filed June 2, 1914. Serial No. 842,372; (Cl. 254—67.)

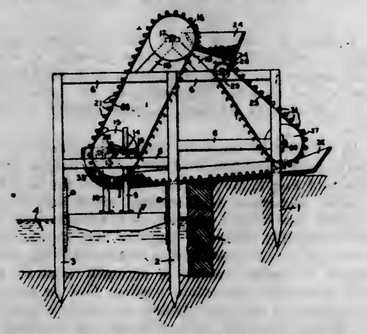


A wire stretcher including a screw threaded bar, a pair of relatively spaced ratchet wheels secured to the bar at a point intermediate its ends, a lever rotatably mounted on the bar between the ratchet wheels for oscillatory movement about the bar and held against longitudinal movement thereon by said ratchet wheels, pawls pivoted upon each side of the lever and adapted to engage the teeth upon the ratchet wheels, said pawls having channels formed in their longer edges, resilient bars secured to each side of the lever and having their free ends disposed in the channels for normally holding the pawls in engagement with the ratchet wheels, and rods pivoted at one of their ends to the pawls and having their other ends bent at right angles, said lever having apertures to receive the angled ends of said rods, whereby either of the pawls may be held from engagement with its ratchet wheel.

1,276,112. TIDE-MOTOR. PETER REED, Quincy, Mass. Filed Feb. 12, 1915. Serial No. 7,905. (Cl. 185—8.)

1. A motor of the class described comprising a float resting upon the surface of a body of water subject to rising and falling conditions, a drum of large diameter, racks connected to said float and means operatively connecting said racks to said drum to cause rotation of said drum in one direction during the movement of the float in both directions, a companion drum also of large diameter located at a higher level, an endless conveyer having a series of flights passing around said drum, means for delivering mobile articles in the path of the flights of said

conveyer whereby each flight will receive a heavy load, means for receiving the mobile articles as discharged from the conveyer as it passes over the uppermost drum and means adapted to be actuated by the mobile articles descending at a relatively high rate of speed under the influence of gravity to transform the potential energy of the descending mobile articles into applied power.



2. A motor of the class described comprising a float resting upon the surface of a body of water subject to rising and falling conditions, a drum of large diameter, racks connected to said float and means operatively connecting said racks to said drum to cause rotation of said drum in one direction, a companion drum located at a higher level, an endless conveyer having a series of flights passing around said drum, means for delivering mobile articles in the path of the flights of said conveyer whereby each flight will receive a heavy load, means for receiving the mobile articles as discharged from the conveyer as it passes over the uppermost drum, and an endless conveyer mounted upon rollers of relatively small diameter and having flights adapted to receive said mobile articles whereby said conveyer will be actuated by gravity to transform the potential energy of the mobile articles into power and means to receive said mobile articles and return the same into the path of the flights of the first mentioned conveyer.

3. A motor of the class described comprising a float, an endless conveyer actuated thereby, cup shaped flights on said conveyer, means for delivering a number of heavy balls successively to each of said cup shaped flights, a receptacle into which the balls are delivered by said conveyer, a second descending conveyer having a series of similar flights each adapted to receive the balls from said receptacle and thereby to cause the actuation of said conveyer, means for regulating the number of balls delivered to the last-named conveyer and means for returning the balls discharged from the second conveyer into the path of the flights of the first conveyer.

1,276,113. LEATHER SUBSTITUTE AND PROCESS FOR MAKING THE SAME. ROLAND B. RESPESS, New York, N. Y. Filed Nov. 26, 1917. Serial No. 203,932. (Cl. 91—68.)

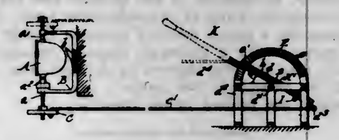
1. The herein described process of making a leather substitute consisting in forming a matted fiber sheet, compressing the said sheet and saturating it with a binding agent composed of rubber, balata, fish glue, silicate of soda, sulfur and linseed oil, drying the sheet and compressing it.

5. A leather substitute comprising matted fibers, and a binding agent comprising rubber, naphtha, balata, fish glue, silicate of soda, sulfur and linseed oil.

[Claims 2 to 4 not printed in the Gazette.]

1,276,114. CONTROL-LEVER. GEORGE W. REYNOLDS, Rock Glen, N. Y. Filed Feb. 23, 1917. Serial No. 150,211. (Cl. 74—39.)

3. In an adjusting mechanism for headlights, a foot lever comprising a plate on which the foot is adapted to rest, a flange at one side of said plate, and a second flange adjustably secured on said plate, bolts having a threaded engagement with said flange and extending through slots in said plate, eccentrics pivoted to said bolts and adapted to be swung about on their pivots to



clamp said flange on said plate, projecting members on said eccentrics, and grooves on the lower face of said plate with which said projecting members are adapted to engage to hold said bolts against turning.

[Claims 1 and 2 not printed in the Gazette.]

1,276,115. SYSTEM OF TRANSPORTATION. CHAUNCEY E. RICHARDSON, Chevy Chase, Md. Filed Nov. 2, 1917. Serial No. 199,946. (Cl. 104—14.)



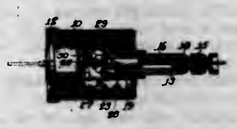
1. In a system of transportation, the combination with a conduit containing a liquid, of a submarine boat in said conduit, and arranged to be propelled therethrough between distant points.

3. In a system of transportation, the combination with a liquid-filled conduit submerged in a body of water and having entrance and exit openings adjacent to the surface of the said water, with its intermediate portions submerged at a greater depth than its entrance and exit portions, of a submarine boat in said conduit and arranged to be propelled therethrough between distant points.

6. In a system of transportation, the combination with a liquid-filled conduit submerged in a body of water, or laid upon, or buried under or supported by the dry land, of a submarine boat in said conduit, and arranged to be propelled therethrough between distant points.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,276,116. AUTOMOBILE-LOCK. THEODORE C. RIEBE, Chicago, Ill., assignor to Rogers Motor Lock Company, Chicago, Ill., a Corporation of Illinois. Filed June 13, 1917. Serial No. 174,466. (Cl. 74—14.)



1. In a locking device, the combination of a casing, a conduit connected thereto, a wire in said conduit, a rotatable locking element, a pair of gears located in a plane transverse to the arc of rotation of the locking element, and means operable by the gears for reciprocating said wire, substantially as described.

4. In combination, a casing, a conduit connected thereto, a wire in said conduit, a frame in the casing, a lock interlocked with said frame, a toothed disk secured to the lock, a pair of gears secured to the frame and meshing with the teeth of said disk, and means for connecting the wire to said gears whereby the rotary motion of the lock is changed to reciprocating motion of the wire, substantially as described.

6. In a locking device, the combination of a casing, a lock therein, a valve-operating wire, and means operable by said lock for changing the rotary motion of the lock into a reciprocating motion of the wire in line with the longitudinal axis of the lock, substantially as described.

[Claims 2, 3, 5, 7, and 8 not printed in the Gazette.]

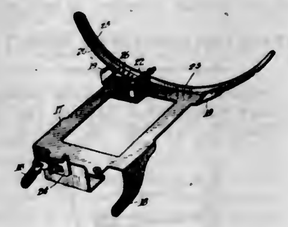
1,276,117. FLEXIBLE ARMORED CONDUIT. THEODORE C. RIEBE, Chicago, Ill., assignor to Rogers Motor Lock Company, Chicago, Ill., a Corporation of Illinois. Filed June 13, 1917. Serial No. 174,467. (Cl. 64—30.)



1. A flexible conduit composed of ball and socket sections each having a longitudinal, axial opening therethrough the sections being permanently united by crimping the metal constituting the socket around the ball portion of an adjacent section, the sections being so formed that a wire or rod contained within the longitudinal opening formed by the connected sections may bend in substantially the arc of a circle without longitudinal separation of the connected sections, substantially as described.

[Claims 2 to 4 not printed in the Gazette.]

1,276,118. UNIVERSAL BAR. ALVAH C. ROEBUCK, Chicago, Ill., assignor to Woodstock Typewriter Company, Woodstock, Ill., a Corporation of Illinois. Filed Apr. 25, 1914, Serial No. 834,554. Renewed Jan. 22, 1918. Serial No. 218,267. (Cl. 197—97.)



1. In a typewriter, a type bar segment, and a horizontally reciprocable universal bar moving toward and from the type bar segment with its upper face inclined downwardly away from the segment to deflect falling dirt therefrom and to discharge dirt from the bar by its movement in a direction away from the segment.

16. In a typewriter, the combination with a type bar segment, of type bars pivoted in the segment, a universal bar adapted to be engaged by the type bars, a reciprocable frame for the universal bar, a hinged support for mounting the frame at the rear end thereof for free reciprocal movement, and a sliding connection between the frame and the segment at the forward end of the frame for supporting it for free reciprocation.

21. In a universal bar structure for typewriters, the combination with a top plate having depending lugs spaced apart, of a rocker pivotally mounted in the lugs, extending rearwardly thence downwardly from the pivot point with extremities curved forwardly, a type bar segment secured to the plate, a universal bar frame pivotally connected at its rear end to the extremities of the rocker, the pivot point lying below the pivot of the rocker, an adjustable guiding connection between the frame at its forward end and the segment, a universal bar supported by the frame adjacent the segment, type bars mounted in the segment adapted to engage the universal bar for moving it rearwardly, an adjustable stop at the rear of the rocker for limiting the upward movement of the rocker with respect to the supporting plate, and a spring disposed between the rocker and the supporting plate, tending to press the rocker downwardly and the universal bar frame forwardly.

[Claims 2 to 15 and 17 to 20 not printed in the Gazette.]

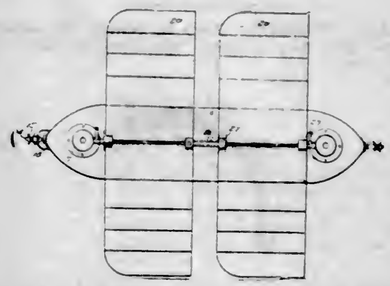
1,276,119. ANTISEPTIC AND GERMICIDAL TABLET. ALLEN ROGERS, Brooklyn, N. Y., assignor to Charles T. Davis, Brooklyn, N. Y. Filed Apr. 2, 1918. Serial No. 226,161. (Cl. 167—9.)

1. An antiseptic tablet of potassium mercuric iodid containing a stabilizing agent in quantity sufficient to prevent reduction in solution to insoluble mercuric iodid and a suitable binder acting as a filler and serving to prevent deliquescence of the tablet.

2. An antiseptic tablet of potassium mercuric iodid containing a stabilizing agent in quantity sufficient to prevent reduction in solution to insoluble mercuric iodid, and a binder of sodium chlorid, the latter being present in an amount to give to the antiseptic solution of normal strength a tonicity approximating that of the blood.

3. An antiseptic tablet of potassium mercuric iodid containing a stabilizing agent of iodid salt in quantity sufficient to prevent reduction in solution to insoluble mercuric iodid, and a salt preventing deliquescence acting as a binder and present in an amount to give to the antiseptic solution of normal strength a tonicity approximating that of the blood.

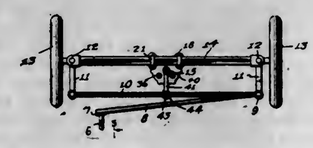
1,276,120. AIRSHIP. JAMES DAVID SALTS, Bois D'Arc, Mo. Filed Jan. 8, 1918. Serial No. 210,870. (Cl. 244—6.)



1. A device of the character specified, comprising a wheel supported car, gas bags connected with the ends of the car, said car having an opening at each end through which the small end of the bag extends, and planes at each side of the gas bag at approximately the center thereof and extending laterally therefrom and supported from the car to swing vertically on an axis transverse to the car, a pair of planes extending from the top of the car toward each side thereof and mounted to swing vertically with respect to the car on an axis longitudinal to the car, and a common means for swinging all of said planes, said means comprising radial arms connected with the supporting shafts for the planes of the bags, shafts supporting the planes on the car, arms extending radially from the shafts, links connecting the said arms with the arms of the shafts of the planes of the bag, and means for simultaneously oscillating the shafts of the planes of the car.

[Claims 2 to 4 not printed in the Gazette.]

1,276,121. ATTACHMENT FOR STEERING MECHANISMS. LIONEL D. SAXTON, New York, N. Y. Filed Apr. 27, 1917. Serial No. 164,841. (Cl. 21—195.)



1. In a device of the character described, a chamber adapted to be attached to a steering mechanism; means for attaching the said chamber to a steering mechanism; a wing piston having a plurality of arms mounted within the said chamber and adapted to oscillate therein; transverse apertures in the arms of the said wing piston; secondary apertures in the arms of the wing piston at right angles to the said transverse apertures; means within the said second apertures for regulating the area thereof; a plurality of openings in the top wall of the said chamber adapted to provide access to the said regulating means in the said secondary apertures; and fluid means adapted during the oscillating movement of the said wing piston to move through the said transverse apertures in the arms of the wing piston.

2. In a device of the character described, a chamber adapted to be attached to a steering mechanism; means for attaching the said chamber to a steering mechanism; a wing piston mounted within said chamber and adapted to oscillate therein and having a plurality of arms with extended ends provided with transverse grooves; transverse apertures in the arms of the wing piston; secondary apertures in the arms of the wing piston at right angles to the said transverse apertures; means within the said second apertures for regulating the area thereof; and fluid means adapted during the oscillating movement of the said wing piston to move through the said transverse apertures in the arms of the wing piston.

1,276,122. NOSE-RING. JOHN H. SCHEID, Minneapolis, Minn. Filed Dec. 27, 1917. Serial No. 209,088. (Cl. 119—135.)



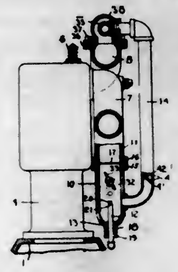
A ring of the class described comprising a body of arcuate formation provided with a bore in one end thereof, an arcuate section hingedly connected to the opposite end of the body and provided with a bore, said section terminating short of the opposite end of the body to form an entrance opening for a portion of a nose, a spring in the bore of the body portion, a sliding member in said bore, said member bridging the entrance opening, a piercing point formed on the sliding member and entering the bore in the arcuate section, and means for disengaging the sliding members.

1,276,123. DYEING COMPOSITION. JOSEPH A. SCHIFFERS, Knoxville, Tenn. Filed Aug. 23, 1916. Serial No. 116,442. (Cl. 8—6.)

1. In the art of dyeing, the herein-described dye comprising coal tar dye-stuff, common salt, and coal tar oil soluble in water, substantially as described.

2. In the art of dyeing, the herein-described dye comprising coal tar dye-stuff, common salt, and coal tar oil soluble in water and chalk, substantially as described.

1,276,124. AIR-HEATER FOR INTERNAL-COMBUSTION ENGINES. JACOB RUPERT SCOTT, North Weymouth, Mass., assignor of two-tenths to Edward H. Kavanagh and two-tenths to James W. Colgan, Weymouth, Mass. Filed Jan. 2, 1917. Serial No. 139,993. (Cl. 257—241.)

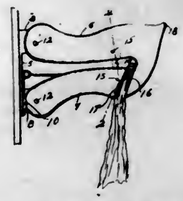


1. In an internal combustion engine comprising a plurality of cylinders, an intake manifold leading to said cylinders, a mixing chamber communicating with said manifold and means for supplying liquid fuel to said mixing chamber; an exhaust manifold leading from said cylinders having a lateral extension forming a heating chamber, a heating pipe extending through said chamber provided at its end with a bell shaped mouth piece lying close to and conforming to the contour of said manifold, an air intake pipe connecting with said heating pipe and leading to said mixing chamber.

4. In an internal combustion engine comprising a plurality of cylinders, an intake manifold leading to said cylinders, a mixing chamber communicating with said manifold and means for supplying liquid fuel to said mixing chamber; an exhaust manifold leading from said cylinders having a longitudinal opening therein, a semi-cylindrical casing detachably secured to said manifold providing an auxiliary heating chamber, a heating pipe extending longitudinally of said heating chamber open at both ends to the atmosphere, an air intake pipe extending into said heating chamber and communicating with said heating pipe and leading therefrom to said mixing chamber.

[Claims 2 and 3 not printed in the Gazette.]

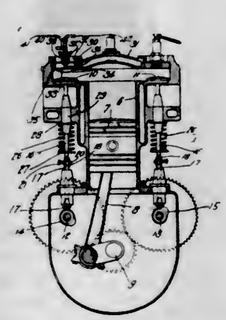
1,276,125. TOWEL-HOLDER. ANNA SHERBURNE and ROGER HENRY VARICLE, Los Angeles, Cal. Filed Feb. 5, 1917. Serial No. 146,800. (Cl. 45—32.)



1. A holder of the character described, comprising a base, an upper hook shaped member pivoted to the base and forming a gripping jaw at its bill end, a lower member pivoted to the base and forming a jaw at its free end to coöperate with the first named jaw, a link connecting the members for differential movement to cause the jaws to move toward and away from each other on shifting either member, and spring means active upon the lower member to hold the jaws together, the members being formed with inner channels to receive the link and spring.

2. A holder of the character described, comprising a base, an upper hook shaped member pivoted to the base and forming a gripping jaw at its bill end, a lower member pivoted to the base and forming a jaw at its free end to coöperate with the first named jaw, a link connecting the members for differential movement to cause the jaws to move toward and away from each other on shifting either member, spring means active upon the lower member to hold the jaws together, the members being formed with inner channels to receive the link and spring, and ears on the base and forming the pivotal supports for the members and projected into the channels.

1,276,126. TIRE-PUMPING MECHANISM. JACOB L. SHROYER, Pittsfield, Mass. Filed Apr. 30, 1917. Serial No. 165,436. (Cl. 123—198.)



1. A tire pumping mechanism having, in combination, an organized gas engine comprising a cylinder, a cylinder piston, means to impart a reciprocatory motion to said piston, said cylinder having an air inlet port opening thereinto, a valve adapted to open and close said port, a hollow stem fast to said valve and terminating at one end thereof in a port opening out of said cylinder, a spring encircling said valve stem and adapted to hold said valve normally closed and air conducting means adapted to connect said stem to the air valve of a pneumatic tire.

2. A tire pumping mechanism having, in combination, an organized gas engine comprising a cylinder, a cylinder piston, means to impart a reciprocatory motion to said piston, said cylinder having an air inlet port opening thereinto, a valve adapted to open and close said port, a hollow stem fast to said valve and terminating at one end thereof in a port opening out of said cylinder, a spring encircling said valve stem, a nut having screw-threaded engagement with said valve stem, said spring bearing at one end against said nut and at the other end against a stationary member and air conducting means adapted to connect said valve stem to the air valve of a pneumatic tire.

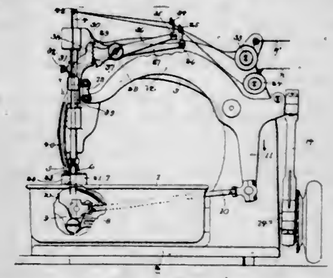
3. A tire pumping mechanism having, in combination, an organized gas engine comprising a cylinder, a cylinder piston, means to impart a reciprocatory motion to said piston, said cylinder having an air inlet port opening thereinto, a valve adapted to open and close said port, a hollow stem fast to said valve and terminating at one end thereof in a port opening out of said cylinder, a light spring encircling said valve stem, a nut having screw-threaded engagement with said valve stem, said spring bearing at one end against said nut and at the other end against a stationary member, a comparatively heavy spring also encircling said valve stem and shorter than said first-named spring and air conducting means adapted to connect said valve stem to the air valve of a pneumatic tire.

4. A tire pumping mechanism having, in combination, an organized gas engine comprising a cylinder, a cylinder piston, means to impart a reciprocatory motion to said piston, a gas inlet valve, a gas outlet valve, a cam shaft and cams and connections from said cams to said gas inlet and gas exhaust valves, each of said connections comprising a valve stem, a sleeve having screw-threaded engagement with said valve stem, a rod having sliding engagement with said sleeve and a plate rotatably mounted on said sleeve and projecting between adjacent ends of said stem and rod, whereby said connections may be thrown out of operation and whereby said gas inlet valve and gas outlet valve will remain closed during the operation of said cylinder piston, said cylinder having an air inlet port opening thereinto, a spring actuated valve adapted to open and close said port, said cylinder having an air outlet port opening out of the same, and air conducting means adapted to connect said air outlet port to the air valve of a pneumatic tire.

5. A tire pumping mechanism having, in combination, an organized gas engine comprising a cylinder, a cylinder piston, means to impart a reciprocatory motion to said piston, said cylinder having an air inlet port opening thereinto, a valve adapted to open and close said port, a hollow stem fast to said valve and terminating at one end thereof in a port opening out of said cylinder, a spring encircling said valve stem and adapted to hold the same normally closed, a manually operable petcock fast to the upper end of said valve stem, and air conducting means adapted to connect said petcock to the air valve of a pneumatic tire.

[Claim 6 not printed in the Gazette.]

1,276,127. THREAD-CONTROLLING MECHANISM FOR SEWING-MACHINES. DUDLEY S. SEYMOUR, Oak Park, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 15, 1916. Serial No. 120,335. (Cl. 112—26.)



1. The combination of a work support, stitch-forming mechanism, said stitch forming mechanism including a plurality of needles, a slack thread-controlling device for each needle, and a movable fabric-engaging member adjacent each needle, said slack thread controlling device for each needle being connected to the movable fabric-engaging member adjacent its respective needle.

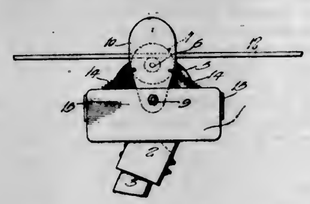
4. The combination of a work support, an overhanging arm, a needle bar, two needles carried by said needle bar, a thread guide at the upper end of the needle bar for the needle threads, tension devices on the overhanging arm for the needle threads, a thread-controlling lever pivoted to the overhanging arm for each needle thread, a thread guide carried by each thread controlling lever, the thread guides on the controlling levers being so disposed relative to the tension devices and the guide on the end of the needle bar whereby movements of the levers will either give or take up slack thread in the respective needle threads, and means controlled by the thicknesses of the fabrics being stitched at the respective needles for varying the position of the thread-controlling levers in accordance with the thicknesses of the materials at said respective needles.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,276,128. TROLLEY HEAD AND GUARD. ABSALOM D. SHAFFER, Kittanning, Pa. Filed Sept. 17, 1917. Serial No. 191,824. (Cl. 191—78.)

1. A device of the class described comprising a horizontally elongated head having a pair of upstanding

plates between which the trolley wheel is mounted, said head having recesses in its upper side adjacent the outer sides of said plates, a pair of upstanding guards pivoted at their lower ends in said recesses and extending above the trolley wheel, and front and rear springs attached to said guard and to said head to retain the former yieldably in vertical position.



2. A device of the class described comprising a head having means for attachment to a trolley pole, a pair of spaced plates extending upwardly from the upper side of said head, a trolley wheel journaled between said plates, said head being provided with a pair of longitudinally extending recesses disposed along its side edges outwardly of said plates, and diagonal aperatures extending from the ends of said head into said recesses, a pair of guards having their lower ends disposed in said recesses and their upper ends provided with lips which hook over the flanges of said trolley wheel, bolts extending through the walls of said recesses and the lower ends of said guards to form pivots for the latter, and pairs of coil springs having one of their ends in said apertures and anchored to said head and the other ends connected to opposite edges of said guards to normally hold the same in an upright position.

3. A device of the class described comprising a head having a socket depending from the lower side thereof and adapted to receive the upper end of a trolley pole, a pair of spaced semi-circular plates extending upwardly from the upper side of said head, a trolley wheel journaled between said plates, said head being provided adjacent its side edges with a pair of longitudinally extending recesses, said recesses having their bottoms curved and their inner walls continued to form the outer sides of said plates, said head being provided with diagonal apertures which extend from the ends thereof to the ends of said recesses, a pair of guards having their lower ends disposed in said recesses and their upper ends provided with lips which hook over the flanges of said trolley wheel, bolts extending through the walls of said recesses and the lower ends of said guards to form pivots for the latter, plates secured to the ends of said head over the outer ends of said apertures, and pairs of coil springs having one of their ends disposed in said apertures and secured to the last named plates and their other ends connected to the opposite edges of said guards to hold the latter in upright position.

1,276,129. FILTERING APPARATUS. CAROLYN S. SMITH, Brooklyn, N. Y. Filed May 18, 1914, Serial No. 839,262. Renewed Jan. 10, 1918. Serial No. 211,314. (Cl. 204—25.)

2. In filtering apparatus, the combination with a tank, of transverse partitions forming galvanic couples, intermediate filtering media consisting of carbon and aluminum capable of setting up electrolytic action in the water, and means for forcing water under pressure through said filtering media, whereby the filtration takes place in the presence of upward percolation, pressure, and electrolytic action, and the residue descends to the bottom of the tank.

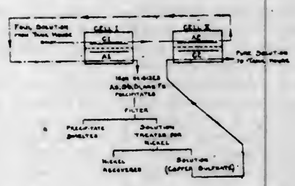
3. In filtering apparatus, the combination with a tank, of transverse partitions forming galvanic couples, intermediate filtering media composed of materials capable of setting up electrolytic action in the water, and means for forcing water under pressure upwardly through said filtering media, whereby the filtration takes place in the presence of upward percolation, pressure, and electrolytic



action, and the residue descends to the bottom of the tank.

[Claim 1 not printed in the Gazette.]

1,276,130. PROCESS OF TREATING FOUL SOLUTIONS. FRANK T. SMITH, Jamaica Plain, Mass. Filed Apr. 2, 1915. Serial No. 18,746. (Cl. 204—57:)



1. The process of treating impure electrolytes composed of solutions of acid and salts, said process consisting of electrolyzing the impure solution in the anode chamber of an electrolytic cell which contains a soluble anode while a solution of pure copper sulfate flows through the cathode chamber.

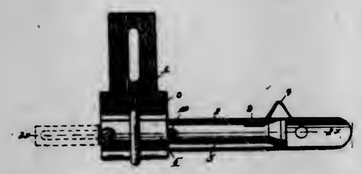
2. The process of treating impure electrolytes composed of solutions of acid and salts, said process consisting of passing the impure solution through the anode chamber of an electrolytic cell which contains a soluble anode while an acidified solution of pure copper sulfate flows through the cathode chamber, the two chambers being separated from each other by a diaphragm.

3. The process of treating impure electrolytes composed of solutions of acid and salts, said process consisting of passing the impure solutions through the anode chamber of an electrolytic cell which contains a soluble anode while an acidified solution of pure copper sulfate flows through the cathode chamber, the two chambers being separated from each other by a diaphragm, then treating the anolyte with a precipitant and then removing the precipitates from the solution.

4. The process of treating impure electrolytes composed of solutions of acid and salts, said process consisting of electrolyzing the impure solution in the anode chamber of an electrolytic cell which contains a soluble anode while a solution of pure copper sulfate flows through the cathode chamber, then adding an oxidizing agent and a basic precipitant for iron, then separating the precipitate and treating the solution to leave only pure copper sulfate, then passing the copper sulfate to the cathode chamber of the cell, then passing the solution to a tank house.

[Claims 5 and 6 not printed in the Gazette.]

1,276,131. TRIMMING ATTACHMENT FOR APPLE-PARING MACHINES. LEONARD J. STRUCK and JOHN O. DEAN, Rochester, N. Y. Filed Dec. 3, 1917. Serial No. 205,225. (Cl. 146—8.)



1. In an apple paring machine, the combination of a coring device, a stem mounted to slide therein, a spring contained therein for holding it yieldingly in normal position, a trimming knife attached to said stem, said knife being V shaped and having the outer end thereof pointing forward and centrally toward the axis of the apple.

2. In an apple paring machine, the combination of a stem, a support therefor, a spring in said stem for yieldingly holding said stem in normal position on said support, a trimming knife attached to said stem, said knife being V shaped and having the outer end thereof pointing forward and centrally toward the axis of the apple.

3. In an apple paring machine, the combination of a stem, a support therefor, a spring in said stem for yieldingly holding said stem in normal position on said support, a trimming knife attached to said stem, said knife being V shaped and having the outer end thereof pointing forward and centrally toward the axis of the apple, said knife having a shank that lies flat on the cylindrical surface of said stem, said shank being adjustable along said stem parallel to the axis thereof.

4. In an apple paring machine, the combination of a sleeve, a stem mounted to slide therein, a spring contained in said stem, a slot in said stem extending parallel to its axis, a screw set in said sleeve extending through said slot and engaging one end of said spring, the other end of said spring pressing against the end of the stem and holding it yieldingly in position, a trimming knife carried on said stem.

5. In an apple paring machine, the combination of a sleeve, a stem mounted to slide therein, a spring supported by said sleeve pressing on said stem for yieldingly holding it in normal position, a trimming knife carried on said stem.

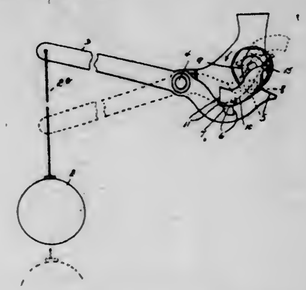
[Claim 6 not printed in the Gazette.]

1,276,132. SETTING FOR PRECIOUS STONES. ABRAHAM SUDEROV, New York, N. Y. Filed Feb. 27, 1917. Serial No. 151, 153. (Cl. 63—15.)



A jewel setting comprising a top member having a plurality of passages therethrough forming jewel seats, a plurality of downwardly extending convergent arms symmetrically arranged around said top member and meeting substantially at a point under the center of said top member, the space between said arms and said top member being unobstructed, said arms each being longitudinally slotted, the slot extending almost but not quite from one end to the other, those parts of the arms on opposite sides of the slots being bowed outwardly away from each other to form a plurality of curved light reflecting surfaces.

1,276,133. LEVER-OPERATING MECHANISM. WILLIAM TAYLOR, Ford City, Ontario, Canada, assignor to W. A. Case & Son M'f'g Company, Buffalo, N. Y., a Corporation of New York. Filed Apr. 18, 1918. Serial No. 229,256. (Cl. 74—5.)



1. A lever-operating mechanism comprising a rock-shaft, an arm upon said shaft engageable with the lever to rock the same when said shaft is rocked, and means carried by the rock-shaft supplemental to said arm to rock the lever out of engagement with said arm when the latter is passing through a dead-center position.

[Claims 2 to 5 not printed in the Gazette.]

1,276,134. PURIFIED CRYSTALLINE ALUMINA AND METHOD OF MAKING THE SAME. FRANK J. TONE, Niagara Falls, N. Y., assignor to The Carborundum Company, Niagara Falls, N. Y., a Corporation of Pennsylvania. Filed Jan. 5, 1918. Serial No. 210,499. (Cl. 204—64.)

1. The method of making fused crystalline alumina, consisting in mixing aluminous material with carbon, melting the mass and forming fused alumina containing some carbon or carbids, and then adding to the fused alumina material a solid oxidizing agent to oxidize the carbon or carbids and allowing the mass to cool.

5. The process of making fused crystalline alumina which consists in first making a mixture of aluminous ore with an amount of carbon more than sufficient to reduce all the impurities in the ore, bringing the mixture to a temperature sufficient to substantially reduce the impurities and to form fused alumina containing some carbon or carbids and less than one per cent. titanium oxid, allowing it to cool, separating the carbon-alumina material from the reduced impurities, mixing the carbon-alumina material with sufficient iron oxid or its equivalent to oxidize the carbon and carbids, recharging said mixture into an electric furnace, and bringing it to a temperature sufficient to fuse the alumina and oxidize the carbon and carbids and allowing the mass to cool.

9. As a new article of manufacture, the herein described previously fused crystalline alumina containing less than one per cent. and over one-tenth per cent. of titanium oxid.

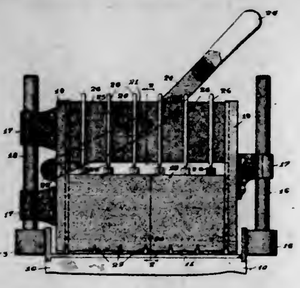
[Claims 2 to 4 and 6 to 8 not printed in the Gazette.]

1,276,135. GRIP FOR SLICING-MACHINES. CORNELIS F. M. VAN BERKEL, Laporte, Ind., assignor to U. S. Slicing Machine Company, Laporte, Ind., a Corporation of Indiana. Filed June 29, 1917. Serial No. 177,620. (Cl. 17—14.)

1. A device for holding material to be sliced, comprising a support, elongated tines for entering the material and of a length to pass substantially therethrough in the direction of the plane of the slices, and means for moving the tines toward the support to cause them to penetrate the material to be sliced.

2. A device for holding material to be sliced, comprising a support, upwardly projecting teeth carried by said support, elongated tines arranged in the same vertical plane

with said teeth, and means for moving said tines toward said support to cause them to penetrate the material to be sliced to a position adjacent said teeth.



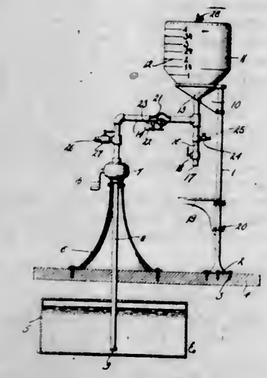
3. A device for holding material to be sliced, comprising a support for said material, elongated tines arranged to penetrate said material and of a length to pass substantially therethrough in the direction of the plane of the slices, means for moving said tines toward said support to cause them to penetrate said material, and arranged to afford a mechanical advantage for increasing the force exerted upon said tines, and means for guiding said tines during said movement in straight lines through said material.

4. A device for holding material to be sliced, comprising elongated tines arranged to penetrate substantially through the material to be held, and a power multiplying device for forcing said tines into said material.

5. A device for holding material to be sliced, comprising elongated tines arranged to penetrate the material to be sliced, a power multiplying device for forcing said tines into said material, and means for slidably engaging said tines to guide them in the direction of the plane of the slices during their movement into said material.

[Claims 6 to 19 not printed in the Gazette.]

1,276,136. LIQUID MEASURING AND DISPENSING DEVICE. EDWIN A. VONDE VELD, Willard, N. Mex. Filed Jan. 15, 1916. Serial No. 72,274. (Cl. 221—99.)



1. In a liquid measuring and dispensing apparatus, a reversible pump, a storage tank, a pipe connected with one side of the reversible pump and leading into the tank to withdraw and supply liquid fuel from and to the same, a measuring tank disposed at a suitable distance from the reversible pump, a second pipe connected with the opposite side of the reversible pump and connected with the measuring tank, a check valve connected in the second named pipe and normally operating to permit of the passage of liquid fuel from the reversible pump to the measuring tank and to prevent the passage of liquid fuel through this pipe in an opposite direction, means to open the check valve and hold the same in the open position so that its normal function is prevented, coupling connected in the second named pipe between the reversible pump and the check valve, and a valve connected with the coupling.

2. In a liquid measuring and dispensing apparatus, a reversible pump, a storage tank arranged beneath the same, a pipe connected with one side of the reversible pump and leading into the storage tank, a measuring tank arranged above the reversible pump, a substantially vertically arranged discharge pipe connected with the lower end of the measuring tank, a cut off valve connected in the discharge pipe, a third pipe connected with the opposite side of the reversible pump and connected with the discharge pipe between the measuring tank and the cut off valve, a check valve connected in the third named pipe and normally operating to permit of the flow of liquid fuel from the reversible pump to the measuring tank and to prevent such flow through the third named pipe in an opposite direction, manually operated means adapted to unseat the check valve and retain the same unseated whereby its normal function is prevented and liquid may flow in an opposite direction through the third named pipe, a coupling connected in the third named pipe between the reversible pump and the check valve, and a valve connected with the coupling.

3. In apparatus of the character described, a storage tank for arrangement beneath the surface of the ground or the like, a reversible pump, means for supporting the pump at a point above the surface of the ground or the like in convenient reach of the operator, a pipe connecting one side of the pump with the tank, an upstanding support arranged near the pump, a tank secured to the support and having means to measure the liquid supplied thereto, a second pipe serving to connect the opposite side of the pump with the second named tank, a check valve connected in the second named pipe, means to open the check valve and hold the same in the open position, and an outlet conduit connected with the second named pipe between the pump and the check valve.

4. In apparatus of the character described, a storage tank for arrangement beneath the surface of the ground or the like, a reversible pump, means for supporting the pump at a point above the surface of the ground or the like in convenient reach of the operator, a pipe connecting one side of the pump with the tank, an upstanding support arranged near the pump and extending above the same for a substantial distance, a transparent tank connected with the top of the support and provided with graduations to indicate the contents thereof, a second pipe connecting the transparent tank and the opposite side of the pump, a valve connected in the second named pipe, a coupling connected with the second named pipe between the pump and the first named valve, a valve connected with the coupling, a depending pipe connected with the second named pipe between the transparent tank and the first named valve, a valve connected in the depending pipe, and a support member secured to the upstanding support and adapted for holding a receptacle near and beneath the discharge end of the depending pipe.

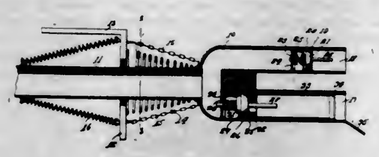
1,276,137. KEY-HOOK. CALVIN R. WAID, Birmingham, Ala., assignor to Birmingham Key Hook Company, Birmingham, Ala., a Corporation of Alabama. Filed Feb. 25, 1918. Serial 219,164. (Cl. 24—3.)



1. A key hook formed by a strip of metal having its ends bent reversely to form hooks, the free ends of which stand opposite each other with said strip between them, there being a slot in said strip between said hooked ends, and a pin carried by one hook end and adapted to penetrate through said slot and engage the other hook end to form a common guard at the throats of both hooks.

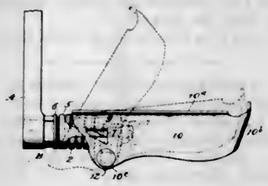
[Claims 2 to 4 not printed in the Gazette.]

1,276,138. AUTOMATIC HOSE-COUPLING. JOHN T. WARD, Hardin, Ky. Filed Aug. 24, 1917. Serial No. 188,000. (Cl. 188—13.)



A coupling head including a substantially U-shaped tubular body member defining parallel tubular arms of different diameters, a tubular member connected to the intermediate portion thereof, a pair of conical valves, one in each tubular member, oppositely extending valve stems on said valve members, a pair of cages, one in each tubular member to receive one of the valve stems, springs interposed between said cages and valve, valve seats, and a relatively long tubular gasket inserted in the wider tubular member having a thickened end wall formed with an aperture to receive the valve stem of the valve therein and having its other end beveled inwardly and reduced to receive the smaller tubular portion of an adjacent coupling head.

1,276,139. PEDAL FOR CYCLES. FRANK D. WARREN, Colorado Springs, Colo., assignor to The Cycle Supplies Company, Colorado Springs, Colo., a Corporation of Colorado. Filed Mar. 9, 1916. Serial No. 83,098. (Cl. 208—70.)



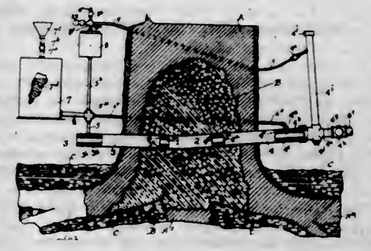
10. A hinged pedal adapted to fold up when colliding with an obstruction, means for normally yieldingly holding the pedal in lowered position, means for limiting the downward movement of the pedal, and yielding means for normally tilting the pedal when pressure is removed therefrom and for locking the same against rotation.

14. The combination with a hub having arms on its outer end, of a yoke slidably mounted on the hub and having hook shaped extensions engaging the arms, a spring interposed between the hub and the yoke, a pedal frame pivotally supported on the hub, and means located above the plane of the pivot and engaged by the yoke hooks for tilting the pedal.

18. In a pedal structure, the combination with a hub having outwardly projecting arms formed with rearwardly extending flange parts, of a sliding yoke member having outwardly extending hook parts engaging the said flange parts of the arms, a spring interposed between the yoke and the hub, a pedal frame pivotally supported on the hub and having offset hook stops arranged to be engaged by the hook parts of said yoke, and means for normally holding the pedal in lowered position.

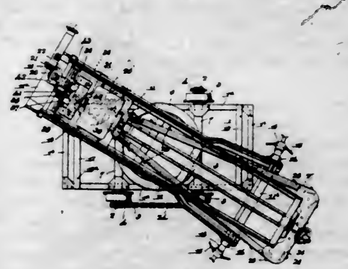
[Claims 1 to 9, 11 to 13, 15 to 17, and 19 to 22 not printed in the Gazette.]

1,276,140. STUMP-BURNER. ARTHUR WATTS, Bellingham, Wash. Filed Nov. 12, 1917. Serial No. 201,482. (Cl. 110—21.)



In a device for burning stumps, the combination of two tubes each provided with water jackets adapted to be fitted into holes in a stump, one of said tubes providing an air inlet and the other tube an outlet for the products of combustion, a water tank, and pipes in communication with said jackets and said tank.

1,276,141. MINING APPARATUS. CARL J. E. WAXBOM, Westerville, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed Oct. 11, 1912. Serial No. 725,323. (Cl. 125—14.)



1. In a mining apparatus, the combination of a main base frame, a supporting frame having longitudinally extending guide bars mounted on the base frame for movement about a vertical axis, and a mining machine mounted on the supporting frame and comprising a bed frame slidably engaging the said guide bars, a horizontally projecting constantly moving continuously acting kerf cutting mechanism on the bed frame operable while the machine is on the supporting frame and a motor for driving the cutting mechanism, the said mining machine being readily separable from the base frame and the supporting frame and operable independently thereof.

4. In a mining apparatus, the combination of a wheeled truck, a supporting frame rotatably mounted on the truck, a mining machine separably mounted upon the supporting frame and provided with a clutch element connected to its motor, a clutch element on the supporting frame adapted to be engaged by the clutch element on the mining machine, and power transmitting devices adapted to connect the said clutch element on the turntable with the truck wheels.

5. In a mining apparatus, the combination with a truck comprising a frame, two axles and track wheels on the axles, of a supporting frame rotatably mounted on the truck frame midway between the axles, of a mining machine separably mounted on the supporting frame and provided with a clutch element connected to its motor, a clutch element on the supporting frame adapted to be engaged by the clutch element on the mining machine, a sprocket wheel on the supporting frame connecting with the last said clutch element, a sprocket wheel on one axle

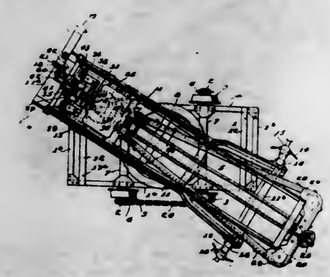
adapted to aline with the sprocket wheel on the supporting frame when the frame is in one position, a sprocket wheel on the other axle adapted to aline with the sprocket wheel on the supporting frame when the frame is in another position, and a chain for connecting the sprocket wheel on the supporting frame with whichever axle sprocket wheel it may be in alinement with.

6. In a mining apparatus, the combination of a wheeled truck, a supporting frame rotatably mounted on the truck, a mining machine separably mounted upon the supporting frame and provided with a clutch element connected to its motor, a clutch element carried by the truck and adapted to be engaged by the clutch element of the mining machine, and power transmitting devices for connecting the clutch element on the truck with the truck wheels.

20. Coal cutting apparatus comprising, in combination, a complete mining machine having cutting apparatus adapted to form an undercut in coal, a wheeled truck, a horizontally rotatable frame on the truck having guideways formed of longitudinally arranged horizontally and vertically disposed guide bars, said mining machine comprising a shoe element at its bottom related to and adapted to slide along said guideways while supported thereon and also to slide upon the mine floor when the mining machine is used independently of the base for undercutting.

[Claims 2, 3, 7 to 19, and 21 not printed in the Gazette.]

1,276,142. MINING-MACHINE TRUCK. CARL J. E. WAXBOM, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Original application filed Oct. 11, 1912, Serial No. 725,323. Divided and this application filed Nov. 12, 1914, Serial No. 871,712. Renewed Oct. 27, 1917. Serial No. 198,885. (Cl. 105—32.)



1. The combination of a wheeled truck, and a mining machine supporting frame mounted on the truck for rotation about a vertical axis and provided with skids for supporting a mining machine and guiding it for movement longitudinally.

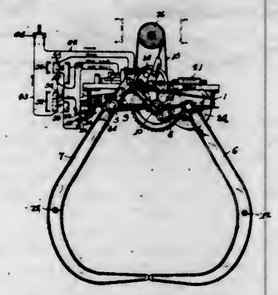
2. The combination of a wheeled truck, a mining machine supporting frame rotatably mounted on the truck and provided with skids for supporting a mining machine and guiding it for movement longitudinally, and a releasable lock for holding the supporting frame in fixed position with respect to the truck.

3. The combination of a wheeled truck, a turntable centrally mounted on the truck, a mining machine supporting frame on the turntable and provided with skids for supporting a mining machine and guiding it for movement longitudinally, and means for locking the supporting frame in either of two positions with its longitudinal lines parallel with the longitudinal lines of the truck.

[Claims 4 to 7 not printed in the Gazette.]

1,276,143. GRAPPLE. HENRY WHICKER, Milwaukee, Wis., assignor to Pawling and Harnischfeger Company, West Milwaukee, Wis., a Corporation of Wisconsin. Filed June 15, 1918. Serial No. 240,178. (Cl. 57—9.)

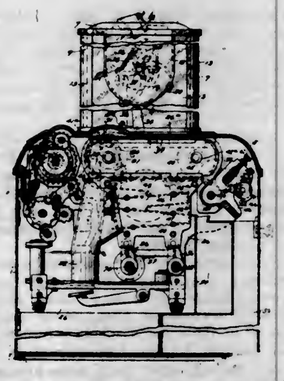
2. In a grapple the combination, of a portable frame, parallel shafts mounted in said frame, depending L-shaped grapple arms mounted on said shafts in pairs, one arm of each pair having an upwardly extending crank arm and the other a downwardly extending crank arm, a link connecting the crank arms of each pair of opposing grapple arms, a gear mounted on one of the grapple-arm shafts, a sleeve mounted on the other grapple-arm shaft and provided with a worm gear and a pinion, an intermediate shaft parallel with the grapple-arm shafts and provided with a pinion meshing with the gear on one of said grapple-arm shafts, a gear loosely mounted on the intermediate shaft and meshing with the pinion on said sleeve, a friction coupling yieldingly connecting said loose gear with the intermediate shaft, and a motor mounted on said frame and having a shaft provided with a worm meshing with the worm gear.



6. In a grapple the combination of a portable frame, parallel horizontal shafts mounted in said frame, depending and inwardly bent grapple arms mounted on said shafts, links connecting opposing grapple arms in pairs so that they are caused to swing simultaneously toward or from each other, a reversible electric motor mounted on said frame and connected with one of said shafts, motor circuit controlling means operated by the grapple to automatically stop the motor when the grapple is closed and when it is opened, and means for manually closing the motor circuit and reversing the current through the motor to open and close the grapple.

[Claims 1 and 3 to 5 not printed in the Gazette.]

1,276,144. FARE-SEPARATING DEVICE. DAVID B. WHISTLER, Dayton, Ohio, assignor to The American Railways Equipment Company, Dayton, Ohio, a Corporation of Ohio. Original application filed July 10, 1916, Serial No. 108,355. Divided and this application filed Feb. 27, 1918. Serial No. 219,437. (Cl. 83—92.)



11. A separator for coin and ticket fares comprising cooperating parts, one of said parts being movable relatively to the other and having a supporting surface to receive and display both coins and tickets, and means to actuate said movable part to cause the fares on said supporting surface to be delivered to the other part, and to cause the coöperation of said parts to separate the coins and tickets.

23. In a mechanism of the character described, a device having an apertured surface to receive coin and ticket fares, a second device arranged substantially parallel with said apertured surface and movable lengthwise thereof to act upon the fares upon said apertured surface to cause the coins to pass through said openings and the tickets to be discharged from said apertured surface.

33. In a mechanism of the character described, a device having an apertured surface to receive coin and ticket fares, an endless belt having one stretch arranged adjacent to said surface to act upon the fares thereon and having its other stretch arranged to receive fares, and means for imparting intermittent movement to said belt to cause the fares received by the last-mentioned stretch thereof to be delivered to said apertured surface.

45. In a mechanism of the character described, a separating device having an apertured top-plate to receive coin and ticket fares, and having other devices arranged beneath said top-plate to separate the coins according to their denominations, and a part movable along said apertured top-plate to cause the coins to pass through the apertures therein and to remove the tickets therefrom.

60. In a fare separating device, a separating member having an opening therein, and means coöperating therewith to prevent the passage of tickets through said opening but to permit the passage of coins therethrough.

[Claims 1 to 10, 12 to 22, 24 to 32, 34 to 44, 46 to 59, and 61 to 66 not printed in the Gazette.]

1,276,145. HOSE-SUPPORTER. ADELAIDE W. WHITE, Syracuse, N. Y. Filed May 14, 1918. Serial No. 234,378. (Cl. 24—263.)



1. A hose supporter comprising a back plate having its opposite edges provided with out-turned lengthwise flanges converging toward the top and overhanging the adjacent portions of the main body to form lengthwise grooves, and a front plate having its opposite edges provided with upwardly converging outturned flanges gradually diminishing in depth from bottom to top for sliding interlocking engagement in said grooves, a supporting strap attached to the back plate, and a tightening and releasing strap attached to the front plate.

3. In a hose supporter, a pair of clasp members having opposite edge flanges gradually diminishing in depth from one end to the opposite end for wedging coaction to press their main bodies toward each other as one member is moved endwise in one direction relatively to the other member.

[Claim 2 not printed in the Gazette.]

1,276,146. COMPOSITE LATH. ALEXANDER P. WHITE, Caldwell, N. J. Filed Sept. 10, 1914. Serial No. 861,115. (Cl. 72—116.)

1. A building lath formed of composite material which comprises, in combination, a consolidation of metallic holding members for the plaster or equivalent material, a flexible fibrous body element carried with said members, and absorbent reinforcing threads adhesively united with the body element.

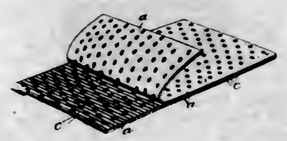


3. A building lath formed of composite material which comprises, in combination, a consolidation of metallic holding members for the plaster or equivalent material, a flexible fibrous body sheet carried with said metallic holding members, and absorbent reinforcing threads united with the fibrous sheet and lying at one side of and next to the metallic holding members.

4. A building lath formed of composite material which comprises, in combination, a consolidation of metallic holding members for the plaster or equivalent material, a flexible fibrous body sheet carried with said metallic holding members, and absorbent reinforcing threads united with the fibrous sheet and lying at one side of and next to the metallic holding members, said elements being arranged to provide ribs projecting from the face of the structure.

[Claims 2 and 5 not printed in the Gazette.]

1,276,147. COMPOSITE LATH. ALEXANDER P. WHITE, Caldwell, N. J. Filed Sept. 10, 1914. Serial No. 861,116. (Cl. 72—116.)

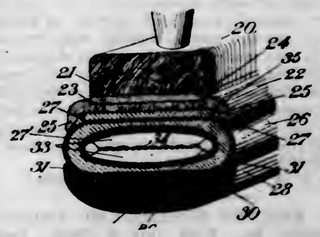


1. A building lath composed of a fibrous body sheet, absorbent reinforcing threads extending throughout the structure and united with the body sheet, and an artificial stone element having a bonding engagement with both the body sheet and said threads.

2. A structure for lathing consisting of a perforated paper sheet, fibrous reinforcing threads extending throughout the structure and exposed at the perforations, and an artificial stone element covering the sheet and extending through the perforations.

3. A structure for lathing consisting of metallic holding members for the plaster or equivalent material, a perforated fibrous sheet carried with said members, fibrous reinforcing threads extending throughout the structure and united with the sheet, and an artificial stone element covering and engaging the metallic members and fibrous sheet and extending through the perforations of the latter.

1,276,148. RESILIENT CUSHIONING WHEEL EQUIPMENT. JOSEPH S. WILLIAMS, Riverton, N. J. Filed Dec. 8, 1909, Serial No. 532,046. Renewed Nov. 20, 1917. Serial No. 203,059. (Cl. 152—1.)



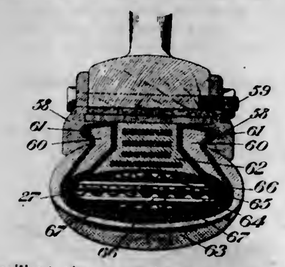
1. A resilient tire, comprising an inner support, an annular and transversely elongated tension belt having flattened formation in spaced relationship about said sup-

port, a yielding flexible cushion between said support and tension belt, said tension belt and cushion providing definite ranges of resilient movements and non-collapsible resilient support under load about said inner support and ranges of resilient movements radially of approximately three-eighths of an inch altitude of tread deflection along the plane of road, and a detachable tread, said belt and tread having means to form a locking engagement with each other under inflation and deflation of the cushion.

10. A resilient tire body having means to limit its resilient movement under load, and a detachable tread, said body and tread having means to form a locking engagement with each other under inflation and deflation of the body.

[Claims 2 to 9, 11, and 12 not printed in the Gazette.]

1,276,149. RESILIENT CUSHIONING WHEEL EQUIPMENT. JOSEPH S. WILLIAMS, Riverton, N. J. Filed Dec. 8, 1909, Serial No. 532,044. Renewed Nov. 20, 1917: Serial No. 203,060. (Cl. 152—1.)



1. A resilient tire, comprising an inner support, an annular and transversely elongated tension belt having flattened formation across the median line and in spaced relationship about said support with curvatures about the sides to terminal seatings, and an annular and transversely elongated resilient core engaging the inner walls of the outer casing and in constant supporting relationship therewith, inwardly and outwardly of the major transverse axis, and provided with annularly and transversely disposed channels forming cellular construction, providing space for definite ranges of resilient movements of the belt and core and resilient non-collapsible support for load about said inner support.

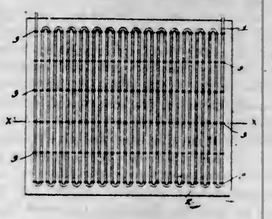
2. A resilient tire, comprising an inner support, an annular and transversely elongated tension belt having flattened formation across the median line and in spaced relationship about said support with curvatures about the sides to terminal seatings, and an annular and transversely elongated resilient core engaging the inner walls of the outer casing and in constant supporting relationship therewith, inwardly and outwardly of the major transverse axis, and provided with annularly and transversely disposed channels forming cellular construction, providing space for definite ranges of resilient movements of the belt and core and resilient non-collapsible support for load about said inner support, and mobile contents under pressure in said core.

8. A tire, comprising an inner support, an annular and transversely disposed tension member with curvatures at the sides to said inner support and with flattened formation between the sides, and an annularly and transversely disposed resilient core provided with annularly and transversely disposed channels forming cellular construction in tension and in spaced non-collapsible relationship about said support providing definite ranges of resilient flexing of said member under load.

[Claims 3 to 7 not printed in the Gazette.]

1,276,150. ELECTRIC HEATING-PAD. CHARLES WIRT, Philadelphia, Pa. Filed July 3, 1915. Serial No. 37,817. (Cl. 219—46.)

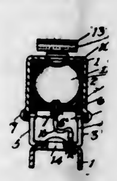
1. A heating pad composed of two flexible asbestos sheets, and a reflexed conductor formed of a material capable of high temperature variations interposed between the sheets, and an outside covering of a material possessing strength and flexibility, the said sheets and covering being secured together and to the conductor in such a manner as to prevent movement of the conductor.



2. A heating pad comprising a reflexed metallic conductor, two sheets of asbestos on opposite sides of the conductor, an outside covering of strong flexible non-fireproof material, and a plurality of rows of threads connecting the said sheets, covering and conductor together in such a manner as to prevent movement of the conductor, the convolutions of the conductor being separated one from the other by the thickness of the stitching only.

3. A heating pad comprising a reflexed bare metallic conductor arranged in parallel rows, a sheet on each side of said conductor formed of flexible asbestos, an outside sheet of flexible non-fireproof material on each side, and a plurality of rows of threads connecting all the sheets together and to the conductor in such a manner as to prevent movement of the conductor.

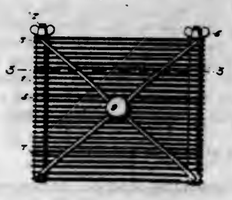
1,276,151. SHOCK-ABSORBER. ARTHUR GEORGE WITT, Hamilton, Ontario, Canada. Filed Nov. 8, 1917. Serial No. 200,945. (Cl. 267—50.)



1. A shock absorber comprising upper and lower cylindrical members adapted to be secured to the opposing portions of a vehicle and telescoping one within the other, a plate resting upon the upper edge of the lower telescoping member, a ball cushion inserted in the upper telescoping member and resting upon the plate, and opposing cup ring members, one member being held in the upper end of the upper telescoping member and the other cup ring member carried by the plate at the opposite side of the ball cushion.

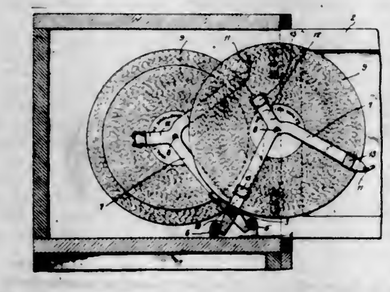
[Claim 2 not printed in the Gazette.]

1,276,152. SLICER. HUGH L. WOODWARD, Lewis, Iowa. Filed May 4, 1918. Serial No. 232,533. (Cl. 17—22.)



A device of the class described comprising a plurality of knives having openings at their ends, bolts passing through said openings, washers on the bolts for spacing the knives apart, nuts engaging the ends of the bolts for holding the parts in assembled position and a handle comprising curved pieces having rings formed at their ends for engaging the bolts, said rings being located between the knives of the end pairs for spacing the same apart.

1,276,153. DISK-RECORD-FILING CABINET. FRANCIS LINCOLN YOUNG, New York, and RICHARD JAMES PRETTIE, Jamaica, N. Y., assignors to The Aeolian Company, a Corporation of Connecticut. Filed July 31, 1915. Serial No. 42,943. (Cl. 211—16.)



1. A record-cabinet for center-holed disk records, having housed within it a plurality of hangers for supporting the records vertically in side-by-side relation, each hanger provided on one side face thereof with a lateral extension receivable through the hole in a record to support the record on the hanger; said hangers being mounted for movement outwardly of the cabinet to carry the records into position to be grasped.

4. A record-cabinet for center-holed disk records, containing a plurality of movable hangers which support said records vertically in side-by-side relation, each of said hangers having a lateral extension receivable through the hole in a record to support the record on the hanger, and each consisting of an elbow shaped part pivoted at one end to the cabinet and having the aforesaid record-supporting extension at the angle of the hanger.

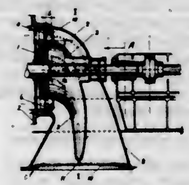
5. A record-cabinet for center-holed disk records, containing a plurality of movable hangers which support said records vertically in side-by-side relation, each of said hangers having a lateral extension receivable through the hole in a record to support the record on the hanger, and each consisting of an elbow shaped part pivoted at one end to the cabinet and having the aforesaid record-supporting extension at the angle of the hanger and a part projecting from the point portion of the elbow to contact with the face of the record.

6. A record-cabinet for center-holed disk records, containing a plurality of movable hangers which support said records vertically in side-by-side relation, each of said hangers having a lateral extension receivable through the hole in a record to support the record on the hanger, and each consisting of an elbow shaped part pivoted at one end to the cabinet and having the aforesaid record-supporting extension at the angle of the hanger, the other end of said elbow shaped hanger constituting a finger-piece by which to manipulate the hanger, each hanger having an extension beyond the edge of the supported record by which it is pivotally connected to the cabinet, and stop means which engage said hangers to support them and the records in a row side by side as aforesaid in the cabinet and also to support them when severally pivoted edgewise out from the row when removing a record or records from the hangers.

8. A record-cabinet for center-holed disk records, containing a plurality of movable hangers which support said records vertically in side-by-side relation, each of said hangers consisting of an elongated member having a lateral extension from its upper end receivable through the hole in the record to support the record on the hanger, each hanger member projecting beyond the edge of the supported record and being there pivotally connected to the cabinet; and stop means which engages said projecting portion of the hangers and supports them and the records in a row side-by-side as aforesaid in the cabinet and also supports them when severally pivoted edgewise out from the row when removing a record or records from the hangers.

[Claims 2, 3, and 7 not printed in the Gazette.]

1,276,154. EXHAUST CONNECTING BRANCH FOR TURBINES. HEINRICH ZOELLY, Zurich, Switzerland, assignor to Aktiengesellschaft der Maschinenfabriken Escher Wyss & Cie., Zurich, Switzerland. Filed Mar. 3, 1915. Serial No. 11,845. (Cl. 60—64.)

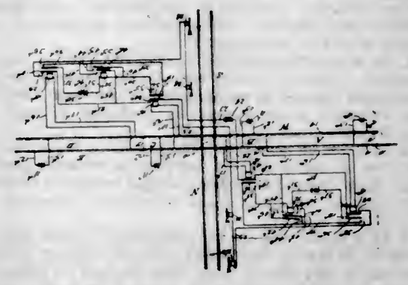


1. An exhaust connecting branch for axial flow steam or gas turbines, comprising a casing open at both ends and guide-walls built-in in said casing, said guide-walls being so formed and so arranged within said casing, that the working fluid flowing from the outlet of the last rotor wheel toward the outlet of the branch passes through a continuously widening path, whereby the said working fluid whose velocity is continuously decreasing while its pressure is continuously increasing, is diverted from the axial direction into a direction substantially at right angles to the axis of the turbine.

4. An exhaust connecting branch for axial flow steam or gas turbines, comprising an outer casing provided with an inlet and outlet opening for the working fluid and a horn-shaped built-in body in said outer casing and tapered to a point toward the branch outlet and having a curved axis, said body being connected by means of ribs to the outer casing, a continuous space being provided between the outer casing and the built-in body, whereby the annular cross sections of said space continuously increase toward the outlet opening of the branch.

[Claims 2, 3, 5, and 6 not printed in the Gazette.]

1,276,155. AUTOMATIC RAILWAY-CROSSING SIGNAL. JAMES W. ARNEY, Many, La. Filed Sept. 14, 1916. Serial No. 120,102. (Cl. 246—82.)

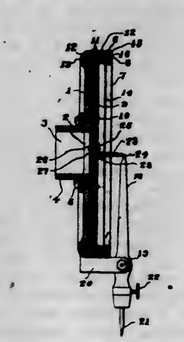


1. The combination with a pair of intersecting tracks constituting a railroad crossing; one of said tracks being

divided into a pair of blocks on each side of the crossing, a signal controlling circuit extending along the other track and arranged to normally hold a series of signals in clear position, means including a circuit in each block for opening the signal controlling circuit, each of said block circuits being arranged for short circuit upon entry of the train into block, and means for closing the signal circuit operable by simultaneous short circuits of the block circuits on one side of the track and subsequent energization of the block circuits adjacent the crossing.

2. The combination with a pair of intersecting tracks constituting a railroad crossing, one of said tracks being divided into a pair of blocks on each side of the crossing, a signal controlling circuit extending along the other track and arranged to normally hold a series of signals in clear position, said circuit including a contact and armature for each of said blocks, a normally energised magnet for each of said blocks, said magnets being arranged for deënergization upon entry of the train into the respective block and for energization upon passage of the train from that block; a normally open restoring circuit on each side of the crossing points, said restoring circuit constituting a local circuit and arranged to be closed upon deënergization of both of the relay magnets on one side of the crossing points and subsequent energization of the inner relay magnet.

1,276,156. SOUND-REPRODUCING MECHANISM. CHARLES H. ALLEN, Claremont, N. H. Filed May 28, 1917. Serial No. 171,561. (Cl. 181—31.)



1. In a sound reproducing mechanism, a sound box, a plurality of operatively connected reproducing elements therein disposed parallel to one another, and means whereby said elements may coöperate freely in either direction.

2. In a sound reproducing mechanism, a sound box, a plurality of operatively connected reproducing elements therein disposed parallel to one another, and means whereby said elements may move freely in unison in response to soft or loud tones.

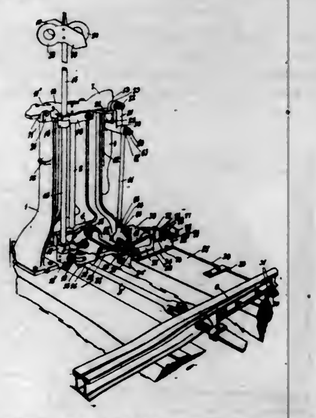
3. In a sound reproducing mechanism, a sound box, a plurality of spaced parallel reproducing elements having their edges clamped to permit a sliding movement therein, and vibrating means operatively connected to each of said elements.

4. In a sound reproducing mechanism, a sound box, a plurality of spaced parallel reproducing elements having their edges clamped to permit a sliding movement therein, and resilient vibrating means operatively connected to each of said elements.

5. In a sound reproducing mechanism, a sound box, a plurality of spaced reproducing elements disposed in parallel planes and having their edges clamped to permit a sliding movement therein, and resilient vibrating means operatively connected to each of said elements.

[Claims 6 to 17 not printed in the Gazette.]

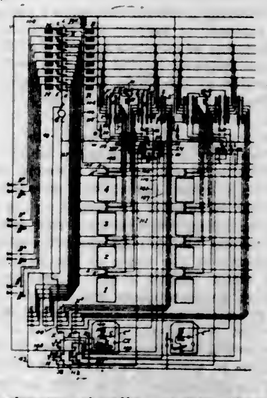
1,276,157. INTERLOCKING AND TARGET-OPERATING MECHANISM FOR SWITCH-STANDS. FRANK C. ANDERSON, Cincinnati, Ohio, assignor to The American Valve & Meter Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Mar. 27, 1916. Serial No. 86,959. (Cl. 246—41.)



1. In interlocking and target-operating mechanisms for switch stands, in combination with an interlocking plunger adapted to lie below the upper surface of a head block, a housing adapted to be mounted on said head block over said plunger, and means adapted for connection to the operating mechanism of a switch stand and extending into said housing in operative engagement with said plunger, a stem extending through and guided by a wall of said housing and operatively connected to said plunger, and a connecting rod pivoted to said stem outside the housing for operative connection of said mechanism to a rotary target.

[Claim 2 not printed in the Gazette.]

1,276,158. ELEVATOR-SIGNAL. AUGUST ANDRÉN, Brooklyn, N. Y., assignor, by mesne assignments, to Elevator Supply & Repair Company, New York, N. Y., a Corporation of Illinois. Filed Apr. 19, 1909, Serial No. 490,887. Renewed Dec. 3, 1917. Serial No. 205,248. (Cl. 177—336.)



5. In an elevator signaling system, the combination with elevator cars, of signaling means comprising a despatcher's signal board, a signal device in the car for informing the car operator at which floors to stop, a device at the despatcher's board for cutting out this signal in the car, and another car signal independent of said cutting out device which may also be operated from the despatch board as a flash, repeated, or continuous signal.

11. In electric elevator signal apparatus, the combination with elevator cars, of a passenger's stop signal and a despatcher's signal in each car, signal switches operable from the floors to effect the operation of said stop signals, a despatch board comprising visual indicators indicating the positions of the cars, signals indicating the operation of said signal switches, and switches for closing circuits to the despatcher's signals in the cars to indicate express runs.

20. In electrical signaling apparatus for elevators, the combination with elevator cars, of signaling means comprising a stop signal element and a despatcher's signal element in each car, means for automatically operating the stop signal element in the car, a despatch board provided with switches, one of said switches being operative to prevent operation of the car stop signal element, and means controlled by the other switch to restore the first switch to its normal position and also for operating the despatcher's signal element in the said car.

27. In an elevator signal apparatus in combination, a plurality of cars, signals for the cars to stop at the floors, up and down signaling means corresponding to each floor and operated by the intending passengers for initiating up and down calls, a despatcher's station having for each car means controlled by the movement of that car only and indicating the position and direction of movement of that car together with an up and a down indicator corresponding to each floor and each displayed as soon as its corresponding signal call has been initiated, means whereby the cars may run past some of the floors without canceling the initiated call, and means for each car, controlled at the despatcher's station, for indicating to its operator to run his car past some of the floors from which signals have been initiated.

33. In a signaling system for controlling elevator operation, the combination with elevator cars running up and down elevator shafts, of passengers' floor signals and circuit operating means therefor, a car stop signal in each car and circuit operating means therefor, circuit controlling means for preventing the operation of said circuits to permit the car to run express, and means automatically operated by the car when it approaches the bottom of the shaft to restore said circuit operating means.

[Claims 1 to 4, 6 to 10, 12 to 19, 21 to 26, 28 to 32, and 34 not printed in the Gazette.]

1,276,159. CASHIER'S TICKET. JAMES S. ARCUS, Chicago, Ill. Filed Jan. 29, 1915. Serial No. 5,056. (Cl. 283—60.)



1. A cashier's ticket of substantially rectangular form having a row of numerals printed thereon parallel to and spaced inwardly from an edge of said ticket, with a plurality of substantially triangular detachable tabs formed on said ticket, one located adjacent each of said numerals, said tabs being separated from the body of the ticket by slits extending through the body of the ticket, a portion of the latter extending between adjacent tabs, said tabs being united to the body of the ticket at the ends of said slits, and being located with their bases at said edge of said ticket and capable of being detached by being gripped between the fingers of the user.

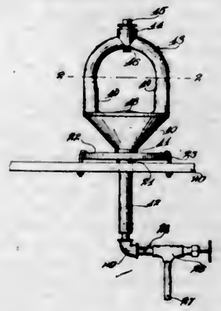
2. A cashier's ticket of substantially rectangular form having a row of numerals printed thereon parallel to and spaced inwardly from an edge of said ticket, a plurality of substantially triangular detachable tabs formed from the body of the ticket and located between said edge and said numerals, one of said tabs being located adjacent each of said numerals, said tabs being separated from the body of the ticket by slits extending through the body of the ticket, a portion of the latter extending between adjacent tabs, said tabs being united to the ticket at each end of each of said slits, and being located with their bases at said edge of said ticket whereby the removal of one of said tabs by the fingers of the user will leave an indentation pointing toward one of said numerals.

3. A cashier's ticket of substantially rectangular form having a row of numerals printed thereon parallel to an edge of said ticket, with a plurality of detachable tabs formed from the body of said ticket, one of said tabs being provided for each of said numerals, said tabs being separated from the body of the ticket by slits extending through the body of the ticket, one of said slits extending along each of the inner edges of said tabs whereby said tabs are united to the body of the ticket only at their corners, a portion of the body of the ticket extending between adjacent tabs, said tabs being located adjacent said edge of said ticket whereby they may be detached by being gripped between the fingers of the user.

4. A cashier's ticket having a row of numerals printed thereon parallel to an edge of the ticket, with a plurality of detachable tabs formed from the body of said ticket, one of said tabs being provided for each of said numerals, a portion of the body of the ticket extending between adjacent tabs, said tabs being separated from the body of the ticket by apertures through the ticket.

5. A cashier's ticket having a row of numerals printed thereon parallel to an edge of the ticket, with a plurality of substantially triangular detachable tabs formed from the body of said ticket, one of said tabs being provided for each of said numerals, a portion of the body of the ticket extending between adjacent tabs, said tabs being separated from the body of the ticket by apertures through the ticket.

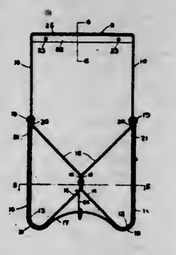
1,276,160. LIQUID-FUEL BURNER. SMITH F. ATWOOD, Chicago, Ill. Continuation in part of application Serial No. 135,474, filed Dec. 6, 1916. This application filed Dec. 19, 1917. Serial No. 207,903. (Cl. 158—66.)



1. In a liquid fuel burner, a retort chamber having a fuel supply connection, and laterally spaced, imperforate vapor conducting pipes leading from the top of said chamber and having a top connecting portion in open communication with both pipes, and spaced from the top of the chamber, with a discharge orifice in said connecting portion discharging between the conducting pipes and pointing in the direction of the top of the chamber.

[Claims 2 to 5 not printed in the Gazette.]

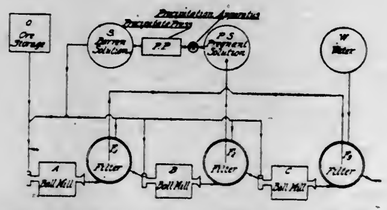
1,276,161. WALL-PAPER-DISPLAY RACK. ROBERT N. BEARD, Omaha, Nebr. Filed Apr. 21, 1916, Serial No. 92,627. Renewed June 29, 1918. Serial No. 242,666. (Cl. 211—22.)



1. A display stand comprising a frame member and a relatively short supporting bail member pivoted thereto, said frame member having at its lower portion connected bracing elements terminating at the point of pivotal connection with the bail member.

2. In a wall paper display rack, the combination comprising a single frame member, book securing means supporting books mounted upon opposite sides of said frame, a relatively short reversible supporting bail member pivotally connected with the frame member whereby said frame may be shifted from one display position to another, and bracing elements terminating at the points of pivotal connection with said bail member.

1,276,162. EXTRACTING METALS FROM ORES. CHARLES BIESEL, El Paso, Tex. Filed Jan. 9, 1917. Serial No. 141,367. (Cl. 75—185.)



1. The method of extracting soluble metal values from ores, which comprises crushing the ore in successive stages and subjecting the ore progressively to fresh extraction at each stage; substantially as described.

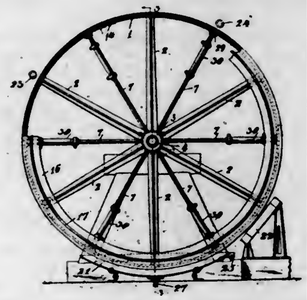
3. The method of extracting soluble metal values from ores, which comprises subjecting the ore to a series of successive crushing and extraction operations by crushing the ore in the presence of a solvent, removing the solution after each crushing and extraction operation and supplying fresh amounts of the solvent in the next successive operation; substantially as described.

17. The method of extracting metal values from ores, which comprises subjecting the ore to a plurality of similar treatment cycles each of which is substantially complete in itself and includes the steps of crushing the ore in the presence of the necessary amount of suitable solvent and thereby effecting a partial solution of the metal values during the contact of the solvent with the ore, replacing to a substantially complete degree the resulting pregnant solution by new solvent, and returning the resulting partially crushed and impoverished ore in contact with the required amount of new solvent to the next treatment cycle; substantially as described.

[Claims 2 and 4 to 16 not printed in the Gazette.]

1,276,163. CONTINUOUS-VACUUM DEHYDRATOR. CHARLES BIESEL, El Paso, Tex. Filed Jan. 11, 1917. Serial No. 141,775. (Cl. 210—14.)

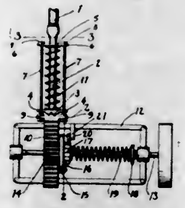
1. A continuous-vacuum filter or dehydrator comprising a hollow drum provided with a peripheral suction chamber and with an outer filtering medium, means for applying a vacuum continuously to said chamber, means for supplying to said drum the pulp or other material to be filtered or dehydrated, and means for continuously deflecting or removing from said drum the dehydrated cake and the liquid removed therefrom without interrupting the vacuum in said peripheral suction chamber.



11. A deflector for removing or deflecting the pulp or other dehydrated material from the filtering surface of a revolving filter or dehydrator, comprising a frame, and a plurality of spaced-apart wires supported by said frame in a plane substantially tangential to the filtering surface of said filter and so arranged that each wire is inclined at an angle to both a plane perpendicular to the axis of said filter and to a plane through the axis of said filter and radial with respect thereto.

[Claims 2 to 10 and 12 to 15 not printed in the Gazette.]

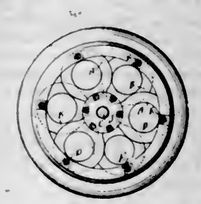
1,276,164. POWER DEVICE. PAUL BLACK, Algona, Iowa. Filed Dec. 11, 1917. Serial No. 206,662. (Cl. 74—54.)



A power device, comprising in combination, a reciprocating rod, a rack bar suspended from the lower end of the rod, a spring cushioning means interposed between the rod and the rack bar, a shaft extending across the rack bar, a pinion loose on the shaft and meshing with the rack bar, a wheel fixed on the shaft, a ratchet wheel loose on the shaft, a pawl carried by the pinion and engageable with the ratchet wheel, a coil spring connecting the ratchet wheel and the wheel fixed on the shaft and means for preventing rotation of the ratchet wheel in a direction opposite to the direction of rotation caused by engagement of the pawl therewith.

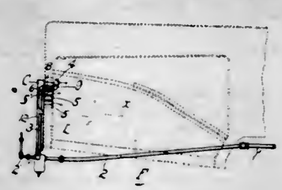
1,276,165. DISK WHEEL FOR VEHICLES. ROBERT BLAKOE, London, England. Filed Nov. 14, 1916. Serial No. 131,271. (Cl. 21—69.)

In a wheel of the type set forth, trefoils constituting the body of the wheel, ribs or flanges formed on a sleeve constituting the hub and hub flanges with bolts for carrying the trefoils in their central position, brackets of channel formation riveted to the rim, the rim flanges with



transverse bolts or such like for carrying said trefoils at the apexes of the circles.

1,276,166. SMOKE-CONSUMING DEVICE FOR FIRE-BOXES. WILLIAM D. BOYCE, New York, N. Y. Filed Jan. 22, 1917. Serial No. 143,756. (Cl. 110—60.)

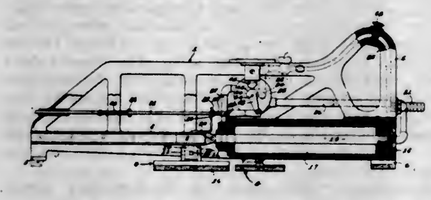


1. In a locomotive boiler provided with a fire-box bounded in the rear by a water-leg having a fuel charging door, one or more hollow stay-bolts disposed in the water-leg on either side of the charging door for admitting atmospheric air to the fire-box above the surface of the fuel charge, means for causing the inflowing air to traverse the outer wall of the rear water-leg before entering said stay-bolts, and means for conducting steam into the fire-box through the rear water-leg independently of the air delivered through the hollow stay-bolts aforesaid.

6. In a locomotive boiler provided with a fire box bounded by a water-leg, one or more hollow stay-bolts disposed in the water-leg for admitting atmospheric air to the fuel in the fire box, and a hood for protecting the outer ends of the stay-bolts comprising an open bottomed box-like member positioned adjacent the water leg and extending to a point near the bottom thereof for conducting atmospheric air to the hollow stay-bolts and for diverting the back-flash toward the bottom of the water-leg.

[Claims 2 to 5 not printed in the Gazette.]

1,276,167. SURFACE-FINISHING MACHINE. SPENCER K. BROWN, Syracuse, N. Y. Filed Mar. 24, 1917. Serial No. 157,102. (Cl. 51—13.)



1. A surface finishing tool comprising an elongated body, an abrading member movable in the front portion thereof and means for actuating the abrading member arranged in the rear portion of the body, and a rest arranged between the ends of the body and in the rear of said member, the rest being pivotally connected to the body to permit the body to have a rocking movement relatively thereto, substantially as and for the purpose described.

2. A surface finishing tool comprising an elongated body formed with a guide extending lengthwise of the forward portion thereof, a reciprocating abrading member having a carriage movable along the guide, means for actuating the abrading member arranged lengthwise of the rear portion of the body in alinement with the guide, and a rest arranged between the ends of the body and in the rear of the path of said member, the rest being pivotally connected to the body to permit the body to have a rocking movement relatively thereto, substantially as and for the purpose set forth.

3. A surface finishing tool comprising a body formed with a guide extending lengthwise of the forward portion thereof a reciprocating abrading member moving a carriage movable along the guide, means for actuating the abrading member arranged lengthwise of the rear portion of the body in alinement with the guide, and rests at the front and rear end of the machine arranged with their bottom faces in planes above the plane of the face of the abrading member, and a foot arranged between the ends of the body and at the rear end of the path of the abrading member, the foot being pivoted to the body to permit the body to have a rocking movement forwardly and rearwardly, substantially as and for the purpose set forth.

4. A surface finishing tool comprising a body formed with a guide extending lengthwise of the forward portion thereof, a reciprocating abrading member having a carriage movable along the guide, the abrading member and the carriage being connected by a universal joint, means for actuating the abrading member, arranged lengthwise of the rear portion of the body in alinement with the guide, rests at the front and rear end of the machine arranged with their bottom faces in planes above the plane of the work face of the abrading member, and a foot arranged between the ends of the body and at the rear of the path of the element, the foot being pivoted to the body to permit the body to have a rocking movement forwardly and rearwardly, the bottom face of the foot being located in substantially the plane of the working face of the abrading member, substantially as and for the purpose described.

1,276,168. PROPELLING MECHANISM. CLARENCE A. BUCHHOLZ, Columbus, Wis. Filed Mar. 25, 1918. Serial No. 224,586. (Cl. 208—36.)

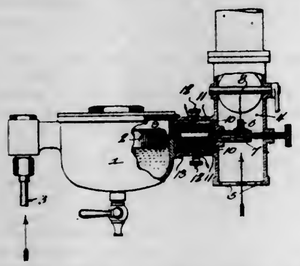


In a propelling mechanism for vehicles, the combination with a vehicle body mounted on a driving axle and main wheels, steering mechanism for said body, and a rock lever pivoted through the body; of a ratchet wheel keyed to the mid-length of said main axle, a drum loosely mounted on the axle and inclosing said wheel, a spring pawl mounted within the drum and engaging said ratchet, the periphery of the drum having teeth, sleeves loose on the axle at opposite sides of the drum, a yoke whose arms are connected with said sleeves, and a rack bar pivoted at one end to the lever and having its other end slidably mounted through said yoke and provided with teeth meshing with those on the drum, for the purpose set forth.

1,276,169. CARBURETER. EDWARD G. BUCHMANN, Milwaukee, Wis. Filed May 3, 1917. Serial No. 166,098. (Cl. 261—15.)

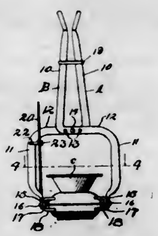
A carbureter comprising, in combination, a fuel supply pipe, a float chamber communicating therewith, a carbureting chamber having an opening in one wall, a

fuel passage pipe formed integrally with one wall of the float chamber and projecting laterally, said pipe being extended into the carbureting chamber through the opening therein, an insulating jacket surrounding the portion of said pipe adjacent its connection with the float chamber, a plurality of electrical heating coils embedded in said insulating material, a sleeve of greater diameter and shorter length than the pipe formed integrally with the carbureting chamber around the opening therein and



projecting laterally from one wall thereof, said sleeve being disposed around said insulating material and coils by being slid thereover simultaneously with the engagement of the free end portion of the fuel passage pipe with the opening in the carbureting chamber, the free end of said sleeve being disposed in abutting engagement with the wall of the float chamber and secured thereto, and a valve controlled spray means carried by the end of said pipe within said carbureting chamber.

1,276,170. SPITTOON LIFTER AND CARRIER. JOSEPH N. BURON, Eholt, British Columbia, Canada. Filed Mar. 19, 1917. Serial No. 155,745. (Cl. 57—111.)



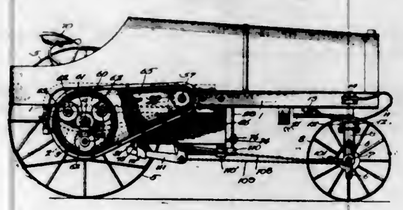
A spittoon manipulating device including a pair of tongs, rotatable spittoon gripping members carried by the ends of the tongs, a rod pivotally connected to one end of one of said rotatable gripping members and having an elongated slot in the outer end thereof, and a bolt carried by one of the members of the tongs and engaging in said slot, whereby the rotation of the gripping members is limited in both directions to prevent the spittoon being turned beyond a level upright position at times and a level inverted position at times.

1,276,171. GASKET AND SCREEN COMBINATION. HAROLD LESTER BURR, Middletown, Conn. Filed Aug. 21, 1917. Serial No. 187,458. (Cl. 48—180.)



A gasket and screen combination comprising a gasket portion having a middle opening and a screen bridging the said opening, the said gasket portion being a composite structure having a body portion of fibrous material and a sheathing portion of thin sheet metal, the said sheathing portion generally inclosing the said body portion and having a thimble part that extends through the said opening so as to form the border wall thereof, and the said screen being secured to and supported by the said thimble part of the sheathing.

1,276,172. VEHICLE. WILLIAM C. BURRELL, Kankakee, Ill. Filed Oct. 22, 1917. Serial No. 197,793. (Cl. 180—17.)



1. A motor vehicle including a chassis frame; a motor on the chassis frame; a motor shaft; friction disks rotatable with and movable on the shaft longitudinally thereof; other friction disks disposed in planes transverse to the first friction disks and between which the first friction disks are disposed, the aforesaid shaft and the friction disks thereon being movable transversely of the space between the other friction disks; power transmission means intervening between the last aforesaid friction disks and the propelling vehicle wheels; hangers supporting said shaft in the region of the friction disks that are on the shaft; and mechanism for individually adjusting the hangers.

4. A motor vehicle including its propelling vehicle wheels; a pair of friction disks in gear connection therewith for effecting the propelling rotation thereof; a motor shaft, a third friction disk in a plane transverse to the planes of the aforesaid friction disks and turned by the motor shaft; a fourth friction disk whose periphery is engaged with the periphery of the third friction disk, this fourth friction disk being also disposed in a plane transverse to the planes of the first aforesaid friction disks; an arm structure supporting the fourth friction disk; a segmental rack connected with the arm structure; a second segmental rack meshing with the aforesaid segmental rack; and mechanism whereby the second segmental rack may be turned to turn the first segmental rack to adjust said arm structure to bring the fourth friction disk into engagement with one or the other of the aforesaid pair of friction disks.

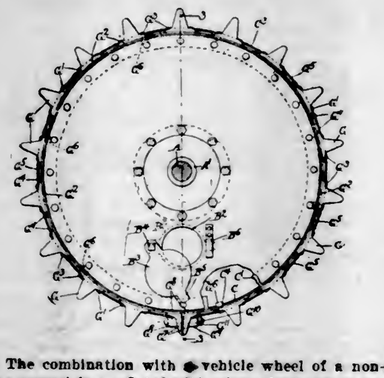
6. A motor vehicle including its propelling vehicle wheels; a pair of friction disks in gear connection therewith for effecting the propelling rotation thereof; a motor shaft; a third friction disk in a plane transverse to the planes of the aforesaid friction disks and turned by the motor shaft; a fourth friction disk whose periphery is engaged with the periphery of the third friction disk, this fourth friction disk being also disposed in a plane transverse to the planes of the first aforesaid friction disks; an arm structure supporting the fourth friction disk; a segmental rack connected with the arm structure; a second segmental rack meshing with the aforesaid segmental rack; and mechanism whereby the second segmental rack may be turned to turn the first segmental rack to adjust said arm structure to bring the fourth friction disk into engagement with one or the other of the aforesaid pair of friction disks.

8. A motor vehicle including its propelling vehicle wheels; a pair of friction disks in gear connection therewith for effecting the propelling rotation thereof; a motor shaft; a third friction disk in a plane transverse to the planes of the aforesaid friction disks and turned by the motor shaft; a fourth friction disk whose periphery is engaged with the periphery of the third friction disk, this fourth friction disk being also disposed in a plane transverse to the planes of the first aforesaid friction disks; and mechanism whereby the fourth friction disk is brought into engagement with one or the other of the aforesaid pair of friction disks.

12. A motor vehicle including a chassis frame; a motor on the chassis frame; a motor shaft; friction disks rotatable with and movable on the shaft longitudinally thereof; other friction disks disposed in planes transverse to the first friction disks and between which the first friction disks are disposed and are movable transversely to the planes thereof, these other friction disks being each individual to a propelling vehicle wheel and in driving relation thereto; and mechanism whereby one of the first aforesaid disks may have engagement with either of the latter aforesaid disks while holding the remaining one of the first aforesaid disks out of engagement with each of the latter aforesaid disks.

[Claims 2, 3, 5, 7, and 9 to 11 not printed in the Gazette.]

1,276,173. TRACTION-WHEEL. ALEXANDER CARPENTER, Carey, Ohio, assignor to National Tractor & Plow Company, Carey, Ohio, a Corporation of Ohio. Filed Apr. 5, 1917. Serial No. 159,889. (Cl. 21—214.)



1. The combination with a vehicle wheel of a non-skid device comprising a flat flexible ring adapted to surround the wheel, grouters rigidly mounted on the ring, means for tightening the ring, comprising a segmental grouter at each end of the ring and means for drawing the two parts of such grouter together to tighten the ring, the outer extremities of the two grouter parts being adapted to engage one another when the ring is tight.

2. The combination with a vehicle wheel of a non-skid device comprising a flat flexible ring adapted to surround the wheel, grouters rigidly mounted on the ring, means for tightening the ring, and means for preventing movement of the ring with respect to the wheel comprising lugs beneath the grouters rigidly mounted on the ring adapted to penetrate the tread surface of the wheel, the tread of the wheel having perforations of the same shape as the said lugs and loosely engaging them.

3. A non-skid device for traction wheels comprising a flexible ring adapted to surround the wheel, grouters mounted on the ring and means for holding the ring in position on the wheel, the ring being made up of a series of separate thin base link members, open links connecting them, the grouters being connected to the base members and not to the open links.

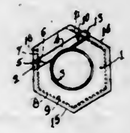
4. A non-skid device for traction wheels comprising a flexible ring adapted to surround the wheel, grouters mounted on the ring and means for holding the ring in position on the wheel, the ring being made up of a series of separate thin base link members, open links connecting them, the grouters being connected to the base members and not to the open links, the means for holding the ring against movement with respect to the wheel comprising lugs projecting downwardly from said grouters through said base members and penetrating the wheel.

1,276,174. HINGE. WILLIS M. CARTER, New York, N. Y., assignor to American Lithographic Company, New York, N. Y., a Corporation of New York. Filed Apr. 19, 1915. Serial No. 22,324. (Cl. 16—11.)



A sewn hinge for uniting the abutting edges of a pair of substantially rigid sheets, the stitches of the sewing being so located that no portion of the sewing thread lies between the abutting sheet edges, whereby said abutting edges are held in contact in all positions where the included angle of the sheets is less than 180 degrees.

1,276,175. LOCK-NUT. JAMES H. CARY, Boston, Mass., assignor of one-half to William Henry Griffith, Narragansett Pier, R. I. Filed Apr. 14, 1917. Serial No. 162,173. (Cl. 151—26.)



1. A nut adapted to engage a suitably threaded bolt and provided with a transverse opening that is, substantially, tangential to the bolt-hole; a pin adapted to reversely occupy said opening; and reversible means adapted to engage both ends of said pin and retain it within said opening; in combination with means for attaching one end of said pin to said reversible means.

2. In a lock-nut, a tapered pin with a V-shaped edge, said pin being provided with a perforation at the large end; and a spring formed to clasp a suitable nut; in combination with means for positively attaching one end of said spring to said perforation.

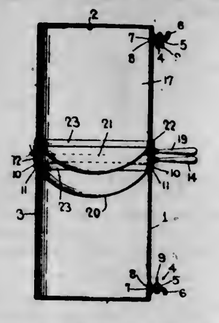
1,276,176. JACK. MICHAEL H. COLLINS, Tiffin, Ohio. Filed June 28, 1916. Serial No. 106,432. (Cl. 254—88.)



1. In a jack for vehicles, a pair of superposed frames of equal width and each having longitudinally disposed side rails, the upper faces of the side rails of the bottom frame being provided with spaced notches having one abrupt wall and one inclined wall, the said inclined wall slanting upwardly to the upper surfaces of said rails, the lower faces of the rails of the upper frame at one end being provided with notches each having an abrupt and an inclined wall, the said inclined walls of the notches in said upper rails being disposed opposite to the corresponding walls of the notches in said lower rails, the under faces of the rails of the upper frame being provided adjacent their opposite ends with elongated notches having their bottom walls parallel with the edges of the rails and the said notches being equal in depth to the other notches, rollers in the notches in said lower rails substantially equal in diameter to twice the depth of each notch, the forward ends of the said elongated notches being disposed over the adjacent notches in the lower rails when the notches in the opposite ends of the upper and lower rails are in register, and means for yieldably holding the upper frame with its notches so positioned.

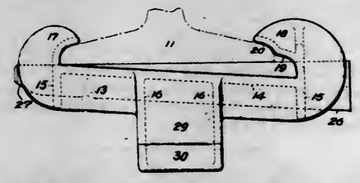
[Claim 2 not printed in the Gazette.]

1,276,177. COFFEE-POT. JAMES B. COOLEY, Bath, N. Y. Filed May 2, 1917. Serial No. 165,985. (Cl. 53—8.)



The herein described coffee pot comprising mating cup-shaped sections having grooves in their walls adjacent their open ends, bands secured around said walls adjacent the grooves, a hinge connecting said bands at one point, and hadles projecting from said bands at a point diametrically opposite the hinge; combined with spring rings for insertion in said grooves, fabric bags carried by said rings respectively, and a manually controlled outlet from each section.

1,276,178. RAIL-ANCHOR. FRANCIS W. COOPER and WILLIAM H. YAWGER, Montreal, Quebec, Canada; said Yawger assignor to said Cooper. Filed Feb. 12, 1918. Serial No. 216,748. (Cl. 238—4.)



1. A rail anchor comprising a body having the ends hooked to engage the edges of the rail base, a wedge slidable in a groove offset from the main part of the body member and running transversely of the rail, the wedge being in a different transverse vertical plane from that of the hooked body ends in close engagement with the edges of the rail base.

2. A rail anchor comprising a body hooked at the ends to engage the edges of a rail base, a depending offset portion at one side of said body adapted to engage a tie, and a wedge at the opposite side of the body adapted to engage a rail base and hold the anchor rigid thereon.

5. In a rail anchor, a body hooked for engagement with a rail, and a resilient wedge slidable in the body and engagable transversely with a rail on which the body is fixed to hold the body, said wedge being held against loosening due to vibration by its resiliency.

10. In a rail anchor, a body adapted for engagement with a rail, a pair of alined laterally projecting flanges at the bottom of the body, forming a key seat, a wall adapted to retain a key on said seat, and supporting webs for said seat and wall.

[Claims 3, 4, 6 to 9, and 11 to 19 not printed in the Gazette.]

1,276,179. CURE OR REPAIR FOR AUTOMOBILE-TIRE RIM-CUTS AND BLOW-OUTS. MIKE COPPS, Reidsville, Ga. Filed July 15, 1916. Serial No. 109,478. (Cl. 152—26.)

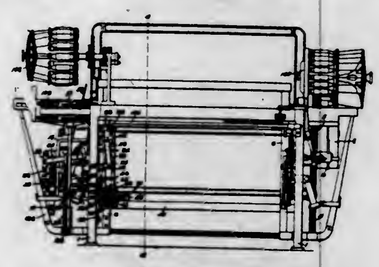
1. The "rim-cut" and "blow-out" repair for pneumatic tires, comprising a covering-strip disposed to cover the fracture in the outer-shoe or casing, and staples disposed to straddle the fracture in the shoe and lie across said strip and have their prongs projected through the shoe and bent down upon the surface of the shoe to hold



the covering-strip in place and the fracture closed, the junction between the prongs and connecting web of the staples forming angles confining the covering-strips at opposite sides of the fracture, substantially as described.

[Claim 2 not printed in the Gazette.]

1,276,180. FILLING-REPLENISHING MECHANISM FOR LOOMS. RANDOLPH CROMPTON, Chatham, Mass. Filed Feb. 21, 1914. Serial No. 820,096. (Cl. 139—85.)



1. A loom comprising shifting shuttle boxes adapted to receive a plurality of shuttles containing filling carriers wound with distinctive fillings, a lay, two devices adjacent opposite ends of the lay to hold in reserve fresh filling carriers, means to lift said shifting shuttle boxes, thereby to bring one of the shuttles contained therein to one of said holding devices, to cause a fresh filling carrier contained in said device to be transferred into said shuttle and to effect the discharge of the exhausted filling carrier from said shifting shuttle boxes, and means to cause a fresh filling package to be transferred from the other of said holding devices to running position in the loom.

4. A loom employing a plurality of shuttles each containing a filling carrier wound with filling of a distinctive character and comprising a lay, a series of shifting shuttle boxes at one end of the lay, a shuttle box at the other end of the lay, a magazine adapted to contain a supply of filling carriers adjacent each end of the lay, and means co-acting with each of said magazines to cause a filling carrier to be transferred into a shuttle in the shuttle box adjacent thereto.

10. A loom employing a plurality of shuttles each containing a filling carrier wound with filling of a distinctive character and comprising a lay, a series of shifting shuttle boxes at one end of the lay and having a blank space for discharge of a filling carrier, a shuttle box at the other end of the lay, a magazine adapted to contain a supply of filling carriers adjacent to each end of the lay, and means to cause a filling carrier to be transferred from one of said magazines into one of a series of shifting shuttle boxes or into the opposite shuttle box according to the location of the shuttle to be replenished.

12. A loom employing a plurality of shuttles each containing a filling carrier wound with filling of a distinctive character and comprising a lay, a series of shifting shuttle boxes at one end of the lay, a shuttle box at the other end of the lay, a magazine adapted to contain a supply of filling carriers adjacent each end of the lay, means to cause a filling carrier to be transferred from one of said magazines into one of the series of shifting shuttle boxes or into the opposite shuttle box according to the location of the shuttle to be replenished, and means to suspend the pick during transfer of a filling carrier.

[Claims 2, 3, 5 to 9, 11, and 13 to 23 not printed in the Gazette.]

1,276,181. LOG-RAFT. GILBERT G. DAVIS, Vancouver, British Columbia, Canada. Filed Nov. 30, 1917. Serial No. 204,641. (Cl. 9—15.)

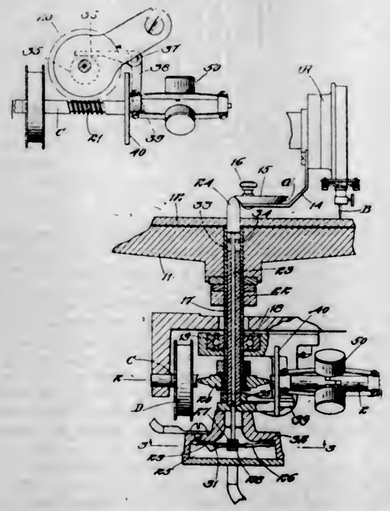


1. In a log raft, a floor layer of logs flexibly connected together side by side, to which floor layer the load of logs is bound as a whole, and means independent of the binding means of the load to the floor layer for binding the load of logs together in connected groups.

4. In a log raft, a floor layer of logs flexibly connected together side by side, to which floor layer the load of logs is bound as a whole, means independent of the binding means of the load to the floor layer for binding the load of logs together in connected groups, said means comprising a series of wire ropes laid across the floor layer at intervals apart throughout the length of the raft on which ropes a group of logs is laid the ropes passing across this group from opposite sides and clamped together at the cross, a further group of logs superposed on the first named group and the ropes again passed across from opposite sides and secured together, and means for releasing the body binding ropes of each separate group.

[Claims 2 and 3 not printed in the Gazette.]

1,276,182. AUTOMATIC STOP AND TEMPO CONTROL FOR TALKING-MACHINES. JOHN A. DAVIS, Boston, Mass. Filed Aug. 28, 1916. Serial No. 117,150. (Cl. 74—46.)



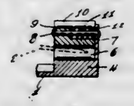
1. A stop mechanism for a disk record sound reproducing machine, comprising a longitudinally movable spindle mounted coaxially with the record, a contact member mounted on the lower end of said spindle, a second contact member with which said contact carried by the spindle is adapted to be engaged and disengaged by the movement of the spindle, means controlled by said two contact members, whereby when said two contact members are in contact with each other, the turn table of the machine will be rotated, and whereby when said contact members are separated, the rotation will be stopped, and stop actuating means connected with the sound member, which is so positioned that when the needle has reached a predetermined point in the record, said stop actuating means will engage said movable spindle and actuate the same to disengage the contact member carried at its lower end from the said coöperating contact and thereby stop the rotation of the table.

4. In a stop mechanism for talking machines, the combination of the record, a contact member at the axis of rotation, which is operatively connected to the stop mechanism, a contact member on the tone arm member, and means for adjusting the position of said second mentioned contact member lengthwise of the path of movement of the tone arm to compensate for differing lengths of records.

5. The improved stop mechanism and tempo control comprising a contact member on the sound box of the machine, a movably mounted contact member at the axis of rotation, a spindle secured to the second contact member, a switch operated by said spindle, a sleeve operatively connected to the spindle and carrying an eccentric, a disk on the drive shaft of the machine and a bell crank lever operated by said eccentric and carrying a brake member which contacts with said disk.

[Claims 2 and 3 not printed in the Gazette.]

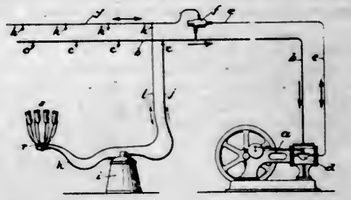
1,276,183. SAFETY-CATCH FOR PINS. RAYMOND V. DAVIS, Denver, Colo. Filed Jan. 11, 1918. Serial No. 211,393. (Cl. 24—155.)



4. A safety catch for pins comprising a guard formed with a pin-retaining pocket, and a combined keeper and transfer member formed with a pin-receiving cut-out for receiving the pin to deliver it to and taking it from the pin retaining pocket of the guard when communicating therewith, said member being movable to and from a position communicating with the pocket whereby to serve as a keeper for the pin when in said guard pocket.

[Claims 1 to 3, 5, and 6 not printed in the Gazette.]

1,276,184. MILKING MACHINERY. NORMAN JOHN DAYSH, Poughkeepsie, N. Y., assignor to The De Laval Separator Company, a Corporation of New Jersey. Filed Nov. 4, 1916. Serial No. 129,443. (Cl. 81—101.)



1. In a milking machine operating system, in combination, a portable milking machine unit comprising teat cups and connections, a pulsation branch pipe connected with said unit and adapted to convey pneumatic pulsations thereto, a plurality of fixed pulsation pipe lines, a primary pulsator connected with and adapted to produce pneumatic pulsations in one of the pulsation pipe lines, a

relay valve interposed between adjacent pulsation pipe lines and controlled by the pneumatic pulsations in one to produce pneumatic pulsations in the other, and one or more cocks arranged on the pulsation pipe line or lines in which relay pulsations are produced, said branch pipe being connectible to said cock or cocks, whereby pulsations of the required strength to render the milking machine unit efficiently operable may be produced in a milking machine unit relatively distant from the primary pulsator.

2. In a milking machine operating system, in combination, a primary pulsation pipe line and means to produce primary pneumatic pulsations therein, a secondary pulsation pipe line, a relay valve controllable by said primary pneumatic pulsations to produce secondary pneumatic pulsations in the secondary pulsation pipe line, teat cups, and means connected with, and operable by the pulsations in, the secondary pulsation pipe line to produce pulsations within the teat cups.

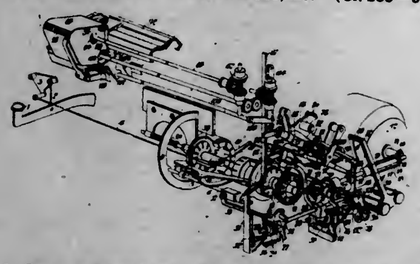
3. In a milking machine operating system, the combination with a primary pulsation pipe line and means to produce pneumatic pulsations therein, a vacuum pipe line, and a secondary pulsation pipe line, of a relay valve operable by pneumatic pulsations from said primary pulsation pipe line to connect the secondary pulsation pipe line alternately with the vacuum pipe line and with the atmosphere.

5. In a milking machine operating system, in combination, a set of double chambered teat cups and teat cup pipes connected with the outer chambers of the respective teat cups, a secondary pulsator connected with and adapted to produce pulsations in said pipes, a primary pulsator and a plurality of pulsation pipe lines one connected with, and the other relatively distant from, the primary pulsator, a relay valve controllable by the primary pulsations communicated to the first pulsation pipe line to produce pneumatic pulsations in the second pulsation pipe line, and a branch pipe connected with the secondary pulsator and adapted to be connected to the second pulsation pipe line, whereby pulsations of the required strength to operate the pulsator may be produced in the branch pipe leading thereto.

6. In a milking machine operating system, the combination with two-chamber teat cups, pipes connected with the outer chambers thereof, a vacuum pipe connected with the inner teat cup chambers, a pulsator connected with and adapted to produce pulsations in the outer teat cup chambers, a primary pulsation line and a primary pulsator adapted to produce pneumatic pulsations therein, a secondary pulsation line connected with and controlling the operation of the first named pulsator, and a relay valve connected with and operable by pneumatic pulsations from the primary pulsation pipe line to produce secondary pulsation in the secondary pulsation pipe line.

[Claims 4, 7, and 8 not printed in the Gazette.]

1,276,185. COMBINED TYPE-WRITING AND COMPUTING MACHINE. GUSTAVE O. DEGENER, New York, N. Y., assignor to Underwood Computing Machine Company, New York, N. Y., a Corporation of New York. Filed June 30,1914. Serial No. 848,219. (Cl. 235—59.)



1. In a computing machine, the combination with computing mechanism, of a motor for driving the same, including an electric circuit, connections between said motor and said computing mechanism, a rock-shaft, a spring tending to rock said shaft to make said connections effective, locking mechanism for said shaft, including a block fixed on said shaft, said block controlling the closing of said electric circuit, and a latch engaging said block to thereby prevent said spring from rocking said shaft, to make said connections effective, and said block from closing said circuit.

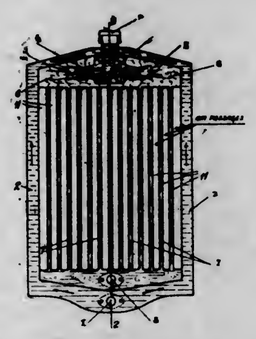
12. The combination with a computing head having a series of computing wheels, of a master wheel for driving said computing wheels, said master wheel and said computing wheels having a step-by-step movement to enable said master wheel to register successively with each computing train including one of said computing wheels, a locking rack on said computing head, a series of detents for said computing wheels, an arm having a tooth to engage between the teeth of said rack to lock said computing head against traveling movement, and having a beak to engage individually with each of said detents to disengage said detents from their associated computing trains.

25. The combination with computing mechanism adapted to compute a number, of a motor for driving said computing mechanism, a circuit controlling the activity of said motor, and controlling means for delaying the breaking of the circuit for a period subsequent to the actual computing of the number *per se*, determined by a given rotation of the motor itself.

27. A detent having a roller for coöperation with a socketed computing wheel, said detent comprising a strip of metal bent on itself in spaced relation to form a casing for said roller, and further converging in close contact to form an ample and rigid surface by which said detent may be engaged and moved relatively to said computing wheel and held in its moved position.

[Claims 2 to 11, 13 to 24, and 26 not printed in the Gazette.]

1,276,186. CONDENSER. ROBERT LUCIEN D'ESPUJOLS, Joinville-le-Pont, France. Filed Oct. 2, 1916. Serial No. 123,817. (Cl. 257—38.)

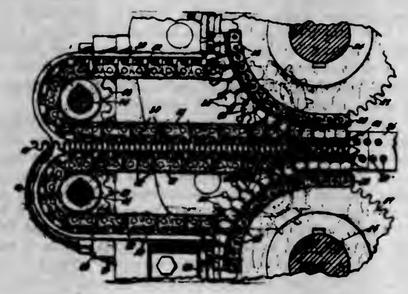


1. A condenser for steam automobiles, comprising an injector for the exhaust steam, a battery of air cooled condenser tubes into which the cooling water and exhaust steam from the injector pass, substantially as described.

2. A condenser for steam automobiles, comprising lateral passages on each side of the condenser, an inlet for water at the lower end thereof, a header at the upper end of the condenser, an injector nozzle mounted in said header through which nozzle the cooling water passes from the said lateral passages and a battery of tubes extending beneath the header in which the injector nozzle is mounted, and an outlet header into which the lower end of the tubes discharge, substantially as described.

3. A condenser for steam automobiles, comprising an injector, said injector being mounted in the upper part of the radiator and being constituted of a nozzle through which the cooling water passes and a surrounding converging diverging nozzle through which the water and vapor flows, a header within which said injector is mounted, a battery of tubes connecting the said header with a bottom header into which the condensed vapor and cooling water is discharged, substantially as described.

1,276,187. VENEER-CORRUGATING MACHINE. ARNOLD W. DE VOS and CHARLES M. DERING, Milwaukee, Wis., assignors to Corrugated Veneer Packing Products Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Nov. 15, 1915. Serial No. 61,466. (Cl. 154—30.)



1. A corrugating machine for corrugating sheet material, comprising a plurality of upper and lower chains having a parallel travel in close relation to each other, suitably operated shafts, sprocket wheels on the shafts around which the chains travel, a series of forming blades connected with the links of the upper chain, a series of forming blades connected with the links of the lower chain, said forming blades of one series having their edges interfitting with the edges of the forming blades of the other series during their parallel travel and adapted to have the sheet material fed between them as they turn around the shafts, spur wheels on the shafts between the sprocket wheels, and lugs on the forming blades engaged by the spur wheels.

3. A corrugating machine for corrugating sheet material, comprising chains of forming blades traveling in parallel close relation to each other, the forming blades of one chain having their edges interfitting with the edges of the forming blades of the other chain and adapted to receive and fold the sheet material between them at one end of the machine, and means traveling with the chains for stripping the veneer from the forming blades at the other end of the machine.

4. A machine for corrugating wood veneer, comprising means for folding limp, moist sheets of veneer, forming members for holding the folded veneer between them until it is dry, and means extending the full length of the forming members for stripping the dry veneer from the forming members.

8. A corrugating machine for corrugating sheet material, comprising a pair of forming chains of forming blades traveling together the length of the machine, the forming blades of one chain interfitting with the forming blades of the other chain and adapted to receive and fold a sheet of material therebetween at one end of the machine, stripping rods carried in the spaces between the forming blades, a pair of stripping chains having lugs to engage the stripping rods, said stripping chains being so positioned as to cause the stripping rods to continue their path of travel beyond the point where the forming chains part at the end of their travel together and to return them to the spaces between the forming blades, and grooved guides with the ends of the stripping rods fitting therein to guide said rods in their travel with the stripping chains.

10. A corrugating machine for corrugating sheet material, comprising a frame, shaft housings mounted on the ends of the frame, a pair of shafts journaled in each shaft housing, one shaft of each pair being adjustable with relation to the other, sprocket wheels on the shafts, a pair of forming chains of forming blades mounted on the sprocket wheels, said forming blades of one chain having their edges interfitting with the edges of the forming blades of the other chain, stripping rods carried by the forming chains between the forming blades thereof, bell cranks mounted on the shafts of the shaft housing at the rear end of the machine, each of said bell cranks having one arm anchored on the shaft housing, sprocket wheels mounted on the other arms of the bell cranks, a pair of suitably driven shafts journaled on the shaft housing at the rear end of the machine, sprocket wheels thereon, stripping chains passing around the sprocket wheels of said pair of shafts and the sprocket wheels of the bell cranks, lugs projecting from the links of the stripping chains and traveling in the path of the stripping rods and adapted to cause said stripping rods to continue their movement in the same direction after the forming chains have turned around their sprocket wheels and then return the forming rods to the forming chains, and grooved guides on the shaft housings in which the ends of the stripping rods travel.

[Claims 2, 5 to 7, and 9 not printed in the Gazette.]

1,276,188. CENTER-BEARING. CHARLES DIETZ, Chicago, Ill., assignor of one-half to Peter S. Theurer, Chicago, Ill.; Myra Dietz administratrix of said Charles Dietz, deceased. Filed Sept. 4, 1915. Serial No. 48,975. (Cl. 105—108.)



1. In a device of the class described, a truck bolster, a body bolster, a truck bolster plate, downwardly extending flanges on said truck bolster plate adapted to engage the opposite sides of said truck bolster, a pin passing through said flanges and said truck bolster, lugs projecting from said truck bolster at opposite ends of said flanges, and means for operatively connecting said truck bolster plate and said body bolster.

2. In a device of the class described, a truck bolster, a body bolster, a truck bolster plate seated on said truck bolster, flanges extending downwardly from said truck bolster plate and engaging the opposite sides of said truck bolster, a pin extending through said flanges and said truck bolster to prevent vertical displacement of said truck bolster plate, additional means to prevent vertical displacement of said truck bolster plate with respect to said truck bolster, and means for operatively connecting said truck bolster plate and said body bolster.

3. In a device of the class described, a truck bolster, a body bolster, a truck bolster plate seated on said truck bolster and having flanges extending downwardly at opposides thereof, hooked lugs carried by said truck bolster at opposite sides of said flanges, and means engaging said hooked lugs for operatively connecting said truck bolster plate and said body bolster.

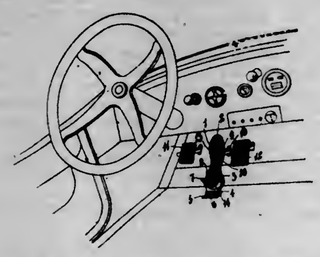
4. In a device of the class described, a bolster, a bolster plate seated on said bolster and having transversely extending flanges at opposite sides of said bolster, a pin extending transversely through said flanges and said bolster, and hooked lugs carried by and extending outwardly from said bolster at each side of said flanges.

5. In a device of the class described, a bolster, a bolster plate seated thereon and having flanges extending downwardly at each side thereof, a pin extending transversely

through said flanges and through said bolster, and a lug extending downwardly from said bolster plate, said bolster having a depression adapted to receive said lug.

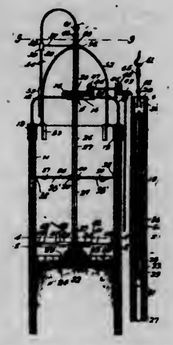
[Claim 6 not printed in the Gazette.]

1,276,189. FOOT-REST FOR AUTOMOBILE-ACCELERATOR PEDALS. HERBERT DIETZ, Cincinnati, Ohio. Filed Oct. 19, 1917. Serial No. 197,462. (Cl. 74—81.)



A foot-rest for automobile-accelerator pedals, comprising a foot-plate, and an upwardly extending heel-rest on the rear of said foot-plate, and a floor-plate hinged to said foot-plate to the rear of said heel-rest, said floor-plate being adapted to be fastened to the floor of a vehicle, and said foot-plate being adapted to incline forwardly and upwardly and make operative contact with the accelerator pedal of the vehicle, and to support the foot of the operator of the vehicle for forward pressure against said accelerator-pedal, but normally affording a stable support for the foot while bearing backwardly and downwardly on said heel-rest, substantially as and for the purposes set forth.

1,276,190. ENSILAGE SPREADER AND PACKER. DANA W. DISHMAN, Owensburg, Ind., assignor of one-half to Theodore Carmichael, Hobbieville, Ind. Filed July 14, 1917. Serial No. 180,597. (Cl. 100—56.)



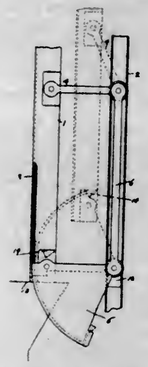
1. A silo packing machine including means adapted to rest upon the ensilage and pack the same when said means is rotated, a shaft formed in sections adapted for end to end connection, each section having a recess formed in one end, a reduced portion formed on the opposite end of each section for entering the recess of the next adjacent section, a releasable latch mechanism within the reduced end of each section for engagement with the next section, whereby said latching means may be released to permit subsequent disconnection of the sections, and means adapted to be mounted upon the silo for rotating said shaft.

2. A silo packing machine including means adapted to rest upon the ensilage and to pack the same when said means is rotated, a shaft adapted to be connected at one end to said means said shaft being formed in sections, adapted for end to end connection and each section having a central longitudinal passage defining a continuous passage extending through the shaft when the sections are connected, each section having a recess formed in one end, a reduced portion formed on the opposite end of each section for engagement in the recess of the next adjacent section, a slidable latch in the reduced end of each section for engagement with the next adjacent end to lock the sections together, means operable to release said latch, whereby a tool may be inserted in the central longitudinal passage to engage said releasable means to permit disconnection of the sections, and means adapted to be mounted upon the silo for rotating said shaft.

3. In a silo packing machine including a shaft, a centralizing means including a central hub portion slidably and rotatably mounted upon the shaft, radial arms extending from said hub portion, and pointed extensions on said arms hingedly connected thereto.

4. In a silo packing machine including a vertical shaft, a support therefor comprising a plurality of arms, bifurcated portions at the lower ends to straddle the upper edge of the silo wall, the opposite end of said arms converging toward the shaft, a semi-circular connecting portion for said terminals to receive the shaft therein, a vertical rod mounted on one of the arms, a second rod journaled on said first mentioned rod for rotation in a horizontal plane, and a semi-circular terminal formed on the second rod to coact with the semi-circular connecting portion to serve as a closure and guide for said shaft.

1,276,191. DOOR. FRANK W. DITTMAN, New York, and EDMUND W. BAGGOTT, Brooklyn, N. Y., assignors of one-third to Rumsey W. Scott, Montclair, N. J. Filed Mar. 12, 1918. Serial No. 221,999. (Cl. 20—19.)



1. The combination of a vertically moving rigid elevator hatchway door and pivoted link mechanism controlling the movement of the same whereby when a force is applied to the door in the plane of the door to open the same, the door will be constrained to be moved continuously in one vertical direction, and during a portion of its movement outwardly from the door opening.

2. The combination of a vertically movable door, and pivoted link mechanism interposed between the door and its guide, whereby when a force is applied to the door in the plane of the door to open the same, the door will be constrained to be moved continuously in one vertical direction, and during a portion of its movement all portions of the door simultaneously moving outwardly from the door opening.

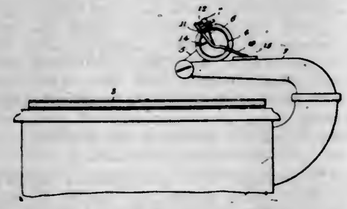
4. The combination of a vertically movable door, links interposed between the door and its guide for operating the same, sectors carried by said links, and a counterweight for the door secured to said sectors.

7. The combination of a hatchway door, links carried thereby, means pivotally secured to said links and maintaining them spaced from each other, said links controlling the movements of the door to cause the same to be moved continuously in one vertical direction when the door is actuated by a force applied thereto in the plane of the door, and simultaneously during a portion of said vertical movement to be retired from or moved toward the hatchway opening, the links at the limit of their movement to move the door toward the hatchway being substantially at right angles to the face of the door.

8. A guideway, a traveler sliding in the guideway, a door, a transverse link connecting the door to said traveler, and means actuating the door in a direction generally parallel to said guideway, whereby movement of the door in its plane will cause a movement transverse to said plane.

[Claims 3, 5, 6, and 9 not printed in the Gazette.]

1,276,192. NEEDLE-HOLDER FOR SOUND-BOXES. EMIL ALBERT DONELIN, Moorestown, N. J. Filed Jan. 26, 1917. Serial No. 144,731. (Cl. 274—15.)



1. A needle holding attachment for talking machines, the combination with a sound box having jointed connection with the tone arm, a stylus bar pivoted upon said box and having a needle receiving socket and a bore formed therein, spring pressed means operable in the bore of the stylus bar for clutching a needle when the sound box is in an active position, and an oscillating member mounted upon the sound box and having pivotal connection with the spring pressed means and operable to engage said tone arm when the sound box is inactively positioned to accomplish the extraction of the spring pressed means from the bore of the stylus bar.

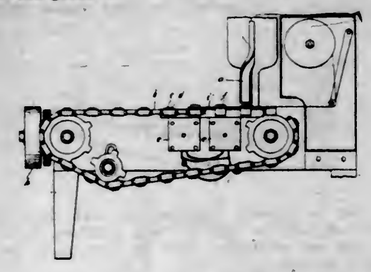
2. In a needle-securing device for talking machines, the combination with a tone arm having a soundbox movably connected therewith, and a needle-receiving stylus bar carried by the soundbox, of needle-retaining means carried by said needle bar and normally operating to maintain the needle in operative relation with the stylus bar, and pivoted releasing mechanism connected with the sound box for oscillating movement and having one end swiveled to the former mentioned means and adapted to engage the tone arm when the soundbox is in a needle-receiving and extricating position.

3. A needle retaining device for talking machines, the combination with a tone arm and a sound box swingingly carried thereby, a stylus bar pivotally mounted upon the sound box and having a needle receiving socket and a bore formed therein, of a pressure actuating element operating laterally of and within the bore of the stylus bar, and a member mounted upon the sound box having pivotal connection at one end with the pressure actuating element and adapted to effect the release of the needle upon the engagement of the opposite end of said member with the tone arm.

[Claim 4 not printed in the Gazette.]

1,276,193. WRAPPING-MACHINE. HOWARD C. DOOLITTLE, New Britain, Conn., assignor to The Stanley Works, New Britain, Conn., a Corporation of Connecticut. Filed Dec. 3, 1915. Serial No. 64,826. (Cl. 93—7.)

1. In a wrapping machine, an endless traveling conveyer the upper run of which is horizontal, said conveyer having a plane surface on which the goods to be wrapped are laid, the wrapping material being positioned on the conveyer underneath the goods, and means acting upon the goods to force them against said conveyer and so grip the wrapper to cause it to move with the conveyer and goods.

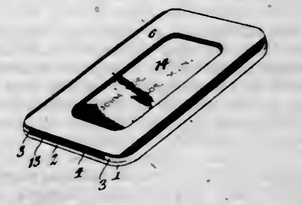


3. In a machine for wrapping magnetizable goods, a movable magnetic means acting upon the goods through the interposed wrapper to cause the latter to move with said magnetic means.

4. In a machine for wrapping magnetizable goods, a movable magnetic means acting upon the goods through the interposed wrapper to cause the latter to move with said magnetic means, and means for periodically interrupting the magnetic effect.

[Claims 2, 5, and 6 not printed in the Gazette.]

1,276,194. STENCIL. GUY J. EVANS, Buffalo, N. Y. Filed Feb. 2, 1917. Serial No. 146,189. (Cl. 101—127.)



1. A stencil holder comprising a comparatively thick main frame having an opening and constructed from a sheet of pliable material and having two longitudinal bars and two transverse bars forming said opening between said bars, two spacing flanges arranged lengthwise on one side of said main frame and integrally connected at their outer edges with the outer edges of the longitudinal bars of said main frame, a spacing frame thinner than said spacing flanges and arranged between the opposing inner edges of the latter and having an opening, and a thin binding sheet secured to the outer side of said spacing flanges and spacing frame and having an opening which registers with the openings of said main frame and spacing frame.

2. A stencil holder comprising a comparatively thick main frame having an opening and constructed from a sheet of pliable material and having two longitudinal bars and two transverse bars forming said opening between said bars, two spacing flanges arranged lengthwise on one side of said main frame along the longitudinal bars thereof, a spacing frame arranged between the opposing inner edges of said spacing flanges and having an opening, and a binding sheet secured to the outer sides of said spacing flanges and spacing frame and having an opening which registers with the openings of the main frame and spacing frame.

1,276,195. WEARING-PLATE FOR MOWING-MACHINES. HARRY F. EVANS, Davenport, Iowa, assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Dec. 1, 1915. Serial No. 64,518. (Cl. 56—44.)

1. A reversible wearing-plate for mowing-machines, said plate having a flange extending substantially at right angles to the plate along each of its front and rear edges so that either flange may extend into the space between adjacent edges of a finger-bar and sickle-bar when the plate is in position upon the machine.

2. A reversible wearing-plate for mowing-machines, said plate having a flange at each of its front and rear edges extending substantially at right angles from the

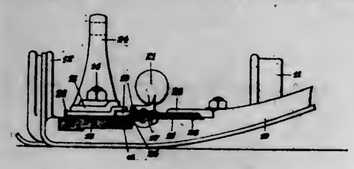
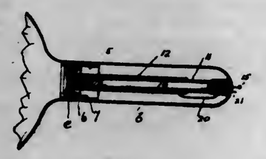


plate and in opposite directions so that either flange may extend into the space between adjacent edges of a finger bar and sickle-bar when the plate is in position upon the machine.

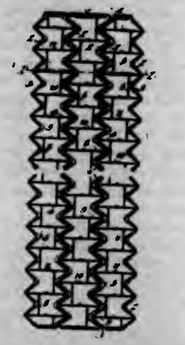
1,276,196. X-RAY TUBE. FRANCIS J. FARRELLY and ALFRED GRENNER, Hartford, Conn. Filed Jan. 25, 1916. Serial No. 74,134. (Cl. 250—35.)



1. In an X-ray tube a cathode stem supporting the cathode and connected with an exterior terminal, a glass shield surrounding said stem, a metallic member carried by said shield, and a conductor from said metallic member leading to the exterior of said tube and into cooperative relationship with said exterior terminal.

[Claim 2 not printed in the Gazette.]

1,276,197. RADIATOR. JOHN M. FEDDERS, Buffalo, N. Y., assignor to Fedders Manufacturing Company, Inc., Buffalo, N. Y., a Corporation of New York. Filed Oct. 23, 1917. Serial No. 198,040. (Cl. 257—130.)



1. A sheet metal radiating member having a plurality of transverse plates arranged in a longitudinal row, and a plurality of longitudinal coupling straps alternating with said transverse plates, said straps being connected at their ends with adjacent transverse plates and formed by metal displaced from the latter and said plates projecting in opposite directions from said straps.

2. A sheet metal radiating member having a plurality of transverse plates arranged in a longitudinal row, and a plurality of longitudinal coupling straps alternating with said transverse plates, said straps being connected at their ends with adjacent transverse plates and formed by metal displaced from the side edges of the latter and said plates projecting in opposite directions from said straps.

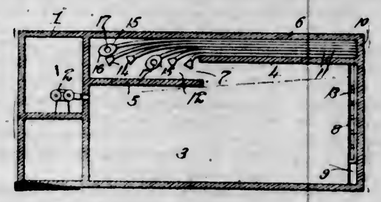
3. A sheet metal radiating member having a plurality of transverse plates arranged in a longitudinal row, and a plurality of longitudinal coupling straps alternating with said transverse plates, each of said straps being formed partly by metal displaced from the side edge of one transverse plate and partly by metal displaced from the side edge of an adjacent transverse plate and said plates projecting in opposite directions from said straps.

4. A sheet metal radiating member having a plurality of transverse plates arranged in a longitudinal row, and a plurality of longitudinal coupling straps alternating with said transverse plates, each of said straps being formed partly by metal displaced from the side edge of one transverse plate and partly by metal displaced from the side edge of an adjacent transverse plate, and the straps between the several transverse plates being staggered relatively to each other in a direction crosswise of the plates.

5. A sheet metal radiating member having a plurality of transverse plates arranged in a longitudinal row, and a plurality of longitudinal coupling straps alternating with said transverse plates, each of said straps being formed partly by metal displaced from the side edge of one transverse plate and partly by metal displaced from the side edge of an adjacent transverse plate and each strap being connected with said plates nearer one of the side edges of the latter than the other side edge of the same.

[Claims 6 to 8 not printed in the Gazette.]

1,276,198. DEVICE FOR CONVEYING SOUNDS TO MOVING-PICTURE SCREENS. HENRY C. FENTRESS, Alton, Ill. Filed May 25, 1916. Serial No. 99,821. (Cl. 181—18.)

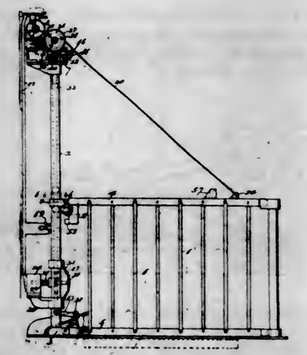


A structure of the class described including a room having a main ceiling and opposite walls, a screen in spaced relation to one wall, a sub-ceiling in spaced relation to the main ceiling and extending from the wall back of the screen and terminating short of the other wall, a platform in spaced relation to the main ceiling at a lower level than the sub-ceiling and extending from the wall opposite to the screen and terminating below the free edge of the sub-ceiling, the free edges of the sub-ceiling and platform being spaced apart so as to provide a view between the same from above the platform to the screen, and means supported between the ceiling and sub-ceiling for conducting sound from the space above the platform to the space between the screen and adjacent wall.

1,276,199. SAFETY-GATE FOR MINE-SHAFTS. WALTER HARDIE FINLEY, Fairmont, W. Va., assignor to Fairmont Mining Machinery Company, Fairmont, W. Va., a Corporation of West Virginia. Filed Feb. 19, 1918. Serial No. 218,054. (Cl. 187—54.)

1. A gate operating mechanism comprising a driving means and a driven means, a device for connecting and disconnecting the driving means to and from the driven means, an actuator for the device responsive to a lift cage, means for normally preventing functioning of the actuator, and means to cause the actuator to function.

3. A gate operating mechanism comprising a winding drum, a motor driven shaft for said winding drum, a clutch interposed between the motor driven shaft and the winding drum, an actuator for the clutch, comprising a reciprocatory rod having an end and flexible connection between the said rod and said end, means for rendering said flexible connection rigid and means responsive to a lift cage to impart a reciprocatory movement to said end when the flexible connection is temporarily rendered rigid.

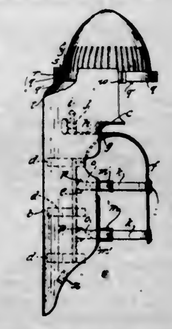


4. A gate operating mechanism comprising a winding drum, a motor for operating it, a clutch between the winding drum and the motor, a clutch actuator comprising a rod, a flexible connection between the ends of the rod, means for temporarily rendering the flexible connection rigid, and means responsive to a lift cage for actuating said rod when the flexible connection is rigid.

8. The combination with a standard, of an upwardly swinging folding gate pivotally supported by said standard, a winding drum at the upper end of the standard and having a cable, one end of which is connected to the forward end of the gate, a motor for operating said drum, a clutch between the drum and the motor, a rod slidably supported by the standard, clutch operating elements cooperating with said rod and comprising a shifting bracket, a lever pivoted intermediate its ends to said bracket, one end of which is connected to the rod, a longitudinally sliding rod connected to the shiftable bracket to impart a sidewise movement thereto, a bolt for operating said rod and responsive to pressure exerted by the gate when it is moved to its collapsed position, a swinging gate detent, and a connection between the detent and rod whereby the movement of the rod in one direction will move the detent into gate engaging position and the movement of the rod in opposite direction will move the detent into gate releasing position.

[Claims 2, 5 to 7, and 9 to 12 not printed in the Gazette.]

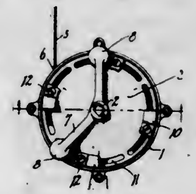
1,276,200. INDIVIDUAL PROTECTIVE ARMOR. PATRICK C. FLANAGAN, New York, N. Y. Filed Apr. 3, 1918. Serial No. 226,374. (Cl. 89—36.)



1. An armor of the character described, including a breastplate; supporting devices therefor adapted to pass over the shoulders of the soldier and extend along his back; and means for binding said supporters to the soldier's body; the upper, inner ends of said supporters being pivotally attached to said breastplate and of such length as to slide lengthwise in their bearings.

[Claims 2 and 3 not printed in the Gazette.]

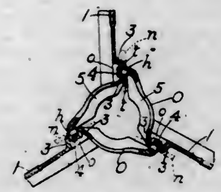
1,276,201. SPRING-MOTOR. CHARLES FLINT, Spokane, Wash. Filed Feb. 11, 1918. Serial No. 216,485. (Cl. 185—37.)



1. In a device of the class described, the combination of a flexible connection with a spring motor consisting of a casing having a slot therein, a central shaft in said casing, a reel rotatably mounted on said shaft and having the flexible connection engaged therewith, said connection being directed through the slot in the casing, a coil spring member engaged with the shaft and also with the reel to operate the latter, an obtuse angular arm fulcrumed on the outer end of said shaft and having beveled locking lugs at the ends thereof, and additional locking lugs on the outer face of the reel adapted for engagement with the aforesaid locking lugs whereby to lock the reel against rotation except at such times as may be desired to release same according to the will of the operator.

2. In a device of the class described, the combination with a flexible connection, of a spring motor consisting of a casing having a slot therein, a central shaft in said casing, a reel rotatably mounted on said shaft and having the flexible connection engaged therewith, said connection being directed through the slot in the casing, a coil spring member engaged with the shaft and also with the reel to operate the latter, an obtuse angular arm fulcrumed on the outer end of said shaft and having beveled locking lugs at the ends thereof, and additional locking lugs on the outer face of the reel adjustably secured to said reel and adapted for engagement with the aforesaid locking lugs whereby to lock the reel against rotation except at such times as may be desired to release same according to the will of the operator.

1,276,202. BOILER-STAND. CHARLES H. FOSTER, St. Louis, Mo. Filed Oct. 8, 1917. Serial No. 195,839. (Cl. 248—41.)



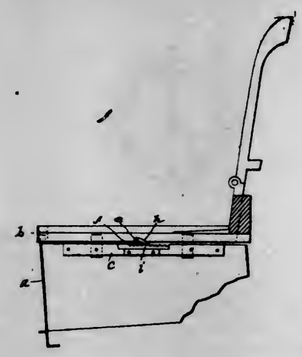
1. A supporting stand comprising a cluster of units or sections bowed toward the axis of the stand, formations at the crowns of the bowed portions of the respective sections for interlocking the sections to permit a play between the sections in a direction parallel to the axis of the stand, said means preventing an outward or radial displacement of the sections.

6. A supporting stand comprising a cluster of mutually interlocked units relatively movable or adjustable in a

given direction, and means providing for the temporary or permanent application of devices to hold said units against movement.

[Claims 2 to 5 and 7 not printed in the Gazette.]

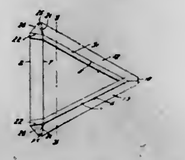
1,276,203. ADJUSTABLE SEAT. EDWARD W. FOX, Detroit, Mich., assignor to Fisher Body Corporation, Detroit, Mich. Filed Aug. 2, 1917. Serial No. 184,007. (Cl. 21—43.)



1. An adjustable seat for automobiles and vehicles, having in combination, a support including side uprights arranged to hold the occupant of the seat a desirable distance above the floor, a track secured near the top of one of the sides of the support and provided with a rack, a combined seat-bottom and seat-back provided with members for slidably engaging said track, a shaft journaled in said seat bottom and having a crank handle exposed at the side of the seat, a pawl fastened to said shaft, and a spring designed to normally turn the shaft and engage the pawl between the teeth of the rack.

2. An adjustable seat for automobiles and vehicles, having in combination, a support including side uprights, a track secured near the top to each side upright, a rack in connection with each track, a seat-bottom and seat-back combined together and provided with members which hold the seat-bottom to the tracks and allow it to slide thereon, a shaft journaled in the seat-bottom and passing clear across the same, a pawl near each end of the shaft, a spring for turning the shaft and causing the pawls to engage the rack, and a crank handle on one or both ends of the shaft.

1,276,204. POWDER-PACKAGE. EMIL FRANK, Cincinnati, Ohio. Filed Oct. 20, 1917. Serial No. 197,608. (Cl. 43—14.)

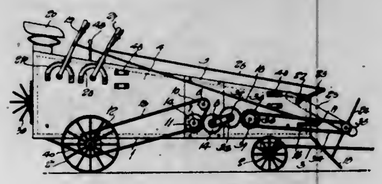


1. A compressible powder shipping package and gun of substantially triangular shape, having flat top and bottom walls, relatively opposing diagonal side walls connected together and respectively to said top and bottom walls, and bendable along their line of juncture to form a bellows, and one apex of the package constituting a nozzle when punctured.

7. A carton powder gun consisting of two opposing flat face walls and oppositely inclined edge walls joining said face walls and forming a bellows structure terminating to apexes at the corners of the walls, one apex providing a nozzle when punctured, and a tape secured to and covering the margins.

[Claims 2 to 6 not printed in the Gazette.]

1,276,205. CORNSTALK-RAKE. WILLIAM FROST, Athens, Ill., assignor of one-half to Joseph Franklin Null, Athens, Ill. Filed Oct. 29, 1917. Serial No. 199,124. (Cl. 56—62.)



1. A convertible machine of the class described comprising a portable body, a rake at the front end of said body for gathering material from the earth and supplying the same to said body, said rake being movable upwardly to assist in forming an end gate for said body, and a vertically movable feed member coacting with said rake when gathering, and forming with said rake an end gate when the two are raised.

[Claim 2 not printed in the Gazette.]

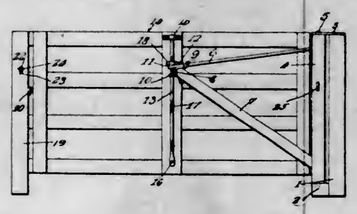
1,276,206. ABSORBENT-MATERIAL-SIZING COMPOSITION. ERNST FUES, Hanau-on-the-Main, Germany. Filed June 15, 1914. Serial No. 845,321. (Cl. 134—23.)

1. An absorbent material sizing composition containing a sizing medium precipitable by acid substances, acid precipitating means, and a small quantity of a suitable protective colloid, for the purpose described.

5. An absorbent material sizing composition containing a sizing medium precipitable by acid substances, acid precipitating means, dye stuff, and a small quantity of animal size, for the purpose described.

[Claims 2 to 4 not printed in the Gazette.]

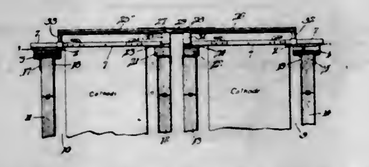
1,276,207. GATE. JERRY FUSSELMAN, Akron, Ohio. Filed Oct. 6, 1917. Serial No. 195,091. (Cl. 39—76.)



1. The combination of a crane; including a pivoted bar, a rod extending from the bar, and a strut extending from the bar and supporting the rod; and a strap interposed between the rod and the bar and having an extending bifurcated end, a vertical rod loosely held by the first rod and slidable therethrough and straddled by the bifurcated end, and a gate secured to the vertical rod.

2. The combination of a crane; including a pivoted bar, a rod extending from the bar, and a strut extending from the bar and supporting the rod; and a strap interposed between the rod and strut, said strap provided with bifurcated ends, one of said ends embracing the rod, a vertical rod pivotally engaged by the first rod and straddled by the other bifurcated end of the strap and a gate secured to the vertical rod.
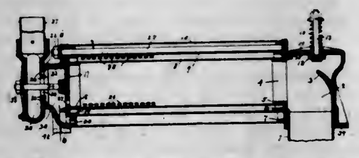
1,276,208. CONDUCTOR-BAR. JULIUS H. GILLIS, Anaconda, Mont., assignor to Anaconda Copper Mining Company, Anaconda, Mont., a Corporation of Montana. Filed Aug. 6, 1917. Serial No. 184,705. (Cl. 204—1.)



14. A conductor bar having substantially the form of an elongated rhombohedron, and rib portions having flat and uniform contacting areas, said rib portions being disposed on opposing sides of the rhombohedron.

[Claims 1 to 13 and 15 to 24 not printed in the Gazette.]

1,276,209. MUFFLER. EMMET P. GRAY, Detroit, Mich. Filed Mar. 30, 1918. Serial No. 225,635. (Cl. 121—116.)

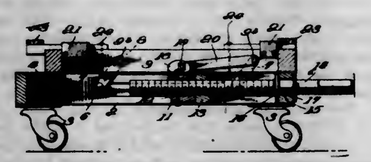


1. In a muffler the combination of a series of concentric cylinders, the interior cylinder having passages to permit the outward flow of exhaust gases, an inlet head at one end of the cylinders having a passage to conduct gases to the interior of the inner cylinder, an outlet head and a chamber on the outer side thereof, said outlet head being formed with a series of passages connecting said chamber to the chambers formed between the walls of the cylinders.

5. In a muffler, the combination with a series of concentric cylinders, the interior cylinder having passages to permit the outward flow of exhaust gases, an inlet head at one end of the cylinders having a passage to conduct gases to the interior of the inner cylinder, an outlet head and a rotatable chamber on the outer side thereof, said outlet head being formed with a series of passages connecting said chamber to the chambers formed between the walls of said cylinders, and means to hold said chamber in any desired position, the innermost passage in the outlet head being of less area than any of the others.

[Claims 2 to 4 not printed in the Gazette.]

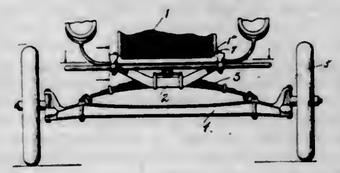
1,276,210. AUTOMOBILE-RAISING TRUCK. JACOB A. HAMELBACK, Newark, Ohio. Filed Mar. 20, 1917. Serial No. 156,114. (Cl. 254—10.)



1. In an automobile raising truck, the combination with a frame, of a secondary frame connected thereto, a cross-head slidably mounted on one of said frames and having an orifice, a yoke connected to said cross-head, a screw engaging said yoke and passing through said orifice, said screw mounted in one of the frames, and adapted to turn therein, and means connecting the cross-head to the other of said frames.

2. In an automobile raising truck, the combination with a frame, of links pivotally connected thereto, a secondary frame having slotted bars, said links extending into said slots, means passing through the slotted bars and links, for pivoting said links to the bars, means for moving said secondary frame with respect to the first, and extensions slidably mounted upon said secondary frame and having fastening means extending through said slots.

1,276,211. BUMPER FOR AUTOMOBILES. WILLIAM P. HAMMOND, Passaic, N. J. Filed May 22, 1916. Serial No. 99,087. (Cl. 293—55.)



1. A bumper supporting arm for use in connection with automobiles having a main frame which includes a transverse front body bolster and side bars connected to the extremities thereof and having a radiator formed with side lugs which are secured to the frame, said supporting arm terminating at the rear end thereof in a shoulder adapted to fit squarely against the front of the automobile frame, a downwardly extending arm being provided in alinement with the shoulder for obtaining an extended bearing upon the frame, and a side plate and top tang being provided, a top tang fitting over a side lug of the radiator, while the side plate extends along a side bar of the main frame.

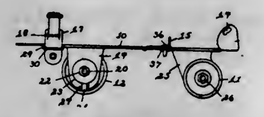
2. A bumper supporting arm for use in connection with automobiles having a main frame which includes a transverse channel shaped front body bolster and side bars connected to the ends thereof, said arm terminating at the rear end thereof in a shoulder adapted to fit squarely against the front of the bolster, a downwardly extending arm being provided in the plane of the shoulder for obtaining an extended bearing upon the bolster, and a side plate being also provided, the side plate fitting tightly against a side bar of the main frame, while the downwardly extending arm terminates in means for positively engaging the edge of the channel shaped bolster.

3. A bumper supporting arm for use in connection with automobiles having a main frame which includes a transverse channel shaped front body bolster and side bars connected to the ends thereof, and also having a radiator frame formed with side lugs, said supporting arm terminating at the rear end thereof in a shoulder adapted to fit squarely against the bolster and having a downwardly extending arm in the plane of the shoulder to obtain an extended bearing upon the bolster, a side plate and an upper tang being also provided at the read end of the arm, the tang fitting over a side lug of the radiator, while the side plate extends along a side bar of the main frame and is provided with a lateral wing for engagement with an edge of the side bar, the downwardly extending arm being provided at its end with means for positively engaging the edge of the channel shaped bolster.

4. A bumper supporting arm for use in connection with automobiles having a main frame which includes a transverse channel shaped front body bolster and side bars connected to the ends thereof, and also having a radiator frame formed with side lugs, said supporting arm terminating at its rear end in a shoulder adapted to fit squarely against the bolster, a downwardly projecting arm being provided in the plane of the shoulder for obtaining an extended bearing upon the bolster, and an upper tang and a side plate being also provided, the tang fitting over a side lug of the radiator while the side plate ex-

tends rearwardly from the lower end of the downwardly extending arm and fits against the side bar of the frame, an integral block being formed at the intersection of the arm and side plate for fitting in the channel shaped front body bolster.

1,276,212. ROLLER-SKATE. EMERY EASTMAN HARDY, Brooklyn, N. Y. Filed June 27, 1917. Serial No. 177,361. (Cl. 46—51.)



1. A roller skate having a frame made of sheet material, and the said frame comprising as integral connected parts a foot plate and front and rear wheel standards and the said standards being each connected to the foot plate through the medium of a connecting plate that serves to position the standard appreciably inwardly from the edge portion of the foot plate.

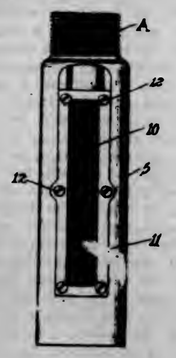
2. In a roller skate, a foot plate, rear heel lugs at the rear end thereof, clamping bracket guides on the lateral edges thereof, front wheel standards and rear wheel standards on the lower face thereof, the said foot-plate, lugs, guides, and standards being all integral parts of a unitary structure of sheet material and the said standards being connected by means of positioning plates with the said foot plate.

5. In a roller skate, a frame having a longitudinal slot, a front heel plate positioned generally above the said frame, having at one end a headed lug extending through the said slot, the head portion of the said lug being engaged with the under side of the said frame, and a clamping screw extending through the said slot and serving to hold the body portion of the said plate to the said frame.

6. In a roller skate, a pair of standards in spaced relation, a wheel positioned between the said standards, a shaft extending through the said wheel and also through each of the said standards and having clamping nuts at the ends, and a sleeve, concentric with the said shaft, serving as the bearing for the said wheel and as a spacer for the said standards.

[Claims 3, 4, 7, and 8 not printed in the Gazette.]

1,276,213. OIL-WELL STRAINER. BERT A. HARE, Bradford, Pa. Filed Jan. 10, 1918. Serial No. 211,157. (Cl. 166—6.)



1. An oil-well strainer of the character described, comprising a tubular shell having a plurality of apertures located in the sides thereof, screening means covering said apertures, retaining means covering the edges of the screening means and a compressible medium located between the screening means and the retaining means.

[Claim 2 not printed in the Gazette.]

1,276,214. COMBINATION WELDING AND CUTTING BLOWPIPE. JOHN HARRIS, Cleveland, Ohio. Filed Nov. 17, 1915. Serial No. 61,887. (Cl. 158—27.4.)



3. In a torch of the kind described, a tubular tip contracted at its outer end, its inner end being threaded internally and externally, the side walls of said tip being apertured adjacent its inner end, and a bored plug threaded into the inner end of said tubular tip as set forth.

[Claims 1, 2, and 4 not printed in the Gazette.]

1,276,215. NOSE-RING. ELMER T. HATTON, Ithaca, N. Y. Filed Mar. 20, 1918. Serial No. 223,592. (Cl. 119—135.)



A nose ring constructed of a single wire bent to form a circular open loop with one end extended radially outward to form an arm and its other end bent laterally in a plane at right angles to the plane of the loop to provide a hook to detachably engage said arm at its inner end.

1,276,216. ELECTRICAL CONNECTION. ELLSWORTH A. HAWTHORNE, Bridgeport, Conn. Filed May 20, 1915. Serial No. 29,418. (Cl. 173—322.)

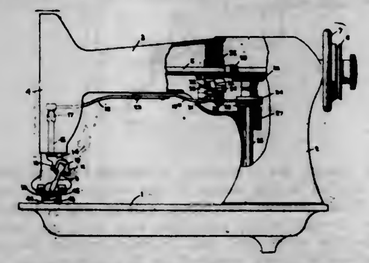


1. An electrical connection comprising a sleeve having an internally flanged bore, a contact plug seated in one end thereof and a wire holding device comprising a tubular member projecting from the other end and having a flange seated on the flange of said sleeve and a compressible neck and clamping means to compress said neck about a wire passed through said tubular member.

3. An electrical connection comprising a sleeve having a bore, a contact plug removably seated in one end thereof, a tubular member to receive a wire leading to the plug insertible in the sleeve from said one end and having provision preventing withdrawal from the other end, said member having a compressible portion projecting from said other end and means to compress the same about the wire which passes therethrough.

[Claim 2 not printed in the Gazette.]

1,276,217. BLINDSTITCH SEWING-MACHINE. THOMAS J. HAYES, Roslindale, Mass., assignor to Arbetter Felling Machine Company, Boston, Mass., a Corporation of Maine. Filed May 27, 1916. Serial No. 100,320. (Cl. 112—24.)



1. A blind stitch sewing machine for felling a superimposed layer upon a base layer of material comprising a work support, means for feeding the material over the work support, a needle and complemental stitch forming mechanism located above said work support, means for advancing the needle in its penetrating strokes in the general direction of feed and means for positioning the needle to cause it in one series of strokes to enter the superimposed layer substantially in parallelism with the edge thereof, and in another series of strokes to enter the base layer adjacent the edge of the superimposed layer in a direction diverging away from the edge of said layer.

8. A blind stitch sewing machine for felling a superimposed layer upon a base layer of material comprising a bed plate, a work support having its work supporting face inclined to the plane of the bed plate, means for feeding the material over the work support, a curved needle and a complemental stitch forming mechanism located above the work support, means for oscillating said needle in a plane inclined to the work supporting surface of the work support and to the vertical plane of the line of feed and means for positioning the needle to cause it in its penetrating movement in one series of strokes to enter the under surface of the superimposed layer beneath and in a direction substantially in parallelism with the edge thereof and in another series of stitches to enter the base layer adjacent the edge of the superimposed layer in a direction diverging from said layer.

[Claims 2 to 7 not printed in the Gazette.]

1,276,218. MALLET. CHARLES W. HOLBROOK, Providence, R. I., assignor to Holbrook Raw Hide Company, a Corporation of Rhode Island. Filed May 17, 1918. Serial No. 235,067. (Cl. 145—36.)



4. In a mallet of the type set forth, the combination of a metallic core, a sheath comprising spiral convolutions of rawhide tightly embracing the core and extending beyond the core, cores comprising spiral convolutions of rawhide fast in the extended portions of the sheath, rivets extending transversely of the sheath and the last mentioned cores, and a handle in the metallic core and sheath.

[Claims 1 to 3 not printed in the Gazette.]

1,276,219. PROCESS OF OBTAINING AROMATIC HYDROCARBONS. FLETCHER B. HOLMES, Woodbury, N. J., assignor, by mesne assignments, to E. I. du Pont de Nemours and Company, a Corporation of Delaware. Filed Apr. 27, 1915. Serial No. 24,330. (Cl. 23—24.)

1. The process which comprises treating a petroleum product containing aromatic hydrocarbons with an aromatic nitro-compound of such a nature as will separate the petroleum product into a part containing a higher percentage and a part containing a lower percentage of aromatic hydrocarbons than in the said petroleum product.

2. The process which comprises treating a petroleum product containing aromatic hydrocarbons with an aromatic nitro-compound of a higher degree of nitration than the mono-nitro-compound of such a nature as will separate the petroleum product into a part containing a higher percentage and a part containing a lower percentage of aromatic hydrocarbons than in the said petroleum product.

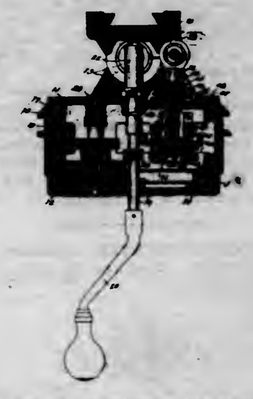
3. The process which comprises treating a petroleum product containing aromatic hydrocarbons with a liquid aromatic nitro-compound so as to separate the petroleum product into a part containing a higher percentage and a part containing a lower percentage of aromatic hydrocarbons than in the said petroleum product.

4. The process which comprises treating a petroleum product containing aromatic hydrocarbons with a liquid aromatic nitro-compound of a higher degree of nitration than the mono-nitro-compound so as to separate the petroleum product into a part containing a higher percentage and a part containing a lower percentage of aromatic hydrocarbons than in the said petroleum product.

5. The process which comprises treating a gasolene containing aromatic hydrocarbons with an aromatic nitro-compound of such a nature as will separate the gasolene into a part containing a higher percentage and a part containing a lower percentage of aromatic hydrocarbons than in the said gasolene.

[Claims 6 to 8 not printed in the Gazette.]

1,276,220. TRIPOD-HEAD MECHANISM. ALBERT S. HOWELL, Chicago, Ill., assignor to Bell & Howell Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 27, 1916. Serial No. 133,769. (Cl. 248—46.)



1. A tripod head comprising a leg carrying member, a plate carried thereby and rotatable about the axis thereof, a table carried by said plate and rotatable about an axis at an angle to the axis of rotation of said plate, independent actuating means for rotating said plate and said table, and an operating member capable of respective coaction with said actuating means and adapted to be maintained normally independent thereof.

4. A tripod head comprising a leg carrying element, a rotatable member carried thereby, a table supported on said member and rotatable about an axis at an angle to the axis of rotation of said member, a rocking frame carried by the member, a rotatable gear on said frame and capable of axial rotation independently of said frame, and a suitable device operatively connecting said table and said gear.

7. A tripod head comprising a leg carrying element, a member carried thereby and rotatable about the axis there-

of, a table supported on said member and rotatable about an axis at an angle to the axis of rotation of said member, spindles journaled in said member, a plurality of gears mounted on each spindle in train with each other, means operatively connecting said gear train and said member whereby the same is moved bodily with relation to said leg carrying element, means for rotating said table independently of said member, and driving mechanism adapted to successively actuate said table rotating means and said member actuating mechanism.

10. A panoramic tilting device, comprising a frame, a supporting platform mounted therein, a base for said frame and platform, means to rotate said frame relatively to said base, means to rotate said platform relatively to said frame, and a rotatable shaft common to said two rotation means to engage one or the other thereof and adapted to effect the corresponding rotation.

[Claims 2, 3, 5, 6, 8, 9, and 11 not printed in the Gazette.]

1,276,221. PLASTIC COMPOSITION. FREDERICK HUDSON, Philadelphia, Pa., assignor of one-half to Joseph A. Missar, Philadelphia, Pa. Filed May 20, 1918. Serial No. 235,674. (Cl. 106—24.)

1. A plastic composition comprising sand and powdered stone thoroughly mixed with litharge (PbO) in suitable proportions, the above being mixed with Chinese wood oil, kerosene oil and benzin.

2. A plastic composition comprising a mixture of burnt sand and powdered stone mixed with litharge (PbO), the above being thoroughly mixed with oil comprising Chinese wood oil, kerosene and benzin.

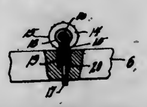
3. A plastic composition comprising a mixture of 99 parts of burnt sand and crushed stone and one part of litharge in powdered form, the above being mixed with an oil consisting of Chinese wood oil 50 parts, kerosene 35 parts and benzin 15 parts.

4. A plastic composition comprising a mixture of 90 pounds of powdered stone, 9 pounds of burnt sand, and one pound of litharge, mixed with 50 parts of Chinese wood oil, 35 parts of kerosene and 15 parts of benzin, approximately one quart of oil being added to every eight pounds of powder.

5. A process of making a plastic composition which consists in burning sand to a red heat, then crushing stone to the consistency of powder, then mixing the sand and powdered stone with litharge, then mixing the above in a proportion of eight pounds to one quart of an oil consisting of Chinese wood oil, kerosene and benzin.

[Claim 6 not printed in the Gazette.]

1,276,222. LUMBER-CONVEYER. RICHARD F. HUGUNIN, Spokane, Wash. Filed Apr. 30, 1918. Serial No. 231,598. (Cl. 193—55.)



The combination in a lumber conveyer with the conveyer frame, of a series of conveyer rolls, each said roll having a supporting stem and a journal head on the stem, and a protractile spring seated in a socket in the frame for resiliently supporting the roll.

1,276,223. CLOSURE. HERBERT H. HULL, Lakewood, Ohio, assignor, by mesne assignments, to Anchor Cap & Closure Corporation, Brooklyn, N. Y., a Corporation of New York. Filed Aug. 20, 1915, Serial No. 46,449. Renewed Oct. 16, 1917. Serial No. 196,974. (Cl. 215—81.)

7. A closure for containers, comprising a cap adapted to be applied to the mouth of the container and having an inclined projecting portion adapted to extend opposite the wall of the container, and a packing ring beside said inclined portion and adapted to be confined between the same and said wall of the container, the cap being of thin ductile metal foldable by axial pressure, and the inclined portion being movable with a wedge action across said ring when the cap is so folded, to press the ring against said wall.



8. A closure for containers, comprising a cap adapted to be applied to the mouth of the container and having an inclined portion extending axially and adapted to oppose the side of the container wall, said cap being of thin ductile metal and said inclined portion having a circumferential bead adapted to be collapsed by axial pressure, and a packing ring between said inclined portion and the container wall and across which the said portion is movable with a wedge action when said bead is collapsed.

9. A closure for containers, comprising a circular cap having at one edge thereof, a frusto-conical part projecting axially and adapted to oppose the side of the container wall, and also having a circumferential bead adjacent said edge, said frusto-conical part inclining from said edge at an angle with respect to the container wall, and a packing ring between said frusto-conical part and said wall, said bead being of thin ductile metal whereby it may be collapsed by axial pressure, to move said frusto-conical part across said ring with a wedge action.

10. A closure for receptacles, comprising a cap having a top portion adapted to rest on the rim of the receptacle and an inclined portion depending beside the wall of the receptacle, and a packing ring between said inclined portion and the side wall of the receptacle, said ring abutting against the top portion of the cap to prevent axial shift of the ring, and said inclined portion being shiftable axially with a wedge action across said ring, to press the same against the wall of the container.

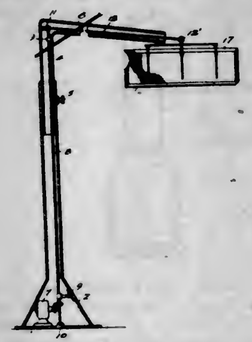
[Claims 1 to 6, 11, and 12 not printed in the Gazette.]

1,276,224. FIGURE TOY. JOSIAH ISAACS, Birmingham, England. Filed Dec. 23, 1916. Serial No. 138,671. (Cl. 46—40.)



A figure toy including the representation of an inimal, human figure or the like, a base plate, a spiral spring having one of its ends secured to said base plate, its opposite end being attached to the head of the figure, which head is suitably weighted whereby when the spring is compressed and released the figure will be, due to the inertia of the head, caused to be raised from the surface upon which the base plate rests.

1,276,225. AUTOMATIC FAN. HENRY JACKSON, Philadelphia, Pa. Filed Apr. 21, 1917. Serial No. 163,566. (Cl. 230—1.)



In combination an automatic fan, a support, a plurality of interconnected blades pivotally connected to said support, bearing pintles formed integral with a marginal side portion of the blades, a foraminated hood engaged with said pintles, operating means arranged in the support, and means extending from said operating means into engagement with one of said blades for oscillating all of the same.

1,276,226. PROCESS OF PREPARING ETCHED OR ENGRAVED PLATES. BURGOYNE JONES, Hinsdale, Ill., assignor to Jahn & Oller Engraving Company, a Corporation of Illinois. Filed Apr. 20, 1916. Serial No. 92,548. (Cl. 95—5.7.)



1. The process of preparing an etchable or engravable plate to receive a design, which consists in first providing a plate with a portion of its surface relatively higher than another portion thereof according to the relative position of the lights and shadows in the intended design.

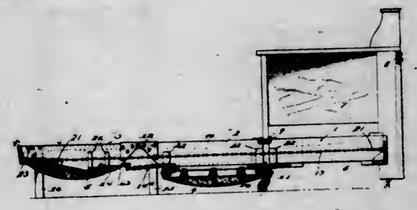
3. The process of preparing an etchable or engravable plate to receive a design, which consists in printing the design upon the surface of a plate, providing portions of the surface with a protecting covering according to the relative position of the lights and shadows in the design, acting upon the unprotected portions of such surface to cut them away, and then reprinting the design upon the plate.

4. The process of preparing an etchable or engravable plate to receive a design, which consists in making an impression of the design upon a plate by a photographic process, then protecting a portion of the surface by a chemical resisting covering according to the relative position of the lights and shadows in the design, then subjecting the plate to the action of chemicals to cut away unprotected portions of its surface and then reprinting the design upon the entire surface.

[Claims 2 and 5 not printed in the Gazette.]

1,276,227. CONVERTIBLE FURNITURE. WILLIAM J. KELLY, Clinton, Iowa. Filed May 15, 1917. Serial No. 168,876. (Cl. 5—48.)

1. In convertible furniture of the type set forth, an inner stationary section having upright side members, an intermediate section hinged at the front of the stationary section and adapted to serve as a davenport seat, an outer section hinged to the intermediate section and adapted to serve as a davenport back, said intermediate and outer sections being foldable between said side members and having the adjacent end faces of their side bars oppositely beveled, adjusting screws projecting from one of said beveled faces and adapted to engage the companion beveled face when the sections are folded, and a supporting part carried by the stationary section against which the outer section rests when the sections are folded.



2. In convertible furniture of the type set forth, an inner stationary section having side members, an intermediate section hinged at the front of the stationary section and adapted to serve as a davenport seat, an outer section hinged to the intermediate section and adapted to serve as a davenport back, said intermediate and outer sections having the adjacent end faces of their side bars beveled to permit the folding of said sections into right angular relation, a chain extending between the adjacent cross-bars of said sections to prevent their unfolding movement beyond the co-planar relation, and means for withdrawing said chain into the space behind said outer and intermediate sections during the folding thereof.

1,276,228. LINE-WIRE CONNECTOR. JAMES CONDON KEENAN and MICHAEL HENRY KEENAN, Toronto, Ontario, Canada. Filed Sept. 11, 1917. Serial No. 190,859. (Cl. 173—313.)

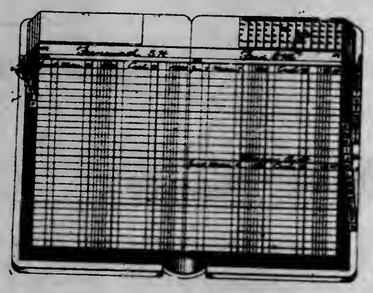


In combination with an insulator a line wire connector comprising a pair of split sleeve-like portions having the split edges of the sleeves formed into out-turned lips having their inner ends turned up to form an entering recess, and an interconnecting band extending between the inner ends of the sleeves and adapted to fit into the groove of the insulator.

1,276,229. VISIBLE-ACCOUNT BOUND LEDGER. SIMEON B. KIRTLEY, Columbia, Mo. Filed Jan. 29, 1917. Serial No. 145,040. (Cl. 11—7.)

1. A visible account bound ledger or book, comprising a series of master index sheets cut away in stepped relation to provide visible spaces, designations of the page numbers permanently affixed upon the visible spaces, and master indexes also permanently affixed upon the visible spaces for identifying the accounts which may be entered on the pages, in combination with a series of overflow sheets between the master index sheets cut away in stepped relation to provide visible spaces adjacent to the visible spaces and master indexes upon the master index sheets adapted to have entered therein page numbers governed by and relating to the page numbers on the master index sheets.

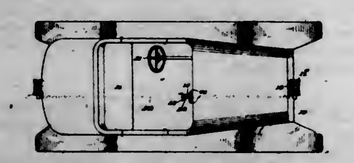
3. A visible account bound ledger or book, comprising series of sub-divisions of master index sheets in which each series is cut away in stepped relation to provide visible spaces upon the respective sheets, designations of the page numbers permanently affixed upon the visible spaces, index characters for the accounts permanently affixed upon the visible spaces, and a number of blank overflow sheets at the end of each series of master index sheets adapted to have entered therein accounts transferred or overflowing from the master index sheets.



6. A visible account bound ledger or book, comprising series of master index sheets cut away in stepped relation to provide visible spaces, designations of the page numbers permanently affixed upon the visible spaces, master indexes permanently affixed upon the visible spaces adjacent to the page numbers, visible spaces adjacent to the master indexes adapted to have entered therein designations of the pages to which accounts are transferred from the master index sheets, series of overflow sheets between the master index sheets cut away in stepped relation to provide visible spaces adjacent to the visible spaces and designations of page numbers on the master index sheets adapted to have entered thereon designations of the page numbers governed by and relating to the master index pages and corresponding to the page numbers entered in said spaces adjacent to the master indexes as aforesaid, and also provided with visible spaces for receiving identifying characters or indexes corresponding to the identifying characters or indexes upon the master index sheets.

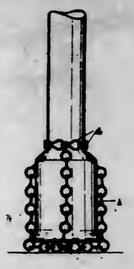
[Claims 2, 4, and 5 not printed in the Gazette.]

1,276,230. DIRECTION-INDICATOR. JOHN KRALOVICH, Binghamton, N. Y. Filed Nov. 12, 1917. Serial No. 201,512. (Cl. 40—77.)



In combination with a vehicle, a direction indicating drum journaled thereon having day and night direction indications, a position indicating dial fixed upon the vehicle with night and day position indicating points, a stub shaft operatively connected to the said drum concentrically journaled in the said dial, an indicating finger upon the said stub shaft having a path of movement adjacent the dial and adjustable stop pins for the finger arranged in one position during the day time and in another position when the device is adapted for indicating directions of travel during the night time.

1,276,231. ANTISLIP DEVICE FOR CRUTCH-TIPS. THOMAS J. LE CRAS, Toronto, Ontario, Canada. Filed Jan. 14, 1918. Serial No. 211,866. (Cl. 156—53.)



1. The combination with a rubber crutch tip provided with a circular tread of an antislip device comprising a ring formed of a plurality of flexibly connected links, a chain connected to each link of the ring, and a fastening band to which the chains are connected, the chain links underneath the tread being so proportioned and the ring of such a diameter that single links of the connecting chains extend from the ring to the edge of the tread.

2. The combination with a rubber crutch tip provided with a circular tread of an antislip device comprising a ring formed of a plurality of flexibly connected links, a chain connected to each link of the ring, and a fastening band to which the chains are connected, the chain links underneath the tread comprising each an eye adapted to lie parallel to the tread surface and an eye adapted to stand at right angles thereto, the links also being so proportioned and the ring of such a diameter that single links of the connecting chains extend from the ring to the edge of the tread.

1,276,232. BUCKLE. SIGMUND L. LEDERER and GEORGE U. MEYER, Providence, R. I., assignors to Providence Stock Company, Providence, R. I., a Corporation of Rhode Island. Filed Feb. 16, 1918. Serial No. 217,499. (Cl. 24—191.)

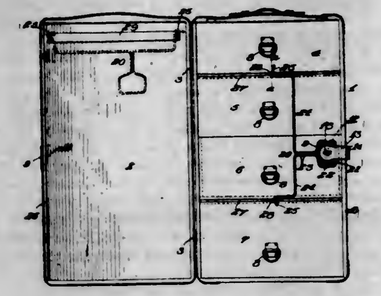


A buckle for band bracelets comprising a frame having a binding bar to which one end of the bracelet band is connected and also over which a second part of the band is also passed, said frame having an outer pivot bar offset laterally from the plane of said binding bar, and a lever plate having a gripping lip offset laterally from its inner face, said plate being hinged to said pivot bar whereby said lip is positioned to swing and bind one part of the band upon the other against said bar and to snap inwardly past said bar to lock the lever in closed position.

1,276,233. TRUNK-DRAWER LOCK. HENRY LIKLY, Rochester, N. Y., assignor to Henry Likly & Company, Rochester, N. Y., a Corporation of New York. Filed Mar. 4, 1918. Serial No. 220,112. (Cl. 45—94.)

1. A trunk drawer lock comprising a catch on one of the drawers, and an operatively similar catch on the openable trunk cover, in combination with a hasp lock on one trunk section adapted to lock with either the closed trunk cover catch or the catch on the aforesaid drawer of the opened trunk.

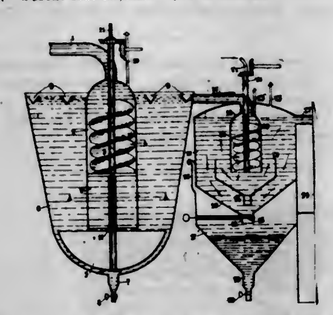
2. A trunk drawer lock comprising a catch on one of the drawers, and an operatively similar catch on the openable trunk cover, in combination with a hasp lock on one trunk section adapted to lock with either the closed trunk cover catch or the catch on the aforesaid drawer of the opened trunk, and an auxiliary latch device applicable to the aforesaid drawer catch and having parts then overlying one or more adjacent drawers, whereby a plurality of trunk drawers may be locked closed simultaneously when the hasp lock is engaged with the first named drawer catch.



3. A trunk drawer lock comprising a catch on one of the drawers, and an operatively similar catch on the openable trunk cover, in combination with a hasp lock on one trunk section adapted to lock with either the closed trunk cover catch or the catch on the aforesaid drawer of the opened trunk, and an auxiliarly latch device applicable to the aforesaid drawer catch and having parts then overlying one or more adjacent drawers, whereby a plurality of trunk drawers may be locked closed simultaneously when the hasp lock is engaged with the first named drawer catch; said auxiliary drawer latch device having opposite end hooks adapting it for suspension upon hanger supports in the trunk wardrobe section to then serve as a garment hanger.

4. In a trunk, the combination of a drawer section having a plurality of drawers supported therein, a wardrobe section hinged to the drawer section, a hasp lock adapted to engage either the wardrobe section or one of said drawers, and means coöperating with said hasp lock for locking all of said drawers.

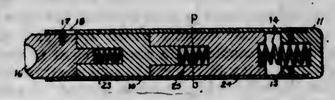
1,276,234. APPARATUS FOR PURIFYING WATER. LUCIEN LINDEN, Putney, London, England, assignor to William J. Stewart, Belfast, Ireland. Filed July 9, 1915. Serial No. 39,030. (Cl. 210—1.)



1. In combination in apparatus for purifying liquids, an open topped vessel, a tubular member open at the bottom positioned vertically therein and extending from the top to near the bottom thereof, a conduit conveying a liquid already mixed with a precipitant to the top of said member, means for producing vigorous turbulence of the liquid moving down the upper portion of said member and means for rapidly stilling said turbulence at the lower part of said member to transfer the liquid therefrom to said vessel in a state of slow uniform upward motion.

[Claims 2 to 6 not printed in the Gazette.]

1,276,235. DOLLY-BAR. JOSEPH D. LORANGER, Central Falls, R. I. Filed Jan. 12, 1918. Serial No. 211,665. (Cl. 78—53.5.)



1. A dolly-bar comprising a body portion formed of a sleeve having a fixed head at one end, a relatively light anvil-block slidably mounted in the opposite end of said sleeve, a relatively heavy inertia-block slidably mounted intermediate said anvil and head, and cushioning members interposed between said inertia-block and head and between said inertia and anvil blocks.

2. A dolly-bar comprising a body portion formed of an elongated sleeve having a fixed head at one end, an anvil block slidably mounted in the opposite end of said sleeve, a relatively heavy inertia-block slidably mounted in said sleeve between said head and anvil, said inertia-block being divided into a plurality of members, a spring interposed between each of said members, a spring interposed between the outer member of the inertia-block and the head, and a spring interposed between the inner member of the inertia-block and the anvil-block.

1,276,236. WRENCH. ALFRED B. LORD, Cambridge, Mass., assignor of one-third to F. J. Pickman and one-third to William A. Southam, Cleveland, Ohio. Filed Dec. 17, 1917. Serial No. 207,570. (Cl. 81—177.)



1. A wrench comprising outer and inner shank handle members provided with outer and inner jaws respectively, said members being fastened together at their rear ends, the outer member having a forwardly presented shoulder on its inner edge, and the inner member having a coöperating rearwardly presented shoulder on its edge adjacent the outer member, said members being adapted to spring together in use to engage said shoulders with each other.

2. A wrench comprising inner and outer shank handle members provided with inner and outer jaws respectively at their front ends and adapted to spring toward each other under pressure, said members having a dovetail connection between each other at their rear ends.

1,276,237. WORM-GEARING. RALPH M. LOVEJOY, Meredith, N. H. Filed Sept. 25, 1915. Serial No. 52,701. (Cl. 74—79.)



1. A worm gearing comprising a worm, a coöperating rotatable member having a gear segment adapted to engage said worm, a spring for forcing the gear segment into intimate contact with the threads of the worm and means for preventing undesirable displacement of the segment

relatively to said rotatable member upon the removal of the worm from engagement with said segment.

3. In a steering gear or controlling device, a steering shaft, a rectangular member integral therewith and having parallel guiding faces, a gear segment having a slotted portion engaging and slidably keyed upon said member, guiding means for causing said gear segment to retain the same angular position in respect to said shaft, a worm engaging said segment and a spring seated between said member and said gear segment adapted to maintain the gear teeth in intimate contact with the threads of the worm and means for preventing disengagement of said gear segment from said worm.

6. A steering gear or controlling device comprising a steering shaft, a rectangular member rigid therewith having keys secured thereto, a gear segment slotted from the end opposite the teeth to fit slidably said rectangular member, a radial recess extending farther into the gear from the bottom of said slot, a spring in said recess engaging said rectangular member, a gear casing surrounding said gear segment, a worm mounted in bearings in said casing engaging said gear segment whereby said spring will maintain the teeth of said gear in engagement with the threads upon the worm.

[Claims 2, 4, and 5 not printed in the Gazette.]

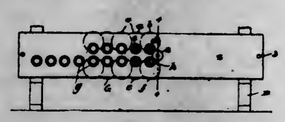
1,276,238. HYGIENIC GARMENT-SUPPORTER. LILLIAN CROCKETT LOWDER, Indianapolis, Ind. Filed Aug. 14, 1915. Serial No. 45,550. (Cl. 241—2.)



1. An improved hygienic garment supporter comprising a main part having a fastener connected directly to one end thereof, a front part, two metallic links secured directly to the two opposite edges of the front part, a side part secured at one end directly to the opposite end of the main part, a second side part having a connecting device on one end thereof to engage said fastener, the side parts extending through the links respectively, two buckle frames directly connected to the opposite end portions of the side parts respectively, and securing devices connected to said frames to directly engage said side parts respectively.

[Claim 2 not printed in the Gazette.]

1,276,239. MECHANICAL CALCULATOR. THOMAS ARTHUR MCCARTHY, Toronto, Ontario, Canada. Filed June 14, 1918. Serial No. 240,039. (Cl. 35—2.)

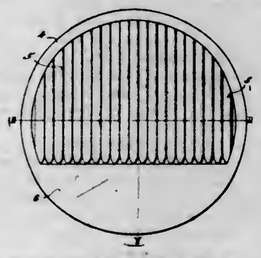


1. A device of the class described comprising an upper plurality of rotary elements each provided with the following arithmetical characters: 1, 2, 3, 4, 5, 6, 7, 8, 9, 0, spaced as shown; a lower plurality of like character-provided rotary elements; means supporting said elements in coöperative relationship, and means whereby said upper and lower plurality of rotary elements are relatively moved so as to bring into alinement the required figures of the multiplier and multiplicand, for the purpose specified.

4. A device of the class described comprising an upper plurality of disks each provided with the following arithmetical characters 1, 2, 3, 4, 5, 6, 7, 8, 9, 0 spaced as shown; a suitable support; means whereby each of the said disks is rotatably mounted in alinement in said support; a lower plurality of disks marked as described; a movable member mounted to travel longitudinally of said suitable support; means carried by said movable member whereby said lower plurality of disks are rotatably mounted in alinement therein; a cover carried by said suitable support to inclose said disks and provided with upper and lower rows of alined holes, and means whereby the supporting member for said lower plurality of disks is moved longitudinally of said suitable support so that any given disk in said lower plurality may be positioned to co-act with any given rotary disk in said upper plurality and with the numerals of said disks arranged to visually disclose the required multiplier and multiplicand through their respective holes formed in said cover, for the purpose specified.

[Claims 2 and 3 not printed in the Gazette.]

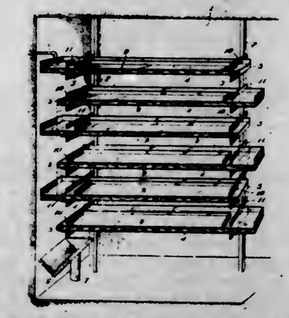
1,276,240. LAMP CONSTRUCTION. GEORGE A. MACBETH, Pittsburgh, Pa., assignor to Macbeth-Evans Glass Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Dec. 23, 1914. Serial No. 878,660. (Cl. 240—48.4.)



1. In combination in a lamp having a source of illumination, a lens having its upper portion provided with vertical refracting ridges and its lower portion plain, the upper portion of the lens carrying the ridges being thicker than the lower portion.

[Claims 2 to 5 not printed in the Gazette.]

1,276,241. METHOD OF REGULATING THE HUMIDITY OF AIR IN CHAMBERS. PAUL MANDEVILLE, Chicago, Ill., assignor to The Paul Mandeville Co., Chicago, Ill., a Corporation of Illinois. Filed Nov. 30, 1917. Serial No. 204,715. (Cl. 183—119.)

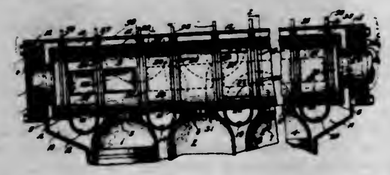


1. The method of regulating the humidity of the air in a chamber containing a temperature-varying liquid having its surface exposed to the atmosphere, which consists in varying the area of such surface exposed to the atmosphere.

4. The method of regulating the humidity of the air in a chamber which consists in flowing a temperature-varying liquid through such chamber with its surface exposed to the atmosphere and varying the area of such liquid exposed to the atmosphere by covering more or less of such area with a heat conducting member placed in contact therewith.

[Claims 2, 3, 5, and 6 not printed in the Gazette.]

1,276,242. ROTARY VALVE FOR INTERNAL-COMBUSTION ENGINES. ALFRED N. MASSEY, San Francisco, Cal. Filed Feb. 21, 1917. Serial No. 150,160. (Cl. 123—190.)



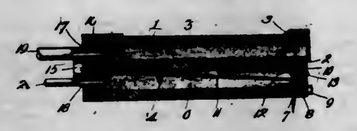
2. The combination of an engine cylinder, a valve chamber in communication with the cylinder, intake and exhaust ports communicating with the chamber, a rotary valve disposed in the valve chamber and having its face spaced from the walls of the chamber to provide a clearance, packing rings on the valve and arranged to lie between said ports and the port of the cylinder for solely preventing leakage of gas between the ports, said valve having passages for communicating said ports with the cylinder and means for preventing the passage of gas between said ports and passages except when the latter are in registration.

11. The combination of a grooved body, a packing member mounted in said groove and comprising a main body portion having end portions movable thereon, means tending to move said main body and end portions outwardly from the groove, and wedge members normally tending to move said end portions laterally relatively to said main body portion.

12. In combination, a valve chamber, a valve member rotatably mounted in said chamber, and circumferential packing members arranged in groups on said valve member and being spaced relative to each other, said valve chamber having passages therethrough admitting lubricant to the surface of the valve between the packing members of each group.

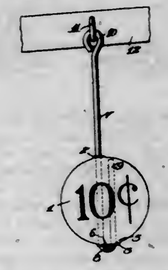
[Claims 1 and 3 to 10 not printed in the Gazette.]

1,276,243. OIL-BURNER. EDWARD R. MAYER, Amarillo, Tex., assignor of one-half to J. C. Storm, Amarillo, Tex. Filed July 13, 1917. Serial No. 180,447. (Cl. 158—75.)



An oil burner provided with a pair of superposed passages and recessed below the front end of the upper passage to provide a drip shoulder therefor forward of the discharge end of the lower passage, a removable block secured across the front end of the lower passage and leaving uncovered a part of same to form an outlet for discharging a broad and thin sheet of fluid, and a perforated partition secured to said removable block and extending upwardly and rearwardly within the said lower passage.

1,276,244. TAG AND HOLDER. JOHN L. MENCH, Rochester, N. Y., assignor to Duffy-Powers Company, Inc., Rochester, N. Y., a Corporation of New York. Filed Jan. 21, 1918. Serial No. 212,881. (Cl. 40—20.)



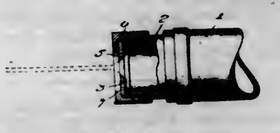
1. A tag and holder comprising a holder having at one end of its stem an open loop, and a detachable indicating disk or plate provided at one portion with an aperture loosely fitting the holder stem and having at another portion a like aperture loosely fitting one limb of the holder loop and an adjacent notch or open slot loosely engaging the opposite limb of said loop when the disk or plate is normally adjusted on the holder.

2. A tag and holder comprising a holder having at one end of its stem an open loop, and a detachable indicating disk or plate provided with opposed laterally projecting lips, one lip having an aperture loosely fitting the holder stem and the other lip having a like aperture loosely fitting one limb of the holder loop and also having an adjacent notch or open slot loosely receiving the opposite limb of said loop when the disk or plate is normally adjusted on the holder.

3. A tag and holder comprising a holder having at one end of its stem an open loop, and a detachable indicating disk or plate provided with opposed laterally projecting lips, one lip having an aperture loosely fitting the holder stem and the other lip having a like aperture loosely fitting one limb of the holder loop and also having an adjacent notch or open slot loosely receiving the opposite limb of said loop when the disk or plate is normally adjusted on the holder, said holder loop having a length approximating the height of the indicating disk or plate to be mainly concealed thereby when the tag is in use.

4. In a tag, the indicating disk or plate having opposed laterally projecting lips, one lip having an aperture adapted to receive a holder stem and the other lip having a like aperture adapted to loosely engage one limb of a loop on the holder and also having an adjacent notch or open slot adapted to receive the opposite limb of said holder loop.

1,276,245. SPRAYING-NOZZLE. BRUCE E. MILLARD and FRANK B. TAYLOR, San Diego, Cal., assignors of one-half to Gilmour Sharp, San Diego, Cal. Filed Nov. 3, 1916. Serial No. 129,322. (Cl. 137—17.)



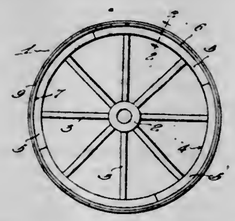
A spraying nozzle comprising a disk having a substantially rectangular opening extending from one face thereof to the other, and arranged diametrically thereof, the said opening having its end walls inclined and converging toward the outer face of the disk and having its side walls approximately parallel, means for connecting the disk to the end of a pipe, and a packing in connection with the said means, said means comprising a ring having threaded engagement with the pipe and having an inwardly extending flange engaging the edge of the disk to hold the disk in place.

1,276,246. SELF-PROPELLED SLEIGH. HENRY W. MISHOE and LEONIDAS W. MANSELL, West Enfield, Me. Filed Feb. 16, 1915, Serial No. 8,591. Renewed Feb. 8, 1918. Serial No. 216,140. (Cl. 180—6.)



In a device of the class described, the combination with a runner, an axle, a drive wheel on said axle, a casing on said runner, a hub on said wheel extending into said casing, a hub block mounted for vertical movement in said casing and a revoluble support on said hub, the lower portion of said block being wedge shape, a pair of oppositely disposed adjusting blocks mounted in said casing and being beveled at their adjacent ends for engagement with the opposite sides of said wedge portion of said hub block, means for adjusting said blocks toward and away from said hub block, and means for rotating said axle.

1,276,247. TIRE FOR VEHICLE-WHEELS. JAMES CHRISTOPHER MOONEY, Hot Springs, Ark., assignor of one-half to Chester S. Rouse, Hot Springs, Ark. Filed Feb. 12, 1917. Serial No. 148,191. (Cl. 21—155.)



The combination with a wagon wheel felly formed of a plurality of arcuate sections abutting each other at their ends, of a flat inner tire surrounding said felly and formed of similar arcuate sections extending over the joints between said felly sections, each of said tire sections having on its edges a pair of inwardly extending flanges extending throughout its length and spaced apart a distance equal to the greatest width of the felly, said flanges contacting with the opposite sides of said felly to hold the sections thereof in alinement, the longitudinal centers of each tire section having an external V-shaped rib extending throughout its length and of less width than the tire, the sides of said rib being disposed at an obtuse angle to each other, and a flat outer one-piece tire snugly surrounding said inner tire and shrunk thereon, said outer tire being equal in width to said inner tire and having a central internal V-shaped groove snugly receiving the rib of the inner tire, the circumference of the inner tire at the vertex of the rib being substantially the same as the internal circumference of the outer tire when expanded by heat.

1,276,248. MINING-MACHINE. EDMUND C. MORGAN, Morgan Park, Ill. Filed June 27, 1910, Serial No. 569,167. Renewed Aug. 4, 1915. Serial No. 43,696. (Cl. 125—14.)

9. In a mining machine, the combination with a pick, of mechanism for operating the same, a support for said pick, mechanism comprising a wheel having an actuating pin projecting therefrom for oscillating said support together wtih said pick, and means for adjusting the position of said pin radially on said wheel to regulate the extent of oscillation of said pick.

17. In a mining machine, the combination with a pick machine, of means for operating the same, and gearing comprising a circular groove with the end of a crank movable therein for oscillating said pick machine.

21. In a mining machine, the combination with a pointed picking tool, of a rod for carrying the same, a spring associated with said rod, involute cam mechanism for compressing said spring and suddenly releasing the same to cause said picking tool to strike a blow against an upright mine wall to break down material therefrom, and means operable independently of the operation of said cam mechanism for moving said rod in an arc on its own axis during the operation of said picking tool.

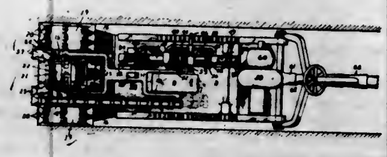


23. In a mining machine, the combination with a base frame, of a reciprocable carriage mounted thereon, an under-cutting kerf-cutter mounted on said carriage, spaced-apart upright kerf-cutters mounted on said carriage, a pick machine mounted on said carriage, means for operating said pick machine between said side cutters and above said under-cutter, means for automatically oscillating said pick machine as a whole continuously up and down, a platform for receiving the broken-down material directly from its native position in the upright mine wall operated on by said pick machine, and means for conveying the broken-down material from said platform where received toward the rear of the mining machine.

24. In a mining machine, the combination with supporting framework, of an under-cutting kerf-cutter mounted thereon, spaced-apart upright kerf-cutters mounted on said framework to coöperate with said under-cutting kerf-cutter to cut a U-shaped kerf in an upright mine wall, a traveling conveyer having superposed portions traveling in opposite directions from a forward receiving position within the boundary of the under-cutting kerf-cutter and extending rearwardly on an upward incline toward loading position with a free and unobstructed space above the conveyer for the passage of large blocks of material from the mine wall toward loading position, spaced-apart pick machines mounted laterally of the conveyer without obstructing the passageway of said conveyer but comprising picking tools each arcuately movable toward and from the upright planes of the side kerfs, means for operating said pick machines, and mechanism for arcuately adjusting said picking tools to break down onto the receiving end of said conveyer substantially all of the material within the boundary of said kerfs.

[Claims 1 to 8, 10 to 16, 18 to 20, 22, and 25 to 29 not printed in the Gazette.]

1,276,249. MINING-MACHINE. EDMUND C. MORGAN, Morgan Park, Ill. Filed Aug. 15, 1910. Serial No. 577,134. (Cl. 125—14.)



1. The combination with rotary cutting mechanism comprising a plurality of cutters and rotatable in a given plane during the cutting operation, of means for supporting said mechanism, and a cam groove for positively shifting the plane of rotation of said cutters during a predetermined portion of their rotary travel and for positively confining the cutters in a predetermined position during the cutting operation and preventing lateral movement thereof except as determined by said groove.

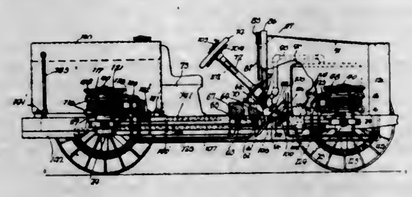
8. In a mining machine, the combination with a rotary cutter head, of a support therefor, a plurality of cutters rigidly connected to said cutter head, additional cutters pivoted to the peripheral portion of said rotary cutter head in planes outside of said fixed cutters, means acting independently of gravity for positively moving said additional cutters toward each other, and means for positively holding said additional cutters in their paths of travel.

12. In a mining machine, the combination with a rotary shaft, of three drums spaced apart from each other and mounted on said shaft to rotate therewith, a plurality of cutters on each of said drums, bearings for said shaft between the intermediate drum and the drums on the end portions of said shaft, a forked support for said bearings, aditional cutters for cutting the mine wall in the planes of the arms of said forked support, means for moving said additional cutters out of the way of said arms when said cutters are passing over the rear portions of their paths of travel, a sprocket connected to said shaft to rotate therewith, a chain cutter mounted on said sprocket between one arm of said forked support and one of the outer drums, and means for operating said chain cutter to transmit power simultaneously to said drums and additional cutters.

13. In a mining machine, the combination with rotary cutting mechnaism comprising a multiplicity of cutters operating in juxtaposed planes and extending entirely across a mine wall, of a movable support for said rotary cutting mechanism, a motor, means connected between said motor and said rotary cutting mechanism for operating the latter, and means connected between said motor and said movable support for automatically and continuously oscillating the latter together with said rotary cutting mechanism carried thereby.

[Claims 2 to 7 and 9 to 11 not printed in the Gazette.]

1,276,250. MOTOR-VEHICLE. AUGUST E. MUELLER, Chicago, Ill., assignor of one-third to Thomas J. Hruby and one-third to John O. Hruby, Jr., Chicago, Ill. Filed July 22, 1916. Serial No. 110,642. (Cl. 180—45.)



1. In a motor vehicle, the combination with the chassis embracing a fixed axle frame; castings fitted to the ends of said frame, stub axles pivoted to said castings by vertical pivots, and wheels on said axles, of motors supported directly on said castings with their shafts vertically alined with the stub axle pivots; intermeshing gears on the motor shafts and wheels, and a steering gear operatively connected to said stub axles.

4. A motor driven vehicle comprising a chassis; stub axles pivoted thereto; wheels mounted on said axles; rotary motors mounted on the chassis and rotating on axes alined with the pivotal axes of the stub axles; gears on the wheels; gears detachably fixed to the motor shafts and meshing with the wheel gears, whereby gears having gear teeth disposed at different distances from the axes of rotation of the wheels may be interchangeably applied to the motor shafts to mesh with gears of different diameters of wheels that are adapted to be interchangeably applied to the stub axles, and a steering gear operatively connected to said motor shafts.

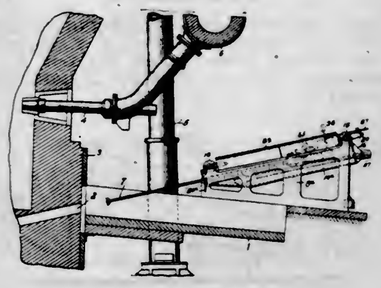
8. A motor driven vehicle comprising a chassis; supporting and steering wheels therefor; rotary steam motors operatively connected to the wheels to drive the same, said motors being provided on opposite sides of their rotors with ahead and reverse steam inlets and with exhaust ports; a steam boiler supported on the chassis; a distributing and controlling valve communicating with said boiler; pipes leading from said valve and branched toward said motors, said branches provided with forked terminals which extend on opposite sides of the motors for connection to the ahead steam inlet ports of the motors; other pipes leading from said valve and branched for connection to the opposite reverse inlet ports of the motors; operating means for said valve, and exhaust pipes leading from the exhaust ports of the motors.

10. A motor vehicle comprising a chassis; supporting wheels therefor; steam motors, one for each wheel; a steam boiler supported on the chassis; a distributing and controlling valve communicating with the boiler; pipes connecting said valve to the inlet ports of said motors; operating means for said valve to simultaneously control the supply of steam to all the engines; a condenser supported on the chassis, and exhaust pipes connecting the exhaust ports of the motors with said condenser.

13. A motor vehicle comprising a chassis; supporting and steering wheels therefor; steam motors, one for each wheel; operative connection between the motors and wheels to drive them; a steam boiler supported on the front end of the chassis; a hood inclosing said boiler, a distributing valve communicating with the boiler; pipes connecting said valve to the ahead inlet ports of the motors; other pipes connecting said valve to reverse inlet ports of the motors; operating means for said valve; a condenser supported on the chassis in front of the engine; pipes leading from the exhaust ports of the engine to the condenser; a water tank supported on the rear end of the chassis, and a pipe connecting the water tank to the boiler.

[Claims 2, 3, 5 to 7, 9, 11, and 12 not printed in the Gazette.]

1,276,251. MACHINE FOR TAPPING BLAST-FURNACES. BENJAMIN J. MULLEN, Leetonia, Ohio. Filed Jan. 28, 1915. Serial No. 4,918. (Cl. 121—10.)



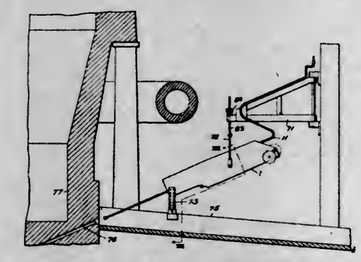
5. In a machine for tapping blast furnaces, the combination of a frame, a reciprocatory fluid pressure engine mounted for longitudinal movement thereon and comprising a cylinder and a piston, feed screw connections between said frame and engine, means for attaching a tapping tool to said piston, and means coördinated with the reciprocation of said piston for effecting an intermittent forward advance of said engine upon said feed screw.

6. In a machine for tapping blast furnaces, the combination of a frame, a reciprocatory fluid pressure engine mounted for longitudinal movement thereon and comprising a cylinder and a piston, means for attaching a tapping tool to said piston, a feed screw rotatably mounted in said frame and operatively connected to said cylinder,

and means coördinated with the reciprocation of said piston for effecting an intermittent turning of said feed screw to automatically feed said cylinder forwardly.

[Claims 1 to 4 not printed in the Gazette.]

1,276,252. MACHINE FOR TAPPING BLAST-FURNACES. BENJAMIN J. MULLEN, Leetonia, Ohio. Filed Aug. 18, 1915, Serial No. 46,107. Renewed June 6, 1918. Serial No. 238,604. Cl. 121—10.)

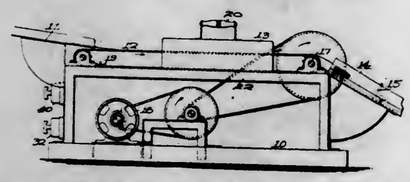


1. In a machine for tapping blast furnaces, the combination of an elongate frame, a fluid pressure cylinder mounted for longitudinal movement upon the rear portion of said frame and provided with a reciprocatory piston, means for moving said cylinder forwardly and rearwardly upon the frame, a motive fluid supply conduit secured to the frame and extending from the rear to the front thereof and thence, rearwardly parallel to the line of advance of the cylinder, and a second conduit secured to said cylinder and telescoping with said rearwardly extending portion of the first named conduit.

10. In a machine for tapping blast furnaces, the combination of a frame, a fluid pressure cylinder mounted for longitudinal movement upon said frame and provided with a reciprocatory piston, means for attaching a tapping tool to said piston, a feed screw rotatably mounted in said frame, and operatively engaging said cylinder, a motor, and double driving connections between said motor and screw, each of said connections including a magnetic clutch.

[Claims 2 to 9 not printed in the Gazette.]

1,276,253. MACHINE FOR EMBOSSING WITHOUT DIES. PAUL NATHAN, New York, N. Y., assignor to Wood, Nathan & Virkus Company, New York, N. Y., a Corporation of Virginia. Filed Oct. 10, 1914. Serial No. 866,172. (Cl. 34—12.)

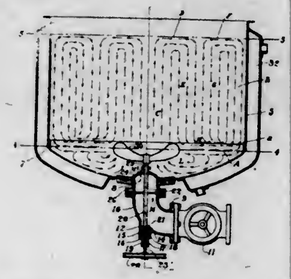


3. In a machine of the character described, the combination of a table, a conveyer above it for carrying the sheets, and an oven located on the table and comprising heating means above and below the conveyer and a hood adapted to be set down over the same on the table and removable therefrom by a direct upward motion.

[Claims 1, 2, and 4 to 7 not printed in the Gazette.]

1,276,254. MIXING OR STIRRING MEANS. NIELS D. NIELSEN, Elyria, Ohio. Filed Mar. 22, 1918. Serial No. 223,908. (Cl. 259—108.)

1. In mechanism of the class described, the combination of a kettle having cylindrical side walls and a saucer-shaped bottom having an opening in the central part thereof, a vertically arranged propeller shaft projecting through said opening, a horizontally arranged propeller mounted on said shaft adjacent said opening and having its blades part above and part below the line of connection between the bottom and side walls of the tank, whereby when the propeller is operated the material in the tank is driven upwardly in the tank or hurled substantially horizontally toward the sides thereof, the width of the tank being more than one and one-half times as great as the diameter of the propeller, and means through which the shaft and propeller are driven.



4. In mechanism of the class described, the combination of a tank, a bladed propeller shaft extending through the bottom of the tank, a propeller mounted on said shaft and adapted when operated to drive liquid upwardly in the central part of the tank and to hurl it radially from the propeller in substantially horizontal directions, the diameter of the propeller being less than one-third the diameter of the tank.

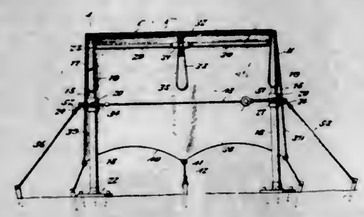
7. In mechanism of the class described, the combination of a cylindrical tank having a saucer-shaped bottom with an opening in the central part of the bottom, a pipe connected to the tank about the opening in the bottom, including an elbow near the opening, said elbow having an opening therein in line with the opening in the bottom of the tank, a bearing in said opening in the elbow, a valve in said pipe below the opening in the elbow, a propeller shaft extending through the bearing in the opening in the elbow and the opening in the bottom of the tank, means on the end of the shaft outside the pipe and tank through which the shaft is driven, a propeller on the shaft in the tank adapted when operated to drive a stream of liquid upwardly in the central part of the tank to draw into the tank liquid from that part of the pipe between said valve and the opening in the tank and to hurl liquid radially against the saucer-shaped bottom of the tank which deflects the liquid upwardly along the edges of the tank, the diameter of the propeller being less than one-third the diameter of the tank, to permit the liquid thus propelled upwardly to return between such two upwardly driven streams.

10. In mechanism of the class described, the combination of a tank, a pipe connected with the tank, a valve in the pipe, and means passing through a part of the pipe between the valve and tank for forcibly drawing into the tank the contents of that part of the pipe between the valve and tank when the valve is closed.

15. In liquid stirring mechanism which extends through an opening in the wall of a vessel, the combination of a rotatable shaft extending through said opening, means to prevent leakage of the contents of the vessel through said opening, a propeller mounted on said shaft in said vessel, a yoke having an opening through which the shaft extends, a plurality of horns extending from said yoke and adapted to engage the vessel, means to draw said horns against said vessel wall, means to support said shaft in said opening and means through which said shaft is operated.

[Claims 2, 3, 5, 6, 8, 9, 11 to 14, and 16 to 18 not printed in the Gazette.]

1,276,255. TENT. CHARLES M. NEISS, Newark, N. J. Filed Dec. 29, 1917. Serial No. 209,546. (Cl. 135—4.)



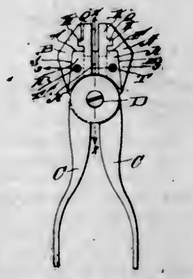
1. A tent comprising end poles each formed from an upper and a lower tubular pole section, a coupling connecting said pole sections, supporting arms on said couplings, ridge pole sections connected with the upper end pole sections, a coupling connecting said ridge pole sections, fly supports mounted in the upper end pole sections and the last mentioned coupling, and a fly overlying and extending below said fly supports.

2. A tent comprising end poles each formed from a lower tubular pole section and an upper tubular pole section, each of said upper pole sections having a threaded opening adjacent its upper end, a coupling connecting the pole sections in each end pole, apertured supporting arms on said coupling, threaded ridge pole sections extending within said threaded openings, fly supports having stems thereon extending within the upper pole sections engaged by the ridge pole sections, a coupling connecting said ridge pole sections, another fly support having a stem thereon passed through the coupling connecting said ridge pole sections and engaged by one of the ridge pole sections, and a fly on said fly supports.

4. In a tent, tubular end poles having openings therein adjacent their upper ends, a pair of fly support sections above each end pole, mating stem sections on each pair of fly support sections extending within an end pole and having an opening therein registering with the said opening in the end pole, ridge pole sections extending within the openings in the end poles and stem sections, a coupling connecting said ridge pole sections having a transversely extending opening therein, and a pair of fly support sections having mating stem sections passed through the opening in said coupling, said last mentioned stem sections having an opening therein into which one of said ridge pole sections extend.

[Claims 3, 5, and 6 not printed in the Gazette.]

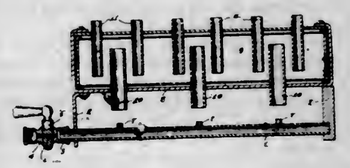
1,276,256. ADJUSTABLE KNIFE AND JAW FOR PLIERS. CHARLES O'REARDON, Philadelphia, Pa. Filed Jan. 19, 1918. Serial No. 212,811. (Cl. 81—52.)



1. In combination with a pair of pliers having jaws, each provided with a recessed portion and a transverse groove, a knife with integral jaw plate, said knife adapted to engage the recessed portion of the jaw and the jaw plate having a transverse rib for engagement with said groove, said jaw having a shoulder at the end of the recessed portion, against which the end of the shank portion of the knife is adapted to bear, and coöperating with the interlocking groove and rib to prevent the knife from moving toward the free ends of the jaws of the pliers, and means for fastening the knife to the jaw.

2. In combination with a pair of pliers having jaws, each provided with a recessed portion and a transverse groove, a knife with integral jaw plate having a transverse rib upon the face thereof adapted to engage said groove in the jaw, the inner edge of the shank portion of the knife adapted to bear against the wall of the recessed portion of the jaw, and having a shoulder engaging the inner edge of the recess of the jaw, a set screw passing through the shank portion of the knife and engaging a threaded aperture in the jaw.

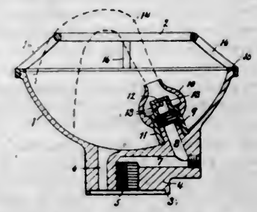
1,276,257. FUEL-MIXING DEVICE. MORTIMER L. PACKER, Columbus, Ohio. Filed Feb. 18, 1918. Serial No. 217,897. (Cl. 158—106.)



1. A fuel commingling structure for gas burners, comprising a fuel supply pipe, an outlet opening in said pipe, a mixing receptacle disposed in coöperative relation with said pipe, an inlet member carried by said receptacle and disposed so that one extremity thereof is in substantial alinement with said opening and spaced from the latter while its opposite extremity extends within said receptacle and terminates adjacent the wall of the latter opposite that through which said member enters, and an outlet member having its inner end protruding into said receptacle and spaced a considerable distance beneath the inner extremity of said inlet member whereby a fluid circulating through said receptacle will flow a circuitous path.

[Claim 2 is not printed in the Gazette.]

1,276,258. DRINKING-FOUNTAIN. GEORGE M. PAGE, Haydenville, Mass., assignor to The Haydenville Company, Haydenville, Mass., a Corporation of New Jersey. Filed Jan. 7, 1918. Serial No. 210,656. (Cl. 137—109.)



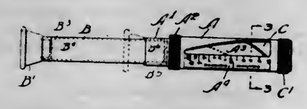
1. A drinking fountain comprising a bowl having a central bottom inlet and a lateral passage therein and provided in the bottom with a nipple which rises from and stands above said bottom, said nipple being located at a point remote from the center of said bowl, and communicating through said passage with said inlet, and a nozzle attached to and extending above said nipple and arranged with its axis oblique to the axis of said bowl.

2. A drinking fountain comprising a bowl having a bottom inlet and a lateral passage therein and provided in the bottom with a nipple which rises from and stands above said bottom, said nipple being located at a point remote from the center of said bowl, and communicating through said passage with said inlet, a sleeve mounted

on said nipple, said sleeve having a perforated dome, and a nozzle mounted on said sleeve and arranged with its axis oblique to the axis of said bowl, said sleeve and nozzle extending above said nipple.

[Claims 3 and 4 are not printed in the Gazette.]

1,276,259. PHOTOMETER. TROY L. PARKER, Chicago, Ill. Filed Nov. 15, 1915. Serial No. 61,496. (Cl. 88—23.)



1. A photometer comprising a single opaque visual object, means for controlling the illumination thereof, an eye-piece removed from said object and means for preventing the entrance into said eye-piece of any light rays except those coming directly from the object.

2. A photometer comprising a single opaque visual object, means for controlling the illumination thereof, an eye-piece removed from said object and means for preventing the entrance into said eye-piece of any light rays except those coming directly from the object, said means comprising an apertured partition interposed between the eye-piece and the object.

3. A photometer comprising a single opaque visual object, an illumination chamber in which it is contained, means for controlling the illumination of the object by varying the amount of light entering the chamber, an eye-piece removed from the chamber and means for excluding from the eye-piece any light rays except those reflected by the object.

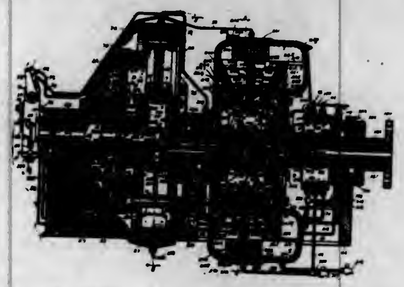
4. In an optical instrument a supporting sleeve, a tube slidable therein the sleeve being provided with a bearing for the tube, an eye-piece mounted in one end of the tube larger than the bearing in the sleeve, a perforated plug mounted in the other end of the tube larger than the normal interior diameter of the tube and adapted to expand the tube to an outer diameter larger than the diameter of the bearing the perforations in the eye-piece and in the plug being concentric and in line with the axis of the tube.

5. In a photometer a single illumination chamber, an opaque visual object therein the wall of the chamber being perforated, a shutter mounted for movement within the chamber across such perforation and a translucent diffusing screen carried by said shutter mounted for movement within said chamber and adapted always to extend across that part of the perforation in the chamber wall which may be uncovered by the shutter and an eye-piece in line with the visual object.

1,276,260. INTERNAL-COMBUSTION TURBINE. RUSSELL J. PARRISH, Richmond, Ind. Filed Aug. 29, 1917. Serial No. 188,705. (Cl. 123—9.)

1. An internal combustion motor comprising a turbine, an air compressor, a triple pump adapted to deliver fuel, water, and oil under pressure, and a regulator adapted to control the supply of air, fuel, and water, a main shaft and a stationary shaft, a stationary valve member located between the ends of the stationary shaft and the main shaft and adapted to conduct free air into the compressor and to conduct the compressed air from the compressor and deliver it through the main shaft to the turbine to be utilized in connection with the fuel.

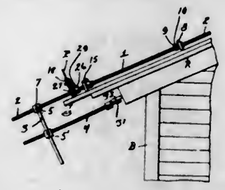
16. An internal combustion motor, comprising a base, a casing secured to the base, a hollow shaft extending through said casing and supported by said shaft, a hub secured around the shaft and located in said casing a pair of outward and centerward extending walls slidably connected with the casing and rigidly secured to said hub for forming a combustion chamber around the hub, a baffle plate extending entirely around in said chamber but spaced from said walls and from the hub, laterally extending blades extending toward each other from the stationary walls of the case, a disk rotative with said hub and located between the free ends of said blades, laterally extending blades secured to said disk and alternating with the first mentioned blades, there being outwardly flaring nozzles connecting the combustion chamber with the space in which the said blades are located, there also being an exhaust chamber formed around said blades with exhausts leading out from the exhaust chamber, all substantially as shown and described.



18. In an internal combustion turbine motor having a stationary hollow shaft and a rotatable hollow shaft, a regulator controlled by oil pressure developed by the power of the turbine with which it is employed, said regulator being attached to one end of said stationary shaft, and comprising a main body portion, a secondary body portion attached to the main body portion, a main cylinder contained in the secondary body portion, a secondary cylinder contained in the secondary body portion, a piston operative in each of said cylinders, a spring for each piston, there being passageways to and from said cylinders to admit and discharge fluid under pressure, a lever operative by one of said pistons, rotary valves carried by the main body portion of the regulator, said lever being connected to said rotary valves for controlling the flow of fuel, water and oil, a shutter operative by said lever for controlling the admission of air to said hollow shaft, and a second set of rotary valves adapted to be operated manually for controlling the admission of fuel, water and oil, substantially as set forth.

[Claims 2 to 15, 17, and 19 to 25 not printed in the Gazette.]

1,276,261. MARKING-GAGE. PHILIP E. PETERSON, Whitehall, Mich. Filed May 1, 1917. Serial No. 165,706. (Cl. 33—42.)

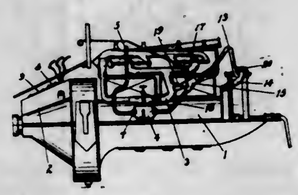


1. A marking gage of the class described including a pair of blocks, one having an arm extending laterally therefrom and a bore extending therethrough at right angles to said arm, the other block having bores extending therethrough at right angles to each other, the arm of said first mentioned block being adjustably mounted in one of the bores of the other block, rods adjustably mounted in the remaining bores of said blocks and disposed in parallel planes, a marking element adjustably mounted on one of said rods, and a guide on the other.

3. A marking gage of the class described including a pair of blocks, one having an arm extending laterally therefrom and a bore extending therethrough at right angles to said arm, the other block having bores extending therethrough at right angles to each other, the arm of said first mentioned block being adjustably mounted in one of the bores of the other block, rods adjustably mounted in the remaining bores of said blocks and disposed parallel with each other, a marking element adjustably mounted on one of said rods, guide rollers carried by said rod, a guide arm slidably mounted intermediately its ends on the other rod, and rollers carried by the terminals of said arm.

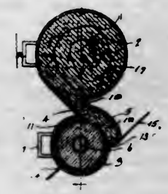
[Claims 2 and 4 not printed in the Gazette.]

1,276,262. INTERNAL-COMBUSTION ENGINE. FRANK R. PETTITT, Spokane, Wash. Filed Aug. 13, 1917. Serial No. 186,075. (Cl. 123—119.)



In an internal combustion engine, the combination with a portion of the crank case having an opening, a carbureter, and the cylinder communicating with the carbureter, of a pipe connecting the crank case and carbureter, a perforated plate in the crank case opening and a valve therefor, and a resilient arm controlling the valve whereby a circulation of vapor is automatically maintained as described.

1,276,263. MOISTENING ATTACHMENT FOR TYPEWRITER RIBBONS. JOHN C. PHELAN, East Cleveland, and HERMANN B. MACALPINE, Lakewood, Ohio, assignors to The Ribbon Life Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 22, 1917. Serial No. 197,847. (Cl. 91—49.)



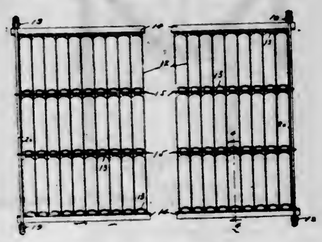
1. A ribbon moistening attachment, comprising a casing, a roller therein over which the ribbon travels, means to supply liquid to the surface of the roller, and means to hold the ribbon out of contact with the roller when desired comprising a shield movable into and out of position between the ribbon and the roller.

3. A ribbon moistening attachment, comprising a casing having a ribbon passage through the same, a roller in the casing in contact with the ribbon, and means to supply liquid to the surface of the roller, and a segmental turning shield around the roller automatically actuated thereby to space the ribbon therefrom when the roller is rotated one way and allow the ribbon to contact with the roller when the latter is rotated the opposite way.

4. A ribbon moistening attachment, comprising a wick casing, a roller casing, a contracted neck connecting the casings, a wick in the wick casing and extending through the neck in compressed condition, a roller in the roller casing, in contact with the end of the wick, the latter casing having a passage through the same for the ribbon to contact with the roller.

[Claim 2 not printed in the Gazette.]

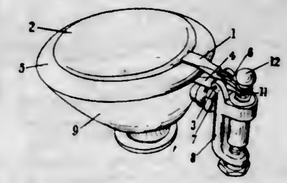
1,276,264. KNOCKDOWN MOLDING APPARATUS. GEORGE W. PORTER, Minneapolis, Minn., and DENNIS C. NOONAN, Watertown, S. D. Filed Feb. 23, 1918. Serial No. 218,675. (Cl. 25—121.)



5. A knock-down apparatus for constructing a multiplicity of concrete planks, comprising a battery of molds formed by a bed, a plurality of side and end plates removably supported on the bed, said end plates being connected in groups and spaced to afford seats for the side plates, tie-rods for holding the end and side plates in assembled relation on the bed, and pallets closing the bottoms of the molds and removably supported on the bed.

[Claims 1 to 4, 6, and 7 not printed in the Gazette.]

1,276,265. CLOSET-SEAT PIVOT. BENJAMIN PURNELL, Benton Harbor, Mich. Filed Feb. 1, 1918. Serial No. 214,864. (Cl. 4—18.)

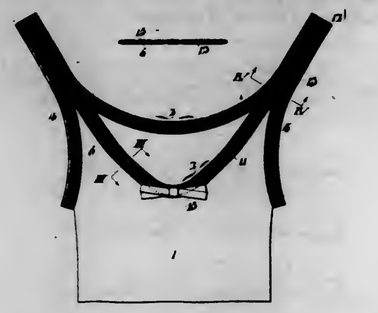


In a closet seat pivot, a cover pivoted on a fixed pin, a seat hinge pivoted on said pin by means of a laterally disposed slot, a setting lever pivoted on said pin, shoulders on the front end of said setting lever, a transverse member of said seat hinge for positive engagement or disengagement with said shoulder, cams on the back portion of said cover hinge, and internal cam surfaces on said seat hinge for engagement of said cover hinge cams.

1,276,266. WOMAN'S UNDERVEST. EVA A. Y. QUERNS, Philadelphia, Pa. Filed June 2, 1916. Serial No. 101,223. (Cl. 2—41.)

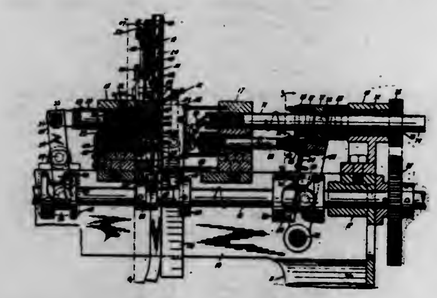
In a vest, the combination of an underbody formed of knit fabric and having armholes open at the top, a neck band formed of a strip of fabric comprising two relatively wide main bands of open-work embroidery having a pattern which is uniformly substantially obscuring throughout its entire length, said main bands being integrally united and folded longitudinally to form a ribbon pocket, the longitudinal edges of said folded band being secured to the edges of the underbody at the front and back, and said neck band being carried across the opening at the top of the arm-holes; and arm-hole bands formed of folded pieces similar to those of the neck band, and having their longitudinal edges secured to the edges of the lower portion of the arm-holes in the body fabric

and to the meeting edges of the neck band along the portion which extends across the top of the arm-holes, and



a ribbon in the pocket of the neck band, substantially as set forth.

1,276,267. MACHINE FOR REMOVING SEALING-DISKS FROM CROWN-CORKS AND SIMILAR CLOSURES. OLAF RASMUSSEN and EMILIO ALBERTI, New York, N. Y., assignors to International Cork Company, Brooklyn, N. Y., a Corporation of New York. Filed Nov. 6, 1917. Serial No. 200,564. (Cl. 113—1.)



1. In a machine for removing sealing disks from closures of the cap variety, the combination with a chute for the closures, of means for intermittently feeding the closures through the said chute, means coacting with said chute for holding a stationary closure therein against rotation, and means in alinement with said holding means for removing the sealing disk from the closures engaged by said holding means.

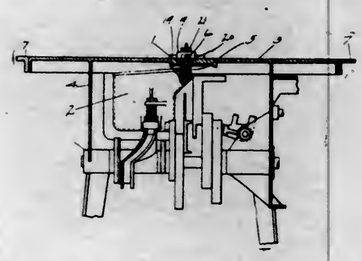
6. In a machine for removing sealing disks from closures of the cap variety, the combination with a rotary tool for removing the sealing disk from the closure, of means for feeding the closures toward and into alinement with said tool, and means for centering the closures in relation to said tool and holding them against motion when in alinement with said tool.

12. In a machine for removing sealing disks from closures of the cap variety, the combination with a chute for the closures, of means for intermittently feeding the closures through said chute, a rotary tool for removing the sealing disks from the closures, a rotary tool for scraping the inner faces of the heads of the closures after the sealing disks have been removed therefrom, and means coacting with said chute for holding the closures against rotation when in alinement with said tools.

18. In a machine for removing sealing disks from closures of the cap variety, the combination with a chute for the closures, of means for intermittently feeding the closures through said chute, a reciprocable tubular member adapted to protect through said chute and provided with notches in its projecting end for holding a stationary closure in said chute against rotation, and means in alinement with said tubular member for removing the sealing disk from the closure engaged by said tubular member.

[Claims 2 to 5, 7 to 11, and 13 to 17 not printed in the Gazette.]

1,276,268. TYPOGRAPH MECHANISM. WILLIAM A. READE, Cleveland, Ohio, assignor to The Ludlow Typograph Company, Cleveland, Ohio, a Corporation of Maine. Filed May 22, 1911. Serial No. 628,649. Renewed Feb. 18, 1916. Serial No. 79,211. (Cl. 199—47.)



3. In a typograph machine, the combination of slug-casting mechanism including a mold formed with a casting slot; a set of detached matrix-bars; an independent member arranged to receive and hold a number of said bars in selected relation, thereby forming a composite matrix apart from, but adapted to coöperate with, said mold; and adjustable means adapted to locate said member with such composite matrix properly alined with the slot in said mold.

5. In mechanism of the class described, the combination of a suitable support; a mold movable relatively thereto; a set of detached matrix bars; a detached holder for said bars; and means adapted temporarily to secure said holder to said support in position to present the bars held therein with their matrices in coöperative relation to said mold.

18. In mechanism of the class described, a holder for matrix-bars, comprising a frame adapted to receive such bars, said frame being open on one face, so as to leave the matrices on such bars exposed, and having one side movable relatively to the other; means on said sides adapted to interlock with said bars; and resilient means for drawing said sides together.

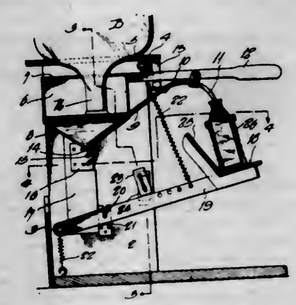
24. In mechanism of the character described, the combination with detached matrix bars of similar outline, the type-character impressions being formed on corresponding edges of said bars; of an independent member in the form of a frame adapted to receive and hold said bars in selected relation transversely disposed of a straight line with the edges bearing such type-character impressions exposed, said frame having one side member movable relatively to the other to force said bars into end-wise alinement; and means adapted to clamp said bars together longitudinally of said holder.

36. A quad-block for slug casting machines comprising a body-portion, a matrix section adapted to be supported thereby, and means adapted to prevent the support of said matrix section in an improper position in said body-portion.

[Claims 1, 2, 4, 6 to 17, 19 to 23, 25 to 35, and 37 to 39 not printed in the Gazette.]

1,276,269. BOTTLE-FILLER. ERNEST A. RICKER and JAMES F. DOBBIN, Jacksonville, Fla. Filed Mar. 1, 1917. Serial No. 151,799. (Cl. 226—24.)

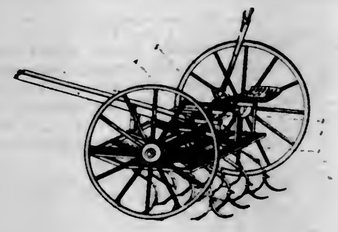
1. A liquid dispensing apparatus comprising a support for an inverted reservoir bottle, a tilting receptacle below said support into which the neck of the bottle extends, the bottom of said receptacle being V-shape in transverse section, a plurality of metal outlet tubes passing through one side of said receptacle and disposed transversely of its axis, said tubes extending across half the width of said V-shaped bottom in contact therewith and being secured thereto, whereby said tubes are securely braced, said tubes projecting from said receptacle and having their outer ends bent downwardly for reception in the bottles to be filled, and a depressible bottle support below said downwardly bent end.



8. A bottle filling apparatus comprising a pair of vertical side members having brackets secured to their inner sides, said brackets having notches formed in their upper ends, a substantially horizontal frame extending between said side members at its rear end and having a bottle support at its front end, the side bars of said frame having trunnions received removably in said notches, and springs secured to the rear ends of said side bars and exerting stress thereon to retain said trunnions in said notches; together with a tilting receptacle above said frame, outlet siphons from said receptacle, and means for supplying liquid to said receptacle.

[Claims 2 and 4 not printed in the Gazette.]

1,276,270. CULTIVATOR. OTTO G. RIESKE, Toronto, Ontario, Canada, assignor to Massey-Harris Company, Limited, Toronto, Canada. Filed Sept. 21, 1915. Serial No. 51,903. (Cl. 97—34.)

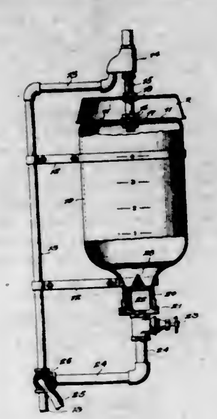


6. In a cultivator the combination of a cultivator frame; a bar secured thereto, having its back cut away to provide corrugations, a tooth having its end provided with a traverse rib coöperable with said corrugations, a second bar with its back bent to provide corrugations resting on said tooth; and actuating means for clamping the tooth and said bars as described.

[Claims 1 to 5 and 7 to 9 not printed in the Gazette.]

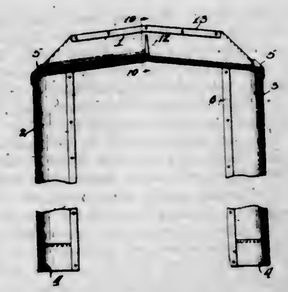
1,276,271. LIQUID-DISPENSING APPARATUS. CHARLES F. ROSAIGNOL, Augusta, Ga. Filed Sept. 13, 1917. Serial No. 191,160. (Cl. 210—16.)

In combination with a pipe-line for supplying liquid from a source of supply to a receiving container, of a transparent receptacle connected in said pipe-line between its inlet and discharge ends and in a manner to receive the liquid at its upper end, said transparent receptacle being provided with a contracted lower end, and an open vent in its upper end, and means on its side for indicating the quantity of liquid contained therein at various levels, a filter removably connected in the contracted lower end, a shield extending over the upper end of said



transparent receptacle and supported in spaced relation thereto to lie above said open vent, and a manually controlled valve in the pipe-line between said filter and the discharge end of the pipe-line, whereby the liquid can be temporarily stored, measured, and inspected in the transparent receptacle before its discharge into the receiving container.

1,276,272. UNIFOLD CAR-DIAPHRAGM. HARRY H. SCHROYER, Chicago, Ill., assignor to Dunbar Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 22, 1915. Serial No. 23,102. (Cl. 105—61.)



1. A mono-fold diaphragm of the class described comprising a unitary strip of fabric shaped to form the top and leg portions of the diaphragm, the top portion curved convexly inwardly, a transverse rib formed in the top portion causing the top inclining from the middle downwardly toward the ends, said leg portions curved convexly outward.

3. In a device of the class described a mono-fold diaphragm comprising outwardly convexed legs, an inwardly convexed top, means for drawing the top at the center upwardly causing the same to slope downwardly to the ends, and reinforcing members secured at the junction of the legs and top.

5. A mono-fold diaphragm comprising outwardly convexed U shaped legs joined by an inwardly convexed U shaped top disposed in the same plane.

[Claims 2 and 4 not printed in the Gazette.]

1,276,273. HINGE FOR SUITCASES. LOUIS C. SCHWENSEN, Brooklyn, N. Y. Filed Aug. 15, 1917. Serial No. 186,375. (Cl. 16—104.)



A link for a suit case cover, comprising a single strip of metal having a central body portion, a downwardly bent tongue carried by the upper end of the body portion and spaced therefrom, an upwardly bent tongue carried by the lower end of the body portion and extending above the lower end of the downwardly bent tongue, and a single rivet passing through the outer tongue, the body portion, the wall of the suit case and the inner downwardly bent tongue and securing the link to the cover and wall of the suit case.

1,276,274. ADJUSTABLE PIPE-WRENCH. JOSEPH SHAFFER, McKittrick, Cal. Filed May 2, 1917. Serial No. 166,006. (Cl. 81—79.)
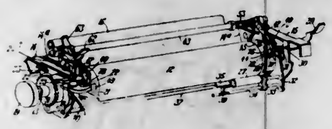


A wrench comprising a shank having a longitudinal slot therein, a jaw secured to the end of the shank at right angles thereto and having a groove in the under face thereof to extend longitudinally of said jaw for communicating with said slot, said groove extending from the rear of said jaw to a point adjacent its forward end and being curved downwardly to said point, teeth on the edges of said groove, a second shank pivoted to the first shank and passing through the slot in the first shank, a second jaw of semicircular form on the inner longitudinal edge of the upper end of the second shank, the uppermost end of said jaw being flush with the under side of the first named jaw and opposite the groove therein, and the lower end of the semicircular jaw being arranged in the slot in the first named shank when the jaws are in a closed position, to form an opening whereby a pipe may be passed through the groove and between the jaws without adjusting the parts of the wrench in any way.

1,276,275. TYPE-WRITING MACHINE. CURTIS W. SHIELDS, Brooklyn, N. Y., assignor to Underwood Typewriter Company, New York, N. Y., a Corporation of Delaware. Filed June 26, 1916. Serial No. 105,792. (Cl. 197—127.)

1. In a typewriting machine, the combination with a platen, and line-space mechanism therefor, of means operable repeatedly by said line-space mechanism to produce on a work-sheet, at one insertion thereof, and while on the platen, a resultant gaging abutment by which the sheet, if removed from the machine and again placed thereon, may be adjusted to a position having a predetermined fixed relation to the position of the sheet at the time said gaging abutment was produced.

8. In a typewriting machine, the combination with a platen, of means to advance work-sheets over the platen, types to print on said sheets, and gaging means operable repeatedly independently of the types to produce on the edge of the work-sheet a single resultant gaging impression by which the sheet, if removed from the platen and again placed thereon, may be gaged or adjusted to a position determined by the position of the last printed line on the sheet.



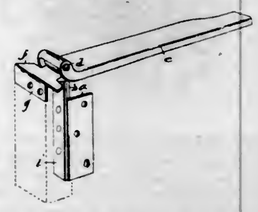
9. In a typewriting machine, the combination with a platen, of means to advance work-sheets over the platen, types to print on said sheets, gaging means operable independently of the types to produce on a work-sheet a gaging impression by which the sheet, if removed from the platen and again placed thereon, may be gaged or adjusted to a position determined by the position of the last printed line on the sheet, and means whereby said gaging means is operated and controlled by said sheet-advancing means.

16. In a typewriting machine, the combination with a roller platen, and a line-spacing mechanism, of a cutter at one end of the platen, and means controlled by said line-spacing mechanism to operate said cutter, said operating means including means to cause said cutter to cut or punch the margin of a work-sheet when the latter is on the platen with said margin projecting beyond the end of the platen.

38. In a typewriting machine, the combination of a revoluble platen, and means at the delivery side of the platen and close to the printing line on said platen for guiding a work-sheet into position thereon, said means comprising gages between which the sheet may be guided during the line-spacing operations, and by which the position of the sheet lengthwise of the platen is determined, said gages also forming abutments against which transverse edges or shoulders on the margins of the work-sheet may be brought to gage the initial position of the sheet circumferentially of the platen.

[Claims 2 to 7, 10 to 15, 17 to 37, 39, and 40 not printed in the Gazette.]

1,276,276. DOOR-FLAPPER. EMORY GLENN SIMPSON, Detroit, Mich., assignor to Fisher Body Corporation, Detroit, Mich., a Corporation of New York. Filed May 5, 1917. Serial No. 166,513. (Cl. 21—125.)

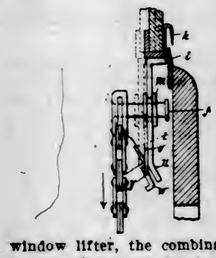


1. In a door flapper, an anchor comprising a web formed up at its top into a loop and having a continuation in the form of a plate adapted to rest on the top of the side upright of the door, and a reinforcing member fastened to the web and fastened to the plate for reinforcing the anchor and tying the loop ends together.

2. In a door flapper, an anchor comprising a stamping formed up into a web with a wing turned at right angles for attachment to the door top rail, the said web continuing on at the top to form a loop for hinging purposes, thence continuing on at right angles to form a plate to rest on top of the side upright of the door, thence turned at right angles and down for attachment to the side upright, and a reinforcing member fastened to the inside of the web and turned over at its top and fastened to the inside of the said plate, substantially as described.

3. In a door flapper, an anchor comprising stamped sheet metal formed into a web capable of ensheathing the top and upper portion of the side upright of the door frame and provided with means for securing the same to such side upright, the sheet metal at the top being looped to form a knuckle for the flapper pin, and a reinforcing plate welded to the sheet metal at opposite sides of the loop.

1,276,277. WINDOW-LIFTER. EMORY GLENN SIMPSON, Detroit, Mich., assignor to Fisher Body Corporation, Detroit, Mich., a Corporation of New York. Filed Aug. 18, 1917. Serial No. 186,834. (Cl. 16—53.)

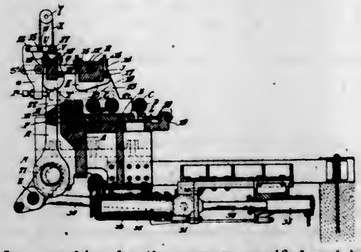


1. In a window lifter, the combination of a wheel, a linear member running thereover, a plate having a contact-portion, a lifting device engaged between the linear member and the plate, and a cam upon a succeeding portion of the linear member which engaging with the said contact-portion pushes the window laterally over the fence and pulls it laterally from over the fence at the required time.

2. In a window lifter, the combination of a wheel, a linear member running thereover, a plate for carrying the window, lifting connections between the plate and the linear member, the said plate being provided with an inclined way, and a cam having a wiper adapted to engage in said inclined way to force the window over the fence and pull it away from the fence at the required time.

3. In a window lifter, the combination of a wheel, a linear member running thereover, a plate for carrying the window provided with a portion bent into an incline, a second incline secured to the plate substantially paralleling the first incline to form an incline way and a cam secured to a portion of the chain and provided with a wiper adapted to travel in the cam-way between the two inclines to push the window over the fence and pull it away from the fence at the appointed time.

1,276,278. MACHINE FOR BREAKING STEEL INTO SHELL-BLANKS. FRANK SMALLWOOD, Sault Ste. Marie, Ontario, Canada, assignor to Algoma Steel Corporation Limited, Sault Ste. Marie, Ontario, Canada, a Corporation of Ontario. Filed Jan. 11, 1918. Serial No. 211,394. (Cl. 29—66.)

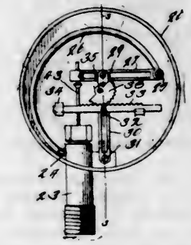


1. In a machine for the purpose specified and in combination, a supporting member, retaining means on the supporting member, an anvil member at the end of the supporting member, means for raising the anvil member above the surface of the supporting member.

5. In a machine for the purpose specified and in combination, a frame, a supporting member on the frame, an anvil member on the supporting member, means for raising and lowering the anvil member, a retaining member above the supporting member, a breaking member adapted to exert a pressure on the opposite side of the bar to be broken and against the anvil member, means for actuating the breaking member, and a stop member movable to and from operative position by the breaking member.

[Claims 2 to 4 and 6 to 13 not printed in the Gazette.]

1,276,279. AUTOMATIC CONTROLLER. GIBSON C. SMITH, Frederick, Md. Filed Dec. 18, 1916. Serial No. 137,641. (Cl. 284—16.)



1. In a device of the kind described, the combination with a pipe and a valve controlling the flow of liquid through said pipe; of means for controlling said valve comprising a spring, a lever connected at one end to said spring, a fulcrum block slidable longitudinally of said lever, a gage arm operatively connected with said fulcrum block to coördinate the positions of the fulcrum and gage arm, and a connection between said lever and valve.

2. In a device of the kind described, the combination with a pipe and a valve controlling said valve comprising a Bourdon tube leaving one end fixedly connected to the pipe, a lever having one end connected to the remaining end of the tube, a movable fulcrum for said lever, and an operative connection between said lever and valve.

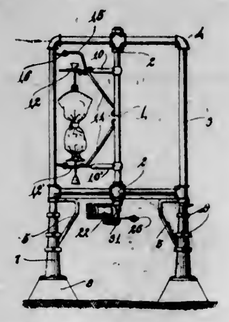
3. In a device of the kind described, the combination with a pipe and a valve controlling the flow of fluid through the pipe; of means for controlling said valve comprising a Bourdon tube leaving one end fixedly connected to the pipe, a lever having one end connected to the remaining end of the tube, a movable fulcrum for said lever, an indicator arm, an operative connection between said arm and fulcrum, and a link connecting said lever and valve.

4. In a device of the kind described, the combination with a pipe having an inlet at one end, an outlet at the other end and a second outlet between the inlet and outlet; of a valve in said pipe and arranged to selectively close communication between said inlet and the outlets, a Bourdon tube having one end fixedly connected with the pipe and communicating with the first outlet, a lever having one end fixedly connected to the remaining end of the Bourdoo tube, a fulcrum adjustable longitudinally of said lever, an indicator arm connected with the fulcrum to adjust the same, and a link connecting the lever and valve.

5. In a device of the kind described, the combination with a pipe having an inlet at one end, an outlet at the other end and a second outlet between the inlet and outlet; of a valve in said pipe and arranged to selectively close communication between said inlet and the outlets, a Bourdon tube having one end fixedly connected with the pipe and communicating with the first outlet, a lever having one end fixedly connected to the remaining

end of the Bourdon tube, a fulcrum adjustable longitudinally of said lever, a lever having one end pivoted in fixed relation to the pipe and its other end connected to the fulcrum, a sliding rack bar having connection with said lever, an indicator arm, and a gear carried by the indicator arm and meshing with the rack bar.

1,276,280. MAIL-EXCHANGING DEVICE. HERBERT E. SMITH, Spokane, Wash. Filed Dec. 27, 1916. Serial No. 139,120½. (Cl. 258—23.)



1. In a device of the character described, a supporting structure, a revoluble standard mounted thereon, arms carried by said standard, a tensionally controlled member carried by said standard, an engaging device carried by said member, a stationary spring controlled recessed latch adapted to coöperate with said engaging device to retain said arms in predetermined operative position, and a spring having one end secured to said tensionally controlled member for exterting tension thereon and for returning and retaining said arms in their inoperative position.

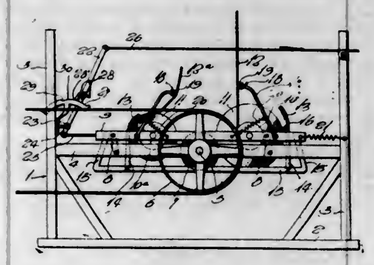
2. In a device of the character described, a stationary mail bag supporting structure having horizontally extended upper and lower bag supporting and bag catching arms, bag catching hooks carried by said arms, a superposed bag supporting device disposed above the plane of said upper arm, and a bag supporting device carried by said lower arm, said hooks and supporting devices being adapted for coöperation with a car apparatus to effect the transference of mail bags from the car to the station and vice versa.

3. In a device of the character described, a supporting structure, a revoluble standard mounted thereon, arms carried by said standard, a spring controlled substantially U-shaped bracket having an upper and an extended lower leg, the former being fixedly mounted upon said standard, an engaging device carried by said lower leg; a stationary latch adapted to engage said engaging device to retain said arms in predetermined operative position, a spring having one end secured to said lower leg for exerting tension thereon and for returning and retaining said arms in their inoperative position; a shock absorbing fluid compression cylinder having one end secured to said bracket and a piston coöperating therewith having the free end of its rod pivotally mounted, said spring and shock absorbing device coöperating to maintain said arms in operative position, absorb shocks, and to balance the elements of the apparatus during the mail bag exchanging operation.

5. The combination with a supporting structure, a revoluble standard and mail bag supporting means thereon, of a U-shaped retaining bracket fixed to the standard, a fluid pressure cylinder pivoted to the bracket and to a post on the supporting structure, a contractile spring suspended between the bracket and post, a roller on the free end of the bracket, a latch bracket on the structure, and a latch member resiliently supported by said bracket for coöperation with the roller.

[Claim 4 not printed in the Gazette.]

1,276,281. HOIST. EDWARD STOUT, Brighton, Iowa. Filed Dec. 27, 1917. Serial No. 209,063. (Cl. 254—184.)

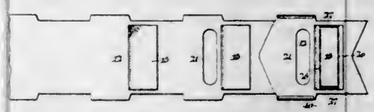


3. A machine of the class described comprising a pair of parallel winding drums each having a friction wheel, ropes wound on said drums, a friction driving wheel between said first named wheels, carrying means for said drums, means for shifting said carrying means to engage the friction wheel of either drum with said driving wheel, a pair of bars spaced from and secured to said carrying means, arms pivoted to said bars and having brake shoes for engagement with the friction wheels of said drums, arched brake operating members having the free ends of their arms pivoted to said carrying means, links connecting said first named arms and the arms of said arched members, and springs for moving said members to apply said brake shoes, the crown bars of said arched members being disposed for engagement with the ropes of said drums to hold the brake shoes of either drum released when the rope of such drum is under load.

4. A machine of the class described, comprising a pair of parallel winding drums each having at one end a friction wheel, a friction driving wheel between said first named wheels, carrying means for said drums, spring means for moving said carrying means in one direction to engage the friction wheel of one drum with said driving wheel, a lever operatively connected with said carrying means for moving the latter in the opposite direction to engage the friction wheel of the other drum with said driving wheel, a sector adjacent said lever and having a notch formed with an abrupt wall and an inclined wall, a spring pressed dog on said lever adapted to engage said abrupt wall to hold said carrying means in a neutral position against the tension of said spring means, and an operating member connected to said lever and extending to a remote point.

[Claims 1 and 2 not printed in the Gazette.]

1,276,282. PROCESS FOR MAKING WINDOW-ENVELOPS. GEORGE W. SWIFT, Jr., Bordentown, N. J. Filed Nov. 27, 1917. Serial No. 204,134. (Cl. 93—61.)



1. The process of making window envelops which consists in continuously advancing unperforated envelop material; applying window material to parts only of the envelop material; perforating other parts of the envelop material at intervals for the formation of window openings; and folding and cutting the material for envelop formation, whereby the folding operation brings a patch of window material into proper relation to each window opening.

[Claims 2 and 3 not printed in the Gazette.]

1,276,283. WIND-SHIELD CLEANER. HOWARD D. THOMAS, Seattle, Wash. Filed Nov. 28, 1916. Serial No. 133,067. (Cl. 15—59.)



In a wind shield cleaner, in combination, a pivot base provided with means for securing it upon the edge of a wind shield, a flat cleaner bar and a wiper member comprising a plate of yielding material of a width relatively slightly greater than the effective width of the cleaner bar, opposite edges of said cleaner bar being folded over to secure the edges of the plate of yielding material and to cause the latter to buckle outward at the center, a guide rod mounted between said cleaner bar and said plate of yielding material and pivotally connected with the pivot base, and an operating arm pivoted upon said base and upon the cleaner bar.

1,276,284. PROCESS OF PURIFYING CRUDE HYDROCARBONS. JAMES E. THOMPSON, Mayville, Wis. Filed July 25, 1917. Serial No. 182,721. (Cl. 23—24.)

1. The process of purifying hydrocarbons containing the benzene ring which consists in mixing therewith an ammonical aqueous solution having approximately the same specific gravity as the hydrocarbon.

3. The process of purifying hydrocarbons containing the benzene ring consisting in mixing therewith an ammoniacal aqueous solution having a specific gravity not greater than the specific gravity of the hydrocarbon, allowing the impurities which combine with the ammoniacal solution to sink and drawing off the purified hydrocarbon.

4. The process of purifying liquid "CS_2 benzol" which consists in mixing therewith an aqueous solution of ammonia, allowing the ammonia combined with the impurities to sink and then withdrawing the purified "benzol."

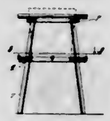
5. The method of purifying hydrocarbons containing the benzene ring consisting in mixing with the hydrocarbon an aqueous solution having a specific gravity not greater than the specific gravity of the hydrocarbon which aqueous solution will chemically combine with the impurities in the hydrocarbon and increase the specific gravity of the solution so formed and then drawing off the superimposed relatively lighter purified hydrocarbon.

6. The process of purifying "CS_2 benzol" consisting in treating said product with an aqueous solution of ammonia having a specific gravity not greater than the specific gravity of the benzol, allowing said solution to combine with the impurities in the "benzol," then allowing it to sink and then withdrawing the superjacent purified "benzol."

[Claim 2 not printed in the Gazette.]

1,276,285. WATER-PAIL SUPPORT. HARRISON F. THOMPSON, Vineland, N. J. Filed Feb. 7, 1918. Serial No. 215,865. (Cl. 248—41.)

1. In a device of the class described, the combination with a plurality of upwardly converging legs bent outward at their upper ends into arms standing in a single horizontal plane, and a plurality of frame bars riveted to and connecting the outer ends of said arms; of a relatively smaller ring connecting said legs just beneath said arms, a relatively larger ring connecting the legs at a lower point, and bars across the last mentioned ring to form a support for an article passing through the first-mentioned ring.



2. In a device of the class described, the combination with a plurality of upwardly converging legs having deflected portions within their length, and a ring secured to their upper ends; of a hoop riveted within said deflected portions, a cross bar of strap metal within said hoop having hooks at its ends engaging over the hoop, and a second cross bar at right angles to the first and having a dropped center passing beneath it and hooks at its ends engaging over said hoop.

[Claim 3 not printed in the Gazette.]

1,276,286. GREASE-GUN. MYRTUS E. THOMPSON, Huntaburg, Ohio. Filed Dec. 8, 1917. Serial No. 206,216. (Cl. 221—78.)



1. A grease gun comprising a cylinder composed of two telescoping sections, one of which is double walled to receive the other, said double walled section having a filling opening in one side thereof, means for limiting the opening and closing movement of said sections, a discharge nozzle, and a piston operable to force the contents of said gun out through said nozzle.

3. A grease gun comprising a cylinder composed of two telescoping sections, one of which is double walled to receive the other, said double walled section having a filling opening in one side thereof, a discharge nozzle and a piston operable to force the contents of said gun out through said nozzle.

4. A grease gun comprising two telescoping cylindrical sections, one of which is double walled with the walls spaced apart to form a pocket between them to receive the other section, said double walled section having an opening in one side wall, the side walls of said opening converging toward their upper ends, a lateral projection carried by the other section and adapted to engage the apex of said opening, a ring surrounding said double walled section at its lower end and designed to engage said projection for limiting the opening movement of said sections, and a piston operable for forcing out the contents of the gun.

[Claims 2 and 5 not printed in the Gazette.]

1,276,287. SOUND-DIRECTING APPLIANCE. ERIC MAGNUS CAMPBELL TIGERSTEDT, Copenhagen, Denmark. Filed May 12, 1915. Serial No. 27,580. (Cl. 179—116.)

1. In a sound directing appliance, the combination of a diaphragm, a funnel, the opening of which is in direct

opposition to the diaphragm, and means including a portion provided with a plane surface closely overlying the diaphragm for conveying the sound waves from the rim of said diaphragm to the central portion of the same, and vice versa.



2. In a sound directing appliance, the combination of a diaphragm, a funnel, a cone-shaped element within said funnel, the base wall of said cone being in direct and close opposition to the diaphragm, the base portion of the cone being located centrally within the narrower opening of the funnel, whereby an annular gap is formed between the rim of said opening and the base of the cone, for directing the sound waves from said annular gap near the circumference of the diaphragm toward the central portion of the same, and vice versa.

6. In a sound directing appliance, the combination of a diaphragm, a funnel, a cone in said funnel, a second diaphragm forming the base portion of the cone and in direct opposition to said first named diaphragm, whereby an annular gap is formed between the narrower end of the funnel and the base portion of the cone, for directing the sound waves from said annular gap near the circumference of the first named diaphragm toward the central portion of the same, and vice versa, and telephone magnets for imparting vibratory motion to both of said diaphragms.

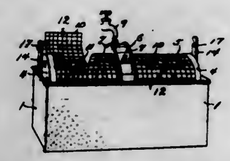
[Claims 3 to 5 not printed in the Gazette.]

1,276,288. COPING-TILE FOR ROOFS AND THE LIKE. MORRIS M. TROMM, New Point, Ind. Filed Dec. 26, 1917. Serial No. 208,754. (Cl. 72—86.)



A tile for a coping, semi-cylindrical in cross section and provided with openings in one end for the passage of a binding strip for securing same to the structure, with an overlapping raised semi-cylindrical rim portion at the other end, said rim portion provided with a groove on the under side for the reception of binding material, and with a downwardly projecting lug at said latter end provided with a longitudinal opening for the reception of a rod to lock underneath the overlapped tile.

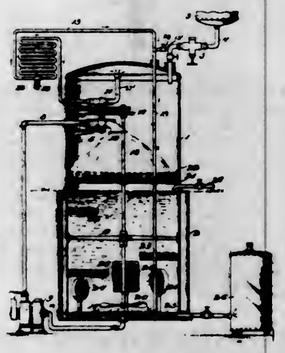
1,276,289. PHOTOGRAPH-WASHER. PAUL D. ULRICH, Hershey, Pa., assignor of one-half to Abraham T. Heilman, Hershey, Pa. Filed Mar. 18, 1918. Serial No. 222,993. (Cl. 95—93.)



1. A photograph washer including a tank; a drum positioned within said tank; means providing rotatable bearings for said drum; a waterwheel secured to said drum; and bars pivotally mounted on said tank and having portions providing a support for said drum when raised from its normal position in the tank, substantially as described.

2. A photograph washer including a tank; a rotatable drum positioned within said tank and having trunnions thereon; sockets forming bearings for said trunnions; bars having slots therein; and pivot means on said tank adapted to extend through the slots of said bars, said bars having notches therein forming bearings for said trunnions when the drum is raised from its normal position in the tank, said bars being adapted to engage the sides of said sockets due to the weight of said drum on the bars, substantially as described.

1,276,290. PROCESS OF AND APPARATUS FOR HYDROGENATING FATS, OILS, WAXES, AND THE LIKE. THOMAS BAILEY WALKER, Austin, Tex. Filed Jan. 6, 1917. Serial No. 141,061. (Cl. 87—12.)



1. Apparatus for hydrogenizing oils, fats and the like, comprising a closed receptacle adapted to be connected with a source of hydrogen, means for supporting catalytic material therein, a fluid-operated motor and a gas circulating pump driven thereby both located in said receptacle, a conduit including a power-driven pump for delivering oil from the said receptacle through said motor for driving said gas pump, and means for spraying the oil discharged from the first-named motor over said catalytic material and a conduit including said gas pump for withdrawing gas from above the surface of liquid in the receptacle and discharging the same into the liquid.

2. Apparatus for hydrogenizing oils, fats, and the like, comprising a receptacle adapted to be connected with a source of hydrogen and provided with means for supporting catalytic material therein, a fluid-operated motor and a gas pump driven thereby both located within said receptacle, a gas-circulating conduit connected with said gas pump including a condenser outside said receptacle, a second conduit including a power-driven pump for delivering oil from the receptacle through said motor to said catalytic material.

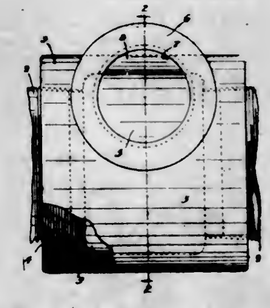
6. Apparatus for hydrogenizing oils, fats, and the like, comprising a closed receptacle adapted to be connected with a source of hydrogen, a catalytic septum dividing said receptacle into an upper compartment and a lower compartment provided with trays adapted to support catalytic material, a liquid circulating pipe open to both compartments including a power driven pump, a fluid motor in the upper compartment connected to said pipe and provided with a spray delivery, a gas circulating pipe open to both compartments and including liquid separating means and a gas circulating pump having driving connections with said motor, and stirring means in the lower compartment having operating connections with said motor.

7. The process of hydrogenizing oils, fats, and the like, consisting in subjecting a body of the oily liquid in which catalytic material is suspended to the action of hydrogen, conducting the hydrogen escaping therefrom through a body of catalytic material, and simultaneously spraying onto said material a portion of the oil previously treated and permitting the same to percolate through said material into the main body of oil.

8. The process of hydrogenating fats, oils, waxes and the like, consisting in subjecting the liquefied material to be hydrogenated in the presence of a finely divided catalyzer and a body of coarse catalyzer to the action of hydrogen in the presence of heat, withdrawing portions of the liquid, and returning the same in spray above the body of coarse catalyzer and in the presence of the hydrogen and repeating the cycle.

[Claims 3 to 5 not printed in the Gazette.]

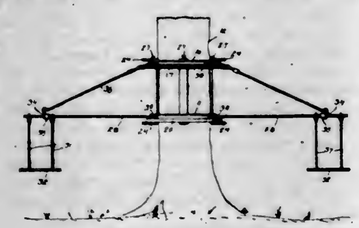
1,276,291. PIPE-FITTING. FREDERICK J. WALLING, Lemax, Ill. Filed Oct. 24, 1917. Serial No. 198,248. (Cl. 137—75.)



1. A pipe fitting comprising a T, a screw thread in the branch of said fitting, terminating at its inner end substantially in a plane that is tangential to the inner wall of the main body of said fitting, the channel leading from the main cavity to the said threaded branch being outwardly expanded.

2. A pipe fitting comprising a T having a channel leading from its main chamber to its threaded branch, the said channel being outwardly expanded, the screw thread in the said branch terminating at its inner end substantially in a plane that is tangential to the inner wall of said main chamber, and the projected axis of said threaded branch being approximately tangential to the inwardly projected cylindrical surface of the main end threads of said fitting.

1,276,292. PORTABLE CAROUSEL. JOHN WARGO, Jr., Trenton, N. J. Filed Apr. 28, 1917. Serial No. 165,248. (Cl. 46—27.)

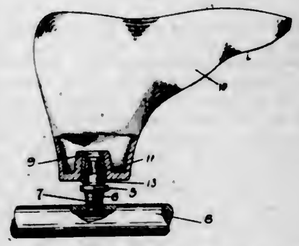


1. In a carousel, a pair of annular members, formed in separable sections whereby they may be embraced about the trunk of a tree, means for securing said sections together, means for securing the annular members to the tree, a pair of horizontal struts having rollers upon their inner ends adapted to be guided in the lower annular member, a pair of braces having rollers adapted to be guided in the upper annular member for supporting the outer ends of the struts, and swings supported upon the struts.

2. In a carousel, a pair of annular members, formed in separable sections whereby they may be embraced about the trunk of a tree, each annular member being formed to provide an annular track, means for securing said annular members to the tree, a pair of struts disposed in diametrically opposite directions having rollers upon their adjacent ends guided for movement in the track of the lower annular member, a pair of braces having rollers upon their adjacent ends adapted to be guided in the track of the upper annular member, the remote ends of said braces being connected to the outer ends of the struts, and swings supported upon said struts.

[Claims 3 and 4 not printed in the Gazette.]

1,276,293. LAST CONNECTION. ADNA D. WARNER, Mishawaka, Ind., assignor to Mishawaka Woolen Manufacturing Company, a Corporation of Indiana. Filed Mar. 26, 1915. Serial No. 17,088. (Cl. 18—46.)

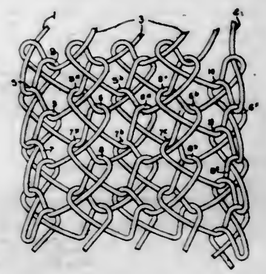


1. In combination with a hollow last of sufficient stiffness to withstand evacuation and having a tapered opening therein, a tapered nipple frictionally engaging the walls of said opening, said nipple being attached to a suitable conduit.

3. In combination with a hollow last of sufficient stiffness to withstand evacuation and having a tapered opening in the body thereof, a tapered nipple frictionally engaging the wall of said last about said opening, and means to evacuate said last.

[Claim 2 not printed in the Gazette.]

1,276,294. KNITTED FABRIC. JOHN WATERFIELD, Providence, R. I., assignor, by mesne assignments, to Shannock Narrow Fabric Company, Pawtucket, R. I., a Corporation of Rhode Island. Original application filed Feb. 7, 1913, Serial No. 746,828. Divided and this application filed Jan. 20, 1915, Serial No. 3,194. Renewed May 22, 1918. Serial No. 236,049. (Cl. 66—4.)

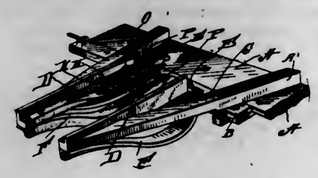


1. As an article of manufacture, a knit fabric composed of a plurality of independent body threads, each extending lengthwise of the fabric, each body thread being formed into loops which extend alternately in opposite directions, the loops of each thread which extend in one direction passing through a loop of the adjacent thread from the rear to the front and around another loop of said adjacent thread, and the loops which extend in the other di-

rection extending through loops of adjacent thread from the front to the rear and around other loops of said adjacent thread.

[Claim 2 not printed in the Gazette.]

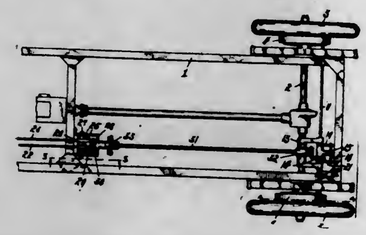
1,276,295. NON-CLOGGING CORN-HARVESTER KNIFE. GEORGE H. WATERS, Glenfield, N. Y. Filed Dec. 20, 1917. Serial No. 208,126. (Cl. 56—130.)



1. A device for preventing grass or other foreign matter from clogging the reciprocating sickle bars of corn harvesters comprising in combination with the frame of a harvester, a reciprocating sickle bar with cutting blades thereon, a U-shaped brace member secured to said frame, bars secured to the frame and projecting therefrom at angles to each other, brace angle bars secured to the under surface of said U-shaped member and spaced apart, the angle bars having their outer portions tapering, ledger plates bolted to said angled bars and having lateral adjustment, and set screws mounted in threaded apertures of the angled bars and bearing against the under surfaces of said plates, the inner ends of the angled bars and ledger plates terminating intermediate the opposite longitudinal edges of the sickle bar.

2. A device for preventing grass or other foreign matter from clogging the reciprocating sickle bars of corn harvesters, comprising in combination with the frame of a harvester, a reciprocating sickle bar with cutting blades thereon, a U-shaped brace member secured to said frame, bars secured to the frame and projecting therefrom at angles to each other, brace angle bars secured to the under surface of said U-shaped member and spaced apart, the angle bars having their outer portions tapering, ledger plates bolted to said angled bars and having lateral adjustment, and set screws mounted in threaded apertures of the angle bars and bearing against the under surfaces of said plates, the inner ends of the ledger plates and angle bars being beveled and terminating intermediate the opposite edges of the sickle bar.

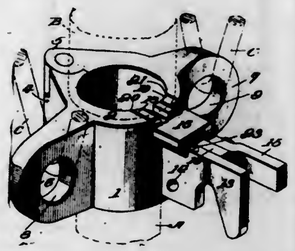
1,276,296. BRAKE MECHANISM FOR VEHICLES. EZRA L. WEAVER, Toledo, Ohio, assignor of one-half to George J. Madden, Toledo, Ohio. Filed Oct. 10, 1917. Serial No. 195,705. (Cl. 21—8.)



1. The combination with two brakes, of a sectional operating shaft therefor, an arm fixedly projecting from each shaft-section, a member loosely mounted on one of said sections between said arms, means connecting said member and arms for imparting rotation to the arms in the same direction when the member is rotated and to permit a limited relative movement of the arms to compensate for lost motion, operating means for imparting rotation to said member, said operating means comprising a shaft in geared connection with said member, a rocker-arm in geared connection with said shaft, and separate operating draft-rods in pin-and-slot connection with said rocker-arm.

2. In a brake mechanism for vehicles, a brake, a shaft extending longitudinally of the vehicle, operating connection between said shaft and brake, a motion converting member movable longitudinally of the vehicle, connection between said member and shaft for imparting rotation to the latter from movements of the former, and a plurality of manually controlled brake operating elements in separate pin and slot connection with said member whereby said member may be operated by a movement of either of said elements.

1,276,297. AUTOMATIC FINGER-LATCH ELEVATOR. CARL WHITE, Jr., Chattanooga, Tenn., assignor to Lucey Manufacturing Corporation, Chattanooga, Tenn., a Corporation of Tennessee. Filed May 6, 1918. Serial No. 232,766. (Cl. 57—9.)



1. In a casing or tubing elevator, the combination with semi-circular hinged jaws, of an arm carried by each of said jaws, one of said arms being provided with an inclined portion, a recess provided in the upper face of each jaw, a latch pivoted to one of said arms and having fingers which rest in said recesses when the elevator is closed for aiding in securing the jaws in closed position, a hook portion provided on said latch having an inclined face adapted to coöperate with the inclined portion of the arm to raise said latch when the arms are brought together and cause the fingers to engage their respective recesses, and a handle integral with the latch.

2. In a casing or tubing elevator, the combination with semicircular hinged jaws, of an arm carried by each of said jaws, a recess provided in the upper face of each jaw, an inclined portion provided on the upper face of one jaw adjacent the recess in the same, a latch pivoted to one of said arms and having fingers which rest in said recesses when the elevator is closed, an inclined portion provided on one of said arms, and a hook portion provided on said latch having an inclined portion adapted to coöperate with the inclined portion of the arm to raise said latch when the arms are brought together and cause the fingers to engage their respective recesses, the inclined portion on the jaw coöperating with one of said fingers to aid in raising the latch when the arms are brought together.

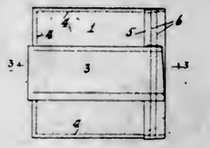
1,276,298. BEVERAGE EXTRACT. WARREN HENRY WHITE, Tacoma, Wash. Filed May 29, 1916. Serial No. 100,669. (Cl. 99—11.)

1. A solid soluble beverage extract comprising cacao products, pulverized extractive matter of a roasted cereal, peas, and caramelized saccharine matter.

7. A solid soluble beverage extract comprising pulverized extractive matter of roasted cereals, peas, and caramelized saccharine matter.

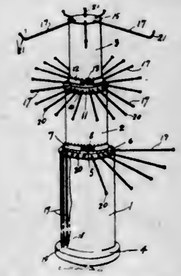
[Claims 2 to 6 not printed in the Gazette.]

1,276,299. RUBBING-CONTAINER. LESLIE DENMAN WHITNEY, San Mateo, Cal. Filed Oct. 3, 1917. Serial No. 194,635. (Cl. 2—100.)



A container for the described purpose comprising a flexible fabric bag composed of a relatively non-pervious back member; a functionally pervious face member; means securing the two members together on three sides; a turned back portion of both members at the fourth side; other means securing together the turned back portion; and a handle member on the back, secured at one end to the turned back portion of the face and back members and secured at its other end on the opposite side of said members.

1,276,300. CLOTHES-DRIER. EDWARD WIDEEN, Vancouver, British Columbia, Canada. Filed Mar. 1, 1918. Serial No. 219,819. (Cl. 68—34.)



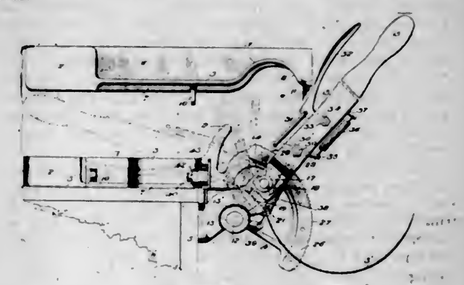
2. A clothes drier comprising a suitably supported lower column having inner and outer casings connected together by a closure member at their upper ends, the said closure being provided with a plurality of spaced openings, an intermediate column vertically adjustable in the said inner casing and also consisting of inner and outer casings connected together by an upper closure member having a plurality of spaced openings, an upper column vertically adjustable in the inner casing of the intermediate column closed at its upper end and having a plurality of spaced openings in the closure, a plurality of withdrawable arms normally arranged to hang within each column having their upper ends extended through said openings and enlarged so as to be supported from the respective closure members, means on the lower ends of said arms for preventing their disengagement from their respective column when withdrawn to assume a horizontal position, and means for securing the intermediate and upper columns in any vertically adjusted position.

[Claim 1 not printed in the Gazette.]

1,276,301. PORTABLE HAND-TOOL FOR APPLYING BINDING MATERIAL TO RECEPTACLES. CLARENCE E. WISE, Washington, D. C. Filed Nov. 17, 1917. Serial No. 202,517. (Cl. 100—15.)

1. A portable hand tool for applying binding material to receptacles comprising a weighted base member, a drum sector carried by said base-member having a flattened gripping surface, and an operating lever secured to the drum-sector carrying a pivoted gripping shoe adapted to rigidly clamp the binding material to the gripping surface of the drum sector.

3. A portable hand tool comprising a base member, a movable member secured to said base member, an operating lever eccentrically pivoted to said movable member, and a rocking gripping shoe eccentrically pivoted to said lever.



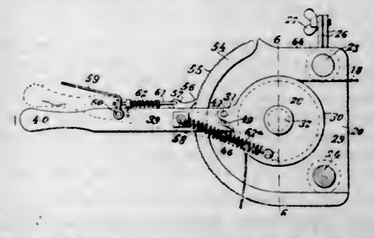
6. A portable hand tool comprising a weighted base member, a drum-sector secured to and carried by said base member, an operating lever eccentrically pivoted to the sector, and a gripping shoe eccentrically pivoted to the lower end of said lever.

13. A portable hand tool for applying binding material to receptacles comprising a drum-sector having a flattened gripping surface, an operating lever eccentrically pivoted to the sector, a movable gripping shoe secured to the lever for firmly clamping the binding element to the sector, and means for locking the binding element when in its stretched and tightened condition.

21. A portable hand tool for applying binding material comprising a base member, a drum-sector supported by said member, means carried by said sector for clamping the binding material against the same and adapted to move said sector to stretch the material simultaneously with the clamping operation, and tension means connecting the said sector and clamping means to lock the clamping means in its clamped position.

[Claims 2, 4, 5, 7 to 12, 14 to 20, and 22 to 25 not printed in the Gazette.]

1,276,302. BINDER-ELEMENT-TIGHTENING MECHANISM. CLARENCE E. WISE, Washington, D. C. Filed May 31, 1916, Serial No. 100,929. Renewed July 9, 1918. Serial No. 244,125. (Cl. 254—161.)



3. Binder element tightening means including in combination with a revolubly mounted drum, a lever pivoted thereto and having an engaging member at its inner end to coöperate with the periphery of said drum, a pin mounted off center with respect to the drum, and a tension spring connecting said pin and lever whereby the latter exerts its force to move said lever to either side of its pivoted point.

12. Binder element tightening mechanism including in combination with a drum adapted to receive a binder element, of a lever pivoted to the periphery of said drum having a loose shoe pivoted off center with respect to the lever pivot and coacting with said lever to engage the binder element against the drum when the lever is moved in a predetermined direction, and tension means connect-

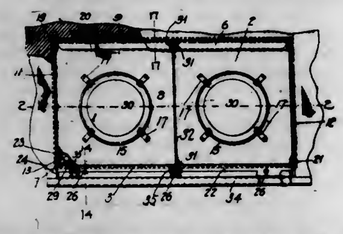
ing said drum and said lever to retain said lever with respect to said drum when the binder element is in stretched position.

16. Binder element tightening mechanism including in combination with a movable drum adapted to receive a binder element, said drum having an operating lever pivoted adjacent its periphery; of a shoe carried by said lever adapted to move into engagement with the periphery of said drum for engaging the binder element only when the lever is moved in a predetermined direction and to disengage when moved in an opposite direction, and tension means connecting said lever and shoe whereby said shoe is retained in position when said lever is moved on its pivot.

22. Binder element tightening means including in combination with a supporting member having a drum adapted to receive a binder element, of means carried by said drum for engaging with said binder element to grip and tighten the same, means coöperating with said supporting member and gripping and tightening means to control the setting of said gripping and tightening means with respect to the drum, and tension means connecting said drum and gripping and tightening means to control the gripping of the binder element between said gripping and tightening means and said drum.

[Claims 1, 2, 4 to 11, 15, and 17 to 21 not printed in the Gazette.]

1,276,303. LINING STRUCTURE FOR ICE-RECEPTACLES. JOHN J. WOMPEY, Denver, Colo., assignor to The L. Grauman Company, a Corporation of Colorado. Filed Sept. 5, 1916. Serial No. 118,482. (Cl. 220—98.)



1. A lining structure for ice-receptacles of the character described, a cage-section fitted across a corner thereof to cover an overflow pipe within a receptacle to which the structure is applied, and a cover section to cover the space around the over-flow pipe limited by the cage section.

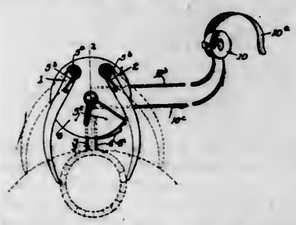
6. A collapsible lining structure for the ice receptacles of soda fountains or refrigerators, composed of sections adapted to cover the bottom and sides of an ice-receptacle and means for securing said structure in the receptacle, the several sections being loosely interlocked at their adjoining edges to be separately removable from the receptacle to which the structure is applied.

[Claims 2 to 5 and 7 not printed in the Gazette.]

1,276,304. ARMATURE-CIRCUIT-TESTING APPARATUS. CLYDE ZEEK, San Diego, Cal. Filed Oct. 31, 1916. Serial No. 128,653. (Cl. 175—183.)

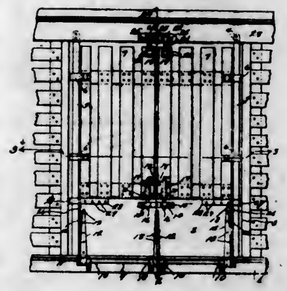
1. In an armature circuit testing apparatus, the combination of a handle member, a pair of arms pivotally mounted to one end thereof, a stationary pin extending from said handle member intermediate the extending ends of said arms, a longitudinally movable pin adjacent said stationary pin, a receiver and electrical conductors connecting said arms with said receiver and said pins with a source of electrical energy.

4. In an armature circuit testing apparatus, the combination of an insulated head piece, an iron tube with one end secured therein forming a core for an induction coil, a handle secured on said tube inclosing the primary and secondary winding of the induction coil, a pair of arms pivotally mounted on said head, means tending to hold their extended ends toward each other, a pin secured to said head intermediate the extended ends of said arms and a longitudinally movable pin adjacent thereto, means tending to hold said movable pin outwardly, a receiver in electrical connection with the secondary winding of said induction coil, conductors connecting both terminals of said primary winding of said induction coil with said arms and conductors for connecting said pins with an alternating current source.



[Claims 2, 3, and 5 not printed in the Gazette.]

1,276,305. STOCK-CAR DOOR AND GANGWAY. CHARLES D. ADAMS, Jacksonville, Fla. Filed Feb. 23, 1918. Serial No. 218,794. (Cl. 119—7.)



1. A stock car door comprising a horizontally pivoted gangway section, vertical posts secured in a door opening, pivoted guard sections slidably mounted on said posts, retaining brackets carried by the sides of the gangway section for the reception of the lower ends of the guard sections when the gangway is in position for unloading, said retaining brackets being so positioned that they will engage the posts in the door opening and limit the inward movement of the gangway section when the same is closed and means for locking the guard and gangway sections in relation to each other when the door is closed.

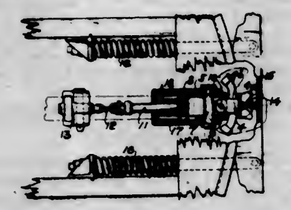
[Claims 2 to 5 not printed in the Gazette.]

1,276,306. AUTOMATIC TRAIN-PIPE CONNECTOR. ROBERT E. ADREON, St. Louis, Mo., assignor, by mesne assignments, to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Oct. 6, 1916. Serial No. 124,029. (Cl. 285—24.)

2. In an automatic train pipe connector, the combination of a longitudinally movable connector head, a hanger attached to the draw bar for supporting said head, a buffer separate from the draw bar, and means operated by the buffer for shifting said connector head.

3. In an automatic train pipe connector, the combination of a longitudinally movable connector head, a hanger for supporting said head, a yielding buffer, and a spring controlled by the yielding movement of the buffer for projecting said connector head forward.

7. In an automatic train pipe connector, the combination of a hanger attached to the draw bar, and having a horizontal pin, a yoke slidably mounted on said pin, a connector head connected to the forward end of said yoke by a vertical pivot, another yoke secured to the hanger and a spring between said yokes for forcing said yoke forward on said pin.



8. In an automatic train pipe connector, the combination of a hanger attached to the draw bar, a yoke slidably mounted on said hanger, a connector head pivotally connected to the forward end of said yoke, a spring for forcing the yoke and connector head forward, a spring actuated buffer, and a connection from said buffer for withdrawing the yoke and connector head.

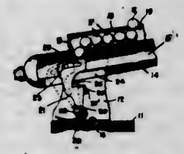
[Claims 1 and 4 to 6 not printed in the Gazette.]

1,276,307. PROCESS FOR PRODUCING ON THE FIBERS NEW COPPER COMPOUNDS OF SUBSTANTIVE ORTHOOXYAZO DYESTUFF. EUGEN ANDERWERT, HERMANN FRITZSCHE, and HEINRICH SCHOBEL, Basel, Switzerland, assignors to Society of Chemical Industry in Basle, Basel, Switzerland. Filed Nov. 4, 1915. Serial No. 59,579. (Cl. 8—5.)

2. The described process for producing fast tints on animal or vegetable goods, which consists in first dyeing the goods in a bath formed by a solution of a substantive orthooxyazo dyestuff derived from a 2:5:7-aminonaphtholsulfonic compound and treating afterward the thus obtained dyeing with a solution of a copper salt.

[Claim 1 not printed in the Gazette.]

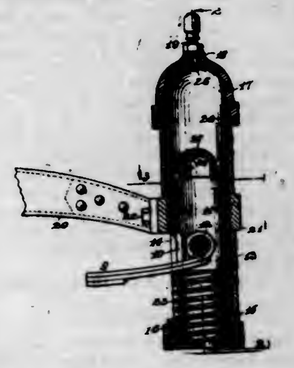
1,276,308. TOY CANNON. THOMAS RAYMOND ARDEN, New York, N. Y., assignor to Arden Manufacturing Corporation, New York, N. Y., a Corporation of New York. Filed May 31, 1918. Serial No. 237,399. (Cl. 124—13.)



A toy cannon comprising a bored barrel having a slot therein, a pin traversing said barrel, a pivotally mounted hammer having a head projecting through the slot into the barrel and an arcuate slot in the hammer head through which latter slot said pin projects, there being a notch in said hammer intermediate its ends, a spring tending to normally urge said hammer toward the forward end of the cannon, and a crank shaft having a portion engageable with said notch for moving the hammer in the opposite direction against the action of the spring.

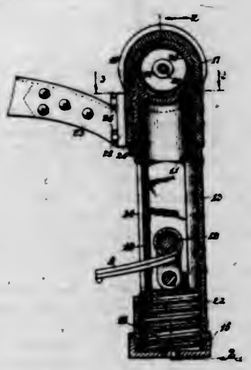
1,276,309. VEHICLE-SPRING. HENRY P. ARNDT, Amston, Conn., assignor of two-thirds to Charles M. Ams, New York, N. Y. Filed Oct. 4, 1916. Serial No. 123,753. (Cl. 267—24.)

1. In combination, with each of the side members of the body-supporting frame of a motor vehicle, and a semi-elliptic spring having one end connected with said member intermediate the ends of the latter, of a device comprising two telescoping members, mounted at the other end of said spring and at the end of said frame member, respectively, and combining to provide a chamber therebetween, a flexible, impervious and inflated sack or bag in said chamber substantially forming an hermetic lining therefor to provide an air-tight cushion, and a spring associated with one of said telescoping members to yieldingly oppose the reactive forces of said cushion when compressed.



[Claim 2 not printed in the Gazette.]

1,276,310. PNEUMATIC VEHICLE-SPRING. HENRY P. ARNDT, Amston, Conn., assignor of two-thirds to Charles M. Ams, New York, N. Y. Original application filed Oct. 4, 1916, Serial No. 123,753. Divided and this application filed Nov. 16, 1917. Serial No. 202,274. (Cl. 267—50.)



1. In a device of the character described, the combination of a cylinder, a plunger adapted to reciprocate therein, said cylinder being provided with and open to a transversely disposed top portion having closed ends and constituting an elongated chamber, a flexible hermetic lining for said chamber providing a pneumatic cushion toward the side of which said plunger is directed, an open-ended, flexible reinforcing casing surrounding said lining, and means for connectively interposing said cylinder and plunger between the body and the running gear of a vehicle.

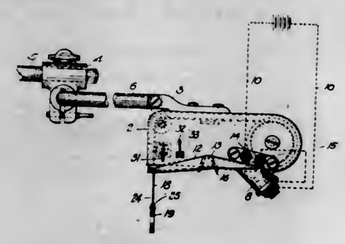
3. In a device of the character described, the combination of two telescoping cylinders providing a chamber of substantially greater length than diameter, the inner cylinder having a closed upper end and the outer being provided with and open to a transversely disposed cylindrical top portion having closed ends, a pneumatic cush-

ion in said top portion against the side of which the closed upper end of said inner cylinder is adapted to impinge, and means for connectively interposing said cylinders between the body and the running gear of a vehicle.

7. In combination, with the side member of the body-supporting frame of a motor vehicle, and a semi-elliptic spring having one end connected with said member intermediate the ends of the latter, of a device comprising two hollow members in telescopic arrangement, the inner having a closed upper end and the outer being provided with and open to a transversely disposed top portion having closed ends, a pneumatic cushion in said top portion against the side of which the closed upper end of said inner member is adapted to impinge, said outer hollow member being rigidly secured to the end of said side member of the frame, and said inner hollow member being provided with registering longitudinal slots and the other end of said spring passing through said slots, and means within said inner hollow member for securing therein said spring-end.

[Claims 2, 4 to 6, and 8 to 10 not printed in the Gazette.]

1,276,311. MEASURING INSTRUMENT. CHARLES E. H. ARMBRUSTER, Denver, Colo. Filed May 14, 1917. Serial No. 168,528. (Cl. 33—138.)



5. A measuring instrument of the character described comprising a holder, a measuring tape wound thereon, guiding means causing a portion of the tape to extend in a determinate direction as it is unwound, and another portion to extend at an angle to said direction, a pointer coöperating with the first-mentioned portion of the tape, an electric lamp to illuminate the portion of the tape coöperating with the pointer, a switch for controlling the current-flow to the lamp, including a spring-pressed contact-lever, and a shouldered device on the tape, engaging said lever to move the switch to an open position when the tape is rewound.

6. A measuring instrument of the character described comprising a holder, a measuring tape wound thereon, guiding means causing a portion of the tape to extend in a determinate direction as it is unwound, and another portion to extend at an angle to said direction, a pointer coöperating with the first-mentioned portion of the tape, an electric lamp to illuminate the portion of the tape coöperating with the pointer, a switch for controlling the current-flow to the lamp, including a spring-pressed contact-lever, and a hook at the free end of the tape, adapted to engage said lever and thereby move the switch to an open position when the tape is rewound.

7. A measuring instrument of the character described comprising a holder, a measuring tape wound thereon, guiding means causing a portion of the tape to extend in a determinate direction as it is unwound, and another portion to extend at an angle to said direction, a pointer coöperating with the first-mentioned portion of the tape, an electric lamp to illuminate the portion of the tape coöperating with the pointer, a switch for controlling the current-flow to the lamp, including a spring-pressed contact-lever, a shouldered device on the tape, engaging said lever to move the switch to an open position when the tape is rewound, and means independent of said device for locking the lever in the position it occupies when the switch is open.

8. A measuring instrument of the character described comprising a holder, a measuring tape wound thereon, guiding means causing a portion of the tape to extend in a determinate direction as it is unwound, and another portion to extend at an angle to said direction, a pointer coöperating with the first-mentioned portion of the tape, and means for locking the tape in a partially or completely unwound condition.

[Claims 1 to 4 and 9 not printed in the Gazette.]

1,276,312. ATTACHING DEVICE. ADOLPH BALLENBERG, New York, N. Y.; Fannie Ballenberg executrix of said Adolph Ballenberg, deceased. Filed Aug. 14, 1917. Serial No. 186,089. (Cl. 45—88.)



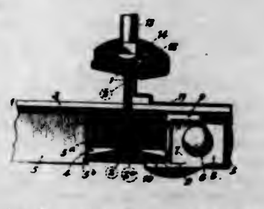
1. The herein described means for connecting two parts which consist in providing said parts with protruding headed members and an attaching device comprising two plates, means for connecting said plates to permit of a longitudinal movement thereof one upon another, both of said plates being provided with apertures through which said headed members are adapted to pass, and the apertures in one of said plates being provided with L-shaped extensions or recesses, the extensions or recesses in said apertures being adapted to receive the shanks of the protruding headed members.

3. An attaching device of the class described, comprising front and back plates, means for connecting said plates to permit of their movement one upon another, said plates being provided with spaced apertures, the apertures in the back plate being provided at one side thereof with extensions or recesses and the apertures in the front plate being provided on the corresponding sides thereof with L-shaped extensions or recesses.

4. An attaching device of the class described, comprising front and back oblong plates mounted one upon another, the back plate being provided with longitudinal side edge keepers in which the front plate is longitudinally movable and both of said plates being provided with spaced apertures, the apertures in the front plate being provided at one side thereof with extensions or recesses ranging longitudinally of and parallel with the side edge keepers of the back plate and a rivet secured centrally of the back plate and passing through an elongated slot in the front plate for holding said plates together but permitting their movement one upon another.

[Claims 2 and 5 not printed in the Gazette.]

1,276,313. CAR-ROOF WITH INTERLOCKING FRAME. PAUL BATEMAN, Webster Groves, Mo., assignor to American Car and Foundry Company, St. Louis, Mo., a Corporation of New Jersey. Filed July 28, 1914. Serial No. 853,708. (Cl. 108—5.)



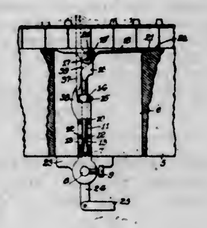
1. In a roof, a flanged carline provided with a T-shaped perforation, a notched purlin of T-shape section adapted to pass through said perforation, the horizontal leg of the perforation being wider than the horizontal leg of said purlin, said purlin by reason of its notch and the horizontal leg of said perforation being adapted to assume an interlocking relation with said carline, and a retaining clip secured to said purlin and opposing movement of said carline for maintaining the lower edges of the carline and purlin substantially coincident.

2. In a roof, an I-shaped carline provided with a T-shaped perforation, a notched purlin of T-shaped section projecting through said perforation, the horizontal leg of the latter being wider than its own vertical leg and the horizontal leg of said purlin, said purlin by reason of its notch and the horizontal leg of the perforation being adapted to assume an interlocking relation with said carline, and a retaining clip secured to said purlin and projecting beneath said carline to maintain a relatively flexible connection between the purlin and the carline.

3. In a car roof, carlines composed of I-beams having T-shaped openings in the webs thereof, in combination with T-shaped purlins passing through the openings in said carlines, the webs of said purlins being notched to inclose the lower flanges of said carlines, a roofing sheet having a portion extending between the carline and the purlins and a locking block riveted to said purlins and having a portion extending beneath said carlines to maintain said carlines and purlins in interlocked relation with the lowermost portions of the carlines and purlins substantially coincident.

4. In a car roof, carline members composed of I-beams having T-shaped openings in the webs thereof, in combination with T-shaped purlin members passing through the openings in said carlines with the flanges of the purlins uppermost to form supports for roofing sheets and with the flanges of the purlins resting on the webs of the carlines, the webs of said purlins being notched to inclose the lower flanges of said carlines in such manner that the lower flanges of the carlines and the lower edges of the webs of the purlins are substantially coincident, a locking block riveted to one of said members and in engagement with the other of said members to maintain the upper flanges of the carlines above and spaced apart from the upper flanges of the purlins, said members being flexibly secured together by said locking block.

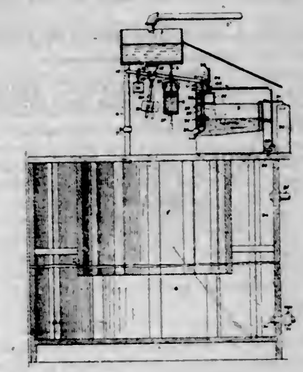
1,276,314. TEMPO-LEVER MECHANISM FOR AUTOMATIC PLAYING-PIANOS. CARL BERGLAND, Chicago, Ill., assignor to Gulbransen-Dickinson Company, Chicago, Ill., a Corporation of Illinois. Filed July 30, 1914. Serial No. 854,014. (Cl. 84—160.)



1. In a piano, the combination of a key bed having an opening, a rotatable lever in said opening, the lower portion of which cooperates with the tempo mechanism, said lever comprising two portions relatively movable, a lug on one portion, and a pivoted actuating piece adapted to be brought into a substantially vertical position, and a tongue on said piece adapted for engagement behind the lug so that the lever may be rotated, said actuating piece when in its horizontal position serving to close the opening in the key bed.

[Claims 2 and 3 not printed in the Gazette.]

1,276,315. FEED DEVICE FOR WATER-SOFTENERS. OTTO BEST, San Francisco, Cal. Filed Nov. 5, 1917. Serial No. 200,418. (Cl. 210—1.)



1. In means for automatically feeding a reagent to a stream of liquid, the combination of a distributing tank for the liquid, having a discharge hole in its bottom, a balance lever, a vessel supported upon one arm of said balance lever, into which the liquid discharged through said hole enters, a reacting chamber, said vessel having a hole in its bottom through which the liquid flows into to reacting chamber, a vessel for containing the reagent having a hole in its bottom, means for maintaining constant the level of the reagent in said vessel, a vertically movable pipe for discharging the reagent through said hole having an inlet for the reagent, and suspended from said arm of said balancing lever, and a weight suspended from another arm of said balancing lever and counterbalancing the weights of the vessel, when empty, and of the pipe.

[Claims 2 to 4 not printed in the Gazette.]

1,276,316. DRESS-PATTERN. JUDITHA BLACKBURN, Los Angeles, Cal. Filed Oct. 25, 1915. Serial No. 57,645. (Cl. 33—14.)

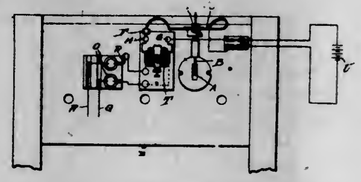


3. A dress pattern having front and side front sections and back and side back section panels, each provided with a waist portion and a skirt portion, the skirt portions of said pattern being detachably connected with the waist portions at the waist line, said skirt portions being provided with transverse members and lapping longitudinal members adapted to be adjusted between each set of transverse members to longitudinal and angular relation with respect to each other.

6. A dress pattern having a plurality of waist panels for the front and back of the waist and a detachable skirt pattern, the said skirt portion of the pattern being reversible and adaptable to each waist panel for producing the different panels necessary for the formation of the skirt.

[Claims 1, 2, 4, and 5 not printed in the Gazette.]

1,276,317. ELECTRIC INCUBATOR. FRANK NELSON BLAGEN, Hoquiam, Wash. Filed Feb. 16, 1917. Serial No. 149,006. (Cl. 219—19.)



1. In an electric incubator, the combination of an incubating chamber, insulating members at opposite sides thereof, a resistance wire connected back and forth on the insulating members, a thermostat, a balanced lever operatively connected with the thermostat, a cup of mercury with which one end of the balance lever is arranged to electrically connect, a battery, a wire connecting the opposite end of the balanced lever with the battery, a relay, a wire from the battery to the primary terminal of the relay, and means for electrically connecting the relay with the service mains and the resistance wire.

2. In an electric incubator, the combination of an incubating chamber, insulating members at opposite sides thereof, a resistance wire connected back and forth in substantially U-shaped and evenly spaced arrangement continuously from one end of the incubator to the other, a thermostat, a balanced lever operatively connected with the thermostat, a cup of mercury with which one end of the balanced lever is arranged to electrically connect, a source of electric current, a wire electrically connecting the aforesaid source of current with the free end of the balanced lever, a relay connected with the resistance wire and adapted to close the heating circuit when the relay is energized, and an electric connection from the source of current to a terminal of the relay and a connection from the other terminal of the relay to the mercury cup.

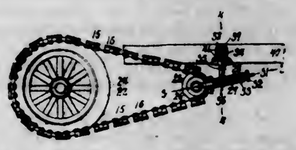
3. In an electric incubator, the combination of an incubating chamber, a heating element in the chamber, a balanced lever, a thermostat to which the balanced lever is operatively connected, a cup of mercury with which one end of the balanced lever is arranged to electrically connect, a battery, a wire connecting one end of the balanced lever with the battery, a relay, a wire from the battery to a terminal of the relay, a wire from the cup to the relay and means for electrically connecting the relay with the service mains and the heating element.

1,276,318. STEERING DEVICE. BENJAMIN M. BOLSER, Centerville, Wash. Filed Apr. 2, 1917. Serial No. 159,263. (Cl. 21—202.)



A steering device of the class described comprising a housing, a spindle inclosed by said housing and rotatable therein and having a caster wheel at one end, a sleeve surrounding the major portion of said spindle, a gear carried by spindle and interiorally of said housing, arcuate rack members also inclosed in said housing and engaging on opposite sides of said gear for rotating the same in opposite directions, levers pivoted to said sleeve and connected to said rack members, and foot pedals mounted exteriorally of said housing and connected to said levers whereby to actuate said rack members.

1,276,319. NON-SKIDDING TRACTION DEVICE. ANDREW J. BORST, Jr., Buffalo, N. Y. Filed Nov. 23, 1916. Serial No. 132,988. (Cl. 21—150.)



1. The combination, with a wheel of a self-propelled vehicle, of a traction device, comprising an idler supporting element mounted on a substantially fixedly-located part of the vehicle forward of the wheel, an idler yieldingly and pivotally mounted in the supporting element so as to yield toward and from the wheel and oscillate vertically at a substantial distance above the surface traveled, and a tractor member passing around the wheel and idler.

5. The combination, with a wheel of a self-propelled vehicle, of a traction device, comprising an idler mounted so as to yield toward and from the wheel, oscillate vertically with respect to the surface traveled and laterally movable into and out of alinement with the wheel, and a tractor member passing around the wheel and idler.

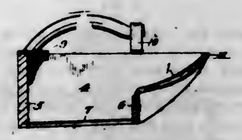
6. The combination, with a wheel of a self-propelled vehicle, of a traction device, comprising an idler supporting element mounted on a substantially fixedly-located part of the vehicle forward of the wheel, a vertically and longitudinally yieldable self-alining idler mounted in said idler supporting element, and a tractor member passing around the wheel and idler.

7. The combination, with a wheel of a self-propelled vehicle, of a traction device, comprising a vertically and longitudinally yieldable idler, an idler supporting element mounted on the vehicle in a substantially fixed location forward of the wheel and adapted to permit automatic adjustment of the idler with respect to the line of travel of the wheel, and a tractor member passing around the wheel and idler.

10. The combination, with a wheel of a self-propelled vehicle, of a non-skidding, traction device, comprising a U-shaped yoke supporting member, a yoke provided with slotted arms, a crosshead carried by the U-shaped yoke-supporting member and disposed within and between the slotted arms, tension means between the crosshead and the yoke, an idler rotatably carried by the yoke, and a tractor member passing around the wheel and idler.

[Claims 2 to 4, 8, and 9 not printed in the Gazette.]

1,276,320. BERRY-GATHERING APPARATUS. HANS BORSTAD, Christiania, Norway. Filed May 3, 1918. Serial No. 232,282. (Cl. 56—99.)



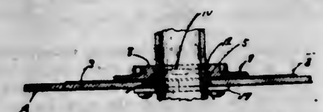
1. A berry gathering apparatus, comprising a receptacle, and a plurality of teeth carried thereby each consisting of yielding side members and a rigid member adapted to hold the latter in operative position.

2. A berry gathering apparatus, comprising a receptacle, and a plurality of teeth carried thereby, each tooth consisting of two flexible substantially parallel side wires having their inner ends fixed in the receptacle, and a centrally rigid wire fixed to the receptacle and connected to the outer free ends of the flexible side wires and adapted to support the latter in operative position.

3. A berry gathering apparatus, comprising a receptacle, and a plurality of teeth mounted on the front portion thereof, each tooth consisting of a loop of flexible wire having bent inner ends and a rigid rod having its inner end fixed to the receptacle and its outer end connected to the free end of the loop.

4. A berry gathering apparatus comprising a receptacle having parallel pointed sides, a back connecting the sides, a front member connecting the sides lower than the latter, parallel bottom rods mounted in the back and front members, a plurality of teeth each consisting of a loop formed of flexible wires having bent inner ends mounted in the top of the front member, and a rigid supporting rod having one end fixed in the latter between the inner end of the loop and having its other end secured to the free end of the loop.

1,276,321. ROOF-JOINT. JAMES BROPSON, Cleveland, Ohio, assignor of one-half to James J. Bropson, Jr., Cleveland, Ohio. Filed Feb. 17, 1916. Serial No. 78,882. (Cl. 285—31.)



1. A roof joint, comprising a plate having an opening for a pipe and provided with an upwardly extending flange around said opening, a collar arranged to rest on said plate and having a recess in its under side to receive said flange, the upper part of the collar having a shoulder projecting inwardly around the margin of the opening therein and the flange being spaced from the pipe to permit the insertion of calking material from below, into the space between the flange and the pipe and against the under side of said shoulder.

2. A roof joint, comprising a plate having an opening adapted to receive a pipe and provided with an upwardly extending flange, a collar resting on said plate and having a recess on its under side to receive said flange and segmental ribs projecting inwardly over the edge of said flange, said ribs being spaced apart at their ends to form vertical grooves therebetween, and calking material filling the space between the flange and the pipe and also between the ribs and the pipe and the said grooves.

1,276,322. BAG-CARRIER. NORVELL H. BULLOCK, Bala, PA. Filed Aug. 6, 1917. Serial No. 184,667. (Cl. 21—65.)



1. The combination in a bag carrier, of a frame; wheels on the frame; a handle projecting from the frame; means for securing the lower portion of the bag to the frame, the bag having a longitudinal rib; and means for securing the rib to the handle.

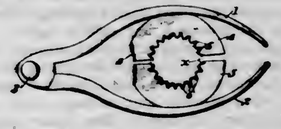
2. The combination in a bag carrier, of a frame having a handle; an axle mounted on the frame; wheels on the axle; a support for the carrier projecting from the front of the frame; and a bag secured to the frame and to the handle.

3. The combination in a bag carrier, of a frame; a handle projecting from the frame; an axle on the frame; wheels on the axle located on each side of the frame; supports projecting from the front of the frame; a bag having a flange at its lower edge secured to the frame; and a longitudinal flange secured to the handle.

4. The combination in a bag carrier, of a frame; a handle projecting from the frame; an axle on the frame; two wheels mounted on the axle; a support projecting in front of the frame for holding the frame in an upright position; a bag having a flange at its lower edge with a series of holes therein; bolts extending through the flange of the bag and the frame for holding the bag firmly to the frame, said bag having a longitudinal flange; bolts securing the flange to the handle; and means for closing the upper end of the bag.

5. The combination in a bag carrier, of a frame; wheels carried by the frame; a handle projecting from the frame and having a handhold at its outer end; a second handhold at or about the middle of the structure; and a bag secured to the frame and to the handle.

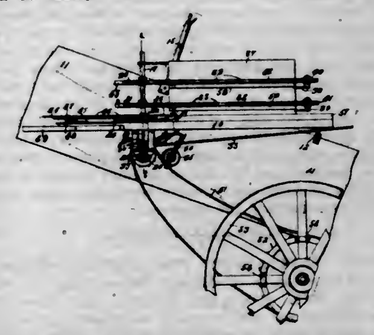
1,276,323. BOTTLE-CAPPING TOOL. WILLIAM W. BURESCH, Baltimore, Md. Filed Aug. 28, 1917. Serial No. 188,550. (Cl. 113—4.)



1. A bottle capping tool comprising a pair of handle members pivoted together, and a coöperating pair of flat, semi-annular die members secured to said handle members, said die members being provided at their inner edges with a series of teeth adapted to engage the corrugations of a bottle cap, one face of the die members adjacent the teeth being beveled so as to conform to the flaring edge of such cap.

[Claim 2 not printed in the Gazette.]

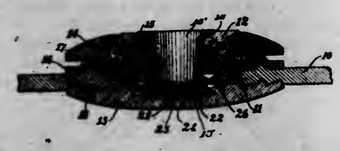
1,276,324. CORN-CUTTER. WILLIAM T. CAMPBELL, Wilsey, Kans. Filed Mar. 22, 1916. Serial No. 85,902. (Cl. 56—131.)



A stalk cutter comprising a base provided at its forward end with a stalk receiving slot, a partition wall extending longitudinally of the base from the inner end of said slot, a side wall extending from the base and coacting with one side of said partition wall to form a passage-way for the stalk, upper and lower brackets car-

ried by the rear end of said partition wall, sprockets supported by said brackets, a vertical shaft extending through the base adjacent the forward end of the partition wall and arranged upon one side of the inner end of said slot, upper and lower sprockets carried by said shaft in alinement with said first mentioned sprockets, endless conveyers supported by said sprockets and movable through the passage-way provided between said outer wall and partition wall, a sprocket mounted on the base at the forward end of the slot, a third sprocket wheel mounted on the shaft at the inner end of said slot, an endless conveyer connecting said last mentioned sprockets and movable along one side of the slot, a stationary cutter extending across the inner end of said slot and a rotary cutting blade carried by said vertical shaft and coöperating with said stationary cutter.

1,276,325. VALVE. ROSE S. CARLING, Los Angeles, Cal. Filed Mar. 28, 1917. Serial No. 158,047. (Cl. 137—4.)

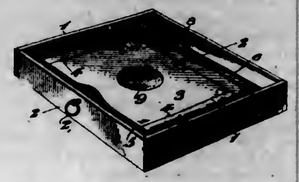


1. In a valve for pads and the like, a valve member having a central screw-threaded bore, a flat valve seat at the bottom of the bore, and a passage through the center of the valve seat, a flat rubber washer upon the flat valve seat and having a central opening communicating with the opening through the valve seat, and a second valve member screw-seated in the central bore of the first valve member and having a flat end wall engaging the upper flat face of the rubber washer and having a bore extending downwardly to the flat end wall; there being a passage leading through the side wall above the flat end wall; so that when the second valve member is screwed down upon the washer the passage is completely sealed and so that when the second valve member is screwed upwardly the passage is open through the flat valve seat, through the rubber washer, between the rubber washer and the flat end wall, and through the side wall passage.

2. A valve for pads and the like, comprising a valve member having a cylindrical stem exteriorly and interiorly threaded; there being a flat valve seat at the bottom of the interior thread and a central passage through the flat valve seat; a rubber washer upon the flat valve seat and having a central opening, a second valve member screw-seated in said cylindrical stem and having a flat end wall fitting upon the flat rubber washer and having a central bore extending downwardly to the flat end wall and having a side passage above the flat end wall, an annular flange formed around the inner end of the cylindrical stem and adapted to fit against the inner face of the pad, an annular tongue projecting upwardly from said flange, a clamping washer around the cylindrical stem and adapted to bear against the upper face of the pad and having an annular groove to match the annular tongue, and a nut screw-seated upon the cylindrical stem against the washer.

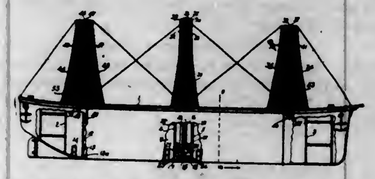
1,276,326. CONTAINER FOR TALKING-MACHINE RECORDS. IRWIN G. CASPER, Philadelphia, Pa. Filed July 14, 1917. Serial No. 180,501. (Cl. 129—20.)

A receptacle for disk records comprising in combination a receptacle in drawer form having a finger opening in its body and a series of disk-holding cases each flexibly connected to a binder portion, said binder portions being superposed and permanently secured adjacent the rear side of said drawer, said cases being open at their front ends to permit ready access to the record disks when said disks and holding cases are bodily lifted by inserting a finger or thumb through said body opening and said records being retained in their cases by the



front wall of the drawer when said cases are restored thereto.

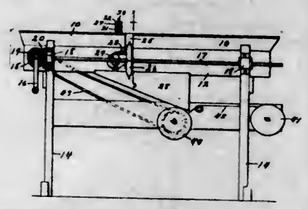
1,276,327. SUBMARINE TOWER-BARGE FOR RAISING SUNKEN VESSELS. NEWTON F. CHAMBERLIN, Libertyville, Ill. Filed Apr. 8, 1918. Serial No. 227,233. (Cl. 114—53.)



1. In apparatus for raising sunken vessels, the combination with a hull having air-tight sealed compartments at the ends, of open work towers arranged at the bow and stern of the said hull, the said towers having cable grooves passing over the top and upon the sides thereof, the said hull having an operating compartment, an open-work operating tower erected upon the said hull above the said operating compartment, a sea valve opening into the said operating compartment, means for actuating the said sea valve and extending to the top of the said operating tower, the said compartment having bulkheads separating the compartment from the interior of the hull, openings in the lower parts of the said bulkheads near the bottom of the hull, water valves arranged to control the said openings, means extending to the top of the said operating tower for opening and closing the said water valves individually, and a water pipe opening in the said compartment and extending to the top of the operating tower.

[Claims 2 to 4 not printed in the Gazette.]

1,276,328. SEED-CORN-SAMPLING MACHINE. CHARLES EDWARD CLARK, Hubbard, Iowa. Filed Nov. 30, 1917. Serial No. 204,802. (Cl. 130—10.)



2. A seed-corn sampling machine, comprising a trough, a chain mounted for travel therein and adapted to receive and carry ears of corn, a picking device mounted for movement on said trough and adapted to engage ears of corn on said chain and remove kernels therefrom, and means for receiving the kernels so removed.

3. A seed-corn sampling machine, comprising a trough, a member mounted for longitudinal travel in said trough and adapted to receive and carry ears of corn, a pick mounted for movement on said trough and adapted to

engage ears on said traveling member and remove test kernels therefrom, a germinator strip, and means for depositing said test kernels so removed on said germinator strip.

6. A seed-corn sampling machine, comprising a trough, an endless device mounted for travel therein, said endless device being adapted to receive and carry ears of corn, a pick mounted for movement adjacent said endless device and adapted to remove test kernels from ears of corn on said chain, means for simultaneously operating said endless device and pick, and yielding pressure devices adapted to engage and hold ears of corn on said endless device for operation of said pick.

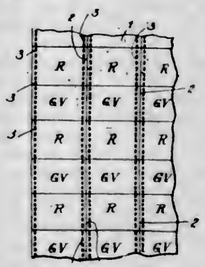
7. A seed-corn sampling machine, comprising a trough, an endless device mounted for travel therein and adapted to receive and carry ears of corn, a pick mounted on said trough and adapted to engage ears on said endless device and remove test kernels therefrom, means for simultaneously operating said endless device and pick, yielding devices to limit upward movement of ears of corn when engaged by said pick and yielding devices to limit lateral movement of said ears under such engagement.

8. A seed-corn sampling machine, comprising a trough, an endless device mounted for travel therein and adapted to receive and carry ears of corn, a pick mounted on said trough and adapted to engage ears of corn on said endless device and remove test kernels therefrom, means for simultaneously operating said endless device and pick, a roller journaled in said trough beneath said endless device, and a roller journaled above the first roller and also adapted for vertical movement, yielding pressure devices being provided for controlling such vertical movement.

[Claims 1, 4, and 5 not printed in the Gazette.]

1,276,329. [WITHDRAWN.]

1,276,330. PHOTOGRAPHIC FILM. CLYDE J. COLEMAN, New York, N. Y. Filed Apr. 1, 1912. Serial No. 687,562. (Cl. 95—9.)



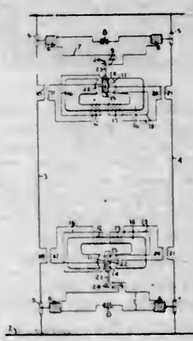
1. A photographically sensitive film having portions adapted to be exposed to red rays more sensitive than portions adapted to be exposed to other rays.

4. A photographically sensitive film divided into sections for successive exposures, those sections which are adapted to be exposed to red rays being more sensitive than other portions to compensate for the difference in activity between rays of different colors.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,276,331. SYSTEM OF ELECTRICAL DISTRIBUTION. WILLIAM H. COLE, Waltham, Mass. Filed Aug. 12, 1915. Serial No. 45,233. Renewed Dec. 8, 1917. Serial No. 206,327. (Cl. 175—294.)

1. The combination with a plurality of parallel-connected conductors extending between two points in an electrical transmission or distribution system, of relays for disconnecting said conductors from the system, and relay-controlling means which holds the relays inoperative so long as the ratio of the currents in the conductors of any associated pair of conductors remains within a predetermined limit, but which renders said relays operative to disconnect said pair of conductors from the system whenever the ratio of the currents carried in the conductors of said pair exceeds a predetermined limit due to an increase or a decrease or a reversal in direction of the current in either conductor of said pair relative to that in the other conductor.



2. The combination with two parallel-connected conductors extending between a receiving and distributing station, of a cut-out at each end of each conductor, and operating means therefor which is held inoperative so long as the ratio between the current carried in said conductors remains within a predetermined limit, but which becomes operative whenever the ratio of the currents carried in the conductors exceeds a predetermined limit due to an increase or a decrease or reversal of direction of the current in one conductor relative to that in the other.

3. The combination with a plurality of parallel-connected conductors extending between two points in an electrical transmission or distribution system, of relays for disconnecting said conductors from the system, and means connecting said relays to the system whereby each relay is subject to the effect of both the sum and the difference of the currents in two associated parallel conductors and under normal working conditions will be held inoperative by the preponderance of the effect of the sum of the currents over the effect of the difference, but will become operative to disconnect the conductors from the system whenever the current in one of said conductors increases, decreases or reverses in direction relative to that in the other conductor thereby to produce a current difference in said conductors which exceeds a predetermined percentage of the current in either conductor.

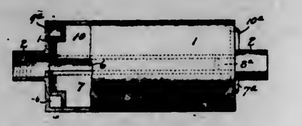
6. In a system of electrical transmission or distribution of that type having a plurality of parallel-connected conductors grouped in feeding sections and subject to power flow in either direction, the combination with disconnecting devices for disconnecting each of the conductors from the system, of means to cause the disconnecting device for any conductor to operate thereby to disconnect said conductor from the system whenever the current therein has a value greater than the maximum or smaller than the minimum value permitted by a predetermined ratio of maximum to minimum current value in the parallel conductors.

[Claims 4 and 5 not printed in the Gazette.]

1,276,332. FUEL-VAPORIZER. CLAUDE HARRISON COOK, Youngstown, Ohio, assignor of one-fourth to S. D. L. Jackson and one-fourth to J. W. Fawcett. Filed Jan. 7, 1918. Serial No. 210,719. (Cl. 257—241.)

1. A fuel vaporizer for internal combustion engines adapted to be interposed in the line of exhaust from the engine, said vaporizer being of tubular cross section

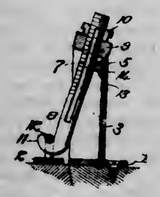
and having an interior cross-shaped exhaust passage formed longitudinally therein and also a plurality of separate compartments each in communication with the other, means for supplying liquid fuel to one of said compartments, and means for conveying vaporized fuel therefrom.



3. A fuel vaporizer for internal combustion engines consisting of a vaporizing casting formed with means at each end for coupling with the exhaust pipe of the engine, and having an integral interior cross-shaped wall portion forming a passage-way for the heated exhaust gases through the vaporizer and dividing the interior of the latter into longitudinal vaporizing chambers.

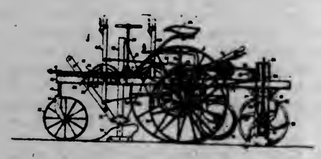
[Claim 2 not printed in the Gazette.]

1,276,333. SASH-FASTENER. WILLIAM CROSTA, Stamford, Conn. Filed Feb. 7, 1917. Serial No. 147,167. (Cl. 16—146.)



A sash lock, comprising in combination, a tubular housing mounted on one sash, a looped keeper mounted upon the second sash, a rock block mounted in said housing, a threaded bolt slidable within said block and adapted to be rocked laterally of the housing, said housing having a slot through which the bolt may swing upon the block, a head threaded upon the bolt for vertically moving the lattter with relation to the housing, a hook upon the lower end of the bolt for engaging the keeper, and a resilient means for normally throwing the bolt outwardly from the housing into the path of the keeper.

1,276,334. COMBINATION PLOW AND PULVERIZER. WILLIAM W. CURTIS, Willis, Tex. Filed Jan. 5, 1918. Serial No. 210,420. (Cl. 55—85.)

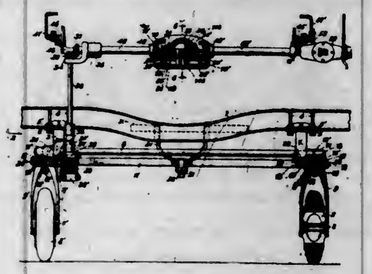


2. A device of the character described including a framework, a pair of vertically adjustable supports carried thereby and spaced apart, thimble-like bearings slidably mounted in said supports, a drum shaft whose respective ends rotate in said bearings, tubular members communicating with respective bearings at one end and whose other ends operate through bearings in the corresponding supports, yieldable members surrounding said tubular members and interposed between the respective bearings thereof, a cutter carrying drum fixed upon said shaft, whose hubs are provided with recesses to receive the outer ends of said thimble bearings and cutter blades carried by said drums.

3. A device of the character described including a framework, a pair of vertically adjustable supports carried thereby, a bearing block slidably mounted in each support, thimbles fixed in said blocks and forming bearings, a drum shaft whose respective ends operate in said thimbles, a cutter carrying drum fixed on said shaft whose hubs are provided with recesses to receive the outer ends of said thimbles which project beyond their corresponding supports, cutter blades carried by said drum and resilient members operating against the blocks to hold said drum yieldably against the ground surface.

[Claim 1 not printed in the Gazette.]

1,276,335. MOTOR-VEHICLE. MANUEL DE ARRIGUNAGA, New York, N. Y. Continuation of application Serial No. 190,289, filed Sept. 8, 1917. This application filed Apr. 17, 1918. Serial No. 229,020. (Cl. 21—192.)



1. In a vehicle, the combination of auxiliary steering means movable to various operative positions to steer the vehicle in different directions and comprising a wheel adapted to be lowered to and raised from the roadway, means for lowering said wheel to the roadway, a motor for actuating said means to lower the wheel, and means for automatically rendering the motor inoperative to move the wheel when the latter has been lowered to the roadway.

6. In a vehicle, the combination of auxiliary steering means comprising a pair of spaced wheels adapted to be lowered to and raised from the roadway for lifting the adjacent wheels of the vehicle, means including gearing for lowering and raising the auxiliary steering wheels, a motor for actuating the gearing to raise and lower the wheels, clutch mechanism for connecting and disconnecting the motor and gearing, means under the control of the driver for closing the clutch to connect the motor and said gearing, means for locking the clutch in its closed position, and means automatically operated when the clutch is closed for tripping the locking means after the auxiliary steering wheels have been moved a predetermined distance.

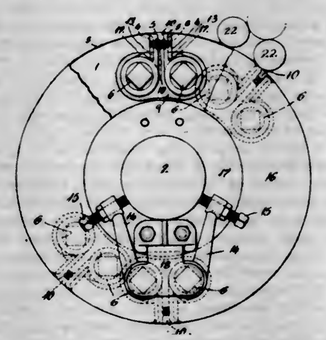
9. In a vehicle, the combination with steering means connected with the main front wheels, of auxiliary steering means comprising a normally raised auxiliary road-wheel mounted on the vehicle adapted to be swung vertically so as to be lifted off of and lowered to the roadway, a separate upright axis for the auxiliary wheel about which the wheel is swung to steer the car when the wheel is lowered to the roadway, a gear connected with said auxiliary wheel to turn therewith about said vertical axis and a rack meshing with said gear to turn the same about said axis, means for effecting the vertical swinging movement of said auxiliary wheel, and means for automatically connecting said rack and normal steering means when the auxiliary wheel is lowered, and for disconecting the same when said wheel is raised.

13. In a motor vehicle, the combination of one or more auxiliary steering wheels, means on which said steering wheels are mounted, said means being pivotally supported from the vehicle to swing up and down to lower said wheels to and raise them from the roadway, a shaft geared to said wheel-supporting means for swinging the same about the pivot thereof, a second shaft geared to said last shaft, gearing comprising a main gear and two pinions, means under the control of the driver for connecting one or the other of said pinions to said second shaft for rotating the same in either direction, a motor, a clutch for connecting said motor and main gear, and means for automatically releasing said clutch after the wheel-supporting means has been raised or lowered.

17. In a motor vehicle, the combination of one or more steering wheels means for carrying said steering wheels, said means being pivotally supported from the vehicle to swing up and down to lower said wheels to and raise them from the roadway, a shaft geared to said swinging support for moving the same about the pivot thereof, a second shaft geared to said first shaft, gearing including a main gear and two pinions for driving said second shaft, a motor for driving said main gear, a clutch for connecting said motor and main gear, means under the control of the driver for closing said clutch, a starting device for the motor, means operatively connecting said starting device with said second shaft for driving the motor from the starting device and for storing energy in the starting device when the motor is operated, a second clutch for operatively connecting said second shaft with said first shaft, means under the control of the driver for releasing said last clutch when the starting device is operated to drive the motor, and means for interrupting the connection between said second shaft and starting device after the starting device has had a predetermined amount of energy stored therein.

[Claims 2 to 5, 7, 8, 10 to 12, and 14 to 16 not printed in the Gazette.]

1,276,336. MEANS FOR ATTACHING PRINTING-PLATES TO CYLINDERS. CARL EBERHARD DRANGE, Plainfield, N. J., assignor to Isabella Scott and David J. Scott, executors of Walter Scott, deceased. Filed Jan. 20, 1916. Serial No. 73,092. (Cl. 272.)

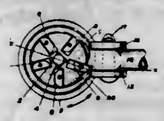


5. A flexible plate attaching device comprising: a plate supporting member having a relatively large opening terminiating in a narrow slot on the surface thereof, a flexible plate, rigid reinforcing members adapted to grip an end of the plate, a shaft in said opening on which said reinforcing members are mounted, and means on said shaft adapted to move said reinforcing members relatively to each other to grip the plate, whereby when said shaft is turned said members will grip the plate and be tilted in said slot to strain said plate.

6. A flexible plate attaching device comprising: a plate supporting member having a relatively large opening terminating in a narrow slot on the surface thereof, a flexible plate, rigid reinforcing members adapted to grip an end of the plate, a shaft in said opening on which said reinforcing members are mounted, means on said shaft for engaging and moving one of said reinforcing members relatively to each other to grip the plate, means for turning said shaft to cause said reinforcing members to grip and strain said plate, and means normally tending to move said reinforcing members to relieve the tension on said plate.

[Claims 1 to 4 and 7 to 9 not printed in the Gazette.]

1,276,337. CAR-BRAKE HANDLE. JOSEPH ECKERT, Dayton, Ohio, assignor to The Dayton Manufacturing Company, Dayton, Ohio, a Corporation of Ohio. Filed Apr. 9, 1918. Serial No. 227,456. (Cl. 74—54.)

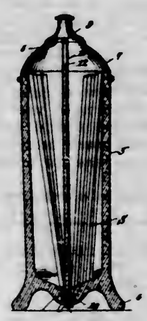


1. The combination with a shaft having a roller carrier thereon rotatable therewith, of a casing mounted on said shaft and rotatable independently thereof, an operating lever pivotally mounted on said casing, and roller mechanism carried by said carrier adapted to engage said lever and operatively connect the same with said shaft whereby the latter may be rotated.

5. In a device of the character described, a shaft adapted to be rotated, a casing mounted on the shaft and rotatable independently thereof, a roller carrier mounted on the shaft and rotatable therewith within the casing, said roller carrier having a plurality of inclined channels formed therein, rollers operative in said channels, an operative lever pivotally connected with said casing, said lever having means for engaging one of said rollers whereby the shaft may be rotated.

[Claims 2 to 4 and 6 to 17 not printed in the Gazette.]

1,276,338. STRAW-DISPENSER. WILLIAM J. EISENHARDT, Baltimore, Md. Filed Apr. 5, 1918. Serial No. 226,880. (Cl. 211—8.)



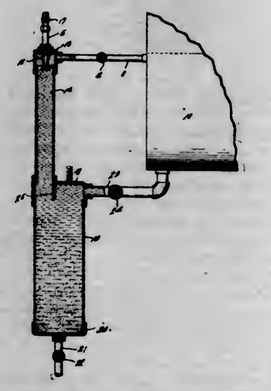
2. A straw dispensing apparatus comprising a container having a removable cover provided with a central straw exit opening, and a straw ejector operating through said opening and movable in the direction thereof, for ejecting straws through said opening, the ejector being spaced laterally from the wall of the opening a distance to permit the straws to pass therethrough alongside the ejector.

[Claims 1 and 3 not printed in the Gazette.]

1,276,339. FEED-WATER HEATER AND PURIFIER FOR BOILERS. WILLIAM J. EVERETT, Indianapolis, Ind. Filed Dec. 3, 1915. Serial No. 64,837. (Cl. 122—403.)

1. In a feed water purifier, the combination with a boiler, of a relatively long and substantially vertical mixing tube, a supply pipe arranged below the water level in the boiler and connecting said boiler and the upper end

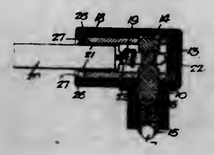
of the mixing tube, a feed-water nozzle leading into the upper end of said mixing tube and delivering below the mouth of the supply pipe, the mixing tube being materially larger than the nozzle, a drum into which the lower end of the mixing tube opens directly downward, said drum being materially larger than the mixing tube, a sludge discharge at the lower end of said drum, said drum being free from obstructions below the open lower end of said mixing tube and said sludge discharge so that any sediment may settle from the mixing tube through the drum into said sludge discharge without interference, and a pipe connecting the upper portion of said drum with the boiler at a point below the supply pipe.



3. As an article of manufacture, a feed water heater and purifier comprising a settling drum having a sludge discharge, an outlet leading from the upper end of said drum, a bottomless mixing tube opening at the bottom directly into the upper end of said drum, said mixing tube being relatively long and of materially less diameter than the drum, and said drum being free from obstructions below the open lower end of said mixing tube and said sludge discharge so that any sediment may settle from the mixing tube through the drum into said sludge discharge without interference, a water supply inlet at the upper end of said mixing tube, and a feed-water nozzle leading into the upper end of said mixing tube below the water supply inlet, said nozzle being a spraying nozzle of materially less diameter than the mixing tube and supply inlet.

[Claim 2 not printed in the Gazette.]

1,276,340. ELECTRICAL COUPLING. WILLIAM GADKE, Philadelphia, Pa. Filed Sept. 2, 1915. Serial No. 48,677. (Cl. 173—324.)



1. The combination of a terminal having a neck of reduced diameter; an insulating sleeve fitting over said terminal; with a conductor removably fitting said sleeve and having a tongue of flat spring material arranged with its flat surface engaging the curved surface of the neck of the terminal, said tongue coacting with the shoulder at one end of said neck to lock said parts together.

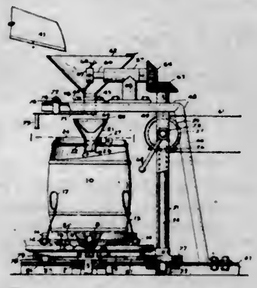
4. The combination of a conductor; a split metal sleeve yieldingly mounted thereon and having a projection; a non-yielding metal sleeve formed to fit over the split sleeve and provided with an annular recess for the reception of the projection thereof; with an insulating sleeve inclosing and in intimate permanent contact with said second sleeve.

7. The combination of a fixed body of insulating material having a convex portion; a terminal post extending therethrough; an insulating sleeve having a concave recess for the reception of the convex portion of the fixed body and provided with an opening for the terminal post; with means for temporarily locking the terminal post in said sleeve, the same consisting of a conductor removably fitting into the sleeve and having a contact portion electrically engaging said post.

10. The combination of a conductor; a body of insulating material thereon; a longitudinally split contractile metal sleeve mounted on said body and having at least two projections; with a second sleeve formed to receive the split sleeve and provided with a recess for the reception of one of said projections, the other projection being in electrical engagement with the conductor.

[Claims 2, 3, 5, 6, 8, and 9 not printed in the Gazette.]

1,276,341. BARREL-FILLING MACHINE. JOSEPH GALLEAZZI, San Francisco, Cal. Filed Feb. 21, 1918. Serial No. 218,487. (Cl. 100—57.)



1. In a barrel support, the combination of a table for supporting the barrel, a platform supporting the table, radially extending bearings on said platform, shafts rotatable in said bearings, fingers extending upwardly from the inner ends of said shafts and adapted to support the barrel, and arms extending upwardly from the outer ends of the shafts.

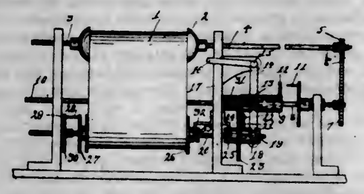
2. In a barrel support, the combination of a table for supporting the barrel, a platform supporting the table, a circular series of bearings on said platform, spring rods the lower ends of which are rotatable in said bearings, said rods extending upwardly from said bearings at their ends, and so coiled that their upper ends are adapted to press against a barrel on said table.

3. In a machine for filling barrels, the combination of a table for supporting the barrel, a movable platform for supporting the table, a circular series of radially extending bearings on said platform, spring rods the lower ends of which are rotatable in said bearings, said rods extending upwardly from said bearings and coiled in vertical planes parallel with said lower ends, their upper ends being adapted to press against a barrel on said table, means for filling the barrel, and means for simultaneously rotating the platform and imparting thereto a series of rapid vertical movements.

4. In a machine for filling barrels, the combination of a table for supporting the barrel, a movable platform for supporting the table, a circular series of bearings on said platform, spring rods the lower ends of which are rotatable in said bearings, said rods extending upwardly from said bearings, and so coiled that their upper ends are adapted to press against a barrel on said table, means for filling the barrel, and means for simultaneously rotating the platform and imparting thereto a series of rapid vertical movements.

5. In a machine for filling barrels, the combination of a platform for supporting the barrel, a base upon which said platform can rotate, means for rotating the platform, equally spaced cams on said base, equally spaced devices on the under side of said platform arranged in the rotation of the platform to engage said cams simultaneously to raise and lower the platform, and a cam on the base arranged to engage each of said devices in succession to raise a portion only of said platform, the remainder of the devices being at that time free from engagement with cams.

1,276,342. MUSIC-ROLL GEARING. ROBERT A. GALLY, Cincinnati, Ohio, assignor to The Baldwin Company, Cincinnati, Ohio. Filed Sept. 17, 1917. Serial No. 191,806. (Cl. 84—166.)



1. A take-up spool and guide means adapted to retain the said spool in one position as to its length; a slidable and revoluble shaft on which said spool is mounted; clutch means adapted to always engage said spool and shaft for revolution together but to allow the said shaft to slide longitudinally relatively to the said spool; a gear wheel loosely mounted on the said shaft and a guide means adapted to retain the said gear wheel in one position in the direction of its axis; and a clutch means adapted to engage and disengage the said gear and shaft from revoluble connection together.

2. A take-up spool and guide means adapted to retain the said spool in one position as to its length; a slidable and revoluble shaft on which said spool is mounted; clutch means adapted to always engage said spool and shaft for revolution together but to allow the said shaft to slide longitudinally relatively to the said spool; a gear wheel loosely mounted on said shaft and a guide means adapted to retain the said gear wheel in one position in the direction of its axis; and clutch means adapted to engage and disengage the said gear and shaft from revoluble connection together; and means adapted to revolve the said gear.

4. A take-up spool and guide means adapted to retain the said spool in one position as to its length; a slidable and revoluble shaft on which said spool is mounted; clutch means adapted to always engage said spool and shaft for revolution together but to allow the said shaft to slide longitudinally relatively to the said spool; a gear wheel loosely mounted on the said shaft and a guide means adapted to retain the said gear wheel in one position in the direction of its axis; and clutch means adapted to engage and disengage the said gear and shaft from revoluble connection together; a slidable and revoluble drive shaft having a pinion fixed therewith and constantly engaging the said gear; a music roll spindle and means adapted to drive the said spindle in reverse direction to the take-up revolution of the take-up spool; clutch means adapted to revolubly engage the said reverse drive means and the said drive shaft; and shifter means adapted to engage either one of the said clutches and at the same time disengage the other one of the said clutches.

5. A roll gearing having a vertical side frame, gears, shafts and clutches mounted on the said frame; and a shifter means combined with the said gears, shafts and clutches, the said shifter means comprising a member mounted on said frame revoluble on a horizontal axis extended front and rear of the said frame, and pivotally mounted to the said frame, and said shifter means fixed with the said member and engaging with elements of the said gears, shafts and clutches; and a handle connected to said shifter means and revoluble on the same said axis and extended horizontally from and transversely to said axis.

[Claims 3 and 6 not printed in the Gazette.]

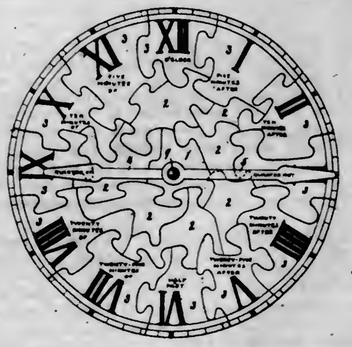
1,276,343. BOTTLE-CLOSURE. WILLIAM E. GASTON, Torrington, Conn. Filed Dec. 11, 1915. Serial No. 66,238. (Cl. 215—10.)



4. In a bottle closure of the class described, in combination, a bottle-top having an upper packing face and provided with cap-retaining means for engaging a closure-cap, and having in said upper face a pair of separate and concentric bearing-zones comprising an outer bearing-zone and a concentric and convex inner bearing zone, of a metal closure-cap comprising an annular crown disk which is provided on the outer circumference thereof with means for engaging said cap-retaining means of the bottle-top, and is provided on the inner circumference thereof with a depending resistance wall having a non-convex pressure zone in position directly above said inner bearing-zone and having a downwardly and inwardly inclined position, and a packing member consisting of a sealing disk having an outside diameter corresponding with said outer bearing-zone, and held impinged thereon by an outer zone of the cap, and also extending inwardly between said inclined resistance wall and said inner corner-zone for thereby upholding the said resistance wall and producing a stress in the annular crown-disk, and having the tangential direction thereof in said corner-zone in a direction (in an axial plane of the closure) transverse to the tangential direction of said outer packing-zone, and having said outer and inner packing-zones of said packing-member separated by an annular low-pressure zone extending from said outer zone inwardly to the upper line of said resistance wall, the closure also having the tangential direction of the cap-retaining zone of the bottle-top inclining downwardly and inwardly relatively to said tangential direction (in said axial plane of the closure) of said corner zone of the sealing disk, whereby each radially-disposed segmental part of the crown-disk becomes self-retaining on the bottle-top while bearing on both of said outer and inner zones of the sealing disk, substantially as set forth.

[Claims 1 to 3 and 5 to 7 not printed in the Gazette.]

1,276,344. EDUCATIONAL TOY. MYRON A. GILMAN, Westfield, Mass. Filed Aug. 1, 1917. Serial No. 183,969. (Cl. 35—12.)



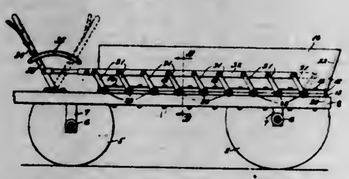
1. As a new article of manufacture, an educational toy comprising a dissected clock-face, and hands attach-

able to one of the dissected pieces of said clock-face, and rotatably movable over said face.

3. As a new article of manufacture, an educational toy comprising a clock-face which consists of exterior and interior dissected pieces, one of such interior pieces being perforated, perforated hands, and a pin receivable in the perforations in said hands and perforated piece, the perforation in said perforated piece being located in the center of said clock-face, and said pieces, hands and pin all being separable one from the other.

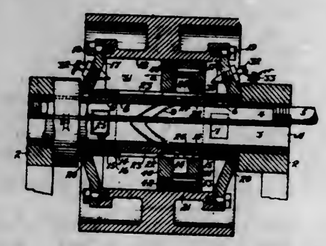
[Claims 2, 4, and 5 not printed in the Gazette.]

1,276,345. DUMP-WAGON BODY. WALTER L. GOODWIN and AXEL HOLMAN, Seattle, Wash. Filed Nov. 20, 1916. Serial No. 132,475. (Cl. 21—20.)



In a dump wagon a frame, channel members receiving the side members of the frame, bars superposed upon the channel members, a body having at its sides outstanding flanges, which rests upon the upper bars, securing devices passing transversely through the flanges, bars, channel members and side members of the frame, shafts journaled between the bars, means for turning the shafts simultaneously and slats carried by the shafts and adapted to overlap each other.

1,276,346. ROTARY ENGINE. EDWARD G. GOULD, Oakland, Cal. Filed Apr. 4, 1917. Serial No. 159,617. (Cl. 123—43.)



1. A rotary engine comprising a stationary supporting shaft having a gas inlet and an exhaust passage formed therein, a sleeve turnably mounted on the shaft, a cylinder secured on the sleeve, said sleeve having a pair of ports formed therein adjacent each end of the cylinder and a pair of slots between the ports, a double-acting piston slidably mounted on the sleeve, a pair of key members secured on the piston extending one into each slot, a pair of exhaust and inlet ports formed in the stationary shaft in alinement with the sleeve ports communicating with the gas inlet and exhaust passage respectively, a cam groove formed in the outer face of the shaft, and a shoe secured on each key member extending into the cam groove adapted to impart a reciprocating movement to the piston.

2. A rotary engine comprising a stationary supporting shaft having a gas inlet and an exhaust passage formed therein, a sleeve turnably mounted on the shaft, a cylinder secured on the sleeve, said sleeve having a pair of ports formed therein adjacent each end of the cylinder and a pair of slots between the ports, a double-acting piston slidably mountd on the sleeve, a pair of key members secured on the piston extending one into each slot, a pair of exhaust and inlet ports formed in the stationary shaft in alinement with the sleeve ports communicating with the gas inlet and exhaust passages respectively, a cam groove formed in the outer face of the shaft, and a shoe secured on each key member extending into the cam groove adapted to impart a reciprocating movement to the piston during each revolution of the sleeve and cylinder.

4. A rotary engine comprising a stationary shaft, an exhaust and an inlet passage formed in the said shaft, a sleeve member mounted to rotate about the shaft, said sleeve having a pair of ports formed therein adapted to register alternately with inlet and exhaust ports formed in the shaft which register with the exhaust and inlet passages, a cylinder adapted to rotate about the shaft, a piston within the cylinder slidably mounted on the sleeve and adapted to rotate in unison with the cylinder, means for transmitting a positive and timed reciprocal movement to the piston during the rotation of the cylinder, the piston and the sleeve and means for rotating the ported sleeve member in unison with the cylinder and piston.

6. A rotary engine comprising a stationary shaft, an exhaust and an inlet passage formed in the said shaft, a sleeve member mounted to rotate about the shaft, said sleeve having a pair of ports formed therein adapted to register alternately with inlet and exhaust ports formed in the shaft which register with the exhaust and inlet passages, a cylinder adapted to rotate about the shaft, a piston within the cylinder slidably mounted on the sleeve, and means for transmitting a positive and timed reciprocal movement to the piston during the rotation of the cylinder and the sleeve.

[Claims 3 and 5 not printed in the Gazette.]

1,276,347. EXPLOSIVE SHELL. GERALD GORDON GRIFFIN, New York, N. Y. Filed Sept. 28, 1917. Serial No. 193,657. (Cl. 102—39.)



1. The combination with an explosive shell, of a structure extending forward from the body of the shell comprising a cylindrical casing containing a suitable filling, and a firing rod therein.

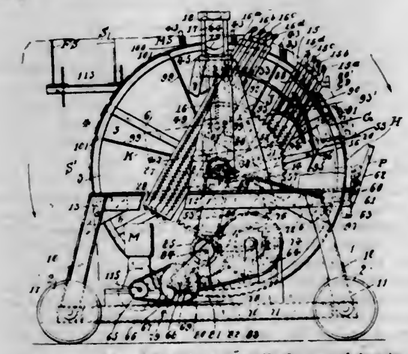
7. The combination with an explosive shell, of a structure extending forward from the body of the shell comprising a cylindrical casing containing a suitable filling and a firing rod, internal supports at intervals in the casing, and soft bands upon the outside of the casing at the regions of said internal supports to engage with rifling.

9. The combination with an explosive shell having a percussion cap at the forward end, of a casing extending forward from the shell, a firing rod therein, and means for covering the forward end of the casing and the forward end of the shell.

[Claims 2 to 6 and 8 not printed in the Gazette.]

1,276,348. METHOD AND APPARATUS FOR DECORTICATING FIBROUS PLANTS. WINFIELD S. GROVE, Manila, Philippine Islands, assignor to Fibre Machinery Company, Inc., New York, N. Y., a Corporation of New York. Filed July 27, 1916. Serial No. 111,555. (Cl. 13—18.)

2. A machine of the class described comprising in combination a drum or fiber resisting member, an initial gripping mechanism for securing the stock to be cleaned to the drum or resisting member, an initial set or sets of opposing decorticating members, at least one of the decorticating members of each set being a knife, one of the members of each initial set being arranged to engage the side of the stock which is farthest remote from the drum, the other member of each set being located between the exterior of the drum and the stock when secured to the drum by said initial gripping mechanism, means tending to normally force the decorticating members of each initial set relatively toward each other, means for moving said initial set or sets of decorticating members toward one end of the stock when in engagement with the stock, a subsequent gripping mechanism for securing to the drum the end portion of the stock when the end portion has been cleaned, a subsequent set or sets of opposing decorticating members, one member of each subsequent set being located upon and engaging the side of the stock farthest from the resisting member or drum, the other or opposing member of each set being located between the stock and the drum and engaging the side of the stock nearest to the drum, means tending to normally force the decorticating members of said subsequent set relatively toward each other, and means for moving said subsequent set or sets of opposing decorticating members from a cleaned portion of the stock toward the other end of the stock so as to clean the rest of the stock, the initial gripping mechanism being released so that said subsequent set or sets of decorticating members can be moved along the stock.



19. A machine of the class described comprising in combination a resisting drum, gripping mechanism associated with said drum decorticating members movable along the periphery of said drum, a feed table located at the side of said drum, feeding means for moving a strip of stock from said table to a position where it can be secured in place relative to said drum by said gripping mechanism, and a common mechanism for controlling the operation of the gripping mechanism and feeding means.

41. The method of decorticating fibrous stock detached from the plant, which method comprises holding the stock substantially stationary and while so holding it decorticating the entire stock.

57. In a machine of the class described, means for gripping a piece of stock, means for cleaning a portion of the stock, means for gripping the portion so cleaned, and means for cleaning the portion originally gripped, said stock being at all times substantially stationary.

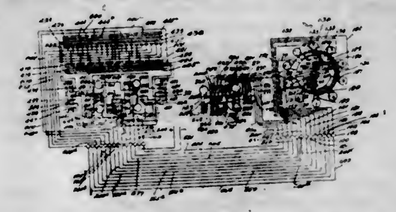
[Claims 1, 3 to 18, 20 to 40, 42 to 56, and 58 to 63 not printed in the Gazette.]

1,276,349. TIRE-FILLER. FRANK A. HAGER, Portland, Oreg. Filed Apr. 11, 1918. Serial No. 228,012. (Cl. 106—23.)

A tire filler comprising the following ingredients substantially in the proportions stated, to wit, soy bean oil, twenty four pounds; chlorid of sulfur, six pounds; oxid of magnesium, seventeen and one-half ounces; and Venetian red, three ounces.

1,276,350. APPARATUS FOR SENDING AND RECEIVING INFORMATION. EDWIN V. HAGMAN, Boston, Mass., assignor to Alfred A. Ziegler, trustee, Boston, Mass. Filed May 13, 1914. Serial No. 838,254. (Cl. 177—337.)

1. An apparatus for sending and receiving information comprising a register at the receiving-station having two rotatable number-drums, a motor having a shaft and comprising a plurality of electro-magnets, and an armature common to all said magnets, means to separately connect the number-drums with the motor-shaft, and two sets of circuit-selecting means at the sending-station for the circuits of said electro-magnets, there being one set corresponding to each number-drum, substantially as described.



7. An apparatus for sending and receiving information comprising a register at the receiving-station having two rotatable number-drums arranged for rotation in either direction, a motor having a shaft arranged for rotation in either direction and comprising a plurality of electro-magnets controlling rotation of the shaft, one for each number on said drum, two sets of circuit-controlling means at the sending-station for the circuits of the electro-magnets of the motor, there being one set corresponding to each drum, two hand-actuators, one for each set of circuit-controlling means, clutch-mechanism arranged to connect either drum with the motor-shaft and means associated with one of the hand-actuators at the sending-station for controlling said clutch-mechanism substantially as described.

16. An apparatus for sending and receiving information comprising a register at the receiving-station having two rotatable number-drums, a motor having a shaft and comprising a plurality of electro-magnets, and an armature common to all said magnets, means to separately connect the number-drums with the motor-shaft, locking-means for the number-drums, and two sets of circuit-selecting means arranged at the sending-station for the circuits of said electro-magnets, there being one set corresponding to each number-drum, substantially as described.

30. An apparatus for sending and receiving information comprising a register at the receiving-station having a rotatable number-drum, a motor governing rotation of the drum and comprising a plurality of electro-magnets, one for each number on the drum, circuit-controlling means at the sending-station for the circuits of said motor-magnets, and means to hold said circuits open while said circuit-controlling means is being operated, substantially as described.

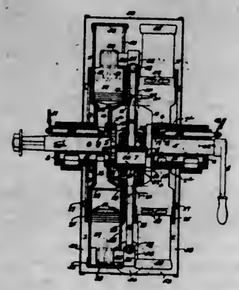
37. An apparatus for sending and receiving information comprising a visual indicator and operating-electromagnet therefor, a circuit-controller for the circuit of said magnet, actuating-means for said circuit-controller, a hand-actuator, means associated with said hand-actuator rotarily movable into and out of the path of said actuating-means and operating upon a downward movement of said actuator to engage said actuating-means when in proper relative position with respect thereto, substantially as described.

[Claims 2 to 6, 8 to 15, 17 to 29, and 31 to 36 not printed in the Gazette.]

1,276,351. INTERNAL-COMBUSTION ENGINE. JAMES T. HALSEY, Philadelphia, Pa.; Sue Mason Maury Halsey, Philadelphia, Pa., administratrix of said James T. Halsey, deceased. Filed June 14, 1913. Serial No. 773,662. Renewed Dec. 17, 1917. Serial No. 207,622. (Cl. 123—44.)

1. The combination, in an internal combustion engine, of a plurality of cylinders disposed radially in fixed relation with respect to each other and mounted to rotate, a plurality of pistons disposed in said cylinders and rotating with the latter about an axis eccentric to the axis of

rotation of the cylinders, means for introducing an explosive mixture into the cylinders, and means for igniting the same whereby the pistons may be caused to move to effect rotation of the several cylinders about their axes, said cylinders having communicating passages adjacent the point of termination of the inward movement of the pistons whereby the pressure developed within the respective cylinders may freely pass between the same and be equalized.



2. The combination, in an internal combustion engine, of a plurality of pairs of radially disposed cylinders rotatable about an axis comprising a fixed stud, an ignition chamber formed within the fixed stud upon which said pairs of cylinders rotate, said cylinders having passages which are successively brought into communication with said ignition chamber upon rotaton of said cylinders, and said ignition chamber being arranged to communicate with a plurality of said passages whereby the flame from the explosion chamber of one cylinder may communicate with the explosion chamber of the succeeding chamber, and pistons within the cylinders upon which such explosions react, said pistons rotating about an axis eccentric to the axis of rotations of the cylinders whereby the latter may be rotated by the movement of the pistons.

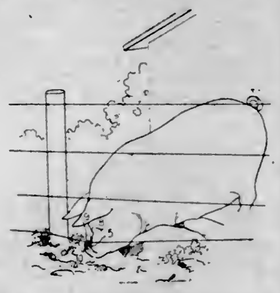
3. The combination, in an internal combustion engine of the multiple cylinder type, of a plurality of pairs of cylinders disposed side by side, pistons within said cylinders and forming with the latter explosion chambers between said pistons and a point adjacent the axis of rotation of the cylinders, couplings for pairs of said pistons whereby they may move together, fixed studs forming independent axles for the respective sets of cylinders, rods connected to the piston couplings and disposed between the several cylinders, a rotatable hub to which said rods are pivotally connected, a stem disposed eccentrically with respect to the axles of the cylinders upon which said hub is rotatably mounted, and means operable exteriorly of the structure whereby the position of said stem may be changed to advance or retard the time of explosion or to effect reversal of the rotative movement of the cylinders.

8. In an internal combustion engine, the combination of two sets of radially disposed cylinders mounted side by side, each of said cylinders having arc-shaped abutting shouldered portions in nested relationship, means for connecting said cylinders together at their abutting portions, said shoulders interlocking and serving to restrain the force of centrifugal action, and continuous rings disposed on both sides of each set of cylinders and shouldered to engage the shouldered portions of said cylinders.

9. In an internal combustion engine of the multiple cylinder type, the combination of a plurality of pairs of radially disposed coupled cylinders rotating about fixed axles, independent studs forming said fixed axles, each pair of said cylinders having communicating passages adjacent the point of termination of the inward movement of the pistons for equalizing the pressure developed within the respective cylinders, pistons within said cylinders, couplings for pairs of said pistons disposed outwardly with respect to the axles of the rotating cylinders, said cylinders being slotted for the passage of said couplings, connecting rods for said pistons, a hub to which said connecting rods are pivotally connected, an adjustable stem for said hub mounted eccentrically with respect to the axis of rotation of the cylinders, means for introducing an explosive mixture into the cylinders; said means including passages formed in the studs upon which the several cylinders rotate, and means for exploding said mixture whereby said pistons may be moved to effect rotation of the cylinders.

[Claims 4 to 7, 10, and 11 not printed in the Gazette.]

1,276,352. ANIMAL NOSE-RING. CHARLES T. HANCOCK, Galena, Mo. Filed Mar. 25, 1918. Serial No. 224,582. (Cl. 119—135.)



1. As an improved article of manufacture, a nose ring for animals consisting of a wire rod having a U-shaped end portion provided with parallel arms of relatively different lengths, the longer arm having a longitudinally curved portion extending beyond the shorter arm for insertion through the nose of the animal, said short arm being adapted to be subsequently bent inwardly and engaged at its extremity against the longer arm to close the U-shaped end of the ring.

[Claim 2 not printed in the Gazette.]

1,276,353. FIRE-EXTINGUISHER. AUGIE L. HANSEN, Evanston, Ill., assignor to Justrite Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 20, 1916. Serial No. 85,284. (Cl. 169—12.)



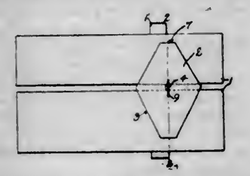
1. In a fire extinguisher, the combination of a container for liquid, a nozzle pipe at one end of the container and communicating with the exterior, said pipe being rotatable axially, a discharge conductor connected at one end with said pipe, the other end of said conductor being always open to the liquid and free to follow the liquid to any part of the container as the container is tilted or rotated, and pressure producing means within the container for forcing the liquid into the discharge conductor and through the nozzle pipe.

2. In a fire extinguisher, the combination of a container for liquid, a discharge nozzle structure at one end of the container, a discharge conductor connected at one end with said nozzle structure with its other end open to the liquid, said conductor being flexible and being helically arranged whereby its inlet end may follow the liquid to any part of the container as the container is tilted or rotated, and pressure producing means within the container for forcing the liquid into and through said discharge conductor and through the nozzle structure.

3. In a fire extinguisher, the combination of a container for liquid, a discharge nozzle, a flexible discharge conductor within the container connected at one end with said nozzle, a weight to which the inlet end of said conductor is secured, a shiftable frame for said weight, said weight being shiftable on and with said frame to carry the inlet end of said conductor to follow the liquid to any part of the container as the container is tilted or rotated, and pressure producing means within the container for forcing the liquid through said conductor and nozzle.

[Claims 4 to 10 not printed in the Gazette.]

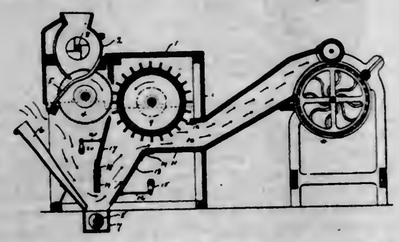
1,276,354. CLEAT. HENRIK A. HANSSON, Greenfield, Cal. Filed Feb. 7, 1918. Serial No. 215,839. (Cl. 25—131.)



6. In a concrete mold, the combination of a studding, boards positioned on said studding, a plate bearing upon the inner surfaces of said boards, said plate being comparatively broad at its center and tapering toward its ends, a spur formed on said plate for digging into one of said boards, thus holding the plate against any tendency of accidental shifting, a headed fastener passing through the central portion of said plate, and means for engaging the opposite end of a said fastener for releasably holding the same upon said studding.

[Claims 1 to 5 and 7 not printed in the Gazette.]

1,276,355. COTTON-SEED LINTER. NELSON B. HENRY, Atlanta, Ga., assignor to The Murray Company, Dallas, Tex., a Corporation of Texas. Filed Dec. 26, 1916. Serial No. 138,984. (Cl. 18—9.)



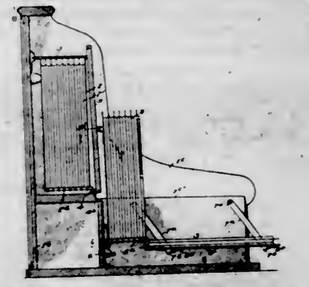
1. In a cotton gin having a saw cylinder, a doffing brush inclosed in a casing and a lint flue, said casing having an opening therein opposite the lint flue permitting the entrance of an air current, a chamber in the lower part of the casing through which said air current passes to the flue, a conveyer at the bottom of said chamber, a seed chute leading to the conveyer above which chute said air current passes and means causing a sharp bend in said current directly above and close to said conveyer.

3. In a cotton gin having a saw cylinder, a doffing brush inclosed in a casing and a lint flue, said casing having an opening therein opposite the lint flue permitting the entrance of an air current, a chamber in the lower part of the casing through which said air current passes to the flue, a conveyer at the bottom of said chamber, a seed chute leading to the conveyer above which chute said air current passes and a beam arranged directly above and close to said conveyer and an adjustable partition extending from the beam to a point nearly between the point of contact between the saw and brush, said beam and adjustable partition constituting a means for causing a sharp bend in the air current directly above and close to said conveyer.

4. In a cotton gin having a saw cylinder, a doffing brush inclosed in a casing and a lint flue, said casing having an opening therein opposite the lint flue permitting the entrance of an air current, a chamber in the lower part of the casing through which said air current passes to the flue, a conveyer at the bottom of said chamber, a seed chute leading to the conveyer above which chute said air current passes and a parting board arranged directly above and close to said conveyer and arranged to cause a sharp bend in said air current directly above and in proximity to the conveyer, a board depending downward from the lower wall of the flue to the conveyer and means for moving the board toward or away from the parting board to thereby regulate the volume of air passing below said parting board.

[Claim 2 not printed in the Gazette.]

1,276,356. FILING APPLIANCE. HARRY J. HICK, Alliance, Ohio, assignor, by mesne assignments, to The McCaskey Register Company, (incorporated in 1914,) Alliance, Ohio, a Corporation of Ohio. Filed June 26, 1911. Serial No. 635,354. (Cl. 45—2.)



1. In a filing appliance, the combination of a casing having an upright abutment therein, a series of holders normally arranged in reclined position and having connections between them whereby they may be rotated to and from an upright position, pairs of parallel links having their upper ends pivoted to the case, and a table pivoted to the lower ends of the links bodily supporting the holders, the upper holder being adapted for sliding contact with the abutment and the lower holder being removably mounted on the table for swinging the same forward when one or more holders are rotated from reclined to upright position.

2. In a filing appliance, the combination of a casing, a series of holders normally arranged in horizontal position and having connections between them whereby they may swing relative to each other to a vertical position, the upper end holder of the set being adapted for sliding engagement with the casing when in operative position and link mechanism for swingably supporting the said holders, the said mechanism including a horizontal table carried by a pair of U-shape members pivoted at their upper ends to the casing and operating, when any of the holders are operated about their respective pivots, to swing the remaining horizontal holders outward and upwardly.

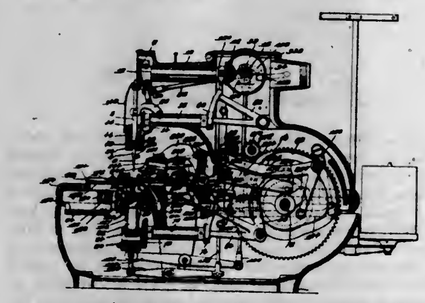
3. In a filing appliance, a casing having a guide wall, sets of links pivotally connected at their upper ends to said casing, a series of holders normally supported by said links in horizontal position and having pivotal or rocking connection therewith, and connections between the holders permittig them to swing relative to each other from the horisontal to a vertical position, the upper end holder of the series of holders being adapted for sliding engagement with said guide wall when in operative position and the sets of links operating to maintain the unoperated holders in horizontal position as said links swing about their pivots.

4. In a filing appliance, the combination of a casing, a series of holders normally arranged in horizontal position in said casing and having connections between them permitting the said holders to swing relative to each other, a pair of U-shaped members arranged transversely of the holders at or near their outer and inner ends, respectively, means for swingably supporting said U-shaped members in the casing at their opposite ends, and an abutting wall arranged to be slidably engaged by the upper end holder of the series, a horizontal table carried by the pendent ends of said links forming a support for said holders, whereby when any of the holders are operated about their respective pivots the U-shaped members swing outwardly and upwardly.

6. In a filing appliance, the combination of a casing having an upright abutment therein, a series of holders normally arranged in reclined position and having connections between them whereby they may be rotated to and from an upright position, pairs of normally pendent links pivoted for swinging in the case, and a table carried by the links bodily supporting the holders, the upper holder being adapted for sliding contact with the abutment and the lower holder being removably mounted on the table for swinging the same forward and upward when one or more holders are rotated from reclined to upright position, whereby the weight of the holders tends to swing the table rearward to normal position.

[Claim 5 not printed in the Gazette.]

1,276,357. SEWING-MACHINE. GEORGE S. HILL, Strafford, N. H., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed June 19, 1916. Serial No. 104,449. (Cl. 112—4.)



1. A sewing machine, having, in combination, an upper needle mechanism, complemental under mechanism coöperating therewith to form overseam stitches, a rotary head for the upper needle mechanism, a rotary turret for the under mechanism, horizontal shafts geared to the head and turret, connected segments for rotating the shafts, and a horizontal shaft provided with a cam for rocking the segments.

8. A sewing machine, having, in combination, stitch forming mechanism, a reciprocating clamp carriage, work clamps on the carriage, clamp operating mechanism on the carriage, and relatively fixed actuating mechanism for closing and opening the clamps which is connected with the mechanism on the carriage by the movement of the carriage into stopping position and is disconnected therefrom by the forward feed of the carriage.

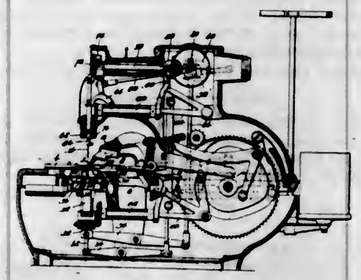
24. A sewing machine, having, in combination, sewing mechanism, a work clamp, feed mechanism for relatively moving the sewing mechanism and work clamp to sew about a buttonhole, a sewing shaft, a stop cam on the shaft, a spring pressed plunger for coöperating with the cam to retard and stop the shaft, means moving with the feed mechanism for controlling the movement of the plunger into and out of coöperative relation with the stop cam, and mechanism for throwing out the sewing shaft driving mechanism operated through the movement of the plunger by the stop cam.

32. A sewing machine, having, in combination, sewing mechanism, a work clamp, feed mechanism for relatively moving the sewing mechanism and clamp to sew along the opposite sides and about the eye end of a buttonhole, a sewing shaft, driving connections between the sewing shaft and feed mechanism, driving and stopping mechanism for the sewing shaft, and a controlling cam for the driving and stopping mechanism moving with the feed mechanism arranged to start and stop the sewing on opposite sides of the buttonhole and the same distance from the eye end, and having provision for adjustment of its length to vary said distance and thereby the length of the buttonhole sewn.

48. A sewing machine, having, in combination, sewing mechanism, feed mechanism for relatively moving the sewing mechanism and work, a sewing shaft, a stop cam on the shaft, a spring pressed plunger for coöperating with the cam to retard and stop the shaft, means for moving the stop plunger into and out of coöperative relation with the stop cam, and mechanism for throwing out the sewing shaft driving mechanism operated through the movement of the plunger by the stop cam.

[Claims 2 to 7, 9 to 23, 25 to 31, 33 to 47, and 49 to 53 not printed in the Gazette.]

1,276,358. SEWING-MACHINE. GEORGE S. HILL, Strafford, N. H., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Aug. 28, 1916. Serial No. 117,241. (Cl. 112—4.)



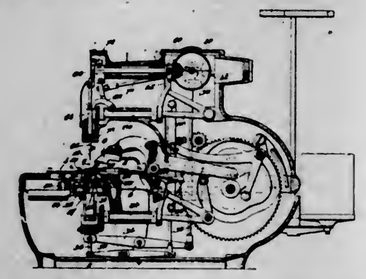
1. A sewing machine, having, in combination, upper needle mechanism above the work, a reciprocating and transversely moving looper point below the work for taking and carrying a needle loop, a thread retainer to which the loop is carried by the looper and coöperating therewith to spread the loop of needle thread, an opposed and alternately acting thread of looper, and a spreader point moving with and transversely of the threaded looper.

5. A sewing machine, having, in combination, an upper needle mechanism above the work, an oscillating support below the work, a carrier mounted on the support to oscillate about an axis substantially at right angles to the axis of the support, a threaded looper point on the oscillating support, a coöperating loop spreader point and an opposed unthreaded looper point on the carrier, mechanism for oscillating the support and for oscillating the carrier on the support at twice the speed, and a stationary thread retainer finger coöperating with the unthreaded looper point to spread a needle loop.

[Claims 2 to 4 not printed in the Gazette.]

1,276,359. SEWING-MACHINE. GEORGE S. HILL, Strafford, N. H., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Original application filed June 19, 1916, Serial No. 104,449. Divided and this application filed Mar. 19, 1917. Serial No. 155,847. (Cl. 112—4.)

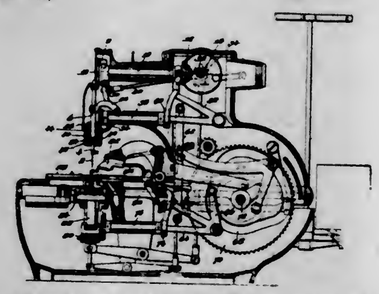
1. A sewing machine, having, in combination, an upper needle mechanism above the work, and looper and loop spreader mechanism below the work comprising a reciprocating looper carrier, two loopers thereon, coöperating loop spreaders mounted to move with the loopers during their reciprocation, and mechanism acting independently of the reciprocation of the looper carrier to relatively move a looper and coöperating spreader transversely each stroke of the looper carrier.



15. A sewing machine, having, in combination, a rotary upper needle mechanism, a turret below the work, looper and loop spreader carriers on the turret provided with looper and loop spreader points, mechanism for reciprocating the carriers in unison to introduce the points into and withdraw them from the needle loops, and mechanism for reciprocating one of the carriers transversely twice for each reciprocation of the carriers in unison.

[Claims 2 to 14 and 16 to 23 not printed in the Gazette.]

1,276,360. SEWING-MACHINE. GEORGE S. HILL, Strafford, N. H., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Original application filed June 19, 1916, Serial No. 104,449. Divided and this application filed Mar. 19, 1917. Serial No. 155,848. (Cl. 112—4.)



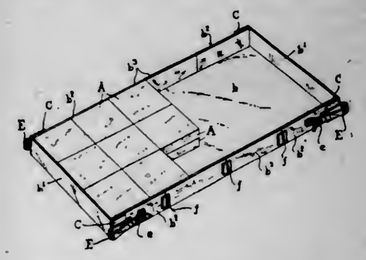
1. A sewing machine, having, in combination, a vertically reciprocating needle bar, a vertically reciprocating carrier in which the needle bar reciprocates, and connections through which the vertical movement of the carrier causes it to move laterally.

11. A sewing machine, having, in combination, a vertically reciprocating needle bar, a carrier sleeve within which the bar reciprocates, a rotary head, a link connecting the lower end of the sleeve with the head, a lever having a horizontal arm connected with the upper end of the sleeve by a universal joint, and an eccentric and connections for reciprocating the lever.

15. A sewing machine, having, in combination, a vertically reciprocating needle bar, a vertically reciprocating carrier within which the bar reciprocates, connections through which the vertical movement of the carrier causes it to move laterally, a lever connected to the upper end of the carrier, and connections through which the lever is oscillated adjustably connected with the lever to vary its throw.

[Claims 2 to 10 and 12 to 14 not printed in the Gazette.]

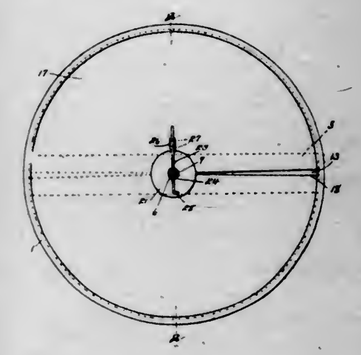
1,276,361. MATTRESS. CLAYTON HOBERT, Philadelphia, Pa. Filed Apr. 23, 1918. Serial No. 230,205. (Cl. 5—13.)



1. A mattress comprising an open-top-box shaped casing and separate filling sections rested upon the bottom of said casing and jointly confined by the side and end walls thereof; a side wall of said casing having a detachably secured portion adapted to provide a side-wall opening for laterally placing and removing filling sections.

[Claims 2 to 4 not printed in the Gazette.]

1,276,362. HEAD FOR BARRELS AND THE LIKE. ARTHUR J. HODGE and HENRY B. RUGGLES, Pasadena, Cal., assignors to The American Products Company, St. Louis, Mo. Filed Apr. 14, 1915. Serial No. 21,432. (Cl. 217—78.)



1. A head composed of a pair of radially slit disks, the slit of one disk being opposed to the solid part of the other for completing the closure, a supporting member for said disks, said disks being adapted to be flattened upon said supporting member, and means for retaining said disks in flattened position with their edges expanded.

8. The combination with a receptacle having a croze and a transverse supporting bar therein; of an upwardly projecting staple carried by said bar, a centrally apertured head resting upon the ends of said bar, said head being adapted to be pressed toward said supporting bar to permit the staple to project through said head and to force the outer edge of said head into binding engagement with the wall of said croze, a wire seal for removable engagement through the projected end of said staple to retain said head in flattened and expanded position, said wire seal having one end bent to form a hook for withdrawing said head from within the receptacle after removal of said wire seal from said staple, and a seal locking member upon said wire seal and adapted to be moved to operative position to tighten said wire seal and compressed to prevent withdrawal of said wire seal.

[Claims 2 to 7 not printed in the Gazette.]

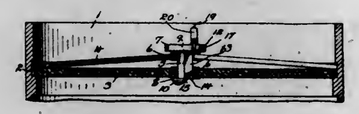
1,276,363. **HEAD FOR BARRELS AND THE LIKE.** ARTHUR J. HODGE and HENRY B. RUGGLES, Pasadena, Cal., assignors to The American Products Company, St. Louis, Mo. Filed Apr. 26, 1915. Serial No. 24,077. (Cl. 217—78.)



1. A closure head comprising a flat supporting disk, a concavo-convex locking disk engaged against the first mentioned disk and adapted to have its outer edge expanded beyond the outer edge of the first mentioned disk to fasten it in place, and means for locking the second mentioned disk in expanded position.

[Claims 2 and 3 not printed in the Gazette.]

1,276,364. **BARREL-HEAD SEAL.** ARTHUR J. HODGE and HENRY B. RUGGLES, Pasadena, Cal., assignors to American Products Company. Filed Aug. 9, 1915. Serial No. 44,454. (Cl. 217—78.)



1. A barrel head seal and fastener comprising a main seal member for locking together a plurality of head members, said member having a flange engaging one of said head members and a flange engaging the other head member, an auxiliary seal member for preventing movement of said main seal member, and means for locking together said main and auxiliary seal members.

5. A receptacle head seal and fastener made up of a latch member having a pressure receiving head and a latching head, the said member when receiving pressure being adapted to connect the parts of a receptacle head, and an auxiliary seal member adapted to be inserted through the pressure receiving head of the other member for keeping it in place.

[Claims 2 to 4 and 6 not printed in the Gazette.]

1,276,365. **CURTAIN-FIXTURE.** TRUMAN P. HOPKINS, Seattle, Wash., assignor of one-half to W. M. Cross, Seattle, Wash. Filed Apr. 16, 1918. Serial No. 229,198. (Cl. 24—132.)



5. A fixture of the class described, comprising a cylindrical base portion, a plate pivotally connected therewith and extending outwardly past the periphery of said base portion said plate being adapted to be turned on its pivot into any angular position about said base portion, means on the outer end of said plate for securing it to a support, a perforated shank connected with said base portion, a bifurcated portion connected with said shank, said bifurcated portion having a substantially vertical front wall, a roller in said bifurcated portion, a pawl pivoted adjacent the outer end of said bifurcated portion and adapted to engage with the front wall of said bifurcated portion when it is lifted, and a rest for supporting said pawl with its end removed from said front wall.

[Claims 1 to 4 not printed in the Gazette.]

1,276,366. **GRINDING-WHEEL DRESSER.** JOHN E. HOY and ROLAND P. PLACE, Detroit, Mich. Filed Mar. 7, 1918. Serial No. 220,975. (Cl. 125—19.)



1. A dressing tool comprising a rotatable spool-like dressing implement having teeth thereon, a fixed spindle about which the implement turns, and means for supporting the spindle entirely from one end.

4. A rotatable working element of a tool comprising a tubular member having a plurality of restraining surfaces arranged to form helices spaced apart about the axis of the tubular member on the outer surface thereof, a plurality of toothed metal disks through which the tube passes, the angle between the helices being different from that between adjacent teeth on the disks, the disks each including a restraining surface adapted to coöperate with the first named restraining surfaces to prevent the corresponding disk from turning about the tubular member, the restraining surfaces on adjoining disks coöperating with the restraining surfaces of different helices on the tubular member.

5. A rotatable working element for a tool comprising a rotatable tubular member and a plurality of perforated disks thereon, the tubular member including as an integral part thereof an outwardly turned end flange, and a cup shaped bearing housing in which said end flange is received.

8. A dressing tool including a hood-forming member having a perforated end, a spindle having a portion of relatively large diameter fixed in the perforation in said end and supported solely thereby, said spindle having a collar adjacent the inner surface of said end, and a dressing implement supported by and rotatable on the spindle.

[Claims 2, 3, 6, and 7 not printed in the Gazette.]

1,276,367. **GOVERNOR FOR AUTOMATIC DIALS.** HARRY H. IDE, La Grange, Ill., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 6, 1915. Serial No. 54,314. (Cl. 74—45.)



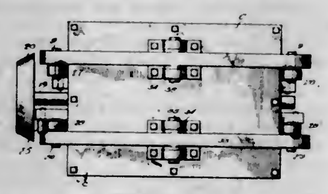
1. A device of the class described comprising a rotatable shaft member provided with weighted members, a cup member provided with an inner conically shaped surface adapted to be engaged by said weighted members, and means for moving said cup member for increasing or decreasing the frictional engaging path of said weighted members per revolution thereby controlling the speed of rotation of said shaft member.

2. A device of the character described including a spring-driven impulse mechanism, a rotatable shaft connected to said impulse mechanism, a governor member carried by said shaft for controlling the speed of rotation of said impulse mechanism, a non-rotatable cup member adapted to be frictionally engaged by said governor member, and means for adjusting said cup member to vary the speed of rotation of said impulse mechanism.

8. A governing device of the character described including a rotatable shaft, a weighted member attached to said shaft and rotatable therewith, a cylindrical cup provided with an inner conically shaped surface, means for rotating said shaft thereby causing said weighted member to engage the inner surface of the said cup, a threaded member upon which said cup is mounted, and means for laterally adjusting said cup by revolving the same upon its threaded support, thereby regulating the speed of rotation of said shaft by changing the length of path traveled per revolution by said weighted member.

[Claims 3 to 7, 9, and 10 not printed in the Gazette.]

1,276,368. **CHANGE-SPEED GEARING.** WILLIAM S. IRBY, Apalit, Pampanga, Philippine Islands. Filed May 21, 1917. Serial No. 170,056. (Cl. 74—59.)



1. A change speed gearing comprising a drive shaft, a driven shaft, a master gear on said drive shaft, a plurality of sets of gears for operating said driven shaft at different speeds, each set of gears being in constant mesh, a clutch for each of said sets of gears disposed on said driven shaft and movable longitudinally thereof for bringing its particular set of gears into operation, means for selectively operating any of said clutches, said means comprising slidable bars or rods, yokes connected to said slidable bars and arranged to straddle portions of said clutches, and pedals in connection with said bars, arranged to reciprocate the bars upon rocking of the pedals.

3. A change speed gearing comprising a drive shaft, a driven shaft, a master gear on said drive shaft, a plurality of sets of gears for operating said driven shaft at different speeds, each set of gears being in constant mesh, a clutch for each of said sets of gears disposed on said driven shaft and movable longitudinally thereof for bringing its particular set of gears into operation, means for selectively operating any of said clutches, said means comprising slidable bars or rods, yokes connected to said slidable bars and arranged to straddle portions of said clutches, cams arranged to engage said bars for shifting the latter at will, and means for operating the cams.

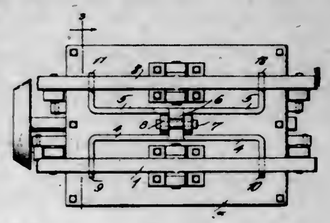
5. In a change speed gearing, the combination of the drive shaft, gear and clutch devices on said shaft, clutch shifting means movable longitudinally of said shaft, means for displacing said clutch shifting means movable transversely of said drive shaft and the clutch shifting means, and pedally controlled means operating said displacing means.

9. In a change speed gearing, a clutch member, a shifting bar including a yoke in engagement with the clutch member and including a contact member having a roller, a cam movable transversely of said shifting bar, including a low and a high portion merging at a point having an inclined surface, said roller being in engagement with said cams, and a pedal having a pin and slot connection with the cam.

[Claims 2, 4, and 6 to 8 not printed in the Gazette.]

1,276,369. **CHANGE-SPEED GEARING.** WILLIAM SILAS IRBY, San Fernando, Pampanga, Philippine Islands. Filed Dec. 19, 1917. Serial No. 207,870. (Cl. 74—39.)

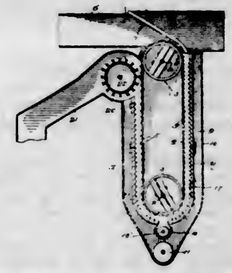
2. In a change speed gearing, and in combination with levers for operating the same pivoted midway of their ends, a shift member pivotally mounted between the levers and adapted to rock laterally and having extensions projecting across opposite end portions of the levers to insure the returning of one of the levers when set to neutral



position when the remaining lever is operated to change the speed.

[Claims 1, 3, and 4 not printed in the Gazette.]

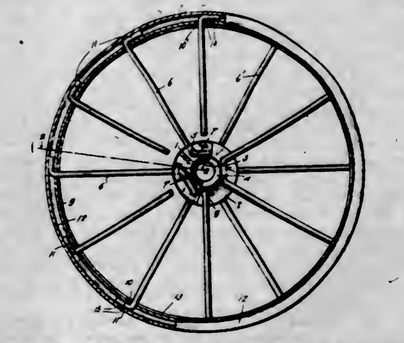
1,276,370. **COTTON-BUR SEPARATOR.** SAMUEL D. IRWIN, Floydada, and STEPHEN ELBERT JOHNSON, Jr., Spur Tex. Filed May 20, 1918. Serial No. 235,535. (Cl. 13—12.)



1. A bur separator in combination with a casing having a feed pipe into which cotton is introduced, an endless conveyer belt with teeth thereon, a series of deflector blades positioned over said belt and designed to deflect the cotton and burs toward the belt, a series of transversely disposed blades spaced apart from one another and positioned intermediate the conveyer belt and the vertical wall of the casing, the inner ends of said series of blades having round edges, conveyers in the lower portions of the casing, and a rotary brush adapted to separate the lint from the belt.

[Claims 2 and 3 not printed in the Gazette.]

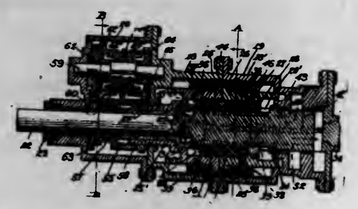
1,276,371. **WHEEL.** IVER JOHNSON, Vancouver, British Columbia, Canada. Filed Nov. 6, 1916. Serial No. 129,684. (Cl. 21—69.)



A wheel having a hub formed of two tubular sleeved members, annular disks provided on the outer of said mem-

bers and held against withdrawal by flange elements of the inner member, said disks being each provided with a series of apertures, a wheel rim, and spokes connecting said rim with the respective disks, each pair of spokes being formed of a piece of wire bent to provide a portion located at one side of a disk and thence extending as shoulders through the respective of said disk apertures and then bent and extending radially to said rim.

1,276,372. ROTARY PUMP. SINCLAIR J. JOHNSON, Montclair, N. J.; Sarah Johnson, executrix of said Sinclair J. Johnson, deceased, assignor of one-half to Walter C. Shultz, Montclair, N. J. Filed June 21, 1916. Serial No. 104,844. (Cl. 103—44.)



1. The combination of a piston chamber, a piston to rotate in said chamber, an abutment reciprocable transversely of the chamber to intercept the path of movement of the piston during the rotation thereof, and means to cut off the piston and vary the working area of the piston chamber and simultaneously therewith adjust the abutment, substantially as and for the purpose specified.

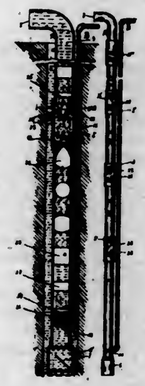
14. The combination of a cylinder having an annular enlargement to constitute a piston chamber; a shaft rotatable in the cylinder; a piston rotatable with the shaft to revolve in the piston chamber; a sleeve rotatable with and slidable longitudinally of the shaft having an annular enlargement to engage in the piston chamber; a nut rotatable with the sleeve adapted to be rotated at variable velocities relative to the rotation of the sleeve; and means operable from the shaft to vary the velocity of the nut relative to the rotation of the shaft, substantially as and for the purpose specified.

20. The combination of a piston chamber; a rotable shaft; a piston rotatable with said shaft revoluble in the piston chamber; abutments reciprocable transversely of the piston chamber; an annular member engaging in the piston chamber rotatable with the shaft and piston and movable longitudinally to vary the working area of the piston chamber and piston; a nut having screw threaded connection and rotatable with the annular member and having a pair of gears of different diameters fixed thereto; a counter shaft positively driven from the piston shaft; a pair of gears of different diameters loose on said shaft meshing with the gears on the nut; clutch mechanism to connect one of said loose gears to the counter shaft to rotate the nut at a reduced velocity with relation to the rotation of the annular member to adjust said member longitudinally in one direction and to connect the other loose gear to the counter shaft to rotate the nut at an increased velocity with relation to the rotation of the annular member to adjust said member longitudinally in an opposite direction; and means to shift said clutch mechanism and maintain the annular member in adjusted position, comprising a lever having a slidably supported fulcrum, a shifter for the clutch mechanism fixed to the fulcrum support of the lever, a slidably supported rod pivotally connected to one end of the lever, a hand operated lever connected to the rod, a slide connected to the annular member and to which the other end of the lever is pivotally connected, substantially as and for the purpose specified.

28. The combination of a cylinder having an annular enlargement to constitute a piston chamber; abutments slidably carried by the cylinder at opposite sides of said chamber; a shaft rotatable in the cylinder; a sleeve mounted on the shaft to rotate therewith and have longitudinal movement, said sleeve having an annular enlargement to engage in the piston chamber; a piston head mounted on said sleeve to rotate with the sleeve and shaft and having wing pistons to revolve in the piston chamber; a second sleeve mounted on the first sleeve to rotate with the first sleeve and shaft and have longitudinal movement, said sleeve having an annular enlargement to engage in the piston chamber; cam grooves in said sleeves to coöperate with the abutments to reciprocate with said abutments transversely of the piston chamber to intercept the path of movement of the pistons; a nut having a right hand threaded connection with one of said sleeves and a left hand threaded connection with the other sleeve; means to rotate said nut at different velocities with relation to the rotation of the sleeves to adjust said sleeves longitudinally in opposite directions; and fluid inlets and outlets from the piston chamber on opposite sides of the pistons through the shaft, substantially as and for the purpose specified.

[Claims 2 to 13, 15 to 19, and 21 to 27 not printed in the Gazette.]

1,276,373. METHOD OF AND APPARATUS FOR PUMPING FLUIDS. DAVID W. JONES, Los Angeles, Cal. Filed Aug. 4, 1916. Serial No. 113,074. (Cl. 103—84.)



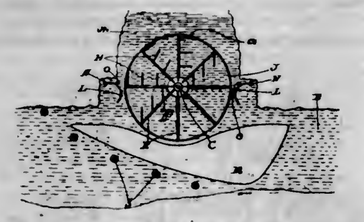
1. In apparatus of the character disclosed, in combination, a pump tube, means for supplying a working fluid to the interior of said tube for intermingling with liquid to be pumped, valves dividing said tube into a lower section and an upper section thus providing a plurality of stages through which the liquid being pumped progresses, and means over each valve for re-arranging and re-applying the working fluid with respect to the liquid.

3. In pumping apparatus of the air-lift type, in combination, a tube, means for supplying working fluid to the tube, and means interposed in the path of ascent of the working fluid and fluid to be pumped to break up the relative arrangement of working fluid and fluid to be pumped at the zone of such interposed means; said interposed means including a valve; there being likewise means adjacent to said valve for reapplying said working fluid to the work of further assisting said fluid being pumped in its ascent.

5. In an air-lift pump, in combination, a tube, means for supplying elastic working fluid to the interior of said tube and in a lower zone thereof, and means interposed in the path of ascent of the working fluid and in a higher zone than the zone of supply of said working fluid for reapplying said working fluid to other fluid to be pumped; said last named means consisting of an inverted cone.

[Claims 2 and 4 not printed in the Gazette.]

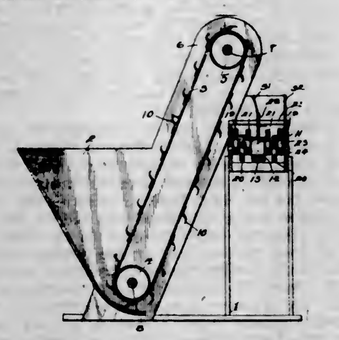
1,276,374. WATER-WHEEL FOR FISHWAYS. DANIEL W. KELLER, Hartshorne, Okla. Filed Feb. 25, 1918. Serial No. 219,053. (Cl. 210—16.)



1. An apparatus for preventing fish and driftwood from going down waterways, comprising a vertically disposed shaft having a conical-shaped bearing recess in the lower end thereof, a collar fitted to said shaft, a plate having a conical-shaped bearing member rising therefrom and on which said shaft rests, a collar fitted to the lower portion of the shaft and extending below the same and extending about said bearing upon the plate, hubs fixed to the shaft, arms secured to said hubs, wings pivotally mounted upon said arms, a screen about the circumference of the wheel, swinging gates mounted at points diametrically opposite the wheel, and means for limiting the swinging movements of the gates in one direction.

2. An apparatus for preventing fish and driftwood from going down waterways, comprising a vertically disposed shaft having a conical-shaped bearing recess in the lower end thereof, a collar fitted to said shaft, a plate having a conical-shaped bearing member rising therefrom and on which said shaft rests, a collar fitted to the lower portion of the shaft and extending below the same and extending about said bearing upon the plate, hubs fixed to the shaft, arms secured to said hubs, wings pivotally mounted upon said arms, a screen about the circumference of the wheel, curved hinged gates having convexed and concave surfaces and mounted at points diametrically opposite relative to the wheel and adjacent thereto, stops against which the gates are adapted to contact to limit the swinging movements in one direction, the convexed surfaces of the gates being positioned toward and a slight distance from the wheel.

1,276,375. MECHANISM FOR FEEDING STRING-BEANS, &c. WILBER KILLINGSWORTH, Columbus, Ohio, assignor to The Phinney Engineering Company, Chillicothe, Ohio, a Corporation of Ohio. Filed Aug. 18, 1914. Serial No. 857,320. (Cl. 193—48.)



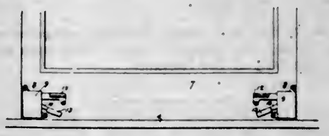
1. A mechanism for feeding string beans and the like comprising a horizontal delivery belt, an agitator bar arranged lengthwise adjacent to said belt, and means for reciprocating said bar horizontally and vertically.

4. A mechanism for feeding string beans and the like comprising a delivery belt, walls arranged on opposite sides of said belt, two sets of agitator bars arranged respectively, between said belt and said walls, and means for reciprocating the bars of each set lengthwise and vertically at different times.

10. A mechanism for feeding string beans and the like comprising a delivery belt, walls arranged on opposite sides of said belt, two sets of agitator bars arranged, respectively, between said belt and said walls, the bars next to said belt projecting with their rear ends beyond the discharge turn of said belt, while the other bars terminate at their rear ends short of the discharge turn of said belt, and means for reciprocating the bars of each set lengthwise and vertically at different times.

[Claims 2, 3, and 5 to 9 not printed in the Gazette.]

1,276,376. MEANS FOR LOCKING WINDOW-SASHES TO SCREENS. LOUIS A. KLING, East Cleveland, and CHARLES F. DENNIS, Cleveland, Ohio, assignors to The J. G. Brill Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 27, 1917. Serial No. 157,769. (Cl. 156—14.)



1. The combination of a frame; a sash; a screen, said frame having a channel adapted to receive the screen; a sash lock arranged to hold the sash in its raised position; means for detachably connecting the screen to the sash lock; and a lever having an arm arranged to lock the screen to the sash.

2. The combination of a window frame; a sash; a screen, said frame having a channel adapted to receive the screen; a sash lock secured to the sash, said lock having a T-slot and an internal rib at the T-slot, the screen frame having a T-headed projection adapted to enter the slot and to pass over the rib so as to attach the screen to the sash.

3. The combination of a window-frame; a sash; a screen; said frame having a channel adapted to receive the screen; a sash lock secured to the sash, said lock having a T-slot and an internal rib at the T-slot, the screen frame having a T-headed projection adapted to enter the slot and to pass over the rib so as to attach the screen to the sash; a locking lever having an arm located in front of the T-headed projection on the screen when in the normal position and, when raised, to move to one side of the T-headed projection to allow the screen to be detached from the frame.

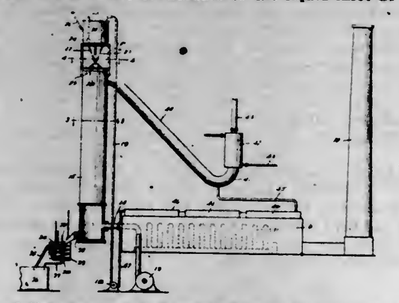
4. The combination of a window frame; a sash; a screen, the sash having a channel to receive the screen; a sash lock at each side of the sash, each lock having a pivoted latch provided with an arm arranged to engage the window frame to hold the sash in the raised position; a T-headed slot in the bottom of the lock; an internal rib at the junction of the narrow and the wide portion of the slot, said rib extending into the casing; and a T-headed projection at each end of the screen adapted to enter the slot and to pass over the rib, the lever having a notched arm arranged to engage the T-headed projection on the screen when the lever is in its normal position, preventing the screen being detached from the sash until the lever is raised.

1,276,377. PROCESS OF AND APPARATUS FOR CONCENTRATING SULFURIC ACID. HENRY G. KLINK, Moundsville, W. Va. Filed Mar. 23, 1917. Serial No. 156,912. (Cl. 23—1.)

1. The method of concentrating acid comprising flowing weak acid in one direction through an intersticed mass and forcing a blast of heated air through said mass in the opposite direction, and cooling the gas after its passage through said mass and returning the condensate through said mass.

3. In a concentrating apparatus, the combination of an evaporating tower having an inlet for liquid at the top and an outlet for liquid at the bottom, a furnace, an air

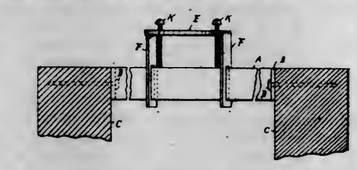
blast conduit heated by said furnace and discharging into the base of the tower, a condenser communicating with the upper end of the tower, to receive gas therefrom, and means to return the condensate to the liquid inlet at the



top of the tower, said means including evaporating pans through which said condensate flows, said pans being exposed to the heat of the furnace.

[Claim 2 not printed in the Gazette.]

1,276,378. ADJUSTABLE SUPPORT FOR ELECTRIC SWITCHES. EDWARD H. KRUSE, Fort Wayne, Ind. Filed Feb. 18, 1916. Serial No. 79,200. (Cl. 247—5.)



1. In a device of the class described, a supporting bar; an open frame having slotted arms extending from its periphery and through which the bar loosely extends, the frame having inwardly extending projections, each projection having a series of threaded openings therein, the center opening of which is in the same plane as the bar; and a screw engaging in the center opening of each projection adapted to bear against the bar and hold the frame in adjusted position.

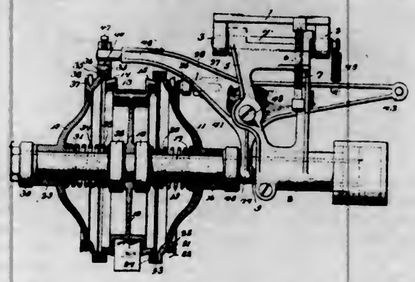
[Claim 2 not printed in the Gazette.]

1,276,379. POWER-TRANSMITTING DEVICE. GUSTAVE F. LINDQUIST, Chicago, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed May 9, 1912. Serial No. 696,204. (Cl. 192—8.)

1. A power transmitter including in combination a driving wheel, two driven wheels normally disconnected from the driving wheel, and means for connecting first one driven wheel to the driving wheel and for subsequently connecting the other driven wheel to the driving wheel while the first mentioned driven wheel is connected to the driving wheel.

3. A power transmitter including in combination, a driving member, a driven member on each side of the driving member, said driving and driven members having coöperating friction surfaces, springs for normally separating the driven members from the driving member and a single lever for causing first one driven member and then the other to engage said driving member.

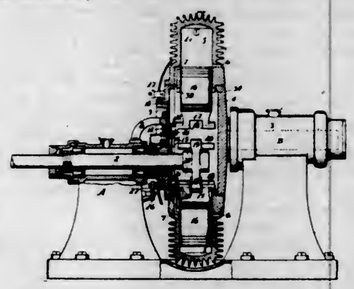
6. A power transmitter including in combination a supporting bracket, a shaft carried thereby, a driven member mounted on said shaft and held from lateral movement thereon, a driving member mounted on said shaft and free to slide laterally thereon, a spring intermediate the driven member and the driving member, a collar secured to the shaft and limiting the movement of the driving member through the action of said spring, a second-named driven member freely mounted on said shaft and capable of moving laterally thereon, a spring interposed between the driving member and the second-named driven member, said driven member having conical friction surfaces formed thereon, said driven members having overhanging flanges adapted to coöperate respectively with the conical friction surfaces of the driving member, the spring between the first driven member and the driving



member being of greater tension than the spring between the second driven member and the driving member, and means for moving the second driven member into contact with the driving member, and the driving member into contact with the first-named driven member.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,276,380. ROTARY ENGINE. THOMAS J. LOFTUS, Castella, Cal., assignor of one-half to Harmon Bell, Oakland, Cal. Filed Aug. 15, 1917. Serial No. 186,306. (Cl. 123—44.)



1. In a rotary cylinder engine, a crank shaft, a plurality of cylinders eccentrically positioned with relation to the crank shaft adapted to rotate independently of same, a reciprocating piston in each cylinder, a stationary member controlling the reciprocal movement of each piston, and means for transmitting movement from the pistons to rotate the crank shaft two revolutions during one revolution of the cylinders.

2. In a rotary cylinder engine, a plurality of radially disposed revolving cylinders, a rotatable crank shaft eccentrically positioned with relation to the axis of rotation of the cylinders, a plurality of radially disposed crank arms secured on the crank shaft, a reciprocating piston in each cylinder, and a rigid connecting rod on each piston having a bearing member formed on the inner end adapted to move into and out of engagement with the crank arms during the rotation of the cylinders and crank shaft and adapted to transmit two revolutions to the crank shaft during one revolution of the cylinders.

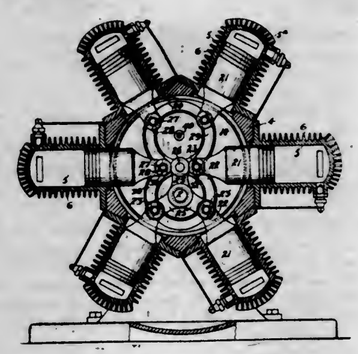
3. A rotary cylinder engine comprising a crank case, a plurality of radially disposed cylinders secured to the crank case, a cylinder shaft journaled to rotate carrying the crank case and cylinders, a crank shaft journaled to rotate independently of the cylinder shaft, and eccentrically positioned with relation thereto, and a piston in each cylinder adapted to alternately engage the cranks of the shaft to permit a speed ratio of two revolutions of the crank shaft to one of the cylinder shaft.

13. In a rotary cylinder engine, a plurality of radially disposed revolving cylinders, a rotating crank shaft eccentrically positioned with relation to the axis of rotation of the cylinders, a reciprocating piston in each cylinder, means independent of the crank shaft controlling the reciprocal movement of the pistons, and a bearing member on the inner end of each piston adapted to engage the crank shaft during a portion of the revolution of the cylinders to transmit rotary movement to the crank shaft.

14. In a rotary cylinder engine, a plurality of radially disposed revolving cylinders, a rotating crank shaft eccentrically positioned with relation to the axis of rotation of the cylinders, a reciprocating piston in each cylinder, a bearing member on the inner end of each piston, crank pins on the crank shaft, and means regulating the reciprocal piston movement to permit the bearing members on the inner ends of the pistons to engage the crank pins during a portion of the revolution of the cylinders and to move out of engagement with the crank pins during the remaining revolution of the cylinders.

[Claims 4 to 12 not printed in the Gazette.]

1,276,381. ROTARY ENGINE. THOMAS J. LOFTUS, Castella, Cal., assignor of one-half to Harmon Bell, Oakland, Cal. Filed Oct. 16, 1917. Serial No. 196,819. (Cl. 123—44.)



1. A four-cycle rotary internal combustion engine comprising a plurality of revolving cylinders, a revolving crank shaft eccentrically positioned with relation to the cylinders, a piston in each cylinder, means for transmitting piston movement to revolve the crank shaft and means for transmitting two reciprocations to each piston during one revolution of the cylinders, said means also adapted to increase the length of the piston stroke during one-half revolution of the cylinders and decrease the length during the other half of the revolution of the cylinders.

2. A four-cycle rotary internal combustion engine, comprising a plurality of revolving cylinders, a piston in each cylinder, a rigid connecting rod in each piston, a bearing member on the lower end of each connecting rod, a revolving crank shaft eccentrically positioned with relation to the cylinders, crank pins on said shaft, means causing the rigid connecting rod bearings to engage the crank pins during one-half revolution of the cylinders and to transmit two revolutions to the crank shaft during one revolution of the cylinders and means for transmitting two reciprocations to each piston during one revolution of the cylinders.

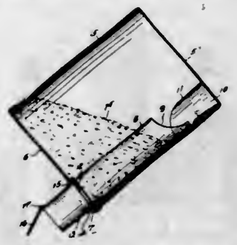
3. A four-cycle rotary internal combustion engine comprising a plurality of revolving cylinders, a piston in each member on the lower end of each connecting rod, a recylinder, a rigid connecting rod in each piston, a bearing volving crank shaft eccentrically positioned with relation to the cylinders, crank pins on said shaft, means causing the rigid connecting rod bearings to engage the crank pins during one-half revolution of the cylinders and to transmit two revolutions to the crank shaft during one revolution of the cylinders and a pair of stationary cam members controlling the reciprocal movement of each piston, said cam members adapted to lengthen the piston stroke during the exhaust and charging cycle and to decrease the stroke during the compressing and firing cycle.

6. A rotary cylinder engine comprising a crank case, a plurality of radially disposed cylinders secured to the crank case, a cylinder shaft journaled to rotate carrying the crank case and cylinders, a crank shaft journaled to rotate independently of the cylinder shaft and positioned eccentrically thereto, a piston in each cylinder, a rigid connecting rod on each piston, a stationary cam head at each end of the crank case, each head having two connected circular superposed grooves formed on their inner sides, one of said circular grooves being larger in diameter than the other, a projection on each side of each connecting rod adapted to be received by the grooves, a bearing member on the lower end of each connecting rod, crank pins on the crank shaft adapted to be engaged by the connecting rod bearings during a portion of the revolution of the cylinders, an exhaust and an inlet valve in each cylinder, and a cam member in each cam head adapted to alternately open said valves once during each revolution of the cylinders.

10. A four-cycle rotary internal combustion engine comprising a plurality of revolving cylinders, a revolving crank shaft, means for transmitting power to turn the crank shaft, a piston in each cylinder, means for transmitting two reciprocations to each piston during one revolution of the cylinders, means for increasing the length of the piston stroke during one-half of a revolution of the cylinders and decreasing the length during the other half of the revolution of the cylinders, said means comprising a circular cam groove regulating the stroke of the pistons during the compression and firing cycles and a connected larger circular cam groove which controls the stroke of the pistons during the exhaust and charging cycles.

[Claims 4, 5, and 7 to 9 not printed in the Gazette.]

1,276,382. MEASURING AND DISPENSING DEVICE. HAROLD LOVELAND, Bremerton, Wash. Filed Nov. 14, 1917. Serial No. 201,892. (Cl. 221—98.)

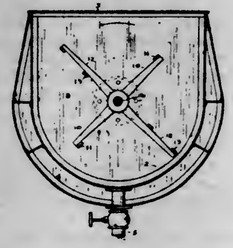


1. In a measuring and dispensing apparatus, the combination with a vessel and a cover therefor provided with an aperture, of a tube open at both ends and movable axially in the cover aperture, a guard provided in the vessel and into which said tube extends, said guard being provided with a side opening for the admission of material from the jar into the lower end of the tube.

3. In a measuring and dispensing apparatus, the combination with a vessel, a hollow guard therein provided with a side opening, and a cover for said vessel, said cover being provided with a hole, a tube open at both ends and extending through the cover hole into said guard, said tube having within the guard a side opening which is adapted to be brought into or out of register with the aforesaid guard opening by suitably turning the tube, and means provided on the tube and engageable with said cover for regulating the position of the tube for dispensing predetermined quantities of material.

[Claims 2 and 4 not printed in the Gazette.]

1,276,383. SOAP AND PROCESS OF MAKING THE SAME. OONA LUDEKENS, San Francisco, Cal., assignor to The Wite-Kat Soap Company, San Francisco, Cal., a Corporation of California. Filed July 23, 1917. Serial No. 182,194. (Cl. 87—16.)



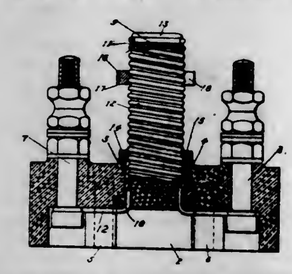
1. The process of making soap which consists in adding to hot water having soap dissolved therein parawax or beeswax substantially in the proportion specified, and then, after allowing the mixture to cool to normal temperature, agitating and aerating the same.

2. The process of making soap, which consists in mixing a hot, soapy liquid with parawax substantially in the proportion specified, and then agitating and aerating the same to reduce it to a paste like form.

3. The process of making soap, which consists in mixing a hot, soapy liquid with a substance capable of forming minute comparatively durable envelops inclosing the liquid, and then agitating the mixture to reduce it to a paste like form.

4. The process of making soap, which consists in mixing a hot, soapy liquid with a waxy substance, and then agitating and aerating the mixture to reduce it to a paste like form.

1,276,384. ADJUSTABLE RESISTENCE UNIT. BEVERLY A. LUNDY, Albany, N. Y., assignor to Hall Switch & Signal Co., a Corporation of Maine. Filed Jan. 29, 1918. Serial No. 214,868. (Cl. 219—56.)



1. A resistance unit comprising a base of insulating material, a threaded upright member adapted to pass through said base and be supported by same, resistance wire wound coincident with the threads on said threaded member, a cavity formed in the base for inclosing a portion of said resistance wire, a collar of insulating material threaded over said resistance wire to lock the upright member in place and seal the inclosed portion of said resistance wire, and a collar threaded over said resistance wire and adapted to make electrical contact with the resistance winding and adapted to be rotated about the winding to adjust the resistance of the same.

2. In a resistance unit, a non-inductive helical resistance winding, and a collar of conductive material threaded over said helical winding and adapted to shunt turns of said winding to adjust the resistance of the same.

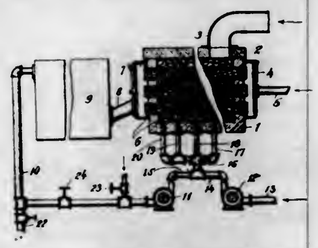
4. In a resistance unit, a non-inductive helical resistance winding, a collar threaded over said helical winding and adapted to make electrical contact with more than one turn of same, and means for rotating said collar about the winding to adjust the resistance of the same.

5. In a resistance unit, a helical resistance winding, a portion of said winding being of non-adjustable fixed resistance, and a collar of conductive material threaded over said helical winding and adapted to shunt turns of said winding to adjust the resistance of the same.

12. A resistance unit comprising a base of insulating material, a double pitch threaded upright member of insulating material supported by said base, resistance wire wound coincident with the threads on said threaded member, means for inclosing a portion of said resistance wire, a collar threaded over said resistance wire and adapted to make electrical contact with more than one turn of same, and means for rotating said collar about the winding to adjust the resistance of the same.

[Claims 3 and 6 to 11 not printed in the Gazette.]

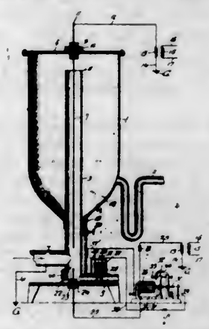
1,276,385. PROCESS FOR MANUFACTURING GAS-BLACK, HYDROGEN, &c. CYRIL DOUGLAS MCCOURT, London, England, and CARLETON ELLIS, Montclair, N. J., assignors, by mesne assignments, to Surface Combustion, Inc., Wilmington, Del., a Corporation of Delaware. Filed Jan. 23, 1912. Serial No. 672,810. (Cl. 252.)



1. The process of producing gasblack which comprises forcing methane through a highly heated porous and permeable bed of refractory material and thereby decomposing the methane into gasblack and hydrogen, separating the gasblack from the hydrogen, and maintaining the temperature of the bed by heat developed by burning hydrogen so produced.

[Claims 2 to 7 not printed in the Gazette.]

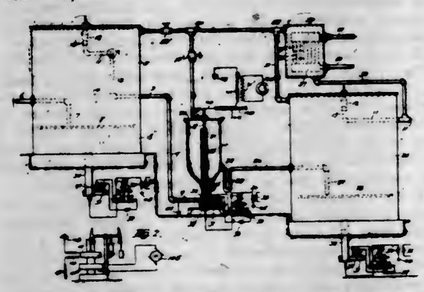
1,276,386. APPARATUS FOR SEPARATING LIQUIDS. CHARLES W. MCKIBBEN, Houston, Tex. Filed Nov. 24, 1917. Serial No. 203,695. (Cl. 204—25.)



1. An apparatus for separating liquids, differing in specific gravity and electrical resistance, when associated as in emulsions, comprising a vertically disposed casing providing a conduit for an emulsion in the upper part thereof; a settling chamber for the heavier liquid, below said conduit; means in the conduit to separate the liquids as they pass therethrough; electrodes in the settling chamber; a drain pipe connected to the settling chamber; a valve in said pipe; an electro-responsive device, for connection to said electrodes for controlling said valve, whereby, when energized, to automatically open the valve to discharge the heavier liquid from said settling chamber upon a predetermined resistance of the contents of said chamber.

[Claims 2 and 3 not printed in the Gazette.]

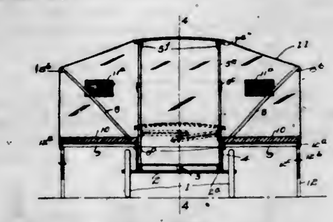
1,276,387. METHOD OF SEPARATING ASSOCIATED LIQUIDS. CHARLES W. MCKIBBEN, Houston, Tex. Filed Jan. 22, 1918. Serial No. 213,236. (Cl. 204—24.)



1. Improvements in the art of separating liquids, in which small particles of one liquid are mechanically suspended in another, which consists in heating the associated liquids to a temperature below the boiling point of the mixture; passing the liquid through a path between suitably electrically-energized electrodes, at a velocity sufficient to prevent the persistence of chains of polarized globules of the entrapped liquid after they have been formed into nascent streams between the electrodes and automatically reducing the effective electro-motive-force of the applied current when the streams begin to form.

[Claim 2 not printed in the Gazette.]

1,276,388. CAMPING-TRAILER. SIDNEY S. MARX, San Diego, Cal. Filed July 26, 1917. Serial No. 182,887. (Cl. 21—7.)

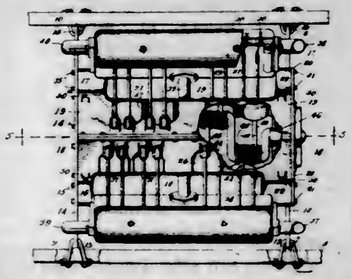


1. In a camping trailer the combination with an ordinary commercial trailer provided with a box, of a tent supporting frame composed of collapsible members, folding transversely, a roof frame secured on the normally upper end of said collapsible frame, a one piece canvas covering secured to said roof frame and extending over space enough to cover beds on the opposite sides of said box and foldable means secured to said canvas covering adapted to hold said canvas covering outwardly to form a compartment over each of said beds, whereby said canvas covering is held taut and in the proper shape and is collapsed with said collapsible frame.

3. In a camping trailer the combination with a two-wheeled cart provided with a box, of uprights secured in each corner of said box, said uprights collapsible so as to fold transversely across said box into compact form one end at a time, a roof frame secured on the normally upper end of said collapsible frame, a one piece canvas covering secured over said roof frame, beds resting on the sides of said box, ridge poles with folding supports secured to the extending portion of said canvas covering, whereby said canvas covering is held taut and is automatically collapsed with the folding of said supports and the collapsing of said frame.

[Claim 2 not printed in the Gazette.]

1,276,389. AUTOMOBILE-ENGINE. ARTHUR C. MASON and ALFRED T. STURT, Flint, Mich., assignors to Chevrolet Motor Company, New York, N. Y., a Corporation of Delaware. Filed June 12, 1916. Serial No. 103,109. (Cl. 123—55.)



1. A multi-cylinder engine of the V-type formed in sections, a chassis, means on the ends of each section for attaching that section to the chassis, the said attaching means at the ends of either section being of unequal length.

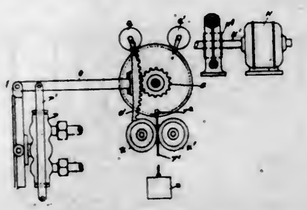
2. A multi-cylinder engine of the V-type formed in duplicate interchangeable sections, a chassis, means on the ends of each section for attaching that section to the chassis, the said attaching means at the ends of either section being of unequal length.

26. A gas engine of the V-type provided with duplicate interchangeable cylinder blocks.

27. A cylinder block for gas engines provided on its opposite ends with attaching means of unequal length.

[Claims 3 to 25 and 28 not printed in the Gazette.]

1,276,390. HYDRAULIC ELEVATOR. GEORGE MASSEY, Beecroft, New South Wales, Australia. Filed Apr. 3, 1916. Serial No. 88,600. (Cl. 187—29.)



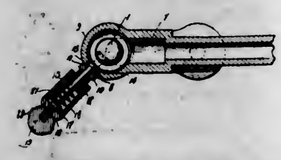
1. In an electrically operated gear for controlling hydraulic elevators the combination of a valve controlling the pressure water, a shaft, means for moving said valve by said shaft, an electric motor, an electro-magnetic clutch between said motor and said shaft, means for rendering said clutch operative or inoperative, a drum connected with said shaft, means tending to return said drum to a predetermined position, and means operated by said drum, after it moves away from said predetermined position, to stop said motor.

4. In an electrically operated gear for controlling hydraulic elevators the combination of a valve controlling the pressure water, a shaft, a pinion mounted on said shaft, a rack engaging said pinion and connected to the valve said valve being in its mid-position when the rack is in its mid-position with relation to said pinion, a reversible electric motor, an electro-magnetic clutch be-

tween said motor and said shaft, a main switch controlling a circuit for rendering said clutch operative or inoperative, a magnetic brake, means whereby said main switch also controls a circuit through said magnetic brake and said motor, a drum connected to said shaft, means tending to return said drum to a predetermined position, and means operated by said drum, after it moves in either direction away from said predetermined position, to break the circuit through said magnetic brake and motor.

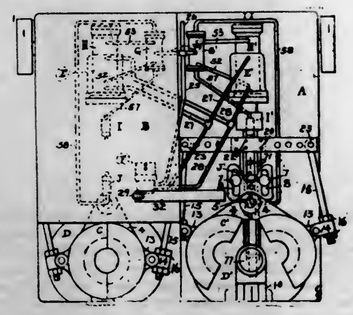
[Claims 2 and 3 not printed in the Gazette.]

1,276,391. UNSEATING DEVICE FOR VALVES. LOUIS D. MAXCORNELL, Chicago, Ill. Filed Aug. 23, 1917. Serial No. 187,833. (Cl. 137—4.)



The combination with a valve casing having a valve seat with a gravity ball valve movably mounted on said seat, said valve casing having an opening therein opposite said valve, a tubular member exteriorly threaded at both ends with an angular collar between said ends, said member having a seat on its inner end, a cap nut engaged with the outer end of said member and having an opening registering with the bore of said tubular member, a stem movable through said member and nut and having a plunger head on one end for normally engaging said seat, with its outer face, to engage said ball valve when projected, a spring on said stem, a stop adjustable on said stem between which and said cap nut said spring is positioned, the tension of the spring being controlled by said stop, and a plunger actuating knob having threaded and adjustable engagement with said stem and provided at its inner end with a skirt encompassing said spring and cap nut.

1,276,392. GLASS-MACHINE. WILLIAM J. MILLER, Swissvale borough, Pa. Filed May 4, 1917, Serial No. 166,313. Renewed May 27, 1918. Serial No. 236,923. (Cl. 49—42.)



1. In a machine for the manufacture of articles from glass, a pair of hinged molds, a compressed air cylinder for each mold adapted to open and close the latter, and a common control valve connected in an opposite manner to the two air cylinders whereby a movement of said valve causes one of said molds to open and the other mold to close, for the purposes described.

3. In a machine for the manufacture of articles from glass, a pair of hinged molds, a compressed air cylinder for each mold having its piston operatively connected to the latter whereby said mold may be opened and closed, a common control valve for said cylinders oppositely connected to the same whereby the same movement of said valve will cause one of said molds to open and the other mold to close, and vice versa, movable bottoms for said molds adapted to be shifted for the discharge of the product, a compressed air cylinder for each mold bottom having its piston operatively connected to the mold bottom, and means whereby when air is admitted to one of said first named cylinders to open a mold, air is automatically admitted to the corresponding one of the second named cylinders first to shift the mold bottom out of position to discharge the product and then to return the mold bottom into position, for the purposes described.

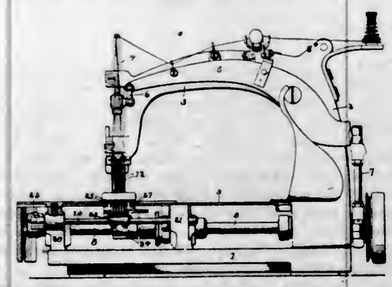
4. In a machine for the manufacture of articles from glass, a pair of hinged molds, pressure actuated means for alternately opening and closing said molds, movable bottoms for said molds, pressure actuated means for shifting said bottoms into and out of position relative to said molds, and means whereby said second named means are actuated by said first named means when said molds are respectively opened for the purposes described.

6. In a machine for the manufacture of articles from glass, a hinged mold, a pressure cylinder mechanism controlling the opening and closing of the mold, a movable bottom for said mold, a second pressure cylinder mechanism controlling the movement of the mold bottom, an automatic valve controlling the admission of pressure to said second named cylinder, a bleeder interposed in the path of the mold opening mechanism and adapted to actuate said automatic valve to admit pressure into said second named cylinder to extend the mold bottom, and a second bleeder interposed in the path of the bottom shifting mechanism and adapted to actuate said automatic valve to admit pressure into said second named cylinder to return said mold bottom to position.

7. In a machine for the manufacture of articles of glass, the combination of a hinged mold, means for opening and closing said mold, a sliding bottom for said mold, means for operating said bottom, a bleeder controlling the action of said last mentioned means, a spring actuated plunger protruding from said bleeder, and a pivoted striking finger carried by said first mentioned means and adapted to drive said plunger inwardly to open said bleeder during the operation of opening said mold, said finger being provided with an incline surface adapted to contact with said bleeder whereby said finger is thrown out of engagement with said plunger after temporary contact therewith, for the purpose described.

[Claims 2 and 5 not printed in the Gazette.]

1,276,393. MULTIPLE-NEEDLE GUARD. JAMES R. MOFFATT, Chicago, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 15, 1915. Serial No. 66,963. (Cl. 112—29.)

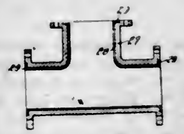


1. A needle guard for sewing machines, including a support, spaced needle guarding sections carried by the support, and means for adjusting one of said sections toward and from the other and for holding the same in fixed position relative thereto.

5. A sewing machine including in combination, a plurality of spaced needles, a looper carrier, a plurality of loopers mounted thereon one for each needle, a multiple needle guard for each needle including separate sets of needle-guarding sections, each needle-guarding set being disposed so that each section thereof is on the same side of its respective needle as the looper coöperating with said needle and each section of the other needle-guarding set is on the opposite side of its respective needle, and means whereby one set of sections of the needle guard may be simultaneously adjusted toward and from the sections of the other set.

[Claims 2 to 4 and 6 not printed in the Gazette.]

1,276,394. CORROSION-RESISTING CONDUIT SECTIONS AND FITTINGS. GUSTAV MONRATH, Chuquicamata, Chile, assignor to Chile Exploration Company, New York, N. Y., a Corporation of New Jersey. Filed Nov. 7, 1916. Serial No. 129,958. (Cl. 137—75.)

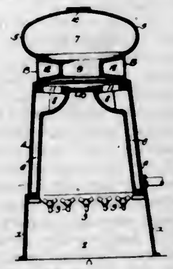


1. Corrosion-resisting conduit sections, couplings, and fittings, of cast iron or similar metal provided with a lining of hard asphaltum mastic composition cast therein, and adapted for use with corrosion-resisting conduit sections to form a conduit corrosion-resisting throughout; substantially as described.

2. Flanged corrosion-resisting conduit sections, couplings, and fittings, of cast iron or similar metal provided with a lining of hard asphaltum mastic composition cast therein, and adapted for use with corrosion-resisting conduit sections to form a conduit corrosion-resisting throughout, the flanged portions of such sections, couplings, and fittings, being provided with a recess filled with the composition and adapted to abut against the composition in similar recesses of other sections, etc., substantially as described.

3. Corrosion-resisting couplings or fittings for conduits of asphaltum mastic composition comprising cast iron sections provided with a cast lining of hard asphaltum mastic composition uniting the same with the end of such conduit section and forming a lining for the metal, whereby similar sections and fittings can be united therewith to form conduits corrosion-resisting throughout, substantially as described.

1,276,395. BOILER-FURNACE. ABRAM C. MOTT, Jr., Philadelphia, Pa., assignor to Abram Cox Stove Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Sept. 8, 1917. Serial No. 190,341. (Cl. 122—217.)



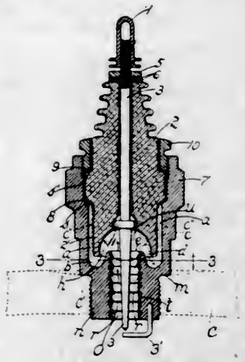
1. The combination in a boiler, of a cast metal fire pot section having a water chamber therein; a cast metal dome section made hollow and forming a water chamber and having a contracted neck and an extended base arranged to fit on the upper end of the fire pot section; an opening at one side of the fire pot section communicating with the water chamber of said section and an opening in the dome section at one side of the center; and means for coupling the two sections together at the openings so that the water will circulate through both sections, leaving the bottom of the dome section exposed to the products of combustion.

3. The combination in a boiler, of a fire pot section made hollow and forming an annular water space surrounding the fire chamber and having two hollow portions projecting at the upper end toward each other and into the combustion chamber, each projection having an opening with a water section mounted on the fire pot section and having openings alining with the openings in the hollow projecting portions; nipples connecting the two sections; and a passage in the upper section communicating with the combustion chamber of the fire pot section to allow for the passage of the products of combustion to the chimney.

5. The combination in a boiler, of a fire pot section made hollow and forming an annular water chamber around a central fire chamber and having a hollow projection at the upper end extending over the fire chamber; each projection having an opening in the upper portion thereof; a dome section made hollow and having an enlarged main portion; a contracted neck and a base, said base fitting on the upper end of the fire pot section and having an opening therein alining with the projections in the fire pot section, the base of the dome section being discontinued at the front to form a passage between the fire pot section and the space surrounding the neck of the dome; a plate extending from the base of the dome and inclosing a flue space of the neck; and a flue box communicating with the space so that the products of combustion will pass from the fire box around the neck of the dome.

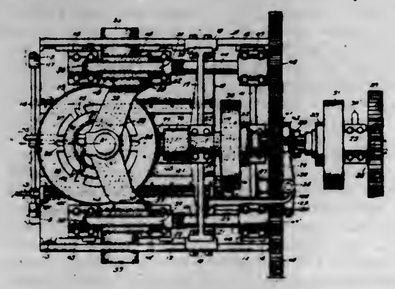
[Claims 2, 4, and 6 not printed in the Gazette.]

1,276,396. SPARK-PLUG. ARDEN J. MUMMERT, St. Louis, Mo., assignor to McQuay-Norris Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed Oct. 21, 1916. Serial No. 126,954. (Cl. 123—169.)



A spark-plug comprising an outer socket, an inner insulating plug mounted therein and terminating inside the socket in a petticoat spaced from the walls of the socket, the inner walls of the petticoat being domed to form a pocket, a thread section terminating the socket and provided with an axial passage-way discharging into the petticoat pocket, a basin surrounding the discharge end of the passage-way, the edge of the inner wall of the basin forming the inner end of the passage-way aforesaid and disposed in a transverse plane slightly within the pocket of the petticoat whereby a short passage is formed between the free ends of the petticoat and the inner walls of the basin for establishing communication between the passage-way of the thread section of the socket and the basin aforesaid, the basin communicating with the space between the socket and outer walls of the petticoat, an electrode extending axially through the insulating plug and through the passage-way of the thread section of the socket and spaced from the walls of said passage-way, and a coöperating electrode carried by the socket.

1,276,397. MILL FOR ROLLING FLANGES. CARL G. NAYLOR, Chicago, Ill. Filed Aug. 24, 1917. Serial No. 187,930. (Cl. 153—19.)



1. A ring chuck having a fixed annular part to engage the outer surface of a ring; a radially expanding chuck member to engage the inner surface of the ring; a stop, for said ring, to permit a part of the ring to extend outwardly beyond the face of the chuck; a disk having a tapered edge for engaging the inner expandible member of the chuck; a stem secured to the disk to draw it into said expandible member; a nut on the stem; means to manually hold the nut from rotation; means to rotate said chuck member's stem and ring; a roll for engagement with the inner surface of the outstanding part of the ring, and means to rock the roll while the ring is being rotated, to roll the outstanding part of the ring into a substantial radial plane.

2. A flange rolling mill comprising a chuck to receive a ring; a vertically movable, ring-receiving stop within the chuck; a rotatable table to receive the chuck; a part rotatable with the table, to open and close the chuck when its rotation is stopped and an impositive means to stop rotation of the part.

3. A flange rolling mill comprising a chuck to receive a ring; a vertically movable ring-receiving stop and ejector, within the chuck; a rotatable table upon which the chuck is axially mounted; a part rotatable with the table to open and close the chuck when its rotation is stopped and to vertically move said ejector and means to stop rotation of said part.

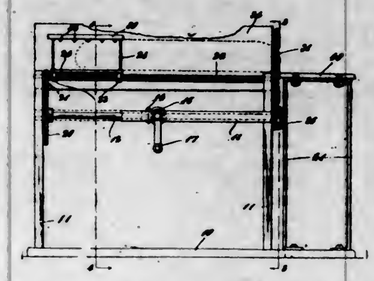
5. A flange rolling machine comprising a flange roller having a normal vertical axis; means for bodily moving the roller to a position with its axis in a substantially horizontal plane; a band-receiving chuck having its axis in a vertical plane; means to rotate the chuck in a given direction while the roller is turning the flange on the band; power means to tighten the chuck while rotating in said direction; means to reverse direction of rotation of the chuck to loosen the band and means for bodily moving the chuck away from the roll, accessible for removing the flange and placing another band in the chuck.

7. In a machine of the character described, a band-receiving chuck; power means to close and open the chuck; manual means for controlling the power means; means to rotate the chuck; a flange roller to turn the flange and means to automatically remove the flange from the chuck when the chuck is opened.

[Claims 4 and 6 not printed in the Gazette.]

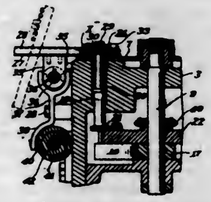
1,276,398. BREAD-CUTTER. ALEXANDER NESTOR, Chicago, Ill. Filed Oct. 20, 1917. Serial No. 197,524. (Cl. 146—12.)

1. In a bread cutter, the combination with a frame a platform mounted to move longitudinally thereon, means for actuating said platform, and a revoluble cutter adapted to sever a bread loaf, of a clamping means for a bread loaf, said clamping means comprising a plurality of hinged plates, spring connections between the outermost of said plates and said platform, means for holding said plate elements normally in a horizontal plane, and means for raising said elements whereby a bread loaf may be inserted thereunder.



2. In a bread cutter, a carriage comprised of a platform upon which the bread loaf is placed, a sectional clamping plate for the bread loaf, resilient connections between said sectional plate and said platform, spurs formed with said sectional plate adapted to engage with the bread loaf, means for holding said sectional plate normally horizontal, means for raising said sectional plate so that a bread loaf may be inserted thereunder, means for advancing said platform, and means for slicing the bread loaf, said slicing means and advancing means acting coincidently.

1,276,399. EJECTING MECHANISM FOR PRESSES OR THE LIKE. MICHAEL W. O'BRIEN, Rochester, N. Y. Filed June 27, 1917. Serial No. 177,349. (Cl. 12—48.)



1. An ejecting mechanism comprising an ejecting plunger, and a secondary ejector movable in a direction normal to said plunger and having a member in engagement with which one face of the article is moved by the plunger and also having retaining means engaging opposite edges of the article while the latter is held against the member by the plunger.

2. In combination with a movable carrier having pockets, a primary ejector movable through said pockets to discharge the articles therefrom, and a secondary ejector receiving said articles from the primary ejector and carrying the same away from the primary ejector.

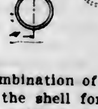
7. An ejector mechanism comprising a primary ejector, and a secondary ejector, the latter having two retaining devices each forming a chute section adapted to pass under an article held by the primary ejector to conduct an article away from the primary ejector.

9. An ejecting mechanism comprising a primary ejector and two chute sections movable toward each other to pass under the article held by the primary ejector to conduct such article away from the primary ejector.

[Claims 3 to 6, 8, and 10 to 15 not printed in the Gazette.]

1,276,400. PROJECTILE. MATHIAS PAQUETTE, Carney, Mich. Filed July 10, 1917. Serial No. 179,739. (Cl. 102—22.)

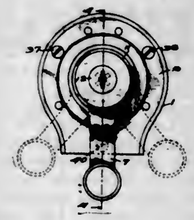
1. In a projectile, a body portion provided with a channel extending longitudinally thereof, a head having connection with said body portion and provided with a collapsible nose piece, a firing pin positioned within said head and operative upon the collapse of the nose piece, and receptacles for containing material adapted to emit fumes upon the explosion of a charge, said head having a concave end portion and the nose piece having a convex end portion coöperating with the concave portion and having a bore flared toward its outer end, said firing pin being rounded at its end conforming to the curvature of the collapsible nose piece, and being tapered to conform to the flared bore.



2. In a projectile, a body portion provided with a series of channels extending longitudinally and located around the main axis of the projectile, said body portion including a central bore within said series of channels, a second series of channels concentric with that first named and adapted to contain material emitting fumes upon the explosion of a charge within the channels first named, said channels first named converging toward one end adjacent the head, and a cap located between said converging portions and opposite the end of the core, a head and nose piece for said projectile, and a firing pin extending through said head and nose piece to a point adjacent the cap.

3. In a projectile, a body portion provided with a plurality of concentrically arranged and longitudinally extending channels, certain of the channels being adapted to contain an explosive charge and others to contain material emitting fumes upon the explosion of the charge, the body portion including a central bore of reduced diameter at its forward end, and the inner series of channels converging toward said reduced portion of the core and extending beyond said reduced portion providing a recess for receiving a cap, a head, and a nose portion connected with the body portion, a firing pin extending through said head and nose portion to a point adjacent a cap located within said recess.

1,276,401. LOCK-SWITCH. WILLIAM H. PARKER, Leipsic, Ohio, assignor to The Temco Electric Motor Company, Leipsic, Ohio, a Corporation of Ohio. Filed July 31, 1916. Serial No. 112,311. (Cl. 70—14.)

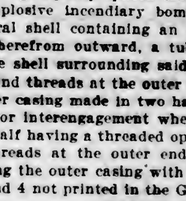


1. In a lock, the combination of a shell having a lock, an arm connected to the shell for rotating the shell, a rotative member connected to the arm through the shell, a fixed member having projections, a movable member having projections for engaging the projections of the first named member to lock the rotative member when in one position and to limit the movements of the rotative member when in another position.

2. In a lock, the combination of a casing, a rotative member located in the casing, a shell, a locking means located in the shell, an arm connected to the shell for rotating the rotative member, a cover for inclosing the rotative member and supporting the shell for rotative movements, a plate secured to the cover and having projections, a second plate located on the end of the shell and movable transversely relative to the end of the shell and the first named plate and having projections for engaging the projections of the first named plate to lock the shell and the rotative member from rotation and to limit the movement of the rotative member and the arm in their rotative movements.

3. In a lock, the combination of a shell having a lock, an arm connected to the shell for rotating the shell, a rotative member connected to the arm through the shell, a fixed member having projections, a movable member having projections for engaging the projections of the first named member to lock the rotative member when in one position and to limit the movements of the rotative member when in another position, a casing for containing the rotative member, a cover for closing the casing, and a locking means for locking the cover to the casing.

1,276,402. INCENDIARY BOMB. NEWTON H. PARKINSON, Kent, Ill. Filed Sept. 28, 1917. Serial No. 193,767. (Cl. 102—29.)



1. In an incendiary bomb, the combination with a shell containing an explosive charge, a time fuse leading therefrom, and a tube projecting from the shell and surrounding a portion of said fuse; of a casing larger than that of the shell and made in two parts, one having an opening to engage said tube and means for connecting the open ends of said halves when they are brought together.

3. In an incendiary bomb, the combination with a round shell containing an explosive charge, a time fuse leading therefrom, and a tube projecting radially from the shell and surrounding a portion of said fuse; of a round casing larger than that of the shell and made in two separably formed halves, one having an opening to engage the outer end of said tube and the other having a filling opening and cap, screw threads around the mouths of said halves adapted to engage each other when they are brought together, and inwardly projecting spacers in the walls of the halves adapted to contact with the wall of said shell to hold the casings equally spaced throughout.

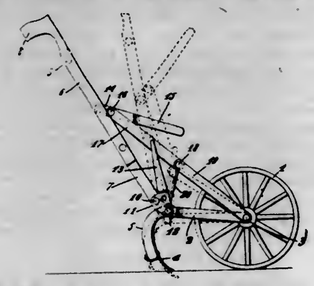
5. In an explosive incendiary bomb, the combination with a spherical shell containing an explosive charge, a fuse leading therefrom outward, a tube opening through the wall of the shell surrounding said fuse for a portion of its length, and threads at the outer end of the tube; of a globular outer casing made in two halves, means around their mouths for interengagement when they are brought together, one half having a threaded opening for the reception of the threads at the outer end of said tube, and means for filling the outer casing with fluid.

[Claims 2 and 4 not printed in the Gazette.]

1,276,403. AGRICULTURAL IMPLEMENT. WILLIAM PARRIOTT, Detroit, Mich. Filed Sept. 4, 1917. Serial No. 189,579. (Cl. 97—42.)

1. In an agricultural implement, the combination with the guide wheel and axle and, blade carrying frame mounted on said axle, of a handle supporting member, link connections between said handle supporting member and said frame, upper adjusting bars, lower adjusting bars mounted on said axle, a lever carried by said handle supporting member, said upper adjusting bars being pivotally connected with said lever, and a pivotal connection between said upper adjusting bars and said lower adjusting bars.

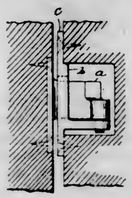
8. In an agricultural implement, the combination with an implement supporting frame, of handles movably con-



nected with said frame, a jointed connection between said handles and frame, and a lever operatively connected with said connection.

[Claims 2 to 7 not printed in the Gazette.]

1,276,404. CONCEALED HINGE. CARL B. PARSONS, Detroit, Mich. Filed July 13, 1917. Serial No. 180,310. (Cl. 16—5.)



In a concealed hinge, the combination of a plate having a slot therein, a rearwardly projecting web extending from one edge of said slot and provided with a socket, a hinged arm having a reduced outer portion and the rest of said arm being of a dimension to fill said slot, said arm having a pin extending therefrom adapted to engage in the socket in said web, the parts being so arranged that when the hinge is turned to its open position the reduced portion of said arm shall be within said slot to permit of the passage of the pin therethrough and in the other positions, said arm shall engage the edge of said slot to prevent the disengagement of said pin.

1,276,405. BLADE-SHROUDING FOR STEAM-TURBINES. CHARLES ALGERNON PARSONS, STANLEY SMITH COOK, and LOUIS MORTIMER DOUGLAS, Wallsend, England; said Cook and said Douglas assignors to said Parsons. Filed Mar. 1, 1917. Serial No. 151,801. (Cl. 253—77.)



1. Blade shrouding for steam turbines comprising in combination turbine blades, oppositely disposed notches toward the ends of said blades, a longitudinally divided shroud strip, notches in said shroud strip the two parts of said strip being disposed on each side of said blades in said notches in said blades, said shrouding being secured rigidly to the blades constructed in sections the ends of adjacent sections not abutting against nor attached to each other and not abutting against nor attached to the blades to which the adjacent sections are attached.

3. Blade shrouding for steam turbines comprising in combination turbine blades, oppositely disposed notches toward the ends of said blades, a longitudinally divided shroud strip, notches in said shroud strip the two parts of said strip being disposed on each side of said blades in said notches in said blades, said shrouding being soldered to said blades.

5. Blade shrouding for steam turbines comprising in combination turbine blades, oppositely disposed notches near the outwardly projected ends of said blades, a shroud strip longitudinally divided into two half sections with the longitudinal division edges shaped to fit around said blades in way of said notches, the half sections of said strip being disposed on opposite sides of said blades in said notches said shrouding being soldered to said blades.

[Claims 2, 4, 6, and 7 not printed in the Gazette.]

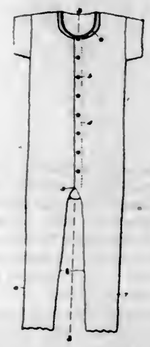
1,276,406. TWEEZERS. JOSEF PEJCHAR, Brooklyn, N. Y. Filed May 27, 1916. Serial No. 100,213. (Cl. 81—5.)



2. Tweezers comprising two substantially elastic members connected at one end and movable toward and from each other at their other ends, said last-named ends being substantially rigid, a gage arm secured to one of said members at its rigid end portion and extending transversely toward and beyond the other member, the latter being provided with a guide for said gage arm, said guide having projections which extend in front of the respective edges of said gage arm to prevent its forward movement, and are spaced from each other to expose the front face of the gage arm where the latter crosses said member.

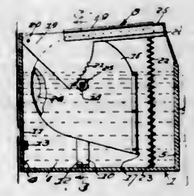
[Claim 1 not printed in the Gazette.]

1,276,407. UNION-UNDERGARMENT. ALVAH L. PERKINS, Needham Heights, Mass., assignor to The William Carter Company, Needham Heights, Mass., a Corporation of Massachusetts. Filed May 24, 1913. Serial No. 769,556. (Cl. 2—144.)



A union undergarment for males having a body with a permanently closed crotch and legs and two inserted gussets having suspensory extensions, each gusset extending up the back of the garment and having one upright edge thereof secured to the body of the garment in the back and one upright edge free therefrom, each gusset having a thigh-widening gore extending from its lower end downward into the leg at that side of the body to which such gusset pertains, the edges of each of said thigh-widening gores being secured to the edges of the respective legs, each gusset also having an upwardly extending suspensory-forming gore, the apex of the outer suspensory-forming gore of the garment being positioned wholly at the opposite side of the axial line of the garment from the thigh-widening gore to which said suspensory-forming gore pertains, and the apex of the other or inner suspensory-forming gore being superposed against the opposite side of the axial line of the garment, whereby the superposed portions of said suspensory-forming gores are wholly at one side of said axial line of the garment, thereby providing a suspensory pocket at one side of said axial line.

1,276,408. STAMP-MOISTENER. ALBIN PETERSON, Peshtigo, Wis. Filed Aug. 2, 1917. Serial No. 184,106. (Cl. 91—47.)



3. A device of the character described including a casing having a water chamber formed therein, a drum journaled in the casing above the chamber, a pad carried by the periphery of the drum, a movably mounted perforated sheet in the casing above the drum and operably connected to the drum so that upon downward movement of the plate the drum will be partially rotated so as to position the pad beneath the plate, and resilient means for automatically returning the plate to a raised or inactive position.

4. A device of the character described including a casing having a water chamber therein, a support mounted in the water chamber, a shaft journaled in the support, a drum carried by the shaft, a pad carried with the outer periphery of the drum and tangentially thereof, cog wheels carried by the shaft adjacent the respective ends thereof, a pair of arms pivotally mounted on the upper end of the support adjacent the upper edge of the casing and the opposite sides thereof, toothed segments depending from the under edges of the arms and meshing with the teeth of the cog wheels, a rectangular frame removably mounted on the upper edges of the arms, a perforated sheet carried by the frame, a cloth covering the perforated sheet, guide rods carried by the support, and coil springs disposed about the guide rods and having their respective ends bearing against the lower portion of the support and the under surfaces of the arms for normally holding the arms in a raised position and the pad within the chamber and adapted to be compressed upon downward movement to partially rotate the drum and arrange the pad beneath the perforated sheet.

[Claims 1 and 2 not printed in the Gazette.]

1,276,409. CIGAR-BOX. LEOPOLD POWELL, New York, N. Y. Filed May 26, 1916. Serial No. 99,985. (Cl. 131—30.)

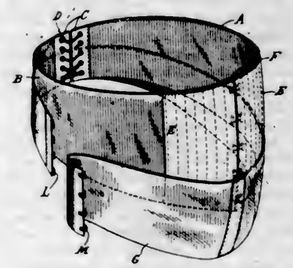
1. In a cigar box, a bottom wall in said box adapted to permit the passage of moisture therethrough, a moisture gathering element comprising a coating of waterproof material upon the upper face of said bottom wall, and a moisture carrying element arranged beneath said bottom wall in close juxtaposition thereto to maintain said bottom wall and coating cool.



2. In a cigar box, a bottom wall in said box adapted to permit the passage of moisture therethrough, a moisture gathering element comprising a coating of oiled silk upon the upper face of said bottom wall, and a moisture carrying element arranged beneath said bottom wall in close juxtaposition thereto to maintain said bottom wall and coating cool.

[Claims 3 and 4 not printed in the Gazette.]

1,276,410. ABDOMINAL SUPPORTER. DOROTHEA C. PRATT, Summit, N. J. Filed Mar. 23, 1918. Serial No. 224,162. (Cl. 2—188.)



1. An abdominal supporter comprising in combination an inner broad band formed of sections of elastic webbing with fabric sections at front and rear, the rear sections being adapted to be secured and the length of the band thereby adjusted by lacing, and the front sections containing bones or steels and adapted to interlock, of a narrower outer belt of elastic webbing sections having interlocking edges at one side, and fabric sections at the rear with means thereon for attaching it at varying distances from its ends to the rear of the inner belt and thereby adjusting its length.

[Claim 2 not printed in the Gazette.]

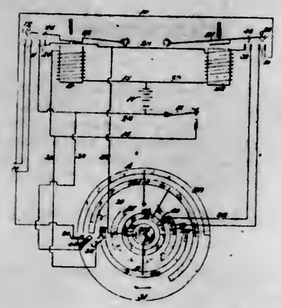
1,276,411. TREATMENT OF TIRES. RAYMOND B. PRICE, New York, N. Y., assignor to Rubber Regenerating Company, a Corporation of Indiana. Original application filed Oct. 9, 1912, Serial No. 724,874. Divided and this application filed Mar. 20, 1915. Serial No. 15,768. (Cl. 18—53.)

1. The process of manufacturing tires which consists of assembling the materials placing the tires in open molds in a vulcanizer, thereafter extracting entrapped air, gases, and other fluids by means of reduced pressure exerted substantially over the entire assembled material closing the molds and vulcanizing, whereby the tires are given final formation under compacting pressure of rigid mold walls.

3. The process of manufacturing tires composed of rubber or rubber-like material and fiber, which consists in assembling the same, placing the tires in open molds in a vulcanizer, thereafter extracting entrapped air, gases, and other fluids therefrom at an elevated temperature by means of reduced pressure exerted substantially over the entire assembled material, closing the molds and vulcanizing, whereby the tires are given final formation under compacting pressure of rigid mold walls.

[Claim 2 not printed in the Gazette.]

1,276,412. TELEGRAPHIC SENDING-CIRCUIT. EDWIN S. PRIDHAM, San Francisco, Cal., assignor to Commercial Wireless & Development Co., San Francisco, Cal., a Corporation of Arizona. Filed Aug. 22, 1916. Serial No. 116,252. (Cl. 177A—880.)
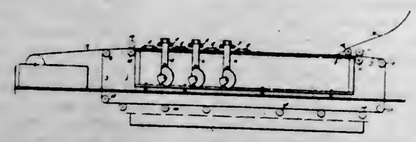


1. In a telegraphic sending circuit, a main circuit provided with spaced terminals by the opening and closing of which the main circuit is directly opened and closed and signals are despatched, an auxiliary circuit shunted around said terminals, said auxiliary circuit including an automatic switch in series with spaced terminals by the closing of which said automatic switch is operative to make and break said auxiliary circuit.

4. In a telegraphic sending circuit, a main circuit provided with spaced terminals, means for initiating the closure of said terminals to directly close said main circuit, an associated circuit including spaced terminals and a rotating switch in series connection shunted around said main circuit terminals, automatic means operative on the closure of said main circuit terminals to close said associated circuit terminals whereby said rotating switch is operative to make and break said associated circuit, and automatic means co-acting with said rotating switch to maintain the closure of said main circuit terminals until said associated circuit is closed by said rotating switch.

5. In a telegraphic sending circuit, a main circuit provided with spaced terminals, initial operating means for the closure of said terminals, an associated circuit including spaced terminals and a rotating switch in series connection shunted around said main circuit terminals, automatic means operative on the closure of said main circuit terminals to close said associated circuit terminals whereby said rotating switch is operative to make and break said associated circuit, and automatic means co-acting with said rotating switch to maintain the closure of said associated circuit terminals until said associated circuit is broken by said rotating switch.

[Claims 2, 3, and 6 to 14 not printed in the Gazette.]

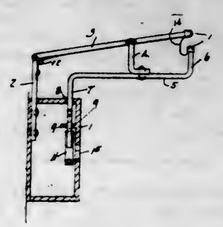
1,276,413. MACHINE FOR PRINTING FABRICS. GEORGE PRIFOLD, Linwood, Pa., assignor to The Congoleum Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Feb. 20, 1918. Serial No. 218,287. (Cl. 101—199.)



2. The combination in a machine for printing woven fabrics, of a frame; a series of vertically reciprocating carriers; printing blocks mounted on the carriers; an apron extending the full width of the machine and having pins projecting from the surface thereof for engaging the fabric; squeese rolls at the forward end of the machine through which the apron and the fabric pass to the machine, said squeese rolls acting to press the fabric onto the pins of the apron, a pair of rolls at the discharge end of the machine between which the apron passes; and a stripping roll in advance of the last mentioned pair of rolls for removing the fabric from the carrier.

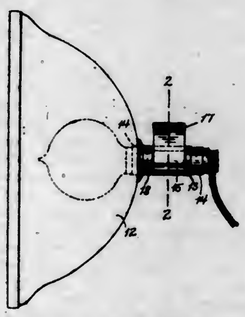
[Claim 1 not printed in the Gazette.]

1,276,414. SAFETY COAT-HOOK. BERTRAM F. RANCH, Seattle, Wash. Filed Jan. 27, 1917. Serial No. 144,800. (Cl. 45—13.)



In a device of the class described the combination of a stationary casing, a hook provided with an upturned end and a downwardly turned rear end the latter of which is slidably mounted in said casing, a closing lever hingedly mounted at one end upon said casing and positioned above said hook, an angle secured to said hook and pivoted to said lever intermediate its ends, the outer end of said hook and the said lever being arranged in spaced relationship to each other and adapted to be drawn in contact with each other when the hook is forced downwardly within the casing under the influence of the weight of the coat which is placed upon the hook, and automatically locking means, whereby when the hook is forced down within the casing it is retained in the forced down position, said locking means including a spring secured to the inside of said casing and its free end cooperating with notches in the downwardly extending end of said hook.

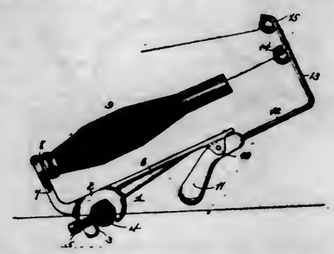
1,276,415. LAMP-SOCKET GUIDE FOR HEADLIGHTS. HOWARD B. RAND, Merrimac, Mass. Filed Nov. 4, 1916. Serial No. 129,488. (Cl. 240—44.)



The combination with a lamp-socket holder having a lateral opening, of a retaining member mounted on said holder and having a portion arranged to project through said opening to engage frictionally a lamp socket within said holder, said retaining member having a handle portion whereby it may be oscillated about said holder into and out of socket-engaging position.

1,276,416. BOBBIN-HOLDER AND TENSION DEVICE. HAL RIVIERE, Columbus, Ga. Filed Aug. 3, 1917. Serial No. 184,281. (Cl. 242—132.)

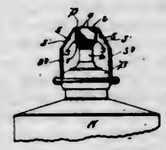
1. The combination of a bracket comprising two arms and a spindle secured to one arm and approximately parallel with the other, a weighted arm pivotally secured to said other arm, a rod or wire secured to the weighted arm and having a lateral member adapted to be held by the thread over the free end of the spindle and to move out of the plane of the spindle when the thread



is exhausted, said lateral member having loops for the passage of the thread, one of said loops adapted to be operatively disposed in line with the spindle when the loop is under tension of the thread passing through the same.

[Claim 2 not printed in the Gazette.]

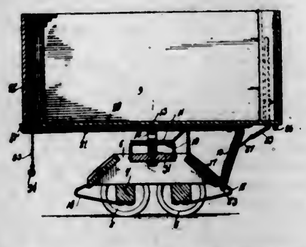
1,276,417. LANTERN-BURNER. GEORGE H. ROLFES, St. Louis, Mo., assignor to Handlan-Buck Manufacturing Company, a Corporation of Missouri. Filed May 11, 1918. Serial No. 233,994. (Cl. 67—53.)



1. A burner of the character described comprising a wick tube, and a cup-shaped flame spreader secured to said wick tube, said flame spreader having walls provided with apertures and baffle wings flaring downwardly and outwardly from the upper portions of the apertured walls.

[Claims 2 to 4 not printed in the Gazette.]

1,276,418. MINE-CAR. MARTIN S. RUNSVOLD, Bisbee, Ariz. Filed Sept. 7, 1917. Serial No. 190,211. (Cl. 105—191.)



1. In a dump car, a truck, a body pivotally and rotatably mounted on said truck, a foot on one end of said body adapted to rest upon said truck, guard members on the sides of said truck for holding said foot against lateral movement, and a latch for holding said foot engaged with said truck.

2. In a dump car, a truck, a body pivotally and rotatably mounted on said truck, a foot on one end of said body adapted to rest on said truck, strap members on the sides of said truck for holding said foot against lateral movement, a pin projecting upwardly from said truck at each end thereof, and between said stops, and the said foot being provided with an aperture to receive one of said pins.

3. In a dump car, a truck, a body rotatably mounted on said truck intermediate the ends thereof, the said truck being provided at each end with a recess, a foot on said body adapted to fit in either of said recesses, a pin on each end of said truck projecting upwardly within each of said recesses, the said foot having an opening to receive one of said pins, the said body being capable of rocking vertically, and means for holding said body against rocking movement.

4. In a dump car, a truck, a body rockably mounted on said truck and capable of rotating thereon, a rotatable rod extending longitudinally of said body, a latch at one end of said rod adapted to engage the door of said body to hold the said door against movement, the opposite end of said rod constituting a latch to hold the said body against rocking movement, and a lever for rotating said rod.

1,276,419. HOLDER FOR DRINKING-GLASSES. FREDERICK E. SANDBURG, (now by judicial change of name Frederick E. Sandburn,) Brooklyn, N. Y. Filed Jan. 19, 1917. Serial No. 143,370. (Cl. 2—144.)



1. A holder for drinking glasses comprising a relatively long upright U shaped part having parallel members between which the cylindrical part of the glass may be inserted with one of said members inside and the other outside of the glass, and means carried by one of said members to engage the glass and hold it in a position wherein one of its diametrical planes coincides with the common plane of said parallel members.

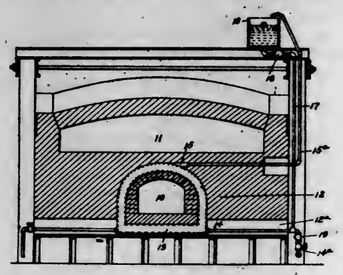
4. A holder for drinking glasses comprising a relatively long upright U shaped part having parallel members between which the cylindrical part of the glass may be inserted with one of said members inside and the other outside of the glass, means carried by one of said members to engage the glass and hold it in a position wherein one of its diametrical planes coincides with the common plane of said parallel members, and means carried by one of said members and disposed within the glass for maintaining a supply of volatile disinfecting liquid.

6. A holder for drinking glasses comprising a bracket-like fixture fashioned to support a drinking glass in an inverted position and provided with a pendant arm for disposal within the glass, an apertured plate secured to the lower end of said arm and a receptacle for a volatile disinfecting liquid for which said plate provides a cover.

8. A holder for drinking glasses comprising a bracket-like fixture fashioned to support a drinking glass in an inverted position and provided with a pendant arm for disposal within the glass, an apertured plate secured to the lower end of said arm and a receptacle for a volatile disinfecting liquid for which said plate provides a cover, said plate having its marginal portion formed to support tooth brushes or other dental implements.

[Claims 2, 3, 5, and 7 not printed in the Gazette.]

1,276,420. SAFETY MEANS FOR FURNACE-COOLING STRUCTURES. LAWRENCE S. SCHMIDT, Pittsburgh, Pa., assignor to Schmidt-McCormick Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Nov. 9, 1915. Serial No. 60,533. (Cl. 122—499.)



1. The combination with a furnace cooling structure having a normal cooling fluid circulation and supply, of means rendered active by the failure of the normal supply for maintaining the circulation of fluid through the cooling structure.

2. The combination with a furnace cooling structure having a normal cooling fluid circulation and supply, of means rendered active by the failure of the normal supply for maintaining the circulation of fluid through the cooling structure, said means being rendered inactive by restoration of normal supply conditions.

6. The combination with a furnace cooling structure, of means for providing a circulation of cooling fluid through said structure, said means including a normal supply, a receptacle for receiving the circulation discharge, and connections between said receptacle and the normal supply for delivering the discharge-fluid to the entrance of the circulation system, whereby said receptacle may act as an auxiliary fluid supply, said connections having an automatically operable valve for controlling the activity of the receptacle as such supply.

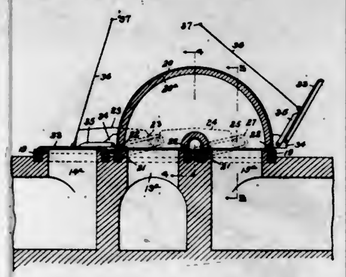
9. The combination with a furnace cooling structure, of means for providing a circulation of cooling fluid through said structure, said means including a normal supply, a valve in said supply, a receptacle for receiving the circulation discharge, and a fluid conduit connected to the fluid supply between said valve and the cooling structure and leading to said receptacle, said conduit having a valve for controlling the passage of fluid from said receptacle, said valves being controlled by the pressure variations in the normal supply.

15. The combination with a furnace cooling structure having a normal cooling fluid circulation and supply, a receptacle adapted to receive the circulation discharge, and automatically operable valved means connecting said receptacle to the circulation system for rendering the fluid of said receptacle active in such system upon material reduction in fluid pressure of the normal supply for said system, said means including a pressure column of definite value adapted to determine the period of activity of the receptacle fluid.

[Claims 3 to 5, 7, 8, and 10 to 14 not printed in the Gazette.]

1,276,421. MEANS FOR HEATING BOILERS BY WASTE GASES. LAWRENCE S. SCHMIDT, Pittsburgh, Pa. Filed Feb. 4, 1916. Serial No. 76,119. (Cl. 122—7.)

1. In apparatus for utilizing waste gases in the heating of boilers and in combination, a boiler, a stack, a waste gas conduit having a port, a stack flue having a port, a boiler flue having a port, all of said ports arranged in the same horizontal plane and having their axes approximately parallel, and a reversing valve mounted above said ports for connecting the waste gas conduit with the boiler flue port or the stack flue port at will, the movement of said valve to establish connection with one of said ports acting to produce a total break in the continuity of the connections to the other port.



2. In apparatus for utilizing waste gases in the heating of boilers and in combination, a boiler, a stack, a waste gas conduit having a port, a stack flue having a port, a boiler flue having a port, said ports of the stack and boiler flues arranged apart from the waste gas conduit port and from each other and without permanent connection therebetween, and a reversing valve mounted above said ports for connecting the waste gas conduit with the boiler flue or the stack flue at will, the movement of said valve to establish connection with one of said ports acting to produce a total break in the continuity of the connections to the other port.

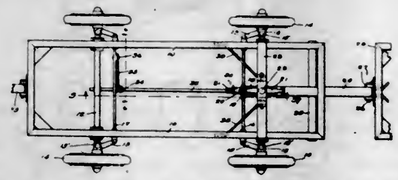
3. In apparatus for utilizing waste gases in the heating of boilers and in combination, a conduit forming the waste gas supply, a stack conduit, a boiler conduit, all of said conduits arranged apart and without permanent connections, the axis of the waste gas conduit outlet and the axes of the entrance to the conduits for the stack and the boiler being approximately parallel, and means for connecting said waste gas supply with the boiler or stack at will, the movement of said means to establish connection with one of said ports acting to produce a total break in the continuity of the connections to the other port, said means including an element for closing a port while the break continues.

4. In apparatus of the character described and in combination, a pair of ports and a port adapted to be connected to either of said pair of ports, said ports having their axes substantially parallel and arranged in the same horizontal plane, and a reversing valve structure mounted above said ports and shiftable at will, the movement of said valve to establish connection with one port of the pair acting to produce a total break in the continuity of the connections to the other port, said structure including an element for closing such other port while such break continues, said valve being water sealed with the water seals arranged out of the path of travel of the waste gases.

5. In apparatus for utilizing waste gases in the heating of boilers and in combination, a boiler, a stack, a waste gas conduit having a port, a stack flue having a port, a boiler flue having a port, all of said ports arranged in the same horizontal plane and having their axes approximately parallel, and a reversing valve structure mounted above said ports for connecting the waste gas conduit with the boiler flue port or the stack flue port at will, the movement of said structure to establish connection with one of said ports acting to produce a total break in the continuity of the connections to the other port, said structure including an element for closing such other port while such break continues, said element being rendered active and inactive by the movements of the structure.

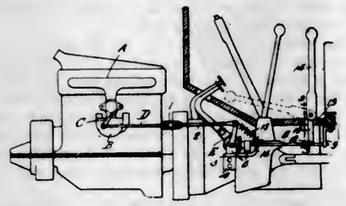
1,276,422. GUIDING APPARATUS FOR VEHICLES. RAYMOND W. SCOTT and CLARENCE C. COOK, Seattle, Wash. Filed Nov. 27, 1916. Serial No. 133,805. (Cl. 21—140.)

1. The combination, with a vehicle frame having a front axle, of steering knuckles pivoted on the ends of said axle, said knuckles having spindles thereon, wheels on said spindles, steering knuckle arms rigid on said steering knuckles and extending rearwardly therefrom, a steering rod connecting said arms, a plate secured at one end to said steering rod and adapted to have its other end rest upon said axle, said plate having a longitudinal slot, a cross bar on said frame adjacent to and in front of said steering rod, a draw bar pivoted to said cross bar to project forwardly of said frame and be secured to a leading vehicle, and a downturned element on the rear end of said draw bar to engage within said slot in said plate and move said steering rod when said draw bar is turned on its pivot.



2. The combination, with a vehicle frame, having wheels mounted by knuckle joints on the front and rear axles thereof, of steering arms on said knuckle joints, transverse steering rods connecting the front steering arms and rear steering arms respectively, a slotted plate on said front steering rod, a pivoted draw bar adapted to be connected with a leading vehicle, means on the rear end of said draw bar for engaging within said slotted plate to move said steering rod when said draw bar is turned on its pivot, a rotatable shaft, an arm fixedly secured to the rear end of said shaft, a link connecting the end of said arm with said rear steering rod, a fixedly secured fin on said shaft and devices on said slotted plate engageable with said fin to rotate said shaft when said front steering rod is moved crosswise of said frame.

1,276,423. KNEE THROTTLE-GEAR. WILLIAM E. SEPPMAN, Lake Crystal, Minn. Filed Nov. 7, 1917. Serial No. 200,804. (Cl. 137—139.)

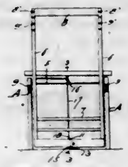


1. In a knee throttle gear, the combination of an automobile motor having a throttle lever, a swinging operating lever extending through the floor of the automobile, the said throttle lever including a yoke, an operating shaft engaged with the said yoke and adapted to rotate when the operating lever is swung, a second shaft, a bracket mounted on the said motor for supporting the said shaft; means conecting the ends of the shaft to impart movement to one when the other is rotated, and means connecting the said shaft with the said throttle gear to exert a pull on the latter when the said shafts are rotated.

[Claims 2 to 4 not printed in the Gazette.]

1,276,424. GATE. GEORGE H. SHATTUCK, Tumwater, Wash. Filed Apr. 3, 1917. Serial No. 159,504. (Cl. 39—42.)

The combination with spaced vertically disposed posts, of a pivot mounted in the posts transversely thereof, a gate frame swingingly supported for vertical movement upon the pivot, an adjustable balancing board carried by the upper end of the gate frame, a notched keeper mounted between the posts in a foundation, a spring latch member mounted on the gate frame and engageable in the notched keeper, a cross member connected to the sides of the gate frame above the pivot and extending beyond the sides of the gate frame, guides pendently supported on the cross member, cables connected



with the latch member and trained over the guides in direction at opposite sides of the gate frame for swinging the gate frame, and laterally extending posts projecting from the front and rear faces of the vertically disposed posts and engageable by the extended ends of the cross member for limiting the swinging movement of the gate.

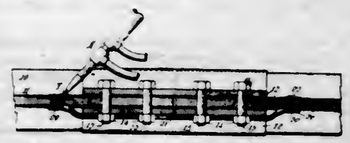
1,276,425. DIRECTION-SIGNAL FOR AUTOMOBILES. CHARLEY G. SHAUCK, Des Moines, Iowa. Filed Nov. 11, 1916. Serial No. 130,793. (Cl. 240—11.)



1. A signal lamp, comprising a frame, a clamp thereon adapted to engage a support, a partition on said frame, an apertured casing inclosing said frame and partition, glass plates in some of the apertures of said casing, said plates being arranged parallel with each other and also being arranged on opposite sides of said partition, the plates on one side of the plane of said partition being alike in color and of a color differing from the plates on the opposite side of the plane of said partition, and lamps carried by and on opposite sides of said partition, together with a door adapted to close the remaining aperture of said casing.

[Claims 2 and 3 not printed in the Gazette.]

1,276,426. METHOD OF SECURING RAIL-BONDS TO RAILS. JAMES E. SLIMP, New York, N. Y. Continuation in part of application Serial No. 872,522, filed Nov. 17, 1914. This application filed Apr. 28, 1917. Serial No. 165,095. (Cl. 113—112.)

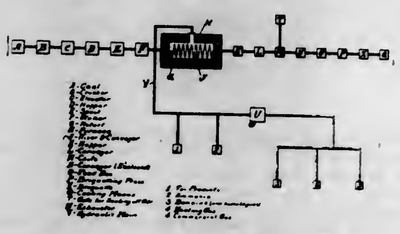


2. The method of bonding rails which consists in first forming close mechanical abutting connections between the rails and the bond terminals, then heating the exposed metal of higher fusing point adjacent to the terminal to its point of fusion, then heating the exposed metal of lower fusing point adjacent to the rail to its point of

fusion puddling the metals together to break down the abutting connections at the surface to form an alloy connection between the metals.

[Claim 1 not printed in the Gazette.]

1,276,427. PROCESS OF TREATING COAL. CHARLES HOWARD SMITH, Short Hills, N. J., assignor to International Coal Products Corporation, Richmond, Va., a Corporation of Virginia. Filed Jan. 20, 1916. Serial No. 73,106. (Cl. 44—1.)



1. The process of forming briquets consisting in heating coal to a plastic condition, removing the coal while in said condition from the heat zone, partially compressing said removed coal and introducing into said plastic coal an admixture of combustible material which will absorb gases and condensates entrained in said plastic coal, and mixing and subsequently pressing into briquets said material while in a heated condition.

4. The process of treating coal consisting in heating coal to a plastic condition, removing it from the heat zone, then introducing into it and mixing therewith coke for the purpose of absorbing gases entrained in the coal, then partially pressing the mass and finally compressing and molding the mass into briquets.

6. The process of treating coal consisting in heating coal to a plastic condition and while it is in said condition introducing therein and mixing therewith a combustible materal such as coke for the purpose of absorbing the gases and condensates entrained in said coal and also while in said condition subjecting the coal to a plastic compression, and subjecting the mass, when partially cooled to a final compression and molding it into briquets.

9. In the manufacture of briquets the method which consists in heating coal in a manner to partially devolatilize the coal and until the resulting residue is in a plastic condition, removing said residue from the heat zone and introducing therein and mixing therewith material such as coke for the purpose of absorbing gases and condensates entrained in said residue, subjecting said residue while in plastic condition to a partial compression, allowing the mass resulting from the mixing of the coal residue and the coke to become partially cooled and finally subjecting the partially cooled mass to a final compression during which the mass is molded itno briquets.

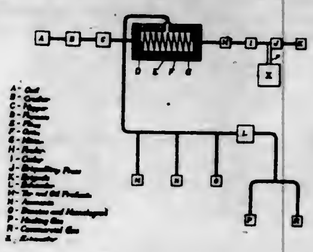
[Claims 2, 3, 5, 7, and 8 not printed in the Gazette.]

1,276,428. PROCESS OF TREATING COAL. CHARLES HOWARD SMITH, Short Hills, N. J., assignor to International Coal Products Corporation, Richmond, Va., a Corporation of Virginia. Filed Jan. 31, 1916. Serial No. 75,288. (Cl. 44—1.)

1. The process of treating coal, consisting in subjecting coal to a partial distillation, then removing from said coal, after it has passed from the retort, by partial vacuum gases entrained in said coal, and then molding it into briquets.

2. The herein described process, consisting in subjecting coal to a partial distillation, then removing from said coal, after it has passed from the retort, by partial vacuum gases entrained in said coal, and then molding it into briquets, the coal being heated during the partial distillation to such a temperature that the gases entrained therein would be likely to rupture the ultimate briquet, if at least a portion of said entrained gases is not removed.

4. The process of treating coal consisting in first subjecting coal to a heat to effect a partial distillation, the heating being carried to such a temperature that the gases entrained therein would be likely to rupture a briquet ultimately formed therefrom, if at least a part of said entrained gases are not subsequently removed, after the heating has terminated removing from said heated coal residue by means of vacuum some of the gases entrained therein and ultimately molding into briquets.



7. In the manufacture of briquets the method which consists in subjecting coal to a partial distillation, removing from the resulting coal residue after it has passed from the heat zone and by means of partial vacuum gases entrained in the coal residue, and finally forming into briquets the residue from which some of the entrained gases have been removed.

[Claims 3, 5, and 6 not printed in the Gazette.]

1,276,429. BRIQUET AND METHOD OF MAKING THE SAME. CHARLES HOWARD SMITH, Short Hills, N. J., assignor to International Coal Products Corporation, Richmond, Va., a Corporation of Virginia. Filed Nov. 15, 1916. Serial No. 131,434. (Cl. 44—1.)

8. A briquet made from partially carbonized coal and a binder by further carbonization and having a volatile content of approximately from two and a half per cent. (2½%) to ten per cent. (10%).

12. A briquet carbonized from a mixture of coal, partially carbonized, and binding material.

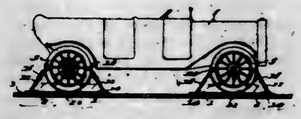
25. The making of briquets by the method which comprises mixing a partially carbonized coal and material providing a binder in such proportions that approximately from eleven per cent. (11%) to seventeen per cent. (17%) of the entire mixture is volatile matter, pressing the resulting mixture into briquets, and subsequently heating said briquets so as to drive off volatile matter contained in the partially carbonized coal and in the binding material.

36. The forming of briquets from coal, coke or partially carbonized coal, or a mixture of the same in which there is too low a volatile content for the direct manufacture of smokeless fuels, by the method which comprises pulverizing said material and adding thereto sufficient hydrocarbon material to make the proportion of volatile matter contained in the resulting mixture approximate from eleven per cent. (11%) to seventeen per cent. (17%), then forming the resulting mixture into briquets by the addition of water as a temporary binder and the subsequent further carbonization of the briquets in a second retort at a temperature of approximately from 1400 degrees F. to 2000 degrees F. and subsequently cooling the briquets thus formed.

55. The process which comprises separately distilling from coal most of the tar vapors and gases which pass off at low temperatures and expand and swell the material by developing its pores, the arresting of the distillation, the formation of the resilue into definite pressed shapes by briqueting or the like, the resuming of the distillation and the carrying of the same forward to a higher temperature than that of the first distillation to further remove gases and other vapors which develop only minute cells or pores in passing from the briquets, and allowing the briquets to cool, the last mentioned heating being carried out at temperatures sufficiently high to produce a strong coherent briquet structure.

[Claims 1 to 7, 9 to 11, 13 to 24, 26 to 35, and 37 to 54 not printed in the Gazette.]

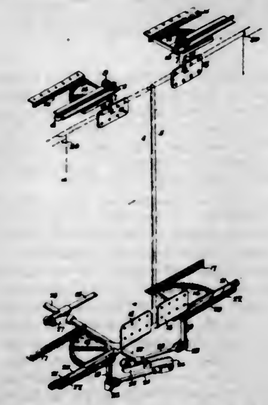
1,276,430. BRAKE-BLOCK. GEORGE R. SMITH, Bay City, Mich. Filed July 30, 1917. Serial No. 183,560. (Cl. 21—8.)



1. A brake block including a pair of base plates, arcuate wheel receiving members, pins for pivotally connecting the wheel receiving members to the base plates, means for adjustably supporting the wheel receiving members with respect to the base plates, and links adjustably engaged on the pins for holding the plates in a relatively adjusted position.

2. In a brake block, a base plate, a pair of ears formed on the upper surface thereof near the rear end, a pintle arranged through the forward end of the plate, an arcuate wheel receiving member, a pair of ears depending from the lower end of the member and pivotally arranged about the pintle, yokes carried by the wheel receiving member, another pair of ears carried by the rear surface of the member near the upper edge thereof, a tubular rod pivotally mounted between the cars on the base plate, a threaded rod pivotally mounted between the ears on the rear surface of the member and a nut adjustably engaged on the threaded rod and arranged in abutting relation with the outer edge of the tubular rod for holding the member in an adjusted position with respect to the plate.

1,276,431. DOOR-OPERATING MEANS. WARREN M. SMITH, Moores, Pa., assignor to The J. G. Brill Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 4, 1916. Serial No. 123,690. (Cl. 268—7.)

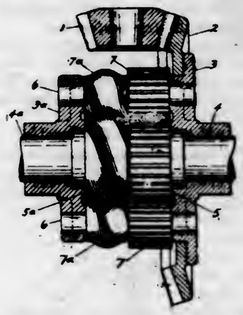


1. The combination in car door operating mechanism, of a platform; two doors at one side of the platform; means for pivotally suspending the doors; a transverse shaft located under the platform and connected to the lower portions of the doors on a line with the pivots so that on turning the shaft the doors will be moved toward or from each other; fixed racks extending parallel with the doors, when in the closed position; and a segment on each door engaging the racks and acting to turn the doors as they are moved by the shaft toward or from each other.

2. The combination in means for operating car doors, of a platform; two doors located at one edge of the platform and arranged edge to edge, when closed; a frame; fixed rails on the frame above the doors; a trolley adapted to travel on each rail; means for pivotally connecting the trolleys to the upper portion of the doors; guides located below the platform and extending parallel with the rails; pivot shafts in line with the pivots of the trolleys and located at the lower portions of the doors and adapted to the guides; a transverse shaft located under the platform; arms on said shaft; rods connecting the arms with the shafts; and means for turning the doors on their pivots as the doors are moved toward or from each other so that, when the doors are open, they are in a position at right angles to the side of the platform.

[Claims 3 to 5 not printed in the Gazette.]

1,276,432. DIFFERENTIAL GEARING FOR MOTOR-VEHICLES. WALTHER SPRENGER, Lynn, Mass. Filed Dec. 26, 1916. Serial No. 138,862. (Cl. 74—99.)

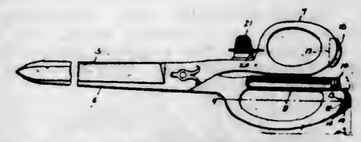


1. In a differential gearing, the combination of a rotatable housing, two driven shafts, a gear mounted on the end of one shaft, a cam mounted on the adjacent end of the other shaft, a shaft journaled in the walls of the housing and a gear and cam mounted thereon so that the gears are in mesh and the cams in operative contact with each other.

2. In a differential gearing, the combination of a rotatable housing, two driven shafts, a gear mounted on the end of one shaft, a cam mounted on the adjacent end of the other shaft, shafts journaled in the walls of the housing, gears and cams mounted thereon, the gears being in mesh with the gear on a driven shaft and the cams being in operative contact with the cam on a driven shaft.

[Claims 3 to 8 not printed in the Gazette.]

1,276,433. COMBINATION IMPLEMENT. DALLAS W. STAINBROOK and RAY H. WINTER, Caldwell, Idaho. Filed Aug. 6, 1917. Serial No. 184,728. (Cl. 7—6.)



1. The combination with a pair of scissors having a recess formed in one of its handle loops, of a marker secured in said recess, a projection formed at one end of said recess, and a curved resilient guard having one end pivotally secured to said finger loop at the opposite end of said recess and its free end engageable with said projection.

2. The combination with a pair of scissors having a socket formed in one of its finger loops, of a thimble retaining member comprising a strand of wire bent upon itself to provide a shank adapted to be received in said socket and then separated to provide clamping arms curving outwardly to opposite sides of said shank.

1,276,434. GRENADE. JOSEPH A. STEINMETZ, Philadelphia, Pa. Filed Oct. 9, 1917. Serial No. 195,571. (Cl. 102—29.)



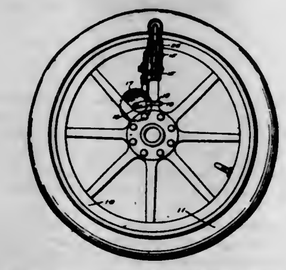
1. The combination with a grenade of a series of short independent tough wire rods, secured around the peripheral portion of the grenade by means destructible by explosion of the grenade.

3. The combination with a grenade having an external equatorial breaking groove with nail-receiving perforations extending oppositely from said groove, and a band covering said groove and preventing accidental escape of any nail which may be in any perforation.

5. The combination with a suitable grenade and a larger concentric ring, of a series of distinct short, tough rods forced into and approximately filling the annular space between the grenade and ring and frictionally retained in place.

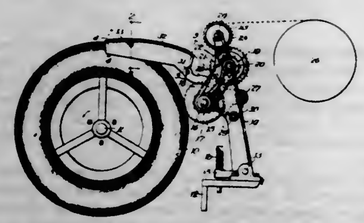
[Claims 2 and 4 not printed in the Gazette.]

1,276,435. SOFT-TIRE ALARM. GEORGE L. STEVENS, Long Beach, Cal. Filed Aug. 20, 1917. Serial No. 187,278. (Cl. 116—1.)



In a tire alarm, the combination with a vehicle wheel upon which is mounted a pneumatic tire, of a mounting bracket secured to one of the spokes of said wheel, a trip arm pivotally secured to the mounting bracket and yieldably held against the side of the tire, a bell secured at the opposite end of said bracket, and a bell striker mounted upon the bracket and adapted to be released by the trip arm to strike the bell when the tire becomes deflated.

1,276,436. FABRIC-SPREADER FOR TIRE-MAKING MACHINES. WILLIAM C. STEVENS, Akron, Ohio, assignor to The Firestone Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed May 18, 1914. Serial No. 839,261. (Cl. 154—10.)



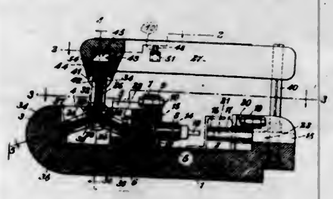
1. In a machine for making tires from fabric, the combination with a transversely curved core and a device which delivers the fabric to the core in flat condition of means for absorbing the fullness of the fabric comprising a transversely and longitudinally curved fabric contacting surface which is tapered toward the core, the tapering end resting over the core and correspondingly curved.

2. In a machine for making tires from fabric, the combination of means for delivering the fabric in flat condition, a transversely curved core to which the fabric is delivered and a fabric spreader intermediate the delivery means and the core, the spreader gradually tapering from a curvature of longer radius to a curvature of shorter radius corresponding to the shape of the core and adapted to shape the fabric to the core in a single bend.

3. In a machine for making tires the combination of fabric delivery means, and a transversely curved core to which the fabric is delivered of an intermediate fabric spreader, the spreader being curved both longitudinally and transversely, the radius of transverse curvature being greater at the end nearer the delivery means and tapering toward the core, and adapted to conform the fabric to the curvature of the core without transverse stretching.

4. In a machine for making tires, the combination of fabric delivery means, and a transversely curved core to which the fabric is delivered of a fabric spreader located between the fabric delivery means and the core, and contacting the fabric between these points, the spreader being wider adjacent the delivery means and tapering toward the core, and adapted to conform the fabric to the curvature of the core without transverse stretching.

1,276,437. TOGGLE MECHANISM. FREDERICK A. STEVENSON, Detroit, Mich., assignor to American Car and Foundry Company, St. Louis, Mo., a Corporation of New Jersey. Filed Nov. 12, 1915. Serial No. 61,063. (Cl. 74—5.)



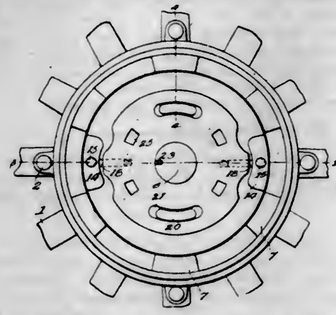
1. In combination in a mechanism of the class described, a movable member, an impulse member, a toggle mechanism connected positively with said movable member and continuously retained by said impulse member being at times loosely and inoperatively connected therewith, and means for positively and operably connecting said toggle mechanism and impulse member at will.

6. In combination in a mechanism of the class described, a stationary member, a movable member, a movable impulse member the latter being provided with a chamber, a pair of bearing loops depending therebelow, a toggle mechanism connecting said stationary and movable members and being provided with a leg extending between said bearing loops, journals projecting from said leg into and movable in said loops, a device in said chamber bearing on said leg and means adapted to be projected between a wall of said chamber and said device to cause said impulse member to definitely position the journals in said loops and to operate said toggle mechanism.

[Claims 2 to 5 and 7 to 10 not printed in the Gazette.]

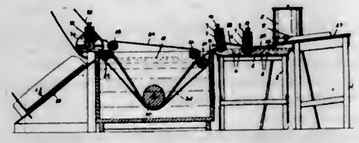
1,276,438. POWER TRANSMISSION. GORDON R. STUAGIS, Hillsboro, Tex. Filed Feb. 20, 1917. Serial No. 149,889. (Cl. 192—20.)

The combination with a driving shaft and a wheel member rotatably mounted thereon, of a body portion, an annular flange formed within said body, lugs mounted on said flange, a driving disk having projections extending therefrom, pawl members pivotally connected to the driving disk adapted to engage said lugs, a ratchet plate having elongated slots therein engaged by said projection to limit the relative opposite movement of the ratchet plate and driving disk, pin members slidably mounted



in the ratchet disk engaging the pawls, a disk keyed to said shaft, and means associated with the last mentioned disk to transmit motion to the ratchet plate for a purpose specified.

1,276,439. COATING-MACHINE. LOUIS W. SUTHERLAND, Kalamazoo, Mich., assignor to Kalamazoo Carton Company, Kalamazoo, Mich. Filed May 2, 1918. Serial No. 232,002. (Cl. 91—51.)



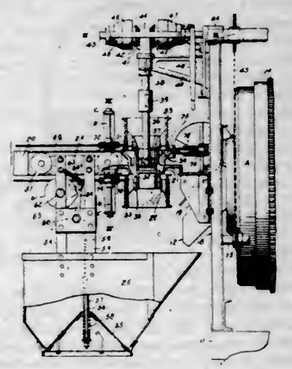
1. In a coating machine, the combination of a tank provided with heating means, a feed table disposed in front of said tank, pairs of felt covered rollers disposed so that the upper portions of the lower rollers are substantially above the surface of the liquid and their lower portions dip into the liquid in the tank, the lower pair of rollers being disposed at the rear of the tank to deliver the stock, pressure adjusting means for the upper rollers, longitudinal spaced guide bars disposed above the surface of the liquid between the pairs of rollers for guiding the stock from the front pair to the rear pair, and longitudinal spaced feed bars disposed above the surface of the liquid in front of the first pair of rollers to support and guide the stock from the table thereto, and driving means for said rollers.

4. In a coating machine, the combination of a tank, pairs of rollers disposed so that the upper rollers are entirely above the surface of the liquid and the lower roller of each pair dips into the liquid in the tank, the points of contact of the rollers being a substantial distance above the surface of the liquid so that the coating material is applied to the upper rollers only through their contact with the lower, longitudinal spaced guide bars disposed above the surface of the liquid between the pairs of rollers for guiding the stock from the front pair to the rear pair, and longitudinal spaced feed bars disposed above the surface of the liquid in front of the first pair of rollers to guide the stock thereto, and driving means for said rollers.

[Claims 2 and 3 not printed in the Gazette.]

1,276,440. DISTRIBUTING MECHANISM FOR CONCRETE-MIXERS. JOHN A. F. SVENSON, Pittsburgh, Pa., assignor to The Standard Scale & Supply Company, Pittsburgh, Pa., a Corporation of Delaware. Filed Feb. 16, 1918. Serial No. 217,697. (Cl. 214—59.)

1. In combination with a socketed bearing, a distributing boom having a partly spherical member seated in said bearing, a carriage and hopper carried by the boom, means for imparting movement to the carriage embodying winding drum mechanism journaled in said member, and means for swinging the boom laterally on said bearing.



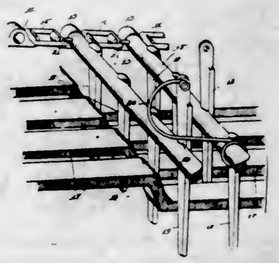
4. In combination with a socketed bearing, a distributing boom having a partly spherical member seated in said bearing, a carriage and hopper carried by the boom, a pair of winding drums having a portion extending through said partly spherical member, a cable connected with the carriage engaging a terminal sheave wheel and adapted to be wound and unwound by said drums, a driving shaft having universal connection with said drums, and means for actuating said shaft in either direction.

8. A universally adjustable distributing boom for a concrete mixer having a drop bottom hopper, a supporting carriage therefor, a raising and lowering sheave wheel thereon having a flexible connection with the hopper bottom, a co-acting sheave, a winding drum, and a cable connected therewith and wound upon said co-acting sheave whereby to provide for imparting movement to the carriage and also to the co-acting sheave to raise or lower the hopper bottom.

12. A distributing mechanism for concrete mixers comprising a boom having universal movement with respect to the mixer, a carriage and hopper movable along said boom, means for moving said carriage, and mechanism embodying a sheave operated by the carriage moving means and a supporting sheave and cable controlled thereby for causing a discharge of material from said hopper.

[Claims 2, 3, 5 to 7, 9 to 11, and 13 to 23 not printed in the Gazette.]

1,276,441. POTATO-DIGGER. CHARLES TACY, Batavia, N. Y. Filed Mar. 28, 1918. Serial No. 225,334. (Cl. 130—82.)



1. The combination in a potato digger of a frame, an endless conveyer mounted to travel in said frame, said conveyer comprising a pair of chains, bearing blocks carried by said chains, cross bars mounted to rock in said

bearing blocks, a series of outwardly projecting fingers mounted on said cross bars, a spring controlled inwardly projecting finger adapted to hold said outwardly projecting finger yieldingly in position.

2. The combination in a potato digger of a frame, an endless conveyer mounted to travel in said frame, said conveyer comprising a pair of chains, bearing blocks carried by said chains, cross bars mounted to rock in said bearing blocks, a series of outwardly projecting fingers mounted on said cross bars, an inwardly projecting finger mounted on each of said cross bars, a coil spring interposed between the end of said inwardly projecting finger and the adjacent cross-bar.

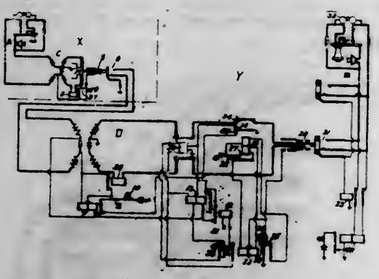
3. The combination in a potato digger of a frame, an endless conveyer mounted to travel in said frame, said conveyer comprising a pair of endless chains, bearing blocks carried by each of said endless chains, cross-bars mounted between said bearing blocks, fingers mounted on said cross-bars, said cross-bars being held yieldingly against rotation in one direction and positively against rotation in the other direction.

4. The combination in a potato digger of a frame, an endless conveyer mounted to travel in said frame, said conveyer comprising a pair of chains, bearing blocks carried by said chains, cross bars mounted to rock in said bearing blocks, a series of outwardly projecting fingers mounted on said cross bars, a spring controlled inwardly, projecting finger adapted to hold said outwardly projecting finger yieldingly in position, a series of stationary grate bars mounted below said endless conveyer, said grate bars having abrupt downwardly projecting shoulders provided at suitable intervals therein, said outwardly projecting fingers adapted to project through between said grate bars.

5. The combination in a potato digger of a frame, an endless conveyer mounted to travel in said frame, said conveyer comprising a pair of chains, bearing blocks carried by said chains, cross-bars mounted to rock in said bearing blocks, a series of outwardly projecting fingers mounted on said cross-bars, a spring controlled inwardly projecting finger adapted to hold said outwardly projecting finger yieldingly in position, a series of stationary grate bars mounted below said endless conveyer, said grate bars having abrupt downwardly projecting shoulders provided at suitable intervals therein, said outwardly projecting fingers adapted to project through between said grate bars, said endless conveyer being mounted to rock on a central axis.

[Claim 6 not printed in the Gazette.]

1,276,442. TELEPHONE-EXCHANGE SYSTEM. DAWSON M. TAGGART, East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 17, 1917. Serial No. 202,516. (Cl. 179—44.)

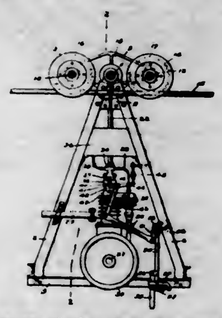


1. A telephone exchange system comprising a telephone line, a link circuit for connecting therewith, a source of ringing current, a first relay in the link circuit responsive to the connection thereof with the line, a second relay energized upon the response of the first relay, and a ringing relay responsive to the energization of the second relay to connect the source of ringing current to the line when the first relay is deënergized.

2. A telephone exchange system comprising a telephone line, a link circuit for connecting therewith, a first relay in the link circuit energized upon the connection thereof with the line, a second relay responsive to the energization of the first relay, a ringing relay energized upon the response of the second relay, and a source of ringing current connected with the telephone line through contacts of the first relay when deënergized and contacts of the ringing relay when energized.

[Claims 3 to 7 not printed in the Gazette.]

1,276,443. MOTOR-DRIVEN CABLE-SUPPORTED CARRIER. GOTTWERTH L. TANZER, Seattle, Wash. Filed Mar. 12, 1918. Serial No. 222,034. (Cl. 105—235.)



1. An apparatus of the class described, comprising a track cable, a truck movable thereon, a frame suspended from said truck, a motor on said frame, driving means connecting said motor with said truck, a governor associated with said driving means, and a trip lever for controlling said motor.

4. A carrier of the class described, comprising a truck frame, shafts extending crosswise thereof adjacent each end, grooved wheels secured on one end of each of said shafts, gearwheels secured on the opposite ends of said shafts, another shaft extending crosswise in the center of said frame, a gearwheel on said centrally located shaft and meshing with said two first named gearwheels, a bevel gear secured to said last named gearwheel, a depending frame pivotally supported on said centrally located shaft, a vertical driven shaft journaled on said depending frame, a bevel pinion on the upper end of said driven shaft and adapted to mesh with said bevel gear, an engine carried by said depending frame and provided with a horizontal driving shaft, bevel gears connecting said vertical driven shaft with said driven shaft, a governor on said vertical shaft, a fuel inlet valve for said engine, means connected with said governor for automatically regulating said fuel inlet valve, and mechanism connected with said valve and adapted to be actuated by tripping devices in the path of said carrier to close said valve.

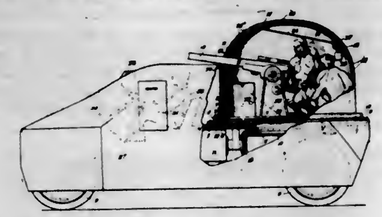
[Claims 2 and 3 not printed in the Gazette.]

1,276,444. ARMORED WAR-AUTOMOBILE. CARROLL M. TAYLOR, Coatesville, Pa. Filed May 31, 1917. Serial No. 171,845. (Cl. 89—40.)

1. An automobile of the character described including a rotatable turret having a slot therein, a gun within the turret having a barrel extending through the slot and movable into various angles of elevation, and a movable protective device for closing the portion of the slot through which the barrel of the gun has been moved, said device being flexible so that during its movement it can conform to the contour of the turret, substantially as described.

3. In a device of the character described, a turret having a slot therein, a gun within the turret having its barrel extending through the slot, guiding members, and a chain of protective plates movable within said members and designed to span said slot, substantially as described.

7. In a device of the character described, a main supporting structure, a hood thereon, a turret on the supporting structure, said hood having deflecting wing portions embracing said turret, substantially as described.



8. In a device of the character described, a turret having a slot therein, a gun within the turret having its barrel extending through the slot, guiding members, a chain of protective plates movable within said guiding members and designed to span the slot, one of said plates having a hole therein through which the barrel of the gun extends, and a weight for keeping said plate in engagement with the gun to permit sighting through the hole, substantially as described.

[Claims 2 and 4 to 6 not printed in the Gazette.]

1,276,445. THREAD-CUTTER. CHARLES HAVELOCK TAYLOR, Toronto, Ontario, Canada. Filed Mar. 9, 1916. Serial No. 83,104. (Cl. 10—154.)



1. In a milling screw-cutting attachment for an automatic screw machine a frame adapted to be incorporated in the machine, an internal gear mounted in the frame an annular cutting member mounted upon said gear and means for driving the gear.

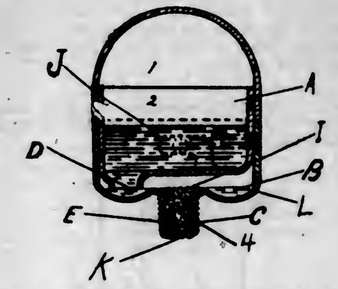
5. The combination with a screw-cutting machine frame and a rotary stock-holding collet, of a milling screw-cutter having toothed helical multiple threads uniformly spaced around the periphery of the cutter the threads having corresponding number of teeth and the number of threads being an aliquant part of the number of teeth of each thread, and means rotatively connecting the collet and cutter whereby the latter is rotated a fraction of the revolutions of the collet equal to number of threads into which the lead of the cutter is divided.

11. In a screw-cutting machine, the combination with a rotary stock-carrier, a tool-driving gear in rotative relation therewith, and a pair of cross-slides with means for reciprocating the same, of a milling screw-cutting attachment comprising a frame, means fastening the frame to one of the cross-slides; a cylindrical member rotatably bearing within the frame and having internal gear teeth; an annular member mounted rigidly upon one end of the cylindrical member with a portion of its outer perimeter protruding beyond the frame and the said perimeter having uniformly circumferentially spaced toothed multiple peripheral threads; a driven gear rotatably mounted within the frame and arranged to engage the said tool-driving gear when the slide is shifted in one direction; a train of gears rotatively connecting the driven gear to the internal gear; and a cutting tool mounted on the other slide and arranged to sever.

[Claims 2 to 4 and 6 to 10 not printed in the Gazette.]

1,276,446. AUTOMATIC OIL-LUBRICATOR. HUSTON TAYLOR, Redford, Mich. Filed Feb. 20, 1918. Serial No. 218,184. (Cl. 184—66.)

1. As an article of manufacture, an oil cup having a threaded hollow stem forming a duct, said oil cup including a container communicating with the duct and also including a sealed reservoir above the container and opening therein, the liquid in the container forming a seal for the outlet from the reservoir.



2. As a unitary article of manufacture, an oil cup having a reservoir in which oil is sustained by atmospheric pressure, said oil cup also having an oil container below the reservoir and supplied with oil therefrom, said oil cup including a hollow threaded stem through which oil is restrictedly fed to a part to be lubricated.

3. As an article of manufacture, an oil cup including a reservoir and a container immediately below the reservoir and a thin dividing wall forming the bottom of the reservoir and the top of the container, said wall being perforated and depending down into the container around the perforation to form a seal with the liquid in said container, and a single means for attaching the cup to a part to be lubricated and for conducting oil from the container.

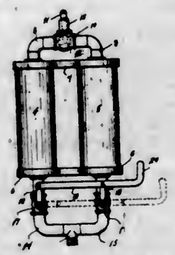
4. A cup-shaped lubricator including a closed upper chamber for lubricating fluid and a lower chamber separated by a partition that dips into the lower chamber and forms a seal with lubricating fluid therein, said lubricator including a perforated threaded stem leading from the lower chamber whereby it may be attached to a part to be lubricated and through which oil may be fed from said lower chamber.

5. As an article of manufacture, an oil cup forming a reservoir closed at its upper end and a container communicating therewith, an outlet for the container at a point above the outlet from the reservoir to said container, the oil cup forming an air chamber between said two outlets, the parts being so constructed and arranged that oil may be shaken from the container through the first named outlet.

[Claims 6 to 10 not printed in the Gazette.]

1,276,447. [WITHDRAWN.]

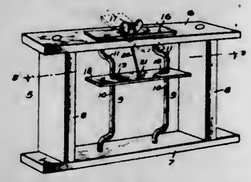
1,276,448. SIGHT-FEED MEASURING DEVICE. GRAYDON M. TERRY, Dallas, Tex. Filed Dec. 11, 1916. Serial No. 136,355. (Cl. 221—110.)



In a sight feed gasolene dispensing pump, the combination with a cabinet comprising a base and a cover top, of a pair of transparent cylindrical containers arranged within the cabinet so they may be covered up by the cover top, said cylinders connected at the top by a pipe,

and at the bottom by a pipe, a three way valve arranged in the upper pipe connection, a feed pipe connecting with the three way valve, a cut off valve connected with the lower extremity of each cylinder and included in the pipe which connects the lower ends of the cylinders, and a linked connection comprising a rod pivotally connected with each cut off valve and provided with a handle for operating the valves in such a way that when one is closed the other is open.

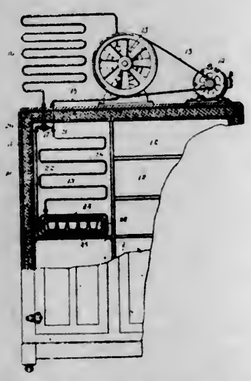
1,276,449. CATTLE-STANCHION. FRED G. TERWILLIGER, Almond, N. Y. Filed Apr. 10, 1918. Serial No. 227,762. (Cl. 119—147.)



1. A cattle stanchion comprising a frame, yoke bars mounted to revolve in said frame and provided with offset ends and parallel intermediate neck engaging portions, a sliding latch plate freely received by said bars, and means for confining said plate against said intermediate portions of said bars to maintain confinement of said bars against the neck of the animal.

[Claims 2 to 4 not printed in the Gazette.]

1,276,450. REFRIGERATING APPARATUS. MILTON TIBBETTS, Detroit, Mich., assignor, by mesne assignments, to The Isko Company, Chicago, Ill., a Corporation of Delaware. Filed July 28, 1916. Serial No. 111,832. (Cl. 62—116.)

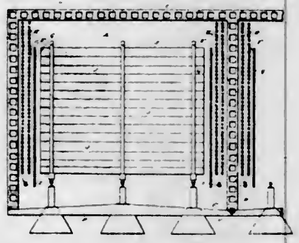


1. In a refrigerating apparatus, the combination with a compressor, and a condenser, of an expansion coil connected to said compressor and condenser, comprising a pipe extending downwardly from its inlet end piping connected to said downwardly extending pipe and forming an inclosure for an ice making pan, and a pipe formed in a plurality of loops from said piping to the outlet end of said coil.

9. The combination with a refrigerator having a compartment, of a refrigerating coil in said compartment comprising a vertical pipe extending from the inlet end of said coil to the lower part of said compartment, a pipe including several loops forming an inclosure for an ice making pan, a second vertical pipe extending from one of said loops at the lower part of said compartment to the upper part thereof, a pipe including several loops extending from the upper part thereof, a pipe including several loops extending from the upper to the lower part of said compartment, and a third vertical pipe extending from one of the lower said loops to the outlet end of said coil at the top of the compartment.

[Claims 2 to 8 not printed in the Gazette.]

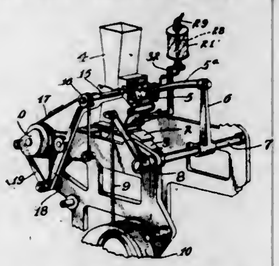
1,276,451. DRY-KILN. HARRY DONALD TIEMANN, Madison, Wis., and NORMAN DE WITT BETTS, Linwood, Utah, assignors, by mesne assignments, to the Government of the United States and to the people of the United States. Filed Apr. 6, 1917. Serial No. 160,332. (Cl. 34—19.) (Dedicated to the public.)



1. A dry kiln including a drying chamber, a recirculating flue adjacent to a wall thereof, or some containing means for heating the circulating medium, and a steam inlet situated adjacent to the heating device so that the escaping steam will pass rapidly through the recirculating flue, thereby inducing a large circulation in the drying chamber and at the same time become superheated.

[Claims 2 to 5 not printed in the Gazette.]

1,276,452. PLUNGER MOISTENING AND CLEANING DEVICE FOR PACKING-MACHINES. BENNETT J. TUCK, Richmond, Va., assignor to American Tobacco Co., New York, N. Y., a Corporation of New Jersey. Filed June 1, 1918. Serial No. 237,699. (Cl. 93—7.)



1. In a packing machine, and in combination with the plunger thereof, a moistening and cleaning pad operable to move over the face of the plunger when the latter is in its inactive position, and means for automatically feeding a regulable supply of moistening fluid to said pad.

2. In combination with the reciprocating plunger of a packing machine, a cleaning device for said plunger, comprising an absorbent pad, means for moving the pad back and forth across the face of the plunger, and automatic means for maintaining the pad in a moist condition.

3. In a packing machine of the plunger type, means for cleaning the plunger of such a machine, comprising a roller having an absorbent face, means for moving the roller back and forth across the face of the plunger to moisten and clean the latter, and means for feeding a moistening fluid to the absorbent face of the roller to maintain the latter in a moist condition.

4. In a packing machine of the plunger type, means for cleaning the plunger face of such a machine, comprising a hollow perforated roller having an absorbent face, means for moving the roller back and forth across the face of the plunger to moisten and clean the same, and means for feeding a moistening fluid into said hollow roller to maintain the absorbent face in a moist condition.

5. In a packing machine of the plunger type, a cleaning device for the plunger, comprising a hollow perforated roller having an absorbent face, means for oscillating the roller across the face of the plunger, means for rotating the roller, a reservoir for a moistening fluid, and a pipe leading from the reservoir to the hollow roller, said pipe having a section adapted to move with the roller during its oscillating movements.

[Claim 6 not printed in the Gazette.]

1,276,453. FRUIT-GATHERING DEVICE. BENJAMIN FRANKLIN TUSSING, Fruitland, Idaho. Filed Feb. 5, 1918. Serial No. 215,527. (Cl. 56—99.)



1. A fruit-gathering device comprising a receptacle, a hopper shaped member flexibly connected to the receptacle and normally supported above it and discharging thereinto, a cushion flexibly supported within the hopper shaped member in spaced relation to the wall of the hopper shaped member, and a flexible chute flexibly attached to the hopper shaped member.

4. A fruit gathering device comprising a support, a receptacle open at its opposite ends, means for closing the lower end of the receptacle, a hopper shaped member supported within the upper end of the receptacle and flexibly connected thereto, flexible connections for engaging the hopper shaped member with the support, a tubular chute operatively connected with the hopper shaped member and discharging thereinto, a cushion disposed below the mouth of said chute, a hopper shaped receiving member disposed in the open end of the chute, and means for adjusting the hopper shaped receiving member nearer to or farther from the receptacle.

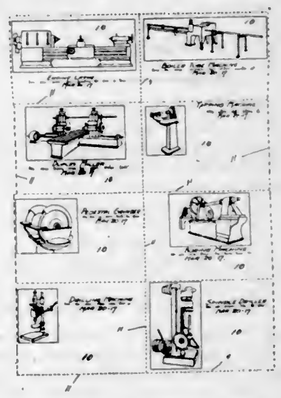
5. A fruit gathering device comprising a support, a receptacle open at its upper and lower ends and having means whereby the lower end may be closed, a hopper shaped member of flexible material disposed in the upper end of the receptacle and flexibly connected thereto, and having operative connections to said support, a cushioning pad disposed within the lower end of the hopper shaped member and less in diameter than said member and flexibly connected thereto, a tubular chute of flexible material having its lower end flexibly connected to the upper end of said chute and having means whereby it may be supported.

6. A fruit gathering device comprising a support, a receptacle open at its upper and lower ends and having means whereby the lower end may be closed, a hopper shaped member of flexible material disposed in the upper end of the receptacle and flexibly connected thereto, and having operative connections to said support, a cushioning pad disposed within the lower end of the hopper shaped member and less in diameter than said member and flexibly connected thereto, a tubular chute of flexible material having its lower end flexibly connected to the upper end of said chute and having means whereby it may be supported, said tubular chute being provided at intervals with rings, and a hopper shaped receiving member having cords depending from it carrying hooks engageable with any set of said rings whereby to lengthen or shorten the tubular chute.

7. In a fruit gathering device, a receptacle, a flexible tubular chute operatively engaged therewith and discharging thereinto and having a series of sets of rings disposed at intervals along its length, a metallic tube disposed in the upper end of the chute, a hopper shaped member engaged with said tube, cords attached to said metallic tube and depending therefrom, and hooks on the ends of the cords adapted to be engaged with any set of rings, to thereby shorten or lengthen the effective length of a tubular chute.

[Claims 2 and 3 not printed in the Gazette.]

1,276,454. EQUIPMENT-INDEX. JOHN H. VAN DEVENTER, Yonkers, N. Y. Filed June 27, 1917. Serial No. 177,241. (Cl. 283—56.)



1. In a device of the class described, a page of a publication of a magazine type, means for sizing and bounding one or more portions on said page less than its full size to cause them to conform in shape and dimensions to a card index file, informative indicia on each of said portions relating to distinct subject-matter whereby the portions may be separated on the boundary lines and each adapted to be filed with its appropriate subject-matter in the card index file.

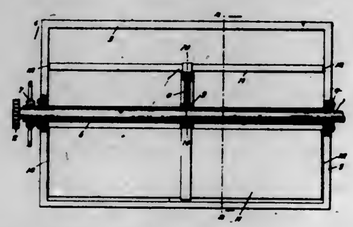
2. In a device of the class described, a page of a publication of a magaizne type, means for sizing and bounding by markings one or more portions of said page less than its full size to cause them to conform in shape and dimensions to a card index file, informative indicia consisting of an illustration and accompanying description on each of said portions relating to distinct subject-matter whereby the portions may be separated on the boundary line, and each adapted to be filed with its appropriate subject matter in the card index file.

3. In a device of the class described, a page of a publication of a magazine type, means for sizing and bounding by weakened lines one or more portions of said page less than its full size to cause them to conform in shape and dimensions to a card index file, informative indicia consisting of an illustration and accompanying description on each of said portions relating to distinct subject matter whereby the portions may be separated on the boundary lines and each adapted to be filed with its appropriate subject-matter in the card index file.

1,276,455. AEROPLANE-PROPELLER. HARRY VASS, Summit, N. J. Filed Oct. 11, 1917. Serial No. 195,968. (Cl. 170—148.)

3. A propeller comprising a cam provided with a peripheral groove, a plurality of spaced propeller blades

mounted to revolve about the periphery of said cam, an endless track member carried by each of said blades, and entirely surounding the same, clips movable in the groove in said cam member and engageable with said track mem-



ber, each of said clips including a head portion mounted for sliding movement in said groove and a plate portion having its opposite ends bent to extend around one of said track members.

[Claims 1 and 2 not printed in the Gazette.]

1,276,456. FASTENING DEVICE. ANTHONY VASSELLI, Newark, N. J., assignor to Otto Heineman Phonograph Supply Co., Inc., a Corporation of New York. Filed Jan. 17, 1918. Serial No. 212,237. (Cl. 185—45.)



1. A device of the character described, comprising a mandrel, a stud carried by the mandrel, a head on the stud, a member having an opening therein, said opening engaging the stud, and a keeper between the member and the head of the stud.

2. A device of the character described, comprising a mandrel, a stud carried by the mandrel, a head on the stud, a spring encircling the mandrel, there being an opening in the spring, said stud engaging the opening, said opening being of a size sufficient to permit the passage of the head of the stud, a keeper engaging the stud between the head and the spring, and means for preventing movement of the keeper relatively to the mandrel.

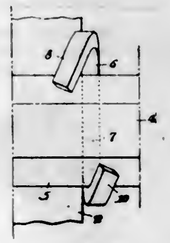
3. A device of the character described, comprising a mandrel, a stud carried by the mandrel, a head on the stud, a spring encircling the mandrel, there being an opening in the spring, said stud engaging the opening, said opening being of a size sufficient to permit the passage of the head of the stud, a U-shaped keeper engaging the stud between the head and the spring, and means for preventing movement of the keeper relatively to the mandrel.

4. A device of the character described, comprising a spring barrel having a head, a mandrel, a member carried by the mandrel and forming a second head for the barrel, a spring having one end secured to the barrel, a headed stud carried by the mandrel, one end of the spring having an elongated opening engaging the stud below the head thereof, a keeper engaging the stud between the head thereof and the spring, said keeper having an open ended slot therein, said slot being of less length than the keeper, the slot in the keeper being arranged at right angles to the opening in the spring, the length of the keeper being so proportioned relatively to the depth of the barrel as to prevent movement of the keeper longitudinally of the mandrel.

5. A device of the character described, comprising means having a projection on its surface, a member having an opening therein for engaging said projection, and means between the said member and the projection for effectively retaining said member in position.

[Claims 6 to 13 not printed in the Gazette.]

1,276,457. ANTICREEPER FOR RAILROAD-RAILS. DAVID F. VAUGHAN, Riverton, N. J. Filed Jan. 22, 1918. Serial No. 213,122. (Cl. 238—4.)



1. An anticreeping device to be applied to the base of a railroad rail by springing the device from its normal condition, said device comprising a bar adapted to extend transversely beneath a rail base and having an upper bearing face adapted to engage the bottom of a rail base, and two jaws extending upwardly and inwardly from the respective ends of the bar and having lower bearing faces adapted to engage the top of the rail base, said upper bearing face being adapted to be strained to a position farther from the plane of the said lower bearing faces when the device is applied to a rail, and said jaws being disposed to exert a twisting action upon the device when it is applied to a rail.

3. An anticreeping device to be applied to the base of a railroad rail by springing the device from its normal condition, said device comprising a cambered bar adapted to extend transversely beneath a rail base and to engage the bottom thereof, and two jaws extending upwardly and inwardly from the respective ends of the bar and adapted to engage the top of a rail base, said jaws being disposed to exert a twisting action upon the device when it is applied to a rail.

4. An anticreeping device to be applied to the base of a railroad rail by springing the device from its normal condition, said device comprising a bar adapted to extend transversely beneath a rail base and to engage the bottom thereof, and two jaws of unequal length extending upwardly and inwardly from the respective ends of the bar and adapted to engage the top of the rail base, said jaws being disposed to exert a twisting action upon the device when it is applied to a rail, and the spaces between said jaws and between them and the bar being large enough to permit the application of the device to a rail by moving the device laterally of the rail and hooking said jaws one in advance of the other over the respective sides of the rail base.

6. An anticreeping device to be applied to the base of a railroad rail by springing the device from its normal condition, said device comprising a bar having a socket formed therein and being adapted to extend transversely beneath a rail base and to engage the bottom thereof, said device comprising a bar adapted to extend transversely beneath a rail base and to engage the bottom thereof, two jaws extending upwardly and inwardly from the respective ends of the bar and adapted to engage the top of a rail base, said jaws being disposed to exert a twisting action upon the device when it is applied to a rail, and a spring within said socket and adapted to exert pressure against the bar and a rail base when the device is applied to the latter.

[Claims 2 and 5 not printed in the Gazette.]

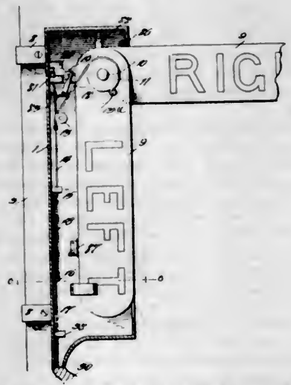
1,276,458. TUBE-SPLITTER. ELBERT LOYD WAGNER, Packard, Ky. Filed June 20, 1917. Serial No. 175,899. (Cl. 81—187.)



1. A tube splitter, comprising a bar having an end portion flattened and notched in its extremity, and having an outer projection in line with the notch beveled on its upper side to provide a chisel edge adjacent the notch.

[Claim 2 not printed in the Gazette.]

1,276,459. SIGNALING DEVICE. GERVAS PHILIP WAHLE, New Albany, Ind. Filed Sept. 7, 1917. Serial No. 190,233. (Cl. 40—67.)



A device of the character specified comprising a casing, a series of signal arms pivoted on a common axis near the top of the casing and mounted to swing into and out of the casing, each arm having at its upper end a longitudinally extending lug, a locking bar in rear of the pivotal connection of the arms and normally spring pressed toward the said connection, the bar and the lugs having beveled coöperating surfaces for moving the bar rearwardly when an arm is lifted and for releasing the lifted arm when another arm is moved into operative position, means for swinging any predetermined arm, and independent means for releasing the locking bar, said independent means comprising an elbow lever having one arm in position to engage the bar, a flexible member connected with the other arm, and a spring normally holding the lever in inoperative position.

1,276,460. AIR-HEATER. EDWIN L. WALKER, Denver, Colo. Filed Apr. 25, 1917. Serial No. 164,448. (Cl. 257—241.)



2. In an air heating device, a relatively long trough-shaped member comprising a flat plate tapered to conform to the shape of an exhaust manifold and provided with flexible projecting flanges adapted to overlap and fit against the top and bottom of the manifold, thereby forming a heating space for air, an outlet nozzle for hot air secured to the said plate, and an adjustable air pipe having a bent portion at its upper end which is pivoted on and slidably connected with the said nozzle, said pipe having also a bent portion at its lower end which projects in a plane substantially parallel to the said plate.

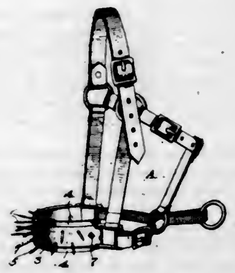
[Claim 1 not printed in the Gazette.]

1,276,461. ASH-SIFTER FOR FURNACES AND THE LIKE. HOSEA I. WEINBERG, Minneapolis, Minn. Filed Nov. 12, 1917. Serial No. 201,655. (Cl. 83—60.)



A sifter having a laterally enlarged body and a narrow neck, and a flange surrounding the sifter except the free end of the neck, said sifter being longitudinally divided through the neck and the body of the sifter to provide correlated sections.

1,276,462. WEANING-MUZZLE. FRANK H. WELCH and GEORGE H. STRANGE, Lone Wolf, Okla. Filed May 7, 1915. Serial No. 26,576. (Cl. 119—130.)

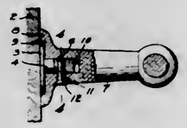


A weaning muzzle comprising in combination, a longitudinally curved plate of uniform width throughout its length provided with a plurality of apertures, a headed prong passed through each aperture and extending beyond the convexed side of the plate, a second plate of similar contour as the first mentioned plate having its opposite longitudinal edges bent outwardly and inwardly toward each other to define retaining grooves, in which the longitudinal edges of the first mentioned plate are received, whereby said plates are concentrically disposed and closely associated, the heads of said prongs being interposed between said plates and immovably held in position thereby, and bolts passing through two diametrically opposite corners of said superposed plates preventing relative separation thereof and serving as securing means for attachment to the nose band of a halter.

1,276,463. ATTACHMENT FOR BATH-ROOM FIXTURES. WILBER E. WELLS, Minneapolis, Minn. Filed Mar. 8, 1918. Serial No. 221,168. (Cl. 248—20.)

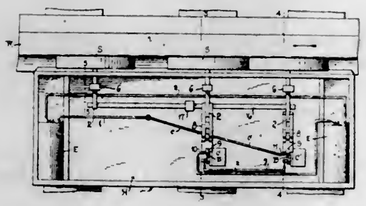
The combination, with an upright wall, of a stud having a base plate secured thereto and projecting horizontally therefrom, a stem having a base provided with a

recess and a longitudinal socket to receive said base plate and stud, said stud having a threaded opening extending transversely therein, the wall of said stem having an orifice therein opposite said opening and slightly out of



alinement therewith, and a screw fitting within said orifice and said threaded opening, the pressure of said screw on the inner wall of said orifice operating to clamp the base of said stem securely against said wall.

1,276,464. SIGNAL. PERRY WESTOVER, Clymer, Pa. Filed July 5, 1917. Serial No. 178,763. (Cl. 246—35.)



1. In combination with an electric signal and an operating circuit therefor, two circuit closers interposed in said circuit, one of said closers being positively operated into either open or closed position, the second circuit closer being positively operated into closed position, and means coacting with the second closer for automatically adjusting the same into open position independently of the first closer member.

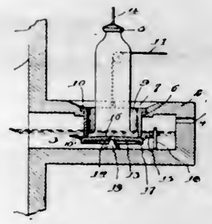
2. In combination with an electric signal and an operating circuit therefor, two circuit closers interposed in said circuit, each of said closers including a stationary contact and a movable contact, a rock lever operatively engaged with each of the movable contacts, means coacting with each of the levers for moving the movable contact into closed position, and means coacting with one of the levers for maintaining the coacting movable contact normally in open position.

3. In combination with an electric signal and an operating circuit therefor, two circuit closers interposed in said circuit, each of said closers including a stationary contact and a movable contact, a rock lever operatively engaged with each of the movable contacts, means coacting with each of the levers for moving the movable contact into closed position, means coacting with one of the levers for maintaining the coacting movable contact normally in open position, and additional means coacting with the lever of the second movable contact for adjusting said second movable contact into open position.

[Claims 4 and 5 not printed in the Gazette.]

1,276,465. GLASS-DRAWING APPARATUS. WILLIAM WESTBURY, Okmulgee, Okla, assignor to L. S. Skelton, Okmulgee, Okla. Filed Sept. 8, 1915. Serial No. 49,536. (Cl. 49—56.)

1. A glass drawing apparatus including a liquid glass reservoir having an opening in the top thereof, said opening surrounded by an annular seat, and said top being sloped in the direction of the opening, and a well tube suspended above the top of the reservoir and adapted to be lowered through the opening, said well tube having a beveled lower end co-acting with the sloping top to guide said well tube to the opening.



2. A glass drawing apparatus including a liquid glass reservoir having an opening in the top thereof, said opening surrounded by an annular seat, and said top being sloped in the direction of the opening, and a well tube suspended above the top of the reservoir and adapted to be lowered through the opening, said well tube having a beveled lower end co-acting with the sloping top to guide said well tube to the opening, and said well tube having an annular flange to engage the annular seat surrounding the opening.

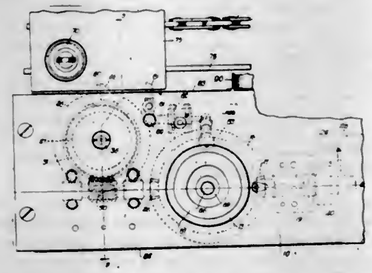
3. In a glass drawing apparatus, a liquid glass reservoir having an opening in the top thereof, a well tube adapted to be lowered through said opening in the direction of the molten glass, and a floating closure element adapted to be moved into registry with the lower end of the well tube and to be depressed by engagement with the well tube below the surface of the molten glass, said closure element having a peripheral depending flange constituting a dam for segregating a portion of the molten glass and said closure element having also a centrally disposed feed opening of relatively small size to permit the passage of the molten glass segregated by the dam in an upward direction within the well tube; in combination with means fixed in the glass reservoir for centering the closure element with respect to the well tube and a conical stopper element rising from the bottom of the glass reservoir to close the feed aperture when the closure element has been depressed to a predetermined extent.

4. In a glass drawing apparatus, a liquid glass reservoir having an opening in the top thereof, a conical stopper element rising from the bottom thereof centrally with respect to the opening, a well tube adjustable through the opening in the direction of the molten glass and a closure element floating on the surface of the molten glass for coöperation with the well tube, said closure element having a depending peripheral flange constituting a dam for segregating a portion of the molten glass and said closure element having also a central opening for coöperation with the stopper element.

5. A glass drawing apparatus including a liquid glass reservoir having an opening in the top thereof, a concavity provided with sloping walls extending to said opening, and a groove or recess around the margin of the opening, a well tube vertically adjustable in said opening and having a flanged seat within said groove when the tube is depressed, and a closure disk adapted to float upon the surface of the glass and to be moved into and out of registration with said well tube and having a rstricted feed opening therein.

1,276,466. SPRAYING-MACHINE. CHARLES A. WICKSTROM, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 20, 1916. Serial No. 132,363. (Cl. 91—45.)

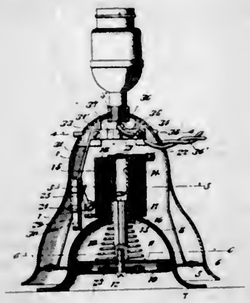
1. A device of the character described comprising in combination, an article holding means, said article having a limited irregular plane surface to be sprayed, means to rotate said means, a pneumatic spraying means, means to operate said spraying means, and means to apply and



confine a coating of finishing fluid to said limited surface of said article as it is rotated.

[Claims 2 to 9 not printed in the Gazette.]

1,276,467. WALL-LIGHT. HERBERT WIDSTRAND, Chicago, Ill. Filed Sept. 29, 1917. Serial No. 194,045. (Cl. 248—39.)



1. A support for electric lights comprising a casing, a vacuum bulb at the end thereof, and magnetic means for exhausting the air from said bulb.

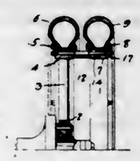
2. A support for electric lights comprising a casing, a vacuum bulb at the end thereof, magnetic means for exhausting the air from said bulb, and automatic means for alternately energizing and deënergizing said magnet.

3. A support for electric lights comprising a casing, a vacuum bulb at the end thereof, a second bulb in communication therewith, a magnet having sliding movement on its core to depress said second bulb, brushes connected with said magnet, contacts on which said brushes have sliding movement, said contacts ending at a point above the end of movement of said brushes so that said brushes will leave the contacts, a spring for returning the magnet to normal position, and means for throwing the brushes into engagement with the contacts when said magnet reaches its normal position.

6. A support for electric lights comprising a casing, a vacuum bulb at the end thereof, a second bulb in communication therewith, a stationary core within said second bulb and having its upper end projecting therefrom, a magnet engaging said projecting end, means for securing the magnet to the upper end of the second bulb, a spring surrounding the core for holding the magnet in raised position, means permitting the passage of air from the second bulb through the magnet, a valve controlling said means, contact means for energizing the magnet to cause its core to attract it to compress the second bulb, said contact means being broken at the end of the movement of the magnet but being formed again by the upward movement of the magnet caused by the spring, and switch means for controlling the current.

[Claims 4 and 5 not printed in the Gazette.]

1,276,468. VEHICLE-WHEEL ATTACHMENT. HORACE WILBERT, San Francisco, Cal. Filed May 27, 1918. Serial No. 236,685. (Cl. 152—23.)

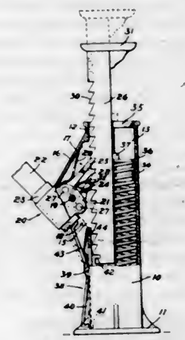


2. The combination with a wheel having a felly, of a second wheel part having a felly, a channel member interposed between said fellies and studs passing through said channel member and fellies and securing them together.

4. The combination with a wheel having a felly, of a second wheel part having a felly, a channel member interposed between said fellies provided with spaced slots, studs seated in said slots and extending through said fellies and enlarged portions on said studs seated in said channel.

[Claims 1, 3, and 5 not printed in the Gazette.]

1,276,469. AUTOMOBILE-JACK. ELMER A. WILCOX, Los Angeles, Cal. Filed Oct. 3, 1917. Serial No. 194,569. (Cl. 254—109.)



1. An automobile jack comprising a housing, a lifting bar, operating means for elevating the lifting bar, a handle whereby the jack may be positioned and operated from a remote point, a spring member adapted to raise the lifting bar independent of its operating means and to dispose the head of the bar against the face of the object to be lifted, a trip-member adapted to control and release said spring member, and means whereby the handle of the jack may actuate the trip member.
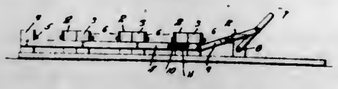
4. An automobile jack comprising a housing, a vertically movable lifting bar positioned therein, operating means for elevating said bar inclosed within the housing, a handle socket provided and connected to said operating means, a handle adapted to be positioned within said socket when the jack is to be operated, a spring by which the bar may be instantly lifted, a trip-lever adapted to normally prevent operation of said spring and which may be released by the movement of the handle as it passes through the end of the socket, and means whereby the operating mechanism, the lifting bar, the handle socket, and the spring may be held rigidly when the trip lever is set.

7. An automobile jack comprising a base, a lifting bar supported in the base, a handle, pawl and ratchet for operating the lifting bar, a spring for compressing the lifting bar against the load, means for locking the handle and holding the spring compressed and the lifting bar

withdrawn; so that by manipulating the handle the jack may be placed in position for operation; and means operated by the handle for releasing the handle and releasing the lifting bar; so that the spring will press the lifting bar against the load and hold the jack in position while the handle is manipulated to lift the load.

[Claims 2, 3, 5, and 6 not printed in the Gazette.]

1,276,470. HOLDER FOR CLEANING BLACKBOARD-ERASERS. HAROLD L. WILSON, Holt, Mich. Filed May 23, 1917. Serial No. 170,479. (Cl. 15—25.)



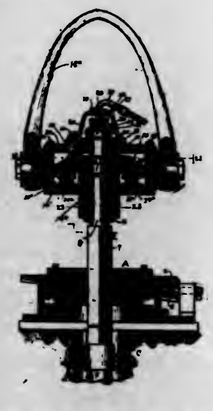
3. A device of the character described, including a base, a plurality of spaced bars fixed to said base, a plurality of sliding bars arranged on said base in a position to cooperate with said fixed bars, supporting strips formed on all of said bars, cushioning strips secured above said supporting strips, means for connecting said sliding bars, a lever pivoted to one of said stationary bars, and a pair of links each having one end thereof connected to said connecting means and the opposite end thereof connected to said lever.

4. A device as described, including a base, a plurality of stationary bars secured to said base in spaced relation, a plurality of sliding bars arranged on said base in coöperative relation with said stationary bars, strap irons secured to opposite ends of said sliding bars, and having slots formed therein, pins formed on one of said stationary bars and adapted to operate in said slots, an operating lever pivotally secured to the outermost of said stationary bars, means for connecting said lever to said strap irons, and eraser supporting means formed on said stationary and sliding bars.

5. A device of the character described including a base, a plurality of stationary bars secured to said base, a plurality of sliding bars arranged on said base and coöperating with the stationary bars, means for connecting said sliding bars, means for moving said sliding bars into and out of operative position and means for operating with the connecting means to prevent vertical movement of the sliding bars in relation to the stationary bars.

[Claims 1, 2, 6, and 7 not printed in the Gazette.]

1,276,471. WELL-BORING APPARATUS. WILLIAM W. WILSON, Los Angeles, Cal. Filed Aug. 17, 1914. Serial No. 857,092. (Cl. 255—25.)

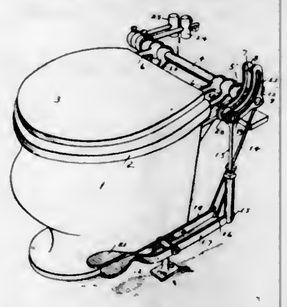


1. In rotary well boring apparatus, a boring string, a swivel, and means uniting a portion of the string which receives the rotative drive and at a point intermediate of the ends thereof directly with one member of the swivel, whereby the string is rotatably supported by the swivel.

9. In rotary well boring apparatus, a swivel comprising two relatively rotative members, one of said members constituting the swivel cross-head, the other comprising an annular bearing plate rotatively mounted upon said swivel cross-head and provided with a sleeve fitting within an opening in the cross-head, a stem fitting within the sleeve, and detachable means applied to the bearing plate and entering a reduced portion in the stem to hold the stem and bearing plate together in rotative couple.

[Claims 2 to 8 not printed in the Gazette.]

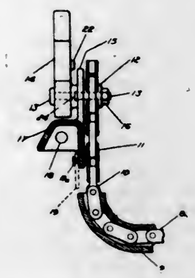
1,276,472. DEVICE FOR RAISING AND LOWERING WATER-CLOSET SEATS AND LIDS. MARTINUS ZEEN, Grand Rapids, Mich., assignor of one-half to John Zeen, Grand Rapids, Mich. Filed Feb. 13, 1918. Serial No. 216,981. (Cl. 74—81.)



1. In a device of the character described; a swingable member having a continuous deflected slideway; a movable element having one end swingably mounted and having its other end slidable in the slideway to one position wherein said element is adapted to be moved to swing said member in one direction and to another position wherein said element is adapted to be moved to swing said member in the opposite direction.

[Claims 2 to 4 not printed in the Gazette.]

1,276,473. AUTOMOBILE-SIGNAL DEVICE. JOSEPH J. ALAIMO, San Jose, Cal. Filed Nov. 27, 1916. Serial No. 133,729. (Cl. 116—31.)



In an automobile signal device, a metal reflector, a metal plate, said metal reflector being fastened to the lower end of the metal plate, said metal plate being provided with openings through the plate below said reflector, adapted to receive bolts therethrough for fastening a number plate thereto; a shaft journaled in the metal plate above said reflector, said shaft having a sprocket wheel attached thereto, adapted to engage a sprocket chain whereby the shaft may be turned; a hollow signal arm, said hollow signal arm being secured to the shaft, and turnable therewith; a red glass front positioned in said signal arm; said signal arm having means for attaching a light therein.

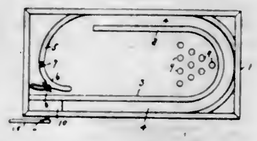
1,276,474. SNAP-HOOK. JOSEPH ANDES, Hazleton, Pa. Filed Feb. 27, 1918. Serial No. 219,469. (Cl. 24—236.)



3. A snap hook comprising an elongated shank longitudinally bowed and having its end portions provided with inwardly facing hooks, the inner surface of the free end of one of the hooks being substantially flush with the central portion of the shank, and the outer surface of the free end of the second hook being substantially flush with the central portion of the shank, and a flat spring secured to the central portion of the shank and having one end portion underlying the first named hook and its opposite end portion overlying the second hook.

[Claims 1 and 2 not printed in the Gazette.]

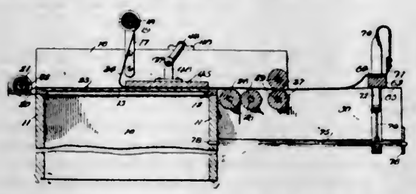
1,276,475. GAME. ARTHUR C. BARNES, Baltimore, Md. Filed Aug. 22, 1917. Serial No. 187,533. (Cl. 46—59.)



1. A game comprising a base having a number of apertures therein, a run-way extending across one side, around one end and along part of the opposite side, a curved piece adjacent the opening of said run-way, a buffer mounted in said run-way, a shaft mounted under said base and having a handle on one end thereof, a cam on said shaft, and means connecting the buffer with said shaft whereby when the handle is forced down the buffer will be operated to discharge the ball from the run-way.

[Claim 2 not printed in the Gazette.]

1,276,476. PHOTOGRAPHIC-PRINTING MACHINE. ISAAC P. BARROWS, Mount Hope, W. Va. Filed Oct. 26, 1916. Serial No. 127,930. (Cl. 95—73.)



1. In a photographic printing machine, the combination of a housing having a transparent top, a presser member arranged above said top for bringing the paper and film into relative proximity and into proximity with said top, means associated therewith for feeding the paper and film including a lever, feeding rollers, said lever actuating said rollers.

2. In a photographic printing machine, the combination of a housing having a transparent top to receive a film and paper, a presser member for bringing the paper and film into relative proximity and into proximity with said top, means associated therewith to control a light source, a lever, feeding rollers, said lever actuating said feeding rollers.

1,276,477. COTTON-SEED FLOUR AND PROCESS OF MAKING THE SAME. GUSTAV ADOLPH BAUMGARTEN, Schulenburg, Tex. Filed Sept. 21, 1915. Serial No. 51,889. (Cl. 83—42.)

1. The process of producing a cotton seed flour, consisting in debranning the seed, cooking the seed for a sufficient length of time at a sufficient temperature to modify the coating of the oil cells, submitting to pressure to extract the oil and residue of the coating, grinding and bolting the same.

2. The process of producing a cotton seed flour, consisting in debranning the cotton seed, crushing the debranned meats, cooking the crushed meats for a sufficient length of time at a sufficient temperature to modify the coating of the oil cells, forming the cooked meal into cakes, subjecting the cakes to hydraulic pressure to extract the oil and residue of the oil cell coatings, cooling and drying the residuary cakes, grinding and bolting to flour.

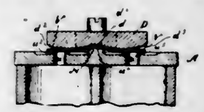
3. The process of producing a cotton seed flour, consisting in debranning the cotton seed, subjecting the meats to cooking in a plurality of cookers under steam pressure decreasing in the several cookers, expressing the oil and disintegrated coating of the oil cells, grinding the residuary cakes and bolting the same to produce flour.

4. The process of producing cotton seed flour consisting in debranning the cotton seed, cooking the debranned seed under steam pressure in a plurality of cookers, the steam pressure decreasing at the several steps, expressing the cotton seed oil and the coating of the oil cells broken down by the cooking, drying, grinding and bolting the residuary cakes.

5. The process of producing cotton seed flour, consisting in debranning the seed, subjecting the debranned seed to a cooking process for substantially one hour and forty minutes at a temperature of approximately 238 to 240 degrees Fahrenheit, expressing the liquid and liquefied content, drying, grinding the residuary cakes and bolting the same to produce flour.

[Claims 6 and 7 not printed in the Gazette.]

1,276,478. FLAP-VALVE FOR TWO-CYLINDER COMPRESSORS. REUBEN E. BECHTOLD, Fort Wayne, Ind., assignor to The Guardian Frigerator Company, Detroit, Mich., a Corporation of Michigan. Filed June 2, 1916. Serial No. 101,309. (Cl. 230—34.)



1. A valve for compressors, comprising a valve seat, a sheet of material constituting a flap valve for said seat, a support for said sheet elevated above the seat and means for bending the sheet over its support and into engagement with the valve seat to bear upon the valve seat with initial tension.

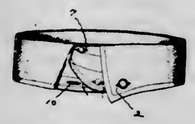
2. In a compressor, the combination of two cylinders with a common head provided with a port and valve seat for each cylinder and with a ridge substantially midway between the valve seats, a normally flat elongated resilient strip seated upon the ridge and extending over both valve seats, a valve stop with a groove on its under side which is the complement of the ridge and in coöperation with said ridge serves to bend, without setting, the ends of the strip downwardly to bear with a tension on the valve seats, the under side of said stop plate toward both ends curving in such a manner as to keep the motion of the valves within their limit of elasticity and to equalize and minimize the strain on the valves when in use, and means for holding the stop in clamped position.

6. The combination of a compressor having two cylinders each having a separate port and valve seat on the same side of each cylinder, a fixed ridged abutment disposed between the valve ports and extending above the plane of the valve seats, an elongated resilient strip form-

ing flap valves for each valve seat and disposed with its intermediate portion engaging the ridged abutment, and means for flexing the strip over said abutment and holding it in position to normally seat upon said valve seats to close said ports.

[Claims 3 to 5 not printed in the Gazette.]

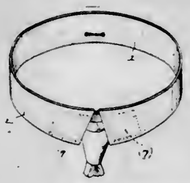
1,276,479. SOFT TURN-DOWN COLLAR. DONALD B. BECKER, Watervliet, N. Y., assignor to Geo. P. Ide & Co., Troy, N. Y. Filed May 16, 1917. Serial No. 168,991. (Cl. 2—67.)



1. A soft fold collar having a neck band and a folded over top portion, said neck band being provided with two button holes at each end disposed in alinement with each other and near the lower marginal edge of the said band, said folded over top being provided with a button hole near each end disposed near its lower marginal edge and positioned to register respectively with one of the button holes in the band.

2. A collar having a neck band and a folded over top portion, the ends of the band extending beyond the ends of the top portion, and each provided with two button holes substantially in alinement with each other, one of said end portions of the band being materially reduced in width whereby its lower edge will clear the innermost button hole in the opposite end of the neck band when the ends are brought together.

1,276,480. SOFT COLLAR. DONALD B. BECKER, Watervliet, N. Y., assignor to Geo. P. Ide & Co., Troy, N. Y. Filed May 16, 1917. Serial No. 168,992. (Cl. 2—91.)



1. A soft turn down collar comprising a neck band and an outer turned down portion, said outer portion comprising a plurality of plies of material, a ply of stiffening material of restricted area secured to the end portion of one of the plurality of plies of the outer portion, the bottom and end marginal edges of all of said plies being secured together by the usual marginal run seam.

2. A soft turn down collar comprising a neck band and an outer turned down portion, said outer turned down portion comprising a plurality of plies of material one of which plies being of comparative restricted area and of haircloth, whereby the end portions of the said outer portion is reinforced by said haircloth against buckling, and collapsing, and whereby the intermediate portion of the collar remains unstiffened.

3. A soft turn down collar comprising a neck band and an outer turned down portion, said outer portion comprising a plurality of plies, a ply of haircloth of comparatively restricted area secured between said other plies, the lower edges of the haircloth and the edge thereof adjacent the ends of the outer portion being secured to the said other plies by the usual marginal stitches of the collar, whereby the end portions of the outer fold including the bottom and end edges thereof are reinforced against buckling.

1,276,481. FINISHING, CLEANING, OR POLISHING COMPOSITION AND PROCESS OF MAKING SAME. HENRY SPENCER BLACKMORE, Mount Vernon, N. Y. Continuation of application Serial No. 43,663, filed Aug. 4, 1915. This application filed May 20, 1918. Serial No. 235,460. (Cl. 87—5.)

1. A compound or composition for polishing, finishing, and other purposes, comprising a naphthalene haloid associated with a fixed mineral hydrocarbon vehicle or diluent.

3. A compound or composition for polishing, finishing, and other purposes, comprising naphthalene-tetrachlorid associated with a fixed mineral hydrocarbon vehicle or diluent.

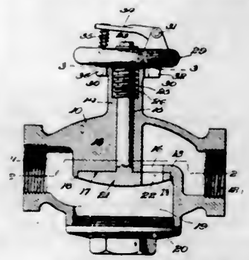
5. A compound or composition for polishing, finishing, and other purposes, comprising a naphthalene chlorid associated with a fixed petroleum vehicle or diluent.

8. A compound or composition for polishing, finishing, and other purposes, comprising a naphthalene chlorid associated with a hydrocarbon having a gravity too great for illuminating purposes and too light for lubricating purposes under ordinary atmospheric conditions.

12. A compound or composition for polishing, finishing, and other purposes, comprising naphthalene-tetrachlorid associated with petroleum having a gravity too great for illuminating purposes and too light for lubricating purposes under ordinary atmospheric conditions.

[Claims 2, 4, 6, 7, and 9 to 11 not printed in the Gazette.]

1,276,482. VALVE. ROBERT A. BOWEN, Spokane, Wash. Filed May 2, 1917. Serial No. 166,019. (Cl. 137—7.)



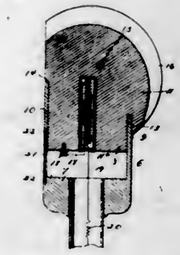
1. A valve including a casing having inlet and outlet ports and provided with an extension, the wall of which is formed with teeth extending partially around said extension, a valve having a stem seated in the extension, a turning member secured to the stem, a bell crank lever pivotally mounted on the turning member and having its short arm provided with a recess adapted to receive any one of the teeth, a spring interposed between the bell crank lever and the turning member, and a lug depending from the turning member and adapted to engage the end teeth for limiting the rotary movement of the turning member.

3. A casing provided with an extension, the outer portion of which is formed with teeth extending partially around the extension, a shaft seated in the extension, a turning member secured to the shaft, a bell crank lever pivotally mounted on the turning member and having its short arm provided with a recess adapted to receive any one of the teeth, means for normally holding the recessed end of the bell crank lever in engagement with the teeth, and a lug depending from the turning member and adapted to engage the end teeth for limiting the rotary movement of the turning member.

[Claim 2 not printed in the Gazette.]

1,276,483. TROLLEY-HEAD. WILLIAM M. BRILLHART, York, Pa. Filed Sept. 7, 1916. Serial No. 118,854. (Cl. 191—62.)

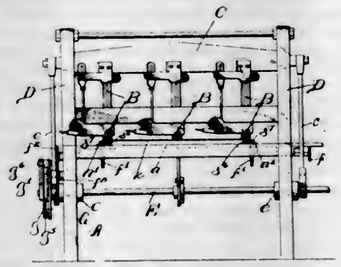
1. A device of the character described comprising a hollow head, consisting of spaced side walls and connecting transverse walls, a solid block fixedly seated in said head and having an arcuate groove formed in its face to adapt the block for direct engagement with a trolley wire and an electrical heating element seated in said block, one of the terminals of which has electrical connection with said block.



5. A trolley head comprising a relatively heavy solid contact block and means to heat the same consisting of an electric heater embedded within said block and in circuit therewith.

[Claims 2 to 4 not printed in the Gazette.]

1,276,484. MACHINE FOR USE IN MAKING METAL-BOUND PACKAGES. NORMAN E. BROWN, St. Joseph, Mich., assignor, by mesne assignments, to Wirebounds Patents Company, Kittery, Me., a Corporation of Maine. Filed Oct. 29, 1904, Serial No. 230,478. Renewed Dec. 29, 1916. Serial No. 139,649. (Cl. 1—14.)



1. A machine for making box blanks comprising, in combination, work-controlling means for positioning a plurality of box sections in coöperative foldable relationship: mechanism for foldably connecting said sections—the work-controlling means and said mechanism being relatively movable to present different parts of the work to said mechanism; and means for positively guiding the relative movement of the work-controlling means and said mechanism.

9. A machine for making box blanks comprising, in combination, cleat-positioning apparatus to receive cleats disposed substantially end to end, constructed and arranged relatively to position adjacent cleat ends in cooperative foldable relationship; fastener-applying means foldably to connect adjacent cleat ends; and feeding mechanism for feeding the cleats relatively to the fastener-applying means, comprising a pair of shafts disposed transversely of the direction of feed of the cleats, sprocket wheels upon said shafts respectively, a sprocket chain mounted upon said wheels, means for driving the chain, and power-transmitting means operatively connecting the chain and cleats; and means for positively guiding the cleats in the line of feed.

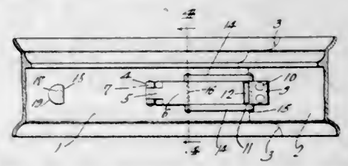
11. A machine for making metal-bound box-blanks, comprising means for guiding the metallic binding onto the blank, suitable means for inserting fastening devices into the blank to secure the metallic binding thereto, and to secure cleats to the inner surface of the blank, a power operated feeding device, and a portable work-holder adapted to carry the blank through the machine, said work-holder being adapted to be connected with said feeding device and, when so connected, constituting a traveling guide for insuring a straight course of travel for the blank, and also constituting a medium through which a proper feeding movement is communicated through the cleats to the said binding, in unison with the motion of the blank, said machine also comprising means for supporting the work-holder in position for movement in a straight line, and the parallel side portions of said work-holder being provided with means for holding the said cleats end to end, in parallel and fixed relation thereto, and for preventing the binding from causing endwise displacement of the cleats thereon, in combination with means for holding said work-holder in operative engagement with said feeding device.

15. A machine for making metal-bound box-blanks, comprising means for directing the metal binding to the surface of the blanks, means for inserting fastening devices to secure the metallic binding to the blank, and to secure cleats to the inner surface of the blank, a power-operated intermittent feeding device, a portable work-holder adapted to be loaded with the material from which the blank is made and then inserted in the machine, said work-holder being adapted to be connected with the said feeding device and, when so connected, to serve as a traveling guide for insuring a straight course of travel for the blank, and also as the medium through which an intermittent feeding movement is communicated through the cleats to the said metallic binding, from the said feeding device, together with stationary guides which engage the said work-holder and thereby determine the direction of the feeding movement of the said cleats and binding, as well as of the said traveling guide, the side portions of said work-holder being provided with means for holding the said cleats in parallel and fixed relation thereto, and for preventing the drag or back-pull of the binding from causing endwise displacement of the cleats thereon.

18. A machine for making metal-bound box-blanks, comprising means for directing the metal binding to the surface of the blank, means for effecting an attachment of the metallic binding to the outer surface of the blank, and of cleats to the inner surface of the blank, together with power operated means including a plurality of separate longitudinally movable members for communicating motion through the cleats to said binding, said members being adapted to engage and move the cleats endwise, and guide the same, and means for holding said members to straight lines of travel.

[Claims 2 to 8, 10, 12 to 14, 16, 17, and 19 to 24 not printed in the Gazette.]

1,276,485. DEMOUNTABLE RIM. WILLIAM WILSON BROWN, Burlington, N. C. Filed Jan. 31, 1918. Serial No. 214,633. (Cl. 152—21.)

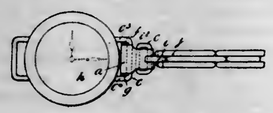


1. A wheel rim embodying relatively movable ends; links each pivoted at one extremity to one end of the rim and adapted to lie against the inner curve of the rim, said end of the rim being continuous between the links; a lever pivoted at one terminal to the other end of the rim; and means for pivotally connecting the other extremity of each link to the lever intermediate the terminals of the lever, the lever extending between the links, the distance between said means and the other terminal of the lever being less than the distance between said

means and the pivoted extremities of the links, whereby said other terminal of the lever may be housed completely between the links.

[Claims 2 and 3 not printed in the Gazette.]

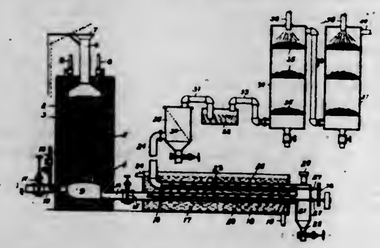
1,276,486. MEANS FOR THE ATTACHMENT OF BRACELETS TO WATCHES. ERNEST GEORGE BROWNE, Plymouth, England. Filed Mar. 19, 1917. Serial No. 155,894. (Cl. 24—241.)



3. An attaching means for the end of a bracelet to a watch loop, consisting of a rigidly constructed fitting comprising a flat body with one extremity bent thereunder at an angle thereto and terminating in a rebent snap, the said snap and bent extremity of the body being insertible through the watch loop and the opposite extremity of the body being bent under to form a hinging knuckle and also centrally bifurcated, a swinging link having a hinge connection with the said hinging knuckle and free to move over and having locking engagement with the re-bent snap, and a connecting device engaging the bifurcated hinging knuckle of the body for attaching the latter to the bracelet end.

[Claims 1 and 2 not printed in the Gazette.]

1,276,487. PROCESS FOR THE MANUFACTURE OF HYDROGEN AND CARBON-BLACK. ROY H. BROWNLEE and ROY H. UHLINGER, Pittsburgh, Pa., assignors to American Nitro-Products Company, Pittsburgh, Pa., a Corporation of Delaware. Filed Jan. 21, 1914. Serial No. 813,457. (Cl. 252.)

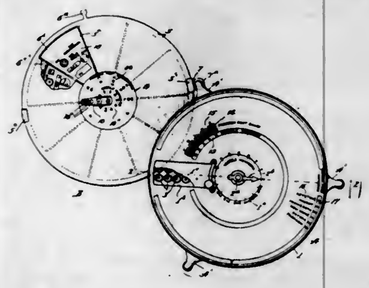


1. The process of making carbon black and hydrogen consisting in decomposing a suitable hydrocarbon by bringing it into contact with highly heated refractory material within an inclosing chamber in the absence of air or catalyst, then cooling the decomposed elements to separate the carbon from the hydrogen, then removing and collecting the separated carbon, and then subjecting the hydrogen to cleansing operations to eliminate impurities.

[Claims 2 to 4 not printed in the Gazette.]

1,276,488. COMBINATION ORDER-CHART AND COMMODITY-CABINET. JAMES H. BOYE, Chicago, Ill., assignor to The Boye Needle Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 5, 1916. Serial No. 89,233. (Cl. 40—28.)

1. In means of the character set forth, the combination of a commodity-cabinet, and an order-chart normally housed beneath said cabinet and adapted to be withdrawn to an exposed position, said order-chart comprising a housing provided with a segmental opening and with a dial equipped with reference characters, and a rotary parts-chart bearing illustrations of machine parts for different machines on different segments thereof and equipped with an index pointer through the medium of which the parts-chart may be turned, and reference characters on the casing of the commodity-cabinet identified with the reference characters on the dial of the order-chart.



2. In means of the character set forth, the combination of a commodity-cabinet having its top provided with a presser-foot chart and reference characters associated with the illustrations of the various presser-feet, and an order chart normally housed beneath the commodity-cabinet and withdrawable to an exposed position, said order-chart comprising a housing having a segmental opening and having also a dial provided with reference characters corresponding with said first named reference characters, a parts-chart in said housing having segments bearing illustrations of parts of different makes of machines, and an index pointer adapted to move over said dial and to serve as a means for rotating said parts-chart.

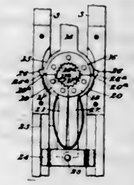
3. In means of the character set forth, the combination of a commodity-cabinet provided with legs, and an order-chart carried by an arm pivotally connected with a leg of said cabinet, said order-chart adapted to be housed beneath said cabinet and comprising a housing mounted on said arm and provided with a segmental opening and equipped with a dial, a parts-chart journaled to rotate with relation to said housing and having segments bearing illustrations of parts of different machines, and an index pointer playing over said dial and serving as a means for rotating said parts-chart.

4. In means of the character set forth, the combination of a commodity-cabinet, an arm pivotally connected therewith and adapted to swing to a position beneath the cabinet, and an order-chart slidably mounted on said arm, said order-chart comprising a housing provided with a segmental opening and a disk having sectors bearing illustrations of parts of different machines, said disk being mounted on a central shaft equipped at its upper end with an index pointer, and said housing bearing a dial over which said index pointer plays.

5. In means of the character set forth, the combination of a commodity-cabinet, an arm pivotally supported at a point near the periphery of the casing of said cabinet and adapted to swing beneath the cabinet, and an order-chart comprising a housing slidably mounted on said arm and provided with a segmental opening and with a dial, a parts-chart bearing on different sectors thereof illustrations of parts of different machines, a central shaft carrying said parts-chart and journaled in said housing, and an index pointer attached to the upper end of said shaft and playing over said dial.

1,276,489. BOTTLE-CAPPING MACHINE. WILLIAM W. BURESCH, Baltimore, Md. Filed Apr. 20, 1918. Serial No. 229,757. (Cl. 113—4.)

1. In a machine for crimping flanged caps on to bottles, suitable guideways, a pair of arcuate crimping jaws slidably mounted therein and normally spaced apart, an independently movable arcuate crimping jaw adapted to force the bottle cap against said pair of jaws and move the latter from normal positions, and means for forcing said pair of jaws toward one another when moved from normal positions.

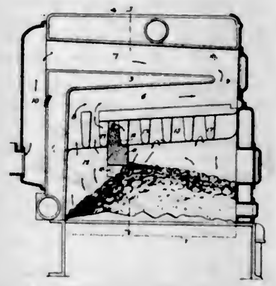


3. In a machine for crimping flanged caps on to bottles, opposed guideways, a pair of pivotally connected arcuate crimping jaws slidable in said guideways and yieldably supported in normal position, means normally tending to spread said jaws apart, said guideways having cam surfaces therein adapted to force the jaws toward one another when the latter are moved from normal positions, an independently movable arcuate crimping jaw adapted to force the bottle cap into engagement with said pair of jaws and to move the latter from normal positions, and means for operating said independently movable jaw.

5. In a machine for crimping flanged caps on to bottles, opposed guideways having convergent cam surfaces therein, a pair of arcuate crimping jaws movable in said guideways in engagement with said cam surfaces, a spring for spreading said jaws, a spring for supporting said jaws in normal positions, a frame movable longitudinally of said guideways, means for reciprocating said frame, and a crimping jaw on said frame adapted to press the pair of jaws against said cam surfaces when the frame is moved in one direction.

[Claims 2, 4, and 6 not printed in the Gazette.]

1,276,490. BOILER-FURNACE. THOMAS D. CASSERLY, Chicago, Ill., assignor to Abram Cox Stove Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 14, 1917. Serial No. 207,150. (Cl. 122—223.)

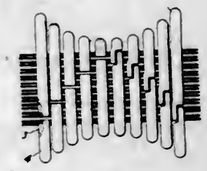


1. The combination in a sectional boiler, of a grate; a series of intermediate sections and end sections, the intermediate sections extending over the grate and having depending legs at the back, said sections having horizontal flues for the passage of the products of combustion in that portion extending over the grate; a separate transverse arch located in the combustion chamber under the overhanging portions of the boiler and extending to a point directly above the grate and spaced from the rear of the boiler formed by the depending legs to form a vertical flue which communicates with the horizontal flue.

2. The combination in a sectional boiler, of a grate; a series of intermediate sections and end sections, the intermediate sections extending over the combustion chamber and having flues therein and also having tongues less in width than the sections and extending toward the grate; and an independent fire brick arch arranged transversely across the combustion chamber at a point some distance from the back of said chamber so as to form a vertical flue between the back of the combustion chamber and the arch, said flue communicating with the flues in the boiler sections, said arch having portions projecting into the spaces between the tongues and terminating short of the sections of the boiler so as to form narrow gas passages between the upper end of the extending portions of the arch of the boiler, said arch being of such depth that, under normal conditions, it will extend into the upper surface of the fuel so that the products of combustion must pass under the arch and through a portion of the fuel into the rear flue.

3. The combination in a sectional boiler, of a base; a grate; a series of intermediate sections and end sections forming the boiler; longitudinal flues formed between the several sections, each of the intermediate sections having depending tongues less in width than the sections, each of the tongues having projecting portions spaced apart, each sections also having legs, and the end sections extending down to a point on a line with the legs and forming, with the legs, a combustion chamber, the lower flues in the overhead portion communicating with the combustion chamber at the rear; and a transverse fire brick arch extending across the combustion chamber above the grate and at a distance from the back of the combustion chamber to form a vertical flue communicating with the said lower flue of the overhead portion of the boiler, said arch being notched to receive the tongues of the overhead sections of the boiler, the portion between the notches being reduced in width; and means for securing the arch to the side sections of the boiler.

1,276,491. CONTACT-BANK. HENRY PETER CLAUSEN, Mount Vernon, N. Y., assignor, by mesne assignments, to Western Electric Company, Incorporated, a Corporation of New York. Filed Sept. 25, 1915. Serial No. 52,659. (Cl. 175—306.)



1. In a contact bank for switching devices, terminal strips arranged side by side in a row, said row extending in a plane at an angle to the side of said bank facing the switches, and contacts integral with each of said strips projecting from the side of said bank facing the switches.

2. In a contact bank for switching devices, terminal strips arranged side by side in a row, said row extending in a plane at an angle to the side of said bank facing the switches, and contacts integral with each of said strips projecting in a row from the side of said bank facing the switches.

3. In a contact bank for switching devices, terminal strips arranged side by side in a row, said row extending in a plane at an angle to the side of said bank facing the switches, and contacts integral with each of said strips projecting from opposite sides of said bank.

4. In a contact bank for switching devices, terminal strips arranged side by side in a row, said row extending in a plane at an angle to the side of said bank facing the switches, and contacts integral with each of said strips projecting from opposite sides of said bank, the corresponding contacts on opposite side of the bank being formed from the same strip and aranged in the same relative position to each other.

1,276,492. VISCOUS STEREOTYPING-MAT COMPOUND. ROBERT W. COFFEE, Richmond, Va., assignor of three-tenths to William P. Redd and three-tenths to Charles C. Satterfield, Richmond, Va. Filed Feb. 6, 1918. Serial No. 215,677. (Cl. 87—17.)

1. A paste for stereotype mats composed of a base of an earthy silicate, sodium carbonate, starch, animal gluten and a vegetable oil.

2. A compound comprising the following elements in combination; gluten, starch, sodium carbonate, a vegetable oil and china clay or kaolin, the elements being so proportioned and intermixed that a penetrating substance of viscous nature is provided.

3. A paste for stereotype mats composed of an earthy silicate including china clay or kaolin mixed with sodium carbonate as a base, dissolved corn starch, animal gluten, and a vegetable oil.

4. A paste for stereotype mats comprising a base of china clay or kaolin, sodium carbonate, starch, gluten and a vegetable oil, compounded substantially as specified.

1,276,493. TICKET-HOLDER. SAMUEL B. COOKE, Richmond, Va. Filed Sept. 5, 1917. Serial No. 189,810. (Cl. 206—40.)



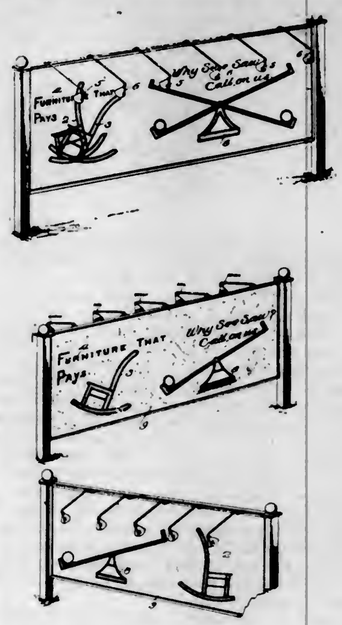
A ticket holder adapted to be used for delivering tickets singly and which may vary in transverse thickness, said holder comprising a casing having fixed walls, said casing being provided at one end and adjacent its top wall with an opening of sufficient size to permit the insertion of a stack of tickets, the casing having at its opposite end and adjacent its top wall an opening of sufficient size to permit of the exit of a single ticket irrespective of its relative transverse thickness, a spring located in the casing, a panel pivotally mounted on the spring and located within the casing between the said openings, and adapted to receive a stack of tickets, means for removing the tickets successively from the stack and for forcing the same through the exit opening, and a pin attached to the pivoted panel and extending through a side of the casing.

1,276,494. ADVERTISING-SIGN. RICHARD M. CRAIG, San Antonio, Tex. Filed Aug. 21, 1917. Serial No. 187,412. (Cl. 40—130.)

1. A device of the class described including a surface bearing in different colors and in superposed relation different non-transparent positions or shapes of symbols, objects, or the like to be displayed, and means for displaying said surface in the presence of a light medium capable of absorbing one of said colors and then displaying said surface in the presence of a light medium capable of absorbing another one of said colors.

5. In a device of the class described, a translucent display surface having upon one face thereof the representation of an object or the like having a movable part, the representation being in one color and the part being shown in one position of its movement, the said surface having upon its reverse side the representation of the said object in another color and with the movable part in another position, and means for illuminating the said surface by alternately flooding the first and last-mentioned sides thereof with different colored lights, the lights of one color being arranged to absorb one representation of the object and the lights of the other color being arranged to absorb the other representation of the object, parts common to the two representations upon the opposite faces of the said surface being represented in a color non-complemental to the first-mentioned colors.

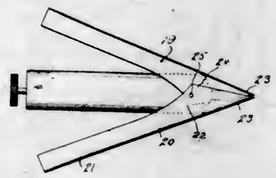
6. A device of the class described including a surface bearing in different colors and in superposed relation different non-transparent shapes or symbols of objects or the like to be displayed, and means for displaying said



surface alternately in the presence of different colored light media each capable of absorbing one of said colors which means comprises suitably colored lights, and means for alternately flashing the said lights on and off.

[Claims 2 to 4 not printed in the Gazette.]

1,276,495. SUCTION APPARATUS. JOHN T. CROCKETT, Cartersville, Ky. Filed Apr. 27, 1916. Serial No. 93,948. (Cl. 128—28.)



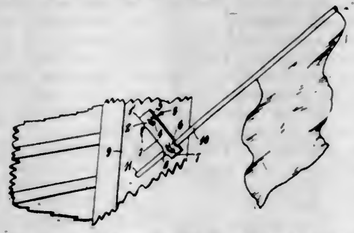
2. In a device of the character described, two handle members substantially semi-circular when viewed in cross section, one end of each of said handle members being tapered to a point thereby forming a jaw, means pivotally connecting said handle members adjacent said jaws, and a suction apparatus including a movable plunger operable between said handle members and cooperating with said jaws, substantially as described.

[Claim 1 not printed in the Gazette.]

1,276,496. FLAG-HOLDER. POWEL CROSLEY, Jr., Cincinnati, Ohio. Filed Aug. 18, 1917. Serial No. 186,976. (Cl. 248—37.)

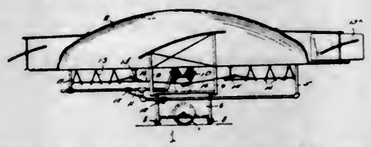
A flag holder comprising a single flat elongated strip of metal, having near respective ends pairs of parallel

slits lengthwise of said strip and terminating short of said respective ends, and so located transversely of the strip that the width of said strip for the length of the respective pair of slits is divided into three parts, the middle one of said parts being pressed sidewise in one direction and the other ones of said parts being pressed sidewise in the other direction, whereby opposed concavities are formed opening transversely of the strip, and said strip having a sharp corner at one of said ends,



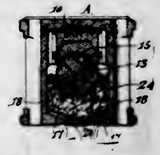
the concavities adjacent to said end being adapted to receive an elongated fastening means down through them in the general direction of projection of said sharp corner, whereby said fastening means and said sharp corner are adapted to be driven into a supporting object to support said strip edgewise thereto, and the concavities near the other end of said strip being adapted to receive a flag staff down through them to rest its lower end against said supporting object, substantially as and for the purposes set forth.

1,276,497. DIRIGIBLE BALLOON. WILLIAM CULVER, Sioux City, Iowa., assignor of one-half to Wencel H. Kirchman, Wahoo, Nebr. Filed July 18, 1917. Serial No. 181,273. (Cl. 244—5.)



A device of the type described, including an engine of the class indicated, in combination with a dirigible balloon or bag, said bag having its intake tube, and said engine having its exhaust pipe in valved communication, a gas exhausting pipe for said bag, having connection with said valve-controlled engine exhaust-pipe and bag-exhaust-intake pipe, and propelling means for said balloon or bag driven from said engine, said bag-gas-exhausting pipe adapted to be operative when the said bag gas-intake pipe is out of valved communication with said bag.

1,276,498. WASTE-CONTAINER. JOHN W. CURRAN, Newport, Ky. Filed Oct. 4, 1917. Serial No. 194,735. (Cl. 64—24.)

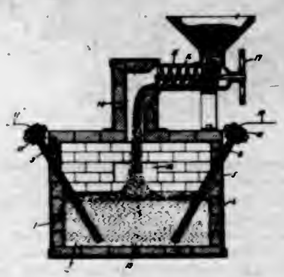


1. A waste container of the character described comprising a plate, shaped correspondingly to the bottom of a journal box and having a marginal flange and also a central walled opening to provide an oil chamber between the wall of said opening and the marginal flange, the wall of said opening being notched at intervals for the ingress and egress of oil to and from the chamber.

5. The combination with a journal box having a dust guard chamber and passages leading from the latter to the interior of the box, of a container comprising a plate dished in cross section and having a walled central opening, waste confined within the journal box and a portion thereof sunk within the walled opening, the wall of the said opening being formed with blunt saw teeth for gripping engagement with the bottom of the journal box and affording passages for the circulation of oil between the plate and the bottom of the box, and a marginal flange on said plate and resting upon the bottom of the box to form an oil chamber about the walled opening.

[Claims 2 to 4 and 6 not printed in the Gazette.]

1,276,499. PROCESS AND APPARATUS FOR PREPARING MAGNESIUM CHLORID. CHRISTIAN DANTSIZEN, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 22, 1916. Serial No. 92,841. (Cl. 23—13.)



1. The process of preparing anhydrous magnesium chlorid which consists in maintaining in a fused state a quantity of magnesium chlorid in an inclosed space, and charging anhydrous ammonium magnesium chlorid into said fusion.

3. The process of preparing anhydrous magnesium chlorid, which consists in charging anhydrous ammonium magnesium chlorid into a fused bath maintained at a temperature above 300° C., thereby dissociating said ammonium magnesium chlorid into magnesium chlorid and ammonium chlorid, conducting away the vaporized ammonium chlorid, and collecting the magnesium chlorid for use.

4. The process of preparing anhydrous magnesium chlorid, which consists in charging anhydrous ammonium magnesium chlorid into an inclosed space, heating said chlorid within said space to a temperature high enough to dissociate said ammonium magnesium chlorid into magnesium chlorid and ammonium chlorid, the ammonium chlorid being vaporized, recovering the ammonium chlorid by condensation in a closed space, removing portions of said magnesium chlorid for use and replenishing said bath by adding ammonium magnesium chlorid while maintaining the space above said bath closed.

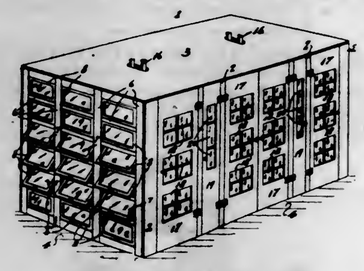
[Claim 2 not printed in the Gazette.]

1,276,500. DRIER FOR ALIMENTARY PASTE. PAUL DE MARTINI, Jamaica, N. Y. Filed Jan. 15, 1918. Serial No. 211,929. (Cl. 34—39.)

1. In a device of the kind described, a main compartment, transverse racks spaced apart within said compartment for supporting material in exposure to air passed therethrough, a rotary fan situated in the intermediate space between adjacent racks, said fan being adapted to be rotated in a transverse plane, and regulatable air admission and controlling means at each end of said compartment, said air admission and controlling means having transparent means admitting light into the interior of said compartment.

2. In a device of the kind described, a main compartment, transverse racks spaced apart within said compartment for supporting material in exposure to air

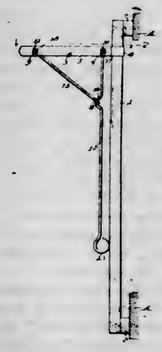
passed therethrough, a rotary fan situated in the intermediate space between adjacent racks, said fan being adapted to be rotated in a transverse plane, regulatable air admission and controlling means at each end of said compartment, said air admission and controlling means having transparent means admitting light into the interior of said compartment, and a side wall of said compartment having doors provided with transparent light admitting panels, said doors providing means of entrance and exit to the rack occupying spaces of said compartment.



3. In a device of the kind described, a main compartment, transverse racks spaced apart within said compartment for supporting material in exposure to air passed therethrough, a rotary fan situated in the intermediate space between adjacent racks, said fan being adapted to be rotated in a transverse plane, regulatable air admission and controlling means at each end of said compartment, said air admission and controlling means having transparent means admitting light into the interior of said compartment, a side wall of said compartment having doors provided with transparent light admitting panels, said doors providing means of entrance and exit to the rack occupying spaces of said compartment, and additional doors provided with transparent light admitting panels providing means of entrance and exit to the fan occupying spaces of said compartment.

[Claims 4 to 11 not printed in the Gazette.]

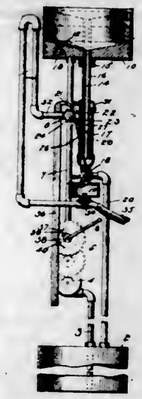
1,276,501. BRACKET. GEORGE B. DOUGLAS, Seattle, Wash. Filed Oct. 5, 1917. Serial No. 194,884. (Cl. 248—19.)



1. The combination in a bracket, of an upright bar, a bracket body having a loop receiving said bar and constructed and arranged when released to bite against the bar, a lever pivoted to and depending from the bracket body, and resting adjacent to the face of the bar, and a strut interposed between said lever and the outer portion of the bracket body.

[Claims 2 and 3 not printed in the Gazette.]

1,276,502. GASOLENE-MEASURING APPARATUS. CHARLES HUGH DUFFY, Chevy Chase, Md., assignor of two-thirds to Walter J. Costello and J. Charles McGuire, Washington, D. C. Filed Feb. 7, 1917. Serial No. 147,131. (Cl. 221—100.)



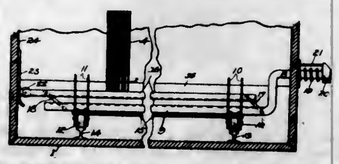
3. A liquid measiring apparatus including a storage tank, a measuring and dispensing tank, a connection between the storage tank and the measuring and dispensing tank, a piston in the measuring and dispensing tank, means for forcing liquid from the storage tank to the measuring and dispensing tank at a point under the piston to raise the same and means controlled by the position of the said piston in the measuring and dispensing tank for opening and closing communication between the measuring and dispensing tank and the storage tank and a dispensing pipe for dispensing liquid from the measuring and dispensing tank.

4. A liquid measuring apparatus including a storage tank, a measuring and ispensing tank connected therewith to receive liquid therefrom, a piston in the measuring and dispensing tank, a dispensing pipe, means controlled by the position of the said piston for effecting communication between the said dispensing tank and the storage tank and between the said dispensing tank and the dispensing pipe, means for controlling the flow of leakage from the dispensing tank alternately to the storage tank and to the dispensing pipe.

5. A liquid measuring apparatus including a storage tank, a measuring and dispensing tank in communication with the storage tank, a piston in the measuring and dispensing tank for alternately effecting communication between the dispensing tank and the storage tank and between the dispensing tank and the dispensing pipe and means for controlling the direction of the flow of leakage past the piston in the said measuring and dispensing tank.

[Claims 1, 2, and 6 to 12 not printed in the Gazette.]

1,276,503. LOOSE-LEAF DEVICE. KENNETH L. EDDY, Chicago, Ill., assignor, by mesne assignments, to Automatic Utilities Co., a Corporation of Illinois. Filed Mar. 30, 1914. Serial No. 828,173. (Cl. 129—16.)



1. In a device of the character described, the combination with a casing having a plurality of loose leaves assembled in a pack therein, means whereby a predetermined leaf or class of leaves can be elevated above their normal position in the pack, and means whereby the displacer can be moved so that a portion thereof passes across the face of the pack of leaves.

5. A device of the character described comprising a casing, a plurality of loose leaves therein, a plurality of pins depending from the lower portion of said leaves, rails extending laterally across the bottom of the casing adjacent the forward and rear ends, travelers adapted to move upon said rails, and comprising rollers upon which they roll, a longitudinally movable bar carried by said travelers, means adapted to engage said pins whereby the longitudinal movement of said bar will elevate a leaf or class of leaves above their normal position, the front wall of said casing having a transverse slot formed therein, and a plurality of perforations, the latter corresponding in number to designations printed on the lower edge of the leaves, the forward end of the longitudinal bar extending outwardly through said slot, a push button secured to the end of said rod, means to hold said rod normally in a projected position.

9. A device of the character described comprising a casing, a plurality of loose leaves therein, a plurality of pins depending from the lower portion of said leaves, racks extending laterally across the bottom of the casing adjacent the forward and rear ends, pinions adapted to mesh with the teeth in said racks, carriages in which said pinions are mounted, and means carried by said carriages and adapted to engage said pins whereby a predetermined class of leaves may be elevated above the plane of the remainder.

11. The combination with a loose leaf card index casing having a plurality of loose leaves therein, a mechanism movable so that a portion thereof moves across the face of said leaves, and means carried by said mechanism to lift a predetermined class of leaves above their normal position, a plurality of pins depending from the lower portion of said leaves, a guide to insure the elevating means engaging all of the pins on the predetermined class of leaves.

12. The combination with a loose leaf card index casing having a plurality of loose leaves therein, a mechanism movable so that a portion thereof moves across the face of said leaves, and means carried by said mechanism whereby a predetermined class of leaves may be elevated above the plane of the remainder, means to hold said laterally movable mechaniam in a predetermined position during the elevation of the said leaves.

[Claims 2 to 4, 6 to 8, and 10 not printed in the Gazette.]

1,276,504. CORSET-RETAINER AND HOSE-SUPPORTER. JENNIE LYNN EDWARDS, Valley, Wash. Filed May 3, 1918. Serial No. 232,363. (Cl. 241—6.)



1. A corset retainer comprising a triangular pad, in two sections, a ring connecting the sections at the top, a spring to normally tend to draw the sections together, and a tape connected to the pad and adapted to encircle the leg of the wearer.

3. A corset retainer comprising a triangular pad, in two sections, a ring connecting the sections at the top, a spring to normally tend to draw the sections together, and a tape connected to the pad and adapted to encircle the leg of the wearer, said spring comprising a coil, and legs extending from said coil on opposite sides and connected respectively to the two sections of the pad.

[Claims 2 and 4 not printed in the Gazette.]

1,276,505. AIR-LIFT PUMP. LEVI T. EDWARDS, Philadelphia, Pa. Filed Dec. 22, 1916. Serial No. 138,329. (Cl. 103—84.)



1. In an air lift pump, an eduction pipe having the bounding wall of its bore formed of wood, said wall being uniformly tapered to provide a bore gradually increasing in cross-sectional area from the inlet end to the outlet end of said pipe.

4. In an air lift pump, an eduction pipe formed of wooden sections, each section comprising a plurality of longitudinally disposed staves united in edge to edge relation and forming a gradually tapering upwardly diverging bore, and a binding member spirally wound about all of said sections.

6. In an air lift pump, the combination of a receiving tank for the discharged water having an opening therein, an eduction pipe passing through said opening and out of contact with the walls of said opening, a shield of flexible impervious material connecting said pipe with the tank and independent means for respectively supporting said pipe and tank.

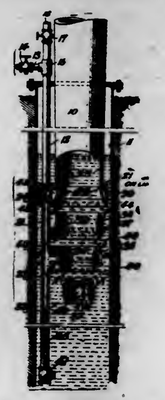
9. In an air lift pump, the combination of a well, an eduction pipe extending into said well and having a submerged inlet, an air supply pipe terminating in a tubular open ended nozzle, said nozzle being located to one side of the air pipe and alined with the eduction pipe and also provided with a laterally disposed channel communicating with the air supply pipe and a mixing tube having an upwardly converging conduit disposed between the outlet of said nozzle and the inlet of said eduction pipe, said mixing tube being located entirely below the eduction pipe inlet.

[Claims 2, 3, 5, 7, 8, and 10 not printed in the Gazette.]

1,276,506. AIR-LIFT PUMP. LEVI T. EDWARDS, Penfield, Pa. Filed June 5, 1918. Serial No. 238,315. (Cl. 103—84.)

7. In an air lift pump, the combination of an eduction pipe, a plurality of superposed nozzles of ring form supported below said eduction pipe, each nozzle having two series of orifices one series being arranged to discharge away from the axis of the nozzle and the other series being arranged to discharge toward the axis of the nozzle,

means to deliver compressed air to all of said nozzles, and manually controlled means for causing a reversal of the direction of fluid flow through said orifies whereby said nozzles are flushed and cleaned.



8. A foot piece for an air lift pump consisting of an annular body, a plurality of ring nozzles of different diametrs, and means to support said nozzles in axial alinement with said body.

[Claims 1 to 6 and 9 to 12 not printed in the Gazette.]

1,276,507. HYDROGENATED-OIL COMPOSITION. CARLETON ELLIS, Montclair, N. J. Filed Jan. 6, 1913. Serial No. 740,416. Renewed Aug. 1, 1916. Serial No. 112,614. (Cl. 106—1.5.)

3. A composition of matter adapted for use as a sound record consisting, at least in part, of a moldable composition of matter comprising a hydrogenated oil having a titre of not materially less than 59 and having an iodin number not exceeding 25, together with carnauba wax, said composition being solid at ordinary temperature.

8. A hydrogenated oil composition solid at normal atmospheric temperatures, comprising hydrogenated oil and paraffin wax.

[Claims 1, 2, and 4 to 7 not printed in the Gazette.]

1,276,508. HYDROGENATED-OIL COMPOSITION. CARLETON ELLIS, Montclair, N. J. Continuation of application Serial No. 740,416, filed Jan. 6, 1913. This application filed Apr. 21, 1917. Serial No. 163,738. (Cl. 106—1.5.)

1. A composition of matter comprising hydrogenated fatty oil which is solid at normal temperature, in intimate admixture with an inert, non-gritty, non-fatty, non-catalytic solid material, insoluble in said oil.

2. A composition of matter comprising hydrogenated cottonseed oil of high melting point solidified in contact with an impalpable non-fatty solid material of a substantially unctuous feel.

3. A composition of matter comprising hydrogenated fatty oil, substantially free of catalyzer, solidified in contact with non-fatty solid material of a substantially flourlike texture.

4. A composition of matter comprising a non-fatty, non-catalytic, non-abrasive solid material and hydrogenated oil, solid at normal temperature and substantially free of hydrogenating-catalyzer, solidified into contact therewith.

5. A composition of matter comprising catalytically-hydrogenated fatty oil which is solid at normal temperature and is at least substantially freed of the catalytic body used to hydrogenate said oil, admixed with an influential proportion of finely-divided inert non-fatty mineral extending material, substantially devoid of catalytic properties, and of abrasive properties.

[Claims 6 to 9 not printed in the Gazette.]

1,276,509. PRODUCT CONTAINING HYDROGENATED OIL. CARLETON ELLIS, Montclair, N. J. Filed Apr. 10, 1918. Serial No. 227,770. (Cl. 106—23.)

3. A composition of matter comprising hydrogenated fatty material intimately mixed with powdered abrasive material.

5. A composition of matter comprising a powder containing a hydrogenated fatty oil in intimate admixture with a comminuted non-fatty solid material.

8. A composition of matter comprising a semi-drying fatty oil hydrogenated to an iodin number of below 50 and being substantially free from siccative bodies, incorporated with a comminuted non-fatty material, such material being substantially free from catalyzer.

9. A composition of matter comprising fatty oil hydrogenated to an iodin number of below 50, incorporated with at least 40% of its weight of finely-divided non-fatty solid material.

12. A shaped product composed of a composition of matter comprising as essential constituents, hard hydrogenated fatty oil and a comminuted non-fatty solid material.

[Claims 1, 2, 4, 6, 7, 10, 11, and 13 not printed in the Gazette.]

1,276,510. SPRING-MOTOR. GEORGE L. EMERSON, Los Angeles, Cal. Filed Nov. 7, 1917. Serial No. 200,832. (Cl. 185—41.)



1. A spring motor comprising a spirally wound spring, a winding drum in connection with the outer end of said spring, a driving drum in connection with the inner end of said spring, both of said drums being in axial alinement with the center of the spring, a driving shaft rigidly connected to the driving drum, a sleeve positioned over said driving shaft and with which a rotating body is adapted to move, ratchet means whereby the shaft may be connected with said sleeve to rotate it in a single direction, ratchet means for optionally connecting the sleeve with the winding drum, and means whereby said motor may be controlled to wind the spring through the movement of the sleeve or drive the sleeve through the movement of the shaft.

3. A spring motor comprising a spirally wound spring, a winding drum in connection with the outer end of said spring, a driving drum in connection with the inner end of said spring, both of said drums being in axial alinement with the center of the spring, a driving shaft rigidly connected to the driving drum, a sleeve positioned over said driving shaft and with which a rotating body is adapted to move, ratchet means whereby the shaft may be connected with said sleeve to rotate it in a single direction, ratchet means for optionally connecting the sleeve with the winding drum, ratchet means for preventing the recoil of the spring and reverse movement of the winding drum, ratchet means for releasing the driving drum to permit recoil of the spring and the consequent driving of the shaft, and means for simultaneously actuating the ratchet connecting means between the sleeve and the winding drum and the ratchet means for releasing the driving drum.

6. A spring motor comprising a spirally wound spring, a winding drum in connection with one end of the spring, a driving drum in connection with the other end of the spring; both of said drums being in axial alinement with the center of the spring; a driving shaft rigidly connected to the driving drum, a sleeve positioned over said driving shaft, a rotating body mounted upon the sleeve, ratchet means whereby the shaft may be connected with said sleeve, ratchet means for optionally connecting the sleeve with the winding drum, and means whereby said motor may be controlled to wind the spring through the movement of the sleeve or drive the sleeve through the movement of the shaft.

[Claims 2, 4, and 5 not printed in the Gazette.]

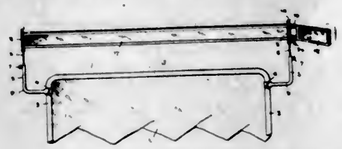
1,276,511. ERASER-GUARD. LOTHAR W. FABER, New York, N. Y., assignor to Eberhard Faber Pencil Company, Brooklyn, N. Y., a Corporation of New York. Filed Nov. 16, 1917. Serial No. 202,360. (Cl. 120—38.)



1. In an eraser mounting, the combination of a member having sharp-pointed outwardly directed spring tongues extending forwardly therefrom and means for holding an eraser, to extend rearwardly therefrom, and a sleeve of soft material adapted to be slid forwardly over the member and eraser, and to be frictionally engaged by said tongues.

[Claims 2 and 3 not printed in the Gazette.]

1,276,512. ADJUSTABLE MIRROR-REFLECTOR. MARIE FAURE, New Orleans, La. Filed July 20, 1917. Serial No. 181,852. (Cl. 88—67.)



1. The combination with a vehicle wind shield, of an elongated mirror reflector, means for rotatably supporting said mirror reflector horizontally above said wind shield and a smaller mirror reflector pivotally connected to one end of said first named reflector.

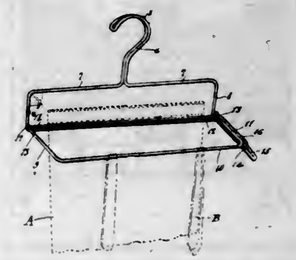
4. The combination with a vehicle wind shield, of a pair of vertically adjustable brackets, each bracket being provided at its upper end with a collar consisting of a stationary section and a movable section, a mirror, rings carried by the opposite ends of said mirror and rotatably mounted within said collars, and means for clamping said movable and stationary collar sections together on said rings.

7. A mirror reflector comprising a frame, a bright reflecting mirror arranged in one side of said frame, and a subdued light reflecting mirror arranged in the other side of said frame.

[Claims 2, 3, 5, and 6 not printed in the Gazette.]

1,276,513. TROUSERS AND NECKTIE HOLDER. EMMETT N. FISCHER, Bristol, Ind. Filed Nov. 23, 1917. Serial No. 203,558. (Cl. 211—13.)

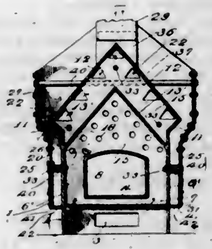
3. A trousers holder and necktie rack formed of a single length of wire bent intermediate its ends to provide a hook, the terminals of the hook bent laterally in opposite directions to provide horizontally disposed supporting bars, the terminals of the bars bent downwardly in a substantially vertical plane to provide connecting members, one of the connecting members bent forwardly and back upon itself in spaced parallel relation to the supporting bars and in a plane below thereof to constitute a rack bar, the rack bar bent rearwardly to provide a latch, the terminal of the latch bent inwardly in spaced parallel relation to the rack bar and connected



to the connecting bar to provide a clamping member, and another clamping member formed integrally with the connecting member in spaced parallel relation with the first named clamping member, said rack bar adapted to facilitate the moving of the clamping bars into and out of engagement with one another, as and for the purpose specified.

[Claims 1, 2, and 4 not printed in the Gazette.]

1,276,514. SAND-DRIER. CHARLES S. FRENCH, Eckman, W. Va. Filed Jan. 7, 1918. Serial No. 210,768. (Cl. 34—34.)



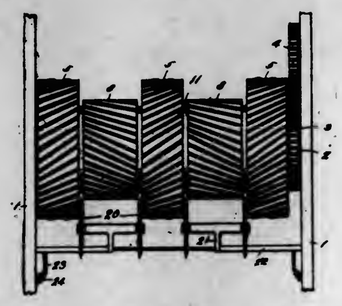
1. In a sand drier, the combination of a fire box, vertical walls arranged in spaced relation to the front and rear end walls of the fire box, there being openings in the front and rear walls of the fire box communicating with the space between the fire box and said walls, an air inlet below the fire box in communication with the space between the front end of the same and the said front wall, deflectors in the space between the said front wall and the front end of the fire box following the lines of the top of the fire box, a deflector in the space between the rear end of the fire box and the rear vertical wall and disposed above the top of the fire box, and horizontal flues disposed above the fire box and in communication with chambers above the respective deflectors.

[Claims 2 to 4 not printed in the Gazette.]

1,276,515. TRACTOR-WHEEL. JOHN A. GALVIN, Spalding, Nebr. Filed Mar. 14, 1918. Serial No. 222,446. (Cl. 21—69.)

1. The herein described composite tractor wheel made up of a series of whole wheel units, a series of segmental units interposed between the others and each having a cavity at its axis, washers interposed between the units

and each having a hub extending into the cavity of one of the segmental units, means for connecting all units with each other, and a single shaft passing through the centers of the whole wheel units and the hubs of the washers.



2. The herein described composite tractor wheel made up of a series of whole wheel units each having a hub and spokes and a rim, a series of segmental units interposed between the others and each having a cavity at its axis and holes around the same, washers between the units having hubs passing into said cavities, a shaft extending axially through all units and fitting closely in all hubs, and a series of bolts passing through all units and washers for holding the parts together.

3. The combination with a tractor wheel made up of a series of units whereof alternate ones are cylindrical and those interposed are of other than cylindrical shape, spacing washers interposed between and smaller than said units, a shaft on which all the units and washers are strung, and means for locking the parts together; of cleaning devices, and means for projecting them into the spaces opposite said washers.

5. In a tractor wheel of the type described, the combination with a series of whole wheel units, a series of segmental units interposed between them, washers between all units, and a shaft on which all these elements are mounted; of a set of disks standing respectively opposite the washers, movable supports carrying said disks, and means for swinging the supports and moving the disks toward and into contact with the washers, for the purpose set forth.

[Claim 4 not printed in the Gazette.]

1,276,516. ELECTRIC-LAMP SOCKET. FREDERIC P. GATES, Hartford, Conn., assignor to The Arrow Electric Company, Hartford, Conn., a Corporation of Connecticut. Filed Mar. 20, 1917. Serial No. 156,063. (Cl. 173—362.)



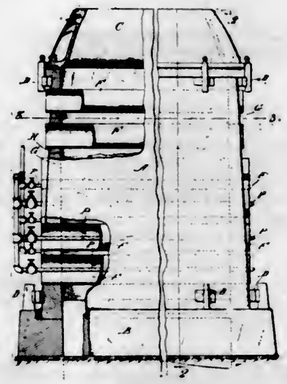
1. An electric lamp socket comprising a casing having independent cap and body members of insulating material and latching means for securing the same together in substantially any relative rotary position of the parts, and serving to hold the same together against endwise separation and relative rotary displacement, said latching means comprising metallic elements secured to said cap and shell members and wholly inclosed in the assembled position of the parts.

4. An electric lamp socket comprising body and cap members sleeved together in assembled relation and having coöperating latching means within the sleeving area to prevent endwise separation or relative rotary displacement of the parts, the body member being of insulating material and the latching element thereon having the form of a metallic spring ring secured thereto and capable of deflection adjacent certain of the latching elements to free the latter for the purpose described.

9. An electric lamp socket comprising a porcelain casing having cap and shell members, the shell member having an external ledge at the cap end thereof and a metallic latching ring mounted on said ledge to engage a cooperating latching element on the cap, together with an independent porcelain interior socket body having an external supporting shoulder adapted to rest upon the cap end of the shell member and within the area of said latching ring.

[Claims 2, 3, 5 to 8, and 10 not printed in the Gazette.]

1,276,517. METHOD OF AND APPARATUS FOR CASTING ARMOR-PLATES. LOUIS GATHMANN, Washington, D. C.; Olga Gathmann Foley administratrix of said Louis Gathmann, deceased. Filed Feb. 15, 1916. Serial No. 78,434. (Cl. 22—204.)



1. The method herein described of casting armor plates, which consists in pouring molten metal into a mold and in causing a cooling medium to pass horizontally through the lower portion only of the molten metal while it is solidifying.

2. The herein described method of casting, which consists in pouring molten metal into a mold, in causing a cooling medium to pass horizontally through the lower portion of the molten metal while it is solidifying, and in causing a heating medium to pass horizontally through the upper portion thereof.

3. A metallic mold having a mold chamber through the lower portion of which extend horizontally a plurality of cores arranged one above the other.

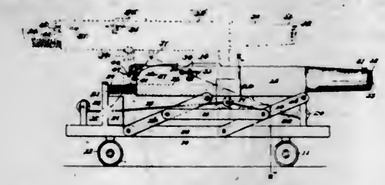
4. A metallic mold, having a mold chamber through which extend horizontally hollow cores those in the lower portion of the mold being of larger cross section than those in the upper portion thereof.

6. A metallic mold, made in sections and provided with horizontally arranged hollow cores supported by the sections when the latter are assembled but separable therefrom when the sections are withdrawn from each other.

[Claim 5 not printed in the Gazette.]

1,276,518. DISAPPEARING GUN. GAETANO GERACE, Timmins, Ontario, Canada. Filed Oct. 8, 1917. Serial No. 195,367. (Cl. 89—38.)

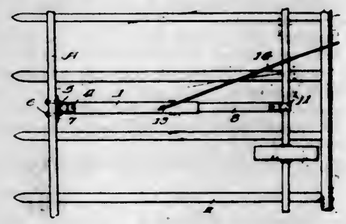
1. In combination with a car, a mount, pivotal link connections between the mount and car, elevating and lowering means for the mount, an anchor block upon the car and shock absorbing springs carried by the mount in engagement with the said block when the mount is in its lowered position.



3. In combination with a car, a mount, links arranged in pairs and pivotally secured to the car and mount, a connector pivotally secured to each pair of links, elevating and lowering means for the mount, an anchor block upon the car, shock-absorbing springs secured to the mount for engagement with the block when the mount is in its lowered position, cannons formed with said mount, firing means for the cannon, a shock-absorbing member secured to the car and anchor block, said member adapted to be engaged by the links when the mount is raised, and a supporting means secured to the car for engagement with the forward end of the mount when the latter is in its lowered position.

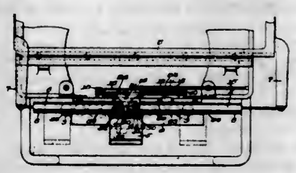
[Claim 2 not printed in the Gazette.]

1,276,519. PUSH-RAKE ATTACHMENT. ALFRED J. GIBBS, Hay Springs, Nebr. Filed Apr. 24, 1917. Serial No. 164,266. (Cl. 56—137.)



In combination with the slidable abutment of a push rake, a channel member hinged at one end to said abutment and having oppositely disposed slots in the remaining end thereof, a second member of less size than the channeled member capable of nesting therein having spaced apertured ears on one end and its remaining end pivoted to a portion of the rake, means for pivotally connecting the adjacent ends of said members and permitting relative sliding movement therebetween, and other means connected to said channeled member at a point slightly beyond the pivotal connection thereof for facilitating upward movement of the same.

1,276,520. CALCULATING-MACHINE. HYMAN ELI GOLDBERG, Chicago, Ill., assignor to Goldberg Calculating Machine Company, Chicago, Ill. Filed Sept. 9, 1911. Serial No. 648,540. (Cl. 235—59.)



1. In a machine adapted for calculating and horizontal printing: a decimal carriage traveling to locate the calculating point; a printing carriage, traveling to locate the printing point, and including in its travel a zone of horizontal addition; a reciprocator for reciprocate the decimal carriage for the calculating of the horizontally printed numbers and traveling at the same rate as said decimal carriage; the reciprocator coöperating relatively movable to said printing carriage coöperating with the decimal carriage within the zone but not coöperating therewith without the zone, and means to move said reciprocator relative to said printing carriage.

2. In a machine adapted for calculating and horisontal printing: a decimal carriage traveling to locate the calculating point; a printing carriage traveling to locate the printing point, and including in its travel a zone of horizontal addition; a reciprocator relatively movable to said printing carriage to reciprocate the decimal carriage for the calculating of the horisontally printed numbers and traveling at the same rate as said decimal carriage; mechanism automatically connecting the reciprocator and the decimal carriage within said zone and disconnecting them without said zone, and means to move said reciprocator relative to said printing carriage.

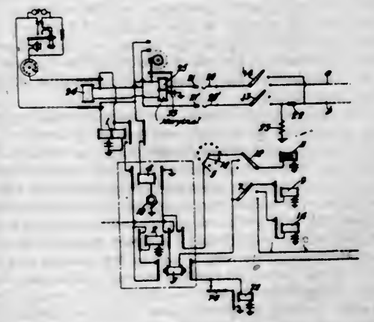
5. In a machine adapted for calculating and horisontal printing: a decimal carriage traveling to locate the calculating point; a printing carriage traveling to locate the printing point, and including in its travel a zone of horizontal addition; a reciprocator relatively movable to said printing carriage to reciprocate the decimal carriage for the calculating of the horizontally printed numbers and traveling at the same rate as said decimal carriage; mechanism for disconnecting the decimal carriage and the reciprocator when the decimal carriage is moved to an extreme position, and means to move said reciprocator relative to said printing carriage.

7. In a machine adapted for calculating and horizontal printing: a totalizer and master mechanism therefor, traveling relatively to each other to locate the calculating point; a printing carriage traveling to locate the printing point, and including in its travel a zone of horizontal addition; a reciprocator relatively movable to said printing carriage to reciprocate the totalizer or the master mechanism for the calculating of the horizontally printed numbers and traveling at the same rate as said totalizer or master mechanism; mechanism for disconnecting the totalizer or master mechanism from the reciprocator when the printing carriage is moved beyond its zone, and means to move said reciprocator relative to said printing carriage.

22. In a calculating machine, the combination of a traveling carriage, a reciprocating totalizer, a spring to hold said totalizer in a normal position and being adapted to be disconnected from said totalizer, and means to automatically govern the connection of said spring to said totalizer at points determined by the travel of said carriage.

[Claims 3, 4, 6, and 8 to 21 not printed in the Gazette.]

1,276,521. TELEPHONE SYSTEM. CHARLES L. GOODRUM, New York, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed June 15, 1916. Serial No. 103,854. (Cl. 179—9.)



1. In a telephone system, a telephone line, a message register for recording calls on said line, an electromagnet

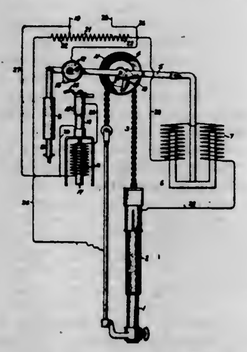
for controlling the operation of said register, a cut-off relay, means for operating said electromagnet independent of said cut-off relay, and a series holding circuit for said electromagnet, and said cut-off relay.

2. In a telephone system, a telephone line, a message register for recording calls on said line, a pair of electromagnet coils for controlling said register, and circuits for said coils, one extending through the contact of said cut-off relay and the other through the winding of said cut-off relay.

7. In a two-wire multiple telephone exchange, a telephone line, a source of current, a cut-off relay and a message register bridged between a talking conductor of said line and said source of current, and means for operating said message register independently of said cut-off relay.

[Claims 3 to 6 and 8 to 16 not printed in the Gazette.]

1,276,522. ARC-LAMP. EMILE J. GUAY, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed Jan. 31, 1917. Serial No. 145,779. (Cl. 176—64.)



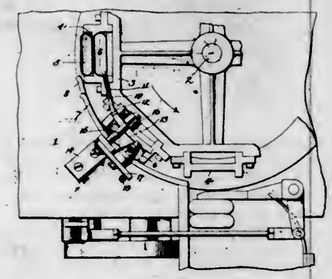
1. The method of operating an arc lamp from a constant alternating current line, which consists in momentarily inducing by the line current a sufficiently high potential discharge between the contacting electrodes to puncture any intervening insulating film and separating the electrodes to establish the arc, then and thereby partially short-circuiting the electrodes and reducing the voltage between them to that requisite to maintain a normal length of arc, and dead short-circuiting the electrodes and thereby causing a feeding operation when an unduly high voltage peak occurs.

3. An arc lamp for an alternating constant current supply line, comprising a step-up transformer the primary of which is in the line and the secondary in the electrode circuit, an arc establishing magnet in the electrode circuit, a normally open circuited feed control magnet subjected to variations of potential corresponding to those in the electrode circuit, means actuated by the arc establishing magnet for closing the circuit of the feed control magnet, and means for short-circuiting the control magnet in response to an unduly high potential discharge through the same.

5. An alternating current arc lamp having electrodes which always tend to and which are in contact when there is no current through the lamp; a step-up transformer, the primary of which is in a constant current supply circuit, and the secondary of which is in the electrode circuit; a series electromagnet in the electrode circuit for establishing the arc by the energy conveyed by the secondary of the transformer; a shunt magnet, the circuit of which is normally open; means for closing the shunt circuit by the arc establishing means, and means for inducing through the shunt magnet an electrode feeding operation by the series magnet when an unduly high voltage peak occurs at the arc.

[Claims 2, 4, and 6 not printed in the Gazette.]

1,276,523. CAN-CLOSING MECHANISM. GEORGE W. GWINN, New York, N. Y., assignor to Automatic Packing & Labeling Company, Durham, N. C., a Corporation of North Carolina. Filed Dec. 1, 1914. Serial No. 875,016. (Cl. 93—5.)



2. In a machine of the character specified, the combination of means for turning the hinged cover of a can over the top of the can-body; and a spring-pressed roller adapted to contact with and fully close said top.

6. In a machine of the character specified, the combination of means for supporting and traversing a hinged-top can; a cam adapted to underlie the out-turned top and to partially turn the same; a second cam contacting with the rear side of the top and continuing such turning movement; and means for finally pressing the top to its closed position.

8. A machine for closing receptacles having hinged flanged lids, comprising, in combination, means for successively advancing receptacles with the lids thereof in substantially horizontal open position; and a lid-closing device located above the path of the receptacles and operative to engage beneath and to swing each lid into closed position.

[Claims 1, 3 to 5, 7, 9, and 10 not printed in the Gazette.]

1,276,524. TATTING-SHUTTLE. AUGIE L. HANSEN, Evanston, Ill., assignor to Justrite Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 17, 1915. Serial No. 67,343. (Cl. 66—10.)

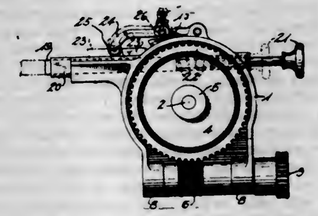


In a tatting shuttle, the combination with a shuttle frame comprising two elliptical plates secured together at their ends and spaced apart intermediate the ends, of a sheet metal bobbin holder comprising a U-shape body part having its limbs secured to the respective shuttle frame plates and extending transversely thereof, arms extending from the yoke of said body part transversely between said plates and having opposed bearing sockets, and a bobbin adapted to be inserted between said arms and having projections for engaging in said sockets.

1,276,525. STOP MECHANISM FOR MEASURING APPARATUS. PETER HARDMAN, Willimantic, Conn., assignor to American Thread Company, New York, N. Y., a Corporation of New Jersey. Filed Oct. 9, 1917. Serial No. 195,642. (Cl. 74—93.)

1. In a machine of the character described, a knock-off device, a shaft, a member carried thereby having a rotating movement and a side movement, a latch for engaging the knock-off member and means carried by the aforesaid member for releasing the latch when said member has moved a predetermined distance.

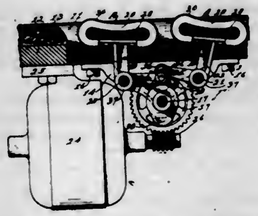
2. In a machine of the character described, a spring projected knock-off device, a latch for holding said member retracted, releasing mechanism for said latch comprising a shaft and means slidably mounted upon and rotatable by said shaft for releasing said latch when said shaft has turned a predetermined distance.



13. In a machine of the character described, a knock-off device, a shaft, a support therefor having a screw threated boss concentric with the shaft, a measuring wheel having a screw threaded hub mounted on said boss, a spline connection between said wheel and shaft whereby the rotation of the latter will cause a combined rotative and side movement of said wheel, a latch for engaging the knock-off member to hold it in one position, and means carried by said wheel to disengage said latch when said wheel has moved a predetermined distance, the last mentioned means being adjustable relatively to said wheel and said latch.

[Claims 3 to 12 not printed in the Gazette.]

1,276,526. MECHANISM FOR MANIPULATING THE SPINAL MUSCLES OF THE HUMAN BODY. CLARA B. HARDY and KATHARINE E. GIBSON, Los Angeles, Cal. Filed Oct. 24, 1917. Serial No. 199,373. (Cl. 128—16.)



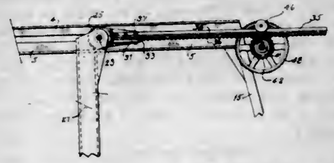
1. In a massaging machine, the combination with a table having an elongated opening therein, of a driven shaft longitudinally disposed beneath and centrally of said opening, means for rotating said shaft, a plurality of bell cranks pivotally supported on axes paralleling said driven shaft and arranged in sets on opposite sides thereof, a plurality of cams carried by said driven shaft for intermittently oscillating said bell cranks, and a plurality of vertebral applicator cushions held on said bell cranks for massaging the muscles of the spinal column.

4. In a massage machine, in combination with a driving element and a driven element, a support for the body of a patient, a plurality of intermittently oscillatable arms supported for operation by said driven element, and a plurality of applicator units formed of resilient material and having their upper sides concave for supporting the vertebral muscles of the patient, the movement of said applicators transversely of their supports and of the spine of a patient serving to press against and pull the muscles away from the spine.

[Claims 2, 3, 5, and 6 not printed in the Gazette.]

2,276,527. STEAM-SHOVEL MECHANISM. HOLLIS H. HARRIS, Lorain, Ohio, assignor to The Thew Automatic Shovel Company, Lorain, Ohio, a Corporation of Ohio. Filed Aug. 18, 1916. Serial No. 115,597. (Cl. 214—134.)

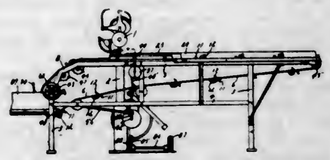
2. The combination of a trackway composed of a pair of inwardly facing separated parallel track members, a dipper stick extending into the space between the members, a tranverse pin carried by the dipper stick, rollers on said pin on the outer sides of the dipper stick occupying the track members, a yoke connected with the dipper stick, two rack bars secured to the yoke, a driving shaft, and two gears thereon meshing with the rack bars.



7. The combination, with a boom, of a trackway carried thereby and composed of two parallel tracks spaced apart, a dipper stick extending into the space between the tracks, supporting members for the dipper stick on opposite sides thereof and located within the tracks, a pair of rack bars connected with the dipper stick, said rack bars being arranged with teeth on their under sides, a shaft extending crosswise of the track members, a pair of gears rigid on said shaft and engaging the teeth of the rack bars, a pair of guiding wheels adapted to engage the opposite face of the rack bars, a pair of inwardly facing studs carrying said guiding wheels, a large driving gear mounted centrally and rigidly on said shaft and extending across the rack bars into the space between said wheels, a pinion meshing with said gear, and means for driving the last mentioned pinion.

[Claims 1 and 3 to 6 not printed in the Gazette.]

1,276,528. SHEET-STAPLING MACHINE. DANIEL A. HOPPING, Sturgis, Mich. Filed Oct. 13, 1917. Serial No. 196,415. (Cl. 1—8.)



1. In a machine for stapling sheets, the combination with a stapler comprising a control means, of a conveyer comprising conveyer chains and connecting cross pieces, supporting and driving sprockets for said chains, conveyer ways adapted to support the upper reaches of said conveyer chains, pockets for said conveyer comprising flights and clamping jaws mounted in coacting relation, said jaws being provided with inwardly projecting releasing tails, a jaw releasing plate with which said tails engage disposed below the upper reach of said conveyer so that said jaws are held open in receiving position, a jogger disposed to engage the sheets prior to the engagement thereof by said jaws, the stapler being disposed to act while the said jaws are engaged, ratchet members of varying numbers of teeth connected to the driving sprocket, an oscillating pawl carrier, pawls mounted thereon to coact with said ratchet members, the pawls being adapted to be adjusted to and from operative position, and operating connections for said control means and ratchet members, for the purpose specified.

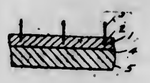
8. In a structure of the class described, the combination with a stapler, of a conveyer, pockets for said conveyer comprising flights and clamping jaws mounted in coacting relation and in front of the flights so that the articles are carried along by the flights, said jaws being provided with inwardly projecting releasing tails, a jaw releasing plate with which said tails engage disposed below the upper reach of said conveyer so that said jaws are held open in receiving position, means for driving

said conveyer, and operating connections for said conveyer and stapler.

14. In a machine for stapling sheets, the combination with a stapler, of a conveyer provided with flights, sheet clamping jaws mounted thereon in front of said flights and adapted to engage the sheets carried along by the flights, means for holding said jaws open when in receiving position, a jogger disposed to act prior to the engagement of the sheets by said jaws, means for driving said conveyer step by step, coöperating connections for said conveyer and stapler, means for actuating said jaws after the jogger has acted upon the sheets and prior to the stapling, and means for releasing said jaws.

[Claims 2 to 7, 9 to 13, and 15 to 20 not printed in the Gazette.]

1,276,529. RUBBER-SET RIFFLE. JOE HORN, Ray, Ariz. Filed Apr. 22, 1918. Serial No. 230,025. (Cl. 83—88.)



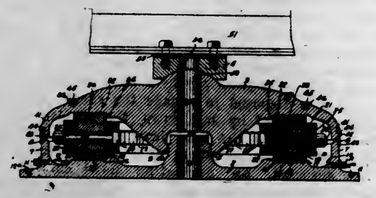
1. In a concentrating table or the like, a wooden deck; a coating of water-proof adhesive material applied to the wooden deck; a sheet of non-metallic water-proof material applied to the adhesive material, and having grooves in its upper face; and riffle plates driven into the grooves.

2. In a concentrating table or the like, a wooden deck; a coating of water-proof adhesive material applied to the wooden deck; a sheet of non-metallic water-proof material applied to the adhesive material, and having grooves in its upper face; water-proof adhesive material applied to the grooves; and riffle plates driven into the grooves and water-proof adhesive material.

3. As an article of manufacture, a sheet of linoleum having grooves in its upper face, rubber cement applied to the upper face of the linoleum and to the grooves, and metal riffle plates driven into the grooves.

4. In a concentrating table or the like, a wooden deck, a coating of rubber cement applied to the wooden deck, a sheet of linoleum applied to the rubber cement and having grooves in its upper face, rubber cement applied to the upper face of the linoleum and to the grooves, and metal riffle plates driven into the grooves and cement.

1,276,530. CENTER-BEARING. OTIS E. HOVEY, New York, N. Y., and CARL W. CHASE, Gary, Ind. Filed Aug. 29, 1916. Serial No. 117,423. (Cl. 64—64.)

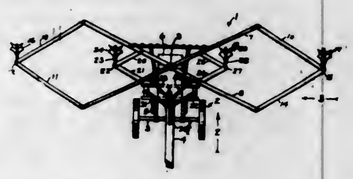


2. A center bearing comprising a recessed upper box having an integral downwardly extending post therein, a recessed lower box having an integral upwardly extending post therein, said boxes being relatively rotatable and said posts having overlapping ends arranged to maintain the boxes in axial alinement, opposite annular surfaces within the recesses of said boxes, a series of radial and axially horizontal frusto-conical rollers between and engaging with said bearing surfaces, and means on the upper box for supporting the load transmitted to the center bearing, said means comprising a lengthwise horizontal rib having a transversely curved surface and a load supporting saddle mounted on the rib to rock thereon, the contacting surfaces of said rib and saddle having a radius of curvature centered above the axial center of the rollers within said recessed boxes.

8. A center bearing comprising recessed relatively rotatable upper and lower roller boxes, said boxes having annular bearing surfaces in the recesses thereof, a series of radial axially horizontal frusto-conical rollers between the bearing surfaces, annular inner thrust and outer spacing rings, radially extending bolts connecting said rings and forming journals for said rollers, thrust washers on said bolts, said washers extending through openings in said outer spacing ring into engagement with the rollers, and castle nuts on the bolts for adjusting the washers on the bolts to equalize the end thrust of the rollers on said washers, said rings having slots to receive the bolt heads and the thrust washers to prevent relative rotative movement of the bolts and thrust washers.

[Claims 1 and 3 to 7 not printed in the Gazette.]

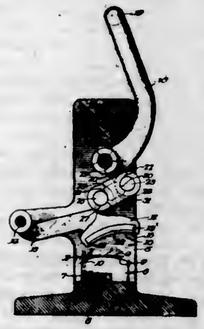
1,276,531. FURROWING-MACHINE. HORACE E. HOWARD and JOHN T. TITSWORTH, San Dimas, Cal. Filed Apr. 15, 1918. Serial No. 228,797. (Cl. 97—34.)



1. The combination with a cultivator of a lazy tong frame mounted horizontally crosswise of the cultivator, furrow shovels carried by the lazy tong frame in a transverse line and means for operating the lazy tong frame to move the shovels to and from each other.

2. The combination of a cultivator having a horizontal platform, of a lazy tong frame pivotally mounted upon the platform and extending laterally both ways, furrow shovels carried by the lazy tong frame in a transverse line, a hand lever mounted upon the cultivator and links connecting the hand levers to the lazy tong frame so that by manipulating the hand lever the lazy tong levers may be operated to move the furrow shovels to and from each other.

1,276,532. MACHINE FOR CURVING PRINTING-PLATES. HENRY E. HUBBARD, Oak Park, Ill., assignor to Addressograph Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 8, 1915. Serial No. 12,817. (Cl. 153—39.)



1. In a machine for curving printing plates, the combination of two members having oppositely disposed concentrically curved complementary, concave and convex faces, a resilient facing on the concave member, and means for bringing said members together and subjecting a printing plate disposed therebetween to pressure, whereby said yielding facing is forced between the lines of printing characters on said plate to evenly distribute the pressure thereon and said plate is bent to conform to the curvature of the faces of said members.

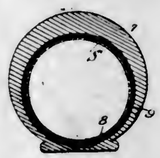
5. In a machine for curving printing plates, the combination of two members having oppositely disposed concentrically curved complementary, concave and convex faces, a rubber facing on the concave member, the face of the other of said members being nonresilient, and means for bringing said members together and subjecting a printing plate disposed therebetween to pressure, whereby said rubber facing is forced between the lines of printing characters on said plate to evenly distribute the pressure thereon and said printing plate is bent to conform to the curvature of the faces of said members.

8. In a machine for curving printing plates, the combination of a frame, a bed thereon having a convexly curved face and adapted to support a plate to be curved, a head movable to and from said bed and having a complementary face concavely curved concentrically with said bed, a resilient facing on said head, and means for moving said head toward and from said bed, including an operating lever and a toggle connection between said lever and said head.

11. In a machine for curving printing plates, the combination of a frame, a bed thereon having a convexly curved face and adapted to support a plate to be curved, a shaft above said bed, a bell-crank mounted on said shaft, arms pivotally mounted at one end of said frame, a head carried by said arms between said shaft and said bed and having a complementary face concavely curved concentrically with the face of said bed, a rubber facing on said head, and a connection between said head and one arm of said bell-crank lever comprising a shaft connected with said bell-crank lever, a shaft connected with said head, a block having segmental bearings interposed between said shafts providing a toggle adapted to force said head toward the bed upon operation of said bell-crank, and links disposed over the ends of said shafts to hold the shafts together and retain the block in position.

[Claims 2 to 4, 6, 7, 9, and 10 not printed in the Gazette.]

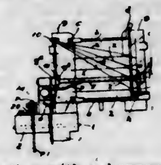
1,276,533. AUTOMOBILE-TIRE. SAMUEL HUMMEL, Fort Yates, N. D. Filed Sept. 29, 1916. Serial No. 122,863. (Cl. 152—8.)



A tire filler of the class described including, in combination with a tire casing, a resilient stiffening element adapted to be positioned in the tire casing, a wire cloth jacket surrounding said stiffening element, a cotton cloth jacket surrounding said element and the wire cloth jacket and having its outer face adapted to engage the inner face of the tire casing, and the edges of said casing being vulcanized when the filler is positioned therein.

1,276,534. WEFT-REPLENISHING LOOM. SIMEON S. JACKSON, Boston, Mass., assignor to The Stafford Company, Readville, Boston, Mass., a Corporation of New Jersey. Filed Aug. 22, 1914. Serial No. 858,014. (Cl. 139—85.)

1. The combination with a hopper or magazine, and a weft-end holder to which the starting ends of the reserve wefts extend rearwardly through between the weft-carriers in the hopper or magazine, of a weft-end guide which keeps the said starting ends beyond the portions of the weft-carriers which contact with one another, and causes the starting ends to pass through between the reduced end-portions of the latter, thereby obviating chafing of the starting ends by the said contacting portions.

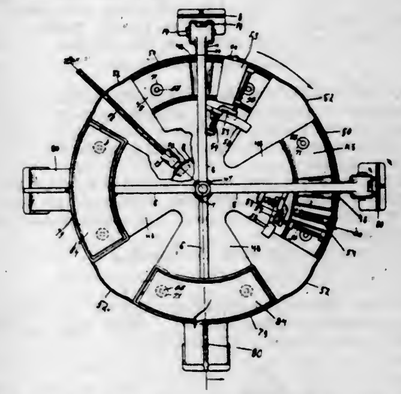


5. The combination with a hopper or magazine, and a weft-end holder to which the starting ends of the reserve wefts extend rearwardly through between the weft-carriers in the hopper or magazine, of a weft-end guide arranged to keep the said starting ends from between the portions of the weft-carriers which contact with one another, supported from the side and constructed at top to permit the starting ends to be looped around the same to engage them with the guide, and at bottom to permit escape of the said ends as the weft-carriers are called into service.

9. The combination with a hopper or magazine, and a holder for starting-ends of weft, of a weft-end catcher, into immediate engaging relations with which the starting end of a just-transferred weft-carrier is drawn by the first pick following the transfer, said weft-end catcher adapted to keep the hanging portion of the parted starting-end out of the path of weft-carriers subsequently transferred to the lay.

[Claims 2 to 4, 6 to 8, and 10 to 25 not printed in the Gazette.]

1,276,535. AUTOMATIC MACHINE FOR THE MANUFACTURE OF PAPER RECEPTACLES. DAVID J. JENNINGS, Cleveland, Ohio. Filed Mar. 20, 1915. Serial No. 15,811. (Cl. 93—79.)



1. A machine for the manufacture of paper receptacles comprising a die plate, a mandrel adapted to be rolled upon said die plate to form a body of a paper receptacle, a bearing upon which said mandrel is mounted, a revolubly mounted standard, an arm carried thereby, said bearing being adjustably attached to said arm, in combination with conduits leading from the outer surface of said mandrel to said standard, and means in combination with said standard for alternately directing said conduits to vacuum producing means and to air.

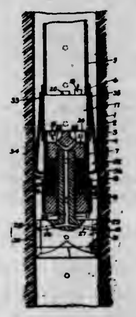
5. In a machine for the manufacture of paper receptacles, the combination of a die plate, a mandrel adapted to roll on the same to form the body of a receptacle, a magazine for the blanks from which the bodies are formed opposite the die plate, a tube extending through the die plate, means for applying suction thereto, and means for moving

the tube to the magazine to withdraw the adjacent blank and position it on the mandrel.

7. In a machine for manufacturing paper receptacles, the combination of a platen, a mandrel moving over the same, carrying means for the mandrel, a magazine opposite the platen, a tube extending through the platen and adapted to be reciprocated to the nearest blank in the magazine and carry a blank back to the platen, tubular passages leading from the periphery of the mandrel through its carrying members, and means for applying suction to each of said passages for causing each mandrel to seize a blank upon the platen and cause it to adhere to the mandrel.

[Claims 2 to 4 and 6 not printed in the Gazette.]

1,276,536. HYDRAULIC OIL-WELL WASHER. ANDREW T. JERGINS, Los Angeles, Cal. Filed Mar. 14, 1918. Serial No. 222,461. (Cl. 166—18.)



1. An oil well washer comprising a tubular washer stem, a packer around the lower end of the stem, a water motor fixed in the lower end of the stem, and a bit below the packer and connected to be operated by the motor.

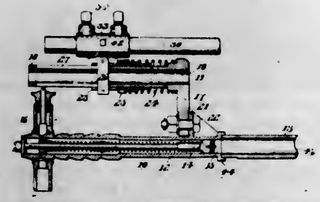
[Claims 2 and 3 not printed in the Gazette.]

1,276,537. EXPLOSIVE. FREDERICK GEOFFREY LEES JOHNSON, Chelsea, London, England, assignor to Palmer-Perchlorate Powder Company of Canada Limited, Montreal, Canada. Filed Sept. 21, 1916. Serial No. 121,371. (Cl. 52—1.)

2. An explosive composition consisting of about 84 per cent. of alkaline perchlorate and of about 16 per cent. of resin, mineral oil and zinc powder in approximately equal proportions.

[Claim 1 not printed in the Gazette.]

1,276,538. FLANGE-LUBRICATING DEVICE. WILLIAM C. JOHNSON, McKeesport, Pa. Filed Feb. 24, 1917. Serial No. 150,706. (Cl. 184—3.)



1. In combination with a lubricant dispensing tube and a supporting means therefor, a bracket rigidly attached to said dispensing tube and slidably connected to said supporting means, and means associated with said bracket to yieldably forwardly slide said dispensing tube and bracket relatively to said supporting means in feeding contact to the wheel flange.

2. In combination with a lubricant dispensing tube, a bracket attached thereto, a tensioned forward feeding means for the bracket whereby the dispensing tube is bodily resiliently operatively mounted in feeding contact with the wheel flange and a resilient swivel mount for the said feeding means.

3. In combination with a lubricator for wheel flanges having a dispensing tube, a resilient longitudinal shifting means for said distributing tube and a normally operative tensioned spring rotating head for the said shifting means.

4. A device of the class described comprising in combination with a lubricant dispenser having a dispensing tube, a bracket secured to said tube, an arm carried by the said bracket, a sleeve adjustably fixed to said arm, and a movement imparting spring for the arm and dispensing tube positioned between the said sleeve and bracket.

5. A device of the class described comprising in combination with a lubricant dispenser having a dispensing tube, a bracket secured to said tube, an arm carried by the said bracket, a sleeve adjustably fixed to said arm, a movement imparting spring for the arm and dispensing tube positioned between the said sleeve and bracket, a mounting tube and a spring swivel head between the said tube and sleeve.

[Claims 6 to 14 not printed in the Gazette.]

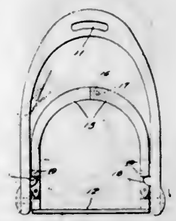
1,276,539. COLLAPSIBLE COT. JOHN A. JUTEN, Gilbert, Minn. Filed Aug. 13, 1917. Serial No. 185,933. (Cl. 5—5.)



1. A collapsible cot comprising a pair of parallel telescopic side members, a fabric top connecting said side members, a pivotal telescopic member arranged in a plane below said side members, pairs of cross legs pivotally mounted on the opposite ends and the intermediate portion of said pivotal member, the upper ends of said cross legs supporting the opposite ends and the intermediate portion of said side members, and means for locking the telescopic pivotal member in extended position.

[Claim 2 not printed in the Gazette.]

1,276,540. SAFETY-STIRRUP. GUSTAV KALL, Alexandria Bay, N. Y. Filed Oct. 10, 1916. Serial No. 124,848. (Cl. 54—49.)



A stirrup of the class described comprising an inverted substantially U-shaped frame, a segmental shaped tread plate having a straight edge and having upstanding arms projecting from its top face adjacent to the ends of its straight edge, the upstanding arms being provided with trunnions which pivotally engage the free ends of the limbs of the U-shaped frame, the frame having stops formed on the inner edges of its limbs, and a pair of interconnecting yoke jaws bridging the tread plate and pivotally connected with the upstanding arms on one side thereof, whereby the pivoted ends of the jaws are brought against the stops on the back faces of the latter, the jaws having abutment shoulders over-hanging and engaging the top edges of the stops to preclude pivotal movement of the jaws when in normal position, the tread plate having its straight edge adjacent to but to one side of its axis of pivotal movement, thereby reducing the tendency to rock the plate when it is engaged by the foot of a rider.

1,276,541. MANGER-GUARD FOR CALVES AND OTHER ANIMALS. EDGAR W. KAMMER, Fort Atkinson, Wis., assignor to James Manufacturing Company, Fort Atkinson, Wis., a Corporation of Wisconsin. Filed June 12, 1916. Serial No. 103,077. (Cl. 119—27.)



1. In a device of the described class, the combination with an inclosure for calves, of a plurality of stanchions, a manger, a horizontally swinging partition guard located between each pair of stanchions and projecting over the manger, a vertical standard located in rear of each partition, a pair of supporting brackets connected to said standard and provided with pin receiving sockets, and arms connected with said guards and adapted to engage in said sockets, said brackets being adapted to allow said guards to swing when lifted from normal position and to hold them against swinging movements when in normal position, whereby said guards may be held in either position independently of the manger walls and said walls being smooth and unobstructed throughout their length.

[Claims 2 and 3 not printed in the Gazette.]

1,276,542. INSCRIPTION MEANS FOR CAMERAS AND METHOD OF PHOTOGRAPHING WRITTEN INSCRIPTIONS. ELMER G. KESLING, Bloomfield, Mo. Filed May 22, 1917. Serial No. 170,214. (Cl. 95—1.1.)



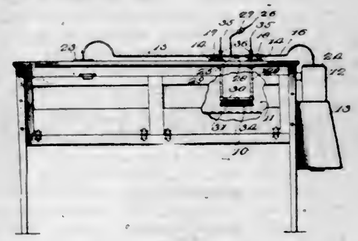
1. A camera having a view area and an aperture through its front wall to one side of the view area, and a door hinged to the camera and normally covering the aperture and provided on the face toward the interior of the camera with an inscription receiving surface, said door being movable about its hinge axis from the aperture-covering position to an open position, thus exposing the inscription receiving surface for access.

6. A roll film camera having a view area and an aperture through its front wall to one side of the view area, focusing and exposing means between the front and rear walls of the camera in line with the aperture, and a door hinged to the front wall and normally closing the aperture, said door having light transmitting correcting means for the focusing means, and a reservoir for inscription receiving material located at the hinge portion of the door for movement of the inscription receiving material across the door.

15. The method of light printing inscriptions upon a photo sensitive surface in a camera, which consists in producing the inscription upon a surface transmissible of actinic light, causing the transmission within the camera of a light image of the inscription through a pin hole aperture on to the sensitive surface, and at the same time modifying the intensity of the light so transmitted and reaching the sensitive surface in inverse relation to the variation of intensity of a light image between the optical axis and the margins of the field as projected by a pin hole aperture.

[Claims 2 to 5, 7 to 14, and 16 not printed in the Gazette.]

1,276,543. INCUBATOR-REGULATOR. ANDREW J. KILE, Harrisonburg, Va. Filed July 13, 1917. Serial No. 180,399. (Cl. 236—6.)



1. A device of the character described including regulating levers, means pivotally connecting the inner extremities of the said levers, a counterweight carried by the inner extremity of one of the levers for balancing both of the said levers, and a thermostat operatively connected with the levers for simultaneously actuating the said levers.

4. A device of the character described including regulating levers, means pivotally connecting the inner extremities of the said levers, a frame associated with the levers, a thermostat mounted upon the said frame, a cross head connected with the said thermostat and free at its extremities, and connecting means between the extremities of said cross head and the said regulating levers respectively.

7. A device of the character described including regulating levers, a pivot loop carried by the inner extremity of one of said levers, a fork carried by the inner extremity of the other of said levers and adapted to freely engage the said loop at different points thereon for pivotally connecting the levers, and a thermostat operatively connected with the levers for actuating the said levers.

9. A device of the character described including a regulating lever, a second regulating lever, a circular loop carried by the inner extremity of the first lever and pivotally engaged by the inner extremity of the second lever for pivotally connecting the said levers, the said loop being adapted for operative engagement by the inner extremities of a plurality of levers extending radially from the loop for pivotally connecting all of such levers with the first lever, and a thermostat operatively connected with the levers for actuating the said levers.

[Claims 2, 3, 5, 6, and 8 not printed in the Gazette.]

1,276,544. HORSESHOE-NAIL. ALFRED WILLIAM KNIGHT, London, England. Filed Nov. 18, 1916. Serial No. 132,032. (Cl. 85—12.)

1. The combination with a horse shoe having a nail hole provided with an inclined front and rear wall, of a horse shoe nail provided with an inclined front face arranged

at an angle to the front face of the nail shank and a flat rear face flush with the rear surface of said shank, the inclined front face of the nail head engaging the front wall of the nail hole when the nail is driven for throwing the head toward the rear and the shank toward the surface of the hoof.



2. The combination with a horse shoe having a nail hole provided with an inclined front and rear wall, of a horse shoe nail having a head of less length than the nail hole and provided with an inclined front face arranged at an angle to the front face of the nail shank, and a flat rear face flush with the rear surface of the shank, and an extension provided on said head having inclined lateral edges diminishing toward the top, the inclined front face of the head engaging the front wall of the nail hole, when the nail is driven, for forcing the head toward the rear and the shank toward the surface of the hoof.

[Claims 3 and 4 not printed in the Gazette.]

1,276,545. GUN-SIGHT. FRANK R. KOENIG, Masonville, Colo. Filed Oct. 15, 1917. Serial No. 196,717. (Cl. 33—54.)



1. A gun sight comprising a tubular body, having a section removable at a point intermediate the length of the body, a stem extending through the body and engaged by said removable section to rotatably mount the stem, and sighting means carried by the stem within the body.

2. A gun sight comprising a tubular body having a removable section, a stem extending transversely through the body with the removable section engaging the stem to rotatably mount the stem, means for holding the removable section in place, and sighting means carried by the stem within the body.

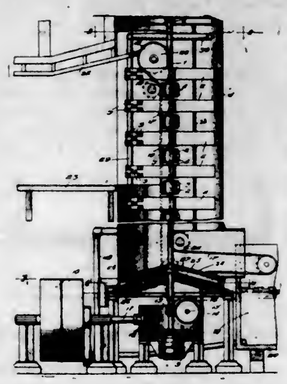
1,276,546. HOG-DEHAIRING MACHINE. LOUIS A. KRAMER, Chicago, Ill. Filed June 22, 1917. Serial No. 176,264. (Cl. 17—11.)

1. In a hog dehairing machine, a shaft, a plurality of scraper members carried by the shaft and distributed longitudinally thereof, means for rotating the shaft, and means for conveying hogs past all the scraper members in a plurality of separate paths parallel to the axis of the shaft and symmetrical with respect to the shaft, thereby balancing the strains on the shaft.

5. In a hog dehairing machine as per claim 1, collars on the shaft adapted to engage the hogs and to rotate the hogs by frictional engagement with the latter.

9. In a hog dehairing machine, a roating shaft, a plurality of scraper members carried by the shaft and spaced longitudinally thereon, means independent of gravity for conveying a hog in a path substantially parallel with the axis of the shaft and past all the said scraper members, and a substantially cylindrical casing coaxial with the shaft and disposed for limiting the movement of the hog radially outward from the axis of the shaft, and a web on the interior of the casing extending in a plane substantially radial of the axis of the shaft and disposed for limiting the movement of the hog circumferentially within the casing.

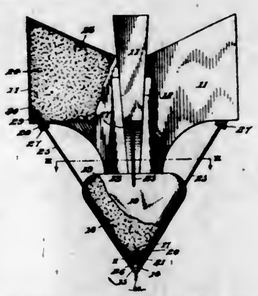
18. In a hog dehairing machine, a substantially vertical rotating shaft, scraper members carried by the shaft and distributed longitudinally thereof, and vertically disposed conveyer means arranged for freely suspending hogs and successively conveying them past all of the scraper members.



17. In a hog dehairing machine, a substantially vertical rotating shaft, scraper members carried thereby and distributed longitudinally thereof, a casing substantially concentric with the shaft, and vertically moving conveyer means arranged for freely suspending hogs.

[Claims 2 to 4, 6 to 8, 10 to 12, 14 to 16, 18, and 19 not printed in the Gazette.]

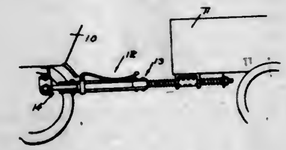
1,276,547. FLYING-BOMB. GEORGE KUPEC and JOHN SLOSAR, New Salem, Pa. Filed Sept. 26, 1917. Serial No. 193,238. (Cl. 102—2.)



A bomb comprising a hollow inverted conical base member, a post upon said member, radially projecting casings carried by the said post, explosive material within the said casings and base, ignition caps for the explosive material of said casings and base member, a shiftable plug at the apex of said base member, a downwardly projecting firing pin carried by said plug extending outwardly of the base member, a point upon said plug adapted for engaging the cap carried by the base member, firing rods having their lower ends engaging the said plug and their upper ends pointed and normally arranged spaced from the caps of said explosion casings whereby all of the said caps are adapted for simultaneous operation upon the inward movement of the said firing pin when the device strikes an object.

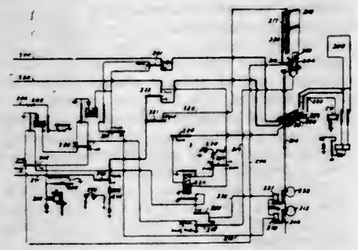
1,276,548. TRAILER CONNECTION. IRA E. LITTEN, Orange, Cal., assignor to Mrs. Maggie M. Litten, Orange, Cal. Filed Nov. 16, 1917. Serial No. 202,264. (Cl. 213—67.)

As an article of manufacture, a trailer connection for automobiles and the like comprising bolting brackets, a shackle plate between the bolting brackets, a bolt inserted through the bolting brackets and shackle plate to form a pivotal connection, a shackle pin fixed through the shackle plate and extending upwardly and downwardly, draw-bar clamping plates having openings in their front ends fitting upon the ends of the shackle pin above and below the shackle plate, a spacing block fixed between the opposite ends of the clamping plates, a U-strap secured to the



lower clamping plate and extending above the upper clamping plate, a clamping lever pivotally connected to the upper ends of the U-strap, a clamping lug carried by the clamping lever to engage the upper clamping plate and force the plates toward each other and toward the shackle plate, and a cylindrical draw-shaft rigidly secured to the spacing block and adapted for connection to a mounting bracket.

1,276,549. TELEPHONE-EXCHANGE SYSTEM. ALBEN E. LUNDELL, New York, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 26, 1916. Serial No. 139,512. (Cl. 179—27.)



1. In a telephone system, two groups of lines, a called line, means for extending a calling line of either group to said called line, two characteristic busy signaling means, and means depending on the group to which an extended calling line belongs for operatively associating therewith a certain one of said signaling means.

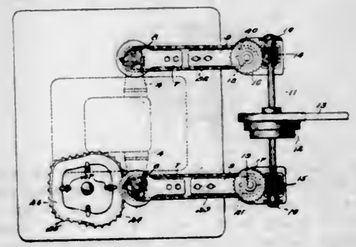
2. In a telephone system, groups of lines, a called line, a switch for connecting any one of said lines when calling to the called line when idle, two busy signaling apparatuses of different character associated with said switch, means for connecting only one of said apparatuses to calling lines belonging to one of said groups, and means for connecting only the other apparatus to calling lines belonging to the other group.

[Claims 3 to 5 not printed in the Gazette.]

1,276,550. WOODWORKING-MACHINE. KARL FREDRICK GUSTAV MAIER, South Ashburnham, Mass. Filed Oct. 10, 1916, Serial No. 124,765. Renewed Sept. 29, 1917. Serial No. 194,082. (Cl. 144—145.)

1. In an apparatus of the character described, in combination, a pattern, a pattern feed, a cutter for work mounted on said pattern, the pattern and feed having interengaging elements whereby the former is fed by the latter oppositely to the direction of cutting while permitting movement of the pattern at will toward and away from the pattern feed, and means for restricting the movement of the pattern in a reverse direction.

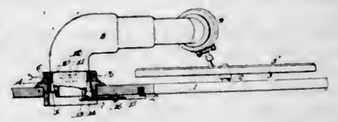
6. In an apparatus of the character described, in combination, a pattern, a pattern feed, a cutter for work mounted on said pattern, the pattern and feed having interengaging elements whereby the former is positively fed by the latter oppositely to the direction of cutting and throw-back by the cutter is prevented while permitting free movement of the pattern toward and away from the pattern feed.



10. A machine of the character described, in combination, a movable pattern for an article, means adapted to secure the article to the pattern for movement therewith, a rotary tool mounted to operate on a peripheral edge of the article, said pattern being laterally movable at the will of the operator to bring an edge of the work into and out of engagement with said tool, and means to feed the article relatively to the tool including a rotor, a shaft, a worm gear thereon, and a worm to rotate said gear and prevent slip or reverse rotation of said rotor.

[Claims 2 to 5, 7 to 9, and 11 to 14 not printed in the Gazette.]

1,276,551. TONE-ARM FOR TALKING-MACHINES. FRANK MALOCSAY, New York, N. Y., assignor to Sonora Phonograph Corporation, a Corporation of New York. Filed Feb. 11, 1916. Serial No. 77,690. (Cl. 274—23.)



1. In a talking machine, having a tone-arm, and a spherical surface thereon, diametrically disposed trunnions on the spherical surface, a collar surrounding the spherical surface, there being openings in the collar to receive the trunnions, a ball race in the collar, and balls therein, a ring, surrounding the collar and supporting the balls, a second ring engaging the balls, there being angle slots in the last mentioned ring for engagement with the trunnions, and a support for the rings.

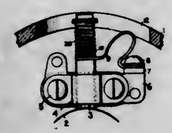
2. In a talking machine, the combination with a tone-arm, a wedge shaped finger at the lower extremity of the tone-arm, and a collar, the tone-arm engaging within the collar, a latch below and secured to the motor board and means for supporting the same, said latch having a double faced, arc-shaped track, said track engaging the finger to lock the tone-arm in any one of a plurality of positions.

3. In a talking machine, the combination with a tone-arm, and a spherical surface on the tone-arm, of a collar, a support for the same, there being an angle slot in the collar, a trunnion on the tone-arm engaging the slot, whereby the tone-arm may rotate on a plane parallel to the axis of the collar, a finger on the lower extremity of the tone-arm, of a spring actuated lever, a support for the lever, said lever having a track engaging either side of the finger for locking the tone-arm in a raised or low-

ered position, said head being arc shaped to permit movement of the tone-arm, while locked, in a horizontal plane.

[Claim 4 not printed in the Gazette.]

1,276,552. BRUSH-MOUNTING FOR DYNAMOS AND THE LIKE. CHARLES MARCUS, Far Rockaway, N. Y., assignor, by mesne assignments, to Bijur Motor Appliance Company, a Corporation of Delaware. Filed June 4, 1915. Serial No. 32,029. (Cl. 200—24.)



1. In construction of the class described, in combination, a commutator, a casing provided with an opening adjacent said commutator, a brush bearing on said commutator, a spring bearing on said brush and urging it toward said commutator, and a member interlocking with said casing at said opening and supporting said spring.

5. In construction of the class described, in combination, a brush, a lead, mechanical means interlocking with said lead and securing said lead to said brush, and means holding said mechanical means in position and independently securing said lead to said brush.

9. In construction of the class described, in combination, a brush, a lead, a screw holding said lead against the end of said brush and having its head projecting outwardly therefrom, a commutator, means mounting said brush upon said commutator and permitting movement of the same toward said commutator, a casing provided with an opening opposite said brush, a cross-piece positioned in said opening and provided with an inward projection, said cross-piece being formed to interlock with the walls of said opening upon being forced outwardly in a predetermined relation thereto, and a spring interlocking with said projection and the head of said screw and urging said brush inwardly and said cross-piece outwardly.

[Claims 2 to 4 and 6 to 8 not printed in the Gazette.]

1,276,553. LAMP-CHIMNEY GUARD. JACOB MASTENBROOK, Big Rapids, Mich. Filed June 4, 1917. Serial No. 172,773. (Cl. 240—97.)



In a lamp chimney guard and holder, the combination with the lamp holding fingers of the burner of the lamp, said fingers having their upper ends turned outwardly and their lower portions outwardly bowed, the said outwardly turned ends being formed with vertical openings, the said bowed portions being formed with vertically alined openings, of a guard including vertical stem portions having chimney embracing ring members on their upper ends, the lower ends of the stems being disposed through the openings in the fingers and extended beneath the burner.

1,276,554. SCABBARD. HIRAM PERCY MAXIM, Hartford, Conn., assignor to The Maxim Silencer Company, Hartford, Conn., a Corporation of Connecticut. Filed June 20, 1917. Serial No. 175,762. (Cl. 224—8.)

A scabbard provided with a metallic upper portion and also provided with an approximately rectangular block, the inner surface of which is curved to conform to the external surface of the metallic upper portion of the scabbard, the block having a flat outer face and also having a plurality of rivets extending rigidly from said flat face, the rivets being in alinement transversely of the scabbard and the distance between them being greater than the distance between either rivet and the end of



the block, a tab doubled on itself and fitted against the outer face of the block, the branches of the tab having transverse perforations to receive the respective rivets, and a plate fitted against the doubled over portion of the tab and having perforations in alinement transversely of the scabbard to receive the respective rivets, the latter being headed over the plate.

1,276,555. PROCESS OF PRODUCING FERTILIZER MATERIALS. THOMAS C. MEADOWS, New York, N. Y., assignor to Kaolin Products Corporation, New York, N. Y., a Corporation of Virginia. Filed Dec. 8, 1916. Serial No. 135,840. (Cl. 71—7.)

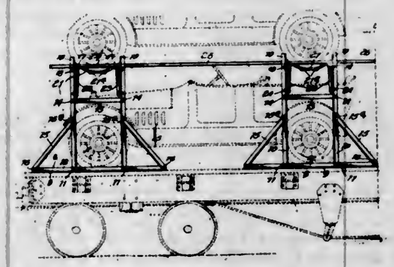
1. The process of producing potassium phosphates from hydrous potassium bearing rocks which consists in finely dividing said rocks; mixing with the finely divided rock material a solution of a commercial acid calcium phosphate; and digesting the mixture until a crude potassium phosphate is formed, substantially as described.

3. The process of producing potassium phosphates from glauconite which consists in finely dividing said glauconite; mixing water with the finely divided material to form a sludge; adding to said sludge commercial acid phosphate containing mono-calcium phosphate and a small proportion of di-calcium phosphate; and digesting the mixture at a pressure above three atmospheres until mono-potassium phosphate and di-potassium phosphate are formed, substantially as described.

4. The process of producing a crude potassium phosphate from "green sand" containing a substantial percentage of glauconite which consists in calcining said sand until substantially all the iron content of said glauconite appears in the ferric condition; finely dividing the calcined sand material; mixing sufficient water to said ground material to form a sludge; adding to said sludge commercial acid phosphate; and digesting the mixture until a crude potassium phosphate is formed, substantially as described.

[Claim 2 not printed in the Gazette.]

1,276,556. SUPPORTING-RACK. CHARLES L. MICHOD, Chicago, Ill. Filed Aug. 24, 1917. Serial No. 187,984. (Cl. 105—15.)



1. The art of storing automobiles which consists in providing beneath the front and rear portions of an automobile to be stored, an automobile-supporting structure formed of elements spaced apart longitudinally of the automobile and supported wholly from the floor of the storage space and to provide an unobstructed space below the automobile supported in elevated position, for housing another automobile to be stored.

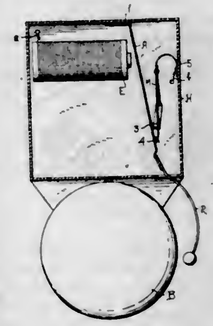
4. A rack for the purpose set forth comprising a pair of spaced end frames, a third frame extending crosswise of said end frames and connecting them together, said third frame being adjustable vertically on said end frames and being formed of members spaced apart extending crosswise of said end frames and in substantially the same horizontal plane, and cross members connected with the said members of said third frame.

7. A rack for the purpose set forth, comprising a pair of spaced end frames and a third frame extending crosswise of said end frames and connecting them together, said end frames being formed with upwardly-extending members, spaced apart with means connecting them together, and said third frame being formed of members extending lengthwise thereof in substantially the same horizontal plane and connected with said upwardly-extending members.

11. A rack for the purpose set forth, comprising a pair of spaced end frames and a cross-frame connecting said end frames together, said cross-frame containing in its upper surface troughs for receiving wheels of an automobile, said cross-frame being formed with members, spaced apart, and deflected intermediate their ends to form troughs, and cross-bars located adjacent each end of the rack at opposite sides of the pairs of said members.

[Claims 2, 3, 5, 6, and 8 to 10 not printed in the Gazette.]

1,276,557. CIRCUIT-BREAKER. JAMES H. MILLSPAUGH, Guthrie, Okla. Filed Sept. 10, 1917. Serial No. 190,589. (Cl. 175—349.)

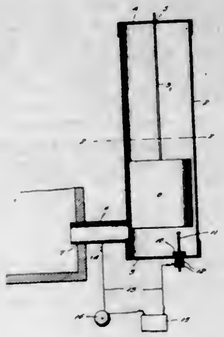


1. A circuit closer comprising two relatively movable members, one of said members comprising spaced strips having their contacting ends twisted whereby the edges of said strips engage the second member.

[Claim 2 not printed in the Gazette.]

1,276,558. TELEMETRIC SIGNAL. ROBERT R. MINTON, Cleveland, Ohio. Filed Jan. 15, 1917. Serial No. 142,523. (Cl. 200—34.)

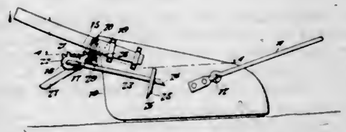
1. A telemetric alarm including a fluid container formed of conducting material having a concentric opening in the top thereof, movable buoyant means formed of conducting material arranged in said container, an upwardly projecting rod of conducting material thereon extending through the opening in the container, a contact element arranged on and insulated from the bottom of said container and disposed eccentric to the buoyant means whereby to cause tipping of the same when engaging therewith and engagement between the rod and top of the container, and



an external electric circuit having the terminals thereof connected to said contact element and said container.

[Claim 2 not printed in the Gazette.]

1,276,559. SCRAPER-DUMPER. MONTE A. MURRAY, Reedpoint, Mont. Filed Dec. 14, 1917. Serial No. 207,159. (Cl. 37—40.)



1. The combination with a shovel adapted to be moved over the surface, of bearings projecting from the shovel, shafts journaled in said bearings, ground engaging elements carried by one of said shafts, pinions carried by the respective shafts and in meshing engagement, and a lever for rotating said shafts through said pinion, whereby said elements are moved to an active position to elevate the rear end of the shovel.

2. The combination with a shovel adapted to be moved over a surface, of shafts journaled in bearings on said shovel, ground engaging elements on one of said shafts, a shield on each of said elements, means connected between said elements and shovel for turning the shaft and retaining said elements normally out of ground engaging position, co-engaging means between the referred to shaft and the remaining shaft in the bearings, and operating means for such co-engaging means whereby to turn both of said shafts and to bring the ground engaging element into ground engaging position.

[Claims 3 and 4 not printed in the Gazette.]

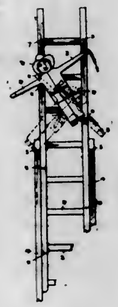
1,276,560. CLAMPING DEVICE. FORD MYERS, Mishawaka, Ind. Filed June 16, 1917. Serial No. 175,172. (Cl. 24—261.)



The herein described spring wire clasp comprising a pair of upright and substantially parallel arms whose

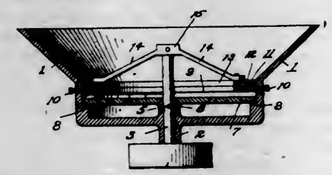
lower portions stand in one plane and whose upper portions are deflected out of that plane and curved, the upper ends of said arms being bent apart and continued into loops, the wires from said loops converging thence downward in a V-shaped tongue standing wholly in one plane and forward of the deflected portions of said arms, the lower end of said tongue being bent sharply forward where the arms are bent to the rear, and means connecting the lower ends of said arms.

1,276,561. TOY. GEORGE E. H. NELSON, Racine, Wis. Filed Oct. 31, 1917. Serial No. 199,485. (Cl. 46—40.)



A toy consisting of a ladder, legs pivoted to the sides of the ladder to support it in an upright position, stops arranged longitudinally to each side of the ladder, the stops on one side being alternately opposite the spaces between the stops on the opposite side of the ladder, a figure having outstretched arms for alternate engagement with said stops whereby it will swing alternately from side to side of the ladder in its gravity descent, and a supporting pin mounted on one side of the ladder in transverse alinement with the uppermost stop and adapted to coöperate with the latter to support the figures in elevated position by its outstretched arms.

1,276,562. ARTICLE-FEEDING HOPPER. ELOF NORDSTROM, Newark, N. J., assignor to American Dan Stopper Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Nov. 1, 1916. Serial No. 128,912. (Cl. 221—130.)



1. In a machine of the character described, a hopper provided with a bottom rotary plate and a discharge outlet into which articles are fed from said bottom plate, a rotary member spaced from said bottom plate, and means suitably mounted on said rotary member to move into and out of feeding engagement with the articles on said bottom plate.

4. In a machine of the character described, spaced rotary plates, one of said plates being provided with means adapted to yieldably engage articles on the other of said plates, and means interposed between said plates and adapted to hold said yieldable means out of engagement with said articles during part of the rotary travel of said plates.

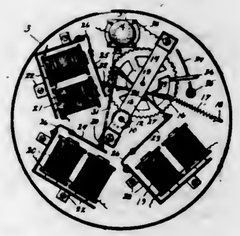
6. In a machine of the character described, a hopper for articles to be fed, said hopper being provided with a discharge outlet, a rotary plate for carrying articles, a yieldable finger suitably mounted to travel above said rotary plate, said finger being adapted to move into and out of feeding enagement with articles on said rotary plate, and means for controlling the movement of said yieldable finger into and out of contact with said articles.

10. In a machine of the character described, a hopper having a depressed rotary bottom plate adapted to carry articles to be fed, a rotary annulus above said rotary bottom plate, a fixed annulus or plate arranged below said rotary annulus and spaced from said rotary bottom plate to accommodate said articles, said fixed annulus being provided with an arcuate slot, and a resilient finger carried by said rotary annulus and adapted to slide over said fixed annulus and to engage said articles through said arcuate slot.

12. In a machine of the character described, a hopper provided with a depressed rotary bottom plate and a discharge outlet to which articles are fed from said plate, a fixed plate arranged above and spaced from said rotary bottom plate to accommodate said articles, said fixed plate being provided with a groove and a slot in the bottom wall of said groove, a rotary plate arranged above said fixed plate and having a groove corresponding to the groove in said fixed plate, and a yieldable member mounted on the upper rotary plate and in the registering grooves of said fixed plate and upper rotary plate, said yieldable member being adapted to periodically drop into engagement with said articles through said slot in the fixed plate, said slot in the fixed plate being arranged adjacent to the discharge outlet of said hopper.

[Claims 2, 3, 5, 7 to 9, and 11 not printed in the Gazette.]

1,276,563. DIRECTION-SIGNAL FOR VEHICLES. JOHN F. O'MALLEY, Geneva, N. Y. Filed May 8, 1917. Serial No. 167,238. (Cl. 177—337.)

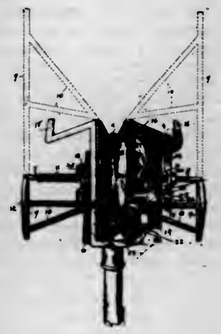


1. A device of the character described, comprising a casing, a member revolubly mounted therein, an indicator movable with said member, a plurality of electro-magnets in said casing, swinging armatures individually associated with said magnets, and means connected individually with said armatures and different points at the periphery of said member and a control switch, said magnets and said switch being included in a circuit including a source of current.

5. A device of the character described, comprising a casing, a shaft revoluble in said casing, an indicator on said shaft adapted to be moved through selected arcs, electro-magnets in said casing corresponding in number to the number of arcs, armatures associated with said magnets, a second shaft journaled in said casing, a gear on said second named shaft, a pinion on said first named shaft meshing with said gear, members pivotally connected with said armatures and individually pivotally connected to the periphery of said gear, a switch arm and a plurality of contact buttons associated with said magnets, an incandescent lamp in said casing, and a second switch arm and contact button associated with said lamp, said lamp, said switch arms and contact buttons, and said magnets being included in a circuit together with a source of current.

[Claims 2 to 4 not printed in the Gazette.]

1,276,564. TROLLEY-REPLACER. EARL L. PANGBORN and HENRY W. NIERMEYER, Indianapolis, Ind. Filed May 7, 1917. Serial No. 166,963. (Cl. 191—83.)



1. The combination, with a trolley wheel and harp, of a two-part rod passing through the axis of rotation of the wheel and each part terminating at its outer end in a right angle arm extending parallel with the trolley wheel, oblique members arranged on and sloping from said arms to the periphery of the trolley wheel, spring means to move the arms substantially to a vertical position when the springs are unrestrained, automatic means to lock the arms when they are in a substantially horizontal position, and automatic means actuated by the wire when the trolley is off of it, to unlock the arms.

2. The combination, with a trolley wheel and harp, of a two-part rod passing through the axis of rotation of the wheel and each part terminating at its outer end in a right angle arm extending parallel with the trolley wheel, oblique members arranged on and sloping from said arms to the periphery of the trolley wheel, automatic means to lock the arms in a substantially horizontal position when they are moved thereto by contact with the overhead work supporting the trolley wire, means actuated by the wire when the trolley is off to unlock the arms and spring means to raise the arms to a substantially vertical position when unlocked.

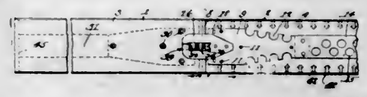
3. The combination, with a trolley wheel and harp, of a two-part rod passing through the axis of rotation of the wheel and each part terminating at its outer end in a right angle arm extending parallel with the trolley wheel, oblique members arranged on and sloping from said arms to the periphery of the trolley wheel, automatic means comprising a ratchet wheel and pawl-lever to lock the arms in a substantially horizontal position when they are moved thereto by contact with the overhead work supporting the trolley-wire, means actuated by the wire when the trolley is off to move the pawl-lever to unlock the arms, and spring means to raise the arms to a substantially vertical position when unlocked.

4. The combination, with a trolley wheel and harp, of a two-part rod passing through the axis of rotation of the wheel and each part terminating at its outer end in a right angle arm extending parallel with the trolley wheel, oblique members arranged on and sloping from said arms to the periphery of the trolley wheel, automatic means comprising a ratchet wheel and pawl-lever to lock the arms in a substantially horizontal postion when they are moved thereto by contact with the overhead work supporting the trolley wire, means actuated by the wire when the trolley is off to move the pawl-lever to unlock the arms, means to hold the pawl-lever out of engagement with the ratchet wheel, means by the lowering of the arms to release said last means, and spring means to raise the arms to a substantially vertical position when unlocked.

5. The combination, with a trolley wheel and harp, of a two-part rod passing through the axis of rotation of the wheel and each part terminating at its outer end in a right angle arm extending parallel with the trolley wheel, oblique members arranged on and sloping from said arms to the periphery of the trolley wheel, automatic means comprising a ratchet wheel and pawl-lever to lock the arms in a substantially horizontal position when they are moved thereto by contact with the overhead work supporting the trolley wire, means on both sides of the trolley wheel actuated by the wire when the trolley is off to move the pawl-lever out of engagement with the ratchet wheel, means on said last wheel by the lowering of the arms to release said last means, and spring means to raise the arms to a substantially vertical position when unlocked.

[Claims 6 and 7 not printed in the Gazette.]

1,276,565. METAL-BOUND JOINT OR LOCK STRAIGHT-EDGE. WILLIAM PASCHALL, Birmingham, Ala. Filed Sept. 29, 1917. Serial No. 194,021. (Cl. 33—75.)

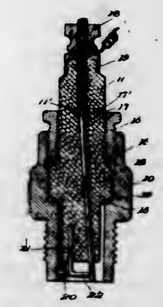


3. A device of the class described comprising coöperating members and anchors carried thereby, the anchors including abutting end flanges, one end flange having an opening; a head constituting a part of one anchor and extended through the opening, the head having an aperture; a bearing constituting a part of the other anchor and received in the aperture of the head; and a screw threaded into the bearing and engaging the head within the contour of the aperture, to hold the end flanges together.

4. A device of the character described comprising coöperating members and anchors carried thereby, the anchors including end flanges, the end flange of one anchor having an opening; a loop-shaped head constituting a part of the other anchor and received in the opening, the head having a lug; a bearing carried by the first specified anchor and received in the opening of the head; and a screw threaded into the bearing and engaging the head within the contour of the opening to hold the end flanges together, the first specified anchor having a recess wherein the lug of the head is received.

[Claims 1 and 2 not printed in the Gazette.]

1,276,566. SPARK-PLUG. ARTHUR D. PORTER, Somerville, N. J., assignor to Walter Morse De Witt, Somerville, N. J. Filed Mar. 29, 1917. Serial No. 158,382. (Cl. 123—169.)



2. A spark plug including a shell, a porcelain fitted therethrough and provided with an internal recess, a main electrode fitted through the porcelain and formed

with a circumscribing reduced portion providing at opposite extremities thereof shoulders upon the electrode and weakening the electrode at the said reduced portion to be bent longitudinally and project beyond the inner end of the porcelain adjacent one side thereof, the reduced portion of the electrode being disposed within said recess, a filler arranged within the recess to mold into the reduced portion of the electrode and engage said shoulders for connecting the electrode with the porcelain, a ground electrode projecting into the shell from the lower extremity thereof, and a neutral electrode mounted upon the lower extremity of the porcelain and projecting between the main and ground electrodes to coöperate therewith.

[Claim 1 not printed in the Gazette.]

1,276,567. PROTECTIVE DEVICE. CHARLES S. PRICE, Rutherford, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 16, 1917. Serial No. 155,246. (Cl. 175—275.)



1. A protective device having in combination a tubular sheath, a fusible conductor inclosed within and extending along the greater portion of said sheath and a self-contained heat coil inclosed within the remaining portion of said sheath and mounted independent of said fusible conductor, said heat coil element comprising a tubular container providing an inner air chamber, a circuit controlling device and a heating winding inclosed within said chamber, and an outer air space between said sheath and said tubular container.

4. In a protective device, a self-contained heat coil comprising a tubular container, a circuit controlling device mounted under tension therein, a metal cap to which said circuit controlling device is connected, inclosing one end of said container, a heating element for operating said circuit controlling device, and an insulating disk to which said heating element is secured closing the other end of said container, said disk being held against said container by the tension of said circuit controlling device.

[Claims 2 and 3 not printed in the Gazette.]

1,276,568. REGULATOR FOR X-RAY TUBES. JOSEPH REONIER, Paris, France, assignor to himself and Paul Render, Paris, France. Filed Dec. 1, 1917. Serial No. 204,948. (Cl. 176—125.)



1. A regulator for X-ray tubes, comprising an air chamber of vitreous material having an inlet branch containing a porous plug, and a branch leading to the X-ray bulb, and also having a mercury cup which is located opposite the first-named branch; and a capillary tube of vitreous material within said chamber fused at its opposite ends to the walls thereof and extending from said first-named branch to said cup, one end of said tube opening directly into said first-named branch, and the other end projecting into the mercury in said cup; said tube being normally filled with mercury and having a single body of porous material fused into it at a point below the level of the mercury, whereby the admission of air under pressure through said first-named branch will force the mercury downward through said tube into said cup, so as to uncover said porous body and permit the passage of air therethrough into and through the second-named branch.

2. A regulator for X-ray tubes, comprising an air chamber of vitreous material having an inlet branch containing a porous plug, and a branch leading to the X-ray bulb, and also having a mercury cup which is located opposite the first-named branch; a capillary tube of vitreous material within said chamber fused at its opposite ends to the walls thereof and extending from said first-named branch to said cup, one end of said tube opening directly into said first-named branch, and the other end projecting into the mercury in said cup; and a centrally apertured partition member of vitreous material disposed transversely within the second-named branch to prevent the rays from the bulb from entering the regulator; said tube being normally filled with mercury and having a single body of porous material fused into it at a point below the level of the mercury, whereby the admission of air under pressure through said first-named branch will force the mercury downward through said tube into said cup so as to uncover said porous body and permit the passage of air therethrough into and through the second-named branch.

1,276,569. HOISTING APPARATUS. JOSEPH HAROLD RIOG, Goldengate, Ill. Filed Oct. 6, 1917. Serial No. 195,105. (Cl. 254—188.)

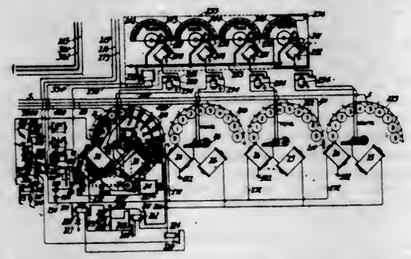


1. In hoisting apparatus, the combination of a two-part casing, a shaft supported between the parts of the casing, a pulley mounted on the shaft and having stepped grooved portions, and a tackle trained over the said stepped portions of the pulley in the grooves and extending through one end of the casing, one part of the casing having stepped concentric grooves in its inner side adapted to closely receive said stepped pulley and maintain the tackle thereon particularly when slackened.

2. In hoisting apparatus, the combination of a casing, a pulley mounted in the casing, a tackle trained over the pulley, a keeper pivoted in one side of the casing and having a beveled inner end adapted to bind against the tackle on the pulley, a laterally extending nose, and an arm projecting outwardly through the casing for manipulation of the keeper, a spring carried by the casing and engaging said nose for normally urging the keeper to turn in a direction to bind the beveled end thereof against the tackle, and a retaining device arranged exteriorly upon the casing for engagement with the arm to hold it in releasing position and against the tension of the spring.

[Claim 3 not printed in the Gazette.]

1,276,570. REGISTERING AND RECORDING DEVICE. JOHN G. ROBERTS, Dobbs Ferry, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Original application filed Mar. 7, 1914, Serial No. 823,094. Divided and this application filed Dec. 30, 1916. Serial No. 139,816. (Cl. 177—338.)



1. A recording mechanism comprising sections with a plurality of recording members in each section and a plurality of actuating devices operatively associated in succession with corresponding members in the several sections.

2. A recording mechanism comprising sections with a plurality of recording members in each section, a plurality of actuating devices for said members and common to the several sections, and means for shifting the control of said actuating devices from one section to another.

3. A recording mechanism comprising sections each adapted to receive and record numeral registrations at a plurality of points, a recording member at each of said points in each section, a plurality of actuating devices, one for each of said members in one section and the corresponding members in the other sections, said actuating devices being operatively associated with the members in one section at a time, and means for shifting the control of said actuating devices from one section to another.

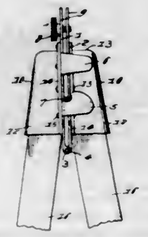
13. In a call recording system, the combination with a mechanism comprising sections with a plurality of recording members in each section and a plurality of actuating devices operatively associated with corresponding members in the several sections, of means for operating any one of said actuating devices to record a call in one section, and means automatically responsive to the recording of each call to shift the control of the actuating devices to another section.

14. In a call recording system, the combination with a mechanism comprising sections, a plurality of recording members in each section and a plurality of actuating devices operatively associated with the corresponding members in the several sections, of means for operating any one of said actuating devices to record a call in one section, means for shifting the control of the actuating devices from section to section as the calls are received, a register for each section, and means for transferring a record in any section to the corresponding register.

[Claims 4 to 12 not printed in the Gazette.]

1,276,571. CLOTHES-PROP HOLDER. JULIA A. ROBINSON, Manchester, Iowa. Filed Jan. 10, 1918. Serial No. 211,206. (Cl. 68—12.)

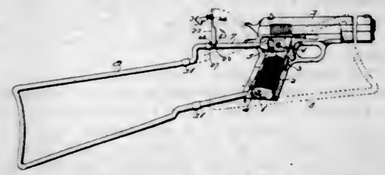
2. A device of the character described including a pair of plates having lower edges swingingly connected to each other, opposed clothes line engaging hooks projecting at right angles from the inner surface of one of the plates and at the side edges thereof, opposed guards extending from and integral with the same plate and positioned above the hooks, an adjusting screw for removably holding the upper ends of the plates in close relation with each other, and clothes prop receivers carried on the



outer surfaces of the plates and opening toward the lower edges of the plates.

[Claim 1 not printed in the Gazette.]

1,276,572. SUPPLEMENTAL STOCK FOR SMALL-ARMS. WILLIAM C. ROGERS, Fort Sheridan, Ill. Filed May 4, 1918. Serial No. 232,497. (Cl. 42—72.)



1. In a supplemental stock for fire-arms, an open tubular frame comprising two sections formed with interconnecting legs, plugs fixedly held in the legs of one section, other plugs loosely engaging in the legs of the other sections, connections between the plugs of the one section and those of the other section, and means carried by the legs of one section and engageable with the legs of the other section whereby the two sections are rigidly connected together.

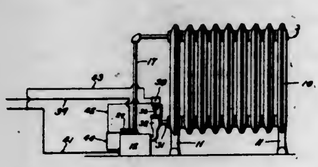
3. In a supplemental stock for fire-arms, an open tubular frame comprising two sections formed with interconnecting legs, plugs fixedly held in the legs of one section and projecting beyond the ends thereof, other plugs loosely carried in the legs of the other or second said section, the legs of the said second section at their extremities being engageable with the projecting ends of the said fixed plugs, sleeve members carried by the legs of the said second section, pins carried by the legs of the said second section and projecting interiorly and exteriorly thereof, the loose plugs being formed with shoulders for engagement with the interior projections of the pins, the sleeve members being formed with rectangular shaped openings into which the exterior projections of the pins project, the sleeve members being further formed with bayonet slots at the ends remote from the rectangular shaped openings, and pins carried by the legs of the first said section for engagement with the bayonet slots for the useful purpose specified.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,276,573. ELECTRICALLY-HEATED RADIATOR. JAMES J. ROHAN, St. Louis, Mo., assignor of one-half to Charles E. Mack, St. Louis, Mo. Filed Mar. 23, 1918. Serial No. 224,201. (Cl. 219—38.)

1. The combination with a radiator, of an electrically heated steam generator associated with said radiator, said steam generator having a connection with a source of water supply, an electrically operated valve for controlling the passage of water through said connection, and means adapted to be actuated by the pressure developed within the steam generator for controlling the

operation of the electric heater within said generator and for controlling the action of the electrically operated valve.



2. The combination with a radiator, of an electrically heated steam generator associated with said radiator, which steam generator is supplied with water of condensation from the radiator, and means adapted to be actuated by the pressure developed within the steam generator for controlling the flow of water of condensation from the radiator to the steam generator.

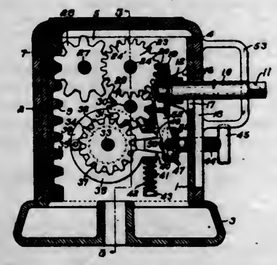
3. The combination with a radiator, of an electrically heated steam generator asaociated with said radiator, which steam generator receives water of condensation from the radiator, and means adapted to be actuated by the pressure developed within the steam generator for controlling the action of the electric heating medium associated with said generator and for controlling the passage of water of condensation from the radiator to said generator.

8. The combination with a radiator, of an electrically heated steam generator having a heating chamber, a steam generating chamber and a water circulating chamber, a tubular connection from the radiator to the water circulating chamber of the generator, and a tubular connection from the steam generating chamber within said generator to said radiator.

10. The combination with a radiator, of an electrically heated steam generator having a heating chamber, a steam generating chamber and a water circulating chamber, a tubular connection from the radiator to the water circulating chamber of the generator, a tubular connection from the steam generating chamber within said generator to said radiator, and means adapted to be actuated by the pressure developed within the generator for controlling the flow of water through the tubular connection from the radiator to the water chamber within the generator.

[Claims 4 to 7 and 9 not printed in the Gazette.]

1,276,574. SELF-LOWERING JOURNAL-JACK. MEYER ROSEN, Bloomington, Ill. Filed Oct. 10, 1917. Serial No. 195,699. (Cl. 254—97.)



4. A jack comprising a casing composed of separable members, gearing for separating said members to effect the lifting movement, and coöperating means including screw means to effect disengagement of the gearing and return movement of the casing members.

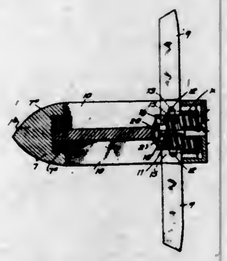
9. A jack comprising a casing composed of separable members, gearing for separating said members to effect the lifting movement and including a ratchet, a disk having pawls to engage said ratchet, a brake band to engage said disk, a screw to release said brake band, and means to disengage said gearing.

20. A jack comprising a casing composed of separable members, gearing for separating said members to effect a lifting movement of one of said members, means to disengage said gearing to permit return movement of the lifted member, a disk-like member driven by said gearing, a brake about said disk-like member, and means to move the brake into braking relation with said disk-like member only upon engagement of said gearing to permit said lifting movement.

21. A jack comprising a casing composed of separable members, gearing for separating said members to effect the lifting movement, a ratchet driven from said gearing, a member having pawls to engage said ratchet, a plural member brake to engage said pawl member, and means acting to disengage the gearing and to expand the members of said brake.

[Claims 1 to 3, 5 to 8, 10 to 19, 22, and 23 not printed in the Gazette.]

1,276,575. PROJECTILE. FREDERICK M. ROSS, Cincinnati, Ohio. Filed May 9, 1917. Serial No. 167,418. (Cl. 102—26.)



1. A projectile consisting of a body portion having a series of longitudinally extending slots, a series of arms located wholly within the slots, and pivotally mounted at one end to swing outwardly therefrom, a single spring engaging the ends of the arms, adapted to throw the arms to extended positions when released, and a trigger engaging the ends of the arms, adapted to release the arms to swing in response to the pressure of the spring when the propelling charge of the projectile is exploded.

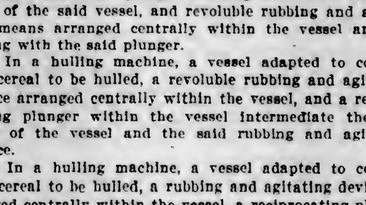
4. A projectile consisting of a body having a series of longitudinally extending slots, a series of arms located within the slots, a pivot pin mounted upon each arm, a collar adapted to retain the pivot pin within the body to pivotally mount the arms therein, a spring normally tending to move the arms to expanded positions with relation to the body, and a trigger operative in response to the explosive pressure of the propelling charge of the projectile and adapted to release the arms to permit them to move to their expanded positions in response to the action of the spring.

[Claims 2 and 3 not printed in the Gazette.]

1,276,576. RAIL-FASTENING. DENNIS RYAN, Salt Lake City, Utah. Filed June 10, 1918. Serial No. 239,191. (Cl. 238—5.)

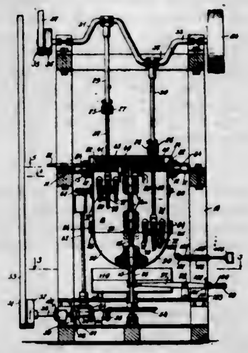
1. A rail fastening device including rail receiving means, a rigid apertured extension on the inner portion of one of said rail receiving means, a second apertured extension hinged for horizontal movement to the inner portion of the remaining rail receiving means, and means for adjustably connecting said extensions.

2. A rail fastening device including base plates, rail base engaging arms on said plates, a rigid apertured extension carried on the inner portion of one of said base plates, a second apertured extension hinged to the inner portion of the remaining base plate, and means for adjustably connecting said extensions.



3. A rail fastening device including base plates, rail base engaging arms formed integral with said plates, portions of said base plates being recessed to form seats, rail base clamping arms engaged in said seats, an extension rigidly carried on the inner portion of one of said base plates, a second extension pivotally connected to the inner portion of the remaining base plate, and means for adjustably connecting said extensions.

1,276,577. HULLING-MACHINE. CARLOS SCHAFLER, Merida, Mexico. Filed Feb. 18, 1918. Serial No. 217,900. (Cl. 83—33.)



1. In a hulling machine, a revoluble vessel adapted to contain the cereal to be hulled, a plunger eccentrically within the vessel and having an up and down and a turning motion, the plunger coacting with the inner surface of the said vessel, and revoluble rubbing and agitating means arranged centrally within the vessel and coacting with the said plunger.

2. In a hulling machine, a vessel adapted to contain the cereal to be hulled, a revoluble rubbing and agitating device arranged centrally within the vessel, and a reciprocating plunger within the vessel intermediate the side wall of the vessel and the said rubbing and agitating device.

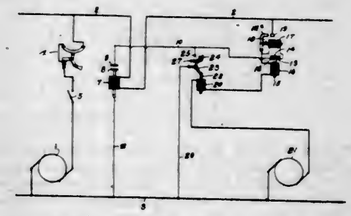
3. In a hulling machine, a vessel adapted to contain the cereal to be hulled, a rubbing and agitating device arranged centrally within the vessel, a reciprocating plunger within the vessel intermediate the side wall of the vessel and the said rubbing and agitating device, means for rotating the said vessel, means for rotating the said rubbing and agitating device and the said plunger, and means for moving the plunger up and down.

10. In a hulling machine, a plunger having vertically disposed cone-shaped hulling members, of which one is centrally disposed and provided with radial arms supporting the other hulling members, the said hulling members and the said arms being roughened at the sides and bottoms, and the tops being smooth and rounded off.

14. In a hulling machine, a vessel adapted to contain the cereal to be hulled, means for rotating the said vessel, a driven shaft extending centrally through the said vessel, rubbing and agitating spider wheels secured on the said shaft within the said vessel, plungers within the vessel intermediate the said wheels and the side wall of the said vessel, plunger shafts carrying the said plungers, means connected with the said plunger shafts to move the same up an down, and means connecting the said central shaft with the said plunger shafts to rotate the latter from the said central shaft, a main shaft, gearing connecting the said main shaft with the said central shaft, and gearing connecting the said main shaft with the said vessel to rotate the latter.

[Claims 4 to 9 and 11 to 13 not printed in the Gazette.]

1,276,578. ELECTRIC CONTROL FOR GENERATORS. HERBERT A. SCOTT, Saltsburg, Pa. Filed Jan. 28, 1916. Serial No. 74,861. (Cl. 171—312.)

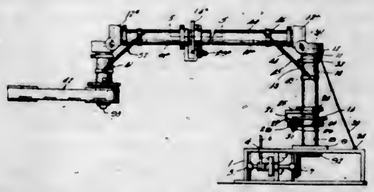


1. In combination with a pair of mains, a main generator connected directly across the mains, an auxiliary generator, a switch responsive to the current in the mains for forming a complete circuit for the auxiliary generator and means arranged in said circuit adapted upon the completion of said circuit to connect the auxiliary generator directly across the mains.

3. In combination with a pair of mains, a main generator bridged directly across the mains, an auxiliary generator, a main solenoid switch having its coil arranged in one of the mains and adapted to close the auxiliary generator circuit, means for keeping said circuit closed and means energized upon the completion of the auxiliary generator circuit for connecting the auxiliary generator directly across the mains.

[Claim 2 not printed in the Gazette.]

1,276,579. SAW. FLETCHER J. SCOTT, Hurdland, Mo. Filed Jan. 27, 1917. Serial No. 144,925. (Cl. 143—82.)

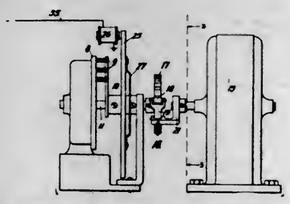


1. In a saw of the class described, a saw frame comprising a back, an arm extending angularly from one end of the back, a pivoted arm connected to the opposite end of the back, a saw passing through each of the arms, guide pulleys at the points where the arms join the back for guilding the saw, a guide pulley at the free end of the pivoted arm, a drive sprocket at the free end of the rigid arm, a chain saw passing over said sprocket and pulleys and having one run exposed and means for tending to move the arms apart to keep the exposed run of the saw taut.

2. In a saw of the class described, a saw frame comprising a back, an arm extending angularly from one end

of the back, a pivoted arm connected to the opposite end of the back, an idler pulley journaled at the point of connection of each arm with the back and in the free end of each arm, an endless chain saw arranged over the idler pulleys, a drive sprocket at the free end of the first arm, and spring means for normally urging the arms apart to tension the exposed run of the saw.

1,276,580. SYNCHRONIZING SYSTEM. CHARLES E. SCRIBNER, Jericho, Vt., assignor, by mesne assignments, to Western Electric Company, Incorporated, a Corporation of New York. Filed May 19, 1915. Serial No. 29,111. (Cl. 172—293.)



1. A synchronizing system comprising a rotatable correcting body, a rotatable corrected body, independent members for rotating said bodies, a clutch interconnecting said corrected body and its driving member, and means controlled by said correcting body to momentarily arrest said corrected body causing said clutch to slip and producing an invariable predetermined relative displacement between said corrected body and its driving member for maintaining synchronism between the two bodies.

2. Synchronizing apparatus comprising a distributer head, a brush carrying arm therefor, means for driving said arm, a clutch between said arm and said means, a member rigidly connected to said brush arm, and an electromagnet adapted to attract said member for arresting said arm and causing said clutch to slip an invariable predetermined amount.

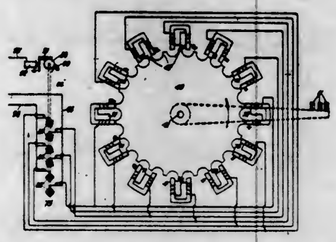
3. Synchronizing apparatus comprising a distributer head, a rotatable brush carrying arm therefor, a motor for driving said arm, a slip clutch interconnecting said arm and said motor, an electromagnet, and a flexible disk adapted to be attracted by said electromagnet when energized, and means coöperating with said disk, said arm and said electromagnet for causing said clutch to slip a predetermined invariable amount to produce relative displacement between said arm and said motor.

4. A synchronizing system comprising a movable correcting body, a movable corrected body, independent members for driving said bodies, a clutch interconnecting said corrected body and its driving member, a flexible disk connected to said corrected body, and a magnet under the control of the correcting body and adapted when energized to magnetically hold said disk, causing said clutch to slip and producing relative displacement between said corrected body and its driving member.

1,276,581. SYNCHRONIZING SYSTEM. CHARLES E. SCRIBNER, Jericho, Vt., assignor, by mesne assignments, to Western Electric Company, Incorporated, a Corporation of New York. Filed May 19, 1915. Serial No. 29,112. (Cl. 172—293.)

1. A synchronizing system comprising two independently driven bodies, a transmission line operatively interconnecting said bodies, a motor for driving one of said bodies, and means controlled by current impulses over said line to shift the magnetic field of said motor to alter the speed thereof.

2. A synchronizing system comprising two independently movable bodies, a transmission line operatively interconnecting said bodies, a motor having a plurality of electromagnetic windings for driving one of said bodies, and a rotatory switch member controlled by current impulses over said line for controlling the energization of said windings to vary the speed of their motor.



3. A synchronizing system comprising a correcting current distributer, a corrected current distributer, a transmission line operatively interconnecting said distributers, a motor having a plurality of electromagnetic windings divided into groups for driving said corrected distributer, an energizing source for said windings, a multiple switch for associating the different groups of said windings with said source, and electromagnetic means controlled by current impulses imparted to said line from said correcting distributer to control the operation of said switch.

4. In a synchronizing apparatus, the combination of a plurality of electromagnetic windings divided into groups, means associated with said windings to convert electromagnetic energy into a rotary movement, a source of energizing current for said windings, a multiple switch controlling the circuit connections associated with said windings and said source for separately connecting any group of windings to said source, and an electromagnet for actuating said switch.

1,276,582. LOOM-SHUTTLE. JOHN C. SHAMBOW and GEORGE H. GOLDSMITH, Woonsocket, R. I., assignors to Shambow Shuttle Company, Woonsocket, R. I., a Corporation of Rhode Island. Filed Dec. 12, 1917. Serial No. 206,719. (Cl. 139—46.)



1. In a shuttle, a body having a chamber, and a tensioning device for the yarn as it leaves the chamber, including a revoluble eccentric adjustable guide and a spring plate bearing thereagainst.

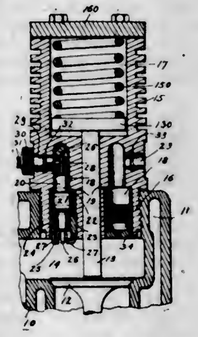
4. In a shuttle, a body having a chamber, and a tensioning device for the yarn as it leaves the chamber, including a base plate, an eccentric rotatably adjustable on the plate, a ring revolubly carried by the eccentric, and a leaf tension spring secured at one end to the plate and extending substantially tangential to the ring, the upper end of the eccentric having means by which it may be turned for adjustment.

[Claims 2 and 3 not printed in the Gazette.]

1,276,583. INTERNAL-COMBUSTION ENGINE. FRANK D. SHEPHERD, Salt Lake City, Utah. Filed Feb. 28, 1918. Serial No. 219,693. (Cl. 123—198.)

2. As an improvement in internal combustion engines, a spring container for a puppet valve having a valve stem guide opening, a chamber eccentric to the valve stem guide opening and opening into the valve controlled port, and an ignition device situated in said chamber.

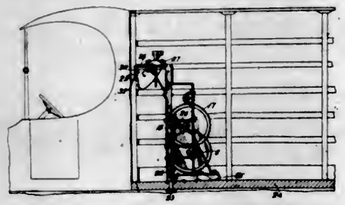
4. As an improvement in internal combustion engines, a spring container for a puppet valve having a valve stem guide opening, a chamber eccentric to the valve stem guide opening and opening into the valve controlled port, an ignition device situated in said chamber, and a priming cock connected with a second eccentric chamber opening into the valve controlled port.



6. As an improvement in internal combustion engines, a spring container for a puppet valve having a valve stem guide opening, a plurality of chambers concentric with the valve stem guide opening and each opening into the valve controlled port and adapted to receive a spark plug, and a spark plug in one of said chambers.

[Claims 1, 3, 5, and 7 not printed in the Gazette.]

1,276,584. TRUCK-WINDLASS. HENRY F. SHEPHARD, New York, N. Y. Filed June 12, 1918. Serial No. 239,608. (Cl. 254—166.)



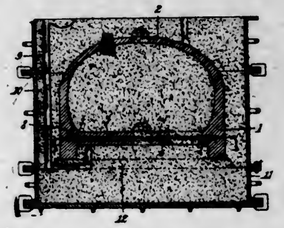
2. An apparatus as characterized comprising a winding drum; a crank shaft; a gear train operatively connecting said crank shaft and winding drum, said train being arranged for multiplication of power applied to said drum; a frame for supporting said drum, shaft and train, said frame being adapted for temporary installation on a truck body; means for holding said frame in operative relation to said body, said means embodying upright framing standards, the lower extremities whereof are adapted for fitting sockets in said body; and means for attaching said standards at the upper end thereof to the permanent structure of said body, said means embodying brackets horizontally extended adjacent the upper end thereof for engaging the structure of said body.

[Claim 1 not printed in the Gazette.]

1,276,585. PIPE-BALL. FREDERICK SOLOMON SNYDER, New Kensington, Pa. Filed Feb. 12, 1918. Serial No. 216,715. (Cl. 78—103.)

1. A pipe ball comprising a hollow conoidal body having an integral pressure-sustaining cross-head located adjacent to the butt-end thereof, and a cross-head reinforcing element having an outer annular portion, the main part of said element being embedded in said cross-head and said annular portion being embedded in the adjacent walls of the body.

3. A pipe ball comprising a hollow body of conoidal form, the walls of said body being of relatively greater thickness at its butt end than at its dome-like end, an integral cross-head located adjacent to said butt end, said cross-head consisting of a hub portion and radial arms extending from said portion to said body, and a reinforcement embedded in said cross-head and the adjacent walls of said body.

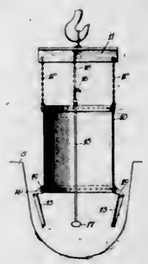


4. A pipe ball comprising a hollow cast-metal body of conoidal form, the walls of said body being gradually increased in thickness from its dome-like end toward its butt end, an integral cross-head located adjacent to said butt end, said cross-head consisting of a hub portion and radial arms extending from said portion to said body, and a reinforcement consisting of inner and outer rings embedded, respectively, in said hub portion and said body, and radially disposed members connecting said rings and embedded in said arms.

6. A pipe ball comprising a hollow cast-metal body of conoidal form, the walls of said body being gradually increased in thickness from its dome-like end to its butt end, an integral cross-head of spider form located adjacent to said butt end, and a reinforcement consisting of rod-like concentric rings and ring-connecting radial members disposed to lie centrally within said cross-head and the adjacent walls of said body.

[Claims 2 and 5 not printed in the Gazette.]

1,276,586. APPARATUS FOR CHARGING ELECTRIC FURNACES AND THE LIKE. FREDERICK T. SNYDER, Oak Park, Ill. Filed June 22, 1917. Serial No. 176,431. (Cl. 214—18.)



1. A charging apparatus for electric furnaces comprising a support, a bucket suspended therefrom, a plurality of swinging doors at the bottom of said bucket, means detachably secured to said support and adapted to detachably engage said doors to hold them in closed position, and means whereby the lowering of said support with relation to said bucket causes said doors to be released.

5. A charging apparatus comprising a beam, a bucket suspended therefrom, a drop bottom for said bucket, means secured to said beam and adapted to support said bottom in closed position by engagement with the under face thereof, and means whereby the lowering of said beam relative to said bucket releases said bottom.

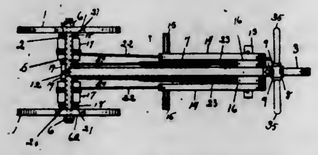
7. Charging apparatus comprising a support, a bucket, means suspending said bucket from said support, a drop bottom for said bucket, and a rod depending from said support and having means for detachably engaging said drop bottom to hold the same in closed position, whereby

the lowering of said support relative to said bucket acts to release said bottom.

8. The combination with a cup-shaped receptacle, of a charging device therefor, a drop bottom for said charging device, and a rod having means for engaging the under face of said bottom to hold the same in closed position, said charging device being adapted to be lowered into said receptacle and to be supported on the sides thereof with said drop bottom disposed above the bottom of said receptacle, whereby said rod may be lowered to release said bottom.

[Claims 2 to 4, 6, and 9 not printed in the Gazette.]

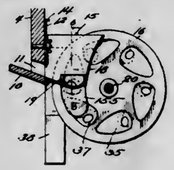
1,276,587. TOY TRICYCLE. CHARLES W. SPAULDING, Clinton, Me. Filed Jan. 3, 1917. Serial No. 140,358. (Cl. 208—38.)



1. In a device of the character described, rear wheels and axle, uprights mounted upon the axle outside the wheels, a supporting frame including a transverse bar supported by said uprights and a longitudinal bar, operating mechanism for imparting limited rotary motion to the wheels and means for automatically returning the operating mechanism to ready position.

[Claims 2 and 3 not printed in the Gazette.]

1,276,588. PEANUT-PLANTER. ALBERT L. STEERE, Petersburg, Va., assignor to Appomattox Iron Works and Supply Company, Petersburg, Va., a Corporation of Virginia. Filed June 30, 1917. Serial No. 178,019. (Cl. 221—135.)



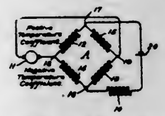
1. In a planter, the combination of a seed-containing hopper, a rotary feed wheel formed with a series of pockets which open through its opposite sides and have inner angularly intersecting reversely inclined walls, each of the said pockets comprising an inner enlarged section which initially receives the seeds from the said hopper, and an outer section into which the seeds pass from the inner section over the said reversely inclined walls, said outer section adapted to carry the seeds partway around therein and then discharge them at a predetermined point, and means for driving the said wheel.

[Claims 2 and 3 not printed in the Gazette.]

1,276,589. THERMOREGULATOR. CHARLES P. STEINMETZ, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed June 26, 1917. Serial No. 176,965. (Cl. 219—20.)

1. In combination, a device which develops heat during its operation, a source of energy connected to said device, and means for controlling the energy supplied to said device comprising resistances having different temperature coefficients and which are affected by the heat developed by said device, the resistances being balanced at a predetermined temperature.

2. In combination, a device which develops heat during its operation, a source of electrical energy, and means for controlling the energy supply to said device comprising a Wheatstone bridge, the legs of which are formed of resistances having different temperature coefficients, all of the resistances of the Wheatstone bridge being subjected to the temperature of said device and the resistances being balanced at a predetermined temperature.



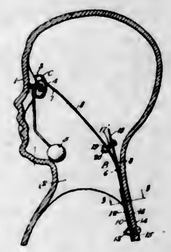
3. In combination, a device which develops heat during its operation, a source of energy connected to said device, and means for controlling the energy supply to said device comprising a Wheatstone bridge two of the opposite elements of which have a positive temperature coefficient and the other resistance elements a negative temperature coefficient, the resistances being balanced at a predetermined temperature.

4. In combination, an electric heating device, a source of electric energy supply connected thereto, and means comprising a Wheatstone bridge, two of the opposite legs of which have a temperature coefficient different from that of the remaining two, for controlling the energy supplied to said device.

6. In combination, a device which develops heat during its operation, a source of energy connected to said device, and means for controlling the energy supplied to said device comprising a Wheatstone bridge, two of the opposite legs of which have a positive temperature coefficient and the remaining two a negative temperature coefficient, and a circuit including a unidirectional cell connected to opposite junction points of the Wheatstone bridge.

[Claim 5 is not printed in the Gazette.]

1,276,590. SLEEPING-EYES MOUNTING FOR DOLLS. DON A. ST. GERMAIN, New York, N. Y., assignor to M. Scheuer & Bro., New York, N. Y., a Copartnership. Filed May 13, 1918. Serial No. 234,304. (Cl. 46—40.)



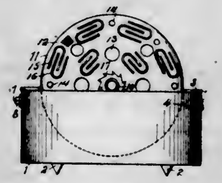
2. The combination of a doll's head having eye sockets, an adjustable resilient member attached to the back neck portion of the head and extending upwardly to a point centrally between the eye sockets, eyes mounted on the member at opposite sides thereof and disposed in the sockets, said eyes being movable and said member having an opening, and a swinging weight connected with the eyes and movable through the opening as the head is tilted.

4. The combination of a head having eye sockets, eyes in the sockets, a pendulum device connected with the eyes for rocking the same, a yielding member forming a support for the eyes, an attaching base fastened in the head, means for securing the member to the base in different positions of vertical adjustment, and an adjusting device for moving the upper end of the member back and forth to adjust the position of the eyes in the eye sockets.

7. The combination of a doll's head having eye sockets, eyes in the said sockets, a pendulum connected with the eyes for moving the same, a supporting member for the eyes, an attaching base having spurs adapted to embed in the wall of the head, a bolt coöperating with the spurs to hold the base in fixed position, said bolt serving to adjustably support the member on the attaching base, and additional means for adjusting the position of the supporting member.

[Claims 1, 3, 5, and 6 not printed in the Gazette.]

1,276,591. HOG-OILER. WILLIAM S. SWIFT, Independence, Mo. Filed Jan. 29, 1917. Serial No. 145,085. (Cl. 119—157.



4. In a hog oiler, an oil tank, a support carried thereby, and a wheel rotatably mounted on said support and extending into and above said tank and provided on its opposite outer sides with buckets adapted to pick up and discharge oil over the outer sides of the wheel when the wheel is rotated.

[Claims 1 to 3 and 5 to 11 not printed in the Gazette.]

1,276,592. MEANS FOR MAKING RUBBER TIRES. JAMES A. SWINEHART, Akron, Ohio. Filed Feb. 2, 1918. Serial No. 215,032. (Cl. 18—17.)

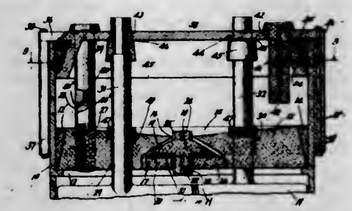


11. A tire mold, comprising an annular section having a flexible wall with a tire-molding surface at one side thereof and a sloping face at its other side.

20. A tire mold, comprising annular sections having engaging portions at the outer circumference thereof and provided with diverging molding surfaces compressible in a degree toward each other, a core seated centrally between said surfaces, and means capable of equalizing the movement of said sections relatively to said core at the inner circumference of said sections.

[Claims 1 to 10 and 12 to 19 not printed in the Gazette.]

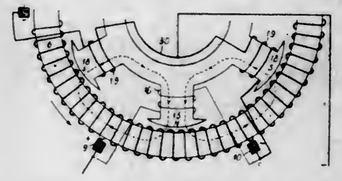
1,276,593. BATTERY-COVER. CLARENCE W. TAUBE, Niagara Falls, N. Y. Filed Jan. 2, 1918. Serial No. 210,014. (Cl. 204—29.)



1. The combination with a battery jar having an internal flange and a plurality of vertical external ribs, of inner and outer covers for the jar, the inner cover being supported upon said flange, the outer cover having outwardly extending lugs alining with said ribs, fastening means passing through the lugs and ribs, and sealing means between each cover and the inner walls of the jar.

[Claims 2 and 3 not printed in the Gazette.]

1,276,594. DYNAMO-ELECTRIC MACHINE. WILLIAM A. TURBAYNE and THOMAS R. DU BOIS, Niagara Falls, N. Y., assignors to U. S. Light & Heat Corporation, Niagara Falls, N. Y., a Corporation of New York. Filed May 19, 1915. Serial No. 29,067. (Cl. 171—315.)



1. In a starting and lighting system for automobiles, a multipolar dynamo-electric machine adapted to operate as a motor or a generator, said machine having a ring wound armature, a plurality of positive and negative brushes equally spaced apart with respect to each other and to the poles of said machine, a storage battery, a starting switch for energizing the field and armature from said battery to operate said machine as a motor, said switch also disconnecting a plurality of said brushes whereby the current in said armature is concentrated in a restricted section thereof when the machine operates as a generator, and means for controlling the distribution of flux set up by the armature current in said restricted section.

7. A dynamo-electric machine adapted to operate as a motor or as a generator, said machine having a field structure and a rotatable armature having a single winding, means for utilizing the entire armature and field structure when operating as a motor to obtain a motor of high torque, and means whereby only a portion of said armature winding is utilized when operating as a generator, said machine being provided with means to reduce the output of said portion as the speed increases.

13. In a starting and lighting system for automobiles, a dynamo-electric machine adapted to operate as the starting motor, said machine also operating as a generator under pre-determined conditions, a storage battery, a starting switch to connect the battery to the machine to operate the machine as a motor, said machine when operating as a generator having a field pole provided with a shunt winding, a leading pole and a trailing pole on either side of said energized pole, three brushes equally spaced apart, two of said brushes being arranged on opposite sides of said energized pole, and the third brush being arranged in trailing relation to said trailing pole, said third brush being electrically connected to the more remote of said two first brushes through a circuit including a field winding, and means for connecting said brushes to said battery under predetermined conditions.

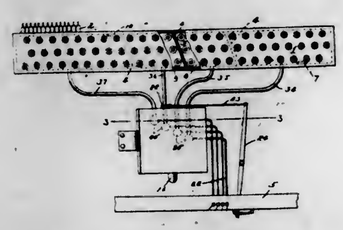
18. In a variable speed generator, an energized field pole, a ring wound armature providing two paths for the flux emanating from said pole and three brushes, a pair of said brushes embracing between them a section of the armature in which the total flux flows and a pair of said brushes embracing between them a section of the armature in which only a portion of said flux flows, one of said brushes being common to each pair, and an electrical connection between the brushes which are not common to said pairs, said connection including means for distorting the flux in that part of the armature embraced between said last mentioned brushes.

21. A dynamo having a ring wound armature, a coöperating field pole provided with a shunt field winding

and a pair of field poles on opposite sides of said first mentioned pole adapted to become consequent poles and embracing a relatively small part of said ring wound armature, said last mentioned poles being provided with windings for supplementing the effects of armature reaction to vary the distribution of flux through said consequent poles.

[Claims 2 to 6, 8 to 12, 14 to 17, 19, 20, and 22 to 27 not printed in the Gazette.]

1,276,595. NOTE-ACCENTING DEVICE. BURT R. VAN VALKENBURG, Oakland, Cal. Filed Dec. 15, 1915. Serial No. 67,012. (Cl. 84—168.)



1. A note accenting mechanism for pneumatically operated musical instruments, comprising the combination with the valve chest having a subdivided vacuum cavity, a vacuum chest having a chamber therein, a bellows mounted on said chest, means for maintaining a lower degree of vacuum in said bellows than in said vacuum chest, tubular connecting members from said vacuum chest, one to each subdivision of said valve chest for placing said tubular members either in communication with the interior of said bellows or the chamber of said vacuum chest.

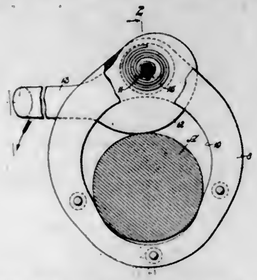
2. A note accenting mechanism for pneumatically operated musical instruments, comprising the combination with the valve chest having a subdivided vacuum cavity; of a vacuum chest having high and low vacuum chambers, a regulating valve between said chambers for maintaining the difference in pressure therebetween, tubular connecting members normally communicating with the interior of said bellows and extending from said vacuum chest, one to each subdivision of said valve chest, and valve means for placing any one of said connecting members in communication with the chamber of said vacuum chest.

3. A note accenting mechanism for pneumatically operated musical instruments, comprising the combination with the valve chest having a subdivided vacuum cavity, a vacuum chest having a cavity therein, a bellows mounted on said vacuum chest, a movable side on said bellows, said bellows having a passageway from the interior thereof to said vacuum cavity, a valve controlled by the movable side of said bellows for maintaining a lower vacuum in said bellows than in said vacuum chest, said vacuum chest having passageways communcating with said vacuum cavity and the interior of said bellows, and means connecting said passageways, one to each of said subdivisions, valve means for connecting any of said connecting members with either of said vacuum cavities or the interior of said bellows.

[Claims 4 to 6 not printed in the Gazette.]

1,276,596. WORK-GRIPPING TOOL. WILLIAM O. VIVARTTAS, Weehawken, N. J. Filed July 7, 1916. Serial No. 107,929. (Cl. 81—99.)

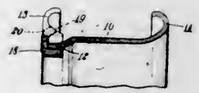
1. A tool as characterized comprising a cam-shaped head having a laterally-extended operating member and an eccentrically-disposed pivot; a work-supporting member having converging edges, said member embodying a plurality of plates rigidly connected in spaced relation and forming a guide for the movement of said head and operating member therefor, said plates forming a support for said pivot and having recesses concentric to said pivot;



and a plurality of springs mounted in said recesses, said springs operatively connecting said head and said plates.

[Claim 2 not printed in the Gazette.]

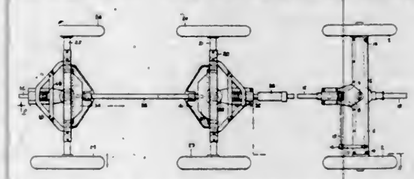
1,276,597. TIRE-RIM. JAMES H. WAGENHORST, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed May 11, 1917. Serial No. 167,894. (Cl. 152—21.)



1. A tire rim comprising, in combination, a rim base formed with a channel on one edge, a fixed locking lug slanting radially outward and laterally inward over said channel, and a transversely-split locking ring seated in said channel and formed near one end with an aperture entered by the lug as the ring end seats in the channel by a movement laterally outward and radially inward of the rim.

[Claims 2 to 7 not printed in the Gazette.]

1,276,598. TRAILER. LEIGH WATKINS, El Paso, Tex. Filed Aug. 4, 1917. Serial No. 184,410. (Cl. 21—137.)

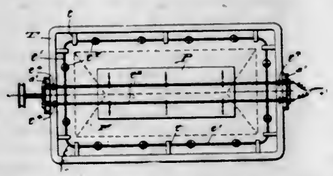


1. A trailer of the character described comprising a body, a pair of axles, a pivotal connection arranged centrally on the axles for connecting the axles pivotally with the body, a front and rear yoke extending from each of said axles, draft means connected with said front axle, a swinging arm engaging the front yoke of the front axle, a rock shaft connected with said swinging arm for swinging the same and thereby moving said yoke and the axle connected therewith, a rock shaft pivotally supported near said body, a swinging arm connected to said rock shaft near each end, said swinging arms being connected at the lower end to the rear yoke of the front axle and the front yoke of the rear axle, and means connected with said draft member and with said power shaft for moving the trailer and for rocking the draft shaft when turning a corner whereby the axles on the trailer will be turned for causing the wheels carried thereby to follow the wheels of said means.

2. In a device of the character described, a trailer, and means for connecting the trailer to a tractor, said means including a substantially U-shaped casing fitting over the rear axle of the tractor and extending substantially the full length thereof for preventing wabbling and movement longitudinally of the axle, pins extending through said casing and locking the casing to said axle, and a draft member pivotally connected with the casing and with the trailer.

3. In a device of the character described, a trailer provided with means for shifting the axles so that the rear wheels will follow in the track of the front wheels, a draft member connected with the trailer, said draft member being formed with a shaft having a cushion member interposed therein, said cushion member being provided with oppositely arranged springs for cushioning a pressure in two directions, means for connecting the parts of the draft member together so as to allow the same to slide while causing the same to rotate simultaneously, means for connecting said draft member with the front axle of said trailer for shifting the same, means for connecting the draft member with a tractor, and means connected with the tractor for rotating said draft member.

1,276,599. PROCESS OF AND APPARATUS FOR ETCHING. JOSEPH H. WEEKS, Rutledge, Pa., assignor to Jackson S. Weeks, Delaware county, Pa., and Raymond M. Weeks, Philadelphia, Pa., trustees. Filed Apr. 1, 1916. Serial No. 88,362. (Cl. 204—1.)



1. The process of etching plates for printing and for other useful and ornamental purposes which comprises the following steps: (1) coating the plate with a solution sensitive to light; (2) exposing the same under a design carrier to the action of light; (3) dissolving the unexposed portions of the coating or film; (4) heating the plate to a temperature sufficient to bake or enamel the exposed portions of the coating or film of the plate; (5) insulating those portions of the plate which are not to be etched; (6) immersing the plate in an electrolytic solution, and passing a current from the plate as an anode through the solution to a suitable cathode therein.

3. The process of etching plates for printing and for other useful and ornamental purposes which comprises the following steps: (1) coating the plate with a solution sensitive to light; (2) exposing the same under a design carrier to the action of the light; (3) dissolving the unexposed portions of the coating or film; (4) heating the plate to a temperature sufficient to bake or enamel the exposed portions of the coating or film of the plate; (5) insulating those portions of the plate which are not to be etched; (6) immersing the plate in an electrolytic solution, and passing a current from the plate as an anode through the solution to a suitable cathode therein; (7) moving the anode only in the solution during etching and in a direction perpendicular to the surface being etched.

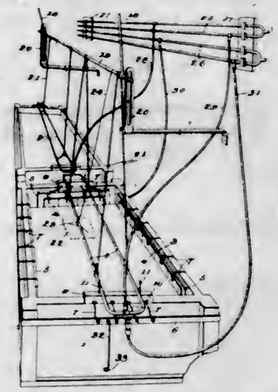
5. The process of etching plates for printing and for other useful and ornamental purposes which comprises the following steps: (1) coating the plate with a solution sensitive to light; (2) exposing the same under a design carrier to the action of light; (3) dissolving the unexposed portions of the coating or film; (4) heating the plate to a temperature sufficient to bake or enamel the exposed portions of the coating or film of the plate; (5) insulating those portions of the plate which are not to be etched; (6) suspending the plate in an electrolytic solution in such position that the heavier solution formed at the surface of the plate and in the recesses therein in etching will tend to flow away therefrom by gravity, passing a current through the plate as an anode and through the solution to a suitable cathode therein and reciprocating said plate during etching in a direction parallel to the natural direction of flow of said heavier solution.

7. The process of etching plates for printing and for other useful and ornamental purposes which comprises the following steps: (1) coating the plate with a solution sensitive to light; (2) exposing the same under a design carrier to the action of light; (3) dissolving the unexposed portions of the coating or film; (4) heating the plate to a temperature sufficient to bake or enamel the exposed portions of the coating or film of the plate; (5) insulating those portions of the plate which are not to be etched; (6) suspending the plate with the face or design downward, and passing a current through the plate as an anode, and through the solution to a cathode therein; (7) moving the plate up and down periodically in the solution at right angles to the surface of the plate and in a direction parallel to the flow of current.

9. The process of etching plates for printing and for other useful and ornamental purposes which comprises the following steps: (1) coating the plate with a substance sensitive to light; (2) exposing the same to action of light to produce a pattern thereon; (3) developing the image; (4) baking the plate to enamel the image thereon, whereby the portions of the plate covered by the image are insulated and protected in a single film; (5) electrochemically etching the plate.

[Claims 2, 4, 6, and 8 not printed in the Gazette.]

1,276,600. ELECTRICAL-ETCHING APPARATUS. JOSEPH H. WEEKS, Rutledge, Pa., assignor to Jackson S. Weeks, Delaware county, Pa., and Raymond M. Weeks, Philadelphia, Pa., trustees. Original application filed July 8, 1916, Serial No. 108,232. Divided and this application filed Sept. 11, 1916. Serial No. 119,548. (Cl. 204—5.)



1. Apparatus for electrochemical etching comprising in combination, a tank or bath to contain an electrolyte; cathodes suspended along and within the walls of the tank; electrical connections to said cathodes; an anode; an anode support extending over the top of the tank; electrical connections to said support; and means for moving said support and the anode suspended therefrom during etching with an appreciable period of rest.

3. Apparatus for electrochemical etching comprising in combination, a tank or bath to contain an electrolyte, cathodes suspended along and within the walls of the tank; electrical connections to said cathodes; an anode support extending over the top of the tank; electrical connections to said support, said cathodes and anodes

being so proportioned as to produce a definite line of precipitation; a reciprocating member carrying the anode support, with means to move the said reciprocating member in the direction of the precipitation and current flow.

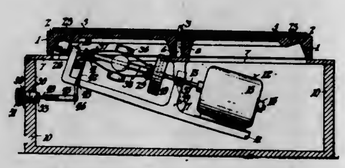
6. Apparatus for electrochemical etching comprising in combination, a tank or bath to contain an electrolyte; cathodes suspended along and within the walls of the tank; electrical connections to said cathodes; an anode support extending over the top of the tank; electrical connections to said support; a movable carrier for said anode support, with mechanically driven means for periodically moving the same so as to produce corresponding movement of the suspended anode in the tank and an electrolyte contained therein, during etching; and means for periodically varying the supply of current to the anode.

9. Apparatus for electrical etching comprising in combination, a tank or bath to contain an electrolyte; a movable anode support arranged to hold a plate to be etched suspended in the tank and in the electrolyte contained therein; a driven member; a loose connection between said driven member and the said anode support; one or more cathodes in the tank immersed in the electrolyte; and electrical connections to said anode support and said cathodes.

12. An apparatus for electrical etching comprising in combination, a tank or bath to contain an electrolyte; an anode support arranged to hold a plate to be etched suspended in the tank and in the electrolyte contained therein, cathodes surrounding and underlying a plate suspended in the electrolyte, a bus-bar for said cathodes, a plurality of separate current leads extending between different points on the anode support and a source of current and a plurality of separate current leads extending between different points on said cathode bus bar and the same source of current.

[Claims 2, 4, 5, 7, 8, 10, and 11 not printed in the Gazette.]

1,276,601. PHONOGRAPH-MOTOR MECHANISM. THEO CLIFFORD WHITING, Philadelphia, Pa. Filed Sept. 4, 1917. Serial No. 189,639. (Cl. 74—26.)



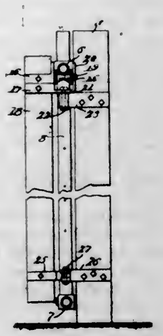
1. The combination with a rotary table for a sound record; of a wheel arranged to turn said table; a rotary shaft carrying said wheel; an electric motor, having a rotary armature shaft in axial alinement with said wheel shaft; an automatically operative rotary coupling for said shafts, including relatively axially and circumferentially movable friction members respectively carried by them; adjustable governor mechanism carried by said wheel shaft and connected with the friction member on that shaft to shift said member axially, including a weight, means connecting said weight with said wheel shaft, arranged to permit said weight to move toward and away from the axis of that shaft, in accordance with the speed of rotation of said wheel shaft, and manually operative means arranged to variably regulate the speed of rotation of said table, including means arranged to axially adjust said weight connecting means; a frame for said motor, so arranged that the weight of said motor tends to maintain said wheel in operative relation with said table, regardless of variations in the position of the latter; a pivotal support for said frame; and means arranged to minimize transmission of vibration at said pivotal support; whereby said turn table may be rotated at a predetermined uniform rate, by said armature shaft, regardless of variations in the rate of rotation of said armature shaft.

2. The combination with a rotary table for a sound record; of a wheel arranged to turn said table; a rotary shaft carrying said wheel; an electric motor, having a rotary armature shaft in axial alinement with said wheel shaft; an automatically operative rotary coupling for said shafts, including relatively axially and circumferentially movable friction members respectively carried by them; adjustable governor mechanism carried by said wheel shaft and connected with the friction member on that shaft to shift said member axially, including a weight, means connecting said weight with said wheel shaft, arranged to permit said weight to move toward and away from the axis of that shaft, in accordance with the speed of rotation of said wheel shaft, and manually operative means arranged to variably regulate the speed of rotation of said table, including means arranged to axially adjust said weight connecting means; a frame for said motor, so arranged that the weight of said motor tends to maintain said wheel in operative relation with said table, regardless of variations in the position of the latter; and a pivotal support for said frame; whereby said turn table may be rotated at a predetermined uniform rate, by said armature shaft, regardless of variations in the rate of rotation of said armature shaft.

3. The combination with a rotary table for a sound record; of a wheel arranged to turn said table; a rotary shaft carrying said wheel; an electric motor, having a rotary armature shaft in axial alinement with said wheel shaft; an automatically operative rotary coupling for said shafts, including relatively axially and circumferentially movable friction members respectively carried by them; adjustable governor mechanism carried by said wheel shaft and connected with the friction member on that shaft to shift said member axially, including a weight, means connecting said weight with said wheel shaft, arranged to permit said weight to move toward and away from the axis of that shaft, in accordance with the speed of rotation of said wheel shaft, and manually operative means arranged to variably regulate the speed of rotation of said table, including means arranged to axially adjust said weight connecting means; whereby said turn table may be rotated at a predetermined uniform rate, by said armature shaft, regardless of variations in the rate of rotation of said armature shaft.

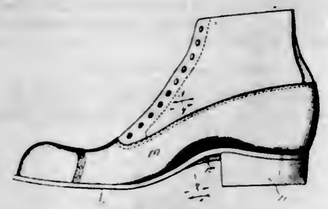
[Claims 4 to 10 not printed in the Gazette.]

1,276,602. GATE. SWAN O. WIDELL, Rockford, Ill. Filed Oct. 5, 1917. Serial No. 194,868. (Cl. 39—83.)



Means for mounting a sliding and swinging gate comprising in combination with a post and a gate having a horizontal slide rail, upper ad lower pintle brackets secured to the post, an upright roller-hanger attached at its lower end through the agency of a pintle to the lower pintle bracket, a bracket secured to the upper portion of said roller-hanger having a horizontal portion resting on the upper pintle bracket, a pintle in alinement with the lower pintle and connecting said horizontal portion of the hanger pintle bracket with the upper post pintle bracket, said horizontal portion of the hanger pintle bracket having its end adjacent to the post turned upwardly to provide a support for one end of a roller supporting pin, a bracket secured to the roller hanger and provided with a horizontal roller pin disposed in substantially vertical alinement with and above the upper pintle and supported at its outer end in the upright portion of the hanger pintle bracket, and a roller mounted on said pin between the pin supporting bracket and the upright portion of the pintle bracket and adapted to receive said horizontal rail of the gate so that the gate may slide lengthwise on the roller and swing laterally about the axis of the pintles.

1,276,603. SHOE. LEO W. V. WILMS, Chicago, Ill. Filed Aug. 9, 1915. Serial No. 44,379. (Cl. 36—17.)

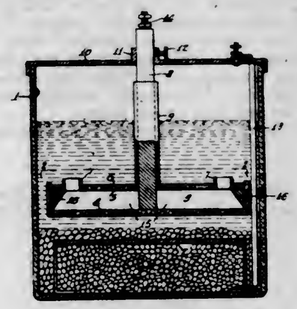


1. In a shoe, an inner sole provided on its lower surface with a channel which is mainly located near the border of said sole and extends forwardly from near the heel portion around the border of the toe portion and then diagonally across the sole to form an endless loop, in combination with a vamp and welt which have their edges bent around the edge of the sole and fastened together by a row of stitches located in and extending along said groove, the shank portion of the insole being of normal width and the lower portion of the vamp at the inner side of the shank being carried under the shank portion of the inner sole and its edge secured to the inner sole adjacent the outer edge of the shank portion of the inner sole.

3. In a shoe, the combination with an outer sole, of a heel secured to its rear lower portion, the said heel being slightly thicker or higher at its front inner portion than at its rear and front outer part and having its upper surface downwardly and rearwardly curved from its front end, the upper portion of the outer sole which lies on the heel having a correspondingly shaped cavity, an inner sole provided on its lower surface with a channel which is mainly located near the border of said sole and extends forwardly from near the heel portion around the border of the toe portion and diagonally across the sole to form an endless loop, a vamp and welt which have their edges bent around the edge of the sole and fastened together by a row of stitches located in and extended along said groove, the insole being of normal width and the lower portion of the vamp at the inner side of the shank being carried under the shank portion of the inner sole and its edge secured to the inner sole adjacent the outer edge of the shank portion of the inner sole.

[Claim 2 not printed in the Gazette.]

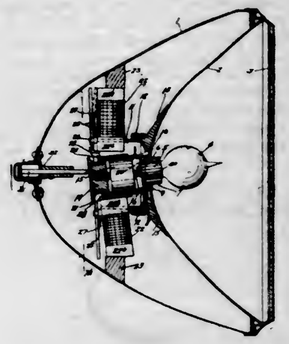
1,276,604. ELECTRIC BATTERY. DAVID H. WILSON, New York, N. Y. Filed Oct. 23, 1914. Serial No. 868,238. (Cl. 204—53.)



1. An electric battery comprising a jar, a copper electrode having bent portions by means of which it is supported at a distance above the bottom of the jar, a porous cup in said jar, and a zinc electrode in said porous cup, the porous cup supported by the zinc electrode.

[Claims 2 to 7 not printed in the Gazette.]

1,276,605. HEADLIGHT. OVERTON WINSTON, Minneapolis, Minn. Filed Mar. 17, 1916, Serial No. 84,778. Renewed Jan. 22, 1918. Serial No. 213,273. (Cl. 240—44.)



6. In a headlight, the combination with a casing and a reflector therein, said reflector having an axial passage, of an annular anchoring hub secured to the back of said reflector around the axial passage thereof and reinforcing said reflector, a bearing head detachably secured to said hub, a lamp socket pivotally associated with said hub and head and arranged to support a lamp bulb through the axial passage of said reflector, and means applied to said head for imparting oscillatory movements to said socket.

8. The combination with a casing and a reflector therein, of a lamp socket associated with said reflector to carry a lamp bulb toward and from the axis thereof, a bearing ring secured to the interior of said casing back of said reflector, and electro-magnets supported by said ring and operative on said socket to oscillate the same.

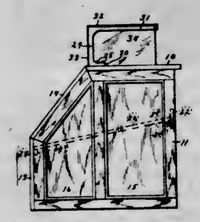
11. In a headlight, the combination with a reflector, of a lamp support and an electric light bulb held thereby within said reflector, said lamp support being mounted to freely swing in a vertical plane on a fulcrum located at the rear of said reflector and vertically offset from the axis of said reflector and lamp support.

12. The combination with a lamp socket, of a light bulb having on its shank three lock lugs normally engaging three contacting points on said socket and determining the position of said bulb in respect to said socket.

14. In a headlight, the combination with a reflector and a lamp socket that is movable in respect to the axis thereof, of an electro-magnet associated with and arranged to move said socket, and a lock for holding said socket in one extreme position, said lock having a portion working with a wedge-like action between said socket and the pole piece of said magnet.

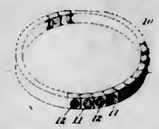
[Claims 1 to 5, 7, 9, 10, and 13 not printed in the Gazette.]

1,276,606. DISPLAY-CASE. GUS H. AMEND, Des Moines, Iowa. Filed Apr. 16, 1917. Serial No. 162,482. (Cl. 211—11.)



A display case consisting of a front wall having an opaque lower section and a transparent upper section, a rear wall, a false bottom extending from adjacent the line of juncture between said sections to said rear wall to divide the case into an upper and a lower compartment, said false bottom affording a vegetable supporting surface and being arranged at an incline so that the vegetables will gravitate toward the transparent upper section and being foraminous so that extraneous matter may gravitate through and below the false bottom and be concealed by the opaque section, said rear wall being open both above and below the false bottom so as to allow free access to the vegetable and dirt compartments formed by the false bottom.

1,276,607. BRACELET. ROBERT ANDERSON, New York, N. Y. Filed May 23, 1917. Serial No. 170,361. (Cl. 59—80.)

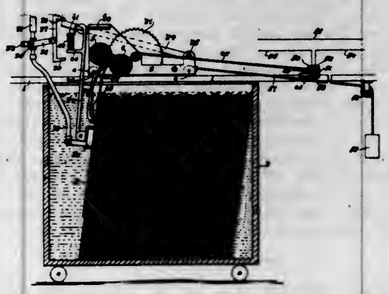


1. A flexible bracelet comprising a plurality of links, each of said links comprising a body portion and downwardly extending side walls, each of said side walls being provided with a projection at one of its ends and with a correspondingly shaped recess at the other of its ends, each of said side walls being provided adjacent its recessed end with a seat having its outer surface in the plane of the inner surface of said side wall, the projections on each link engaging the recesses and the seats of the next adjacent link, and connecting means co-acting with the interengaging projections and seats of adjacent links, substantially as specified.

[Claim 2 not printed in the Gazette.]

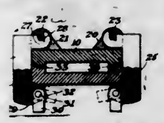
1,276,608. SHEET-FEEDING MACHINE. THADDEUS F. BAILY and FRANK T. COPE, Alliance, Ohio, assignors to The Electric Furnace Company, Alliance, Ohio, a Corporation of Ohio. Filed Feb. 14, 1916. Serial No. 78,323. (Cl. 271—26.)

In a device of the character described, the combination with a tank containing a pack of vertically disposed sheets of a horizontal track located above said tank, a frame mounted for movement upon said track, an arm carried by said track and extending into the tank, a roller provided upon said arm and arranged to contact with the outermost sheet of the pack, a pair of feed rollers carried in said frame, means for moving said frame to hold said feed rollers above the outermost sheet of the pack at all times, an oscillating arm pivoted upon



said frame, means for oscillating said arm, a vertically reciprocating arm pivotally connected to said oscillated arm and adapted to extend into said tank means upon said reciprocating arm for adhesively engaging the face of the outermost sheet of the pack and means for releasing said sheet after the reciprocating arm reaches the upward limit of its movement.

1,276,609. MOLD FOR INGOTS, &c. FRANCIS M. BANGS, Deep River, Conn. Filed Mar. 22, 1918. Serial No. 223,900. (Cl. 22—146.)



1. A mold comprising two parts, a plurality of spaced hook bars and one mold part extending substantially parallel at opposite sides thereof, and a plurality of clamp bars adapted at one end to be disconnectedly secured to the said hook bars to extend across the sides of the mold and at the opposite end to engage the face of the other mold part to secure the parts of the mold together.

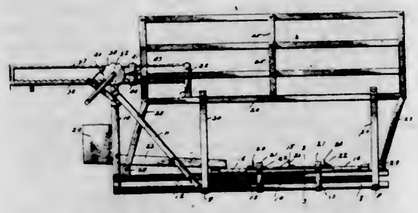
2. A mold comprising two parts, a plurality of spaced hook bars extending substantially parallel with the opposite sides of the mold at the rear of one mold part, a plurality of clamp members each having at one end a hook adapted to engage with one of the said hook bars, and means at the other end of each clamp member for engaging the face of the other mold part to force and hold the parts of the mold together.

3. A mold comprising two parts, a plurality of clamp bars each adapted to be independently secured to the mold parts and each having a hook at one end thereof and a pivotally connected eccentric lever at the opposite end thereof, a series of hook bars secured to the back of one mold member and each adapted to be engaged by the hook at one end of one of said clamp bars, and a corresponding number of similarly placed bosses on the front face of the other mold member and each adapted to be engaged by the pivotally connected eccentric lever in the opposite end of one of the said clamp members.

4. A mold comprising two parts, means for pivotally connecting the parts of the mold together at one end thereof, a plurality of clamp bars each adapted to be independently secured to the mold parts and each having a hook at one end thereof and a pivotally connected eccentric lever at the opposite end thereof, a series of hook bars secured to the back of one mold member and each

adapted to be engaged by the hook at one end of one of the said clamp bars, and a corresponding number of similarly placed bosses on the front face of the other mold member and each adapted to be engaged by the pivotally connected eccentric lever in the opposite end of one of the said clamp members.

1,276,610. FEEDING-TROUGH. CHESTER A. BARNES, Blue Grass, Iowa. Filed Jan. 31, 1918. Serial No. 214,693. (Cl. 119—63.)



1. In a device of the class described, a base, a feed receptacle in said base, an upright at one end of said base, a hood, links connecting said base and hood, a shaft on said upright, a gear on the said shaft, a rack bar in mesh with said gear and being connected at one end with said hood, and means for rotating said shaft.

[Claims 2 to 4 not printed in the Gazette.]

1,276,611. HOLDER FOR IRONING-BOARDS AND THE LIKE. HARVEY V. BASLEY, Jersey City, N. J. Filed Sept. 18, 1916. Serial No. 120,630. (Cl. 248—49.)



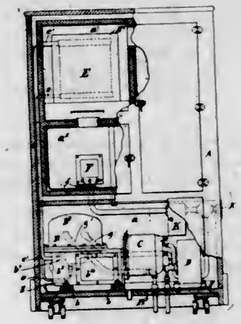
1. A support for ironing boards or the like, comprising a member formed of a single length of wire bent to form a pair of arms and brace legs for said arms all lying in a common plane, and the outer ends of said arms being bent to form shoulders at right angles to said common plane for engaging the opposite edges of the ironing board.

3. A carrier for ironing boards or the like, comprising a member formed of a single length of wire shaped to provide an attaching portion adapted for spanning the width of the ironing board and by which the member may be fixed to a support, to provide portions comprising shoulders adapted for engaging the opposite edges of the ironing board, and to provide portions comprising brace legs extending from adjacent said shoulders and having means whereby they may be fixed to the support.

[Claims 2 and 4 to 7 not printed in the Gazette.]

1,276,612. COOLING APPARATUS. REUBEN E. BECHTOLD, Fort Wayne, Ind., and ALFRED W. MELLOWES, Detroit, Mich., assignors to The Guardian Frigerator Company, Detroit, Mich., a Corporation of Michigan. Filed June 10, 1916. Serial No. 102,912. (Cl. 62—115.)

1. In cooling apparatus of the character indicated, a containing casing embodying in a single compact structure, a motor-casing, a compartment for the power transmitting mechanism and stuffing box, a compartment for a compressor, a compartment for condenser coils containing also a pocket for accumulated refrigerant, having a valve controlled exit.

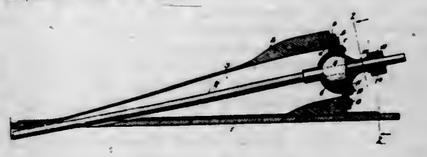


4. In cooling apparatus, the combination of a rigidly connected casing having a plurality of chambers, compressing and condensing means within said casing, a motor fixed to the casing, a support for the casing and a resilient connection between the casing and the support.

10. In a cooling apparatus, the combination in a rigidly connected casing of a compressor chamber and a drive-shaft chamber contiguous thereto but sealed therefrom by a stuffing box within said drive-shaft chamber, each of said chambers adapted to contain a quantity of lubricant sufficient to act as a seal for said stuffing box; a condenser chamber connected with said compressor chamber by valve controlled openings; a condensing coil within said condenser chamber; said condenser chamber adapted to contain a quantity of lubricant sufficient to act as a seal for said valve controlled openings; a valve pocket integral with and extending below the general level of the floor of the condenser chamber and having a float valve controlling an outlet therefrom; an expansion coil outside of the casing; a flexible fluid connection from said outlet to said expansion coil; a flexible fluid connection from said expansion coil to the compressor chamber in said casing; a support for said casing and a resilient connection between the said casing and support.

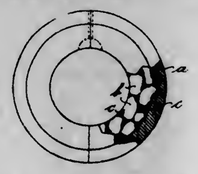
[Claims 2, 3, and 5 to 9 not printed in the Gazette.]

1,276,613. COMBINED SHAFT-LOG, STUFFING-BOX, AND ADJUSTABLE BEARING. GUY H. BERGMAN, Tanana, Alaska. Filed Sept. 22, 1916. Serial No. 121,610. (Cl. 64—52.)



The combination of a shaft log having a passage therethrough, a propeller shaft extending through the passage, a plate having a hemispherical socket and an opening, the shaft extending through the opening, a ball-shaped bearing disposed in the socket and through which the shaft extends, means for adjustably fastening the plate to the said log, a stuffing box on the bearing and through which the shaft extends, and devices mounted at opposite sides of the plate and carried by the said log for moving the plate in its own plane for adjusting the position of the shaft.

1,276,614. BEARING-SHELL OR BEARING-BOX. HERMANN BEUSCH, Lübeck, Germany. Filed Mar. 8, 1918. Serial No. 221,339. (Cl. 64—19.)

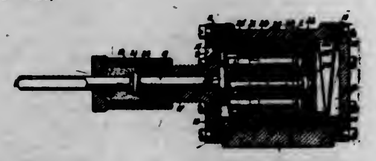


1. As an improved article of manufacture, a bearing box embodying a shell or casing and a mass of hard material with a soft metal filling the interstices between the said hard material.

3. A bearing box comprising a shell with rabbets, plastic material having portions retained in said rabbets and hard substances embedded in said mass and forming the bearing surface for the shaft.

[Claim 2 not printed in the Gazette.]

1,276,615. ROTARY PUMP. GEORGE BEY, Jersey City, N. J. Filed Sept. 5, 1917. Serial No. 189,718. (Cl. 103—76.)



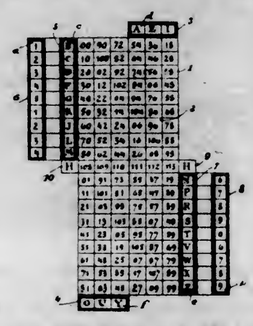
1. A rotary pump, comprising a casing formed with an inlet and an outlet, said inlet and outlet being on opposite sides of the casing, means forming heads for said casing, said means having oppositely facing cams, a piston arranged in said casing having parallel arranged cams coacting with the first mentioned cams and diametrically arranged openings merging into the opposite ends of the piston, the part of the piston between said openings acting as a valve for said inlet and said outlet and means for rotating said piston, said means permitting a back and forth movement under the action of said cams.

4. A rotary pump, comprising a casing provided with an inlet and outlet on diametrically opposite sides, a piston formed with disk-shaped members at each end and a connecting web, said web extending from one side of the piston to the other and acting as valves for said inlet and said outlet, said disks having apertures extending therethrough, said apertures being arranged on opposite sides of said web whereby the opposite sides of the web are in communication with the inlet and outlet respectively, and cam members arranged on the ends of the casing in communication with said apertures, said cam members causing a back and forth longitudinal movement of the piston during its rotary movement whereby the fluid taken in the inlet will be forced out of the outlet.

7. In a rotary pump of the character described, a casing provided with inlet and outlet openings, an inclined cam arranged at each end of the casing interiorly thereof, said cams being inclined in opposite directions so that the widest point between the cams will be diametrically opposite the narrowest point between the cams, a piston having inclined ends, said piston being of a length to snugly fit between the space provided at the nearest point between said cams, whereby when the piston is rotated the matter at the respective ends of the casing will be forced therefrom, said piston being provided with narrow passageways, one passageway extending from one end to the periphery and the other from the opposite end to the periphery, and means for rotating said piston, said means being provided with members transmitting power to the piston and allowing a longitudinal movement thereof.

[Claims 2, 3, 5, and 6 not printed in the Gazette.]
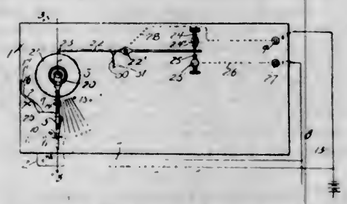
1,276,616. TELEGRAPHIC-CODE APPARATUS. PAUL BIENVAUX, Paris, France. Filed June 8, 1914. Serial No. 843,900. (Cl. 35—13.)



1. In a code apparatus a base having on one board spaced groups of numerals comprising at least two digits to each group arranged in longitudinal columns and horizontal cross-rows; alphabetical characters on movable bands arranged so that each column has a vowel at either its top or foot and each cross-row a consonant at either its right or left hand end; each cross-row having also, one of the ten digits at the same end as its consonant.

2. In a code apparatus a base having on one main board spaced groups of numerals comprising at least two digits to each group arranged in six longitudinal columns and nineteen horizontal cross-rows, the said six columns being marked with distinct signs, four of said columns containing only numbers lower than 100; alphabetical characters on movable bands arranged so that each column has a vowel at either its top or foot, and each cross-row a consonant and one of the ten digits at either its right or left hand end; either at the bottom or at the top of said main-board a small board comprising six longitudinal columns and four horizontal cross-rows, said horizontal cross-rows being marked with the same signs as four of the columns of the main-board, the numbers lower than 100 which are not marked in said four columns of the main board being marked in the squares of the small board, substantially as described and shown and for the purpose set forth.

1,276,617. MORSE TRANSMITTER. JAMES A. BREEN, Washington, D. C., assignor of one-half to Harry H. Miller, Washington, D. C. Filed Dec. 6, 1917. Serial No. 205,761. (Cl. 178—82.)

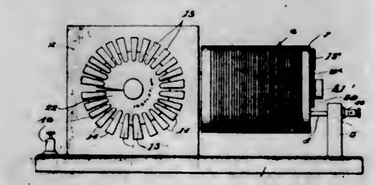


1. In a Morse transmitter, the combination, with a normally open electric circuit, of a movable circuit-closing member, a revoluble toothed wheel engaging said circuit-closing member, a ratchet carried by said wheel, a lever carrying a pawl engaging with said ratchet for rotating said wheel, an operating-handle pivoted to said lever, a contact-plate upon which said handle bears, and an electric contact with which said handle contacts upon pivotal movement thereof.

2. In a Morse transmitter, the combination, with a normally open electric circuit, of a movable circuit-closing member, a revoluble toothed wheel engaging said circuit-closing member, a ratchet carried by said wheel, a lever carrying a pawl engaging with said ratchet for rotating said wheel, an operating-handle pivoted to said lever, means carried by said handle for preventing pivotal movement thereof in one direction, a contact-plate upon which said handle bears, and an electric contact with which said handle contacts upon pivotal movement thereof.

[Claims 3 and 4 not printed in the Gazette.]

1,276,618. TUNING TRANSFORMER. CARLYLE B. CAMPBELL, Sully, Iowa. Filed Feb. 16, 1917. Serial No. 149,034. (Cl. 171—119.)

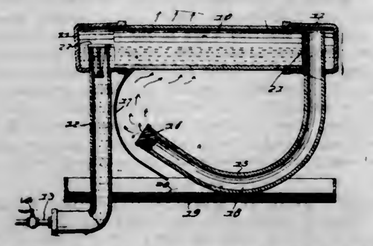


1. In a transformer, a plurality of independent coils of wire, contacts connected to one set of terminals of the coils, contact springs connected to the opposite terminals of the coils and arranged to engage the first mentioned contacts to normally tend to connect all of the coils in series, a switch arm adapted to engage the contacts and to separate the said contacts and contact springs to cut out that part of the coil ahead of the switch arm, and an insulating plate secured to the upper side of the switch arm and extending between the contacts of the last coil in use and the contact spring of the first unused coil.

3. In a transformer, a plurality of independent coils of wire, contacts connected to one set of terminals of the coils, contact springs connected to the opposite terminals of the coils and arranged to engage the first mentioned contacts to normally tend to connect all of the coils in series, a switch arm adapted to engage the contacts and to separate the said contacts and contact springs to cut out that part of the coil ahead of the switch arm, and an insulating plate secured to the upper side of the switch arm for extending between the contacts and contact springs of the unused portion of the coil to prevent the units from being connected and affecting that part of the coil which is in use, and an elevator for raising the plate from operative position with relation to the contacts in the rear of the switch arm.

[Claim 2 not printed in the Gazette.]

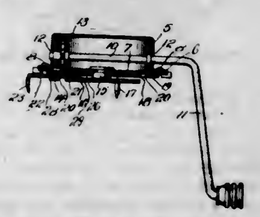
1,276,619. BURNER. JOHN CATRON, Rosenberg, Tex. Filed Jan. 12, 1918. Serial No. 211,584. (Cl. 158—63.)



1. A burner of the type described having a tubular retort or converter provided with terminal caps, feed and burner pipes fitted in openings in said caps and communicating with the interior of the retort, the burner pipe being terminated in a plane near the upper side of the retort and having an over-flow vent disposed in the horizontal diametrical plane of the retort, and said feed pipe terminating in a common plane with said vent and fitted with a check valve, an initial ignition pan, and a deflector arranged in the path of discharge from the burner pipe, the burner pipe adjacent to its discharge end being inclined upwardly from the plane of the said pan.

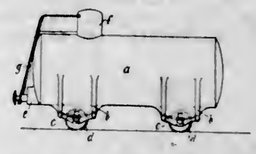
[Claim 2 not printed in the Gazette.]

1,276,620. CAN-OPENER. JULIUS N. CAYO, Gary, Ind. Filed Dec. 22, 1916, Serial No. 138,430. Renewed July 6, 1918. Serial No. 243,707. (Cl. 30—8.)



A can opener comprising a base plate, a casing carried thereby, a shaft journaled in said casing, a spur gear on said shaft extending through a slot in the base plate, a pin carried by said base plate and projecting below the same, a holding plate carried by the end of said pin and spaced from the base plate, a circular plate having openings therein annularly arranged and adapted to be engaged by the said spur gear, a knife member having a forked end located between the bottom plate and said circular plate, the fork engaging the pin and a loop on said circular plate engaging with said knife member above the forked end.

1,276,621. CONSTRUCTION OF WAGONS. HENRI COANDA, Paris, France. Filed June 13, 1918. Serial No. 239,856. (Cl. 105—264.)



1. A railway tank car comprising a skeleton frame, platform and tank all formed in reinforced concrete.

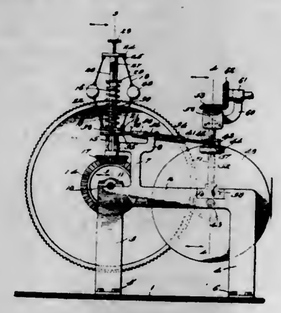
3. A railway tank car comprising a tank, platform and wheel supporting brackets all formed of reinforced concrete, spring connected to said brackets, and wheel supporting axles carried by said springs.

[Claim 2 not printed in the Gazette.]

1,276,622. DRIVING MECHANISM. CHARLES O. COONS, Springfield, Ill. Filed Jan. 29, 1916. Serial No. 75,154. (Cl. 74—97.)

1. Power transmitting mechanism, including a driving member, a driven member intergeared with said driving member, a disk carried on and driven by said driven member, a power transmitting shaft arranged parallel to one surface of said disk, a slidable friction gear mounted on said shaft, governor means driven from said driving element, a pivotal adjustable rod connected with said governor means and said gear whereby the gear will be automatically shifted upon movement of the governor means to various positions of engagement with

said disk for transmitting power at a uniform velocity, and means engaged with said governor means for adjusting the same.

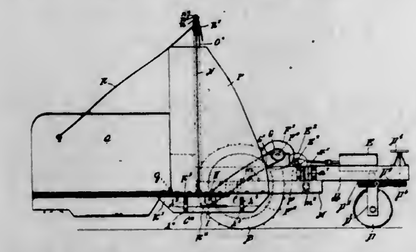


4. A power transmitting mechanism including a driving element, a driven member intergeared with said driving element, a disk carried on and driven by said driven member, a power transmitting means arranged parallel to one surface of said disk, a slidable friction gear mounted on said shaft, governor means driven from said driving element, a pivotal adjustable rod connected with said governor means and said gear whereby the gear will be automatically shifted upon movement of the governor means to various positions of engagement with said disk, for transmitting power at a uniform velocity, a spring bearing upon said governor means, and a set screw carried by said spring for adjusting the tension thereof.

6. A power transmitting mechanism including a driving means and a driven means, a governor means connected to said driving means, a pivotal body having a bore extending therethrough, arms slidably mounted in the ends of said bore and engaging said governor means and said driven means, whereby said driven means will be automatically operated upon movement of the governor means by movement of said body and arms, thus transmitting power at a uniform velocity.

[Claims 2, 3, 5, and 7 not printed in the Gazette.]

1,276,623. SUGAR-CANE-WINDROWING MACHINE. JOHN CURRY CORBIN, Mansfield, La. Filed May 16, 1918. Serial No. 235,011. (Cl. 56—103.)

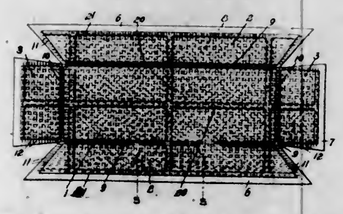


1. A cane wind-rowing machine, comprising a frame and an engine carried thereby, narrow gage wheels supporting said frame and adapted to pass in the trench between adjacent rows of cane, a pair of spring supported secondary frames mounted, respectively, at each side of said main frame, means for vertically adjusting the said secondary frames relative to said main frame, a pair of rotary cutting knives carried by each of said secondary frames, means operated by said engine for rotating said knives, and guards for the cane stalks adapted to direct the cut stalks into the trench between adjacent cane rows, substantially as described.

6. A cane wind-rowing machine, comprising a frame and an engine carried thereby, narrow gage wheels supporting said frame and adapted to pass in the trench between adjacent rows of cane, a pair of spring supported secondary frames mounted, respectively, at each side of said main frame, a pair of rotary cutting knives carried by each of said secondary frames, and means operated by said engine for rotating said knives, substantially as described.

[Claims 2 to 5 and 7 to 9 not printed in the Gazette.]

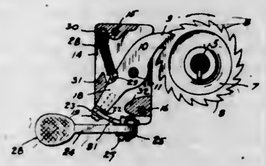
1,276,624. METHOD OF CONSTRUCTING REINFORCED-CONCRETE HULLS FOR BOATS, &c. ROBERT A. CUMMINGS, Pittsburgh, Pa. Filed May 20, 1918. Serial No. 235,561. (Cl. 25—130.)



7. The method of constructing reinforced concrete structures of thin section and large area, consisting in casting the same in sections separately and in substantially horizontal position with reinforcement extending into the spaces between adjacent sections, the reinforcement in adjacent sections being united in said spaces, moving some of said sections relative to others and rotating them about their edges contiguous to the adjacent sections, and closing the joints or angles.

[Claims 1 to 6 not printed in the Gazette.]

1,276,625. ATTACHMENT FOR CAR-BRAKES. GUST A. DANIELSON and MORRIS L. HIRSCH, Los Angeles, Cal. Filed Aug. 9, 1917. Serial No. 185,387. (Cl. 74—16.)



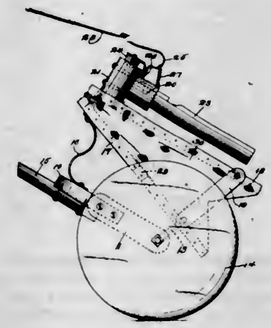
1. A device of the class described in combination with a brake rod and ratchet wheel, of a base plate, provided with stops and means of securing same adjacent to said rod and ratchet wheel, a spring operated pawl mounted on said plate, a connecting rod, an operating lever and means to connect said connecting rod and said lever in operative relation to said plate and said pawl.

2. A device of the class described, in combination with a brake rod and ratchet wheel, of a casting provided with means of securing same to the platform adjacent to said ratchet, and a resiliently operated pawl pivoted in said casting with a point in operative relation to said ratchet, the oppositely disposed end being provided with a pin, a connecting rod adapted to connect with said pin; a foot lever provided with a pedal and arm, and pivotally connected to said casting and means to connect said connecting rod to said arm on said foot lever.

1,276,626. MUSICAL MECHANICAL TOY. LAURENCE A. DICKSON, Memphis, Tenn. Filed Oct. 18, 1917. Serial No. 197,316. (Cl. 46—47.)

1. In a musical toy, the combination of a wheeled frame, a plurality of sound tubes mounted on the frame,

an air compressing means on the frame and having connection with the wheels to actuate the compressing means by movement of the frame, and having connection with the tubes for simultaneously sounding the same.

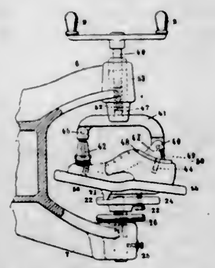


2. In a musical toy the combination of a frame, wheels supporting the frame and bellows on the frame, a connection between the wheels and the bellows for operating the latter, an open neck connected to the bellows, a sound tube connected to the neck, and a valve adapted to close the neck to deflect wind pressure from the bellows to the tube.

3. In a musical toy the combination of a frame, a bellows mounted on the frame, wheels supporting the frame and connected to the bellows for operating the same, an open neck communicating with the bellows, a valve carried by the neck, means for maintaining the valve normally open, operating means connected to the valve for closing the same at times, a wind chest communicating with the neck to receive air therefrom when the valve is closed, and a plurality of sound tubes communicating with the wind chest.

[Claims 4 to 6 not printed in the Gazette.]

1,276,627. SHOE-PRESS. EUGEN GOTTFRIED DIHLMANN, Leipzig-Reudnitz, Germany. Filed Dec. 5, 1917. Serial No. 205,682. (Cl. 12—33.)



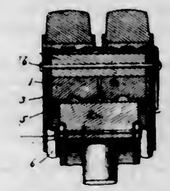
1. In a press for the manufacture of boots and shoes, the combination, with a press device, of a loose press bow detachably engageable with said press device, means carried at one end of said bow for forcing the other end thereof into clamping relation with a work piece, means for holding the work piece up against the bow, and a guide in which the press bow is longitudinally movable.

3. In a press for the purposes described, the combination with a press device having a guide, of a loose press bow lengthwise adjustable on said guide, said bow being capable of engagement with a work-piece out of the press, and a bed for the work piece, said bed being adjustable lengthwise in unison with the bow.

6. In a press for the purposes described, the combination with a press device of a loose press bow, a bed for a work piece said press bow and bed being adapted to be engaged with a work piece and introduced with it into the press as a whole guiding means for the press bow and bed, and means for adjusting the bow and bed lengthwise of the press.

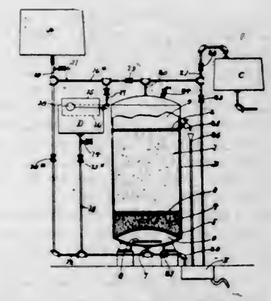
[Claims 2, 4, 5, 7, and 8 not printed in the Gazette.]

1,276,628. CUSHIONED WHEEL. ALFRED S. DUFFINS, Markesan, Wis., and FRANCIS MEAD, Chicago, Ill. Filed Mar. 31, 1916. Serial No. 87,902. (Cl. 152—36.)



In a vehicle wheel, the combination with inner and outer rims disposed for relative motion both radially and laterally of the wheel, of resilient cushions interposed therebetween and each normally flush with a side of one of said rims, of a pair of inflexible annular rings carried on each side of the last named rim, the inner of said rings extending flush with and opposing the said sides and contacting laterally with said cushions, an annular guard of flexible fabric clamped between each pair of said rings and extending radially of the wheel past a portion of the other rim, and means for securing said guard to the last named rim.

1,276,629. METHOD OF AND APPARATUS FOR SOFTENING WATER. THOMAS R. DUGGAN, New York, N. Y., assignor to The Permutit Company, New York, N. Y., a Corporation of Delaware. Filed Oct. 23, 1916. Serial No. 127,127. (Cl. 210—1.)



1. The process of regenerating after use a bed of water softening exchange silicates containing lime or magnesia, which comprises passing a salt solution through said bed in an upward direction as long as said salt solution continues to dissolve and remove substantial amounts of lime or magnesia, and drawing off the contaminated solution after a single passage through the bed.

2. The process of regenerating after use a bed of water softening exchange silicates containing lime or magnesia, which comprises passing a salt solution through said bed in an upward direction as long as said salt solution continues to dissolve and remove substantial amounts of lime or magnesia, and drawing off the contaminated solution at or near the surface of the bed after a single passage through the bed.

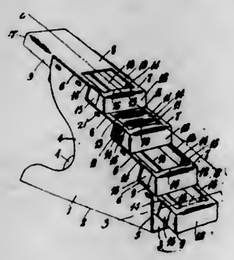
3. The process of regenerating after use a bed of water softening exchange silicates containing lime or magnesia, which comprises passing a salt solution through said bed in an upward direction, drawing off the contaminated solution after a single passage through the bed, such drawing off being continued until the solution has substantially ceased to remove lime or magnesia, and then flushing out the residue of the solution.

4. The process of regenerating after use a bed of water softening exchange silicates containing lime or magnesia, which comprises passing a salt solution through the bed in an upward direction, drawing off the contaminated solution at or near the surface of the bed after a single passage through the bed, such drawing off being continued until the solution has substantially ceased to remove lime or magnesia, and then flushing out the residue of the solution.

5. The process of regenerating after use a bed of water softening exchange silicates, through which the water to be softened has passed downwardly, which comprises passing a salt solution through the bed in an upward direction and drawing off the contaminated solution after a single passage through the bed.

[Claims 6 to 12 not printed in the Gazette.]

1,276,630. DISPLAY AND DISPENSING DEVICE. LEON P. EARL, Cincinnati, Ohio, assignor to The Aromint Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Aug. 18, 1917. Serial No. 186,979. (Cl. 211—28.)

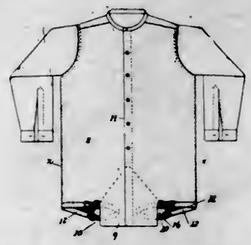


1. In a display and dispensing device, a magazine made up of a single elongated piece of sheet metal having four longitudinal bends forming a wide face side, narrow lateral walls and inturned back flanges, and having near one end a transverse downward bend between said lateral walls, forming a closure for said end, and having outlet openings in its lateral walls and a display opening in its face side, near said end having the closure, and having a lip bent down from its face side at the end of said display opening next to said end having the closure, the other end of said magazine being open.

2. In a display and dispensing device, superposed downwardly forwardly inclined magazines, each made up of a single elongated piece of sheet-metal having four longitudinal bends forming a wide face side, narrow lateral walls and inturned back flanges, and having near its front end a transverse downward bend between said lateral walls, forming a closure for said end, and having outlet openings in its lateral walls and a display opening in its face side, near said front lower end, and having a lip bent down from its face side at the lower front end of said display opening, each upper one of said magazines overlapping the next lower one between the display opening and the upper rear end of said lower one, the upper rear end of each magazine being open.

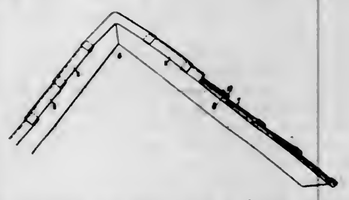
1,276,631. SHIRT. ROBERT J. FIELDS, Baltimore, Md., assignor of one-half to Charles C. Fields, Baltimore, Md. Filed Nov. 7, 1917. Serial No. 200,650. (Cl. 2—41.)

A shirt having a central vertical opening at its front and a notch formed at each of the two lowermost corners thereof leaving the lowermost midway part of the front depending to form an apron; a woven fabric binding at each of said front notches, and extending around the bottom to the shirt-back and each binding having two



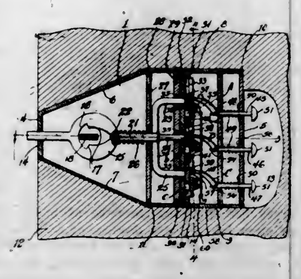
terminal tabs; and two elastic thigh-bands each connected to said terminal tabs of the binding at the right and left sides respectively, to prevent the shirt from working upward on the person or pulling out of the trousers.

1,276,632. ROOF-COVERING. ERNEST FLAGG, New York, N. Y. Filed Sept. 15, 1917. Serial No. 191,596. (Cl. 108—7.)



Roof covering for sloping roofs comprising, overlying narrow strips of paroid, or equivalent material, running transversely of the slope, means securing the underlying edges of the strips, and overlapping angle sections at the ends of the strips, the length of said sections being substantially equal to the width of the strips.

1,276,633. PERMUTATION-LOCK. CHARLES OWEN FORBES, Glasgow, Mont. Filed Jan. 25, 1916. Serial No. 74,203. (Cl. 70—60.)

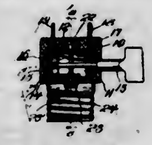


1. In a permutation lock, the combination of a reciprocating bolt, a guide plate having guide flanges formed thereon, a tumbler slidably mounted upon said plate and being guided by said flanges, said plate having an opening formed therethrough, said bolt projecting into said opening and bearing against said tumbler, thus causing the bolt to be held in a set position by said tumbler, one of said guide flanges having openings formed therein,

a pin carried within a selected opening, thus normally retaining said tumbler in a set position, and means for shifting said tumbler for freeing said bolt.

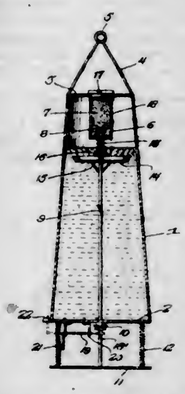
[Claim 2 not printed in the Gazette.]

1,276,634. ELECTRIC-LIGHT SOCKET. JOSEPH C. FORSYTH, Brooklyn, N. Y., assignor of one-fourth to V. C. Gilpin and one-fourth to J. E. McAuliffe, Brooklyn, N. Y. Filed Feb. 24, 1917. Serial No. 150,829. (Cl. 173—351.)



In an electric lamp socket fixture, the combination of an insulating box, terminal strips projecting from said box, one of said strips extending into the box and having oppositely disposed portions in spaced relation to each other, contact pieces arranged in said box one of which is yieldable and attached to the terminal strip which extends into the box, a rotatable contact member mounted between said contact pieces formed with a gap to receive a portion of the yieldable contact piece, and a turn plug for actuating said rotatable contact member having its shank journaled in bearing holes in said oppositely disposed portions of the terminal strip and passing through the rotatable contact member, said rotatable contact member being movable transversely of the turn plug and the latter having a lateral projection to engage and turn said rotatable member.

1,276,635. AEROPLANE-BOMB. ELDRIDGE S. FOXWORTH, Glenmora, La. Filed Feb. 2, 1918. Serial No. 215,100. (Cl. 102—2.)

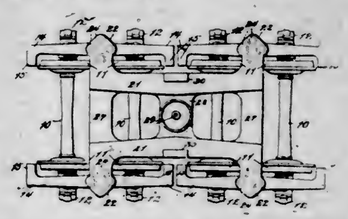


1. A bomb comprising in combination, a shell or container for inflammable liquid, a chamber in the upper part of said shell, a bursting charge in said chamber, a percussion cap therein, a plunger extending longitudinally of the shell and projecting below the bottom end thereof, means for yieldably holding said plunger at the lower limit of its movement, said plunger being adapted to contact with said cap, and a cup-shaped spray thrower mounted upon and movable with said firing plunger.

[Claim 2 not printed in the Gazette.]

1,276,636. CAR-TRUCK. CHARLES F. FREDE, St. Louis, Mo., assignor to Commonwealth Steel Company, St. Louis, Mo., a Corporation of New Jersey. Filed Jan. 5, 1918. Serial No. 210,446. (Cl. 105—244.)

1. In a car truck, two pairs of wheel carrying axles, a pair of separately formed and independently acting truck side frames for each pair of axles, springs supported by said truck side frames, and a center bolster supported by said springs.



2. In a car truck, two pairs of wheel carrying axles, a pair of separately formed and independently acting truck side frames for each pair of axles, and a center bolster yieldingly supported by said truck side frames.

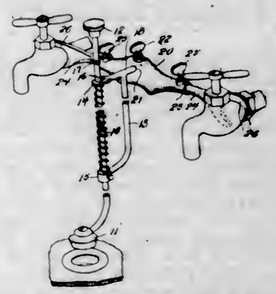
3. In a car truck, two pairs of wheel carrying axles, a pair of separately formed and independently acting truck side frames for each pair of axles, and a center bolster yieldingly supported by said truck side frames, said center bolster and side frames being connected and guided for relative vertical movement.

4. In a car truck, two pairs of wheel carrying axles, a pair of separately formed and independently acting truck side frames for each pair of axles, a center bolster yieldingly supported by said truck side frames, and brake hanger brackets on said side frames.

5. In a car truck, two pairs of axles, journal boxes for said axles, said journal boxes being connected in pairs by separtely formed and independently acting truck side frames, and a center bolster yieldingly supported upon said truck side frames.

[Claims 6 to 17 not printed in the Gazette.]

1,276,637. EXTENSION-SOCKET. CHARLES H. FRICKIE, Bonifas, Mich. Filed Jan. 26, 1918. Serial No. 213,966. (Cl. 4—21.)



1. An attaching bracket of the class described embodying a body portion having an opening therein, a set screw entering said opening, extensible arms provided at each end of the body portion and arcuate shaped spigot engaging ends provided upon each of said arms.

2. The combination with a pair of spigots disposed in horizontal alinement and spaced apart, of an attaching bracket comprising a body portion having an opening therein, an extensible arm secured to each end of the body portion and means located at the outer ends of the arms for engagement with the adjacent surface of the spigot.

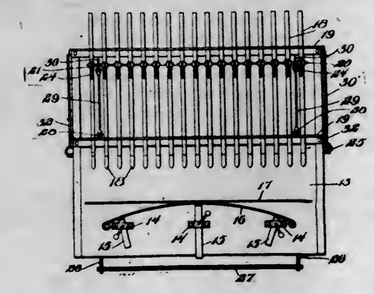
3. An attaching bracket embodying an elongated horizontally disposed body portion having an opening therein, a set screw entering said opening, sockets located at each end of the body portion, arms adjustably secured within each of said sockets and means located at the outer ends of said arms for engagement with the opposed faces of spaced stationary supports, to removably suspend the bracket between the supports.

1,276,638. HAT-FASTENER. GUSTAV FREIWALD, Portland, Oreg. Filed Feb. 26, 1918. Serial No. 219,291. (Cl. 132—25.)



A fastener of the class described comprising an attaching plate having means for connecting it to a hat and provided with a pair of transversely alined laterally spaced slits, a pair of keepers arranged in said plate in longitudinal alinement with said slits, a pair of prongs slidably mounted in said slits and keepers, a cam locking plate having a finger grip at its free end for actuating said plate to retract and project said prongs.

1,276,639. SPRING-FORMING MACHINE. SAMUEL B. FINEGAN, Eugene, Oreg. Filed Feb. 13, 1917. Serial No. 148,358. (Cl. 153—51.)

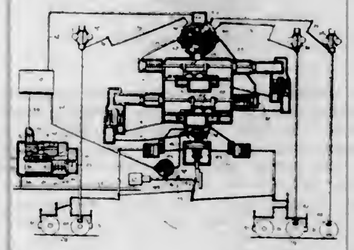


1. A metal forming machine comprising a support, a pattern mounted thereon, spaced parallel apertured guides, plunger rods arranged to slide through said guides, an equalizer spring disposed edgewise beneath and in parallelism with said guides, a member for each rod having a bifurcated extremity straddling said spring, said member having an opening in which said rod slides, said rods being susceptible of independent adjustment relatively, a cam associated with said member and engaging said rod for holding the latter fixed in its adjusted position, and means for moving said rods in unison toward and away from said pattern.

2. A metal forming machine comprising a support, a pattern mounted thereon, spaced parallel guides, a plurality of plunger rods mounted to slide through said guides, an equalizer spring disposed beneath and in parallelism with said guides, a member for each rod, secured to said spring and having an opening through which said rod passes, said rods being susceptible of independent relative adjustment, means carried by said member for engagement with said rod for holding the latter in its adjusted position, and means for moving said rods in unison toward and away from said pattern.

3. A metal forming machine comprising a support, a pattern mounted thereon, a plurality of spaced plunger rods mounted for movement toward and away from said pattern, guides for said rods, an equalizer spring disposed in parellelism with said guides, a connection between said spring and each of said rods for holding the latter fixed relatively to said spring, a shaft journaled on the support beneath said rods, levers projecting upwardly from said shaft adjacent the opposite ends thereof, members secured to the spring at spaced intervals, an arm pivotally associated with the upper extremity of each lever and having connection with the adjacent member on said spring, whereby the rods are actuated toward the pattern when the shaft is rotated in one direction, means for rotating the shaft in said direction, and means for automatically reversing the rotation of said shafts and returning said rods to normal position.

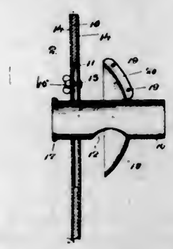
1,276,640. AUTOMATIC QUICK-ACTING AIR-BRAKE. FARREL THOMAS GALLAGHER, Herbert's Creek, Queensland, Australia. Filed Feb. 28, 1914. Serial No. 821,697. (Cl. 188—1.)



1. Improvements in automatic air brakes for preventing the skidding of wheels when brakes are applied thereto, including an auxiliary air reservoir, a brake pipe, a governing valve controlling the communication between said brake pipe and said reservoir, a valve chest including slide valves and exhaust controlling valves, governors, a valve operated by said governors and controlling communication between said auxiliary reservoir and said valve chest, an abutment cylinder connected to said valve chest and adapted to limit the movement of the brake piston, brake easing cylinders connected to the brakes, and a control tap operated by the brake piston to establish communication between said brake easing cylinders and said valve chest.

[Claims 2 to 28 not printed in the Gazette.]

1,276,641. WINDOW ATTACHMENT. JOSEPH M. GALLAGHER, Radville, Saskatchewan, Canada. Filed Feb. 24, 1917. Serial No. 150,774. (Cl. 20—40.5.)



In a device as described, in combination, a panel, a sighting tube, a slidable carriage upon said panel supporting said sighting tube adjustably on said panel, said sighting tube being formed between its ends with an opening in its bottom portion, said carriage adapted to close the panel against foreign matter entering, a frusto-conical shield having a split portion formed with opposing arcuate flanges, said shield having an opening through which said sighting tube projects, and fasteners engaging said flanges and adapted to clamp said flanges together so as to position the shield around said opening in a plane at right angles to the axis of said tube with the inner wall of said shield immediately in front of said opening.

1,276,642. FUEL-TRANSFER MECHANISM FOR STOKERS. NORMAN E. GEE, Altoona, Pa. Filed Dec. 29, 1913. Serial No. 809,349. (Cl. 198—58.)



1. A stoker including a fuel transfer mechanism comprising a main conveyer chute, an elevating chute arranged at an angle thereto, a retilinearly reciprocating conveyer in said main chute, an elevating conveyer connected to said first mentioned conveyer and reciprocating in said angularly disposed elevating chute, and fuel advancing blades pivotally carried by said conveyers.

2. A stoker including a fuel tranfer mechanism comprising a main conveyer chute disposed in a substantially horizontal plane, an upwardly directed elevating chute arranged at one end thereof, a rectilinearly reciprocating conveyer in said main chute, fuel advancing blades pivotally carried by said conveyer, a jointed elevating conveyer connected at one end with the rectilinearly reciprocating conveyer, and fuel advancing blades pivotally carried by said elevating conveyer.

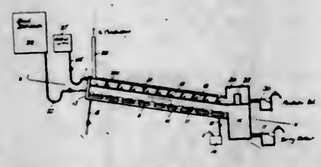
9. A stoker including a fuel transfer mechanism comprising a conveyer chute, a main fuel advancing conveyer and an elevating conveyer connected with said main conveyer, double-bladed fuel advancing units pivotally carried by the conveyer sections, means for preventing the backward rotation of the fuel advancing units, and means for reciprocating both conveyer sections.

10. A fuel transfer mechanism for stokers including a main conveyer chute having a guideway, an elevating chute communicating with said main chute and also having a guideway, a main advancing conveyer consisting of frame bars having tranversely arranged pivot bars, and also similarly arranged stop bars and slidable in the guideway of the main conveyer chute, an elevating conveyer comprising frame bars having jointed connections and slidable in the guideway of the said elevating chute, and also including pivot bars and stop bars, fuel advancing units hung from said pivot bars, actuating means pivotally connected with the elevating conveyer, and means for coupling the main advancing conveyer to the said actuating means.

11. A fuel transfer mechanism for stoking apparatus including a conveyer chute and a reciprocating conveyer therein, said conveyer having a frame, a plurality of pivotally suspended advancing blades, and a follower guard blade carried in rear of each advancing blade.

[Claims 3 to 8 and 12 to 15 not printed in the Gazette.]

1,276,643. PROCESS AND APPARATUS FOR MAKING CALCIUM ACETATE AND BY-PRODUCTS. JACQUES GENDREAU, Shanghai, China. Filed May 3, 1918. Serial No. 232,336. (Cl. 23—24.)



1. A process which comprises continuously admitting wood distillate containing methyl alcohol, acetic acid and tarry matters less volatile than acetic acid, to the upper end of an inclined conduit, heating the said distillate by a heating fluid out of direct contact therewith, to an extent sufficient to induce volatilization of at least the major portions of the said alcohol and acid, causing the vapor produced to traverse a counter-flowing current of an alkaline absorbent liquid, which is maintained in a heated condition, both by the vapors in contact therewith and undergoing absorption, and by the vapors in the vaporizing vessel which have not yet come into contact therewith, while causing said vapors undergoing absorption to be repeatedly bubbled through the said absorbent liquid, whereby the acid is very completely absorbed from said vapors, and whereby an alcohol which may be absorbed thereby is effectively driven out again into the flowing vapor current, drawing off the alcohol vapor and condensing the same, and separately drawing off the acetate solution and the tarry liquid, all in a continuous process substantially as and for the purposes hereinabove set forth.

3. An inclined vaporizing vessel with an inclined absorbing vessel mounted thereupon, said absorbing vessel having means for repeatedly bringing the vapors therein into intimate contact with the liquid therein, a vapor connection between the lower end of the vaporizing vessel and the lower end of the absorbing vessel, a liquid inlet to the upper end of the vaporizing vessel, liquid outlets at the lower ends of both the vaporizing vessel and the absorbing vessel, and a vapor outlet at the upper end of the absorbing vessel.

[Claim 2 not printed in the Gazette.]

1,276,644. PROCESS OF FREEING LIQUIDS FROM SUSPENDED PARTICLES. VICTOR MORITZ GOLDSCHMIDT, Christiania, Norway, assignor to Titan Co. A/S. of Norway, Christiania, Norway. Filed Jan. 31, 1918. Serial No. 214,706. (Cl. 210—1.)

1. Process of freeing a liquid from therein suspended solid particles which consists in precipitating sulfur in the liquid and removing said solid particles.

2. Process of freeing a liquid from therein suspended solid particles, which consists in precipitating sulfur in the liquid, the sulfur enveloping said solid particles, and removing said solid particles.

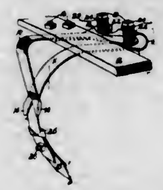
3. Process of freeing a liquid from therein suspended solid particles comprising electropositive colloidal silicon-hydrate-particles, which consists in precipitating sulfur comprising electronegative colloidal sulfur particles in the liquid, the sulfur enveloping said suspended particles and causing a mutual coagulation of the electropositive and the electronegative colloids present, and removing the solid particles.

4. Process of freeing a liquid from therein suspended solid particles, which consists in precipitating sulfur in the liquid, said precipitation being accomplished by oxidation of hydrogen-sulfid, and removing the solid particles.

5. Process of freeing a liquid from therin suspended solid particles, which consists in precipitating sulfur in the liquid, said precipitation being accomplished by oxidation of hydrogen-sulfid by means of ferric salt, and removing the solid particles.

[Claims 6 to 10 not printed in the Gazette.]

1,276,645. HARROW-TOOTH. HARRY M. GOODING, Attica, Ohio. Filed Mar. 14, 1917. Serial No. 154,712. (Cl. 55—36.)



1. In a harrow tooth, a support, resilient blades rigidly secured at one set of ends to the support and extending therefrom in opposite directions beyond the se-

curing means and then converging downwardly, the end of one of the blades being slidable on the other blade and secured against movement therefrom.

4. In a harrow tooth, a blade extending forwardly, and then bent downwardly, rearwardly and downwardly, and resilient means connecting the forwardly and rearwardly extending portions of the blade, for the purpose specified.

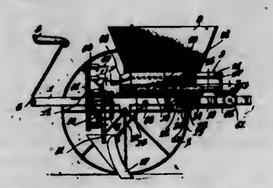
5. In a harrow tooth, a blade having two portions connected by a loop, and resilient means connecting the two portions of the blade adjacent the loop.

6. In a harrow tooth, a blade having a looped portion, a plate disposed across the blade at one side of the looped portion, a blade having arms extending beyond the blade at the other side of the looped portion, and resilient means disposed at the sides of the blade and connecting the plate with the arms.

12. In a harrow tooth, a support, a resilient blade secured to the support and extending from the rear of the support rearwardly and downwardly, a second resilient blade secured to the support and which is looped at the front of the support and which then extends rearwardly and downwardly, the first blade having arms disposed against the outer sides of the last-mentioned blade at the front of the support and adjacent its looped portion, a plate disposed under the said looped portion of the second blade, the plate and the arms having orifices, bolts disposed in the orifices, and springs on the bolts above the looped portion of the blade.

[Claims 2, 3, 7 to 11, 13, and 14 not printed in the Gazette.]

1,276,646. POTATO-PLANTER. LOUIS GREB, Appleton, Wis. Filed Mar. 13, 1917. Serial No. 154,525. (Cl. 221—118.)



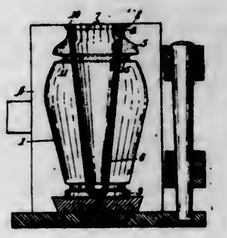
1. In a potato planter, a hopper, means for feeding the potato segments from the hopper, a chute carried by the planter and arranged in proximity of the feeding means for receiving the potato segments, and means adjacent the feeding means for preventing the discharge of potato segments thereonto whenever said feding means has discharged an excess of segments from the hopper.

7. In a potato planter, a hopper, reciprocal means for uniformly feeding the potato segments from the hopper, a chute carried by the planter, a rotatable member on the planter, a plurality of spring pressed pins carried by said rotatable member, an inclined track arranged adjacent said pins and engaged therewith for intermittently depressing and releasing the same whereby a predetermined number of potato segments will be engaged thereby and removed from the feeding means to said planting means and released thereinto, a pivotal arm arranged adjacent the feeding means, and means arranged upon said pivotal arm adapted to be engaged by the potato segments on said feeding means for controlling the discharge of the remaining potato segments from the hopper thereonto.

12. In a potato planter, the combination of a frame having a body carried thereon, a hopper overhanging said body, feeder bars positioned against said body, a block connected to said feeder bars, an eccentric disk engaging said block, means for rotating said disk for causing the reciprocation of said feeding bars, a ledge carried by said body, a grating having ways positioned upon said ledge, said feeding bars projecting through said ways, thus allowing potato segments to move from said hopper into engagement with said feeder bars, means for receiving potato segments from said feeding bars and depositing the same in said chute, a regulating arm pivotally mounted upon said body and having a twisted flat end extending adjacent the outer end of said grating, a link connecting said arm to said grating, thus causing an excessive quantity of potato segments to engage the flat twisted end of said arm for elevating the same and thus lifting said grating from engagement with said ledge for temporarily limiting the movement of potato segments onto said feeding bars.

[Claims 2 to 6 and 8 to 11 not printed in the Gazette.]

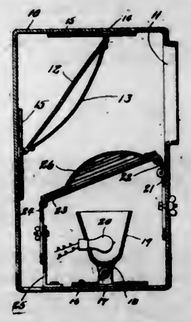
1,276,647. METHOD AND MEANS FOR PRODUCING LANTERN-GLOBES. ALBERT R. GROTZ, Wellsburg, W. Va. Filed Oct. 8, 1917. Serial No. 195,242. (Cl. 49—69.)



1. The herein-described method of making lantern globes, which consists in expanding a hollow pressed blank in a machine blow-mold to form a globe body and an integral bust-off with a relatively thin frangible web intermediate said bust-off and said body.

2. A mold for making lantern globes and the like, including a mold having a globe-forming chamber and a bust-off chamber therein, the latter located adjacent to the mouth of the mold, an inwardly projecting annular rib separating said chambers, the inner edge of said rib being designed to shape the neck of the globe, and the upper face of said rib being sharply inclined from said edge to the point of greatest diameter of said bust-off chamber, said rib and the upper walls of said bust-off chamber being so located relatively and the inclination of the upper face of the rib being such that a choke is produced which causes glass when expanded against the walls of said bust-off chamber to be so stretched that the web resting upon the upper face of the rib will be thinner than the rest of the bust-off.

1,276,648. SIGNALING DEVICE. GEORGE R. GUILD, U. S. Army, assignor of one-half to C. T. Payton, St. Louis, Mo. Filed Oct. 13, 1917. Serial No. 196,416. (Cl. 240—41.)

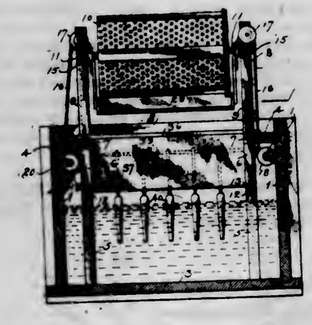


3. In a signaling device of the class described, a source of light, a reflector therefor, a reflecting surface occupying an angular position adjacent to said source of light

and the reflector therefor, and a lens interposed between said source of light and reflecting surface, said reflector, reflecting surface and lens being independently adjustable.

[Claims 1, 2, 4, and 5 not printed in the Gazette.]

1,276,649. ELECTROPLATING APPARATUS. FOREST H. HARTZELL, Dayton, Ohio, assignor to Wayne E. Dunston, receiver of The Crown Hardware Manufacturing Co. Continuation of application Serial No. 68,472, filed Dec. 24, 1915. This application filed Apr. 18, 1916. Serial No. 92,006. (Cl. 204—11.)



1. In an electroplating apparatus, the combination of a vat having grooved recesses or channels in its inner opposite sides, standards projecting above the top edge of the vat having grooved recesses on their adjacent sides registering with and forming continuations of the grooved recesses or channels of the vat, a revoluble drum, trunnions projecting from said drum and engaging in said grooved recesses of the standards, and hoisting apparatus adapted to reciprocate the drum vertically within the limits of the combined grooved recesses.

2. In an electroplating apparatus, the combination of a vat, a revoluble drum therein, standards projecting above the level of the tank, sliding connections between the drum and standards, separate sheaves carried by the standards, cables passing over the sheaves and attached to the drum and winding means for said cables.

4. In an electroplating apparatus, a vat, a revoluble drum therein, hoisting cables attached to the drum, a separate winding reel for each cable, and intermediate driving mechanism between the reels for operating the reels in unison, means for rotating the reels and retaining means for the reels in operated positions.

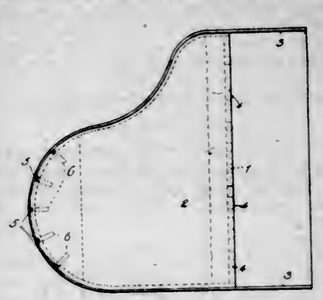
5. In an electroplating apparatus, a vat, a revoluble drum therein, a receiver suspended beneath the drum, and means for simultaneously lifting the drum and receiver from the vat.

14. In an electroplating apparatus, a vat, a revoluble drum therein, an electrical conductor extending through the vat, electrodes suspended upon said conductor, and a housing within the vat inclosing the conductor and electrode connections, substantially as and for the purpose specified.

[Claims 3 and 6 to 13 not printed in the Gazette.]

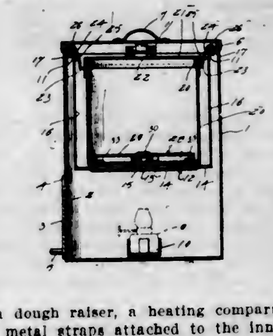
1,276,650. SOUNDING-BOARD MOUNTING FOR GRAND PIANOS. JUSTUS HATTEMER, Cliffside Park, N. J., assignor to Brambach Piano Company, New York, N. Y., a Corporation of New York. Filed Sept. 20, 1917. Serial No. 192,284. (Cl. 84—30.)

4. In a grand piano, the combination of a casing, a sounding board horizontally disposed therein, supporting means sustaining said sounding board along its straight and curved edges in said casing, and air channels through both the supporting means for the straight edge and through the supporting means for the curved edge, whereby the sound waves can pass from underneath said sounding board through said air channels up and out to the atmosphere through the casing.



[Claims 1 to 3 not printed in the Gazette.]

1,276,651. DOUGH-RAISER. PAUL C. HAUBOLD, Naponee, Nebr. Filed Feb. 9, 1918. Serial No. 216,254. (Cl. 126—282.)



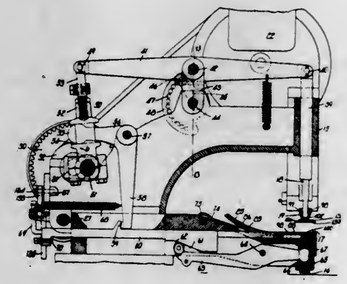
3. In a dough raiser, a heating compartment, a plurality of metal straps attached to the inner surface of the sides of said heating compartment near its top, a support including a plurality of substantially U-shaped bars having the upper ends of their legs bent to form loops for overhanging said straps, a dough retaining compartment carried by said support, a pair of angle brackets attached to said dough retaining receptacle, plates hingedly connected to said angle brackets and having their upper ends bent to form hooks for overhanging certain of these upper hooked ends of said U-shaped members, a heater supporting bracket carried by the bottom of said heat compartment, and a baffle plate attached to said U-shaped members above said heater supporting bracket, a cover for said heat compartment provided with a plurality of perforations to provide air circulation within the compartment and a cover for said dough retaining receptacle.

4. In a dough raiser, a heating compartment, a plurality of metal straps attached to the inner surface of the sides of said heating compartment near its top, a support including a plurality of substantially U-shaped bars having the upper ends of their legs bent to form loops for overhanging said straps, a dough retaining compartment carried by said support, a pair of angle brackets attached to said dough retaining receptacle, plates hingedly connected to said angle brackets and having their upper ends bent to form hooks for overhanging certain of these upper hooked ends of said U-shaped members, a heater supporting bracket carried by the bottom of said heat compartment, and a baffle plate attached to said U-shaped members above said heater supporting bracket, a cover for said heat compartment

provided with a plurality of perforations to provide air circulation within the compartment and a cover for said dough retaining receptacle, and a spider mounted within said dough retaining receptacle and resting upon the bottom thereof to hold a part of the dough within the receptacle from engagement with the bottom of the receptacle.

[Claims 1 and 2 not printed in the Gazette.]

1,276,652. RIVET AND CAP SETTING MACHINE. ARTHUR R. HAVENER, Wayland, Mass., assignor to Judson L. Thomson M'f'g Co., a Corporation of Massachusetts. Filed Mar. 4, 1918. Serial No. 220,193. (Cl. 218—2.)



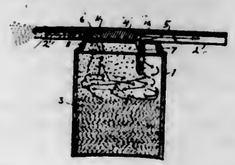
1. A rivet and cap setting machine having, in combination, rivet setting instrumentalities comprising a rivet holder and a rivet driver, rivet cap setting instrumentalities comprising an anvil in alinement with said driver, and a holder for a rivet cap interposed between said rivet holder and anvil, a driving shaft, a crank on said shaft and mechanisms operated by said crank whereby reciprocatory motions are imparted to said rivet and cap setting instrumentalities to drive a rivet through a piece of sheet material and clench it in said cap.

5. A riveting machine having, in combination, an anvil, a rivet carrier, a driver in alinement with said anvil and carrier, a driving shaft, a crank on said shaft, mechanism adapted to impart a reciprocatory motion to said driver comprising a lever and a member connecting said lever to said crank, mechanism adapted to impart a reciprocatory motion to said carrier comprising a lever and an arm fast to said member and engaging said lever, a raceway in two parts for feeding rivets to said rivet carrier and mechanism operated by said carrier lever adapted to separate a rivet from a column of rivets on one of the parts of said raceway and carry it to the other of said parts of said raceway.

11. A rivet and cap setting machine having, in combination, rivet setting instrumentalities comprising a rivet holder and a rivet driver, rivet cap setting instrumentalities comprising an anvil in alinement with said driver and a holder for a rivet cap interposed between said rivet holder and anvil, a driving shaft, a crank on said shaft, a raceway for rivets leading to said rivet carrier, a raceway for rivet caps terminating between said anvil and rivet carrier, and mechanims operated by said crank, viz, a mechanism to feed a rivet cap along said rivet cap raceway and above said anvil, a mechanism to feed rivets down said rivet raceway into said rivet carrier, a mechanism to impart a reciprocatory motion to said anvil, a mechanism adapted to impart a reciprocatory motion to said driver and a mechanism adapted to impart a reciprocatory motion to said rivet carrier, whereby rivets may be driven through a piece of sheet material and clenched in a rivet cap beneath said sheet material.

[Claims 2 to 4 and 6 to 10 not printed in the Gazette.]

1,276,653. SPRAYING IMPLEMENT. HENRY EDWARD HERBERT, and JAMES BERT HOGEBOOM, Martin, Mich. Filed Oct. 13, 1917. Serial No. 196,522. (Cl. 48—14.)



1. In combination with a powder container and its cover, a pipe secured across the top of the cover and having an inflow opening and an outflow opening through the pipe and cover into the container, a dam in the pipe between the two openings, the ends of the dam formed upon a curve back of, and over the openings, and a screw formed sheet metal air distributer projecting downwardly at right angles from the pipe below the inflow opening.

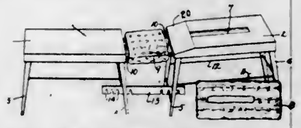
[Claim 2 not printed in the Gazette.]

1,276,654. EXPANDING METAL CORE. WILLIAM A. HIRSCH, Avalon, Pa. Filed Dec. 7, 1917. Serial No. 206,086. (Cl. 18—45.)



An expanding core comprising a plurality of arcuate members, a plurality of blocks each having a cam action with the members, an arcuate rod connecting the blocks together, a link pivotally connected to one end of the rod and a screw having a screw threaded engagement with one of the members and a ball and socket connection with said link for the purpose set forth.

1,276,655. PORTABLE ADJUSTABLE ADJUSTING-TABLE FOR CHIROPRACTIC USE. MINNIE A. HOUSHOLDER, Chicago, Ill. Filed Nov. 27, 1915. Serial No. 63,761. (Cl. 128—16.)



1. A portable adjusting table comprising two sections, each of said sections having four legs, said legs being hinged to their respective sections, whereby they may be folded inwardly, two coil springs extending between the two sections and detachably secured thereto, a detachable brace placed between the two sections, there being a plurality of notches in said brace whereby the sections can be braced the desired distance apart, a handle secured to the outside of the table, and means to hold the two sections securely together when folded up in the form of a suitcase, there being a slot in one of said sections and an inclined plane on the upper surface of one section adjacent one end.

2. A portable adjusting table comprising two sections each of said sections having four legs, each of said legs being hinged to their respective sections whereby the legs may be folded inwardly, said table legs being braced by struts detachably secured thereto, there being coil springs which extend from one table section to the other, a detachable brace placed betwen the two sections, there being a plurality of notches in said brace, whereby the sections can be braced the desired distance apart, there being a slot in one of said sections and an inclined plane on the upper surface of one section adjacent one end.

1,276,656. AMALGAMATOR. JAMES HUTCHINGS, Chicago, Ill. Filed Aug. 22, 1917. Serial No. 187,605. (Cl. 83—67.)



1. In an amalgamator, a casing having an elongated mercury chamber, said chamber comprising a series of successive pan sections having the bottoms at different levels, the depths of said pan sections decreasing toward the bottom of pans at higher levels but the width of said pan sections increasing toward bottoms of higher level.

2. An amalgamator comprising a casing having a mercury pan forming a series of pan sections the depths of which decrease toward one end but the widths of which increase toward the same end, and a cover for said pan having an inlet to the pan section of the greatest depth and an outlet from the pan section of the least depth, said cover being stepped to coöperate with the pan sections and to present an increasing cross section of the mercury pan as it approaches the outlet.

3. In an amalgamator, a casing having a mercury chamber provided with an inlet and an outlet, the bottom of the chamber being stepped so as to present a series of pan sections the depths of which decrease toward the outlet but the widths of which pan sections increase toward the outlet, said chamber having a stepped top coöpertaing with the stepped bottom, so that the cross-sectional area of the chamber increases toward the outlet to decrease the flow through the chamber toward the outlet, and mercury-coated plates on said stepped top having portions extending toward the outlet of the chamber.

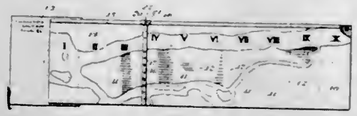
5. In an amalgamator, a casing having an elongated mercury chamber provided with an inlet at one end and an outlet at the other end, the depth of said chamber decreasing toward the outlet but the cross section of the chamber increasing toward said outlet, said chamber being adapted to slope toward the deepest part of same, a propeller in proximity to the deepest part of the chamber adapted to facilitate the feeding through the chamber toward the outlet, and mercury-coated plates at the top of the chamber.

7. In an amalgamator, a casing having a mercury chamber provided with an inlet and an outlet, the bottom of the chamber being stepped to present a series of pan sections the depth of which decreases toward the outlet, and the width of which increases toward the outlet, said chamber having a stepped top coöperating with the stepped bottom so that the cross-sectional area of the chamber increases toward the outlet.

[Claims 4, 6, 8, and 9 not printed in the Gazette.]

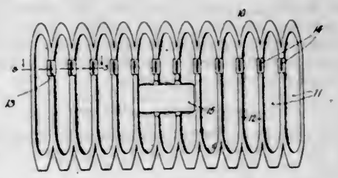
1,276,657. MAP-INDEX. MANUEL C. IBANEZ, New York, N. Y. Filed Apr. 10, 1917. Serial No. 161,096. (Cl. 35—6.)

The combination with a map provided with marginal indicia thereon, of a tape also with indicia thereon for co-



operation with the marginal indicia, a spring clip carried by the tape and frictionally engageable with the marginal edge of the map, said clip having an opening therein to dispose a character of the marginal indicia.

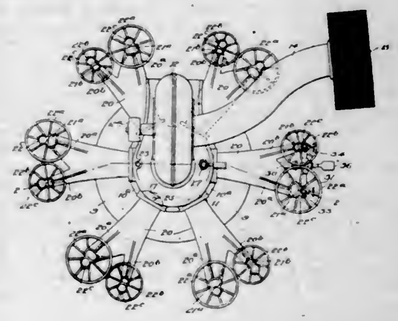
1,276,658. IMITATION ARTICLE. CHRISTIAN JAEGER, MAX J. ROTH, and CARL H. BOEKER, New York, N. Y. Filed Mar. 21, 1918. Serial No. 223,743. (Cl. 40—126.)



2. As an article of manufacture, the herein described layer imitating a series of similar commercial articles arranged in a series alongside of one another, adjacent articles being permanently united, the upper surface of the layer being a faithful reproduction of the articles to be imitated, the under surface of each imitation article being provided with a groove the surface of which is approximately parallel to the upper surface of the same article, and marking devices applied to the several units.

[Claim 1 not printed in the Gazette.]

1,276,659. STERILIZING METHOD. AAGE JENSEN, Long Island City, N. Y. Filed Nov. 9, 1915, Serial No. 60,609. Renewed July 2, 1918. Serial No. 243,089. (Cl. 141—7.)



1. A sterilizing method which consists in first washing the surface to be sterilized with water heated to a sterilizing temperature, then flooding the surface with steam until the surface is substantially sterile, and immediately thereafter, before corrosion of the wet sterile surface and propagation of germ life can take place, drying the wet sterile surface with air heated to a sterilizing temperature.

[Claims 2 and 3 not printed in the Gazette.]

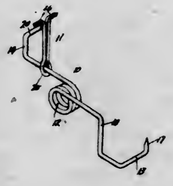
1,276,660. CAN. WHITFIELD E. JONES, Jr., Sharpsburg, Pa., assignor to Pittsburgh Can Company, Sharpsburg, Pa., a Corporation of Pennsylvania. Filed Nov. 28, 1917. Serial No. 203,529. (Cl. 220—29.)



The combination with a keg with its upper edge turned outwardly and then upwardly forming a continu-

ous tubular rim-portion, of ball ear members secured in said tubular rim of said keg, each of said ball ear members comprising a body portion semi-cylindrical in form, and a downwardly extending shank portion terminating in a loop, said shank portion being on a line with the plane of the side face of said keg, said shank and loop portions being held in close engagement with the side face of said keg by forcing said tubular rim of said keg around said shank, substantially as described.

1,276,661. SEAT-ATTACHING DEVICE. HARRIS KAMRASS, New York, N. Y. Filed Jan. 9, 1918. Serial No. 211,033. (Cl. 155—4.)



3. A chair seat attaching device, comprising a plurality of holding members adapted to hold a seat in position on the seat frame of a chair, each holding member being formed of a piece of spring wire bent to form a spring coil intermediate its ends, each end having an angular bearing member, of which the outer bearing member is adapted to reat against the under side of the chair frame and terminates in a point adapted to be driven into the chair frame, the inner bearing member resting against the under side of the seat, and links one for each holding member and extending through the seat, each link having a head resting on top of the seat, and having an eye engaging the holding member adjacent its coil.

4. A chair seat attacbing device, consisting of a piece of spring wire bent to form a coil intermediate of its ends, one end of the wire being bent upwardly and then laterally and the other end being bent downwardly and terminating in an angular and pointed arm, and a link having a head at one end and at the other an eye through which loosely passes the end of the wire which has the upwardly projecting lateral arm.

[Claims 1 and 2 not printed in the Gazette.]

1,276,662. SPRING-PUTTEE. EMIL KAUFMANN, New York, N. Y. Filed Apr. 10, 1918. Serial No. 227,664. (Cl. 36—2.)



1. The combination with the body of the puttee having a metal keeper fixed thereto along one flap and a pointed spring fixed to the opposite flap for coöperation with the keeper, of a metal plate fixed to the first mentioned flap by means of said keeper and having its upper end beveled and extending above the keeper constituting a guard for the puttee body and a guide for the point of the spring in its movement into locking position in the keeper.

[Claim 2 not printed in the Gazette.]

1,276,663. PHOTOGRAPHIC SHUTTER. RUDOLPH KLEIN and THEODOR M. BRUECK, Rochester, N. Y., assignors to Ilex Optical Company, Rochester, N. Y., a Corporation. Filed Dec. 18, 1916. Serial No. 137,557. (Cl. 95—63.)



1. In a photographic shutter, the combination with a master member, of an intermediate member arranged in the path of the master member, a fly wheel, gearing connected to the fly wheel and having a pin and slot connection with the intermediate member, detaining means for the master member for holding the latter in set position, detaining means for the intermediate member to stop the master member to hold the shutter open, and a controlling device for holding the intermediate member in inoperative position so that the master member may open and close the shutter for instantaneous exposure.

2. In a photographic shutter, the combination with a master member, of an intermediate member, detaining means for the master member, a detent for the intermediate member having a latch pivoted thereon, and adapted to be engaged by the intermediate member to be shifted to inoperative position by said intermediate member, a spring acting on said detent to move it in the path of the intermediate member, and an actuating member controlling the detaining means of the master member, engageable with the detent of the intermediate member to hold the latter against the action of its spring until the master member is released, and also engageable with the latch on the detent to shift the latter out of the path of the intermediate member.

1,276,664. BANK. JOSEPH KOMOROUS, Chicago, Ill., assignor to Parisian Novelty Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 24, 1916. Serial No. 127,350. (Cl. 232—6.)



1. In a bank-structure, the combination of relatively rotatable receptacle-forming sections, one of said sections containing a plurality of recesses, lugs on the other of said sections adapted to enter said recesses, one of said sections containing a coin-slot, and a plurality of spring locking means coöperating, respectively, with said lugs and adapted to automatically engage said lugs and releasably lock said sections against relative rotation to a position in which said lugs register with said recesses, upon the act of rotating said sections relative to each other to a position in which said lugs and recesses are out of registration, said locking means being releasable for permitting said sections to be relatively rotated to effect the registration of said lugs with said recesses for permitting separation of said sections, and in such releasing action requiring the action of force against both said locking means at the same time for holding both released against their spring tension.

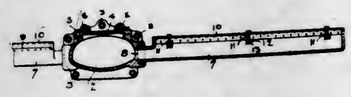
4. A tool for the purpose set forth comprising a pair of levers pivotally connected together and each provided at one end with a laterally projecting extension, and a shoe device connected with the pivot connecting said pair of levers together and spaced from the said extension and projecting at opposite sides of said pivot.

6. In a bank-structure, the combination with the wall thereof containing the coin-slot, of a coin-guard comprising disconnected pairs of resilient members which normally extend partway across the slot toward its opposite ends and are movable in a plane substantially parallel with, and substantially equidistant from, the wall containing said slot.

10. In a bank-structure, the combination of relatively rotatable receptacle-forming sections, one of said sections having an inwardly-projecting flange containing a recess, a lug on the other of said sections adapted to enter said recess and interlock with said flange when said lug is moved out of registration with said recess, said lug extending radially outward, and locking means carried by the one of said sections containing said recess and adapted in the relative rotation of said sections in either direction to interlock with said lug and prevent relative rotation of said sections to a position in which said lug and recess register, said locking means extending between the side wall of the bank-structure and the portion of the lug engaged by said locking means.

[Claims 2, 3, 5, 7 to 9, and 11 not printed in the Gazette.]

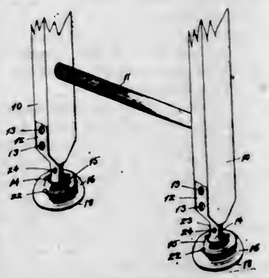
1,276,665. MANIFOLD FOR FILTERS. FREDERICK B. LEOPOLD, Perrysville, Pa. Filed Nov. 30, 1914. Serial No. 874,750. (Cl. 210—18.)



1. In a manifold for filters, the combination of a main conduit, open top lateral conduits projecting out therefrom, cross pieces in said laterals adjacent to the upper edges thereof, strainer plates closing the open tops of said conduits, and means for securing said strainer plates to said cross pieces.

[Claim 2 not printed in the Gazette.]

1,276,666. LADDER-FOOT. ALFRED P. LOHMANN, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Feb. 21, 1917. Serial No. 150,178. (Cl. 228—5.)

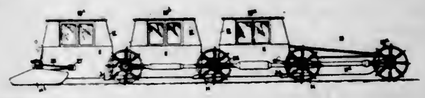


1. A ladder foot comprising an attaching bracket provided with a head constituting a member of a pivotal joint, a pair of plates forming between them a complemental pivotal-joint member or socket embracing said head, and an anti-slipping tread-member secured between said plates.

4. A ladder foot comprising a tread section having upper and lower plates forming the socket member of a ball-and-socket joint, the upper plate having a circular opening to said socket, an anti-slipping tread on said tread-section, and an attaching bracket comprising a pair of bars whose upper portions are adapted to embrace between them the ladder rail, said bars converging downwardly to a neck, and a pair of hemispheres forming a ball head in said socket and adapted to be assembled with the upper plate by passing said bars singly, upper ends foremost, through the opening in said supper plate.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,276,667. TRACTOR-TRAIN. THOMAS MICHAEL MCDONALD, D'Aste, Mont. Filed July 11, 1917. Serial No. 179,789. (Cl. 115—1.)



1. In an automobile train, a pilot unit having driven propelling wheels, additional units having propelling wheels, flexible connections between the units, said units having buoyant bodies to travel in the water, and the propelling wheels having means to give propulsion in the water or on ice, and separate motor-actuated drive means for the wheels of the pilot unit and for the wheels of the said additional units, whereby to utilize a speed in the wheels of an additional unit greater than that of the wheels of the pilot unit to assist in causing the pilot unit to mount an ice field from the water.

4. In an automobile train, the combination of a pilot unit, a motor unit, means to couple said units, front and rear wheels on the pilot unit, a front axle on which said front wheels are mounted, steering means on the motor unit and connected with said front axle, and independent steering means on the motor unit and connected with the pilot unit and adapted to bodily deflect the latter.

6. In an automobile train, a series of units, propelling means on the units, shafting extending along the respective units at the sides thereof and adapted to actuate the propelling means of the respective units, motor driveu means to drive said shafting, means interposed in said shaft and conformable to vary the angular positions of said units, separate housings on the shafting, and extending along the respective units, means to flexibly cement the housings of the respective units, and adapted to establish communication between the same, and means to heat the said housings by heat from the said motor means.

9. In an automobile train, a plurality of units, means to couple the said units, axles on the respective units, said axles having top and bottom plates, spindles on the axles, said spindles having spaced top and bottom members extending between said plates, bearings on the axles between the spindle members, shafting extending along the sides of the units and turning in the bearings on the respective axles, wheels on the axle spindles and driven by said shafting, means to couple the shafting of the respective units, and motor means to drive the shafting.

[Claims 2, 3, 5, 7, 8, 10, and 11 not printed in the Gazette.]

1,276,668. NECKTIE AND COLLAR. JOSEPH DANIEL MCOSKER, Brighton, Mass. Filed Sept. 19, 1917. Serial No. 192,086. (Cl. 2—83.)

2. The combination of an imitation four-in-hand necktie having a rigid tongue extending rearwardly therefrom and widened in a horizontal direction to fit in a slit

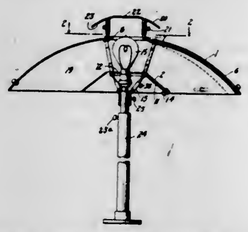
in a collar and prevent the necktie from pivoting on the tongue, and a pivoted buttoning device carried by the rear end of the tongue.



3. An imitation four-in-hand necktie comprising a sheet metal form tapering downwardly and curved backwardly at its side eddges, there being downwardly extending slits in its top edge, and the portion between the slits being bent rearwardly to form a tongue widened in a horizontal direction, a tie strip folded over the top edge of the form, with one portion extending down the front of the latter and another portion extending down the rear, said rear portion of the tie strip having an aperture through which the tongue extends, a band sewed around the tie strip where the same covers the form, and means on the tongue for securing the necktie on a collar.

[Claim 1 not printed in the Gazette.]

1,276,669. LAMP. GEORGE K. MALTBY, New York, N. Y. Filed Nov. 16, 1916. Serial No. 131,650. (Cl. 240—103.)

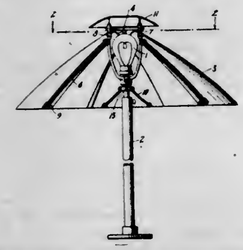


1. In a device of the kind described in combination, a reflector comprising outwardly and downwardly inclined reflector members mounted for vertical adjustment, and radial reflector members associated with said reflector and mounted for adjustment with respect to both a vertical and a horizontal plane.

5. In a device of the kind described, a reflector comprising two bowl-shaped reflector members superimposed one over the other and spaced apart, a source of light disposed between said members, a plurality of partition members disposed between the said reflector members, and means for adjusting the outer ends of said partition members, for the purpose described.

[Claims 2 to 4 not printed in the Gazette.]

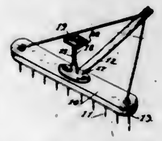
1,276,670. LAMP. GEORGE K. MALTBY, New York, N. Y. Filed Nov. 16, 1916. Serial No. 131,651. (Cl. 240—104.)



1. In a lamp of the kind described, a source of light, a plurality of inverted trough shaped reflector members disposed radially around the light, said members having conical flanges at the sides of the trough shaped portions, the flanges of one of said members overlapping those of the adjacent members, and means for binding said flanges together.

[Claims 2 and 3 not printed in the Gazette.]

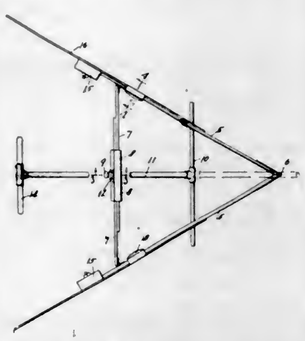
1,276,671. HAND-RAKE ATTACHMENT. ROY J. MARTIN, Lamar, Okla. Filed Mar. 26, 1917. Serial No. 157,535. (Cl. 55—146.)



2. In a hand rake, a cleaning attachment therefor comprising a cleaning plate movable lengthwise of the rake teeth, a stem connected to said cleaning plate and passing through the rake head, a head secured to the upper end of said stem and having a straight sharpened edge, said head serving the double purpose of a hoe when the rake is reversed and to operate the cleaning plate when pressure is applied thereto, and a spring surrounding said stem between the head of the rake and the head forming the hoe.

[Claim 1 not printed in the Gazette.]

1,276,672. SNOW-PLOW. VOLNEY W. MASON, Jr., Kingston, N. Y. Filed Jan. 25, 1918. Serial No. 213,688. (Cl. 32—5.)



1. In a snow plow, a pair of mold boards hinged to form a V, transverse braces between the mold boards in proximity of the unconnected ends, and a resilient handle pivotally mounted in the boards between the braces and the apex of the V formed by the boards so that said handle can be swung on to the braces or the apex so that the plow may be pushed or pulled.

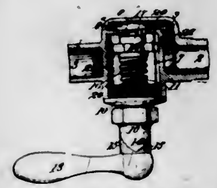
2. In a snow plow, a pair of mold boards hinged to form a V, a brace pivotally connected to each of the boards in proximity to its free end and adapted to extend toward the other mold board, a bracket having a sliding engagement with the braces, means for locking said braces in the bracket, and a resilient handle mounted pivotally in the mold boards between the bracket and the apex of the V formed by the boards, said bracket having an extension provided with a notch for receiving the handle when said handle is swung to rest on said extension, said handle being adapted to be swung to rest on the apex of the V formed by the boards, whereby the plow may be pushed or pulled.

12. In a snow plow, a pair of mold boards connected to form a V, a weight associated with the rear end of the plow, and a handle pivotally connected to the plow to swing on its pivot forwardly and rearwardly to be disposed in the vertical central plane of the plow whereby the plow may be pulled or pushed by said handle.

13. In a snow plow, a pair of mold boards forming a V, a weight at the unconnected extremities of each of the mold boards, and means for manipulating the plow.

[Claims 3 to 11 not printed in the Gazette.]

1,276,673. VALVE. AUGUST W. MELANDER, San Francisco, Cal., assignor, by direct and mesne assignments, to Fountain Faucet Company, a Corporation of Minnesota. Filed Dec. 7, 1915. Serial No. 65,502. (Cl. 277—82.)



A faucet, comprising, in combination, a faucet casing having an upturned discharge passage and a down turned discharge passage, a cylindrical distributing chamber connected by its side through separate ports with said discharge passages, an intake passage connected with one end of said distributing chamber, a valve stem entering the other end of said chamber, a stuffing box in said chamber through which said stem extends and formed with a cam face, a cam on said stem coöperating with said cam face to reciprocate said stem by the revolution of said stem, a valve removably mounted on the inner end of said stem adapted to close the passage entering said distributing chamber in one position of said stem, a spring urging said valve into closing position, an expansible split sleeve valve rotatable in said distributing chamber and having a port adapted to register with either one of said discharge passages and in intermediate position closing both of said passages, and a connection between said stem and sleeve valve for rotating the latter by said stem.

1,276,674. LOAD-HANDLING APPARATUS. ALBERT C. MENTZER and ROBERT E. DUPREY, Hudson, Mass. Filed Apr. 3, 1915. Serial No. 18,993. (Cl. 214—38.)

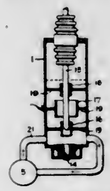


1. In load handling apparatus, the combination of two supporting bases one of which is movable in relation to the other, tilting body supports medially pivoted upon and supported by said bases and each embodying parallel sets of guide rails, and rollers journaled between said guide rails and lying below the top edges thereof, and a load carrying body comprising longitudinal bottom stringers, and runner shoes extending longitudinally of and secured to said stringers and having their opposite end portions recurved in an upward direction and secured to said load carrying body at a higher elevation than the main bodies of the runner shoes, said stringers and shoes being positioned and slidable between said guide rails and upon said rollers.

[Claim 2 not printed in the Gazette.]

1,276,675. ELECTRIC SWITCH. EZRA B. MERRIAM, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Feb. 10, 1914. Serial No. 817,812. (Cl. 175—282.)

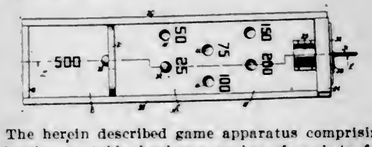
1. An electric switch comprising a vessel adapted to contain an insulating fluid, coöperating contacts separable beneath the surface of said fluid, and means for rapidly circulating said fluid through said vessel and over said contacts prior to and during the movement of said contacts to circuit opening position.



4. An electric switch comprising a vessel adapted to contain an insulating fluid, a stationary contact at one end of said vessel, a plurality of separate metallic tubular arc confining members independently mounted beneath the fluid in said vessel, each of said members differing in bore from the adjacent member, and a coöperating contact movable through said members into and out of engagement with said stationary contact.

[Claims 2, 3, and 5 not printed in the Gazette.]

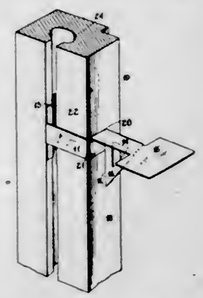
1,276,676. GAME APPARATUS. STEPHEN A. MISCHANSKI, Bayonne, N. J., assignor of one-half to Alex Wojtkowski, Bayonne, N. J. Filed Dec. 1, 1917. Serial No. 204,846. (Cl. 46—62.)



1. The herein described game apparatus comprising, in combination, a table having a series of pockets formed therein, a baffle coöperating with the table top, a pit structure adjacent to the table and having a passageway leading therefrom toward the baffle, one or more projectiles, and rotary means coöperating with the projectiles to eject them singly from the pit toward or against the baffle, whence they may roll into any of said pockets.

[Claims 2 to 4 not printed in the Gazette.]

1,276,677. BRACKET. SAUL MITTLEBURG, Altoona, Pa. Filed June 13, 1917. Serial No. 174,495. (Cl. 248—19.)



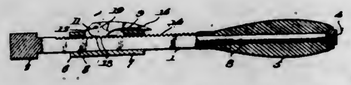
1. In combination with a molding having a facing and a side at an angle thereto, there being a vertical groove in the face of the molding, a bracket having a laterally extending band with one of its ends looped and fitting in the groove, the band being disposed against the face of the molding and being bent rearwardly at the said side of the molding, a support extending horizontally from the band and at the said side of the molding and being provided with a depending leg engaging the molding.

5. A bracket stamped out of a sheet of metal with a horizontal band having a horizontally looped portion and a horizontal support spaced therefrom, the band having a lateral extension which is bent downwardly to form a lug.

7. A bracket blank stamped out of a sheet of metal with a central horizontal band, an arm extending at an angle from an end of the band, and an extension for a leg disposed at the outer side of the arm.

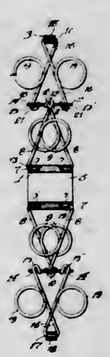
[Claims 2 to 4, 6, and 8 not printed in the Gazette.]

1,276,678. WRENCH. BURROUGH P. MOORE, St. Petersburg, Fla. Filed Mar. 2, 1917. Serial No. 152,063. (Cl. 81—134.)



A wrench comprising a shank, a stationary jaw carried thereby, a rack formed on said shank, a jaw slidably mounted on the shank, said jaw being formed with an opening, spaced ears formed on said jaw upon each side and adjacent one end of said opening, a lever eccentrically pivotally mounted at one end thereof between said ears and having a curved head forming a cam, and teeth located upon said lever between said cam surface and the free end thereof, whereby movement of said lever will initially engage said cam with said rack prior to the engagement of said teeth with said rack.

1,276,679. SPRING-WHEEL. ROY T. MORGAN, St. Louis, Mo. Filed June 12, 1916. Serial No. 103,070. (Cl. 152—28.)



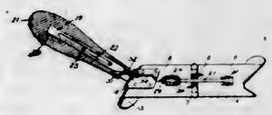
1. In a spring wheel, an inner and an outer hub, said outer hub comprising a resilient ring; a plurality of resilient members radially arranged between said hubs, an annulus carried by said outer hub, said resilient members having their outer ends slidingly secured to said annulus and said outer hub, said annulus providing means for securing said resilient members to said outer hub.

3. A spring wheel comprising an inner hub, an outer hub and a felly, said outer hub comprising a resilient ring and having a series of apertures formed in the periphery thereof, a plurality of resilient members located between said hubs, one end of each of said resilient members having a hook shaped portion formed thereon, each of said hook shaped portions being extended through some of said apertures of said outer hub, an annulus mounted on the outer periphery of said outer hub in engagement with said hook shaped portions of said resilient members, and a plurality of resilient members having hook shaped portions located between said outer hub and said felly, said hook shaped portions of said last mentioned resilient members extending through said other apertures of said outer hub, and a pair of annuli mounted against the inner periphery of said outer hub for engagement with said hooked portions of said last mentioned resilient members.

5. A spring wheel comprising an inner hub, an outer hub and a felly, said outer hub comprising a resilient ring, a plurality of resilient members located between said inner hub and said outer hub having hook shaped portions formed on their outer ends, an annulus mounted on the outer periphery of said outer hub for engaging said hooked portions of said members, a pair of annuli located adjacent the inner periphery of said outer hub, a plurality of resilient members located between said outer hub and said felly having hook shaped portions formed on their inner ends for engagement with said annuli, a transversely arranged portion formed on the inner end of each of said first mentioned resilient members, said transversely arranged portions adapted to engage the side walls of said inner hub, a transversely arranged portion formed on the outer end of each of said second mentioned resilient members, said transverse portions of said second mentioned resilient members adapted to engage the side walls of said felly.

[Claims 2 and 4 not printed in the Gazette.]

1,276,680. OPERATING-HANDLE FOR BRAKE-WHEELS. JOSEPH C. MYERS, West Albany, N. Y. Filed Jan. 19, 1918. Serial No. 212,743. (Cl. 74—33.)

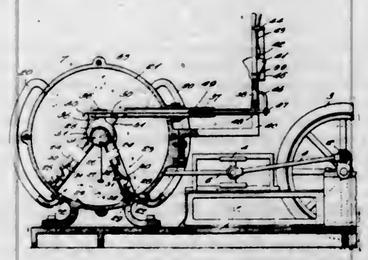


1. A wrench for brake wheels, comprising, a body member provided with a lug adapted to be brought in close contact with the periphery of the wheel, a plurality of lugs respectively adapted to be brought in contact with the inner walls of the wheel and the next adjacent spoke thereof respectively, and a handle carried by said body member and adapted to be extended in a radial position to the periphery of the wheel when the device is applied, the lugs serving to hold said body member in a relatively fixed position upon the wheel in order that power can be applied to said handle.

4. A brake wrench for wheels having annular rims and radial spokes comprising, a member having a lug adapted to engage against the outside face of the rim, a lug adapted to engage with the inside face of the rim and a lug adapted to engage with one of the spokes of the wheel.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,276,681. STEAM-ENGINE. MORRIS EDGAR NEAL, Wellington, Kans. Filed Aug. 27, 1917. Serial No. 188,445. (Cl. 121—43.)



1. A steam engine comprising a rock shaft, a lever secured between its ends on said rock shaft, a piston secured on one end of said lever, a power transmitting rod connected to the other end thereof, an arcuate cylinder in which the piston is mounted, the arc of said cylinder being concentric with the shaft, combined inlet and exhaust passages at the ends of said cylinder, a steam chest through which said shaft passes, a steam inlet for said chest, an exhaust, and a valve operated by and mounted on the aforesaid shaft for alternately placing said passages in communication with the chest and exhaust, said valve being located in said chest.

3. A steam engine comprising a rock shaft, a lever secured between its ends on said rock shaft, a piston secured on one end of said lever, a power transmitting rod connected to the other end thereof, an arcuate cylinder in which the piston is mounted, said cylinder being concentric with said rock shaft and receiving said piston therein, combined inlet and exhaust passages at the ends of said cylinder, a steam chest through which said rock shaft passes and with which the aforesaid passages communicate, a valve mounted loosely on the shaft in said steam chest and including a pair of spaced arms to be alternately moved to opposite sides of said passages, an exhaust from the portion of the chest between said arms and out of communication with the remainder of the chest, a steam inlet for said chest, automatically applied latches for holding the valve in one position or the other, releases for said latches disposed on the arms of the valve, and a hammer projecting from the shaft between said arms and adapted to strike said releases and to then move the valve as said rock shaft oscillates.

6. The combination with the oscillating shaft of a steam engine and a steam chest into which said shaft extends, said chest having a wall concentric to said shaft and having a pair of ports for supplying steam to and receiving it from the engine; of a valve loosely mounted on said shaft in the steam chest and having a pair of arms to be alternately moved to opposite sides of said ports, latches for rocking said valve in one position or the other, releases for said latches disposed on said arms, a hammer extending from the shaft between said arms and adapted to strike said releases and to then move said valve from one position to the other, operating levers connected with said latches and extending to points adjacent the shaft, a tubular reverse rod sliding through the wall of the steam chest and having a sliding connection with the valve, and a second rod sliding through the other and having means for engagement with the aforesaid levers to permit manual release of the latches.

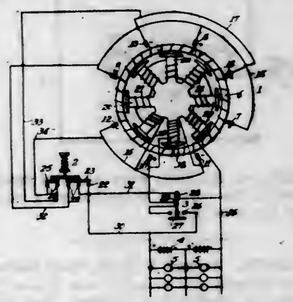
8. The combination with the steam chest of an engine, an oscillating valve therein, and means for locking said valve in its different positions; of a tubular reverse rod sliding through the wall of the chest and operatively associated with the valve, and a second rod sliding through said tubular rod for releasing the locking means manually.

12. The combination with the steam chest of an engine and a movable valve therein, of a tubular reverse rod for said valve, means for locking said valve in its different positions, a release rod sliding through said reverse rod for releasing said locking means manually from the exterior of the chest, a reverse lever pivoted to said reverse rod, a locking device for said reverse lever, a second lever fulcrumed to said reverse lever for releasing said locking device, a third lever fulcrumed, to said reverse lever and connected with said release rod, and means connecting said second and third levers.

[Claims 2, 4, 5, 7, and 9 to 11 not printed in the Gazette.]

1,276,682. DYNAMO-ELECTRIC MACHINE. LEWIS W. NELSON, Niagara Falls, N. Y., assignor, by mesne assignments, to U. S. Light & Heat Corporation, Niagara Falls, N. Y., a Corporation of New York. Filed Aug. 14, 1914. Serial No. 856,805. (Cl. 171—315.)

1. A dynamo-electric machine adapted to operate as a motor or as a generator, said machine having a field structure and a single rotatable ring wound armature, means for utilizing the entire armature and field structure when operating as a motor to obtain a motor of high torque, and means whereby only a portion of said armature is utilized when operating as a generator, whereby a generator of limited capacity is obtained.



7. A dynamo-electric machine adapted to operate as a motor and as a generator, said machine having a multipolar field structure, a majority of the field poles being excited by series coils and a small proportion of the field poles being excited by shunt coils, an armature, means whereby the entire field structure and armature are active when the machine is operating as a motor, whereby a relatively high torque is obtained, means whereby only a portion of the armature within the influence of the shunt excited poles is utilized when the machine operates as a generator, whereby a generator of limited capacity is obtained, and a number of connected brushes spaced to embrace the active portion of the armature, whereby the armature reaction in the active portion of the armature is increased to limit the effective field flux.

21. A multipolar dynamo-electric machine adapted to operate as a motor and also as a generator, one of its poles being provided with a shunt winding, the two adjacent poles being adapted, under generating conditions, to become consequent poles, whereby armature cross flux will affect the distribution of flux through said consequent poles to maintain a substantially constant generator current throughout wide speed changes.

23. A multipolar dynamo-electric machine having a shunt winding on one pole and a series winding on the other poles, whereby the machine will develop a high torque as a motor, said series winding having no practical effect when the machine is operating as a generator, the shunt wound pole being adapted to render the two adjacent poles consequent poles, a ring wound armature associated wtih said poles whereby said shunt wound pole and one of said consequent poles will set up opposing E. M. F's in the armature coils directly associated therewith, brushes embracing said coils, a conductor connecting said brushes and adapted to supply a generator lead, and a third brush intermediate the first two brushes, adapted to supply the other generator lead.

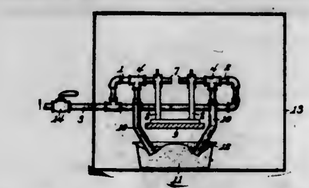
[Claims 2 to 6, 8 to 20, 22, 24, and 25 not printed in the Gazette.]

1,276,683. METHOD OF DRILLING GLASS. HARRY NORTHWOOD, Wheeling, W. Va. Filed July 8, 1916. Serial No. 108,122. (Cl. 51—11.)

1. The method of drilling glass which consists in simultaneously subjecting opposite sides of a thickness of glass to the action of blasts of sand which meet and complete the cutting operation at a point intermediate the opposite faces of the thickness of glass.

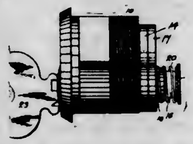
2. A glass-perforating apparatus including opposed, alined, closely-juxtaposed means for simultaneously directing two blasts of sand from opposite sides against an interposed thickness of glass to cut the latter and complete the cutting operation at a point intermediate the faces of said thickness of glass.

3. The method of drilling glass which consists in simultaneously directing against opposite sides of a thickness of glass two alined equal blasts of said which



act to initially cut the glass from opposite faces thereof and to complete the cutting operation at a point intermediate said opposite faces.

1,276,684. LOCK. ALBERT A. PAGE, East Haven, Conn., assignor to Sargent & Company, New Haven, Conn., a Corporation of Connecticut. Filed May 13, 1915. Serial No. 27,855. (Cl. 70—93.)



1. A cylinder lock having a key plug and a rollback embracing and engaging the key plug and guided on the latter lengthwise of the lock; substantially as described.

2. A cylinder lock having a key plug, an extension on the rear end of said key plug, and a rollback embracing and guided longitudinally on said extension; substantially as described.

3. A cylinder lock having a rollback fixed to the key plug and a second rollback slidable on the key plug at the rear of the first rollback; substantially as described.

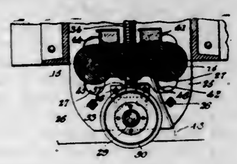
[Claims 4 to 23 not printed in the Gazette.]

1,276,685. ROVING CUTTER OR STRIPPER. LOUIS PAYMENT, Manchester, N. H., assignor to Charles W. Richards, Manchester, N. H. Filed Oct. 28, 1916. Serial No. 128,299. (Cl. 81—9.5.)



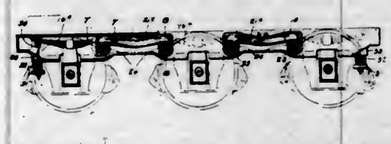
A device of the character described comprising a handle, a supporting member secured to one end thereof and formed as a flat plate cut away to provide a hook at its terminal portion, the bill of the hook being pointed and directed toward the handle and its opening being inclined in respect to the handle, a blade disposed upon said hook member and provided with a longitudinal slot, and a screw passing through said slot and into the hook, whereby said blade is pivotally and slidably adjustable upon said plate forming the hook, the cutting edge of said blade being inclined, the adjustability of said blade permitting its toe to be disposed adjacent the point of the hook and its cutting edge extending diagonally across the opening in the hook.

1,276,686. APPARATUS FOR CUTTING AND BREAKING ASPHALT OR CONCRETE. JOSEPH PETERMANN, Philadelphia, Pa. Filed June 20, 1917. Serial No. 175,941. (Cl. 37—50.)



An apparatus for cutting into the surface of a highway or the like, comprising a weighted frame adapted to be operated over the highway, a carriage movably supported on said frame, a cutter on said carriage, and by the weight of the frame adapted to cut into the surface of the highway, means for controlling the depth of cut of the cutter, means for moving the cutter carriage on the frame, means for lubricating said cutter, and means for depositing a quantity of sand or absorbent material in the path of the cutter, or in the groove made in the highway by the cutter.

1,276,687. CAR-TRUCK. HARRY M. PFLAGER, St. Louis, Mo., assignor to Commonwealth Steel Company, St. Louis, Mo., a Corporation of New Jersey. Filed July 6, 1917. Serial No. 179,035. (Cl. 105—244.)

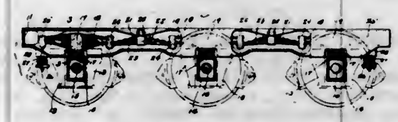


1. A flexible support for railway car trucks comprising springs balanced upon the journal boxes associated with the truck frame, substantially rigid equalizing members fulcrumed upon the truck frame between the journal boxes, coil springs interposed between the ends of the resilient members and said equalizing members and coil springs interposed between the outer ends of the outer pair of springs and the truck frame.

2. The combination with a car truck frame having a substantially hollow wheel piece and the journal boxes associated therewith, of springs balanced upon the journal boxes, equalizing members fulcrumed on the truck frame between said springs, coil springs interposed between the ends of said balanced springs and equalizing members, and coil springs interposed between the outer ends of the outer pair of balanced springs and the truck frame, all of which springs and equalizing members are disposed within the hollow wheel piece of the truck frame.

[Claims 3 and 4 not printed in the Gazette.]

1,276,688. CAR-TRUCK. HARRY M. PFLAGER, St. Louis, Mo., assignor to Commonwealth Steel Company, St. Louis, Mo., a Corporation of New Jersey. Filed July 6, 1917. Serial No. 179,040. (Cl. 105—244.)



1. The combination with a car truck frame and its journal boxes, of a helical spring supported by each

journal box, an equalizing member supported by each helical spring, springs disposed between said equalizing members and bearing upon the truck frame and the outer ends of the outer pair of equalizing members having yielding resilient connections with said truck frame.

2. A flexible support for railway car trucks comprising equalizing members having yielding and resilient supports upon the journal boxes associated with the truck frame, and springs disposed between and connected to said equalizing members, which springs bear upon the truck frame at points between the journal boxes.

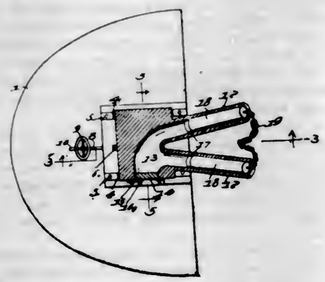
3. A flexible support for railway car trucks comprising equalizing members having yielding and resilient supports upon the journal boxes associated with the truck frame, and springs disposed between and connected to said equalizing members, which springs bear upon the truck frame at points between the journal boxes, all of which parts are disposed within the substantially hollow wheel pieces of the truck frame.

4. A flexible support for railway car trucks comprising equalizing members having yielding and resilient supports upon the journal boxes associated with the truck frame, springs disposed between and connected to said equalizing members, which springs bear upon the truck frame at points between the journal boxes, and flexible and resilient connections for the outer one of the outer pair of equalizing members and the truck frame.

5. The combination with a car truck frame and its journal boxes, of springs mounted for rocking movement upon the truck frame at points between the journal boxes, equalizing members connected to said springs and yieldingly supported upon the journal boxes, and yielding connections between the outer ends of the outer pair of equalizing members and the truck frame.

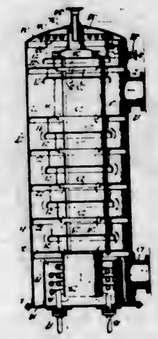
[Claims 6 to 10 not printed in the Gazette.]

1,276,689. ORDNANCE. ALFRED POUDRIER, Slaterville, R. I., assignor of one-half to Arthur C. Devere, Millville, Mass. Filed Oct. 3, 1917. Serial No. 194,574. (Cl. 89—1.)



A cannon of the kind described comprising a cylindrical body portion having divergent barrels formed therewith, the body portion being formed with a chamber with which the bores of both barrels communicate, a block formed with a semi-circular depression in its upper face in which the said body portion rests, the block being formed with a semi-circular slot substantially at the middle of the length of the said depression, the body portion being formed with a plurality of teeth on a portion of its outer cylindrical surface, the said teeth projecting into the said slot, a worm-wheel meshing with the teeth, a shaft journaled in the block and carrying the worm-wheel, the block having clearance space for the said worm-wheel, strap members attached to the block on the top at either side, the said strap members surrounding the said body portion on that portion of its circumference not resting in the depression, and means for imparting angular movement to the shaft, whereby the body portion may be moved angularly in an upward direction for the purpose specified.

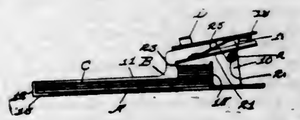
1,276,690. DEPHLEGMATOR AND RECTIFYING-COLUMN. DANIEL PYZEL, San Francisco, Cal. Filed Oct. 10, 1916. Serial No. 124,912. (Cl. 196—1.)



1. In a dephlegmator, a shell, means for supplying vapors to the bottom of said shell, means for withdrawing vapors from the top of said shell, an artificial cooling coil located in the path of said vapors in the top of said shell, a rectifying column so located as to receive and redistil the condensate from said artificial cooling coil, said redistillation being accomplished by the hot vapors passing through said shell around said rectifying column, redistilling means in the bottom of said shell so located as to receive the condensate from said rectifying column, and auxiliary heating means for the bottom of said shell.

2. In a dephlegmator, a shell, means for supplying vapors to the bottom of said shell, means for withdrawing vapors from the top of said shell, an artificial cooling coil located in the path of said vapors in the top of said shell, a rectifying column so located as to receive and redistil the condensate from said artificial cooling coil, said redistillation being accomplished by the hot vapors passing through said shell around said rectifying column, redistilling means in the bottom of said shell so located as to receive the condensate from said rectifying column, auxiliary heating means at the bottom of said shell, and means to regulate the amount of said heat so supplied.

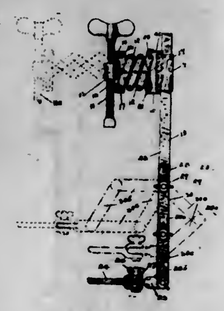
1,276,691. COMBINED PAD-HOLDER AND TICKET-PUNCH. CHARLES T. RASCHICK, St. Paul, Minn. Filed Dec. 26, 1916. Serial No. 138,960. (Cl. 211—37.)



1. In a device of the character described, in combination, a casing comprising a base having flanges on its longitudinal edges adapted to hold a set of leaves, a follower plate journaled between said flanges above said base for engaging and retaining said leaves thereupon, a pocket having an open end secured to one of said flanges, a second plate journaled between said flanges for covering the open end of said pocket, and means interposed between said plates for normally holding said second plate in closed position.

[Claims 2 to 4 not printed in the Gazette.]

1,276,692. CLAMP. FRANK W. REES, Portland, Oreg., assignor of one-half to Myrtle I. Rees, Seattle, Wash. Filed Mar. 29, 1917. Serial No. 158,448. (Cl. 29—87.1.)



1. In a clamp, a bar; a head; a foot; clamping means upon said head adapted to hold material between said head and said foot; pivotally connected links connecting said head and said foot; and means to secure said links in any desired position to form a substantially rigid member therefrom.

[Claims 2 to 6 not printed in the Gazette.]

1,276,693. CAN-OPENER. ANTHONIS W. REKENTHALER, Dunlo, Pa. Filed May 11, 1916. Serial No. 96,837. (Cl. 30—3.)



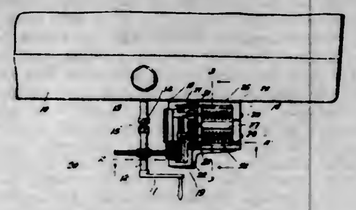
1. A can opener, including, in combination, a shank, a blade carried by said shank and spaced therefrom, said blade having a forward cutting edge inclined relatively to the longitudinal axis of the shank, and a guiding projection formed on the shank in a plane parallel with and in front of the blade and the rear edge of said projection inclined in the same general direction as the cutting edge, the outer face of said projection located between the blade and the shank and adapted to lie on the outside of a can, and the top of the projection positioned to engage underneath the flange joining the top and side walls of the can, substantially as described.

2. A can opener, including, in combination, a flat shank, a blade formed by an angular portion of said shank bent at an angle over the top edge of the latter and the blade lying in a plane spaced from and parallel with the plane of the shank, and a guiding projection formed by another angular portion of the shank bent upwardly from the bottom edge of the shank and lying close against the front face of the latter, said projection positioned in front of the blade and shaped to engage underneath the flange joining the top and side walls of a can, substantially as described.

[Claims 3 and 4 not printed in the Gazette.]

1,276,694. SAFETY ATTACHMENT FOR GAS-ENGINE CRANKS. MATTHEW J. REILLY, New York, N. Y., assignor of one-half to Thomas F. Early, West New Brighton, N. Y. Filed Mar. 19, 1918. Serial No. 223,339. (Cl. 74—33.)

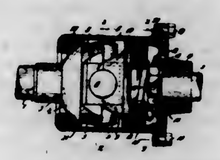
1. The combination with an engine crank adapted to rotate in one direction, of a safety attachment to prevent the rotation of the crank in the opposite direction, said attachment comprising a toothed gear fixed to the crank shaft, a pinion meshing constantly with the gear, and



pawl and ratchet devices cooperating with the pinion to prevent the same from undesired reverse rotation.

[Claims 2 to 4 not printed in the Gazette.]

1,276,695. UNIVERSAL JOINT. ALFRED B. BARNES, Cincinnati, Ohio, and JAMES CARR, Syracuse, N. Y., assignors to The Cincinnati Ball Crank Co., Oakley, Cincinnati, Ohio, a Corporation of Ohio. Filed Apr. 15, 1918. Serial No. 228,531. (Cl. 64—102.)



1. In a universal joint, the combination with drive and driven members, of an intermediate member relatively coupled to said drive and driven members and upon which said members swivel at right angles to each other one of said members being of two-part form relatively connected and one part constituting an intermediate yielding thrust bearing, a spring interposed between the parts of said member and a draft connection between said drive and driven member, having a universal bearing concentric on the one and rigid on the other.

2. In a universal joint, the combination of drive and driven members, a torque coupling member therebetween, and a casing inclosing said torque connection, constituting a draft connection between said drive and driven members removably fixed to one member, and having a ring confined therein and universally bearing on the other of said members.

6. In a universal joint, the combination of drive and driven members, each having clutch arms projecting therefrom, a cross-shaped torque coupling member engaged with and bearing in the clutch arms of one of said drive or driven members, a thrust and torque follower member engaged with said cross-shaped torque member and the clutch arms of the other drive or driven members, a spring under tension intermediate said follower member and drive or driven members, with which said follower connects, and a lubricant tight casing constituting a draft connection between said drive and driven members fixed to one of said members and internally carrying a packing ring having a universal bearing on the other of said members.

[Claims 3 to 5 and 7 to 10 not printed in the Gazette.]

1,276,696. VEHICLE-SPRING. ARRANO J. DILLEY, Muir, Mich. Filed Jan. 8, 1916. Serial No. 70,948. (Cl. 267—33.)

In a leaf spring, a leaf having a struck-up portion adjacent to the free end thereof, said struck-up portion forming a lubricant-containing pocket, a pad of absorbent material in said pocket, and a duct extending from the



recess to the end of the leaf for conveying lubricant to the pocket.

1,276,697. PROCESS FOR PRODUCING PRINTING-PLATES. LOUIS JOHN HERTLIN, Brooklyn, N. Y. Filed Nov. 20, 1915. Serial No. 62,579. (Cl. 41—46.)



2. The process for producing printing plates which consists in impressing with ink a design upon the face of a transparent sheet, the lines of the design being of substantial width, covering the ink of the design with a powder which renders the ink covered part of the transparent sheet impenetrable to light, applying a washable opaque substance to the back of the sheet in the desired spaces outlined by the design, then producing a printing plate from the so formed negative, then removing the opaque substance from the back face of said sheet, and applying a similarly washable opaque substance to the back in different spaces within the spaces outlined by the design and producing a printing plate from the so formed negative.

[Claim 1 not printed in the Gazette.]

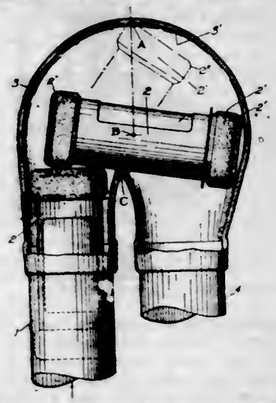
1,276,698. FAUCET-RECEPTACLE FOR BARRELS. GEORGE W. KNAPP, Baltimore, Md., assignor to National Enameling and Stamping Company, New York, N. Y., a Corporation of New Jersey. Filed Oct. 14, 1915. Serial No. 55,770. (Cl. 221—24.)



The combination with a barrel having a bung-hole in its side and another and threaded bung-hole in its end,—the side bung-hole being larger in diameter than the end bunghole, of a faucet receptacle projecting through the larger side bung-hole and having a flange at its outer end to seat against the exterior of the side wall of the barrel; an interiorly-threaded bushing seated against the exterior flange of the faucet receptacle and having a sealing engagement with the side wall of the barrel around the said receptacle-flange to make a liquid-tight joint therewith; a detachable faucet having a threaded end to screw into the threaded end-bung-hole,—said faucet being smaller than the interior dimension of the said faucet receptacle, and a threaded plug of a diameter to screw into the interiorly-threaded bushing and close the outer end of the faucet receptacle.

1,276,699. PNEUMATIC-DESPATCH DELIVERY TERMINAL. ALBERT W. PEARSALL, Lowell, Mass., assignor to The Lamson Company, Boston, Mass., a Corporation of New Jersey. Filed May 17, 1916. Serial No. 98,186. (Cl. 243—20.)

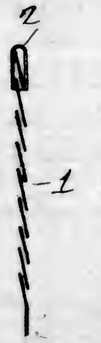
1. A delivery terminal for pneumatic despatch tubes comprising a bend the peripheral radius of curvature of which is less than the length of the headed carrier to be delivered through said bend, said bend having a curved guiding wall adapted for engagement simultaneously with both heads of the carrier and having further an acute groin presenting, toward the path of carriers traversing said bend, an upwardly directed edge, laterally displaced with respect to a vertical plane through the approximate center of curvature of said wall, to cause a carrier which may drop down from said wall onto said groin, to topple out of said bend on the carrier delivery side of the latter,



the distance from said edge to the side of said wall first encountered by a carrier, measured in a horizontal plane, being substantially equal to one-half the length of said carrier.

[Claims 2 to 6 not printed in the Gazette.]

1,276,700. CORSET AND LIKE STIFFENER. FELIX KLEEMANN, London, England. Filed Mar. 12, 1917. Serial No. 154,258. (Cl. 267—33.5.)



1. A method of capping corset and like wire stiffeners consisting in pressing a non-metallic plastic substance into the interstices only at the end, fashioning said plastic substance into desired shape and hardening said plastic substance.

3. A dress stiffener comprising a flattened wire coil with a cap at the end only of plastic substance pressed into the interstices of said coil.

[Claims 2 and 4 not printed in the Gazette.]

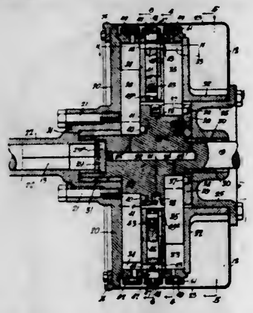
1,276,701. POWER-TRANSMITTING APPARATUS. THOMAS S. PATTERSON, Rosemont, Pa. Filed Apr. 19, 1917. Serial No. 163,193. (Cl. 192—18.)

1. The combination of a driving and a driven member; automatically acting hydraulic means for connecting said members; and mechanical means for positively connecting the mebers after said hydraulic means has acted to a predetermined extent.

4. The combination of a driving and a driven member; positive and non-positive devices for connecting said members; and means for insuring the elapse of a definite time after the non-positive device has acted before the positive device can act.

8. The combination of a source of power; a driven member; a change speed gear connected to said source of

power; and a device between the change speed gear and the driven member for causing power to be gradually applied to the latter.



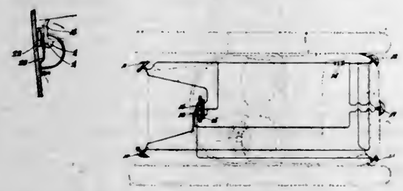
13. The combination of a driving and a driven member: an automatic device for non-positively connecting said members when the driving member is operated; means for preventing action of said connecting means in less than a predetermined time; and a device for positively locking together said members at the end of said time.

33. A fluid transmitting device consisting of a driving and a driven member; a hydraulic clutching device for connecting said members including fluid propelling means and a relatively restricted fluid passage; a valve for varying the flow through said passage; and mechanism actuated by fluid from the clutching device for operating said valve.

[Claims 2, 3, 5 to 7, 9 to 12, and 14 to 32 not printed in the Gazette.]

REISSUES.

14,505. SAFETY-SIGNAL FOR VEHICLES. WILLIAM N. BEST, Brooklyn, N. Y., assignor of one-fourth to Cecilia Wupper, Brooklyn, N. Y., and one-fourth to Clair W. Fairbank, New York, N. Y. Filed Dec. 9, 1916. Serial No. 136,000. Original No. 1,192,264, dated July 25, 1916, Serial No. 49,773, filed Sept. 9, 1915. (Cl. 177—337.)



1. In combination, a plurality of electric lights adapted to be arranged in pairs with one pair in front of the other, adapted to indicate the direction of movement of a vehicle to which the same may be applied, an electric circuit including two of the diagonally opposite lights, another circuit including the other two diagonally opposite lights, and separate circuit controllers for said circuits, each of which is designed to remain indefinitely closed independently of the other after manual operation.

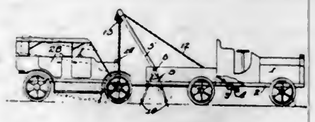
2. In combination, a vehicle, a plurality of electric lights adapted to be arranged in pairs with one pair in front of the other, adapted to indicate the direction of movement of the vehicle to which the same may be applied, an electric circuit including two of the diagonally opposite lights, another circuit including the other two diagonally opposite lights, and separate circuit controllers for said circuits, each of which is designed to remain indefinitely closed independently of the other after manual operation.

3. In combination, a plurality of electric lights adapted to be arranged in pairs with one pair in front of the other, adapted to indicate the direction of movement of a vehicle to which the same may be applied, each of said electric lights being arranged to direct its rays both laterally and in the direction of travel of said vehicle, an electric circuit including two of the diagonally opposite lights, another circuit including the other two diagonally opposite lights, and separate circuit controllers for said circuits, each of which is designed to remain indefinitely closed independently of the other after manual operation.

4. In combination, a vehicle, a plurality of electric lights adapted to be arranged in pairs with one pair in front of the other, adapted to indicate the direction of movement of the vehicle to which the same may be applied, each of said electric lights being arranged to direct its rays both laterally and in the direction of travel of said vehicle, an electric circuit including two of the diagonally opposite lights, another circuit including the other two diagonally opposite lights, and separate circuit controllers for said circuits, each of which is designed to remain indefinitely closed independently of the other after manual operation.

5. The combination with a vehicle, of a plurality of electric lights, one arranged at each corner of the vehicle body and each directing its rays both laterally and in the direction of travel of the vehicle, an electric circuit including the lights at two diagonally opposite corners, a second circuit including the lights at the other two diagonally opposite corners, and separate circuit controllers for said circuits and designed to remain indefinitely in their open or closed position after manual operation.

14,506. WRECKING-TRUCK. JAMES EGAN, Chicago, Ill., assignor to Egan Wrecking Truck Company, a Corporation of Illinois. Filed Dec. 22, 1917. Serial No. 208,503. Original No. 1,116,579, dated Nov. 10, 1914, Serial No. 771,576, filed June 4, 1913. (Cl. 214—86.)



1. In a device of the class described, a self-propelled wrecking vehicle, an auxiliary running gear normally towed at the rear of said wrecking vehicle, said auxiliary running gear adapted to be rolled from beneath the wrecking vehicle to a position beneath a disabled vehicle elevated by said wrecking vehicle, and a pivotally mounted drawbar connecting said running gear with the wrecking vehicle.

2. In a device of the class described, an overhanging wrecking vehicle, front and rear auxiliary gears normally towed at the rear of said overhanging vehicle adapted to be rolled from beneath said wrecking vehicle into position beneath a disabled vehicle, means connecting said front and rear running gears, and a pivotal steering connection between said front running gear and said wrecking vehicle.

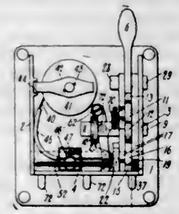
3. In a device of the class described, the combination with a wrecking vehicle, of an auxiliary running gear adapted to be rolled beneath a disabled vehicle, means securing said running gear to said disabled vehicle, a bracket mounted on the wrecking vehicle, and a drawbar pivoted to said bracket connecting said running gear with said wrecking vehicle.

4. The combination with a wrecking vehicle having an elevating mechanism mounted thereon, of an auxiliary gear adapted to be normally towed at the rear of said wrecking vehicle, said auxiliary gear adapted to be rolled to a position beneath an elevated disabled vehicle, means for connecting said auxiliary gear with the disabled vehicle, and means affording a connection between the disabled vehicle and said wrecking vehicle so as to tow the former by the latter.

5. In a device of the class described, a wrecking vehicle, an auxiliary gear, said wrecking vehicle so constructed as to permit said auxiliary gear to be disposed therebeneath and adapted to be rolled beneath an elevated disabled vehicle, and a pivotal steering connection between said auxiliary gear and said wrecking vehicle.

6. In a device of the class described, a hoisting vehicle, an auxiliary gear, said vehicle constructed to permit said gear to be normally towed at the rear of the frame to be rolled into position beneath a disabled vehicle when the same is hoisted, and a pivotal drawbar connection between said hoisting vehicle and said running gear to steer the latter to permit short turning of the combined vehicle and auxiliary gear.

14,507. STAPLING DEVICE. MILLER REESE HUTCHISON, West Orange, N. J. Filed Feb. 14, 1918. Serial No. 217,235. Original No. 1,235,140, dated July 31, 1917, Serial No. 450,058, filed Aug. 24, 1908. Renewed Mar. 26, 1917, Serial No. 157,590. (Cl. 1—2.)



1. In a stapling machine, a wire supplying mechanism, a staple cutting and forming mechanism having a rocking reciprocatory movement and a staple driving mechanism having a rectilinear reciprocating movement, in combination with a single rock shaft provided with means for effecting complete actuation of said mechanisms by a single movement in one direction of said shaft.

2. In a stapling machine, a wire-supplying mechanism, staple-cutting and forming mechanism having a rocking reciprocatory movement to cut and form the staple and a rectilinear reciprocatory movement to transfer the staple to driving position, and mechanism for driving the staple in said position, in combination with a single rock-shaft provided with means for effecting complete actuation of said mechanisms by a single movement in one direction of said shaft.

3. In a stapling machine, a wire-supplying mechanism, a combined staple cutting and forming mechanism, and staple guiding and driving mechanism, in combination with a single rock shaft provided with means for effecting complete actuation of said mechanisms by a single movement in one direction of said shaft, and cam means having eccentric portions arranged in permanent contact with said forming mechanism so that the shaft moves the forming mechanism and at intervals holds said mechanism stationary, said staple driving mechanism being operatively connected with said shaft only when in actual operation.

4. In a stapling machine, a wire-supplying mechanism, a combined staple cutting and forming mechanism, and staple guiding and driving mechanism, in combination with a single rock shaft provided with means for effecting complete actuation of said mechanisms by a single movement in one direction of said shaft, cam means having eccentric portions arranged in permanent contact with said forming mechanism so that the shaft moves the forming mechanism and at intervals holds said mechanism stationary, said staple driving mechanism being operatively connected with said shaft only when in actual operation, and means independent of the staple forming means for returning said staple driving mechanism to normal position after each operation of the same.

5. In a stapling machine, a wire supplying mechanism, staple cutting and forming mechanism, a stationary anvil or forming block coöperating with said forming mechanism, a staple guiding and driving mechanism, in combination with a single rock shaft provided with means for effecting complete actuation of said mechanisms in the order named to cut, form and drive a staple by a single movement in one direction of said shaft.

6. In a stapling machine, a wire supplying mechanism, staple cutting and forming mechanism, a stationary anvil or forming block coöperating with said forming mechanism, staple driving mechanism and mechanism for shifting the staple from the forming to the driving position, in combination with a single rock shaft provided with means for effecting complete actuation of said mechanisms by a single movement in one direction of said shaft.

7. In a stapling machine, a wire supplying mechanism, staple cutting and forming mechanisms, staple driving mechanism, and means for shifting the forming mechanism to cause the same to convey the formed staple to the driving mechanism, said forming mechanism having a rocking movement around a pivot in forming the staple and having a shifting movement on its pivot to transfer the staple to the driving mechanism, in combination with a single rock shaft provided with means for effecting complete actuation of said mechanisms by a single movement in one direction of said shaft.

8. In a stapling machine, a wire feed mechanism, a stationary staple forming block and a staple driver, in combination with a staple former slidably pivoted in the frame of the machine, and means for giving said staple former a rocking reciprocatory movement to form the staple over said stationary forming block and a rectilinear reciprocatory movement to place the staple beneath the staple driver.

9. In apparatus of the character described, the combination with staple forming means and staple setting means, of a single operating member to effect the functioning of said means, a cam on said member to actuate said forming means and maintain it stationary in actuated position, and an additional cam on said member for operating said setting means.

10. In apparatus of the character described, the combination of a wire-feeding means, staple forming means and staple setting means, a shaft, a cam on said shaft for operating said wire-feeding means, a cam lever mounted upon said shaft, the cam thereof being adapted to effect the functioning of said staple forming means, and a projection extending from said lever for operating the staple setting means.

11. In apparatus of the character described, the combination of wire-feeding means, staple forming means and staple setting means, a shaft, a cam on said shaft, for operating said wire-feeding means, a lever mounted upon said shaft, a cam integral with said lever and provided with an inactive surface which first becomes effective to permit said first-mentioned cam to function upon the movement of said lever, said inactive surface on said cam member being followed by an active surface for effecting the operation of said staple forming means, and said active surface being followed by a second inactive surface for retaining said forming means in a given position during the operation of said staple setting means.

12. In apparatus of the class described, the combination of means for holding a section of staple forming wire, a forming head, a staple setting member, an operating lever, a cam forming a part of said lever for moving the forming head into position to form the staple and to maintain the head in position to hold the staple for setting, and a cam integral with said lever for actuating the said member to set the staple.

13. In apparatus of the character described, a base having an upright portion, a wire-containing spool, mounted on said base, a tensioning spring engaging the end of said spool, and means on said upright portion engaging the end of said spring to prevent the latter from rotating with the said spool.

14. In apparatus of the class described, the combination with stapling mechanism, of an operating handle therefor, a casing inclosing said stapling mechanism and including integral base and end members and a removable cover, said cover having an opening therein to ac-

commodate the said operating handle, whereby the cover may be removed independently of the operating handle, and a pocket in the base of said casing to receive articles to be stapled.

15. In apparatus of the character described, a casing having an end wall, a wire-containing spool mounted adjacent said wall, a tensioning spring engaging the end of said spool and having one of its ends extending beyond the edge of the spool head, and ribs formed on the end wall adapted to accommodate the projecting end of said spring, whereby the latter is prevented from rotating with said spool.

16. In a stapling machine, a wire-supplying machanism, a staple cutting and forming mechanism having a rocking reciprocatory movement in combination with a single shaft provided with means for effecting complete actuation of said mechanisms by a single movement in one direction of said shaft.

17. In stapling mechanism, the combination of wire-feeding and cutting mechanisms, staple forming and staple setting mechanisms, an operating lever for actuating said mechanisms by a continuous movement in one direction, and means for automatically returning the wire feeding, staple forming, and staple setting mechanisms to initial position.

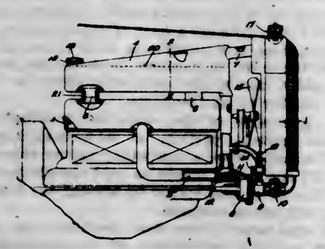
18. In stapling mechanism, the combination of wire-feeding and cutting mechanisms, staple forming and staple setting mechanisms, an operating lever for actuating said mechanisms by a continuous movement in one direction, means for automatically returning the wire-feeding, staple forming and staple setting mechanisms to initial position, and means for limiting the movement of the staple forming mechanism into initial position.

19. An apparatus of the class described, the combination with staple forming means and staple setting means, of a single operating member to effect the functioning of said means, a cam on said member to actuate the said forming means and maintain it in actuated position, and an additional cam on said member for operating said setting means.

20. In apparatus of the character described, the combination of a wire feeding means, staple forming means and staple setting means, a shaft, a cam on said shaft for operating said wire-feeding means, a cam lever mounted upon said shaft, the cam thereof being adapted to effect the functioning of said staple forming means, and a projection extending from said lever for operating the staple setting means.

21. In apparatus of the class described, the combination of means for holding a section of staple forming wire, a forming head, a staple setting member, an operating lever, a cam forming a part of said lever for moving the forming head into position to form the staple and to maintain the head in position to hold the staple for setting, and a cam integral with said lever for actuating the said staple setting member to set the staple.

14,508. COOLING SYSTEM. WELLINGTON W. MUIR, Baltimore, Md. Filed June 19, 1918. Serial No. 240,865. Original No. 1,252,927, dated Jan. 8, 1918, Serial No. 192,458, filed Sept. 21, 1917. (Cl. 123—174.)



1. In a cooling system for internal combustion engines, water jacket, a pump connected to the top and bottom of the water jacket, a radiator, means connecting the top of the radiator to the rest of the system above the water level, a connection from the bottom of the radiator to the suction of the pump, and means for preventing flow through said connection toward the radiator.

2. In a cooling system for internal combustion engines, a water jacket, a pump connected to the top and bottom of the water jacket, a radiator, means connecting the top of the radiator to the rest of the system above the water level, a connection from the bottom of the radiator to the suction of the pump, means for preventing flow through said connection toward the radiator, and a by-pass from the suction to the delivery of the pump.

3. In a cooling system for internal combustion engines, a water jacket, a pump connected to the top and bottom of the water jacket, a radiator, means connecting the top of the radiator to the rest of the system above the water level, a connection from the bottom of the radiator to the suction of the pump, means for preventing flow through said connection toward the radiator, and a safety valve in the top of the radiator.

4. In a cooling system for internal combustion engines, a water jacket, a pump connected to the top and bottom of the water jacket, a radiator, means connecting the top of the radiator to the rest of the system above the water level, a connection from the bottom of the radiator to the suction of the pump, means for preventing flow through said connection toward the radiator, and a filling opening in the system below the top radiator connection.

5. In a cooling system for internal combustion engines, a water jacket, a pipe connected to the top and bottom of the water jacket, a radiator, means connecting the pipe to the top of the radiator above the level of liquid in the system, a connection from the bottom of the radiator to the first-mentioned pipe, a non-return valve in said connection, and means for setting up the flow from the bottom of the radiator toward the bottom of the water jacket.

6. In a cooling system for internal combustion engines, a water jacket, a pipe connected to the top and bottom of the water jacket, a radiator, means connecting the pipe to the top of the radiator above the level of liquid in the system, a connection from the bottom of the radiator to the first mentioned pipe, a non-return valve in said connection, means for setting up the flow from the bottom of the radiator toward the bottom of the water jacket, and a filling opening below the top radiator connection.

7. In a cooling system for internal combustion engines, a water jacket, a pipe connected to the top and bottom of the water jacket, a radiator, means connecting the pipe to the top of the radiator above the level of liquid in the system, a connection from the bottom of the radiator to the first-mentioned pipe, a non-return valve in said connection, means for setting up the flow from the bottom of the radiator toward the bottom of the water jacket, and a safety valve in the top of the radiator.

8. In a cooling system for internal combustion engines, a water jacket, a pipe connected to the top and bottom of the water jacket, a radiator, means connecting the pipe to the top of the radiator above the level of the liquid in the system, a connection from the bottom of the radiator to the first mentioned pipe, a non-return valve in said connection, means for setting up the flow from the bottom of the radiator toward the bottom of the water jacket, and a by-pass around said means.

9. In a cooling system for internal combustion engines, a water jacket, means for maintaining a continuous circulation of water through said jacket, a radiator connected at the top to the water jacket above the level of the water in the jacket, a connection from the bottom of the radiator to the water jacket, a non-return valve in said connection, and means for drawing water from the bottom of the radiator and forcing it into the jacket so that the radiator contains only steam and the water in the jacket is maintained at boiling.

10. In a cooling system for internal combustion engines, a water jacket, a conduit connecting the top and bottom of the water jacket, a pump with its delivery in said conduit, the discharge being directed toward the lower portion of the water jacket, a radiator having its top connected to said conduit above the water level, and a connection from the bottom of the radiator to the pump, the operation of the pump in connection with the system serving to create a slight vacuum over the water and in the radiator whereby the temperature of the system is maintained slightly below the boiling point at atmospheric pressure.

11. In a cooling system for internal combustion engines, a water jacket, a conduit connecting the top and bottom of the water jacket, a reservoir included therein, a pump with its delivery in said conduit and directed toward the lower portion of the water jacket, a radiator having its top connected to said conduit above the water level, a connection from the bottom of the radiator to the suction of the pump, and a non-return valve in said connection.

12. In a cooling system for internal combustion engines, a water jacket, a conduit connecting the top and bottom of the water jacket, a reservoir included therein, a pump with its delivery in said conduit and directed toward the lower portion of the water jacket, a radiator having its top connected to said conduit above the water level, a connection from the bottom of the radiator to the suction of the pump, and a filling cap below the water level in the conduit.

13. In a cooling system for internal combustion engines, a water jacket, a conduit connecting the top and bottom of the water jacket, a reservoir included therein, a pump with its delivery in said conduit and directed toward the lower portion of the water jacket, a radiator having its top connected to said conduit above the water level, a connection from the bottom of the radiator to the suction of the pump, and a by-pass leading from the conduit above the pump delivery to the suction of the pump between the pump and the non-return valve.

14. In a cooling system for internal combustion engines, a water jacket, a conduit connected to the top and bottom of the water jacket, a connection from the radiator to the conduit above the water level in the conduit, a connection from the bottom of the radiator to the conduit, and means for drawing water from the bottom of the radiator and discharging it into the conduit.

15. In a cooling system for internal combustion engines, a water jacket, a conduit connected to the top and bottom of the water jacket, a connection from the radiator to the conduit above the water level in the conduit, a connection from the bottom of the radiator to the conduit, means for drawing water from the bottom of the radiator and discharging it into the conduit, and a non-return valve therein.

16. In a cooling system for internal combustion engines, a water jacket, a conduit connected to the top and bottom of the water jacket, a connection from the radiator to the conduit above the water level in the conduit, a connection from the bottom of the radiator to the conduit, means for drawing water from the bottom of the radiator and discharging it into the conduit, and a by-pass around said means.

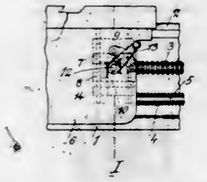
17. In a cooling system for internal combustion engines, a water jacket, a pump connected to the top and bottom of the water jacket, a radiator, means connecting the top of the radiator to the rest of the system above the water level, and a connection from the bottom of the radiator to the suction of the pump.

18. In a cooling system for internal combustion engines, the combination of a circuit adapted to contan a vaporizable cooling fluid including a jacket and means adapted to separate from said fluid substantially all the vapor formed; means for positively circulating said fluid through said circuit; a condenser for said formed vapor; and connections respectively associated with said condenser and circuit adapted to normally, substantially exclude said fluid from said condenser while permitting said vapor to be condensed and returned to said circuit, substantially as described.

19. In a cooling system for internal combustion engines the combination of a circuit including a jacket adapted to normally contain a vaporizable fluid substantially at its boiling point; circulating means adapted to forcibly and continuously circulate said fluid through said circuit at substantially the same temperature throughout; separating means adapted to separate from said fluid substantially all the vapor formed; a condenser for said formed vapor; and connections respectively associated with said circulating and separating means, adapted to normally substantially exclude said fluid from said condenser, while permitting said vapor to be condensed and returned to said circuit, substantially as described.

20. In a cooling system for internal combustion engines the combination of a jacket and circuit adapted to normally contain a vaporizable fluid substantially at its boiling point; means comprising a pump adapted to forcibly and continuously circulate said fluid through said jacket at substantially its boiling temperature throughout said circuit; separating means adapted to separate from said fluid substantially all the vapor formed; a condenser for said formed vapor; connections to said condenser respectively associated with said separating and circulating means, adapted to normally exclude substantially all of said fluid from said condenser, while permitting said vapor to be condensed and returned to said circuit; and a by-pass between said circuit and one of said connections, substantially as described.

14,509. LATHE. JENS SLOTNAES, Grefsen, Christiania, Norway. Filed July 19, 1918. Serial No. 245,677. Original No. 1,261,963, dated Apr. 9, 1918, Serial No. 142,539, filed Jan. 15, 1917. (Cl. 82—27.)



In a turning lathe, the combination of a lead screw and a threaded feed-shaft having threads of a different pitch, one being provided with the inch pitch and the other with the pitch in millimeters.

DESIGNS.

52,260. PHONOGRAPH-CABINET. JAMES D. ADAMS, Wabash, Ind., assignor to The Wabash Cabinet Co., Wabash, Ind., a Corporation of Indiana. Filed May 17, 1918. Serial No. 235,196. Term of patent 14 years.



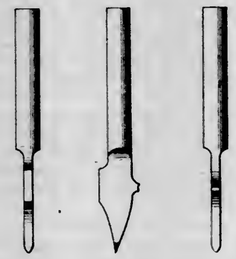
The ornamental design for a phonograph cabinet, as shown.

52,261. BADGE OR SIMILAR ORNAMENT. MELVILLE C. BARNARD, Douglas, Ariz. Filed Apr. 3, 1918. Serial No. 226,549. Term of patent 3½ years.



The ornamental design for a badge or similar ornament, as shown.

52,262. TOOL FOR APPLYING AND REMOVING LOCK-NUTS. CARL A. BAUMLER, St. Lucas, Iowa. Filed May 20, 1916. Serial No. 98,956. Term of patent 3½ years.



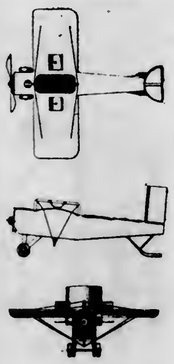
The ornamental design for a tool for applying and removing lock nuts, as shown.

52,263. BADGE OR SIMILAR ARTICLE. VARTAN BERBERIAN, Providence, R. I. Filed Jan. 3, 1918. Serial No. 210,226. Term of patent 14 years.



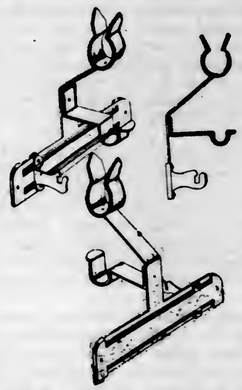
The ornamental design for a badge or similar article, as shown.

52,264. ASH-TRAY AND CIGAR-CUTTER. ISADORE BLUMENTHAL, New York, N. Y. Filed Apr. 2, 1918. Serial No. 226,314. Term of patent 14 years.



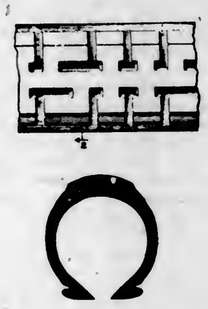
The ornamental design for an ash tray and cigar cutter as shown.

52,265. WINDOW SHADE AND POLE BRACKET. MARTIN BOSNJAK, Cleveland, Ohio. Filed Mar. 20, 1918. Serial No. 223,669. Term of patent 7 years.



The ornamental design for a window shade and pole bracket, as shown.

52,266. ELASTIC VEHICLE-TIRE. ARTHUR L. BREITENSTEIN, Akron, Ohio, assignor to The Rubber Products Company, Barberton, Ohio, a Corporation of Ohio. Filed Apr. 15, 1918. Serial No. 228,777. Term of patent 14 years.



The ornamental design for an elastic vehicle tire, as shown.

52,267. RADIATOR. WILLIAM B. ENGLER, Baltimore, Md., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed May 8, 1918. Serial No. 232,404. Term of patent 7 years.



The ornamental design for a radiator, substantially as shown.

52,268. DRESS. MIRIAM GROSS, Chicago, Ill., assignor to Matthew P. Rae, Chicago, Ill., trading under the name Raedor. Filed Apr. 25, 1918. Serial No. 230,814. Term of patent 3½ years.



The ornamental design for a dress, as shown.

52,269. DRESS. MIRIAM GROSS, Chicago, Ill., assignor to Matthew P. Rae, Chicago, Ill., trading under the name Raedor. Filed Apr. 25, 1918. Serial No. 230,815. Term of patent 3½ years.



The ornamental design for a dress, as shown.

52,270. DRESS. MIRIAM GROSS, Chicago, Ill., assignor to Matthew P. Rae, Chicago, Ill., trading under the name Raedor. Filed Apr. 25, 1918. Serial No. 230,816. Term of patent 3½ years.



The ornamental design for a dress, as shown.

52,271. WRIST-WATCH PROTECTOR. SAMUEL HEIMBERG, Chelsea, Mass. Filed Feb. 2, 1918. Serial No. 215,210. Term of patent 3½ years.



The ornamental design for a wrist watch protector as shown.

52,272. DISH. HARRY EUGENE HYMER, Mamaroneck, N. Y., assignor to Maddock & Miller, New York, N. Y., a Corporation of New York. Filed Apr. 24, 1918. Serial No. 230,586. Term of patent 3½ years.



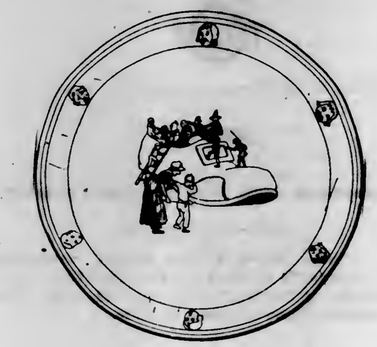
The ornamental design for a dish as shown.

52,273. DISH. HARRY EUGENE HYMER, Mamaroneck, N. Y., assignor to Maddock & Miller, New York, N. Y., a Corporation of New York. Filed Apr. 24, 1918. Serial No. 230,587. Term of patent 3½ years.



The ornamental design for a dish, as shown

52,274. DISH. HARRY EUGENE HYMER, Mamaroneck, N. Y., assignor to Maddock & Miller, New York, N. Y., a Corporation of New York. Filed Apr. 24, 1918. Serial No. 230,588. Term of patent 3½ years.



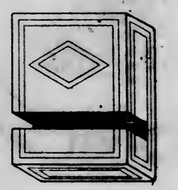
The ornamental design for a dish, as shown.

52,275. DISH. HARRY EUGENE HYMER, Mamaroneck, N. Y., assignor to Maddock & Miller, New York, N. Y., a Corporation of New York. Filed Apr. 24, 1918. Serial No. 230,589. Term of patent 3½ years.



The ornamental design for a dish, as shown.

52,276. BOOK-SUPPORT. GEORGE W. JOHNSTON, Seattle, Wash. Filed Mar. 18, 1918. Serial No. 223,247. Term of patent 7 years.



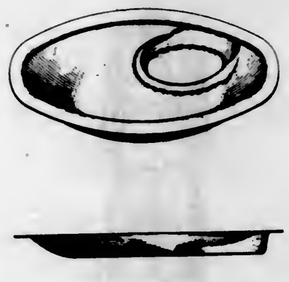
The ornamental design for a book support, as shown.

52,277. STATUETTE OR TABLE ORNAMENT. AUGUST F. KAUFMAN, Wheeling, W. Va. Filed May 6, 1918. Serial No. 232,951. Term of patent 7 years.



The ornamental design for a statuette or table ornament, as shown.

52,278. BREAD AND BUTTER PLATE. JAY L. KRAUS, Chicago, Ill., assignor to Albert Pick & Company, Chicago, Ill., a Corporation of Illinois. Filed May 22, 1918. Serial No. 236,061. Term of patent 14 years.



The ornamental design for a bread and butter plate, as shown.

52,279. JEWELRY PIN, BROOCH, OR SIMILAR ARTICLE FOR PERSONAL WEAR. CHARLES W. LAPHAM, Jr., Phoenix, Ariz. Filed Dec. 22, 1917. Serial No. 208,523. Term of patent 3½ years.



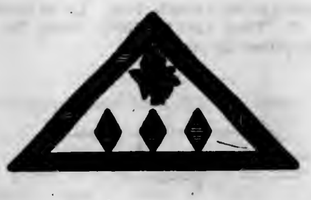
The ornamental design for a jewelry pin, brooch, or similar article for personal wear, as shown.

52,280. SHOULDER-STRAP. WILLIAM H. LOOMIS, Grand Rapids, Mich. Filed Apr. 5, 1917. Serial No. 160,014. Term of patent 3½ years.



The ornamental design for a shoulder strap substantially as shown.

52,281. SHOULDER-STRAP. WILLIAM H. LOOMIS, Grand Rapids, Mich. Filed Apr. 5, 1917. Serial No. 160,015. Term of patent 3½ years.



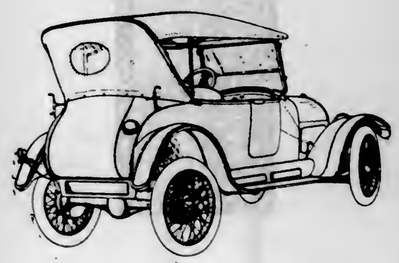
The ornamental design for a shoulder strap substantially as shown.

52,282. LENS FOR AUTO-HEADLIGHTS. ALBERT W. MARSHALL, Detroit, Mich. Filed Apr. 15, 1918. Serial No. 228,781. Term of patent 14 years.



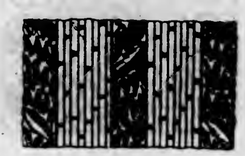
The ornamental design for a lens for auto headlights substantially as shown.

52,283. AUTOMOBILE. CHARLES W. MCKINLEY and HARRY H. GOODALL, Toledo, Ohio, assignors to The Willys-Overland Company, Toledo, Ohio, a Corporation of Ohio. Filed June 15, 1917. Serial No. 175,035. Term of patent 14 years.



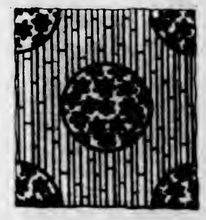
The ornamental design for an automobile as shown.

52,284. TEXTILE FABRIC. MIRIAM NATHAN, New York, N. Y. Filed June 8, 1918. Serial No. 239,051. Term of patent 3½ years.



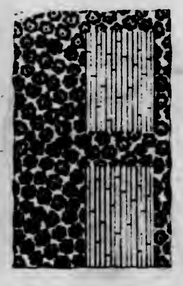
The ornamental design for a textile fabric, as shown.

52,285. TEXTILE FABRIC. MIRIAM NATHAN, New York, N. Y. Filed June 8, 1918. Serial No. 239,052. Term of patent 3½ years.



The ornamental design for a textile fabric, as shown.

52,286. TEXTILE FABRIC. MIRIAM NATHAN, New York, N. Y. Filed June 8, 1918. Serial No. 239,053. Term of patent 3½ years.



The ornamental design for a textile fabric, as shown.

52,287. TEXTILE FABRIC. MIRIAM NATHAN, New York, N. Y. Filed June 8, 1918. Serial No. 239,054. Term of patent 3½ years.



The ornamental design for a textile fabric, as shown.

52,288. GAME DEVICE. EDWARD L. PITT, Cincinnati, Ohio. Filed Mar. 6, 1917. Serial No. 152,950. Term of patent 3½ years.



The ornamental design for a game device, substantially as shown.

52,289. STATUETTE. WILLIAM POLACHECK, Milwaukee, Wis. Filed Feb. 7, 1918. Serial No. 215,915. Term of patent 3½ years.



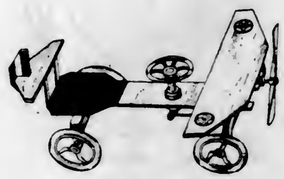
The ornamental design for a statuette, as shown.

52,290. PIN-POINT PROTECTOR. LOUIS PRICE, Brooklyn, N. Y. Filed Apr. 13, 1917. Serial No. 161,912. Term of patent 3½ years.



The ornamental design for a pin point protector, as shown.

52,291. CHILD'S TOY. ALEXANDER N. SCHANSCHIEFF, Valley Stream, N. Y., assignor to Ferdinand Strauss, Inc., New York, N. Y., a Corporation of New York. Filed Nov. 14, 1917. Serial No. 202,063. Term of patent 3½ years.



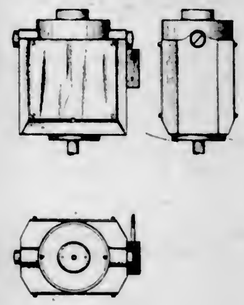
A design for a child's toy simulating a wagon of novel form substantially as shown.

52,292. FIGURE OR DOLL. CHARLES F. SIMMS, Concord, N. H. Filed Apr. 22, 1918. Serial No. 230,138. Term of patent 3½ years.



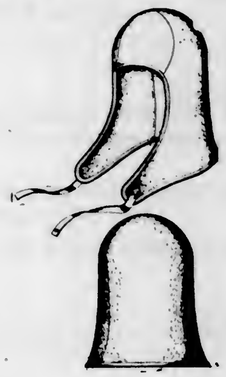
The ornamental design for a figure or doll, as shown.

52,293. ELECTRIC-MOTOR CASING. EDWARD M. WARING, Brooklyn, N. Y. Filed Apr. 18, 1917. Serial No. 163,088. Term of patent 3½ years.



The ornamental design for an electric motor casing, as shown.

52,294. TRENCH-HELMET. WILLIAM E. WEBB, Jr., Larchmont Manor, and GEORGE L. CLOSE, Mount Vernon, N. Y., assignors to Church, Webb & Close, Inc., New York, N. Y., a Corporation of New York. Filed Jan. 31, 1918. Serial No. 214,777. Term of patent 3½ years.



The ornamental design for a trench helmet as shown.

52,295. PEN-RACK. FRANK A. WEEKS, Plainfield, N. J. Filed Feb. 21, 1918. Serial No. 218,587. Term of patent 14 years.





The ornamental design for a pen rack, as shown.

52,296. EMBLEM, BROOCH, BUTTON, FOB, BADGE, CHARM, STICK-PIN, OR SIMILAR ARTICLE. ALBERT WISS, Cortlandt township, Westchester county, N. Y. Filed Feb. 27, 1918. Serial No. 219,520. Term of patent 3½ years.



The ornamental design for an emblem, brooch, button, fob, charm, stick pin, or similar article as shown.

TRADE-MARKS

OFFICIAL GAZETTE, AUGUST 20, 1918.

(PUBLISHED SEPTEMBER 11, 1918.)

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 14 of said act, a fee of ten dollars must accompany each notice of opposition.

Ser. No. 84,918. (CLASS 37. PAPER AND STATIONERY.) R. P. ANDREWS PAPER COMPANY, Washington, D. C. Filed Mar. 4, 1915. Under ten-year proviso.

ARLINGTON

Particular description of goods.—Fine Writing-Paper, Extra Super Writing-Paper, Bond-Paper, Linen Ledger-Paper, Dull-Finish Coated Book-Paper, Cover-Paper, Dull-Finish Post-Card Stock, Shipping-Tags, Round-Cornered Cards, Envelops, Window-Envelops, Toilet-Paper, Writing-Pads, Tablets, Box-Files, Steel Pens, and Lead-Pencils.

Claims use since Jan. 1, 1887.

Ser. No. 93,250. (CLASS 38. PRINTS AND PUBLICATIONS.) ARCHITECTURAL SERVICE CORPORATION, Philadelphia, Pa. Filed Mar. 3, 1916.

EXPERT SERVICE

No claim being made to the words "Expert Service" apart from the mark shown in the drawing.

Particular description of goods.—Service-Sheets, Being Sheets Containing Architectural and Engineering Data Prepared for Use in the Construction, Design, and Equipment of Various Building Structures.

Claims use since about Nov. 28, 1915.

Ser. No. 94,285. (CLASS 37. PAPER AND STATIONERY.) GEORGE B. HURD & Co., New York, N. Y. Filed Apr. 10, 1916.



Gainsborough

The picture being a reproduction of the famous Gainsborough portrait of Duchess of Devonshire.

Particular description of goods.—Writing-Paper and Envelops.

Claims use since about the 23d day of March, 1916.

Ser. No. 94,828. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) W. S. NOTT COMPANY, Minneapolis, Minn. Filed May 1, 1916.

BULL DOG



Particular description of goods.—Tire-Tubes.

Claims use since about Jan. 1, 1916.

Ser. No. 98,725. (CLASS 17. TOBACCO PRODUCTS.) UNITED CIGAR MANUFACTURERS COMPANY, (now by change of name General Cigar Co., Inc.,) New York, N. Y. Filed Oct. 17, 1916.



Consists of the words "Hamilton Fish" and a portrait of Hamilton Fish, deceased, set in a frame flanked on the one side by the picture of some books, an inkstand with a quill pen in it, and a roll of paper upon a table, and on the other side by a picture of a public building. Beneath the picture, on the right, is a sunrise scene at a mountain-lake, while on the left there is a shield.

Particular description of goods.—Cigars.

Claims use since the year 1895.

Ser. No. 98,943. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) H. GAMSE & BRO., Baltimore, Md. Filed Oct. 28, 1916.



Particular description of goods.—Toothache-Drops, Corn Medicine, Palatable Castor-Oil, Cough-Syrup, Arnica Liniment, Fig and Senna Compound Laxative, Milk of Magnesia, Preparation for the Blood, Injection for Gonorrhea.
Claims use since Aug. 25, 1916.

Ser. No. 99,914. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) M. J. BRANDENSTEIN & Co., San Francisco, Cal., and New York, N. Y. Filed Dec. 14, 1916.

TREE

Particular description of goods.—Tea.
Claims use since the year 1898.

Ser. No. 99,915. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) M. J. BRANDENSTEIN & Co., San Francisco, Cal., and New York, N. Y. Filed Dec. 14, 1916.

TREE



Particular description of goods.—Tea.
Claims use since the year 1898.

Ser. No. 101,772. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE COMMERCIAL MILLING CO., Detroit, Mich. Filed Feb. 28, 1917.

VELVET

Particular description of goods.—Wheat-Flour.
Claims use since about Dec. 27, 1895.

Ser. No. 102,278. (CLASS 15. OILS AND GREASES.) EARLE C. ANTHONY, INC., Los Angeles, Cal. Filed Mar. 20, 1917.

MULTIMOTOR

Particular description of goods.—Lubricating-Oil.
Claims use since Nov. 25, 1916.

Ser. No. 103,003. (CLASS 38. PRINTS AND PUBLICATIONS.) AUTOMATIC RECORD COMPANY, Chicago, Ill. Filed Apr. 16, 1917.

MURR-SYSTEM

Particular description of goods.—Printed Books.
Claims use since Apr. 9, 1917.

Ser. No. 103,021. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) LEOPOLD GROSS, New York, N. Y. Filed Apr. 16, 1917.

VIGOROSA

Particular description of goods.—Wheat-Flour.
Claims use since March, 1913.

Ser. No. 103,203. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) CHIC-MINT GUM COMPANY, Wilmington, Del. Filed Apr. 23, 1917.

CHIC

Particular description of goods.—Chewing-Gum.
Claims use since about May 1, 1915.

Ser. No. 103,531. (CLASS 48. MALT BEVERAGES, EXTRACTS, AND LIQUORS.) HYGEIA BREWING COMPANY, Passaic, N. J. Filed May 4, 1917.

"Tox-O-No"

Particular description of goods.—A Non-Alcoholic Beverage Composed of Cereal Extracts and Hops.
Claims use since Mar. 15, 1917.

Ser. No. 103,979. (CLASS 12. CONSTRUCTION MATERIALS.) WALTER S. DICKEY, Kansas City, Mo. Filed May 21, 1917.

HI-TEMP

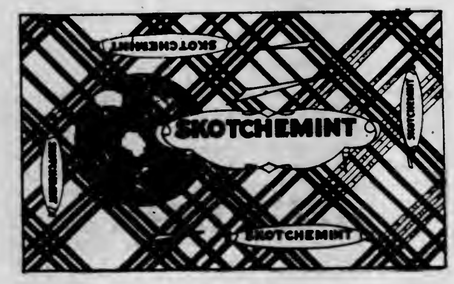
Particular description of goods.—Brick.
Claims use since May 17, 1916.

Ser. No. 104,010. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) HECKER-JONES-JEWELL MILLING COMPANY, New York, N. Y. Filed May 22, 1917.

METROPOLITAN

Particular description of goods.—Wheat-Flour and Rye-Flour.
Claims use since the year 1870.

Ser. No. 104,364. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) SHORT'S FLORIENT GUM CO., St. Thomas, Ontario, Canada. Filed June 9, 1917.



The background being lined to indicate Scotch plaid.
Particular description of goods.—Chewing-Gum.
Claims use since May 25, 1916.

Ser. No. 104,378. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS, NOT INCLUDING ELECTRICAL APPARATUS.) KANSAS CITY FURNACE COMPANY, Kansas City, Mo. Filed June 11, 1917.

IDEAL KING

Particular description of goods.—Furnaces.
Claims use since about the 1st of July, 1905.

Ser. No. 104,545. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) COLLINS CANNING CO., Lakeland, Fla. Filed June 20, 1917.

Southland

Particular description of goods.—Watermelon Pickles, Citrus-Fruit Marmalade, Canned Grape-Fruit, and Strawberry Sunshine, a Preserve Made from Fresh Ripe Strawberries and Cane-Sugar, without Water or Artificial Color.
Claims use since May 1, 1917.

Ser. No. 104,845. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) THE GUTTA PERCHA & RUBBER MANUFACTURING COMPANY, New York, N. Y. Filed July 5, 1917.

SATURN

Ser. No. 104,892. (CLASS 48. MALT BEVERAGES, EXTRACTS, AND LIQUORS.) A. SCHREIBER BREWING CO., Buffalo, N. Y. Filed July 6, 1917.

NILO

Particular description of goods.—Beer.
Claims use since about June 1, 1913.

Particular description of goods.—Belting Composed of Rubber and Fabric.
Claims use since July, 1896.

Ser. No. 105,275. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) SPOEHR'S, Chicago, Ill. Filed July 25, 1917.

Friendship

Particular description of goods.—Hard and Soft Candies, Including Chocolate, Both Plain and Sweetened; Chocolate Creams and Bonbons of All Kinds and Candied Fruits.
Claims use since Dec. 1, 1916.

Ser. No. 105,365. (CLASS 43. THREAD AND YARN.) JOHN LE ROY SCHWEYER, Chicago, Ill. Filed July 30, 1917.



Medallion of Martha Washington accompanied by the words "Martha Washington."

Particular description of goods.—Worsted Yarns.

Claims use since or about the 5th day of July, 1917.

Ser. No. 105,569. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE BERDAN CO., Toledo, Ohio. Filed Aug. 4, 1917.



Particular description of goods.—Canned and Dried Fruits, Vegetables, Fish, Shell-Fish; Pork and Beans, Alimentary Paste Products, Rice, Cocoa; Cornmeal; Prepared Buckwheat, Rye, and Wheat Flours, Corn-Starch, Popcorn, Chicken Feed, Bird-Seed, Coffee, Desiccated Cocoanut, Spices, Flavoring Extracts for Food, Tomato Purée.

Claims use since 1912 as to cocoa and since 1902 as to the remaining articles.

Ser. No. 105,727. (CLASS 14. METALS AND METAL CASTINGS AND FORGINGS.) THOMAS W. ALLISON, Chester, Pa. Filed Aug. 20, 1917.



Particular description of goods.—Steel and Iron Forgings and Castings.

Claims use since the early part of 1916.

Ser. No. 106,140. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) FRANK MCLEES & BROS., New York, N. Y. Filed Sept. 8, 1917.

Cerotype

Particular description of goods.—Metal Plates for Printing Purposes Made by Electrotyping.

Claims use since the year 1894.

Ser. No. 106,446. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) FERGUSON-MCKINNEY MFG. CO., St. Louis, Mo. Filed Sept. 26, 1917.



Particular description of goods.—Certain Colored Cotton Goods—Namely, Drills.

Claims use since July, 1916.

Ser. No. 106,649. (CLASS 37. PAPER AND STATIONERY.) WHITING-PLOVER PAPER COMPANY, Stevens Point, Wis. Filed Oct. 6, 1917.

PENMAN'S

Particular description of goods.—Printing-Papers.

Claims use since Oct. 29, 1915.

Ser. No. 106,783. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) WAPPLER ELECTRIC CO. INC., New York, N. Y. Filed Oct. 15, 1917.

TELATHERM

Particular description of goods.—Electric Machines for Applying Electric Currents of High Frequency to Portions of the Human Body.

Claims use since Apr. 1, 1917.

Ser. No. 107,136. (CLASS 12. CONSTRUCTION MATERIALS.) THE NATIONAL BUILDERS COMPANY, Cleveland, Ohio. Filed Nov. 3, 1917.

GRANITEX

Particular description of goods.—Liquid Hardeners for Cement Surfaces.

Claims use since about Feb. 10, 1916.

Ser. No. 107,383. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS, NOT INCLUDING ELECTRICAL APPARATUS.) BATTERMAN TRUITT COMPANY, Chicago, Ill. Filed Nov. 15, 1917.



Particular description of goods.—Ventilating-Louvers.

Claims use since Oct. 1, 1917.

Ser. No. 107,656. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) SCHNULL AND COMPANY, Indianapolis, Ind. Filed Nov. 28, 1917.

HUMMER

Particular description of goods.—Dried Fruits—Namely, Dried Peaches, Dried Apricots, Dried Prunes, Dried Raisins; for Canned Fruits—Namely, Apricots, Apples, Blackberries, Peaches, Pears, Pineapples, Raspberries, Gooseberries, Plums; for Canned Vegetables—Namely, Beets, String-Beans, Tomatoes, Kidney-Beans, Corn, Hominy, Kraut, Peas, Pumpkins, Sweet Potatoes; for Apple-Butter, Jams, Jelly, Catchup, Peanut-Butter; for Food-Flavoring Extracts—Namely, Lemon and Vanilla Extracts; for Spices and Mustard, for Tapioca, for Canned Pork and Beans and for Tea and Coffee, for Canned Salmon and Canned Oysters.

Claims use since July, 1895.

Ser. No. 107,950. (CLASS 38. PRINTS AND PUBLICATIONS.) PLANOGRAPHIC EQUIPMENT COMPANY INC., New York, N. Y. Filed Dec. 13, 1917.



Particular description of goods.—Printed Books, Supplements, and Pamphlets.

Claims use since Dec., 1, 1917.

Ser. No. 108,001. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) HERBERT C. CRAWFORD, Binghamton, N. Y. Filed Dec. 17, 1917.

RAINBOW

Particular description of goods.—An Ointment for Burns, Scalds, Wounds, Ulcers, Old Sore, Itching, Sore and Inflamed Piles, Boils, Pimples, Eczema, Barber's Itch, Carbuncles, Catarrh, Chafing, Chapping of Hands, Cuts, Insect-Bites, Bruises, Ivy-Poisoning, Rash, and All Infections of the Skin.

Claims use since Nov. 1, 1917.

Ser. No. 108,108. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) STANDARD ELECTRIC COMPANY, Cedar Rapids, Iowa. Filed Dec. 22, 1917.

STELCO

Particular description of goods.—Arc and Incandescent Electric Lamps, Electroliers; Wiring Accessories—Namely, Insulated Wires, Knobs, Tubes, Switches, Conduits, and Insulating-Tape; Electric Heaters, Electric Sad-Irons, Electric Soldering-Coppers, Electric Coffee-Pots, Electric Coffee-Urns, Electric Coffee-Boilers, Electric Teapots, Electric Samovars, Electric Chafing-Dishes, Electric Toasters and Grills, Electric Ovens, Electric Fireless Cookers, and Electric Urns.

Claims use since June 1, 1917.

Ser. No. 108,204. (CLASS 27. HOROLOGICAL INSTRUMENTS.) BYRON L. STRASBURGER, New York, N. Y. Filed Dec. 28, 1917.

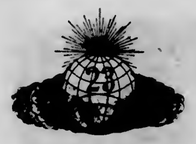
Lake Shore

Comprising the words "Lake Shore."

Particular description of goods.—Watch-Movements, Watchcases, and Watches.

Claims use since about June 1, 1917.

Ser. No. 108,361. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) THE NATIONAL PRODUCTS CO., Mansfield, Ohio. Filed Jan. 8, 1918.



Particular description of goods.—Hand-Soaps, Grease-Removers.
Claims use since Jan. 16, 1917.

Ser. No. 108,414. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) CHAMPION SPARK PLUG COMPANY, Toledo, Ohio. Filed Jan. 11, 1918.

CHAMPION

Particular description of goods.—Mechanical Spark-Plug Cleaners.
Claims use since January, 1916.

Ser. No. 108,640. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) OMER G. WHELAN, Richmond, Ind. Filed Jan. 25, 1918.



Particular description of goods.—Mill Products—Namely, Cornmeal, Rye-Meal, Buckwheat-Flour, Pancake-Flour, Graham Flour, Whole-Wheat Flour, Rye-Flour, Stock Feed, and Barley-Flour.
Claims use since Jan. 1, 1917.

Ser. No. 108,719. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) PLANTER'S NUT & CHOCOLATE COMPANY, Wilkes-Barre, Pa. Filed Jan. 31, 1918.



Particular description of goods.—Salted Peanuts, Peanut Bars, Raw Peanuts, Peanut-Butter, Peanut-Meal, Chocolate-Cream Candy, Nut-Candy, Chocolate Candy, and Peanut-Candy.
Claims use since December, 1917.

Ser. No. 108,839. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) NATIONAL ENAMELING & STAMPING CO., New York, N. Y. Filed Feb. 5, 1918.



Particular description of goods.—Tinware—Namely, Coffee-Boilers, Colanders, Dippers, Funnels, Graters, Kettles, Milk-Dippers, Molds, Pudding-Molds, Soup-Strainers, Steam-Cookers, Steamers.
Claims use since 1908.

Ser. No. 108,857. (CLASS 39. CLOTHING.) AMERICAN LADY CORSET COMPANY, Detroit, Mich. Filed Feb. 7, 1918.

EXELO

Particular description of goods.—Corsets.
Claims use since Jan. 1, 1918.

Ser. No. 108,976. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) COPEMAN LABORATORIES, INC., Flint, Mich. Filed Feb. 13, 1918.

Lubri

Particular description of goods.—Grease-Cups.
Claims use since Oct. 15, 1917.

Ser. No. 109,056. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE FAYETTE LIVE STOCK SUPPLY CO., Washington Court-House, Ohio. Filed Feb. 18, 1918.



Particular description of goods.—A Granular Compound Used as a Tonic for Swine.
Claims use since about May 5, 1917.

Ser. No. 109,341. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) PACIFIC PEA PACKING COMPANY, Eau Claire, Wis., and Oakdale, Cal. Filed Mar. 2, 1918.

POLAR.

Particular description of goods.—Canned Peas, Canned Pork and Beans, Canned Hominy.
Claims use since July 8, 1889.

Ser. No. 109,492. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) WILLIAM BREWSTER COMPANY, INC., New York, N. Y. Filed Mar. 11, 1918.

Echograph

Particular description of goods.—Machine for Writing on Metals.
Claims use since June 12, 1917.

Ser. No. 109,696. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) JUG OIL SOAP CO., Erie, Pa. Filed Mar. 21, 1918.



Particular description of goods.—Soap.
Claims use since Jan. 1, 1911.

Ser. No. 109,760. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) CHATTANOOGA DRUG & CHEMICAL CO., Chattanooga, Tenn. Filed Mar. 25, 1918.

S·O·S

Particular description of goods.—Cold-Cream, Antiseptic Tooth-Powder, Talcum Powder, Antiseptic Bath-Ammonia, Antiseptic Wash, Antiseptic Tooth Liquid, Antiseptic Tooth-Paste, Antiseptic Massage-Cream, Antiseptic Foot-Powder, Antiseptic Freckle-Lotion, Cologne, Lilac Perfume, Iron Tonic: Tonic-Pills for the Treatment of Debility, Nervousness, or Lack of Appetite; Female-Pills, Digestive Tablets, Cathartic Liver-Pills, Antiseptic, Cold-Tablets, Rheumatism Medicine, Chill-Tonic, Kidney-Diuretic, Laxative Salts, and Cough-Drops.
Claims use since Feb. 12, 1918.

Ser. No. 109,872. (CLASS 39. CLOTHING.) BENJAMIN H. KAUFMAN, New York, N. Y. Filed Mar. 29, 1918.



Particular description of goods.—Headwear—Namely, Felt, Cloth, Straw, and Silk Hats and Caps.
Claims use since September, 1917.

Ser. No. 110,041. (CLASS 39. CLOTHING.) COHN, GOLDWATER & COMPANY, Los Angeles, Cal. Filed Apr. 8, 1918.

Slip-On-Kids

Particular description of goods.—Boys' One-Piece Play-Suits.
Claims use since about February, 1914.

Ser. No. 110,042. (CLASS 39. CLOTHING.) COHN, GOLDWATER & COMPANY, Los Angeles, Cal. Filed Apr. 8, 1918.

Out-West

Particular description of goods.—Men's Shirts, Boys' Shirts, Men's Night-Shirts, Girls' and Women's Blouses and Pajamas.
Claims use since about January, 1913.

Ser. No. 110,043. (CLASS 39. CLOTHING.) COHN, GOLDWATER & COMPANY, Los Angeles, Cal. Filed Apr. 8, 1918.

Hooverall

Particular description of goods.—Men's and Boys' Overalls.
Claims use since Mar. 28, 1918.

Ser. No. 110,064. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) CLIFTON A. BERNEY, Mobile, Ala. Filed Apr. 9, 1918.

Jit-Jats

Particular description of goods.—Candies.
Claims use since Mar. 25, 1918.

Ser. No. 110,100. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) PURE FOOD FACTORY "HANSA," Mamaroneck, N. Y. Filed Apr. 10, 1918.

HERB-EX

Consisting of the word "Herb-Ex."
Particular description of goods.—Liquid Vegetable Flavoring Essences for Flavoring Food Products.
Claims use since about Mar. 30, 1918.

Ser. No. 110,105. (CLASS 32. FURNITURE AND UPHOLSTERY.) LYON METALLIC MANUFACTURING COMPANY, Montgomery, Ill. Filed Apr. 10, 1918.

LYON

Particular description of goods.—Cabinets, Desks, Tables, Portable Closets and Wardrobes, All for General Use, Including Domestic, Office, and Warehouse Purposes; Benches for Domestic, Office, and Warehouse Use; Bench-Drawers, and Counters for Commercial Purposes.
Claims use since about the 1st day of December, 1913.

Ser. No. 110,136. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) A. STEINHARDT & BRO., New York, N. Y. Filed Apr. 11, 1918.

MAID OF AMERICA

Representation of the female head being fanciful.
Particular description of goods.—Snap-Fasteners, Hooks and Eyes, Hair-Pins, Safety-Pins, Solid-Headed Brass and Iron and Glass-Headed Straight Pins for Toilet Purposes, Tapes, Braids, and Pearl, Glass, Horn, Composition, Ivory, Celluloid, and Covered Buttons for Wearing-Apparel.
Claims use since Feb. 25, 1915.

Ser. No. 110,312. (CLASS 33. GLASSWARE.) JOHN WATTS. New York, N. Y. Filed Apr. 18, 1918.



Particular description of goods.—Watch-Glasses.
Claims use since September, 1917.

Ser. No. 110,367. (CLASS 11. INKS AND INKING MATERIALS.) THE CARBONUM COMPANY, LIMITED, Leyton, London, England. Filed Apr. 22, 1918.



Particular description of goods.—Writing-Inks, Indorsing-Inks, Printing-Inks, Carbon-Papers, and Type-Writer Ribbons.
Claims use since February, 1916.

Ser. No. 110,385. (CLASS 29. BROOMS, BRUSHES, AND DUSTERS.) CHARLES WHITE, Baltimore, Md. Filed Apr. 22, 1918.

"RAINY RACER"

Particular description of goods.—Device for Clearing Wind-Shields and the Like, Said Device Consisting of Textile Fabric with Which is Incorporated a Material to Transform Raindrops or Moisture on a Wind-Shield or Window into a Thin Transparent Film Instead, Said Fabric Being Carried by a Block or the Like to be Held in the Hand Like a Blackboard-Eraser, so as to Apply the Fabric to the Glass and Rub It Thereover.
Claims use since Dec. 21, 1917.

Ser. No. 110,561. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) CARTER'S LABORATORY COMPANY, Washington, D. C. Filed Apr. 30, 1918.

LUX-L



No claim is made to the exclusive use of the phrase "Keeps the hare from getting thin," except when the words constituting this phrase are disclosed in juxtaposition to the representation of a fat rabbit or hare.
Particular description of goods.—A Hair-Tonic.
Claims use since the middle of February, 1918.

Ser. No. 110,622. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) CHAMBERLAIN AND COMPANY, INCORPORATED, Boston, Mass. Filed May 3, 1918.

REVERE

The word "Revere."
Particular description of goods.—Corned Beef.
Claims use since Apr. 1, 1914.

Ser. No. 110,720. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) THE THORO CORPORATION, Chicago, Ill. Filed May 6, 1918.

THORO

Particular description of goods.—Powdered Skin-Cleanser Adapted to be Used as a Soap Substitute.
Claims use since on or about Apr. 25, 1917.

Ser. No. 110,832. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) E. I. DU PONT DE NEMOURS & COMPANY, Wilmington, Del. Filed May 11, 1918.

CARPOLENE

Consisting of the word "Carpolene."
Particular description of goods.—An Oil Wood-Preservative.
Claims use since Nov. 27, 1917.

Ser. No. 110,834. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) THE DEMING COMPANY, Salem, Ohio. Filed May 11, 1918.

LIBERTY

Particular description of goods.—Machines for Spraying Trees and Plants and for the Spraying of Paint, Whitewash, Disinfectant, or other Substances on Buildings, Ground, &c.
Claims use since about Feb. 21, 1918.

Ser. No. 110,854. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) BRAENDER RUBBER & TIRE CO., Rutherford, N. J. Filed May 13, 1918.



No claim being made to the representation of the tire or tire-casing apart from the mark shown in the drawing.
Particular description of goods.—Pneumatic Tires and the Inner Tubes and Outer Casings Thereof, Composed of Rubber or Rubber and Fabric.
Claims use since September, 1915.

Ser. No. 110,875. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) STOWE SUPPLY COMPANY, Kansas City, Mo. Filed May 13, 1918.



Particular description of goods.—Colters, Disk Furrow-Openers, Corn-Planters, Corn-Shellers, Feed-Grinders, Seeders, Plows, Pump-Jacks, Lawn-Mowers, Wire-Stretchers, Post-Hole Diggers, Shoveling-Boards, Scrapers.
Claims use since June 1, 1910.

Ser. No. 111,032. (CLASS 39. CLOTHING.) AMAZON PRODUCTS CO., Muskegon, Mich. Filed May 18, 1918

BEAR



Particular description of goods.—Children's Waist Union-Suits and Infants' Wrappers.
Claims use since the 5th day of March, 1918.

Ser. No. 111,039. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) CONVERSE & COMPANY, New York, N. Y. Filed May 18, 1918.

INDUSTRY

Particular description of goods.—Cotton Piece Goods.
Claims use since prior to the year 1885.

Ser. No. 111,042. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) CONVERSE & COMPANY, New York, N. Y. Filed May 18, 1918.



Particular description of goods.—Cotton Piece Goods.
Claims use since the year 1890.

Ser. No. 111,064. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) WM. M. KNIGHT, Minneapolis, Minn. Filed May 20, 1918.

ANACIN

Particular description of goods.—Medicinal Preparation for Internal Use in Cases of Headache, Neuralgia, and Pains Centering on the Trigeminal Nerve.
Claims use since about Jan. 1, 1916.

Ser. No. 111,172. (CLASS 39. CLOTHING.) DANIEL GREEN FELT SHOE COMPANY, Boston, Mass. Filed May 24, 1918.

Hylo

Particular description of goods.—Slippers Made in Whole or in Part of Felt or Leather.
Claims use since Jan. 1, 1917.

Ser. No. 111,177. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) LANMAN & KEMP, New York, N. Y. Filed May 24, 1918.



No trade-mark claim being made to the words and names apart from the mark shown in the drawing.
Particular description of goods.—Liquid Vermifuge.
Claims use since Apr. 1, 1918.

Ser. No. 111,226. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) HOMER P. SMITH, Appleton, Wis. Filed May 27, 1918.

Scolding Locks

Particular description of goods.—Hair-Pins.
Claims use since Sept. 10, 1917.

Ser. No. 111,231. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) VON DER HEYDE & JOHN, New York, N. Y. Filed May 27, 1918.



Particular description of goods.—Oak, Union, Hemlock, and Chrome Tanned Sole-Leather; Finished Sheep, Goat, Deer, Cow, and Steer Leather.
Claims use since Oct. 11, 1917.

Ser. No. 111,233. (CLASS 3. BAGGAGE, HORSE EQUIPMENTS, PORTFOLIOS, AND POCKET-BOOKS.) VON DER HEYDE & JOHN, New York, N. Y. Filed May 27, 1918.



Particular description of goods.—Portfolios, Pocket-Books, Purses, Hand-Bags, Made of Leather or Textile Fabrics.
Claims use since Oct. 11, 1917.

Ser. No. 111,248. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE SEPOL LABORATORIES, Portland, Oreg. Filed May 29, 1918.



Particular description of goods.—Liquid Saponified Sheep-Dip Shampoo.
Claims use since Sept. 1, 1917.

Ser. No. 111,278. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) THE WM. MEYER CO., Chicago, Ill. Filed May 31, 1918.

KLINOSCOPE

Particular description of goods.—X-Ray Tables and Stands.
Claims use since Apr. 1, 1918.

Ser. No. 111,312. (CLASS 29. BROOMS, BRUSHES, AND DUSTERS.) LEE BROOM & DUSTER COMPANY, Lincoln, Nebr. Filed June 1, 1918.

RAWHIDE

Particular description of goods.—Brooms.
Claims use since about Oct. 26, 1917.

Ser. No. 111,313. (CLASS 37. PAPER AND STATIONERY.) LASHER & LATHROP, INC., New York, N. Y. Filed June 1, 1918.



Particular description of goods.—Writing and Printing Papers.
Claims use since the 11th day of September, 1916.

Ser. No. 111,381. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) SUNBEAM CHEMICAL COMPANY, Chicago, Ill. Filed June 5, 1918.



The picture shown in the drawing and constituting the trade-mark is fanciful.
Particular description of goods.—Dyes Combined with Soap.
Claims use since on or about July 1, 1917.

Ser. No. 111,395. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) W. A. MCCOMBS & Co., Pittsburgh, Pa. Filed June 6, 1918.

MACO

Particular description of goods.—Electrical Switches.
Claims use since about Oct. 15, 1917.

Ser. No. 111,411. (CLASS 19. VEHICLES, NOT INCLUDING ENGINES.) DAVENPORT-BROWN CO., Somerville, Mass. Filed June 7, 1918.

DBC

Particular description of goods.—Aeroplane-Propellers.
Claims use since May 22, 1918.

Ser. No. 111,414. (CLASS 39. CLOTHING.) THE KREEGER STORE, INCORPORATED, New Orleans, La. Filed June 7, 1918.

NEWCOMB GIRL

Particular description of goods.—Misses' and Women's Frocks.
Claims use since Mar. 25, 1918.

Ser. No. 111,415. (CLASS 39. CLOTHING.) THE KRESGE STORE, INCORPORATED, New Orleans, La. Filed June 7, 1918.



Particular description of goods.—Women's Frocks.
Claims use since Mar. 25, 1918.

Ser. No. 111,421. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) SPOEHR'S, Chicago, Ill. Filed June 7, 1918.



DEAR HEART

Particular description of goods.—Chocolate, Cream, Nut, and Fruit Candies.
Claims use since Feb. 15, 1918.

Ser. No. 111,428. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) DONIGER & COMPANY, INC., New York, N. Y. Filed June 8, 1918.



Particular description of goods.—Surgical Instruments—viz., Hypodermic Syringes and Drop-Syringes, Scalpels, Enterotome-Scissors, Lancets, Forceps, Inhalers, Chloroform-Masks, Aneurism-Needles, Operating-Knives, Operating-Saws, Amputating-Knives, Mallets, Bone-Drills, Needle-Holders, Surgical-Needles, Decapitating-Hook, and Abdominal Retractors, and Parts of Such Articles.
Claims use since December, 1917.

Ser. No. 111,440. (CLASS 38. PRINTS AND PUBLICATIONS.) MYSTIC ORDER OF VEILED PROPHETS OF THE ENCHANTED REALM, Hamilton, N. Y. Filed June 8, 1918.

Mystic Order Veiled Prophets
of the Enchanted Realm

Particular description of goods.—Circulars, Pamphlets, Booklets, Printed Books, and Monthly, Yearly, and Intermittent Publications Used Between the Units of the Association in the Furtherance of Their Business.
Claims use since June 13, 1890.

Ser. No. 111,441. (CLASS 38. PRINTS AND PUBLICATIONS.) MYSTIC ORDER OF VEILED PROPHETS OF THE ENCHANTED REALM, Hamilton, N. Y. Filed June 8, 1918.



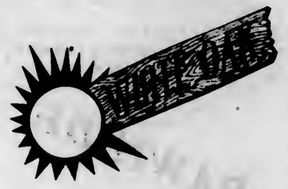
Particular description of goods.—Circulars, Pamphlets, Booklets, Printed Books, and Monthly, Yearly, and Intermittent Publications Used Between the Units of the Association in the Furtherance of Their Business.
Claims use since June 13, 1890.

Ser. No. 111,442. (CLASS 38. PRINTS AND PUBLICATIONS.) MYSTIC ORDER OF VEILED PROPHETS OF THE ENCHANTED REALM, Hamilton, N. Y. Filed June 8, 1918.

M. O. V. P. E. R.

Particular description of goods.—Circulars, Pamphlets, Booklets, Printed Books, and Monthly, Yearly, and Intermittent Publications Used Between the Units of the Association in the Furtherance of Their Business.
Claims use since June 13, 1890.

Ser. No. 111,503. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) HANNAH E. KRIEL, Baltimore, Md. Filed June 11, 1918.



Particular description of goods.—A Lard Substitute Composed of Cotton-Seed Oil and other Ingredients.
Claims use since February, 1820.

Ser. No. 111,515. (CLASS 39. CLOTHING.) WEST COAST KNITTING MILLS, Los Angeles, Cal. Filed June 11, 1918.

ANNETTE

Particular description of goods.—Knitted Goods Consisting of Women's, Children's, and Infants' Knit Underwear.
Claims use since Apr. 24, 1918.

Ser. No. 111,540. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) FINLAY, DICKS & CO., LTD., New Orleans, La. Filed June 13, 1918.

nu-FAD

Particular description of goods.—A Maltless Soda-Water Beverage Sold in a Concentrated Form to be Mixed with Syrup Which is Dispensed in Carbonated Water.
Claims use since May 1, 1918.

Ser. No. 111,565. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) GIOVANNI CANNALIATO, Baltimore, Md. Filed June 14, 1918.



The picture shown in the drawing is fanciful.
Particular description of goods.—A Hair-Tonic.
Claims use since May 31, 1913.

Ser. No. 111,612. (CLASS 12. CONSTRUCTION MATERIALS.) GREAT SOUTHERN LUMBER COMPANY, Bogalusa, La. Filed June 17, 1918.

BOGALUSA

The word "Bogalusa."
Particular description of goods.—Sawed and Hewn Railroad Cross-Ties, Telephone and Telegraph Poles, Cross-Arms, and Piling.
Claims use since on or about the 1st day of July, 1914.

Ser. No. 111,614. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) HOWARD BROS. CHEMICAL CO., Buffalo, N. Y. Filed June 17, 1918.

Howard

The word "Howard" being the autographic signature of Clarence M. Howard, the vice-president of this applicant.
Particular description of goods.—Toilet Cream.
Claims use since May 18, 1915.

Ser. No. 111,628. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) RAWLINGS MANUFACTURING COMPANY, St. Louis, Mo. Filed June 17, 1918.

RUKO

The diagonally-disposed cross-lining on the letters forming the mark is intended to represent shading and not color indicia.
Particular description of goods.—Foot-Balls, Basket-Balls, and Volley-Balls.
Claims use since June 1, 1917.

Ser. No. 111,657. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) BIAGIO PERNETTI, Los Angeles and Harbor City, Cal. Filed June 18, 1918.

CAMPAGNOLA

Particular description of goods.—Canned Tomato Paste.
Claims use since May 8, 1918.

Ser. No. 111,660. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) GEO. H. SCHAFER & CO., Fort Madison, Iowa. Filed June 18, 1918.

U-EL-O

Particular description of goods.—A Cream for Shaving and Massaging.
Claims use since May 20, 1918.

Ser. No. 111,676. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) PROCESSED OILS CORP., Conshohocken and Philadelphia, Pa. Filed June 19, 1918.

TALOL

Particular description of goods.—Treated Oil for Soap-Making.
Claims use since Jan. 19, 1918.

Ser. No. 111,692. (CLASS 37. PAPER AND STATIONERY.) THE CHATFIELD & WOODS COMPANY, Cincinnati, Ohio. Filed June 20, 1918.



Particular description of goods.—Toilet-Paper.
Claims use since May 15, 1916.

Ser. No. 111,696. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) BEN DOUGLAS, Kansas City, Mo. Filed June 20, 1918.

KARO

Particular description of goods.—An Oil Adapted for Internal Use and as a Liniment for External Use in the Treatment of Rheumatism.
Claims use since June 12, 1918.

Ser. No. 111,705. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) McCORMICK & Co., Baltimore, Md. Filed June 20, 1918.

FRAGROMA

Particular description of goods. — Food-Flavoring Extracts.
Claims use since about June 1, 1918.

Ser. No. 111,735. (CLASS 15. OILS AND GREASES.) PENNSYLVANIA LUBRICATING COMPANY, Pittsburgh, Pa. Filed June 21, 1918.

"PENOTOL"

Particular description of goods.—Lubricating Oils and Greases.
Claims use since June 10, 1918.

Ser. No. 111,763. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) CALIFORNIA SOAP COMPANY, INC., Los Angeles, Cal. Filed June 24, 1918.

SUNNY-MAID

Particular description of goods.—Soaps and Washing-Powders.
Claims use since Aug. 1, 1916.

Ser. No. 111,774. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) LANMAN & KEMP, New York, N. Y. Filed June 24, 1918.

ANACAHUITA

Particular description of goods.—A Pectoral Compound for Coughs, Asthma, Bronchitis, and Pulmonary Affections.
Claims use since the year 1864.

Ser. No. 111,794. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) CHICAGO PROCESS COMPANY, Chicago, Ill. Filed June 25, 1918.

MEDROL

Particular description of goods.—A Tanning Extract.
Claims use since on or about July 1, 1916.

Ser. No. 111,809. (CLASS 47. WINES.) CALIFORNIA WINE ASSOCIATION, San Francisco, Cal. Filed June 26, 1918.

BARBERONA

Particular description of goods.—Wine.
Claims use since Nov. 19, 1912.

Ser. No. 111,813. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) JAMES S. KIRK & Company, Chicago, Ill. Filed June 26, 1918. Under ten-year proviso.

OMNIBUS

Particular description of goods.—Toilet Soap.
Claims use since on or about Mar. 15, 1884.

Ser. No. 111,814. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) JAMES S. KIRK & Company, Chicago, Ill. Filed June 26, 1918. Under ten-year proviso.

SAPO CUTI

Particular description of goods.—Toilet Soap.
Claims use since on or about Nov. 15, 1888.

Ser. No. 111,830. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) RED LINE INC., Grand Rapids, Mich. Filed June 26, 1918.

RED LINE

Particular description of goods.—Wet Batteries and Electric Lamps or Spot-Lights and Spark-Plugs.
Claims use since Oct. 17, 1917.

Ser. No. 111,832. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) CLARE CARLE REPLOGLE, Shenandoah, Iowa. Filed June 26, 1918.



Particular description of goods.—Wheat-Flour.
Claims use since Sept. 1, 1916.

Ser. No. 111,877. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) BEAUMONT MANUFACTURING COMPANY, Spartanburg, S. C. Filed June 29, 1918.

CAMOUFLAGE

Particular description of goods.—Cotton Duck and Cotton Osnaburg.
Claims use since about Feb. 19, 1918.

Ser. No. 111,882. (CLASS 37. PAPER AND STATIONERY.) LOUIS K. MALLINCKRODT, Baltimore, Md. Filed June 29, 1918.

PONGEE

Particular description of goods.—Wrapping-Paper.
Claims use since about May 29, 1917.

Ser. No. 111,884. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ONEIDA CORPORATION, Chicago, Ill. Filed June 29, 1918.

Liquid DRESS SHIELD

No claim being made for the word "Liquid" except in connection with the mark shown.
Particular description of goods.—Deodorants and Preparations to Allay Perspiration.
Claims use since May 1, 1918.

Ser. No. 111,899. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) HOLLAND-O'NEAL MILLING COMPANY, Springfield, Mo. Filed July 1, 1918.

METEOR

Particular description of goods.—Wheat-Flour.
Claims use since about September, 1902.

Ser. No. 111,901. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) JERSEY FARM DAIRY COMPANY, St. Louis, Mo. Filed July 1, 1918.

VICTORY

Particular description of goods.—Ice-Cream.
Claims use since May 15, 1918.

Ser. No. 111,905. (CLASS 37. PAPER AND STATIONERY.) LOUIS K. MALLINCKRODT, Baltimore, Md. Filed July 1, 1918.

HAMMER

Particular description of goods.—Wrapping-Paper.
Claims use since about May 29, 1917.

Ser. No. 111,917. (CLASS 37. PAPER AND STATIONERY.) AMERICAN LEAD PENCIL COMPANY, New York, N. Y. Filed July 2, 1918.

DUMA

The trade-mark consists in the word "Duma."
Particular description of goods.—Pencils.
Claims use since the 1st day of June, 1918.

Ser. No. 111,920. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) CAVIN & BROWN, Trautmans, N. C. Filed July 2, 1918.

CAVINOL

Particular description of goods.—A Liniment for External Use in the Treatment of Pains, Strained Muscles, La-Grippe Pains, Headache, Neuralgia, Rheumatism, Lame Back, Sore Throat, Pleurisy, Hard Coughs, Sore Lungs, Stiffness of Joints, Swelling, Cramps in the Bowels, and Chest Soreness.
Claims use since May 22, 1918.

Ser. No. 111,935. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) H. R. MALLINSON & Co., INC., New York, N. Y. Filed July 3, 1918.

Kumsi-Kumsa

Particular description of goods.—Silk Piece Goods.
Claims use since Apr. 18, 1918.

Ser. No. 112,063. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE HARTER CANDY CO., Toledo, Ohio. Filed July 11, 1918.

LADY FINGERS

Particular description of goods.—Candies.
Claims use since May, 1901.

Ser. No. 112,067. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) MARTINEZ CANNING CO., Martinez, Cal. Filed July 11, 1918.

MARTINO

Particular description of goods.—Canned Tomato Paste (Italian Style) and Canned Tomato Puree.
Claims use since Mar. 18, 1918.

Ser. No. 112,068. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE WILLIAM S. MERRELL CHEMICAL COMPANY, Cincinnati, Ohio. Filed July 11, 1918.

PROTEOGEN

Particular description of goods.—A Non-Specific Protein of Vegetable Origin for Subcutaneous Injection for the Treatment of Rheumatism, Arthritis, Tuberculosis, and Hay-Fever.
Claims use since October, 1917.

Ser. No. 112,084. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) CABLE-DRAPER BAKING CO., Detroit, Mich. Filed July 12, 1918.

Thrift

Particular description of goods.—Bread.
Claims use since June 26, 1918.

Ser. No. 112,107. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) R. U. DELAPENHA & CO. INC., New York, N. Y. Filed July 13, 1918.

ECONOMY

Particular description of goods.—Peanut-Oil.
Claims use since May 1, 1918.

Ser. No. 112,116. (CLASS 29. BROOMS, BRUSHES, AND DUSTERS.) NORTHERN WOOD PRODUCTS COMPANY, Glidden, Wis. Filed July 13, 1918.

HAROMA

Particular description of goods.—Broom-Handles.
Claims use since about May, 1916.

Ser. No. 112,208. (CLASS 38. PRINTS AND PUBLICATIONS.) JOHANSEN BROTHERS SHOE COMPANY, St. Louis, Mo. Filed July 18, 1918.

footprints

Particular description of goods.—A Magazine Published Monthly.
Claims use since Mar. 15, 1918.

Ser. No. 112,210. (CLASS 48. MALT BEVERAGES, EXTRACTS, AND LIQUORS.) AMERICAN PRODUCTS COMPANY, Detroit, Mich. Filed July 19, 1918.

-CREAM TOP-

Particular description of goods.—A Non-Intoxicating Cereal Beverage of a Malt Nature Containing Less Than One-Half of One Per Cent. Alcohol and Sold as a Soft Drink.
Claims use since May 1, 1918.

Ser. No. 112,223. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) ORDINATOR COMPANY, INC., New York, N. Y. Filed July 19, 1918.

VENTANO

Particular description of goods.—Window-Shade Cloth.
Claims use since Apr. 26, 1918.

Ser. No. 112,238. (CLASS 2. RECEPTACLES.) PEREFEX CORPORATION INC., New York, N. Y. Filed July 20, 1918.

PEREFX

Particular description of goods.—Collapsible Tubes Adapted to Contain Liquid or Fluid Substances.
Claims use since May 1, 1918.

TRADE-MARK REGISTRATIONS GRANTED

AUGUST 20, 1918.

122,414. CERTAIN NAMED METAL-WORKING MACHINERY. AMALGAMATED MACHINERY CORPORATION, Chicago, Ill.
Filed February 16, 1918. Serial No. 109,018. PUBLISHED MAY 7, 1918.

122,415. APPARATUS FOR VAPORIZING AND BURNING OIL IN RANGES, STOVES, HOT-WATER HEATERS, RADIATORS, &c. AMALGAMATED OIL GAS CORPORATION, New York, N. Y.
Filed December 10, 1917. Serial No. 107,858. PUBLISHED APRIL 16, 1918.

122,416. ZINC-OXID PAINT-PIGMENT. THE AMERICAN METAL COMPANY LIMITED, New York, N. Y.
Filed March 7, 1918. Serial No. 109,407. PUBLISHED MAY 14, 1918.

122,417. COTTON THREAD AND COTTON YARN. THE AMERICAN THREAD COMPANY, Jersey City, N. J.
Filed November 1, 1917. Serial No. 107,084. PUBLISHED MAY 14, 1918.

122,418. ELASTIC VEHICLE-TIRES. THE AMERICAN RUBBER AND TIRE COMPANY, Akron, Ohio.
Filed January 14, 1918. Serial No. 108,443. PUBLISHED APRIL 16, 1918.

122,419. STEEL FENCE-POSTS. AMERICAN STEEL PRODUCTS CO., Macomb, Ill.
Filed March 3, 1917. Serial No. 101,844. PUBLISHED APRIL 30, 1918.

122,420. COTTON YARNS. THE ARGO MILLS CO., Philadelphia, Pa.
Filed October 31, 1917. Serial No. 107,039. PUBLISHED APRIL 16, 1918.

122,421. PASTE PAINTS, READY-MIXED AND LIQUID PAINTS. ATLANTIC DRIER & VARNISH CO., Philadelphia, Pa.
Filed April 4, 1917. Serial No. 102,708. PUBLISHED MAY 7, 1918.

122,422. LOTION FOR REMOVING SKIN BLEMISHES. BESSIE L. BARBER, Los Angeles, Cal.
Filed March 23, 1918. Serial No. 109,737. PUBLISHED MAY 14, 1918.

122,423. CANNED PEAS. BIG FOUR CANNING COMPANY, Stanley and Eau Claire, Wis.
Filed April 4, 1918. Serial No. 109,965. PUBLISHED MAY 14, 1918.

122,424. CERTAIN NAMED FOODS. BISCEGLIA BROS., San Jose, Cal.
Filed April 2, 1918. Serial No. 109,912. PUBLISHED MAY 14, 1918.

122,425. CERTAIN NAMED PAPER AND STATIONERY. J. C. BLAIR COMPANY, Huntingdon, Pa.
Filed March 28, 1918. Serial No. 109,837. PUBLISHED MAY 14, 1918.

122,426. REAMERS, TAPS, DIES, AND HACKSAW-BLADES. L. C. BLANCKE CO., INC., New York, N. Y.
Filed March 27, 1917. Serial No. 102,477. PUBLISHED FEBRUARY 12, 1918.

122,427. LUBRICATING-OILS. BLIVEN & CARRINGTON, INC., New York, N. Y.
Filed March 11, 1918. Serial No. 109,488. PUBLISHED MAY 14, 1918.

122,428. COAL. BLUE DIAMOND COAL COMPANY, Knoxville, Tenn., and Cardiff, Ky.
Filed August 17, 1916. Serial No. 97,392. PUBLISHED JANUARY 2, 1917.

122,429. VISES. BONNEY VISE & TOOL WORKS, INC., Philadelphia and Allentown, Pa., and New York, N. Y.
Filed March 29, 1918. Serial No. 109,862. PUBLISHED MAY 14, 1918.

122,430. TEA. BREWSTER GORDON & CO., Rochester, N. Y.
Filed April 2, 1918. Serial No. 109,909. PUBLISHED MAY 14, 1918.

122,431. TEA. BREWSTER, GORDON & CO., Rochester, N. Y.
Filed April 2, 1918. Serial No. 109,908. PUBLISHED MAY 14, 1918.

122,432. MEDICINE TO BE TAKEN INTERNALLY FOR THE TREATMENT OF CERTAIN NAMED DISEASES. ASA BRUNSON, Pine Bluff, Ark.
Filed March 7, 1918. Serial No. 109,411. PUBLISHED MAY 14, 1918.

122,433. FRESH GRAPES. CALIFORNIA FRUIT EXCHANGE, Sacramento, Cal.
Filed December 15, 1917. Serial No. 107,977. PUBLISHED MAY 14, 1918.

122,434. CERTAIN NAMED MUSICAL INSTRUMENTS AND SUPPLIES MADE OF COMPOUNDS OF PYROXYLIN. THE CELLULOID COMPANY, Newark, N. J., and New York, N. Y.
Filed March 7, 1918. Serial No. 109,425. PUBLISHED MAY 7, 1918.

122,435. CERTAIN NAMED MEASURING AND SCIENTIFIC APPLIANCES MADE OF PYROXYLIN. THE CELLULOID COMPANY, Newark, N. J., and New York, N. Y.
Filed March 7, 1918. Serial No. 109,426. PUBLISHED MAY 7, 1918.

122,436. DAIRY FEED. CHAPIN & COMPANY, Hammond, Ind., and Chicago, Ill.
Filed November 1, 1917. Serial No. 107,088. PUBLISHED JANUARY 22, 1918.

122,437. SPUN-SILK YARN, MACHINE-TWIST KNITTING-SILK, REELED SILK, AND SEWING-SILK. CHENEY BROTHERS, South Manchester, Conn.
Filed March 20, 1918. Serial No. 109,670. PUBLISHED MAY 7, 1918.

122,438. CERTAIN NAMED PRINTS AND PUBLICATIONS. THE CHESAPEAKE & POTOMAC TELEPHONE COMPANY, New York, N. Y., and Washington, D. C.
Filed March 1, 1918. Serial No. 109,288. PUBLISHED APRIL 16, 1918.

122,439. BOILER-TUBES AND COPPER FERRULES ESPECIALLY ADAPTED FOR USE IN CONNECTION WITH BOILER-TUBES. CHICAGO TUBE AND IRON COMPANY, Chicago, Ill.
Filed January 29, 1918. Serial No. 108,680. PUBLISHED MAY 14, 1918.

122,440. FARM-TRACTORS, INTERNAL-COMBUSTION ENGINES, AND THEIR PARTS. CHIEF TRACTOR M'F'G CO., Detroit, Mich.
Filed June 21, 1915. Serial No. 87,459. PUBLISHED MAY 14, 1918.

122,441. PHONOGRAPHS. FRANCESCO CIRELLI, Philadelphia, Pa.
Filed December 19, 1917. Serial No. 108,047. PUBLISHED MAY 14, 1918.

122,442. WHEAT-FLOUR. COHN FLOUR & FEED CO., Baton Rouge, La.
Filed April 4, 1918. Serial No. 109,970. PUBLISHED MAY 14, 1918.

122,443. WHEAT-FLOUR. THE COLORADO MILLING & ELEVATOR CO., Denver, Colo., and Burley, Idaho.
Filed January 31, 1918. Serial No. 108,708. PUBLISHED MAY 14, 1918.

122,444. RUBBER TIRES AND INNER TUBES. THE COMBINATION RUBBER MFG. CO., Bloomfield, N. J.
Filed March 16, 1918. Serial No. 109,587. PUBLISHED MAY 7, 1918.

122,445. GLACÉD KID AND FANCY LEATHERS. COXE & LLOYD LEATHER COMPANY, Wilmington, Del.
Filed May 17, 1917. Serial No. 103,885. PUBLISHED DECEMBER 11, 1917.

122,446. BACON AND HAM. CUDAHY BROTHERS COMPANY, Cudahy, Wis.
Filed March 19, 1917. Serial No. 102,244. PUBLISHED MAY 14, 1918.

122,447. CERTAIN NAMED FOODS. THE ALBERT DICKINSON COMPANY, Chicago, Ill.
Filed March 13, 1918. Serial No. 109,533. PUBLISHED MAY 14, 1918.

122,448. PHOTOGRAPHIC PORTRAITS AND PICTURES. THE EAGLE PHOTO STUDIO, Brooklyn, N. Y.
Filed March 9, 1917. Serial No. 102,002. PUBLISHED APRIL 23, 1918.

122,449. POWDER FOR THE RELIEF OF EXCESSIVE PERSPIRATION. HELMER E. ERRICKSON, Chicago, Ill.
Filed March 25, 1918. Serial No. 109,763. PUBLISHED MAY 14, 1918.

122,450. PERIODICAL PUBLICATION PUBLISHED MONTHLY. ROY FELLOM, San Francisco, Cal.
Filed April 19, 1917. Serial No. 103,108. PUBLISHED APRIL 16, 1918.

122,451. COMPOSITION MACHINERY PACKING. FERGUSON & TIMPSON LIMITED, Glasgow, Scotland, and London, England.
Filed January 22, 1918. Serial No. 108,586. PUBLISHED APRIL 30, 1918.

122,452. DRESS-FASTENERS. I. FLEISCHER & SONS, Cincinnati, Ohio.
Filed April 8, 1918. Serial No. 110,048. PUBLISHED MAY 14, 1918.

122,453. HERB TONIC FOR KIDNEY TROUBLE. CHARLES FLEMING, Ardmore, Okla.
Filed March 8, 1918. Serial No. 109,440. PUBLISHED MAY 14, 1918.

122,454. MOTION-PICTURE FILMS. FIRST NATIONAL EXHIBITORS CIRCUIT, INC., New York, N. Y.
Filed December 10, 1917. Serial No. 107,867. PUBLISHED MAY 14, 1918.

122,455. MONTHLY PUBLICATION DEVOTED TO SEMIRARE ORES AND THEIR PRODUCTS. FOOTE MINERAL CO., Philadelphia, Pa.
Filed March 29, 1918. Serial No. 109,899. PUBLISHED MAY 7, 1918.

122,456. CERTAIN NAMED FOODS. FORT DODGE GROCERY CO., Fort Dodge, Iowa.
Filed June 2, 1916. Serial No. 95,591. PUBLISHED APRIL 3, 1917.

122,457. AGRICULTURAL INSECTICIDES. GENERAL CHEMICAL COMPANY, New York, N. Y.
Filed April 9, 1918. Serial No. 110,069. PUBLISHED MAY 14, 1918.

122,458. MOVING-PICTURE FILMS. GOLDWYN PICTURES CORPORATION, New York, N. Y.
Filed March 4, 1918. Serial No. 109,362. PUBLISHED MAY 14, 1918.

122,459. FRUIT PRESERVES, JAMS, VEGETABLE PICKLE RELISHES, AND PICKLES. MABEL BOONE GOSNELL, Minneapolis, Minn.
Filed December 13, 1917. Serial No. 107,942. PUBLISHED FEBRUARY 26, 1918.

122,460. DRY PAINT, PASTE PAINT, AND READY-MIXED PAINT. THE GLOBE MANUFACTURING CO., Peoria, Ill.
Filed May 14, 1917. Serial No. 103,774. PUBLISHED DECEMBER 18, 1917.

122,461. TILE AND PORCELAIN CLEANSER. THE GRADY MFG. CO., Long Island City, N. Y.
Filed March 21, 1918. Serial No. 109,693. PUBLISHED MAY 14, 1918.

122,462. TONIC AND MEDICINE USED INTERNALLY FOR TREATING CERTAIN NAMED DISEASES AND AFFECTIONS. GOLDINE MANUFACTURING COMPANY, Youngstown, Ohio.
Filed February 4, 1918. Serial No. 108,803. PUBLISHED MAY 14, 1918.

122,463. MANUFACTURED WATER-RESISTING LEATHER-BOARD. THE HERKIMER FIBRE COMPANY, Herkimer, N. Y., and Boston, Mass.
Filed February 21, 1917. Serial No. 101,568. PUBLISHED APRIL 30, 1918.

122,464. PRINTED BOOKS, BOOKLETS, CIRCULARS, PAMPHLETS, AND PERIODICALS ISSUED FROM TIME TO TIME. CHAS. F. HAANEL, St. Louis, Mo.
Filed December 17, 1917. Serial No. 108,012. PUBLISHED APRIL 16, 1918.

122,465. ELECTRIC INSULATED WEATHERPROOF UNDERWRITERS' WIRE. U. T. HUNGERFORD BRASS & COPPER CO., New York, N. Y.
Filed January 15, 1917. Serial No. 100,623. PUBLISHED MAY 7, 1918.

122,466. WATCHES AND WATCH-MOVEMENTS. THE HAMPDEN WATCH COMPANY, Canton, Ohio.
Filed March 26, 1918. Serial No. 109,801. PUBLISHED MAY 7, 1918.

122,467. WATCHES AND WATCH-MOVEMENTS. THE HAMPDEN WATCH COMPANY, Canton, Ohio.
Filed March 26, 1918. Serial No. 109,802. PUBLISHED MAY 7, 1918.

122,468. WATCHES AND WATCH-MOVEMENTS. THE HAMPDEN WATCH COMPANY, Canton, Ohio.
Filed March 26, 1918. Serial No. 109,803. PUBLISHED MAY 7, 1918.

122,469. WATCHES AND WATCH-MOVEMENTS. THE HAMPDEN WATCH COMPANY, Canton, Ohio.
Filed March 26, 1918. Serial No. 109,804. PUBLISHED MAY 7, 1918.

122,470. CANNED PINEAPPLES, APRICOTS, PLUMS, PEACHES, PEARS, PEAS, AND CANNED SALMON. THE G. H. HAMMOND COMPANY, Chicago, Ill.
Filed November 19, 1917. Serial No. 107,465. PUBLISHED MAY 14, 1918.

122,471. WATCHES AND WATCH-MOVEMENTS. THE HAMPDEN WATCH COMPANY, Canton, Ohio.
Filed March 26, 1918. Serial No. 109,805. PUBLISHED MAY 7, 1918.

122,472. CANNED CORN, PEAS, TOMATOES, PEARS, PEACHES, AND CHERRIES. THE G. H. HAMMOND COMPANY, Chicago, Ill.
Filed November 19, 1917. Serial No. 107,466. PUBLISHED MAY 14, 1918.

122,473. WHEAT-FLOUR AND RYE-FLOUR. HECKER-JONES-JEWELL MILLING COMPANY, New York, N. Y.
Filed May 22, 1917. Serial No. 104,009. PUBLISHED SEPTEMBER 4, 1917.

122,474. MEDICINAL PREPARATIONS FOR HUMAN USE FOR THE RELIEF OF COUGHS AND COLDS. GEORGE WILLIAM HEAN, Sydney, New South Wales, Australia.
Filed August 31, 1917. Serial No. 105,987. PUBLISHED MAY 14, 1918.

122,475. INSECTICIDE. B. HELLER & COMPANY, Chicago, Ill.
Filed April 11, 1918. Serial No. 110,117. PUBLISHED MAY 14, 1918.

122,476. MEDICINAL LINIMENTS FOR EXTERNAL APPLICATION IN THE TREATMENT OF INFLAMMATIONS DUE TO COLDS. OREGON HENDRICKS, Chicago, Ill., assignor to Hendricks Liniment Company, Chicago, Ill., a Copartnership.
Filed December 20, 1917. Serial No. 108,072. PUBLISHED MAY 14, 1918.

122,477. TIRE-PATCH. HERCULES MANUFACTURING COMPANY, Oklahoma, Okla.
Filed February 26, 1918. Serial No. 109,222. PUBLISHED APRIL 16, 1918.

122,478. LIQUID POLISH FOR STOVES. HEWITT & RUNNELS, Bay City, Mich.
Filed October 26, 1917. Serial No. 106,971. PUBLISHED MAY 7, 1918.

122,479. PLAIN AND ENGRAVED STATIONERY—NAMELY, ENVELOPS AND LETTER-SHEETS. HOLMES COMPANY, Chicago, Ill.
Filed April 21, 1917. Serial No. 103,175. PUBLISHED MAY 7, 1918.

122,480. CERTAIN NAMED OILED TEXTILES. BURTON M. HOVEY, New York, N. Y.
Filed December 26, 1917. Serial No. 108,153. PUBLISHED APRIL 16, 1918.

122,481. PILE FABRICS AND CORDUROYS TREATED SO AS TO BE WATERPROOF. HOWLETT & HOCKMEYER CO., New York, N. Y.
Filed January 14, 1918. Serial No. 108,458. PUBLISHED MAY 7, 1918.

122,482. CERTAIN NAMED CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARTIONS. DR. WILLIAM LEVI HUGHES, Minor, Ky.
Filed March 6, 1917. Serial No. 101,927. PUBLISHED MAY 14, 1918.

122,483. CLOCKS. THE E. INGRAHAM CO., Bristol, Conn.
Filed March 29, 1918. Serial No. 109,869. PUBLISHED MAY 7, 1918.

122,484. MAGAZINE PUBLISHED MONTHLY. INDEPENDENT ADVERTISING, PUBL'S, INC., New York, N. Y.
Filed July 10, 1917. Serial No. 104,960. PUBLISHED MAY 14, 1918.

122,485. TOILET SOAPS. INTERNATIONAL DRUG COMPANY, Wilmington, Del.
Filed March 24, 1917. Serial No. 102,415. PUBLISHED MAY 7, 1918.

122,486. HEADLIGHT-LENSES. INTERNATIONAL LENS COMPANY, Seattle, Wash.
Filed March 1, 1918. Serial No. 109,296. PUBLISHED APRIL 16, 1918.

122,487. PAY-ROLL-SCHEDULING, MONEY PAYING, REGISTERING, ADDING, AND LISTING MACHINES. INTERNATIONAL MONEY MACHINE CO., Reading, Pa.
Filed January 17, 1918. Serial No. 108,503. PUBLISHED MARCH 19, 1918.

122,488. MONTHLY PERIODICAL. INTERNATIONAL TEXTBOOK COMPANY, Scranton, Pa.
Filed March 26, 1918. Serial No. 109,800. PUBLISHED MAY 14, 1918.

122,489. CERTAIN NAMED PRINTS AND PUBLICATIONS. INTERNATIONAL UNION OF MINE, MILL AND SMELTER WORKERS, Denver, Colo.
Filed April 3, 1917. Serial No. 102,690. PUBLISHED JANUARY 1, 1918.

122,490. MAGAZINE PRINTED MONTHLY. KELLOGG SWITCHBOARD & SUPPLY CO., Chicago, Ill.
Filed April 20, 1917. Serial No. 103,146. PUBLISHED APRIL 30, 1918.

122,491. DOLLS. KELLOW & BROWN NOVELTY COMPANY, Los Angeles, Cal.
Filed April 11, 1918. Serial No. 110,121. PUBLISHED MAY 14, 1918.

122,492. SYRUPS MADE OF PRUNES, FOR BEVERAGES. GEORGE J. KERATSO, San Francisco, Cal.
Filed February 28, 1918. Serial No. 109,275. PUBLISHED MAY 14, 1918.

122,493. BARBED WIRE, FENCE-WIRE, AND WIRE FENCE. KEYSTONE STEEL & WIRE COMPANY, South Bartonville, Ill.
Filed September 12, 1917. Serial No. 106,208. PUBLISHED APRIL 30, 1918.

122,494. BARBED WIRE, FENCE-WIRE, AND WIRE FENCE. KEYSTONE STEEL & WIRE COMPANY, South Bartonville, Ill.
Filed September 12, 1917. Serial No. 106,202. PUBLISHED APRIL 30, 1918.

122,495. BARBED WIRE, FENCE-WIRE, AND WIRE FENCE. KEYSTONE STEEL & WIRE COMPANY, South Bartonville, Ill.
Filed September 12, 1917. Serial No. 106,203. PUBLISHED APRIL 30, 1918.

122,496. BARBED WIRE, FENCE-WIRE, AND WIRE FENCE. KEYSTONE STEEL & WIRE COMPANY, South Bartonville, Ill.
Filed September 12, 1917. Serial No. 106,204. PUBLISHED APRIL 30, 1918.

122,497. BARBED WIRE, FENCE-WIRE, AND WIRE FENCE. KEYSTONE STEEL & WIRE COMPANY, South Bartonville, Ill.
Filed September 12, 1917. Serial No. 106,205. PUBLISHED APRIL 30, 1918.

122,498. BARBED WIRE, FENCE-WIRE, AND WIRE FENCE. KEYSTONE STEEL & WIRE COMPANY, South Bartonville, Ill.
Filed September 12, 1917. Serial No. 106,206. PUBLISHED APRIL 30, 1918.

122,499. BARBED WIRE, FENCE-WIRE, AND WIRE FENCE. KEYSTONE STEEL & WIRE COMPANY, South Bartonville, Ill.
Filed September 12, 1917. Serial No. 106,207. PUBLISHED APRIL 30, 1918.

122,500. BARBED WIRE, FENCE-WIRE, AND WIRE FENCE. KEYSTONE STEEL & WIRE COMPANY, South Bartonville, Ill.
Filed September 12, 1917. Serial No. 106,209. PUBLISHED APRIL 30, 1918.

122,501. BARBED WIRE, FENCE-WIRE, AND WIRE FENCE. KEYSTONE STEEL & WIRE COMPANY, South Bartonville, Ill.
Filed September 12, 1917. Serial No. 106,201. PUBLISHED APRIL 30, 1918.

122,502. LATHES. MORRIS D. KOPPLE, New York, N. Y.
Filed January 31, 1917. Serial No. 101,068. PUBLISHED MAY 7, 1918.

122,503. BATH-CABINETS. THE KWICK-BATH CORPORATION, Wilson, N. C.
Filed November 12, 1917. Serial No. 107,318. PUBLISHED JANUARY 29, 1918.

122,504. WASHING-POWDER AND CLEANSER. JOHN D. LA CROIX, Vincennes, Ind.
Filed July 16, 1917. Serial No. 105,062. PUBLISHED MAY 14, 1918.

122,505. DRY-KILNS FOR DRYING WOOD VENEER AND LUMBER. ERIC LAMBERT, Kansas City, Mo.
Filed November 26, 1917. Serial No. 107,621. PUBLISHED APRIL 16, 1918.

122,506. WHEAT-FLOUR. JOHN F. LENNON, Providence, R. I.
Filed February 26, 1918. Serial No. 109,227. PUBLISHED MAY 14, 1918.

122,507. MOTOR-VEHICLE-HEADLIGHT LENSES. GEORGE A. LEEKS, Hamilton, Ontario, Canada.
Filed October 3, 1917. Serial No. 106,581. PUBLISHED APRIL 30, 1918.

122,508. PERFUMERY IN LIQUID FORM. LUNDBORG COMPANY, New York, N. Y.
Filed April 3, 1918. Serial No. 109,945. PUBLISHED MAY 14, 1918.

122,509. PERFUMERY IN LIQUID FORM AND IN POWDER FORM. LUNDBORG COMPANY, New York, N. Y.
Filed April 3, 1918. Serial No. 109,947. PUBLISHED MAY 14, 1918.

122,510. PERFUMERY IN LIQUID FORM. LUNDBORG COMPANY, New York, N. Y.
Filed April 3, 1918. Serial No. 109,948. PUBLISHED MAY 14, 1918.

122,511. MEDICINAL PREPARATION FOR RELIEF OF CERTAIN NAMED CONDITIONS. BENJAMIN F. MICHAEL, Laceyville, Pa.
Filed April 2, 1918. Serial No. 109,924. PUBLISHED MAY 14, 1918.

122,512. FOOD BEVERAGE CONTAINING A SPECIAL PREPARATION OF MILK. THE MILKOLATE COMPANY, Cleveland, Ohio.
Filed January 4, 1918. Serial No. 108,304. PUBLISHED MAY 14, 1918.

122,513. TUBE-REPAIR KITS. THE MILLER RUBBER COMPANY, Akron, Ohio.
Filed January 22, 1917. Serial No. 100,810. PUBLISHED APRIL 30, 1918.

122,514. CEREAL BREAKFAST FOOD, POPCORN, CITRON-PEEL, LEMON-PEELS, AND ORANGE-PEELS. THE MOREY MERCANTILE COMPANY, Denver, Colo.
Filed December 26, 1917. Serial No. 108,159. PUBLISHED MAY 14, 1918.

122,515. WRITING, PRINTING, AND WRAPPING PAPER. MARY E. MYERS, Rochester, N. Y.
Filed March 25, 1918. Serial No. 109,772. PUBLISHED MAY 14, 1918.

122,516. COFFEE-POTS. NATIONAL ALUMINUM WORKS, Elmira, N. Y.
Filed October 19, 1917. Serial No. 106,865. PUBLISHED MAY 14, 1918.

122,517. MACHINES FOR CLEANING WATER-MAINS AND BOILER-TUBES. NATIONAL WATER MAIN CLEANING CO., New York, N. Y.
Filed March 26, 1918. Serial No. 109,811. PUBLISHED MAY 14, 1918.

122,518. BOARD GAMES. MARCELINO BARRET DE NAZARIS, New York, N. Y.
Filed March 26, 1918. Serial No. 109,795. PUBLISHED MAY 14, 1918.

122,519. TANNED FISH AND MAMMAL SKINS. THE OCEAN LEATHER CO. INC., New York, N. Y., and Newark, N. J.
Filed February 20, 1918. Serial No. 109,133. PUBLISHED APRIL 16, 1918.

122,520. HEAVY LUBRICATING-GREASE. ORIENTAL OIL COMPANY, Dallas, Tex.
Filed February 4, 1918. Serial No. 108,805. PUBLISHED MAY 7, 1918.

122,521. CERTAIN NAMED PRINTS AND PUBLICATIONS. MARVIN E. PALMER, Topeka, Kans.
Filed February 25, 1918. Serial No. 109,205. PUBLISHED APRIL 23, 1918.

122,522. GOGGLES. MERRY OPTICAL COMPANY, Kansas City, Mo.
Filed June 11, 1917. Serial No. 104,396. PUBLISHED JANUARY 29, 1918.

122,523. COLD SELF-VULCANIZING TEXTURE-BACK PATCH FOR TIRES AND THE LIKE. CLARENCE PETERSON, Minneapolis, Minn.
Filed February 14, 1916. Serial No. 92,845. PUBLISHED SEPTEMBER 11, 1917.

122,524. TIRES, SAID TIRES BEING USUALLY COMPOSED OF RUBBER, FABRIC, AND CERTAIN MINERALS AND COLORS. THE F. E. PARTRIDGE RUBBER CO. LTD., Guelph, Ontario, Canada.
Filed November 23, 1917. Serial No. 107,568. PUBLISHED MAY 7, 1918.

122,525. BEAN-MEAL AND CUT-POD FEED FOR USE AS A STOCK AND POULTRY FEED. JNO. F. PEARSON, Montgomery, Ala.
Filed February 26, 1918. Serial No. 109,135. PUBLISHED MAY 14, 1918.

122,526. CANDY. PELOSO BROS., New York, N. Y.
Filed April 11, 1918. Serial No. 110,128. PUBLISHED MAY 14, 1918.

122,527. SNAP-FASTENERS. SAMSTAG & HILDER BROS., New York, N. Y.
Filed April 4, 1918. Serial No. 109,989. PUBLISHED MAY 14, 1918.

122,528. WATCHES, WATCHCASES, AND WATCH-MOVEMENTS. ADOLPHE SCHWOB, INC., New York, N. Y.
Filed March 20, 1918. Serial No. 109,677. PUBLISHED MAY 7, 1918.

122,529. PHENOLIC CONDENSATION PRODUCT FOR CERTAIN NAMED USES. REDMANOL CHEMICAL PRODUCTS CO., Chicago, Ill.
Filed March 20, 1918. Serial No. 109,676. PUBLISHED MAY 7, 1918.

122,530. LEATHER. QUAKER CITY SUPPLY CO., Philadelphia, Pa.
Filed January 31, 1918. Serial No. 108,720. PUBLISHED MAY 7, 1918.

122,531. SEEDS. FREDERICK S. RADWAY, New York, N. Y.
Filed November 3, 1917. Serial No. 107,142. PUBLISHED APRIL 16, 1918.

122,532. CERTAIN NAMED FOODS. THE ROWE-FAWCETT COMPANY, New Albany, Ind.
Filed May 5, 1917. Serial No. 103,569. PUBLISHED MAY 14, 1918.

122,533. MONTHLY PUBLICATION. THE ROYCROFTERS, East Aurora, N. Y.
Filed March 4, 1918. Serial No. 109,369. PUBLISHED APRIL 30, 1918.

122,534. CANDLES. SALVATORE SAVARESE, Brooklyn, N. Y.
Filed January 2, 1918. Serial No. 108,264. PUBLISHED MAY 14, 1918.

122,535. FEATHERS. SCHADT & MATHEWSON, Detroit, Mich.
Filed June 16, 1917. Serial No. 104,471. PUBLISHED APRIL 9, 1918.

122,536. WATCHES, WATCHCASES, AND WATCH-MOVEMENTS. ADOLPHE SCHWOB, INC., New York, N. Y.
Filed March 20, 1918. Serial No. 109,678. PUBLISHED MAY 7, 1918.

122,537. LAGER-BEER. JOS. SCHLITZ BREWING CO., Milwaukee, Wis.
Filed April 2, 1918. Serial No. 109,926. PUBLISHED MAY 7, 1918.

122,538. CLOCKS AND WATCHES. SHAPLEIGH HARDWARE COMPANY, St. Louis, Mo.
Filed February 26, 1918. Serial No. 109,230. PUBLISHED MAY 14, 1918.

122,539. SMOKERS' POUCHES. HENRY H. SCOTT, New York, N. Y., assignor to The Scoban Co., Inc., of New York, N. Y., a Corporation of New York.
Filed August 30, 1917. Serial No. 105,972. PUBLISHED FEBRUARY 5, 1918.

122,540. COAL-TAR COLORS. SOCIETY OF CHEMICAL INDUSTRY IN BASLE, Basel, Switzerland.
Filed June 22, 1917. Serial No. 104,628. PUBLISHED MAY 14, 1918.

122,541. HIDES, RAW FURS, WOOL, AND CRUDE RUBBER. STANDARD HIDE & FUR CO., New Orleans, La.
Filed January 10, 1918. Serial No. 108,409. PUBLISHED MAY 14, 1918.

122,542. SECTIONAL STEEL BUILDINGS. STEEL FABRICATING COMPANY, Chicago Heights, Ill.
Filed February 28, 1918. Serial No. 109,284. PUBLISHED MAY 7, 1918.

122,543. STENOGRAPHIC WRITING-MACHINES. THE STENOTYPE COMPANY, Indianapolis, Ind.
Filed August 5, 1915. Serial No. 88,447. PUBLISHED NOVEMBER 27, 1917.

122,544. NUT-BUTTER OR NUT-MARGARIN. E. A. STEVENSON & COMPANY, Wilmington, Del., and New York, N. Y.
Filed March 8, 1918. Serial No. 109,442. PUBLISHED MAY 14, 1918.

122,545. HOOKS FOR PORTIÈRES AND DRAPERIES AND SIMILAR PURPOSES. HELENE L. SWENEY, Boston, Mass.
Filed July 18, 1917. Serial No. 105,105. PUBLISHED JANUARY 29, 1918.

122,546. PUBLICATIONS ISSUED WEEKLY. W. P. TANNER-GROSS & COMPANY, INC., New York, N. Y.
Filed December 10, 1917. Serial No. 107,887. PUBLISHED MAY 14, 1918.

122,547. WATERPROOF CEMENT FOR LEATHER GOODS, BELTING, AND SIMILAR ARTICLES. THE ULMER LEATHER CO., Norwich, Conn.
Filed March 16, 1918. Serial No. 109,615. PUBLISHED MAY 14, 1918.

122,548. WATERPROOF CEMENT FOR LEATHER GOODS, BELTING, AND SIMILAR ARTICLES. THE ULMER LEATHER CO., Norwich, Conn.
Filed March 16, 1918. Serial No. 109,616. PUBLISHED MAY 14, 1918.

122,549. LEATHER BELTING. THE ULMER LEATHER CO., Norwich, Conn.
Filed February 8, 1918. Serial No. 108,902. PUBLISHED APRIL 23, 1918.

122,550. CEMENT FOR LEATHER GOODS AND BELTING. THE ULMER LEATHER CO., Norwich, Conn.
Filed March 16, 1918. Serial No. 109,617. PUBLISHED MAY 14, 1918.

122,551. CLOSURES FOR ENDS OF ELECTRICAL CONDUITS. WALKER BROTHERS & HAVILAND, Philadelphia, Pa.
Filed December 18, 1917. Serial No. 108,045. PUBLISHED FEBRUARY 12, 1918.

122,552. MONTHLY PERIODICAL. THE WALKER-WADSWORTH COMPANY Wilmington, Del., and Baltimore, Md.
Filed February 26, 1918. Serial No. 109,232. PUBLISHED APRIL 23, 1918.

122,553. TOOTHPICKS. WAUSAU MANUFACTURING CO., Wausau, Wis.
Filed April 3, 1918. Serial No. 109,954. PUBLISHED MAY 14, 1918.

122,554. LIQUID PREPARATION FOR REMOVING DIRT, GREASE, ETC., FROM AUTOMOBILES. WACLEPO MFG. CO., Fort Wayne, Ind.
Filed January 31, 1918. Serial No. 108,735. PUBLISHED MAY 7, 1918.

122,555. SNAP-FASTENERS AND PLACKET-FASTENERS. WALDES & COMPANY OF NEW JERSEY, New York, N. Y., assignor, by mesne assignments, to Waldes & Company of Austria, a Firm.
Filed May 3, 1917. Serial No. 103,517. PUBLISHED OCTOBER 30, 1917.

122,556. NEWSPAPERS PUBLISHED DAILY AND SUNDAY. THE WASHINGTON TIMES COMPANY, Washington, D. C.
Filed April 8, 1918. Serial No. 110,062. PUBLISHED MAY 7, 1918.

122,557. PREPARATIONS FOR THE TREATMENT OF PEDICULOSIS OF THE HEAD OR BODY. WEST DISINFECTING COMPANY, New York, N. Y.
Filed April 11, 1918. Serial No. 110,138. PUBLISHED MAY 14, 1918.

122,558. COATED BOOK AND MAGAZINE PAPER. WEST VIRGINIA PULP & PAPER CO., New York, N. Y.
Filed January 5, 1917. Serial No. 100,376. PUBLISHED MAY 14, 1918.

122,559. CLOCKS AND WATCHES. WESTERN CLOCK CO., Peru, Ill.
Filed March 8, 1918. Serial No. 109,446. PUBLISHED MAY 7, 1918.

122,560. CERTAIN NAMED HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES. WILLIAM E. WILLIAMS, New York, N. Y.
Filed November 30, 1917. Serial No. 107,697. PUBLISHED MAY 7, 1918.

122,561. WATER-ELEVATING PUMPS AND WINDMILLS. WISTRAND MANUFACTURING CO., Galva, Ill.
Filed June 23, 1917. Serial No. 104,654. PUBLISHED FEBRUARY 12, 1918.

122,562. COFFEE-MILLS. WRIGHTSVILLE HARDWARE COMPANY, Wrightsville, Pa.
Filed February 24, 1917. Serial No. 101,670. PUBLISHED MAY 14, 1918.

DECISIONS

OF THE

COMMISSIONER OF PATENTS

AND OF

UNITED STATES COURTS IN PATENT CASES.

DECISIONS OF THE U. S. COURTS.

U. S. District Court—Southern District of New York.

PROCTER & GAMBLE COMPANY *v.* BERLIN MILLS COMPANY.

Decided October 3, 1917.

PATENTABILITY—HYDROGENATION OF OIL.

The patent to Burchenal, No. 1,135,351, relating to hydrogenation of oil, claims 1 and 2, *Held* unpatentable in view of the prior art, and, if properly construed, not infringed.

Messrs. Kerr, Page, Cooper & Hayward (*Mr. Alfred N. Allen*, *Mr. Livingston Gifford*, and *Mr. Thomas B. Kerr* of counsel) for the complainant.

Mr. John C. Pennie (*Mr. Marcus B. May* and *Mr. John C. Pennie* of counsel) for the defendant.

HAND, *Dis. J.*:

This suit is for infringement of Patent No. 1,135,351, granted to the complainant as assignee of John J. Burchenal on April 13th, 1915. The application for the patent was filed November 10th, 1910. The specification states that the invention is for a food product consisting of a vegetable oil, preferably cotton-seed oil, partially hydrogenized and hardened to a homogeneous white or yellowish semisolid closely simulating lard.

Claims 1 and 2 alone are in issue and read as follows:

1. A homogeneous lard-like food product consisting of an incompletely hydrogenized vegetable oil.
2. A homogeneous lard-like food product consisting of incompletely hydrogenized cotton-seed oil.

The special object of the invention is, according to the specification—

> • • • to provide a new food product for a shortening in cooking in which the liability to become rancid is minimized and in which the components of such vegetable oils which are inferior and detrimental to use as such a food product have been to a large extent converted into a higher and more wholesome form. All such vegetable oils contain glycerids of unsaturated fatty acids and among these notable quantities of fatty glycerids of lower saturation than olein. It is the presence of these glycerids of lower saturation that seriously affects the rancidity of the material. Oxidation is largely the cause of rancidity which oxidation weakens the fat at the point of absorption at the double bonds, and these glycerids of lesser saturation readily absorb oxygen from the air at ordinary temperatures while the more highly saturated glycerids, as olein, only absorb oxygen at elevated temperatures. It is evident, therefore, that oils or fats containing notable quantities of glycerids of linolic acid or of lesser saturation are distinctly inferior as an edible product to those containing a minimum of these glycerids with a larger per cent. of olein. On the other hand while it is important to get rid of the readily oxidizable glycerids of lower saturation, it is also important not to supply too large a per cent. of fully saturated glycerids.
> • • • In manufacturing this product cottonseed or other vegetable oil is caused to chemically absorb a limited amount of hydrogen by reacting on the oil with hydrogen in the presence of a catalytic agent and at an elevated temperature. The oil is preferably agitated in a closed vessel in the presence of an atmosphere of compressed hydrogen, a catalyzer of finely-divided nickel carried by kieselguhr being maintained in suspension in the oil and its temperature being raised to about 155° C.
>
> According to the present invention, the amount of hydrogen absorbed is carefully regulated and limited. In practice, the operation is stopped when the oil has been converted into a product which cools to a white or yellowish semi-solid more closely resembling lard than do the commercial mixtures of cottonseed oil and animal oleostearin while in many respects the product is superior to the best leaf lard as a shortening. It is not so liable to become rancid and the product can be heated to a considerably higher temperature than lard without smoking or burning. The high temperature to which my product can be raised without smoking or burning makes the product ideal for frying, inasmuch as a crust forms almost instantly on the food fried, which prevents any absorption of the shortening. A lard-like product thus prepared from cottonseed oil has a saponification value of about 195 and an iodin value ranging from about 55 to about 80. The product having an iodin value of 55 has a titre of about 42° and a melting point of about 40° C., that having an iodin value of 80 has a titre of about 35° and a melting point of about 33° C. While but partially hydrogenized, containing from about 1.5% to 2.5% of additional hydrogen more than in the non-hydrogenized material, it shows no free cottonseed oil when subjected to the Halphen test, thereby differing from all commercial lard substitutes containing this oil. It contains from twenty to twenty-five per cent. of fully saturated glycerids, from five to ten per cent. linolin, and from sixty-five to seventy-five per cent. olein; and an average of a number of samples gives twenty-three per cent. of saturated fats, seven and five-tenths per cent. linolin and sixty-nine and five-tenths per cent. olein, while the cottonseed oil before treatment contained seventeen per cent. saturated fats, thirty-seven per cent. linolin and forty-six per cent. olein. It will thus be seen that I have produced an ideal food product which is high in olein, low in linolin and lesser saturated fats and with only enough stearin to make the product congeal at ordinary temperatures.

The complainant urges that Burchenal first taught the art that a partially-hydrogenated vegetable oil, preferably cotton-seed oil, was edible and was a useful lard substitute. It contends that prior to Burchenal's conception it was not known that hydrogenated cotton-seed oil was edible and that the only processes then in use aimed at complete saturation and produced a hard non-edible product. Before discussing the prior art, I would say in general that Normann, whose patent will later be referred to, had already disclosed a method of hydrogenating oils, and had set forth in his specification that the process was progressive and involved "no secondary reaction." The method of adding cotton-seed oil to beef-stearin for use as a lard compound was well known and much used, as it still is. The hydrogenation of cotton-seed oil resulted in a reduction of the fluid and substitution of the solid fats. Normann's patent, as well as various experiments of scientists, indicated that the addition of hydrogen to cotton-seed oil would result in the reduction or elimination of the fluid and substitu-

tion of solid or partially-solid fats. No one has shown that the product resulting from such hydrogenation was ever non-edible or unsanitary in any respect.

The British Patent No. 10,783 (1887) to Joseph Sears was for a lard substitute composed of refined unbleached cotton-seed oil and a fat adapted to give a stiffness to the compound corresponding substantially to that of refined lard. The specification provided that the temperature should be raised sufficiently to melt the fat or stearin, the heated ingredients mixed and then chilled rapidly so as to prevent crystallization and separation. This general process was well known in the art before the date claimed for the invention of Burchenal and indeed is referred to in the patent in suit. A very large market for such lardlike compounds exists at the present time and has existed many years past.

The British Patent No. 1,515 of 1903, to Normann discloses a process for the reduction of glycerids resembling that of the patent to Burchenal. Normann's patent says that—

The property of finely divided platinum to exercise a catalytic action with hydrogen * * * is already known. * * * Recently Sabatier and Senderens of Paris have discovered that other finely divided metals will also exercise a catalytic effect on hydrogen, viz.: Iron, cobalt, copper and especially nickel.

By causing acetylene, ethylene or benzene vapor in mixture with hydrogen gas to pass over one of the said metals (which had just been reduced in a current of hydrogen) the said investigators obtained from the unsaturated hydrocarbons, saturated hydrocarbons, partly with simultaneous condensation.

I have found that by this catalytic method it is easy to convert unsaturated fatty acids into saturated acids.

This may be effected by causing fatty acid vapors together with hydrogen to pass over the catalytic metal, which is preferably distributed over a suitable support such as pumice stone. It is sufficient, however, to expose the fat or the fatty acid in a liquid condition to the action of hydrogen and the catalytic substance.

For instance, if fine nickel powder obtained by reduction in a hydrogen current, is added to chemically pure oleic acid, the latter heated over an oil bath and a strong current of hydrogen is caused to pass through it for a considerable time, the oleic acid may be completely converted into stearic acid.

The quantity of the nickel thus added and the temperature are immaterial and will only affect the duration of the process. Apart from the formation of small quantities of nickel soap, which may be easily decomposed by dilute mineral acids, the reaction passes off without any secondary reaction. The same nickel may be used repeatedly. Instead of pure oleic acid, commercial fatty acids may be treated in the same manner. The fatty acid of tallow which melts between 44 and 48° C. has an iodin number 35.1 and a yellow color will after hydrogenation melt between 56.5 and 59°, while its iodin number is 98 and its color slightly lighter than before, and it will be very hard.

The same method is applicable not only to free fatty acids, but also to the glycerids occurring in nature, that is to say, the fats and oils. Olive oil will yield a hard tallow-like mass; linseed oil and fish oil will give similar results.

By the new method all kinds of unsaturated fatty acids and their glycerids may be easily hydrogenized.

The Normann patent clearly discloses that oils may be completely hydrogenized, that the process is progressive and that it involves "*no secondary reaction*," in other words, that cotton-seed oil which starts edible remains so. The experiments and articles of Paul and Roth, which were alluded to at the trial, show that hydrogenization of oils including cotton-seed oil was understood in the prior art.

Such being the state of the art, Edwin Cuno Kayser wrote Procter & Gamble from England that he had a process of considerable value and would like to talk to them about it; thereafter he came to America about November, 1907, bringing samples of hydrogenized cotton-seed oil. He showed these to Burchenal, the superintendent of Procter & Gamble. As a result of his visit, he made an arrangement under a preliminary contract of January, 1908, to experiment upon the hydrogenized cotton-seed oil as a substitute for lard. The first project was apparently to use hydrogenated cotton-seed oil as a compound to be added to a percentage of beef-stearin and cotton-seed oil. Burchenal says he had done no work in connection with hydrogenizing cotton-seed oil before he saw Kayser. He testified that—

Mr. Kayser went out to our factory and made sketches as to the apparatus that would be necessary to carry on this work and the apparatus was ordered at once; a little plant was installed for experimental purposes and I think it was ready to operate some time in January or February, 1908. (Deposition of Burchenal, p. 11.)

The defendant succeeded in obtaining contemporaneous memoranda as to some of Kayser's experiments from the records of Proctor & Gamble. The first experiment was as follows:

Fat hardening process by E. C. Kayser.
First experimental lot was completed Jany. 17th, 1908. Fat treated—summer yellow cotton-seed oil. Used nickel sulfate and kieselguhr as described. Experiment was conducted by Mr. Kayser alone. He claims to have used about 1% nickel metal and 2% kieselguhr.
M. P. of fat after 3 hrs. 55½° C.
M. P. of fat after 6½ hrs. 60.3° C.
Dr. Bender reports as follows:
Melting point of fat 60.3° C.
Hydrocarbons .33%.
Iodin value of fat 7.14%.
The fat does not contain free fatty acids. This material is much superior to the samples from J. Crossfield & Sons which showed an iodin value of 52.26 and a melting point of 39.3° C. (The laboratory sample melted at 49.9° C.) Their samples contained 5.12% free fatty acids and 2% hydrocarbons.
Mr. Kayser reports as follows: "The melting point of fatty acid, prepared from first lot hardened cottonseed oil is 62° C. This is several points higher than I ever got before. Presumably the composition of your oil differs somewhat from that of the oil I handled formerly."

Another experiment by Kayser of the date of March 5, 1908, was also obtained from the Procter & Gamble records in which the following melting-points appeared: Five hours at ordinary pressure 42° C.; one and one-half hours at sixty pounds pressure 43° C.

Von Phul testified that Kayser told him in 1907 that he was getting up a patent for a food product and even Burchenal's own testimony shows that Kayser *supposed* that the product he was making was edible. If Kayser at first told him it was not edible he did so when they were negotiating and he wished to keep his process in the dark until he had arranged his terms. That Kayser's statement that it was not edible was not taken seriously by either party is shown by the following testimony:

Q. 887. But you did not know as a matter of fact whether it would be edible or not?
A. I did not. Mr. Kayser stated that it would not be, but that was his method of talking.

Both of these men were proceeding soon after Kayser's arrival in this country to develop hydrogenated cotton-seed oil as a food product. Even if the thought first occurred to Burchenal I cannot see that he did anything to carry it out in practice. Kayser's Patent No. 1,004,035, application for which was filed March 20, 1908, disclosed the process which was employed to make the product covered

by the patent in suit, and the specification for this Kayser patent contains the statement that—

the time of treatment will vary with the progress realized and with the degree of saturation aimed at.

It is to be remembered that Burchenal distinctly disclaimed in his testimony that he had anything to do with the invention of the process covered by the Kayser patents and we thus have a situation where Kayser invented the process and developed the product to the point where it was applicable to use as a food product. He came to America with a sample which as appears from the written record taken from the files of the complainant had a melting-point of only 39 and developed other samples with melting-points of but 42° and 43° in his March 5, 1908, experiments.

Moreover, it is to be remembered that Crossfield had employed Kayser to experiment in hydrogenating oil, that the former had been in close communication with Normann who had patented only four years before the process I have mentioned, and that Crossfield had so strenuously objected to the use by Procter & Gamble of the processes of Kayser that they were obliged to purchase their rights to them. It is also noteworthy that Kayser refused to testify in this case and that the witnesses as to the work of Kayser in America are officers or employees of the complainant. Under such circumstances the meagerness of the evidence which has been adduced to show that Burchenal had anything to do with the development of the lardlike food product which is the subject of the patent in suit, coupled with his admission that the entire *process* under which it was made was the work of Kayser, is most significant and makes it impossible to find that Burchenal invented anything. The defendant has been embarrassed in its defense by many difficulties and has been obliged to go into the enemy's camp to secure almost all its ammunition. In spite of this, it has established that Kayser at the very beginning had developed not only a process but a product little differing from Crisco. Kayser remained with Procter & Gamble until well into 1910, and did not leave America until about July of that year. While there is some general evidence of what Burchenal and others did, or directed, I can find no real proof that any one but Kayser did anything of substantial moment. No step was taken by Burchenal that could possibly amount to invention.

Complainant urges that the experiments of Kayser and the patents of Normann and Kayser aimed at complete saturation and that neither realized the importance of a partially-hydrogenized product. But the process under which their products were made involved in its progress partial hydrogenation, and Kayser's Patent No. 1,004,035 distinctly stated that—

the time of treatment will vary with the progress realized and with the degree of saturation aimed at.

Kayser as far as I can see did everything that was done to develop Crisco, and if his work fell short of this, he achieved enough so that the final step was inevitable to one skilled in the art. Kayser's process was the complainant's process and his product involved a progressive reaction fitted for any purpose. The broad discovery as between him and Burchenal certainly belongs to him.

Furthermore under any fair interpretation of the patent there is no infringement. The file-wrapper indicates that the Examiner rejected the claims as originally filed saying:

* * * If the problem of simulating lard from cotton-seed oil were presented to an oil chemist, an incomplete hydrogenization of the cotton-seed oil would at once suggest itself to him as a solution of the problem. All the claims are accordingly rejected on the * * * ground of lack of invention.

Thereafter new claims were rejected upon the Kayser patents for the reason *that his process could be arrested at any time to produce an incompletely-hydrogenized product*. Then and for the first time Burchenal filed an amendment setting forth certain percentages of linolin, olein and stearin which his product should contain. It seems quite evident therefore that claims 1 and 2 of his patent would under such circumstances, if valid at all, be limited to substantially the chemical composition described in the amended specification. Indeed the specification closes with the statement that the inventor has produced a product which—

is high in olein, low in linolin and lesser saturated fats and with only enough stearin to make the product congeal at ordinary temperatures.

Under such circumstances it is impossible to treat the melting-point as practically the determining factor and if this is not done the defendant's product Kream Krisp does not infringe. After the Examiner had held that an incomplete hydrogenation would suggest itself to any chemist seeking to simulate lard and rejected the claims on Kayser, the patentee, as I have shown, amended by specifying a particular product and dwelling upon the advantages of a small percentage of linolin to avoid rancidity. If, therefore, the inventor contributed anything to the art it was this special chemical composition which his patent discloses. Claims 1 and 2 should consequently be construed in the light of the proceedings of Burchenal before the Patent Office and not given a scope which would monopolize an art in which Normann, Kayser and others had been the real pioneers.

Kream Krisp has a chemical composition extremely remote from that described in the specification of Burchenal. The following are the relative percentages:

	Burchenal.	*Kream Krisp.*
Per cent. saturated fats	20–25	28
Per cent. olein	65–75	34.3
Per cent. linolin	5–10	37.7

Thus it appears that Kream Krisp instead of being low in linolin is extremely high, and that instead of being high in olein as specified in the Burchenal patent, it has a percentage of olein which differs but little from that existing in refined cotton-seed oil unhydrogenated. In fact Kream Krisp seems to present many of the objections referred to in Burchenal's specification

and to lack the very things upon which the latter based his right to receive a patent. Indeed the composition is much closer to the lard compound Jewel made out of stearin and cotton-seed oil than to Crisco.

The bill should be dismissed with costs because the patent is void for lack of invention and for the further reason that claims 1 and 2 if properly construed are not infringed by the defendant.

Applications Made to the Federal Trade Commission for Licenses Under Enemy-Controlled Patents and Trade-Marks Pursuant to the "Trading with the Enemy Act."

Patent No. 943,578, dated December 14, 1909, to Rudolf Tambach, of Ludwigshafen - on - the - Rhine, Germany, assignor to the Firm of Knoll & Company, of Ludwigshafen-on-the-Rhine, Germany, for "Digitalis extract." License applied for by Merck & Co., 45 Park Place, New York city.

Trade-mark "Ichthyol," No. 62,521, dated May 14, 1907, to Ichthyol Gesellschaft Cordes, Hermanni & Co., of Hamburg, Germany, for "Medicated soap." License applied for by Takamine Laboratory, Inc., 120 Broadway, New York city.

Trade-mark "Ichthyol," No. 61,011, dated February 26, 1907, to Ichthyol Gesellschaft Cordes, Hermanni & Co., of Hamburg, Germany, for "Plasters and certain medicinal preparations." License applied for by Takamine Laboratory, Inc., 120 Broadway, New York city.

Trade-mark "Ichthyol," No. 62,603, dated May 14, 1907, to Ichthyol Gesellschaft Cordes, Hermanni & Co., of Hamburg, Germany, for "Medicinal sulfonic acids and their salts." License applied for by Takamine Laboratory, Inc., 120 Broadway, New York city.

Trade-mark "Euquinine," No. 54,088, dated June 19, 1906, to Vereinigte Chininfabriken Zimmer & Co. Ges. mit beschränkter Haftung, of Frankfort-on-the-Main, Germany, for "Derivatives of cinchona alkaloids." License applied for by Takamine Laboratory, Inc., 120 Broadway, New York city.

Interference Notices.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., August 21, 1918.

W. H. Ketzeback & Co., their assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of the Centennial Mill Co., of 1002–6 Hoge Building, Seattle, Wash., for registration of a trade-mark and trade-mark registered May 17, 1898, No. 31,556, to W. H. Ketzeback & Co., of Mapleton, Minn., and because of *prima facie* evidence in the record to the effect that W. H. Ketzeback & Co. are no longer using the mark and have no successor in business who is doing so, notice is hereby given that unless said W. H. Ketzeback & Co., their assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

F. W. H. CLAY,
Assistant Commissioner.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., August 24, 1918.

Allen Brothers Company, its assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of No-Vary Products Co., of 928 Plymouth Building, Minneapolis, Minn., for registration of a trade-mark and trade-mark registered July 9, 1907, No. 63,846, to Allen Brothers Company, of corner of Tenth street and Farnum street, Omaha, Nebr., and because of *prima facie* evidence in the record to the effect that Allen Brothers Company is no longer using the mark and has no successor in business who is doing so, notice is hereby given that unless said Allen Brothers Company, its assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

F. W. H. CLAY,
Assistant Commissioner.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., August 13, 1918.

Home Remedy Company, its assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of Geo. A. Deatel, Munsey Building, Baltimore, Md., for registration of a trade-mark and trade-mark registered March 10, 1908, No. 68,120, to the Home Remedy Company, of Fredonia, N. Y., and a notice of such declaration sent by registered mail to said Home Remedy Company at the said address having been returned by the post-office undeliverable, notice is hereby given that unless said Home Remedy Company, its assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

F. W. H. CLAY,
Assistant Commissioner.

THE
OFFICIAL GAZETTE
OF THE
United States Patent Office.

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Issue of August 27, 1918.

Patents	644—No.	1,276,702 to No.	1,277,345, inclusive.
Designs	81—No.	52,297 to No.	52,377, inclusive.
Trade-Marks	68—No.	122,563 to No.	122,630, inclusive.
Labels	None.		
Prints	None.		
Reissues	7—No.	14,510 to No.	14,516, inclusive.
Total	800		

Interference Notices.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., August 21, 1918.

W. H. Ketzeback & Co., their assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of the Centennial Mill Co., of 1002–6 Hoge Building, Seattle, Wash., for registration of a trade-mark and trade-mark registered May 17, 1898, No. 31,556, to W. H. Ketzeback & Co., of Mapleton, Minn., and because of *prima facie* evidence in the record to the effect that W. H. Ketzeback & Co. are no longer using the mark and have no successor in business who is doing so, notice is hereby given that unless said W. H. Ketzeback & Co., their assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

F. W. H. CLAY,
Assistant Commissioner.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., August 24, 1918.

Allen Brothers Company, its assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of No-Vary Products Co., of 928 Plymouth Building, Minneapolis, Minn., for registration of a trade-mark and trade-mark registered July 9, 1907, No. 63,846, to Allen Brothers Company, of corner of Tenth street and Farnum street, Omaha, Nebr., and because of *prima facie* evidence in the record to the effect that Allen Brothers Company is no longer using the mark and has no successor in business who is doing so, notice is hereby given that unless said Allen Brothers Company, its assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

F. W. H. CLAY,
Assistant Commissioner.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., September 4, 1918.

The Indiana Coffee Company, its assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of The Minor & Dixon Company, of 10 West Second street, Cincinnati, Ohio, for registration of a trade-mark and trade-mark registered August 21, 1889, No. 16,962, to The Indiana Coffee Company, of Indianapolis, Ind., and a notice of such declaration sent by registered mail to said The Indiana Coffee Company at the said address having been returned by the post-office undeliverable, notice is hereby given that unless The Indiana Coffee Company, its assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

F. W. H. CLAY,
Assistant Commissioner.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., September 4, 1918.

Hugh William Taylor, his assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of the Eagle Discount Stamp Co., Railway Exchange Building, St. Louis, Mo., for registration of a trade-mark and trade-mark registered November 29, 1887, No. 14,990, to Hugh William Taylor, Aurora, Ill., and a notice of such declaration sent by registered mail to said Hugh William Taylor at the said address having been returned by the post-office undeliverable, notice is hereby given that unless said Hugh William Taylor, his assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

F. W. H. CLAY,
Assistant Commissioner.

Adverse Decisions in Interference.

PATENT No. 1,121,721.

On July 15, 1918, a decision was rendered that Birney Dysart was not the first inventor of the subject-matter covered by claim 3 of his Patent No. 1,121,721, subject, Recording-machine, and no appeal having been taken within the time allowed such decision has become final.

APPLICATIONS UNDER EXAMINATION.

Condition at Close of Business August 23, 1918.

Room No.	Divisions and subjects of invention.	Oldest new application and oldest action by applicant awaiting office action.		No. of applications awaiting action.
		New.	Amended.	
314	1. Closure Operators; Fences; Gates; Harrows and Diggers; Plows; Railway Gates; Planting; Scattering Unloaders; Trees, Plants, and Flowers.	July 20	July 26	121
128	2. Bee Culture; Curtains, Shades, and Screens; Dairy; Paper Files and Binders; Medicines; Pneumatics; Preserving; Presses; Tents, Canopies, Umbrellas, and Canes; Tobacco.	Apr. 22	June 5	376
175	3. Electric Heating and Rheostats; Electrochemistry; Heating; Metal-Founding; Metallurgical Apparatus; Metallurgy; Metal Treatment; Plastic Metal Working.	May 20	June 15	200
234	4. Conveyers; Elevators; Excavating; Hoisting; Material or Article Handling; Pneumatic Despatch; Pushing and Pulling Implements; Railway Mail Delivery; Store-Service; Traversing Hoists.	July 13	July 17	151
167	5. Book-Making; Books, Strips and Leaves; Harvesters; Jewelry; Manifolding; Music; Printed Matter.	May 14	June 15	222
318	6. Bleaching and Dyeing; Chemicals; Explosives; Fertilizers; Liquid Coating Compositions; Plastic Compositions; Substance Preparation.	Apr. 1	May 8	379
312	7. Educational Appliances; Games and Toys; Optics; Velocipedes	May 8	June 24	257
131	8. Beds; Chairs; Flexible-Sheet Securing Devices; Furniture; Kitchen and Table Articles; Store Furniture; Supports.	July 1	June 10	183
221	9. Air and Gas Pumps; Hydraulic Motors; Motors, Fluid; Motors, Fluid-Current; Pumps; Marine Propulsion.	Feb. 13	July 16	509
285	10. Carriages and Wagons; Motor Vehicles	May 7	July 13	546
154	11. Boot and shoe Making; Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Spring Devices; Whips and Whip Apparatus.	June 3	July 23	190
322	12. Journal-Boxes, Pulleys, and Shafting; Machine Elements	Apr. 24	May 16	749
329	13. Ammunition and Explosive Charge Making; Bolt, Nail, Nut, Rivet, and Screw Making; Button Making; Chain, Staple, and Horseshoe Making; Driven, Headed, and Screw-Threaded Fastenings; Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Tools and Implements, Making; Metal Working; Needle and Pin Making; Nut and Bolt Locks; Turning.	Mar. 22	June 18	607
323	14. Compound Tools; Cutting and Punching Sheets and Bars; Farriery; Metal-Bending; Sheet-Metal Ware, Making; Tools; Wire Fabrics and Structure; Wire-Working.	Apr. 22	July 2	149
308	15. Bread, Pastry, and Confection Making; Coating; Fuel; Glass; Laminated Fabrics and Analogous Manufactures; Paper-Making and Fiber Liberation; Plastic Block and Earthenware Apparatus; Plastics.	July 8	July 18	262
112	16. Electric Signaling-A; Radiant Energy; Telegraphy; Telephony	Apr. 30	May 22	494
307	17. Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet Material Associating or Folding; Sheet Feeding or Delivering; Type Setting.	June 10	May 29	166
229	18. Fluid-Pressure Regulators; Injectors and Ejectors; Liquid Heaters and Vaporizers; Power Plants; Speed Responsive Devices; Steam and Vacuum Pumps; Steam-Engines; Steam-Engine Valves.	May 6	June 22	506
236	19. Dampers, Automatic; Furnaces; Heating Systems; Stoves and Furnaces; Domestic Cooking Vessels	May 2	June 8	307
179	20. Artificial Body Members; Builders' Hardware; Cutlery; Dentistry; Locks and Latches; Safes; Undertaking.	July 17	Aug. 2	194
212	21. Brakes and Gins; Carding; Cloth-Finishing; Continuous-Strip Feeding; Cordage; Felt and Fur; Knitting and Netting; Silk; Spinning; Weaving; Winding and Reeling.	Apr. 13	May 8	348
249	22. Aeronautics; Firearms; Ordnance	May 3	July 22	336
217	23. Acoustics; Coin-Handling; Horology; Recorders; Registers; Sound Recording and Reproducing; Time-Controlling Mechanism.	June 4	July 16	248
144	24. Apparel; Apparel Apparatus; Garment Supporters; Sewing-Machines	June 20	June 22	267
315	25. Agitating; Butchering; Centrifugal Bowl Separators; Mills; Threshing; Vegetable Cutters and Crushers; Gas Separation.	July 20	July 26	98
105	26. Electricity, Generation; Motive Power	Jan. 5	Apr. 15	573
214	27. Brushing and Scrubbing; Grinding and Polishing; Laundry; Washing Apparatus	May 13	July 8	295
225	28. Internal-Combustion Engines	May 10	June 19	431
147	29. Boring and Drilling; Chucks or Sockets; Coopering; Fire-Escapes; Ladders; Rod Joints or Couplings; Wheelwright-Machines; Wooden Buildings; Wood-Sawing; Wood-Turning; Woodworking; Wood-working Tools.	Mar. 5	May 1	452
152	30. Illuminating-Burners; Illumination; Liquid and Gaseous Fuel Burners; Type-Writing Machines	June 1	July 11	332
172	31. Alcohol; Ammonia, Water, and Wood Distillation; Charcoal and Coke; Gas, Heating and Illuminating; Hides, Skins, and Leather; Hydraulic Cement and Lime; Mineral Oils; Oils, Fats, and Glue; Sugar and Salt.	Apr. 29	June 11	271
278	32. Gas and Liquid Contact Apparatus; Heat Exchange; Packaging Liquids; Refrigeration	Feb. 13	July 5	639
70	33. Bridges; Hydraulic Engineering; Masonry and Concrete Structures; Metallic Building Structures; Paving; Roofs.	May 7	June 10	228
304	34. Railways; Railway Rails and Joints; Railway Rolling Stock; Railway Ties and Fasteners; Track-Sanders; Vehicle-Fenders.	July 5	June 27	49
57	35. Buckles, Buttons, Clasps, Etc.; Card, Picture, and Sign Exhibiting; Signals; Toilet	May 17	May 13	412
204	36. Driers; Geometrical Instruments; Measuring Instruments; Photography; Force Measuring	July 5	July 11	431
107	37. Electric Lamps; Electricity, Circuit Makers and Breakers; Electricity, Conduits; Electricity, General Applications.	Apr. 8	May 10	651
378	38. Animal Husbandry; Earth Boring; Fishing and Trapping; Stationery; Stone-Working; Wells	July 29	June 28	133
220	39. Joint Packings; Multiple Valves; Packed Shaft or Rod Joints; Pipe Joints or Couplings; Valved Pipe Joints or Couplings; Water Distribution.	Apr. 15	June 4	242
273	40. Baggage; Bottles and Jars; Check-Controlled Apparatus; Cloth, Leather, and Rubber Receptacles; Deposit and Collection Receptacles; Metallic Shipping and Storing Vessels; Package and Article Carriers; Paper Receptacles; Special Receptacles and Packages; Wooden Receptacles.	Apr. 5	May 11	420
125	41. Railway Draft Appliances; Resilient Tires and Wheels	May 6	June 6	216
114	42. Electricity, Conductors; Electricity-Transmission to Vehicles; Electric Signaling	Jan. 23	Jan. 25	618
382	43. Baths and Closets; Dispensing; Dispensing Beverages; Electricity, Medical and Surgical; Fire-Extinguishers; Sewerage; Surgery; Water Purification.	Apr. 24	May 24	228
253	44. Air-Guns, Catapults, and Targets; Ammunition and Explosive Devices; Boats and Buoys; Ships	July 3	June 26	186
279	45. Clutches; Lubrication; Motors; Railway Brakes	Mar. 16	Apr. 11	313

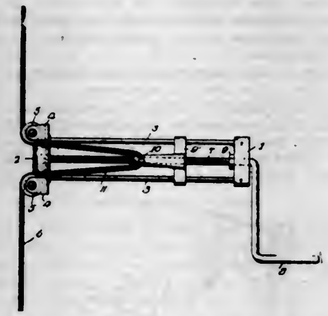
Oldest new case, Jan. 5; oldest amended, Jan. 25.
Total number of applications awaiting action 14,985

163	TRADE-MARKS, DESIGNS, LABELS AND PRINTS:			
	Trade-Marks	July 8	July 16	638
	Designs	June 14	June 12	473
	Labels and Prints	July 25	Aug. 14	103

PATENTS

GRANTED AUGUST 27, 1918.

1,276,702. CLOTHES-LINE STRETCHER. JOHN R. ANDERSON, Moline, Ill., assignor of one-half to John Mordhorst, Rock Island, Ill. Filed Oct. 29, 1915. Serial No. 58,559. (Cl. 24—71.1.)



In a clothes line stretcher, the combination of a frame comprising end members and a pair of separate rods disposed therebetween and secured thereto, a slidable member provided with openings embracing said rods and having a medially disposed hook formed integrally therewith to engage the line midway between said rods, a screw journaled in said end members and threadedly engaging said slidable member, a nut on said screw bearing against one of said end members to retain said screw in operative position, an operating handle connected to said screw whereby the latter may be rotated to move said slidably mounted member longitudinally of the frame, and guiding rollers on one of said end members to support the line on both sides of said hook.

1,276,703. FAN. PER AUGUST ANDERSON, New York, N. Y. Filed July 31, 1917. Serial No. 183,681. (Cl. 230—1.)



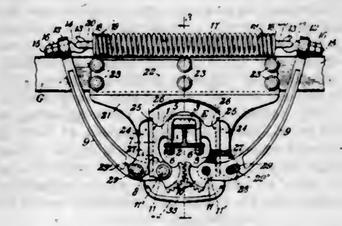
1. The combination of a depending support, a member extensibly connected with said support, a supporting device fixed upon and depending from said member, a casing carried by said supporting device and rotatable relatively thereto about an axis extending in the same direction as that of the depending support, actuating mechanism within said casing and a fan member carried by said casing and actuated by said mechanism.

3. The combination of supporting means, a fan member pivotally connected with said means, actuating mechanism carried by said means, and a pair of resilient connections between said actuating mechanism and said fan member operating in opposition to each other whereby said fan member is oscillated on its pivot, first in one direction and then in the opposite direction.

4. The combination of a casing, driving mechanism within said casing, a driven shaft operatively connected with said mechanism, off-set cranks carried by said shaft, a fan member pivotally connected with said casing and resilient connections between said cranks and said fan whereby the latter is oscillated on its pivot.

[Claims 2 and 5 not printed in the Gazette.]

1,276,704. SHOCK AND MOVEMENT ABSORBING SUPPORT FOR AUTOMOBILE-BODIES. JOSEPH G. ARCARO, New York, N. Y. Filed Mar. 11, 1918. Serial No. 221,727. (Cl. 267—8.)



1. The combination with an axle and avehicle body, of a shock and movement absorbing device comprising members respectively rigid with said axle and body and relatively slidable to each other, levers each pivotally connected to both of said members, and tension means independent of coöperative contact with the vehicle body and said member rigid therewith and tending to draw the free ends of said levers toward each other.

4. The combination with an axle and vehicle body, of slidably engaged members respectively rigid with said axle and body, levers each pivotally connected to both of said members, and floating stress-developing means co-acting with said levers whereby the member rigid with said axle is permitted to rise and descend and the member rigid with said body is maintained substantially vertically stationary.

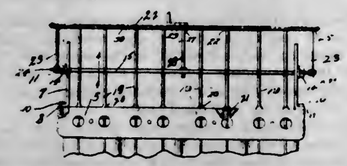
7. In a shock and movement absorbing device, a slide adapted for rigid combination with an axle and having spaced legs, levers pivoted to said legs, tension means connecting said levers, and a pedestal for attachment to a vehicle body and provided with legs articulatedly supported on said levers and engaged with the slide legs for mutual guidance.

14. In a shock and movement absorbing device, a lever adapted to turn about an axis intermediate its ends, means to apply rotary force to said lever on opposite sides of said axis, a load-carrying member, and a floating pivot connecting said member and lever, the pivot axis constituting the center of rotation of said lever, where-

by said pivot and load-carrying member remain unaffected by the turning of said lever.

[Claims 2, 3, 5, 6 and 8 to 13 not printed in the Gazette.]

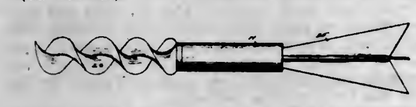
1,276,705. VALVE-GRINDING MACHINE. DAVID D. ARCHIBALD and FRANK L. LOUANDES, Toledo, Ohio. Filed Apr. 23, 1917. Serial No. 164,008. (Cl. 51—4.)



1. The combination with a plurality of supports adapted to be secured in spaced relation to each other upon a cylinder block, of cross members adapted to be connected for vertical adjustment to pairs of said supports and having longitudinal slots therein, a longitudinal bar engaged in said slots, means for fastening the longitudinal bar in its adjusted position in said slots, said longitudinal bar having a plurality of cut out portions, blocks slidably mounted in the cut out portions, means for fastening the blocks in their adjusted positions, valve grinding members engaged in said blocks and having gears at their upper ends, and a driven endless chain supported to have the opposed parallel stretches thereof engaged with the gears at opposite sides of the same.

2. The combination with a plurality of supports adapted to be secured in spaced relation to each other upon a cylinder block, of cross members adapted to be connected for vertical adjustment to pairs of said supports and having longitudinal slots therein, a longitudinal bar engaged in said slots, means for fastening the longitudinal bar in its adjusted position in said slots, said longitudinal bar having a plurality of cut out portions, blocks slidably mounted in the cut out portions, means for fastening the blocks in their adjusted positions, valve grinding members engaged in said blocks and having gears at their upper ends, a driven endless chain supported to have the opposed parallel stretches thereof engaged with the gears at opposite sides of the same, and means supported by the longitudinal bar for imparting movement to the chain.

1,276,706. LAND-TORPEDO. GUADY L. AYDELOTTE, Miami, Fla. Filed Apr. 30, 1918. Serial No. 231,782. (Cl. 102—2.)



1. A device of the character described comprising a contained motor, an auger operated thereby, a bomb carried thereby and a tail for holding the motor against bodily rotation.

6. A device of the character described comprising a casing, a motor mounted therein, a bomb chamber in the casing, a sleeve surrounding the casing and rotative with respect thereto, an auger threaded upon said sleeve, an internal gear carried by the sleeve, reduction gearing between said internal gear and the motor shaft and a tail for preventing bodily rotation of the casing.

[Claims 2 to 5 not printed in the Gazette.]

1,276,707. TOP-ROLL SADDLE AND STIRRUP. LEIGH S. BACHE, Middlesex borough, N. J., assignor to Bound Brook Oil-Less Bearing Company, Boundbrook, N. J., a Corporation of New Jersey. Filed Sept. 22, 1915. Serial No. 52,093. (Cl. 19—33.)

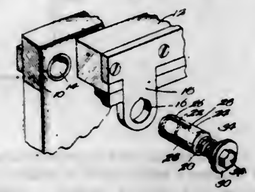
1. In a saddle block for top rolls, a saddle member, a weight stirrup for said member, and an adjusting plate upon which the stirrup rests, said plate having a series of cam surfaces forming inclines arranged transversely of the plate and upon which inclines the stirrup rests and over the upper edges of which cams the stirrup may be pushed.



4. A saddle block, having an adjusting plate for a weight strap or stirrup, said plate having sharply defined transverse serrations forming oblique cam surfaces all undercut in the same direction and arranged in parallelism transversely of and from end to end of the plate, down turned tangs adapted to be pressed into the upper surface of the saddle block to secure the plate, and lugs, embracing the sides of the saddle member to prevent lateral displacement.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,276,708. EXPANSION-BOLT. CLARENCE L. BAIR, St. Joseph, Mich., assignor to Auto Specialties Manufacturing Co., San Francisco, Cal., a Corporation of California. Filed Feb. 18, 1918. Serial No. 217,774. (Cl. 85—2.4.)



1. In a device of the class described, the combination of a screw threaded bolt, an expansible member slidable thereon, an expanding member threaded on one end of the bolt and entering the expansible member to expand it, means preventing rotation of the expanding with reference to the expansible member while permitting longitudinal movement of the two, a clamping member on the other end of the bolt, and a compressible spring on said bolt between the expansible member and the clamping member, for the purposes set forth.

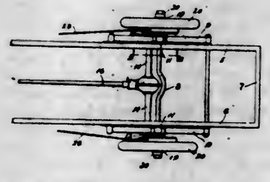
2. In a device of the class described, the combination of a first member and a second member to be secured side by side, there being corresponding registering bolt holes in the two members, a screw threaded bolt through said bolt holes, an expansible member on said bolt inside the first member, a clamping member on the bolt outside of and bearing on the second member, a compression spring of greater length than the thickness of the second member, on said bolt through the second member and between the nut device and the expansion member, a conical expansion member on the bolt engaging the expansible member to expand it, and means for preventing rotation while permitting longitudinal movement of the conical member with reference to the expansion member, for the purposes set forth.

[Claim 3 not printed in the Gazette.]

1,276,709. MOTOR-VEHICLE. THOMAS FREDRICK BARSBY, Seattle, Wash., assignor, by mesne assignments, to University Garage Company, Seattle, Wash., a Corporation. Filed June 6, 1916. Serial No. 102,103. (Cl. 180—73.)

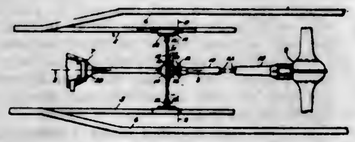
In an automobile of the class described, a fixed rear axle, an automobile wheel rotatably mounted on each of the opposite end portions of said axle, a gear wheel having outer peripheral teeth and mounted securely on and against the inner end of the hub of each of said wheels, a flanged disk formed integral with each of the hubs of said wheels in a position with its flange encircling the adjacent one of said gear wheels, a separate disk provided with an integral circumferentially grooved hub rigidly mounted on each end portion of said axle in a position

adjacent to the inner side of said gear wheels, a separate carriage spring rigidly secured to the hub of each of said last-named disks by means of clamping members seated in the circumferential grooves of said disk hub, a chassis



whose rearwardly extended portion is connected to both of said springs, tubular shaft housings rigidly connected to and extending between said last-named disks, two independently rotatable shafts disposed end to end in said shaft housings, each with its outer end projected outwardly through the adjacent one of said last-named disks, a pinion securely mounted on the outwardly projecting end of each of said two shafts in a position to mesh with the adjacent one of said gear wheels, and means for communicating rotary motion to said two shafts.

1,276,710. EXTENSIBLE DRIVING-SHAFT FOR AUTOMOBILES. THOMAS FREDRICK BARSBY, Seattle, Wash., assigner, by mesne assignments, to University Garage Company, Seattle, Wash., a Corporation. Filed Aug. 15, 1916. Serial No. 115,084. (Cl. 180—73.)



1. An extensible driving shaft for an automobile, which embodies two sections; a universal joint to one end of which is rigidly connected one end of one of said sections, and to the other end of which universal joint is slidably connected one end portion of the other one of said sections, thereby to be independently movable in endwise directions with respect to said universal joint; a housing within which said universal joint is disposed, said housing comprising a rigidly supported portion to which is articulated a movable portion thereof; a tubular shaft housing connected to said movable portion of the said housing that contains said universal joint, and within which shaft housing is disposed one of said sections; and means adapted to make a resiliently and slidable connection between said independently movable section and the transmission mechanism of said automobile.

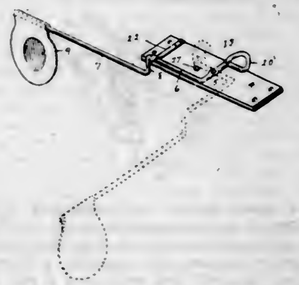
2. The combination with the transmission and differential mechanism of a motor vehicle, of a two-part shaft including a universal joint at their adjacent ends, one of the shaft sections being movable in a direction parallel to the longitudinal axis thereof and one end of the longitudinally movable shaft having a slidable engagement with the universal joint while the other end thereof has resilient engagement with the transmission shaft.

3. The combination with the transmission and differential mechanism of a motor vehicle, of a two-part shaft including a universal joint at their adjacent ends, one of the shaft sections being movable in a direction parallel to the longitudinal axis thereof and a hanger for supporting the universal joint extending transversely of the vehicle and having its ends slidably supported in the side bars of the vehicle chassis.

4. An extensible driving shaft for automobiles including two sections having a universal joint at their adjacent ends, means for supporting the universal joint in a manner to permit free longitudinal movement thereof relative to the vehicle chassis and one of the shaft sections having a cushioned sliding engagement with the driving mechanism.

5. An extensible driving shaft for automobiles including two sections having a universal joint at their adjacent ends, means for supporting the universal joint in a manner to permit free longitudinal movement thereof relative to the vehicle chassis, one of the shaft sections having a cushioned sliding engagement with the driving mechanism and a freely extensible connection with the universal joint.

1,276,711. DIRECTION-SIGNAL FOR VEHICLES. SHOUKRY S. BATLOUNEY, Portland, Me. Filed Dec. 1, 1917. Serial No. 204,993. (Cl. 116—31.)



2. In a device of the character described, a vehicle, a hand steering mechanism, a horizontal plate secured to the vehicle, a horisontally movable carrying arm pivotally secured to the plate, said arm having a signal at one end and an operating handle at the other end, the operating handle being located relative to the handhold of said steering mechanism so that the operator may operate the signal with his elbow while steering the vehicle with his hand, and means for yieldingly locking the carrying arm to the plate.

[Claim 1 not printed in the Gazette.]

1,276,712. SAFETY-RAZOR. HENRY VAN DEN BERG, Montreal, Quebec, Canada. Filed Dec. 21, 1917. Serial No. 208,238. (Cl. 30—12.)

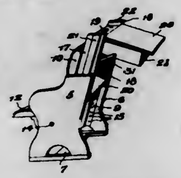


1. A safety razor comprising a handle, said handle having a dovetailed groove formed in the upper end thereof, a holder, said holder comprising a squared plate, a guard formed with each edge of said plate, a block projecting from the lower face of said plate, said block adapted to be seated within said dovetail-shaped groove, a locking member carried by the handle for retaining said block within said groove, a squared projection formed with the upper face of said plate, a cutting blade adapted to be seated upon said plate, said cutting blade having an opening therein for receiving said squared projection formed with the upper face of said plate, and a locking member detachably connected to said plate and said locking member having a plurality adapted to rest upon the upper face of said plate substantially as and for the purpose specified.

2. A safety razor comprising a hollow handle, a block seated within the upper end of said handle, an inclined dovetail groove formed within the upper face of said block, said handle adapted to close one end of said groove, a slidable locking member arranged within said handle and

adapted to project within one end of said groove, a squared guard plate, a double dovetailed projection formed with the lower face of said plate and adapted to be retained within said dovetailed groove, a guard formed with each edge of said plate, a projection formed with the upper face of said plate, a cutting blade adapted to rest upon the upper face of said plate, a detachable locking member secured to said plate and said locking member comprising a plurality of arms adapted to rest upon the upper face of said plate substantially as and for the purpose specified.

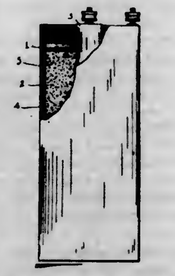
1,276,713. SCHOOL-BENCH. CARLOS M. BINDMA, Buenos Aires, Argentina. Filed Mar. 6, 1918. Serial No. 220,775. (Cl. 155—34.)



2. In a school bench, the combination of a pair of spaced, parallel vertical supports having their inner sides provided with oppositely-located, longitudinal guides, connecting means between said supports; a frame disposed between said supports and comprising a pair of vertical side members arranged against said supports and slidably engaging said guides, and upper and lower cross-pieces connecting said side members; means for retaining said frame in adjusted position; a swinging drawer having its sides pivoted to the frame sides slightly below the upper cross-piece; means for releasably supporting said drawer in substantially-horizontal, rearwardly-extending position; and a board hinged to said frame sides above and to the rear of said upper cross-piece to swing with relation to the drawer forwardly into a position in which it extends forwardly across and rests upon said upper cross-piece, or rearwardly into a position in which it extends over and rests upon said drawer when the latter occupies its rearwardly-extending horizontal position; said drawer being adapted to swing downwardly into the space between said upper and lower cross-pieces, and said board to swing downwardly relatively to said drawer into position to act as a cover therefor.

[Claim 1 not printed in the Gazette.]

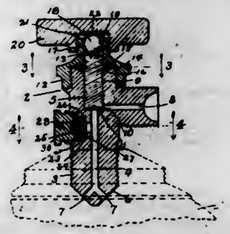
1,276,714. ELECTRIC BATTERY. RAYMOND C. BENNER, Fremont, Ohio, assignor, by mesne assignments, to National Carbon Company, Inc., a Corporation of New York. Filed Feb. 7, 1916. Serial No. 76,533. (Cl. 204—37.)



2. In dry cells, zinc and carbon electrodes, an electrolyte therebetween, and a paste adjacent said zinc electrode containing an alkaline bichromate.

[Claims 1 and 3 not printed in the Gazette.]

1,276,715. VALVE FOR OXYGEN-TANKS. WILLIAM F. BRESDENBACH, Indianapolis, Ind. Filed Aug. 15, 1917. Serial No. 186,418. (Cl. 220—110.)



1. A valve for high pressure tanks, comprising a casing having an exteriorly threaded upper end and a bore extending longitudinally of the casing from the upper end thereof and part way through said casing, the remaining portion of said casing having a central longitudinally extending lead communicating at its upper end with said bore and terminating in lateral extensions at its lower end, said casing also having a discharge opening extending laterally to the trend of said bore and lead and entering said bore at the point of juncture between said bore and lead, a plunger adapted to enter said bore, a circumferential rib at the lower end of said plunger adapted to engage the floor of said bore, a peripheral semicircular flange on the upper end of said casing, a cap adapted to engage the threaded portion of the casing, a shoulder formed on said cap and in position to register with said flange, a flexible collar integral with the plunger and adapted to be impinged between said flange and shoulder, and means to direct downward pressure on said plunger for forcing said rib against the floor of the bore to close communication between said lead and discharge opening.

3. In a valve for high pressure tanks, a casing having an enlarged bore at one end extending part way through the casing, the lower end of said casing being substantially conical, and a lead extending from said bore to the opposite end of the casing of less diameter than the bore, the lower end of said lead being bifurcated, the bifurcated ends intersecting the tapered portion of the casing at diametrically opposite points.

[Claim 2 not printed in the Gazette.]

1,276,716. FIREARM. JOHN M. BROWNING, Ogden, Utah. Filed Mar. 30, 1917. Serial No. 158,569. (Cl. 42—8.)

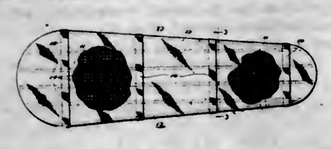


1. In a firearm, the combination of a frame having an upward extending front abutment and a downward extending grip, and having an open top in rear of the abutment, a barrel rigidly supported by the frame in the abutment, a breech-slide mounted from the rear upon the frame and vertically locked to reciprocate thereon, and comprising a breech-bolt for opening and closing the barrel, and having a recess in rear of the breech-bolt and an imperforate rear wall closing said recess, and a butt piece removably mounted in the frame and projecting above the top thereof into said recess in the breech-slide, whereby said butt piece limits the rearward movement of the breech-slide and confines the same upon the frame.

8. In a firearm, a frame having a downward extending grip, a hammer and a sear mounted in the frame in rear of the grip, a trigger pivotally mounted in front of the grip and a trigger-bar pivotally mounted in the trigger and connecting the trigger with the sear, a trigger spring seated in the frame and holding the trigger in inoperative position and holding the trigger-bar in operative position, means for confining the trigger spring in the frame and interlocking means between the trigger spring and the trigger and trigger-bar, whereby the trigger and trigger-bar are removably locked in the frame.

[Claims 2 to 7 and 9 to 12 not printed in the Gazette.]

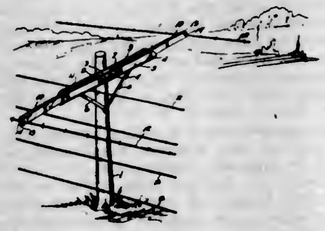
1,276,717. PAD-SUPPORT FOR PRESSING-MACHINES. OSCAR E. W. BRUNK, St. Louis, Mo., assignor to Joseph J. MARX, St. Louis, Mo. Filed Oct. 15, 1917. Serial No. 196,577. (Cl. 68—9.)



1. A device of the character described, comprising an upper frame composed of woven wire, a lower frame also composed of woven wire, and a series of spacing elements interposed between and contacting with both of said frames and maintaining said frames in their spaced relation.

2. A device of the character described, comprising a lower frame composed of woven wire, an upper frame also composed of woven wire, a fabricated spacing strip interposed between the edge portions of the upper and lower frames and maintaining the edge portions of said frames in spaced relation and preventing the passage of steam laterally from between said frames, and a series of additional spacing strips also interposed between said frames and supporting them in spaced relation.

1,276,718. FENCE. WILLIAM L. BUTCHER, Bringhurst, Ind. Filed Jan. 17, 1918. Serial No. 212,272. (Cl. 256—11.)

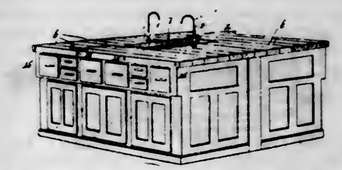


1. A fence guard consisting of a bar to be secured to a fence-post, a plurality of intercommunicating eyes in said bar, an arm mounted on the bar, a connecting means which permits movement of the arms from one eye to another when the arm is vertical and locks the latter against longitudinal movement when it lies longitudinally, and means to secure a guard wire to the arms.

2. A fence guard consisting of a bar to be secured to a fence-post, a plurality of intercommunicating eyes in said bar, an arm mounted on the bar, a connecting means which permits movement of the arms from one eye to another when the arm is vertical and locks the latter against longitudinal movement when it lies longitudinally and means to secure a guard wire to the arms, and a means to hold the arms in vertical position.

[Claim 3 not printed in the Gazette.]

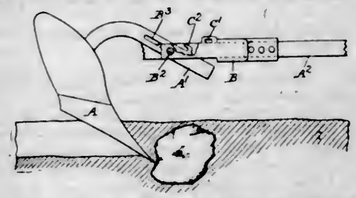
1,276,719. TABLE-TOP. CHARLES G. CAMPBELL, Chicago, Ill., assignor to Kewaunee Mfg. Co., Kewaunee, Wis., a Corporation of Wisconsin. Filed Dec. 17, 1917. Serial No. 207,492. (Cl. 45—31.)



1. A table top comprising a plurality of adjoining strips, there being a sink opening formed through said table top and alining openings in said strips at each side of said sink opening; binding rods extending through said openings, said rods being somewhat smaller than said openings and freely movable therein; and a yieldable bearing at each end of said rods bearing against the corresponding outermost strip, substantially as described.

2. A table top comprising a plurality of adjoining strips, there being a sink opening formed through said table top and alining openings in said strips at each side of said sink opening; binding rods extending through said openings, said rods being somewhat smaller than said openings and freely movable therein; and a compression spring at each end of said rods bearing against the corresponding outermost strip, substantially as described.

1,276,720. PLOW. ALEXANDER CARPENTER, Carey, Ohio, assignor to National Tractor & Plow Company, Carey, Ohio, a Corporation of Ohio. Filed Mar. 31, 1917. Serial No. 158,804. (Cl. 97—69.)



1. A plow comprising a horizontally disposed draft bar arranged in the line of the draft, a plow beam parallel with and adjacent the end thereof, a plow rigidly mounted on the beam, a socket carried by the draft bar engaged by the forward end of the plow beam, a slot and pin interposed between the plow beam and the draft bar adapted to permit longitudinal movement of the plow beam with respect to the draft bar and to hold the end of the plow beam deeply embedded in the socket, the arrangement of the parts being such that when the holding means are released the plow beam may draw back out of the socket and then only rotate with respect to the draft bar.

2. The combination with a plow frame of a plow beam, a plow thereon, a slidable and pivotal connection between the beam and frame, means for releasably holding the beam in position with respect to the frame, means for limiting the rearward slidable movement of the beam with respect to the frame, means for holding the beam against rotation with respect to the frame until the beam has moved to the limit of its rearward excursion, and means for holding the beam as it rotates on the axis in a plane perpendicular to its line of slidable movement.

1,276,721. MOTOR. CHAPIN A. CARTWRIGHT, Chicago, Ill. Filed Sept. 10, 1915. Serial No. 49,979. (Cl. 138—2.)

1. A valve mechanism comprising a chamber having inlet and exhaust ports; a valve movable in said chamber

and comprising a central chamber adapted to register with said exhaust port and end chambers adapted for alternate registration with said inlet port; and means for automatically equalizing the pressure in said end chambers, substantially as described.



4. A motor comprising a cylinder, a reciprocating piston therein and a hollow piston-rod for said piston, in combination with a valve chamber arranged in alinement with said cylinder and connected thereto by ports, said valve chamber being provided with spaced supply ports, and a centrally positioned exhaust port, a main valve slidable in said valve chamber and provided adjacent its ends with supply passages arranged to register alternately with said cylinder ports and connected by means of an open passage in the main valve, and a central exhaust passage in constant communication with the exhaust port in the valve chamber, there being a central passage extending through said main valve, an auxiliary valve slidable in said passage and provided with passages extending inwardly from the ends thereof there being ports communicating with said passages at a distance from the ends of said auxiliary valve arranged to register with corresponding ports leading to the exhaust passage in the main valve, there also being ports in the main valve controlled by said auxiliary valve arranged to connect the central passage in the main valve and the ends of the valve chamber with the annular supply ports of the main valve, and a rod connected with said auxiliary valve and having lost motion in said hollow piston-rod, substantially as described.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,276,722. PROCESS FOR PRODUCING LAUNDRY STARCH. SAMUEL B. CHAMBERS, Chicago, Ill. Filed Dec. 1, 1916. Serial No. 134,432. (Cl. 134—19.)

1. The process of treating starch comprising the steps of subjecting the starch to a solution containing nitric acid and subsequently removing moisture from the mixture thus formed by evaporation.

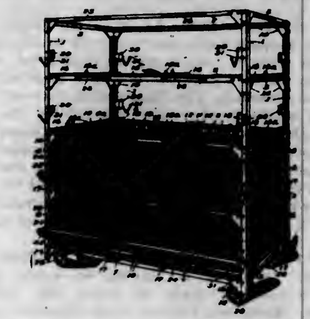
5. The process of treating starch comprising the steps of subjecting a mixture of starch and sodium borate to a solution of nitric acid in water.

24. The process of producing laundry starch which consists in adding to substantially dry starch in the form in which it is derived from Indian corn for commercial use, and known to the trade as pearl or powdered starch, powdered borax in the proportion of fifteen ounces of borax to one hundred pounds of starch; mixing the two together; adding to the mixture a solution of nitric acid in water, in the proportion of six ounces of acid and six gallons of water to one hundred pounds of starch; mixing the starch, borax, acid and water; permitting the mixture to cure for a period of from twenty-four to forty-eight hours during which time it is stirred at intervals to prevent excessive heating; and finally drying the mixture at a temperature of from 130° to 155° Fahrenheit.

[Claims 2 to 4 and 6 to 23 not printed in the Gazette.]

1,276,723. POULTRY-COOP. GEORGE COLLIS, Clinton, Iowa; Florence Mary Collis, executrix of said George Collis, deceased, assignor to The Collis Company, Clinton, Iowa, a Corporation of Iowa. Filed Oct. 9, 1915. Serial No. 55,036. (Cl. 119—17.)

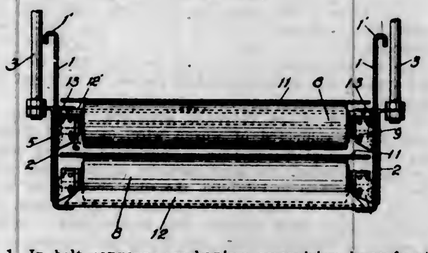
1. A traveling metallic coop including a plurality of corner-members, supporting-rollers attached thereto, a plurality of superposed cage-structures mounted on said corner-members in spaced-apart relation and comprising upper and lower cross-pieces secured to the corner-members, and means for permitting access to the interior of each cage-structure comprising a slidable and tiltable gate having a bar at its lower end formed with eyes, a guide-



element secured to the upper cross-piece, and vertical cage-wires embraced by said eyes.

[Claims 2 and 3 not printed in the Gazette.]

1,276,724. CONVEYER. JAMES T. COWLEY, Minot, Mass., assignor to The Lamson Company, Boston, Mass., a Corporation of New Jersey. Filed Feb. 16, 1916. Serial No. 78,569. (Cl. 193—4.)



1. In belt conveyer mechanism comprising imperforate side boards, an endless belt running within the space defined by the side boards, and rollers for supporting the belt, bearing means for the axes of the belt comprising perforate bearing blocks, clips attached to the side boards forming surfaces adapted to receive the blocks between them and to permit the blocks to rock on vertical axes, and removable means for holding the blocks against falling out of the clips having surfaces on which the blocks can rock in a horizontal sense, whereby the bearing blocks are universally supported, but upon removing said holding means the blocks are free to be removed downwardly from or inserted upwardly in the clips.

4. The combination of a rotary member with journal blocks therefor, side supports and opposed socket-clips attached to said side supports into which said blocks, when operatively disposed with respect to said rotary member, may be inserted from below while disposing said rotary member in its operative position immediately between said supports, and removable pins in said clips to hold said blocks in place in said clips.

8. The combination of a sheet-metal, substantially U-shaped clip, with a support for said clip to which the latter is attached, an impregnated-wood bearing block in said clip, and a pin through said clip to support said block, said block being adapted to swivel in a vertical plane upon said pin and also to swivel in a horizontal plane within its clip and while in engagement with said pin.

11. The combination of an impregnated-wood bearing block journaled to receive a rotary element, with a split-pin to support said block, and means to support said split-pin and to retain said block against undue lateral displacement of said block with respect to said split-pin in the direction of the length of the latter, said block being free to swivel upon said split-pin to accommodate itself to changes in the direction of the axis of rotation of said element.

[Claims 2, 3, 5 to 7, 9, and 10 not printed in the Gazette.]

1,276,725. TIMBER-PRESERVING COMPOSITION. LOUIS A. CRETSINGER, Deshler, and JOHN A. WORKMAN, Cleveland, Ohio. Filed Nov. 20, 1916. Serial No. 132,292. (Cl. 99—12.)

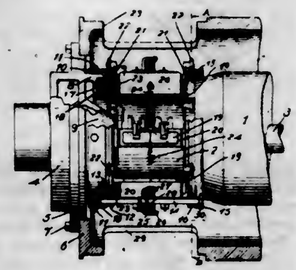
1. A composition of matter for the preservation of timber, consisting of an admixture of a major portion of sodium chlorid, with an arsenical compound, and a mercuric compound in sufficient quantity to spread or scatter the composition throughout the timber.

4. A composition of matter for the preservation of timber, consisting of an admixture of substantially sixteen parts of sodium chlorid, six parts of arsenic trioxid and one part of mercuric chlorid.

5. A method of preserving wood which consists in boring holes in the wood at suitable distances from each other, inserting a preserving composition in said holes consisting of a major portion of sodium chlorid, with an arsenical compound, and a mercuric compound in sufficient quantity to spread or scatter the composition throughout the wood, and then plugging the holes and permitting the wood so treated to retain the preserving composition so placed until it becomes impregnated therewith.

[Claims 2 and 3 not printed in the Gazette.]

1,276,726. BRUSH-HOLDER FOR DYNAMOS. JOHN L. CREVELING, New York, N. Y., assignor to Safety Car Heating and Lighting Company, a Corporation of New Jersey. Filed Sept. 29, 1911. Serial No. 651,892. Renewed May 28, 1918. Serial No. 237,172. (Cl. 171—318.)



1. In a generator having a field-frame provided with an end member; a commutator within said frame and brushes in operative communication therewith; brush-holders and means for connecting the same about the commutator; and means connected to said end member affording the entire support for the brush-holders at opposite ends thereof.

5. A generator having a commutator; brushes in operative communication therewith; a plurality of independent means carrying the brushes; a plurality of independent means rotatable respectively with the brush-carrying means and insulated therefrom for supporting the latter; sustaining means for said rotatable means; and magnetic means for restraining the brush-carrying means at predetermined intervals.

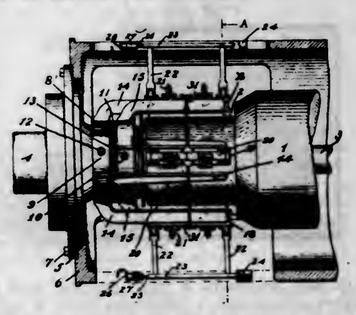
14. In a generator provided with a commutator, the combination of brush-carrying means; brushes carried thereby in operative relation to said commutator; means for supporting said brush-carrying means independently in rotatable relation to said commutator, said supporting means comprehending movable supporting means and means for supporting the same; and means for holding said brushes yieldingly together and in engagement with the commutator.

18. In a generator provided with a commutator, the combination of a plurality of independent brush-holders; brushes carried thereby in operative relation to said commutator; a plurality of independently movable means for supporting said brush-holders in rotatable relation to said commutator; and magnetic means adjacent the movable means for restraining the movement of the brushes about the commutator.

21. In a generator, the combination of a commutator; a brush-holding device associated with said commutator and mounted to be movable axially with respect to said commutator; means for producing said axial movement; and means for engaging the brush-holder and shaped to cause the same to move radially away from the commutator when said axial movement is effected.

[Claims 2 to 4, 6 to 13, 15 to 17, 19, 20, and 22 not printed in the Gazette.]

1,276,727. REVERSIBLE BRUSH-HOLDER FOR USE WITH DYNAMOS. JOHN L. CREVELING, New York, N. Y., assignor to Safety Car Heating and Lighting Company, a Corporation of New Jersey. Filed Dec. 26, 1911, Serial No. 667,740. Renewed May 28, 1918. Serial No. 237,173. (Cl. 171—318.)



1. A dynamo electric machine having an armature and commutator; a brush-holder carrying a brush and capable of automatically assuming two positions, said brush-holder being movable frictionally to either position by the commutator; coöperating means partly carried by the brush-holder for firmly holding the same in either position; and means for moving the brush-holder so its brush shall be held in true radial position relatively to the commutator in the position assumed by the brush-holder.

6. A dynamo electric machine having an armature, a commutator, and brush-holding devices; means for pivotally supporting said devices permitting motion thereof in either of two directions, said means including a swinging link; stationary means for limiting the movement of said brush-holding devices in either direction; and magnetic means for securely holding said devices in accordance with the direction of rotation of the armature.

8. A dynamo electric machine having an armature, and a commutator; together with a plurality of commutator brushes and brush-holding devices adapted to be moved by friction of the brushes with the commutator in either direction through definite arcs; means for supporting the brush-holding devices on a stationary part of the machine; and means connected with a stationary part of the machine for limiting the movement of said brush-holding devices; in combination with electro-magnetic means adapted to be connected in circuit with the armature and to be energized when the said devices reach either limit of movement, for holding said devices from movement.

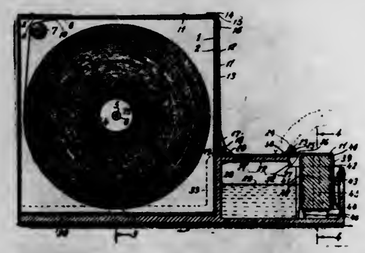
15. A brush-holder comprising a coil-wound casing, and means for supporting the same including a journal-rod, a flexible link, and a pivotal connection between the link and casing.

[Claims 2 to 5, 7, 9 to 14, 16, and 17 not printed in the Gazette.]

1,276,728. MANUAL TAPE-MOISTENING MACHINE. CHARLES H. CROWELL, Brooklyn, N. Y. Filed Nov. 10, 1916. Serial No. 130,506. (Cl. 91—14.5.)

1. In tape moisteners, a frame provided with adjustable side clamps to engage and support a substantially sealed

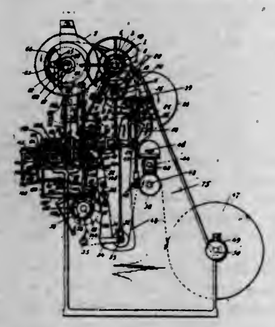
tape roll dispensing container, a moistening tank having a covered rear portion mounted on said frame adjacent said clamps, a guide plate pivotally connected to said frame to coöperate with the forward portion of said tape container and provided with guides for the tape issuing therefrom, a feed plate on the top of said moistening tank, a clamping dog pivotally mounted at the rear portion of said feed plate, a stationary type cutter and a connected cutter lock pivoted to said feed plate adjacent its forward portion, a belt type moistener arranged on a distributing moistener carrier block and having one end extending into said moistening tank so that its upper moistening face projects adjacent said cutter, said carrier block being formed of wood having the grain substantially vertical and provided with a series of staggered inclined capillary slots extending from both front and rear faces thereof and with narrow distributing recesses formed in said front and rear faces.



26. In tape moisteners, a frame provided with means to support a tape roll, a moistening tank, a belt type moistener arranged on a distribupting moistener carrier block and having one end extending into said moistening tank so that its upper moistening face projects therefrom, said carrier block being formed of wood having the grain substantially vertical and provided with a series of staggered inclined capillary slots extending from both front and rear faces thereof and with narrow distributing recesses formed in said front and rear faces.

[Claims 2 to 25 and 27 not printed in the Gazette.]

1,276,729. TRANSVERSE-DELIVERY GUMMED-STRIP SEVERING AND MOISTENING MACHINE. CHARLES H. CROWELL, Brooklyn, N. Y. Filed Feb. 24, 1917. Serial No. 150,667. (Cl. 91—14.5.)

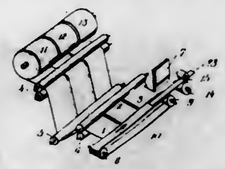


1. In tape moistening machines, a frame to support a web roll of gummed tape, web feeding devices comprising intermittent rolls and an interposed looper having supplying rolls engaging the web before it reaches the feeding rolls, a power shaft for the machine, friction disks operated by said power shaft and connected to said supplying rolls and an interposed friction wheel regulated by the looper to control the speed of the continuously rotating supplying rolls, a cam shaft connected to said power shaft, a cutter gear connected to said power shaft, a cutter coöperating with said feeding rolls and having a one revolution stop motion controlled by said cam shaft intermittently operating said cutter from said cutter gear, delivery devices comprising upper and lower delivery belts adjacent said cutter, belt lifting devices to lift the upper delivery belt for the entrance of the end of the tape web, a feed plate entering between said delivery belts to facilitate the entrance of the tape web between the same, means controlled by said cam shaft to operate said feed plate and said belt lifting devices and to actuate said delivery belts when a strip of gummed tape has been severed from said web and a continuously rotating moistener roll and a coöperating presser roll adjacent the discharge end of said delivery belts to moisten the tape strips of gummed tape received therefrom.

6. In tape moistening machines, a frame to support a web roll of gummed tape, web feeding devices, a cutter coöperating with said feeding devices, delivery devices comprising upper and lower delivery belts adjacent said cutter, belt lifting devices to lift the upper delivery belt for the entrance of the end of the tape web, and to actuate said delivery belts when a strip of gummed tape has been severed from said web.

[Claims 2 to 5 and 7 to 24 not printed in the Gazette.]

1,276,730. PROCESS OF MAKING CLOTH GUMMED TAPE. CHARLES H. CROWELL, Brooklyn, N. Y. Filed Mar. 8, 1917. Serial No. 153,328. (Cl. 154—2.)



1. The process of making cloth gummed tape strips which comprises weaving a web of fabric having relatively stronger and more numerous warp threads woven at considerably greater tension than the coöperating filling threads so that the warp threads are arranged relatively straighter in the fabric, filling and finishing the fabric to render it substantially impervious and free from pinholes, applying an adhesive gum coating to said fabric and severing relatively narrow gummed tape strips from the end of said web so that the warp threads extend transversely to said strips to increase their transverse strength.

6. The process of making cloth gummed tape strips which comprises weaving a web of fabric having warp threads relatively much more numerous than the coöperating filling threads, applying an adhesive gum coating to said fabric and severing relatively narrow gummed tape strips from the end of said web so that the warp threads extend transversely to said strips to increase their transverse strength.

9. The process of making a number of series of gummed strips the strips having different lengths in each series, which comprises simultaneously feeding forward a number of webs of gummed fabric having different widths and severing relatively narrow strips from the ends of said webs and successively delivering said strips.

[Claims 2 to 5, 7, and 8 not printed in the Gazette.]

1,276,731. CLOTH GUMMED TAPE AND PROCESS OF MAKING SAME. CHARLES H. CROWELL, Brooklyn, N. Y. Filed Sept. 19, 1917. Serial No. 192,070. (Cl. 91—68.)

1. The roll of adhesive cloth gummed tape consisting of a substantially continuous backing fabric strip having relatively straight threads extending transversely across it and connected by interwoven weaker longitudinal threads, there being about twice as many transverse threads to the inch as the interwoven threads to increase the transverse strength of the strip, filling material incorporated with said threads to render the ungummed side of the strip substantially impervious and a hygroscopic glue coating applied to one side of said strip to render the same adhesive when moistened.



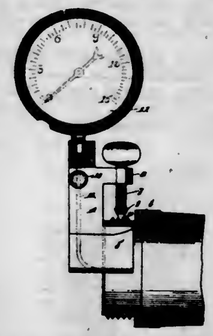
9. The roll of adhesive cloth tape comprising a woven cloth backing strip in which the transversely extending threads have considerably more aggregate strength per linear inch than the interwoven threads and an adhesive coating applied to said strip to render the same adhesive.

13. The strip of adhesive cloth gummed tape comprising a filled woven cloth backing in which the transversely extending threads are more numerous and have considerably greater aggregate strength per linear inch than the interwoven threads and an adhesive coating applied to one side of said strip to render the same adhesive.

15. The process of making strips of narrow cloth gummed tape which comprises weaving a web of backing fabric having relatively stronger and more numerous filling threads woven at considerably greater tension than the coöperating warp threads so that the filling threads are arranged relatively straighter in the fabric, filling and finishing the fabric to render it substantially impervious, applying an adhesive gum coating to said fabric and slitting the web of gummed fabric into long strips so that the filling threads extend substantially perpendicularly to said strips.

[Claims 2 to 8, 10 to 12, 14, and 16 to 20 not printed in the Gazette.]

1,276,732. VELOCITY-PRESSURE AND CALCULATING GAGE. WILLIAM S. DARLEY, Chicago, Ill. Filed May 20, 1916. Serial No. 98,968. (Cl. 73—31.)

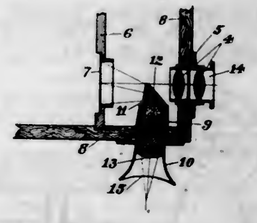


1. A device of the class described comprising a bracket having an arm adapted to take within a hydrant orifice; clamping means on said bracket coöperating with said arm; and a gage on said bracket, there being a passage leading from the inner end of said arm to said gage, the inner end of said passage being located well within said orifice and distanced from the sides thereof, substantially as described.

2. A device of the class described comprising a bracket having an arm adapted to take within a hydrant orifice; a clamping screw on said bracket coöperating with said arm; a bearing member swiveled to said screw and shaped to engage a thread; and a gage on said bracket, there being a passage leading from the end of said arm to said gage, substantially as described.

3. A device of the class described comprising a bracket having an arm adapted to take within a hydrant orifice; a clamping screw on said bracket coöperating with said arm; a bearing member swiveled to said screw and shaped to engage a thread; a gage on said bracket, there being a passage leading from the end of said arm to said gage; and a valve for regulating said passage, substantially as described.

1,276,733. FOCUSING DEVICE. ERNEST W. DAVIS, Chicago, Ill. Filed Mar. 16, 1917. Serial No. 155,196. (Cl. 95—42.)

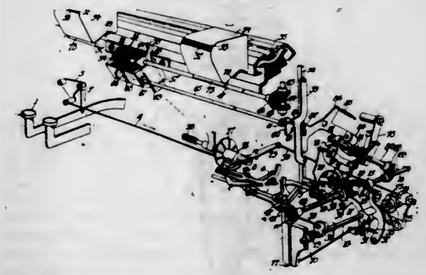


1. In combination, a lens adapted to produce an image, a receiving surface arranged to receive said image, a light excluding casing having an aperture therein and surrounding the space between said lens and said receiving surface, and a reflecting surface interposed between said lens and said receiving surface and arranged to reflect said image through said aperture.

5. In combination, a camera lens arranged to produce an image on a receiving surface, a prism having a reflecting surface, a magnifying lens integral with said prism, said prism being interposed between said camera lens and said receiving surface and arranged to reflect said image through said magnifying lens.

[Claims 2 to 4 and 6 not printed in the Gazette.]

1,276,734. COMBINED TYPE-WRITING AND COMPUTING MACHINE. GUSTAVE O. DEGENER, New York, N. Y., assignor to Underwood Computing Machine Company, New York, N. Y., a Corporation of New York. Filed June 6, 1914. Serial No. 843,383. (Cl. 235—62.)



1. The combination with a computing wheel, of a normally effective detent for locking said computing wheel against rotation, a power-driven master wheel for driving said computing wheel, being normally out of engagement with said computing wheel, and power-driven means for concomitantly shifting said master wheel by a transaxial movement into engagement with said computing wheel and disengaging said detent from said computing wheel.

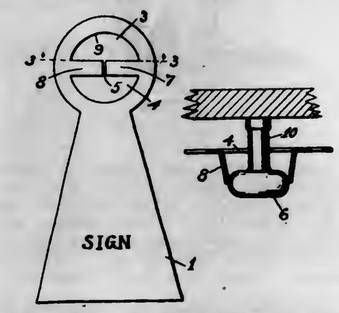
9. The combination with a computing wheel, of a master wheel for driving said computing wheel, said master wheel being normally disengaged from said computing wheel, a motor for driving the master wheel,

indexing mechanism for determining the extent of rotation of said master wheel, said indexing mechanism being normally silent, and motor driven starting mechanism for bringing said indexing mechanism into play, acting first to bring about an engagement of said master wheel with said computing wheel.

29. A tens-carrying wheel having three broad teeth arranged at the apexes of an equilateral triangle, and two narow teeth, one arranged on each side of one of said broad teeth.

[Claims 2 to 8, 10 to 28, and 30 to 48 not printed in the Gazette.]

1,276,735. ADVERTISING-SIGN HANGER. RICHARD E. DEVNEY, Cleveland, Ohio. Filed July 27, 1917. Serial No. 183,136. (Cl. 40—128.)



An advertising sign hanger, comprising a sign, a head of resilient material supporting the sign, the head being provided with a pair of semicircular openings having their straight sides opposite each other, and the material separating said openings being cut through to form a pair of springy arms, substantially as described.

1,276,736. BOMB. JOHN W. DOBINSKY, Hamilton, Ontario, Canada. Filed Sept. 17, 1917. Serial No. 191,770. (Cl. 102—29.)



2. A bomb comprising a body portion having a discharge head at the front end thereof, a tail carried by the bomb having a longitudinal recess and lateral openings communicating therewith, a rod provided with radial arms movably positioned in said recess and openings respectively, a fragile element operatively associated with said rod for holding the same stationary and means for forcing said rod toward said bomb when said fragile connection is broken.

[Claim 1 not printed in the Gazette.]

1,276,737. ELECTRIC GAS-LIGHTER. ROY F. DOWDY, Roanoke, Va., assignor to Safety Gas Lighter Corporation, Roanoke, Va., a Corporation of Virginia. Filed Mar. 6, 1917. Serial No. 152,477. (Cl. 175—91.)



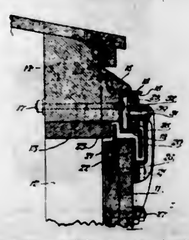
1. In an electric gas lighter, a hollow handle having an integral head at one end thereof and a removable head at the other end, an electrode extending through the integral head and rigidly secured therein, an electric cord extending through the said removable head, a resistance unit formed to fit within the hollow of the said handle and adapted to be entered therein upon the removal of the said head, the said cord being connected to the one end of the said resistance unti and the electrode being connected to the other end, there being a normally open switch in one of the said connections, there being a stop shoulder on the interior of the handle adapted to retain the resistance unit in its normal position.

3. In an electric gas lighter, a handle, a resistance unit therein, an electrode extending without the said handle, a source of electric energy, the said resistance unit comprising a cylindrical insulator with enlarged collars at either end thereof, a length of resistance wire coiled on the said insulator between the said collars in a helical path, the ends thereof extending through the opposite collars and being clamped to the outer faces of said collars, the one end being connected to the source of electric energy and the other end to the electrode.

6. In an electric gas lighter, a source of electric energy, an electrode, a resistance unit, a connection from one terminal thereof to the said electrode and another connection from the other terminal thereof to the source of electric energy, the means for connecting a terminal of the resistapce unit and its connected wire together comprising a clip of sheet metal having the ends bent back to overlap the central portion and a screw engaging the body of the resistance unit and passing through the clip, the two wires being inserted under the opposite turned ends of the clip and the screw being adapted to clamp the ends of the clip against the central portion thereof.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,276,738. HANGER MECHANISM FOR CAR-DOORS. PERCY M. ELLIOTT, Chicago, Ill. Filed May 29, 1913. Serial No. 770,624. (Cl. 20—22.)



1. The combination with a car body having a door opening and a sliding door for closing said opening, of a rolled metal Z-shaped guard bar secured to and resting upon the upper edge of the door and having a depending flange overlying the outer face of the door and an upstanding flange projecting upwardly above the door opening, said flanges extending the width of the door, a track bar secured to the car body above said door opening and having depending Z-shaped portions everlying and substantially parallel to the corresponding parts of said Z-shaped guard bar, the lower horizontal member of said track bar being below the top of said guard bar, hangers secured to the door and extending upwardly outside of said track bar and having rollers engaging the same, substantially as described.

2. The combination with a car body having a door opening and a sliding door for closing the same, of a rolled metal, channel-bar track member secured to the side of the car above the door opening and having the lower part of its vertical portion spaced from the adjacent part of the car, said member having upper and lower track flanges and a guard flange depending from the lower track flange and overlying the supper portion of the door, hangers secured to the door and extending upwardly over said guard flange, rollers on said hangers arranged between said track flanges, and a guard bar extending the width of the door and secured to and resting upon the upper edge of the door and having a flange at its rear edge extending upwardly behind said track member, substantially as described.

3. The combination of a car body having a door opening, a sliding door for closing said opening, said car having a track block secured thereto above said door opening and a header at the upper portion of the door opening projecting outwardly beneath said track block and over the upper edge of the door, a track bar secured to said track block and depending below the same to form a space between the vertical part of said track bar and said header, said bar having a track flange extending outwardly therefrom and a guard flange depending from said track flange and overlying the upper portion of said door, a Z-shaped guard bar secured to the upper edge of the door and having an outer, depending flange overlapping and secured to the outer face of the door and an inner, upstanding flange extending into the recess between said track bar and header, and hangers on the door having rollers engaging said track flange, substantially as described.

1,276,739. MAKING MANGANESE COMPOUNDS. CARLETON ELLIS, Montclair, N. J., assignor to National Carbon Company, Inc., New York, N. Y., a Corporation of New York. Filed Oct. 27, 1917. Serial No. 198,886. (Cl. 204—38.)

3. The process of making manganese dioxid which comprises reacting on raw material containing basic manganese compounds with acid material comprising acid sodium sulfate at a reacting temperature to form manganese sulfate and in converting the manganese of this salt into manganese dioxid.

[Claims 1, 2, and 4 to 7 not printed in the Gazette.]

1,276,740. FASTENING DEVICE. JOHN ERICKSEN, Blue Mounds, Wis. Filed Apr. 23, 1917. Serial No. 163,960. (Cl. 24—206.)



A fastener of the character described, comprising an elongated casing forming a female member and having an aperture in its top, a resilient catch having cut and stamped therefrom a supporting arm fixed to the top of said casing to space said catch therefrom exteriorly of the same, a male member removably insertible in the casing and having a series of holes, a projection on one end of the catch to work through the aperture to engage in any one of the holes, and a finger piece at the other end of the catch.

1,276,741. BOAT PROPELLING AND STEERING DEVICE. STEVEN FAZEKAS, New York, N. Y. Filed Aug. 22, 1917. Serial No. 187,534. (Cl. 115—24.)

1. A boat attachment comprising a pair of standards, a spindle mounted therein longitudinally of the boat, a pair of cranks attached to said spindle, a gear on said pinion, a horizontal tubular shaft extending through the stern of the boat, a propeller rigidly engaged therewith, a pinion fixed upon the inner end of said shaft, driving connection between said gear and said pinion, and means for operating the rudder of the boat, said means extending through said tubular shaft.



[Claims 2 and 3 not printed in the Gazette.]

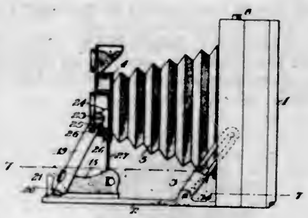
1,276,742. FIRE-EXTINGUISHING AND FIREPROOFING COMPOSITION. GEORGE E. FERGUSON, New York, N. Y., assignor to Pyrene Manufacturing Company, a Corporation of Delaware. Filed Dec. 12, 1914. Serial No. 876,814. (Cl. 23—5.)

1. A fireproofing and fire extinguishing composition comprising a substantially saturated aqueous solution of potassium carbonate and borax, and sufficient sodium phosphate to substantially saturate the solution.

2. A fireproofing and fire extinguishing composition comprising an aqueous solution of potassium carbonate, a phosphate of sodium and borax.

3. A fireproofing and fire extinguishing composition comprising an aqueous solution of potassium carbonate, trisodium phosphate and borax.

1,276,743. FOLDING CAMERA. AUSTIN CARL FISHER, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Original application filed Mar. 12, 1917, Serial No. 154,179. Divided and this application filed May 9, 1918. Serial No. 233,444. (Cl. 95—40.)



1. In a folding camera, the combination with a body and a hinged bed closing the front thereof, of a carriage mounted on the bed having two sets of abutments, a pair of links pivoted to the carriage to swing forwardly against one set of abutments or to fold rearwardly against the bed, a front pivoted to the links to also fold against the bed and adapted to engage the other set of abutments on the carriage, a bellows connecting the front and body and means for projecting the front and links from folded position.

2. In a folding camera, the combination with a body and a hinged bed closing the front thereof, of a carriage plate mounted on the bed having upwardly extending side flanges provided with outwardly turned forward abutments and inwardly turned rearward abutments, a pair of links pivoted to the carriage plate on the outer sides of the flanges to swing forwardly against the said forward abutments, or to fold rearwardly against the bed, a front pivoted to the links to also fold against the bed and adapted to swing forwardly between the flanges of the carriage plate and engage the rearward abutments thereon, a bellows connecting the front and body and means for projecting the front and links from folded position.

3. In a folding camera, the combination with a body and a hinged bed closing the front thereof, of a pair of links pivoted to the bed to fold rearwardly against the latter, a front pivoted to the links to fold forwardly against the bed, an inclined tongue on the bed for guiding the front to its folded position by engagement with the base thereof, a bellows connecting the front and body and means for projecting the front and links from folded position.

1,276,744. STAY-BOLT STRUCTURE. JOHN ROGERS FLANNERY, Pittsburgh, Pa., assignor to Flannery Bolt Company, Pittsburgh, Pa. Filed Feb. 19, 1916. Serial No. 79,391. (Cl. 85—1.5.)

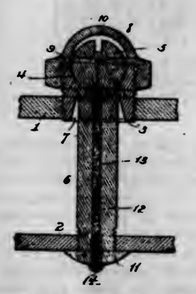


2. A stay bolt having a tell-tale hole, and material freely disposed in said tell-tale hole, said material being sensitive to the action of water to denote the condition of the bolt.

5. In a stay bolt structure, a stay bolt having a tell-tale opening, a bearing for the head of said bolt, and a cap over the head of the bolt, said cap having an opening, a metal closure for the opening in the cap, and material in said tell-tale opening which will, when exposed to moisture, set up reactions which result in the breaking down, or disintegrating of said closure in the opening in the cap.

[Claims 1, 3, and 4 not printed in the Gazette.]

1,276,745. STAY-BOLT STRUCTURE. JOHN ROGERS FLANNERY, Pittsburgh, Pa., assignor to Flannery Bolt Company, Pittsburgh, Pa. Filed Nov. 21, 1916. Serial No. 132,607. (Cl. 85—1.5.)



2. A bolt having a hole therein accessible from an end of the bolt, and readily soluble material contained within said hole.

3. In a stay bolt structure, a stay bolt having a bore containing material readily soluble in water and removable means normally sealing said bore.

[Claims 1, 4, and 5 not printed in the Gazette.]

1,276,746. STAY-BOLT STRUCTURE. JOHN ROGERS FLANNERY, Pittsburgh, Pa., assignor to Flannery Bolt Company, Pittsburgh, Pa. Filed Nov. 21, 1916. Serial No. 132,609. (Cl. 85—1.5.)

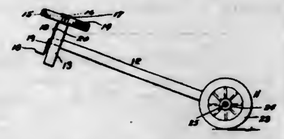
1. A staybolt having a cavity readily accessible from one end of the bolt and closed at its other end within the bolt, and a removable detector located in and readily removably bodily from the accessible end of said bore, said detector being made of material which is sensitive to the action of water to denote the condition of the bolt.



2. A stay bolt having a bore closed at one end and open at the other end, and a metal rod removably disposed in said bore and removable through said open end thereof, said metal rod being such as shall be sensitive to the action of water to denote the condition of the bolt.

[Claim 3 not printed in the Gazette.]

1,276,747. SOUNDING WHEELED TOY. EUGENE S. FOLJAMBE, Drexel Hill, Pa. Filed Jan. 26, 1917. Serial No. 144,729. (Cl. 46—47.)



1. A toy of the character stated comprising a beam symbolic of an automobile body, a member symbolic of a steering post fixed with respect to one end of said beam, said member being provided with a journal, an axle fixed with respect to the other end of said beam having journals at the respective ends thereof, a disk symbolic of a steering wheel mounted upon the steering post journal, a disk symbolic of an automobile wheel mounted upon each journal of said axle and means for rotatably connecting said disks with respect to said journals.

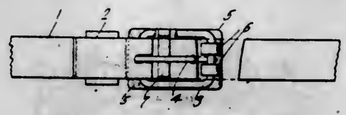
2. A toy of the character recited embracing a rail or beam adapted in use to be straddled by the user with the feet upon the ground, said rail or beam being provided at its forward end with a post equipped with a wheel symbolic of a steering wheel and provided at its rear end with an axle equipped with disks symbolic of automobile wheels and means mounted upon said post for producing sound symbolic of the cranking of an internal combustion engine.

3. A toy of the character recited embracing a rail or beam adapted in use to be straddled by the user with the feet upon the ground, said rail or beam being provided at its forward end with a post equipped with a disk symbolic of a steering wheel and provided at its rear end with an axle equipped with disks symbolic of automobile wheels, and means interposed between said axle and wheels for producing a sound symbolic of the "exhaust" of an internal combustion engine.

4. A toy of the character stated comprising means symbolic of an automobile body provided at one end with a device symbolic of a steering wheel and provided at its other end with elements symbolic of automobile wheels, means for producing sound symbolic of the cranking of an internal combustion engine and means for producing sound symbolic of the "exhaust" thereof.

[Claims 5 to 9 not printed in the Gazette.]

1,276,748. BUCKLE-PLATE. CLARENCE M. FOSTER, Toledo, Ohio. Filed Jan. 29, 1918. Serial No. 214,385. (Cl. 24—184.)

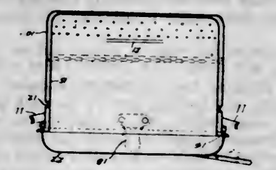


1. A formed plate, curved fingers extending from one end of the plate, said fingers adapted to engage the cross bar of a buckle, and a strip secured to the back of the plate and forming a strap loop.

3. A buckle plate, including a formed metallic plate, spaced, curved fingers extending rearwardly of one end of the plate and adapted to embrace the cross bar of a buckle and straddle the tongue, and a strip on the plate to embrace the strap and bind the plate in place upon the buckle.

[Claim 2 not printed in the Gazette.]

1,276,749. COOKING UTENSIL. MARTHA B. GEORGE, Indianapolis, Ind. Filed Nov. 15, 1915. Serial No. 61,572. (Cl. 53—1.)



A cooking utensil including an outer vessel with an outwardly turned top rim and a pair of oppositely located inwardly extending transverse segmental ribs in the upper part thereof, and a colander adapted to fit in said outer vessel and having a pair of oppositely located outwardly extending transverse segmental ribs in the lower part thereof and adapted when the colander is in elevated position to engage and rest upon the ribs in the wall of the outer vessel and also having a top rim projecting outwardly far enough to rest upon the top rim of the outer vessel when the colander is lowered therein for supporting the colander in said outer vessel.

1,276,750. RECEIVER FOR MILK-BOTTLES AND THE LIKE. LOUIS GICLAS, Washington, D. C. Filed June 18, 1916. Serial No. 103,565. Renewed Mar. 7, 1918. Serial No. 221,095. (Cl. 232—42.)



1. The combination with a frame member adjoining a way, of a movable closure for said way operatively associated with said frame member, a receiver, and means for mounting the receiver to permit the same to be swung to an operative position adjacent the outer side of said closure or to a reverse inoperative position adjacent to the inner side of the closure, substantially as described.

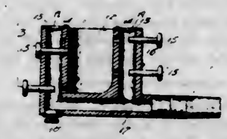
4. A device of the character described comprising a receiver having an inwardly opening bottom through which a bottle may be introduced, and means in the receiver normally permitting such introduction of the bottle through the bottom but arranged to engage the bottle and coöperate therethrough with the bottom to prevent opening of the latter.

13. A device of the character described comprising a receiver having an inclined bottom portion adapted to open inwardly to permit a bottle to be introduced, and a stop member at one side of the receiver, said side of the receiver being otherwise open, the stop member being arranged to engage the bottle when tilted on said bottom for the purpose set forth.

22. A device of the character described comprising a receiver having an inclined bottom portion adapted to open inwardly to permit a bottle to be introduced, and a plurality of stop members at one side of the receiver, the stop members being arranged to engage bottles of different sizes when tilted on said bottom, the lower stop member being movably mounted and located adjacent to an opening through which the bottle may be drawn for the purpose described.

[Claims 2, 3, 5 to 12, and 14 to 21 not printed in the Gazette.]

1,276,751. PIPE. ARTHUR D. GILBERT, Dunseith, N. D. Filed May 6, 1918. Serial No. 232,815. (Cl. 131—12.)



1. A pipe comprising a bowl consisting of a tobacco chamber, a smoke chamber and a stem, a bit connected with the stem, said smoke chamber extending up alongside the tobacco chamber and communicating with the bore of the stem portion at the bottom of the smoke chamber and with the tobacco chamber by a series of openings spaced apart vertically from each other, a plunger slidable in the outer wall of the smoke chamber at each opening and designed to engage and close and clean the same when pushed inwardly, and removable closures at the ends of the smoke chamber.

[Claims 2 to 4 not printed in the Gazette.]

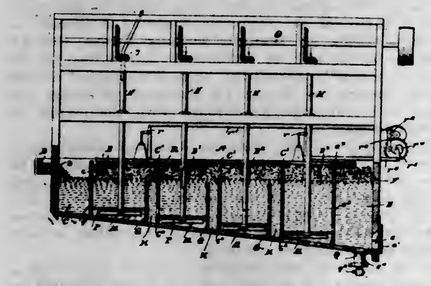
1,276,752. COVERED HOSE. HOWARD W. GOODALL, Aldan, Pa. Filed Jan. 26, 1918. Serial No. 213,838. (Cl. 137—90.)



1. A covered hose comprising in combination, a cover and a rubber hose in eccentric spaced relation, and a rubber tube interposed between the cover and hose, substantially as described.

2. A covered hose comprising in combination a cover and a rubber hose initially partly filling the cover and adapted by heat expansion to fill the same, and means between the hose and cover for spacing the cover and adapted to yield and in effect disappear to permit of such expansion, substantially as described.

1,276,753. ORE CONCENTRATION. FRANK GROCH, Cobalt, Ontario, Canada. Filed May 25, 1916. Serial No. 99,846. (Cl. 83—85.)



1. An apparatus for concentrating ores, comprising an agitation and froth decanting chamber, a centrifugal agitator and distributer in the lower portion of said chamber, and a vertically arranged, hollow shaft extending outside of said chamber and receiving feed of air and pulp from the exterior thereof, to which the agitator is secured and through which air and pulp are delivered to the central portion of said agitator.

2. An apparatus for concentrating ores, comprising an agitation and froth decanting chamber, a centrifugal agitator and distributer in the lower portion of said chamber, comprising radial impeller blades and upper and lower plates incasing them, and a vertically arranged hollow shaft extending outside the agitation chamber and receiving feed of air and pulp from the exterior thereof, to which the agitator is secured and through which air and pulp are delivered to the central portion of said agitator.

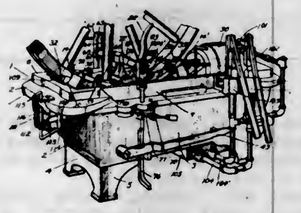
1,276,754. ELECTRIC BATTERY. WALTER GROTHE, Fremont, Ohio, assignor, by mesne assignments, to National Carbon Company, Inc., a Corporation of New York. Filed Feb. 5, 1916. Serial No. 76,235. (Cl. 204—38.)



3. In electric batteries, a flanged yoke having depending ends with a hole therethrough, an insulating electrode support beneath said yoke and extending transversely thereacross, a clip between the flanges of the yoke adapted to clamp the support thereagainst, said clip having depending ends with a threaded hole, a container for depolarizing material having sides fitting between the depending ends of the yoke and clip and screws passing through the holes in the depending ends of the yoke and into the threaded ends of the clip to clamp the said container in position.

[Claims 1, 2, and 4 not printed in the Gazette.]

1,276,755. TIRE-SETTER. ISAAC M. HACKNEY, Wichita, Kans. Filed Dec. 15, 1916. Serial No. 137,190. (Cl. 78—59.)



3. In a tire setting device, a frame having an arcuate guide, a draw head fixed on said frame, a draw head movable along said guide, the movable head and an adjacent portion of the frame being provided with spaced sockets, a cylinder having a boss pivotally mounted in the frame socket, a piston coöperative with the cylinder and having a boss pivotally mounted in the movable draw head socket, and means for controlling flow of fluid pressure medium to and from the cylinder, whereby movement of the movable draw head is effected for the purpose set forth.

4. In combination with a frame, paired draw heads mounted in said frame, each provided with a tire channel, a pair of gripping keys adjustably mounted in each of said channels and shifting devices for each pair of gripping keys comprising revoluble cross shafts, rocker arms extended upwardly from said shafts and slidably connected with said gripping keys, an actuating rocker arm for each shaft, a common actuating lever and yielding means connecting said actuating member with both of the shaft actuating rocker arms, whereby simultaneous actuation of the gripping keys is effected.

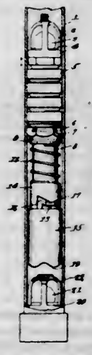
5. In a tire setting device, a pair of draw heads each having an upwardly facing channel for seating a wheel rim and tire and having double inclined side walls, pins projecting from said heads at opposite sides of said channel, tire gripping keys slidably mounted in said channels, having serrated gripping edges adapted for engaging a wheel tire and having double inclined rails at their opposite sides for seating against inclined channel walls, key shifting devices slidably mounted on said heads, having slots therein for receiving said pins at opposite sides of said channel and having downturned ends for engaging the gripping keys, shafts revolubly mounted beneath said draw heads, having rocker arms thereon for actuating the key shifting devices, and means for actuating the rocker shafts, for the purpose set forth.

9. In a tire setting device, a frame, draw heads mounted in said frame and provided with tire receiving channels, gripping devices mounted in said channels adapted for engaging opposite sides of a wheel tire and adjustable both longitudinally and, at their outer ends vertically, within said channels, slide members on each head engaging said gripping devices to adjust the same against a tire, movable members mounted on said frame for engaging the vertically adjustable ends of said paired gripping devices, means for locking said members at an adjusted position and means for actuating the slide devices and for locking the same to retain the gripping devices in gripping relation with a tire.

[Claims 1, 2, 6 to 8, and 10 to 12 not printed in the Gazette.]

1,276,756. STAND-VALVE TAP. HARRY E. HAMILTON, Bridgeport, Ill. Filed May 25, 1918. Serial No. 236,565. (Cl. 29—88.2.)

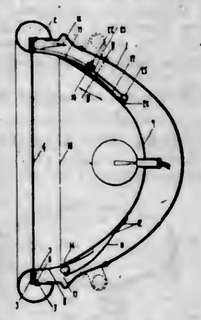
1. The combination with a pump including a stand valve, and a working valve; of a member secured to and depending from the working valve, a tap depending from said member, a sleeve slidable on the member and nor-



mally projecting below the tap, and yielding means for holding the sleeve in its normal position.

[Claims 2 and 3 not printed in the Gazette.]

1,276,757. HEADLIGHT. ALFRED W. HARRIS, Peoria, Ill. Filed Apr. 24, 1916. Serial No. 93,099. (Cl. 240—41.)



1. In a device of the class described, the combination of a lamp body, a reflector wholly within said lamp body and comprising a plurality of parts, one of said reflector parts being fixed in but removable from said lamp body and the other reflector part being universally mounted on the fixed part of the reflector, and means for holding said reflector parts in operative engagement with each other.

7. In a device of the class described, the combination of a lamp body, a reflector in said lamp body comprising a plurality of parts, one of which has universal bearing with respect to the other, and co-acting means on said reflector parts for yieldingly holding said reflector parts in operative engagement with each other.

[Claims 2 to 6, 8, and 9 not printed in the Gazette.]

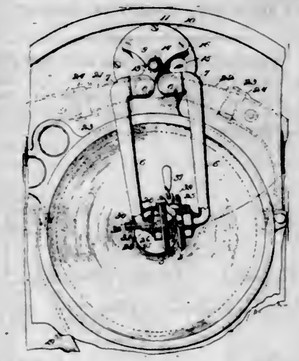
1,276,758. COMBINED PINCUSHION AND PAPER-WEIGHT. CHARLES F. HENDERSON, Madisonville, Ohio, assignor to The Kemper-Thomas Company, Norwood, Ohio, a Corporation of New Jersey. Filed Dec. 14, 1916. Serial No. 136,827. (Cl. 120—1.)



1. A combined pin cushion and paper weight composed of a flat disk-like casing of flexible material, with a filling of finely divided comparatively heavy material penetrable to pins.

(Claims 2 to 5 not printed in the Gazette.)

1,276,759. DUPLEX GRAPHOPHONE. FRANK C. HINCKLEY and JOHN GRAHAM, Bridgeport, Conn., assignors to American Graphophone Company, Bridgeport, Conn., a Corporation of West Virginia. Filed Jan 9, 1917. Serial No. 141,424. (Cl. 274—123.)



1. In combination with a record support a plurality of sound-boxes each provided with a stylus, means mounting said sound-boxes in coöperative relation with a record on said support to enable said styli to simultaneously and consecutively track the record groove, and means to position said styli in consecutive portions of the record groove at any desired point in the length thereof.

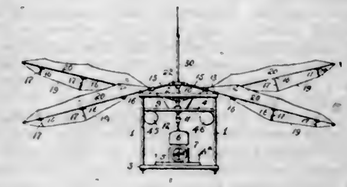
2. In combination with a record support, a plurality of sound-boxes each provided with a stylus, means mounting said sound-boxes in coöperative relation with a record on said support to enable said styli to simultaneously and consecutively track the record groove, and means to bring the points of said styli into substantial coincidence for positioning the same in the record groove.

3. In combination with a record support, a plurality of sound-boxes each provided with a stylus, means mounting said sound-boxes in coöperative relation with a record on said support to enable said styli to simultaneously and consecutively track the record groove, and means to move one of said styli into engagement with the other of said styli for positioning said styli in the record groove.

4. In combination with a record support, a plurality of sound-boxes each provided with a stylus, means mounting said sound-boxes in coöperative relation with a record on said support to enable said styli to simultaneously and consecutively track the record groove, and means to move one of said styli in a plane extending longitudinally thereof into alinement with the other of said styli for positioning said styli in the record groove.

(Claims 5 to 30 not printed in the Gazette.)

1,276,760. FLYING-MACHINE. MARTIN HINES, Brooklyn, N. Y. Filed Feb. 1, 1917. Serial No. 145,886. (Cl. 244—20.)

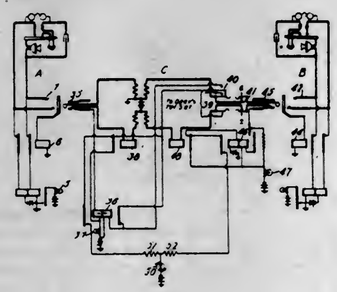


1. In an aerial navigating machine, the combination of a carrying frame, a plurality of pairs of wings positioned in said carrying frame, a coupling between each pair of wings, a crank-shaft arranged in said carrying frame and

having mutually-alternating cranks, links connected to the cranks of said crank-shaft, pitmen and toggle-connections between said links and said pitmen, said couplings being pivoted to said wings and said pitmen being connected to said wing-couplings, and means for actuating said crank-shafts.

(Claims 2 and 3 not printed in the Gazette.)

1,276,761. TELEPHONE-EXCHANGE SYSTEM. EDWARD E. HINRICHSEN, New York, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed May 22, 1917. Serial No. 170,308. (Cl. 179—70.)



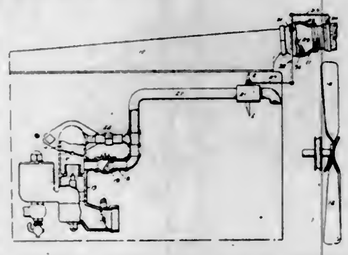
1. A telephone exchange system comprising a telephone line, a link circuit, a signaling device in the link circuit, a supervisory relay and a secondary relay in the link circuit energized upon connection of the link circuit with the line as a calling line, an operating circuit for the signaling device established upon the energization of both relays, an operator-controlled switch actuated to cause the deënergization of this secondary relay to disable the operating circuit of the signaling device, and interrupter mechanism brought into circuit with the signaling device upon the subsequent deënergization of the supervisory relay and the energization of the secondary relay.

4. A telephone exchange system comprising a telephone line, a link circuit, a signaling device in the link circuit, a supervisory relay and a secondary relay in the link circuit energized upon connection of the link circuit with the line as a calling line, an operating circuit for the signaling device established upon the energization of both relays, an operator-controlled switch actuated to cause the deënergization of the secondary relay, a shunt circuit for the signaling device established upon the deënergization of the secondary relay while the supervisory relay is energized, and another shunt circuit for the signaling device including interrupter mechanism and contacts of both relays established upon the deënergization of the supervisory relay followed by the energization of the secondary relay to cause the intermittent operation of the signaling device.

10. A telephone exchange system comprising a telephone line, a link circuit, a signaling device in the link circuit, an operating circuit for the signaling device established upon the connection of the link circuit with the line as a called line to cause the continuous operation of the signaling device, a supervisory relay in the link circuit, a secondary relay energized upon the energization of the supervisory relay, a shunt circuit for the signaling device including a winding of the secondary relay established upon the energization of the supervisory relay to disable the signaling device, and a second shunt circuit including interrupter mechanism substituted for the first-mentioned shunt circuit upon the subsequent deënergization of the supervisory relay to cause the intermittent operation of the signaling device.

[Claims 2, 3, 5 to 9, and 11 not printed in the Gazette.]

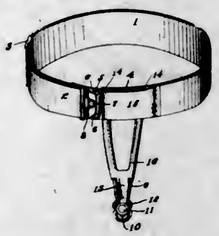
1,276,762. AUTOMATIC AIR-SUPPLY DEVICE AND COMBINATION-GOVERNOR THEREFOR. EDWARD G. HODGES, Marshalltown, Iowa. Filed Feb. 4, 1918. Serial No. 215,414. (Cl. 123—124.)



5. In a device of the class described, the combination of an internal combustion engine of the water cooled type and having a carbureter with a throttle valve, with an automatic air supply device and combination governor therefor comprising an air supply pipe, a pipe leading therefrom to the fuel mixture passage of the engine above and below said throttle valve, a check valve in the pipe below the throttle valve, a valve in said first air supply pipe, having a stem, a vane operatively connected with said stem, a valve arranged to be operated by the movement of water passing through the circulating system of the engine, means for operatively connecting said last named valve with said stem, and yielding means for normally tending to hold the valve in said air supply pipe in closed position.

[Claims 1 to 4, 6, and 7 not printed in the Gazette.]

1,276,763. GARTER AND GARMENT-SUPPORTER. FRANK W. HOELTING, Granite City, Ill. Filed Apr. 14, 1917. Serial No. 162,182. (Cl. 241—6.)



1. An improved garter and garment supporter, composed of a suitable band for embracing the body, a guide-piece secured at one end to said band, to form a space between the latter and said guide-piece, and a V-shaped spring the free ends of which are arranged to slide within the said space between said band and said guide-piece and exert a yielding strain upon the opposite ends of said band, when the device is in use.

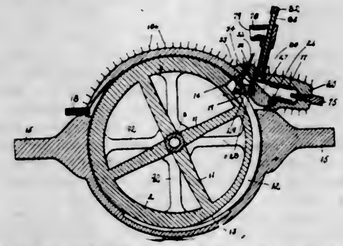
2. An improved garter and garment supporter, composed of a suitable band having common means for adjusting its effective length; a guide-piece secured at one end to said band to form a space between the latter and said guide-piece; a V-shaped spring having its free upper ends located in said space between said band and said guide-piece; a sliding strip also located in said space and having one of its ends detachably secured to one end of said band and its opposite end fixed to one of the ends of said V-shaped spring, to move therewith in said space; the end of said band which is opposite the one to which said sliding-strip is to be secured being fixed to the end of said spring which is opposite the one to which said sliding strip is fixed; whereby said spring will exert a yielding strain upon the opposite ends of the said band during use.

1,276,764. NAIL. WILLIAM HENRY HOLBROOK, Sr., Venice, Ill. Filed Oct. 26, 1916. Serial No. 127,740. (Cl. 85—28.)



A nail comprising a body part provided at one end with a head formed integrally therewith and having an angularly faced portion adjacent said head, in combination with a separately formed supplemental head member adapted to be detachably engaged with said body part, the supplemental head member being provided with a body part receiving opening extending centrally and longitudinally thereof and of a size and shape corresponding to the shape in cross section of the angularly faced portion of the body part, said supplemental head member being adapted to fit upon the angularly faced portion with one end face fitting against the under face of the integral head, the other end face of the supplemental head member constituting a work engaging shoulder at a point below the integral head, said supplemental head member intermediate its ends being reduced in thickness and shaped to provide an exteriorly disposed angularly faced claw engaging portion with shoulders at opposite ends thereof.

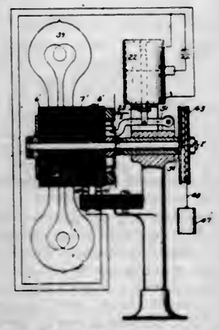
1,276,765. ROTARY INTERNAL-COMBUSTION ENGINE. CLARENCE B. HOWE, Morrisville, N. Y. Filed May 5, 1916. Serial No. 95,672. (Cl. 123—15.)



1. In an internal combustion engine, a rotor having an elongated recess, a casing disposed about said rotor, a second casing having an explosion chamber attached to said first named casing, valves in said second named casing, whereby to permit the escape of the expanding gases to revolve said rotor, and a stem having a notch therein for automatically locking said valves in closed position.

[Claims 2 to 7 not printed in the Gazette.]

1,276,766. BURNED-OUT-LAMP REPLACER. WINTHROP K. HOWE, Rochester, N. Y., assignor to General Railway Signal Company, Gates, N. Y., a Corporation of New York. Filed July 13, 1914. Serial No. 850,720. (Cl. 175—279.)



1. In an electric lighting device, a carrier, a number of lamps supported by said carrier, means tending to move said carrier in one direction, detent mechanism adapted when released from its actuated position to permit the carrier to advance one step and when again actuated to permit the carrier to advance a further step, a normally closed circuit, means for connecting said lamps into said circuit successively as they are advanced to a predetermined position by the movement of the carrier, and electro-magnetic means included in said circuit for releasing and actuating said mechanism when deënergized and energized respectively.

[Claims 2 and 3 not printed in the Gazette.]

1,276,767. CIRCUIT-CONTROLLER. WINTHROP K. HOWE, Rochester, N. Y., assignor to General Railway Signal Company, Gates, N. Y., a Corporation of New York. Filed July 3, 1916. Serial No. 107,856. (Cl. 246—29.)



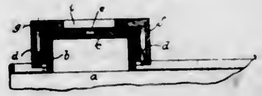
1. In a circuit controller for railway signaling appliances, in combination; a movable circuit controlling member pivotally supported between its end and having spaced lugs at one end; an insulated contact piece carried by the same member at its other end; fixed contact fingers arranged to coöperate with the contact piece in the different positions of said member; a spring connected to said member and tending to move in one direction; an oscillatable shaft disposed parallel to the axis of movement of said member; a rocker arm fixed to the shaft; and a rod carried by the outer end of the rocker arm and adapted to fit loosely between the lugs of said member, whereby the movement of said member from one circuit controlling position to the other is caused at one extreme of the range of movement of the shaft.

2. In a circuit controller, in combination: an oscillatable shaft; a movable circuit controlling member comprising a pivotally supported arm and a contact member loosely connected thereto; a spring tending to move said circuit controlling member in one direction; and means constituting a lost motion connection between said shaft and said member.

3. In an electrically operable device, in combination: a shaft biased to turn in one direction, electrically operable means for turning said shaft in the opposite direction; retaining mechanism for holding said shaft in its operated position; controlling circuits for said electrically operable means and for said retaining mechanism; and circuit controlling means governed by said shaft for selectively controlling said circuits, said means comprising two parts loosely connected, and one of said parts being operatively connected to said shaft.

[Claims 4 to 7 not printed in the Gazette.]

1,276,768. CLOSURE FOR RECEPTACLES. CHARLES COLIN GLENN HOYLE and GERALD LAY HART, Calcutta, India, assignors to Alexander Frank Newell, Calcutta, India. Filed Aug. 9, 1917. Serial No. 185,349. (Cl. 220—74.)



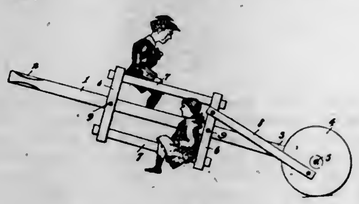
1. A closure for receptacles of the character described, comprising in combination, a stopper adapted to be secured to the receptacle, springs externally attached to said stopper, a cap covering said stopper, an internal

shoulder on said cap adapted to engage with said leaf springs and a lead disk arranged upon said stopper and held in position by said cap, said leaf springs adapted to be engaged by an opening tool for disengaging said springs and the shoulder of said cap, substantially as described.

3. A closure for receptacles of the character described, comprising in combination, a screw stopper having a groove in its upper face, adapted to be secured to the nozzle of the receptacle, leaf springs externally attached to said stopper, a loose cap having an orifice covering said stopper, an internal shoulder on said cap adapted to be engaged by said springs, a disk on said stopper held in position thereon by said cap and subject to destruction by a tool introduced through the orifice in said cap into the groove of said stopper for extracting the same, substantially as described.

[Claim 2 not printed in the Gazette.]

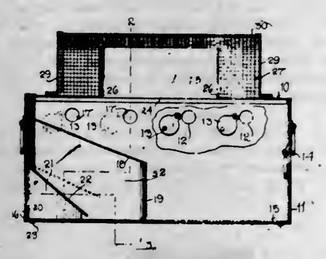
1,276,769. TRUNDLE TOY. ARTHUR J. HUNT, Altoona, Pa. Filed Feb. 8, 1917. Serial No. 147,418. (Cl. 46—45.)



1. A trundle-toy including a staff, spaced vertical-supports pivoted to said staff, said supports having their ends pivotally connected together by horizontal figure supports, wheeled means for said staff and means connected to one of said vertical supports and operated by said wheeled-means for transmitting motion to said support.

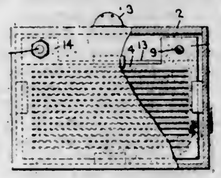
2. A trundle toy, including a staff, spaced vertical supports pivoted to said staff, horizontal cross pieces pivotally connecting the ends of the vertical supports, a figure positioned on the upper horizontal cross piece, and a figure positioned on the lower horizontal cross piece, so that when the device is in operation the figures will be moved toward each other.

1,276,770. COMBINED GARBAGE-CAN AND TRAP. JOSEPH JONES, New Orleans, La. Filed Nov. 19, 1917. Serial No. 202,816. (Cl. 43—24.)



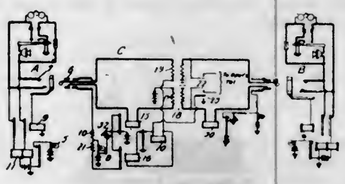
A combined garbage receptacle and trap comprising a rectangular casing open at one end, and a garbage container in the form of a drawer insertible into said casing and open at its top, the front wall of the container having an entrance opening, a trap door opening inward and normally closing said entrance opening, a trapping compartment having a wall extending downward and rearward from the front wall of the garbage container, and having a length less than the length of the garbage container, and a perforated screen disposed between the rear edge of this wall and the bottom of the container, the opening in the container leading into said trapping compartment.

1,276,771. STORAGE BATTERY. HAROLD W. KA DELL, Edgeley, N. D. Filed May 7, 1917. Serial No. 166,927. (Cl. 204—29.)



In a storage battery of the class described, the combination of a jar, a plurality of positive plates positioned within the jar and comprising elongated comparatively thick bodies, said plates having bosses formed thereon adjacent one end of each plate, said bosses projecting for a considerable distance beyond their respective plates in one direction, although terminating evenly with the side surfaces of the plates in the opposite direction, means passing through said bosses for binding the same in engagement with each other for supporting the positive plates in parallel spaced relation, whereby the plates at their opposite ends will be unobstructed, negative plates comprising elongated thickened bodies interposed between said positive plates and extending below the bosses of the positive plates, said negative plates having bosses formed thereabove, the boss of each negative plate extending for a considerable distance beyond the one side surface of the plate although terminating evenly with the other side surface thereof and being positioned within the jar adjacent the unobstructed end portions of the positive plates, whereby the bosses of the negative plate will extend above the unobstructed ends of the positive plates, and securing means passing through the bosses of the negative plates for binding engagement with each other, whereby said negative plates will be properly spaced from the positive plates.

1,276,772. TELEPHONE-EXCHANGE SYSTEM. CHARLES W. KECKLER, Newark, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed May 24, 1917. Serial No. 170,603. (Cl. 179—70.)



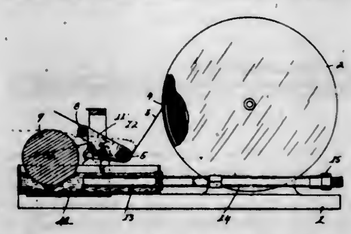
1. A telephone exchange system comprising a telephone line, a link circuit connected therewith, a supervisory signaling device, a supervisory relay and a secondary relay for the link circuit, an interrupter brought into circuit relation with the signaling device upon the deënergization of the supervisory and secondary relays to cause the intermittent operation of the supervisory signaling device to furnish a disconnect signal, and an operating circuit for the supervisory signaling device rendered effective upon the subsequent energization of the supervisory relay while the secondary relay is deënergized to cause the continuous operation of the supervisory signaling device to furnish a recall signal.

5. A telephone exchange system comprising a telephone line, a link circuit, a signaling device for the link circuit, an operating circuit for the signaling device established upon connection of the link circuit with the telephone line as a calling line to cause the continuous operation of the signaling device, an operator controlled switch, a relay energized upon the actuation of the switch, a shunt circuit for the signaling device established upon the actuation of the relay to stop the operation of the signaling device, a supervisory relay for the link circuit, and an interrupter included in the shunt circuit upon the deënergization of the supervisory relay to cause the intermittent operation of the signaling device to furnish a disconnect signal.

7. A telephone exchange system comprising a telephone line, a cord circuit connected therewith, a supervisory lamp for the cord circuit, a supervisory relay and a secondary relay for the cord circuit, an interrupter in circuit relation with the supervisory lamp when the supervisory and the secondary relays are deënergized to cause the intermittent glowing of the supervisory lamp to furnish a disconnect signal, an operating circuit for the supervisory lamp rendered effective upon the subsequent energization of the supervisory relay while the secondary relay is deënergized to cause the continuous glowing of the supervisory lamp to furnish a recall signal.

[Claims 2 to 4 and 6 not printed in the Gazette.]

1,276,773. MACHINE FOR MOISTENING ADHESIVE TAPE. FRANK KUHN and JAY A. HAND, Detroit, Mich., assignors to American Electrical Heater Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 14, 1918. Serial No. 222,287. (Cl. 91—14.5.)



1. The combination with a mounting for a reel of adhesive coated tape, of a tank for receiving a body of liquid, means for applying said liquid to the coated surface of the tape as the latter is drawn from the reel, an electric heater permanently associated with said tank, and a metallic tube extending from said heater exteriorly of the tank and terminally carrying a socket member.

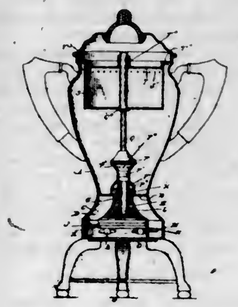
[Claim 2 not printed in the Gazette.]

1,276,774. COFFEE-PERCOLATOR. FRANK KUHN and FRANK E. SHAILOR, Detroit, Mich., assignors to American Electrical Heater Company, Detroit, Mich., a Corporation of Michigan. Filed Apr. 19, 1913. Serial No. 22,406. (Cl. 53—3.)

1. In a percolator, the combination with a receptacle for the granular material having a perforated bottom and substantially imperforate side walls, of a perforated top for said receptacle having an outwardly-extending flange provided with enlarged perforations for drainage of the overflow.

2. In a percolator, the combination with a receptacle for the granular material, having a perforated bottom and side walls imperforate in their lower portion, having a series of drain perforations near the top, a perforated cover for said receptacle fitting within the same, and an outwardly-extending flange upon said cover having a series of drain apertures therein.

3. In a percolator, the combination with a receptacle for the liquid having a hot-well in the bottom thereof, of a font comprising a tube with the lower end thereof registering with said hot-well, a receptacle for the granular material sleeved upon said tube and seated on a shoulder thereon, the bottom of said receptacle being



perforated and the side walls being imperforate in the lower portion thereof, and a perforated cover for said receptacle having an outwardly-extending flange perforated to form overflow drain apertures.

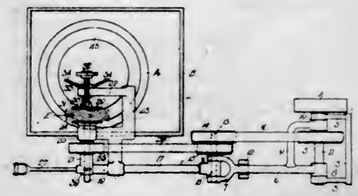
1,276,775. TEEING-PLATFORM. GEORGE H. LAMBERT, Asheville, N. C. Filed Mar. 19, 1918. Serial No. 223,304. (Cl. 46—4.)



2. A teeing platform, comprising a rigid frame having side members and end members, a tee-supporting strip having one end fixed to one of the end members, a movable bar arranged transversely in the frame and having the other end of the strip secured to it, and a tensioning device interposed between the said bar and the adjacent end member of the frame.

[Claims 1, 3, and 4 not printed in the Gazette.]

1,276,776. MACHINE FOR GRINDING GLASS DISKS. GEORGE A. LEEKS, Hamilton, Ontario, Canada. Filed Nov. 17, 1917. Serial No. 202,663. (Cl. 51—3.)

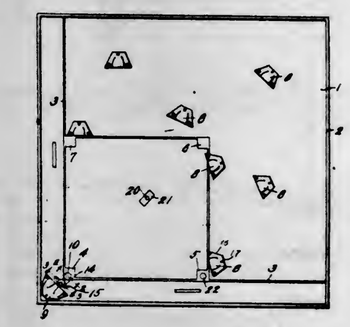


1. In a machine of the class described, the combination with a horizontal rotating mill, of a first shaft journaled in a rigid bearing, and actuating means therefor, a second shaft journaled in a bearing, a stationary arm connecting the two bearings, a vertically swingable arm

hingedly secured to the second shaft, bearings rigid with the free end of said arm, a third shaft journaled in said bearings, a disk rigid with one end of the third shaft, a hand screw threaded through an arm integral with said bearings, a second disk loose on one end of said screw, and disposed opposite to and concentric with the first disk, pulleys rigid with all said shafts, and belts connecting the pulleys, substantially as described.

2. In a machine of the class described, the combination with a horizontal rotating mill, of a vertically swingable arm, bearings rigid with the free end of said arm, a shaft journaled in the bearings, a disk rigid with one end of the shaft, a rod threaded through an arm integral with said bearings, and provided with a hand wheel, a second disk loose on one end of said rod and disposed opposite to and concentric with the first disk, a winged nut threaded on said rod against the arm on the bearings, a cable secured to one end of said bearings and passed over pulleys, and a counter weight suspended from the opposite end of the cable, and means for actuating said shaft.

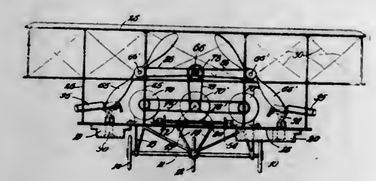
1,276,777. BASE-BALL GAME. CHARLES W. LEWIS, Tampa, Fla. Filed Apr. 1, 1918. Serial No. 226,033. (Cl. 46—62.)



1. A game of the class described comprising a board, a stationary bat carried by said board, an umpire plate, a pivot pin supporting said plate in the rear of said bat, said umpire plate provided with a plurality of laterally extending wings adapted to extend upon the opposite sides of said bat for indicating strikes, and a plurality of pockets carried by said board and adapted to receive a ball as the same rebounds from said bat.

[Claims 2 to 4 not printed in the Gazette.]

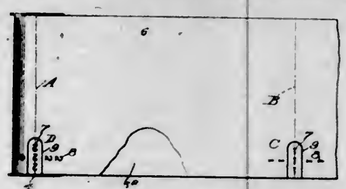
1,276,778. AEROPLANE. PAUL LOVECZKY, Brooklyn, N. Y. Filed Mar. 13, 1918. Serial No. 222,088. (Cl. 244—14.)



1. In an aeroplane, the combination with a wheeled platform, a plurality of motors on said platform, driving connections engaging between said motors, a horizontal shaft mounted above said motors centrally thereof, driving connections between said motors and said horizontal shaft, a pair of twin propellers arranged parallel to said shaft, said shaft being in sections, clutch elements arranged upon each section of said shaft, and means for operating said clutch elements whereby said propellers may be put in motion.

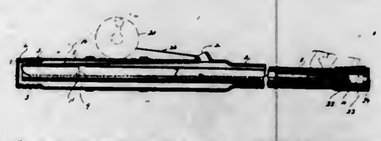
[Claim 2 not printed in the Gazette.]

1,276,779. PHOTOGRAPHIC FILM. FRANK W. LOVEJOY, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Aug. 13, 1917. Serial No. 185,880. (Cl. 95—9.)



A film cartridge embodying a sensitive medium associated with a strip of material adapted to be wound past the sight opening of a film camera and being provided on its rear or outer surface with two intersecting lines of repeated numbers for each exposure area of the film, said lines of numbers extending at right angles to each other with one of them parallel with the longitudinal edges of the strip.

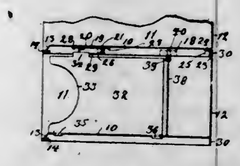
1,276,780. FISHPOLE. AUGUST L. LUCAS, New Haven, Conn. Filed Jan. 30, 1917. Serial No. 145,386. (Cl. 43—16.)



1. In a device of the character described, the combination with a hollow handle section, having reel retaining devices thereon, and an opening through one side thereof, of a plurality of sections telescoping into said handle section, and when so assembling one end of each of said sections passes said opening and when assembled said ends are at a point in the rear thereof; a locking joint block for each telescoping section for holding said section in alinement, said block having longitudinal grooves in two sides thereof; and a detent fixed at one end in one of said grooves.

[Claims 2 to 6 not printed in the Gazette.]

1,276,781. ROUTING OR FILING CASE. ALVA L. LYNDS, Akron, Ohio. Filed Nov. 22, 1917. Serial No. 203,394. (Cl. 211—36.)

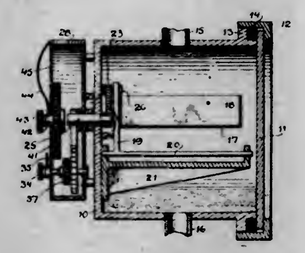


1. The combination with a sectional unit for use in a routing or filing case, comprising a lower, rear and end walls, a coupling member extending between the upper portions of said end walls and constituting a socket, said coupling member provided with a series of spaced apart slots, a coupling member secured to the under face of the lower wall and adapted to constitute a rib or ridge arranged to be inserted in the socket coupling member of the next lower unit, the lower wall of each unit provided with two series of slots the members of each of which are spaced from each other and the members of the two series in respective transverse alinement and in vertical alinement with the slots in the socket forming coupling member at the top of each unit, and a partition comprising a sheet of suitable material arranged between said lower wall and said upper coupling member and provided with appropriately-disposed projecting lugs each of which is arranged to seat in one of the slots in each mentioned series.

4. The combination with a sectional unit for use in a routing or filing case, comprising lower, rear and end walls, a coupling member extending between the upper portions of said end walls and constituting a socket, a coupling member secured to the under face of the lower wall of said unit and adapted to be received in the socket forming coupling member of the next lower unit, said lower wall provided with two series of slots the members of which are spaced from each other and the members of the two series in respective transverse alinement, said lower wall further provided with a longitudinally-extending series of spaced slots positioned rearwardly from the mentioned series of slots, the clips mounted on the inner faces of the end walls below said lower wall, a partition comprising a sheet of suitable material arranged between said lower wall and said upper coupling member and provided with appropriately-disposed projecting lugs each of which is arranged to seat in one of the slots in each mentioned transverse series and a second longitudinally-positioned partition mounted in said longitudinal slots and engaging said clips in the end walls for limiting the depth of the compartments bounded by said first mentioned partitions.

[Claims 2 and 3 not printed in the Gazette.]

1,276,782. MEASURING AND INDICATING DEVICE. EDWARD M. C. MCALPINE, New York, N. Y., assignor to McAlpine Milking Machine Company, Chateaugay, N. Y., a Firm consisting of Edward M. C. McAlpine, Clarence W. Sprague, and Roscoe C. Sprague, Chateaugay, N. Y. Filed Apr. 18, 1917. Serial No. 162,829. (Cl. 73—28.)

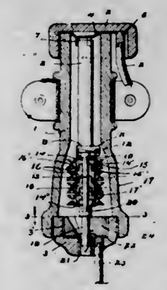


1. An apparatus of the kind described comprising an inclosing casing having an inlet at the top and a suitable outlet, a shaft journaled in one end of the casing, an indicator connected with and operated by the shaft, an oscillating vessel located beneath the inlet and divided longitudinally to form two similar compartments, a dog carried by the aforesaid shaft, an oscillating arm serving as a support for the vessel, and a connection between the arm and the dog whereby the oscillations of the vessel and arm are communicated to the dog.

4. An apparatus of the kind described comprising an inclosing casing having an inlet at the top and a suitable outlet, a shaft journaled in the casing, an upwardly extending arm on the shaft, a vessel carried by and oscillating with the arm, said vessel being located beneath the aforesaid inlet and divided longitudinally to form two similar compartments, a second shaft journaled in the end of the casing, an indicator operated by the shaft, a dog secured to the shaft and having lugs spaced apart and arranged in the path of the aforesaid arm, and means for limiting the movement of the dog.

[Claims 2 and 3 not printed in the Gazette.]

1,276,783. LIGHTNING-ARRESTER. JOHN ROBERT MCFARLIN, Philadelphia, Pa., assignor to Electric Service Supplies Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 14, 1917. Serial No. 180,495. (Cl. 175—30.)



1. A lightning arrester comprising a housing containing a fluid chamber having an outlet, a conductor provided with engaging means in said housing, a resistor engaged by said means, conducting and insulating devices forming one or more air gaps in series with said resistor, means comprising an insulating bolt whereby said devices are tied to said resistor, a conducting terminal connected by said bolt in series with said gap or gaps, and a conductor connected with said housing so as to form an air gap with said terminal in said outlet.

8. A lightning arrester comprising a housing containing a fluid chamber having an outlet at an end thereof, a conductor provided with engaging means fixed at the opposite end of said housing, a resistor engaged by said means so as to be movable relatively thereto by contraction and expansion, conducting and insulating devices forming one or more air gaps in series with said resistor, means comprising an insulating bolt passing through said devices whereby they are fixed to said resistor, a stem providing a conducting terminal connected with said bolt in series with said gap or gaps, said stem having a part thereof connected in bearing relation with a part of said housing, and a conductor connected with said housing so as to form an air gap with said terminal in said outlet.

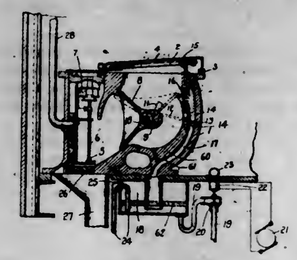
14. In apparatus of the character described comprising an insulating casing containing an air chamber, a conductor fixed in said chamber, said conductor having means for frictionally engaging a detachable conductor, a conductor comprising non-inductive resistance detachably connected with said conductor first named, a set of conductors separated by insulating means so as to form air gaps, one of said sets of conductors being electrically connected with said conductor second named, a stem connected to one of said sets of conductors, said case having internal means for holding said stem and set of conductors in place, and a conductor fixed in said case, said conductor last named having a member coöperating with said stem to form an air gap in an outlet from said chamber.

[Claims 2 to 7 and 9 to 13 not printed in the Gazette.]

1,276,784. CLOSET. ALEXANDER MCGARY and JOHN P. SUNDERLAND, New York, N. Y., assignors, by mesne assignments, to Gould Coupler Company, a Corporation of New York. Original application filed Aug. 4, 1913, Serial No. 782,781. Divided and this application filed Nov. 24, 1913. Serial No. 802,638. (Cl. 4—20.)

1. The combination of a closet seat, a heater, a pan beneath the seat adapted to tilt to and normally remain

in a position to discharge excreta into the heater, and means for automatically throwing the pan to operative position upon a depression of said seat.



5. The combination of a closet seat, a tilting pan beneath said seat adapted to receive and discharge excreta, an electric heater in operative relation to said pan, and means automatically tilting said pan to and normally holding it in a position to discharge the same into the heater upon one leaving the seat.

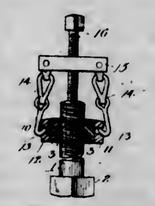
10. In a device of the class described, an electrical heater for receiving and heating excreta, means for automatically turning on the current to said heater after the excreta has been received thereby, and means for automatically turning off the current of said heater after a predetermined interval of time.

15. In a device of the class described, a closet seat, an electric heater for receiving and heating excreta, a circuit for energizing said heater, said circuit comprising a time-controlled switch, a circuit operating to set said time-controlled switch and energized upon one leaving the seat, a pan below said seat, means to revolve said pan upon one leaving said seat, and a switch in said last named circuit operated by the revolving of the pan.

17. In a device of the class described, a hollow bowl having openings in the top and side, and a hopper mounted within said bowl to swing to a position to cover either opening, said bowl having a drain opening in its lower wall whereby liquid poured thereinto while the hopper covers the side opening, will be discharged.

[Claims 2 to 4, 6 to 9, 11 to 14, 16, and 18 to 20 not printed in the Gazette.]

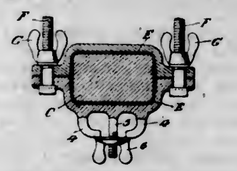
1,276,785. NUT. EUGENE H. MCGINNIS, New York, N. Y. Filed Sept. 22, 1917. Serial No. 192,646. (Cl. 85—32.)



1. The combination with a hegaxonal nut formed of a plurality of sections adapted to be placed together to form a complete nut, and a collar of hexagonal shape to fit thereover to hold said nut sections in their assembled positions, and means for yieldingly retaining said collar around said nut sections and against longitudinal movement relative thereto.

2. A nut structure comprised of sections of equal size to form a complete nut when assembled, and each section provided on its outer surface with a projection, a removable collar of similar peripheral shape with said nut and adapted to fit around the same, and provided with holes through the wall thereof to receive the projections on the nut sections to removably hold said nut sections in position, and means for engaging said collar in said holes for removing the same from said nut.

1,276,786. FASTENING MEANS. WILLIAM H. MCLAUGHLIN, Hartford Conn., assignor to Cassius S. Chase, Hartford, Conn. Filed Apr. 21, 1917. Serial No. 163,727. (Cl. 24—241.)

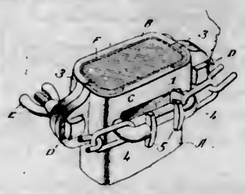


1. A plate having two hooks and a screw-threaded part projecting from said plate, in combination with a keeper freely mounted on said part and a nut screwing on the end of said part for holding said keeper in proper position.

2. A plate having two hooks and a bolt passing through said plate and projecting between the free ends of said hooks, in combination with a keeper freely mounted on said bolt and having arms adapted to close the spaces between the free ends of said hooks and said bolt, said plate and said keeper being provided with a cooperating lug and recess to prevent the turning of said keeper when held in its normal position longitudinally of said bolt, and a nut screwing on the end of said bolt and adapted to hold the keeper in such position.

3. A plate having two projections, an element having engagement with said plate and projecting between the free ends of said projections, in combination with a keeper mounted on said element, adapted to be moved thereon toward or from said plate and to be turned on said element, and having arms in normal position closing the spaces between the free ends of said projections and said element, said plate and said keeper being provided with a cooperating lug and recess to prevent the turning of said keeper when held in its normal position, and means working on said element to hold said keeper in such position.

1,276,787. CONNECTING DEVICE. WILLIAM H. MCLAUGHLIN, Hartford, Conn., assignor to Cassius S. Chase, Hartford, Conn. Filed May 21, 1917. Serial No. 169,948. (Cl. 24—85.)

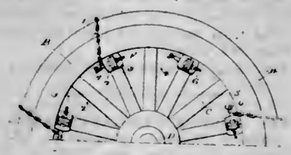


1. A plate provided with a longitudinal slot and having the ends of its inner face recessed, in combination with removable plates adapted to fit in said recesses and provided with parts adapted to project through said slot.

6. A pair of clamp plates and means for holding said plates together on some intervening object, one of said plates being provided with a longitudinal slot and having the end portions of its inner face recessed and provided with shoulders, in combination with removable plates corresponding in shape to, and adapted to fit in, said recesses respectively and provided with hooks adapted to project through said slot, said removable plates being held in position by the article on which said clamp plates are normally mounted.

[Claims 2 to 5 not printed in the Gazette.]

1,276,788. FASTENING MEANS. WILLIAM H. MCLAUGHLIN, Hartford, Conn., assignor to Cassius S. Chase, Hartford, Conn. Original application filed Apr. 21, 1917, Serial No. 163,727. Divided and this application filed Mar. 26, 1918. Serial No. 224,771. (Cl. 24—73.)

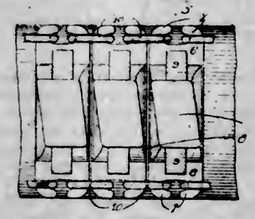


3. A plate having projections and a screw-threaded stem, in combination with a screw-threaded member screwing on said stem and adapted to engage simultaneously two of such projections.

4. A plate having projections and a stem, in combination with means moving on said stem and having substantially rigid engagement therewith prevening accidental movement thereon, said means being adapted to simultaneously engage two of such projections.

[Claims 1 and 2 not printed in the Gazette.]

1,276,789. TIRE-SHOE. ABRAM MACMILLAN, Chicago, Ill. Filed June 9, 1917. Serial No. 173,700. (Cl. 152—16.)

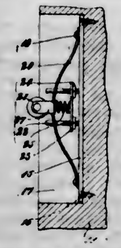


5. A shoe comprising a concave plate, arms thereon, hooks integral therewith disposed in the plane of said arms, a reinforced spirally twisted heel piece on said concave plate, the outer end of which is disposed at an angle with respect to the sides of said concave plate, and means engaging said hooks adapted to permit a number of similarly constructed shoes to be removably connected together to form a flexible tire chain adapted to be mounted around the periphery of a tire casing before inflation thereof and be held in position on said tire casing when the tire casing is inflated.

6. A tire shoe for use upon a tire casing comprising a plurality of removably connected unitary metal shoes consisting of a concave plate, arms formed thereon, hooks integrally formed on said arms, and a heel integrally formed on the outer portion of said concave plates.

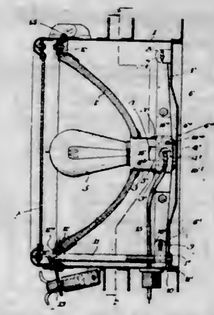
[Claims 1 to 4 not printed in the Gazette.]

1,276,790. SASH-HOLDER. JOHN E. MALKIN, New York, N. Y. Filed Sept. 8, 1917. Serial No. 190,294. (Cl. 16—54.)



In a device of the character described, the combination of a window and its frame, said frame having a channel in one side thereof and a recess provided in said window, a plate secured rigidly in the bottom of said recess, and outwardly bowed springs movably attached to said plate for outward movement toward the open end of said recess a roller carried by said spring member and adapted to engage the channel in the window frame, threaded rods, a plate adjustable at each of its ends upon said threaded rods, a nut for adjusting said plate and locking it in said adjusted position, and a spring between the adjustable plate and roller for forcing the roller and spring member outwardly.

1,276,791. LIGHT-FOCUSING MECHANISM. WALTER S. MAYER, Philadelphia, Pa., assignor to Electric Service Supplies Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 6, 1917. Serial No. 195,050. (Cl. 240—44.)



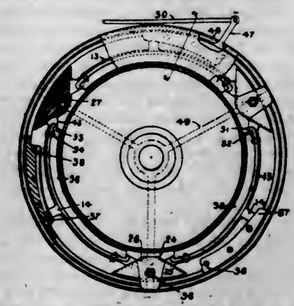
1. The combination of a case, a reflector supported therein, a lamp socket, a lamp carried by said socket means for supporting said socket and holding said lamp in the axis of said reflector, a lever connected with said socket for moving it to adjust the position of said lamp, and a bolt journaled on opposite sides of said lever and having a threaded connection therewith for adjusting it.

2. The combination of a case, a reflector therein, a lamp socket provided with laterally extending lugs adapted for supporting it and passing wires, a lamp carried by said socket in the axis of said reflector, means in the axis of said reflector for guiding said socket, and means engaging said lugs for moving said socket in its guiding means.

7. The combination of a reflector having an axial guide, a lamp socket movable in said guide, said socket having laterally extending lugs adapted for the passage of conductors, yokes engaging said lugs, and a lever having a yoke within which said socket is disposed, the yoke of said lever having a rocking connection with said yokes first named.

[Claims 3 to 6 not printed in the Gazette.]

1,276,792. BAND-BRAKE. THOMAS ROY MORSE, Bexley, near Sydney, New South Wales, Australia. Filed Nov. 15, 1917. Serial No. 202,180. (Cl. 74—13.)

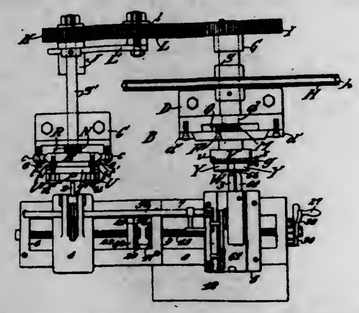


3. A brake comprising a revolving drum, relatively stationary shoes mounted exteriorly of said drum and

capable of occupying two extreme positions, one position in which they engage said drum and another in which they are disengaged with respect to said drum, a ring encircling said drum and supported for partial rotation, said ring being capable of occupying two extreme positions, and means interposed between said shoes and ring whereby said shoes will be caused to occupy one extreme position or the other according as said ring occupies one position or the other.

[Claims 1, 2, and 4 not printed in the Gazette.]

1,276,793. ENGRAVING-MACHINE. EARL R. MULCHAHEY, Providence, R. I. Filed Apr. 27, 1917. Serial No. 164,878. (Cl. 33—23.)



20. In an engraving machine, the combination with means for supporting a pattern and the work to be engraved therefrom, of means to reciprocate the pattern- and work-supporting means, two slides adjustable in relation thereto, a rock-shaft connecting the slides, a lever pivoted on one of the slides to rock the shaft, a stylus supported on said lever, a tool-holder adjustably supported on the other slide, a graving-tool slidably supported in the tool-holder, a spring to press the tool against the work, a gage on the tool-holder adapted to bear against the work to regulate the position of the tool in relation thereto, and means connecting the rock-shaft to control the movement of the tool under the action of the stylus.

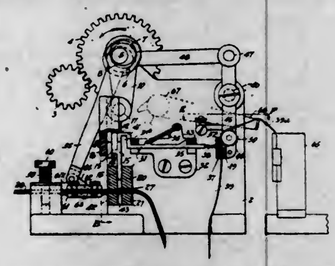
21. In an engraving machine, the combination with means for supporting a relief-pattern and the work to be engraved therefrom, of means to reciprocate the pattern- and work-supporting means, two slides adjustable laterally in relation to the pattern and work, an oscillating stylus on one of the slides, a reciprocable tool on the other slide, means connecting the stylus to actuate the tool under the influence of the relief-design on the pattern, and a gage on the tool-slide adapted to bear against the face of the work to maintain the tool normally away from contact therewith.

22. In an engraving machine, the combination with means for supporting a relief-pattern and the work to be engraved therefrom, of means to reciprocate the pattern- and work-supporting means, two slides adjustable laterally in relation to the pattern and work, an oscillating stylus on one of the slides adapted to follow the contour of the pattern, a rock-shaft extending between the slides, means connecting the stylus to rock the shaft, a tool-holder slidable on the other slide to adjust it toward or away from the work, a tool slidable in the holder, means connecting the rock-shaft to slide the tool under the action of the stylus, and means for rocking the shaft to withdraw the stylus from the pattern when the tool-holder is drawn away from the work.

23. In an engraving machine, the combination with means for supporting a relief-pattern and the work to be engraved therefrom, of means to reciprocate the pattern- and work-supporting means, two slides adjustable across the face of the pattern and work, an oscillating stylus on one of the slides adapted to follow the contour of the pattern, a rock-shaft extending between the slides, means connecting the stylus to rock the shaft, a tool-holder adjustable on the other slide toward and away from the work, a tool slidable in the tool-holder, means connecting the rock-shaft to slide the tool in its holder under the action of the stylus, a lever on the rock-shaft, and means on the tool-holder for rocking the lever to withdraw the stylus from the pattern when the tool is drawn clear back from the work.

[Claims 1 to 19 not printed in the Gazette.]

1,276,794. PERFORATING APPARATUS. DONALD MURRAY, London, England, assignor to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed Nov. 24, 1915. Serial No. 63,149. (Cl. 164—114.)



1. A perforated tape duplicating machine comprising master-tape feed mechanism, punch mechanism through which the tape to be perforated may be fed, said punch mechanism comprising a plurality of punches and a driver therefor, a plurality of interponent members adapted to engage said master tape and also to be moved into and out of interposition between said driver and punches selectively, said master-tape feed mechanism adapted to move said master tape opposite the ends of said interponent members and comprising means for moving the portion of the tape so opposite the ends of the interponent members bodily toward and from said interponent members, whereby interponent members opposite blank portions of such master-tape are moved under selective control of such master tape, and means for returning interponent members so moved upon retreat of the master-tape.

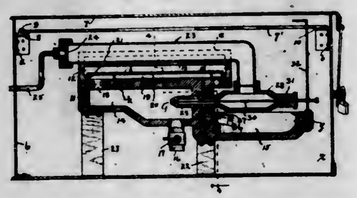
4. A perforated tape duplicating machine comprising punch mechanism through which the tape to be perforated may be fed, said punch mechanism comprising a plurality of punches and a reciprocating driver therefor, a plurality of interponent members adapted to be moved into and out of position between said driver and punches, said interponent members comprising feeler portions, a pivoted master-tape carrier, a driving shaft, eccentrics on said driving shaft and means operated thereby adapted to operate said driver and also to oscillate said master tape carrier, and thereby to move the master tape periodically toward and from the feeler portions of the interponent members, and feed mechanism for the master tape.

8. A perforated tape duplicating machine comprising power operated means for perforating tape, such perforating means comprising punches and interponent members adapted for selective control and adapted to determine particular punches of such punch mechanism to be operated, and means for pressing perforated master tape against said interponent members and thereby operating such interponent members.

11. A perforated tape duplicating machine comprising perforating means itself comprising a power operated driver, a plurality of punches, and interponent members adapted to be interposed functionally between such driver and punches or to be withdrawn from such interposing position, such interponent members adapted for selective control and means for pressing perforated master tape against said interponent members and thereby moving such interponent members as are opposite blank portions of the master tape, and leaving stationary such interponent members as are opposite perforations of the master tape.

[Claims 2, 3, 5 to 7, 9, and 10 not printed in the Gazette.]

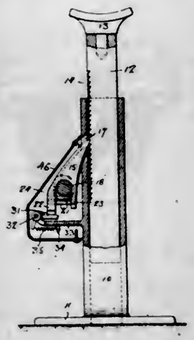
1,276,795. CAMP-STOVE. WILLOUGHBY C. NELSON, Omaha, Nebr., assignor of one-half to C. W. Conkling, Tekamah, Nebr. Filed Feb. 20, 1918. Serial No. 218,322. (Cl. 158—65.)



1. A stove, comprising, in combination with a casting providing a priming receptacle and a mixing chamber having an air intake, and provided with a ridge above the mixing chamber, an apertured partition mounted on the ridge providing a second mixing chamber in communication with the first named mixing chamber, a foraminous cap above the second mixing chamber, said cap being provided with a groove and mounted on the casting, a tubular member for receiving liquid fuel disposed in the groove of the foraminous cap, a container in communication with the tubular member, said container being disposed above the priming receptacle and having a discharge port communicating with the first named mixing chamber, and means movable within the container for controlling the discharge port thereof.

[Claims 2 to 4 not printed in the Gazette.]

1,276,796. LIFTING-JACK. RICHARD T. NEWTON, Nutley, N. J. Filed Sept. 20, 1915. Serial No. 51,643. (Cl. 254—110.)



1. A lifting jack comprising a jack bar, a pawl and ratchet mechanism for operating the same, said mechanism comprising a plurality of single-tooth working pawls, and a rotary member moving said pawls into intermittent, successive, operative engagement with the ratchet on continued rotation of said member in one direction, the operative engagements of said pawls with the ratchet slightly overlapping each other, for the purpose described.

4. A lifting jack comprising a jack bar, a pawl and ratchet mechanism for operating the same, said mechanism comprising a plurality of working pawls, a shaft continuously rotatable in one direction to operate the same, spring means temporarily engaging the pawls during their downward movement to press their dogging ends into ratchet engaging position, together with catch means engaging the pawls during the pressure of said spring means when said shaft is rotating in one direction, said catch serving to prevent the ratchet engaging movement of the pawls while under the influence of said spring means.

7. A lifting jack comprising a jack bar, a pawl and ratchet mechanism for operating the same, said mechanism comprising a plurality of single-tooth pawls, a continuously rotatable member for actuating the latter, a spring-pressed lever lying in the path of the free ends of the pawls and temporarily engaging the latter during the non-working travel of the pawls to press the latter into ratchet-engaging position on the rotation of the actuating shaft in one direction, together with a catch on said lever engaging said pawl ends and serving to hold the pawls temporarily out of engagement with the ratchet on the rotation of the shaft in the opposite direction.

[Claims 2, 3, 5, and 6 not printed in the Gazette.]

1,276,797. STEERING-WHEEL. RICHARD T. NEWTON, New York, N. Y. Filed Apr. 11, 1917. Serial No. 161,299. (Cl. 74—33.)



A steering wheel having a hub adapted to fit upon a steering post, a spider uniting said hub to the wheel rim, portion of said spider being rigid wth the hub and another portion making joint therewith when the wheel is in normal position but being freely detachable therefrom, a hinge connection between the fixed spider element and the wheel rim member supported by the movable spider element, and latching means for holding said movable spider element in fixed position when engaged with the hub.

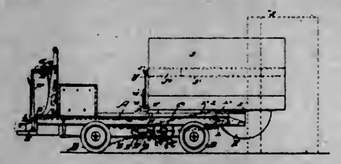
1,276,798. GRAVE-MARKER. WILLIAM F. NORMAN, Nevada, Mo. Filed Aug. 21, 1917. Serial No. 187,455. (Cl. 40—125.)



The herein described grave marker including a supporting member and a card carrying member, said card carry member being made from a single sheet of material divided centrally and longitudinally and bent so that the bent edge forms the top thereof, the front wall being provided with a slight opening, the rim of which is outwardly depressed to cooperate with the rear wall to provide a receptacle for a card index and a transparent covering, there being formed upon one side edge of the front wall a flange for embracing the corresponding edge of the rear wall, both the front and rear wall centrally thereof and

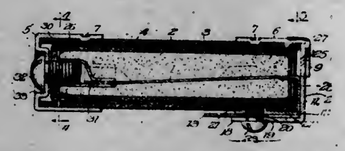
at points above and below, the opening in the front wall being apertured, and fastening devices in said apertures for attaching the card carrying member to the support.

1,276,799. INDUSTRIAL TRUCK. BURTON ASHLEY NORTHRUP and THOMAS K. CALDER, Detroit, Mich. Filed Feb. 23, 1917. Serial No. 150,390. (Cl. 254—3.)



A motor propelled and load hoisting and discharge truck comprising a truck frame, traction wheels supporting the frame, a titling platform hinged to the rear end of the frame and having its front portion normally resting upon and supported by the same, a counter-shaft extending across the truck frame gearing between the counter-shaft and the platform for tilting the latter, a motor mounted on the truck frame, relatively short counter-shafts disposed at opposite sides of the truck frame and independently geared to the shaft of the motor, gear elements arranged in pairs and loose on the motor driven counter-shafts, power transmitting means between one of the gear elements and a traction wheel, separate power transmitting means between the other gear element and the counter-shaft geared to the platform, clutch members slidably interlocked with the relatively short counter-shafts and disposed between the gear elements for engaging one or the other thereof, a rock shaft located between the clutch members and having opposite arms connected with the same and operating mechanism for actuating the rock shaft to effect simultaneous movement of the clutch members.

1,276,800. ELECTRIC FUSE. ELMER L. OGLE, Chicago, Ill., assignor to Federal Sign System (Electric), New York, N. Y., a Corporation of New York. Filed Apr. 23, 1917. Serial No. 163,811. (Cl. 175—273.)



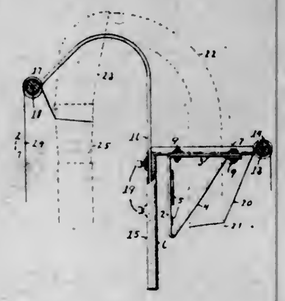
1. An electric fuse having a fusible element, a casing, an end cap for the casing, means for connecting the fusible element to the cap, said means including a metallic tube, into the end of which the end of the fusible element is inserted, the tube being collapsed and pressed onto the fusible element to securely grip it, and means for fastening said tube to said end cap.

3. An electric fuse having a casing, an end cap therefor, a fusible element, a metallic tube, one end of which contains and is collapsed onto to grip the fusible element, the opposite end of the tube being cylindrical and internally threaded, and a screw passing through the end cap and screwing into said tube.

[Claim 2 not printed in the Gazette.]

1,276,801. SILO ATTACHMENT. LESTER E. OHMART, Hope, Kans. Filed Mar. 9, 1918. Serial No. 221,432. (Cl. 254—142.)

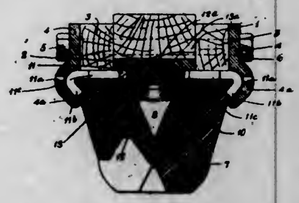
1. The combination of a pair of L-shaped brackets each comprising a horizontal leg and a vertical leg and the vertical leg being upturned to form a diagonal brace, cross-braces rigidly securing said brackets together in spaced relation, a second pair of similarly formed brackets formed with slots in their horizontal legs, bolts extending through said slots and into the horizontal legs of the first-named brackets, the vertical legs being in spaced parallel relation and adapted to bear against the outer and inner face of a wall, and axle hinged to the free end of one of the horizontal legs of the second-named pair of brackets and supported on the free end of the other bracket of said pair and a spool-shaped pulley mounted on said axle.



3. The combination of a frame formed with outwardly projecting spaced pulley-supporting arms and formed to fit against the outer face of a wall, a pair of brackets formed to fit against the inner face of the wall and adjustably secured to said frame and formed with vertical sockets, a pulley removably supported on the outer ends of said arms and spanning the space therebetween, a pair of inwardly extending arms having verical stems slidably fitting in the respective sockets, set-screws for holding said stems in said sockets, and a pulley spanning the inner ends of said last-named arms.

[Claim 2 not printed in the Gazette.]

1,276,802. TIRE-SECURING MEANS. MAX CYRUS OVERMAN, New York, N. Y. Filed Oct. 6, 1916. Serial No. 124,100. (Cl. 152—7.)

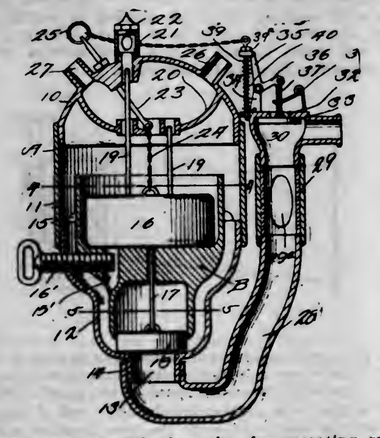


1. In combination with a tire having a recessed base, plate-means secured to the tire in said recesses having their ends at the sides of the tire and having extensions directed longitudinally of the tire, the respective recesses in the tire fitting said extensions; and wheel-flanges at the sides of the tire clamping the ends of said plates.

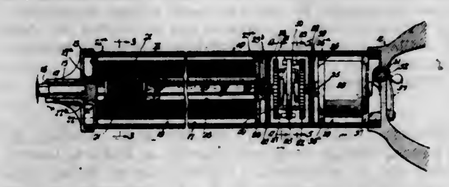
[Claims 2 to 8 not printed in the Gazette.]

1,276,803. MILKING-MACHINE. CARL H. PAARMANN, Delmar, Iowa. Filed Sept. 12, 1916. Serial No. 119,730. (Cl. 31—97.)

A milking apparatus including a vacuum casing having ports in its upper portion for connection with teat engaging members, a vacuum conduit in communication with said casing, a valve for closing said conduit, a chamber in the casing adapted to receive discharge of milk from the ports and having an outlet, a float in the chamber and connected with the valve for operating same, and means for varying flow of milk through said port.



1,276,804. ELECTRIC HAMMER. GEORGE M. PAINTER, Chicago, Ill. Filed July 20, 1917. Serial No. 181,897. (Cl. 172—126.)



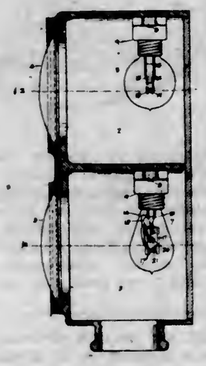
1. An electro-magnetic motor comprising a plurality of solenoids connected in series and arranged in longitudinal succession with a common axis, a core constituting a hammer, movable with respect to said solenoids, two commutators having a like number of segments, the number of solenoids exceeding one half of the number of segments of a commutator by a predetermined number, one half of the number of segments of one of said commutators being connected in succession to the solenoids, beginning at one end of the series, and the corresponding segments of the other commutator being connected in succession to the other side of said solenoids, but beginning at that one of the solenoids which is spaced from the same end of the series by a number of solenoids substantially equal to the said predetermined number, and each of the other half of the number of segments of the commutators being cross connected to the same solenoids successively, but in reverse direction and in opposite order.

2. An electro-magnetic motor comprising a plurality of solenoids connected in series and arranged in longitudinal succession with a common axis, a core constituting a hammer, movable with respect to said solenoids, two commutators having a like number of segments, the number of solenoids exceeding one half of the number of segments of a commutator by a pre-determined number, one half of the number of segments of one of said commutators being connected in succession to the solenoids, beginning at one end of the series, and the corresponding segments of the other commutator being connected in succession to the other side of said solenoids, but beginning at that one of the solenoids which is spaced from the same end of the series by a number of solenoids substantially equal to the said pre-determined number, and each of the other half of the numbers of segments of the commutators being cross connected to the same solenoids successively, but in reverse direction and in opposite order, a collector ring associated with each commutator and a rotative brush operatively connecting each collector ring with the segments of the associated commutator.

7. An electro-magnetic tool comprising a tubular casing, a tool holder at one end of the casing and a handle at the other end of the casing, a plurality of solenoids connected in series and arranged in longitudinal succession with a common axis within the casing, means providing rails within said solenoids, a core constituting a hammer reciprocable on said rails, spaced commutators having a like number of segments in the handle end of said casing, the number of solenoids exceeding one half of the number of segments of a commutator by a predetermined number, one half of the number of segments of one of said commutators being connected in succession to the solenoids, beginning at one end of the series, and the corresponding segments of the other commutator being connected in succession to the other side of said solenoids, but beginning at that one of the solenoids which is spaced from the same end of the series by a number of solenoids substantially equal to said pre-determined number, cross connection boards adjacent each commutator connecting the other half of the segments of the commutators to the same solenoids but in reverse direction and in opposite order, a collector ring fixed to the inner face of and associated with each commutator, a rotative shaft arranged in line with the axis of said solenoids, a disk fixed to said shaft between said commutators, brushes carried by said disk and operatively connecting each collector ring with the segments of the associated commutator, and means in said casing for rotating said shaft.

[Claims 3 to 6 not printed in the Gazette.]

1,276,805. INCANDESCENT-LAMP SIGNAL. ELI BURTON PARSONS, Rochester, N. Y., assignor to General Railway Signal Company, Gates, N. Y., a Corporation of New York. Filed June 10, 1915. Serial No. 33,348. (Cl. 240—22.)



1. An incandescent lamp signal comprising a casing, a lens sustained thereby, and an incandescent light source in the casing behind the lens and having duplex or plural filament portions normally in the same lighting circuit, both lying in substantially the same general horizontal plane, one filament portion having a greater resistance than the other and both disposed symmetrically about a point at substantially the focal center of the lens.

[Claims 2 and 3 not printed in the Gazette.]

1,276,806. RETAINING-CLIP FOR BRASSIÈRES AND THE LIKE. CHARLES PFANNENMULLER, New York, N. Y. Filed Nov. 17, 1917. Serial No. 202,471. (Cl. 24—78.)

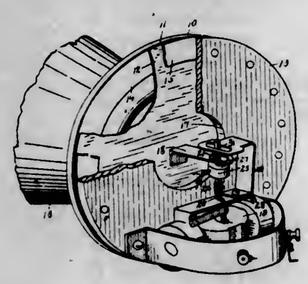


3. A clip for brassières and the like comprising a body having a lower stud attaching means, an upper clamping means adapted to grip and press a pair of laterally directed tapes tightly against the body and hold them detachably in place, and a pair of central transverse slots through which may be slipped over a third tape so that the clip is held firmly but adjustably.

5. A clip for brassières and the like comprising a sheet-metal metal body having a lower stud-engaging slot, an upper gripping means between which and the clip body a pair of transversely directed tapes may be slipped and will be frictionally held, and a centrally disposed gripping device with which a third tape may be frictionally engaged, said third tape being therefore adjustable.

[Claims 1, 2, and 4 not printed in the Gazette.]

1,276,807. ALARM-SIGNAL. ALEXANDER N. PIERMAN, Long Beach, N. Y. Filed July 1, 1916. Serial No. 107,081. (Cl. 116—1.)



6. In an alarm signal, an electric motor, a rotary shaft, an oscillatory extension on said shaft, a coil spring for connecting said shaft and extension, a slotted member which receives the free end of said extension, vibratory means secured to said slotted member, and guide means for said shaft extension supported separately from said vibratory member, substantially as set forth.

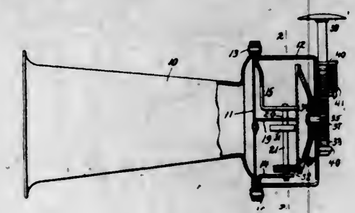
[Claims 1 to 5 and 7 not printed in the Gazette.]

1,276,808. SIGNAL OR ALARM APPARATUS. ALEXANDER N. PIERMAN, Newark, N. J. Filed Dec. 7, 1916. Serial No. 135,516. (Cl. 116—1.)

1. In signal apparatus, vibratory means, means for imparting vibration thereto including a shaft with a loose bearing at one end, and means in the neighborhood of said bearing and between the ends of the shaft for imparting rotation to said shaft.

3. In signal apparatus, an unbalanced rotary shaft, vibratory means, means whereby said vibratory means is vibrated upon rotation of the shaft, guide means for the shaft, and a universal bearing for said shaft at one end thereof and means applied to said shaft between its ends for imparting rotation to said shaft.

4. In signal apparatus, a vibratory member, an unbalanced rotary member comprising a rigid shaft having a universal mounting at one end, stationary guiding means for causing the rotary member to oscillate in a plane and deliver hammer blows to the vibratory member, and means applied to said shaft between its ends for imparting rotation to said shaft.



5. In signal apparatus, a diaphragm having a slotted anvil block thereon, a slotted guide supported away from said diaphragm, an unbalanced shaft passing through said slots, a loose bearing for the other end of the shaft, a pinion on said shaft near the loose bearing, a disked crown gear meshing with said pinion and means including a hand-piece for imparting rotation to said crown gear.

6. In signal apparatus, the combination of a vibratory member and an unbalanced rotary hammer for imparting vibration thereto, said hammer comprising a substantially rigid shaft and a weight and a pinion, said shaft being loosely journaled at one end and having a mounting away from the loosely journaled end permitting the shaft to oscillate, and means coacting with said pinion to rotate said hammer.

[Claim 2 not printed in the Gazette.]

1,276,809. SEPARATION OF METALS. GEORGE W. PAWEL, Hudson Falls, and EDWARD A. REKATE, Lancaster, N. Y., assignors to United States Nickel Company, New Brunswick, N. J., a Corporation of New Jersey. Filed Sept. 12, 1917. Serial No. 190,978. (Cl. 75—18.)

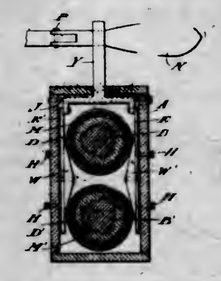
1. The method of preparing a copper-nickel matte, which comprises obtaining a matte from the ore, burning out the excess of sulfur but maintaining the sulfur as sulfids, diluting the resulting matte with about one-third of its weight of desulfurized copper, and thereafter recovering the metallic values of the diluted matte.

5. The method of treating metals, which comprises obtaining a matte in which the sulfur is combined in a form soluble in sulfuric acid, diluting the resulting matte with about one-third of its weight of residues obtained hereinafter, treating the matte with hot, strong sulfuric acid, evaporating the solution and obtaining nickel therefrom by roasting and reducing, absorbing the SO_3 gases in water developed in roasting, to recover the sulfuric acid, refining part of the residues to obtain the copper and other metals therein, and using part of said residues as the diluent above mentioned.

14. The process of extracting nickel from copper from a rich nickel-copper matte, which comprises the preparation of an easily soluble matte by dilution or by extensive bessemerizing as above described and then agitating this finely ground matte with hot solutions of strong sulfuric acid, recovering the nickel from the solution as nickel salts by crystallization from which pure nickel free from copper is obtainable by any of the well-known methods, recovering the copper and the precious metals in the resulting residues also by any of the well-known methods, and recovering the sulfuric acid by absorption of the SO_3 gases in water freed on roasting the nickel sulfate crystals, and using the recovered sulfuric acid to dissolve a further portion of matte.

[Claims 2 to 4 and 6 to 13 not printed in the Gazette.]

1,276,810. REVERSING SCREW-AND-NUT GEARING. FREDERICK HATHAWAY RAGAN, Seattle, Wash. Filed Oct. 13, 1913, Serial No. 795,012. Renewed May 23, 1918. Serial No. 236,281. (Cl. 74—40.)

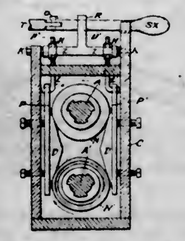


1. A device of the class described comprising in combination, screw gears adapted to be continuously rotated, nuts freely carried by said screw gears, oppositely located friction members disposed intermediate said nuts, and adapted to bear there against, leverage means connecting said friction members, a casing disposed around said nuts and serving as a support for said leverage means, a handle adapted to engage said leverage means whereby pressure applied to said handle will be transmitted through said leverage means to one of said friction members thereby causing said member to frictionally engage one of said nuts and arrest its free rotative movement with said screw gear thereby longitudinally shifting said handle in the direction in which pressure is applied.

3. A device of the class described comprising in combination, a pair of screw gears adapted to be continuously rotated, cylindrical nuts, freely carried thereby, said screws passing through said nuts, oppositely located vertical friction wedges having convergently inclined faces intermediate said nuts, a casing disposed around said friction wedges and serving as a support therefor and a thrust bearing for said nuts, a lever, upwardly projecting rods rigidly connected to said friction wedges and adapted to be pivotally adjusted to said lever, said lever pivotally attached to said casing and having an upwardly projecting U shaped arm, a lever having a handle adapted to be reposed in said U-shaped arm, said casing being provided with a notch in the plane of said U shaped arm whereby the handle of said last named lever may retain said friction wedges in a neutral position out of contact with said cylindrical nuts.

[Claim 2 not printed in the Gazette.]

1,276,811. POWER OPERATING DEVICE. FREDERICK HATHAWAY RAGAN, Detroit, Mich. Filed Feb. 9, 1914, Serial No. 817,717. Renewed Aug. 2, 1917. Serial No. 184,173. (Cl. 74—40.)



1. In a device of the class described, the combination of a screw shaft, a member screw threaded thereon for rotary movement therewith and longitudinal movement relatively thereto, a casing within which the member is contained, and means for retarding or arresting the movement of such member relative to the screw shaft at the will of the operator.

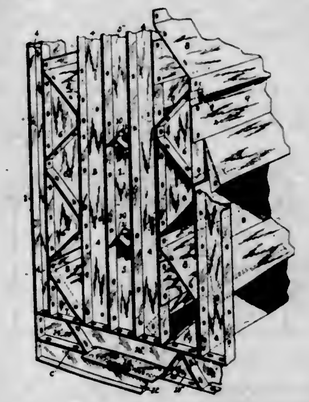
14. The combination of a pair of rotatable screw shafts, nuts freely carried thereby, oppositely arranged friction members coöperating with said nuts for applying frictional resistance thereto for retarding or arresting their rotary movement.

17. A device of the class described comprising in combination, a pair of screw shafts adapted to be continuously rotated, cylindrical nuts carried by said screw shafts and adapted to revolve freely therewith, oppositely located friction members disposed intermediate said cylindrical nuts, a casing disposed around said friction members and serving as a support for the same, a lever, links operatively connected to said friction members and having pivot connection with said lever, said lever being pivoted to said casing and having an upwardly projecting U-shaped arm, a lever having a handle adapted to repose in said U-shaped arm, and means whereby said last named lever may retain said friction members in a neutral position out of contact with said cylindrical nuts.

22. The combination of a pair of rotatable screw shafts, nuts freely carried thereby, a friction device adapted to coöperate with said nuts for applying frictional resistance thereto for retarding or arresting their rotary movement, a casing inclosing said nuts and friction device, and two set screws threaded in the casing and adapted to adjust the friction device toward said nuts.

[Claims 2 to 13, 15, 16, 18 to 21, 23, and 24 not printed in the Gazette.]

1,276,812. GRAIN AND SEED DRIER. OLIVER W. RANDOLPH, Toledo, Ohio. Filed Dec. 18, 1916. Serial No. 137,529. (Cl. 34—34.)

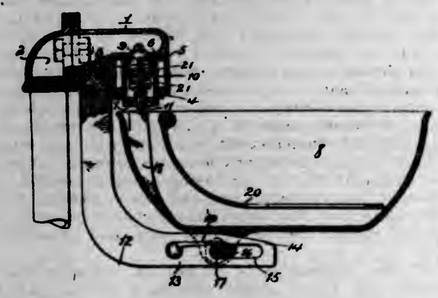


1. In a grain and seed drier the combination of a drier body comprising a plurality of chutes for grain or seed formed of opposite vertical side channels, having perforated channel sides, cross connected by common zig zag partitions formed of alternately reversed plates, each having upper and lower marginal portions angled parallelly and said lower marginal portions having a marginal portion bent parallel with itself to form a hook, and perforated end marginal portions adapting the plates to be jointly and overlappingly secured to the perforated channel sides, and angled drier plates, one for each partition plate, said drier plates each having an upper marginal hook portion adapted to be hooked onto the hood portion of a partition plate with the upper portion extending vertically downward opposite the inner angles formed by two reversed partition plates, and with its lower portion

inclined inwardly and downwardly of a chute, and provided with end ear portions adapted to be secured to the inner side of the channels.

[Claims 2 and 3 not printed in the Gazette.]

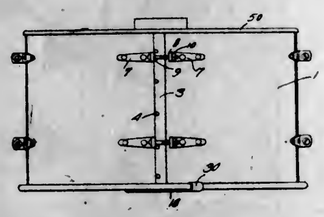
1,276,813. WATERING DEVICE FOR CATTLE. HUGO C. RASSMANN, Beaver Dam, Wis. Filed Aug. 15, 1917. Serial No. 186,313. (Cl. 119—75.)



1. In a watering device, the combination of a valved fount and a bowl, a projection within the bowl normally engaging the stem of the valve of the valved fount when the bowl is in horizontal position and adapted to cause the valve to be opened when the bowl is tilted, and a pin-and-slot connection between the bowl and the fount whereby the bowl may be tilted, and moved horizontally and swung downwardly.

2. In a watering device, the combination of a valved fount and a bowl, a pin on one of said parts and the other part having an elongated slot to receive said pin, a latch to engage said pin and hold the same in normal position, and a projection in said bowl to engage the stem of the valve of the valved fount when the bowl is in normal position.

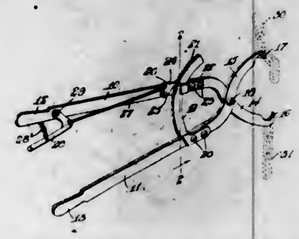
1,276,814. TANK. WESLIE MARCH ROADES, Okmulgee, Okla. Filed Nov. 13, 1916. Serial No. 131,119. (Cl. 220—125.)



A tank comprising a wall provided at its lower end with an outstanding flange; a bottom comprising parts having their inner edges overlapped, the said parts having peripheral hook-shaped beads receiving the flange; a spacer coöperating with one of the parts of the bottom; a bottom strip mounted on the spacer and coöperating therewith to define a groove wherein the inner edge of the other of said parts is received, the bottom strip being provided at its ends with hooks receiving the ends of the hook-shaped beads of the bottom-forming parts; and tightening devices connecting said parts.

1,276,815. CHAIN-TIGHTENING TOOL. GEORGE W. RUTHVEN, Donna, Tex. Filed June 23, 1915. Serial No. 35,916. (Cl. 254—78.)

A wire chain tightening tool, comprising like members, each having a handle at one end and a curved arm at the opposite end terminating in a hook, said members having their curved arms crossing and pivoted at the point of crossing, a segmental rack secured rigidly to one member, a guide secured to the other member and embracing the segmental rack, the end of the guide facing the toothed edge of the rack being open, a dog pivoted



to the member provided with the guide and disposed opposite the open end of said guide to engage the toothed edge of the rack, and manually operable means mounted on the member carrying the dog and guide adjacent the handle of said member and connected with the dog for operation thereof.

1,276,816. METHOD OF INSEAMING SHOES. WILLIAM IRVING RYAN and FERNANDO P. AYER, Manchester, N. H., assignors to W. H. McElwain Company, Boston, Mass., a Corporation of Massachusetts. Filed Nov. 14, 1914. Serial No. 872,230. (Cl. 12—145.)

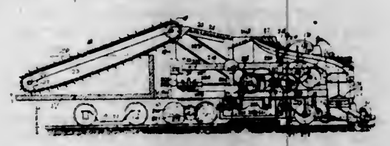


1. The improvement in the method of making shoes which consists in lasting a shoe in such manner that the edges of the upper adjacent to the toe project away from the plane of the shoe bottom, and then binding such edges in place by application thereto of a coating of plastic composition which has the property of becoming hard with lapse of time and is penetrable by the needle of a sewing machine.

8. The improvement in shoemaking which consists in lasting a shoe and gathering the toe part of the upper about the toe of the last in such manner that the edges of the upper project away from the bottom of the last, enveloping such edges at the toe part in a heated plastic composition which has the property of hardening when cool, and finally stitching or sewing the inseam of the shoe through the edges of the upper, including the portion thereof thus enveloped in such composition.

[Claims 2 to 7 not printed in the Gazette.]

1,276,817. PAVING-MACHINE. JOHN FREDERICK SEIBERLING, Akron, Ohio. Filed June 5, 1916. Serial No. 101,743. (Cl. 94—6.)



1. In a paving machine, propelling mechanism, a device in which the row of brick is formed, means for delivering brick to said device, means operable independently of said propelling mechanism for transferring the row of brick to the roadbed, and means for transferring the row from said device to said means.

8. In a paving machine, means for delivering a row of brick to the roadbed, a device in which the row is formed, means for feeding brick to said device, and means effecting the feed of brick to said device so that they will break joints.

5. In a paving machine, a device in which the rows of bricks are formed, an inclined storage platform, means for transferring the rows of bricks from said device to said storage platform, and means for transferring the rows of bricks from said storage platform to the roadbed.

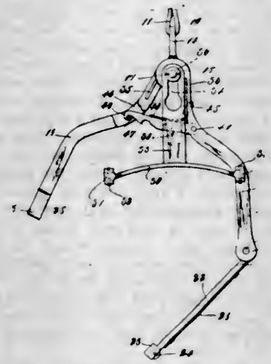
7. In a brick paving machine, a device in which rows of bricks are formed, means for retaining the rows in said device, means for tilting said device and releasing said retaining means, a storage platform to receive the rows of bricks when said device is tilted, a detent to retain the rows of bricks upon said platform until needed, and means for transferring the rows from said platform to the roadbed and operating said detent.

10. In a brick paving machine, power operated propelling mechanism, devices for forming rows of bricks, a shuttle platform adapted to receive the rows of bricks, a ram slidably mounted upon said platform, guides upon said platform for retaining said slidable ram in position, and power-operated means for actuating said ram.

[Claims 2, 4, 6, 8, 9, and 11 to 45 not printed in the Gazette.]

1,276,818. [WITHDRAWN.]

1,276,819. SAFETY-STIRRUP. SAMUEL SKLAR, Brooklyn, N. Y. Filed Sept. 8, 1917. Serial No. 190,297. (Cl. 54—49.)

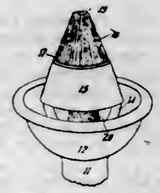


1. A saddle stirrup comprised of a pair of hingedly engaged, downwardly extending sides, means for holding said sides in operative position, a foot-rest hingedly engaged with one of said sides, a stem formed with said foot-rest enterable into an opening formed in the other of said sides, a slidable plate arranged over said foot-rest, and means combined therewith for releasing said foot-rest, when said plate is moved upward.

4. In a riding saddle stirrup, the combination with a support strap, and an eye with which said strap is engaged, of a pair of separable curve side elements hingedly engaged at the upper end thereof, said eye being rigid with one of said side elements, a foot-rest hinged at the lower end of one of said side elements, a stem formed with said foot-rest adapted to enter a recess formed in the other of said side elements, a roller carried in said stem, a spring adapted to move said foot-rest downward when released, means for holding said side elements in operative position, an arcuate plate arranged partially over said foot-rest adapted to make contract with a foot, means for guiding said arcuate plate vertically, means formed with said arcuate plate adapted to release said holding means, and means for separating said side elements when released.

[Claims 2 and 3 not printed in the Gazette.]

1,276,820. DRINKING-FOUNTAIN. RICHARD M. SMYTHE, Brooklyn, N. Y. Filed Oct. 11, 1917. Serial No. 195,903. (Cl. 137—110.)

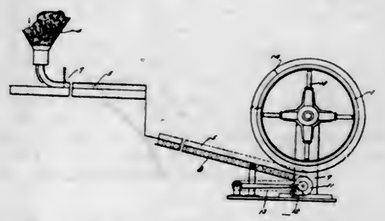


1. The combination of a drainage bowl, a water supply pipe rising therefrom and terminating at its upper end in a fork, and a nozzle in the form of a conical shell carried upon the members of said fork, the wall of said shell being hollow and in open communication with said members, and the upper end of said shell formed with lips to discharge the water upwardly and centripetally, to cause the discharged water to fall in the form of a hollow uninterrupted stream through the hollow of the nozzle into the bowl.

2. A drinking-fountain comprising a hollow cone, having hollow walls, the hollow in the walls being closed at the bottom of the cone and open at the top, for discharging the water upwardly and inwardly, the direction of the discharge being mainly upward to produce a drinking-cone, said parts formed to cause the discharge to fall short of the apex of the drinking-cone and fall in a hollow internal continuous stream.

[Claims 3 to 8 not printed in the Gazette.]

1,276,821. METHOD OF MAKING SOLID TIRES. WILLIAM C. STEVENS, Summit, Ohio, assignor to The Firestone Tire and Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Feb. 5, 1917. Serial No. 146,695. (Cl. 154—12.)



1. The method of making "hard base" tires, comprising forming a base of hard rubber on a rim, extruding the cushion portion of the tire, placing said cushion portion on said rim and on said previously applied hard base and vulcanizing.

3. The method of making "hard base" tires, comprising forming a base of hard rubber on a rim, shaping the cushion portion of the tire to approximately the cross section of the finished tire, cutting said cushion portion to a length sufficient to encircle the rim, encircling said cushion portion about said rim and on said previously applied hard base, and vulcanizing.

9. The method of making "hard base" tires, comprising forming the "hard base" portion by extrusion, wrapping a length sufficient to go about a rim, warming said rim, forming a cushion portion by extrusion, warming said cushion portion, wrapping said cushion portion over said "hard base" while the rim and portion are warm and vulcanizing.

[Claims 2 and 4 to 8 not printed in the Gazette.]

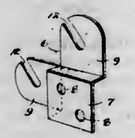
1,276,822. PROCESS OF OBTAINING OILS. JEFFREY STEWART, Philadelphia, Pa., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a Corporation of Delaware. Filed Oct. 27, 1915. Serial No. 58,201. (Cl. 87—12.)

1. The process which comprises treating residues obtained from the refining of oils through the addition of an alkali, and the separation of the residues from the refined oil by adding to the residues an acid sulfate.

2. The process which comprises treating residues obtained from the refining of oils through the addition of an alkali, and the separation of the residues from the refined oil by adding to the residues an acid sulfate of sodium.

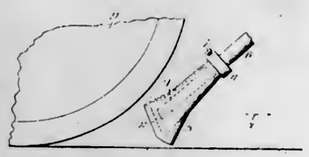
3. The process which comprises treating residues obtained from the refining of oils though the additon of an alkali, and the separation of the residues from the refined oil by adding to the residues a quantity of niter cake.

1,276,823. DOUBLE-ROLLER SHADE-BRACKET. WILLIAM T. SULLIVAN, New York, N. Y. Filed July 11, 1917. Serial No. 179,939. (Cl. 156—24.)



A window shade bracket comprising a plate, a right angular bend formed at the top and one side edge of said plate to form offset extensions, and ears extending from said extension in parallel relation to the plate and at right angles to each other.

1,276,824. SANDING DEVICE FOR LOCOMOTIVES. JOHN B. SWAN, Gladstone, Mich. Filed Jan. 12, 1917. Serial No. 141,971. (Cl. 291—41.)



1. In a sanding device, a sand pipe, and a skirt surrounding said sand pipe and flaring outwardly therefrom, the point of feed being isolated from the edge of said skirt, said skirt flaring more in the downward vertical plane than in the other planes, and the end of said sand pipe being flattened to accord thereto, said skirt insulating said sand pipe from moisture and cold.

2. In a sanding device, a sand pipe, a skirt surrounding said sand pipe and flaring outwardly therefrom and extending below the lower end of the sand pipe, the lower end of the sand pipe being the point of feed and a second skirt surrounding said first named skirt flaring therefrom and extending below the same.

3. In a sanding device, a sand pipe, a skirt surrounding said sand pipe and flaring outwardly therefrom and extending below the lower end of the sand pipe, the lower end of the sand pipe being the point of feed and a second skirt surrounding said first named skirt flaring therefrom and extending below the same, said skirts flaring more in vertical plane than in transverse plane.

4. In a sanding device, a sand pipe, a skirt surrounding said sand pipe and flaring outwardly therefrom and extending below the lower end of the sand pipe, the lower end of the sand pipe being the point of feed and a second skirt surrounding said first named skirt flaring therefrom and extending below the same, said skirt flaring more in the downward vertical plane than in the other planes and the end of the sand pipe being flattened to accord thereto.

5. In a sanding device, a head providing a socket adapted to thread over the end of a sand pipe, a nozzle extending from said head to form an extension from said pipe, and a skirt extending from said head and surrounding said pipe, said skirt flaring more in the downward direction than in the other directions.

[Claims 6 and 7 not printed in the Gazette.]

1,276,825. AUTOMATIC TAKE-UP ATTACHMENT FOR PORTABLE-TELEPHONE CONDUCTORS. DAVID SWOPE, Merchantville, N. J. Filed July 21, 1916. Serial No. 110,425. (Cl. 242—109.)



1. In an automatic take-up device for the cord of an extension telephones, a spindle, a reel rotatably mounted on said spindle, a spring intermediate said reel and spindle, a telephone cord wound on said reel in one direction and having an extended spare length wound in the reverse direction on said spindle, whereby a predetermined length of cord may be unreeled, and a telephone connected to the outer end of said cord extending from said reel.

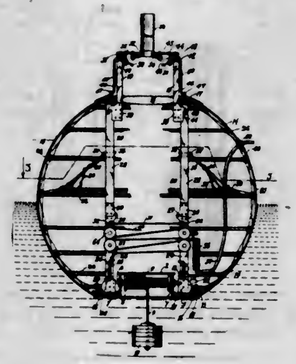
2. In an automatic take-up device for the cord of an extension telephone, a spindle, means for preventing said spindle from rotation, a reel rotatably mounted on said spindle, a spring intermediate said reel and spindle, a telephone cord wound on said reel in one direction and having an extended spare length wound in the reverse direction of said spindle, whereby said telephone may be readily moved toward and away from said reel, and a fastening device for said cord intermediate said reel and spindle, and secured to said reel body, whereby a predetermined length of cord may be unreeled from said reel.

3. In an automatic take-up device for the cord of an extension telephone, a box having a reel therein, a spindle for said reel, tension devices intermediate said reel and spindle, and a telephone cord wound on said reel in one direction and having an extended spare length wound in the reverse direction on said spindle, whereby a predetermined length of cord may be unreeled from said reel, said box having an inlet opening for the cord wound on said spindle, and an outlet opening for the cord extending from said reel, said latter cord being connected to said telephone.

1,276,826. PASSENGER LIFE-BUOY. KAMEZO TAIRA and KIKUJIRO MASUDA, Denver, Colo. Filed May 21, 1917. Serial No. 169,825. (Cl. 9—4.)

1. A life buoy approximately spherical in shape comprising an inner jointed stanchion structure, expanding rings, and a flexible cover upon which said rings act, said rings being of varying diameter to maintain the spherical contour, the intermediate portions of the stanchion structure being spaced from the rings and the covering.

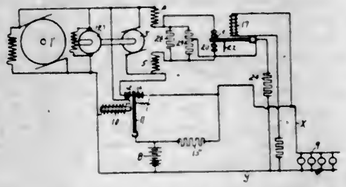
10. Apparatus of the class described including a rigid base, posts arranged in pairs their lower extremities being connected with the base, rods connecting the posts of each pair above the base, a flexible covering connected with the base and the tops of the posts, expanding rings for the covering, said rings being located intermediate



the post extremities, and means for connecting the median ring with the posts.

[Claims 2 to 9 not printed in the Gazette.]

1,276,827. SYSTEM OF ELECTRICAL DISTRIBUTION. HARRY L. TANNER, Brooklyn, N. Y., assignor to Sperry Gyroscope Company, Brooklyn, N. Y., a Corporation of New York. Filed Aug. 28, 1914. Serial No. 859,087. (Cl. 171—225.)



1. A voltage regulator adapted to be connected with a line to be regulated comprising a dynamo-electric machine, a plurality of field windings thereon in series with one another, means for causing a drop in potential between said windings whenever current flows from one to another of said windings, and means for varying the potential drop between said windings responsive to variations in the voltage on the regulated line when said regulator is operatively connected to said line.

7. A voltage regulator comprising a dynamo-electric machine adapted to be placed in series with a variable line, a shunt field circuit therefor having a resistance high enough to prevent the building up of the machine, means for causing the building up of the machine by completing a circuit including a source of E. M. F. around a portion of the field winding, and means for driving said machine.

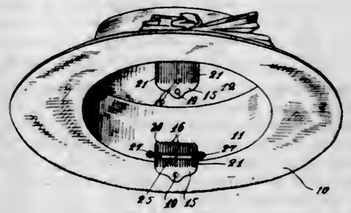
16. In combination, a supply system, a load supplied thereby, means for regulating the voltage of said supply system comprising a dynamo-electric machine, a plurality of field coils connected in series thereon, and means responsive to variations in the voltage on the load to cause a variation in the electro-motive force across one of said coils whereby the resultant field current is increased, reduced or reversed, dependent upon the direction magnitude and duration of the initial voltage variation and upon whether that portion of the machine influenced by said field coils was acting as a bucker or as a booster at the time of the voltage variation.

18. A method of maintaining a constant voltage on a variable line by the field regulation of a dynamo-electric machine, characterized by the following cycle as the supply voltage and power gradually increase from zero, first the building up of the field until the desired voltage is reached, second the simultaneous introduction of a counter electro-motive force across a portion of the field winding and a resistance in circuit with another portion of the field winding as said voltage is exceeded, third a reversal of the current in said first mentioned portion of the field winding, fourth the increase in the strength of said portion beyond the strength of said other portion and fifth the reversal of current in said other portion.

20. In combination, a supply line, a voltage regulating dynamo comprising a field winding in series with one side of said line, a connection between an intermediate point of said field winding and the opposite side of said line and means responsive to changes in voltage on said line for making and breaking said last named connection.

[Claims 2 to 6, 8 to 15, 17, 19, and 21 to 24 not printed in the Gazette.]

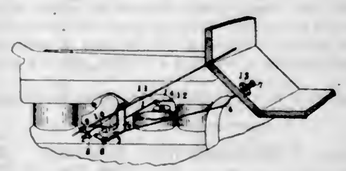
1,276,828. HAT-SECURING MEANS. MARIE TANNLER, Portland, Oreg. Filed Mar. 23, 1917, Serial No. 156,809. Renewed July 17, 1918. Serial No. 245,406. (Cl. 132—25.)



1. A hat fastener comprising a flexible plate provided with a plurality of teeth extending in one direction, the outermost teeth being of increased width, and having a longitudinal slot therethrough, a flexible bar extending through the mentioned slot in the end teeth, and hooked lugs formed with said bar contiguous to its ends adapted to engage with said end teeth whereby said comb plate may be adjusted in a secured position.

2. A hat fastener comprising a flexible plate having a pair of widely disposed slotted elements formed upon each of its ends, a plurality of comb teeth formed with said plate between said end elements, beveled edges formed upon the exterior of said end elements, a flexible bar passing through the mentioned slots, and a plurality of hook shaped lugs formed with said flexible bar adapted to engage with said beveled edges.

1,276,829. FOOT-ACCELERATOR. WALTER H. THOMAS, Spencer, Iowa. Filed Apr. 1, 1915. Serial No. 18,575. (Cl. 74—81.)

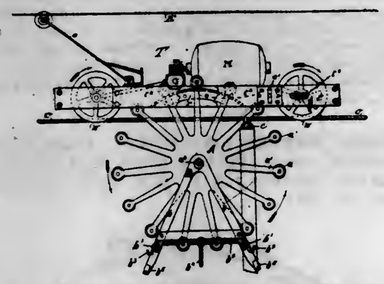


1. In means for the purpose described, the combination of an internal combustion engine, a carbureter connected therewith and having a lever, a suitably mounted bell-crank, a rod extending between and connecting the carbureter lever and one arm of said bell-crank and having an abutment, a rod connected to and extending rearwardly from the other arm of the bell-crank, an angle

mounted to swing on its apex and loosely receiving in one of its arms the said connecting rod and having said arm arranged against the abutment on the rod and between said abutment and the throttle lever, spring means for closing the throttle, and a rearwardly extending rod connected to the other arm of the angle.

[Claim 2 not printed in the Gazette.]

1,276,830. AERIAL CABLEWAY CARRIER SYSTEM. HAROLD THORNE, New York, N. Y. Filed Jan. 21, 1918. Serial No. 212,901. (Cl. 104—132.)



1. In an aerial cable-way carrier system of the character designated, in combination, an elevated track cable and lateral stay supports therefor, a carrier truck having traction wheels engaging said track cable and provided with concentric bridge rails, rotatable suspender spiders formed with radial arms adapted to engage successively with said concentric bridge rails on the carrier truck, said rotatable suspender spiders being axially connected to rotate in unison, and means pivotally mounted on the axis of said suspender spiders adapted to support a burden, for the purpose described.

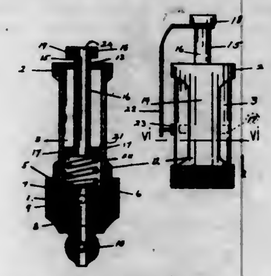
9. In an aerial cable-way carrier system of the character designated, in combination, an elevated track cable and lateral stay supports therefor, a carrier truck having traction wheels engaging said track cable, and provided with concentric bridge rails, rotatable suspender spiders formed with radial arms adapted to engage successively with said concentric bridge rails on the carrier truck, said rotatable suspender spiders being axially connected to rotate in unison, and a burden supporting frame pivotally mounted on the axis of said rotatable suspender spiders and comprising triangular side members connected by transverse members sustaining a central bight hook, said burden support frame being also formed with bight hooks on the lower extremities of each of its triangular side members, for the purpose described.

11. In an aerial cable-way carrier system of the character designated, in combination, an elevated track cable and lateral stay supports therefor, a carrier truck having traction wheels engaging said track cable, and provided with concentric bridge rails, rotatable suspender spiders formed with radial arms adapted to engage successively with said concentric bridge rails on the carrier truck, and means pivotally mounted on the axis of said suspender spiders adapted to support a burden, for the purpose described.

[Claims 2 to 8 and 10 not printed in the Gazette.]

1,276,831. SELF-CLEANING OIL-GAGE. NOAH F. TILLERY, Humansville, Mo. Filed Mar. 26, 1918. Serial No. 224,724. (Cl. 73—54.)

4. In an oil gage having a transparent indicating tube, the combination of a plunger movably arranged in the tube, said plunger comprising a piston having a ring of yielding material secured on its peripheral face and in engagement with the inner side of the tube and a rod extending upwardly from said piston through and beyond the upper end of the gage, said rod having a vent communicating with the tube below the piston, a spring arranged in the tube and adapted to hold said plunger



normally elevated, and a brush carried by said plunger and slidably engaging the outer side of the tube.

[Claims 1 to 3 not printed in the Gazette.]

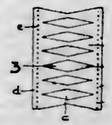
1,276,832. PISTON-RING. HENRY SCHMITT, Detroit, Mich. Filed Sept. 20, 1917. Serial No. 192,315. (Cl. 121—108.)



1. A piston ring comprising an annulus having separable ends and the inner wall thereof at said ends cut away, said annulus having both faces thereof at one end provided with recesses, one of said recesses being dovetailed, an uninterrupted coupling member engaging in the cut away ends of said annulus and having a dovetailed tongue fitted in the dovetailed recess of said annulus, and a flange carried by said coupling member and fitted in the other recess of said annulus, said flange and said tongue cooperating and retaining said coupling member in place.

[Claims 2 and 3 not printed in the Gazette.]

1,276,833. LACING-TIP. EDWIN F. TOMKINS, Coaticook, Quebec, Canada. Filed June 14, 1917. Serial No. 174,808. (Cl. 24—143.)

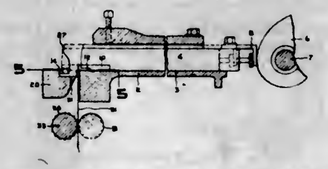


1. A tip for a lace for shoes and the like consisting of prolate truncated conical form having a cylindrical base portion the diameter of which is uniform throughout and less than the width of the lace, said base portion being provided with a circumferential series of inward friction points for causing the tips to adhere to the laces.

[Claims 2 and 3 not printed in the Gazette.]

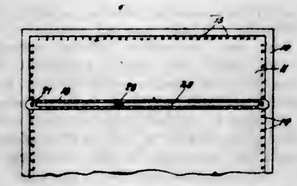
1,276,834. LACE-TIPPING MACHINE. EDWIN F. TOMKINS, Coaticook, Quebec, Canada. Original application filed June 14, 1917, Serial No. 174,808. Divided and this application filed Mar. 25, 1918. Serial No. 224,698. (Cl. 153—1.5.)

In a machine for rolling a blank around a length of lacing material in the form of a pair of tips of conical form with their apices united, the combination with a machine frame having a slideway, of a prism-like carrier carried slidably in the slideway, means for reciprocating the carrier; a movable die of substantially rectangular plate form with its forward under surface cut away to present a concave matrix with a middle angular projection; the lower edge of the matrix being in the form of a cutting edge and located to the rear of the main portion of the matrix which overhangs the same; a second die consisting of a carrier plate and die proper, the plate having a seat receiving the die proper, engaging beveled



portions upon the said die proper and carrier plate respectively, the said die proper having a matrix corresponding to the matrix of the movable die and the said matrix of the die proper having a middle angular projection in alinement with the first-mentioned angular projection; a pair of feed rolls one of which has a circumferential series of pins at each end, and the other roll having sockets arranged to have the said pins register therewith.

1,276,835. MAP-INDICATOR. JOE FRED TOTH, Detroit, Mich. Filed Dec. 4, 1917. Serial No. 205,382. (Cl. 33—75.)



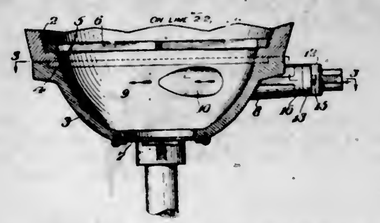
2. In a map indicator, the combination with a map having marginal characters, of a bar comprised of a plurality of joined elements having a longitudinal slot extending from end to end therein, there being transverse slots formed in the ends of said bar through which the mentioned characters can be seen, an eye piece movable longitudinally in the mentioned longitudinal slot, and means for holding said eye piece in engagement at intervals in said slot.

4. In a map indicator, the combination with a map having marginal characters along all of its edges, of an indicator bar slidable over the face of said map, said indicator bar having openings at its ends registerable with the characters upon the end edges of said map, a slide movable in said indicator bar, a plurality of uniformly spaced sinuosities formed in one of the longitudinal sides of said bar, a guide movable in said bar, a detent formed in said guide engageable with any of the mentioned sinuosities, an eye piece rotatably mounted in said slide, and means whereby said eye piece may force said detent outward into engagement with the sinuosities.

[Claims 1 and 3 not printed in the Gazette.]

1,276,836. AIR-FEEDING DEVICE FOR FORGES, FURNACES, AND THE LIKE. BURTON H. TRIPP, Philadelphia, Pa., and HUGH V. RAMSAY, Gloucester City, N. J. Filed Mar. 11, 1918. Serial No. 221,633. (Cl. 110—3.5.)

1. In a device of the character stated, a bottom casing inclosing a concave air preheating chamber, an air inlet passage leading tangentially thereinto at a point intermediate the top and bottom thereof, a nozzle for high pressure air having flanges secured to flanges on said casing, said nozzle having a contracted inlet passage, a port leading therefrom, and an air chamber for atmospheric air located in proximity to said nozzle and discharging into said inlet passage for the purpose of introducing commingled high pressure and atmospheric air in a preheated condition into said combustion chamber.

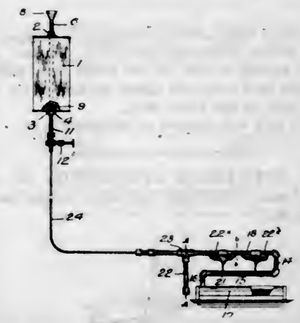


3. As an improved article of manufacture, an air injection device, comprising a body portion with flanges at each end thereof, a central inlet chamber for compressed air, a chamber of reduced diameter having a reduced outlet port forming a nozzle into which said inlet chamber discharges, a portion of said flanges around said nozzle being removed from the exterior of said body to said nozzle so as to permit atmospheric air to be commingled with the wiredrawn compressed air discharged through said nozzle.

5. In a portable rivet heating forge, a bottom interiorly concave air preheating chamber, an elongated air inlet passage cast on a side of said chamber and discharging tangentially thereinto at a point intermediate its top and bottom, the outer portion of said inlet passage terminating in flanges, an air injecting device for high pressure air having a body portion provided with flanges secured to said first mentioned flanges, and a central threaded inlet passage discharging into a passage of reduced diameter and having a reduced exit port forming a nozzle and a portion of said body being removed from the exterior thereof to said nozzle so as to permit atmospheric air to be commingled with the wiredrawn compressed air discharged through said nozzle.

[Claims 2, 4, and 6 not printed in the Gazette.]

1,276,837. GAS-GENERATING AND HEATING APPARATUS. JAMES WILLIAM WALKER, Montreal, Quebec, Canada. Filed Feb. 16, 1918. Serial No. 217,696. (Cl. 158—63.)



In a gas generating and heating apparatus, the combination; with fuel supply means; of a gas generating chamber in communication therewith, comprising a pair of connected, horizontal pipes disposed one above the other in parallel relation, the lower pipe having a plurality of burner openings; and a filling of intermingled strands of mineral absorbent material and wires within said pipes, said absorbent material serving as a wick to

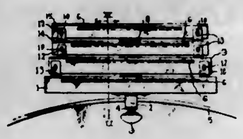
cause oven feeding of the fuel and vapor to said openings and also serving to prevent the inner walls of said pipes from peeling.

1,276,638. KINETOSCOPE FOR PROJECTING STEREOSCOPIC MOVING PICTURES. ALOYS WAYDITCH, New York, N. Y. Filed Oct. 22, 1914. Serial No. 867,997. (Cl. 88—16.6.)



An improved projecting system for projecting right and left pictures upon a screen, comprising a projecting apparatus provided with an exhibitor's aperture plate of double height, a film having lineally alternating right and left pictures, means for intermittently moving said film before said aperture plate, a shutter device adapted to be closed during the moving of the film, projecting means adapted to project double laterally adjacent projections of said right and left pictures and controlling means adapted to be moved during moving of the film and adapted to control the simultaneous projection of right and left pictures from said projecting apparatus, repsectively laterally adjacent the right and left side of screen, each picture appearing twice on the same portion of the screen, said two appearances being separated by one shutter function, said controlling means comprising a pair of rotating wings one of said wings adapted to obscure right eye pictures while the other obscures left eye pictures, and to expose left eye pictures while the other exposes right eye pictures.

1,276,839. MUSICAL BLOCK. WILLIAM H. WEBER, Detroit, Mich. Filed July 5, 1917. Serial No. 178,539. (Cl. 84—31.)



1. A musical instrument comprising a stepped stringer and wood blocks mounted thereon in musical sequence, each block having a slot in the outer face thereof that separates the base from the upper portion of the block for the major part of the block area.

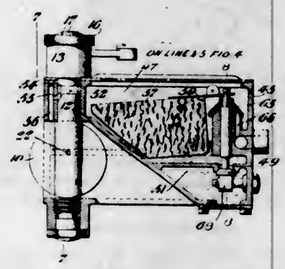
[Claims 2 to 4 not printed in the Gazette.]

1,276,840. WIRE-FENCE STRUCTURE. ELI L. WEE, Huxley, Iowa. Filed Mar. 25, 1916. Serial No. 86,681. (Cl. 245—9.)



In a wire fence structure, the combination with a line wire, of a pair of stay wires looped at their free ends to surround the line wire, loops at the ends of the first-mentioned loops extending around the stay wires and binding loops formed on the ends of the second-mentioned loops and surrounding the line wire to firmly secure the whole in place, each of said first-mentioned loops having their sides engaged, and said binding loops extending in opposite directions to engage the opposite sides of the first-mentioned loops, and said stay wires being bent slightly inwardly above and below the first-mentioned loops to bring the stay wires in alinement with each other and thereby provide an even pull on the line wire.

1,276,841. CARBURETER FOR INTERNAL-COMBUSTION ENGINES. ALFRED WEILAND, Philadelphia, Pa. Filed Mar. 6, 1917. Serial No. 152,528. (Cl. 158—36.)



1. In a carbureter, a casing forming a main fuel reservoir, a carbureting chamber and an auxiliary receptacle for liquid fuel, said receptacle having communication with a low level liquid fuel supply, a conduit forming a communication between said receptacle and the motor intake, manually operable means to vary the size of said conduit to produce a substantially constant vacuum in said receptacle and means to intermittently admit air from said main fuel reservoir to said receptacle to break said vacuum and replenish said fuel reservoir.

2. In a carbureter, a casing forming a main fuel reservoir, a carbureting chamber and a plurality of auxiliary receptacles for liquid fuel, said receptacles each having communication with a low level liquid fuel supply, means to automatically replenish the fuel reservoir from one or the other of said receptacles and means common to both receptacles for maintaining a substantially constant vacuum in one or the other of said receptacles.

5. In a carbureter, a casing forming a main fuel reservoir and an auxiliary supply receptacle, said receptacle having an air vent sealed and unsealed by the liquid fuel in said main reservoir, a throttle valve and means controlled by said throttle for creating and regulating a vacuum in said receptacle.

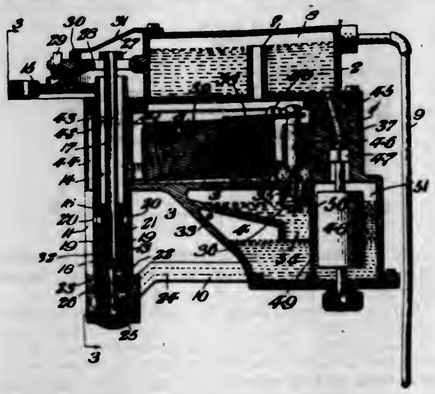
[Claims 3, 4, and 6 not printed in the Gazette.]

1,276,842. CARBURETER FOR INTERNAL-COMBUSTION ENGINES. ALFRED WEILAND, Philadelphia, Pa. Filed Apr. 4, 1917. Serial No. 159,603. (Cl. 158—36.)

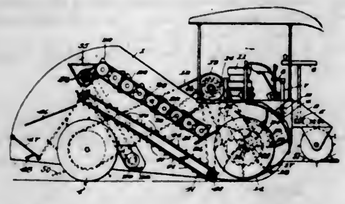
1. In a carbureter, a casing forming a main reservoir and a carbureting chamber, a fuel jet supplied from said main reservoir, means to automatically replenish the fuel supply in said main reservoir, an auxiliary fuel replenishing means for said main reservoir, said auxiliary means being inoperative under normal conditions, and means to automatically bring said auxiliary replenishing means into operation under abnormal conditions.

13. In a carbureter, a casing forming a main reservoir and a carbureting chamber, a fuel jet supplied from said main reservoir, a receiving tank for the liquid fuel supply, a normally operative means for feeding liquid fuel to said main reservoir from said tank, a normally inoperative means for controlling a liquid fuel feed to said main reservoir from said tank, and means for rendering said normally inoperative means operative under abnormal conditions.

[Claims 2 to 12 not printed in the Gazette.]



1,276,843. PROCESS AND MACHINE FOR SOIL-TILLAGE. JESSE S. WENTWORTH, Decatur, Ill. Filed Oct. 8, 1915. Serial No. 54,824. (Cl. 97—71.)



1. The method of tilling the soil consisting in removing a layer of the soil, vegetation and other material, disintegrating the same and separating the finer particles therefrom, removing a portion of the soil from the bottom of the ditch or trench formed by the removal of the layer of material, depositing the larger particles of soil, vegetation and other material in the bottom of said ditch or trench, separating said finer particles and the second portion of soil removed, into grades of varying fineness and depositing said grades of material in said ditch or trench, with the finest grade on top in the form of a loose mulch.

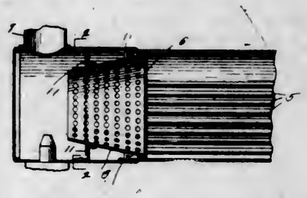
4. A method of preparing soil for planting, consisting in disintegrating, shredding and removing a top layer or portion of soil, vegetation and other material, thereby forming a ditch, trench or furrow, separating the finer particles from the coarser particles and refuse and vegetable matter, depositing said coarser particles and refuse and vegetable matter on the bottom of said ditch, trench or furrow, compressing said deposited layer of matter, and depositing the finer particles of soil loosely on top of said compressed layer.

6. A method of preparing soil for planting, consisting in disintegrating, shredding and removing a top layer or portion of soil, vegetation and other material, thereby forming a ditch, trench or furrow, separating the finer particles from the coarser particles and refuse and vegetable matter, depositing said coarser particles and refuse and vegetable matter on the bottom of said ditch, trench or furrow, compressing said deposited layer of matter, and depositing the finer particles of soil loosely on top of said compressed layer, and then raking and compressing the top layer.

8. A method of preparing soil for planting consisting in removing a layer of the soil, vegetation and other material, disintegrating the same and separating the finer particles therefrom, removing a portion of the soil from the bottom of the ditch or trench formed by the removal of said layer of material, depositing the larger particles of soil, vegetation and other material in the bottom of the ditch or trench, and mixing and depositing said finer particles and said second portion of soil together on top of said redeposited larger particles.

[Claims 2, 3, 5, and 7 not printed in the Gazette.]

1,276,844. REDUCED-DRAFT DEVICE. TRACY G. WESTINGHOUSE, New York, N. Y. Filed June 1, 1916. Serial No. 101,072. Renewed Mar. 13, 1917. Serial No. 154,592. (Cl. 110—147.)

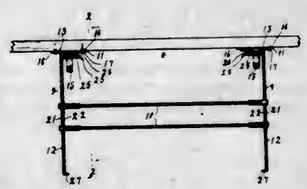


1. A draft reducing device for boilers, comprising the combination with a forward flue sheet and a smoke box and stack, of a frusto-conical drum surrounding the outer face of said flue sheet and having its smaller end open to the smoke box at a point between said flue sheet and said stack, whereby products of combustion are partially checked within the drum and then delivered through said smaller end to the stack.

3. A draft reducing device for boilers, comprising the combination with a forward flue sheet and a smoke box and stack, of a frusto conical perforated drum having its larger end wholly surrounding said flue sheet and its smaller end open to the smoke box between the flue sheet and the smoke stack, said frusto conical drum receiving all of the products of combustion from the flues, and partially checking their passage through the smoke stack and then delivering the products of combustion through its smaller end to the stack, and a damper fitted in the smaller end of said drum and operative to regulate the flow of the products of combustion through said smaller end.

[Claim 2 not printed in the Gazette.]

1,276,845. GARMENT-HANGER FIXTURE. GEORGE HENRY WHEARY, Racine, Wis. Filed Dec. 26, 1914. Serial No. 879,033. (Cl. 211—15.)



1. A garment hanger fixture, comprising a bracket member adapted to be connected to a support, a garment hanger supporting track member slidably, horizontally, removably connected to the bracket member, and means locking the two members together.

2. A garment hanger fixture, comprising a bracket member adapted to be connected to a support and having an elongated eyed portion, and a garment hanger supporting track member having a fixed attaching portion which extends horizontally through the eye of the eyed portion.

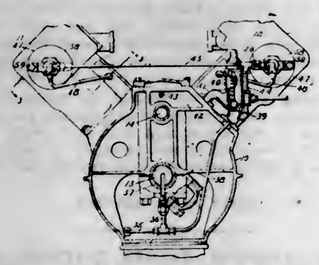
3. A garment hanger fixture, comprising a bracket member adapted to be connected to a support and having an elongated eyed portion, a garment hanger supporting track member having a fixed angularly horizontally projecting attaching portion which horizontally enters the eye of the bracket member, and means locking the two members together.

4. A garment hanger fixture, comprising a bracket member adapted to be connected to a support and having an elongated eyed portion, and a garment hanger supporting track member having a fixed angularly horizontally projecting attaching portion which horizontally enters the eye of the eyed portion and also having another fixed angular projecting portion which engages one side portion of the eye of the bracket.

14. A garment hanger fixture, comprising a pair of brackets adapted to be connected to a support in spaced relation, said brackets provided with elongated eyed portions, garment hanger supporting track members formed of plates of material connected together in pairs and having their inner ends bent horizontally at right angles to form fixed attaching portions, said attaching portions of each track member being spaced apart and one of said portions adapted to enter the eye of its respective bracket horizontally and the other of said attaching portions being adapted to bear against the outer face of the eyed portion of the bracket, said track members being capable of entering the eyed portion from either side edge of the bracket to vary the distance apart of the respective track members to accommodate garment hangers of varying lengths, and yielding means for locking the track members to their respective brackets.

[Claims 5 to 13 not printed in the Gazette.]

1,276,846. HYDROCARBON-MOTOR. D'ORSAY MCCALL WHITE, Detroit, Mich., assignor to Cadillac Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 24, 1916. Serial No. 133,187. (Cl. 184—6.)



1. In a device of the class described, in combination, means for supplying a lubricant to a surface, means for circulating a temperature control medium about said surface, and means actuated by changes in the temperature of said temperature control medium for regulating the supply of the lubricant.

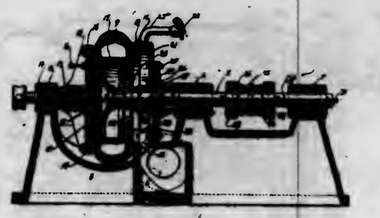
2. In an internal combustion engine, the combination with means for circulating lubricant to various parts thereof, of means directly in contact with parts to be lubricated for regulating the action of said circulating means.

9. In an internal combustion engine, the combination with a crank case, a shaft mounted in bearings therein, a cylinder and means for pumping oil from said crank case to said bearings and cylinder, respectively, of a thermo regulator between said pumping means and said cylinder for regulating the supply of lubricant thereto.

[Claims 3 to 8 and 10 not printed in the Gazette.]

1,276,847. CENTRIFUGAL PUMP. ARTHUR R. WILFLEY, Denver, Colo. Filed July 1, 1916. Serial No. 106,994. (Cl. 103—43.)

1. A centrifugal pump, including a runner, its shaft, packing material, forming a tight joint around the shaft, and means for supporting said packing material to cause the same to vibrate with the shaft.



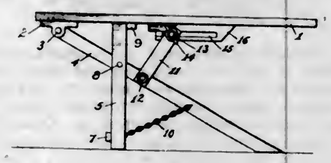
4. A centrifugal pump, including a runner, its shaft, and a flexible diaphragm carrying a stuffing box through which the shaft passes.

15. In a centrifugal pump, the combination of a runner, a shaft on which the runner is mounted, a sleeve surrounding the shaft and carrying a quantity of packing material, the hub of the runner entering the sleeve and engaging said packing material, and means for supporting the sleeve and packing material to cause them to vibrate with the shaft and runner in the direction of the axis of the shaft, and also at right angles thereto.

21. The combination of a casing, a runner, a shaft on which the runner is mounted, a stuffing box, a resilient diaphragm through which the shaft passes and on which the stuffing box is mounted, a leaf spring arranged on the opposite side of the diaphragm from the stuffing box and through which the shaft passes, the diaphragm being equipped to engage the central portion of the spring, and rods adjustably connected with the extremities of the spring on opposite sides of the shaft.

[Claims 2, 3, 5 to 14, 16 to 20, 22, and 23 not printed in the Gazette.]

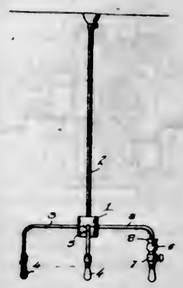
1,276,848. IRONING-BOARD. LOVERN V. WISE, Cleveland, Ohio. Filed July 23, 1917. Serial No. 182,137. (Cl. 68—10.)



1. In an ironing board, the combination of a flat member, an inclined leg pivoted to the flat member, an upright leg pivoted to the inclined leg, a block fixed to the flat member to prevent the upright leg moving beyond the vertical position, a chain connecting the upright leg to the inclined leg to prevent the spreading of the inclined leg with relation to the upright leg, a brace pivoted to the inclined leg, a guide on the flat member, and a thumb screw slidably connecting the brace to the guide, substantially as described.

2. In an ironing board, the combination of a flat member, an inclined leg pivoted to the flat member, a pair of upright legs, the upright legs being connected by an intermediate cross rod, the cross rod pivotally connecting the upright legs to the inclined leg, means for preventing the upright legs moving beyond the vertical position with the flat member resting thereupon, flexible means connecting the upright legs to the inclined leg to prevent spreading of the inclined leg with relation to the upright legs, a pair of braces pivoted to the inclined leg, a guide fixed to said flat member, the guide having a longitudinal slot, a bolt passing through said braces and the slot, and a thumb nut on the bolt for binding the braces to the guide whereby the ironing board will be locked in operative position, substantially as described.

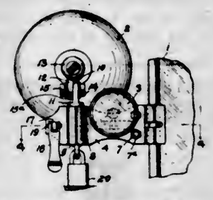
1,276,849. EXTENSIBLE INCANDESCENT LAMP. WILLIAM C. WITHERSPOON, Bakersfield, Cal. Filed July 9, 1917. Serial No. 179,451. (Cl. 240—71.)



2. In a device of the class described, the combination of a bobbin box, a shaft carried within said box, a bearing carried upon said shaft, a sleeve extending into the opposite end of said box and having a bearing upon its inner end, a bobbin having recesses in its ends carried by said bearings, said bobbin having a counter-bore, a bushing carried by said sleeve and extending beyond the inner end thereof, a conductor carried by said bushing, conductor heads carried by said conductor, said conductor heads being within said counter-bore, a conductor or cord having their terminal ends extending into said counter-bore, said terminal ends engaging said conductor heads, means for urging said bobbin to rotate in one direction and means for holding said bobbin against accidentally rotating.

[Claims 1 and 3 not printed in the Gazette.]

1,276,850. COMBINED LAMP AND MIRROR FIXTURE FOR AUTOMOBILES. FRANK YOKEL, Pittsburgh, Pa., assignor to Pittsburgh Lamp, Brass & Glass Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Nov. 2, 1916. Serial No. 129,117. (Cl. 240—57.)



4. A fixture unit of the character described and in combination, a bracket structure including two complemental members adapted to be secured to an automobile wind shield, means connecting the members and securing the bracket to the wind shield, a lamp structure including a supporting post mounted on the bracket, and quick-acting means including an eccentric lever coöperating with the bracket members to lock and release the post of the lamp structure while the bracket structure is positioned on the wind shield, said locking means disposed beyond the lamp supporting post.

6. A fixture unit of the character described and in combination, a bracket structure including two spring plate members adapted to be secured to an automobile wind shield within the line of vision of the driver, a mirror and means for supporting it on and intermediate the ends of the bracket with a universal movement, said supporting means including a plate member and an adjusting screw, said adjusting screw being passed through one of the bracket members and bearing against the other bracket member, a lamp and means for removably and adjustably supporting it on the bracket beyond the mirror.

[Claims 1 to 3 and 5 not printed in the Gazette.]

1,276,851. ELEVATOR-BUCKET ATTACHMENT. ALFRED LORIMER ADRIANSON, Racine, Wis. Filed Oct. 12, 1917. Serial No. 196,280. (Cl. 193—6.)

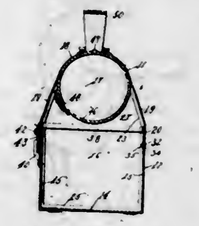


1. The combination with a belt and a series of elevator buckets thereon, of a curved plate bridging the space between each two adjacent buckets, and said plate being hinged at an appropriate point in its width to one of said buckets, with its opposite longitudinal edges bearing against the respective buckets.

5. The combination with a belt and a series of elevator buckets thereon, of a curved plate arranged between each two adjacent buckets, leaf springs secured to one of said buckets and hingedly supporting said plate, said plate having its opposite longitudinal edges bearing against the respective buckets, and an outwardly curved portion projecting from said plate adjacent each end thereof for the purpose described.

[Claims 2 to 4 not printed in the Gazette.]

1,276,852. LUNCH KIT. GEORGE P. ALTENBERG, Cincinnati, Ohio, assignor to The Icy-Hot Bottle Company, Cincinnati, Ohio, a Corporation of West Virginia. Filed Mar. 9, 1917. Serial No. 153,736. (Cl. 220—5.)



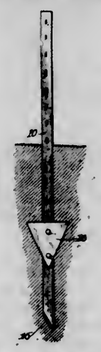
In a lunch kit, the combination of a top having an upper crown portion formed as the sector of a cylinder extending longitudinally of said top, outwardly slanting sides merging into said crown portion, a body, a carrying strap, a hinge extending substantially throughout the length of said top and body at one of the sides of said top and body, a plurality of releasable clasping means between the end portions of said top and body at the other side of said top and body, and a plurality of supporting means at the end portions of said crown portion for said carrying strap, whereby the support for the carrying strap is substantially in cross line with said hinge and respective releasable clasping means.

1,276,853. FENCE-POST. BROOKE ANDERSON, Chicago, Ill., assignor to Chicago Steel Post Company, Chicago, Ill., a Corporation of Illinois. Filed June 18, 1917. Serial No. 175,326. (Cl. 189—23.)

1. A post comprising plates or webs arranged at an angle to one another and having their lower edges cut away at an angle to the vertical and in a plane at an obtuse angle to the plane of said webs thus forming beveled surfaces on the outside faces of said webs at the lower end of said post and sharpened cutting edges which are presented to the earth when the post is driven.

2. A post comprising webs or plates arranged at an angle to one another and having their lower edges cut away at an angle to the horizontal and also at an oblique angle to the plane of said webs forming beveled surfaces on the outside faces of said webs and so related to one another that the forces exerted upon said surfaces by the

pressure of the earth during downward movement of the post shall be opposed to one another so that the tendency



of such forces to deflect the post from a downward course shall be neutralized.

[Claims 3 to 7 not printed in the Gazette.]

1,276,854. GARMENT. JOHN ANTONELLI, Chicago, Ill. Filed Aug. 10, 1914. Serial No. 855,979. (Cl. 2—61.)



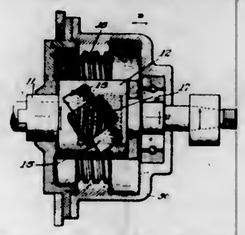
1. In a garment, the combination of a coat body member having a fixed collar piece and upper and lower back sections, and a transverse inclined back seam connecting the sections along a line intermediate the arm-holes and adjustable therealong whereby the material of the said sections may be conformed to the required contour across the shoulders without ripping off the collar piece, said coat body member being provided with substantially vertical seams disposed at the sides of the lower back section and each extending below one of the arm-holes to the bottom edge of the body member, said seam having a portion thereof capable of adjustment to maintain the alinement of the bottom edge of the back section upon adjustment of the back seam.

[Claims 2 to 4 not printed in the Gazette.]

1,276,855. SPEED-REDUCING GEARING. VINCENT G. APPLE, Dayton, Ohio. Filed Aug. 10, 1917. Serial No. 185,410. (Cl. 74—34.)

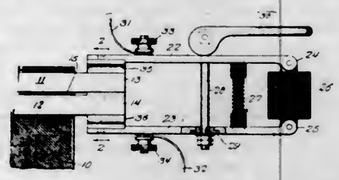
1. In combination, substantially concentric non-meshing gears, with teeth disposed relatively cross-wise, one of which gears is rotatable and the other gear rotatably and axially fixed; an interposed diagonally-disposed connecting gear meshing with both said gears, means for revolving said connecting gear bodily, thereby to cause said connecting gear, in its revolution, to rotatively displace the rotative gear of the concentric gears.

2. Speed reducing gearing comprising two rotatable elements; a spur gear on one element; a fixed, internal spiral gear; a spiral-tooth connecting gear, diagonally disposed on and revoluble about the axis of the other element, said gears intermeshing and having tooth differentiation, whereby the on-its-own-axis rotation of the connecting gear, incident to its bodily revolution, rotates



the driven element at a speed less than that of the driving element.

1,276,856. METHOD OF MAKING COMMUTATORS. VINCENT G. APPLE, Dayton, Ohio. Filed Feb. 14, 1918. Serial No. 217,148. (Cl. 219—10.)

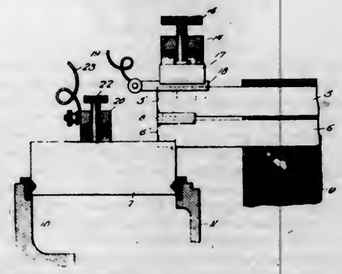


1. The art of joining separated armature conductors together in radially disposed pairs at their ends beyond the core, which consists in increasing the cubic area of copper in their ends and welding same together by application of electric current and pressure.

3. The art of making commutators which consists in enlarging the ends of armature conducting bars, so that radially disposed pairs, when placed on a core and welded together, will form properly shaped commutator segments; supporting said bars on a core in radially disposed pairs, with their enlarged ends projecting axially beyond the core end and electrically welding the pairs together.

[Claims 2 and 4 not printed in the Gazette.]

1,276,857. ART OF ARMATURE CONSTRUCTION. VINCENT G. APPLE, Dayton, Ohio. Filed Feb. 14, 1918. Serial No. 217,152. (Cl. 219—10.)

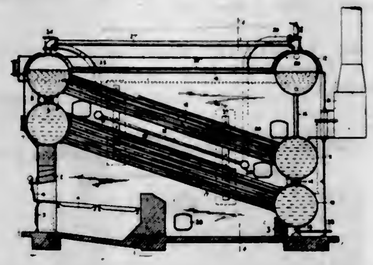


1. The art of joining radially disposed pairs of spaced-apart armature terminals to commutator segments, which consists in placing an alining filler block between the terminals; placing one edge of one of the pair of terminals in contact with a commutator bar; passing a current of electricity through the commutator bar, the terminals and the block, and applying pressure as the metal softens, to weld the four elements together.

3. The art of joining radially-disposed pairs of spaced-apart armature terminals after they are in place on a core of the armature which consists in placing an alining filler block between the terminals; welding both terminals to the filler, then welding the terminals and filler to a commutator bar.

[Claim 2 not printed in the Gazette.]

1,276,858. WATER-TUBE BOILER. FREDERIC E. ARNOLD, Salt Lake City, Utah. Filed Apr. 27, 1915. Serial No. 24,202. (Cl. 122—297.)

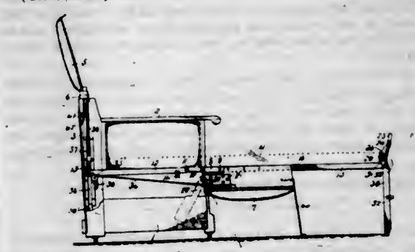


1. In a water-tube boiler, a pair of front horizontal cylindrical drums at different levels, straight water circulators connecting the same, three rear horizontal cylindrical drums at different levels, straight water circulators connecting the same, a bank of inclined straight tubes connecting the lower drums, a bank of inclined straight tubes connecting the upper front drum and the middle rear drum, a row of straight tubes connecting the upper front drum with the upper rear drum, and a baffle arranged to direct the gases from the front of the boiler rearwardly along the lower bank of tubes, a baffle arranged to direct the gases from the rear end of the boiler forwardly along the upper bank of tubes, a baffle resting on the top row of tubes forming the roof of the boiler and causing the gases to travel rearwardly along this top row of tubes and out past the rear water circulators between the middle drum and upper drum.

2. In a water-tube boiler, a pair of superimposed front horizontal steam and water drums, circulator tubes connecting said drums, a pair of rear horizontal water drums at different levels, a rear horizontal steam drum arranged above said rear water drum, water circulator tubes connecting said rear drums, water circulator tubes connecting the upper rear water drum and the rear steam drum, a row of tubes connecting the rear steam drum and the upper front drum, the rear steam drum and the upper front drum being on substantially the same horizontal plane, a bank of inclined tubes connecting the upper rear water drum with the upper front drum, a bank of inclined tubes connecting the lower rear water drum and the lower front drum, the rear lower water drum being at a lower level than the lower front drum, a baffle arranged to direct the gases from the front of the boiler rearwardly along the lower bank of tubes, a second baffle to direct the gases from the rear of the boiler upwardly along the upper bank of tubes, and a third baffle aranged to direct the gases from the second baffle along said row of tubes to a discharge point.

3. In a water-tube boiler, a pair of front and rear horizontal drums, the front drum being at a higher elevation than the rear drum, a bank of inclined tubes connecting said drums, a fire box arranged beneath the higher ends of said tubes, a baffle arranged along the top of said bank of tubes and extending from the front drum to near the rear drum for directing the gases from the fire box along said tubes, a pair of front and rear upper drums, a bank of tubes connecting the last mentioned drums, circulator tubes connecting the front drums, circulator tubes connecting the rear drums, means for directing the gases along said second mentioned bank of tubes and to a discharge point past the circulator tubes connecting the rear drums.

1,276,859. DAVENPORT. PHILLIP W. BAIR, Kansas City, Kans. Filed Nov. 19, 1917. Serial No. 202,728. (Cl. 5—51.)



1. In a davenport, a box frame, and a bed bottom comprising a seat section, an inner section and an intermediate section, said sections being pivotally connected with each other so as to swing from a folded position to a horizontal extended position, the seat section being hinged to the box frame independently and out of axial alinement with the pivotal connection between the sections, on an axis located intermediate of the upper and lower sides of the seat section, a bearing device carried by the box frame, and a flexible supporting member supported by said bearing device and having a running connection therewith and having its ends secured respectively to the seat section and to the inner section and arranged to elevate and hold elevated the inner section when the sections are swung from the folded to the stretched out position.

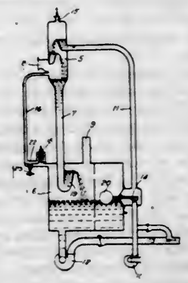
2. In a davenport, a box frame, a bed bottom hinged thereto and comprising a plurality of sections pivotally connected with each other so as to be swung from a folded position in the box frame to an extended horizontal position, a pillow rest carried by the bed bottom, and releasable means for lockingly engaging the pillow rest with the box frame for holding the bed bottom in the folded position.

3. In a davenport, a frame, a bed bottom section hinged to the frame, a bed bottom section hinged to the first named bed bottom section, a support mounted on said frame, and a flexible supporting member connecting the two sections and supported by and having a running connection with said support, said flexible member being adapted to cross the axis of the first named section when the latter is swung from one position to another.

5. In a davenport, a frame, two bed bottom sections hinged to each other, one of the sections being a seat section provided with an arm for engaging and limiting the swinging movement in one direction of the other section, and yielding means for engaging and supporting said arm, when the seat section is swung to the operative position.

[Claims 4 and 6 not printed in the Gazette.]

1,276,860. FEED-WATER HEATER. KARL BAUMANN, Urmston, England, assignor to The British Westinghouse Electric & Manufacturing Company, Limited, London, England. Filed May 1, 1916. Serial No. 94,792. (Cl. 261—21.)



1. A multi-stage feed water heater of the jet or contact type adapted to utilize low pressure steam compris-

ing a plurality of heater chambers, a steam connection to each chamber, semi-barometric legs connecting said chambers in such manner that the water passes through the same in series, means for removing water from the last chamber of the series, and automatically controlled means for venting one chamber to the chamber of next lower pressure.

6. A multi-stage feed water heater comprising at least two stages through which water to be heated passes in series and adapted to receive heating fluid at a different pressure, a pipe or passage connecting said stages, an automatic relief valve located within said pipe or passage, and a by-pass passage around said relief valve.

[Claims 2 to 5 not printed in the Gazette.]

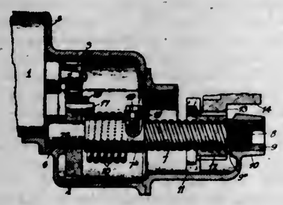
1,276,861. COLOR. FRANK J. BAUMGARDNER, Cleveland, Ohio, assignor of four-tenths to Worthington Hoyt and one-tenth to Arthur J. Hudson, Cleveland, Ohio. Filed Nov. 6, 1916. Serial No. 129,724. (Cl. 134—58.)

1. A color comprising a base of finely ground oyster shells and coloring material which is precipitated upon the finely ground oyster shell.

2. A color comprising a base of finely ground oyster shells and a dye which is inseparably mixed with the said base.

3. A color comprising a base of substances substantially the same as found in oyster shells in finely ground condition and coloring material which is intimately and inseparably mixed with said base.

1,276,862. ENGINE-STARTER. VINCENT BENDIX, Chicago, Ill. Filed Apr. 26, 1915. Serial No. 24,030. (Cl. 74—7.)



1. A starter for engines comprising a shaft having an intermediate screw-threaded portion, a driving device which is screw-threaded upon the shaft and adapted to travel longitudinally thereon and to engage a part of the engine to be driven, a driving gear which is mounted on the screw-shaft and in which the latter is adapted to slide, and a yielding driving connection between said gear and the shaft.

3. A starter for engines comprising a shaft having an intermediate screw-threaded portion, a driving device which is screw-threaded upon the shaft and adapted to travel longitudinally thereon and to engage a part of the engine to be driven, a driving gear which is loosely mounted on the screw-shaft, a projection on one side of the gear, a projection on the shaft and a spring coiled around the shaft and having its ends anchored to said projections.

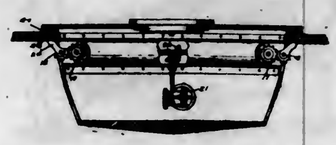
6. A starter for engines comprising a shaft having an intermediate screw-threaded portion, a driving device which is screw-threaded upon the shaft and adapted to travel longitudinally thereon and to engage a part of the engine to be driven, said shaft having at one end two cylindrical portions of different diameters, the outermost being the smaller, a driving gear which is mounted on such outermost portion and in which the latter is adapted to slide, and a yielding driving connection between said gear and the shaft, comprising a spring coiled around the cylindrical portion of the larger diameter and secured at its ends to the gear and shaft respectively.

15. A starter for engines comprising a shaft having a screw-threaded portion and a plain portion, a driving member screw-threaded upon said threaded portion, a gear loosely mounted on said plain portion, and a spring forming a driving connection between the shaft and gear.

18. A starter for engines comprising a shaft having plain bearing ends and an intermediate screw-threaded portion, a driving member screw-threaded upon such threaded portion, a gear mounted on the plain portion of the shaft, and a yielding driving connection between said gear and shaft, the shaft being mounted for longitudinal sliding movement through the gear.

[Claims 2, 4, 5, 7 to 14, 16, and 17 not printed in the Gazette.]

1,276,863. SUBMARINE. ATTILIO BIANCHI, New York, N. Y. Filed Sept. 5, 1917. Serial No. 189,867. (Cl. 114—16.7.)

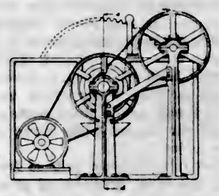


1. In a structure of the character described, a main vessel, an auxiliary vessel movable respectively into and out of said main vessel and provided with a portion adapted to overlie the deck of said main vessel, movable dogs carried by the auxiliary vessel and adapted to engage beneath the deck of said main vessel, and a releasing mechanism for said dogs, said mechanism serving to advance the dogs in the direction of said overlying portion of the auxiliary vessel and to move the latter with relation to the deck of the main vessel.

3. In a structure of the character described, a main vessel, an auxiliary vessel movable respectively into and out of the main vessel and provided with a deck normally arranged in approximately the same general line with the deck of the main vessel, a gasket interposed between the deck of the auxiliary vessel and the deck of the main vessel, and locking mechanism carried by the auxiliary vessel for securing the latter to the main vessel, and including swinging dogs having tail portions adapted to engage against the underside of the deck of the main vessel to hold the auxiliary vessel against casual separation from the main vessel and also serving to clamp the two decks against the gasket.

[Claim 2 not printed in the Gazette.]

1,276,864. PAPER-STOCK-TREATING MACHINE. MILTON C. J. BILLINGHAM, Kalamazoo, Mich., assignor of one-half to Henry Vander Horst, Kalamazoo, Mich. Filed June 10, 1918. Serial No. 239,279. (Cl. 92—35.)



1. In a structure of the class described, the combination of a tank, a foraminated cylinder mounted to revolve therein, an internal spiral for said cylinder having a rearward lead, a series of compartments disposed within said spiral, blades disposed between the turns of the spiral and coacting therewith to provide a series of spirally disposed dippers which discharge the stock into said compartments as the cylinder revolves, the dippers of succeeding spirals being adapted to discharge to succeeding compartments, said compartments having discharge openings on the down-stroke side of the cylinder so that the stock is passed through the compartments and advanced in the cylinder, a discharge trough at the rear of said compartments into which the dippers at the rear end of the cylinder discharge, a shaft disposed axially of the cylinder and through said compartments and discharge trough, blades on said shaft within said compartments, a discharge screw on said shaft within said discharge trough, a spray directed through said cylinder at the point of discharge of its dippers, sprays directed across the path of the stock as it is delivered to and from said compartments, and means for feeding stock to the front end of said cylinder.

[Claims 2 to 24 not printed in the Gazette.]

1,276,865. CUSHION-MAT. WENDELL P. BOSWORTH, Brockton, Mass., assignor to Brockton Heel Company, Inc., Brockton, Mass., a Corporation of Massachusetts. Filed Nov. 14, 1917. Serial No. 202,054. (Cl. 20—78.)

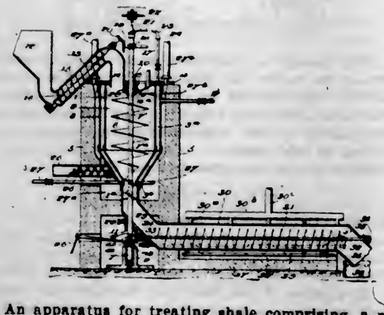


1. A cushion mat composed of pieces of tough flexible yielding material arranged in longitudinal parallel lines and transverse parallel rows, with spaces between successive pieces in the same lines and between pieces in the same rows, the pieces in continuous lines and rows being staggered and overlapping at their ends, connectors passing through the overlapping parts of said pieces transversely of said lines, thereby pivotally connecting the pieces together, and relatively bulky and rigid filling bars passing through the pieces in several of the adjacent rows and between the ends of the pieces in the respectively adjacent rows.

4. A cushion mat as set forth in claim 1, of which the pieces through which said bars pass form the impact portion of the mat, distinguished by a spacing portion constructed of narrower pieces similarly arranged and connected, without filling bars.

[Clams 2 and 3 not printed in the Gazette.]

1,276,866. APPARATUS FOR THE EXTRACTION OF HYDROCARBON MATERIALS. ALEXANDER M. BOYLE, Reno, Nev., assignor to Crane Shale Oil Corporation, Reno, Nev. Filed Dec. 29, 1917. Serial No. 209,571. (Cl. 196—19.)



1. An apparatus for treating shale comprising, a main retort chamber having upright walls, means encircling said walls to heat the same evenly, an intake passage adjacent the top of said retort for the entrance of unheated shale, an exhaust port adjacent the top of said retort for the discharge of vapors and gases evolved from said shale, a tubular conveyer member communicating with said intake passage and inclined obliquely with the receiving end of said tubular conveyer member positioned below the discharge end thereof, a supply container positioned above and having its discharge opening communicating with the receiving end of said tubular conveyer, a screw conveyer within said tubular member and extending substantially the length thereof, a vertical screw agitator member centrally positioned in the center of said main retort and with the edges of the screw threads spaced from the walls of the retort to provide a downward passageway for shale material elevated by said agitator member, and means to drive said screw conveyer and said agitator member.

3. An apparatus for treating shale comprising a retort having upright walls, a cover for the same, a secondary wall inclosing said upright walls and providing a steam jacket around the same, a vertical screw agitator member centrally positioned and spaced from said upright walls and adapted to elevate shale in the center of the retort and allow the shale to fall downwardly between said upright walls and the sides of said agitator, means for releasing steam located within the peripheral sweep of said agitator member, and means to rotate said agitator member.

[Claims 2 and 4 to 7 not printed in the Gazette.]

1,276,867. MEASURING DEVICE. FRANKLIN F. BRADLEY, Chicago, Ill., assignor to Bradley & Vrooman Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 7, 1917. Serial No. 153,149. (Cl. 221—112.)



1. A measuring pipe in combination with valves at the ends of the measuring pipe, the valve at one end permitting admission of material to the measuring pipe and the valve at the other end permitting discharge of material that is measured in the measuring pipe between the valves; a discharge pipe communicating with the measuring pipe, the discharge end of the discharge pipe having a pipe closing valve; and means common to the valve between the measuring and discharge pipes and the pipe closing valve at the end of the discharge pipe for operating these valves together, these two valves having openings so relatively disposed that when either of these two valves is opened the other valve is closed.

8. A measuring pipe in combination with a valve at the discharge end of the measuring pipe; a partition in and extending longitudinally of the measuring pipe; a second valve coöperating with the partition and the aforesaid valve for excluding a part of the space within the measuring pipe from receiving material to be measured; a valve at the admission end of the measuring pipe; and means common to the valves at the admission and discharge ends of the measuring pipe for operating these valves together, these two valves having openings so relatively disposed that when either of these two valves is opened the other valve is closed and whereby both valves may be closed at the same time.

[Claims 2 to 7 not printed in the Gazette.]

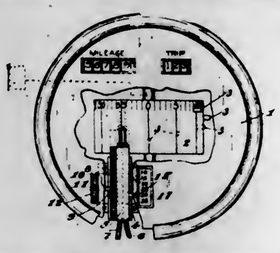
1,276,868. ROLL-PAPER HOLDER AND PRINTER. FRANK F. BRADSHAW, Boulder, Colo. Filed Jan. 5, 1917. Serial No. 140,741. (Cl. 101—226.)



3. A printing attachment for roll paper holders comprising a frame having means for attachment to a roll paper holder, a platen carried thereby, a printing roller adapted to coöperate with said platen, an inking roller adapted to coöperate with said printing roller, a support for said rollers, a fulcrum supported by said frame and supporting said support, and two adjustable clamping devices connecting the support and frame at opposite sides respectively of said fulcrum.

[Claims 1, 2, and 4 not printed in the Gazette.]

1,276,869. AUTOMATIC CONTROLLER. GUIDO E. CAGLIERI, San Francisco, and HARRY MURRAY, Ross, Cal.; said Murray assignor to said Caglieri. Filed Oct. 16, 1916. Serial No. 125,841. (Cl. 175—355.)



1. In combination with a speed responsive device having a movable element, of means for closing an electric circuit including means arranged at an inclination to and across the path of the movable element, and means adjustable transversely of the path of the movable element for contacting with a predetermined part of the first means, one of said means being carried by the movable element of the speed responsive device.

2. An automatic controller comprising, in combination with a movable speed responsive device and an ignition circuit, of means for rendering the circuit inoperative including stop means arranged at an inclination to the path of movement of the speed responsive device and contact means included in the circuit, and adjustable relative to the inclined stop means to vary its point of engagement with said stop means, one of said means included in said first means being carried by said speed responsive device.

3. In combination with a speed responsive device having a movable element, of means for closing an electric circuit including means arranged at an inclination to and across the path of the movable element, and means adjustable transversely of the path of the movable element for contacting with a predetermined part of the first means, one of said means being carried by the movable element of the speed responsive device, said second means comprising a slidably mounted member and a contact part carried by the latter for being engaged by the first means.

5. In combination with a movable speed responsive device having wiping means arranged at an inclination to the path of movement thereof, means adjustably mounted for movement into the path of said device to vary the point of engagement of said second means on said wiping means, and means controlled by said second means for governing the operation of an engine.

[Claims 4 and 6 to 10 not printed in the Gazette.]

1,276,870. PROCESS OF TREATING PHOSPHORIC-ACID SOLUTIONS. FRANK K. CAMERON, Washington, D. C. Filed Nov. 11, 1916. Serial No. 130,858. (Cl. 23—21.)

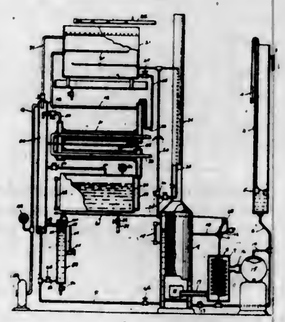
1. Process of effecting a substantially complete precipitation of phosphoric acid from strong solutions thereof, comprising bringing gaseous ammonia into presence of an aqueous solution containing not less than twelve per cent. of phosphoric acid, the ammonia being in sufficient excess to effect a substantially complete precipitation of the phosphoric acid in the form of tri-ammonium phosphate.

2. Process of treating strong phosphoric acid solutions, which consists in reacting thereon under superatmospheric pressure with gaseous ammonia in sufficient excess to precipitate substantially the whole of the phosphoric acid as tri-ammonium-phosphate.

4. Process of treating strong phosphoric acid solutions, which consists in reacting thereon under superatmospheric pressure with gaseous ammonia in sufficient excess to precipitate substantially the whole of the phosphoric acid as tri-ammonium-phosphate, and subsequently recovering a portion of the ammonia by converting the tri-ammonium phosphate into an ammonium-phosphoric acid compound or mixture containing a lesser proportion of ammonia.

[Claim 3 not printed in the Gazette.]

1,276,871. VACUUM WATER-PURIFICATION SYSTEM. OLIVER M. CAMPBELL, Kansas City, Kans. Filed Jan. 27, 1916. Serial No. 74,603. (Cl. 210—1.)

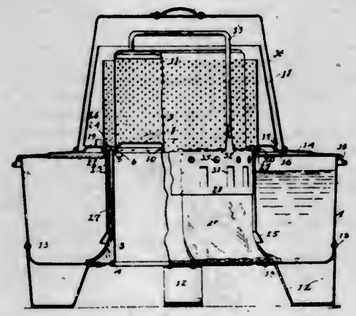


1. The process of purifying water which consists in distilling the water and removing the gaseous impurities from the vapor during condensation by subjecting said vapor to a continuous vacuum action at various points corresponding to the various successive stages of condensation of said vapor.

[Claims 2 to 8 not printed in the Gazette.]

1,276,872. OIL-STOVE. LEE S. CHADWICK, East Cleveland, Ohio, assignor to The Cleveland Metal Products Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 8, 1914. Serial No. 855,861. (Cl. 158—88.)

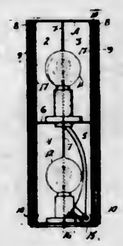
1. In a stove of the character described, the combination of an open top reservoir having an inner wick tube and a perforated inner commingling tube, a removable cover for the reservoir having a depending outer wick tube adapted to surround the inner wick tube and an outer perforated commingling tube, a wick in the space, between said wick tubes, and a wick raiser connected with said wick and having an operating device extending upwardly between the commingling tubes and across the top of the inner commingling tubes.



15. In a stove of the character described, the combination of an inner and an outer wick tube, a band mounted in the space within said wick tubes, said band being divided into a plurality of segments by vertically extending ribs or flanges, wick segments applied to the band between the ribs or flanges, and wick engaging means carried by the band between each pair of ribs or flanges, whereby the tops of the wick segments may be adjusted with reference to each other thereby to vary the effective vapor generating space at the top of the complete wick.

[Claims 2 to 14 and 16 to 28 not printed in the Gazette.]

1,276,873. DIRECTION-INDICATOR. GEORGE C. CHEEK, Sacramento, Cal., assignor of one-sixth to Omer E. Cheek and one-sixth to Rodney J. Morrissey, Sacramento, Cal. Filed Oct. 8, 1917. Serial No. 195,439. (Cl. 40—132.)



1. In a direction indicator, a casing, a horizontal partition in the casing forming an upper and a lower compartment, a vertical partition in the casing bisecting the horizontal partition and forming a pair of upper and a pair of lower compartments, a semi-transparent legend bearing plate for each side of the casing, said vertical partition acting to prevent light from passing through the casing from one plate to the other and said vertical partition having an opening above and an opening below said horizontal partition, and an electric lamp in each opening extending on opposite sides of the vertical partition so as to simultaneously illuminate the respective pairs of upper and lower compartments.

[Claim 2 not printed in the Gazette.]

1,276,874. BOTTLE-CLEANER. LOUIS CLARKE, College Point, N. Y. Filed June 10, 1918. Serial No. 239,297. (Cl. 141—7.)

1. A rotary cleaning device including a shank comprising a plurality of strands twisted together to form spiral thread grooves, a handle swiveled at one end of the shank, said strands being separated and extending divergently at the other end of the shank, cleaning members carried by said separated strand portions, and a member slidable on the shank and having portions engaged in the thread grooves thereof.



2. A rotary cleaning device including a shank comprising a plurality of strands twisted together to form spiral thread grooves, a handle swiveled at one end of the shank, said strands being separated and extending divergently at the other end of the shank, cleaning members carried by said separated strand portions, and a member slidable on the shank and having portions engaged in the thread grooves thereof and a second member slidable on the shank and extensible over the separated strand portions to retract said portions.

1,276,875. PNEUMATIC TIRE. FRED COLBY, Tuxedo Park, N. Y. Filed May 2, 1913. Serial No. 765,024. (Cl. 152—17.)

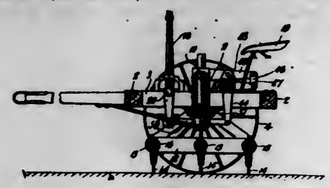


1. In a pneumatic tire having a transversely rounded periphery with spherical protuberances thereon and terminating in lateral annular grooves, a separable tread member having edges adapted to said grooves and concavities corresponding with said spherical protuberances; and retaining means comprising a relatively non-yielding circumferentially disposed band within said tread member adjacent said concavities and extending into the edges of said member.

2. In a pneumatic tire having a transversely rounded tread portion with annular grooves at the sides and a series of protuberances upon the rounded portion upon the periphery of said tread portion and at the sides thereof, a separable tread member having concavities for said protuberances and edges adapted to said grooves; and retaining means comprising a non-yielding flexible band extending from one edge to the other immediately adjacent said concavities, said protuberances and concavities coacting to lock the edges of said tread member in said grooves.

[Claim 3 not printed in the Gazette.]

1,276,876. GRADING-MACHINE. XAVIER F. COUNARD, Brussels, Wis. Filed Apr. 17, 1917. Serial No. 162,720. (Cl. 37—7.)

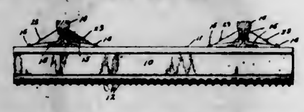


1. In a grading machine, the combination with a wheeled frame, of an auxiliary frame, scraper plates suspended therefrom, a cross-piece rotatably carrying said auxiliary frame, said cross-piece being adjustably supported by the wheeled frame, a lever, connections between said lever and said cross-piece, and separate connections between said lever and the auxiliary frame.

7. In a grading machine, the combination with a wheeled frame, of an auxiliary frame, scraper plates suspended therefrom, a cross-piece, a pivot pin connecting said auxiliary frame to said cross-piece, a transverse shaft journaled in bearings of the main frame, a double lever pivotally supported on the main frame, connections between said transverse shaft and one end of said double lever, the other end of the double lever being connected to said cross-piece, guiding means for said cross-piece, a pair of levers placed in juxtaposition, each of which comprises an upper and a lower part, notched quadrants for the upper parts of said pair of levers and adapted to receive a tooth of said upper parts, a manipulating lever interposed between said pair of levers and adapted to selectively disengage the upper parts from said notched quadrant and to simultaneously interlock said upper parts with said manipulating lever, and connections between said pair of levers of said auxiliary frame and said transverse shaft respectively.

[Claims 2 to 6 not printed in the Gazette.]

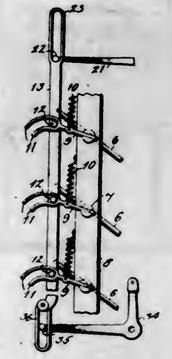
1,276,877. RAILWAY-TIE AND RAIL-FASTENER. STEPHEN D. COVERT, Denver, Colo. Filed Oct. 22, 1917. Serial No. 197,901. (Cl. 238—5.)



The combination with a tie member having a rail disposed transversely thereon, said tie member having a vertical longitudinal slot formed therethrough, an angle bar disposed on the tie member and against the rail, the horizontal portion of the angle bar having a slot registering with the slot of the tie member, a plate secured to the lower side of the tie member beneath the slot thereof and having a central opening therethrough, a vertical pin disposed through the opening, a head on the lower end of the pin, and an elongated head on the upper end of the pin, said upper head being arranged to lie in the slot of the tie member below the horizontal portion of the angle bar at times, and to engage transversely of the slot and on the said portion of the angle bar at times.

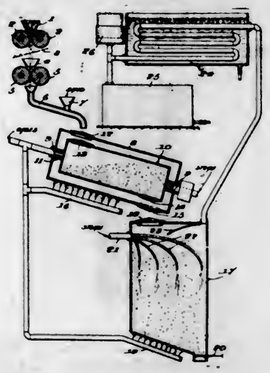
1,276,878. TEMPERATURE-REGULATING SYSTEM. HARRIS SHAUL COX, Anderson, Ind. Filed Aug. 30, 1916. Serial No. 117,618. (Cl. 236—6.)

In combination with an automobile radiator, vertical bars at the sides thereof, shafts journaled in said bars, arms at one end of the shafts having their outer ends forked and curved, a spring connecting each arm with the adjacent bar, an operating bar having loops at its ends, pins projecting from the operating bar and engaging the curved forked ends of the said arms, a thermally controlled member engaging one of the looped ends of the operating bar to open the shutters, a manually operated member connected with the remaining looped end of the



operating bar to admit of the shutters being opened at will, and an indicator coöperating with the thermally controlled member.

1,276,879. PROCESS OF EXTRACTING HYDROCARBON MATERIALS FROM SHALE AND SIMILAR EARTHY MATERIAL. ADOLPHUS G. CRANE, Reno, Nev., assignor to Crane Shale Oil Corporation, Reno, Nev. Filed Oct. 4, 1917. Serial No. 194,737. (Cl. 196—21.)



1. The process of extracting hydrocarbon material from shale and similar earthy material, which consists in reducing the material to be treated by mechanical action to a pulverized condition, subjecting the material so pulverized in a first container to a continuous agitating movement and to a heat treatment and to the action of dry steam, leading off the gases and vapors generated in said first container, conducting said material so treated into a second container and subjecting said material to a temperature higher than that in said first container to generate hydrocarbon vapors and dry the material, and condensing the vapors so generated.

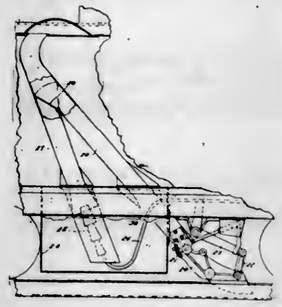
6. The process of extracting hydrocarbon material from shale and earthy material, which consists in reducing the material to be treated by mechanical action to a pulverized powderlike conditon, mixing the material so treated with sand to keep separate the oil bearing particles of shale and prevent packing of the mass of shale, subjecting the mixture of pulverized material and sand in a dust

container to an agitating action and to the action of dry steam and to a temperature sufficiently high to drive off volatile gases and vapors, leading off the gases and vapors generated in said first container, conducting said material so treated into a second container and subjecting said material to a pressure greater than atmospheric pressure and to a higher temperature than the temperature in said first mentioned container and sufficient to drive off substantially all hydrocarbon material as vapor, and condensing the vapors so generated.

8. The process of extracting hydrocarbon material from shale and similar material which consists in mixing the shale-like material containing the desired hydrocarbon material in a pulverized condition with a neutral granular substantially non-absorbent material to keep separate the oil bearing particles of shale and prevent packing of the mass of shale, heating the mixture in a retort, and condensing the vapors generated by said heat treatment.

[Claims 2 to 5, 7, 9, and 10 not printed in the Gazette.]

1,276,880. WATER-SCOOP APPARATUS. DAVID F. CRAWFORD, Pittsburgh, Pa. Filed Aug. 2, 1916. Serial No. 112,702. (Cl. 103—51.)



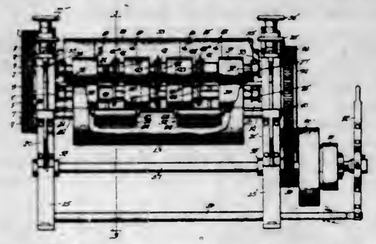
1. The combination in a vehicle provided with a main upper tank, of a lower supplemental tank, a scoop beneath the vehicle opening forwardly so as to scoop up water as the vehicle moves over a water trough, a conduit leading from the scoop to the main tank and having an intermediate opening into the supplemental tank, a second conduit leading from the supplemental tank to the main tank, and water lifting means for carrying water from the supplemental tank to the main tank.

4. The combination in a vehicle provided with a main upper tank, of a lower supplemental tank, a scoop beneath the vehicle opening forwardly so as to scoop up water as the vehicle moves over a water trough, a conduit leading from the scoop to the supplemental tank, a second conduit leading from the supplemental tank to the main tank, and an ejector for carrying the water from the supplemental tank to the main tank.

[Claims 2 and 3 not printed in the Gazette.]

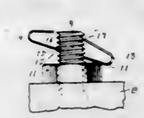
1,276,881. METHOD OF MAKING COMPOSITION SHINGLE-STRIPS. HARRY A. CUMFER and OWEN D. MCFARLAND, Chicago, Ill., assignors to Guyton & Cumfer Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Original application filed Jan. 2, 1915, Serial No. 249. Divided and this application filed Nov. 20, 1916. Serial No. 132,346. (Cl. 164—28.)

The method of making shingle-simulating strips of flexible material for roof covering, which consists in providing a sheet sufficiently wide to make two or more strips; slitting the sheets longitudinally into strips; punching transversely extending openings at uniform intervals across the edge of the severed sheet at right angles to the path of movement of the sheet; holding the severed edges together while being punched, and



moving the fabric continuously during the slitting and punching operation.

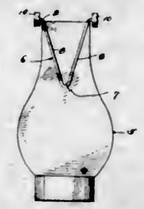
1,276,882. NUT-LOCK. IRVIN W. DAVIS, Milwaukee, Wis. Filed Oct. 12, 1916. Serial No. 125,160. (Cl. 151—30.)



1. A nut lock, comprising a strip of material having a bolt opening formed therein of a size to permit the free passage of the threaded portion of a bolt therethrough without engagement with the thread, said strip of material having a folded over finger portion the free end portion of which forms a partial thread and overlaps a part of the bolt opening and prevents the free passage of the threaded portion of the bolt except when the strip of material is tilted obliquely with relation to the axis of the bolt, the edge portion of the material forming the bolt opening and opposite to the finger and the free end of the finger forming partial threads for clampingly engaging the bolt thread when the strip of material is positioned substantially at right angles to the bolt axis.

2. A nut lock, comprising a strip of material having an opening therein for receiving a bolt but larger than the outer thread diameter of the bolt to permit its free passage thereover, a part adjacent said opening forming a partial thread engaging the thread portion of the bolt and a folded over finger portion projecting inwardly and having its free end forming a partial thread for engagement with the bolt diametrically opposite but spaced above the portion engaged by the first mentioned partial thread to permit said strip of material to be tilted obliquely and slipped onto the bolt in tilted position until that part of the strip adjacent said finger engages the member to be locked whereupon subsequent turning of the strip will bring its upwardly tilted portion into engagement with the member to be held and in a position at substantially right angles to the bolt axis and move the free end of the finger portion downwardly clampingly against the threaded portion of the bolt.

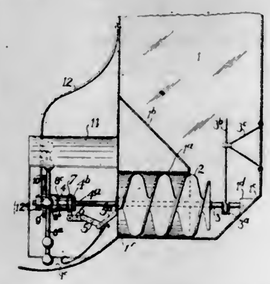
1,276,883. LAMP-CHIMNEY PROTECTOR. MARY E. DENGLER, Tivoli, N. Y. Filed Aug. 17, 1917. Serial No. 186,816. (Cl. 240—95.)



As an article of manufacture, a lamp chimney protector, comprising a substantially V shape member formed

from a single length of wire having outturned free ends, and button-like heads fixed on the outturned ends of each formed from non-heat-conducting material.

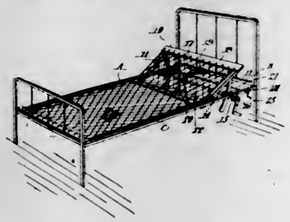
1,276,884. STOCK-FEEDER. JOHN DIERKS, Kansas City, Mo. Filed Feb. 1, 1918. Serial No. 214,868. (Cl. 119—54.)



1. In a stock feeder, the combination of a bin, provided with an aperture and a trough extending therefrom, a cylindrical piece secured in the bottom of said bin, providing communication between said bin and said aperture, a spiral revolubly mounted therein, a spider mounted in front of said bin over said trough and means for engaging and disengaging said spider with said spiral.

[Claims 2 to 5 not printed in the Gazette.]

1,276,885. INVALID-BED. THOMAS DODDS, Thessalon, Ontario, Canada. Filed Mar. 25, 1918. Serial No. 224,598. (Cl. 5—43.)

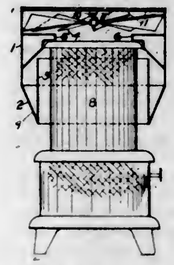


A bed comprising a hinged member, means for raising and lowering said member including a ratchet carrying rotatable shaft, and means for maintaining said shaft in adjusted position comprising a bracket carried by the headboard frame, a pawl supported therefrom engaging said ratchet, a spring also carried by the headboard frame engaging said pawl, bearings depending from the bed frame, a handled shaft journaled therein having a cranked portion adapted to engage and release the pawl from the ratchet, and a U-shaped bail carried by said crank shaft encircling said pawl.

1,276,886. HEAT-DISTRIBUTING DEVICE. WILLIAM C. A. EBERHARDT, Racine, Wis. Filed Dec. 4, 1916. Serial No. 134,850. (Cl. 126—96.)

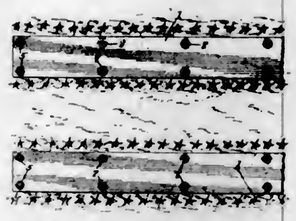
1. A heat distributing device of the kind described, comprising a cylindrical casing, having a perforated cone-shaped lower portion, and an inner open ended cylinder shorter than said casing and with its lower end joined to the lower end of the cone shaped portion, and a bladed disk mounted in said casing above said cylinder, said disk having a flat central portion with blades extending radially therefrom and located at an angle to the upper end of said cylinder.

2. A heat distributing device of the kind described, comprising a cylindrical casing having an inwardly inclined perforated lower portion, and an inner open ended cylinder, shorter than the outer casing, and spaced therefrom, and joined at its lower end to the lower end of the



outer casing, a bladed disk mounted within the outer casing and above said cylinder, a perforated cover on the casing, and brackets on the casing adapting it to be mounted on a heater.

1,276,887. IMPERVIOUS MULSH FOR REGULATING SOIL-WATER. CHARLES FRANKLIN ECKART, Olaa, Hawaii. Filed Sept. 16, 1916. Serial No. 120,470. (Cl. 47—36.)



1. A water-proof, opaque mulsh consisting of a strip having pegging centers formed of a coating of water-proof material, on one side thereof.

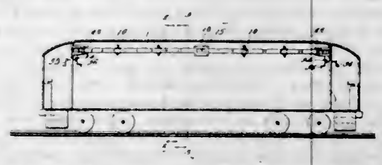
3. A water-proof, opaque mulsh consisting of a body having pegging centers formed of a coating of water-proof material in one side thereof, and of a reinforcing element on the other side thereof.

[Claims 2 and 4 to 8 not printed in the Gazette.]

1,276,888. METHOD OF TREATING FOOD REMNANTS. EDWARD C. EMERY, Los Angeles, Cal. Filed Apr. 26, 1917. Serial No. 164,621. (Cl. 99—5.)

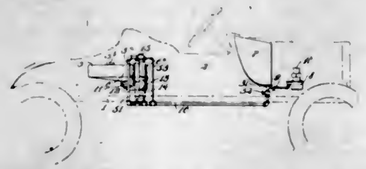
The method of converting food remnants into a condensed food which consists in grinding the remnants to a desired fineness to extract the juice content and reduce the remnants to a pulp, then subjecting the ground mass to a temperature sufficient to convert the juice content into a sterilizing vapor whereby the animal and vegetable salts are infused in the mass, aerating the mass and thereby driving off the excess moisture, and finally drying the mass.

1,276,889. STREET-CAR INDICATOR. LYLE A. FAVRE, Grey Eagle, Minn. Filed Nov. 15, 1915. Serial No. 61,607. (Cl. 40—96.)



In a street car indicator, the combination with a car, of an endless band extending around the interior of the car and provided with the names of streets or thoroughfares traversed by the car in its route, means for guiding the endless band, and means for actuating the same comprising a bearing bracket mounted on the car interiorly thereof and having spaced horizontal projecting portions extending above and below the band and provided with slots, said bracket being also provided with a depending arm, vertical rollers located at opposite faces of the band and provided with shafts, one of the shafts operating in the said slots and the other shaft being journaled in the said horizontal portions of the bearing bracket and depending therefrom in parallelism with the depending arm of the bracket, adjustable means yieldably urging the shaft operating in the slot to maintain the rollers in frictional engagement with the band, a horizontal shaft journaled in the said depending arm and extending exteriorly of the car, gears mounted on the extended shaft and the horizontal shaft and meshing with each other, and operating means connected with the horizontal shaft and arranged exteriorly of the car.

1,276,890. SYSTEM FOR SUPPLYING LIQUID FUEL. THOMAS J. FAY, Brooklyn, N. Y., assignor, by mesne assignments, to The Standard Parts Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 25, 1915. Serial No. 47,380. (Cl. 158—36.)



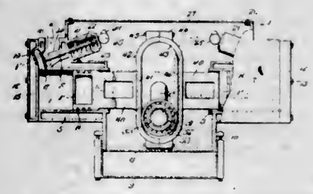
1. In a system of the character described, the combination, with an engine fuel supply pipe and a liquid fuel tank connected thereto, of a pair of storage tanks, a pair of pumps each of which has an inlet communicating with one of said storage tanks and an outlet communicating with the first mentioned tank.

2. In a system of the character described, the combination, with an engine fuel supply pipe and a liquid fuel tank connected thereto, of a pair of storage tanks for dissimilar liquids, and means for supplying liquids from the two storage tanks in definite and invariable proportions to the first mentioned tank.

13. The combination, with an engine fuel supply pipe and a tank connected thereto, of a pair of auxiliary storage tanks, means for supplying liquid from each of said tanks in definite proportions to the first mentioned tank, and means for rendering the supplying means inoperative when the liquid in either of the tanks falls below a predetermined level.

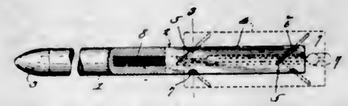
[Claims 3 to 12 and 14 not printed in the Gazette.]

1,276,891. MULTICYLINDER ENGINE. PAUL FELIX, Knoxville, Tenn. Filed Dec. 8, 1916. Serial No. 135,843. (Cl. 123—56.)



In an internal combustion engine, the combination with opposed cylinders, pistons therein, a main shaft whose cranks stand between relatively opposite pistons, and a sleeve fast on its crank; of an upright loop-shaped yoke connecing the stem of each pair of pistons and made of an arched top, upright sides whose inner faces are cut away at their respectively opposite edges to leave tracks along their remaining edges, and means for connecting the lower end of their sides and the extremities of the top to the upper end of the track, and on each sleeve two bearings including channeled ring-shaped inner members disposed side by side on the sleeves, balls in their respective channels, and channeled outer members surrounding said balls and constituting wheels, each traveling on one of said tracks within the yoke as the latter reciprocates during the rotation of the crank.

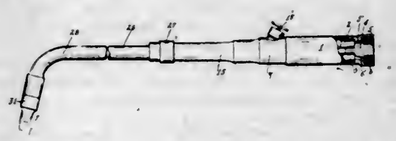
1,276,892. PROJECTILE. BROWN FENDER, Kaufman, Tex. Filed Jan. 12, 1918. Serial No. 211,579. (Cl. 102—26.)



1. A projectile comprising an elongated shaft tubular at its rear end and provided with a longitudinal slit, a weighted tip on the shaft, wings slidably mounted in the slit, and a resilient element within the shaft and abutting the forward ends of the wings to force the wings to extended position.

2. A projectile comprising an elongated shaft tubular at its rear end and provided with a longitudinal slit wings slidably mounted in the slit, said wings having inclined slots, pins secured in the shaft and passing through the slots, and a resilient element within the shaft and abutting the forward ends of the wings to force the wings rearwardly, whereby the pins and slots will guide the wings outwardly to extended positions.

1,276,893. WELDING-TORCH. MICHAEL FISCHER, Richmond, Cal. Filed May 6, 1918. Serial No. 232,915. (Cl. 158—27.4.)



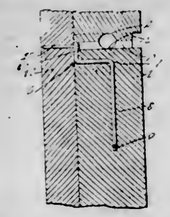
3. A torch for the described purpose comprising a handle member provided with separate connections and passages for the gases; a mixing-chamber-member into which said passages separately lead; a controllable injector intermediate the handle member and mixing-chamber-member; a series of plugs in said mixing-chamber-member formed with communicating ducts constituting a tortuous mixing passage leading from the mixing-chamber of said member, said series of plugs comprising concave-ended members with an annular series of body ducts and inwardly directed delivery ducts, and an intervening portion with a helical peripheral groove; and a nozzle member fitted to the mixing chamber member, said nozzle member being jacketed.

[Claims 1, 2, and 4 to 6 not printed in the Gazette.]

1,276,894. VENEER BLOCK. GEORGE D. FLANDERS, Ellsworth, Kans. Filed Aug. 13, 1917. Serial No. 185,970. (Cl. 72—20.)

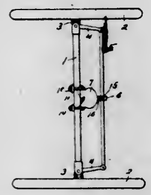
A block of the class described, provided in one edge with a transverse groove; and an anchor comprising an outer end having an aperture alined with the groove, a body disposed at right angles to said end, and a shank disposed at right angles to the body and projecting there-

from in an opposite direction to said end, said outer end of the anchor being partially embedded in the block and extending along the rear of the block within the perimeter of the block and beyond the base of the groove, the outer



surface of said end being flush throughout its length with the rear face of the block, the body being disposed parallel to said edge of the block and being embedded in the block in spaced relation to said edge of the block, the shank being embedded in the block.

1,276,895. STEERING DEVICE FOR AUTOMOBILES. JAMES C. FULKERSON, Kansas City, Mo., assignor, by direct and mesne assignments, to Donald A. Davis, Kansas City, Mo. Filed Mar. 30, 1915. Serial No. 17,980. (Cl. 21—200.)



1. In a steering device for automobiles, a lever support provided with means for attachment to the axle of an automobile, a lever having two fulcra on said support and, when in the straight-ahead position, resting upon both fulcra, and adapted when oscillated, to rest alternately upon said fulcra, means for clamping the steering rod of the automobile, pivotally and slidably connected with said lever, and yielding means for normally forcing said lever to the straight-ahead position.

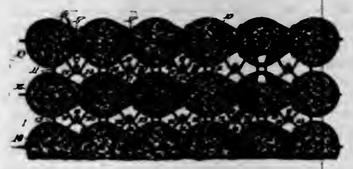
3. In a steering device for automobiles, a casing, means adapted to secure said casing to an automobile axle, a lever oscillatively mounted in said casing and having two fulcra upon which the lever, when oscillated, alternately rests, the lever in the straight ahead position resting upon both fulcra, the lever being provided with a longitudinal slot, a bolt slidable in said slot, means secured to said bolt and coöperating with said bolt for clamping a steering rod of the automobile, and yielding means for normally forcing said lever to the straight ahead position.

5. In a steering device for automobiles, a lever support having means for being secured to an automobile axle, a lever oscillatively mounted on said support and having a slot, the lever having two fulcra on said support and, when in the straight ahead position resting upon both fulcra, and, when oscillated, resting alternately upon said fulcra, means adapted to be secured to the steering rod of an automobile and slidable in said slot and adapted to swing said lever, and means for normally swinging said lever to the straight ahead position.

[Claims 2, 4, and 6 not printed in the Gazette.]

1,276,896. SPRING STRUCTURE. CHARLES H. GAIL, Cincinnati, Ohio. Filed Dec. 29, 1917. Serial No. 209,381. (Cl. 5—13.)

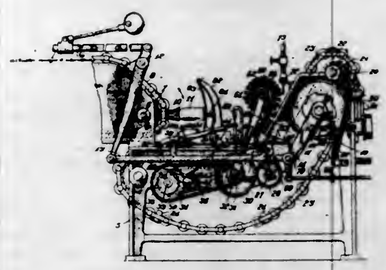
9. In a spring-structure of the character described, the combination of a plurality of rows of spiral-springs, the springs of each row having their convolutions interfitting with those of the adjacent rows, casings inclosing alternate rows of said springs, and means fastening together the springs of the incased rows and constituting with said incased springs the sole means for retaining the



springs of the unincased rows in place, each of said fastening means comprising a hook member secured to a pair of springs of one of said incased rows and an eye member secured to a pair of springs of the next adjacent incased row, substantially as described.

[Claims 1 to 8 and 10 not printed in the Gazette.]

1,276,897. BOTTLE-WASHING MACHINE. ROCKWELL L. GALLUP and WALTER G. WACHS, Chicago, Ill., assignors to Barry-Wehmiller Machinery Company, St. Louis, Mo., a Corporation of Missouri. Original application filed Sept. 19, 1914, Serial No. 862,476. Divided and this application filed Oct. 27, 1917. Serial No. 198,752. (C. 193—24.)



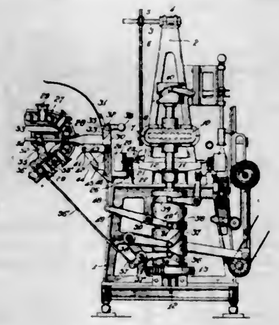
1. In a bottle washing machine, the combination of a frame, a conveyer mounted on said frame and adapted to carry a bottle through said machine, a second conveyer disposed beneath the first mentioned conveyer, means for intermittently actuating said second-mentioned conveyer, means for delivering a bottle onto said second-mentioned conveyer, and a gate adapted to be moved into the path of the bottle on said second-mentioned conveyer to hold the bottle until it is picked up by said first-mentioned conveyer.

4. In a bottle washing machine the combination of a frame, a conveyer mounted on said frame for carrying bottles through the machine, means for intermittently actuating said conveyer, means for delivering bottles to said conveyer, and means for automatically spacing the bottles on said conveyer including a moving support for the bottles traveling in the same direction as and holding the bottles in the plane of said conveyer, and means for limiting the movement of the bottles on said support.

11. In a bottle washing machine the combination of a frame, a conveyer mounted on said frame, bottle holders having means for engaging the necks of the bottles and mounted on said conveyer, a shaft mounted in said frame adjacent the discharge end of said conveyer, and plunger wheels mounted on said shaft each carrying a plurality of resilient plungers adapted to directly engage the necks of the bottles and force them from said holders.

[Claims 2, 3, and 5 to 10 not printed in the Gazette.]

1,276,898. BOTTLE-WASHING MACHINE. ROCKWELL L. GALLUP and WALTER G. WACHS, Chicago, Ill., assignors to Barry-Wehmiller Machinery Company, St. Louis, Mo., a Corporation of Missouri. Original application filed Jan. 2, 1915, Serial No. 131. Divided and this application filed Oct. 27, 1917. Serial No. 198,753 (Cl. 193—24.)



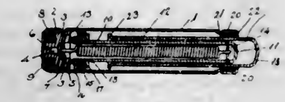
1. In a machine of the character described, the combination of a support, a shelf adapted to receive a plurality of bottles in reclining position, links pivotally connecting one side of said shelf to said support, the other side of said shelf being slidably mounted in said support, whereby the shelf may be moved from horizontal to vertical position, and means for moving said shelf to vertical position to right the bottles disposed thereon.

3. In a machine of the character described, the combination of a bottle carrier adapted to support a plurality of bottles, a shelf in juxtaposition therewith and adapted to receive the bottles therefrom, automatic means for forcing the bottles from said carrier onto said shelf, weighted levers adapted to contact with the ends of the bottles to prevent overthrow thereof as they are forced from said carrier, a bottle conveyer, and automatic means for actuating said shelf to dispose the bottles in upright position in said conveyer.

7. In a machine of the character described, the combination of a bottle conveyer comprising a fixed shelf and a chain movable thereabout and having a plurality of pockets vertically disposed above the shelf, a movable shelf horizontally disposed above the fixed shelf and at the side thereof opposite said pockets, the edge of said movable shelf adjacent said conveyer being constrained to move in a vertical plane while the shelf bodily tilts, a carrier adapted to support a plurality of bottles, and located adjacent said movable shelf on the side thereof opposite the conveyer, ejector means arranged to deliver the bottles from said carrier in horizontal position on said movable shelf, and means for operating said shelf to deliver bottles therefrom into said conveyer.

[Claims 2 and 4 to 6 not printed in the Gazette.]

1,276,899. PRESSURE GAGE. PRESTON E. GILLING, East Orange, N. J., assignor to A. Schrader's Sons, Incorporated, Brooklyn, N. Y., a Corporation of New York. Filed Nov. 2 1911, Serial No. 658,077. Renewed June 27, 1916. Serial No. 106,263. (Cl. 73—11.)

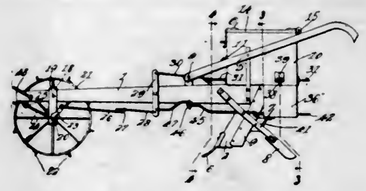


1. A pressure gage comprising in combination an outer casing forming at its interior a cylinder adapted at one end to connect with an air valve and open at the other end, a piston in said casing engaging with an air tight fit the walls of said cylinder, a piston tube extending from said piston toward the open end of the casing with its end adjacent the piston opening therethrough into the casing and with its other end closed, a gage tube telescopically mounted in the open end of the casing separate from the piston tube and inclosing the outer closed end portion of the same so as to be carried outward therewith, means at said open end of the casing for frictionally engaging said gage tube whereby the same will be retained at any position to which it is pushed, and a spring mounted within the piston tube secured thereto at its closed end and extending through the other and open end of the piston tube and attached to the casing, whereby said spring normally retracts said piston and piston tube.

8. A pressure gage, comprising a casing, a plate closing the inner end of said casing, said plate having a groove circumferentially thereof, said casing having a portion thereof pressed into said groove to fasten the parts, and said plate having a projecting part constituting a valve-stem depressor, and a packing around said projecting part, said casing being turned in at its edge to form a shoulder to confine said packing.

[Claims 2 to 7 not printed in the Gazette.]

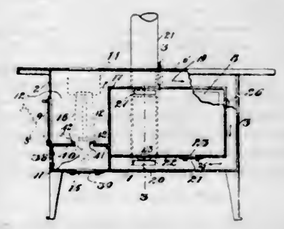
1,276,900. PLANTER. WILLIAM V. GIST, Sparta, Tenn. Filed Sept. 5, 1917. Serial No. 189,846. (Cl. 221—125.)



1. A planter, including a suitably supported hopper, a delivery spout associated therewith, means for delivering seed from the hopper to the spout, a fertilizer hopper associated with the first hopper, said fertilizer hopper having openings in the forward face thereof, slides in the hopper and working through the openings, cleats on the slides for collecting fertilizer and forcing it through the openings, and means for directing the fertilizer behind the delivery spout.

[Claim 2 not printed in the Gazette.]

1,276,901. OIL-BURNING STOVE. ARNOLD F. GLASS, Birmingham, Ala. Filed Apr. 2, 1918. Serial No. 226,185. (Cl. 126—45.)



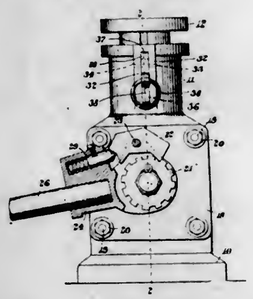
1. An oil burning stove having therein an oven about which the hot gases pass, a smoke flue, there being outlet ports for the hot gases opening from the oven and from below the oven into said flue, means to control the admission of hot gases into the oven, damper means for said outlet ports, an auxiliary draft valve in the

oven, and means to open said valve when the damper mechanism is set to pass the hot gases through the oven to said smoke flue.

2. The combination with an oil burning stove having therein an oven, a smoke flue and means to direct the hot gases about the oven, there being outlet ports for the hot gases opening into said flue below the oven and near the top of the oven, means to admit hot gases into the bottom of the oven, a damper mechanism for simultaneously controlling said outlet ports and opening one as it closes the other, and a safety draft valve in the oven bottom movable by said damper mechanism to open position when the damper mechanism is set to pass the hot gases through the oven to the smoke flue.

3. An oil burning stove comprising an oven, means to cause the hot gases to pass over and around under the oven, valve mechanism to admit the hot gases into the lower portion of the oven, a smoke flue, there being outlet ports for the hot gases entering said flue below the oven and near the top of the oven, a common ported damper slidable in the smoke flue and adapted to open one of said outlet ports as it closes the other, and a safety draft valve in the bottom of the oven connected to the sliding damper and adapted to be opened thereby when said oven outlet port is opened.

1,276,902. LIFTING-JACK. FRANK L. GORMLEY, Brookline, Mass., assignor to A. O. Norton, Inc., Roxbury, Mass., a Corporation of Maine. Filed Mar. 23, 1918. Serial No. 225,375. (Cl. 254—103.)



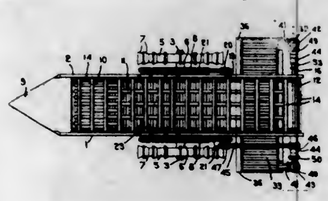
4. In a lifting jack, the combination of a cylinder, having parallel ears extending therefrom; a ram in said cylinder having a vertical peripheral slot with a closed lower end; a key interposed between said ears and extending through said cylinder into said slot, said key having an inclined slot extending therethrough; a pin mounted in said ears and extending through said slot; and means acting on the lower end of said key for normally retaining said key in operative position.

6. In a lifting jack, the combination of a cylinder, having parallel ears extending therefrom; a ram in said cylinder having a vertical peripheral slot with a closed lower end; a key interposed between said ears and extending through said cylinder into said slot, said key having a inclined slot extending therethrough; a pin mounted in said ears and extending through said slot; and a cam member pivotally mounted between said ears and adapted to retain said key in operative position.

[Claims 1 to 3, 5, 7, and 8 not printed in the Gazette.]

1,276,903. POTATO-DIGGER. AUSTIN E. GREEN, Easton, Me. Filed Apr. 20, 1918. Serial No. 229,680. (Cl. 130—32.)

1. A potato digger comprising a frame, an upwardly inclined riddle carried in said frame having its bar spaced at the lower portion to prevent, and at the upper portion to permit, potatoes to fall therethrough, an endless flexible elevator having its upper run extending above said riddle and acting to carry the potatoes and other dug material over the riddle, allowing the potatoes to drop through said upper portion and discharging the unriddled material at the rear, and an endless flexible auxiliary conveyer having its upper run extending beneath the said upper portion of the riddle and acting to receive and convey rearwardly the potatoes dropping through the riddle.



3. A potato digger comprising the features defined by claim 1 together with means acting to receive the potatoes from the auxiliary conveyer and discharge them at either side of the machine as desired.

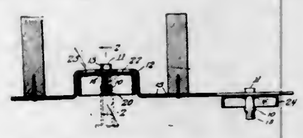
4. A potato digger comprising the features defined by claim 1 together with a transverse conveyer mounted at the rear of the frame acting to receive the potatoes from the auxiliary conveyer, and means acting to cause the transverse conveyer to discharge the potatoes at either side of the machine as desired.

5. A potato digger comprising an upwardly inclined riddle having its bars spaced at the lower portion to prevent, and at the upper portion to permit, potatoes to fall therethrough, and an endless flexible elevator having its upper run extending above said riddle and acting to carry the potatoes and other dug material over the riddle, allowing the potatoes to drop through said upper portion and discharging the unriddled material at the rear, and means to receive the potatoes dropping through the riddle and convey them rearwardly and laterally and discharge them at the side of the machine.

7. A potato digger comprising means for elevating the potatoes and other dug material, means for separating the potatoes from said material, and means acting to receive the separated potatoes and to convey and discharge them at either side of the machine as required.

[Claims 2, 6, and 8 not printed in the Gazette.]

1,276,904. OUTLET-BOX HANGER. CONRAD GRUNHOW, Chicago, Ill. Filed Oct. 5, 1917. Serial No. 194,934. (Cl. 248—



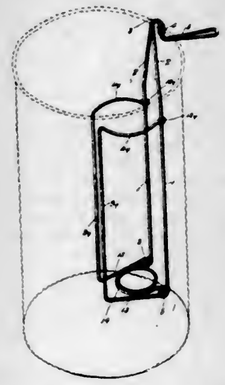
1. An outlet box hanger, comprising a bar, a fitting adapted to pass through an opening in the box, and having a vertical opening in its upper end portion to receive the bar, a plate vertically slidable within the opening in the fitting and adapted to be positioned beneath the opening in the box, and a screw taking axially through the lower end of the fitting for engagement with said plate to force the same against the box.

2. An outlet box hanger comprising a bar, a fitting adapted to pass through an opening in the box and having a vertical opening in its upper end portion to receive the bar, a plate vertically slidable within the opening in the fitting and adapted to be positioned beneath the opening in the box, projections on the plate to prevent its removal from the fitting, and a screw taking axially through the lower end of the fitting for engagement with said plate to force the same against the box.

8. An outlet box hanger comprising a bar having spaced-apart openings therein, a fitting adapted to pass through an opening in the box, said fitting having upstanding arms to lie at each side of the bar, a hook projecting from an arm for engagement with an opening in the bar, a plate positioned between the arms and adapted to underlie the box, and a screw taking through the bottom of the fitting for engagement with the plate for clamping the box against the bar.

[Claims 3 to 7 and 9 to 11 not printed in the Gazette.]

1,276,905. RACK. GEORGE MORGAN HALL, Grand Rapids, Mich., assignor to Hall Canner Company, Grand Rapids, Mich., a Corporation of Michigan. Filed June 15, 1917. Serial No. 174,929. (Cl. 53—1.)



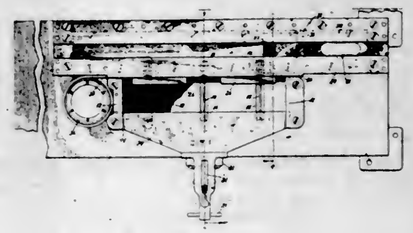
1. In combination, a rack comprising a member formed from a single piece of wire bent at its middle to form a handle, the wires of the handle coming together at their inner ends and then formed into an inverted U-shaped bend, and thence diverging and extending downwardly to make two spaced apart vertical standards, a base normally lying in a horizontal plane and open at one side to which the lower ends of said standards are secured at a side opposite said open side, said base being yieldingly expansible at said open side whereby the opening may be enlarged, and members extending upwardly from and connected to the base at each side of the opening and connected at their upper ends to said standards, said members moving away from each other as the base is expanded, whereby the vertical standards and said members are adapted to receive various sizes of jars or the like between them, substantially as described.

2. In combination, a rack comprising two wire members, the first member including two spaced apart vertical standards, and the second member including two spaced apart vertical wire portions located in front of the vertical wire standards of the first member, a base including a spring coil interposed between the lower ends of said standards and vertical portions of the second member, said base being formed integrally with and from the same piece of wire as said vertical portions, connections between the lower ends of said standards and the base, and horizontal portions bent at the upper ends of said vertical wire portions and connected at the ends to said standards, substantially as described.

[Claims 3 to 6 not printed in the Gazette.]

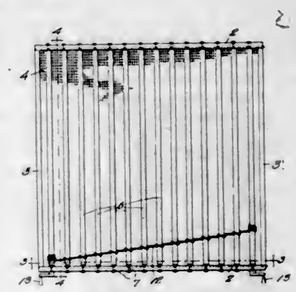
1,276,906. BAND-FEEDING DEVICE. WILLIAM S. HAMM, Hubbard Woods, Ill., assignor to The Adams & Westlake Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 24, 1916. Serial No. 93,167. (Cl. 271—43.)

1. In a band feeding device, in combination, a suitable bed upon which a quantity of bands may rest on edge, ways between which the mass of bands may be advanced laterally, a follower for advancing the mass of bands, a face plate against which the bands may be pressed and along which they may be separately moved longitudinally, a reciprocating feeder having a pivoted dog engageable with one end of the band bearing against the face plate, a detent for advancing the nose of the dog as the feeder reaches the limit of its retractive movement and means for holding the mass of bands against movement by the friction of the band moved by the feeder.



2. In a band feeding device, in combination, a suitable bed upon which a quantity of bands may rest on edge, ways between which the mass of bands may be advanced laterally, such ways having overlapping lips, a follower for advancing the mass of bands, a face plate against which the bands may be pressed and along which they may be separately moved longitudinally, and a reciprocating feeder having a dog engageable with one end of the band bearing against the face plate.

1,276,907. INCUBATOR. SAMUEL E. HARPHAM, Heartwell, Nebr. Filed July 6, 1917. Serial No. 178,950. (Cl. 119—44.)

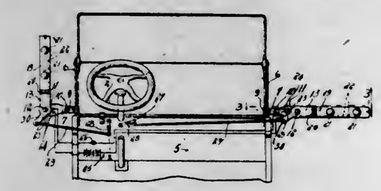


An incubator tray including opposed upright members having a plurality of longitudinally spaced notches in their upper edges and a groove arranged loosely on the inner face of each of said members above the bottoms of said notches, rollers having their ends journaled in said notches, a wire rod positioned in each of said grooves, means for retaining each rod in said grooves, and permitting it to slide longitudinally, the two end rollers having one of their journals made angular to receive a crank handle, and a flexible element wound around said rollers and inclined from one end roller to the other.

1,276,908. DIRECTION-SIGNAL. CLARK R. HATHURST, Texas City, Tex. Filed Feb. 21, 1916. Serial No. 79,746. (Cl. 116—31.)

1. A direction indicator comprising a support adapted for securement to one side of a vehicle, a signal member pivotally mounted on said support, an operating shaft, means for pivotally securing said operating shaft to a

dashboard to extend inwardly therefrom, a crank arm on said shaft, a link connecting the crank arm and the signal



member, and a lateral operating arm on the inner end of the shaft.

[Claim 2 not printed in the Gazette.]

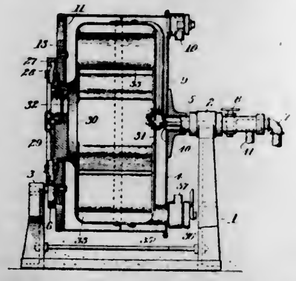
1,276,909. WATERPROOF AND BUOYANT FABRIC. NICHOLAS P. HEISDORF, New York, N. Y. Filed May 24, 1917. Serial No. 170,695. (Cl. 139—9.)



2. A buoyant fabric made up of an open mesh base fabric including warp and welt strands, kapok tufts looped around said strands and having their ends spread out on said base, and a lining to cover said ends and to be connected to said base fabric.

[Claim 1 not printed in the Gazette.]

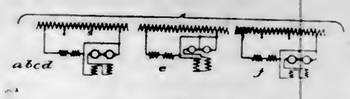
1,276,910. METHOD OF TREATING LACTEAL FLUIDS. ERNST B. HELLER, New York, N. Y., assignor, by mesne assignments, to The Vacuum Churn Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 19, 1915, Serial No. 3,109. Renewed June 19, 1916. Serial No. 104,572. (Cl. 31—66.)



The process of manufacturing butter and preventing its globules from sticking on the interior of the container which consists in carrying out the pasteurizing, churning and working operations in a rotating, partially exhausted vessel having smooth, non-porus, non-absorbent walls; and artificially cooling said walls to a temperature below 62° F. to prevent the formed butter from adhering thereto to an objectional degree, substantially as described.

1,276,911. CONTROL SYSTEM. RUDOLF E. HELLMUND, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 13, 1916. Serial No. 83,777. (Cl. 172—274.)

1. The combination with a source of alternating currents, of a plurality of commutator-type motors, means for initially energizing the exciting field windings of said motors by the armature current of a portion of said motors, and means for subsequently energizing said exciting field windings by the sum of the armature currents of a greater number of said motors.



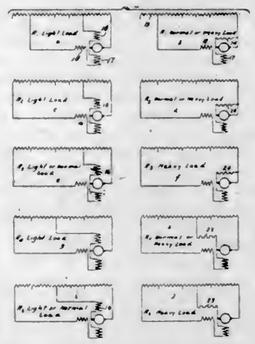
3. The combination with a source of alternating currents, of a plurality of compensated, commutator motors, means for initially energizing the exciting field windings of said motors by the armature current of a portion of said motors, means for connecting the compensating field windings of said motors across a portion of said source, means for subsequently energizing said exciting field windings by the sum of the armature currents of a greater number of said motors, and means for finally energizing said exciting field windings by the sum of the armature currents of said greater number of motors and for energizing said compensating field windings by a predetermined portion of said joint armature current.

5. The method of operating a plurality of motors of the compensated commutator type from a source of alternating current which comprises initially energizing the exciting field windings of said motors by the armature current of a portion of said motors and subsequently energizing said exciting field windings by the sum of the armature currents of a greater number of said motors.

8. The combination with two motors of the commutator type, of means for short-circuiting the armature of one of said motors, and means for simultaneously energizing the exciting field windings of both of said motors by the armature current of the other motor.

[Claims 2, 4, 6, and 7 not printed in the Gazette.]

1,276,912. FIELD-CONTROL SYSTEM FOR SINGLE-PHASE COMMUTATOR-MOTORS. RUDOLF E. HELLMUND, Pittsburgh, Pa., assignor to Westing ouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 12, 1916. Serial No. 90,703. (Cl. 172—276.)



1. The combination with an alternating-current motor of the commutator type provided with a plurality of main field windings, of means adapted for continuously energizing one of said main field windings, and means adapted for energizing the other of said main field windings at predetermined speeds under conditions of light load only.

3. The combination with an alternating-current motor of the commutator type provided with a plurality of main field windings, of means adapted for energizing one of said main field windings, means for inserting the other of said main field windings in an intermediate connection to said motor at predetermined speed under light-load conditions and for eliminating said winding from said connection under heavy-loaded conditions, and means for short circuiting the armature of said motor under said heavy-load conditions.

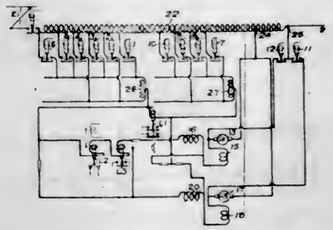
6. The method of operating an alternating-current motor of the compensated, commutator type provided with a plurality of main field windings which comprises connecting said motor for doubly-fed operation at certain speeds under light load, with one of said main field windings in the intermediate tap, and connecting said motor for other than doubly-fed operation at corresponding speeds under heavy load, with said last named field winding eliminated from the circuit.

9. The method of operating an alternating-current motor of the compensated, commutator type provided with a plurality of main field windings which comprises connecting said motor for doubly-fed operation at certain speeds under light load, with one of said main field windings in the intermediate tap, connecting said motor for repulsion operation at corresponding speeds under heavy load, and, at higher speeds, connecting said motor for doubly-fed operation, with said main field winding in the intermediate tap under light load and for doubly-fed operation with said main field winding replaced by a current-limiting device under heavy load.

12. The method of operating an alternating-current motor of the compensated, commutator type provided with a plurality of main field windings which comprises energizing a portion of said main field windings by the cross-field current under heavy load at certain speeds and, in addition, energizing the remainder of said main field windings by the difference between the armature and cross-field currents at corresponding speeds under light load.

[Claims 2, 4, 5, 7, 8, 10, and 11 not printed in the Gazette.]

1,276,913. SYSTEM OF CONTROL FOR SINGLE-PHASE COMMUTATOR-MOTORS. RUDOLF E. HELLMUND, Pittsburgh, HARRY R. MEYER, Wilkinsburg, and ANDREW H. CANDEE, Pittsburgh, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 12, 1916. Serial No. 90,705. (Cl. 172—276.)



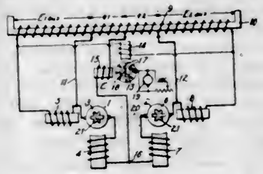
1. The combination with a source of alternating current, of an alternating current motor of the compensated commutator type, means for initially connecting the terminals of said motor to said source and for connecting the inner armature terminal thereof for reverse doubly-fed operation, means for thereafter increasing the voltage applied to said motor for the acceleration thereof, and means for automatically changing over for doubly-fed operation when the load current falls to a predetermined value if the line voltage exceeds a predetermined value.

5. In a system of automatic acceleration for alternating current motors of the compensated commutator type arranged for other than straight doubly-fed start and for subsequent straight doubly-fed operation, the combination with a switching device, of a balanced pressure operating mechanism for operating said device in accordance with the motor current, and a switching mechanism operable in accordance with the effective armature voltage of said motor for modifying the action of said switching device.

10. The combination with a source of alternating current, of an alternating current motor of the cross-field commutator type, connections therebetween, means for altering said connection so that at least a portion of the main field winding of said motor may be transferred from the cross-field circuit to the armature circuit, and means whereby said change over is rendered subject solely to the motor load current during certain stages of the motor acceleration and is rendered subject to the joint control of the motor current and of the voltage across a portion of the motor circuit in other stages of the motor acceleration.

[Claims 2 to 4 and 6 to 9 not printed in the Gazette.]

1,276,914. SUPPLY SYSTEM FOR PULSATING-TORQUE MOTORS. RUDOLF E. HELLMUND, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed May 20, 1916. Serial No. 98,786. (Cl. 172—276.)



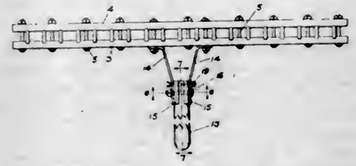
1. The combination with two, single-phase, alternating-current motors of the commutator type, of a resilient mechanical coupling between the rotors thereof, and means for maintaining a phase difference between the electromotive forces applied to the two motors.

3. The combination with a source of single-phase, alternating-current, of two single-phase, alternating-current motors connected in series relation across a portion thereof, a connection from a point between said motors to an intermediate point in said source, and phase-displacing energy-storing and restoring means in said connection.

11. The combination with a source of alternating current, of two alternating-current motors connected in series relation across a portion thereof, mechanical coupling means between the rotors of said motors, a connection from a point between said motors and an intermediate point in said source, and a synchronous phase-converter arranged to produce an electromotive force in said connection of like frequency to the electromotive force of the source but differing therefrom in phase and means for varying the amount of direct current excitation of said phase converter, whereby the power factor of the load on said main source may be adjusted.

[Claims 2, 4 to 10, and 12 not printed in the Gazette.]

1,276,915. RAKE. ANDREW J. HINKLE, Whitesville, Ind. Filed Sept. 23, 1916. Serial No. 121,825. (Cl. 55—10.)



1. A rake having teeth on both sides of the central transverse line of the head whereby the rake may be reversed for use on either side thereof said teeth being of solid construction and having wide surfaces from front to rear thereof, such surfaces being uniform throughout the length of the teeth and having flat,

beveled ends extending from front to rear of the teeth said end portions being beveled upwardly and rearwardly and the end at one point of each tooth being more acutely beveled than the other end.

2. A rake having a head comprising separable cross bars, flat wide teeth detachably clamped edgewise between said bars and having their longitudinal edges bearing against the latter, said bars and teeth having interfitting formations adapted to prevent movement of the teeth longitudinally thereof with respect to the bars, and means to hold said teeth against sidewise displacement.

3. A rake having transverse clamping bars and having a tooth adapted to be held between said bars, said tooth provided on one of its longitudinal edges with a notch having inclined walls, a correspondingly shaped recess on one of said bars adapted to engage said notch to prevent longitudinal movement of the tooth, and a V-shaped ridge on the other longitudinal edge of the tooth and a groove in the other bar adapted to engage said V-shaped ridge, to prevent sidewise tilting of the tooth.

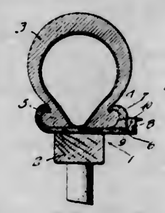
4. A rake having a toothed head and having a handle, connecting means between the handle and head, said connecting means comprising arms extending angularly from the head and adapted to bear on opposite sides of the handle, a pivot bolt permitting angular adjustment of the head relatively to the handle and socket and ferrule means between the arms and handle, said arms being movable relatively to the handle around the latter on the pivot bolt to obtain said adjustment.

1,276,916. METALLIC ALLOY. FRANK S. HODSON, Philadelphia, Pa. Filed Aug. 28, 1917. Serial No. 188,555. (Cl. 75—1.)

1. The herein described composition of matter, consisting of an alloy of copper, aluminum and zinc, the aluminum being present in large excess of the copper and the zinc being present in large excess of the aggregate amount of aluminum and copper together, substantially as described.

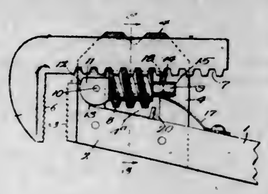
2. The herein described composition of matter consisting of a metallic alloy in the following proportions, zinc eighty to eighty-five parts, aluminum eighteen to fourteen parts, and copper two to one parts, substantially as described.

1,276,917. AUTOMOBILE-RIM. ERNEST W. HOFSTATTER, Nyack, N. Y. Filed Sept. 20, 1917. Serial No. 192,360. (Cl. 152—21.)



A vehicle rim straight throughout its width in transverse section and having on one edge an integral bead engaging ring, the outer edge of said rim having a plurality of circumferentially spaced circumferentially extending slots, a removable bead engaging ring surrounding said last named edge of the rim and spaced inwardly from said slots, pairs of lateral ears on and integral with said removable ring and located at the ends of said slots, and a plurality of L-shaped latches between said ears and pivoted thereto, one end of said latches extending into said slots to prevent outward movement of said removable ring and circumferential creeping of the latter, and the other ends of said latches forming operating means therefor.

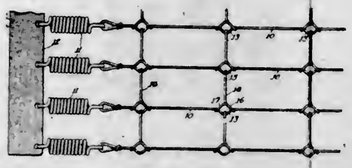
1,276,918. WRENCH. ALFRED E. HOLMES, Chicago, Ill. Filed June 21, 1917. Serial No. 175,984. (Cl. 81—100.)



1. A wrench comprising a fixed jaw having a shank, a saddle fastened to the shank, and arching the back thereof, a movable jaw having a shank extending through the saddle for both longitudinal movement and movement toward and away from the shank of the fixed jaw, a rack on the face of the shank of the movable jaw adjacent the shank of the fixed jaw, a shaft pivoted between the shanks of the fixed and movable jaws, and having a shoulder on the free end thereof, a worm rotatable on said shaft and coöperating with said rack; a spacing collar loose on said shaft between the worm and shoulder, a stop on the shank of the fixed jaw engageable with said collar to limit movement of the worm in one direction to a position of non-engagement with the shank of the fixed jaw, and spring means constantly urging the worm toward the shank of the movable jaw.

2. A wrench comprising a fixed jaw having a shank, a saddle fastened to the shank and arching the back thereof, a movable jaw having a shank extending through the saddle for both longitudinal movement and movement toward and away from the shank of the fixed jaw, a rack on the face of the shank of the movable jaw adjacent the shank of the fixed jaw, a shaft pivoted between the shanks of the fixed and movable jaws, a worm rotatable on said shaft and coöperating with said rack, and a leaf spring secured to the shank of the fixed jaw and having its free end curved transversely to slidably embrace the shaft and permit unrestricted rotation of the latter, said spring constantly urging the worm toward the shank of the movable jaw.

1,276,919. COUCH FABRIC. CLAUDE S. HOPKINS, Dayton, Ohio. Filed Nov. 30, 1917. Serial No. 204,583. (Cl. 245—5.)

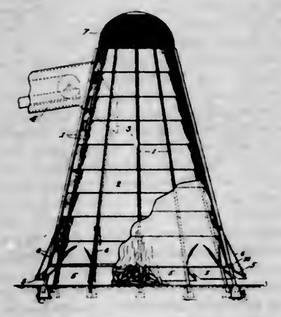


1. In a couch-fabric construction, the combination of a plurality of longitudinal members kinked at intervals, and cross-links each having an end portion engaging one of said kinks and an opposite end portion straddling the corresponding kink of an adjacent longitudinal member, substantially as described.

7. In a couch-fabric construction of the character described, the combination of a plurality of spaced longitudinal members and associated single-strand cross-links, each of the latter engaging one of said members at one end and bent at its other end to provide two spaced loops both engaging a companion longitudinal member, substantially as described.

[Claims 2 to 6 and 8 to 10 not printed in the Gazette.]

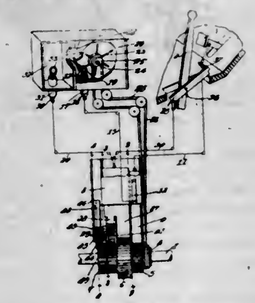
1,276,920. REFUSE-BURNER. FRANK F. HOPKINS, Seattle, Wash. Filed June 23, 1917. Serial No. 176,478. (Cl. 110—18.)



2. A refuse burner comprising a plurality of posts, and a skin supported thereby comprising a plurality of overlapped plates the lowermost of which has its lower edge spaced from the ground to form a continuous open draft zone and doors having pivots at their horizontal edges which pivots are engaged with the posts, said doors being conjointly of such size as to completely open or close said draft zone and means for holding said doors in adjusted position.

[Claim 1 not printed in the Gazette.]

1,276,921. AUTOMATIC SAFETY-STOP FOR AUTOMOBILES. LEVI FORNER WHITE, Kans. Filed Sept. 26, 1917. Serial No. 193,317. (Cl. 21—8.)



1. The combination with a rotary member of a vehicle rotatable when the vehicle is moved, of means for stopping the vehicle, manually operable means for bringing the stopping means into operation, means for concealing the manually operable means having a door, a latch for holding the door closed, and means operated by said member for preventing the releasing of the latch when the vehicle is in motion.

2. The combination with a clutch pedal of a vehicle and a rotary member thereof rotatable when the vehicle is moved, of means for stopping the vehicle, means for moving the stopping means to releasing position when the clutch pedal is moved to throw in the clutch, means for holding the stopping means in releasing position, manually operable means for releasing the holding means, and means operated by said member for preventing the operation of the manually operable means when the vehicle is in motion.

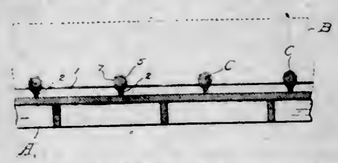
3. The combination with a rotary member of a vehicle rotatable when the vehicle is moved, of a dog for stopping the rotation of said member, means for moving the dog to releasing position, a catch for holding the dog in releasing position, manually operable means operating the catch, and means operated by said member for preventing the operation of the manually operable means when the vehicle is in motion.

4. The combination with a rotary member of a vehicle rotatable when the vehicle is moved, of a dog for stopping the rotation of said member, means for moving the dog to releasing position, a catch for holding the dog in releasing position, manually operable means operating the catch, means for concealing the manually operable means including a door, and means operated by said rotary member for preventing the door from being opened when the vehicle is in motion.

5. Manually operable stopping means for a vehicle, a door preventing access to said means to bring the same in operation, and means for preventing the door from being opened when the vehicle is in motion.

[Claims 6 to 10 not printed in the Gazette.]

1,276,922. COMBINATION TIE AND GAGE MEMBER FOR REINFORCED CONCRETE CONSTRUCTION. WILLIAM B. HOUGH, Chicago, Ill., assignor, by mesne assignments, to Patented Devices Company, Portland, Me., a Corporation of Maine. Filed July 17, 1911. Serial No. 638,839. Renewed July 12, 1916. Serial No. 108,961. (Cl. 72—122.)

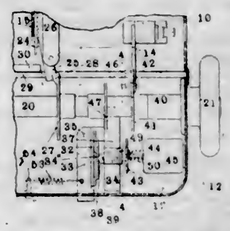


1. As an article of manufacture, a combination tie and gage device comprising a longitudinal member having a series of downwardly extending bends therein disposed at intervals along its length, each bend being adapted to underlie and support a transverse reinforcing bar, said bends constituting legs or gages, and a plurality of relatively short wires, each having its central portion twisted about each of the oposite sides of one of said gages, the ends of each of said shorter wires being free, and each of said ends extending from its side of the gage around to the opposite side of the reinforcing bar and being adapted to be bent upwardly around said bar for securing the latter to the gage.

3. A combined tie and gage member for concrete construction having a longitudinal member, a plurality of flexible members arranged at intervals along the longitudinal member and secured thereto, each of said members being bent to provide a supporting leg or gage, the end portions of each of said flexible members constituting arms adapted to be bent into embracing relation to a reinforcing bar, said longitudinal member being bent to provide supporting legs or gages located adjacent to the other gages.

[Claims 2 and 4 not printed in the Gazette.]

1,276,923. VENDING-MACHINE. GILBERT L. HUFF, Holdenville, Okla. Filed Jan. 30, 1918. Serial No. 214,533. (Cl. 211—8.)



3. In a vending machine, the combination with a yielding support for the articles to be vended, of a ro-

tary member provided with a surface for engaging with one of said articles to move it from said support, a rack for locking said support, and a cam wheel operated by said rotary member to release said rack.

[Claims 1 and 2 not printed in the Gazette.]

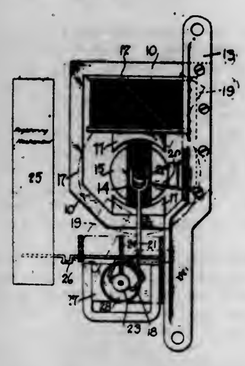
1,276,924. LAMP. JOHN H. HUNT, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 27, 1913. Serial No. 751,083. (Cl. 240—48.4.)



1. In a lamp, the combination with a parabolic reflector, of a front glass having a section thereof formed with horizontally and diagonally extending prisms.

[Claims 2 and 3 not printed in the Gazette.]

1,276,925. WATT-HOUR METER. CHARLES L. INGLEFIELD, Midland, Pa. Filed Dec. 15, 1914. Serial No. 877,385. (Cl. 171—265.)



1. In an electric meter, the combination of a registering mechanism, a motor for operating said mechanism, an escapement mechanism restraining the rotation of said motor, said mechanism being responsive to the electrical conditions of the circuit to be measured for operating the escapement mechanism, and means for periodically changing the direction of flow of current through said escape ment mechanism.

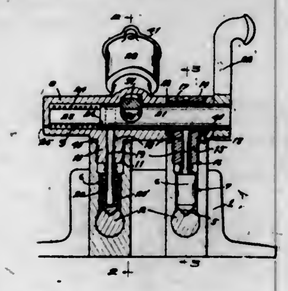
2. In an electric meter, the combination of a registering mechanism, a motor for operating said mechanism, an escapement mechanism restraining the rotation of said motor, said mechanism being responsive to the electrical conditions of the circuit to be measured for operating the escapement mechanism, and means carried by the aforesaid operating motor for periodically changing the direction of flow of current through the said escapement mechanism.

3. In an electric meter, the combination of a registering mechanism, a motor for operating said mechanism, an escapement mechanism for restraining the rotation of said motor, said escapement mechanism comprising a motor having an oscillative armature, and means for periodically reversing the current in said oscillative armature during the period of measurement of meter.

13. In an electric meter, the combination of a registering mechanism, an electric commutator motor for operating said mechanism in circuit with the current to be measured, an escapement mechanism restraining the rotation of said motor, said escapement mechanism comprising an electro-magnet, an oscillatory coil between the poles of said magnet, and a damping means for said coil, said oscillatory coil positioned in the circuit of a main, the electro-magnet having an iron-core frame and two opposing poles permitting a limited oscillation by said coil, a potential winding electrically connected with the armature of said motor, and a two part commutator for said motor for changing the polarity of said magnetic poles for each half revolution of the motor, and a spindle for the oscillatory coil, said escapement mechanism having an eccentric rigidly mounted on said spindle, a rock bar engaging with the eccentric, a pair of pallets on the free end of the bar and a single tooth escapement wheel in positive connection with the motor and meshing with said pallets, thereby permitting only a half revolution of said motor for each oscillation of said coil.

[Claims 4 to 12 not printed in the Gazette.]

1,276,926. SHIFT-DEVICE LOCK MECHANISM. GEORGE C. JENSEN, Oakland, Cal. Filed Dec. 12, 1917. Serial No. 206,828. (Cl. 70—126.)



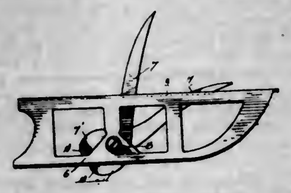
1. In combination with a fixed member, a plurality of shifter devices movable relatively thereto and in parallel planes and each provided with a stop, a plurality of yieldably mounted retaining plungers carried by said fixed member and one coöperating with the stop of each shifter device for retaining the respective shifter devices in their set positions, said plungers capable of disengagement from their respective stops on the movement of the respective shifter devices, and a lock controlled mechanism carried by said fixed member and capable of operation to simultaneously lock said plungers in coöperative relation with their respective stops to lock said shifter devices in their set position.

2. In combination with a fixed member a shifter device movable relatively thereto and provided with a stop, a yieldably mounted retaining plunger carried by said fixed member and coöperating with said stop, means for yieldably maintaining said plunger in contact with said stop for retaining said shifter device in set position, said plunger capable of disengagement from said stop on the movement of said shifter device, a lock pin coöperating with said plunger, and a lock controlled mechanism for actuating said pin to lock said plunger in locked engagement with its stop.

8. In combination with a movable shifter device provided with a stop, movable means normally engaging said stop for retaining said shifter device in its set position, said movable means capable of disengagement from said stop during the movement of said shifter device, a locking bolt capable of operation to lock said movable means in coöperative engagement with said stop to prevent movement of said shifter device from its set position, and a lock for controlling the operation of said bolt.

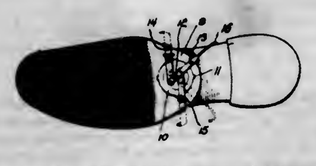
[Claims 3 to 7 not printed in the Gazette.]

1,276,927. GUIDING MEANS FOR SLEDS. JOHN F. JOHNSEN, Craig, Mo. Filed Mar. 30, 1915. Serial No. 18,152. (Cl. 21—46.)



A steering and braking device for sleds comprising in combination with the side members of the sled, independently operable levers pivoted to said sides and having corresponding ends thereof enlarged to provide a flat peripheral head of relatively large area, the lever pivot being adjacent said head, the ground engaging tip of said head being inclined out of the plane of the major portion of the head at an acute angle with respect to the axis of the lever pivot, the major portion of said head being at right angles to said axis.

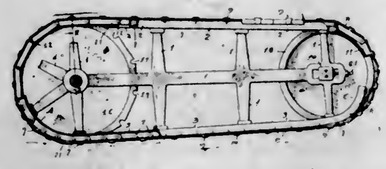
1,276,928. OVERSHOE. ALFRED JOHNSON, Detroit, Mich. Filed Oct. 11, 1917. Serial No. 196,055. (Cl. 36—6.)



1. A shoe sole protecting device comprising a plate having an inturned wall adapted to engage the side edges of a shoe sole, a gripping member in the upper edges of said wall and having end portions adapted to overlie the side edges of a shoe sole, clamping arms on the inner end of said plate adapted to engage the side edges of a shoe sole, and means connected to said arms and adapted to engage the side edge of a shoe sole to hold said arms in engagement therewith.

[Claims 2 and 3 not printed in the Gazette.]

1,276,929. TRACTOR. WILLIAM H. JOHNSON, San Francisco, Cal. Filed Sept. 29, 1917. Serial No. 194,401. (Cl. 21—150.)



1. A tractor comprising parallel channels comprising upper and lower portions, connected by semicircular portions at the rear ends and having arcuate upturned portions at the front of the lower channels; rollers mounted within the channels with their peripheries extending slightly beyond the flanges of said channels; flights connected together and mounted upon the rollers to support the channels; and means for engaging the flights to move the same over the rollers within the channels.

2. A tractor comprising a suitable frame; parallel channels mounted upon the frame and comprising upper and lower portions connected at their rear ends by semicircular portions and having upturned arcuate portions upon the front ends of the lower channels; rollers mounted between the flanges of the channels with their peripheries extending slightly beyond said flanges; a series of connected flights mounted around the channels to support the same and the frame; and means for engaging the flights to move the frame and channels over said flights.

3. A tractor comprising a suitable frame; parallel channels mounted upon the frame and having upper and lower portions connected at their rear ends by means of semicircular portions, and having upturned arcuate portions, on the front ends of the lower channels; rollers rotatably mounted between the flanges of the channels with their peripheries extending beyond the said flanges; connected flights mounted around the channels and rollers; means for carrying the flights from the front end of the upper channels onto the arcuate portions of the lower channels; and rotary means mounted within the frame and concentric with the semicircular channels to engage the flights and move the channels and frame over said flights.

4. A tractor comprising a suitable frame; parallel channels mounted upon the frame and having upper and lower portions connected at their rear ends by means of semicircular portions and having arcuate portions at the front ends of the lower channels; rollers rotatably mounted between the flanges of the channels and extending beyond said flanges; a series of flights, each having parallel link portions whereby said flights may be connected, mounted around the channels and rollers therein, the lower flights supporting the channels and frame; rollers mounted between the link portions of the flights and between each flight; a driving wheel rotatably mounted within the frame, between the channels and concentric with the semicircular portions of the channels to engage the rollers mounted between the link portions of the flights; to move the frame and channels over the lower flights; and means slidably and rotatably mounted within the front end of the frame to carry the flights from the front ends of the upper channels onto the arcuate portions of the lower channels.

5. A tractor comprising a suitable frame; parallel channels mounted upon the frame and having upper and lower portions connected at their rear ends by means of semicircular portions and having arcuate portions at the front ends of the lower channels; rollers rotatably mounted between the flanges of the channels and extending beyond said flanges; a series of flights, each having parallel link portions whereby said flights may be connected, mounted around the channels and rollers therein, the lower flights supporting the channels and frame; rollers mounted between the link portions of the flights and between each flight; a driving wheel rotatably mounted within the frame, between the channels and concentric with the semicircular portions of the channels to engage the rollers mounted between the link portions of the flights; to move the frame and channels over the lower flights; and a double flanged wheel slidably and rotatably mounted within the front end of the frame to carry the flights from the front ends of the upper channels onto the arcuate portions of the lower channels.

1,276,930. STEERING-WHEEL HAND-WARMER. CHARLES W. KEMPER and JOHN T. KEMPER, Oakland, Cal. Filed Apr. 17, 1917. Serial No. 162,766. (Cl. 219—19.)



1. An electric heating element comprising an insulating core, a metal ring on each end of the core connected by a conductor, an insulating tube surrounding the conductor, a metal ring secured on one end of said tube adjacent to

one of the first-named rings, a pair of wires connecting said adjacent rings with a source of current supply, and a plurality of separated heating elements surrounding the insulating tube and running parallel with same, said elements being connected at one end with the metal ring surrounding the insulating tube and at the opposite end with the first-named ring farthest removed from the adjacent rings.

2. An electrically heated handle for steering wheels comprising a metal tube, a head member closing each end of the tube, a tie rod connecting the heads, an insulating member inclosing said rod, a plurality of interspaced heating elements carried by the insulating member, each element comprising a tortuous wound wire extending from end to end of the insulating member, a terminal member on each end of the insulating member with which the terminal ends of the heating elements are connected, wires connecting the terminal members with a source of current supply and an insulating member interposed between the heating elements and the metal tube.

5. An electrically heated handle for steering wheels, comprising a tube-like container, a head member closing each end of said tube, a tie rod connecting the heads, an insulating member including said rod, a metallic ring on each end of said insulating member, a plurality of heating elements running parallel with the insulating member, the terminal ends of said elements being connected with the metal rings, and wires connecting the rings with a source of current supply.

7. In an electrically heated handle for steering wheels, an insulating tube, a plurality of interspaced heating elements carried by said tube, each element comprising a tortuous wound wire extending from end to end of the tube, a metal ring on each end of the tube to which the terminal ends of the heating elements are connected and wires connecting the metal rings with a source of current supply.

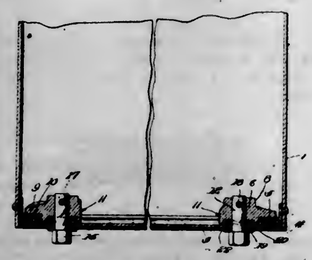
[Claims 3, 4, and 6 not printed in the Gazette.]

1,276,931. TRANSFER FOR LOOSE-LEAF BINDINGS. CHARLES F. KINDT, Jenkintown, Pa. Filed Mar. 22, 1918. Serial No. 223,942. (Cl. 129—8.)



A transfer for loose-leaf binders comprising a rigid strip or bar provided with parallel posts and with a lining sheet and with pin-receiving openings, substantially as described.

1,276,932. FASTENING DEVICE FOR THE CLOSURES OF BURIAL-VAULTS. CLARENCE W. KING, Galion, Ohio, assignor to The National Grave Vault Co., Galion, Ohio. Filed Sept. 20 1917. Serial No. 192,359 (Cl. 27—7.)



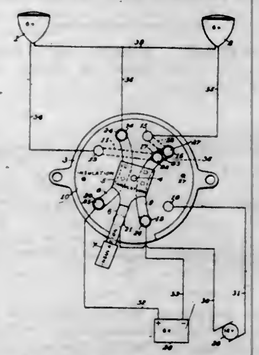
The combination with a burial vault having a receiving opening and a seating member located within the opening, and a closure for the opening, of a securing device for the closure including a stem rotatably fitted through the closure and provided at its outer end with means whereby it may be rotatably adjusted, a hub fitted upon the inner end of the stem and having a cam surface for engagement against the seating member, the said hub at its inner end being provided with notches and having a socket in its outer end, a pin fitted through the said stem and engaging at its ends in said notches whereby to connect the cam hub for rotation with the stem, a packing washer upon the stem seating against the outer face of the closure and sealing the opening therein through which the stem is rotatably fitted, and a spring fitting in the socket in the outer end of the hub and against the inner face of the closure and exerting an inward pull upon the said stem and also holding the cam hub in position for engagement of its notches with the ends of the said pin.

1,276,933. DUSTER. LENA M. KIRCHNER, Kansas City, Mo. Filed July 17, 1916. Serial No. 109,719. (Cl. 15—13.)



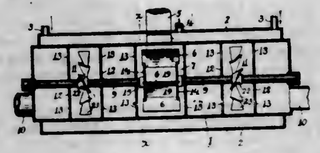
The combination with a handle having an end aperture and a frame comprising a circular band extending pivotally through said aperture, of a mop comprising a bag adapted to receive said frame and having a slit down the side thereof for receiving said handle, and having a hem about the open end thereof, a draw string extending within the hem whereby the bag may be closed about the frame and polishing material attached to the bag for the purpose set forth.

1,276,934. ELECTRIC-LIGHTING SYSTEM FOR AUTOMOBILES. ERNEST WILSON LANE, Waverly, Iowa. Filed July 26, 1915. Serial No. 42,093. (Cl. 171—97.)



In combination, translating devices, a source of electric current of relatively low voltage, a source of electric current of relatively high voltage, a conductor connecting said translating devices, conductors leading from said devices and each having a pair of terminals, a bridging conductor leading from the first-mentioned conductor to a terminal, conductors leading from the source of low voltage current to terminals, other conductors leading from the source of high voltage current to terminals, and a multicontact switch having separated sets of connected contacts operable selectively with said translating-devices terminals and with said bridging conductor terminal to independently place said translating-devices in series circuit with said source of high voltage current or in parallel circuit with said source of low voltage current.

1,276,935. MUFFLER. DENNIS FRANCIS LEARY, Chelsea, Mass. Filed Sept. 23, 1916. Serial No. 121,878. (Cl. 123—194.)

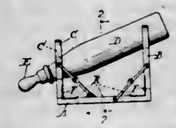


1. A muffler comprising an elongated chamber having baffler partitions transversely disposed therein, means for delivering exhaust gases into the muffler at one section thereof and for permitting its escape at another section, a rotative device adapted to be revolved by the inrush of the said exhaust, and a second rotative device revolved by the first one, the second rotative device being disposed in the path of the exhaust as it escapes and being adapted for giving a backward impulse to the passing exhaust.

2. A muffler comprising an elongated chamber having baffler partitions therein, a longitudinally disposed shaft rotatably supported in the chamber, a fan wheel having vanes in the same planes with the shaft and fixed on the latter, a fan of the propeller type fixed on the shaft and spaced from the fan wheel, and means for operatively delivering exhaust gases against the vanes of the fan wheel and for permitting their escape past the propeller fan, the latter having blades inclined to resist the gases forced past them.

3. A muffler comprising a chamber adapted to receive exhaust gases, a shaft rotatably supported therein, a fan wheel fixed on the shaft to be rotated by the entering gases, and a fan fixed on the shaft spaced from the fan wheel, said fan having obliquely disposed blades each given a double curvature transversely.

1,276,936. NURSING-BOTTLE SUPPORT. BRUTUS A. MCGEE, Chicago, Ill. Filed June 27, 1917. Serial No. 177,184. (Cl. 248—11.)

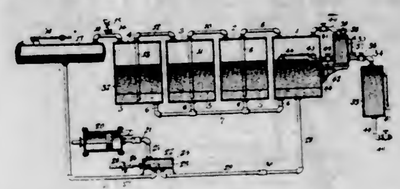


1. A nursing bottle support comprising a base, a cradle consisting of folding end supports mounted on the base and adapted to support the bottle in an inclined position, and means for holding the bottle from longitudinal movement on the cradle.

[Claims 2 to 4 not printed in the Gazette.]

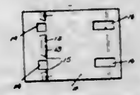
1,276,937. CARBURETER. JOHN MCKENNEY, Anaconda, Mont. Filed Sept. 15, 1915. Serial No. 50,805. (Cl. 261—46.)

A carbureter comprising a plurality of containers for volatile hydrocarbon liquid all connected together in multiple at a low point, pipes connecting each container at a high point to a low point of the next container in order, means for maintaining a predetermined level of liquid in all the containers through the multiple connections at low points of the containers, a storage tank for carbureted air, a connection between the last container in order and the storage tank, an air pump, a valve connected to the discharge side of the air pump, a pipe leading from the valve to the first container in order at a low point thereof and provided with a check valve opening toward the container, and another pipe leading from the valve to the storage tank, said valve having a range of movement to



connect it to either pipe alone or to both pipes simultaneously at will, whereby air may be progressively enriched by being successively passed through a plurality of like quantities of hydrocarbon liquid, or the enriched air may be diluted with other air, or both operations may be performed at the same time.

1,276,938. TIE-PLATE. FINIS MCLEAN, Valley Junction, Iowa. Filed Nov. 15, 1917. Serial No. 202,285. (Cl. 238—2.)

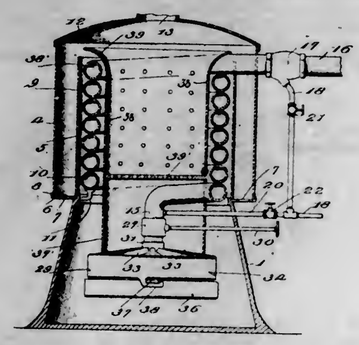


1. A tie plate having a substantially flat upper surface, said plate having near one edge a rib designed to engage the outside edge of the base of the rail, said plate having spike holes extended through said rib and the plate, said rib being cut away on opposite sides of the spike holes adjacent thereto for leaving clear spaces on opposite sides of said holes and for leaving the reinforcing portion of the rib along the rail base except at said holes, spaced elongated holes in said plate near the opposite edge thereof designed to receive spikes and to permit the use of different sizes of rails.

2. A tie plate having a substantially flat upper surface, said plate having near one edge a rib designed to engage the outside edge of the base of the rail, said plate having spike holes extended through said rib and the plate, said rib being cut away on opposite sides of the spike holes adjacent thereto for leaving clear spaces on opposite sides of said holes and for leaving the reinforcing portion of the rib along the rail base except at said holes, spaced elongated holes in said plate near the opposite edge thereof designed to receive spikes and to permit the use of different sizes of rails, and spike holes near the side edges of said plate for receiving spikes and permitting the heads of the spikes to overhang the plate.

3. A tie plate having a substantially flat upper surface provided near one edge with a rib adapted to engage one side edge of the rail base, said plate having spike holes extended through said rib and through the body of the plate, said rib being cut away on the opposite sides of said holes on lines diverging from the edges of said holes adjacent to the portion of the rib adapted to engage the rail whereby tree spaces are left adjacent to the sides of the spikes received in said holes and whereby the walls of said ribs serve as a guide for causing a spike puller to properly engage the spike when the head of the spike puller is moved from the side edge of the plate toward the rail base for pulling the spike, and having grooves in its upper surface designed to be under the rail and to extend longitudinally thereof.

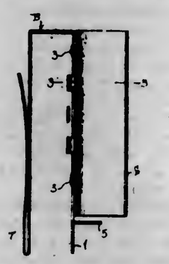
1,276,939. OIL-BURNER. WILLIAM MALLORY, Topeka, Kans. Filed Mar. 26, 1918. Serial No. 224,811. (Cl. 158—79.)



6. In an apparatus for the purpose set forth, the combination of an oil reservoir, a compressed air reservoir, means for establishing a flow of air from the compressed air reservoir into the oil reservoir, a coil connected with the oil reservoir, means for controlling the flow of oil into the coil, means for admitting air to the upper end of the coil, a burner carried by and communicating with the lower end of the coil, means for admitting air to the lower end of the coil, and means for controlling the flow of fuel from the coil to the burner.

[Claims 1 to 5 and 7 not printed in the Gazette.]

1,276,940. COMBINED WHIP-SOCKET AND REIN-HOLDER. HOFF M. MANSAGER, Colton, S. D. Filed Apr. 17, 1918. Serial No. 229,158. (Cl. 21—131.)



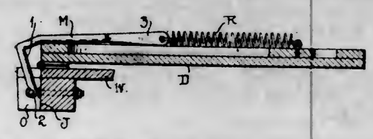
1. A device of the character described comprising a substantially U-shaped body having its side portions resilient, one of said side arms being provided with a returned extension to afford a rein holding clip, and a whip socket carried by the second side arm of the U-shaped body, one of said side members having tongues struck therefrom.

3. A device of the character described comprising a substantially U-shaped body having its side portions resilient, one of said side arms being provided with a returned extension to afford a rein holding clip, and a whip socket carried by the second side arm of the U-shaped body, the side arm with which the socket coacts having tongues struck therefrom, said tongues serving to hold the socket in applied position.

[Claim 2 not printed in the Gazette.]

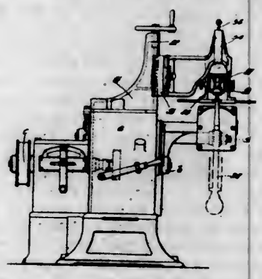
1,276,941. DOOR-SPRING. HOFF M. MANSAGER, Colton, S. D. Filed Apr. 17, 1918. Serial No. 229,159. (Cl. 16—96.)

In combination with a support and a member hingedly connected therewith, a substantially L-shaped member having its foot hingedly engaged with the support and moving in the same general direction as the first named member, and a retractile member secured to the free end portion of the stem of the L-shaped member and to the first named member at a point adjacent the outer end



thereof, the stem of the L-shape member being inclined in the same general direction in which the foot of the member extends, the stem of the L-shape member contacting with the hinged member when said hinged member is at the limit of its open position.

1,276,942. MANUFACTURE OF PNEUMATIC TIRES. FRANK HOLT MERCER and HERBERT FREDERICK HASSALL BLEASE, Melksham, England. Filed June 20, 1917. Serial No. 175,859. (Cl. 154—19.)

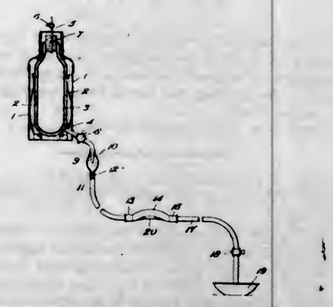


1. In a machine for molding tire covers on a core adapted to be rotated, brackets pivotally mounted on the machine, a shaft mounted in said brackets, two disks on said shaft free to slide thereon but adapted to be rotated therewith, rollers on said disks adapted to bear against the fabric placed on the core.

2. In a machine provided with disks mounted on a shaft on pivoted brackets as claimed in claim 1, a casing adapted to protect the disks formed on an extension of one of said brackets, a spring between each disk and the wall of the casing, said springs being adapted to force the disks toward each other.

3. In a machine provided with disks mounted on a shaft on pivoted brackets as claimed in claim 1, means for moving the disks apart comprising a cam disposed between the disks and means for moving the cam.

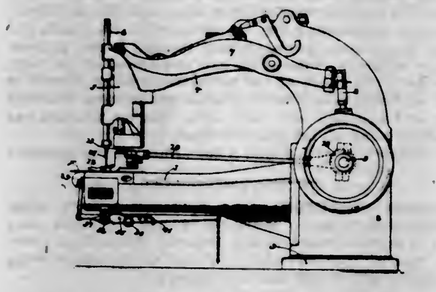
1,276,943. SURGICAL APPLIANCE. NATHAN MININBERG, Dickinson, N. D. Filed Aug. 4, 1917. Serial No. 184,417. (Cl. 128—39.)



1. In an apparatus of the class described the combination of a thermos bottle having an interior chamber, a vacuum chamber surrounding said interior chamber, and an outer casing surrounding said vacuum chamber; a valved inlet communicating with said interior chamber; a valved outlet extending from said interior chamber through said vacuum chamber and said outer casing; a bulb connection adapted to snap off and on said outlet and provided with a flexible pipe; an application member provided with a passage through which liquid may freely flow joined at one end to said flexible pipe and provided with a porous but liquid tight wall adapted to be applied to the injured part; and a valved drain pipe connected to the other end of said applicator, substantially as described.

[Claim 2 not printed in the Gazette.]

1,276,944. FABRIC-FOLDING GUIDE FOR TRIMMING MECHANISMS FOR SEWING-MACHINES. JAMES R. MOFFATT, Chicago, Ill., assignor to Union Special Machinery Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 7, 1916. Serial No. 124,864. (Cl. 112—6.)



1. The combination of a stitching mechanism, a trimming mechanism including a trimming blade moving horizontally in advance of the stitching mechanism, and a folding guide located in advance of the trimming blade for forming a rib or fold in the fabric which is cut-off by the trimming blade.

2. The combination of a stitching mechanism, a trimming mechanism including a trimming blade moving horizontally in advance of the stitching mechanism, a folding guide located in advance of the trimming blade for forming a rib or fold in the fabric which is cut-off by the trimming blade, and means whereby said folding guide may be raised or lowered at the will of the operator, without stopping the stitching mechanism.

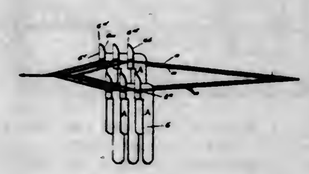
3. The combination of a stitching mechanism, a trimming mechanism including a trimming blade moving horizontally in advance of the stitching mechanism, a folding guide located in advance of the trimming blade for forming a rib or fold in the fabric and directing the same to the trimming blade whereby said folding guide in ineffective position, and means under the control of the operator for raising said folding guide to form the rib or fold.

4. The combination of a stitching mechanism, a trimming mechanism including a trimming blade moving horizontally in advance of the stitching mechanism, a folding guide located in advance of the trimming blade for forming a rib or fold in the fabric and directing the same to the trimming blade whereby said rib or fold is cut off, means for normally holding said folding guide in ineffective position, and means under the control of the operator for raising said folding guide to form the rib or fold, said means being operable without stopping the stitching mechanism.

5. The combination of a work support, a presser foot having a slot or cut-away portion at its forward end, a trimming mechanism including a trimming blade movable horizontally across said cut-away portion or slot in the presser foot, and stitching mechanism adapted to join abutted edges of fabric, a folding guide located in advance of the trimming blade, and means under the control of the operator for raising said folding guide into said cut-away portion of the presser foot for forming a rib or fold in the fabric which is cut off by the trimming mechanism.

[Claims 6 to 9 not printed in the Gazette.]

1,276,945. LOOM ELEMENT. HOWARD I. MORRIS, San Diego, Cal., assignor to The Savage Tire Company, San Diego, Cal., a Corporation of California. Original application filed Sept. 9, 1916, Serial No. 119,208. Divided and this application filed Dec. 1, 1916. Serial No. 134,480. (Cl. 139—14.)



5. A device of the character disclosed, comprising a body portion provided with a tapering working end portion angularly related to the body portion and having a thread-receiving notch in said end portion; said terminal portion being disposed forwardly of the body portion and directed laterally of the plane thereof whereby said notch is disposed at one side of the plane of the body portion; said body portion being provided with an angularly directed neck portion connecting the terminal portion of the body portion.

8. A device of the character disclosed, comprising a body portion provided with a tapering working end portion angularly related to the body portion and having a thread-receiving notch in said end portion; said terminal portion being disposed forwardly of the body portion and directed laterally of the plane thereof whereby said notch is disposed at one side of the plane of the body portion; said body portion being provided with an angularly directed neck portion connecting the terminal portion with the body portion; the terminal portion having a rounded edge through which the notch is produced.

10. A shed-forming finger for looms and the like, comprising an elongated flat body portion terminating at its upper end in an angularly and forwardly directed neck, and a terminal portion carried by said neck and disposed forwardly of the body portion and directed laterally in one direction from the neck and in a plane at right angles to the common plane of the body portion and the neck; said terminal portion being provided with a thread-receiving notch, and said terminal portion being likewise provided with a straight edge and with an upwardly-inclined rounded opposite edge through which said notch is produced.

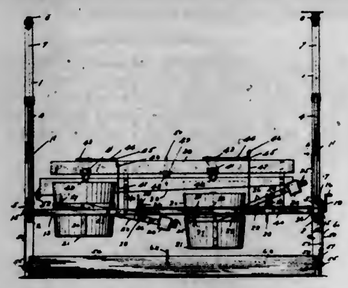
12. A device of the character disclosed, comprising a body portion provided with a tapering working end portion angularly related to the body portion and having a thread-receiving notch; said terminal portion being disposed forwardly of the body portion and directed laterally of the plane thereof whereby said notch is disposed at one side of the plane of the body portion; said body portion being provided with an angularly directed neck portion connecting the terminal portion with the body portion; the terminal portion having a rounded edge through which the notch is produced; said terminal portion rising above the upper end of the body portion.

[Claims 1 to 4, 6, 7, 9, and 11 not printed in the Gazette.]

1,276,946. AUTOMATIC CALF-FEEDER. MATH NEUMANN, Buffalo, Minn. Filed June 7, 1916. Serial No. 102,259. (Cl. 248—5.)

2. In a stock feeding apparatus, the combination with a support, of an arm and toggle links having their inner ends pivoted to said support, the outer ends of said arm

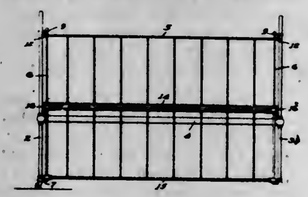
and toggle links being pivotally connected, a latch, adjustably connecting the members of the toggle links, a recep-



tacle pivotally supported from said arm, and a counterweight tending to buckle the toggle links.

[Claims 1, 3, and 4 not printed in the Gazette.]

1,276,947. CHILD'S CRIB. FRANK NICOLLS, Minneapolis, Minn., assignor to Salisbury & Satterlee Co., Minneapolis, Minn., a Corporation. Filed Mar. 29, 1916. Serial No. 87,454. (Cl. 5—58.)



The combination, with crib posts, of angle brackets secured thereon and having horizontally projecting plate-like portions provided with slots extending transversely of the crib, said brackets also having depending portions secured to said posts in planes transverse to the crib and having recesses therein and openings in their inner edges leading to said recesses, upright rods mounted for oscillation at the lower ends of said posts and having their upper ends free to slide back and forth in said slots transversely of the crib, a cribside mounted to slide vertically on said rods and having pins projecting from the ends thereof for entering the openings leading to said recesses, the slots in said plate-like portions extending inwardly beyond said openings to allow said pins to be inserted into or withdrawn from said recesses in closing or opening the cribside.

1,276,948. INTERNAL-COMBUSTION ENGINE. MEYER NUTA, Chicago, Ill. Filed Nov. 21, 1916. Serial No. 132,600. (Cl. 123—151.)

3. In a multi-cylinder internal combustion engine, in which the cylinders are arranged in line with each other, a shaft extending across the heads of the cylinders, the shaft being formed with spherical enlargements and being perforated through the enlargements to produce passages by which the interiors of the cylinders are respectively brought into communication with the inlet and with the exhaust passages of the engine as the shaft is turned, and igniters supported in recesses formed in the sad spherical enlargements of the shaft, and means for rotating the shaft in synchronism with the movements of the pistons in the cylinders.

7. In an internal combustion engine, the combination with a cylinder, a rotary shaft therefor supported in the head of the cylinder, an igniter carried by the shaft and arranged to be successively moved into communication with the cylinder and to be carried out of such communication, a bearing surrounding the shaft and having an opening through its opposite to which the igniter is moved, a removable plug adapted to close the opening through the bearing, and a brush carried by the plug for cleaning the points of the igniter as it is moved past the same.

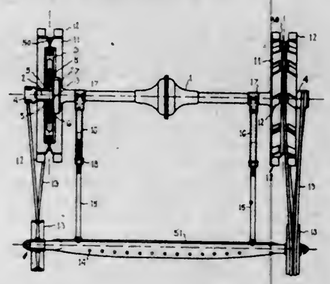


9. In an internal combustion engine, the combination with a cylinder in the head of which is an opening, of a shaft formed with a spherical enlargement, a zone of which is adapted to pass the opening into the cylinder, a bearing surrounding the enlargement of the shaft, the said enlargement having formed through it two perforations on opposite sides of the axis of rotation of the shaft, the peripheral ends of the perforations being located in the aforesaid zone, and a metallic gas packing bounding the said zone and each perforation opening, the said gas packing being an integral structure.

[Claims 1, 2, 4, 5, 6, and 8 not printed in the Gazette.]

1,276,949. TRACTOR. NELS L. OLSON, Detroit, Mich. Filed Sept. 7, 1917. Serial No. 190,259. (Cl. 180—70.)

1. The combination with a live axle, pulleys fixed thereon, wheels loose on said axle, and cables transmitting power to said wheels from said pulleys.



2. The combination with a live axle, pulleys fixed thereon, wheels loose about said axle, pulleys in spaced relation to said fixed pulleys, cables trained about all of the pulleys and wheels for imparting movement to said wheels from said axle.

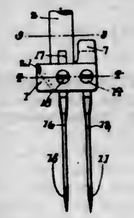
3. The combination of a live axle, pulleys thereon, wheels loose to revolve about said axle, demountable rims for said wheels, and means trained on said pulleys and rims for imparting movement to said rims from said pulleys.

4. The combination of a live axle, fixed pulleys thereon, wheels loose to revolve about said axle, demountable rims for said wheels, power transmission means trained on said pulleys and rims for imparting movement to said rims and said pulleys, and means adapted for adjusting the tension of said power transmission means.

5. The combination of a live axle, fixed pulleys thereon, wheels loose to revolve about said axle, members spaced from said live axle, wheels at the ends of said members, power transmission means between said pulleys, loose wheels and last mentioned wheels so that all the wheels revolve in the same direction.

[Claims 6 to 9 not printed in the Gazette.]

1,276,950. NEEDLE-CLAMP FOR SEWING-MACHINES. LANSING ONDERDONK, New York, N. Y., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 2, 1916. Serial No. 123,361. (Cl. 112—37.)



1. The combination of a needle bar and means for securing a plurality of needles thereto, said means including a collar secured to the lower end of the needle bar, said collar having a rearward extension and upwardly extending projections, and a recess extending upwardly through the collar into each projection, which recesses are adapted to receive needles, devices in the recesses initially determining the vertical positions of the needles in the said recesses, and means for clamping the needles in said recesses.

2. The combination of a needle bar and means for securing a plurality of needles thereto, said means including a collar secured to the lower end of the needle bar, said collar having a rearward extension and upwardly extending projections, and a recess extending upwardly through the collar into each projection, which recesses are adapted to receive needles, means initially determining the vertical positions of the needles in the said recesses, and means for clamping the needles in said recesses, said collar having a thread guiding recess for guiding a thread to each of the needles, said recess being located between said projections.

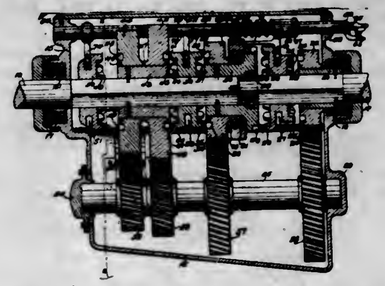
3. The combination of a needle bar and means for securing a plurality of needles thereto, said means including a collar secured to the lower end of the needle bar, said collar and needle bar having means for supporting a pair of needles lying in a plane containing the axis of the needle bar, said collar having a rearward extension for supporting a pair of needles lying in a plane in the rear of the first-named plane, said rearward extension of the collar having projections extending above the collar and recesses extending through the collar into said projections and adapted to receive the needles, a screw for the upper end of each recess for positioning the needles, and clamping screws for clamping the needles in their respective recesses.

[Claim 4 not printed in the Gazette.]

1,276,951. TRANSMISSION MECHANISM. MATTHEW C. OSTER, Denton, Mont. Filed Oct. 2, 1917. Serial No. 194,330. (Cl. 74—59.)

1. In transmission mechanism, the combination of drive and driven shafts, a countershaft, connections between the counter shaft and the drive and driven shafts and including each a gear wheel loose upon its respective drive and driven shaft, a clutch element on the drive shaft adapted to interlock with the adjacent gear wheel, a second clutch element on the driven shaft adapted to interlock with its gear wheel, and shifting means for the clutch elements including yieldably connected devices each having engagement with one of the clutch elements, and adapted to be shifted in one direction for interlocking one of the clutch members with its gear wheel and to be further shifted in the same direction for interlocking the other clutch element with the other gear wheel while maintaining the first clutch element and the gear wheel interlocked.

8. In transmission mechanism, the combination of drive and driven shafts, a counter-shaft, gear-wheels fixed upon the counter-shaft, gear-wheels loose upon the drive and driven shafts, a reverse gear-wheel loose upon the driven shaft and having connection with one of the gear-wheels on the counter-shaft, a clutch element shiftable upon the drive shaft for interlocking engagement with the gear-wheel thereon to drive all of said gear-wheels by the drive shaft, a second clutch element on the driven shaft adapted for interlocking engagement with the adjacent gear-wheel selectively to lock the desired gear-wheel to the driven shaft for turning the same, a third clutch element on said driven shaft adapted for interlocking engagement with the reverse gear-wheel for operating the driven shaft in a reversed direction, and a pair of concentric rods extending longitudinally of the drive and driven shafts and having connection with the clutch members to independently shift the same.



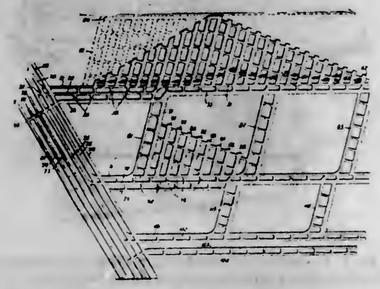
9. In a transmission mechanism, the combination of drive and driven shafts, a counter-shaft, gears fixed to the counter-shaft, gears loose upon the drive and driven shafts, and meshing with the gears on the counter-shaft, a clutch element mounted upon the drive shaft in spaced relation to an adjacent gear upon the drive shaft, clutch elements on the driven shaft arranged adjacent to said loose gears of the driven shaft, a longitudinally shiftable bar having a fork on one end for engagement with one of said clutch members on the driven shaft, a sleeve on said bar having a fork engaging a second clutch member on the driven shaft and provided with a locking finger, a stop collar on said bar for engagement with one end of the sleeve to limit the sliding movement thereof in one direction, a tension spring adjustably mounted on the bar adjacent the opposite end of the sleeve to hold the latter yieldingly against the collar, said first fork of the bar being spaced from the adjacent gear-wheel substantially twice the distance of the space between the fork of the collar and its adjacent gear-wheel, means for shifting said bar longitudinally in one direction to engage the second clutch member with its adjacent gear-wheel and for further moving the bar in the same direction for compressing said spring and engaging the first clutch member within the adjacent gear-wheel, said operating means being adapted to move the bar in an opposite direction to release both of said clutches from their respective gear-wheels and to interlock the second clutch with said clutch element upon the driven shaft for directly connecting the drive and driven shafts, said finger being adapted to be moved into interlocking relation with an adjacent gear-wheel to hold all of the gear-wheels from turning, a third clutch member arranged between intermediate gear-wheels upon the driven shaft, and a second bar having a fork connected to said third member for shifting the same in opposite direction to selectively interlock the gear-wheels with the driven shaft.

14. In transmission mechanism, the combination of a plurality of gears arranged in closely spaced relation, clutches disposed between said gears, a bar connected to certain of said clutches, a second bar connected to other of said clutches, a pair of concentric shafts connected respectively to the bars, a handle pivotally connected to the outer shaft adapted to swing in the longitudinal plane thereof and to turn laterally with the shaft, an arm upon

the inner shaft projecting through one side of the outer shaft, a link connecting the arm to the handle, a guide mounted on the outer shaft and having a longitudinal and a transverse way therein for limiting the longitudinal and rotary movement of the arm, said handle being adapted to be turned laterally in opposite direction for turning the outer shaft when the arm registers with the lateral way of the guide, and being adapted to be swung longitudinally of the shaft for moving the arm in the longitudinal way when registering therewith for moving the inner shaft longitudinally, and means for locking the handle in adjusted position.

[Claims 2, 4 to 8, 10 to 13, and 15 not printed in the Gazette.]

1,276,952. SYSTEM OF MINING COAL. EDWARD O'TOOLE, Gary, W. Va. Filed Mar. 16, 1914. Serial No. 824,979. (Cl. 37—51.)



1. The system of mining coal consisting in driving an airway at the level of the coal seam, turning a heading out of the airway, successively turning a series of rooms out of the heading as the development of the heading progresses, turning a second heading out of the airway, turning a series of rooms out of the second heading, connecting the headings with a haulway at intervals in the length thereof and robbing the mine by removing the pillars therefrom in the order in which the rooms are driven.

2. The system of mining coal consisting in driving a plurality of airways at the level of the coal seam, turning headings out of the airways, successively turning a series of rooms out of each heading as the development thereof progresses, connecting the headings with a haulway at intervals in the length thereof, and robbing the mine by removing the pillars from the rooms in the order in which the rooms are driven.

1,276,953. WRENCH WITH UNIVERSAL JOINT. ORREL A. PARKER, Cleveland, Ohio. Filed Jan. 8, 1917. Serial No. 141,088. (Cl. 81—121.)



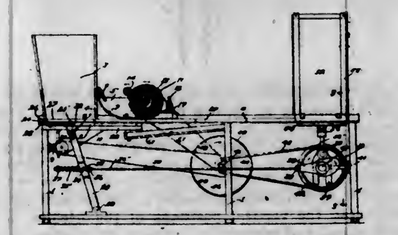
1. A wrench comprising a socket member having radial projections, a driving member provided with projections adapted to engage the projections of the socket member, the engagement between the socket and driving members being capable of a universal movement, the driving member being provided with means for turning it and the socket member in unison.

3. A wrench comprising a handle terminating in a driving member provided with lateral projections, a socket member having radial projections, said projections being adapted to engage each other and constitute a universal joint, one of said members being provided with means to prevent disconnection.

5. A wrench comprising a handle terminating in a driving member having laterally projecting portions, a socket member having an apertured central portion and upturned side portions together with means to prevent disconnection of said parts.

[Claims 2 and 4 not printed in the Gazette.]

1,276,954. APPARATUS FOR APPLYING PASTE TO BOX ENDS. ARCHIE F. PARTCH, Los Angeles, Cal. Filed Jan. 21, 1918. Serial No. 212,926. (Cl. 91—37.)



1. An apparatus for applying paste to box ends for the applying of labels thereto, comprising a frame, a horizontally disposed runway supported thereon, a magazine at one end thereof for containing a stack of ends to be pasted and labeled, a receiving chamber at the opposite end thereof for receiving the finished pasted and labeled ends, means intermediate said magazine and receiving chamber for applying paste to the ends as conveyed from the magazine to the receiving chamber, said runway provided with a label applying station intermediate said receiving chamber and said paste applying member, and reciprocating means for successively removing the lowermost end from the magazine and for forcing the removed ends longitudinally of said runway with their edges in engagement into contact with the paste applying means and thence into said receiving chamber.

3. An apparatus for applying paste to box ends for the applying of labels thereto, comprising a horizontally disposed runway along which the ends to be pasted are conveyed, a paste receptacle positioned above said runway and opened at one side across said runway, said receptacle provided with a bottom over said runway, a rotating paste applying member providing a closure for the open wall of said receptacle and for removing paste therefrom and applying the same to the box ends as passed beneath the same, means for conveying the ends longitudinally of said runway, and means for rotating said paste applying member.

5. An apparatus for applying paste to box ends for the applying of labels thereto, comprising a horizontally disposed runway along which the box ends to be pasted are conveyed, means for applying paste to the ends as conveyed along said runway, means at each side of the runway and adjustable angularly transversely thereof for contacting with a portion of the pasted area of the box ends as conveyed for removing the paste therefrom and a spring coöperating with each means for frictionally retaining said means in contact with the pasted ends as successively conveyed under the same.

[Claims 2 and 4 not printed in the Gazette.]

1,276,955. PARALLEL-RULER. CHARLES M. PIDGEON, Washington, D. C. Filed Dec. 30, 1916. Serial No. 139,736. Renewed Jan. 22, 1918. Serial No. 213,268. (Cl. 33—109.)

1. In a device of the class described, the combination with a ruler, rollers mounted upon the ruler and extending therethrough, and a shaft connecting said rollers, of a gear fixed to said shaft, a worm shaft extending over and coöperating with said gear, means to manually rotate said worm shaft, and means to move the worm shaft into and out of engagement with said gear.



2. In a device of the class described, the combination with a ruler, a pair of rollers mounted upon said ruler and extending therethrough, and a shaft connecting said rollers of a gear fixed to said shaft, a worm shaft extending transversely of the first shaft and coöperating with said gear, means for manually rotating said worm shaft, means to move said worm shaft into or out of engagement with said gear, and means to lock the worm shaft against casual rotation.

3. In a device of the class described, the combination with a ruler, rollers mounted upon said ruler, and a shaft connecting said rollers, of a gear fixed to said shaft, a housing surrounding said shaft, a worm shaft extending transversely through the housing, means to pivotally and rotatably mount one end of said worm shaft in the housing, a block having a seat to receive the opposite end of said worm shaft, said block being movably mounted in said housing, means to hold said block in its raised or lowered position, and means to lock said worm shaft against casual rotation.

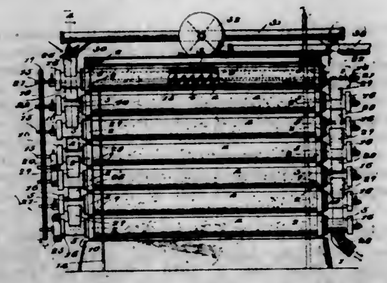
1,276,956. CUFF. FRANK M. PRESTWICH, New York, N. Y. Filed May 12, 1917. Serial No. 168,076. (Cl. 2—79.)



3. A reversible foldable cuff or the like comprising an interlining having spaced relatively stiff portions on each side of the fold and a selvage extending lengthwise of and adjacent the line of fold, said selvages being connected across said line of fold by separated threads forming a continuous relatively flexible folding portion.

[Claims 1 and 2 not printed in the Gazette.]

1,276,957. DRIER. LUTHER CALVIN REED, Dallas, Tex. Filed Feb. 21, 1918. Serial No. 218,545. (Cl. 34—7.)

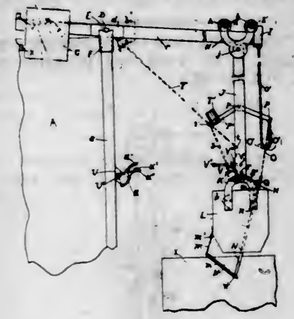


1. An appaatus for the purpose set forth comprising a plurality of superposed brackets, heating jackets having their ends secured in and closed by said brackets, pipes extending through said jackets and said brackets, caps closing the ends of the pipes, chutes connecting the opposite ends of alternate pipes with the adjacent ends of subjacent pipes between the brackets and the caps, conveyers disposed within the pipes and journaled in said caps, and means for driving the alternate conveyers in opposite directions.

2. An aparatus for the purpose set forth comprising a plurality of superposed brackets, heating jackets having their ends secured in and closed by said brackets, pipes extending through said jackets and said brackets, caps closing the ends of the pipes, chutes connecting the opposite ends of alternate pipes with the adjacent ends of subjacent pipes between the brackets and the caps, conveyers disposed within the pipes and journaled in said caps, means for driving the alternate conveyers in opposite directions, a supply pipe for a heating medium disposed at one side of the apparatus and having branches leading into the respective jackets above the centers thereof, and a return pipe disposed at the opposite side of the apparatus and having branches leading from the respective jackets below the centers thereof.

[Claims 3 and 4 not printed in the Gazette.]

1,276,958. AUTOMATIC WEIGHING-MACHINE. JOHN F. REINERT, South Elgin, Ill. Filed Apr. 15, 1918. Serial No. 228,560. (Cl. 214—2.)



1. In an automatic weighing machine, a lever, a pivotal mounting therefor, a weight adjustably mounted on said lever to one side and a carriage movably mounted on said lever to the other side of said pivotal mounting, means to limit the travel of said carriage when moving away from said pivotal mounting, a receptacle suspended from said carriage, means to supply material to said receptacle, means to arrest said supply, means to discharge material from said receptacle, means to close said discharging means and to maintain said closed position, and means to release said maintaining means on the predetermined travel of said carriage.

4. In an automatic weighing apparatus, a weighing beam fulcrumed to rock to a predetermined angle above and to a predetermined angle below a horizontal plane, a counter balance and a carriage on said beam, said carriage arranged to travel to predetermined positions on said beam in combination with a connecting beam depending from and pivotally attached to said carriage, a receptacle attached to said conecting beam and means to limit the swaying of said connecting beam and receptacle on the arrival of said carriage to said predetermined positions, a botom to said receptacle, means to close said bottom on the travel of said carriage a predetermined distance toward said fulcrum, means to latch said bottom in a closed position, and means to release said latch on the travel of said carriage a predetermined distance from said fulcrum.

[Claims 2, 3, and 5 to 8 not printed in the Gazette.]

1,276,959. FENCING IMPLEMENT. ERNEST RIBBE, New York, N. Y. Filed Apr. 23, 1917. Serial No. 163,967. (Cl. 42—86.)



3. A device of the class described, comprising a staff, an apertured head movably mounted on said staff, and means associated with said staff for projecting powder through said aperture in the direction of the staff upon contact between said head and another object.

5. A fencing implement comprising a staff, a cylinder slidably mounted on and forming an extension of said staff, a spring adapted to hold said cylinder in extended position, a padded head supported by said cylinder, and means providing a passage extending from the inside of said cylinder to the outer face of said head whereby powdered chalk or like material may be introduced into said cylinder, all for the purpose described.

[Claims 1, 2, and 4 not printed in the Gazette.]

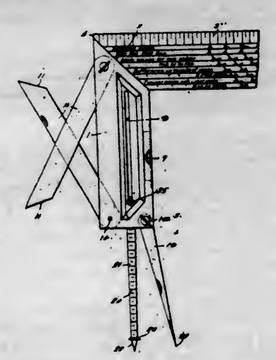
1,276,960. COMBINATION IMPLEMENT. FRANK F. RIGGS, Lead, S. D. Filed July 13, 1916. Serial No. 109,079. (Cl. 81—15.)



A tool comprising pivotally connected members constructed at one side of their pivotal connection with longitudinal opposed jaws and laterally extended whereby the entire inner surface of each jaw is opposed to and adapted to coöperate with the entire inner surface of the other jaw, one of the jaws having a transverse stop shoulder at its inner extremity and a transverse recess in its face at the junction of the same with said transverse stop shoulder and a gripping shoulder extending angularly from one end of said transverse stop shoulder, and the other jaw being provided on one side with a lateral gripping shoulder overhanging and coöperating with the first-mentioned gripping shoulder.

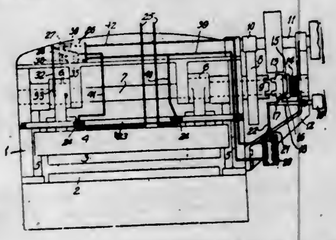
1,276,961. COMPOUND TOOL. SAMUEL L. ROACH, Grinnell, Iowa. Filed Mar. 3, 1916. Serial No. 81,901. (Cl. 32—95.)

1. A compound tool comprising a butt, a leg slidable longitudinally within the butt, means for adjustably holding the leg in various positions with relation to the butt, said leg being provided with graduations on one face thereof, a point formed on the free end of the leg, a flange near the lower end of the leg, a pivoted leg on the butt coöperating with the slidable leg and providing a compass, and means for holding the pivoted leg in an adjusted position.



2. In a tool of the class described, a butt having a slot in one of its side edges, and an aperture extending transversely therethrough, a leg fitted in said slotted portion and having a transversely extending aperature therein, registering with the aperture in the butt, a set screw extending through the registering apertures and threaded in the lower portion of the aperture in the butt, said set screw holding the leg for pivotal movement in the slot, the upper portion of the aperture in the butt being enlarged from the top surface of the butt to the slot, a sleeve slidably mounted in the enlarged portion of the aperture and adapted to engage the leg, said sleeve having a transversely extending aperture registering with the aperture in the blade and the aperture in the butt and receiving the set screw, and an enlarged head on the set screw engaging the outer surface of the sleeve for forcing the sleeve inwardly, whereby the leg can be held in any adjusted position.

1,276,962. ELECTRICAL SAFETY DEVICE. EDWARD ROBERTS, Detroit, Mich. Filed July 21, 1917. Serial No. 181,956. (Cl. 74—46.)



In an electrical device for machines, the combination with a source of electrical energy, a clutch controlling the operation of the machine, and an arm controlling the operation of said clutch, of a solenoid in circuit with said source of electrical energy and adapted to be energized to have the core thereof shift said clutch control arm, push buttons adapted for completing the circuit of said solenoid, and a switch arm shifted by said machine to break the circuit of said solenoid even though the push buttons are depressed.

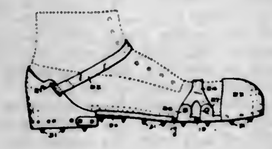
1,276,963. CAN-OPENER. JOHN ARTHUR ROBINSON, Ottawa, and MILTON LORNE ROBINSON, Arnprior, Ontario, Canada. Filed Dec. 6, 1916. Serial No. 135,481. (Cl. 30—3.)

A can-opener comprising a pair of levers pivoted together intermediate of the length, one of said levers having a straight end, the other of said levers having a curved end, the end of the lever having a curved end being formed with a U-shaped extension, a pivot pin extending transversely across the U-shaped extension, a rotary cut-



ting knife mounted on the pivot pin, a guide on the top of the U-shaped extension adapted to engage the edge of the can and a piercing point on the extremity of the lever having a straight end, substantially as and for the purpose specified.

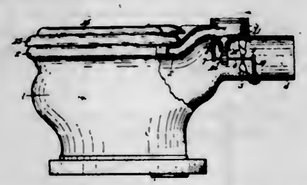
1,276,964. TRENCH-SANDAL. CHARLES O. ROE, Indianapolis, Ind. Filed Oct. 22, 1917. Serial No. 197,829. (Cl. 36—63.)



4. A sandal of the herein described class comprising a sole-member composed of a plurality of hingedly connected sections containing a plurality of perforations, spikes passing through said perforations, spike-retaining means for holding said spikes in operative position and provided with slots, pins arranged in said sole-member and extending through said slots, transverse heads on said pins for locking the spike-retaining means when the heads stand transversely of said slots, and means for securing the marginal edges of said spike-retaining means in operative position.

[Claims 1 to 3 not printed in the Gazette.

1,276,965. WATER-CLOSET. WALTER A. ROWE, Tiffin, Ohio, assignor of one-half to George W. Mix, Tiffin, Ohio. Filed Oct. 8, 1917, Serial 195,210. Renewed July 15, 1918. Serial No. 245,078. (Cl. 4—21.)



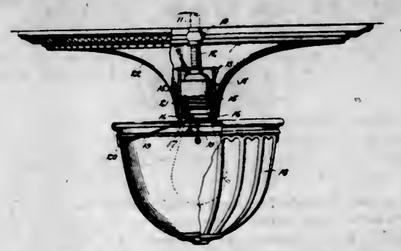
1. The combination with a closet bowl having a vent tube, of a rotary shaft disposed longitudinally within said tube, a fan carried by said shaft, a propeller carried by said shaft, and means for directing a portion of the water used in flushing said bowl into operative relation to said propeller, said means being functional only during the operation of flushing the bowl.

2. The combination with a closet bowl having a vent tube, of a rotary shaft disposed longitudinally within said tube, a fan carried by said shaft, and means whereby water admitted for bowl flushing purposes actuates rotation of said shaft, said means being inactive except during the operation of flushing the bowl.

3. The combination with a closet bowl having a vent tube, of a rotary shaft disposed longitudinally within said tube, a fan carried by said shaft, means for diverting some of the water admitted for bowl flushing purposes to said tube, and means in the path of and actuated by the diverted water whereby said shaft is rotated during the bowl-flushing operation only.

[Claims 4 to 10 not printed in the Gazette.]

1,276,966. ELECTRIC-LIGHT FIXTURE. HARRY RUBIN, Baltimore, Md. Filed Aug. 31, 1917. Serial No. 189,111. (Cl. 240—78.)



1. A lighting fixture comprising in combination a support, a canopy, a light-diffusing bowl, said canopy having a substantially funnel-shaped central portion with a concave reflecting surface, and a lamp-socket holder carried by the support adapted to support both the canopy and the light-diffusing bowl, said holder comprising upper and lower disks and intermediate spacing rods and a shell or casing inclosing a lamp-socket, the lower of said disks forming a support for the funnel-shaped portion of the canopy, and the shell or casing and the other disk forming a support for the lower disk.

[Claims 2 to 7 not printed in the Gazette.]

1,276,967. FIGURE TOY. HOMER J. RUSH, Cleveland, Ohio. Filed June 19, 1918. Serial No. 240,741. (Cl. 46—40.)



2. A figure toy comprising two relative movable sections, the adjacent portions of each of the sections being provided with a cap, a button underlying one of the caps, a strand doubled upon itself and threaded through the button and extending through both of the caps, a plate contacting with the inner face of the second cap and having a returned spring member, the adjacent ends of said strands being twisted one about the other, the spring member contacting with the inner end of the twisted portions of the strands.

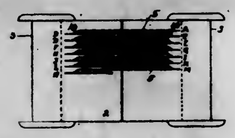
3. A figure toy comprising a body, a head consisting of an outer lamination of flexible material, a filler within the head, a member secured to the base portion of the head and extending along the face portion thereof, members secured to the face portion of the head to simulate eyes, and strands extending from said members and secured to the first-named member.

9. A figure toy comprising a body, a head consisting of an outer lamination of flexible material, a filler within

the head, a member secured to the base portion of the head and extending along the face portion thereof, members secured to the face portion of the head to simulate eyes, and strands connecting the nose portion of the face and the member.

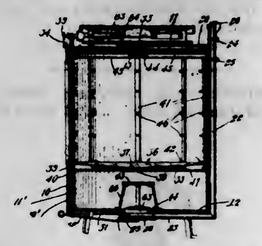
[Claims 1 and 4 to 8 not printed in the Gazette.]

1,276,968. RECORD FOR PHONOGRAPHIC MACHINES. AUGUST C. RUTZEN, Cleveland, Ohio. Filed June 7, 1915. Serial No. 32,545. (Cl. 274—43.)



A sound reproducing device comprising two reels and a rotatable drum between the same, in combination with a flexible strip engaged on said reels and stretched over said drum, said strip having linear sound reproducing channels extending substantially from end to end, and said channels having terminals in switched back relations at their ends with different channels for continuous travel of the needle.

1,276,969. OVEN AND ASSOCIATED HEATING APPARATUS. WILLIAM K. SCHAEFER, Fairmont, W. Va. Filed Feb. 29, 1916. Serial No. 81,221. (Cl. 126—89.)

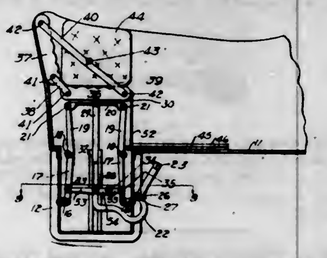


1. A hollow body having a valve controlled inlet in its bottom, a valve controlled outlet in its top, a burner and mixing chamber associated with the inlet in the bottom, an upper conduit in communication with the valved outlet, a second conduit in communication with the said mixing chamber and the said upper conduit, and valves in the length of the second conduit above and below the point of communication of the upper conduit therewith.

2. A hollow body, comprising a shell and top and bottom plates, a valved outlet in the top plate, a mixing chamber on the bottom plate provided with a damper controlled air inlet, a burner in the mixing chamber, an upper conduit in communication with the valved outlet, a second conduit in communication with the mixing chamber and the upper conduit and opening into the air at its upper end, and valves in the length of the second conduit above and below the point of communication of the upper conduit therewith.

1,276,970. CONVERTIBLE AUTOMOBILE-BODY. JOSEPH J. SCHRAMM, St. Louis, Mo. Filed July 25, 1917. Serial No. 182,635. (Cl. 21—43.)

1. The combination of an automobile body having a front seat and a front side door opening and a side rear door opening, of a housing located in the rear of the car body and below the car floor, a collapsible seat adapted to be positioned within said housing, toggle joints located at each end of the seat for supporting said seat, a bell crank lever for breaking the toggle joints and collapsing the seat, a sliding floor section forming a cover for said housing when the seat has been collapsed, and rear doors hinged above said housing and affording access to the rear of the car body.

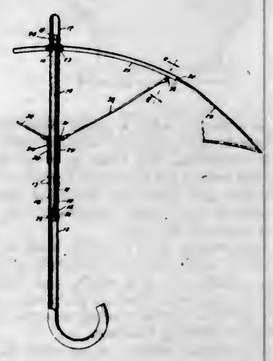


2. A convertible automobile body comprising a body provided with side entrances and a front seat, a housing depending from and located in the rear of said body, a pair of hinged doors arranged in the rear of said body, a collapsible seat having back and sides adapted to be positioned within the housing, toggle joints located at each end of the seat for supporting the same, and a lever projecting through the floor of the car for operating the toggle joints for elevating and lowering the seat.

3. A convertible automobile body provided with side entrance doors and a front seat, a housing positioned beneath the floor of said body and behind the rear axle, toggle joints pivoted at the lower ends within the housing and connected at their upper end by tie rods, guide plates oppositely disposed within the housing, slides located in said guide bars, a plate connecting said slides and seat mounted on said plate, a break lever pivotally secured to each pair of toggle joints, a rod connecting said break levers, a bell-crank pivotally secured to said rod, and provided with a handle projecting through the floor of the body for breaking the toggle joints for lowering the seat.

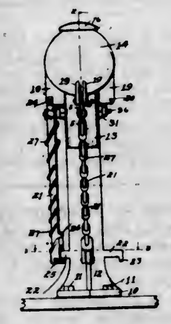
4. A convertible automobile body comprising a body provided with a front seat and side entrance doors, a housing secured to and depending below the floor of said body, a sliding floor section adapted to form a cover for said housing, a pair of toggle joints pivotally mounted at their lower ends within the housing, a break lever pivoted to each pair of toggle joints, a bell-crank provided with a detachable handle for breaking said break levers, a guiding bar positioned above the toggle joints, and a folding seat carried by said guiding bar.

1,276,971. FOLDABLE UMBRELLA. FREDERICK SCHILLING, Newark, N. J. Filed June 20, 1916. Serial No. 104,708. (Cl. 135—26.)



The combination, in a foldable umbrella, of a rod composed of detachable sections, a plurality of ribs each having one end pivoted to the rod for being swung toward and from the rod, and each of the ribs having a slotted tubular section with a slidably adjustable rod in the tubular section of its respective rib whereby the ribs may be reduced and increased in length, a sleeve on the sectional rod, a plurality of stays each having one end pivoted to the sleeve, a plurality of yielding retaining elements one pivotally connecting the second end of each stay to the slidable rod of each of the ribs, and the retaining elements being adapted to frictionally engage the tubular sections of the ribs to hold the adjustable rod against accidental movement when extensibly adjusted in the pivoted sections.

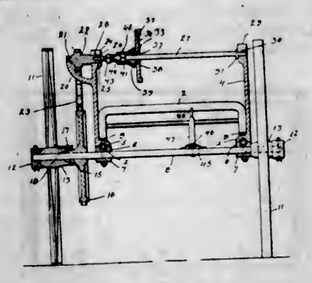
1,276,972. ANIMAL-OILING DEVICE. FERDINAND H. SCHULTZ, Treynor, Iowa. Filed Feb. 7, 1917. Serial No. 147,236. (Cl. 119—157.)



1. In an animal oiler, an upright, a container at the upper end thereof, a pivoted arm arranged alongside said container, said arm having an opening extending through it, said receptacle having an opening through its wall, and means for conducting liquid from said receptacle to said arm including a bolt adjustably mounted in said arm having a head countersunk in the opening in said arm on the side adjacent to said receptacle below the outer surface of the arm, a valve casing mounted in the opening in said receptacle having a head on its outer end with an annular lower edge, a valve in said casing having a stem projecting through said head and adapted to enter the opening in the arm and to contact with the bolt head therein in one position of the arm, and means for yieldingly holding said valve in seated position.

[Claims 2 and 3 not printed in the Gazette.]

1,276,973. WIRE-WINDER. MARTIN N. SCHUMANN, New Lisbon, Wis. Filed Sept. 23, 1916. Serial No. 121,746. (Cl. 242—92.)



A wire winder comprising a frame, uprights secured to said frame, a reel shaft journaled to said uprights, a wire reel journaled on said shaft, a conical hub journaled on said shaft, oppositely disposed arms formed on said hub and having hooked ends for engagement with the wire reel, a collar secured to the shaft and having squared faces, a clutch element having a squared bore to receive the squared faces of the collar to secure the clutch elements to the shaft for rotation therewith and which will permit sliding movement thereof in relation to the shaft, a conical portion formed on said clutch element and adapted to receive the conical hub, a nut threaded to said shaft and capable of adjustment thereon, a spring interposed between the nut nd clutch element for urging the conical portion thereof in engagement with the conical hub to lock the reel to said shaft, and means rotating said shaft.

1,276,974. PROCESS OF ORE CONCENTRATION. WALTER A. SCOTT, Chicago, Ill., assignor to Minerals Separation North American Corporation, a Corporation of Maryland. Filed Dec. 15, 1916. Serial No. 137,115. (Cl. 83—85.)



1. A concentration process comprising the operations of forming an unaerated emulsion of an insoluble frothing agent in a comparatively small amount of water, the addition of a suitable amount of the emulsion to an ore pulp, and the flotation of the valuable product contained in the pulp.

2. The process of ore concentration comprising the operations of forming an unaerated emulsion of an insoluble frothing agent in a comparatively small amount of water, the addition of a suitable amount of the emulsion to an ore pulp, and the introduction into the ore pulp of a gas for the purpose of effecting flotation.

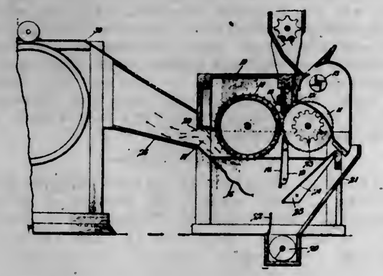
3. The process of concentrating ores comprising the operations of forcing a mixture of an insoluble frothing agent and water through fine orifices, the addition of a suitable amount of the product so formed to an ore pulp, and the flotation of the metalliferous matter contained in the ore pulp.

1,276,975. SEPARATING MECHANISM FOR LINTERS. HUGH E. SEASIONS, Columbia, S. C. Filed Dec. 15, 1914. Serial No. 877,442. (Cl. 13—9.)

1. In a cotton seed linter, the combination with a saw cylinder of a brush cylinder adapted to remove the lint from the teeth of the saws, a mote board extending downwardly at an angle beneath said brush cylinder forming an outlet flue beneath the brush cylinder, a board having its upper edge closely adjacent to but not extending within the periphery of said saws and extending downwardly opposite the flue entrance formed by said mote board.

4. In a cotton seed linter, the combination with a saw cylinder, of a brush cylinder, a mote-board beneath the brush cylinder forming an outlet flue beneath the brush cylinder, a separating board having its upper edge closely approaching the periphery of said saw cylinder at a point immediately below the line where the brush and saw cylinders most closely approach each other, the said board extending downward opposite the flue entrance but leaving an air passage beneath its lower edge, a conveyer below the edge of said separating board,

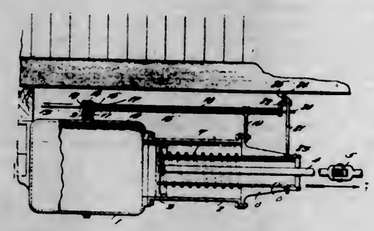
means for directing material falling from said saw cylinder to said conveyer, and means for preventing the woolly motes passing down said separating board on the side next to said brush cylinder from entering said conveyer.



6. In a coton seed linter, the combination with a saw cylinder, of a brush cylinder, a mote-board beneath the brush cylinder forming an outlet flue beneath the brush cylinder, means extending up between said cylinders for separating the woolly motes from the sharp motes discharged by said cylinders, means for causing air passing to said outlet flue to pass through the seperated descending sharp motes and wooly motes, and means for separately collecting the said woolly motes and sharp motes.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,276,976. ATTACHMENT FOR AIR-BRAKES. FRED T. SHAW and JOSEPH G. MEADOR, Jr., Winchester, Miss. Filed Aug. 22, 1917. Serial No. 187,612. (Cl. 188—10.)



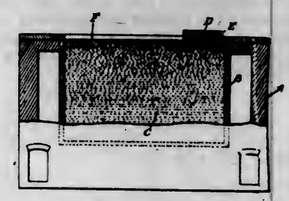
An attachment for air brakes comprising in combination with the brake cylinder, the piston, the spring-controlled relief valve, and means for operating the same, of a latch for holding the valve open, a spring controlling the latch, and means operated by the piston at the end of its movement to release position for releasing the latch, said means comprising a lever pivoted intermediate its ends and having means adjustable with respect thereto for engaging the latch to release the same, and a stop adjustably connected with the piston for engaging the lever.

1,276,977. METHOD OF COATING METAL ARTICLES. ROBERT JAY SHOEMAKER, Topeka, Kans. Filed July 5, 1917. Serial No. 178,728. (Cl. 91—70.3.)

1. Improvement in the method of plating metal articles which consists in immersing the article in a flux composed of zinc chlorid and common salt in a molten state and thereafter in a bath of molten plating metal.

2. Improvement in the method of plating metal articles which consists in immersing the article in a flux composed of substantially eighty per cent., by weight, of zinc chlorid and twenty per cent. of common salt in a molten state, and thereafter immersing the article in a bath of molten plating metal.

7. Improvement in the method of plating metal articles which consists in introducing the article into a bath of molten plating metal through a supernatant body of flux containing zinc chlorid and common salt in a molten state, said body of flux covering only a portion of the surface of the plating metal and covering the remaining surface of the plating metal with a relatively thin film of the flux.



8. Improvement in the method of lead-plating metal articles which consists in introducing the article into a bath of a molten lead through a supernatant body of flux containing zinc chlorid and common salt which covers only a portion of the surface of the body of lead, and covering the remaining surface of the body of lead with a relatively thin film of the flux.

[Claims 3 to 6 not printed in the Gazette.]

1,276,978. METHOD OF PLATING METAL CASTINGS. ROBERT JAY SHOEMAKER, Milwaukee, Wis. Continuation of application Serial No. 178,728, filed July 5, 1917. This application filed Dec. 6, 1917. Serial No. 205,779. (Cl. 91—70.3.)

1. Improvement in the method of plating iron or steel castings which consists in bringing the surface to be plated into contact with a caustic alkali heated to a molten state and thereafter plating the same with a plating metal.

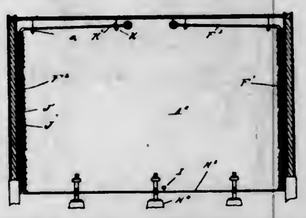
2. Improvement in the method of plating iron or steel castings which consists in bringing the surface to be plated into contact with a caustic alkali heated to a molten state, washing the surface with water, treating it with an acid and thereafter plating the same with a plating metal.

3. Improvement in the method of plating iron or steel castings which consists in bringing the surface to be plated into contact with an alkali heated to a molten state and afterward into contact with the plating metal in a molten state.

9. Improvement in the method of plating metal articles which consists in immersing the same in a bath of caustic soda and borax heated to red heat, and thereafter introducing them into a body of molten plating metal through a supernatant flux.

[Claims 4 to 8 not printed in the Gazette.]

1,276,979. LUMBER-CURING KILN. EDWARD D. SIDMAN, London, Ontario, Canada. Filed Dec. 14, 1917. Serial No. 207,084. (Cl. 34—47.)



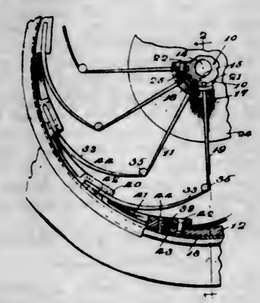
1. In a kiln for drying lumber, the combination with a room or compartment, of combined miter wall and ceiling heat-radiating pipes or coils for heating the interior thereof.

11. In a kiln for drying lumber, the combination with a room or compartmnet, of a series of foul air flues in one of the side walls thereof, provided with openings into said room or compartment of gradually increasing size from near one end thereof to the opposite end.

23. The process of curing or drying lumber, comprising the placing of the same into the tempering room, and the successive subjection thereof from therebeneath to moisture for saturating and slightly heating the same, and to greater heat from near the sides thereof, and the placing of the lumber into the finishing room, and the successive subjection thereof to greater heat from near the sides and top thereof, and to gradual decrease of the humidity while maintaining substantially the same temperature.

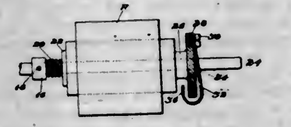
[Claims 2 to 10, 12 to 22, and 24 not printed in the Gazette.]

1,276,980. RESILIENT WHEEL. JOHN SKADBERG, Duluth, Minn. Filed Mar. 20, 1917. Serial No. 156,122. (Cl. 152—28.)



A wheel including a hub and a rim, the rim, having a plurality of sockets extending tangentially thereof and opening laterally and communicating without obstruction with the interior of the wheel, a plurality of resilient spokes extending from the hub, a resilient arm engaging at one end in each of the sockets and with a notch in the socket engaging end, each of said arms being pivoted at the other end to one of the spokes, a fastening device extending through the socket and through the portion of the arm within the socket, and a holding device extending through the socket and engaging within the notch of the arm.

1,276,981. RETAINING DEVICE. EDWIN W. SMITH, Beverly, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Sept. 27, 1917. Serial No. 193,557. (Cl. 242—130.)

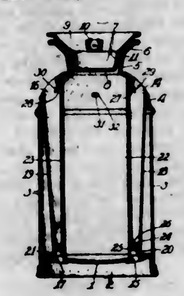


1. A device for retaining a member in place upon a spindle comprising a collar for coöperation with the member, said collar being freely movable upon the spindle, and a resilient member carried by the collar and being provided with an opening to receive the spindle, the edge of the opening being held normally in engagement with the spindle to retain the collar against movement thereon.

6. A device for retaining a member in place upon a spindle, comprising a collar for coöperation with the member, said collar being movable upon the spindle, and a leaf spring secured at one end adjacent to the edge of the outer face of the collar and being provided with an opening through which the spindle projects, the spring being tensioned and positioned to hold the edge of the opening in normal engagement with the spindle with the spring inclined outwardly from the point at which it is secured.

[Claims 2 to 5 not printed in the Gazette.]

1,276,982. MILK-COOLING CAN. HARVEY M. SMITH, Mooresville, Ind. Filed June 9, 1916. Serial No. 102,649. (Cl. 220—141.)

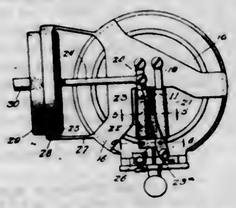


1. A shipping-can comprising a cylindrical container having an upright tube extending therethrough that is tapering uniformly from end to end thereof, the top of the container being adapted to be sealed, the larger end of the tube being uppermost and rigidly secured in the top of the container, and the major axis of the tube being inclined with respect to the major axis of the container.

2. A milk-cooling shipping-can having an upright unitary tube extending therethrough that is tapering uniformly from end to end thereof, the larger end of the tube being rigidly secured in the top of the shipping-can and having a guide secured therein, the smaller end of the tube being rigidly secured in the bottom of the shipping-can, a stopper in the tube below said guide, and a rod extending movably through said guide and connected to the stopper.

[Claim 3 not printed in the Gazette.]

1,276,983. CONTROLLING MECHANISM FOR PHONOGRAPHS. HARRY M. SMITH, Chicago, Ill. Filed Oct. 23, 1916. Serial No. 127,040. (Cl. 274—27.)



1. In a phonograph, an arm adapted to receive vibrations from a record, a second arm pivotally mounted at one end adjacent to said first-mentioned arm and provided with a jacket of resilient material, and manually controlled pneumatic means for causing said jacket to engage said first-mentioned arm to thereby dampen the vibrations of the same.

2. In a phonograph, a vibrating arm, a pair of arms pivotally mounted at one end on opposite sides of said first-mentioned arm, each of said pair being provided with a resilient jacket, and manually controlled pneumatic means for simultaneously moving said pair of arms

toward said vibrating arm to thereby cause said jackets to engage with said vibrating arm to thereby dampen the vibrations of the same.

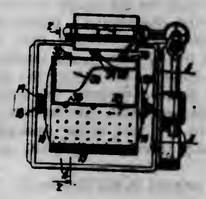
3. In a phonograph, a vibrating arm, a pair of arms mounted on opposite sides of said vibrating arm and pivotally mounted at one end, a lever pivotally connected to the free end of one of said pair of arms, a connection from said lever to the free end of the other of said pair of arms, and means for moving said lever to thereby cause said arms to be moved toward or away from said vibrating arm.

4. In a phonograph, a vibrating arm, a pair of arms mounted on opposite sides of said vibrating arm and pivotally mounted at one end, a lever pivotally connected to the free end of one of said pair of arms, a connection from said lever to the free end of the other of said pair of arms, and manually controlled pneumatic means for moving said lever to thereby cause said arms to be moved toward or away from said vibrating arm.

5. In a phonograph, a vibrating member, a pair of arms mounted on opposite sides of said vibrating member and pivotally mounted at one end, a lever pivotally connected to the free end of one of said pair of arms, a connection from said lever to the free end of the other of said pair of arms, and means for moving said lever to thereby cause said arms to be moved toward or away from said vibrating arm, said pair of arms being provided with jackets of resilient material adapted to engage with said vibrating member to thereby dampen the vibrations of the same.

[Claim 6 not printed in the Gazette.]

1,276,984. WASHING-MACHINE. HERMAN A. SPERLICH, Highland Park, Mich. Original application filed Mar. 30, 1917, Serial No. 158,607. Divided and this application filed Mar. 21, 1918. Serial No. 223,733. (Cl. 68—18.)



1. In a device of the character described, a frame, a tub supported by said frame, a cylinder rotatable in said tub about a horizontal axis, a cylinder driving shaft coaxial with said cylinder and projecting through the end wall of the tub, a nut on the inner end of said shaft, a bracket secured to the adjacent end of the cylinder, said bracket having therein a socket in which said nut is detachably received, said socket having a plurality of walls conforming to corresponding faces of the nut and having one wall inclined to the axis of the cylinder and of less depth than others, whereby the cylinder may be driven by said shaft or may be detached therefrom after slightly spreading the cylinder from the corresponding end of the tub.

3. A washing cylinder comprising a perforated sheet metal cylindrical body and a pair of ends for said body, a plurality of longitudinal wooden paddles in said cylinder, said body having an opening therein, headed members passing through the metal of the body from the outside and into the paddles adjacent the opening, the heads of said members being spaced from the body, and a closure for said opening, said closure having slotted projecting portions adapted to be slid longitudinally of the cylinder until they are received between the corresponding heads and the body, and means for retaining the closure in the last named position.

4. A washing machine comprising a tub, a casing mounted on the outside of one end of the tub, said casing having a perforated boss projecting into the tub, a cylinder in the tub, a driving shaft for the cylinder projecting through the boss, a driving element secured to the inner end of the shaft, said element constituting the support for the adjacent end of the cylinder and forming therewith a detachable driving connection, and a gland secured to the driving element and preventing seepage of liquid in the tub into the bearing between the driving shaft and the boss.

[Claims 2 and 5 not printed in the Gazette.]

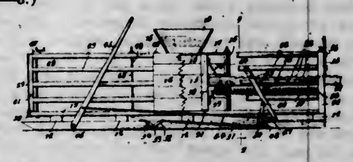
1,276,985. DEMOUNTABLE RIM. FRANK SPRANGER and NICHOLAS M. SPRANGER, Detroit, Mich. Filed Mar. 25, 1918. Serial No. 224,625. (Cl. 152—21.)



1. In a demountable rim, the combination of a fixed channel rim having side flanges provided with notches and the material from the notch of the inner flange struck inwardly to provide lips, a demountable rim adapted to fit on the flanges of said fixed rim, blocks carried thereby adapted to abut the lips of the inner flange of said fixed rim, and extend into the notches of the outer flange of said fixed rim, clips adapted to engage the outer flange of said fixed rim and extend into the notches thereof and engage said blocks, bolts extending through the flanges of said fixed rim and having heads extending into the notches of the inner flange of said fixed rim to engage the lips thereof, and nuts screwed upon said bolts holding said angle clips in engagement with said fixed rim.

[Claims 2 and 3 not printed in the Gazette.]

1,276,986. BALING-PRESS. JESSE J. STEWART, Yale, Ark. Filed Oct. 31, 1916. Serial No. 128,749. (Cl. 100—6.)



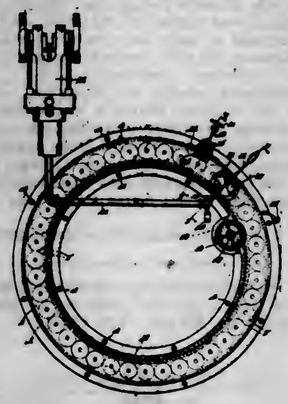
1. In a baling press, a structure to receive the material to be baled, a plunger mounted to operate in said structure, means to thrust said plunger in one direction, automatic means to return said plunger to its normal position, and a treadle to return said plunger-operating means to their normal position.

2. In a baling press of the character described, a structure to receive the material to be baled, a plunger mounted to operate in said structure, means including a hand lever to impart a thrusting movement to said plunger, a spring to return said plunger to its normal position, a treadle and means operable by said treadle to return said plunger-thrusting means to their normal position.

3. In a baling press the combination of a structure to receive the material to be baled, a plunger mounted to operate in said structure, a plunger-beam having teeth thereon and connected to said plunger, means to support said plunger-beam intermediate of its ends, a hand lever, means operable by said hand lever to engage with the teeth of said plunger-beam and thereby impart a thrusting movement to said plunger, means to return said plunger to its normal position, a treadle to return said plunger-thrusting means to the normal position thereof and means independent of said plunger-thrusting means and mounted to be moved into a position to retain said plunger against return movement.

4. In a baling press, the combination of a structure to receive the material to be baled, a plunger mounted to operate in said structure, a plunger-beam fixed adjacent one end to said plunger and having a plurality of teeth thereon, a pawl mounted to engage said teeth, an arm to move said pawl and thereby impart a thrusting movement to said plunger, an operating lever arranged on said structure, means connecting said operating lever and said arm whereby said arm may be moved, means to return said plunger to its normal position, and means having engagement with said arm to return said pawl and said operating lever to their normal position.

1,276,987. APPARATUS FOR PRESERVING OBJECTS CONTAINING FLUID UNDER PRESSURE. FRANK W. STOCKTON, Chicago, Ill. Filed Mar. 6, 1915. Serial No. 12,653. (Cl. 118—82.)



1. Apparatus for preserving objects containing compressed fluid, said objects being arranged in receptacles, comprising fluid compressing means; means for introducing the compressed fluid into the receptacles containing the objects to be preserved; a pressure gage for determining the pressure of the fluid introduced into said receptacles; and means for hermetically sealing the receptacles after the introduction of the compressed fluid thereinto.

4. Apparatus for preserving objects containing compressed fluid, said objects being arranged in receptacles each having a fluid inlet opening, comprising a chamber for the reception of said receptacles; means for introducing compressed fluid into said chamber for passage into said receptacles; a pressure gage connected with said chamber; and means for hermetically sealing said receptacles while positioned in said chamber.

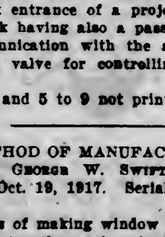
6. Apparatus for preserving objects containing compressed fluid, said objects being arranged in receptacles, comprising a compressed fluid supply pipe; means for introducing the compressed fluid supplied into said receptacles; a pressure gage connected with said supply pipe; and means for hermetically sealing said receptacles after the introduction of the compressed fluid thereinto.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,276,988. FRUIT-DRIER. ULYSSES G. STOVER, Waynesboro, Pa. Filed Oct. 15, 1917. Serial No. 196,678. (Cl. 34—39.)

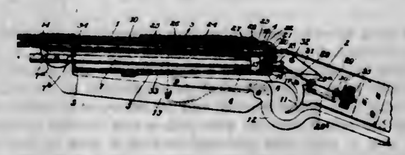
1. A drier comprising a frame having its upper and lower ends open, trays removably engaged within the frame, and plates hingedly connected with the opposite sides of the frame at the top thereof and adapted to overlie said top, the hinged marginal portions of the plate being provided with restricted openings.

2. A drier comprising a frame having its upper and lower ends open, trays removably engaged within the frame, plates hingedly connected with the opposite sides of the frame at the top thereof and adapted to overlie said top, the hinged marginal portions of the plate being provided with restricted openings, and means carried by the plates and co-acting with the frames for maintaining said plates in different positions relative to the frame.



3. A drier comprising a frame having its upper and lower ends open, trays removably engaged within the frame, plates hingedly connected with the opposite sides of the frame at the top thereof and adapted to overlie said top, the hinged marginal portions of the plate being provided with restricted openings, an upstanding ear carried by an end portion of each of the plates, a rod pivotally engaged with said ear and overlying the adjacent wall of the frame, said rod being provided with a longitudinally disposed slot, an outstanding threaded shank carried by said wall of the frame and extending through the slot of the rod, and a clamping member engaged with said shank.

1,276,989. AIR-GUN. SVEN SVENSON, La Crosse, Wis. Filed Oct. 8, 1917. Serial No. 195,377. (Cl. 124—8.)



1. In an air rifle having a barrel, a shot magazine, an inner barrel, an air compressing plunger, and a pivoted trigger guard lever, means operated by said lever for simultaneously reciprocating said plunger and said inner barrel.

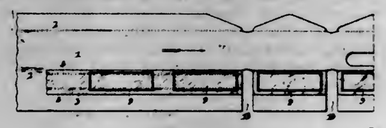
4. In an air rifle an air compression chamber with means for storing air therein under pressure, a barrel, a breech block having a barrel passage in which the rear end of said barrel is movably held, a magazine supported in proximity to said barrel, said breech block having a passage adapted to be uncovered by movement of the barrel to permit entrance of a projectile to the barrel, said breech block having also a passage for placing the barrel in communication with the air chamber, and a trigger operated valve for controlling said last named passage.

[Claims 2, 3, and 5 to 9 not printed in the Gazette.]

1,276,990. METHOD OF MANUFACTURING WINDOW-ENVELOPS. GEORGE W. SWIFT, Jr., Bordentown, N. J. Filed Oct. 19, 1917. Serial No. 197,384. (Cl. 93—61.)

1. The process of making window envelops which consists in feeding together webs of envelop material and window material, the latter being applied to the former along a line not coincident with that of the window apertures; and cutting and folding the material in such

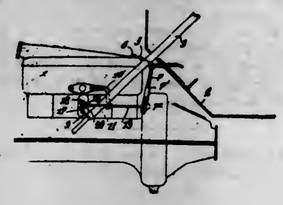
a way that the window material is thereby caused to assume its ultimate and proper relation to the window aperture of each envelop.



5. The process of window envelop formation, which consists in forming successive apertures in a running envelop web; applying a window web running at similar speed alongside the line of said apertures; cutting the flaps in relation to each aperture required for envelop formation, and simultaneously subdividing and cutting away enough of the window material to prevent the length of each piece of such material from exceeding the length of a completed envelop; and folding the flaps in such way that a piece of window material is brought up against the aperture of each envelop.

[Claims 2 to 4 not printed in the Gazette.]

1,276,991. FOOT-THROTTLE FOR FORD AUTOS. WALTER I. SYLVESTER, Marcus, Iowa. Filed June 21, 1917. Serial No. 176,190. (Cl. 74—81.)



A foot throttle mechanism for automobiles comprising straps secured to the engine and having bearings, a rod rocking therein and having a pedal and an arm projecting radially from it, a bell-crank lever pivoted at its angle, its long arm being slotted and its short arm connected with the radial arm on said rod, a rod passing through the slot of said long arm and having a loop at one extremity and its other extremity connected with the carbureter lever, a stop adjustably mounted on this rod against the slotted end of the bell-crank lever, and a second rod passing through the loop of the first and itself having a loop at one extremity embracing the body of said first rod and its other extremity connected with the throttle control mechanism on the steering post.

1,276,992. STRAINER. SIMEON TADEJEVICH, San Francisco, Cal. Filed Nov. 17, 1917. Serial No. 202,521. (Cl. 210—16.)



1. A strainer, comprising in combination, a strainer body and a marginal rim therefor, a spring element secured to the inner side of the rim, and curved into the body of the strainer, and an attachment finger constituting the end of the spring element and overlying the upper edge of the rim to constitute with the latter a resilient clamp for the engagement of a pouring lip.

[Claims 2 and 3 not printed in the Gazette.]

1,276,993. STRUCTURAL MEMBER FOR AIRPLANES. JOHN H. TALGE, Indianapolis, Ind. Filed Feb. 25, 1918. Serial No. 218,989. (Cl. 244—31.)



1. A structural member for air planes composed of laminated side members and a cross member, interlocked and having a long radius of curvature, and a tension member extended through the cross member and through the joint between the side members placing the side members under transverse compression.

3. A structural member for airplanes, composed of laminated side members having a long radius of curvature joined along two edges with their other edges materially separated, and a laminated cross member connecting and interlocked with said separated edges of the side members, the laminations of said cross member lying at substantially right angles to the laminations of the side members.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,276,994. THROAT FOR BRUSH-MAKING MACHINES. NIKOLAUS THOLL, Hoosick Falls, N. Y. Filed May 9, 1918. Serial No. 233,547. (Cl. 15—7.)



1. A bristle-feeding throat for brush-making machines comprising a block divided into two members on a plane extending from front to rear, said members being provided with complementary channels forming a bristle-passageway through the block; a pair of face-plates detachably mounted within said block on opposite sides of said passageway extending across the line of division of the block; and detachable means for securing each of said face-plates to both block-members.

2. A bristle feeding throat for a brush-feeding machine comprising a block divided into two members on a plane extending from front to rear, said members being provided with complementary channels forming a tapered bristle passageway through the block, said channel walls being formed with oppositely disposed bristle-guiding grooves in the smaller end of said passageway; a pair of face-plates detachably mounted within said block on opposite sides of said passageway extending across the line of division of the block, said face-plates being provided with oppositely disposed staple-guiding grooves; detachable means for securing said block-members directly together; and detachable means for securing each of said face-plates to both block-members.

1,276,995. FIELD-KITCHEN. CHARLES O. THOMAS, Jr., U. S. Army. Filed May 5, 1917. Serial No. 166,611. (Cl. 126—29.)

1. A field outfit comprising a pair of grids adapted to be nested together, a tank adapted to be inclosed by said nested grids, and having a bottom spaced from the edges of its lateral sides, and a heating coil arranged upon the bottom of said tank within the space defined by said bottom and the lateral sides thereof.

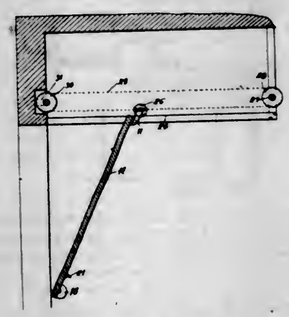
2. A field outfit comprising a pair of grids adapted to be nested together, roasting pans, boilers and a tank adapted to be nested together and inclosed in said nested grids, and a heating coil lying adjacent the bottom of said tank and permanently secured thereto, the lateral sides of said tank extending past said coils.



3. A field outfit comprising a tank, a heating coil arranged upon the bottom of the tank, roasting pans adapted to inclose the tank, boilers adapted to nest within the tank, a pair of grids having legs adapted to slip one within the other and adapted to form a protective crate about said pans, and means for securing said grids about said pans.

4. A field outfit comprising a tank, having a bottom spaced inwardly from the edges of the sides, a heating coil arranged upon the bottom of said tank, a grid for supporting said tank above a fire, and side pieces arranged on said grid to prevent lateral spreading of said fire.

1,276,996. DOOR-CONTROL MECHANISM. CHARLES C. TOMKINSON, Plainfield, N. J., assignor to George H. Frothingham Company, New York, N. Y., a Corporation of New York. Filed May 3, 1916. Serial No. 95,286. (Cl. 20—19.)

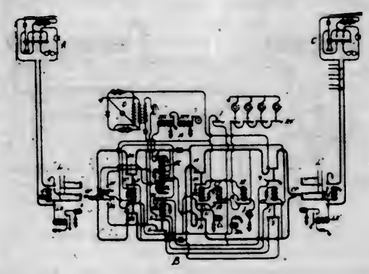


1. The combination with a door having its lower corners guided to move in a plane parallel with the door opening and with its upper corners adapted to swing away from the door opening at the top, hoisting mechanism connected to the door, stationary guide means in the plane of the door opening for the lower corners of the door, track rails extending in the direction of movement of the top of the door and located near its respective edges, rollers secured to the door on a common axis and coöperating with said rails, and means for causing the respective upper corners of the door to travel outwardly at the same speed whereby the axis of said rollers is maintained in parallel relation with the lower edges of the door during the upward movement of said corners.

2. The combination with a door having its lower corners adapted to be moved in a plane parallel with the door opening and with its upper corners adapted to swing away from the plane of the door opening at the top, of guide rails extending at an angle to the plane of the door opening, rollers on the door adapted to coöperate with the track rails, and a pair of endless chains adjacent to the guide rails and connected to opposite edges of the door, and means for interconnecting the chains to insure their concurrent movement.

3. The combination with a door having its lower corners adapted to be moved in a plane parallel with the door opening and with its upper corners adapted to swing away from the plane of the door opening at the top, of guide rails extending at an angle to the plane of the door opening, rollers on the door adapted to coöperate with the track rails, a pair of endless chains adjacent to the guide rails, a pocket sheave for each chain, and an interconnecting shaft to which the pocket sheaves are secured, whereby the pivotal axis of the door is maintained in parallel relation to the plane of the door opening.

1,276,997. TELEPHONE SYSTEM WITH INSTANTANEOUS DISCONNECT AND RECALL. THOMAS J. TUNE, Cleveland, Ohio, assignor to Kellogg Switchboard & Supply Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 10, 1914. Serial No. 865,983. (Cl. 179—51.)



1. A telephone system comprising telephone lines, an operator's cord circuit for connecting calling and called lines, an operator's telephone, automatic means for connecting and disconnecting said operator's telephone and said cord circuit, cord disconnect means responsive to the replacing of the receiver of a connected line upon its switch-hook, and operator key controlled circuits for reconnecting the cord to the last said line and connecting the operator's telephone to the cord without the removal of either plug from its connected jack.

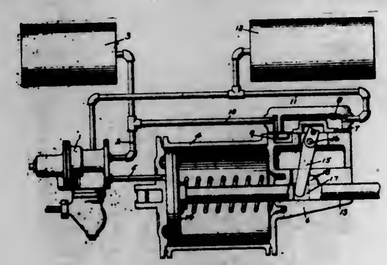
9. A telephone system including subscribers' lines, a link circuit for connecting said lines, an answering supervisory signal, a relay associated with said link circuit adapted to be energized responsive to a control exercised over one of said subscribers' lines for operatively disassociating the said connected subscriber's line from the link circuit and for actuating said supervisory signal, an operator's key for said link circuit, and a circuit for said relay adapted to be opened by said key to restore said relay, whereby the said link circuit is again associated with said subscriber's line.

15. A telephone system comprising subscribers' telephone lines, a manual link circuit for connecting two of said lines in a conversational circuit, an operator's telephone, automatic means responsive to connection of said link circuit to a calling and a called one of said lines respectively for connecting and disconnecting the said operator's telephone and the said link circuit, electromagnetic means controlled at the substation of one of the connected lines for operatively disassociating said connected line from said link circuit and for restoring the subscriber's line circuit equipment to normal, an operator's key for said link circuit, and circuit connections controlled by said key for reconnecting said operator's telephone with said link circuit and for reassociating said link circuit with said subscriber's line without necessitating the removal of the link circuit plugs from the line jacks of the connected lines.

17. A telephone system comprising subscribers' telephone lines, a link circuit provided with connection terminals for connecting said lines in conversational circuit, inductive devices normally connected to the strands of said link circuit and to said terminals, subscriber-controlled means associated with said link circuit for operatively disassociating said inductive devices from a connected one of the subscribers' lines, an operator's key and circuit connections controlled by said key for again associating said inductive devices with said subscriber's line prior to the disconnection of said connection terminals from said lines.

[Claims 2 to 8, 10 to 14, 16, and 18 to 26 not printed in the Gazette.]

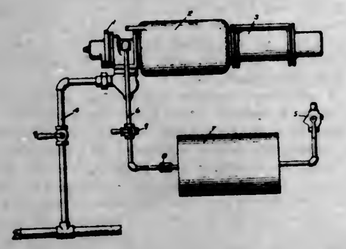
1,276,998. FLUID-PRESSURE BRAKE APPARATUS. WALTER V. TURNER, Wilkinsburg, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Nov. 29, 1916. Serial No. 134,081. (Cl. 188—1.)



3. In a fluid pressure brake, the combination with an auxiliary reservoir, a brake cylinder containing a brake cylinder piston, and a triple valve device for supplying fluid from the auxiliary reservoir to the brake cylinder, of an additional reservoir normally connected to the auxiliary reservoir, and a valve operated by the movement of the brake cylinder piston in applying the brakes for cutting off communication from the additional reservoir to the auxiliary reservoir.

[Claims 1, 2, 4, and 5 not printed in the Gazette.]

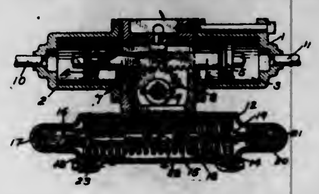
1,276,999. RETAINING-VALVE DEVICE. WALTER V. TURNER, Wilkinsburg, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Dec. 13, 1916. Serial No. 136,609. (Cl. 188—12.)



4. In a fluid-pressure brake, the combination with a brake cylinder, triple valve device and a retaining valve device connected to the triple valve exhaust port, of a reservoir interposed between the triple valve device and the retaining valve device and means for restricting communication from the triple valve device to the reservoir.

[Claims 1 to 3 not printed in the Gazette.]

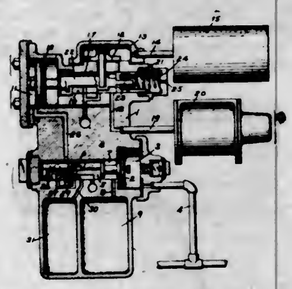
1,277,000. MOTOR FOR DOOR AND STEP CONTROLLERS. WALTER V. TURNER, Wilkinsburg, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed May 14, 1917. Serial No. 168,888. (Cl. 188—2.)



1. In a car door and step controlling device, the combination with a piston device operated by fluid under pressure, of a spring, a cam lever operated by said piston device, movable abutments engaging opposite ends of the spring, and means adapted to be engaged by the cam lever for operating one of the abutments according to the direction of movement of said piston device.

[Claims 2 and 3 not printed in the Gazette.]

1,277,001. LOCOMOTIVE BRAKE DEVICE. WALTER V. TURNER, Wilkinsburg, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Oct. 25, 1917. Serial No. 198,500. (Cl. 188—1.)



3. In a fluid pressure brake, the combination with a brake cylinder, of a valve device having a piston subject to the opposing pressures of the brake cylinder and an application chamber, a valve operated by said piston upon an increase in pressures in the application chamber for supplying fluid to the brake cylinder, and a piston stop device acting on said piston and subject on one side to brake cylinder pressure and on the opposite side constantly to atmospheric pressure and the pressure of a spring for initially retarding the application of the brakes, the spring stop device being cut out of action at a predetermined brake cylinder pressure.

[Claims 1 and 2 not printed in the Gazette.]

1,277,002. RIFLE-GRIP. JOSHUA V. VAN NAME, Mariners Harbor, N. Y. Filed Sept. 28, 1917. Serial No. 193,760. (Cl. 42—71.)



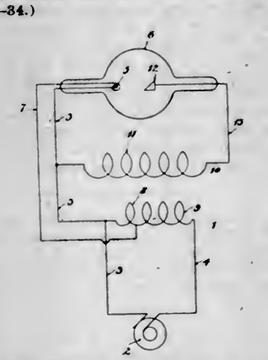
1. A rifle grip comprising a body, said body having an elongated socket formed therein, said body also having a plurality of independent reduced sockets formed therein,

said sockets having continuous abutment shoulders, whereby said body may be firmly gripped by the fitting of the user's thumb and fingers within said sockets, and means for releasably retaining said body upon the stock of a rifle.

3. In a device of the class described, the combination of a rifle stock having a slot formed therein, a rifle grip comprising a body, said body having flanges formed thereon, said body fitting upon said stock and said flanges gripping said stock thereby positively supporting said grip upon said stock, a bolt passing through said body and through said slot, means carried by said bolt for clamping said body upon said stock whereby said grip will be retained upon said stock in an adjusted set position, and sockets formed in said body whereby said grip may be firmly held.

[Claims 2 and 4 to 7 not printed in the Gazette.]

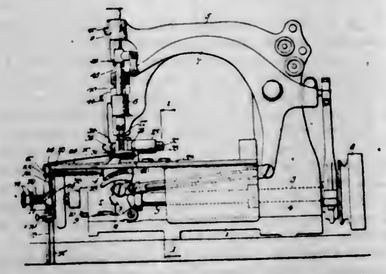
1,277,003. X-RAY SYSTEM. HARRY F. WAITE, New York, N. Y. Filed Oct. 18, 1917. Serial No. 197,201. (Cl. 250—84.)



1. In a system of the class described, a step-up transformer with a low tension circuit and a high tension circuit, a hot cathode X-ray tube in the high tension circuit, and conductors connecting the hot cathode of the high tension circuit with the low tension circuit.

[Claims 2 and 3 not printed in the Gazette.]

1,277,004. STRIP-FEEDING MEANS FOR SEWING-MACHINES. JOHN P. WEIS, Nyack, N. Y., assignor, by mesne assignments, to Metropolitan Sewing Machine Corporation, Dover, Del., a Corporation of Delaware. Filed July 12, 1915. Serial No. 39,222. (Cl. 112—24.)



1. In a sewing machine, the combination of stitching and feeding mechanism, hemming means, means for guiding an elastic strip into position within the hem, means for shifting said elastic strip to and from the stitching mechanism, and means for clamping said elastic strip when shifted away from the stitching mechanism and for releasing it when shifted into the path of the stitching mechanism.

6. In a sewing machine, the combination with stitching mechanism, feeding mechanism and hemming means, of means for guiding an elastic strip into the hem, and means for clamping the strip at one time and for releasing it at another time, the organization being such that when the elastic strip is clamped such strip is stretched and when released it is permitted to return to its normal unstretched condition.

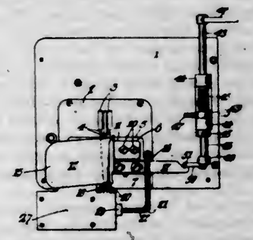
71. In a sewing machine, the combination of stitching and feeding mechanism, means for guiding a strip into position to be stitched, means for shifting said strip to and from the stitching mechanism, and means controlled by said shifting means for clamping said strip when shifted away from the stitching mechanism and for releasing it when shifted into the path of the stitching mechanism.

72. In a sewing machine the combination with stitching mechanism, of means for guiding a strip to the stitching mechanism, and means for clamping the strip at one time, thereby to retard the movement thereof and stretch the strip to narrow it and thus carry it out of the path of the stitching mechanism to prevent the stitching of said strip and for releasing the strip at another time, whereby the strip is permitted to return to its normal unstretched condition and into the path of the stitching mechanism whereby it will be stitched.

83. In a sewing machine, the combination of stitching mechanism and feeding mechanism, means for guiding an elastic strip to the work, and means for retarding said elastic strip at one time thereby to carry it away from the stitching mechanism and for releasing it at another time thereby to carry it into the path of the stitching mechanism.

[Claims 2 to 5, 7 to 70, 73 to 82, and 84 not printed in the Gazette.]

1,277,005. SEWING-MACHINE. JOHN P. WEIS, Nyack, N. Y., assignor, by mesne assignments, to Metropolitan Sewing Machine Corporation, Dover, Del., a Corporation of Delaware. Filed May 20, 1916. Serial No. 98,725. (Cl. 112—9.)



1. In a sewing machine, the combination of means for folding a hem in the work, means for folding and guiding a covering strip into position to cover the raw edge of the hem, means for guiding an elastic strip into position to be stitched between the work and the covering strip, and means for shifting said elastic strip toward and from the stitch line simultaneously placing the strip under tension when in one of its shifted positions.

10. In a sewing machine, the combination of means for guiding a strip into position to be stitched, means for shifting said strip to and from the stitching position, means for placing said strip under tension, when shifted into one of said positions and for releasing it when shifted into the other of said postions, and means for supplying a covering strip.

16. In a sewing machine, an elastic-strip-guiding means comprising a shiftable strip guide, a slide carrying the same, a rock shaft connected with the slide, means for operating said rock shaft, clamping means for the strip, and means connected with said slide for releasing said clamping means.
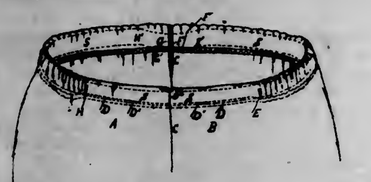
21. In a sewing machine, the combination of means for forming a hem, means for folding a covering strip,

means for guiding a strip into position to be stitched, said strip guiding means being located between the hem forming means and the strip folding means and below the hem forming means, and means operative at the will of the operator without stopping the stitching mechanism for shifting one of said means laterally relatively to the other two means.

33. In a sewing machine having a cloth plate, the combination of a slide plate carried thereby, means for forming a hem carried by said slide plate, means for guiding a strip to the stitching mechanism and also carried by said slide plate, and means for folding and guiding a covering strip also carried by said slide plate.

[Claims 2 to 9, 11 to 15, 17 to 20, 22 to 32, and 34 to to 62 not printed in the Gazette.]

1,277,006. WEARING-APPAREL. JOHN P. WEIS, Nyack, N. Y., assignor to Metropolitan Sewing Machine Corporation, Nyack, N. Y., a Corporation of Delaware. Original application filed July 12, 1915, Serial No. 39,222. Divided and this application filed Nov. 9, 1917. Serial No. 201,007. (Cl. 2—143.)



1. An article of wearing apparel having a finished edge or portion, an elastic strip having spaced parts stitched to the article while the strip is in its normal condition and free of tension, and having a part intermediate such spaced and stitched parts unstitched to the article while such intermediate part is in a stretched or tensioned condition so that when such stretched portions of the elastic strip resume their normal condition the garment will have a series of gathers between those spaced points where the strip is stitched to the article.

2. An article of wearing apparel having a hem or pocket and an elastic strip therein, said garment having a plain portion and a gathered portion, with a strip stitched to the article at the plain portion and unstitched thereto at the gathered portion, the hem being formed by a line of sitching and the elastic strip where stitched to the garment being stitched by another parallel line of stitching.

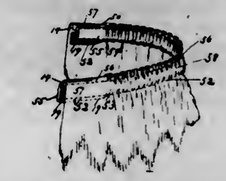
3. An article of wearing apparel having a hem or pocket and an elastic strip therein, said garment having a plain portion and a gathered portion, formed of a series of gathers with separated ends of the elastic strip stitched to the article at the plain portion and unstitched thereto at the gathered porion.

4. An aricle of wearing apparel having a hem or pocket and an elastic strip therein, said garment having a plain portion and a gathered portion, with separated ends of the elastic strip stitched to the atricle at the plain portion and unstitched thereto at the gathered portion, the hem being formed by a line of stitching, and the elastic strip where stitched to the garment being stitched by another parallel line of stitching.

[Claims 5 to 9 not printed in the Gazette.]

1,277,007. WEARING-APPAREL. JOHN P. WEIS, Nyack, N. Y., assignor to Metropolitan Sewing Machine Corporation, Nyack, N. Y., a Corporation of Delaware. Original application filed May 20, 1915, Serial No. 98,725. Divided and this application filed Nov. 9, 1917. Serial No. 201,008. (Cl. 2—143.)

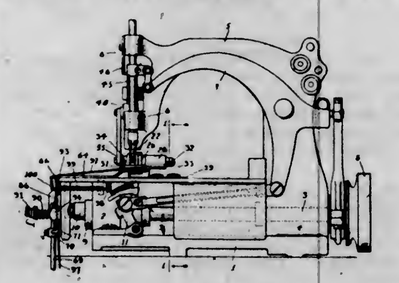
1. An article of wearing apparel having a finished edge or portion comprising a hemmed edge and a covering strip stitched thereto by spaced parallel rows of stitches and forming therewith a pocket, and an elastic strip in said pocket and having spaced parts stitched to the garment while the strip is in its normal condition and free of tension and a part intermediate such spaced and stitched parts unstitched to the garment while such intermediate part is in a stretched condition, so that when such stretched portions of the elastic strip resume their normal condition the garment will be gathered between those points where the strip is unstitched to the article.



4. An article of wearing apparel having a hemmed portion and a covering strip having hemmed or folded edges stitched to said hemmed portion of the garment by spaced parallel rows of stitching, thereby forming a pocket, and an elastic strip in said pocket, said garment having a plain portion and a gathered portion with the elastic strip stitched to the article by one line of stitching at the plain portion of the article and unstitched thereto by either line of stitching at the gathered portion.

[Claims 2, 3, and 5 to 11 not printed in the Gazette.]

1,277,008. ELASTIC-STRIP-FEEDING MEANS. JOHN P. WEIS, Nyack, N. Y., assignor to Metropolitan Sewing Machine Corporation, Nyack, N. Y., a Corporation of Delaware. Original application filed July 12, 1915, Serial No. 39,222. Divided and this application filed Nov. 15, 1917. Serial No. 202,215. (Cl 112—24.)



1. In a sewing machine, the combination of feeding mechanism, stitch forming mechanism having two spaced needles and complemental stitch forming devices for the respective needles, means for guiding a fabric to the needles and forming a pocket therein, a guide for directing an elastic tape to the needles and in the pocket formed by the stitching mechhanism, means for supporting said guide in a fixed position so that the tape when free from tension will be engaged by one of the needles, and means for placing said tape under tension at the will of the operator for withdrawing the tape from the path of the needle whereby the tape will be placed in the pocket free from the lines of stitching.

2. In a sewing machine, the combination of a feeding mechanism, stitch forming mechanism having a needle means for guiding a fabric to the stitching mechanism, a guide for directing an elastic tape when free from tension into the path of the needle, means for holding said guide in a fixed position, means for placing said elastic tape under tension at a point some distance from the needle thereby to carry said tape ont of the path of the needle, and manually operating means for releasing said tension at will.

3. In a sewing machine, the combination of feeding mechanism, stitch forming mechanism having a needle, means for guiding a fabric to the stitching mechanism, a fixed guide located to direct an elastic strip at an angle to its initial direction of movement and into the path of the needle, and means for engaging said strip at the will of the operator for diverting said strip from the path of the needle.

[Claims 4 to 13 not printed in the Gazette.]

1,277,009. CRUTCH. FRANCIS WELDON, Reading, England. Filed June 1, 1917. Serial No. 172,290. (Cl. 135—49.)



1. A crutch having a curved segmental base piece and a head piece, that, as looked at from above, is inclined from the rear and in the direction of walking inwardly and forwardly in relation to the base piece, substantially as described.

2. A crutch as claimed in claim 1 having the base and head pieces connected to the lower and upper ends respectively of a pair of wooden rods inclined upwardly throughout their length toward each other, substantially as described.

1,277,010. GARMENT-STRETCHER. ERNEST M. WENZEL, Kansas City, Mo. Filed Sept. 22, 1917. Serial No. 192,798. (Cl. 223—19.)

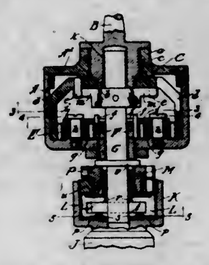


1. A trousers stretching device adapted to be inserted within the leg portions of trousers comprising a pair of side members formed with substantially straight outer edges adapted for engagement with the crease lines of the trousers leg, an expanding mechanism associated with each end of the device and connected to the ends of said members and operable, by relative approaching movement of said mechanisms toward each other, to spread said members, and yielding means detachably connecting said mechanisms and acting to hold the same in yieldingly expanded relation.

3. A garment stretching device comprising a pair of side members, a toggle mechanism associated with each end of the device and connecting the ends of said members, each toggle mechanism comprising a pair of oppositely arranged semicircular toggle links provided each with a series of bolt openings, and a pivot bolt adapted to be adjustably mounted in said openings, the toggle joints of said mechanisms moving toward each other in expanding the device, and means detachably connecting the toggle joints of said mechanisms to each other and including a yielding element tending to straighten said toggle mechanisms and hold said stretching device in yieldingly expanded relation.

[Claims 2 and 4 not printed in the Gazette.]

1,277,011. REVERSING MECHANISM FOR TAPS, DRILLS, &c. FREDERICK W. WHELPLEY and FRANK A. BICKNELL, Greenfield, Mass. Filed Oct. 6, 1916. Serial No. 124,057. (Cl. 10—138.)



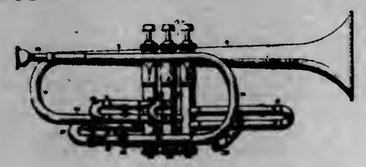
1. A tap reversing mechanism consisting of a casing having an end wall and a side wall, a drive shaft having its upper end disposed in said casing and its lower extending through said casing, a gear positioned on the bottom wall of said casing around but not connected to said shaft, gears journaled to said bottom wall and in engagement with the first gear, upstanding studs on said first gear, a cap threaded on the side wall of said casing and provided with a central hub, a shaft having a socketed enlargement on its lower end inclosed by said hub and having bearing against the upper end of said hub, an internal gear wheel in normal engagement with the second named gears, means connecting said inner gear to the socketed enlargement of said shaft and adapted to secure said enlargement to the cap, depending studs on said means, and a cross bar on said first named shaft adapted to alternately engage with the upstanding studs or the depending studs.

2. A tap reversing mechanism consisting of a casing having an end wall, and a side wall, a cap threaded on said side wall and having a central hub, a shaft having a socketed enlargement disposed in said hub and provided with a shoulder having a bearing against the upper end of the hub, a reversing element threaded on the inner end of the enlargement and against said hub, whereby said enlargement is secured to said cap and may rotate with said reversing element, reversing elements in normal engagement with the first named reversing element, and a shaft extending through the bottom wall of the casing and having its upper end disposed slidably in the socket of said enlargement and adapted to be interlocked with either said first named reversing element or said second named reversing elements.

1,277,012. CORNET. HENDERSON N. WHITE, Cleveland, Ohio. Filed Mar. 1, 1915. Serial No. 11,182. (Cl. 84—8.)

1. A cornet comprising a bell tube having a crook and straight extension, three valves, a tapered mouth pipe, and a relatively long tuning slide extending toward the mouth end and beneath the bell crook extension of the instrument and in straddling relation with the bottom

end of said valves and communicating with and in slidable connection with the third valve and with the tapered mouth pipe.

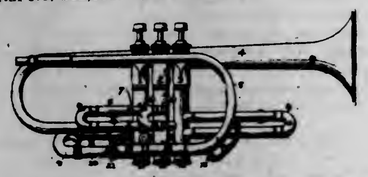


4. A cornet comprising a set of three valves, a bell tube communicating with the first valve of the set, a mouth pipe having a crook and a straight extension projected rearwardly therefrom adjacent the bottom ends of said valves, and the rear end of said extension having tapered spring tongues, a clamping collar for said tongues, a tuning slide having tubular legs and separate sets of indicating marks at the inner and middle portion of one of said legs and a branch tube projected rearwardly from the third valve on the bell tube side of the instrument and on a higher horizontal elevation than said mouth pipe extension to slidably support said tuning slide in inclined and straddling relation to said valves.

8. In a cornet or other wind instrument, a tube and a tubular slide, and means to determine instantly different relative positions of the slide to said tube, comprising a yielding device, and retarding shoulders at spaced intervals annularly of the slide adapted to be engaged successively by said device.

[Claims 2, 3, 5 to 7, and 9 not printed in the Gazette.]

1,277,013. CORNET. HENDERSON N. WHITE, Cleveland, Ohio. Continuation of application Serial No. 26,419, filed May 6, 1915. This application filed Apr. 16, 1917. Serial No. 162,581. (Cl. 84—8.)



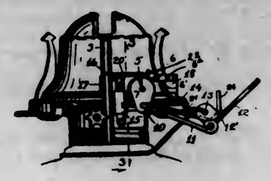
1. In a cornet, a mouth pipe-extension having a tuning slide therein and a sleeve in telescopic connection with both said mouth pipe-extensions and slide and adjustable longitudinally on said mouth pipe-extension, means to adjustably fix said sleeve upon said pipe-extension, and means to limit the movement of said slide relatively to said sleeve.

8. A cornet having a mouth pipe extension and a tuning slide having a shouldered end closely fitting in said extension, a short sleeve slidably mounted upon said pipe extension having a split end provided with an internal shoulder to engage said shouldered end, a clamping collar encircling said split end, and a device to fasten said sleeve in various adjusted positions on said pipe.

[Claims 2 to 7, 9, and 10 not printed in the Gazette.]

1,277,014. SELF-LIGHTING LAMP-BURNER. JAMES L. WHITE, Buffalo, Tex. Filed May 22, 1917. Serial No. 170,226. (Cl. 67—10.1.)

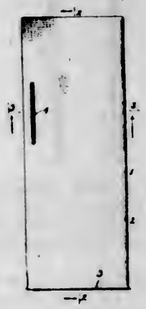
1. In a lamp lighter, an oil lamp burner having a wick tube, parallel plates carried by said burner and located above the top plate thereof, an igniting wheel journaled in bearings of said plates, a spring-acting arm pivoted to said plates and carrying at its free end a block of pyrophoric material pressing upon said wheel, means for turning said wheel including a plate having a crank extension, an inclined operating lever having lower lugs spaced apart from each other, inclined oppositely to the lever proper and pivoted at their upper upper ends to the rim of said burner, and a connecting rod from the lower end of said crank extension to the lower end of



said lever, the latter located in exposed position outside said burner.

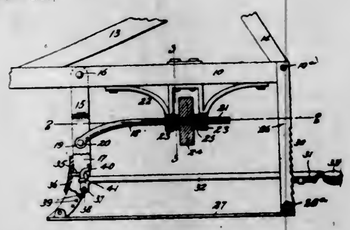
[Claim 2 not printed in the Gazette.]

1,277,015. MITTEN. WILLIAM ELLIOTT WHITE, Graham, N. C. Filed May 6, 1918. Serial No. 232,738. (Cl. 2—102.)



A mitten composed of a tube of knitted material, folded back upon itself so as to form a tube with double walls and stitches for holding the ends of the tube together and registering slits with their edges secured together to form a thumb hole.

1,277,016. PLOW-STOCK. CALVIN M. WINDHAM, Lamar, S. C. Filed June 30, 1916. Serial No. 106,912. (Cl. 97—26.)



1. In a plow stock, the combination with a plow beam, of a plowshare supporting standard pivoted at its upper end directly to said beam, a threaded rod pivoted on said standard below the beam, a wheel-nut on said rod for moving the same and the standard forwardly and rearwardly on its pivot, and independent locking means for holding the standard in position after adjustment.

2. In a plow stock, the combination with a plow beam, of a plow share supporting standard pivotally connected at its upper end to said beam, a threaded rod pivoted to the standard below the beam and extending rearwardly therefrom, a bracket depending from the beam through which said rod is adapted to slide freely, a wheel-nut threaded on said rod bearing at each side again said

bracket for moving said rod and the standard forwardly and rearwardly when said nut is turned in one direction or the other, and means distinct from said rod and nut for locking the standard immovable after adjustment.

[Claims 3 to 6 not printed in the Gazette.]

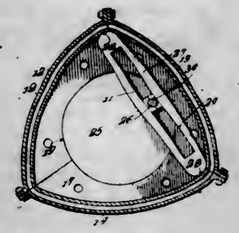
1,277,017. ANIMAL CATCHER AND HOLDER. HALLIE OWEN WILLIAMS, Watson, N. Y. Filed Apr. 18, 1917. Serial No. 163,000. (Cl. 119—154.)



3. A hog catcher and holder including a pair of connecting jaws, a detachable tubular shaft uniting the said jaws, a detachable coiled spring mounted in the axis of said jaws and within said tubular detachable shaft, one end thereof being engaged with one of said jaws and the opposite end being engaged with the other jaw for normally holding said jaws closed, and means for holding said jaws open against the resistance of said spring.

[Claims 1 and 2 not printed in the Gazette.]

1,277,018. ROTARY ENGINE. ARLIE A. WOLFINGTON, Quinton, Okla. Filed Dec. 5, 1917. Serial No. 205,595. (Cl. 121—47.)



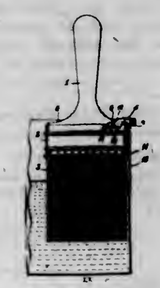
1. A rotary engine including a triangular casing, having its sides curved outwardly a plate to form a rotor mounted therein for rotary and reciprocable motion, and a rotary means mounted in the casing to guide the rotor for movement toward and away from each side of the casing in circumferential order.

10. A rotary engine including a triangular casing, a piston mounted therein for rotative, pivotal and bodily movement toward and away from the sides of the casing in circumferential order and alternately upon opposite ends of the rotor, and means for converting such motion of the piston into rotary motion.

[Claims 2 to 9 not printed in the Gazette.]

1,277,019. BRUSH-HOLDER. ERNEST B. WRIGHT, New Rochelle, N. Y., assignor to Hanlon & Goodman Co., New York, N. Y., a Corporation of New York. Filed Oct. 18, 1917. Serial No. 197,199. (Cl. 248—30.)

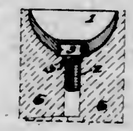
1. In a brush, the combination of a brush head, a holder slidably mounted thereon to slide over the upper surface thereof, said holder comprising an integral sheet having a downwardly extending hook at its forward edge adapted to extend beyond the edge of the head and over the edges of a pot when extended, and having a guiding



slot therethrough, and a pair of alined pins extending through said slot into the head, said slot having offset portions to receive said pins to latch the holder in a desired position.

[Claims 2 to 4 not printed in the Gazette.]

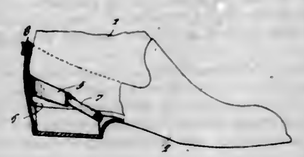
1,277,020. DENTAL DISK AND HOLDER. LUTHER A. YOUNG, St. Louis, Mo. Filed Jan. 19, 1918. Serial No. 212,830. (Cl. 32—13.)



1. An improved dental disk, composed of a body of rubber of the desired shape, and a metallic holder having its head covered by the rubber, except at the base of its head, which is clean and uncovered, as is also the shank of said holder.

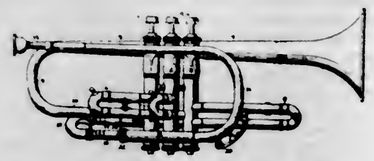
2. An improved dental disk and holder, composed of a suitable body of rubber of the desired shape to form a disk, and a headed screw the head whereof is covered by said rubber except at the base of said head, which is clean and uncovered to form an exposed seat which fits a correspondingly shaped part of the vulcanizing-mold, and acts as a valve to prevent passage of rubber from the mold onto the threaded shank of said screw.

1,277,021. RUBBER-RETAINER. PORUS J. YOUNG, Santa Susana, Cal. Filed Dec. 6, 1917. Serial No. 205,824. (Cl. 36—58.6.)



1. An overshoe retainer including an integral frame consisting of a vertical member engaged with the back of the shoe and within the confines of the overshoe and having lateral extensions formed thereon to embrace the sides of the shoe, means engaged with the upper terminal of the vertical portion for engaging the frame to the overshoe and retaining means engaged with the

end of said valves and communicating with and in slidable connection with the third valve and with the tapered mouth pipe.

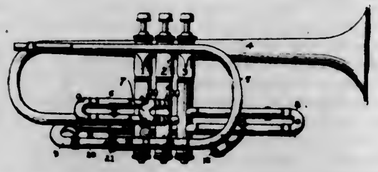


4. A cornet comprising a set of three valves, a bell tube communicating with the first valve of the set, a mouth pipe having a crook and a straight extension projected rearwardly therefrom adjacent the bottom ends of said valves, and the rear end of said extension having tapered spring tongues, a clamping collar for said tongues, a tuning slide having tubular legs and separate sets of indicating marks at the inner and middle portion of one of said legs and a branch tube projected rearwardly from the third valve on the bell tube side of the instrument and on a higher horizontal elevation than said mouth pipe extension to slidably support said tuning slide in inclined and straddling relation to said valves.

8. In a cornet or other wind instrument, a tube and a tubular slide, and means to determine instantly different relative positions of the slide to said tube, comprising a yielding device, and retarding shoulders at spaced intervals annularly of the slide adapted to be engaged successively by said device.

[Claims 2, 3, 5 to 7, and 9 not printed in the Gazette.]

1,277,013. CORNET. HENDERSON N. WHITE, Cleveland, Ohio. Continuation of application Serial No. 26,419, filed May 6, 1915. This application filed Apr. 16, 1917. Serial No. 162,581. (Cl. 84—8.)



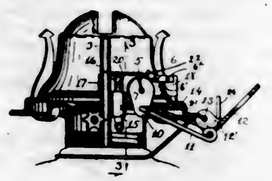
1. In a cornet, a mouth pipe-extension having a tuning slide therein and a sleeve in telescopic connection with both said mouth pipe-extensions and slide and adjustable longitudinally on said mouth pipe-extension, means to adjustably fix said sleeve upon said pipe-extension, and means to limit the movement of said slide relatively to said sleeve.

8. A cornet having a mouth pipe extension and a tuning slide having a shouldered end closely fitting in said extension, a short sleeve slidably mounted upon said pipe extension having a split end provided with an internal shoulder to engage said shouldered end, a clamping collar encircling said split end, and a device to fasten said sleeve in various adjusted positions on said pipe.

[Claims 2 to 7, 9, and 10 not printed in the Gazette.]

1,277,014. SELF-LIGHTING LAMP-BURNER. JAMES L. WHITE, Buffalo, Tex. Filed May 22, 1917. Serial No. 170,226. (Cl. 67—10.1.)

1. In a lamp lighter, an oil lamp burner having a wick tube, parallel plates carried by said burner and located above the top plate thereof, an igniting wheel journaled in bearings of said plates, a spring-acting arm pivoted to said plates and carrying at its free end a block of pyrophoric material pressing upon said wheel, means for turning said wheel including a plate having a crank extension, an inclined operating lever having lower lugs spaced apart from each other, inclined oppositely to the lever proper and pivoted at their upper upper ends to the rim of said burner, and a connecting rod from the lower end of said crank extension to the lower end of



said lever, the latter located in exposed position outside said burner.

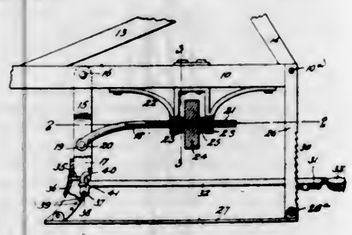
[Claim 2 not printed in the Gazette.]

1,277,015. MITTEN. WILLIAM ELLIOTT WHITE, Graham, N. C. Filed May 6, 1918. Serial No. 232,738. (Cl. 2—102.)



A mitten composed of a tube of knitted material, folded back upon itself so as to form a tube with double walls and stitches for holding the ends of the tube together and registering slits with their edges secured together to form a thumb hole.

1,277,016. PLOW-STOCK. CALVIN M. WINDHAM, Lamar, S. C. Filed June 20, 1916. Serial No. 106,912. (Cl. 97—26.)



1. In a plow stock, the combination with a plow beam, of a plowshare supporting standard pivoted at its upper end directly to said beam, a threaded rod pivoted on said standard below the beam, a wheel-nut on said rod for moving the same and the standard forwardly and rearwardly on its pivot, and independent locking means for holding the standard in position after adjustment.

2. In a plow stock, the combination with a plow beam, of a plow share supporting standard pivotally connected at its upper end to said beam, a threaded rod pivoted to the standard below the beam and extending rearwardly therefrom, a bracket depending from the beam through which said rod is adapted to slide freely, a wheel nut threaded on said rod bearing at each side again said bracket for moving said rod and the standard forwardly and rearwardly when said nut is turned in one direction or the other, and means distinct from said rod and nut for locking the standard immovable after adjustment.

Claims 3 to 6 not printed in the Gazette.]

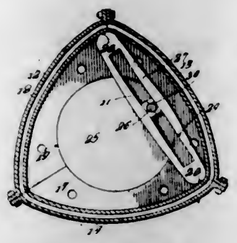
1,277,017. ANIMAL CATCHER AND HOLDER. HALLIE OWEN WILLIAMS, Watson, N. Y. Filed Apr. 18, 1917. Serial No. 163,000. (Cl. 119—154.)



3. A hog catcher and holder including a pair of connecting jaws, a detachable tubular shaft uniting the said jaws, a detachable coiled spring mounted in the axis of said jaws and within said tubular detachable shaft, one end thereof being engaged with one of said jaws and the opposite end being engaged with the other jaw for normally holding said jaws closed, and means for holding said jaws open against the resistance of said spring.

[Claims 1 and 2 not printed in the Gazette.]

1,277,018. ROTARY ENGINE. ARLIE A. WOLFINGTON, Quinton, Okla. Filed Dec. 5, 1917. Serial No. 205,595. (Cl. 121—47.)



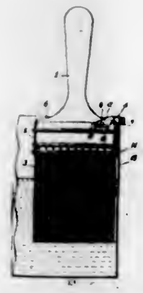
1. A rotary engine including a triangular casing, having its sides curved outwardly a plate to form a rotor mounted therein for rotary and reciprocable motion, and a rotary means mounted in the casing to guide the rotor for movement toward and away from each side of the casing in circumferential order.

10. A rotary engine including a triangular casing, a piston mounted therein for rotative, pivotal and bodily movement toward and away from the sides of the casing in circumferential order and alternately upon opposite ends of the rotor, and means for converting such motion of the piston into rotary motion.

[Claims 2 to 9 not printed in the Gazette.]

1,277,019. BRUSH-HOLDER. ERNEST B. WRIGHT, New Rochelle, N. Y., assignor to Hanlon & Goodman Co., New York, N. Y., a Corporation of New York. Filed Oct. 18, 1917. Serial No. 197,199. (Cl. 248—50.)

1. In a brush, the combination of a brush head, a holder slidably mounted thereon to slide over the upper surface thereof, said holder comprising an integral sheet having a downwardly extending hook at its forward edge adapted to extend beyond the edge of the head and over the edges of a pot when extended, and having a guiding



slot therethrough, and a pair of alined pins extending through said slot into the head, said slot having offset portions to receive said pins to latch the holder in a desired position.

[Claims 2 to 4 not printed in the Gazette.]

1,277,020. DENTAL DISK AND HOLDER. LUTHER A. YOUNG, St. Louis, Mo. Filed Jan. 19, 1918. Serial No. 212,830. (Cl. 32—13.)



1. An improved dental disk, composed of a body of rubber of the desired shape, and a metallic holder having its head covered by the rubber, except at the base of its head, which is clean and uncovered, as is also the shank of said holder.

2. An improved dental disk and holder, composed of a suitable body of rubber of the desired shape to form a disk, and a headed screw the head whereof is covered by said rubber except at the base of said head, which is clean and uncovered to form an exposed seat which fits a correspondingly shaped part of the vulcanizing-mold, and acts as a valve to prevent passage of rubber from the mold onto the threaded shank of said screw.

1,277,021. RUBBER-RETAINER. PORUS J. YOUNG, Santa Susann, Cal. Filed Dec. 6, 1917. Serial No. 205,824. (Cl. 36—58.6.)



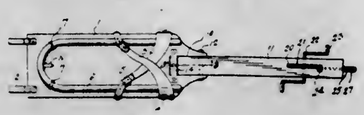
1. An overshoe retainer including an integral frame consisting of a vertical member engaged with the back of the shoe and within the confines of the overshoe and having lateral extensions formed thereon to embrace the sides of the shoe, means engaged with the upper terminal of the vertical portion for engaging the frame to the overshoe and retaining means engaged with the

free terminals of the extensions for connecting the frame to the shoe.

3. An overshoe retainer including a frame consisting of a vertical strip having a lip formed on its lower end to engage between the heel and the shoe upper, arms extending laterally from said strip and embracing the shoe upper, an elastic element associated with the free ends of said arms and adapted to extend around the breast face of the heel of the shoe, and a clasp mounted on the upper end of the vertical strip and adapted to engage the overshoe.

[Claim 2 not printed in the Gazette.]

1,277,022. SWIMMING APPLIANCE. PORUS J. YOUNG, Santa Susana, Cal., assignor of one-half to Stillwell W. McMichael, Fullerton, Cal. Filed Mar. 22, 1918. Serial No. 224,022. (Cl. 9—18.)



1. In a swimming appliance, the combination with a body-float having a notch in its lower end, a narrow extension whose upper end projects into said notch and whose extremity is formed into a reduced tongue, and propelling mechanism at the lower portion of said extension; of a pivotal connection between the extension and float near the lower end of the latter, plates secured to the opposite faces of said float in line with said tongue, a bolt through the plates and tongue, and a series of washers strung on said bolt above and below the tongue and selectively disposed to alter the angle of the extension to the float.

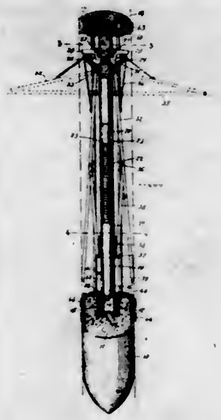
2. In a swimming appliance, the combination with a body-element forked at its lower end, a narrower element extending into said fork and pivoted between the fork-arms near their lower extremities, and propelling mechanism carried by the lower portion of said narrower element, of plates carried by the body element above and below the upper extremities of said extension element, and compressible members selectively disposed above and below said extremity for adjusting the angle of the two elements to each other, for the purpose set forth.

1,277,023. PROJECTILE. WILLIAM B. ALEXANDER, Brooklyn, N. Y. Filed Dec. 8, 1914. Serial No. 876,026. (Cl. 102—29.)

1. A projectile comprising an explosive shell, a support extending therefrom in an axial direction, means carried by said support for exploding said shell, means for maintaining said exploding means in an inoperative position, a device controlling the operation of said maintaining means, a member movable on said support and having its movement in one direction arrested by said device and means actuated by contact with a target for causing a further movement of said member in said direction whereby the resistance of said device is overcome and said exploding means released to explode said shell.

4. A projectile comprising an explosive shell, a support extending rearwardly from said shell in an axial direction, means carried by said support for exploding said shell, a trigger for maintaining said device in an inoperative position, a yoke frictionally secured upon said support in engagement with said trigger, a sleeve slidable lengthwise of said support and adapted to abut against said yoke whereby its sliding movement in one direction is arrested, and means pivotally connected with said yoke and with said sleeve and adapted to be actuated by a target to cause a continued movement of said sleeve in said direction whereby the frictional resistance of said yoke is overcome and said trigger is operated to release said exploding means and explode said shell.

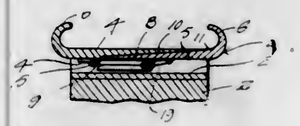
7. A projectile comprising an explosive shell, a gas-check block in axial alinement therewith, rods connecting said shell and gas-check block, means for exploding said shell, means for maintaining said exploding means in an inoperative position, means slidable lengthwise of



said rods and located in coöperative relation with said maintaining means and means arranged to be actuated by a target whereby said slidable means is moved relatively to said rods to operate said maintaining means whereby said exploding means is released.

[Claims 2, 3, 5, 6, and 8 not printed in the Gazette.]

1,277,024. DEMOUNTABLE RIM. WILLIAM W. ALLEN, Washington, D. C. Filed Nov. 30, 1917. Serial No. 204,707. (Cl. 152—21.)

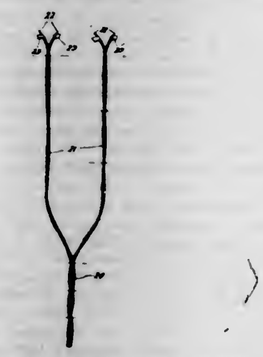


In combination, a demountable tire rim including a pair of annular telescoping interfitting sections, means engaging said sections to hold the same in engagement with each other and including a loop pivotally secured to one section, a two part lever pivotally secured to the opposite section, the parts of said lever being hingedly secured to each other and having a notch formed on each side of the hinge, one part of said lever being adapted to overlie and engage the other part, the notches being adapted to aline with each other to form a closed compartment, the notches being adapted to receive the pivoted link, as and for the purpose specified.

1,277,025. TELEPHONE AND TELEGRAPH CABLE. GUSTAVUS A. ANDEREGG, Oak Park, and WILBUR E. MOUGEY, Chicago, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Original application filed June 30, 1916, Serial No. 106,808. Divided and this application filed Sept. 14, 1917. Serial No. 191,368. (Cl. 173—81.)

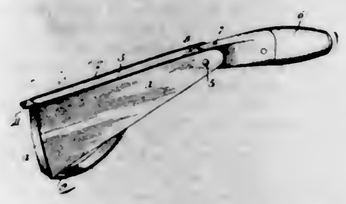
1. A group of four insulated conductors consisting of two pairs helically twisted together to form a quad, having pair twists longer than the quad twists and the quad being twisted in the same direction as one of the pairs

2. A group of four insulated conductors consisting of two pairs twisted in reverse directions and about each



other to form a quad, one of said pairs having twists longer than the quad twists.

1,277,026. TROWEL. EARNEST J. ASHBY, Henderson, Ky. Filed Sept. 27, 1915. Serial No. 52,941. (Cl. 72—188.)



1. A trowel including a magazine, a handle pivotally connected to the magazine, a pointing finger secured to the handle, and a spring secured at its respective ends to the handle and to the magazine, said spring normally holding the finger to form a bottom for the magazine, the means for securing the spring to the magazine serving to limit movement of the finger under the influence of the spring.

2. A trowel including a magazine formed of a metallic section bent to provide spaced parallel side walls and one end wall, the top and bottom and remaining end wall of the magazine being open, a handle pivotally mounted in the open end of the magazine, a finger carried by the handle and projecting into and approximately filling the space between the side walls of the magazine, and a spring terminally secured to the handle and to the magazine remote from the handle, said spring normally holding the handle in such position as to arrange the finger as a bottom for the magazine.

1,277,027. DATE AND RUBBER-TYPE HOLDER. WILBUR FISK BARTHOLOMEW, Brooklyn, N. Y. Filed Jan. 17, 1918. Serial No. 212,209. (Cl. 101—380.)

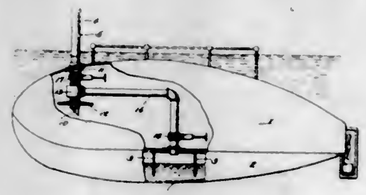


1. A stamp comprising a base, an elastic cushion thereon containing a recess for type and the like, and a frame embedded in said cushion and encompassing said recess outwardly from the walls thereof and being less in thickness than the depth of said recess.

5. A stamp comprising an elastic cushion containing a recess for type and the like, and a rigid frame embedded in said cushion and encompassing said recess outwardly from opposite walls thereof and being materially less in thickness than the depth of said recess.

[Claims 2 to 4 not printed in the Gazette.]

1,277,028. SUBMARINE. GEORGE WATSON BEACH, Saybrook, Conn. Filed May 10, 1917. Serial No. 167,773. (Cl. 114—16.)

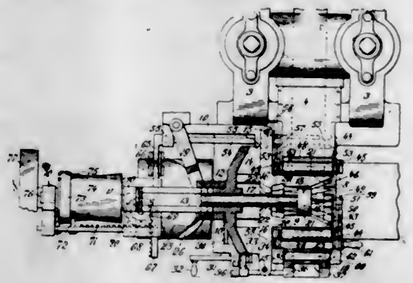


1. The combination with a submersible vessel having a periscope and a submerging tank, of means for automatically admitting water to said tank in case of injury to said periscope, whereby to submerge the vessel.

2. The combination with a submersible vessel having a periscope and a submerging tank, of a passage leading from said tank to said periscope for automatically exhausting the air from said tank in case of injury to said periscope, whereby said tank may fill with water to submerge the vessel.

[Claims 3 and 4 not printed in the Gazette.]

1,277,029. BLOCKING ATTACHMENT FOR STRIP-MILLS. GEORGE HILLARD BENJAMIN, New York, N. Y. Filed Feb. 15, 1915. Serial No. 8,405. (Cl. 242—78.)



1. In a blocking attachment for strip mills, the combination of a revolving block, a single series of connected rollers arranged around the block, means permitting the rollers to change their position as regards the block as the strip is wound on the block, and means for removing the rollers from around the block to allow the passage of the wound strip from the block.

4. In a blocking attachment for strip mills, the combination of a block formed of a series of pivoted arms, means for directing and guiding a strip around the block, together with means for alternately altering the position of the pivoted arms to permit the strip to be wound on the block, and the coiled strip to be discharged from the block.

6. In combination with the rolls of a strip mill, a collapsible rotatable block situated in front of said rolls, a series of rollers, pivoted links connecting the rollers, means for separating the rollers from the block, and means for changing the configuration of the surface of

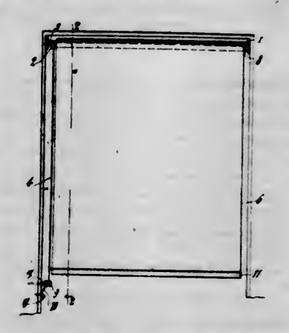
the block to permit discharge of the coiled strip from the block.

8. In a blocking attachment for strip mills, the combination of a revolving collapsible block, means for directing and guiding a strip around the block, means for varying the speed of rotation of the block, and means interposed between the directing and guiding means and the speed varying means for controlling the speed of rotation of the block.

9. In a blocking attachment for strip mills, a collapsible block constructed in such a manner, that in one position the block will present a cylindrical surface upon which a strip may be wound, and in another position a V-shaped surface to permit gravital discharge of the wound strip from the block, together with means to actuate the parts of the block to alternately present the desired cylindrical and V-shaped surfaces.

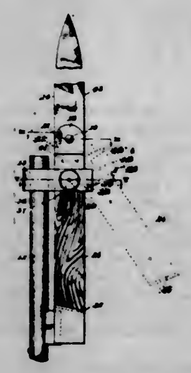
[Claims 2, 3, 5, 7, and 10 not printed in the Gazette.]

1,277,030. WINDOW-SHADE. SIMON BERGER, New York, N. Y. Filed Mar. 14, 1918. Serial No. 222,330. (Cl. 156—25.)



The method of making a shade fastening, means for a shade roller which consists in removing bodily from the roller a dove tail spline from end to end of said roller, said spline being widest at the part nearest the axis of the roller, whereby said spline serves as a key to clamp the end of the shade in said groove and hold it without other fastening means.

1,277,031. WIRE-CUTTING ATTACHMENT FOR RIFLES. ANDRZEJ BIGOS, Lorain, Ohio. Filed June 20, 1918. Serial No. 240,953. (Cl. 42—90.)

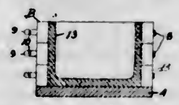


1. A bayonet including a blade having a side notch and provided with a handle at the base of the blade, a lever pivoted to the blade having a notched jaw at its pivoted end adapted for coöperating with the notch of the blade during the cutting of wires, the free end of the lever being inclined and beveled, an overhanging flange carried by the handle of the bayonet adapted for the reception of said free end of the lever when the wire cutter is closed, means adapted for limiting the outward opening movement of the lever for positioning said notches in alinement with each other when the lever is open, a side extension upon the bayonet having a dovetailed socket, an ear upon the lever having a projecting lug complementary shaped with respect to said socket and adapted for reception therein when the wire cutter is closed, and locking means for the lever.

4. In combination with a bayonet having a blade and a handle, a lever pivoted to the blade, the said blade and lever having coöperating cutting notches adapted for the reception of a wire, an attaching sleeve carried by the bayonet having a projecting finger overlying the latter with a block positioned therebeneath, an extension upon the bayonet opposite said sleeve having a dovetailed socket, a latch button journaled upon said finger, a depending pin carried by said button, the said lever having a reduced portion provided with cutaway side adapted for engaging over the said block when the cutaway portion is positioned beneath the finger upon closing the lever, an ear carried by the reduced portion of the lever adapted for abutting the adjacent end of the finger when the lever is closed, the said ear having a curved keeper opening adapted for receiving the said pin during the turning of the button, a projecting lug carried by the ear adapted for retaining reception within the socket of the extension when the lever is closed, a curved groove in the under face of the reduced portion of the lever, a stop pin carried by the bayonet extending within the said groove adapted for limiting the opening movement of the lever to position said notch in alinement with each other, and an inclined flange carried by the bayonet handle, the free end of the lever being beveled and inclined adapted for wedging reception beneath the said flange when the lever is closed.

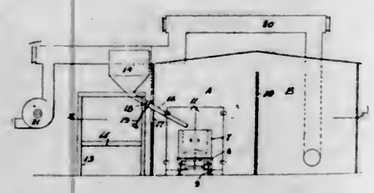
[Claims 2 and 3 not printed in the Gazette.]

1,277,032. CRUCIBLE. JOHN J. BOERICKE, Merion, Pa. Filed July 20, 1914, Serial No. 851,883. Renewed June 29, 1918. Serial No. 242,662. (Cl. 263—48.)



A crucible for use in metal founding operations and the like composed of separable members, and a continuous, refractory, friable lining therefor permitting of the ready separation of the members to expose the contents.

1,277,033. APPARATUS FOR CARRYING ON METALLURGICAL OPERATIONS. JOHN J. BOERICKE, Merion, Pa. Filed July 20, 1914. Serial No. 851,884. Renewed June 29, 1918. Serial No. 242,663. (Cl. 266—1.)



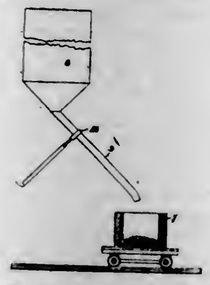
1. An apparatus for carrying out metallurgical operations comprising in combination a substantially inclosed reducing chamber having means for introducing a container, feeding means for supplying material from the exterior of the chamber to the container within said chamber, and means operable from the exterior of the chamber for controlling the supply of material to the container.

3. An apparatus for carrying out metallurgical operations comprising in combination a substantially inclosed chamber divided into a reducing compartment and fume collecting compartment, a door in the reducing compartment for introducing a crucible, a hopper having a discharge spout extending into the said reducing compartment, and means operable from the exterior to control the flow from the discharge spout.

4. An apparatus for carrying out metallurgical operations comprising in combination a substantially inclosed chamber, a baffle wall dividing the chamber into two connecting compartments, one a reducing compartment having means for introducing a crucible and the other a fume collecting compartment, a condensing pipe opening from the collecting compartment, a feed pipe leading into the reducing compartment, and means operable from the exterior of the reducing compartment for controlling the feed through the feed pipe.

[Claim 2 not printed in the Gazette.]

1,277,034. METHOD OF PRODUCING METALS. JOHN J. BOERICKE, Merion, Pa. Filed July 20, 1914, Serial No. 851,885. Renewed June 29, 1918. Serial No. 242,664. (Cl. 75—17.)



1. The herein described process of reducing metallic compounds which consists in igniting a mixture of the compound to be reduced and aluminum and then in feeding to the ignited material a mixture of the compound and aluminum under control so that the reaction is instituted from beneath upward.

2. The herein described steps in the exothermic process of reducing metallic compounds which consist in placing a relatively small quantity of a mixture of the compound to be reduced and aluminum in a crucible, in instituting an exothermic reaction in such mixture and in feeding into the crucible a mixture of the compound to be reduced and aluminum.

3. The herein described process of reducing metallic compounds which consists in igniting a mixture of the compound and a reducing agent in a crucible having a relatively extended area so that the greater portion of the mixture in which the reaction is taking place is exposed to the action of the atmosphere, and then in feeding to the ignited material a mixture of the compound and a reducing agent.

[Claims 3 and 4 not printed in the Gazette.]

1,277,035. METHOD OF PRODUCING METALS. JOHN J. BOERICKE, Merion, Pa. Filed July 20, 1914, Serial No. 851,886. Renewed June 29, 1918. Serial No. 242,665. (Cl. 75—17.)

1. The herein described process of producing metals or alloys from metallic compounds which consists in mixing ingot aluminum with the compound and in instituting an exothermic reaction.

8. The herein described step of treating metallic compounds preparatory to reduction by the alumino-thermic process which consists in mixing a reducing agent in ingot form with the compound to be reduced, and then in instituting an exothermic reaction.

9. The herein described step in producing metals or alloys from metallic compounds by the alumino-thermic process which consists in carrying out the reaction with aluminum in lump form.

[Claims 2 to 7 not printed in the Gazette.]

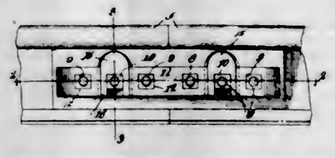
1,277,036. AERONAUTIC APPARATUS. FRANCIS E. BOLAND, Rahway, N. J., assignor to Boland Aeroplane & Motor Company, New York, N. Y. Filed Mar. 18, 1910. Serial No. 550,226. (Cl. 244—29.)



1. An aeroplane including in combination, a main horizontal plane; a vertical plane adjacent each end of said horizontal plane; and means for swinging each of said vertical planes about a diagonal axis extending from one edge of said plane to a point in vertical alinement with the opposite edge of said plane.

[Claims 2 to 5 not printed in the Gazette.]

1,277,037. NUT-LOCK. PETER C. BOOZER, Mayport, Pa. Filed Oct. 15, 1917. Serial No. 196,698. (Cl. 151—54.)



1. A nut lock for rail joints, comprising a plate having a plurality of nut receiving openings, a bolt opening and a recess in its outer side intersecting the bolt opening and adapted to receive a nut, and a locking member slidable vertically into said recess and having its upper end adapted to be engaged by a car wheel whereby to depress the said member and prevent its displacement.

2. The combination with the meeting ends of railway rails, and fish plates in lapped relation thereto, said fish plates and rails being provided with alined apertures, of bolts through certain of said apertures, nuts on said bolts, a locking plate provided with apertures to receive and prevent the turning of said nuts, said locking plate being provided with another aperture, a bolt extending through certain alined apertures of said rails and fish plates and through said other aperture of said locking plate, said locking plate being provided with a recess in communication with said other aperture, a nut fitted on the last said bolt and disposed in said recess, said recess being provided with outwardly converging walls, and a bifurcated member having beveled sides and being fitted between said outwardly converging walls and over the last said nut so as to prevent turning of the nut.

3. The combination with the meeting ends of railway rails, and fish plates in lapped relation thereto, said fish plates and rails being provided with alined apertures, of bolts through certain of said apertures, nuts on said bolts, a locking plate provided with apertures to receive and prevent the turning of said nuts, said locking plate being provided with another aperture, a bolt extending through certain alined apertures of said rails and fish plates and through said other aperture of said locking plate, said locking plate being provided with a recess in communication with said other aperture, a nut fitted on the last said bolt and disposed in said recess, and a locking member slidable vertically into said recess and held therein against lateral displacement, and having its upper end extended to adapt it to be depressed by a car wheel and prevent vertical displacement of the locking member.

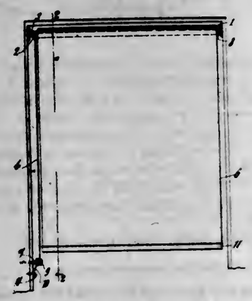
the block to permit discharge of the coiled strip from the block.

8. In a blocking attachment for strip mills, the combination of a revolving collapsible block, means for directing and guiding a strip around the block, means for varying the speed of rotation of the block, and means interposed between the directing and guiding means and the speed varying means for controlling the speed of rotation of the block.

9. In a blocking attachment for strip mills, a collapsible block constructed in such a manner, that in one position the block will present a cylindrical surface upon which a strip may be wound, and in another position a V-shaped surface to permit gravital discharge of the wound strip from the block, together with means to actuate the parts of the block to alternately present the desired cylindrical and V-shaped surfaces.

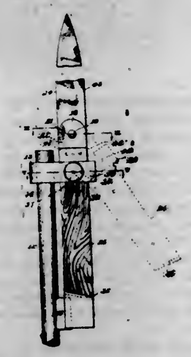
[Claims 2, 3, 5, 7, and 10 not printed in the Gazette.]

1,277,030. WINDOW-SHADE. SIMON BERGER, New York, N. Y. Filed Mar. 14, 1918. Serial No. 222,330. (Cl. 156—25.)



The method of making a shade fastening, means for a shade roller which consists in removing bodily from the roller a dove tail spline from end to end of said roller, said spline being widest at the part nearest the axis of the roller, whereby said spline serves as a key to clamp the end of the shade in said groove and hold it without other fastening means.

1,277,031. WIRE-CUTTING ATTACHMENT FOR RIFLES. ANDRZEJ BIGOS, Lorain, Ohio. Filed June 20, 1918. Serial No. 240,953. (Cl. 42—90.)

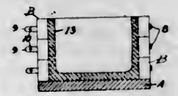


1. A bayonet including a blade having a side notch and provided with a handle at the base of the blade, a lever pivoted to the blade having a notched jaw at its pivoted end adapted for coöperating with the notch of the blade during the cutting of wires, the free end of the lever being inclined and beveled, an overhanging flange carried by the handle of the bayonet adapted for the reception of said free end of the lever when the wire cutter is closed, means adapted for limiting the outward opening movement of the lever for positioning said notches in alinement with each other when the lever is open, a side extension upon the bayonet having a dovetailed socket, an ear upon the lever having a projecting lug complementary shaped with respect to said socket and adapted for reception therein when the wire cutter is closed, and locking means for the lever.

4. In combination with a bayonet having a blade and a handle, a lever pivoted to the blade, the said blade and lever having coöperating cutting notches adapted for the reception of a wire, an attaching sleeve carried by the bayonet having a projecting finger overlying the latter with a block positioned therebeneath, an extension upon the bayonet opposite said sleeve having a dovetailed socket, a latch button journaled upon said finger, a depending pin carried by said button, the said lever having a reduced portion provided with cutaway side adapted for engaging over the said block when the cutaway portion is positioned beneath the finger upon closing the lever, an ear carried by the reduced portion of the lever adapted for abutting the adjacent end of the finger when the lever is closed, the said ear having a curved keeper opening adapted for receiving the said pin during the turning of the button, a projecting lug carried by the ear adapted for retaining reception within the socket of the extension when the lever is closed, a curved groove in the under face of the reduced portion of the lever, a stop pin carried by the bayonet extending within the said groove adapted for limiting the opening movement of the lever to position said notch in alinement with each other, and an inclined flange carried by the bayonet handle, the free end of the lever being beveled and inclined adapted for wedging reception beneath the said flange when the lever is closed.

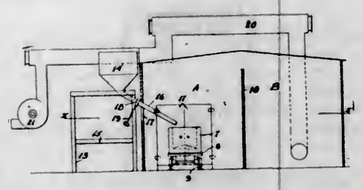
[Claims 2 and 3 not printed in the Gazette.]

1,277,032. CRUCIBLE. JOHN J. BOERICKE, Merion, Pa. Filed July 20, 1914, Serial No. 851,883. Renewed June 29, 1918. Serial No. 242,662. (Cl. 263—48.)



A crucible for use in metal founding operations and the like composed of separable members, and a continuous, refractory, friable lining therefor permitting of the ready separation of the members to expose the contents.

1,277,033. APPARATUS FOR CARRYING ON METALLURGICAL OPERATIONS. JOHN J. BOERICKE, Merion, Pa. Filed July 20, 1914, Serial No. 851,884. Renewed June 29, 1918. Serial No. 242,663. (Cl. 266—1.)



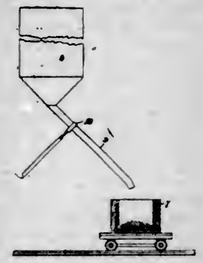
1. An apparatus for carrying out metallurgical operations comprising in combination a substantially inclosed reducing chamber having means for introducing a container, feeding means for supplying material from the exterior of the chamber to the container within said chamber, and means operable from the exterior of the chamber for controlling the supply of material to the container.

3. An apparatus for carrying out metallurgical operations comprising in combination a substantially inclosed chamber divided into a reducing compartment and fume collecting compartment, a door in the reducing compartment for introducing a crucible, a hopper having a discharge spout extending into the said reducing compartment, and means operable from the exterior to control the flow from the discharge spout.

4. An apparatus for carrying out metallurgical operations comprising in combination a substantially inclosed chamber, a baffle wall dividing the chamber into two connecting compartments, one a reducing compartment having means for introducing a crucible and the other a fume collecting compartment, a condensing pipe opening from the collecting compartment, a feed pipe leading into the reducing compartment, and means operable from the exterior of the reducing compartment for controlling the feed through the feed pipe.

[Claim 2 not printed in the Gazette.]

1,277,034. METHOD OF PRODUCING METALS. JOHN J. BOERICKE, Merion, Pa. Filed July 20, 1914, Serial No. 851,885. Renewed June 29, 1918. Serial No. 242,664. (Cl. 75—17.)



1. The herein described process of reducing metallic compounds which consists in igniting a mixture of the compound to be reduced and aluminum and then in feeding to the ignited material a mixture of the compound and aluminum under control so that the reaction is instituted from beneath upward.

2. The herein described steps in the exothermic process of reducing metallic compounds which consist in placing a relatively small quantity of a mixture of the compound to be reduced and aluminum in a crucible, in instituting an exothermic reaction in such mixture and in feeding into the crucible a mixture of the compound to be reduced and aluminum.

5. The herein described process of reducing metallic compounds which consists in igniting a mixture of the compound and a reducing agent in a crucible having a relatively extended area so that the greater portion of the mixture in which the reaction is taking place is exposed to the action of the atmosphere, and then in feeding to the ignited material a mixture of the compound and a reducing agent.

[Claims 3 and 4 not printed in the Gazette.]

1,277,035. METHOD OF PRODUCING METALS. JOHN J. BOERICKE, Merion, Pa. Filed July 20, 1914, Serial No. 851,886. Renewed June 29, 1918. Serial No. 242,665. (Cl. 75—17.)

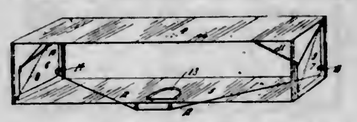
1. The herein described process of producing metals or alloys from metallic compounds which consists in mixing ingot aluminum with the compound and in instituting an exothermic reaction.

8. The herein described step of treating metallic compounds preparatory to reduction by the alumino-thermic process which consists in mixing a reducing agent in ingot form with the compound to be reduced, and then in instituting an exothermic reaction.

9. The herein described step in producing metals or alloys from metallic compounds by the alumino-thermic process which consists in carrying out the reaction with aluminum in lump form.

[Claims 2 to 7 not printed in the Gazette.]
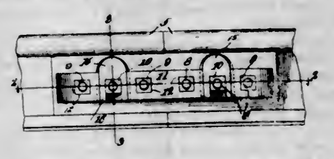
1,277,036. AERONAUTIC APPARATUS. FRANCIS E. BOLAND, Rahway, N. J., assignor to Boland Aeroplane & Motor Company, New York, N. Y. Filed Mar. 18, 1910. Serial No. 550,226. (Cl. 244—29.)



1. An aeroplane including in combination, a main horizontal plane; a vertical plane adjacent each end of said horizontal plane; and means for swinging each of said vertical planes about a diagonal axis extending from one edge of said plane to a point in vertical alinement with the opposite edge of said plane.

[Claims 2 to 5 not printed in the Gazette.]

1,277,037. NUT-LOCK. PETER C. BOOZER, Mayport, Pa. Filed Oct. 15, 1917. Serial No. 196,698. (Cl. 151—54.)

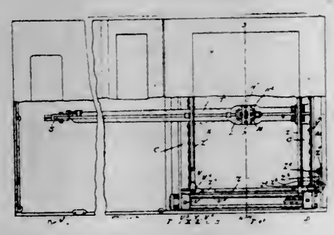


1. A nut lock for rail joints, comprising a plate having a plurality of nut receiving openings, a bolt opening and a recess in its outer side intersecting the bolt opening and adapted to receive a nut, and a locking member slidable vertically into said recess and having its upper end adapted to be engaged by a car wheel whereby to depress the said member and prevent its displacement.

2. The combination with the meeting ends of railway rails, and fish plates in lapped relation thereto, said fish plates and rails being provided with alined apertures, of bolts through certain of said apertures, nuts on said bolts, a locking plate provided with apertures to receive and prevent the turning of said nuts, said locking plate being provided with another aperture, a bolt extending through certain alined apertures of said rails and fish plates and through said other aperture of said locking plate, said locking plate being provided with a recess in communication with said other aperture, a nut fitted on the last said bolt and disposed in said recess, said recess being provided with outwardly converging walls, and a bifurcated member having beveled sides and being fitted between said outwardly converging walls and over the last said nut so as to prevent turning of the nut.

3. The combination with the meeting ends of railway rails, and fish plates in lapped relation thereto, said fish plates and rails being provided with alined apertures, of bolts through certain of said apertures, nuts on said bolts, a locking plate provided with apertures to receive and prevent the turning of said nuts, said locking plate being provided with another aperture, a bolt extending through certain alined apertures of said rails and fish plates and through said other aperture of said locking plate, said locking plate being provided with a recess in communication with said other aperture, a nut fitted on the last said bolt and disposed in said recess, and a locking member slidable vertically into said recess and held therein against lateral displacement, and having its upper end extended to adapt it to be depressed by a car wheel and prevent vertical displacement of the locking member.

1,277,038. PLATFORM-SCALE. JOHN H. A. BOUSFIELD, St. Johnsbury, Vt., assignor to E. and T. Fairbanks and Company, St. Johnsbury, Vt., a Corporation of Vermont. Filed Sept. 20, 1917. Serial No. 192,293. (Cl. 265—71.)



1. In a scale, the combination with a rigid frame and platform-supporting levers fulcrumed therein, of a platform-supporting frame within said rigid frame comprising corner blocks and longitudinal and transverse connecting bars therefor, flexible plate fulcrums secured to said corner blocks and to the platform levers, and stay-rods connecting said corner blocks with said rigid frame, flexible to permit vertical movement of the platform-supporting frame and longitudinally adjustable to aline said flexible plate fulcrums.

6. In a scale, a platform-supporting frame comprising corner blocks having plate fulcrum bearings formed thereon, and parallelly-arranged shouldered rods for connecting said corner blocks and holding said plate fulcrum bearings in accurately spaced parallelism.

9. In a scale, a platform-supporting frame comprising corner blocks having convex bearings in their upper faces and depending plate fulcrum engaging bearings, shouldered rods connecting pairs of said corner blocks and holding said plate fulcrum bearings in parallelism, stay-rods for holding said corner blocks from lateral movement while permitting free vertical oscillation thereof, and a platform having concave bearings for engaging said convex bearings in alinement with said plate fulcrum.

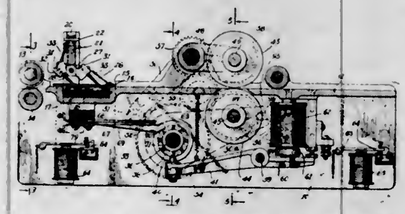
12. In a scale, the combination with a frame formed of connected side-bars, of platform-supporting levers fulcrumed within said frame, a platform-supporting frame mounted on said levers comprising corner blocks, shouldered rods for connecting said corner blocks in accurately spaced parallelism, a member secured to one of said corner blocks having an eye portion, a pair of stay-rods pivotally attached to the eye portion of said member and extending in transverse directions, the opposite ends of said stay-rods being threaded, members secured to said stationary frame having apertured portions spaced therefrom, said stay-rods passing through said apertures, and nuts engaging the threaded portion of said stay-rods on opposite sides of said apertured portions, forming adjustment means for accurately positioning said platform-supporting frame.

[Claims 2 to 5, 7, 8, 10, and 11 not printed in the Gazette.]

1,277,039. PAPER-TESTING MACHINE. OTTO E. BRAITMAYER, Washington, D. C., assignor to The Tabulating Machine Company, Washington, D. C., a Corporation of New Jersey. Filed Oct. 12, 1917. Serial No. 196,210. (Cl. 73—51.)

1. In a machine for testing a paper-strip moving therethrough, the combination with mechanism for damaging the strip, of means for controlling the same, including a normally open controlling circuit having devices acting automatically to close the circuit through an imperfection in the strip.

3. In a machine for testing a paper-strip moving therethrough, the combination of a contact on one side of the path of the paper-strip, a brush on the other side of said path and normally insulated from the contact by the paper-strip but adapted to make electrical connection with the contact through an imperfection in the paper, a normally open circuit controlled by the brush and contact, and mechanism controlled by the circuit to damage the paper-strip when the circuit is closed.



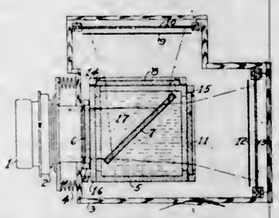
4. In a machine for testing a paper-strip moving therethrough, the combination with normally separated slitting disks on opposite sides of the path of the paper-strip, of means for shifting at least one of the disks into coöperation with the other to slit the strip, and a controlling circuit for said means, having contacts on opposite sides of the path of the paper strip and normally separated by the latter but adapted to close the circuit through an imperfection in the paper.

6. In a machine for testing a paper-strip moving therethrough, the combination with normally separated slitting disks on opposite sides of the path of the strip, of a normally inactive cam for shifting at least one of the disks into engagement with the other to slit the strip, means for actuating the cam; and electromagnetic mechanism for controlling said means, including a normally open controlling circuit provided with devices normally separated by the paper-strip and acting automatically to close the circuit through an imperfection in the paper.

7. In a machine for testing a paper-strip moving therethrough, the combination with normally inactive mechanism for mutilating the paper-strip; of driving means for said mechanism; means for setting the driving means in operation, including a normally open circuit having devices acting automatically to close the circuit through an imperfection in the paper-strip; and means for disabling the driving means, including a maintaining circuit having means actuated by the driving means to open the maintaining circuit.

[Claims 2 and 5 not printed in the Gazette.]

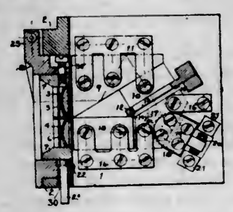
1,277,040. LIGHT-SPLITTING DEVICE FOR COLOR PHOTOGRAPHY. PERCY D. BREWSTER, East Orange, N. J., assignor to Brewster Film Corporation, Newark, N. J., a Corporation of New York. Filed Sept. 2, 1916. Serial No. 118,182. (Cl. 88—1.)



1. A light splitting device comprising a receptacle constructed with a plurality of glass sides, one or more partly transparent glass mirrors mounted in the receptacle, and a suitable fluid in the receptacle having substantially the same index of refraction as the glass of said mirror or mirrors.

[Claims 2 to 10 not printed in the Gazette.]

1,277,041. PHOTOGRAPHIC CAMERA. PERCY D. BREWSTER, East Orange, N. J., assignor to Brewster Film Corporation, Newark, N. J., a Corporation of New York. Filed Nov. 7, 1914, Serial No. 870,752. Renewed Dec. 16, 1916. Serial No. 137,475. (Cl. 95—2.)



1. The combination in a photographic camera, of means for supporting in position for exposure two superposed sensitized surfaces, optical image-projecting means to receive light emanating from the object to be photographed, a plurality of reflecting devices between the said image-projecting means and the said supporting means to reflect on the two said sensitive surfaces independent images of the same object, and devices for adjusting at least one of the said reflecting devices.

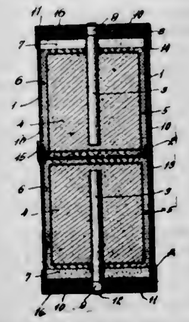
7. The combination in a photographic camera, of means for supporting in position for exposure two superposed color-sensitized surfaces, and optical means for projecting on one of the said surfaces so supported and in light predominantly green in color an image of the object to be photographed and on the other said surface a suitably registering independent image predominantly red in color.

12. The combination in a photographic camera, of a flat base plate, a pair of lenses, a front carrying the two lenses, two reflecting prisms and two transmitting prisms mounted on the said base plate, a film-gate adapted to support in position for exposure two sensitized surfaces in a plane substantially parallel to a reflecting surface, of one of the said reflecting prisms.

19. In a photographic camera, in combination, a pair of lenses to receive and project light from an object to be photographed, means in rear of the lenses to support a film in position for exposure, reflecting devices to receive light from the lenses and direct the same to the film to form simultaneously thereon two images of the object, and means permitting the inclination of the optical axes of the lenses to be varied relatively to each other.

[Claims 2 to 6, 8 to 11, 13 to 18, 20, and 21 not printed in the Gazette.]

1,277,042. DRY CELL. CHARLES F. BURGESS, Madison, Wis., assignor, by mesne assignments, to Burgess Battery Company, Madison, Wis., a Corporation of Wisconsin. Filed Mar. 23, 1917. Serial No. 157,315. (Cl. 204—38.)



3. A dry cell having a container serving as an electrode, and a pair of electrodes of opposite polarity thereto coöperating therewith and accessible respectively through opposite ends of said container.

[Claims 1, 2, and 4 to 16 not printed in the Gazette.]

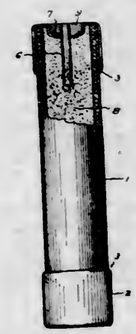
1,277,043. EXPLOSIVE. OSCAR BIRGER CARLSON and EMIL FILIP OTTERDAHL, Månsbo, Avesta, Sweden. Filed Dec. 8, 1915. Serial No. 65,702. (Cl. 52—1.)

1. The herein described explosive which contains perchlorate of ammonium, ferrosilicon and a combustible, consisting of fractions from rock-oil rich in naphthenes and having a boiling point of above 250° C.

4. The herein described explosive which contains perchlorate of ammonium, ferrosilicon, wood-meal, a combustible, consisting of fractions from rock-oil rich in naphthenes and having a boiling point of above 250° C. a substance obtained by gelatinizing liquid trinitrotoluene with nitro-cellulose and nitrate of sodium.

[Claims 2 and 3 not printed in the Gazette.]

1,277,044. INCLOSED ELECTRIC FUSE. ROBERT C. COLE, Hartford, Conn., assignor to The Johns-Pratt Company, Hartford, Conn., a Corporation of Connecticut. Filed Mar. 28, 1918. Serial No. 225,177. (Cl. 175—273.)



1. An inclosed electric fuse comprising an insulating tubular case, metallic caps permanently fastened on the ends of the case, said caps having reëntrant perforated outer ends, perforated metallic plates located in the bottom of the recesses in said caps, a fusible link with terminals extending through the perforations in said plates, granular absorbing and condensing material filling the case, and solder filling the recesses in the end caps and mechanically and electrically uniting the link terminals, plates and caps.

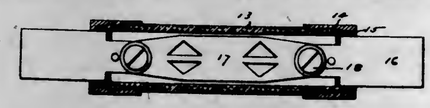
2. An inclosed electric fuse comprising an insulating tubular case, metallic caps permanently fastened on the end of the case, said caps having reëntrant perforated outer ends and portions of their ends struck out to form a cleat, perforated metallic plates located in the bottom of the recesses in said caps, a fusible link with terminals extending through the perforations in said plates, and solder filling the recesses in the end caps and mechanically and electrically uniting the link terminals, plates and caps.

1,277,045. ELECTRIC-FUSE LINK. ROBERT C. COLE, Hartford, Conn., assignor to The Johns-Pratt Company, Hartford, Conn., a Corporation of Connecticut. Filed Mar. 28, 1918. Serial No. 225,178. (Cl. 175—273.)

1. A fuse link formed of a strip of fusible metal having sets of calibrating perforations located to provide in series with each other a plurality of constricted current carrying sections that are in multiple with each other.

2. A fuse link formed of a strip of fusible metal having a plurality of calibrating perforations arranged in pairs.

7. A fuse link formed of a strip of fusible metal having a pair of triangularly shaped calibrating perforations lo-



cated base to base each side of the middle of the length of the strip.

[Claims 3 to 6 not printed in the Gazette.]

1,277,046. ALLOY. HUGH S. COOPER, Cleveland, Ohio, assignor to The General Alloys Company, a Corporation of Ohio. Original application filed Feb. 23, 1918, Serial No. 218,791. Divided and this application filed Apr. 17, 1918. Serial No. 229,173. (Cl. 75—1.)

1. An alloy, comprising a preponderating amount of a metal in the iron group, which is resistant to oxidation, a relatively small amount of aluminum, silicon and zirconium, and a metal in the chromium group.

2. An alloy, composed of a high per centage of nickel, a relatively small amount of aluminum, silicon and zirconium, together with a metal in the chromium group not to exceed twenty-five per cent. of the composition.

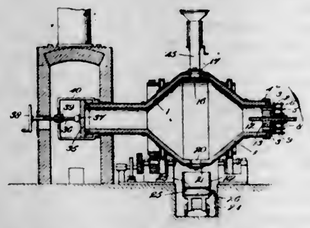
3. An alloy, comprising nickel, zirconium, aluminum, silicon, and a metal of the chromium group, in which the amount of nickel is greatest, and the amount of zirconium, and aluminum and silicon together is greater than the metal of the chromium group.

4. An alloy, comprising nickel, zirconium, aluminum, silicon and tungsten, in which the proportion of nickel is greater than all the other metals combined, and the zirconium is less than the aluminum and silicon together, and the tungsten not in excess of twenty-five per cent. of the whole.

5. An alloy, comprising a metal in the iron group, one of twenty-five per cent. of a metal in the chromium group, one to twenty-five per cent. of zirconium, one to twelve per cent. of aluminum, and one to ten per cent. of silicon.

[Claims 6 to 8 not printed in the Gazette.]

1,277,047. METALLURGICAL PROCESS. OLIVER B. DAWSON, El Paso, Tex., assignor to Dawson Metallurgical Furnace Company, a Corporation of Arizona. Filed July 11, 1917. Serial No. 179,917. (Cl. 75—17.)



1. The process of producing metal free from metallic oxids in ores which consists in heating said ores in a furnace to substantially their temperatures of reduction; adding carbon to said heated ore to reduce the same and to liberate carbon monoxid gas in said furnace; closing said furnace; causing the pressure to rise sufficiently to cause said gas to penetrate the interstices of said ores and liberate sufficient heat to change the freed metal from a fibrous to a shotted condition; and recovering said metal while preventing a reoxidation of the same, substantially as described.

3. The process of producing metals from ores containing the oxids of said metals, except metals capable of combining with carbon at the temperatures employed, which consists in heating said ores in the presence of air to points just below the temperatures of fusion of the metals in the ore charge; adding sufficient carbonaceous fuel to reduce all the oxids present, thus freeing the said metals and producing carbon monoxid gas in the furnace; maintaining said gas in said furnace at a pressure sufficient to cause it to penetrate the interstices of the ore while permitting the exothermic heat generated to raise the temperature of the charge to the fusion points of the metals present; suitably stirring said charge while the fusion is taking place to agglomerate the freed metals; and suitably recovering said metals from the gangue, substantially as described.

5. The process of producing metals from a metallic oxid in an ore which consists in heating said ore to a point just below the fusion temperature of the metal present; adding sufficient carbon to reduce all the metal oxid present and to liberate enough carbon monoxid gas in the furnace to evolve sufficient heat to raise said metal to its fusion point; maintaining the evolved carbon monoxid gas at a predetermined pressure above the atmosphere to facilitate the reduction; stirring the charge during the reducing action to facilitate the reduction of the mineral and the agglomeration of the freed metal particles; discharging the mass into an atmosphere of water vapor to prevent a reoxidation of the reduced metal; and suitably recovering the metallic values, substantially as described.

6. The process of producing metallic copper from an oxidized copper ore which consists in heating said ore to substantially 1700° F.; adding sufficient carbon to the charge to reduce all the mineral to metal and carbon monoxid gas; maintaining the pressure of said gas in the furnace sufficiently above that of the atmosphere to cause the metal to assume a shotted form; agitating the charge to permit said gas to penetrate the interstices of said charge to facilitate the reducing action and to agglomerate the reduced metallic particles; discharging said charge from the furnace in an atmosphere of preheated water to prevent a reoxidation of the reduced metal; and suitably recovering said metal from the gangue, substantially as described.

[Claims 2 and 4 not printed in the Gazette.]

1,277,048. SUBSTANCE FOR USE IN PHOTOGRAPHY AND METHOD OF MAKING THE SAME. ALFRED DE BRAYER, Paris, France. Filed Apr. 20, 1917. Serial No. 163,436. (Cl. 95—88.)

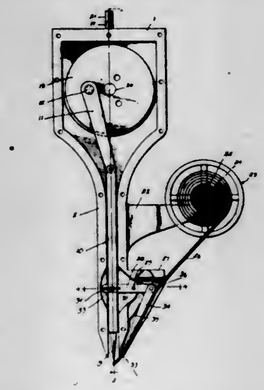
1. The method of conserving and preparing substances for use in photography, consisting in preparing a pasty mass with such substances and a viscous body adapted to act as a soluble and non-deleterious vehicle for the same, and adding to such mass a small proportion of a coloring matter adapted to stain the reagent, whereby the color is made apparent on any photographic image bearing some of the reagent until such reagent is completely washed out from such image.

2. As an article of manufacture, a substance for use in photography consisting of a chemical reagent thoroughly incorporated with a viscous body adapted to act as a vehicle which is soluble in water, which preserves the reagent from atmospheric and other actions for an indefinite period, and which does not exert any deleterious reaction in the use of the reagent for photographic purposes, in combination with a small proportion of a coloring matter thoroughly mixed with the reagent and adapted to serve as an indicator showing when the last traces of the reagent have been completely washed out from a photographic image in the preparation of which said reagent has been utilized.

1,277,049. MACHINE FOR CALKING SEAMS. JOSEPH D. DENBURGER, Lents, Oreg. Filed Dec. 10, 1917. Serial No. 206,525. (Cl. 114—224.)

1. In a calking machine, a supporting structure, guiding means therefor, a calking hammer, and a feeding device mounted for alternate reciprocation whereby the calking material is fed under the hammer ready for the driving blow thereof.

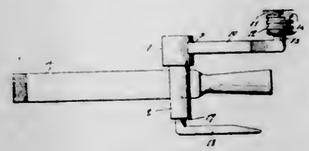
6. In a machine of the class described, a casing having a tubular standard depending therefrom and communicating therewith, a disk rotatably mounted in said casing, a rod mounted to reciprocate in said standard, a link connecting the upper end of said rod eccentrically with said disk, means connected to rotate said disk, the lower end of said standard having a chamber therein registering with the bore of the standard, a blade carried by said rod and normally housed within said chamber, said rod having a slot extending longitudinally thereof, a laterally extending housing carried by said standard, a lever fulcrumed intermediately of its ends within said housing and having one end slotted and extending through the



slot within said rod, a pin extending through the side walls of the slot in the rod and through the slot in said lever, a feed finger carried by the other end of said lever, the outer wall of said housing being inclined downwardly and inwardly, said housing having an opening arranged adjacent the path of the hammer, and a mouth at its other end through which the calking thread is designed to pass, and spring means for normally forcing the feeding finger into yieldable engagement with the calking thread which is guided between said finger and the inclined wall of said housing.

[Claims 2 to 5 and 7 not printed in the Gazette.]

1,277,050. UNDERCUTTER GUIDE FOR CROSSCUT-SAWS. IRA C. DRAKE, Rochester, Wash. Filed Sept. 1, 1916. Serial No. 118,064. (Cl. 143—163.)



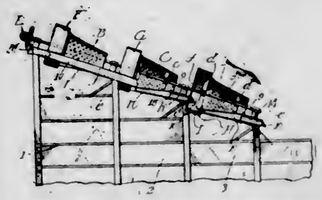
1. A device of the class described comprising a hollow tubular support having a longitudinal slot terminating short of the ends thereof, an outwardly directed flange at the inner end of said support, a hollow cylindrical head mounted upon said support and projecting beyond the inner end thereof and provided with alined openings in its sides, said head being adapted to be rotated and moved axially upon said support, an inwardly directed flange at the inner end of said head adapted to coöperate with the flange of said support to prevent the displacement of the head in one direction, a tool passing through the slot of said support and adapted to prevent the displacement of the head in the reverse direction, an arm passing through the slots in the head, a roller carried by the arm, a pin carried by the support between and engaging the tool and arm, and a tail bolt threaded to the other end of the support and adapted to be adjusted into engagement with the tool to lock all the parts against any relative movements.

2. A device of the class described including a tubular support having a longitudinal slot therein, an exterior flange at one end of said support, a cylindrical member rotatably mounted on said support and about said flange, a tool extended through said slot of the support for holding the cylindrical member against movement thereon, an arm extending through said cylindrical member outwardly beyond the flange, a pin located in said support and having one end bearing against the inner edge of the tool and its opposite end against one edge of the arm, and a tail bolt threaded to the outer end of the support and adapted to be adjusted into engagement with the tool to lock all the parts against relative movement.

3. A device of the class described including a tubular support having a longitudinal slot therein, an exterior annular flange at one end of the support, a cylindrical member rotatably mounted on and about the flange of the support, a tool extending through the slot of the support and limiting the movement of the cylindrical member in one direction thereon, an arm extended through the cylindrical member beyond the flange of the support, a pin located in the support and bearing against the arm and tool, and a tail bolt fitted in the open end of the support and adapted to be adjusted into engagement with the tool for holding and locking all the parts against relative movement.

4. An undercutter guide of the class described including a tubular pivot member having a longitudinal opening interiorly threaded at one end, said pivot member being provided with a longitudinal slot and having an annular flange at the end opposite that which is interiorly threaded, a cylindrical rotary member provided at its inner end with an inwardly extending annular flange fitted on and receiving one end of the pivot member and arranged contiguous to the flange thereof, said cylindrical member being provided with opposite openings, a supporting arm arranged within the said openings of the cylindrical member and provided with saw guiding means, a chisel located within the said slot of the pivot member, a plug interposed between the chisel and the supporting arm and an adjusting screw mounted in the threaded end of the pivot member engaging the chisel whereby the chisel and the supporting arm are clamped in a single operation.

1,277,051. GRAVEL WASHING AND SCREENING APPARATUS. RAYMOND W. DULL, La Grange, Ill. Filed Aug. 23, 1915. Serial No. 46,866. (Cl. 83—56.)



1. In a gravel washing and screening apparatus, a shaft, a screen on said shaft, an imperforate drum rigid with one end of said screen, forming an enlargement thereof, and serving as a scrubber for feeding the material to one end of said screen, means to deliver the materials to said drum, the other end of said screen being open to discharge the materials which are too large to pass through the perforations of the screen, and means for rotating said shaft, said shaft being inclined, said screen being tapered toward the lower end of said shaft, so that the bottom of the screen is inclined toward its smaller end, and said drum being on the upper end of said screen.

2. In a gravel washing and screening apparatus, a shaft, a screen on said shaft, an imperforate drum rigid with one end of said screen, forming an enlargement thereof, and serving as a scrubber for feeding the material to one end of said screen, means to deliver the materials to said drum, the other end of said screen being open to discharge the materials which are too large to pass through the perforations of the screen, and means for rotating said shaft, said shaft being inclined, said screen being tapered toward the lower end of said shaft, so that the bottom of the screen is inclined toward its smaller end, and said drum being on the upper end of said screen, there being a series of said screen and scrubber units, and means to deliver materials from one screen to the scrubber of another screen, whereby the materials are subject to alternate scrubbing and screening operations.

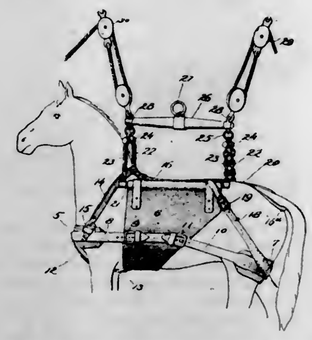
5. In a gravel washing and screening apparatus, the combination of (1) a rotary screen, (2) a supporting frame having parallel inclined members spaced apart to accommodate the screen between them, (3) an inclined trough having the side edges thereof secured to said members, (4) a transverse wall carried by the lower end of said trough, forming a dam, (5) a spout secured to and supported by said wall, having a top forming a deflector for the discharge from said screen, (6) another screen having a receiving chamber adjacent the end of said spout, (7) means on the end of said spout to deflect the discharge downwardly in said chamber, (8) means to feed the materials to the first screen, and (9) means to rotate said screens.

8. In a gravel washing and screening apparatus of that class in which the screen has a discharge opening at one end thereof, the combination of a ring at said discharge end of the screen to restrict the discharge opening, means to form an extension of said restricted opening, a support for said ring and extension, and devices to secure said support to the screen, with the edge of said ring extending outward to form a flange to prevent the drip from the under-side of said screen from mixing with the discharge from said extension.

10. In a screening apparatus, a pan in the form of a shallow trough, a transverse wall at one end of said trough, said wall having an opening, a spout secured to said wall and extending from said opening, the bottom of said trough being in the plane of the bottom of the spout, and said spout having a top shaped to serve as a deflector.

[Claims 3, 4, 6, 7, and 9 not printed in the Gazette.]

1,277,052. HORSE-SLING. SOLA B. DUNN, Chicago, Ill. Filed Mar. 12, 1917. Serial No. 154,166. (Cl. 119—102.)

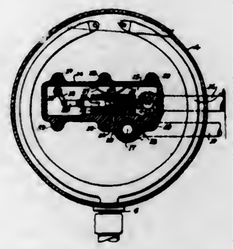


2. A sling of the character described, comprising in combination a breast band to extend in front of the animal and having a strap adapted to extend between the fore legs of the animal, a body band connected with said strap and having a narrowed intermediate portion and wide end portions, the intermediate portion extending beneath the animal's ribs and short of the abdominal region, a breeching having adjustable strap connections with the body band, adjustable strap connections between the breast band and body band, cross-trees flexibly connected to the end portions of the body band and at right angles thereto, rump straps extending from said breeching to and connected with the body band adjacent its rear upper ends, a collar for said breast band terminating in a crupper, and means for separately actuating said cross-trees, substantially as described.

6. A sling of the character described, comprising in combination a breast band to extend in front of the fore legs, a body band having a restricted central portion positioned behind the fore legs and extending rearwardly over the animal's body and terminating short of the abdominal region, a breeching having strap connections with said body band, a strap supporting said neck band and having a connection extending along the back of the animal, side bars secured in the upper ends of said body band, cross-trees flexibly connected to said side bars, a longitudinally disposed suspension tree connected to said cross-trees, suspending connections thereon, a strap extending from the opposite sides of said breeching to the adjacent end portions of said body band inwardly of said cross-tree connections, and means for actuating said sling whereby either end of the animal may be raised independently of the other end, or the animal raised as a whole, substantially as described.

[Claims 1, 3 to 5, and 7 not printed in the Gazette.]

1,277,053. AIR-BRAKE MECHANISM. SAMUEL H. ELLIOTT, Roanoke, Va. Filed Oct. 6, 1917. Serial No. 195,059. (Cl. 188—10.)



1. In an automatic fluid pressure brake system, means in addition to the triple valve for controlling the exhaust of air from the brake cylinder, comprising an additional connection from the brake cylinder to the atmosphere having a valve therein, said valve having a body with two compartments, and a dividing wall, the first of said compartments being in constant communication with the brake cylinder and the second in communication with the atmosphere, a port in the dividing wall adapted to connect the two compartments, a movable member mounted upon the dividing wall and having an elongated port communicating with the port in the dividing wall at various positions of its travel, a valve within the movable member adapted to establish or prevent communication between the port thereof and one of the said compartments and means actuated respectively by increases or decreases of pressure in the train line for opening or closing the valve.

[Claim 2 not printed in the Gazette.]

1,277,054. TWO-WAY-FOLDING SEAT. JAMES F. FIDIAM and FLOYD F. PERALTA, Greeley, Colo. Filed Jan. 19, 1918. Serial No. 212,668. (Cl. 155—13.)

1. A chair comprising a supporting-base, a seat supporting arm carried by said base, a vertically hinged back secured to said base, a seat hinged to said arm, and an upwardly extending lug carried by said seat and adapted

2. In a gravel washing and screening apparatus, a shaft, a screen on said shaft, an imperforate drum rigid with one end of said screen, forming an enlargement thereof, and serving as a scrubber for feeding the material to one end of said screen, means to deliver the materials to said drum, the other end of said screen being open to discharge the materials which are too large to pass through the perforations of the screen, and means for rotating said shaft, said shaft being inclined, said screen being tapered toward the lower end of said shaft, so that the bottom of the screen is inclined toward its smaller end, and said drum being on the upper end of said screen, there being a series of said screen and scrubber units, and means to deliver materials from one screen to the scrubber of another screen, whereby the materials are subject to alternate scrubbing and screening operations.

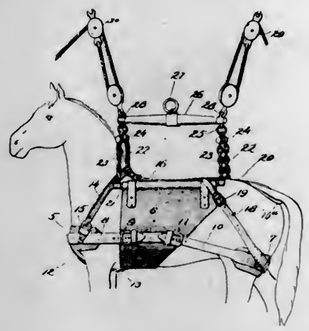
5. In a gravel washing and screening apparatus, the combination of (1) a rotary screen, (2) a supporting frame having parallel inclined members spaced apart to accommodate the screen between them, (3) an inclined trough having the side edges thereof secured to said members, (4) a transverse wall carried by the lower end of said trough, forming a dam, (5) a spout secured to and supported by said wall, having a top forming a deflector for the discharge from said screen, (6) another screen having a receiving chamber adjacent the end of said spout, (7) means on the end of said spout to deflect the discharge downwardly in said chamber, (8) means to feed the materials to the first screen, and (9) means to rotate said screens.

8. In a gravel washing and screening apparatus of that class in which the screen has a discharge opening at one end thereof, the combination of a ring at said discharge end of the screen to restrict the discharge opening, means to form an extension of said restricted opening, a support for said ring and extension, and devices to secure said support to the screen, with the edge of said ring extending outward to form a flange to prevent the drip from the under-side of said screen from mixing with the discharge from said extension.

10. In a screening apparatus, a pan in the form of a shallow trough, a transverse wall at one end of said trough, said wall having an opening, a spout secured to said wall and extending from said opening, the bottom of said trough being in the plane of the bottom of the spout, and said spout having a top shaped to serve as a deflector.

[Claims 3, 4, 6, 7, and 9 not printed in the Gazette.]

1,277,052. HORSE-SLING. SOLA B. DUNN, Chicago, Ill. Filed Mar. 12, 1917. Serial No. 154,166. (Cl. 119—102.)

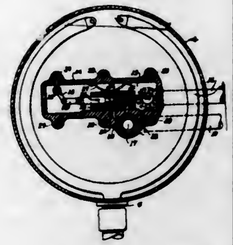


2. A sling of the character described, comprising in combination a breast band to extend in front of the animal and having a strap adapted to extend between the fore legs of the animal, a body band connected with said strap and having a narrowed intermediate portion and wide end portions, the intermediate portion extending beneath the animal's ribs and short of the abdominal region, a breeching having adjustable strap connections with the body band, adjustable strap connections between the breast band and body band, cross-trees flexibly connected to the end portions of the body band and at right angles thereto, rump straps extending from said breeching to and connected with the body band adjacent its rear upper ends, a collar for said breast band terminating in a crupper, and means for separately actuating said cross-trees, substantially as described.

6. A sling of the character described, comprising in combination a breast band to extend in front of the fore legs, a body band having a restricted central portion positioned behind the fore legs and extending rearwardly over the animal's body and terminating short of the abdominal region, a breeching having strap connections with said body band, a strap supporting said neck band and having a connection extending along the back of the animal, side bars secured in the upper ends of said body band, cross-trees flexibly connected to said side bars, a longitudinally disposed suspension tree connected to said cross-trees, suspending connections thereon, a strap extending from the opposite sides of said breeching to the adjacent end portions of said body band inwardly of said cross-tree connections, and means for actuating said sling whereby either end of the animal may be raised independently of the other end, or the animal raised as a whole, substantially as described.

[Claims 1, 3 to 5, and 7 not printed in the Gazette.]

1,277,053. AIR-BRAKE MECHANISM. SAMUEL H. ELLIOTT, Roanoke, Va. Filed Oct. 6, 1917. Serial No. 195,059. (Cl. 188—10.)

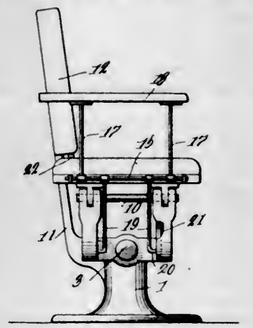


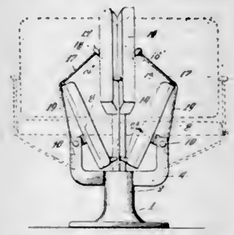
1. In an automatic fluid pressure brake system, means in addition to the triple valve for controlling the exhaust of air from the brake cylinder comprising an additional connection from the brake cylinder to the atmosphere having a valve therein, said valve having a body with two compartments, and a dividing wall, the first of said compartments being in constant communication with the brake cylinder and the second in communication with the atmosphere, a port in the dividing wall adapted to connect the two compartments, a movable member mounted upon the dividing wall and having an elongated port communicating with the port in the dividing wall at various positions of its travel, a valve within the movable member adapted to establish or prevent communication between the port thereof and one of the said compartments and means actuated respectively by increases or decreases of pressure in the train line for opening or closing the valve.

[Claim 2 not printed in the Gazette.]

1,277,054. TWO-WAY-FOLDING SEAT. JAMES F. FIDIAM and FLOYD F. PERALTA, Greeley, Colo. Filed Jan. 19, 1918. Serial No. 212,668. (Cl. 155—13.)

1. A chair comprising a supporting-base, a seat supporting arm carried by said base, a vertically hinged back secured to said base, a seat hinged to said arm, and an upwardly extending lug carried by said seat and adapted to be engaged by said back as the same is swung to a closed position for raising said seat.

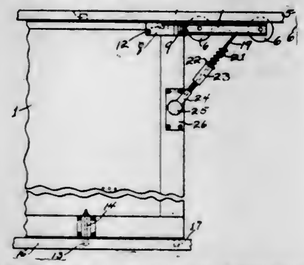




3. A chair comprising a base, said base provided with a plurality of laterally extending arms, a seat pivotably supported upon said arms at each side of said base, an arm rest, a shaft secured to the edge of each seat, a plurality of supporting rods connecting said arm rest to said shaft, said arms provided with vertical guiding slots, depending rods secured to said shaft, and laterally extending ends formed upon said rods and working in said slots for limiting the swing of said seat.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,277,055. SLIDING-DOOR-OPERATING MECHANISM. FRANK JAMES FITE, Fort Worth, Tex., assignor of one-half to Jno. C. Griffith, Fort Worth, Tex. Filed Nov. 3, 1917. Serial No. 200,076. (Cl. 20—19.)



1. In a sliding door provided with antofriction rollers on the lower edges, tracks for said rollers, a balancing bracket hingedly connected to the upper rear corner of said door, rollers for the ends of said bracket, a straight track for the rollers of said bracket, a curved bearing plate attached to the rear upper corner of said door, said bracket having a flange provided with a curved edge bearing against said plate, and means for holding said bracket yieldingly against the upper track.

2. In a sliding door provided with antifriction rollers on the lower edges and tracks for said rollers, a bearing plate attached to the rear upper corner of said door provided with a curved member extending on the rear part of the door, a balancing bracket having a hook loosely engaging said plate and having a curved flange engaging said curved member, relatively large rollers connected with the ends of said brackets, a track for said rollers, and means for holding said bracket yieldingly against the upper track.

3. In a sliding door provided with tracks and operative connections with said tracks including a roller bracket hingedly connected with said door for movement laterally of the plane of the door and a track for said bracket, means for holding said bracket yieldingly against its track consisting of a rod engaging said bracket, a barrel in adjustable sections pivotally connected to said door and receiving said rod loosely, and a spring attached to said rod and bearing against said barrel.

1,277,056. PRODUCTION OF BLACK UPON TEXTILE FIBERS. EMILE AUGUSTE FOURNEAUX, Manchester, England. Filed Aug. 9, 1917. Serial No. 185,238. (Cl. 8—5.)

3. A dyeing solution comprising the following components in the proportions by weight as stated, starch thirty five, gum dragon mucilage one hundred and fifty, anilin seventy four and one-quarter, hydrochloric acid (thirty two degrees Twaddell) twenty four and three quarters, anilin salt 27¾ paraphenylenediamin hydrochloride three and one-quarter, formic acid (ninety per cent.) ninety, lactic acid (thirty per cent.) forty eight, boracic acid forty, sodium chlorate fifty two, copper chlorid eight and one-quarter, and water to bulk to one thousand parts by volume.

5. A process of producing black upon vegetable textile fibers which consists in impregnating the fiber with a solution comprising a plurality of primary amins of the benzene series other than aminodiphenylamin compounds, strong mineral acid, formic acid, thickening, boracic acid and phosphoric acid, chlorates of the alkali metals, paraphenylenediamin and a copper salt, impregnating the vegetable textile fibers with such mixtures by any known process, then drying the impregnated fiber and developing by steaming in an anilin ager.

[Claim 1, 2, and 4 not printed in the Gazette.]

1,277,057. TEXTILE PRODUCT AND PROCESS OF MAKING THE SAME. WILLIAM L. FRANCK, Philadelphia, Pa. Filed Mar. 9, 1917. Serial No. 153,569. (Cl. 8—13.)

2. The combination with textile fiber, of chromium sesquioxid and glucose with the production of a water repellent product that is soft and pliable, substantially as and for the purpose set forth.

4. The process which consists in treating sodium dichromate with a mineral acid for the production of a solution containing chromic acid, adding to this solution sufficient alkali to effect approximate neutrality, adding an agent capable of reducing the liberated chromic acid to chromium sesquioxid, and treating textile fiber therewith.

9. The process which consists in forming a bath by combining sodium dichromate, hydrochloric acid, an alkali, sodium thiosulfate and sodium sulfite, and treating textile fiber therewith.

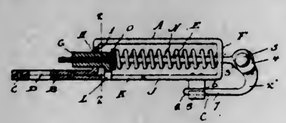
10. The process which consists in treating textile fiber in a bath formed, in approximate proportions, of four (4) ounces of sodium dichromate dissolved in water, eight (8) ounces of commercial hydrochloric acid, two (2) ounces of glucose, three (3) ounces of sal soda, two (2) ounces of sodium thiosulfate, and two (2) ounces of sodium sulfite.

[Claims 1, 3, and 5 to 8 not printed in the Gazette.]

1,277,058. AUTOMATIC RELEASE-COUPLING. FRANCIS SYDNEY GARFORD, Lougheed, Canada. Filed Apr. 11, 1918. Serial No. 227,945. (Cl. 213—67.)

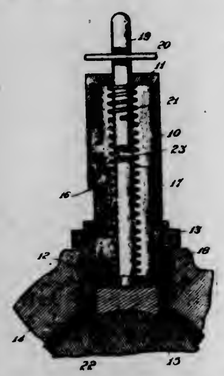
A device of the class described formed of an open rectangular frame having two alined hole-provided end-plates; a hole-provided coupling-plate extending longitudinally of the frame and in line with one side thereof; a draw-bar extending through each of the said end-plates with its longitudinal axis parallel to the line of draft, and

having one of its ends threaded; an internally-threaded cylindrical nut mounted in one of said end-plates and through which the threaded portion of said draw-bar passes, to provide a sliding bushing for said bar; the said nut normally spaced apart from and overhanging said coupling-plate; a lip carried by one end of said nut and



extending through the slot formed in one of the sides of said frame; a coiled-spring mounted on said draw-bar between said nut and one of said end-plates; a coupling-hook pivoted to one end of said draw-bar beyond said frame, and a keeper carried by said frame co-acting with said coupling hook to maintain it in normal position.

1,277,059. GREASE-CUP. GEORGE S. GARREN, Oak Park, Ill., assignor to Sargent Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 5, 1917. Serial No. 205,511. (Cl. 184—45.)



1. A grease cup, comprising an elongated shell or casing having a closed end while the other, open end is adapted to be secured to the element to be lubricated, the side wall of said shell or casing being provided with an opening or port, an elongated plunger arranged in sliding relation with the inner walls of said shell or casing, the length of the plunger and the distance between the lower end of the shell or casing and the upper end of said side opening or port being correlated, said plunger being controllable from the casing exterior and means whereby the plunger is maintained under constant pressure.

2. A grease cup, comprising a hollow member having a closed upper end, while the other end is open, the side wall of said member being provided with an opening or port, a spring controlled plunger reciprocatingly mounted in the member adapted to travel entirely to the open end of said member, and means movable with the plunger whereby said opening or port is kept covered throughout the feeding movement of said plunger.

4. A grease cup, comprising an outer shell or cylinder closed at one end, a connecting member or nipple secured to the other open end of the cylinder, the side wall of the cylinder being provided with an elongated circumferentially disposed port or slot through which the cylinder is adapted to be charged, a cylindrical plunger slidably mounted in the shell or cylinder and of a length somewhat greater than the distance between the upper end of said port or slot and the lower end of said connecting member or nipple, the cylindrical plunger being closed at its lower end, a stem secured to the closed end of said plunger and disposed through the end wall of said outer shell or cylinder, means secured to the outer end of said stem to constitute a grasp and prevent the withdrawal of the stem into the shell or cylinder, and a coil-spring disposed about said stem intermediate of the closed end of the plunger and the closed end of said outer shell or cylinder whereby the plunger is maintained under constant pressure.

6. A grease cup, comprising an externally threaded connecting member or nipple having a wrench-engaging surface, one end of the nipple or connecting member being internally threaded, an outer shell or casing closed at one end while the other, open end is adapted to screw into the internally threaded end of said connecting member or nipple to form a grease or lubricant-holding receptacle therewith, the casing being provided at an intermediate point with an elongated transversely disposed port or opening through which the receptacle is charged, an elongated plunger slidably mounted in said receptacle and in intimate relation with the inner walls thereof, said plunger being of a length substantially equal to the distance intermediate of the lower end of the receptacle and the upper end of said port or opening so as to normally close off said port or opening, the plunger being provided with an elongated stem disposed through the closed end of said casing, with the outer end of said stem provided with a grasp-forming portion whereby withdrawal of said stem through the closed end of said outer casing is normally prevented, and a spring concentrically arranged about said stem intermediate of the closed end of the casing and the plunger whereby the latter is maintained under constant pressure.

[Claims 3, 5, and 7 not printed in the Gazette.]

1,277,060. STUD. ROBERT GORTON, Brookline, Mass. Filed Sept. 13, 1915. Serial No. 50,542. (Cl. 24—245.)



1. A stud comprising a sheet metal base plate having a sheet metal post formed integrally therewith, of tubular form and provided with a flanged head and a rubber button having a post-receiving recess smaller at its entrance end than the flanged head and closed at its inner end into which the post extends.

3. A stud comprising a base plate, two sheet metal posts, formed integrally with the base plate and each of which is of tubular form slotted at the side and provided with a flanged head and a rubber button having post-receiving recesses each smaller at its entrance end than the flanged head and each closed at its inner end, and into which recess a post extends.

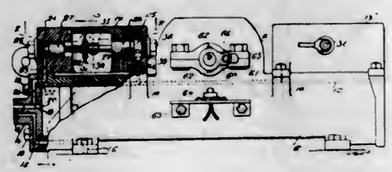
5. A stud comprising a base plate, two parallel hollow posts connected with the base plate and having flanged outer ends and slotted sides and a rubber button having post-receiving recesses smaller than the flanged heads and closed at their inner ends into which the posts extend.

[Claims 2 and 4 not printed in the Gazette.]

1,277,061. MOTOR FOR DOOR-OPERATING MECHANISM. ALBERT GOTTSCHALK, New York, N. Y., assignor to National Pneumatic Company, New York, N. Y., a Corporation of West Virginia. Filed Sept. 6, 1916. Serial No. 118,724. (Cl. 138—2.)

1. The combination with a fluid-pressure operated motor, a valve for controlling the supply and exhaust of fluid pressure to and from said motor, an electric device to control said valve, a normally open circuit for controlling said electric device, of means for momentarily closing said circuit and fluid pressure means operated thereby for maintaining said circuit closed.

6. The combination with a fluid pressure operated motor, of a magnet valve to control the supply of fluid pressure to said motor, a normally open circuit for controlling said magnet valve, a fluid pressure operated switch for controlling said circuit, and means controlled by the initial momentarily closing of said circuit for operating said switch, and means controlled by the completion of the operation of said motor, for opening said switch.

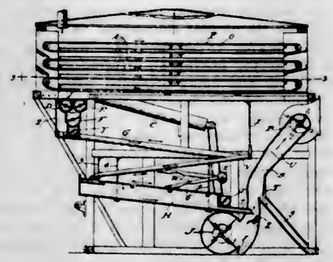


7. In a door operating device, the combination with a fluid pressure operated motor, a valve for controlling the supply and exhaust of fluid pressure to and from said motor, of an electric circuit for controlling the operation of said valve, and means operated by the manual movement of said motor for closing said circuit.

12. The combination with a fluid pressure operated motor, a valve for controlling the supply and exhaust of fluid pressure to and from said motor, electric devices to control said valve, normally open circuits for controlling said electric devices, of means for momentarily closing one of said circuits, and fluid pressure means operated thereby for maintaining said circuit closed, and means for momentarily closing the other of said circuits and means operated thereby for opening said first mentioned circuit.

[Claims 2 to 5, 8 to 11, and 13 to 15 not printed in the Gazette.]

1,277,062. SEED-SEPARATOR. HAROLD LINE GRAY, Crawfordsville, Ind., assignor to Crabbs Reynolds Taylor Company, Crawfordsville, Ind., a Corporation of Indiana. Original application filed May 17, 1917, Serial No. 169,540. Divided and this application filed July 23, 1917. Serial No. 182,326. (Cl. 130—17.)



1. In a seed separating machine, the combination of a lower blower fan, an upper exhaust fan, an inclined conduit extending between and connecting the fans, a valve positioned to receive and break up the flow of seeds entering the conduit, a discharge spout positioned to receive the heavy material, a second discharge spout for seeds of medium grade, the lightest material being sucked upwardly by the current created by the exhaust fan, substantially as described.

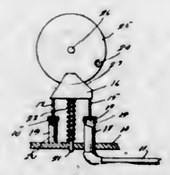
2. In a machine for separating heavy seeds into one grade and lighter seeds into a single distinct grade, the combination of a blower fan, an exhaust fan positioned above the blower fan, an inclined conduit directly connecting the two fans, the aforesaid conduit being of substantially the same cross sectional area, a feeding chute opening into the conduit above the blower fan and supplying the seed in a layer so that an even amount and large volume of material is presented to the blast, an adjustable valve positioned below the feeding chute and above the blower fan to receive the outflow of seeds from the chute and to aid in separating the seed, and means for the discharge of seeds of different weights into separate receptacles, substantially as set forth.

4. In fan mechanism for separating seeds into two distinct grades, the combination of a blower fan, an elevated exhaust fan, a conduit directly connecting the two fans, a seed feeding chute opening into the aforesaid conduit, a valve positioned below the said chute and above the blower fan to receive the outflow of seeds from the chute and for separating the heavy and light material, a discharge conduit positioned above the aforesaid valve for the discharge of medium weight seeds from the main conduit, a second discharge conduit positioned below the valve for the discharge of heavy material, the lightest material being sucked up by the exhaust fan, and means for conveying said light material from the exhaust fan, substantially as shown.

7. In a seed separating machine, the combination of an exhaust fan, an inclined conduit directly connecting the exhaust fan with a blower fan, a blower fan, a seed supply chute opening into the conduit a short distance above the blower fan, a valve positioned below said chute to receive the outflow of seeds from the chute and for separating the seed, a plurality of discharge spouts opening out of the conduit for the collection of seeds of different grades and weights, the separation of the seeds being effected by the aforesaid valve and by the current of air holding the seed in temporary suspension at a point to permit the lighter material being sucked up by the exhaust fan and the heavier medium grade seeds being discharged through the adjacent discharge spout, arranged as described and for the purposes specified.

[Claims 3, 5, 6, 8, and 9 not printed in the Gazette.]

1,277,063. AUTOMATIC TRAIN-STOP. WALTER GRAY, Fort Huachuca, Ariz., assignor of one-half to Eugene P. Frierson, Fort Huachuca, Ariz. Filed Oct. 2, 1915. Serial No. 53,845. (Cl. 187—4.)

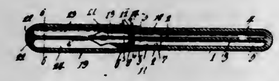


In an automatic train stop, a train pipe, a cylinder communicating with said train pipe, a valve arranged in said cylinder, a stem carried by said valve projecting exteriorly of the cylinder, a vertically movable member connected with said stem and having an inclined upper face, a second cylinder arranged in spaced parallel relation to the first-mentioned cylinder, a rod carried by the vertically movable member extending downwardly within the second-mentioned cylinder, means associated with said rod normally retaining the vertically movable member in elevated position, means arranged between said stem and said rod normally tending to elevate said vertically movable member, a motor, and a crank pin connected with said motor adapted to engage the inclined face of said vertically movable member to depress the latter and open said valve.

1,277,064. FOUNTAIN-PEN. LEONARD L. GUGEL, Louisville, Ky. Filed Dec. 8, 1917. Serial No. 206,241. (Cl. 126—42.)

1. A pen of the class described comprising a tube, said tube provided with a plurality of compartments, a cap

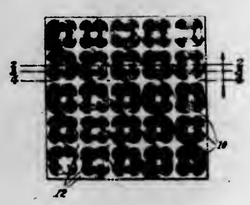
detachably supported upon said tube and provided with channels, registering with said compartments, a pen point carried within each channel, a plug mounted within each channel, a closure cap detachably engaging said first mentioned cap, said closure cap provided with a partition, tapering toward the inner end thereof, said partition adapted to fit between said pen points, and said partition terminating short of the inner end of said closure cap.



2. A pen of the class described comprising a tube, said tube provided with a plurality of compartments, a cap detachably supported upon said tube and provided with channels registering with said compartments, a pen point carried within each channel, a plug mounted within each channel, a closure cap detachably engaging said first mentioned cap, and means mounted within said closure cap and adapted to separate said pen points and prevent contact thereof with each other while said closure cap is in a closed position upon said first mentioned cap.

[Claim 3 not printed in the Gazette.]

1,277,065. LIGHT-REFRACTING GLASS. CONRAD J. GUNDLACH, New York, N. Y., assignor to Mississippi Glass Company, New York, N. Y., a Corporation of New York. Filed Aug. 17, 1917. Serial No. 186,679. (Cl. 88—60.)



1. As an article of manufacture, a sheet of glass having in one of its surfaces minute depressions of such contour and in such number for a given area as to break up and diffuse direct glare producing rays of light into smaller rays which produce upon the eye no glare.

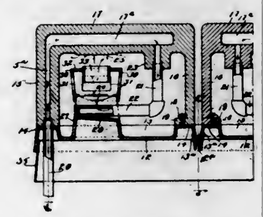
5. As an article of manufacture, a glass having a flat face and a roughened face, said latter face having a plurality of pits therein arranged in tessellar order, said surface having substantially 900 of said pits per square inch.

6. As an article of manufacture, a glass sheet or plate having one surface flat and polished and the opposite surface having a fire polish, said latter surface formed with a great number of depressions therein, undulating in contour and spaced in such close relation as to break up and diffuse glare-producing beams of light into minute beams which do not produce glare.

[Claims 2 to 4 not printed in the Gazette.]

1,277,066. FUEL-OIL BURNER. CHARLES HARVEY, Somerville, Mass. Filed Apr. 8, 1918. Serial No. 227,163. (Cl. 158—64.)

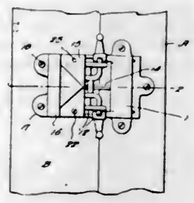
2. An oil vaporizer and burner comprising a base having a bottom and an upstanding marginal curb whereby the base is adapted to contain oil for preliminary heating, said bottom being provided with an upstanding tubular nipple constituting both an inner curb and an air conduit extending through the base, said nipple having a transverse channeled rest at its upper end portion and air passages at opposite sides of said rest, a substantially horizontal retort extending over said nipple, means for supplying oil to said retort, a gas conduit connected with the retort and extending into said rest, said conduit having a gas outlet centrally arranged relatively to the nipple, the upper end of the nipple constituting a horizontal seat, and a tubular nipple-extension resting loosely



on said seat and removable therefrom to permit access to said gas outlet, said extension including a tubular body portion open at its lower end and having air passages, and a head having a central flame and air passage located between the gas outlet and the retort.

[Claims 1 and 3 not printed in the Gazette.]

1,277,067. HINGE. HENRY E. HARRIS, Indianapolis, Ind. Filed June 6, 1917. Serial No. 173,124. (Cl. 16—106.)



In a hinge, the combination with two pivotally connected leaves, the one having screw holes therein to permit its attachment to a door, the other having a retaining rib formed adjacent to its longitudinal edge and semicircular notches formed in its ends between the retaining rib and its pivotal connection with the first leaf, of a keeper adapted to be mounted upon the frame of said door, the keeper having an internal groove to receive the retaining rib and being provided with a cheek plate, between which and the door jamb, the second said leaf member is designed to be held, the cheek plate having formed therein, transverse holes positioned one near either end of the cheek plate, and a screw for insertion in either hole of the cheek plate, so that the second said leaf member may be sustained thereby, the screw engaging in one of the notches of said leaf, whereby the hinge and its keeper may be employed on right hand or left hand hung doors to removably support the said door.

1,277,068. WELDING-TORCH. JOHN HARRIS, Cleveland, Ohio, assignor to Carbo-Hydrogen Company of America, Pittsburgh, Pa., a Corporation of Delaware. Filed Dec. 17, 1914. Serial No. 877,648. (Cl. 158—27.4.)



1. In a device of the kind described, the combination, with a detachable burner tube, of a branched fitting to

which said tube is attached, said fitting comprising a straight portion and a curved portion communicating with the straight portion, conduits connected to the branches of said fitting, a valve common to said conduits and independent valves arranged in the said conduits rearwardly of the first mentioned valve.

7. A tip comprising a branched fitting having a straight bore and a curved passageway extending rearwardly from the front portion of said bore, an injector in said bore and having its discharge end at the junction of the passageway with the bore, and a burner having a bushing at the rear end thereof adapted to register with said injector.

[Claims 2 to 6, 8, and 9 not printed in the Gazette.]

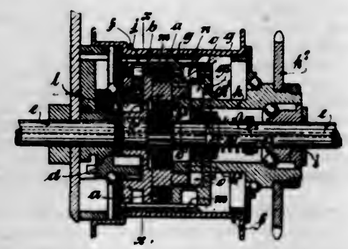
1,277,069. VALVE MECHANISM FOR BLOWPIPES AND THE LIKE BURNERS. JOHN HARRIS, Cleveland, Ohio, assignor to Carbo-Hydrogen Company of America, Pittsburgh, Pa., a Corporation of Delaware. Original application filed Dec. 17, 1914, Serial No. 877,649. Divided and this application filed Jan. 2, 1917. Serial No. 140,111. (Cl. 158—27.4.)



1. In a blowpipe, the combination, with a head having passageways for supplying oxygen and a mixture thereof with a combustible gas, respectively, to jets, of a valve body having therein a valve-controlled passageway for combustible gas and an inlet passageway for oxygen, a chamber communicating with the second passageway, an annular valve seat in said chamber, a valve in said chamber, a spring in said chamber normally holding said valve against said seat, a passageway for cutting oxygen extending through said seat and an operating stem therein, a passageway leading from the last-mentioned passageway to the oxygen passageway in said head, a valve-controlled passageway for heating oxygen extending from said chamber and conducting oxygen to the mixture passageway or passageways in said head, and means for operating said stem to unseat said valve.

[Claims 2 to 5 not printed in the Gazette.]

1,277,070. COMBINED VARIABLE-SPEED GEAR AND BRAKE MECHANISM FOR VELOCIPEDES. WILLIAM EDWIN HARRISON, Manchester, England. Filed Nov. 5, 1917. Serial No. 200,325. (Cl. 208—154.)



1. In combination, a velocipede wheel hub and a relatively fixed axle for said hub, a single epicyclic gear train and a back-pedaling brake within the hub, said gear train consisting of a fixed gear pinion, a single train of planet pinions, a planet cage and a gear ring, means between the gear ring and wheel hub whereby the motion of the gear ring in one direction may be imparted to the hub, a driving member also within the hub, means whereby the said driving member may be caused to transmit its motion to the axes of the planet pinions through the gear ring, or direct, and also whereby the motion transmitting means between the gear ring and hub may be caused to be inoperative for the low and normal speeds, means for transmitting the forward motion of the planet cage to the wheel hub, or the reverse motion to the brake, the said forward motion transmitting means, between the planet cage and hub, operating automatically to disengage the brake operating means when the velocipede is being driven forward or wheeled backward, substantially as herein set forth.

2. In combination, a velocipede wheel hub, having ratchet teeth on its inner face, a relatively fixed axle for said hub, a fixed sun pinion on said axle, a single train of planet pinions, a planet cage for said pinions and a gear ring within the hub, the planet pinions meshing with the sun pinion and with the gear ring, and the axes of the planet pinions having clutch projections, a pair of pawls on the planet cage and a pawl on the gear ring respectively and one of the pawls on the planet cage being bodily movable relatively to the planet cage, and toward and away from the other pawl, and also being adapted to engage the ratchet teeth in the hub, for the low and normal speeds, the other pawl on the planet cage being reversed and having an arm with which the relatively movable pawl may engage when the hub is being driven forward or wheeled backward, the said third pawl on the gear ring being also adapted, for the high speed, to engage the ratchet teeth on the hub, a back-pedaling brake having an operating boss formed with ratchet teeth, with which the reversed pawl on the planet cage may engage when the cage is rotated backward, springs for urging the said pawls into engagement with the ratchet teeth and the bodily movable pawls toward one end of the slots in which their pivots lie, a driving clutch member at that end of the hub farthest from the brake, and means whereby the said driving clutch member may be caused to transmit its motion to the gear ring, or to the planet pinion axes, and the pawl on the gear ring may be caused to lie out of engagement with the ratchet teeth on the hub for the low and normal speeds, or be caused to engage such teeth for the high speed, substantially as herein set forth.

3. In combination, a velocipede wheel hub, having ratchet teeth on its inner face, a relatively fixed axle for said hub, a fixed sun pinion on said axle, a single train of planet pinions, a planet cage for said pinions, and a gear ring within the hub, the planet pinions meshing with the sun pinion and the gear ring, and the axes of the planet pinions having clutch projections and the gear ring having clutch teeth, a pair of pawls on the planet cage and one or more pawls on the gear ring, and one of the pawls on the planet cage being bodily movable relatively to the planet cage and toward and away from the other pawl, and also adapted always to engage the ratchet teeth in the hub, while the other pawl on the planet cage is reversed and has a rearwardly extending arm with which the bodily and relatively movable pawl may engage, the said farther pawl or pawls on the gear ring being yieldingly mounted on said gear ring and for the high speed being also adapted to engage the ratchet teeth on the hub, a back-pedaling brake with an operating boss having ratchet teeth, with which the reversed pawl on the planet cage may engage when the cage is rotated backward, springs for urging the said pawls into engagement with the ratchet teeth and the bodily movable pawls toward one end of the slots in which their pivots lie, a driving member having segmental jaws, a sliding disk with segmental slots constantly engaging the said jaws of the driving member and adapted to control the action of the pawl or pawls on the gear ring, and also adapted to be clutched to the gear ring, or to the projections on the planet pinion axes, substantially as herein set forth.

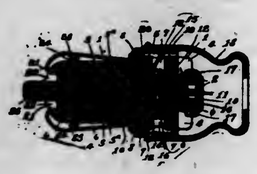
6. In combination, a velocipede wheel hub and a relatively fixed axle therefor, ratchet teeth in said hub, three speed epicyclic speed gear and back-pedaling brake mechanism within said hub, the said speed gear consisting of a single train of planet pinions, a planet cage, a relatively fixed sun pinion and a gear ring, and this latter having a

through opening for the reception of a pawl, and also having inwardly extending clutch teeth, a pawl pivotally and yieldingly mounted in said through opening, and having a tail or arm adapted, when unsupported, to project inward beyond the inner face of the ring gear, further pawls on the planet cage for driving the hub forward and for applying the brake respectively, a driving member, and means between the driving member and the said gear ring whereby motion may be imparted to the planet cage, either through the gear ring or direct, and the said pawl on the gear ring prevented engaging the ratchet teeth in the hub for the low and normal speeds, or allowed to engage such teeth for the high speed, springs for urging the said pawl into engagement with the ratchet teeth and the bodily movable pawls toward one end of the slots in which its pivots lie, substantially as herein set forth.

7. In combination, a velocipede wheel hub and a relatively fixed axle therefor, ratchet teeth in said hub, three speed epicyclic speed gear and back-pedaling brake mechanism within said hub, the said speed gear consisting of a single train of planet pinions, a planet cage, a relatively fixed sun pinion and a gear ring, a pawl pivotally and yieldingly mounted on the ring gear, further pawls on the planet cage for driving the hub forward and for applying the brake respectively, a driving member, and means between the driving member and the said gear ring whereby motion may be imparted to the planet cage, either through the gear ring or direct, and means whereby the said pawl on the gear ring is prevented engaging the ratchet teeth in the hub for the low and normal speeds, or allowed to engage such teeth for the high speed, springs for urging the said pawls into engagement with the ratchet teeth and the bodily movable pawl toward one end of the slots in which its pivots lie, substantially as herein set forth.

[Claims 4 and 5 not printed in the Gazette.]

1,277,071. ELECTRIC PLUG. HAROLD P. HASTINGS and FLOYD C. SMITH, Syracuse, N. Y., assignors to Crouse-Hinds Company, Syracuse, N. Y., a Corporation of New York. Filed July 30, 1915. Serial No. 42,760. (Cl. 173—338.)



1. An electric plug comprising a body including a head at one end formed with lengthwise grooves therein, and a portion projecting in advance of the head, terminals extending lengthwise of the body and having portions lying on the bottoms of the grooves, a single fastening member for holding the terminals in position, said member extending transversely through the portion of the terminals lying in the grooves and the interposed part of the head, and means for insulating the terminals from the fastening member, substantially as and for the purpose described.

4. An electric plug comprising a body including a head formed with lengthwise grooves therein, and a portion projecting in advance of the head, the head having a peripheral annular flange at its advance end, terminals extending lengthwise of the body and having portions lying on the bottoms of the grooves, means for holding the terminals in position including blocks of insulation lying in the grooves, and fastening means extending through the blocks into the body, and a cap on the head abutting against the flange, substantially as and for the purpose described.

7. An electric plug comprising a body including a head formed with grooves, and a projecting portion in advance of the head, and terminals extending lengthwise of the periphery of the projecting portion of the body and having portions lying in the grooves, the terminals having binding devices near the rear ends of the grooves, substantially as and for the purpose described.

12. An electric plug comprising a body formed with a plurality of lengthwise surfaces and with grooves alined with said surfaces and extending into the body and located at corresponding ends of said surfaces, terminals extending lengthwise of said surfaces and having portions extending into the grooves, and means for clamping the terminals in the grooves, substantially as and for the purpose specified.

[Claims 2, 3, 5, 6, and 8 to 11 not printed in the Gazette.]

1,277,072. STUFFING-BOX PACKING. STEPHEN T. HIATT, Jersey City, N. J., assignor to R. G. von Kökeritz & Co., New York, N. Y., a Partnership consisting of Reinhold G. von Kökeritz, Charles B. Hill, and Nathaniel P. Hill. Filed Nov. 23, 1916. Serial No. 133,010. (Cl. 288—1.)



1. A composite stuffing-box packing comprising a substantially continuous fibrous element and a substantially continuous metallic element partially embedded in the said fibrous element, the said metallic element having its operative face provided with excrescences and its opposite face provided with projections embedded in the fibrous element, the said metallic element being temporarily bound to the said fibrous element.

2. A composite stuffing-box packing comprising a substantially continuous fibrous element and a substantially continuous metallic element partially embedded in the said fibrous element, the said metallic element having its operative face provided with excrescences and its opposite face provided with ribs embedded in the fibrous elements, the said metallic element being temporarily bound to the said fibrous element by thread.

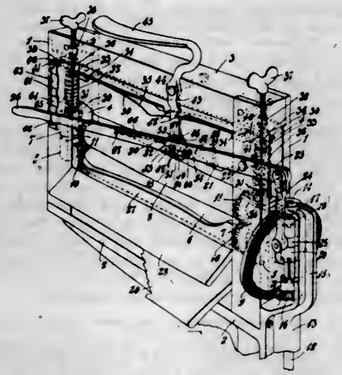
3. A composite stuffing-box packing comprising a substantially continuous fibrous element and a substantially continuous metallic element partially embedded in the said fibrous element, the said metallic element having its operative face provided with excrescences and its opposite face provided with ribs embedded in the fibrous element, the said metallic element being temporarily bound to the said fibrous element by thread, that portion of the thread which engages the metallic element being composed of metal.

1,277,073. WRINGER SAFETY DEVICE. JAMES A. HICKS, Cincinnati, Ohio. Filed Mar. 21, 1917. Serial No. 156,412. (Cl. 68—32.)

1. In combination with a pair of coöperating rolls and yieldable means pressing said rolls to hold them together, reversible means for driving said rolls in either direction, releasing means for relieveing the pressure of said yieldable means on said rolls, and an operative connection from said releasing means to said reversible means whereby said reversible means is reversed when said pressure is relieved.

3. In combination with a pair of coöperating rolls and yieldable means pressing said rolls to hold them together, reversible means for driving said rolls in either direction, and releasing means for relieving the pressure of said yieldable means on said rolls, said relessing means being operatively connected to said reversible means whereby said reversible means is reversed when said pressure is relieved.

8. In combination with a pair of coöperating rolls and yieldable means pressing said rolls to hold them together, reversible means for driving said rolls in either direction, releasing means for relieving the pressure of said yieldable means on said rolls, a reversing lever to reverse said reversible means, a trip-lever to engage and operate said releasing means, and means to yieldably hold said trip-lever out of operative engagement with said reversing lever.



9. In combination with a pair of coöperating rolls, a helical spring pressing said rolls to hold them together, an adjusting screw for said spring, a bearing plate between said spring and said screw, having an opening in alinement with said screw, a bearing bar having an opening and normally lying between said bearing plate and screw with its opening out of alinement with said screw and said opening in said bearing plate, and adapted to be displaced to bring its opening in said alinement, reversible means for driving said rolls in either direction, and an operative connection from said bearing bar to said reversible means whereby said means is reversed when said bar is displaced.

13. In combination with two levers, only one of which has operative movement independently of the other, a cam having a pivot on one of said levers and having a nose and sides diverging from said nose toward opposite sides of said pivot, and having a slot opening toward the other of said levers comprising a main part beginning near said nose and extending toward said pivot, and parts diverging from said main part toward opposite sides of said pivot, said cam also having sides at opposite sides of said pivot presented away from said nose, stops on said lever on which said cam has said pivot, at opposite sides of said pivot and spaced away from said pivot in the direction away from said nose to allow said cam to tilt on said pivot and move its nose one way or the other, but to limit said tilting, a pin in the other of said levers normally extending into said main part of said slot to tilt said cam when one of said levers is moved one way or the other, without moving the other lever, and a lug on said other lever substantially midway of the range of tilting of said nose, to one side or the other of which said nose passes and which thus engages with one or the other of said diverging sides, according to the direction in which said cam has been tilted, when the other of said levers is moved, while said pin passes into one or the other diverging part of said slot, whereby said other lever is moved in one direction or the other according to the side of said cam engaged.

[Claims 2, 4 to 7, 10 to 12, and 14 not printed in the Gazette.]

1,277,074. CLOSED UNDERGARMENT. MALINDA HITZEMAN, Fort Wayne, Ind. Filed Oct. 19, 1917. Serial No. 197,499. (Cl. 2—144.)

1. A garment of the class described, composed of a front portion of woven fabric, portions forming the back of the waist and also back leg portions of woven fabric, and a comparatively elastic portion of knitted fabric that extends from the arm-pits down the sides of the waist, across the back at the lower end of the waist, and continuing therefrom beneath the crotch to the front portion



and from thence downwardly forming the inner portions of the legs.

[Claims 2 and 3 not printed in the Gazette.]

1,277,075. FINGER-RING GAGE. JOSEPH B. INGALLS, Chicago, Ill., assignor to Howard D. Ingalls, Chicago, Ill. Filed July 25, 1917. Serial No. 182,777. (Cl. 33—178.)

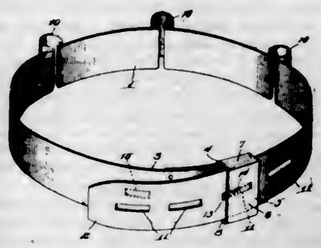


1. In a gage of the class described, a relatively fixed member having a finger opening, a plurality of blades each pivotally connected at one end to the said member and arranged in overlapped relation, a rotatable member to which the other ends of the blades are pivotally connected, the adjustment of the said rotatable member serving to adjust the blades to vary the size of the opening, and means actuated by the rotation of the last-mentioned member for indicating variations in the diameter of the opening defined by the said blades.

2. In a gage of the class described, a relatively fixed member having a finger opening, a series of blades each pivotally connected at one end to the said member, the blades normally surrounding the said opening and being adjustable with relation to the opening to increase and decrease the diameter thereof, means for so adjusting the blades, and means actuated by the adjusting means for indicating the variations in the diameter of the finger opening.

[Claims 3 and 4 not printed in the Gazette.]

1,277,076. SHEET-METAL SHOCK-BINDER. HARVEY IRELAND, North Emporia, Va. Filed Mar. 12, 1918. Serial No. 221,980. (Cl. 24—20.)



1. A corn shock binder comprising a sheet metal band, having a guide loop at one end thereof composed of re-

silient outer, top and bottom walls, a locking lug projecting from such end of the band within the loop and having an inner straight abutment shoulder and an outer inclined face leading to said shoulder and having its outer extremity lying in close proximity to the outer resilient wall of the guide loop, the opposite end of the band being formed to provide a tongue for insertion through said loop and having slots therein for engagement with said lug.

[Claims 2 and 3 not printed in the Gazette.]

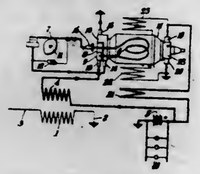
1,277,077. WIRE SHOCK-BINDER. HARVEY IRELAND, North Emporia, Va. Filed Mar. 12, 1918. Serial No. 221,981. (Cl. 24—27.)



2. A corn shock binder comprising a resilient wire band having at one end an eye and provided at points with contraction and expansion coils, one of said coils being located at the opposite end of the band, and the wire at such end of the band being extended beyond said coil and formed to provide inner and outer arms and a hook to engage the eye, the outer arm being connected at its extremity with the aforesaid coil.

[Claim 1 not printed in the Gazette.]

1,277,078. IGNITION SYSTEM. JOHN W. JEPSON, Depew, N. Y., assignor to Gould Coupler Company, a Corporation of New York. Filed July 9, 1915. Serial No. 38,848. (Cl. 123—148.)



1. A system of the class described having an ignition circuit containing a battery, magneto armature and interrupter in series with one another, a commutator acting to so effect connection of the battery and magneto armature that the voltage of one is maintained in the same direction as the voltage of the other in said circuit whereby the voltage of the ignition circuit increases with the speed of the magneto, a work circuit, and armature windings driven synchronously with the magneto armature and connected to charge the battery and supply the work circuit when running at sufficient speed.

2. A system of the class described having an ignition circuit with a battery, magneto armature and interrupter in said circuit, a commutator acting to reverse the connections between the battery and magneto armature so that the voltage of each will always be in the same direction to build up the ignition circuit, and armature windings connected in circuit with the battery to charge the battery when running at sufficient speed.

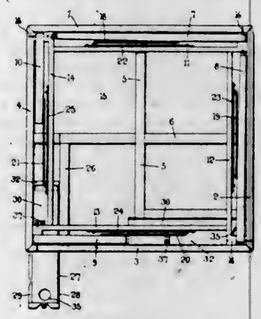
3. A system of the class described having a generating armature, a battery and an ignition circuit in operative relation, and a commutator reversing the connections between the battery and armature so that the voltage generated by the armature and battery will be in the same direction to build up the igniton circuit, said generating armature having windings connected to charge the battery when running at sufficient speed.

4. A system of the class described having an ignition circuit with a battery and generating armature in series therein, a commutator reversing the connections between the battery and armature so that the voltage generated by the armature and battery will be in the same direction to build up the ignition circuit as the speed of the armature increases, said generating armature having windings connected to charge the battery when running at sufficient speed, and a work circuit connected across the battery to be supplied by the said last-mentioned armature windings and battery.

5. A system of the class described having an ignition circuit operating with a battery, generating armature and induction coil in series therein and in series with one another, the induction coil having a secondary circuit adapted to feed sparking devices, said generating armature having windings connected to charge the battery when running at sufficient speed, and a work circuit connected across the battery to be supplied by the said last-mentioned armature windings and battery.

[Claims 6 to 31 not printed in the Gazette.]

1,277,079. CARD-TABLE. ADAM E. JOHNSON, Hoboken, N. J., assignor to Mark Cross Company, New York, N. Y., a Corporation of New York. Filed Sept. 19, 1916. Serial No. 121,041. (Cl. 45—122.)



1. A card table having a top a drawer slidable in said top and adapted to support the score card while the score is being noted thereon, a transparent covering in the top for exposing the card while the drawer is closed, and a rearward extension on the drawer for supporting it during the notation of the score and for simultaneously obstructing the transparent covering.

2. A card table comprising a peripheral frame, a cross frame, a support abutting the two frames and a top having a cutaway portion, the said table having a drawer for visibly supporting the score card under said cutaway portion, which drawer is slidably mounted in the said frames and support.

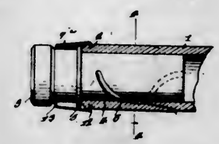
4. A card table having a top comprising a peripheral frame, a cross-frame and a support abutting the two, the said top having a drawer for visibly supporting a score card, which drawer is slidably mounted in the said frames and support, and a rearward extension for steadying the drawer when it is open, said extension being also slidably fitted in the said frames and support.

[Claim 3 not printed in the Gazette.]

1,277,080. RIVETING-HAMMER. FRANCIS E. JOHNSON, Altoona, Pa. Filed Aug. 17, 1915. Serial No. 45,983. (Cl. 121—20.)

1. In a riveting hammer, a barrel, and a die having a plunger operating in said barrel, said plunger being provided with a collar and equipped on its outer surface with a longitudinally extending groove, open at the inner end,

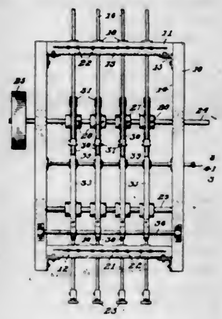
and means connected to the collar to limit the movement of said plunger.



9. A peumatic riveting hammer comprising a barrel, a die equipped with a plunger slidably mounted in said barrel, means connecting said plunger and barrel and permitting limited outward movement of the latter, and an escape passage-way controlled by the movement of said plunger to permit escape of the pressure within said barrel, said passage-way being arranged in such a manner as to place the interior of the barrel in communication with the atmosphere upon a predetermined outward movement of said plunger.

[Claims 2 to 8 not printed in the Gazette.]

1,277,081. TAMPING-MACHINE FOR CONCRETE BLOCKS. JOHN O. JOHNSON, OTTO H. JOHNSON, and CHARLES W. JOHNSON, New Hampton, Iowa. Filed June 28, 1917. Serial No. 177,509. (Cl. 25—41.)

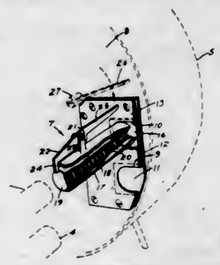


1. A tamping machine comprising a frame, having upper and lower ends formed of spaced bars arranged with longitudinal slots, pairs of spaced bolts arranged within said slots shiftable transversely of the frame, pairs of guide blocks arranged between each pair of said bolts, tamping bars longitudinally slidably arranged vertically through the said pairs of blocks at the top and bottom of the frame, tamping feet upon the lower ends of said bars, a power and a driven shaft transversely journaled upon said frame, sprocket wheels upon said shafts, sprocket chains upon said wheels arranged directly rearwardly of the said bars, lift collars upon said bars, elevating forks carried by said chains adapted for upright movement beneath the said collars whereby the tamping bars are elevated and released during the turning of the said shafts when the device is in operation, retaining springs for the said bars adapted for engagement beneath the said collars and cam releasing means for the said springs.

[Claims 2 and 3 not printed in the Gazette.]

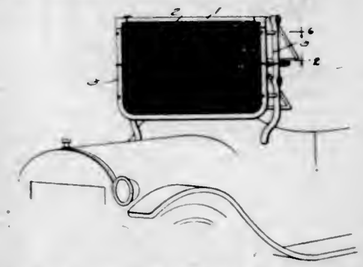
1,277,082. TIME-OPERATED LIGHT-SWITCH. SWAN G. JOHNSON, Los Angeles, Cal. Filed July 23, 1917. Serial No. 182,258. (Cl. 161—27.)

1. The combination with an alarm clock, of a mounting secured to the back of the clock and forming a socket, an actuator mounted in the socket; said actuator comprising a base adapted to fit in the socket, a barrel extending from the base, a spring actuated plunger mounted in the barrel, latch mechanism for holding the plunger withdrawn, and a handle for the latch mechanism; and means whereby the handle is operated to release the plunger by the operation of the alarm key.



2. The combination with an alarm clock, of a mounting fixed to the back of the alarm clock and forming two sockets, one above the other; said mounting consisting of a base plate fitting against the back plate of the clock, an E-shaped spacing block fitting against the base plate, and a top plate fitting against the spacing block; said top plate having notches opening sidewise and forming entrances to the sockets; a spring actuated plunger adapted to be removably mounted in either socket and moved from one socket to the other, and means whereby the plunger is discharged by the operation of the alarm key.

1,277,083. ATTACHMENT FOR WIND-SHIELDS. AARON KATZENSTEIN, Shreveport, La. Filed Oct. 26, 1917. Serial No. 198,659. (Cl. 21—148.)



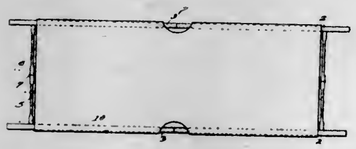
1. An attachment for wind shields comprising a frame having a filling of perforate material and adapted to be arranged in front of the wind shield, and means for connecting the frame to the bracket supporting the wind shield, said means comprising clamps intermediate the ends of the frame and snubbers arranged above and below each clamp, each snubber comprising a U-shaped member consisting of a body connected to the frame and arms adapted to extend on opposite sides of the bracket, and a rubber plug held between the arms and body.

2. An attachment for wind shields comprising a frame having a filling of perforate material and adapted to be arranged in front of the wind shield, and means for connecting the frame to the brackets supporting the wind shield, said means comprising clamps intermediate the ends of the frame and snubbers arranged above and below each clamp, each clamp comprising a plate connected with the frame, rods extending from the frame on opposite sides of the bracket, an abutment plate having notches at its ends for engagement by the rods, rubber buffers between the plate and the bracket, and means connected with the rods for forcing the abutment plate toward the bracket.

1,277,084. STRETCHER. FRED A. KEITH, South Poland, Me. Filed May 5, 1917. Serial No. 166,632. (Cl. 21—80.)

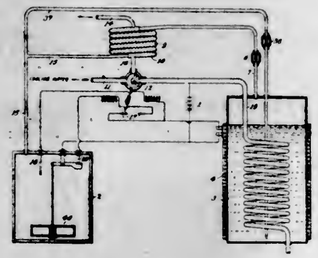
In a device of the character described the combination of a pair of sections detachably associated, each section

comprising a pair of longitudinally extending tubular members having apertures therein, the apertures being diametrically opposite, a pair of arms hingedly connected, the



free ends of the arms being reduced and adapted to engage in said opening to retain the tubular members in the same plane or to be folded, and a supporting means associated with said sections for a purpose specified.

1,277,085. REFRIGERATING-MACHINE. FREDERICK G. KEYES, Boston, Mass., assignor to National Automatic Refrigerator Company, a Corporation of New Jersey. Filed Apr. 25, 1917. Serial No. 164,354. (Cl. 62—118.)



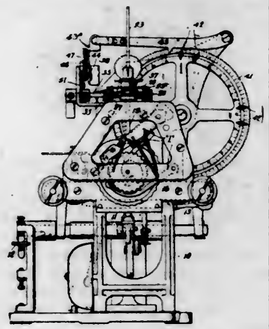
1. In a refrigerating apparatus of the kind herein described, the combination of a distilling chamber, a refrigerating chamber and an intermediate condenser in which the vapor when driven over from the distilling chamber is intended to be liquefied and delivered in liquid form to the refrigerating chamber, the refrigerating chamber having substantially all of its walls of poor heat conducting material to effect a delayed transfer through them of the heat imparted by the condensation that takes place thereon.

3. In a refrigerating apparatus of the kind herein described, the combination of a distilling chamber, a refrigerating chamber and an intermediate condenser connected with both chambers, substantially all of the walls of the refrigerating chamber being composed of Monel metal.

[Claim 2 not printed in the Gazette.]

1,277,086. ELIMINATION DEVICE FOR TIME-RECORDERS. CLINTON E. LARRABEE, Binghamton, N. Y., assignor to International Time Recording Company of New York, Endicott, N. Y., a Corporation of New York. Filed Aug. 21, 1916. Serial No. 115,980. (Cl. 234—41.)

2. In a time recorder, in combination with type wheels, driving devices therefor and a clock driven element, means for coupling and uncoupling the clock driven element and the driving devices, said means comprising a rotatable element moving in unison with the clock driven element and having a series of apertures therein, a clutch element rotatable in unison with the driven element, clutch pins carried thereby and adapted to engage the holes in the first mentioned rotatable element, to couple the driving device and the clock driven element together, a stationary plate having holes therein below the clutch element the said holes being adapted to receive the clutch pins and maintain the driving devices stationary when they are uncoupled from the clock driven element, and a



clutch shifting means operating at predetermined time intervals for shifting the said clutch element.

[Claims 1 and 3 not printed in the Gazette.]

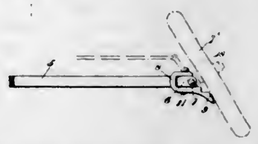
1,277,087. SPRING SUSPENSION. HOMER LAUGHLIN, Jr., and CHARLES A. F. DUCORRON, Los Angeles, Cal., assignors to Homer Laughlin Engineers Corporation, Los Angeles, Cal., a Corporation of California. Filed Sept. 24, 1917. Serial No. 192,943. (Cl. 267—27.)



2. A spring suspension construction, comprising two straight springs, means for connecting the central portions of the springs together, means for connecting the forward ends of the springs close together, and means for connecting the rear ends of the springs together wide apart, so that one spring is inclined relative to the other.

[Claim 1 not printed in the Gazette.]

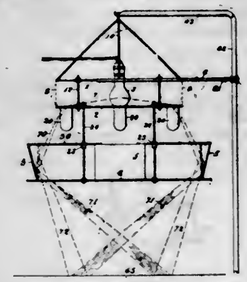
1,277,088. AUTOMOBILE-LOCK. FRANCIS J. LEEAK, Detroit, Mich. Filed Jan. 14, 1918. Serial No. 211,792. (Cl. 70—90.)



1. An automobile locking device comprising a U-shaped body member adapted to embrace the knuckle post journal arm of an axle, a stop member on one of the legs of said body member, and a locking pin adapted for securement to the legs of the body member and to extend between the knuckle post and the journal arm of the axle.

2. An automobile locking device comprising a U-shaped body member adapted to embrace a portion of the steering knuckle structure of an automobile, one of the legs of the body member being formed with a well opening at its outer side and with a socket opening at its inner side and communicating with the well on one side thereof, a lock mechanism in the well including a member extensible into the socket and a locking pin adapted for securement to the other leg of the body member and having one end engageable in the socket and provided with a groove for receiving the locking member.

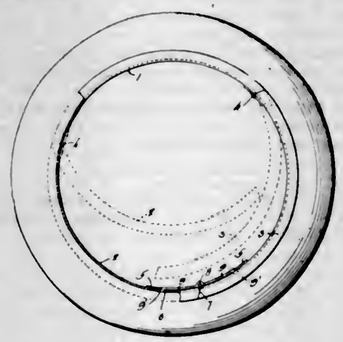
1,277,089. THERAPEUTIC LIGHT APPARATUS. CHARLES W. LITTLEFIELD, Seattle, Wash. Filed Feb. 28, 1918. Serial No. 218,672. (Cl. 240—1.)



1. A device for decomposing light and applying selected rays thereof, comprising a source of light, a plurality of light decomposing members grouped about said source of light, a reflector for each of said light decomposing members positioned to receive the decomposed rays, and means for adjusting the angular position of said reflectors to thereby concentrate selected rays of the decomposed rays upon a given area.

[Claims 2 and 8 not printed in the Gazette.]

1,277,090. COLLAPSIBLE AUTOMOBILE-RIM. EDWARD C. LUDWICK, Basin, Wyo., assignor of one-third to Chester E. Harris and one-third to Frank A. Wise, Basin, Wyo. Filed Mar. 19, 1918. Serial No. 223,448. (Cl. 152—21.)

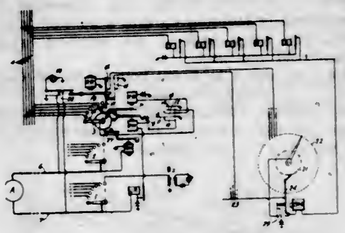


1. In a collapsible automobile rim, the combination of a plurality of hingedly connected sections, two of the sections having slots near their free ends, stops extending partially over the slots, and a detachable hinge having offset opposite ends shaped to engage in the slots to secure the rim to the tire.

[Claims 2 and 3 not printed in the Gazette.]

1,277,091. TELEPHONE-EXCHANGE SYSTEM. FRANK A. LUNDQUIST, New York, N. Y., assignor to The Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 2, 1916. Serial No. 134,576. (Cl. 179—18.)

1. In a telephone exchange system, telephone lines, a group of connecting circuits, means for extending a calling line to an idle connecting circuit, signaling means associated with said telephone lines, means for automatically connecting said signaling means to a calling subscriber's line when all of said circuits are busy, and means automatically operated as soon as one of said circuits becomes idle to inform said calling subscriber of such a fact.



2. In a telephone exchange system, the combination with telephone lines, connecting circuits and means for automatically extending a calling line to an idle connecting circuit, of a signaling circuit including said calling line, auxiliary automatic testing means operated if a predetermined number of said connecting circuits are busy, and means for automatically closing said signaling circuit when one of said busy connecting circuits becomes idle.

3. In a telephone exchange system, the combination with telephone lines, connecting circuits, means for automatically extending a calling line to an idle connecting circuit and means automatically operated if a predetermined number of the connecting circuits are busy for projecting signaling current of one character over the calling line, of a signaling circuit including said telephone line, and auxiliary automatic testing means constructed and arranged to close said signaling circuit when one of said connecting circuits becomes idle.

[Claims 4 to 7 not printed in the Gazette.]

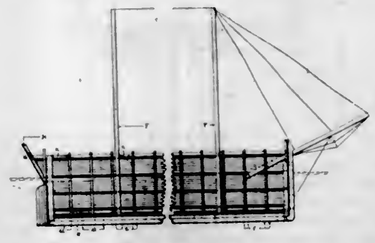
1,277,092. PROCESS OF PURIFYING PARAFFIN. ALMER M. MCAFEE, Port Arthur, Tex., assignor to Gulf Refining Company, Pittsburgh, Pa., a Corporation of Texas. Filed June 10, 1918. Serial No. 239,291. (Cl. 196—26.)

1. The process of purifying paraffin wax which comprises warming such wax with a metallic halid at a temperature sufficient to melt the wax but insufficient to cause production of any substantial amount of volatile bodies by the action of said metallic halid.

3. The process of purifying paraffin wax which comprises warming such wax with anhydrous aluminum chlorid at a temperature around 150° F.

[Claims 2 and 4 not printed in the Gazette.]

1,277,093. LUMBER-SHIP. DUNCAN D. MCBEAN, New York, N. Y. Filed June 27, 1917. Serial No. 177,208. (Cl. 9—15.)

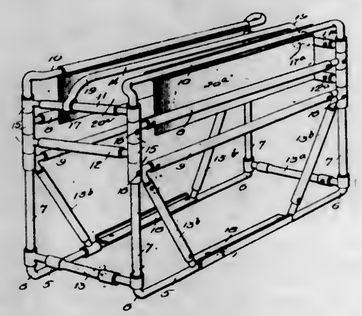


3. The method herein described of associating for the purpose of transportation by water a cargo of lumber and timber, which consists in assembling the cargo, associating on the water and securing together while floating a plurality of tiers or courses of timber, to form a bottom, erecting uprights along the side and central

lines of the bottom, applying side walls of planking to such uprights, tying together the structure by means of such uprights and longitudinal and transverse timber, while progressively building up into a substantially solid mass the entire cargo with all its members capable of being dissociated and used.

[Claims 1, 2, and 4 to 6 not printed in the Gazette.]

1,277,094. CRATE. WILLIAM W. MCCLAY and CLARENCE GILBERT MCCLAY, Chicago, Ill. Filed Mar. 8, 1918. Serial No. 221,177. (Cl. 220—133.)

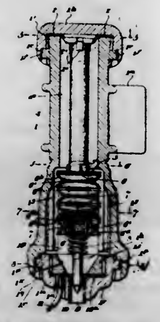


1. A crate composed of a pair of parallel and spaced bottom side bars, upstanding corner posts rising from the ends of said bars, end cross bars connecting the respective pairs of corner posts, the connection between said cross bars and the corner posts being a pivotal one, and said cross bars at one end being also detachable from the corresponding corner posts, and a longitudinal top bar connecting the top ones of the end cross bars and detachable therefrom.

4. A crate composed of a pair of parallel and spaced bottom side bars, upstanding corner posts rising from the ends of said bars, end cross bars connecting the respective pairs of corner posts, the connection between said cross bars and the corner posts being a pivotal one, and said cross bars at one end being also detachable from the corresponding corner posts, a longitudinal top cross bar connecting the top one of the end cross bars and detachable therefrom, and article-supporting means carried by the bottom side bars.

[Claims 2 and 3 not printed in the Gazette.]

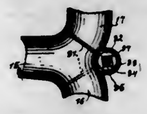
1,277,095. LIGHTNING-ARRESTER. JOHN ROBERT MCFARLIN, Philadelphia, Pa., assignor to Electric Service Supplies Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 26, 1916. Serial No. 127,798. (Cl. 175—30.)



2. In apparatus of the character described, a casing containing a chamber having a restricted outlet, in combination with means comprising conductors having between them an air gap in the path of a blast through said outlet, a plurality of conducting plates in said chamber, having air gaps between them, and resilient means for holding said plates in position.

[Claim 1 not printed in the Gazette.]

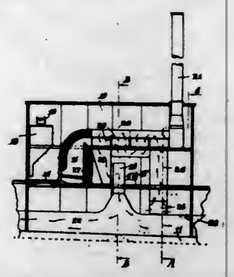
1,277,096. SOUND-REPRODUCING MACHINE. HUGH J. MCGREAL, Milwaukee, Wis., assignor of one-half to Michael S. Sheridan, Milwaukee, Wis. Filed Feb. 8, 1916. Serial No. 76,888. (Cl. 274—2.)



1. A sound reproducing machine, comprising a sound reproducing mechanism including a pivoted tone-arm having oppositely extending branches at one end, a pair of fixed amplifying horns separately connecting with each of said branches and having their discharge mouths distinct from each other, and means carried by said tone-arm intermediate the ends of the branches for varying the relative volume of sound passing through the branches and the respective amplifying horns.

2. A sound reproducing machine, comprising a casing, and a removable cover for the same, both said casing and cover being provided with a horizontal wall having a vertical opening therein, said openings being in alinement and the space between said horizontal walls forming a closed reproducing chamber, a sound reproducing mechanism in said chamber and including a tone-arm having an upwardly and a downwardly extending branch, the ends of the branches being free to rotate in said openings, a swivel mechanism for pivotally supporting said tone-arm on the horizontal wall of the casing, a valve carried by said tone-arm at the junction of its two branches for directing the sound through either one, or both branches, and an amplifying horn in the casing below its horizontal wall, and another horn in the cover above its horizontal wall, each of said horns connecting with one of said tubular branches.

1,277,097. THAWING APPARATUS. JAMES H. MACLAUCHLAN, New York, N. Y. Filed Sept. 11, 1916. Serial No. 119,369. (Cl. 34—16.)

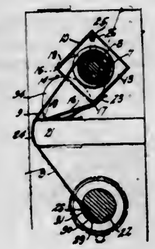


1. In a thawing apparatus of the character described, the combination of a thawing shed, a hot air supply duct extending therethrough, a furnace, an air heater comprising alternately arranged vertical air flues and horizontal smoke flues adapted to be heated by smoke and combustion gases from said furnace, and means for circulating air between said heater and said duct.

2. In a thawing apparatus of the character described, the combination of a thawing shed, a hot air supply duct extending therein, a blower in communication with said duct, a heater in superposed relation to said blower, said heater having alternating vertical air flues and horizontal smoke flues, an air uptake at one side of said blower establishing communication between said duct and one end of said heater, an air downtake at the other side of said blower establishing communication between the inlet side of said blower and the opposite end of said heater, and a furnace adjacent one end of said heater and in position to have the smoke and gases from said furnace pass through said heater.

[Claims 3 and 4 not printed in the Gazette.]

1,277,098. MUSIC-ROLL PACKAGE. PHILIP S. MCLEAN, Bloomfield, N. J. Filed Nov. 27, 1917. Serial No. 204,201. (Cl. 84—162.)



1. In combination, a perforated sheet music roll including a spool and a record strip wound thereon, a box incasing said roll having ends freely journaled on the spool so as to permit of said spool rotating freely and unrestrictedly within the box, said box having an opening in one side thereof for the passage of the record strip and a cover for said opening hinged to the body of the box and adapted when opened to serve as a stop for holding the box against rotation as the roll rotates within the box.

4. A box for perforated sheet music rolls having an opening in one side thereof for the passage of the record strip, a record strip spool journaled in said box with its ends exposed for engagement with an automatic player instrument, and box supporting means for taking the weight of the box off the spool when the device is in position in an automatic player.

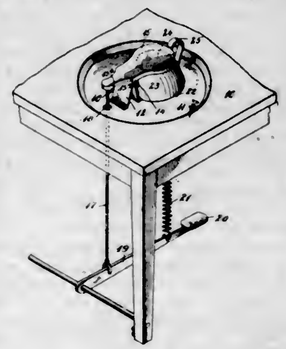
8. In combination wtih a box for inclosing a perforated sheet music roll provided with openings in the ends thereof, a roll in said box including a spool having the ends therof exposed by the openings in the ends of the box for engagement with the roll feeding mechanism of an automatic player, a clip engageable over the tracker bar of an automatic player, and a stop carried by said clip for engagement with the box.

10. In combination with a box for inclosing a perforated sheet music roll, provided with openings in the ends thereof, a roll in said box including a spool having the ends thereof exposed by the openings in the ends of the box for engagement with the roll feeding mechanism of an automatic player, and spring means for yieldingly supporting the box when the device is in position in an automatic player.

18. The combination with a music roll spool having annular end flanges and substantially cylindrical hub extensions projecting endwise beyond said flanges and socketed to fit the supporting spindles of an automatic player and a perforated record sheet confined on said spool between the end flanges, of a box of relatively light material incasing said spool having end portions covering the end flanges of the spool and provided with openings therein freely receiving the cylindrical hub extensions of the end flanges whereby said spool will rotate freely within the box and the box will be lightly supported upon the spool when said spool is engaged with the supporting spindles of a player, means for holding the box against rotation while the spool is rotating therein, and said box having a longitudinal opening for the passage of the record strip.

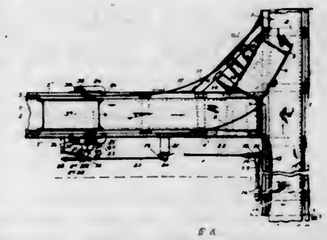
[Claims 2, 3, 5 to 7, 9, and 11 to 17 not printed in the Gazette.]

1,277,099. RECEPTACLE. WILLIAM H. MCNUTT, New York, N. Y. Filed Oct. 8, 1915. Serial No. 54,709. (Cl. 220—115.)



In a device of the character specified, the combination of a supporting plate, a container adapted to be frictionally held on said plate, a pivot-support comprising legs converging upwardly from said support and having horizontal supporting flanges at their lower ends and an annular bearing above their point of convergence, a lid comprising an enlarged portion adapted to rest on said receptacle, an intermediate portion and a rear contracted portion, depending perforated lugs at the intermediate portion of the lid and adapted to register with said bearing, a pivot pin freely insertible in and withdrawable from said lugs and bearing, and a treadle connection to the rear contracted portion of the lid.

1,277,100. SAFETY DEVICE FOR TRAY-CONVEYERS AND THE LIKE. WILLARD ADNA MARCY, Newton Upper Falls, Mass., assignor to The Lamson Company, Boston, Mass., a Corporation of New Jersey. Filed June 11, 1915. Serial No. 33,474. (Cl. 193—24.)



1. In combination, conveying apparatus comprising a main line and a branch line leading thereinto, continuously moving means for conveying articles along said lines, article moving parts of said means traveling along with said articles, means for emplacing an article *en route* along said branch line, upon said main line, and mechanism operable by articles traveling along said main line, for resisting the action of the branch line article-moving parts upon any article *en route* along said branch line which would collide with said articles traveling along said main line were said article on the branch line free to continue its advance toward and be delivered to said

main line, said mechanism having means to invariably give the articles traveling along the main line the right of way over any article traveling along the branch line, the latter, alone, being held as aforesaid.

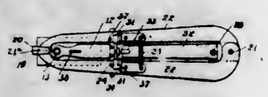
5. In combination, a conveyer, trays adapted to be conveyed by said conveyer, a pair of oppositely movable jaws adapted for movement into and out of the path of a tray when the latter is being conveyed by said conveyer, a second tray conveyer disposed at an angle to that first mentioned, means to effect the delivery of a tray from said first mentioned conveyer to said second mentioned conveyer, and means, controlled by a tray traveling along said second mentioned conveyer, for causing said jaws to occupy their operative position in the path of a tray traveling along said first mentioned conveyer.

9. In conveying apparatus, the combination of two belt conveyers disposed substantially at an angle to each other, a roller disposed in the angle between said conveyers, the axis of rotation of said roller lying in the plane of said angle obliquely between the respective sides of said angle, a deflector extending resistingly over but one of said conveyers, a tray adapted to be carried by the belts of said conveyers, said deflector adapted to deflect said tray onto said roller as said tray is about to be delivered from one of said conveyers to the other, said tray being of sufficient length to permit each said conveyers to simultaneously engage opposite ends of the tray, whereby the latter when emplaced upon said roller is thrust forwardly thereover by one of the belts and is pulled along over said roller by the other of said belts.

10. In tray conveying apparatus, the combination of a main belt conveyer and a branch belt conveyer disposed at an angle to each other, the main conveyer being prolonged past the adjacent end of the branch conveyer to carry trays past said end, a roller disposed in the angle between said conveyers, the axis of rotation of said roller lying in the plane of said angle obliquely between the respective sides of said angle, a deflector extending only over the branch conveyer to leave the course of the main line conveyer clear, a tray adapted to be carried by the belts of said conveyers, said deflectors adapted to deflect said tray onto said roller as said tray is about to be delivered from the branch conveyer to the main conveyer, said tray being of sufficient length to permit each of said conveyers to simultaneously engage opposite ends of the tray, whereby the latter when emplaced upon said roller is thrust forwardly thereover by the belt of the branch conveyer and is pulled along over said roller by the belt of the main conveyer.

[Claims 2 to 4, 6 to 8, and 11 not printed in the Gazette.]

1,277,101. ATTACHMENT FOR SEWING-MACHINES. HARRY MENDELSOHN, New York, N. Y. Filed Nov. 3, 1916. Serial No. 129,323. (Cl. 270—90.)

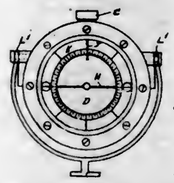


1. In a device of the character described, the combination of a presser foot, a gage plate below the forward end thereof, a gage removably attached to said gage plate in advance of the presser foot, a pair of pivotally supported tucking arms having their forward ends converging at opposite sides of said gage plate, upwardly projecting arms carried by said tucking arms, and a wedge projecting upwardly from said presser foot between said last named arms whereby the upward movement of said presser foot will separate said tucking arms.

2. In a device of the character described, the combination of a presser foot, a gage plate under the forward end thereof, a gage removably secured to said gage plate in advance of said presser foot, a pair of tucking arms having their forward ends converging at opposite sides of said gage and their rear ends pivoted, upwardly projecting arms carried by said tucking arms, pendent arms having rollers at the ends thereof, a wedge projecting upwardly from said presser foot between the ends of said pendent arms, and rollers on said upwardly projecting arms in engagement with the rollers on the pendent arms whereby upward movement of the presser foot will cause separation of the converging ends of said tucker arms.

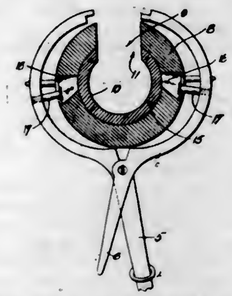
3. A sewing machine attachment, comprising a presser foot, a gage in advance of said presser foot, movable tucking arms at opposite sides of said presser foot and having ends converging at opposite sides of said gage, and a perforated yoke supported by said presser foot adjacent said tucking arms, there being perforations in said tucking arms whereby means may be passed through the perforations in either of said tucking arms and said yoke to hold either of said tucking arms out of engagement with said gage.

1,277,102. CLINOMETER. ARCHIBALD R. MILLER, Helensburgh, Scotland. Filed Dec. 27, 1917. Serial No. 209,067. (Cl. 33—206.)



The herein described clinometer comprising, in combination, a box containing liquid, a buoyant hermetically sealed compartment of the form of a segment of a cylinder mounted upon and free to rotate within said box on an axis coincident with that of said cylinder, said compartment being completely submerged in liquid contained within said box, said compartment and said box provided with coöperating indicating devices, and means for protecting said compartment from surface action of the liquid.

1,277,103. WRENCH. DAVID C. MILLER, Tulsa, Okla. Filed July 12, 1917. Serial No. 180,188. (Cl. 81—119.)



1. A wrench of the character described comprising a pair of pivoted frame jaws, and a pair of ring sections, one section embracing the other, each section being adapted for independent circumferential movement, and means for pivotally mounting the said sections of the frame jaws.

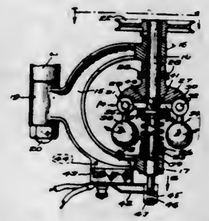
3. A wrench of the character described, comprising a pair of jaws pivotally connected together and adapted to form a closed circular space when in closed position, a retaining ring embraced by the jaws and pivotally connected thereto to permit opening and closing of the jaws while the ring is retained between the same.

7. A wrench of the character described comprising a pair of rings each having a portion removed to provide open spaces adapted to be alined for establishing communication between the exterior of the outer ring and the interior of the inner ring, and means pivotally supporting the said outer ring and adapted for movement to open and close the space in the outer ring.

9. A wrench of the character described comprising a pair of rings, one mounted within the other, each of the rings having an open space, the said spaces being adapted for alinement when the rings are moved to a predetermined position, the outermost ring having diametrically opposite cavities, frame jaws pivotally connected together, and pins carried by the said jaws and extended into the said cavities for pivotally supporting the rings and permitting relative swinging movement of the jaws toward and away from the rings.

[Claims 2, 4 to 6, and 8 not printed in the Gazette.]

1,277,104. MOTOR-CONTROLLED SWITCH FOR HEADLIGHTS OF AUTOMOBILES. SETH MULVANEY and EBMO LOUIS BORNER, Inglewood, Cal., assignors to Evelyn Mulvaney, Inglewood, Cal. Filed Aug. 14, 1916. Serial No. 114,765. (Cl. 171—312.)



1. The combination with an engine and a dynamo driven thereby, a pair of headlights electrically connected to said dynamo, a signal light adapted to be electrically connected to said dynamo, all of said lights being connected in parallel, and one of said headlights being constantly connected and the other of said headlights and said signal light being normally disconnected, means directly controlled by the speed of the engine whereby the normally disconnected headlight will be illuminated throughout a given range of engine speed, and means whereby both the headlights and the signal lights will be illuminated when an excessive predetermined engine speed has been reached.

2. The combination with an engine adapted to run at a variable speed and having a dynamo connected therewith, electric conductors connected in parallel with said dynamo and a plurality of lamps, each connected to one of said conductors, and an engine operated governor, a governor operated switch adapted to successively close the circuits of the lamps as the speed of the engine increases and hold them in their closed positions, and to successively open the circuits of said lamps as the speed of the engine decreases.

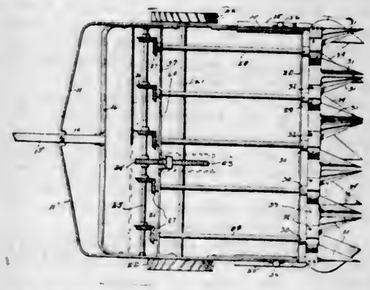
3. The combination with an automobile engine, a dynamo connected therewith, an ignition circuit and a plurality of lamp circuits connected to said dynamo, all of said circuits being connected in parallel, an engine operated governor, a governor operated switch adapted to control all but one of said lamp circuits, said switch being adapted to successively close the circuits of the switch controlled lamps as the speed of the engine increases, and hold them in their closed positions, and to successively open the circuits of said switch controlled lamps as the speed of the engine decreases.

6. In an electric system for an automobile engine, a generator, an ignition circuit connected to the generator, a constant light circuit connected to the generator, a second light circuit normally disconnected from the generator, a third light circuit normally disconnected from the generator, and a governor adapted to be operated from the engine and adapted to leave the electric circuits in their normal condition until the engine exceeds a given speed and then cut in the second light circuit to maintain the two lights until the engine exceeds a second given speed and then cut in the third light; so that the electric energy produced at a low speed is cut out from flowing through the second and third lights, thereby strengthening the ignition circuit, and so that as the speed increases a consumption of energy by the lights is increased and divided so as to prevent overload of the first light.

7. In an electric system for an automobile engine, an electric generator, an ignition circuit including said generator, a constant light circuit including the generator, a second light circuit in parallel with the constant light circuit and normally disconnected from the generator, a signal circuit in parallel with said constant and second circuits and normally disconnected from the generator, a governor driven from the automobile engine by which the generator is driven, and a double contact switch actuated by the governor as it accelerates to successively establish the second-named light circuit and the signal light circuit whereby they will be held in their closed conditions and will be successively broken as the speed of the governor decreases.

[Claims 4 and 5 not printed in the Gazette.]

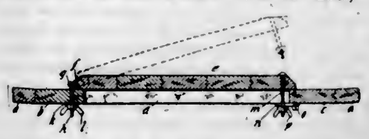
1,277,105. GRASS-CUTTER. FRANK NIMCHEK, Benbush, W. Va. Filed Jan. 29, 1918. Serial No. 214,363. (Cl. 56—19.)



1. In a device of the kind described, a frame, a fixed cutter bar extending transversely of said frame, ground wheels supporting said frame, a shaft operatively connected to the ground wheels, a series of shafts extending longitudinally of the frames, gears connecting the first shaft with the series of shafts, and rotary knives carried by the forward ends of the series of shafts and coöperating with the cutter bar.

2. In a device of the kind described, a frame, a fixed cutter bar extending transversely of said frame, ground wheels supporting said frame, a shaft operatively connected to the ground wheels, a series of shafts extending longitudinally of the frames, gears connecting the first shaft with the series of shafts, hubs on the forward ends of said series of shafts, means to detachably connect the hubs to their shafts, a plurality of knife blades extending forward from each hub, and means to detachably attach the blades to the respective hubs.

1,277,106. CLAMPING DOOR-HINGE. HENRY NORTH, Portland, Oreg., assignor to National Tank & Pipe Co., Portland, Oreg., a Corporation of Oregon. Filed Sept. 22, 1916. Serial No. 121,681. (Cl. 16—106.)



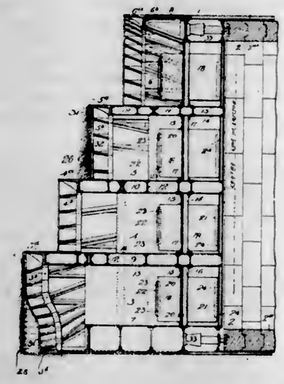
1. In a silo having a door on the interior of its opening, the combination of a hinge for one side of the door comprising a bolt and a hinge-strap journaled on such bolt, the hinge-strap being fastened to the door, the

bolt bearing in a hole of the door-casing and projecting a substantial distance beyond the exterior of the latter, and tightening means on such projecting end, the bolt being of such length as to permit the movement of the hinge-side of the door from its casing, the hinging of the door to its casing being so arranged that the opposed bearing faces of the door and its casing will prevent the former from being swung on its hinge until the bolt of the hinge is loosened so as to permit the inward movement of the door.

2. In a silo having a door on the interior of its opening, the combination of a hinge for one side of the door comprising a screw-bolt and a hinge-strap journaled on such bolt, the hinge-strap being fastened to the door, the bolt bearing in a hole of the door-casing and projecting a substantial distance beyond the exterior of the latter, and a nut on such projecting end, the bolt being of such length as to permit the movement of the hinge-side of the door from its casing, the hinging of the door to its casing being so arranged that the opposed bearing faces of the door and its casing will prevent the former from being swung on its hinge until the bolt of the hinge is loosened so as to permit the inward movement of the door.

3. In a silo having a door on the interior of its opening, the combination of a hinge for one side of the door comprising a screw-bolt having a T-shaped head and a hinge-strap journaled on such head-end, the hinge-strap being fastened to the door, the bolt bearing in a hole of the door casing and projecting a substantial distance beyond the exterior of the latter, and a nut on such projecting end, the bolt being of such length as to permit the movement of the hinge-side of the door from its casing, the hinging of the door to its casing being so arranged that the opposed bearing faces of the door and its casing will prevent the former from being swung on its hinge until the bolt of the hinge is loosened so as to permit the inward movement of the door.

1,277,107. TUNNELING. JOHN F. O'ROURKE, New York, N. Y. Filed Feb. 1, 1918. Serial No. 214,877. (Cl. 61—45.)



1. The method of constructing a shield driven tunnel consisting in excavating the ground at the front of a shield in separate chambers on different levels and producing faces of the excavations in stepped relation in front of the several chambers, advancing the shield toward such faces, and erecting a lining within the tail of the shield after such advances.

9. A shield for tunneling having unitary chambers in its forward part extending beyond one another in horizontal stepped relation, jacks in tiers and upright supports therefor at the forward end of each chamber whereby the jacks in each chamber may hold sheeting at the face of the excavation in each chamber.

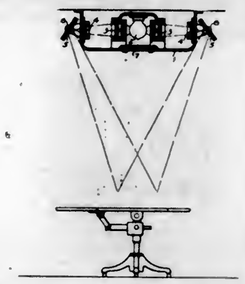
[Claims 2 to 8 and 10 not printed in the Gazette.]

1,277,108. BRAKE-LINING AND METHOD FOR PREPARING THE SAME. WILLIAM D. PARDON, Trenton, N. J., assignor to Thermoid Rubber Company, Hamilton township, Trenton, N. J., a Corporation of New Jersey. Filed Mar. 16, 1917. Serial No. 155,330. (Cl. 91—68.)

2. The method of making a brake lining which consists in passing a body of fabric through a solution containing asphalt; an oxid of lead, sulfur, and an oxidation accelerator; and thereafter subjecting said fabric to a relatively high pressure and temperature to vulcanize the material with which it is impregnated.

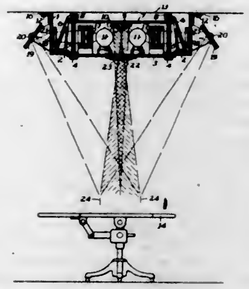
[Claims 1 and 3 to 12 not printed in the Gazette.]

1,277,109. OPERATING-TABLE ILLUMINATOR. WILLIAM L. PATTERSON, Rochester, N. Y., assignor to Bausch & Lomb Optical Company, Rochester, N. Y., a Corporation of New York. Filed Apr. 5, 1917. Serial No. 159,848. (Cl. 240—3.)



In an illuminator, the combination with a dust and fluid tight casing having a lower wall and a connected marginal wall, of a light source mounted within said casing, a plurality of projecting lens systems arranged within the casing around the light source, each lens system being in position to project a beam of light radially outward, and a plurality of reflectors arranged outside the casing and adapted to reflect all of the beams of light emitted by the projecting lens systems on to a common area to be illuminated; said lower wall of the casing having an opening normally closed by translucent material and located under the light source and through which opening access may be had to the light bulb and through which translucent material a beam of light emitted directly from the light source may pass to assist in illuminating the area adjacent the field upon which the projected light beams are centered.

1,277,110. OPERATING-TABLE ILLUMINATOR. WILLIAM L. PATTERSON, Rochester, N. Y., assignor to Bausch & Lomb Optical Company, Rochester, N. Y., a Corporation of New York. Filed Apr. 16, 1917. Serial No. 162,285. (Cl. 240—3.)

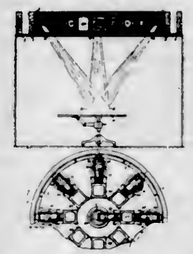


1. In an illuminator, the combination with a plurality of light sources grouped around a central area, light collecting and projecting means for each light source arranged outside of the latter, a corresponding plurality of light deflecting elements arranged outside of the light projecting means and in the path of the light beam from each light projecting means and bending said light beams convergently and merging them together upon a common area to be illuminated, and means arranged at said central area bending the light beams directed inward and upward from all the light sources and deflecting them upon the common illuminated area.

3. In an illuminator, the combination with a plurality of light sources grouped around a central area, of a projecting lens system arranged outside of each light source, said lenses projecting their collected light rays radially in divergent beams, reflectors placed in the several paths of light and deflecting said divergent beams upon a common field, and a reflector arranged in said central area and deflecting light rays therein from the several light sources divergently over the illuminated area.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,277,111. OPERATING-TABLE ILLUMINATOR. WILLIAM L. PATTERSON, Rochester, N. Y., assignor to Bausch & Lomb Optical Company, Rochester, N. Y., a Corporation of New York. Filed Apr. 18, 1917. Serial No. 162,985. (Cl. 240—3.)



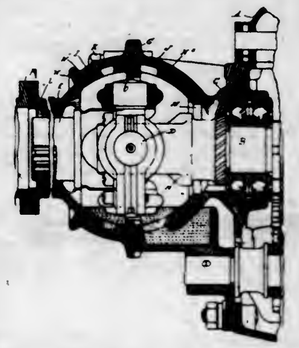
1. An illuminator comprising a casing having transparent wall portions, and a plurality of grouped unitary optical projectors each including a coacting light source, projecting lens and reflector; all of the unitary projectors being positioned within the casing to have the light rays from the individual reflectors of the several projectors convergently pass through opposed transparent wall portions of the casing and fall upon a common area to be illuminated.

4. An illuminator comprising a casing having a plurality of outer transparent wall portions and a central transparent wall portion, and a plurality of unitary optical projectors grouped within the casing, each projector including a coacting light source and an outer condenser, objective and reflector, one or more of the unitary projectors also having an inner condenser, objective and reflector, whereby the diverging light beams from the outer reflectors of all the projectors are deflected convergently through the respective outer transparent wall portions of the casing upon a common area to be illuminated, and the diverging light beams from the inner projector reflector, are deflected through the central transparent wall portion of the casing upon the same illuminated area.

[Claims 2 and 3 not printed in the Gazette.]

1,277,112. PROPELLER DRIVE MECHANISM FOR MOTOR-VEHICLES. LAFE V. PENCE, Flint, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Sept. 1, 1917. Serial No. 189,281. (Cl. 74—103.)

1. The combination with a rotary transmission-shaft and a universal joint therein, of a tubular housing surrounding said transmission-shaft, and a hollow universal joint surrounding the universal joint in said rotary transmission comprising a female member formed in two sections clamped to each other and a male member also formed in two sections arranged concentrically within said female member and assembled about the inner universal joint from opposite sides thereof.

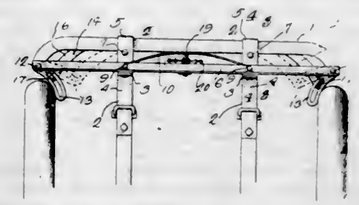


2. The combination with a rotary transmission-shaft and a universal joint therein, of a housing for said shaft forming a thrust connection to the axle, and a hollow universal joint for connecting said housing to the vehicle frame arranged concentric with the inner joint, said outer joint comprising a two-section male member assembled around said inner joint from opposite ends thereof, the sections abutting in the plane of the center of the joint, and a female member formed in two sections clamped to each other.

5. The combination with a rotary transmission-shaft of a universal joint in said shaft having an enlarged central portion and oppositely-extending shank portions, a hollow propeller shaft surrounding said rotary transmission and a hollow universal joint for connecting said propeller shaft to a fixed portion on the vehicle frame, said hollow joint comprising a male member formed of two centrally-abutting sections surrounding the inner joint and apertured for engaging the shank portions thereof, and a female member formed in two segmental spherical segments embracing said male member and clamped to each other.

[Claims 3 and 4 not printed in the Gazette.]

1,277,113. AUTOMOBILE-LOCK. CARL PETERSEN, San Francisco, Cal. Filed May 29, 1918. Serial No. 237,263. (Cl. 70—90.)



1. In combination with an automobile bumper, wheel engaging means mounted on the bumper and movable into and out of engagement with the wheels of the automobile, rack bars slidably mounted on the bumper and each having one end connected to one of the wheel engaging means, and means for actuating the rack bars in opposite directions.

2. In combination with an automobile bumper, locking arms pivotally mounted on the end of the bumper, rack bars slidably mounted on the bumper and each rack bar being connected to one of the said locking arms, a gear

engageable with the rack bars to simultaneously move them in opposite directions, and means for rotating the gear.

3. In combination with an automobile bumper, wheel engaging means mounted on the bumper and adapted for movement into and out of engagement with the wheels, rack bars slidably mounted on the bumper and engageable with the wheel engaging means to move the latter, and means for locking the rack bars against movement.

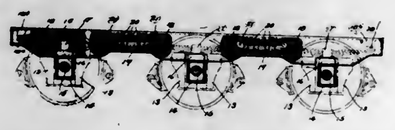
[Claims 4 to 6 not printed in the Gazette.]

1,277,114. CAR-TRUCK. HARRY M. PFLAGER, St. Louis, Mo., assignor to Commonwealth Steel Company, St. Louis, Mo., a Corporation of New Jersey. Filed July 6, 1917. Serial No. 179,038. (Cl. 105—244.)



The combination with a car truck frame and its journal boxes, said truck frame being provided with a substantially hollow wheel piece, the lower portion of which is cut away for the reception of the journal boxes, of rigid equalizing members bearing upon the journal boxes, rigid equalizing members bearing upon the truck frame at points between the journal boxes, coil springs arranged between the ends of the two sets of equalizing members, and coil springs arranged between the truck frame and the outer ends of the outer pair of equalizing members, all of which equalizing members and springs are disposed substantially within the wheel piece of the truck frame.

1,277,115. CAR-TRUCK. HARRY M. PFLAGER, St. Louis, Mo., assignor to Commonwealth Steel Company, St. Louis, Mo., a Corporation of New Jersey. Filed July 6, 1917. Serial No. 179,039. (Cl. 105—244.)



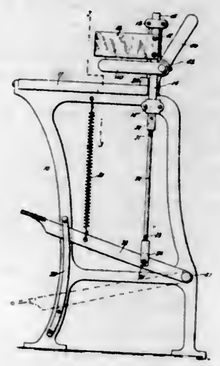
1. A flexible support for railway car trucks comprising resilient members balanced upon the journal boxes associated with the truck frame, rigid equalizing members arranged between and supported by said resilient members, which rigid equalizing members are channel-shape, and a plurality of springs arranged between each equalizing member and the truck frame.

2. The combination with a car truck frame and its journal boxes, of springs supported by the journal boxes, rigid equalizing members disposed between said springs, the central portion of the body of each rigid equalizing member being substantially U-shape in cross section and the end portions of said member being of inverted U-shape in cross section to form housings for the ends of the springs, and a plurality of coil springs interposed between each rigid equalizing member and the truck frame.

3. The combination with a car truck frame and its journal boxes, of springs supported by the journal boxes, equalizing members disposed between said springs, the ends of which equalizing members are of inverted U-shape in cross section so as to form housings for the end portions of said springs, and a plurality of springs interposed between said each equalizing member and the truck frame, all of which parts are located within the substantially hollow wheel piece of the truck frame.

[Claims 4 to 7 not printed in the Gazette.]

1,277,116. ICE-CREAM CUTTER. CHARLES ELMER PHENICIE, Tacoma, Wash. Filed Mar. 2, 1918. Serial No. 219,987. (Cl. 107—21.)



1. An ice cream cutter, comprising a table adapted to support a block of ice cream, a knife mounted to move up and down above the table to cut the block into bricks or the latter into slices, a fixed gage spaced from the said knife a distance corresponding to the length of the ice cream brick, and a second gage adapted to be moved into active position intermediate the knife and the first-named gage to permit of cutting an ice cream brick into slices and adapted to be moved into inactive position when the ice cream block is being cut into bricks.

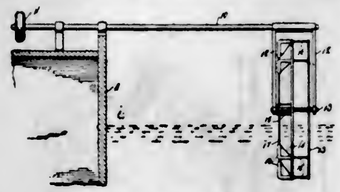
3. An ice cream cutter, comprising a table, a post erected on the back of the table and provided with bearings, a transverse knife extending above the top of the table and provided with bearings, a transverse knife extending above the top of the table and provided with a bar mounted to slide up and down in the said bearings, an adjustable treadle mechanism connected with the said bar to move the knife up and down, the said knife when in lowermost position having its cutting edge immediately above the top of the table, a longitudinally extending rod attached to the said post, a transverse gage fixed on the said rod and extending above the table a distance from the said knife corresponding to the length of the ice cream brick to be cut by the said knife from a block of ice cream supported on the table and abutting with one end against the said gage, a second transverse gage mounted to swing on the said rod intermediate the said knife and the said first-named gage, and a forked adjusting member adjustably secured on the said rod and having its members engaging the sides of the said second gage to hold the latter against longitudinal movement after the said adjusting member is fastened in the adjusted position, the end of the ice cream brick being adapted to abut against the said second gage to permit of cutting the said brick into slices.

5. In an ice cream cutter, a table, a reciprocating cutter disposed above the table near one end thereof, a longitudinally extending rod at the rear of the table, a stationary gage on the rod, a sleeve having spaced members and adjustably mounted on the rod, and a second gage mounted on the rod between the members of the sleeve and provided with a lug adapted to engage the underside of the sleeve to hold the gage in horizontal position between the knife and first gage.

[Claims 2 and 4 not printed in the Gazette.]

1,277,117. TORPEDO-GUARD. ODYSSEUS PILALIS, Pittsburgh, Pa. Filed Dec. 13, 1917. Serial No. 206,953. (Cl. 114—240.)

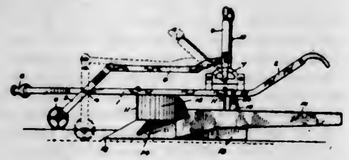
2. Means for protecting ships from torpedo attack, comprising a shaft mounted on the ship and extending outwardly, therefrom, a pair of arms secured to the outer end of the shaft and extending radially therefrom, an axle connecting the outer ends of the arms, and a rotary guard mounted on the axle and adapted to be raised or lowered bodily by rotating the said shaft.



4. A torpedo guard, comprising a hub, spokes, radiating from the hub and having their outer ends bent laterally, a netting supported by the spokes, and paddles attached to the spokes and the bent ends thereof and extending across the angles formed between them.

[Claims 1, 3, and 5 not printed in the Gazette.]

1,277,118. DITCH-PLOW. EVANGÉLISTE QUENNEVILLE, Ste. Thérèse De Blainville, Quebec, Canada. Filed Apr. 28, 1917, Serial No. 165,301. Renewed July 24, 1918. Serial No. 246,461. (Cl. 97—12.)



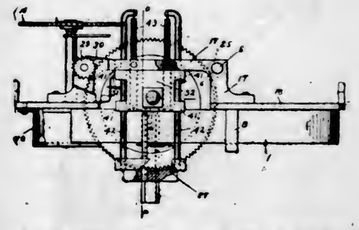
2. In a ditching plow, the combination; with a beam; of a longitudinal bar disposed directly below and parallel with the beam and having its forward end beleved to form the point of the plow; vertical rods connecting said beam and said bar and suspending the latter from the former; means carried by said bar for depositing the plowed-up earth at opposite sides of the ditch being dug; a vertical member connecting the rear portions of said beam and bar and formed along one edge with a guide rib; a pair of vertically-adjustable, forwardly-converging wings extending to opposite sides of said bar and located in rear of said depositing means so as to sweep over and spread out the earth deposited thereby at the sides of the ditch and preventing it from banking up; and a cross-bar connecting the rear portions of said wings and provided with a pair of spaced lugs; the front ends of said wings being slidably engaged at opposite sides of said guide rib, whereby the wings are enabled to automatically rise bodily and pass over obstructions in their path.

[Claim 1 not printed in the Gazette.]

1,277,119. APPARATUS FOR PRINTING OR MARKING. JOHN T. QUIGLEY, Boston, Mass., assignor, by mesne assignments, to Costmeter Company, Boston, Mass., a Corporation of Massachusetts. Filed Mar. 16, 1914. Serial No. 824,934. (Cl. 101—1.)

3. A printing mechanism having means for holding a continuous impression sheet, means for holding an inking vehicle against the same, a printing member with a printing character or characters thereon having printing relations to said vehicle and sheet, means for causing the progressive traveling movement of said continuous impression sheet, a movable pressure member having a path of movement transverse the movement of said impression sheet and across the printing member, and means to move the pressure member reciprocatively to force successive portions of the sheet and inking vehicle toward the printing member on both the forward and backward movements.

5. A printing mechanism having means for holding an impression sheet, an inking fabric, an annular holder for the same, a printing member held in printing relation to the fabric and sheet, a presser adapted to be moved to apply traveling pressure to the impression sheet, and means actuated by the movement of the presser for turning said fabric holder to bring a fresh surface into printing relation.

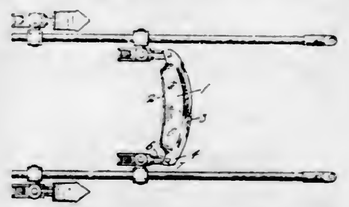


9. A printing mechanism having means for holding an impression sheet, means for holding an inking vehicle against the same, a printing member with a printing character or characters thereon held in printing relation to said vehicle and sheet, a presser adapted to be moved to traverse the printing member, sheet and vehicle, a marker, and means actuated by said presser for pressing the marker against the sheet.

14. A printing mechanism having means for holding an impression sheet, a printing member, a printing character or characters thereon, an inking vehicle held in printing relation to said sheet and member and comprising an ink-carrying fabric, an annular holder for the same having gear teeth cut in its periphery, a presser guided to traverse the printing member, sheet and vehicle, means for moving said presser to apply a traveling pressure to the impression sheet, and means for turning the fabric holder comprising a pinion meshing with the gear teeth on the holder, a ratchet connected to the pinion, a pawl for turning the ratchet, and means actuated by the presser-moving means for actuating said pawl.

[Claims 1, 2, 4, 6 to 8, and 10 to 13 not printed in the Gazette.]

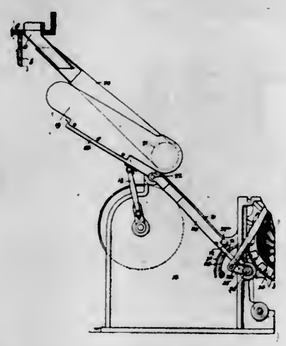
1,277,120. PEANUT-DIGGING ATTACHMENT. JOHN T. RAINER, Grapeland, Tex. Filed Apr. 30, 1918. Serial No. 231,694. (Cl. 55—9.)



1. A peanut digger comprising a longitudinal bar curved in two directions and having an arcuate cutting edge, and ears at each end of the bar bent sharply from the same and disposed at a greater inclination than the bar, said ears having provision for attaching to an agricultural implement.

2. The combination with transverse alined feet of an agricultural implement traveling on opposite sides of the row, of a peanut digging bar curved longitudinally and extending between the feet of the agricultural implement, said bar having ears at each end disposed at a greater inclination than its body and resting on the feet of the implement, and heel bolts fastening the ears in place, the said bar being curved downward toward its center from each ear and having a forwardly projecting cutting edge, the rear edge of the bar being higher than the cutting edge.

1,277,121. TABLET-ASSEMBLING DEVICE. JOSEPH PERCY REMINGTON, Philadelphia, Pa. Original application filed Apr. 1, 1913, Serial No. 758,237. Divided and this application filed Jan. 22, 1915. Serial No. 3,805. (Cl. 107—45.)



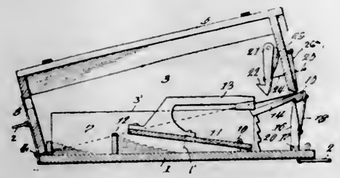
1. Tablet assembling mechanism including a pivotally mounted container having a side opening adjacent its pivot; a receiving conduit connected to said opening; a series of partitions in the container forming tablet collecting channels; means for receiving the tablets from said channels; and means for oscillating the container on its pivot.

2. Tablet assembling mechanism including an oscillatory container having a portion of its bottom cut away and provided with a supplementary tablet receiving extension under said bottom; a series of substantially parallel partitons in said extension placed to receive tablets from the body of the container; and a condensing trough placed to receive tablets collecting in the channels formed by the partitions; with means for alternately moving the container into and out of a position in which tablets pass from it into said condensing trough.

7. Tablet assembling mechanism including a feed chute; an oscillatory container; a conduit connected to deliver to the container in the general line of the axis of oscillation of the latter and having sliding engagement with said chute; and means in the container for arranging the tablets in lines when said container is moved.

[Claims 3 to 6 not printed in the Gazette.]

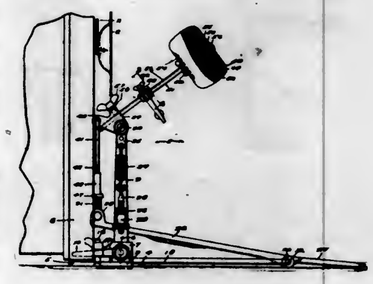
1,277,122. ANIMAL-TRAP. CLAUDE A. RENNER, Perkasie, Pa. Filed Feb. 9, 1918. Serial No. 216,370. (Cl. 43—19.)



1. In a cage trap, the combination with a base, a box-like body hinged at its rear end thereto, a bait-compartment within the base, and a platform pivoted to this base forward of said compartment and having an overlying finger; of an upstanding fulcrum bar hinged on the base near its front end, and a trigger having a notch near its front end on the underside to engage the tip of said bar when its rear end underlies said finger for supporting said body as described.

[Claims 2 to 4 not printed in the Gazette.]

1,277,123. FOOT-OPERATED BEATER FOR DRUMS AND CYMBALS. ARTHUR W. RICHES, Los Angeles, Cal. Filed July 26, 1917. Serial No. 182,992. (Cl. 84—10.)



1. A base, a post extending upwardly from the base, a rocker-arm pivotally connected to the post, a pedal, an adjustable yielding connection between the free end of the pedal and the free end of the rocker-arm, a ledge extending from the base in position to limit the down stroke of the pedal, and a beater carried by the rocker-arm.

3. A drum beater comprising a stem, a compression plate upon the stem, a fabric casing filled with packing mounted upon the stem aginst the compression plate, a second compression plate upon the stem against the casing, and means for adjustably moving the compression plates to or from each other to regulate the hardness.

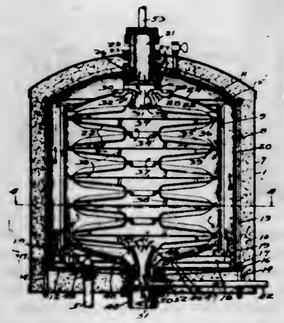
5. A drum beating device comprising a vertical post, a rocker-arm pivotally secured upon said post for vertical swinging movement, a pedal connected to said rocker-arm, a drum beater stem held for longitudinal adjustment through the rocker-arm, a bearing block slidably mounted upon said stem, means for clamping said block to the stem in a manner to secure it against rotation and sliding movement, a cymbal beater secured upon said block, and means for adjusting the cymbal beater in relation to the block and transversely of the drum beater stem.

7. A drum beater comprising a base, a vertical post, a rocker-arm pivotally supported by said post, a drum beater stem secured to said arm, a pedal, means for connecting the swinging end of the pedal with the rocker-arm, and means whereby said connection may be rendered yieldable so that the beater member on the stem may swing forwardly after the pedal has reached a dead stop.

8. A base, means for clamping said base to the rim of a drum head, a vertical post detachably positioned upon said base, means for clamping said post in rigid relation to the base, a bearing formed at the upper end of said post, a horizontally disposed rock-shaft extending through said bearing, a rocker-arm secured at one end of said shaft, a spring crank secured at the opposite end of said shaft, a spring connected to said crank, a threaded stem connected to the lower end of the spring, a forked bearing extending outwardly from the side of the post and between the arms of which said stem is removably disposed, an adjusting nut positioned upon the stem and adapted to bear against the under face of said bearing to regulate the tension of the spring and normally maintain the spring crank in a vertically alined position, a beater stem secured for longitudinal adjustable movement through the rocker-arm, a beater head mounted at the outer end of said stem, a connecting stem pivotally secured to the rocker-arm and hanging downwardly therefrom, a threaded sleeve engaging the lower end of said stem, a bolt mounted within the threaded sleeve, a spring yieldably holding the body in movable relation to said sleeve, and a pedal pivotally connected to said bolt.

[Claims 2, 4, 6, and 9 not printed in the Gazette.]

1,277,124. REFRIGERATION APPARATUS. FRANCIS B. RILEY, Toledo, Ohio, assignor to Martin V. Kelley, trustee, Toledo, Ohio. Filed Feb. 5, 1917. Serial No. 146,815. (Cl. 257—245.)



1. In a refrigeration apparatus, the combination of a plurality of lens-shaped drums connected in series and having thin metal walls, the walls having corrugations disposed radially and means for directing fluids along the walls both within and without the drums.

6. In a refrigeration apparatus, the combination of a plurality of lens-shaped drums having corrugated walls and connected in series, baffle plates located within the drums, a drum for containing the first-named drums, a drum surrounding the said drums, a circular pipe having a plurality of openings located in the last-named drum, partitions for separating the space between the two outermost drums into chambers, cross-connectors, one connecting the chambers with the interior of the first-named drums and connecting the interior of the second-named drum with the exterior of the last-named drum, the other connecting the interior of the first-named drums with the exterior of the last-named drum and connecting the exterior of the last-named drum with the interior of the second-named drum, and means for directing fluids to the circular pipe and to the passageway of the last-named connector communicating with the second-named drum.

[Claims 2 to 5 not printed in the Gazette.]

1,277,125. TORTILLA-BAKING MACHINE. TOMAS RIOS, Monterey, Mexico. Filed Dec. 18, 1917. Serial No. 207,646. (Cl. 107—57.)



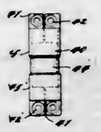
1. In a machine for baking tortillas, a plurality of superposed, moving, endless conveyers, means for heating said conveyers to bake tortillas deposited upon the upper sides thereof, said conveyers being so related that each upper conveyer is arranged to turn over and deliver the tortillas carried thereby to the conveyer immediately therebeneath.

3. In a tortilla baking machine, a plurality of movable baking means upon which the tortillas are carried to be baked upon the side exposed thereto, one of said baking means delivering its tortillas onto the other and means for turning the tortillas as they pass from one to the other of the baking means.

6. In a device of the class described, a plurality of moving baking means upon which cakes are carried to be baked, one of said means delivering its cake onto the other, means for turning the cakes during said delivery operation, and means adapted to affect the turning means to prevent the sticking of the cakes thereon.

[Claims 2, 4, and 5 not printed in the Gazette.]

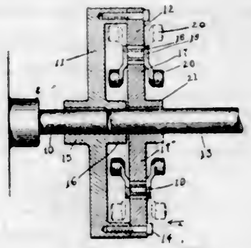
1,277,126. CREMORNE BOLT. OSCAR C. RIXSON, New Rochelle, N. Y. Filed July 26, 1917. Serial No. 182,812. (Cl. 16—63.)



1. In a Cremorne bolt construction, the combination of a bolt rod, a guide comprising a strap having an intermediate part in sliding contact with said rod and having its end portions of greater diameter than the intermediate portion and out of contact with said rod, each of said end portions being of a greater length than the travel of said rod.

2. A guide for a bolt rod consisting of a sheet metal tube having its meeting edges forming a seam at the back, the back being flat to form a base and extending longitudinally beyond each end of the tube, the extensions having perforations each side of the seam therein.

1,277,127. TRANSMISSION MECHANISM. CLARENCE T. ROGERS, New York, N. Y., assignor of one-half to Enrique J. Conill, Habana, Cuba. Filed Jan. 7, 1916. Serial No. 70,748. (Cl. 74—95.)



1. In a power transmitting device, a driven member, a driving member, a gear conected with the driven member, a toothed member connected to the driving member, a plurality of pinions carried by and meshing with the aforesaid gear and toothed member, and a plurality of weight arms rigidly secured to said pinions and adapted through centrifugal action to yieldingly rotate the gear and the driven member connected thereto.

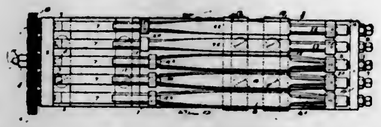
5. In a power transmitting device, in combination, a driven member, a driving member, rotatable devices engaging said members, coöperating means on said members to rotate said devices upon relative rotational movement between the driven and driving member, and centrifugally operated means to restrain the rotation of said devices, the said coöperating means and the rotational devices being then adapted to drive the driven member with an amount of slip with respect to the rotation of the driving member depending upon the speed and torque of the driving member and driven member.

6. In a power transmitting device, a driven member, a driving member and connections for effecting varying relative speeds of said members, comprising a gear member fixed to said driven member, a toothed member concentrically arranged about and in substantially the same plane with said gear member, and a plurality of pinions located between and meshing with said gear and toothed members

and centrifugal means connected to said pinions to receive the rotational movement of the driving member whereby the driven member is rotated.

[Claims 2, 3, and 4 not printed in the Gazette.]

1,277,128. CHUCK FOR HOLDING FILE-BLANKS. GEORGE L. ROGERS, Philadelphia, Pa., assignor to Henry Disston & Sons, Incorporated, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 6, 1917. Serial No. 205,782. (Cl. 29—77.)

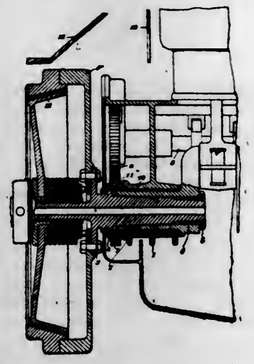


1. A chuck for holding a plurality of half-round file or other blanks consisting of an elongated, prismatic body portion and means for holding the flat surfaces of the blanks against the flat surfaces of the body portion so that the curved surfaces of the blanks are within a single cylindrical surface; and means for rotating the chuck.

6. The combination of a base; bearings thereon; a spindle mounted in one bearing and having a pinion at one end and a socket at the opposite end; a screw mounted in the other bearing; a chuck having a pin adapted to the socket in the spindle and arranged to be held by the screw in the other bearing, said chuck being shaped to receive two or more files; means for holding the blanks in position; a double toothed rack, one set of teeth engaging the teeth of the spindle; a wheel engaging the other set of teeth; an arm carrying a pawl arranged to engage the teeth of said wheel so as to give it motion in one direction, causing the spindles to turn to present fresh surfaces to the device acting upon the blanks.

[Claims 2 to 5 and 7 to 10 not printed in the Gazette.]

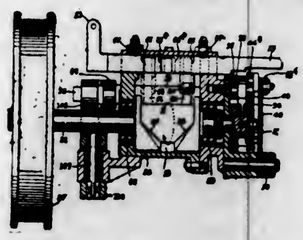
1,277,129. CAM-SHAFT DRIVING-GEAR OF INTERNAL-COMBUSTION ENGINES. FREDERICK HENRY ROYCE, Derby, England, assignor to Rolls-Royce Limited, Derby, England. Filed Dec. 27, 1917. Serial No. 209,110. (Cl. 74—7.)



1. In a camshaft driving gear for internal combustion engines, the combination of an engine crankshaft bored hollow through its rear journal, a coaxial shaft secured to said crank shaft, and flanges on said coaxial shaft adapted to carry the fly wheel and a gear for driving the camshaft.

2. In a camshaft driving gear as set forth in claim 1, the said coaxial shaft being adapted to carry the driven member of the clutch.

1,277,130. CHANGE-SPEED GEAR. RICHARD MATTHEWS RUCK, South Kensington, London, England. Filed Jan. 19, 1918. Serial No. 212,778. (Cl. 74—58.)



1. The combination of a power-operated change-speed gear, a driving clutch whereby motion is transmitted to the change speed gear, a power shaft rotatable continuously irrespective of the position of said driving clutch, mechanism operatively connected with said clutch and with said change-speed gear, a locking cam and a timing cam for said mechanism, both of said cams being actuated by said power shaft and a pair of cams arranged in opposed relation to each other and also actuated by said shaft for operating said mechanism to effect any step in a change of gear and to concurrently control the clutch.

3. The combination of a power-operated change-speed gear including a displaceable element, a driving clutch whereby motion is transmitted to the change-speed gear, a power shaft rotatable continuously irrespective of the position of said driving clutch, a slide operatively connected with said displaceable element of said change-speed gear, a locking cam actuated by said power-shaft, a timing cam actuated thereby, oppositely-inclined, normally ineffective, main cams operatively connected with said power shaft, means operatively connected with said driving clutch and controlled by said locking and timing cams whereby said main cams are alternately and selectively placed in operative connection with said slide to cause the latter to be moved from normal position in one direction or the other through a distance corresponding to the distance between the neutral position and a position of engagement of said displaceable element for effecting a step in a change of gear, said means being capable of an initial movement independently of said slide whereby said driving clutch is disengaged before said slide begins its movement.

6. The combination of a power-operated change-speed gear, a driving clutch whereby motion is transmitted to said change-speed gear, a continuously rotatable power shaft, a locking cam fast upon said power shaft, a timing cam fast upon said shaft, two main cams carried thereby, a pair of rock shafts parallel to said power shaft, spring-pressed arms carried by said rock shafts and adapted to bear alternatively upon said timing cam, spring-pressed locking levers adapted to engage said locking cam and to normally maintain the rock shaft arms out of operative engagement with the timing cam, means for disengaging either of said locking levers from the corresponding rock shaft arm at will, guiding means, a slide movable therein parallel to the power shaft and connected with the change-speed gear, said slide being provided with notches, a hand lever for manually operating the driving clutch, a pair of levers slidably carried by the respective rock shafts and operatively connected with said hand levers said levers being each adapted, when the rock shaft arm upon the corresponding rock shaft is in operative engagement with the timing cam, to be brought into coöperative relation with one of said main cams and to enter a notch of said slide whereby the latter is operatively connected with said slidable lever, said notches being relatively wider than the co-acting end of the lever whereby the latter is given an initial movement lengthwise of its rock shaft independently of said slide to disengage the clutch without interfering with the hand lever mechanism for controlling said clutch at will and continuing is given a subsequent movement to slidably move said slide to effect a stop in a change of gear.

8. The combination of a power-operated change-speed gear, a driving clutch whereby motion is transmitted to said change-speed gear, a continuously rotatable power shaft, a locking cam fast upon said power shaft, a timing cam fast upon said shaft, two main cams carried thereby, a pair of rock shafts parallel to said power shaft, spring-pressed arms carried by said rock shafts and adapted to bear alternatively upon said timing cam, spring-pressed locking levers adapted to engage said locking cam and to normally maintain the rock shaft arms out of operative engagement with the timing cam, means for disengaging either of said locking levers from the corresponding rock shaft arm at will, guiding means, a slide movable therein parallel to the power shaft, means carried by the respective rock shafts and controlled by said rock shaft arms and the timing cam whereby said slide is operatively connected with one or the other of said main cams, gate mechanism for manually controlling said change-speed gear and including a hand lever, capable of angular and lateral movements, and a connection between said gate hand lever and said slide whereby any angular movement of the former produces a sliding movement of the slide and any sliding movement of said slide causes an angular movement of said gate hand lever, said connection permitting a lateral movement of said hand lever without effect upon said slide.

[Claims 2, 4, 5, and 7 not printed in the Gazette.]

1,277,131. SAW-HANDLE. MAX RUTH, Jersey City, N. J. Filed June 25, 1917. Serial No. 176,707. (Cl. 145—113.)

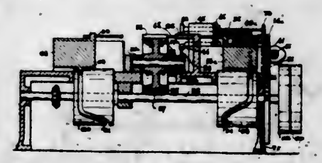


1. The combination of a saw blade having a hinge eye, a handle having a channel, a U-shaped element composed of side members and a cross bar, the cross bar being resilient and set in the channel of the handle, said side members being provided with eyes alining with the eye on the blade, a bolt passing through the eyes for connecting the handle with the blade, and interenguging teeth between the eyes for holding the handle in the plane of the blade or at an angle thereto.

2. The combination of a saw blade having an eye, a handle formed with a channel, spaced members projecting from the handle, resilient connecting means located in the channel for uniting the members, eyes on the members, a bolt passing through the eyes on the blade and the members, and means for clamping the eyes together to hold the handle in different positions of adjustment.

1,277,132. MACHINE FOR MANUFACTURING MOUTHPIECES FOR CIGARETTE-CASINGS. OSCAR SANDBERG, Södertelje, Sweden, assignor to Aktiebolaget Svenska Tobaksmonopolet, Stockholm, Sweden. Filed Apr. 3, 1917. Serial No. 159,395. (Cl. 93—81.)

1. A machine for making tubes comprising rotatable needles, movable tables associated with said needles, means for feeding material to said needles, means for cutting said material, and means for moving said tables to cause said material to enter said needles.

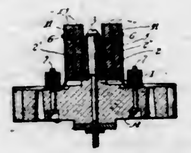


4. A machine for making tubes comprising a hinged table, a rotatable table spaced from said hinged table, rolling needles interposed between said tables, means for introducing a strip of material onto each of said tables, means for moving said strips toward each other, means for moving said tables during movement of said strips to cause said strips to enter said needles, and means for rotating said needles.

10. A machine for making tubes comprising a pair of spaced tables, needles between the tables, means for feeding a continuous strip of paper to one of said tables, means for cutting said strip, means for feeding said cut portion to the other of said tables, means for cutting a second portion of said strip on the first mentioned table, means for moving one of said portions into one of said needles, means for moving the first mentioned cut portions from the second table into the other of said needles, means for rotating said needles, a drum having peripheral pockets formed therein, and means for intermittently revolving said drum a predetermined distance whereby said corrugations will successively register momentarily with said needle.

[Claims 2, 3, 5 to 9, and 11 to 27 not printed in the Gazette.]

1,277,133. PROTECTIVE DEVICE. ROY GRANVILLE SANDS, Waukegan, Ill., assignor to Frank B. Cook Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 19, 1917. Serial No. 155,832. (Cl. 175—30.)



1. An arrester comprising a base of dielectric material having an elongated centrally disposed rib on an upper face of the base, an elongated inverted U-shaped mounting strip secured to said rib, a plurality of spring fingers mounted on said face of the base adjacent the mounting strip, a plurality of corresponding spring fingers on the mounting strip and a pair of discharge elements removably held by each pair of fingers in contact therewith.

4. A discharge clip for lightning arresters comprising a yieldable U-shaped element formed from sheet metal and having guiding means disposed along the side edges of one leg.

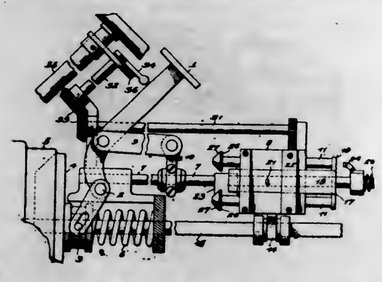
[Claims 2 and 3 not printed in the Gazette.]

1,277,134. GEAR-SHIFTING MECHANISM FOR AUTOMOBILES. FRANK C. SANFORD, Bridgeport, Conn. Filed Apr. 10, 1917. Serial No. 160,988. (Cl. 74—58.)

1. In a gear shifting mechanism, a support, spaced independently movable gear shifting bars thereon, common operating means for the bars, and means for holding the one bar inoperative by and during movement of the first means to move the other bar.

2. In a gear shifting mechanism, a support, spaced pairs of gear shifting bars slidable thereon, means for selectively sliding any bar to operative position, and means operable

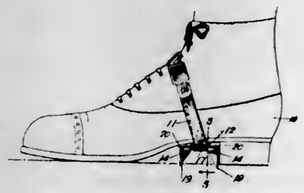
by and during the operation of the first means to hold the bars of the other pair in normal position.



3. In a gear shifting mechanism, a support, gear shifting members slidable thereon and projecting therefrom at each end, means selectively engageable with the members at one end to move them to operative position, and other means engageable with the members at their opposite ends to return them to normal position.

[Claims 4 to 21 not printed in the Gazette.]

1,277,135. ICE-CREEPER. ABRAHAM SCHEMEL, Yonkers, N. Y. Filed May 14, 1918. Serial No. 234,471. (Cl. 36—62.)



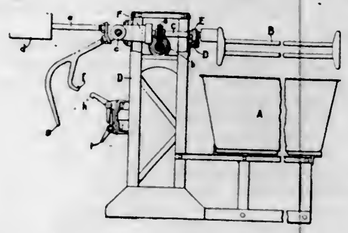
1. An ice creeper comprising a keeper plate; means for attaching the same to a shoe for the human foot when in service; a spur plate removably attached to said keeper plate; and means for locking said spur plate on said keeper plate, said means embodying edges on said spur plate, said edges being overturned in spaced relation to the body of said spur plate forming channels for the edges of said keeper plate.

4. An ice creeper comprising a keeper plate; means for attaching the same to a shoe for the human foot when in service; a spur plate removably attached to said keeper plate; means for locking said spur plate on said keeper plate, said means embodying a spring latch mounted on one of said plates for engaging the other of said plates; and means manually operable for releasing said latch, said means embodying a handle end integrally formed with said latch and extended from the side of said spur plate.

[Claims 2 and 3 not printed in the Gazette.]

1,277,136. APPARATUS FOR TREATING SILK AND OTHER TEXTILE GOODS IN HANKS BY MEANS OF LIQUIDS. ALBERT WILLIAM SCHMID, Basel, Switzerland. Filed Oct. 12, 1917. Serial No. 196,148. (Cl. 8—19.)

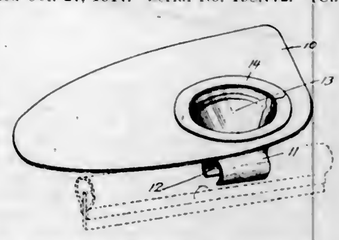
1. In an apparatus for the treating of silk and other textiles in the form of hanks with liquids, the combination with a treatment vessel of a normally horizontal hank support, an eccentric rotary shaft carrying said hank support, a bearing for said shaft pivotally mounted at such a distance from the hank support that when the latter is raised, the hanks suspended from it are automatically lifted quite above the liquid in the vessel, and a worm gear placed between the pivotal point of said bearing and the hank support for imparting a rotary motion to the said shaft and arranged so as to allow the pivotal raising of the hank support, substantially as described.



4. In an apparatus for the treating of silk and other textiles in the form of hanks with liquids, the combination with a treatment vessel of a normally horizontal hank support, an eccentric rotary shaft carrying said hank support, a bearing for said shaft pivotally mounted at such a distance from the hank support that when the latter is raised, the hanks suspended from it are automatically lifted quite above the liquid in the vessel, and a worm gear placed between the pivotal point of said bearing and the hank support for imparting a rotary motion to the hank support, the said bearing being provided with a counterbalance weight in order to facilitate the raising of the hank support and with a hook, a second hook being supported on the machine frame in such a position that on the lifting of the hank support the first hook can engage with the second hook for the purpose of holding the hank support in its raised position, the said second hook being combined with a releasing lever and the said bearing being also provided with a push finger so arranged with regard to the said releasing lever that, when the hank support is raised a little above the position in which the two hooks mutually engage, the push finger displaces the releasing lever and releases thereby the hook supported on the machine frame from the other hook, to allow of lowering of the hank support, substantially as described.

[Claims 2 and 3 not printed in the Gazette.]

1,277,137. SHEET-METAL WORK AND MEANS FOR MAKING SAME. GUSTAV E. SCHMIDT, Chicago, Ill. Filed Oct. 27, 1917. Serial No. 198,772. (Cl. 46—50.)



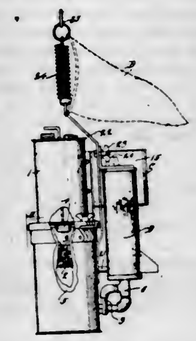
1. In sheet metal work, the combination of a tubular member provided with an outwardly projecting flange at one end and a circumferentially extending outward bulge on the other end, and a perforated plate having a tubular flange inclosing the plate perforation surrounding and fitting said tube and interposed between said tube flange and said bulge.

[Claim 2 not printed in the Gazette.]

1,277,138. SIGNAL APPARATUS. ERNEST H. SCHRAGA, Salt Lake City, Utah, assignor to Automatic Exploder Company, Salt Lake City, Utah. Filed June 19, 1917. Serial No. 175,637. (Cl. 116—13.)

1. In apparatus of the class described, the combination with a visible signal and support therefor, of means automatically operable periodically to produce movement of the signal on its support.

2. In apparatus of the class described, the combination with a light signal and support therefor, of explosion means mounted thereon, operable intermittently to produce an audible signal, said light being caused to move on its support by operation of the explosion means.



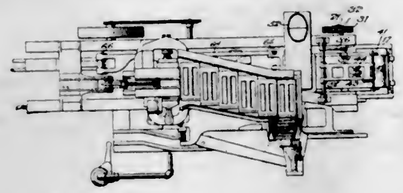
3. In apparatus of the class described, the combination with a flag-like signal and support therefor, of agitating means operable automatically at intervals to produce agitation of the signal aforesaid.

4. In apparatus of the class described, the combination with a flag-like signal and support therefor, of a sound producing signal carried by the support, the operation of the sound signal producing the signal operation of the flag signal.

5. In apparatus of the class described, the combination of a flag-like signal and support therefor, of a sound producing signal, and means for operating said sound signal to thereby produce movement of the flag-like signal on its support as a result of the sounding of the sound signal.

[Claims 6 to 25 not printed in the Gazette.]

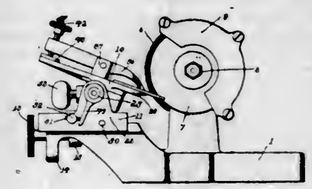
1,277,139. CARTON-HANDLING MACHINE. ERNEST A. SCHROEDER and JOHN N. TOOKER, Syracuse, N. Y., assignors to Church & Dwight Company, New York, N. Y., a Corporation of Maine. Original application filed July 20, 1915, Serial No. 40,823. Divided and this application filed Feb. 26, 1916. Serial No. 80,655. (Cl. 271—62.)



1. In a machine of the character described, a collapsed carton supply magazine, an endless carrier for feeding the cartons upwardly along the magazine into their feeding-in position, feeding-in means for the cartons and means adapted to be engaged either by the carton stack or the feeding-in means for arresting the movement of the carrier.

2. In a machine of the character described, a collapsed carton supply magazine, an intermittently moving endless carrier for feeding the cartons upwardly along the magazine into their feeding-in position, feeding-in means for the cartons and means adapted to be engaged either by the carton stack or the feeding-in means for arresting the movement of the carrier.

1,277,140. TOGGLE-GRINDER. DUDLEY S. SEYMOUR, Oak Park, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 5, 1916. Serial No. 135,127. (Cl. 51—7.)



1. A grinding machine including in combination a grinding wheel, a holder including clamping members for clamping the article to be ground, a support on which said holder is pivotally mounted so as to swing in a plane parallel with the axis of the grinding wheel, means for pivotally supporting said holder whereby it may be moved in a direction at right angles to the plane in which it is swung, a stop for limiting said last named swinging movement of the holder and means for securing the holder in position against said stop.

2. A grinding machine including in combination a grinding wheel, a holder including clamping members for clamping the article to be ground, a support on which said holder is pivotally mounted so as to swing in a plane parallel with the axis of the grinding wheel, means for pivotally supporting said holder whereby it may be moved in a direction at right angles to the plane in which it is swung, a stop for limiting said last named swinging movement of the holder and means for securing the holder in position against said stop, said stop being adjustable whereby the position of the article being ground may be shifted relative to the grinding wheel.

3. A grinding machine including in combination a grinding wheel, a holder including clamping members for clamping the article to be ground, a support on which said holder is pivotally mounted so as to swing in a plane parallel with the axis of the grinding wheel, a carriage on which said holder is mounted, means for moving said carriage toward and from the grinding wheel to bring the article into engagement with said grinding wheel, said holder being pivotally supported by said carriage, whereby the same may be moved in a plane at right angles to the plane in which it is swung, stops for limiting the tilting movement of the holder, and means for securing the holder in an adjusted position.

9. A grinding machine including in combination, a grinding wheel, a holder including clamping members, means for pivotally supporting said clamping members whereby they may be swung in a plane substantially parallel with the axis of the grinding wheel, a placing pin having its center in alinement with the pivotal axis for said holder and adapted to receive the pivot aperture of a toggle trimmer member clamped in said holder, whereby the edge of said trimmer may be ground in an arc having its center at the pivot center of said trimming member.

10. A grinding machine including in combination, a grinding wheel, a holder including clamping members, means for pivotally supporting said clamping members whereby they may be swung in a plane substantially parallel with the axis of the grinding wheel, and a placing pin having its center in alinement with the pivotal axis for said holder and adapted to receive the pivot aperture of a toggle trimming member clamped in said holder, whereby the edge of said trimming member may be ground in an arc having its center at the pivot center of said trimming member, said placing pin being yieldingly mounted and having a reduced section whereby toggle trimming members having different sized pivot apertures may be separately placed thereon.

[Claims 4 to 9 not printed in the Gazette.]

1,277,141. BRUSH. WILLIAM T. SHERMAN, Troy, N. Y., assignor, by mesne assignments, to Henry L. Hughes Co. Inc., New York, N. Y., a Corporation of New York. Filed Aug. 21, 1916. Serial No. 115,951. (Cl. 15—29.)



1. A brush having a back provided with a recess, an elastic bristle-supporting pad the edge-portion of which fits within said recess, and means inclosed between the pad and the brush-back coöperative with the wall of the recess to secure the edge-portion of the pad within the recess.

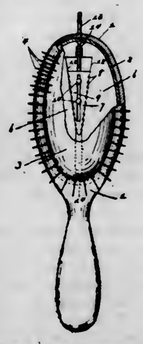
3. A brush having a back provided with a recess, an elastic bristle-supporting pad the edge-portion of which fits within said recess, and clamping mechanism having resilient members coöperative with the wall of the recess to clamp thereagainst the edge-portion of the pad.

5. A brush having a back provided with a recess, an elastic bristle-supporting pad the edge-portion of which fits within said recess, and clamping-mechanism inclosed between the pad and the brush-back said clamping mechanism having peripherally disposed, resilient members cooperative with the wall of the recess to clamp thereagainst the edge-portion of the pad.

8. A brush having a back provided with a recess, an elastic bristle-supporting pad the edge-portion of which fits within said recess, and clamping mechanism inclosed between the pad and the brush-back coöperative with the wall of the recess to clamp thereagainst the edge-portion of the pad.

[Claims 2, 4 6, and 7 not printed in the Gazette.]

1,277,142. BRUSH. WILLIAM T. SHERMAN, Troy, N. Y., assignor, by mesne assignments, to Henry L. Hughes Co., Inc., New York, N. Y., a Corporation of New York. Filed Jan. 4, 1916. Serial No. 70,269. Renewed Feb. 25, 1918. Serial No. 219,157. (Cl. 15—29.)

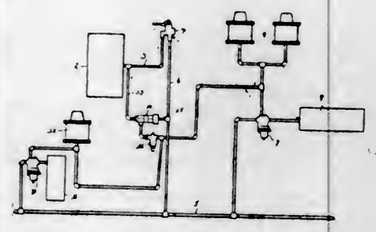


1. A brush having a back provided with a recess, and an elastic bristle-supporting pad the edge-portion of which fits within said recess, and having inclosed between the pad and the brush-back an expansible clamp coöperative with the wall of the recess to clamp thereagainst the edge-portion of the pad, and a clamp-expanding member.

2. A brush having a back provided with a recess and with a perforate opening through a wall of the recess, and an elastic bristle-supporting pad the edge-portion of which fits within said recess, and having inclosed between the pad and the brush-back an expansible clamp coöperative with the wall of the recess to clamp thereagainst the edge-portion of the pad, and a clamp-expanding member accessible for operation through said perforate opening.

3. A brush having a back provided with a recess and with a perforate opening through a wall of the recess, an elastic bristle-supporting pad the edge-portion of which fits within the recess, and clamping-mechanism inclosed between the pad and the brush-back comprising relatively movable clamp-plates coöperative with the wall of the recess to clamp thereagainst the edge-portion of the pad, and a movable wedge interposed between the clamp-plates and accessible for operation through said perforate opening.

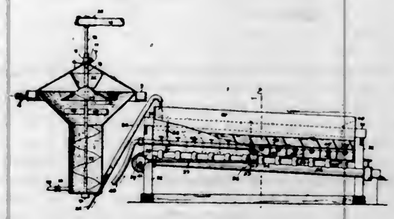
1,277,143. AIR-BRAKE. JAMES G. SMELTZER, Germantown, Pa. Filed May 12, 1916. Serial No. 97,041. (Cl. 188—1.)



4. In an air brake system, a main reservoir adapted to hold air at a high pressure, a train pipe adapted to carry air at a lower pressure than that in the main reservoir, brake cylinders, an auxiliary reservoir for each set of brake cylinders, a triple valve located between the train pipe and each set of brake cylinders and a valve controlled by the pressure in the train pipe, whereby a reduction of pressure in said train pipe will form a communication between the main reservoir and brake cylinders and between the main reservoir and the auxiliary reservoirs through the triple valve and the fluid from the main reservoir lifting the slide valve of each triple valve off its seat thereby closing the exhaust and permitting the fluid to pass into the auxiliary reservoirs.

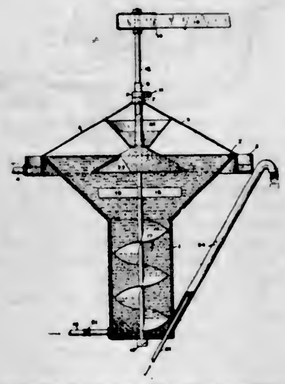
[Claims 1 to 3 not printed in the Gazette.]

1,277,144. PROCESS OF SEPARATING MANGANESE DIOXID FROM ORE CONTAINING THE SAME. LEROY E. SOWERS and PRESTON S. PHILLIPS, Livermore, Cal. Filed Sept. 12, 1917. Serial No. 191,078. (Cl. 83—85.)



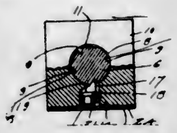
The method of separating the constituents of ores which consists in feeding the ore in a dry condition to the central portion of the top of a body of water while causing said water to flow at a uniform speed from said central portion through a uniform distance to the periphery thereof whereby the lighter particles are carried from said periphery with said water while the heavier particles sink through the water.

1,277,145. SEPARATOR FOR SEPARATING MANGANESE DIOXID FROM ORES CONTAINING THE SAME. LEROY E. SOWERS and PRESTON S. PHILLIPS, Livermore, Cal. Filed Oct. 30, 1917. Serial No. 199,255. (Cl. 83—85.)



In an apparatus for separating the constituents of ore, the combination of a separating chamber symmetrical with respect to a central axis and having a flaring upper portion open at the top, a trough closely surrounding the rim of said upper portion, a distributing cone centrally located in the upper portion of said chamber and depending below its rim, means for discharging dry, pulverized ore on to said distributing cone uniformly around its axis, and means for causing water to flow upwardly in said separating chamber with substantial uniformity on all sides of its central axis.

1,277,146. NUT-LOCK. DOMINEK G. STANEK, Ekalaka, Mont., assignor of one-half to B. B. Gross and W. R. Gross, Sykes, Mont. Filed Sept. 18, 1917. Serial No. 191,984. (Cl. 151—10.)



1. A nut lock comprising a bolt having a plurality of longitudinally extending grooves presenting shoulders and inclined faces, a nut adapted to be fitted upon said bolt having a recess formed in one side thereof, said recess provided centrally with an inwardly extending bore which intersects the bore of the nut, a shoulder formed at the inner end of the bore, a pawl, means carried by the pawl and engaging the shoulder of the bore for limiting the movement of the pawl therein, a shank formed integrally with said means, a spring surrounding said shank and normally urging the working end of the pawl into the bore of the nut, and a retaining plate slidably arranged in said recess and engaging said spring for normally urging said pawl into engagement with the grooves of the bolt, as and for the purpose specified.

3. The combination with a bolt having a plurality of longitudinally extending grooves therein, a nut adapted to be fitted upon said bolt and provided in one side with a transverse dove-tail recess, said recess tapering from one end to the other, said side of the nut provided with an inwardly extending bore intersecting said recess and bore of the nut, a shoulder formed adjacent the inner end of the bore in the side of the nut providing a rectangular opening therein, a pawl having a working end, an annular flange formed at the opposite end of the pawl, a tapering shank having its smaller end formed integrally with the upper side of the flange and concentrically related thereto forming a seat, said pawl adapted to be arranged in the bore in the side of the nut and its flange engaging the shoulder for limiting the inward movement of the pawl in the bore, a spring surrounding said tapered shank normally urging the working end of the pawl into the bore of the nut, and a wedge-shaped plate fitted in the dove-tail recess of the nut engaging the outer end of said spring for normally holding the pawl under tension and into engagement with the grooves of the bolt, as and for the purpose specified.

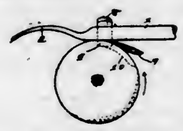
[Claim 2 not printed in the Gazette.]

1,277,147. MULTICELL ELECTRIC BATTERY. ARTHUR V. ST. ARMANDE, Paisley, Scotland. Filed Feb. 15, 1918. Serial No. 217,318. (Cl. 204—38.)



The improvement in the manufacture of multi-cell electric batteries consisting in shrinking a wrapper on to a series of cells disposed end to end so as to envelop the abutting ends.

1,277,148. METHOD OF DERINDING ORANGES AND PRODUCT THEREOF. FERDINAND W. STARR, Oklahoma, Okla. Filed June 7, 1916. Serial No. 102,339. (Cl. 146—14.)



1. As a new commercial product in derinded oranges consisting of a derinded body, and semispherical rind cups surrounding the same and connected at the navel and stem portions thereof, said cups being spaced apart and having vertically disposed parallel extending severed edges.

2. A new commercial product in derinded oranges, comprising semispherical rind cups separated from the body of the orange and from each other substantially midway between the navel and stem portions thereof.

3. The commercial product in the derinding of oranges, comprising the derinded spherical orange body surrounded by semispherical rind cups separated circumferentially by a groove having vertical parallel arranged sides approximately midway between the navel and stem portions thereof.

4. The method of removing and utilizing orange rinds, consisting in (1) making complete ring removing vertical and parallel extending circumferential incisions of predetermined depth through the rind only approximately

midway between the stem and navel portions of the orange and (2) then loosening the rind through and from said circumferential incisions semispherically down under the rind to the stem and navel of the orange producing surrounding semispherical rind cups without removal during the derinding operation.

5. The method which consists in removing semispherical sections of rind from an orange and then replacing the same and fastening together the meeting edges thereof, substantially as described and shown.

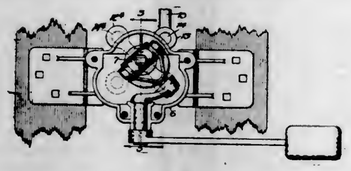
1,277,149. SOLIDIFIED ALCOHOL. ALEXANDER STROBL, New York, N. Y. Filed July 20, 1915. Serial No. 40,846. (Cl. 44—7.)

1. A product formed of denatured alcohol, methyl alcohol, and a solidifying agent mixed therewith.

2. A product formed of denatured alcohol sixty parts, methyl alcohol forty parts, and sodium stearate about two to three parts.

3. A sootless burning solidified alcohol comprising ethyl and methyl alcohols in about equal proportions and a solidifying agent mixed therewith.

1,277,150. SWITCH-STAND. EUGENE N. STROM, Chicago, Ill., assignor to Pettibone, Mulliken Company, Chicago, Ill., a Corporation of New York. Filed July 3, 1918. Serial No. 243,114. (Cl. 104—25.)



1. A multiple crank-arm device for switch-stands, comprising a hub having a plurality of frangible crank-arms extending from it with pivots on their outer ends for attachment of a switch connecting-rod, said pivots successively projecting in relatively opposite directions.

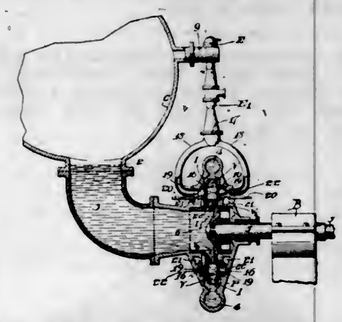
4. A multiple crank-arm device for switch-stand shafts, comprising a hub having four frangible arms radiating from it in spaced relation to each other, two of said arms being in alinement and having studs on their outer ends, for attachment of a switch-connecting rod, projecting in one direction and the remaining arms being in alinement and extending at right-angles to the first-named arms and having studs on their outer ends projecting in the direction opposite that of the first-named studs, and each pair of alining arms being offset with relation to the other pair.

7. In combination with the shaft of a switch-stand, a hub removably secured to said shaft and having four frangible crank-arms radiating therefrom at 90 degree intervals, two of said arms being in alinement and having parallel upwardly projecting studs on their outer ends, and the remaining arms being in alinement at right-angles to the first-named arms and having parallel downwardly propecting studs on their outer ends, each pair of said alining arms being offset with relation to the other pair.

[Claims 2, 3, 5, and 6 not printed in the Gazette.]

1,277,151. CONDENSATE AND AIR REMOVING APPARATUS. ROBERT SUCZEK, Philadelphia, Pa., assignor to C. H. Wheeler Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Original application filed Dec. 30, 1916, Serial No. 139,985. Divided and this application filed Jan. 7, 1918. Serial No. 210,654. (Cl. 230—14.)

5. The combination with a condenser, of centrifugal air and water removing apparatus comprising impellers spaced from each other and operating to remove water from said condenser, a connection for delivering air from said condenser to the space between said impellers, and nozzle structure adjacent the space between said impellers delivering motive fluid for accelerating the fluid delivered through said air connection.



12. The combination with a condenser, of centrifugal air and water removing apparatus comprising a submerged auxiliary impeller, a main impeller, said auxiliary impeller delivering condensate under pressure in dense liquid form to said main impeller, means for removing air from said condenser and delivering it at higher pressure to the space between said impellers, and nozzle structure delivering motive fluid adjacent the space between said impellers for accelerating the air from said condenser.

16. The combination with a condenser, of centrifugal air and water removing apparatus comprising impellers spaced from each other and operating to remove water from said condenser, an ejector removing air from said condenser and delivering it into the space between said impellers, and nozzle structure delivering motive fluid adjacent the space between said impellers for accelerating the air delivered by said ejector.

[Claims 1 to 4, 6 to 11, and 13 to 15 not printed in the Gazette.]

1,277,152. ANSWERING-BOARD. DANIEL SULLIVAN, St. Louis, Mo. Filed Jan. 28, 1918. Serial No. 214,081. (Cl. 46—56.)

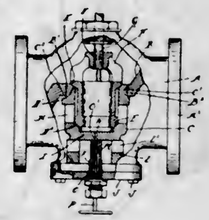


2. An indicator for an apparatus of the character described adapted to travel freely over the surface of the table, consisting of a disk having diametric recesses in its periphery, pointers secured in said recesses and projecting beyond the periphery of the disk, a support projecting from the under face of the disk; said recesses functioning to direct the position of the hands of the operator on the disk whereby the direction of the pointers is always visible.

[Claims 1, 3, and 4 not printed in the Gazette.]

1,277,153. VALVE. JOSEPH M. SULLIVAN, Detroit, Mich., assignor to Alexander J. McDonough, Detroit, Mich. Filed Dec. 27, 1916. Serial No. 139,190. (Cl. 137—4.)

1. A valve, comprising the combination with a hollow cylindrical valve proper having seats at opposite ends, of a cage having coöperating seats and an opening in the wall thereof intermediate said coöperating seats, said cage having an extension with an opening in the wall thereof and a partition extending thereacross intermediate said openings.

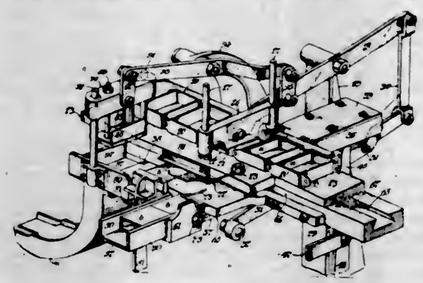


2. A valve, comprising the combination with a hollow cylindrical valve proper, having a seating portion, of a cage having a coöperating seat and an opening in the wall thereof, said cage having an extension with an opening in the wall thereof and a partition extending thereacross intermediate said openings in the cage, provided with an opening therein, a hollow set screw engaging said partition in substantial alinement with the opening therein, said set screw having an aperture in the wall thereof and means within said hollow set screw for engaging in said opening in the partition.

4. A valve comprising the combination with a hollow valve proper having a seating portion, of a cage having a coöperating seat and an opening in the wall thereof, said cage having a partition extending thereacross provided with an opening therein, a hollow set screw engaging said partition in substantial alinement with the opening therein, said set screw being provided with an aperture in the wall thereof, and a longitudinally movable member within said hollow set screw for engaging in said opening in the partition.

[Claims 3, 5, and 6 not printed in the Gazette.]

1,277,154. TRAY AND SHUCK ASSEMBLING MECHANISM FOR BOX-MACHINES. OLIVER P. TEEPLE, Barberton, Ohio, assignor to The Diamond Match Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 2, 1916. Serial No. 134,643. (Cl. 93—55.)



1. In a machine of the character described, the combination of means for feeding a series of trays in a horizontal path; a tray-and-shuck support parallel with and in a lower plane than said path; a tray support underlying said path at right angles thereto and opening into one side of the said tray-and-shuck support; means for moving the successive trays of the series down upon the underlying tray support; means for moving said trays endwise along the tray support to the tray-and-shuck support; means for delivering shucks to the tray-and-shuck support in advance of the junction therewith of the tray support; means for moving said shucks along the tray-and-shuck support and into endwise alinement with the tray support, and a yielding tapering guide throat at the junction of the supports converging from the tray-support to the tray-and-shuck support.

3. In a machine of the character described, the combination of means for feeding a series of trays in a horizontal path; a tray-and-shuck support parallel with and in a lower plane than said path; a tray support underlying said path at right angles thereto and opening into one side of the said tray-and-shuck support; means for moving the successive trays of the series down upon the underlying tray support; means for moving said trays endwise along the tray support to the tray-and-shuck support; means for delivering shucks to the tray-and-shuck support in advance of the junction therewith of the tray support; and means for moving said shucks along the tray-and-shuck support and into endwise alinement with the tray support; a yielding tapering guide throat at the junction of the supports converging from the tray-support to the shuck-and-tray support, and means for pushing each positioned shuck upon the adjacent narrow end of the guide throat.

4. In a machine of the character described, the combination of means for feeding a series of trays in a horizontal path; a tray-and-shuck support parallel with and in a lower plane than said path; a tray support underlying said path at right angles thereto and opening into one side of the said tray-and-shuck support; means for moving the successive trays of the series down upon the underlying tray support; means for moving said trays endwise along the tray support to the tray-and-shuck support; means for delivering shucks to the tray-and-shuck support in advance of the junction therewith of the tray support; means for moving said shucks along the tray-and-shuck support and into endwise alinement with the tray support; a yielding tapering guide throat at the junction of the supports converging from the tray-support to the tray-and-shuck support, and a reciprocative member for acting upon each positioned shuck and pushing it partly upon the adjacent end of the guide throat.

5. In a machine of the character described, the combination of means for feeding a series of trays in a horizontal path; a tray-and-shuck support parallel with and in a lower plane than said path; a tray support underlying said path at right angles thereto and opening into the tray-and-shuck support; means for imposing the successive trays of the series upon the underlying tray support; means for moving the successive trays endwise along the tray support to the tray-and-shuck support; means for feeding a series of shucks at right angles to the path of the series of trays and depositing said shucks successively upon the tray-and-shuck support in advance of the junction therewith of the tray support, and means for feeding the successive shucks along the tray-and-shuck support and positioning them in endwise alinement with the tray support.

[Claims 6 to 9 not printed in the Gazette.]

1,277,155. FERTILIZER FROM PEAT AND PROCESS OF MAKING THE SAME. NILS TESTRUP, London, England, and THOMAS RIGBY, Dumfries, Scotland, assignors to Wetcarbonizing Limited, Westminster, London, England. Filed July 29, 1915. Serial No. 42,582. (Cl. 71—6.)

1. A process of making fertilizer from peat consisting in subjecting peat to heat under pressure sufficient to

prevent evaporation to destroy its water binding properties, dewatering said peat to any desired extent, and exposing the treated peat to gases containing ammonia.

3. A process of making fertilizer from peat consisting in subjecting peat to a temperature of from 100 to 180° C. under pressure sufficient to prevent evaporation to destroy its water binding properties, dewatering said peat to any desired extent, and exposing the treated peat to gases containing ammonia.

4. A process of making fertilizer from peat consisting in subjecting the peat to heat under pressure sufficient to prevent evaporation, dewatering the resulting material, subjecting part thereof to gasification and utilizing another part to absorb ammonia from the gases so produced.

5. A process of making fertilizer from peat consisting in subjecting the peat to heat under pressure sufficient to prevent evaporation, reducing the water content of the material to not more than about 68 per cent., subjecting part thereof to gasification, and utilizing another part to absorb ammonia from the gases thus generated.

[Claims 2 and 6 not printed in the Gazette.]

1,277,156. ENVELOP-FASTENER. LOUIS F. THIEL, Chicago, Ill. Filed Mar. 26, 1917. Serial No. 157,549. (Cl. 229—76.)



1. In a device of the class described an envelop body, a locking member integral with the body, a double flap member, one member having apertures therein through which the locking members are adapted to be inserted and hooks secured to the other flap member to engage said locking members.

3. In a device of the class described, an envelop body having overlapping parts, a locking member on one of the parts, the other part having a doubled portion with an aperture therein through which the locking member is adapted to be inserted, and a shiftable latch within the doubled portion adapted to engage the said locking member.

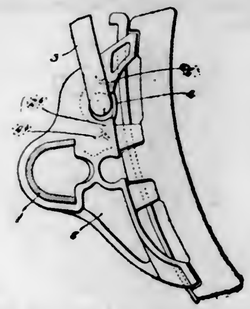
4. A locking envelop having overlapping parts, a locking member on one of said parts having a plurality of reversely hooked portions, the other part having a doubled portion provided with an intermediate space, and a movable part within the doubled portion adapted to engage the hooked locking member.

[Claim 2 not printed in the Gazette.]

1,277,157. BRAKE-BEAM-HANGER-LOCKING KEY. GEORGE N. VAN SWERINGEN, Chicago, Ill., assignor to Chicago Railway Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 9, 1918. Serial No. 227,494. (Cl. 188—70.)

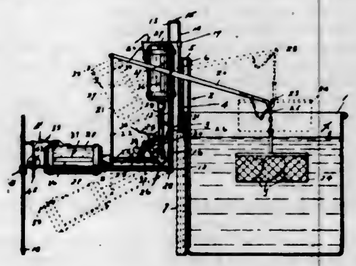
1. In a brake hanger locking key for brake beams, the combination of a brake head having a seat formed therein for the brake hanger, the walls of said brake hanger seat being formed with openings or recesses for the reception of a brake hanger locking key, a brake hanger locking key introduced into said walls or recesses and so arranged as to constitute a front wall of said brake hanger seat, and a yielding locking device for holding said key in position against accidental displacement.

2. In a brake hanger locking key for brake beams, the combination of a brake head having a seat formed therein for the brake hanger, shoulders on the brake head adjacent to the walls of said seat for coöperating with the locking key, a locking key which passes through an opening in at least one wall of said hanger seat, and yielding means on said locking key for engaging the shoulder or



shoulders on the brake head for preventing accidental displacement of said key.

1,277,158. TIMED EGG-BOILER. JOHN D. WALL, Minneapolis, Minn. Filed Dec. 27, 1915. Serial No. 68,736. (Cl. 161—16.)



1. The combination with an element to be moved, of a motor including two fluid chambers, a frame supporting said two chambers, the one above the other and at an angle to each other, said frame being pivoted at a point between said two chambers for vertical oscillatory movement, a conduit connecting said two chambers, whereby the flow of liquid from the upper fluid chamber to the other thereof will impart a movement to the frame, and a lifting connection from the frame to the element to be moved.

4. The combination with an element to be moved, of means for moving the same comprising an intermediately pivoted operating lever having at each end a fluid chamber, spring closed relief valves in the fluid chambers, tripping abutments for opening the relief valves, means connecting said element to the operating lever, and a conduit connecting the two fluid chambers, whereby the flow of fluid from one of the fluid chambers to the other will actuate the operating lever.

7. The combination with an element to be moved, of means for moving the same comprising an intermediately pivoted operating bell-crank lever having at each end a fluid chamber, means connecting said element to the operating lever, a contracted conduit connecting the two fluid chambers, whereby the flow of fluid from one of the fluid chambers to the other will actuate the operating lever, and an adjustable tripping abutment for holding the operating lever in normal position.

9. The combination with an element to be moved, of a motor including two fluid chambers, a frame supporting said two chambers, the one above the other and at an angle to each other, said frame being pivoted at a point between said two chambers for vertical oscillatory movement, a conduit connecting said two chambers, whereby the flow of liquid from the upper fluid chamber to the other thereof will impart a movement to the frame, a lifting connection from the frame to the element to be moved, and a timed valve in the conduit.

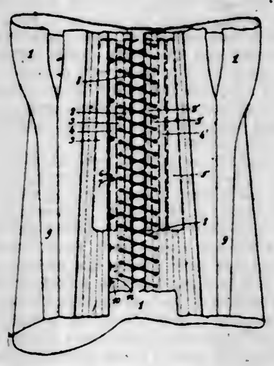
[Claims 2, 3, 5, 6, 8, and 10 to 12 not printed in the Gazette.]

1,277,159. MOUTHPIECE-GUARD FOR SMOKING-PIPES. SAMUEL WALKER, New York, N. Y. Filed Apr. 4, 1917. Serial No. 159,627. (Cl. 131—12.)



A guard as characterized comprising an enveloping single-service tube formed of flexible material; and means permanently attached to the mouth-piece of a pipe for holding said tube in service position, said means embodying an attachable ferrule, and a spring clip pivotally connected with said ferrule and provided with arms adapted to circumfold the mouth-piece of the pipe and said tube thereon.

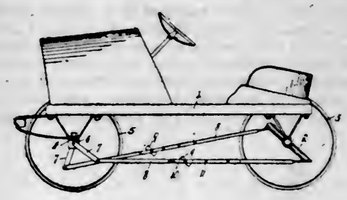
1,277,160. CORSET. DE VER H. WARNER, Bridgeport, Conn., assignor to The Warner Brothers Company, Bridgeport, Conn., a Corporation of Connecticut. Filed June 14, 1916. Serial No. 103,672. (Cl. 2—74.)



A laced in front corset, having a lacing arranged in the middle of the divided front of the corset, a broad ended clasp member and a similar broad ended boning member located on opposite sides of said lacing and equidistant from the middle line of the divided front, and a clasp member and a boning steel member also in relatively like positions on each side of said middle line, the combination and arrangement being such that the strains in use are evenly distributed on both sides and over the abdomen of the wearer, substantially as set forth.

1,277,161. JUVENILE VEHICLE. JOHN WEBER, Jr., Toledo, Ohio, assignor to The Toledo Metal Wheel Company, Toledo, Ohio, a Corporation of Ohio. Filed Mar. 2, 1918. Serial No. 219,945. (Cl. 208—30.)

In a foot-propelled vehicle, a frame, a propeller crankshaft, links pivotally suspended from the frame for swinging movements lengthwise thereof and in transversely spaced relation to said shaft, propeller bars connecting said links and shaft and movable to impart rotation to the shaft, a bracket screwed to a side of each propeller



bar intermediate its ends, and a pedal carried by each bracket.

1,277,162. WRENCH. LEWIS E. WEGNER, Hot Springs, Ark. Filed Oct. 19, 1917. Serial No. 197,381. (Cl. 81—89.)



1. The combination in a wrench of a toothed shank having a relatively fixed jaw; a movable jaw slidable on the shank and having a projecting arm; a stirrup extending around the shank; an operating handle; a pivot connecting the arm, the stirrup and the handle; and a pawl on the handle in position to engage the teeth of the shank when said handle is operated.

3. The combination in a wrench of a toothed shank having a relatively fixed jaw; a movable jaw slidable on the shank and having a projecting arm; a stirrup extending around the shank; an operating handle having branches frictionally engaged by the sides of the stirrup; a pivot connecting the arm, the stirrup and the handle; and a pawl on the handle in position to engage the teeth of the shank when said handle is operated.

16. The combination in a wrench of a toothed shank having a fixed jaw; a slidable jaw on the shank; a handle; a pivot connecting said handle to the slidable jaw; and two toothed members mounted on the handle eccentrically to the pivot in position for either of them but not both to engage the teeth of the shank when said handle is moved through an angle of less than 90°.

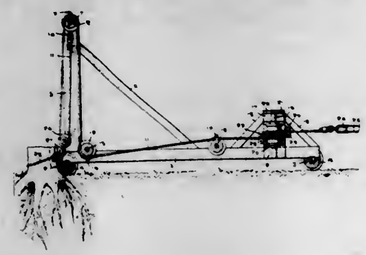
22. The combination in a wrench of a toothed shank; a fixed jaw thereon; a member slidable on the shank and including a second jaw; a spring tooth carried by said member in position to coöperate with the teeth of the shank; a handle pivoted to the member; and a pawl carried by the handle and also coöperative with the teeth of the shank.

[Claims 2, 4 to 15, and 17 to 21 not printed in the Gazette.]

1,277,163. STUMP-PULLING MACHINE. BAILEY H. WEST, Makanda, Ill. Filed Oct. 31, 1917. Serial No. 199,483. (Cl. 254—139.)

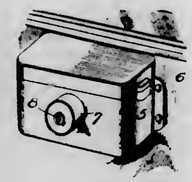
A portable stump pulling machine comprising a wheeled main frame, a vertical frame at the forward end of the main frame, a sheave mounted in the upper end of said

vertical frame, a cross rod mounted in the vertical frame beneath said sheave, a sheave mounted at the bottom of the vertical frame, a sheave block having a hook, both of said last named sheaves mounted in a vertical plane with said upper sheave, a drum carried by the rear end of the main frame in a vertical plane with said last named sheave block, a sheave mounted on the main frame between and in longitudinal alinement with said drum and the sheave at the bottom of the vertical frame, a pull cable trained around said drum over said last named sheave, under the



sheave at the bottom of the vertical frame, over the sheave at the upper end of the vertical frame and around said hook sheave block, means for rigidly attaching the terminal of the cable to said cross bar, stump encircling means adapted to be engaged by said hook sheave block, and a clevis carried by the other end of the cable for the attachment of draft means, said sheaves and drum to be so arranged that the line of draft will be in a vertical plane.

1,277,164. KEY. DAVID L. WINTERS, Philadelphia, Pa. Filed Apr. 19, 1918. Serial No. 229,578. (Cl. 70—9.)



1. A key of the character set forth comprising lock members, one of which is provided with a portion adapted to be severed therefrom and left in the lock, thereby permitting only the key having the complementary portion capable of operation in said lock.

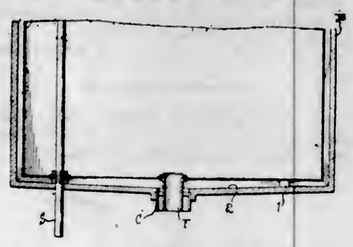
2. As an article of manufacture, a key comprising projections one of which is provided with an extension connected with the body portion of the key by a relatively thin frangible part adapted to permit the same to be severed and left in the lock.

4. The combination with a lock having a key-way, partially filling said key-way to prevent the operation of the lock by means of a key of normal size adapted to fit said lock when unobstructed, of a key having a reduced portion adapted to act in complementary relation with said means and to operate said lock.

[Claim 3 not printed in the Gazette.]

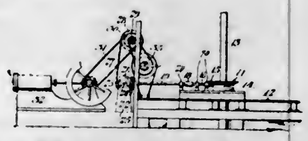
1,277,165. FLUSH-TANK. IRVING B. WINTERS, Wyckoff, N. J. Filed Apr. 20, 1918. Serial No. 229,708. (Cl. 4—5.)

In combination with a flush tank, a bowl and a flush pipe leading from the tank to the bowl, a box inclosing the side and bottom walls of the tank and spaced therefrom to afford an air space, a casing surrounding the flush pipe and in communication with the air space between the box and tank, and leading to the bowl and engaged therewith, said bowl being provided with a port in communication with the lower part of the end portion of



the casing engaged with the bowl and discharging within the bowl.

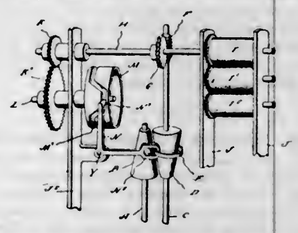
1,277,166. OIL-WELL DRIVE. VICTOR YORK and WALTER G. BLACK, Brea, Cal. Filed July 9, 1917. Serial No. 179,553. (Cl. 74—31.)



1. An oil well drive for use in a derrick comprising a rotary table, a bevel gear formed thereon; a bevel pinion driving said bevel gear; a jack shaft on which said pinion is secured, said jack shaft extending across the floor of and outside said derrick; a secondary shaft located at right angles to said jack shaft outside said derrick; bevel gears connecting said jack shaft to said secondary shaft; a primary shaft located above and parallel to said secondary shaft; a chain and sprockets connecting said primary and secondary shafts; a prime mover; and a chain and sprockets connecting the shaft of said prime mover with said primary shaft.

2. An oil well drive for use in a derrick comprising a rotary table, a bevel gear formed thereon; a bevel pinion driving said bevel gear; a stub shaft on which said bevel pinion is secured; a jack shaft connected to said stub shaft, said jack shaft extending across the floor of and outside said derrick; a secondary shaft located at right angles to said jack shaft outside said derrick; bevel gears connecting said jack shaft to said secondary shaft; a primary shaft located above and parallel to said secondary shaft; a chain and sprockets connecting said primary and secondary shafts; a prime mover; and a chain and sprockets connecting the shaft of said prime mover with said primary shaft.

1,277,167. FRICTION-GEARING. OSCAR A. ALBRECHT, Grand Rapids, Mich., assignor to O. A. Albrecht Company, Omaha, Nebr., a Corporation of Nebraska. Filed Sept. 25, 1916. Serial No. 121,960. (Cl. 74—26.)



1. An automatic selective-change-speed drive for the delivery rolls of a braiding machine comprising a roll-driving shaft, a cam shaft; a cam on said shaft, intermeshing removable change-speed-gears on the roll-driving shaft and cam shaft which permit selective changing of the gear-ratio by the substitution of other change-speed gears therefor, variable speed driving means operatively connected to the roll-driving shaft, and a speed controller therefor operated by the cam.

[Claim 2 not printed in the Gazette.]

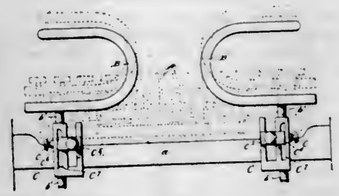
1,277,168. COLLAR-FASTENER. LOUIS A. ANDERSON, Attleboro, Mass., assignor to The R & G Company, Attleboro, Mass. Filed Feb. 11, 1918. Serial No. 216,628. (Cl. 24—88.)



1. The combination of a hollow bar; internal annular ribs therein adjacent the bar ends, the bar having slits opening from each bar end through the adjacent ribs; pins fitted with annular recesses adjacent the pin head and adapted to enter the opposite ends of the bar separately and engage its recess with the adjacent rib.

2. A hollow bar; finger extensions from each end thereof; flanges on the ends of the fingers; pins fitted with annular recesses adapted to enter the open ends of the bar separately and make engagement of the finger flanges with the annular recesses.

1,277,169. TOUCH-SYSTEM HAND-REST. WALTER J. ANDERSON, Galveston, Tex. Filed Feb. 2, 1918. Serial No. 215,076. (Cl. 120—56.)



1. A hand-rest for typewriters adapted to be mounted to the typewriter frame, desk, or table in juxtaposition to the key-board of a typewriter, consisting of a suitable hand, or wrist-support provided with a depending arm, a clamping member having a cylindrical opening therein adapted to receive and afford a vertically adjustable bearing for said arm, means for holding said arm in adjusted position, a stationary jaw and a movable toothed jaw adapted to clamp a type-writer frame, desk, or table, ratchet teeth adapted to engage said toothed-jaw, and means for holding said jaw engaged.

[Claims 2 and 3 not printed in the Gazette.]

1,277,170. REINFORCEMENT OF CLOTHES PEGS OR PINS. FRANK APTED, Geelong, Victoria, Australia. Filed Oct. 22, 1917. Serial No. 197,915. (Cl. 24—138.)

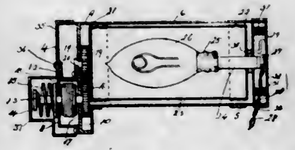
4. A reinforcement for wooden clothes pegs or pins consisting of a metallic ring formed in two pieces pivoted to each other, one of said sections having a curved upward extension at each end thereof, the ends of the



other section being bent around the first section at the base of said curved extensions.

[Claims 1 to 3 not printed in the Gazette.]

1,277,171. AUTOMOBILE-SIGNAL. ERNEST A. AROLAN, Kingston, N. Y. Filed July 13, 1917. Serial No. 180,266. (Cl. 40—77.)



2. In a device of the character stated, a housing open at each end and provided with a sight opening, a sheet of transparent material disposed across said sight opening, a gear casing at one end of the housing, a permanent partition located adjacent one end of the housing and forming one of the walls of the gear casing, a bracket secured to the permanent partition, a shaft journaled in the bracket and permanent partition and projecting through said partition into the interior of the housing, a spring secured to the shaft and bracket for normally forcing said shaft in one direction, a cable drum fast on said shaft, a gear also fast on the inner end of said shaft, a transparent cylinder within the housing, said cylinder having designation marks thereon adapted to be sighted through the sight opening in the housing, an end cover detachably mounted on each end of the cylinder, a trunnion on each end cover, one of which projects into the cylinder, a gear carried by the other trunnion, a removable partition located at the other end of the housing, said trunnions being journaled in the partitions with the gears in mesh, a washer for spacing the removable partition from the adjacent end cover of the transparent cylinder, a cap for closing that end of the housing where the removable partition is located, springs carried by said cap and engaging the removable partition for normally forcing the latter inward, a source of illumination carried by the trunnion which projects into the cylinder, another cap for closing the opposite end of the housing, said cap having an offset to provide a chamber for the end of the shaft and the spring thereon and attaching lugs projecting from the housing for fastening the same to an object.

3. A signal comprising a housing having a sight opening therein, a permanent partition within said housing adjacent one end thereof, a removable partition within said housing adjacent the opposite end, a glass cylinder, end covers having threaded engagement with the ends of said cylinder, trunnions carried by said end covers and journaled in the partitions, designation marks on the glass cylinder and a mechanism for rotating the glass cylinder whereby the different designation marks may be moved to the sight opening.

4. A signal comprising a housing having a sight opening therein, a permanent partition within said housing

adjacent one end thereof, a removable partition within said housing adjacent the opposite end, a glass cylinder, end covers having threaded engagement with the ends of said cylinder, trunnions carried by said end covers and journaled in the partitions, designation marks on the glass cylinder, a gear fast on one of said trunnions, a bracket, a shaft journaled in said bracket and the permanent partition and having one end projecting through said partition, a gear fast on said shaft and meshing with the first named gear, a drum fast on said shaft, a spring connected to said shaft and the bracket for revolving the shaft in one direction, a cable wound about the drum and means to which the cable is attached whereby the rotary movements of the glass cylinder may be controlled.

[Claims 1 and 5 not printed in the Gazette.]

1,277,172. COLORATION METHOD. BRAXTON D. AVIS, Clarksburg, W. Va. Filed Jan. 8, 1918. Serial No. 210,877. (Cl. 91—68.)

1. A coloration method, which consists in forming an ammoniacal solution of a double salt of mercury and ammonium and coating the surface to be colored with the solution, whereby the double salt of mercury and ammonium is precipitated on the surface by the evaporation of the ammonia from the solution.

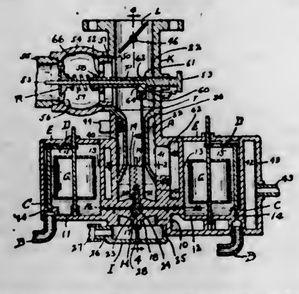
3. A coloration method, which consists in forming an ammoniacal solution of a double nitrate of mercury and ammonium, then coating the surface to be colored with the solution to precipitate a double nitrate of ammonium and mercury by the evaporation of ammonia from the solution.

5. A coloration method, which consists in forming a precipitate of a dimercuric ammonium nitrate, dissolving the precipitate in a concentrated solution of ammonium hydroxid containing an ammonium salt, then coating the surface to be colored with the solution formed to precipitate the dimercuric ammonium nitrate by means of evaporation of the ammonia from the solution.

7. A coloration method, which consists in forming an alkaline solution of a double salt of mercury and an alkali, adding alcohol to the solution, then coating the surface to be colored with the solution to precipitate the double salt of mercury and alkali produced by the evaporation of the alcohol.

[Claims 2, 4, and 6 not printed in the Gazette.]

1,277,173. CARBURETER. HARRY H. BAER, Cleveland, Ohio. Filed Oct. 27, 1917. Serial No. 198,778. (Cl. 261—18.)



1. In a carbureter, the combination, with a mixing or carbureting chamber, two ducts for conducting fuel to be fed to said chamber from different fuel-supply sources, a fuel-feeding nozzle arranged to discharge into said chamber and comprising fuel-feed-controlling means arranged and adapted to be operated to establish communication through said nozzle between said chamber and the one or the other of said ducts, and means for supplying air to said chamber adjacent said nozzle, said chamber being provided at a point spaced forwardly from said nozzle with an air-inlet, of a valve controlling the supply of air to said chamber at said air-inlet and normally in its closed position and arranged and adapted to be opened by the requisite suction created within said chamber, and means whereby the movement of said valve by any given suction is reduced or increased according as communication is established by the aforesaid fuel-controlling means between said chamber and the one or the other of the aforesaid ducts.

2. In a carbureter, the combination, with a mixing or carbureting chamber, two ducts for conducting fuel to be fed to said chamber from different fuel-supply sources, fuel-feed-controlling means employed in establishing communication between said chamber and the one or the other of said ducts, means for supplying air to said chamber adjacent said fuel-feed-controlling means, and a throttle-valve arranged within said chamber and employed in controlling the passage from said chamber of the fuel-and-air mixture formed in said chamber, said chamber having an air-inlet intermediately of said valve and the aforesaid air-supply means, of a valve controlling the supply of air to said chamber at said air-inlet and normally in its closed position and arranged and adapted to be opened by the requisite suction created within said chamber, and means independent of the aforesaid throttle-valve and arranged and adapted to render the movement of the second-mentioned valve by a given suction greater or less according as communication is established by the aforesaid fuel-feed-controlling means between said chamber and the one or the other of the aforesaid ducts.

3. In a carbureter, the combination, with a mixing or carbureting chamber having an air-inlet, two ducts for conducting fuel to be fed to said chamber from different fuel-supply sources, fuel-feed-controlling means employed in establishing communication between said chamber and the one or the other of said ducts, a valve controlling the supply of air to said chamber at the aforesaid air-inlet and normally in its closed position and arranged and adapted to be opened by the requisite suction created in said chamber, and yieldable means acting to retain said valve in its closed position, of means whereby the resistance offered by said yieldable means to the opening of said valve is increased or reduced according as communication by the aforesaid fuel-feed-controlling means is established between the aforesaid chamber and the one or the other of the aforesaid ducts.

[Claims 4 to 12 not printed in the Gazette.]

1,277,174. LOCK. MAX BAKST, Brooklyn, N. Y., assignor to United States Bolt Lock Company, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 22, 1917. Serial No. 187,595. (Cl. 70—74.)



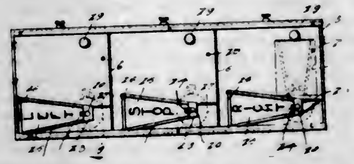
1. In a lock, a casing, bearings one above and the other below the casing, a main bolt in the casing, an auxiliary bolt in each bearing, bell crank levers pivoted to the casing and each having a pivotal and sliding connection with the main bolt, sliding members having their inner ends loosely pivoted to the bell crank levers, bell crank levers pivoted to the bearings and pivotally and slidably connected with the auxiliary bolts and the outer ends of the sliding members.

2. In a lock, a casing provided with an attaching bar for securing the lock to a door, said bar projecting beyond the casing and provided with bearings at its ends, spaced bolts, of which one is the controlling bolt and is mounted to slide in the casing and through the said bar, the other bolts being auxiliary bolts and being mounted to slide in the said bearings, key controlled means mounted on the casing and engaging the said controlling bolt, bell crank levers connected with the said controlling bolt, bell crank levers fulcrumed on the said bearings and connected with the said auxiliary bolts, and connecting members slidably mounted on the said casing and its attaching bar and connecting the bell crank levers of the controlling bolt with the bell crank levers of the auxiliary bolts.

3. In a lock, a casing provided with an attaching bar for securing the lock to a door and provided outside of the casing with bearings, spaced bolts, of which one is the controlling bolt and is mounted to slide in the casing and through the said bar, the other bolts being auxiliary bolts and being mounted to slide in the said outside bearings, key controlled means mounted on the said casing and engaging the said controlling bolt, pins on opposite sides of the said controlling bolt, inner bell crank levers having slotted arms and fulcrumed in the said casing, one of the slotted arms of each bell crank lever being engaged by the said pins, sliding members mounted to slide on the casing and its attaching bar, outer bell crank levers having slotted arms and fulcrumed on the said bearings, pins on the ends of the said sliding members, the pins on the said ends within the casing engaging the other slotted arms of the said inner bell crank levers connected with the controlling bolt, and the pins on the outer ends of the sliding members engaging each one of the slotted arms of the bell crank levers mounted on the bearings, and pins on the said auxiliary bolts and each engaging the other slotted arm of the corresponding outer bell crank lever.

[Claims 4 and 5 not printed in the Gazette.]

1,277,175. AUTOMOBILE-SIGNAL. ROBERT C. BARFIELD, Salem, Oreg. Filed Mar. 20, 1917. Serial No. 156,092. (Cl. 40—53.)



An automobile signal comprising a casing having a plurality of compartments provided with openings in the front wall thereof, motors in said casing, substantially U-shaped frames secured to the shafts of the motors and constructed of channel iron, transparent panels carried by said frames and each bearing different direction characters, strips secured to the ends of the arm portions of the frames for retaining the panels therein, springs connected to the web portions of the frames and to the casing for normally holding said frames in an inoperative position, stops carried by said casing for engaging the frames when swung to signaling position to aline the panels with the openings in the compartments, and means energizing the motors.

1,277,176. PROCESS FOR FORMING BOXES. JOHN G. RAUBE, Warsaw, N. Y. Filed Jan. 21, 1918. Serial No. 213,016. Cl. 93—36.)

1. A process for manufacturing paper boxes, comprising the placing of a core strip around a suitable core, then starting a wrapper strip around the core, then placing two end strips upon the core, then sealing these end strips to the wrapper sheet by means of adhesive sealing tape, then tightly winding said wrapper strip around said core strip and sealing the edge thereof, then cutting the wrapper at a predetermined point down to the core strip and then covering the entire outer ends of the wrapper with a covering sheet.



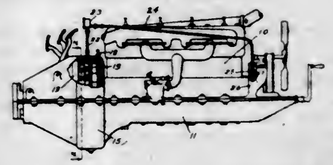
2. A process for manufacturing paper boxes, comprising the placing of a core strip around a suitable core, then starting a wrapper strip around the core, then placing two end strips upon the core, then sealing these end strips to the wrapper sheet by means of adhesive sealing tape, then tightly winding said wrapper strip around said core strip and sealing the edge thereof, then cutting the wrapper at a predetermined point down to the core strip and then covering the entire outer ends of the wrapper with a covering sheet, then placing a hinged strip upon the rear of said box, for hingedly securing the cover of the body to the box, and then placing the cover strip over said hinged strip throughout the entire length of said body.

1,277,177. SHOE-RETAINER. VINCENZO BENEDETTI, Palisade, N. J. Filed Sept. 21, 1917. Serial No. 192,581. (Cl. 36—58.5.)



A shoe retainer comprising a supporting section provided with openings to receive the ankle joints of the wearer, said section partially covering the counter and rear of a shoe in service; strap ends extending from said section for encircling the ankle of the wearer; and means extending below the arch of said shoe for holding the retainer in place.

1,277,178. LUBRICATING SYSTEM FOR INTERNAL-COMBUSTION ENGINES. CHARLES F. BERNHARD and HARRY J. BERNHARD, Pasadena, Cal. Filed Nov. 5, 1917. Serial No. 200,246. (Cl. 184—11.)



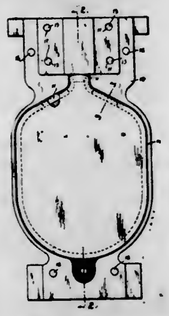
1. In a lubricating system for internal combustion engines wherein an engine is provided with a horizontal crank shaft at one end of which a fly-wheel is positioned

having radially disposed magneto magnets secured to one of its side faces, said fly-wheel and crank shaft being inclosed within a housing partially filled with oil, the combination with said engine, of an oil receiving stem disposed through the side of the housing in alinement with the axial path of travel of the magnets and spaced therefrom, and a circulating pipe connected with said stem to convey the oil thrown by the magnets to an indicator and then to the forward end of said housing.

2. In a lubricating system for internal combustion engines of the class described, a tubular stem extending through the side of the fly-wheel housing of said engine and adapted to present an oil inlet opening to the oil thrown by centrifugal force from the radially disposed magnets upon the face of the fly-wheel of said engine and to stand in axial alinement therewith and spaced from said magnets, an elevating tube in connection with said stem and through which the oil will be forced by the motion of said magnets, a sight feed through which the oil will pass, and a circulating tube in connection with said sight feed to convey the oil to the forward end of the engine crank case.

3. A lubricating system for engines, comprising an oil receiving stem formed with an opening in its side in communication with a longitudinal bore leading to the opposite end of the stem, said stem being positioned through the fly-wheel and magneto case of said engine and in direct alinement with magnets upon the fly wheel, said oil receiving stem being spaced from said magnets and disposed through the side of the case to stand within the patch of travel of oil thrown upwardly by the centrifugal force of said moving magnets, a sight feed with which said stem communicates, and a circulating pipe conveying the oil from the sight feed to the forward end of the engine where it is caused to pour over the timing gears and to thereafter circulate through the engine crank case.

1,277,179. METHOD AND APPARATUS FOR MAKING HOLLOW RUBBER ARTICLES. REES BEYNON, Chicago, Ill., assignor to The Mechanical Rubber Company, a Corporation of New Jersey. Filed Jan. 10, 1917. Serial No. 141,514. (Cl. 18—45.)

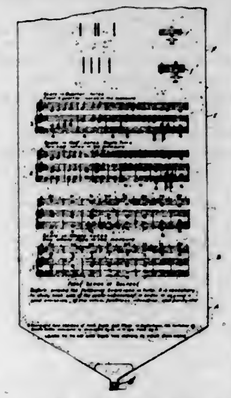


1. A molding core for hollow rubber articles, comprising a support having an opening therethrough, rods passing through said opening and terminating beyond the support in diverging arms, and means for adjustably securing said rods in said opening.

11. Apparatus for closing a core-removing opening extending into the neck of a water bottle or the like, which comprises an outer mold for supporting the walls about the opening, a core formed of independent sections adapted to extend through the neck of the bottle and having their lower ends bent to engage the inner walls about the opening and their opposite ends extending from the neck of the bottle, and means for securing the sections together at their outer ends and for drawing them simultaneously toward the oppositely disposed supporting walls of the mold.

[Claims 2 to 10 not printed in the Gazette.]

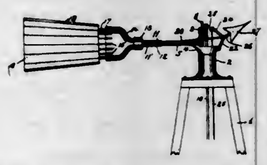
1,277,180. MUSIC-ROLL FOR PLAYER-PIANOS. FREDERICK C. BILLINGS, Milwaukee, Wis. Filed Mar. 30, 1917. Serial No. 158,514. (Cl. 84—162.)



1. A music instruction roll for player pianos, comprising a strip having an imperforate portion, a printed musical exercise upon said portion subdivided into tranversely extending sections adapted for successive exposure upon the tracker bar of a player piano, the said strip having a series of perforations in another portion of the roll adapted to cause the mechanical reproduction of the same exercise by a player piano when used in connection therewith, whereby a student may have the exercise mechanically played in alternation with efforts to read the music as printed upon the imperforate portion of the roll and to play the same manually upon the instrument with which the roll is used.

2. A music instruction roll for player pianos, composing a strip having an imperforate portion, a printed exercise upon said portion subdivided into transversely extending sections adapted for successive exposure upon the tracker bar without exposing perforations thereon, said strip being provided with a perforate portion adapted to mechanically reproduce the same exercise when used in connection with a player piano, said perforate portion having an imperforate border portion provided with printed fragments displaying portions of the exercise and arranged in lineal series, each such printed fragment being laterally offset from perforations productive of the sounds represented by the notes on the printed fragment, whereby a student may alternately play the exercise upon the piano while the imperforate portion is being passed over the tracker bar, and then read the same exercise on the imperforate border portion while the sounds are being mechanically reproduced as the perforate portion traverses the tracker bar.

1,277,181. WIND-MOTOR. CHARLES O. BLAKE, El Reno, Okla. Filed Nov. 27, 1917. Serial No. 204,216. (Cl. 170—43.)



1. In a wind motor, the combination with a turn table, a horizontal bearing spindle carried thereby, and a wheel shaft journaled in the spindle, of a wheel hub having a closed tapering front end rotatable with the shaft, a sleeve slidable on the spindle connected with and inclosing the tapering end of the hub, a plurality of blade ribs pivoted in the large end of the hub, blades mounted on the ribs arranged to form when the wheel is closed, a cylindrical structure concentric to the axis of the shaft and closed at its front end by the hub, a cylindrical rack fixed on the shaft, segmental gears on the ribs concentric to their pivots engaging the rack, and means to shift the sleeve on the spindle to move the hub relatively to the rack to open and close the wheel.

[Claim 2 not printed in the Gazette.]

1,277,182. DETACHABLE UTENSIL-HANDLE. ANTON A. BORASS, Sheboygan, Wis. Filed Mar. 11, 1918. Serial No. 221,740. (Cl. 53—7.)

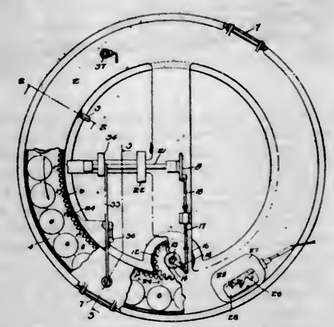


1. A device of the class described comprising a handle having one end offset for interlocking engagement in a portion of an article to be carried, an ear depending from the handle and having its free end portion laterally directed toward the offset portion of the handle, and an angular retaining member pivoted at one end to the ear, one arm of said retaining member extending inwardly of the handle to form a finger piece.

3. A device of the class described comprising a handle having one end adapted to engage an article to be lifted, an ear on the handle, and a substantially rightangular retaining member pivoted at one end to said ear, one arm of the retaining member being adapted to grip said article between the same and the handle.

[Claims 2 and 4 not printed in the Gazette.]

1,277,183. PROCESS OF AND APPARATUS FOR PRESERVING FOOD PRODUCTS. MANFRED BRANDENSTEIN, San Francisco, Cal. Filed Jan. 9, 1917. Serial No. 141,397. (Cl. 113—82.)



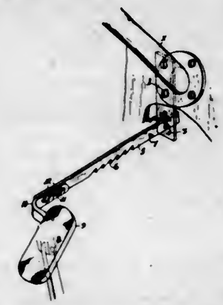
1. The method of preserving food products, which consists in placing the product in a receptacle, sealing the receptacle, making an opening in said receptacle *in vacuo* and sealing the opening *in vacuo*.

7. In a vacuum sealing machine, a chamber adapted to be vacuumized, a turret in said chamber, guides on said turret for positioning receptacles thereon, a sealing station in said chamber, means for rotating said turret to bring the receptacles to the sealing station, and means for making an aperture in each receptacle in the chamber before it reaches the sealing station.

10. In a vacuum sealing machine, a chamber adapted to be vacuumized, a sealing station in said chamber, a plunger arranged in said chamber, means for operating the plunger to make an aperture in a receptacle and means for moving the apertured receptacle to the sealing station.

[Claims 2 to 6, 8, and 9 not printed in the Gazette.]

1,277,184. CLUTCH-PEDAL LOCK. MARVIN M. BRAWNER, Martinez, Cal. Filed Nov. 22, 1917. Serial No. 203,350. (Cl. 74—81.)



2. The combination with the clutch pedal on a planetary transmission gear of an automobile, of a foot plate pivotally mounted on the pedal, a plate rigidly secured ahead of the pedal, said plate having a cross-shaped slot formed therein, a toothed rack bar secured to the pedal extending through the cross-shaped slot in the plate, and a pin secured in the rack bar adapted to permit the clutch pedal to be locked against movement when in neutral position.

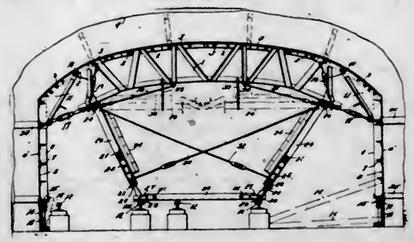
[Claims 1, 3, and 4 not printed in the Gazette.]

1,277,185. PROCESS OF PREPARING AND EXTRACTING VEGETABLE FIBER FROM YUCCA AND THE LIKE. ALFRED G. BROWN, Los Angeles, Cal., assignor to Yusi Fibre Company, Los Angeles, Cal., a Corporation of California. Filed Dec. 24, 1917. Serial No. 208,691. (Cl. 92—16.)

1. The art of separating fiber from yucca leaves which consists in passing the green leaves between crushing rollers, cooking the crushed green leaves, passing the cooked material between corrugated rollers and then between differential smooth rollers, and then passing the soft wet material through a scutching machine.

[Claim 2 not printed in the Gazette.]

1,277,186. TUNNEL-MOLD FORM. CHRISTIAN BRYNOLDT, Pittsburgh, Pa., assignor to Blaw Steel Construction Company, a Corporation of New Jersey. Filed Apr. 11, 1917. Serial No. 161,131. (Cl. 25—131.5.)

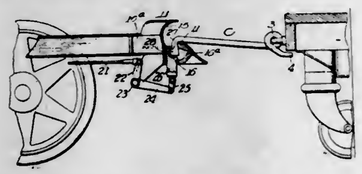


6. A tunnel mold for forming concrete tunnels comprising a collapsible form for supporting the concrete, a traveler carried by the form for supporting the form when the form is in collapsed position, adapted when in operative position to support the entire form, the said traveler being carried by the form and adapted to be moved adja-

cent the shell thereof so as to permit of free passage of objects through the tunnel when the form is in operative position and means for adjusting the form into operative position while supported upon the traveler.

[Claims 1 to 5 and 7 not printed in the Gazette.]

1,277,187. AUTOMATIC COUPLING FOR TRACKLESS VEHICLES. GEORGE W. BULLEY, Chicago, Ill., assignor to Mercury Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 13, 1915. Serial No. 66,569. (Cl. 213—67.)

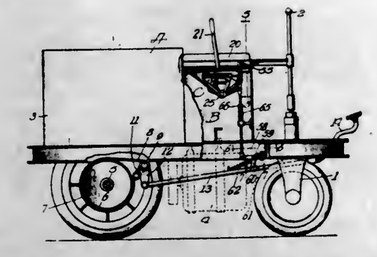


1. The combination of a broad coupler member having angularly disposed portions meeting at substantially central point to provide a comparatively wide coupling range, a coöperating hitch member capable of engaging said coupler member at any point in said range and at various angles with respect thereto, means for automatically centering the hitch member with respect to the coupler member after having engaged said coupler member, and a lock for holding the hitch member against shifting from its central position with respect to the coupler.

5. The combination of two trackless vehicles adapted to be operated in train alinement, and coupling mechanism of said vehicles capable of coupling said vehicles together regardless of their relative position with respect to train alinement and embodying angularly disposed shouldered portions carried by one of said vehicles extending transversely of the width of the vehicle in a substantially horizontal plane, a vertically movable draw-bar member on the other vehicle having a hooked end normally maintained in a plane parallel to but separated from the plane of the shouldered portions and adapted to engage said shouldered portions at any point in their length and to shift to a central position when the vehicles are moved relatively from each other, and an apron disposed along the length of said shouldered portions adapted to deflect the draw-bar member from its normal plane into engagement with said shoulder in the act of coupling the vehicles together.

[Claims 2 to 4 and 6 not printed in the Gazette.]

1,277,188. CONTROLLER FOR ELECTRIC VEHICLES. GEORGE W. BULLEY, Chicago, Ill., assignor to Mercury Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 17, 1916. Serial No. 72,419. (Cl. 246—61.)



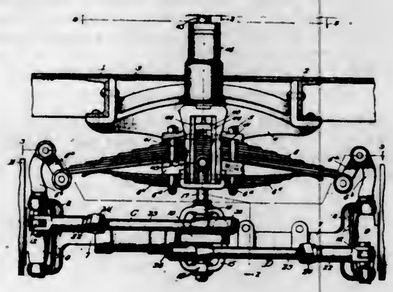
1. The combination of a support, a controller mounted thereon and having a controller member rotatable in opposite directions from a neutral position, a hand lever fastened to said controller for actuating said controller member in either direction, means constantly acting on said controller member to restore it to its neutral position when moved in one direction, a spring-actuated arm loose on said member normally holding the controller member against movement in the other direction, an operator's seat, and means operated by the seat in response to the occupation of the seat by the operator for actuating said arm to release said controller member.

2. The combination of a controller having a shaft rotatable in opposite directions from a normal position, a lever mounted on said shaft for rotating it, a locking arm rotatable on said shaft, a spring acting on the arm to lock the shaft in its normal position, and an operator's seat responsive to the weight of the operator for actuating said arm against the tension of the spring to release the shaft.

5. The combination of a support, an electric controller mounted thereon and having a rotary operating shaft, a hand lever secured to the shaft for rotating it, a fixed collar on said shaft having a shoulder, a rotatable collar on said shaft having a corresponding shoulder, means constantly acting on said rotatable collar to engage the shoulders and rotate the shaft, an operator's seat, and means responsive to the occupation thereof for separating said shoulder members.

[Claims 3 and 4 not printed in the Gazette.]

1,277,189. STEERING-GEAR. GEORGE W. BULLEY, Chicago, Ill., assignor to Mercury Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 4, 1916. Serial No. 129,434 (Cl. 21—198.)



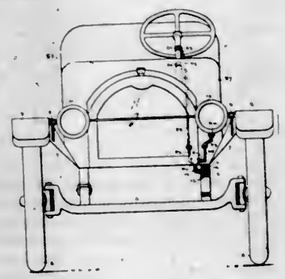
1. The combination of an axle member, rotatable wheel supporting spindles mounted at the ends thereof, radius mechanism rotatably supported by said axle member, arms extending from said spindles, connecting links connected between said arms and said radius mechanism, a vehicle frame, springs supporting said frame on said axle for relative movement, a steering post and a slotted arm on said steering post engaging said radius mechanism to provide a universal connection between the steering post and radius connection.

2. The combination of a vehicle frame, a rotatable steering post mounted thereon, a crank arm on said steering post and having a substantially vertical, elongated slot, an axle member, spring mechanism between said frame and axle member providing relative movement thereof, wheels mounted on said axle, steering mechanism for operating said wheels, and an operating arm for said steering mechanism movable vertically in said slotted crank arm for transmitting the rotation of said steering post to said steering mechanism.

3. The combination of a vehicle frame, a rotatable steering post mounted thereon, a crank arm on said steering post and having a substantially vertical, elongated slot, an axle member, spring mechanism between said frame and axle member providing relative movement thereof, pivoted spindles on said axle, wheels on said spindles, an arm pivotally mounted on the axle, vertically movable in said slotted crank arm and adapted to be rotated by said crank arm, and means connecting said arm and said spindles.

4. The combination of a vehicle frame, an axle and springs therebetween providing for relative vertical movement, a rotatable steering post on the frame, wheels and steering mechanism therefor on said axle, horizontally extending members on said steering post and steering mechanism, and a connection between said horizontal members for transmitting rotary motion to the steering mechanism from the post and arranged to permit relative vertical movement of said members.

1,277,190. HEADLIGHT. CLARK BURGETT, Anacortes, Wash., assignor of one-half to Edmund E. Haugen, Anacortes, Wash. Filed Aug. 25, 1917. Serial No. 188,108. (Cl. 240—61.)



1. The combination of a vehicle provided with a head light pivotally mounted to tilt in a vertical plane, a block secured upon the frame of said vehicle and formed with a horizontal bearing, a U-shaped frame having its horizontal arm journaled in said bearing, a connection extending from one of the end arms of said frame to said head light, and a connection extending from the other arm of said frame to means for oscillating the frame to effect the tilting of the head light.

[Claims 2 and 3 not printed in the Gazette.]

1,277,191. INFANTRY-FIRE-CONTROL RULE OR SCALE. SMEDLEY D. BUTLER, West Chester, Pa., assignor of one-half to Peter Abrams, Philadelphia, Pa. Filed Aug. 23, 1915. Serial No. 46,960. (Cl. 33—64.)



1. A scale or rule for controlling infantry fire, comprising a bar divided into longitudinal sections representing ranges in yards, each longitudinal section subdivided equally into unit sections bearing a definite relation to the ranges of the first mentioned sections, and reference members slidably mounted on said bar.

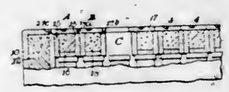
2. A scale or rule for controlling infantry fire, comprising a bar divided into longitudinal sections representing ranges in yards, each longitudinal section subdivided equally into unit sections bearing a definite relation to the ranges of the first mentioned sections, reference members slidably mounted on said bar, and guiding means for said reference members.

3. A scale or rule for controlling infantry fire, comprising a bar divided into longitudinal sections representing ranges in yards, each longitudinal section subdivided equally into unit sections bearing a definite relation to the ranges of the first mentioned sections, reference members slidably mounted on said bar, guiding means for said reference members, and friction means carried by said reference members to hold them in adjusted positions on said bar.

4. A scale or rule for controlling infantry fire, comprising an elongated bar divided into longitudinal sections representing ranges in definite units of measurement, each of said longitudinal sections being subdivided equally into unit sections bearing a definite relation to the ranges of the first-mentioned sections, and a reference member slidably mounted on said bar.

5. A scale or rule for controlling infantry fire, comprising an elongated bar divided into longitudinal sections representing ranges in definite units of measurement; each longitudinal section being subdivided equally into unit sections bearing a definite relation to the ranges of the first-mentioned sections, reference members slidably mounted on said bar and means connected to the ends of such scale or rule whereby it may be conveniently held a proper distance from the eye to subtend each of said unit divisions one squad front at the respective ranges.

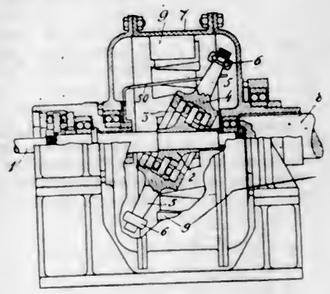
1,277,192. REFRIGERATING APPARATUS. SAMUEL C. CARTY, Washington, N. C. Filed Sept. 8, 1917. Serial No. 190,392. (Cl. 217—56.)



4. A cover for freezing tanks, consisting of a plurality of closed box-like sections filled with insulating material, the top of each section having one edge projecting beyond one side wall of the section and its opposite edge terminating short of the outer face of the opposing side wall of the said section.

[Claims 1 to 3 not printed in the Gazette.]

1,277,193. POWER-TRANSMISSION GEAR. GUNNAR ELIAS CASSEL, Stockholm, Sweden, assignor to Artur Lorenz Olof Abraham Leffler, Djursholm, Sweden. Filed Dec. 20, 1917. Serial No. 208,085. (Cl. 74—14.)



1. A power transmission gear, comprising a rotating shaft, an oblique disk attached to said shaft, a thrust-disk loosely mounted on said oblique disk and performing a gyratory movement during the rotation of said shaft, projections on said thrust-disk, guiding means engaged by said projections, said thrust-disk and said guiding means being adapted to perform a relative rotation during the gyratory movement of the thrust-disk.

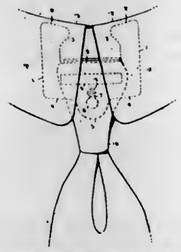
3. A power transmission gear, comprising a rotating shaft, an oblique disk attached to said shaft, a thrust-disk loosely mounted on said oblique disk and performing a gyratory movement during the rotation of said shaft, projections on said thrust disk, guiding means engaged by said projections, stationary means for preventing the thrust-disk from rotation, a rotatably mounted casing inclosing said thrust-disk, guiding slots on the inner surface of said casing engaged by said projections to cause the

casing to perform a rotary movement during the gyratory movement of the thrust-disk.

6. A power transmission gear, comprising a rotating shaft, an oblique disk attached to said shaft, a thrust-disk loosely mounted on said oblique disk and performing a gyratory movement during the rotation of the shaft, radially extending projections, symmetrically disposed on the periphery of said thrust-disk, a casing inclosing said thrust-disk, zig-zag slots on the inner surface of said casing, each of said slots being adapted to be engaged by diametrically opposite projetcions of the thrust-disk to cause the thrust disk and the casing to perform a rotary movement in relation to each other.

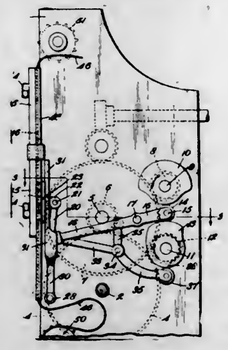
[Claims 2, 4, and 5 not printed in the Gazette.]

1,277,194. NECKTIE-HOLDER. JOHN CISHEK, Grantwood, N. J. Filed June 1, 1917. Serial No. 172,242. (Cl. 2—84.)



As an article of manufacture, a necktie holder formed from a sheet of resilient material and embodying a pair of side bars having their upper ends straight and inclined toward each other and provided with inwardly extending bearing shoulders to fit in and against the fold of the collar, a bottom bar connecting said side bars, a tongue depending from said bottom bar and provided with a collar button receiving opening, a reinforcing bar adjacent but spaced from said bottom bar and connecting said side bars, said tie holder adapted to be flexed outwardly by an upward pressure on the tongue to spring the tongue over the collar button, the inherent resiliency of the tie holder maintaining it in applied position and at the same time exerting an inward tension on the upper ends of the side bars to prevent the casual separation of the meeting ends of the collar.

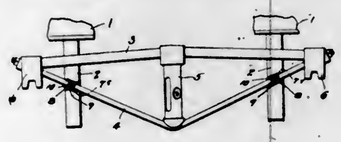
1,277,195. FILM-FEEDING MECHANISM. HERSCHEL M. CONNOR and DON D. MILES, San Francisco, Cal., assignors to Safetygraph Educational Film Company, Inc., San Francisco, Cal., a Corporation of Nevada. Filed July 30, 1917. Serial No. 183,523. (Cl. 74—54.)



1. In a film feeding mechanism the combination of a pair of conjugate cams; means for continuously rotating said cams in the same direction; a member in continuous contact with the surfaces of said cams; a film feeding member positively reciprocated in opposite directions by said first named member; a third cam rotating with one of said first named cams; and connections between said third cam and said film feeding member, adapted to reciprocate the latter in opposite directions at an angle to said first mentioned directions, substantially as described.

[Claims 2 to 7 not printed in the Gazette.]

1,277,196. FOURTH-POINT SUPPORT FOR BRAKE-BEAMS. FREDERICK R. CORNWALL, St. Louis, Mo., assignor to Chicago Railway Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 11, 1918. Serial No. 221,711. (Cl. 188—70.)



1. A reversible fourth point support for brake beams comprising a member designed to be secured to the brake beam, and a bearing member having an angular adjustment with respect to said first-mentioned member.

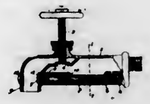
2. A reversible fourth point support for brake beams comprising a member adapted to be secured to a part of the brake beam, a bearing member having angular adjustment with respect to said first-mentioned member, and means for holding said bearing member in its adjusted position.

3. A fourth point support for brake beams comprising a member designed to be secured to a part of the brake beam, in combination with a detachable bearing member supported upon said first-mentioned member and capable of angular adjustment relative thereto.

4. A reversible fourth point support for brake beams comprising a member designed to be secured to a part of the brake beam, in combination with a bearing member which may be turned with relation to said first-mentioned member so as to adapt it for use at either end of the beam.

5. A fourth point support for brake beams comprising a member adapted to be secured to a part of the brake beam, in combination with a bearing member detachably mounted with relation to said first-mentioned member and angularly adjustable with respect thereto, and means for locking said bearing member in adjusted position.

1,277,197. NON-FREEZABLE FAUCET. JOSEPH B. CRANDON, MARKS M. BERNSTEIN, and BERNARD J. BERNSTEIN, Portland, Me. Filed Apr. 4, 1918. Serial No. 226,599. (Cl. 137—35.)

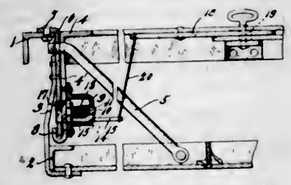


2. A non-freezable faucet including a by-pass having a valve seat, a thermostatic rod having an end adapted to fit said valve seat and close said by-pass, said rod being composed of material more expansible by heat than the material of the faucet.

5. A non-freezable faucet including a by-pass, a hard rubber rod having its end formed into a valve element, a metal casing for said rod, a screw plug having at one end a valve seat coacting with said valve element and having a central opening forming a portion of said by-pass, said faucet having a longitudinal chamber in its lower portion to contain said rod and an opening connecting said chamber with the interior of the faucet and an opening in the faucet for permitting access to the said screw plug.

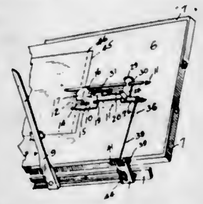
[Claims 1, 3, and 4 not printed in the Gazette.]

1,277,198. ADJUSTABLE BED AND LOCKING MEANS THEREFOR. WILLIAM J. CURTIS, Wilmington, Del., assignor to National Adjustable Bed and Spring Company, Wilmington, Del. Filed Oct. 22, 1917. Serial No. 197,900. (Cl. 5—43.)



In a bedstead of the class described, a main frame, locking segments attached to said main frame at either side, an adjustable section of substantially U-shape pivotally connected to the main frame, the end portions thereof being bent downwardly adjacent to the pivot to form supporting arms, locking means mounted on each of said arms comprising a U-shaped keeper secured to the inner face, a spring actuated locking bolt mounted in the keeper and projecting through the arm, said keeper having a supporting extension projecting therefrom, a lever pivoted to said extension for retracting the bolt, and a flexible actuating connection extending from said lever to the end of the adjustable section for unlocking the bolt to permit of adjustment of said section.

1,277,199. ALINING DEVICE FOR PRINTING-PRESSES. WILLIAM C. DANIELS, Huntington Park, and GEORGE T. REED, Inglewood, Cal. Filed Nov. 14, 1916. Serial No. 131,843. (Cl. 101—414.)



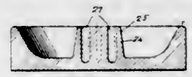
1. An alining device of the class described, comprising a plate provided with opposed puncturing means for securing the same to a tympan, a gage slidably mounted thereon, tension means carried by said plate normally urging the gage into advanced position, and adjustable means to vary the throw of said gage.

4. An alining gage comprising a plate provided with tympan engaging means and a slideway, a slide movably mounted in relation to said plate, a lever connected with said slide, tension means connecting said slide to said plate and normally urging said slide into registering position, a member adapted to be secured to a movable part of the press to which said gage is secured, and flexible means connecting said lever and said member.

[Claims 2, 3, and 5 to 8 not printed in the Gazette.]

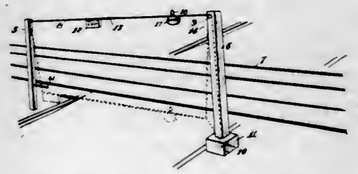
1,277,200. NUT AND FRUIT BOWL. MORTON DAVIS, New York, N. Y. Filed June 28, 1916. Serial No. 106,405. Renewed July 17, 1918. Serial No. 245,403. (Cl. 65—15.)

1. In a nut and fruit bowl, a receptacle, a post projecting upwardly from the interior of said receptacle, a series of pockets in said post spaced radially around the center thereof, each pocket being adapted to hold a nut pick therein, and a pair of larger adjacent pockets in said post adapted in conjunction to hold the handles of a nut cracker.



2. An article of the character described comprising a hollow bowl-like receptacle having upstanding walls, a projecting part supported in the center of the receptacle and terminating substantially in line with the upper edge of the walls, said upstanding part having a relatively wide top portion formed with a plurality of separated sockets arranged in circular formation for receiving and supporting nut picks, the upstanding part being also formed well within its borders with sockets for receiving and supporting a nut cracker, substantially as described.

1,277,201. RAILROAD-CROSSING GATE. JOHN DOSSA, Los Angeles, Cal. Filed Dec. 19, 1916. Serial No. 137,826. (Cl. 269—3.)



1. A railroad crossing gate comprising a pair of spaced posts, a gate cable extending between the upper portions of the posts and attached to one of said posts, a drum for winding and unwinding the cable to raise and lower the portion of the cable between the posts, a weight on the cable intermediate the post for causing a portion thereof to depend substantially vertical when lowered, a second drum and a cable thereon connected to the gate cable adapted to coöperate with the weight to dispose a portion of the gate cable horizontally when lowered.

4. The combination with a pair of parallel railroad rails insulated to form a block, and an electrical circuit having terminals connected to the rails and adapted to be closed on electrically connecting the rails, of a gate chain suspended horizontally, means actuated by closing of the circuit through the rails for lowering said chain and means controlled by the opening of the circuit for raising the chain, and means for wig-wagging the chain while the circuit is closed.

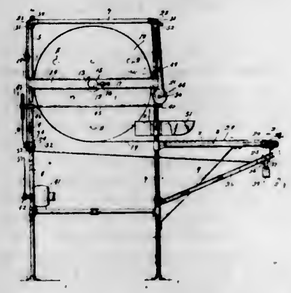
7. The combination with a pair of railroad rails insulated to form blocks, and an electrical circuit having terminals connected to the rails and adapted to be closed on electrically connecting the rails, a motor on said circuit, a drum adapted to be rotated by said motor, a cable wound on said drum and suspended horizontally between posts, means controlled by closing the electrical circuit through the rails setting the motor in operation and causing the cable to unwind from the drum, means on the cable for stopping rotation of the drum, and means controlled by the cable for closing an auxiliary circuit to the motor to maintain the latter in operation after the rail circuit is open.

[Claims 2, 3, 5, 6, 8, and 9 not printed in the Gazette.]

1,277,202. MACHINE FOR DRYING PHOTOGRAPHIC PRINTS AND THE LIKE. GLEN M. DYE, Minneapolis, Minn. Filed Jan. 19, 1917. Serial No. 143,402. (Cl. 34—4.)

1. In a drying machine of the kind described, the combination with a frame, of a revoluble cylinder and guide

rollers journaled on the frame, an endless apron arranged to run over the cylinder and guide rollers, and means for holding one edge of the apron against transverse movement toward the other edge thereof but with freedom for longitudinal movement, said other edge of the apron being free to drift transversely and the cylinder and guide rollers arranged to be set to produce a tendency in the apron to drift transversely toward the free edge thereof.

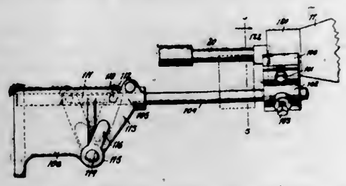


2. In a drying machine of the kind described, the combination with a frame, of a revoluble cylinder and guide rollers journaled on the frame, at least one of which has a bead-engaging shoulder, and an endless apron arranged to run over the cylinder and guide rollers and having at one of its edges a bead engaging said shoulder, the other edge of the apron being free to drift transversely and the cylinder and guide rollers arranged to be set to produce a tendency in the apron to drift transversely toward its free edge.

3. In a drying machine of the kind described, the combination with a frame, of a revoluble cylinder and guide rollers journaled on the frame, certain of the guide rollers having at one of their ends allned peripheral grooves, and an endless apron arranged to run over the cylinder and guide rollers and having at one of its edges a bead arranged to run in said allned grooves, the other edge of the apron being free to drift transversely and the cylinder and guide rollers arranged to be set to produce a tendency in the apron to drift transversely toward its free edge.

[Claims 4 to 8 not printed in the Gazette.]

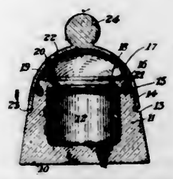
1,277,203. MULTIPLE-COPYING LATHE. GEORGE A. ENSIGN, Defiance, Ohio, assignor to Defiance Machine Works, Defiance, Ohio, a Corporation. Filed Dec. 26, 1917. Serial No. 208,840. (Cl. 142—55.)



1. In a multiple copying lathe, sets of headstock spindles and tailstock centers arranged one in front of the other and each adapted to carry a piece of work, a V-shaped centering support arranged below the rearmost of the said work-carrying headstock spindles and adapted to support the end of the piece of work to be engaged by the said rearmost headstock spindle, a rod mounted to slide longitudinally of the machine in a bearing on the head stock and carrying the said support, and a rock shaft extending transversely of the machine and provided at its inner end with an arm engaging the said rod and provided at the outer end with a handle under the control of the operator.

2. In a multiple copying lathe, a head stock and a tail stock, the head stock being provided with a bracket having a slotted bearing, sets of spindles and centers carried by the head stocks and each adapted to carry a piece of work, a centering support having a recess in its upper edge and arranged below the rearmost of the said work-carrying spindles and in which the end of the work is adapted to rest, a rod carrying the support and slidably mounted in the bearing of the headstock, said rod being provided with a pin projecting through the slot of the said bearing, and a transverse rock shaft mounted in the bracket and having at its inner end an arm slotted to receive the pin of the rod and provided at its outer end with a handle for operating it.

1,277,204. INK-WELL AND OTHER RECEPTACLE. JOSEPH B. ESTES, Babylon, N. Y. Filed Dec. 26, 1917. Serial No. 208,792. (Cl. 120—57.)



1. A receptacle for ink and other substances comprising a base, a wall rising therefrom to provide a chamber therein and which wall terminates at its upper end in an annular bead, a portion of which overhangs the chamber in the receptacle and the upper surface of which is concaved and inclined inwardly so as to form a drain back into the chamber and provide a rib on the bead, and a cap adapted to fit over a part of the said wall.

[Claims 2 to 4 not printed in the Gazette.]

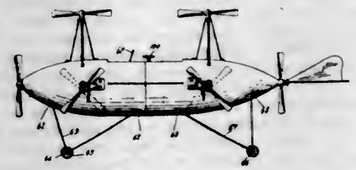
1,277,205. COMBINATION FORK AND SPOON. CATHERINE EVANS, Pittsburgh, Pa. Filed Apr. 9, 1917. Serial No. 160,715. (Cl. 30—22.)



The combination with a spoon having a bowl and a flat relatively short handle, of a sleeve fixed to and extending about said handle, a three tined fork having a contractible handle slidable through the sleeve for the positioning of the bowl outwardly beyond or inwardly of the fork tines, the handle of the fork being notched for locking engagement with the sleeve when said bowl is inwardly of the fork tines, the sleeve being formed with a socket, and a bight on one of the tines of the fork to engage the socket to lock the bowl extended outwardly beyond the fork tines.

1,277,206. AEROPLANE. GEORGE FEDCHENKO, Detroit, Mich. Filed Jan. 2, 1918. Serial No. 209,935. (Cl. 244—25.)

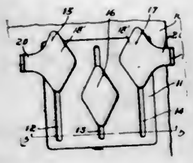
1. In a flying machine, the combination with tubular casing, and a power source carried thereby, of propellers engaged at the front and rear of said casing, a tail plane rotatable upon its central axis, means for operating said tail plane, connections between said power source and said propellers, a pair of vertically arranged propellers above said casing, connections between said vertical propellers and said power source, opposed pairs of laterally extending propellers, pivoted brackets upon which said propellers are rotatably mounted, means for turning said lateral propellers vertically, and connections between said



lateral propellers and said power source whereby they may be operated either horizontally or vertically.

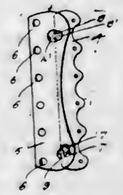
[Claim 2 not printed in the Gazette.]

1,277,207. SAFETY-GUARD FOR FOOT-PEDALS. SAMUEL FISCHER, Los Angeles, Cal. Filed Oct. 29, 1917. Serial No. 199,087. (Cl. 74—81.)



The combination of three control pedals arranged side by side, a detachable foot plate secured upon each of the outermost pedals, and a foot retaining projection on the outermost side of each plate, the inner side of each plate being unobstructed to allow the foot to pass freely from one pedal to the other.

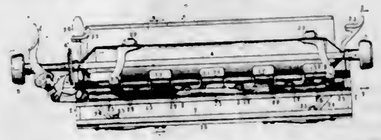
1,277,208. CLASP FOR THE CORSETS OF ARTIFICIAL LIMBS. ADAM FORSTER, Pittsburgh, Pa., assignor to J. E. Hanger, Incorporated, a Corporation of the District of Columbia. Filed July 9, 1917. Serial No. 179,542. (Cl. 24—203.)



A clasp for the corsets of artificial limbs, comprising a pair of elongated plates secured to the free edges of the opening in the body of the corset, projecting hook-shaped lugs on the face of one plate one of which extends longitudinally thereof while the other extends laterally, an elliptical orifice in the other plate disposed diagonally to the longitudinal axis thereof for engaging the longitudinal hook, and another orifice for engaging the other hook, substantially as described.

1,277,209. TYPE-WRITING MACHINE. GEORGE GOULD GOING, Middletown, Conn., assignor to The Noiseless Typewriter Company, Middletown, Conn., a Corporation of Connecticut. Filed Mar. 31, 1916. Serial No. 87,918. (Cl. 197—138.)

1. In a typewriting machine, in combination, a platen roll, a plurality of feed rollers spring pressed thereagainst, a spring pressed member movable longitudinally of said roll to repress said rollers, an operating lever for said member movable transversely of said roll, and connecting means between said lever and said member comprising a pivoted sub-lever associated with said lever and a rotatable bearing therefor on said member, said sub-lever and said bearing having rolling contact on one side or the other of the diameter of said bearing parallel to the axis of said roll to yieldingly hold said operating lever in one or the other of its extreme positions.

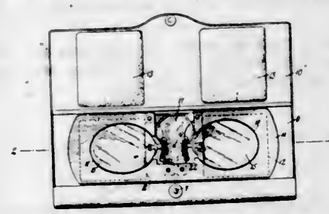


2. In a typewriting machine, in combination a platen roll, a plurality of paper guide clips spring pressed against the upper part of said roll, a plurality of feed rollers spring pressed against the lower part of said roll and operable to insure movement of said clips away from said roll, and means for moving said rollers away from said roll to move said clips.

3. In a typewriting machine, in combination, a platen roll, a plurality of feed rollers therefor arranged in pairs, the corresponding rollers of each pair being pivotally supported on and eccentric with respect to spaced spindles extending longitudinally of said roll, a plurality of paper clips pivotally supported on one of said spindles, and common operating means to move said rollers and said clips away from said roll.

[Claims 4 to 8 not printed in the Gazette.]

1,277,210. EYEGLASS-CASE. RINALDO A. GOELKEL, New York, N. Y., and WINFRED N. LURCOTT, Weehawken, N. J.; said Lurcott assignor to said Goelkel. Filed Sept. 21, 1917. Serial No. 192,606. (Cl. 206—6.)



1. The combination of a case having pivotally connected coacting sections; a plurality of rubbing members disposed in paired relation for superposition when the case is closed; a movable frame for holding eyeglasses; and means for moving said frame and eyeglasses when said sections are closed one on the other.

4. The combination of a case having pivotally connected coacting sections; a plurality of rubbing members disposed in paired relation and fixedly attached each to one of said sections to impinge upon each other or interposed object when said sections are closed; holding means for engaging eyeglasses when placed in said case for shifting the same when held between said members; and operating means for shifting said holding means, said operating means embodying a crank-like device extending exterior to said case.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,277,211. POKER-CHIP HOLDER. TOM C. GRAHAM, Arlington, N. J. Filed Mar. 29, 1918. Serial No. 225,411. (Cl. 46—55.)

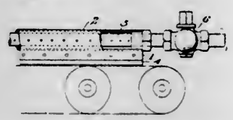
In a poker chip holder, a base, a plurality of spindles rising upwardly therefrom and adapted to pass through the openings of poker chips, to hold the chips in several

stacks, the lower end of each spindle having reduced parts, the end of which being swaged to hold the spindle firmly upright, each spindle comprising a tubular section, which is secured to the base, and an extensible section, which is telescopically united in the tubular section and



adapted to be held frictionally in adjusted positions, both sections being provided with graduations, the numbers of the graduations of the extensible section starting where the numbers of the graduations of the tubular section terminate.

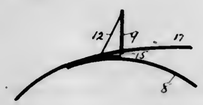
1,277,212. EDGE RULER FOR THE WIRE PART OF PAPER-MACHINES. ANDERS HENRIK GUSTAFSON, Tofte, Norway. Filed Apr. 17, 1918. Serial No. 229,175. (Cl. 92—44.)



1. In combination with the wire part of a paper machine or the like, a stationary ruler along each edge of the wire part, the lower edge of said ruler consisting of elastic material and touching the edge of the wire part, and means for supplying water to the inside surface of said ruler to lessen the friction between the ruler and the wire part.

[Claims 2 and 3 not printed in the Gazette.]

1,277,213. PISTON-RING COMPRESSOR. WILLIAM HODGKINSON, Waterbury, Conn. Filed May 25, 1918. Serial No. 236,562. (Cl. 81—8.)



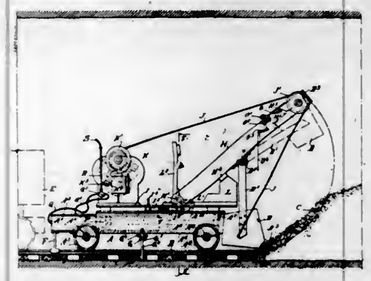
1. A piston ring compressor comprising a band, a bridge rigidly secured to one end thereof and extending across the outer face of the band and forming a passage between the band and the lower edge of the bridge, the other end of the band extending through said passage and adjustably interlocked with the said bridge.

4. A piston ring compressor comprising a band, a bridge rigidly secured to one end thereof and extending across the band forming a passage between them, the lower edge of the said bridge formed with downwardly projecting lugs, the other end of the band extending through said passage and formed with a series of slots which said lugs may enter, whereby the said other end of the band is interlocked with the bridge.

[Claims 2 and 3 not printed in the Gazette.]

1,277,214. SHOVELING OR MUCKING MACHINE. MANFRED T. HOSTER, St. Peters, Pa. Continuation of application Serial No. 878,601, filed Dec. 22, 1914. This application filed July 25, 1917. Serial No. 182,808. (Cl. 214—138.)

1. A shoveling machine of the character described, comprising a truck having two main parts each provided with wheels adapted to travel on track rails, one of the truck parts being held temporarily fixed during the shoveling operation and the other part having its frame mounted to slide forward and backward on the frame of the fixed truck part, actuating means for imparting a forward and backward movement to the said movable part, a bucket adapted to be engaged by the forward end of the said movable truck part to push the bucket forward in a straight line, into the material to be shoveled, means for subsequently imparting a forward and upward swinging motion to the said bucket for the latter to scoop up the material, and carrying means adapted to carry the said bucket from a filled and raised position rearwardly overhead of the machine into an upside down dumping position.



8. A shoveling machine of the character described provided with a bucket, a transferring means on which the bucket is mounted to swing, and an actuating means connected with the said bucket and the said transferring means for imparting an upward swinging motion to the said bucket to engage the latter with the said transferring means and to subsequently impart a rearward motion to the said transferring means to carry the said bucket overhead the machine into dumping position at a point beyond the rear of the machine.

13. A shoveling machine of the character described provided with a pivoted transferring arm having side pieces, a bucket mounted on the said transferring arm and adapted to pass with its open mouth between the said side pieces, a cover pivoted on the said side pieces and adapted to form a closure for the said bucket, an arm on the pivot of the said cover, a locking and releasing device for the said arm to hold the cover in locked position and to allow of releasing the cover, and means adapted to be engaged by the said arm to limit the opening movement of the cover for the latter to form a chute for material dumped by the said bucket.

[Claims 2 to 7, 9 to 12, and 14 to 19 not printed in the Gazette.]

1,277,215. COMPOUND FOR WAXING OR LUBRICATING YARNS AND THREADS. JOSEPH FREDERIC HOUSTON, Philadelphia, Pa. Filed Apr. 26, 1918. Serial No. 231,003. (Cl. 87—19.)

1. A waxing compound comprising a mixture of paraffin wax, cocoa butter and sperm oil.

2. A waxing compound comprising a mixture of paraffin wax, cocoa butter and sperm oil, produced by the commingling of sperm oil and cocoa butter with liquefied paraffin wax.

3. A waxing compound comprising a mixture of paraffin wax, cocoa butter and sperm oil, in substantially the following proportions:—paraffin wax, one pound,—cocoa butter, one quarter ounce to one ounce,—and sperm oil, one quarter ounce to one-half ounce.

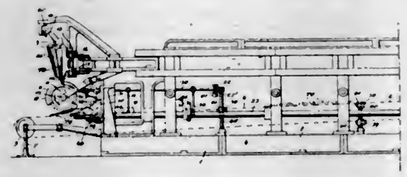
1,277,216. FLY-SWATTER. CLYDE S. HUTTON, Conyngham, Pa. Filed June 19, 1918. Serial No. 240,841. (Cl. 43—1.)



1. A fly swatter comprising a perforated plate having notched side edges, and cushioning bands disposed in said notches and extending in parallel lines transversely of the plate.

[Claims 2 and 3 not printed in the Gazette.]

1,277,217. DELIVERY MECHANISM. CHARLES A. JUENGST, Croton Falls, N. Y., assignor to American Assembling Machine Company, a Corporation of Delaware. Filed Oct. 31, 1916. Serial No. 128,705. (Cl. 193—1.)



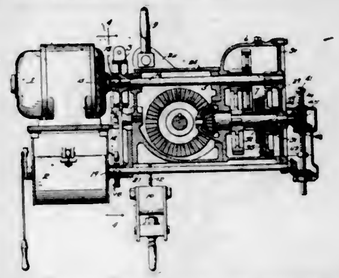
1. A book covering machine comprising: a horizontally disposed book conveyer arranged in plurality of right line stretches extending substantially longitudinally of the machine and having a delivery point, clamps carried by said book conveyer for supporting books in an upright position with their backs lowermost and exposed, a delivery conveyer extending longitudinally of the machine from said delivery point below the book conveyer and adapted to carry books flatwise in a horizontal position, means for opening the clamps as they arrive at the delivery point, and a rotary transferring member at the delivery point for receiving the book from the book conveyer in an upright position and for delivering it flatwise to the delivery conveyer.

4. A book covering machine comprising: a horizontally disposed book conveyer arranged in two divergent right line stretches and a transverse delivery stretch connecting the divergent ends of the right line stretches, means at the narrow end of the right line stretches for actuating the book conveyer, clamps on the book conveyer for carrying books in an upright position with their backs lowermost and exposed, a longitudinally extending driving shaft, means for driving the actuating means for the book conveyer from said driving shaft, a longitudinal delivery conveyer below said book conveyer, and means for driving said delivery conveyer from said driving shaft.

5. A book covering machine comprising: a horizontally disposed book conveyer arranged in a plurality of right line stretches extending substantially longitudinally of the machine and having a delivery point, clamps carried by said book conveyer for supporting books in an upright position with their backs lowermost and exposed, a delivery conveyer extending longitudinally of the machine from said delivery point below the book conveyer and adapted to carry books flatwise in a horizontal position, means for opening the clamps as they arrive at the delivery point, means at the delivery point for transferring books received in an upright position from a clamp to the delivery conveyer in a flatwise position, a driving shaft extending longitudinally of the machine, and means for operating the book and delivery conveyer and the transferring means from said driving shaft.

[Claims 2 and 3 not printed in the Gazette.]

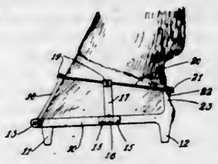
1,277,218. PORTABLE ELECTRIC HOIST. SAMUEL EDWARD KALBACH, Reading, Pa. Filed Mar. 21, 1918. Serial No. 223,696. (Cl. 254—168.)



1. In a portable electric hoist, the combination of a main frame, a motor and a controller mounted together at one end of the frame; a set of hoisting gears and a load brake-mounted at the opposite end of the frame; an armature shaft; a motor shaft for conveying rotation from the motor to the gears; a motor brake, a shaft coupling formed integrally with the motor brake for connecting the armature and motor shafts together; a pair of winding drums; a driving shaft for conveying rotary motion to the drums; a cam for mechanically operating the motor brake; a controller shaft, and an automatic stop device, directly connected to the controller shaft and in geared engagement with the driving shaft, said stop device comprising a screw having upper and lower cams and a sleeve for said screw and lugs formed on said sleeve for engagement by the cams for bringing the controller to neutral position.

[Claim 2 not printed in the Gazette.]

1,277,219. HORSESHOE. FRANK KARPF, Cleveland, Ohio. Filed Mar. 30, 1918. Serial No. 225,622. (Cl. 168—22.)



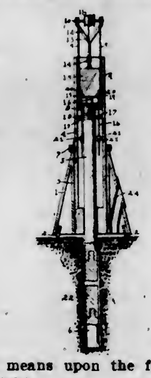
1. A horseshoe comprising a body portion, pairs of lugs extending at the front and sides thereof, said lugs being in the plane of the body of the shoe, raised projections at the heel of said shoe, levers having rectangular openings engageable between each of said pairs of lugs, said levers being adapted to extend upward over the hoof and containing openings at the upper end, flexible engaging means passing through said openings, securing means comprising a spring and screw for said levers engageable with the said lugs, and rectangular pins suited to said lugs and adapted to limit the motion of said levers.

2. A horseshoe comprising a rigid body portion having pairs of extending lugs formed at the sides and the toe thereof, levers engaging between said pairs of lugs, said levers being adapted to extend upward over the hoof, means for clamping said levers against the hoof, the lower ends of said levers containing rectangular openings, pins suited to the mentioned openings, said pins being engaged in recesses formed in said lugs, springs adapted to press said pins into operative engagement, and means permitting the disengagement of said pins.

1,277,220. MINING-DRILL. JOHN ARTHUR KAYE, Sault Ste. Marie, Ontario, Canada. Filed June 15, 1918. Serial No. 240,152. (Cl. 255—5.)

1. A mining drill including a tubular guide, a stock mounted to reciprocate within the guide, a drill bit carried

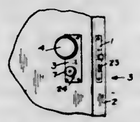
by the lower end of the stock, a cross head applied to the upper end of the stock, a frame projecting upwardly from the cross head, a reciprocating weight mounted above the



cross head, and means upon the frame for lifting and dropping the weight.

[Claims 2 to 8 not printed in the Gazette.]

1,277,221. SAFETY ATTACHMENT FOR LOCKS. FRED H. KRIZER, Los Angeles, Cal. Filed Apr. 4, 1918. Serial No. 226,726. (Cl. 70—46.)

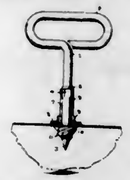


1. The combination with a door, a mortise lock in the door, an escutcheon plate on the outdoor side of the door; there being a key hole extending through the door and through the mortise lock; and a key inserted through the key hole into the mortise lock from the indoor side; there being a tongue groove in the inner end of the key; of a safety attachment comprising an escutcheon cylinder mounted in the outer face of the door in line with the key hole, an attaching flange extending outwardly around the escutcheon cylinder, bolts securing the attaching flange against the inner face of the escutcheon plate, a key cylinder in the escutcheon cylinder, a connecting plate rotatably mounted in the inner end of the escutcheon cylinder to rotate with the key cylinder, and a tongue extending from the connecting plate into the groove in the key.

2. The combination with a door, a mortise lock in the door, an escutcheon plate on the outdoor side of the door; there being a key hole extending through the door and through the mortise lock; and a key inserted through the key hole into the mortise lock from the indoor side; there being a tongue groove in the inner end of the key; of a safety attachment comprising an escutcheon cylinder mounted in the outer face of the door in line with the key hole, an attaching flange extending outwardly around the escutcheon cylinder, bolts securing the attaching flange against the inner face of the escutcheon plate, a key cylinder in the escutcheon cylinder, a connecting plate rotatably mounted in the inner end of the escutcheon cylinder to rotate with the key cylinder, and a tongue extending from the connecting plate into the groove in the key; the parts being set so that the key cannot be removed from the mortise lock.

1,277,222. SANITARY CAN-TAP. BERNEY KNUDSEN, Denver, Colo., assignor of one-half to F. G. Warrick, Scottsbluff, Nebr. Filed Dec. 14, 1916. Serial No. 136,983. (Cl. 221—23.)

1. A can tap comprising a handle, a shank extending from said handle and provided with a pointed end, a hollow bit adapted to be attached to said shank, an a protector cap adapted to be attached to said bit.

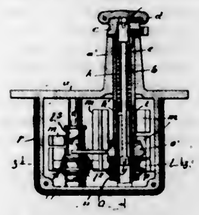


5. A can tap comprising a handle, a shank projecting from said handle and formed with a pointed end, a hollow bit slidably mounted upon said shank and adapted to be reversibly mounted thereon end for end, means for locking the hollow bit to said shank for rotation therewith, and means carried by said shank and adapted to prevent sliding movement of the bit in one direction upon said shank.

10. In a device of the class described, the combination with the pointed handle shank thereof, of a hollow bit detachably mounted on the outer end of said shank and comprising a sleeve, a flange formed on said sleeve, said flange formed with a dished outer surface, sharp-edge screw threads formed on the sleeve between the outer end and said flange, the inner ends of said screw threads terminating in spaced parallel relation to the dished surface of said flange, and means to lock the bit sleeve to said shank.

[Claims 2 to 4 and 6 to 9 not printed in the Gazette.]

1,277,223. ELECTRIC SWITCH. FRANZ KRATZ and GOTTLOB HONOLD, Stuttgart, Germany, assignors to the Firm of Robert Bosch, Stuttgart, Germany. Original application filed Mar. 9, 1915, Serial No. 13,200. Divided and this application filed Apr. 12, 1916. Serial No. 90,740. (Cl. 219—62.)

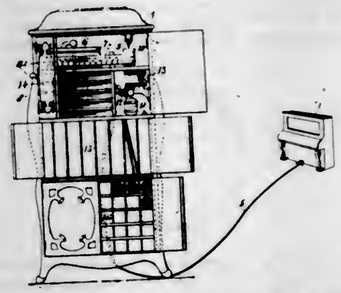


1. In an electric motor starting system for engines, the combination with a starting switch, of a housing therefor providing a channel insulated on opposite walls, a strip resistance in said channel, and fastening means drawing the opposite insulated walls into firm contact with the strip resistance to hold it in place upon temperature changes therein.

2. In an electric motor starting system for engines, the combination with a starting switch, of a housing therefor providing a channel with an opening to the atmosphere, and a strip resistance arranged in the channel and passing loosely through said opening, whereby the strip resistance is ventilated to dissipate the heat generated therein.

3. In an electric motor starting system for engines, the combination with a starting switch, a housing therefor providing a channel insulated on opposite walls and having an opening to the atmosphere, a strip resistance arranged in the channel and passing loosely through said opening, and fastening means passing between the folds of the strip resistance and drawing the opposite insulated walls into firm contact with the strip resistance, whereby the strip resistance is held firmly in place in the channel upon temperature changes therein, and the heat generated is dissipated by air passing into the channel from the atmosphere.

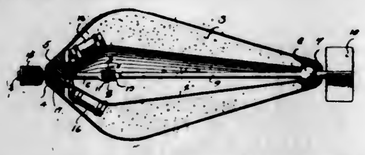
1,277,224. SYNCHRONOUSLY-OPERATED REPRODUCING APPARATUS. LAWRENCE LANGNER, London, England, assignor to Aeolian Company, New York, N. Y., a Corporation of Connecticut. Filed Apr. 11, 1918. Serial No. 760,490. (Cl. 84—198.)



1. In combination, a talking machine including a record-supporting means and a motor for driving said means, a player piano, and means mechanically connected with and driven through said record-supporting means for supporting a music sheet which controls the playing of the player piano.

[Claims 2 and 3 not printed in the Gazette.]

1,277,225. SELF-STEERING BOMB. HANS LAUBSEN, Wiedom, Mont. Filed May 18, 1918. Serial No. 235,301. (Cl. 172—282.)

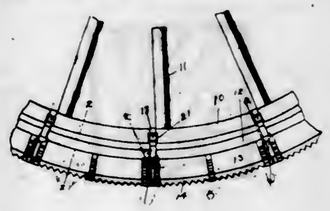


1. A bomb or explosive projectile, having an axial opening therethrough which is enlarged at an intermediate point and which tapers from such point toward opposite ends of the bomb, shafts extending through the axial opening and mounted at opposite ends of the bomb by means of ball and socket joints, the inner ends of the shafts being connected by a universal joint, and said shafts projecting beyond the ends of the bomb, steering vanes on the projecting end of one of the shafts, and a magnetic element on the projecting end of the remaining shaft and disposed forward of the nose of the bomb.

2. A bomb or like missile, having an axial opening therethrough, which is enlarged at an intermediate point, and which terminates in ball sockets, shafts provided intermediate of their ends with balls which are mounted in the respective sockets, said shafts passing axially through the opening of the bomb, and connected at their inner ends by a universal joint, which is disposed about in line with the enlarged portion of the axial opening of the bomb, steering vanes on the rear projecting end of one of the shafts, and a magnetic directing element on the projecting end of the remaining shaft and disposed forward of the nose of the missile.

1,277,226. TIRE-PROTECTOR AND ANTISKID DEVICE. CLAUS H. LIGHT, Des Moines, Iowa, assignor of one-half to Eva Sparling, Garden Grove, Iowa. Filed Feb. 7, 1917. Serial No. 147,239. (Cl. 152—16.)

In an anti-skid device, a plurality of anti-skidding sections adapted to fit the central tread portion of a pneumatic tire and arranged in succession around the tire; means for pivotally connecting the sections successively together, comprising a member on each side of each section at one end of each section, projecting circumferentially alongside the tire, provided with oppositely extending cylindrical pins, and a pair of spaced hook members on each side of the opposite end of each section, adapted to re-



ceive the pins of an adjacent section and to be spaced on opposite sides of the circumferentially extending portion of an adjacent section; and means for securing one end of each section on the rim of a wheel.

1,277,227. REFRACTORY ARTICLE AND METHOD OF MAKING THE SAME. SILAS C. LINDAHGEN, Niagara Falls, N. Y., assignor to The Carborundum Company, Niagara Falls, N. Y., a Corporation of Pennsylvania. Filed Mar. 22, 1918. Serial No. 224,067. (Cl. 106—10.)

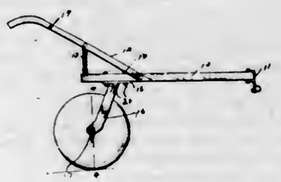
1. In the art of molding refractory mixtures of graphite and clay, the improvement which consists in adding crystalline silicon carbid grain in quantities sufficent to lessen or prevent the formation of parting planes in the body of the molded mass.

2. The herein described refractory article, comprising graphite to a percentage above fifteen per cent. by weight, silicon carbid, and a bonding material.

3. The herein described refractory article, containing graphite in flake or granular form, silicon carbid, and clay.

4. The herein described refractory article, containing graphite to a percentage above fifteen per cent. by weight, silicon carbid, and clay.

1,277,228. PLANTING-MACHINE. MANUAL LISBERG, Slidell, La. Filed Oct. 9, 1917. Serial No. 195,597. (Cl. 111—2.)

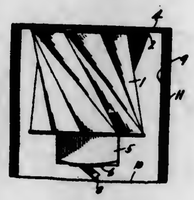


A vine planting machine comprising a draft beam having spaced rearwardly inclined depending legs, a flat base uniting the same and secured transversely to the underside of the beam near its rear end, an axle mounted transversely in the spaced legs, a roller journaled on the axle and being in the form of a double convexed disk with the periphery slightly rounded, and guide handles arranged in forward convergent relation to each other fixed to the beam in advance of the legs.

1,277,229. SOUNDING DEVICE FOR DOLLS. BURT E. LLOYD, West Hoboken, N. J. Filed Dec. 31, 1917. Serial No. 209,715. (Cl. 46—46.)

1. A sound-producing device comprising a bellows having helical creases.

2. A device of the class described embodying a bellows having a flexible body formed with creases lying obliquely to the axis of the bellows.

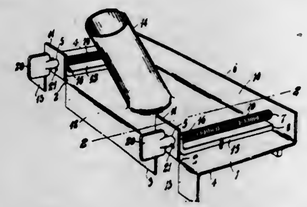


3. In a device of the class described, a bellows having a flexible body formed with creases which produce relative rotation of the ends of the bellows as the latter expands and contracts.

4. A bellows device comprising a pair of heads, and a flexible body attached to the heads, said body being helically creased to permit the heads to be moved toward and from each other.

[Claims 5 to 8 not printed in the Gazette.]

1,277,230. HOLDER. CARL W. LOHSTROH, Cincinnati, Ohio. Filed Nov. 24, 1917. Serial No. 203,777. (Cl. 15—54.)



2. A holder comprising a main middle flat part with upstanding parts at opposite sides, and a downwardly extending part at one of said sides, a screw lying across said main flat part and journaled in and held against endplay in said upstanding parts, a movable clamping member lying across said main flat part with an upwardly projecting part through which said screw is threaded, and extending through the upstanding part at the edge opposite said downwardly extending parts, and extending downwardly past said opposite edge to coöperate with said downwardly extending part, and means to mount said holder on a suitable handle.

3. As a new and improved article of manufacture, a body for a holder composed of a single rectangular plate with a flange bent up along one side, and having upper and lower openings through said flange near respective ends of the plate, and said plate having pairs of slits cut into it from its opposite edge near respective ends of the plate, and having openings through the parts of the plate between the slits, these parts being bent up, and the alternate remaining parts of the plate being bent down, substantially as and for the purposes specified.

[Claim 1 not printed in the Gazette.]

1,277,231. METHOD OF MAKING PISTON-RINGS. ROBERT G. MCCLARY, Wellston, Mo. Filed Aug. 8, 1917. Serial No. 185,132. (Cl. 29—156.1.)

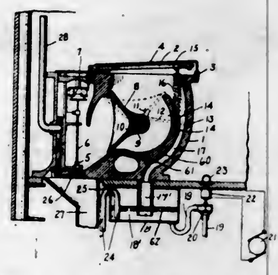
4. The method of making piston rings which comprises forming a circumferential slit in the inner face of a ring, the end portions of said circumferential slit being formed only in the inner face of the ring and the intermediate portion of said slit being formed entirely through the ring, also forming arcuate transverse slits in the side faces of the ring at points opposite the respective end portions of the circumferential slit, thereby producing a pair of lapping tongues seperated from each other at the circumferential slit and separated from the main body of the ring at the arcuate transverse slits, contracting the ring



so as to move the arcuate face of each tongue toward the adjacent arcuate face on the main body of the ring, the gap between the adjacent arcuate faces being tapered when the ring is thus contracted, heating the ring while while it is in said contracted condition, and springing one of the free tongues over the other so as to reverse the relative positions of the tongues, thereby bending the ring and thereafter replacing said tongues to close the circumferential slit.

[Claims 1 to 3 not printed in the Gazette.]

1,277,232. CLOSET. ALEXANDER MCGARY and JOHN P. SUNDERLAND, New York, N. Y., assignors, by mesne assignments, to Gould Coupler Company, a Corporation of New York. Filed Aug. 4, 1913. Serial No. 782,782. (Cl. 4—17.)



1. In a device of the class described, a trap for receiving the urine and comprising a container and a conduit discharging thereinto at a point below the normal level of the urine and a conduit through which the urine may flow out of the trap when substantially full, said conduit extending nearly to the bottom of the trap, whereby a disinfectant may be placed on top of the urine in the trap without being withdrawn from the trap with the urine.

2. In a device of the class described, a trap for the urine having an outlet, drawing from a point below the normal level of the urine and extending to a height above the lower end of the inlet conduit, said trap comprising a container and a conduit discharging thereinto at a point below the normal level of the urine, means for opening and closing said outlet, and an overflow adapted to discharge only when the trap is substantially full and drawing from the bottom of the trap.

3. In a device of the class described, a trap for the urine and comprising a container and a conduit discharging thereinto at a point below the normal level of the urine, an overflow pipe extending into the trap nearly to the bottom thereof and through which the urine may flow when the trap is substantially full, said overflow pipe

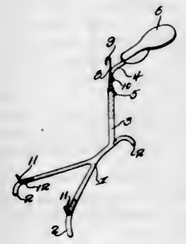
extending to a height above the lower end of the inlet conduit and having a vent at the top whereby siphoning is prevented.

4. In a closet for moving vehicles, the combination of a trap for receiving urine, an outlet for said trap, and means for automatically closing said outlet when the vehicle stops.

5. In a closet for moving vehicles, the combination of a trap for receiving urine, and means for closing the outlet to said trap upon a stopping of the vehicle.

[Claims 6 to 12 not printed in the Gazette.]

1,277,233. MILKING-STOOL. HAROLD T. MCKEE, near McCloud, Cal. Filed June 4, 1917. Serial No. 172,837. (Cl. 31—13.)

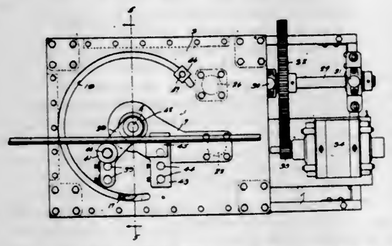


1. A milking stool comprising a bottom part of Y-shape having its ends curved downwardly to form legs, an upright secured to the stem of the Y, a seat bracket adjustably mounted in said upright, a rod having a hooked end adjustably secured in said seat bracket and a bent rod adjustably secured in each leg member of the Y adjacent the curved portion.

2. A milking stool comprising a bottom adapted to receive a milk pail, means on said part for preventing said pail from sliding, an upright carried by said bottom part, a seat secured thereto, and a downwardly projecting hook adjustably mounted in said upright and adapted to engage the upper edge of the milk pail for preventing it from tipping over.

3. A milking stool comprising a pail supporting part of Y-shape, adjustable means carried by the arms thereof for engagement with the pail, an upright secured to the stem of the Y for engagement with the pail, and a seat carried by said upright.

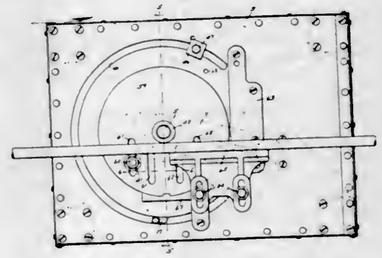
1,277,234. MACHINE FOR BENDING METAL BARS. MICHAEL H. MCKENNA, Cleveland, Ohio. Filed Oct. 13, 1917. Serial No. 196,355. (Cl. 153—45.)



1. In a metal bending machine, the combination of a table having a work holder thereon and an arcuate slot therein, a shaft projecting through the table and having a bending arm above the same, a driving wheel loose on the shaft below the table, an arm fixed to the shaft, and a catch pivoted on the last mentioned arm and engageable with the wheel to turn the shaft, said catch having an operating handle projecting upwardly through the slot in the table and movable in said slot when the arm swings.

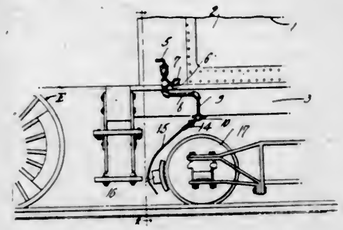
2. In a metal bending machine, the combination of a table having a work holder and an arcuate slot therein, a shaft projecting through the table and having a bending arm above same, a driving gear below the table, and a clutch device between the gear and the shaft, having an operating handle projecting through the slot and a stop adjustable along the slot to engage the handle at the end of stroke and release the clutch.

1,277,235. MACHINE FOR BENDING METAL BARS. MICHAEL H. MCKENNA, Cleveland, Ohio. Filed Oct. 13, 1917. Serial No. 196,356. (Cl. 153—45.)



In a metal bending machine, the combination of an oscillatable bender shaft, means including a clutch to turn the shaft one way, means to release the clutch at the end of the stroke, and means to automatically return the shaft to original position after the clutch is released said means including a spring, and a collar on the shaft to which the spring is connected, said collar being reversible to connect the spring at either side of the shaft.

1,277,236. RAIL-MOISTENER. CHARLEY E. MATTISON, De Ridder, La. Filed June 13, 1918. Serial No. 239,850. (Cl. 104—153.)



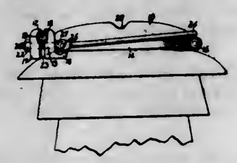
1. In a device of the class described, a locomotive engine including a tender comprising a tank and a track wheel; a conduit leading directly from the tank of the tender and discharging in a common vertical plane with the wheel; and a valve in the conduit, adjacent the tank the conduit having a normally open vent disposed between the valve and the discharge end of the conduit.

2. In a device of the class described, a locomotive engine including a tender comprising a frame, a tank on the frame, and a track wheel; a pipe extended transversely of the frame and having one of its ends in direct communication with the tank, and a branch pipe leading from the transverse pipe, the branch pipe discharging in a common plane with the wheel.

1,277,237. TIE-CLAMP FOR INSULATORS. THEODORE R. MAUSEN, New Brunswick, N. J. Filed Aug. 2, 1917. Serial No. 184,081. (Cl. 173—313.)

3. In a tie clamp of the character set forth, the combination of a relatively fixed jaw having projecting hooks and holes extending laterally through the jaw adjacent to

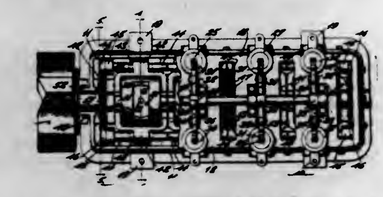
the hooks, a relatively movable jaw, a pair of bolts extending through said holes and fixed rigidly to the movable jaw, and a bail pivoted to the ends of said bolts, said bail being provided with points on the opposite side of the pivots from the main portion of the bail, said points



serving to bear against the fixed jaw when the bail is swung into clamping position and coöperating with said hooks to force the jaws apart when the bail is swung into idle position.

[Claims 1 and 2 not printed in the Gazette.]

1,277,238. OSCILLATING ENGINE. ONESIME E. MICHAUD, St. Louis, Mo., assignor of one-half to Fritz A. Muller, McGehee, Ark. Filed Nov. 26, 1915. Serial No. 63,391. (Cl. 123—42.)



1. An explosion engine comprising a head, and an oscillatory cylinder pivotally bearing against said engine head and having an opening through its head end, valve passages in said engine head and means for closing them periodically on opposite sides of said cylinder, said valve passages being adapted to register in alternation with the opening in the head end of said cylinder.

2. An oscillating engine comprising a casing having a head on one end and inclosing an oscillatory cylinder, the head end of said cylinder having a pivotal bearing on the inside of the casing head, and a yoke supported in the casing and surrounding the head end of said cylinder, said yoke being provided with bearings engaging said cylinder to hold it against said pivotal bearing.

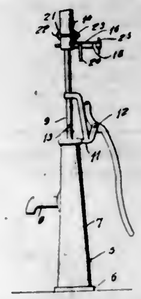
3. An oscillating engine comprising a casing having a head on one end and inclosing an oscillatory cylinder, the head end of said cylinder having a pivotal bearing on the inside of the casing head, and a yoke surrounding the head end of said cylinder and provided with bearings at its middle engaging said cylinder to hold it against said pivotal bearing, the ends of said yoke being adjustably supported in said casing.

[Claims 4 to 6 not printed in the Gazette.]

1,277,239. WINDMILL CONNECTING-BOLT. LOUIE F. MOHNIKE, Shickley, Nebr. Filed Oct. 3, 1917. Serial No. 194,546. (Cl. 74—17.)

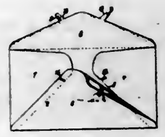
1. A windmill bolt comprising a housing of substantially U-shaped cross section, attaching plates formed at one end of the housing, means for detachably securing the housing to the operating rod of a windmill, an L-shaped bolt slidable in the housing, means for holding the bolt in an extended position in relation to the housing and means for limiting the movement of the bolt in the opposite direction.

2. A windmill bolt comprising a housing of substantially U-shaped cross section providing long and short flanges, an attaching plate carried by the longer flange of the housing, said shorter flange being provided with recesses, and a barrel, an L-shaped bolt having one portion slidably arranged between the flanges of the housing and the barrel, said bolt adapted to be moved into said re-



cesses in an operative or inoperative position, means for limiting the movement of said bolt in one direction to prevent its entire withdrawal from the housing.

1,277,240. ENVELOP. JAMES MOORE, Stratford, Conn. Filed Oct. 23, 1917. Serial No. 198,090. (Cl. 229—82.)

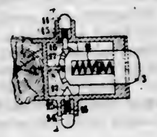


1. An envelop of the class described comprising a blank having a bottom flap, side flaps, a covering flap, and locking tongues extending from the edges of the covering flap so as to follow the obliquity of the overlapping edges of the bottom and side flaps when said covering flap is folded over said bottom and side flaps, said side flaps having notches and said bottom flap having slots adapted to register with said notches when said bottom flap is folded over said side flaps, said tongues being adapted to engage the registering notches and slots and lock the flaps together.

2. An envelop of the class described comprising a blank having a bottom flap, side flaps, a covering flap, and locking tongues extending from the edges of the covering flap so as to follow the obliquity of the overlapping edges of the bottom and side flaps when said covering flap is folded over said bottom and side flaps, said side flaps having notches and said bottom flap having slots adapted to register with said notches when said bottom flap is folded over said side flaps, said tongues and edge of the covering flap being gummed, said tongues being adapted to engage the registering notches and slots, the gum on said tongues preventing the unlocking of said side flaps by a side pull, the gummed portion of the covering flap preventing accidental damage to said tongues when engaged by the notches and slots of the bottom and side flaps.

1,277,241. SAFETY-LOCK. FRANTZ MORTENSEN, Copenhagen, Denmark. Filed Oct. 11, 1917. Serial No. 196,032. (Cl. 70—75.)

1. In combination in a lock, a slidable bolt, a fence-like abutment member, a series of tumbler plates slotted to accommodate said fence, mounted on a pivot pin with intervening spacing disks axially pressable against said tumblers but restrained from angular movement therewith thus providing for independent movement of any tumbler against frictional resistance sufficient to prevent undesired movement, and a push key adapted to operate said tumblers and effect alinement of the slots therein to receive said fence and permit backward movement of said bolt.



2. In combination in a lock, a slidable bolt, a fence-like abutment member, a series of tumbler plates slotted to accommodate said fence, mounted on a pivot pin with intervening spacing disks axially pressable against said tumblers but restrained from angular movement therewith thus providing for independent movement of any tumbler against frictional resistance sufficient to prevent undesired movement, a resilient element for pressing said disks against said tumblers to automatically compensate for wear, and a push key adapted to operate said tumblers and effect alinement of the slots therein to receive said fence and permit backward movement of said bolt.

11. In combination in a lock, a bolt slidable in a casing, a fence-like abutment in said casing behind said bolt, a series of tumbler plates slotted to accommodate said fence and of which at least one has two slots so placed that one will be moved into line with said fence when said plate is operated, and a push key insertible from either side of the lock to operate said tumbler plates and effect alinement of a row of slots to receive said fence and permit backward movement of said bolt.

[Claims 3 to 10 and 12 not printed in the Gazette.]

1,277,242. COMPOSITION OF MATTER FOR TREATING LEATHER. HUGO R. MOSNAT, Kansas City, Mo. Filed Dec. 26, 1917. Serial No. 208,849. (Cl. 134—8.)

1. A composition of matter for waterproofing and preparing leather, consisting of a gum, turpentine, acetate of lead, sulfate of iron and lead monoxid, plumbago and asphaltum and oil of mirbane.

[Claim 2 not printed in the Gazette.]

1,277,243. PIG'S FORCEPS. GUSTAVE A. MUHL, Toronto, Iowa. Filed Nov. 5, 1917. Serial No. 200,379. (Cl. 128—27.)



1. A pig's forceps consisting of pivoted members each including a penetrating portion substantially round in cross section that tapers from near the pivotal end to near the outer end with the said outer end terminating in a flattened clamping jaw that is substantially oval shape in cross section, the said jaw being provided on its clamping face with a series of independent lugs projected at right angles therefrom and located along the outer edge thereof, each of the said lugs having its edges rounded, that face of the lugs adjacent the outer peripheral edge of the jaw merging and being rounded off with the said jaw.

2. An improved forceps of the character stated, consisting of pivoted members each including a penetrating member substantially round in cross section that tapers from near the pivotal end to near the outer end, the said outer end being flattened to form a substantially oval shaped clamping jaw, a series of lugs projected at right angles from the inner face of the jaw, the said lugs being located along the peripheral edge of the jaw, each of the said lugs including a plurality of tapered surfaces, one of which merges and rounds off with the adjacent edge of the jaw, the remaining surfaces of the lugs being rounded and merging with the inner surface of the jaw, the lugs of one jaw being arranged to close between the lugs of the other jaw when the two jaws are close together.

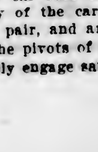
1,277,244. METHOD OF AND MEANS FOR ANNEALING STEEL. JAMES GEORGE RAPID MUNDAY, Kingston-upon-Hull, England. Filed Aug. 6, 1917. Serial No. 184,658. (Cl. 148—29.)

1. A method of annealing "high-speed" steel, which consists in heating the steel to a temperature of between 600 and 700 degrees, centigrade, and then placing it in a mixture comprising turpentine and resin and permitting it to cool therein.

3. A mixture for use in annealing "high-speed" steel, comprising turpentine, resin, and salt, in substantially the proportions set forth.

[Claim 2 not printed in the Gazette.]

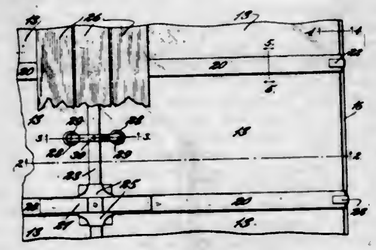
1,277,245. ARTIFICIAL DENTURE. FREDERICK L. MURDOCK, Meriden, Conn. Filed June 7, 1918. Serial No. 238,651. (Cl. 32—9.)



1. A sheath for artificial denture comprising a tubular portion expanded near its upper end and formed at its upper end with an annular flange.

2. The combination with a prepared root formed with a cavity and provided with a cap formed with a central opening in line with the cavity, of a sheath inserted through said opening, said sheath formed with a flange resting upon the upper face of said cap.

1,277,246. CAR-ROOF. CLINTON C. MURPHY, Chicago, Ill., assignor to P. H. Murphy Company, Parnassus, Pa., a Corporation of Pennsylvania. Filed May 20, 1918. Serial No. 235,633. (Cl. 108—5.)



1. A car roof comprising a roof sheet, said roof sheet being movably mounted on the substructure of said car and having an upwardly extending pivot member, and an anchor member secured to car at the ridge, said anchor member having a perforated portion overhanging the pivot member of the roof sheet and adapted to be rotatably engaged by said pivot.

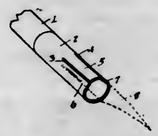
2. In an outside car roof comprising roof sheets arranged transversely of the car, pivots secured to each of said sheets, and anchor members secured to the outside roof, each of said anchor members being adapted to receive the pivots of a number of sheets.

3. In an outside car roof comprising roof sheets arranged transversely of the car in pairs, pivots secured to each sheet of a pair, and an anchor member fixed to the outside roof, the pivots of each pair of sheets being adapted to rotatively engage said anchor member.

4. In an outside car roof, comprising roof sheets arranged transversely of the car in pairs, oppositely disposed pivot pins secured to each sheet of a pair near the ridge ends of said sheets, an anchor member secured to the outside roof, said anchor member being provided with holes adapted to receive the pivot pins of each pair of sheets.

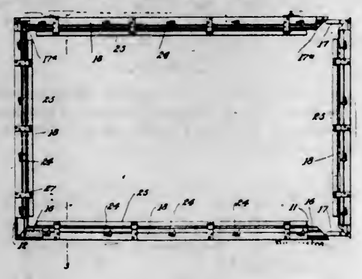
[Claims 5 to 7 not printed in the Gazette.]

1,277,247. COMBINATION PEN AND PENCIL HOLDER. ROBERT EDWIN NAPE, Preston, Ontario, Canada. Filed Nov. 15, 1917. Serial No. 202,195. (Cl. 120—9.)



In a combination pen and pencil holder, the combination with the holder body, of a sleeve secured to the body adapted to receive a pencil end and having longitudinal splits forming a longitudinal tongue and having longitudinal grooves formed at the opposite side of each split forming inwardly extending longitudinal ribs adapted to grip a pencil to prevent its turning movement when it is inserted in the sleeve and between the groove of which and the tongue is adapted to be inserted a pen nib.

1,277,248. FRAME FOR FABRIC SCREENS. GEORGE W. NEWCOMB, New York, N. Y. Filed Aug. 3, 1916. Serial No. 112,897. (Cl. 45—24.)

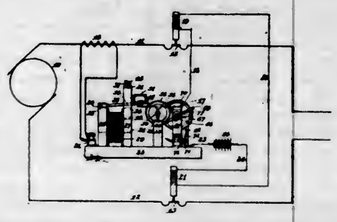




7. A portable moving picture screen frame composed of detachable sections which are capable of association into a rectangular or four sided frame, in combination with manually manipulated means for securing the said sections rigidly together, a clamp secured to each section and coextensive therewith and means for causing it to bind the entire marginal edges of a screen to such section, and independent means secured to each section and coextensive therewith adapted to exert a pressure upon the clamped fabric along lines closely adjacent to the margin thereof when clamped to said sections.

[Claims 1 to 6 and 8 to 10 not printed in the Gazette.]

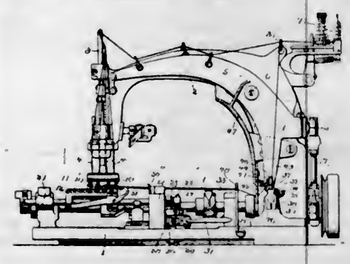
1,277,249. OVERLOAD DEFINITE-TIME-LIMIT RELAY. LLOYD C. NICHOLSON, Buffalo, N. Y. Filed Sept. 7, 1915. Serial No. 49,235. (Cl. 175—294.)



1. The combination of an alternating current circuit, solenoid-operated switches in said circuit normally closing the same, a vibrating synchronous motor responding to a certain predetermined flow of alternating current through said circuit, a normally open battery circuit including the solenoids of said switchts, and means to close said battery circuit actuated by said vibrating motor.

[Claims 2 to 9 not printed in the Gazette.]

1,277,250. VARIABLE THREAD-CONTROLLING MECHANISM FOR SEWING-MACHINES. LANSING ONDERDONK, New York, N. Y., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed May 24, 1916. Serial No. 99,622. (Cl. 112—26.)



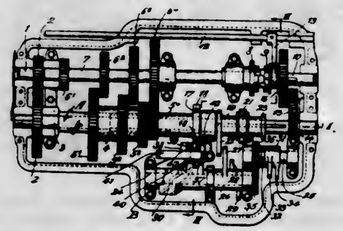
1. The combination with a looper moving in the general direction of the line of feed, of a thread controlling mechanism therefor, including two thread engaging elements and devices for moving said elements bodily in the same direction for taking up looper thread and in the opposite direction for giving up looper thread, said devices having means for moving one of said elements relative to the other during said taking up action for giving up thread, and during said giving up action for taking up thread.

3. A looper thread controlling mechanism for sewing machines including two thread arms, and devices for moving said thread arms in the same direction for taking up looper thread on the backward movement of the looper, and said devices including means for moving one of said arms relative to the other to give up thread during the backward movement of the looper.

4. A looper thread controlling mechanism for sewing machines including in combination, two thread arms, and means for moving one thread arm relative to the other for taking up thread on the first part of the forward movement of the looper for substantially moving said arms together to give up thread to the looper as it completes its forward movement.

[Claims 2 and 5 to 7 not printed in the Gazette.]

1,277,251. CHANGE-SPEED GEAR. JOHANN KLAUS OTT, Bischofszell, Switzerland. Filed Mar. 6, 1918. Serial No. 220,745. (Cl. 74—58.)



1. A change speed gear, comprising a group of driving members, a group of driven members, the driving members being adapted to coöperate with said driven members and the members of one of said groups being subdivided into portions, and means adapted to displace successively the single portions of the subdivided members during an interval of time at which said portions do not come momentarily into coöperation with the driven members for the transmission of motion.

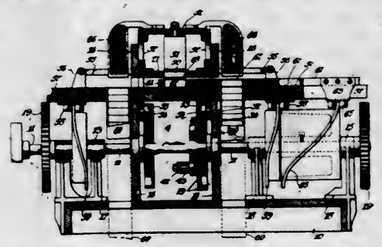
3. A change of speed gear, comprising a driving shaft, two auxiliary shafts operatively connected to said driving shaft, driving toothed members subdivided into two portions, one portion of each subdivided member being carried by one of said auxiliary shafts and the other portion by the second auxiliary shaft, toothed driven members adapted to coöperate with said driving toothed members and means adapted to effect at first a displacement of the portions of the subdivided driving members carried by one auxiliary shaft relatively to the latter and then of the portions of said subdivided driving members carried by the other auxiliary shaft relatively to the latter.

5. A change of speed gear, comprising a driving shaft, two auxiliary shafts, means for transmitting the motion of said driving shaft to the auxiliary shafts, a sleeve keyed on each auxiliary shaft and adapted to slide in the longitudinal direction of the shaft, each sleeve having rims provided with teeth over one half of their circumference, a fourth shaft, toothed wheels fixed on the latter, each of said toothed wheels being adapted to coöperate with two toothed portions of rims having the same diameter and provided on different sleeves, a second sleeve on each auxiliary shaft provided with cams, adjustable pins adapted to coöperate with the cams of said sleeves, bearings for said pins, and means operatively connecting said bearings to the sleeves provided with rims in such a manner, that the latter are successively displaced in the longitudinal direction of the auxiliary shafts when one of said pins is brought to coöperate with one of said sleeves provided with a cam.

7. A change speed gear, comprising a driving shaft, two auxiliary shafts, means for transmitting the motion of said driving shaft to the auxiliary shafts, a sleeve keyed on each auxiliary shaft and adapted to slide in the longitudinal direction of the shaft, each sleeve having rims provided with teeth over one half of their circumference, a fourth shaft, toothed wheels fixed on the latter, each of said toothed wheels being adapted to coöperate with two toothed portions of rims having the same diameter and provided on different sleeves, a second sleeve on each auxiliary shaft provided with cams, a casing inclosing said auxiliary shafts and the fourth shaft, movable slides guided in said casing, pins adjustably mounted in said slides and adapted to coöperate with the cams of said sleeves, a second group of movable slides also guided in said casing, a fork-shaped member on each of the last mentioned slides coöperating with the sleeves adapted to slide in the longitudinal direction of the auxiliary shafts, and an intermediate member between each pair of movable slides appertaining to different slide-groups, said intermediate member effecting according to its position a displacement or no displacement of one of said slides carrying the fork-shaped member upon a coöperation of one of said pins with a cam of one of said sleeves mounted on the auxiliary shafts.

[Claims 2, 4, and 6 not printed in the Gazette.]

1,277,252. BOX-MAKING MACHINE. MICHAEL PARIDON, Barberton, Ohio, assignor to The Diamond Match Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 17, 1917. Serial No. 207,444. (Cl. 93—47.)



1. The combination of box-forming mechanism including a reciprocating former, two box-receiving chutes arranged in spaced relation to each other having their mouths in a horizontal plane below the said mechanism, a transfer element reciprocable in a plane between the said mechanism and the mouths of the chutes, said element having two box-receivers in such spaced relation to each other that by actuation of the element the receivers are positioned to receive the boxes from the box-forming mechanism and transfer them adjacent the mouths of the chutes in alternate succession, means for reciprocating said element, and means operable simultaneously with the reciprocating former for ejecting the boxes from the transfer head into the chutes in alternation.

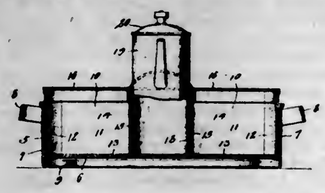
4. The combination of box-forming mechanism, including a reciprocating former, a die structure and end folders, a series of short shafts in spaced endwise relation to each other, means for simultaneously rotating said shafts, means, including cams on certain of said shafts, for actuating the said end folders, means, including cams on one of said shafts, for actuating the said former, two box-receiving chutes arranged in spaced relation to each other having their mouths in a horizontal plane below the said mechanism and depending through the spaces between the adjacent ends of the shafts, a slide reciprocable in a plane between the said mechanism and the mouths of the chutes, said slide having therein three openings in spaced relation to each other, two of said openings being adapted to receive the boxes from the box-forming mechanism and transfer them adjacent the mouths of the chutes in alternate succession, and the remaining opening affording clearance for an ejecting plunger, a support for the slide, means, including a cam on one of said shafts, for reciprocating the said slide, box-ejecting plungers overhanging the respective chutes, and means whereby the said plungers are reciprocated simultaneously with the said former.

[Claims 2 and 3 not printed in the Gazette.]

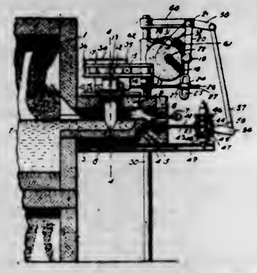
1,277,253. COOKING UTENSIL. DAVID NEWMAN PASCHAL, Richmond, Va. Filed Dec. 29, 1916. Serial No. 139,613. (Cl. 53—1.)

In a device of the class described, a pan including an annular side wall, an imperforate bottom, and an annular flanged member extending downwardly below the bottom, and in alinement with the side wall, then deflected in-

wardly in a direction substantially parallel with the bottom and having its edge portion deflected upward and outward toward the outer portion of the pan forming a pocket for heated air, and a plurality of independent receptacles carried by the pan for containing different articles of food.



1,277,254. FEEDER FOR MOLTEN GLASS. KARL E. PEILER, Hartford, Conn., assignor to Hartford-Fairmont Company, Canajoharie, N. Y., a Corporation of New York. Filed Aug. 6, 1912, Serial No. 713,538. Renewed Nov. 28, 1916. Serial No. 133,995. (Cl. 49—55.)



1. In apparatus for feeding molten glass, the combination of a container for the glass, and means for propagating waves or surges of the glass in a regulated succession toward and over the side of the container.

20. A conduit for molten glass, a sweep, a carriage supporting the sweep and mounted for longitudinal movement, and a carriage supporting yoke mounted for vertical movement for raising and lowering the sweep as it is moved by the carriage.

22. The combination of a conduit for molten glass, a protecting hood for the conduit, a sweep projected through the hood into the conduit, and means outside of the hood and conduit for reciprocating the sweep horizontally along the conduit.

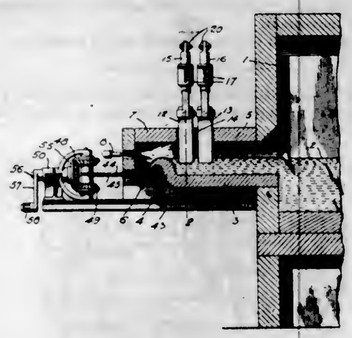
26. The combination of a glass melting furnace in which the glass has a normally clear and unobstructed surface, of a discharge outlet above the general level of such surface, means adjacent to the outlet for causing the discharge of glass from the outlet by raising above the level of the outlet the surface level of a part of the glass immediately adjacent to the outlet, without raising above its normal level the free surface of other parts of the glass more remote from the outlet.

31. The combination with a glass melting furnace having a discharge outlet above the general level of the glass in the furnace, and having a pool of the glass adjacent to the outlet, of means for contracting the pool horizontally to raise its surface level above the level of the discharge outlet.

[Claims 2 to 19, 21, 23 to 25, and 27 to 30 not printed in the Gazette.]

1,277,255. FEEDER FOR MOLTEN GLASS. KARL E. PEILER, Hartford, Conn., assignor to Hartford-Fairmont Company, Canajoharie, N. Y., a Corporation of New York. Filed Aug. 7, 1912. Serial No. 713,738. (Cl. 49—55.)

1. The combination, in feeders for molten glass, of a container for the glass, and means including a plurality of displacers cooperating to displace a succession of timed surges or waves of glass toward and over the side of the container.



2. Means for feeding regulated charges of molten glass from a container, including a displacing member mounted and guided for vertical movement in the glass adjacent to the container outlet, and mechanism for moving the plunger displacing member vertically, including means for varying the amplitude of the vertical movements of the said member.

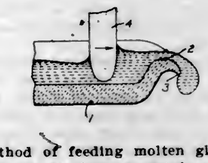
4. A feeder for molten glass including in combination a conduit for glass, and a plurality of displacers disposed side by side longitudinally of the conduit and movable successively downwardly and upwardly in the glass, cooperating with each other and with the conduit to advance successive waves of glass along the conduit.

10. The combination, in feeders for molten glass, of a container for the glass, means including a plurality of displacers for propagating waves or surges of the glass toward and over the side of the container, cams for moving the respective displacers in prescribed succession and means for adjusting the range of movement of one of the displacers.

12. The combination, in feeders for molten glass, of a container for the glass, means including a plurality of displacers for propagating timed waves or surges of the glass toward and over the side of the container, cams for moving the respective displacers in prescribed succession and adjustable connections between one of the displacers and its cam for varying the amplitude and the range of movement of the displacer.

[Claims 3, 5 to 9, and 11 not printed in the Gazette.]

1,277,256. METHOD OF FEEDING MOLTEN GLASS. KARL E. PEILER, Hartford, Conn., assignor to Hartford-Fairmont Company, Canajoharie, N. Y., a Corporation of New York. Original applications filed Aug. 6, 1912, Serial No. 713,538, and Aug. 7, 1912, Serial No. 713,738. Divided and this application filed Nov. 28, 1916. Serial No. 133,948. (Cl. 49—77.)



1. The method of feeding molten glass in successive equal compact charges from a container having an outlet communicating with the container above the normal level of the glass in the container, which consists in periodically raising the level of a determinate portion of the glass adjacent to the outlet sufficiently to discharge the desired charge therefrom in a compact mass through the outlet.

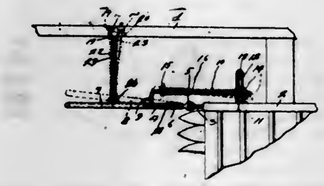
2. The method of feeding molten glass in successive equal compact charges from a container having an outlet communicating with the container above the normal level of the glass in the container, which consists in periodically raising the level of a determinate portion of the glass adjacent to the outlet, suspending it from the outlet and severing the suspended portion from the remainder of the glass.

3. The method of feeding molten glass in successive equal compact charges from a container having an outlet communicating with the container above the normal level of the glass in the container, which consists in periodically raising the level of a determinate portion of the glass adjacent to the outlet, accumulating it into a drop suspended from the outlet, attenuating and severing the suspending neck or thread.

4. The method of feeding molten glass in successive equal compact charges from a container having an outlet communicating with the container above the normal level of the glass in the container, which consists in periodically raising the level of a determinate portion of the glass adjacent to the outlet, accumulating it into a drop suspended from the outlet, attenuating and severing the suspending neck or thread, and reversing the direction of movement of the glass within the outlet.

5. The method of feeding molten glass over a dam in successive equal compact charges which consists in periodically raising the free surface of the glass adjacent to the dam, discharging a portion of this glass over the dam, accumulating said portion into a charge suspended from the dam and severing the suspended charge from the remainder of the glass.

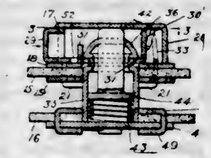
1,277,257. GUARD ATTACHMENT FOR HARVESTERS AND THE LIKE. RALPH E. POTTERFIELD, Independence, Oreg. Filed Oct. 12, 1917. Serial No. 196,154. (Cl. 56—30.)



1. In combination with a harvester machine, having a slotted bracket carried by one side of the frame of the machine, and a slotted extension arm pivoted to the tongue of the machine, a guard vertically arranged and pivoted to the frame of the machine adjacent one end of the cutting mechanism, said guard having a curved rod extending from its upper part rearwardly and downwardly and through the slot of the bracket, a nut thereon adjacent the guard, a spring interposed between the nut and the bracket, means on the extremity of said rod and engaging the bracket to prevent disengagement of the rod, said guard having a laterally extending rod passing through the slot of the extension arm, a nut on the second rod adjacent the sides of the guard, and a coiled spring on the lateral arm between the extension arm and the second nut, and means on the extremity of the second rod adjacent the extension arm to retain the second rod in place.

2. A guard for a harvesting machine constructed of sheet metal and being substantially triangular in shape, an acute angle shaped rod frame to the acute angled sides of which, the upper and lower edge portions of the triangular sheet metal guard are fixed, the lower rod of the frame terminating in an eye at its rear end, said eye being pivotally connected to the frame of the harvester, the upper rod of the frame of the guard having a yielding connection with the frame of the harvester, and a yielding connection between the side of the guard and the tongue of the harvester.

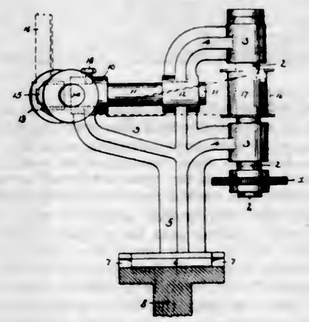
1,277,258. STUD-AND-SOCKET FASTENER. ANDREW RAICHE, Fairhaven, Mass., assignor to Atlas Tack Company, Fairhaven, Mass., a Corporation of New Jersey. Filed May 3, 1917. Serial No. 166,142. (Cl. 24—211.)



1. A stud-and-socket fastener comprising a socket member having a crown and a latching device in the latter, and a stud member having a latching shoulder arranged to coact with said latching device, said stud member having a central spring-plunger normally protruding from the leading end of said stud member and arranged to be repressed by said crown, whereby said plunger is adapted to eject the stud member from the socket member when said latching device is moved to unlatch said members.

[Claims 2 and 3 not printed in the Gazette.]

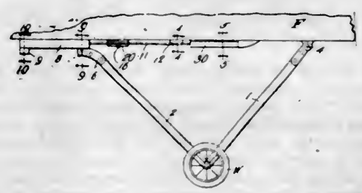
1,277,259. MACHINE FOR JOINTING STAVES AND LIKE OBJECTS. EDWARD WILLIAM ROBINSON and CHARLES JEWELL ROBINSON, Savannah, Ga. Filed Nov. 24, 1917. Serial No. 203,715. (Cl. 144—130.)



1. The combination of the cutter shaft and its driving pulley with a movable standard having forwardly projecting arms providing bearings for said cutter shaft and a rearwardly projecting arm with bearing thereon, a post adjustable longitudinally in said bearing, a head on said post, studs projecting in opposite directions from said head and belt directing pulleys rotatably mounted on said studs.

[Claim 2 not printed in the Gazette.]

1,277,260. AEROPLANE SHOCK-ABSORBER. PETER ROSA, Tonopah, Nev. Filed Apr. 25, 1918. Serial No. 230,780. (Cl. 244—2.)



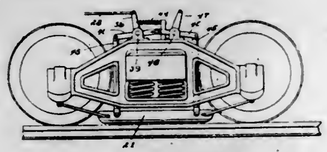
1. In a shock absorber of the type described, the combination with a truss composed of two pairs of links piv-

oted to each other and supporting wheels at such pivotal point, the outer ends of one pair of links being connected with the vehicle to be cushioned, blocks at the outer ends of the other pair of links, and guides in which said blocks travel; of a rod mounted in guides beneath said vehicle body, shock springs for resisting the movement of said rod, and connections between the latter and said blocks.

8. In a pick-up spring structure, the combination with a channeled casing having one end closed, a hook attached to said closed end, and a block carried by the hook; of a rod extending into the other en dof the casing and having its inner end headed adjacent said block, large and small coiled springs respectively long and short inclosing the inner end of said rod and secured at one end to the shank of the hook behind its block, with their other ends reduced and surrounding said rod whereby the head of the latter engages the reduced end of the small spring when the rod has made its initial movement, and a button fast on the rod and engaging the reduced end of the large spring at the beginning of said initial movement.

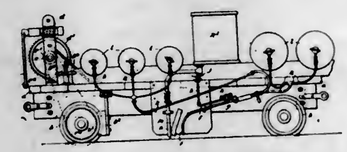
[Claims 2 to 7 not printed in the Gazette.]

1,277,261. AUTOMATIC AIR-BRAKE SYSTEM AND TRAIN-STOP. FRANK A. RUSS, Weatherly, Pa. Filed Sept. 15, 1916. Serial No. 120,380. (Cl. 188—2.)



The combination with the train pipe of an air brake system, of a valve connecting the train pipe with the atmosphere, a pivoted lever engaging with the stem of said valve, a second lever having a toe and heel part adapted to engage with the first mentioned lever, a rod connecting with said second mentioned lever, a shoe carried by the truck and located above the rail, a sliding block, means for sliding said block close to the rail to contact with the shoe to force the same upwardly, means connected with said shoe for causing the rod to force the heel of the lever into contact with the first mentioned lever to open the valve when the block is moved into engagement or the train is derailed, and manually operated means engaging with the toe of the lever for returning the same to normal position.

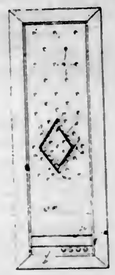
1,277,262. HEAT TREATMENT OF TRACK-RAILS. CHRISTER PETER SANDBERG, London, England. Filed Aug. 13, 1917. Serial No. 186,041. (Cl. 148—13.)



1. A method of hardening or tempering track rails *in situ* so as to produce in the head of the rail a hard structure which extends from the wearing surface into the mass of metal and merges gradually into the normal structure of the main body of the steel, which method consists in moving slowly and continuously along the surface of the rail a source of heat adapted to direct the heat against a very small portion of the wearing surface but to heat said surface over its whole width and to heat the head of the rail to a desired, and in any case considerable, depth to a temperature above the critical range and directing a cooling medium on to the rail immediately in the rear of the source of heat to cool the rail to a temperature below the critical.

[Claims 2 to 4 not printed in the Gazette.]

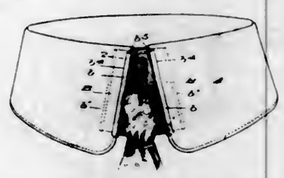
1,277,263. GAME. RYUJI SATO, New York, N. Y. Filed Aug. 31, 1917. Serial No. 189,172. (Cl. 46—59.)



1. A game board comprising a base and side walls confining a playing surface, a diamond shape groove arranged in said base, counting pockets arranged in said groove, obstructing pockets arranged between said counting pockets and penalizing pockets distributed over the remaining surface of the base.

[Claims 2 to 4 not printed in the Gazette.]

1,277,264. ANTIFRICTIONAL BINDING FOR COLLARS. JAMES SCHEVENELL, New York, N. Y. Filed Feb. 12, 1918. Serial No. 216,830. (Cl. 2—67.)



1. An anti-frictional binding for collars, consisting of a suitably fashioned folded strip of metal, having the parts of a snap button secured to the respective flaps thereof.

2. The combination with a fold-over collar having a stud hole in each of its outer folds, of a binding for each outer fold provided with securing means extending through said stud hole.

5. An anti-friction binding, adapted to embrace the edge of a piece of wearing apparel, and provided with a flange which is adapted to engage a ridge of said wearing apparel.

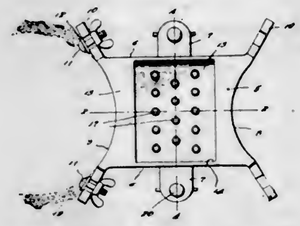
6. An anti-frictional binding, having a folded edge adapted to engage a ridge in a piece of wearing material.

9. A resilient binding for collars, having a wide flange, a narrow ornamental rib, and securing means additional to said flange and rib having parts disposed on opposite sides of said binding.

[Claims 3, 4, 7, and 8 not printed in the Gazette.]

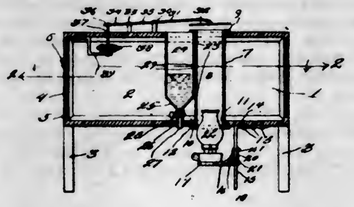
1,277,265. VULCANIZER. JOHN F. SCHNEIDER, St. Louis, Mo. Filed Apr. 28, 1916. Serial No. 94,197. (Cl. 18—18.)

A vulcanizer comprising an imperforate bottom having an outer flat heating face, oppositely arranged flat sides at a right angle to said bottom, other opposite arcuate walls connecting the flat sides and also extending at a right angle to the bottom, said arcuate walls having concaved outer faces described on arcs of different radii, a wall in spaced parallel relation to the bottom having an aperture of smaller dimensions than the wall in which



it is formed leaving fuel pockets bounded at one side by said arcuate wall, and attaching ears at the four corners of the body of the vulcanizer.

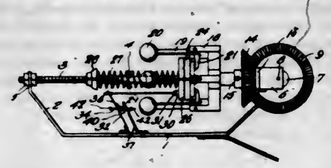
1,277,266. HEATING MEANS FOR INCUBATORS. JOSEPH SELL, Rushcenter, Kans. Filed Aug. 19, 1915. Serial No. 46,295. (Cl. 237—14.)



In an incubator having an incubator chamber, a heating apparatus comprising a water container arranged vertically centrally in said chamber and having its upper and lower ends connected in the upper and lower walls of said chamber, said container having its upper end open and its lower end provided with draining means, an air heating tube having its upper and lower ends open, said upper and lower ends of said tube projecting through the upper and lower walls of said chamber, the upper end of said heating tube having a flange coöperating with the upper wall of the chamber, means for detachably connecting the lower end of the heating tube to the lower wall of the incubator chamber, the wall of the tube being in contact with the wall of the water container, both the container and the heating tube being removable, said adjacent walls of the tube and container having registering openings substantially midway their contacting surfaces, whereby the heat from said tube may pass through said openings into the container and over the surface of the water, a heating element adjustably supported below said chamber, for adjustment into said air heating tube, and automatic means coöperating with the upper open end of said air heating tube for controlling the heat from the heating element, whereby the heated air may be allowed to escape from the upper end of the tube or caused to pass through said openings and over the surface of the water in the container.

1,277,267. AUTOMATIC SPEED CONTROL FOR AUTOMOBILES. ARTHUR L. SKELLS, Henry, S. D. Filed Nov. 12, 1917. Serial No. 201,721. (Cl. 175—355.)

1. An automatic speed controller comprising a frame, a longitudinally extending stem supported thereby, a beveled gear loosely mounted upon said stem, governor arms coöperating with said beveled gear and adapted to rotate therewith, revolving collars mounted upon said stem, a spring mounted upon said stem and engaging said collars, one end of said stem being threaded and anchored in firm engagement with said frame, a tension regulating screw mounted upon said threaded end and engaging one end of said spring for regulating the tension thereof and controlling the operation of said governor arms and a circuit closing means coöperating with said revolvng collars.



2. An automatc speed controller comprising a support, a stem mounted upon said support, a gear carried upon one end of said support, friction bearings coöperating with said gear and adapted to drive the same, said friction bearings adapted to coöperate with driving means actuating said gears, a loosely mounted beveled gear mounted upon said stem, governor arms supported in conjunction with said loosely mounted gear, revolving collars mounted upon said stem, tension means engaging said revolving collars, means for regulating said tension means, and a circuit breaker actuated by said revolving collars.

3. An automatic speed controller comprising a support, a stem secured at each end to said support, one end of said stem being threaded, governor arms mounted upon said stem, an adjusting nut threaded upon said stem, a coil spring interposed between said governor arms and said adjusting nut for regulating the operation of said governor arms, and a circuit breaker coöperating with said governor arms and adapted to be actuated as said governor arms are spread apart.

4. An automatic speed controller comprising a frame, a stem supported thereon, revolving collars mounted upon said stem, and capable of moving longitudinally thereof, tension means engaging said collars, a governor arm supporting means carried by said stem and rotatably mounted thereon, means for rotating said governor arms supporting means, each governor arm provided with an inwardly extending finger having an enlarged knob formed upon the inner end thereof, one of said revolving collars provided with a plurality of radiating tracks within which the said knob portions work for causing said governor arms to be swung as said revolving collars are moved longitudinally upon said stem, and circuit breaking means carried by said collars and adapted to make and break a circuit as said collars are moved longitudinally upon said stem.

5. An automatic speed controller comprising a frame, a stem carried thereby, a plurality of revoluble collars slidably mounted upon said stem, governor arms coöperating with said collars and adapted to move the same longitudinally upon said stem as said arms are moved outwardly, a plurality of contact arms carried by said frame, a cutout rod carried by one of said revolving collars and extending substantially parallel with said stem and engaging the upper ends of one of said contact arms for producing a direct push against the same as said revolving collars are moved longitudinally upon said stem, and means for rotating said stem.

1,277,268. WRENCH. AARON LEROY SMART, Vickery, Ohio. Filed Oct. 29, 1917. Serial No. 198,940. (Cl. 81—63.)

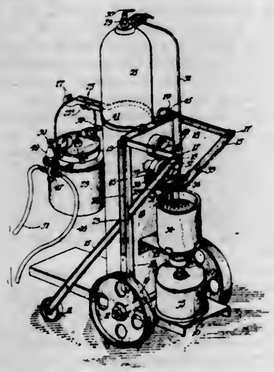


1. A wrench including a handle having a toothed socket member journaled thereon, a dog centrally pivoted to the

handle, and designed to be swung to either side of the handle to engage between the teeth of the socket member, said dog having a V-shaped depression opposite and to the rear of its pivot, and the inner wall provided by the depression having an aperture, a spring pressed bolt having an offset end received in the aperture, the handle having a pocket provided with a restricted opening through which the free end of the bolt enters the pocket, and the said bolt adapted to be brought in locking engagement with the opposite walls provided by the restricted opening, when the pocket is swung to bring the opposite end of the bolt against one of the side walls provided by the referred to V-shaped depression in the pocket.

[Claim 2 not printed in the Gazette.]

1,277,269. SPRAYING OR ATOMIZING SYSTEM. HERMAN EDWARD STUECKE, Brooklyn, N. Y. Filed May 14, 1915. Serial No. 28,101. (Cl. 91—45.)



1. Method of atomizing or spraying material such as paint by means of carbon dioxid in a pressure container, consisting in leading a stream of high pressure carbon dioxid gas from said container through a heated liquid bath, thereby heating said gas, reducing the pressure of said heated gas, leading said gas at reduced pressure through a heated liquid bath whereby to re-heat said gas, and subjectng the material to be sprayed to the action of said gas.

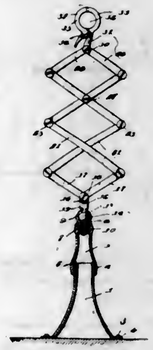
2. Method of atomizing or spraying material such as paint by means of carbon dioxid in a pressure container, consisting in leading a stream of high pressure carbon dioxid gas through a heated liquid bath, then reducing the pressure of said gas, and subjecting the material to be sprayed to the action of said gas.

3. Method of atomizing or spraying material such as paint by means of gas in liquid form in a pressure container, consisting in leading a stream of said gas in gaseous form at high pressure from said container through a heated liquid bath, then heating said gas, and subjecting the material to be sprayed to the action of said gas.

5. An atomizing apparatus comprising a pressure container, a liquid bath, a receptacle for the material to be sprayed, a spraying tool, means for heating said liquid bath, means for leading the contents of said container through said bath, presaure-reducing means, means for leading the contents of said container through said pressure-reducing means after leaving said liquid bath, a re-heating means connected with said pressure-reducing means, and means for leading said contents of said container to the material to be sprayed after passing through said re-heating means.

[Claim 4 not printed in the Gazette.]

1,277,270. LAMP-SUPPORT. ALEXIUS SUNDEN, Coquille, Oreg. Filed Aug. 25, 1916. Serial No. 116,897. (Cl. 248—8.)



In a device of the class described, a base, a handle member detachably conected to the base, a socket member detachably connected to the handle member, a member having a ball fitted in the socket member, the last-named member being angularly movable with respect to the socket member, a lazy tongs arm connected to the last-named member, and a holder member carried by the lazy tongs arm.

1,277,271. BOMB. ELWOOD REED SUTCH, Philadelphia, Pa. Filed Sept. 6, 1916, Serial No. 118,669. Renewed June 27, 1918. Serial No. 242,309. (Cl. 102—2.)

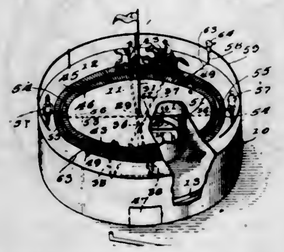


1. A device of the class described adapted to be dropped from a height, comprising a spindle, means for guiding the same in its descent, means for holding the same erect upon reaching the earth, a plurality of fire arms arranged in a plane at right angles to the axis of said spindle, and means including a flange adjacent the lower end of said spindle, actuated by the impact of said flange with the earth for actuating said fire arms, said flange maintaining said firearms at a relatively great distance above the earth.

6. A device of the class described, comprising a support having a pointed lower end and a flange adjacent said end, and means for guiding said support in its descent, a carrier rotatable on said support, automatic fire-arms horizontally mounted on said carrier with their axes offset from the axis of rotation of the carrier, and means for actuating said fire-arms by the impact of the device with the earth.

[Claims 2 to 5 not printed in the Gazette.]

1,277,272. AMUSEMENT APPARATUS. HAKULYO CHUHACHI TANABE, Marysville, Cal. Filed June 2, 1917. Serial No. 172,445. (Cl. 46—27.)

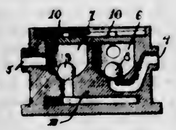


2. An amusement apparatus of the character described comprising a support, a standard rising centrally therefrom and mounted for rotation, arms projecting radially from said standard, means for rotating said standard, animal like figures pivotally mounted on said arm and disposed to travel over said support, said figures being slightly unbalanced for vertical movement, and yieldable means carried by the heaviest portion of the figure and having one end in free engagement with the support to maintain the pivotal movement of the figures during rotation of the standard.

7. An amusement apparatus of the character described comprising a support, a standard rising centrally therefrom and mounted for rotation, arms projecting radially from said standard, means for rotating the standard, animal like figures pivotally mounted on said arms and disposed to travel over said support, said figures being slightly unbalanced for vertical movement and a coiled spring having one end secured to the heaviest portion of the figure and its opposite end adapted to contact with the support to maintain the pivotal movement of the figures during the rotation of the standard.

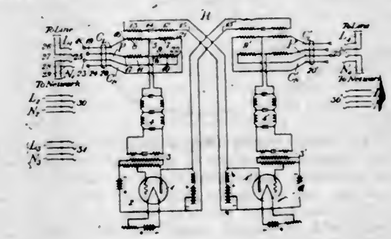
[Claims 1 and 3 to 6 not printed in the Gazette.]

1,277,273. PUMP. WALTER E. TAYLOR, Avalon, Pa. Filed Mar. 30, 1917. Serial No. 158,687. (Cl. 103—66.)



In a pump including a cylinder and a piston, a base closing one end of the cylinder, a ledge formed integrally within said base and spaced from the bottom thereof by an undercut recess communicating with the interior of the base, said ledge being provided with a pair of inclosed valve chambers, one valve chamber communicating with said undercut recess by a vertical passage terminating in a valve seat and communicating by a passage with the exterior of said base, the other valve chamber having communicating therewith a passage terminating in a valve seat and communicating with the exterior of the base and a passage communicating with the interior of the base, a ball disposed within each of said chambers and seating upon the respective valve seats, the walls of said valve chambers extending entirely to the top of said ledge, and plugs threaded into the ends of said valve chambers whereby direct communication of the valve chambers with the interior of the cylinder will be prevented.

1,277,274. ARTIFICIAL-LINE-SELECTING SYSTEM. JOHN F. TOOMEY, New York, N. Y., and WALTER V. H. READ, Newark, N. J., assignors to American Telephone and Telegraph Company, a Corporation of New York. Filed Mar. 31, 1917. Serial No. 158,899. (Cl. 179—170.)

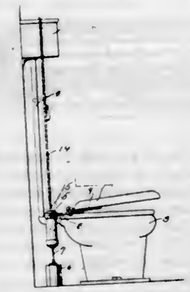


1. A repeating system comprising a plurality of transmission lines, a plurality of balancing artificial lines, a repeater and switching means to associate any one of the lines and a balancing artificial line of similar characteristics with the repeater.

2. A repeating system comprising a plurality of transmission lines, a plurality of balancing artificial lines, a plurality of repeaters, and switching means for associating any one of said repeaters with any one of the lines and an artificial line having characteristics similar to the line.

[Claims 3 to 6 not printed in the Gazette.]

1,277,275. FLUSHING MECHANISM. ARTHUR M. VOGEL, Centralia, Wash. Filed Jan. 17, 1917. Serial No. 142,832. (Cl. 4—5.)

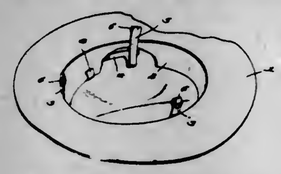


1. In a flushing mechanism of the character described, the combination of a movable cylinder, a connecting rod secured to said cylinder, a weight adjustably mounted upon the lower end of said rod, said cylinder being adapted to contain a quantity of heavy fluid matter, a piston rod projecting into the upper end of said cylinder, a piston carried upon the inner end of said rod and having ports formed therein, said piston rod being adapted to be connected to a valve mechanism, means for raising said cylinder and weight and holding the same in elevated position for a predetermined time, whereby said piston rod and said piston will move downwardly toward the lower end of said cylinder, while the fluid will pass through said ports above said piston, and said cylinder being adapted to be lowered suddenly thus causing the weight of the fluid upon the piston to draw downwardly upon

the piston and piston rod for tripping a valve mechanism, although said fluid will gradually pass through said ports below said piston.

[Claims 2 to 4 not printed in the Gazette.]

1,277,276. HAT-CLAMP. JOHN C. WAGNER, Cleveland, Ohio. Filed Feb. 6. 1917. Serial No. 147,028. (Cl. 2—108.)



1. A hat clamp formed from a single strip of spring material rounded upon itself to be received between the hat and the sweat band therefor and to conform to the shape of the hat and sweat band, said strip from the inner edge thereof being provided with central and end extensions, said extensions being bent upon themselves over the strip and extended below the outer edge of the strip to provide spring fingers which are disposed over the outer face of the sweat band and exert a pressure away from said sweat band.

2. A clamp for hats formed from a strip of spring material rounded upon itself to be received in the hat to the rear of the sweat band and to conform to the shape of the hat and sweat band, said strip having extensions at its central portion and at the ends thereof, said extensions bent upon themselves over the strip and extended beyond the outer edge of the strip to provide spring fingers which have their ends rounded and which exert an inward tension, said strip between the fingers being formed with spring hooks, and said hooks adapted to engage with the inner edge of the sweat band of the hat.

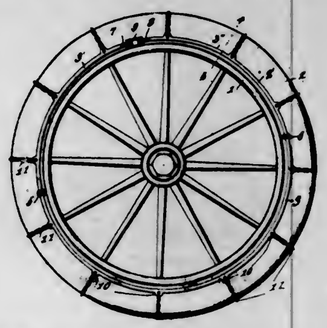
1,277,277. AEROPLANE. JESSE FERNANDO WALDEN, Merryville, La. Filed Dec. 5, 1917. Serial No. 205,548. (Cl. 244—6.)



In a dirigible air ship, a gas bag, a compartment suspended therefrom, propelling means for the air ship, a pair of arms projecting downwardly and rearwardly from the rear ends of the compartment, a bar connecting said arms, laterally oscillating means mounted in bearings of the bar and gas bag for steering the air ship in its lateral course, the ends of said bar terminating in downwardly extending ears, a transverse shaft mounted in bearings of said ears and provided with a plane to be oscillated vertically for elevating or lowering the air ship, said elevating plane being below the laterally moving means, one end of said transverse shaft having an arm extending downwardly therefrom, and means having a link connection with said last named arm for operating the elevating plane.

1,277,278. ANTISKID DEVICE. JOHN F. WHISTLER, Havana, Kans. Filed July 11, 1916. Serial No. 108,600. (Cl. 152—14.)

In an anti-skid device for automobile wheels, the combination with a hoop adapted to lie against one side of the tire and made up of sections hingedly connected with each other at diametrically opposite points, one section being subdivided into smaller sections, and means for detachably and adjustably connecting the meeting ends of these smaller sections; of another hoop adapted to lie against the opposite side of the tire and made up of two semi-circular sections, means for hingedly connecting these sections at one end at a point opposite one



of the hinge connections of the first-named hoop, means for hingedly and detachably connecting the same sections at their other ends at a point opposite the other hinge connection of the first-named hoop, and flexible elements connecting the hoops at points opposite each other and passing over the tire tread, as set forth.

1,277,279. ASH-SIFTING SHOVEL. CALVIN F. WILEY, Columbus, Ohio. Filed July 5, 1917. Serial No. 178,716. (Cl. 83—60.)



1. A shovel comprising a foraminated body portion, channeled metal side strips engaging the side edges thereof, a channeled metal end strip extending across the front edge of the same, and a center stay extending longitudinally beneath the body of the shovel.

2. A shovel comprising a foraminated body portion, channeled metal side strips engaging the side edges thereof, the rear ends of said strips projecting centrally from the rear edge of the body in parallel spaced relation and having oppositely curved faces adapted to receive a handle therebetween, a channeled metal end strip extending across the front edge of the body, and a longitudinally extending center stay disposed beneath the body of the shovel having its rear end connected with the handle, and its front end with the front end strip of the shovel.

1,277,280. [WITHDRAWN.]

1,277,281. POWDER-RECEPTACLE. PHILIP K. WILLIAMS and GEORGE S. HURST, Glastonbury, Conn., assignors to The J. B. Williams Company, Glastonbury, Conn., a Corporation of Connecticut. Filed Dec. 24, 1915. Serial No. 68,469. (Cl. 221—61.)

1. A receptacle including a top having a slot of circular form divided by narrow bridges, said slot forming a central portion which is shaped into a crown, said bridges being of a width merely to sustain the crown, a cap fitting said top and having a central opening of less diameter

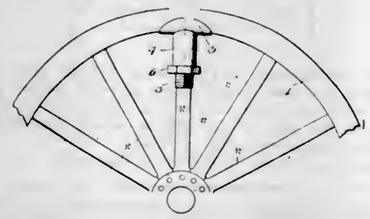
than said crown, and means for separating the meeting surfaces of the top and cap to permit flow of powder said



slots being of a width to cause all powder to fall into the box and clear the slots when the cap is closed.

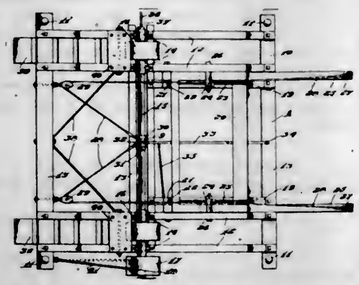
[Claim 2 not printed in the Gazette.]

1,277,282. WHEEL SPOKE AND RIM REPAIRER. WILLIAM A. WRIGHT, Cypress Inn, Tenn. Filed May 1, 1916. Serial No. 94,721. (Cl. 21—173.)



In a wheel, in combination with a rim and with a spoke having a reduced outer end and a shoulder around the base of the reduced portion, an externally threaded thimble fitted on the outer end of the spoke, and covering the extreme end of the spoke and bearing at its inner end on the shoulder of the spoke, a collar having an unthreaded bore in which the thimble is arranged so that the collar is freely slidable on the thimble, said collar also having means at its outer end for engaging the rim, and an adjusting nut engaging the threaded thimble and arranged at the inner end of the collar.

1,277,283. MEANS FOR TRANSMITTING POWER. JOHN ARCHER, Red Deer, Alberta, Canada, assignor of three-eighths to Ernest William De Long and one-fourth to Robert Barclay Welliver, Red Deer, Alberta, Canada. Filed Sept. 24, 1917. Serial No. 193,024. (Cl. 74—106.)



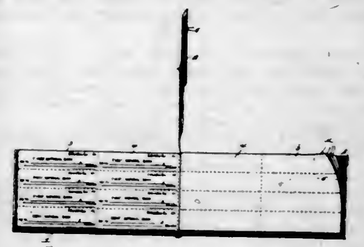
1. A power transmission device of the class described comprising a frame, a cradle on the frame, dogs movably mounted on the frame for engagement with the axle of an automobile to locate it rigidly with respect to the cradle, powe rtransmission means on the frame and means for rotating the cradle in a vertical plane.

4. A power transmission device of the class described comprising a frame, means on the frame for engaging the rear end of an automobile to hold the driving wheels of the same disengaged from the ground, a shaft in front of the said means, friction means on the shaft coacting with the automobile wheels, legs extending rearwardly of the frame coacting with the first said means, flexible means for rotating the legs in a vertical plane, and clutch means on the shaft controlling the operation of flexible means.

6. A power transmission device of the class described comprising a frame, a cradle pivotally mounted on the frame, a shaft rotatably mounted in front of the cradle, means for rating the cradle in a vertical plane, said means including a clutch, a spring controlled lever coacting with the clutch, a rod coacting with the clutch, and means for rotating the shaft.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,277,284. CHECK-BOOK. HAROLD B. AYRES, Columbia, S. C. Filed June 22, 1914. Serial No. 846,612. (Cl. 11—13.)



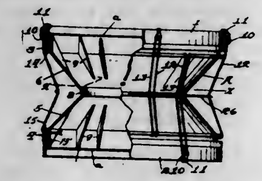
1. A check-book comprising sheets each containing two vertical banks of check-blanks, and record sheets interleaved between groups of sheets of check-blanks, each record sheet being ruled to provide horizontal spaces having indicia designating entries pertaining to each check issued from the corresponding group of check-blanks and to provide vertical ledger-account columns having indicia designating entries of the items distributed according to the different ledger accounts represented by said vertical columns.

2. A check-book comprising sheets containing check-blanks, and record sheets interleaved between groups of sheets of check-blanks, each record sheet having a debit side provided with horizontal spaces having indicia designating entries pertaining to cash received and vertical ledger-account columns having indicia designating entries of the amounts received, said amounts being distributed according to the ledger accounts represented by said vertical columns, and each record sheet also having a credit side provided with horizontal spaces having indicia designating entries pertaining to checks issued and vertical ledger-account columns having indicia designating entries of the amounts of the checks issued, the latter entries being distributed according to the ledger accoults represented by said last-mentioned columns.

1,277,285. DRUM. SAMUEL M. BADGER, St. Paul, Minn. Filed May 17, 1916. Serial No. 98,066. (Cl. 84—10.)

2. A device of the type described comprising a shell having heads at its opposite ends, said shell consisting of a pair of frustums joined together at their reduced ends, a plurality of pairs of tension cords spaced about said shell, the alternate pairs of said cords being secured at one extremity adjacent to the head of one frustum and one extremity of the remaining pairs of cords being secured

adjacent the head of the other frustum, the free ends of all of the pairs of cords engaging the head of the frustum remote from their several points of securance, and means passing about said cords for tensioning the same, to produce a corresponding effect upon said heads.



5. A device of the type described comprising a shell having heads at its opposite ends, said shell consisting of a pair of frustums joined together at their reduced ends, a plurality of pairs of cords spaced about said shell, the alternate pairs of said cords being secured at one extremity adjacent to the head of one frustum and one extremity of the remaining pairs of cords being secured adjacent the head of the other frustum, the free ends of all of the pairs of cords engaging the head of the frustum remote from their several points of securance, and a plurality of separate means for tensioning each set of alternate pairs of cords independent of the other set of cords.

8. A drum, comprising, a single pair of frustum shells, directly joined at their small ends, drum heads on the large ends of said shells and means for holding said heads on the outer ends of said shells under tension and for simultaneously holding said shells together.

[Claims 1, 3, 4, 6, and 7 not printed in the Gazette.]

1,277,286. ACETYLENE-GAS LAMP. THOMAS H. BIBBY, Denver, Colo. Filed June 22, 1917. Serial No. 176,418. (Cl. 48—24.)



1. In an acetylene gas lamp, a carbid holder, a partition arranged in the holder dividing the interior of the latter into carbid receiving chambers, a water receiver communicating with said chambers, means for supplying water to the receiver, means for alternately directing the water from the supplying means into the respective chambers, and means for controlling the admission of water to the chambers and actuating the directing means.

[Claims 2 to 5 not printed in the Gazette.]

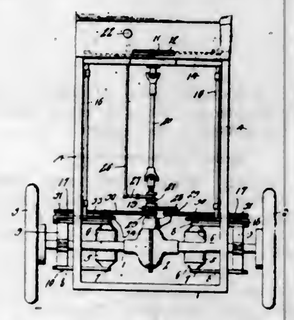
1,277,287. PROCESS OF ROLLING RAIL-JOINT BARS. WILLIAM J. BRADLEY, Troy, N. Y., assignor to The Rail Joint Company, New York, N. Y., a Corporation of New York. Filed Jan. 29, 1916. Serial No. 75,050. (Cl. 29—16.)



2. A process of making bars for rail joints which consists in subjecting a metal blank to a rolling operation producing a bar-shape having angularly related members one of which is formed at its edge with a continuous projection of metal, then severing the said bar shape into rail joint lengths, next removing portions of said projection of metal along opposite end portions of the bar, and subsequently displacing said member with its edge projection of metal into its final rail seating plane.

[Claim 1 not printed in the Gazette.]

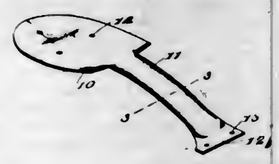
1,277,288. ANTISKID DEVICE. AXEL BRASEN, Astoria, N. Y. Filed Apr. 14, 1917. Serial No. 162,074. (Cl. 180—1.)



1. In combination with a motor vehicle axle, two oppositely rotatable motor-driven anti-skid rollers connected with said axle and having their axes at right angles to the axes of the vehicle wheels and having cylindrical ground-engaging surfaces.

[Claims 2 and 3 not printed in the Gazette.]

1,277,289. COMBINED HEEL-PLATE AND SHANK-BRACE. WILLIAM A. BUCHANAN, Asheville, N. C. Filed Sept. 12, 1917. Serial No. 191,014. (Cl. 36—76.)

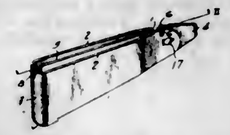


The combination with a shoe including inner and outer soles and a heel, of a combined heel plate and shank brace interposed between the inner and outer soles of the shoe and comprising a body portion of resilient metal conforming in shape to the shape of the heel seat and slightly concavo-convex, a relatively narrow integral tongue projecting from the forward edge of the heel plate and forming a shank brace, the tongue being longitudinally curved to conform to the curvature of the shank of the shoe, and fastening devices passed through the heel plate, outer sole and into the heel, the tongue being transversely arched throughout the greater portion of its length with its concaved face directed downwardly and the outer sole being molded to fill in the concavity thus formed.

1,277,290. COMBINATION-TOOL. WILLIAM A. CAMPBELL, Pittsburgh, Pa. Filed Aug. 24, 1916. Serial No. 116,651. (Cl. 7—16.)

1. A device of the character described, comprising a forked handle having pivotal projection formed thereon, a blade member pivotally connected between said members and having an opening to receive said pivotal projection, and a rivet for securing said handle member to each other extending through said projection; substantially as described.

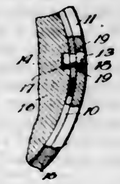
4. A device of the character described, comprising a forked handle formed from a sheet metal blank, said blank having a V-shaped projection struck up on each of its forked ends, there being a rivet opening through each of said projections, a tool having a pivotal opening engaging said projections,



being approximately equal to the thickness of the blade, the pivotal opening on the blade having a V-shaped recess for the reception of the projection to retain the blade in fixed position, and a rivet passing through the handle members and the blade for securing the members to each other; substantially as described.

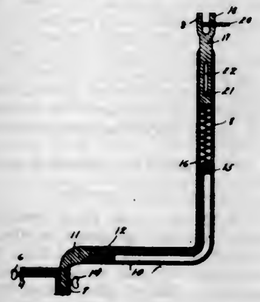
[Claims 2 and 3 not printed in the Gazette.]

1,277,291. PISTON-RING. PHILEMON B. CANFIELD, Syracuse, N. Y. Filed Nov. 26, 1917. Serial No. 203,953. (Cl. 121—108.)



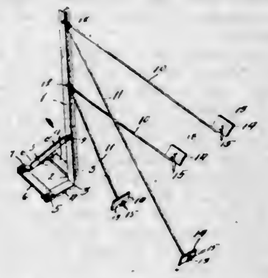
A piston ring comprising an inner section adapted to snap into a piston groove, a pair of outer sections arranged about the inner section at the upper and lower edges thereof and meeting midway between the edges of the inner section, said sections having their split portions out of register, and a pin loosely mounted in the inner section and having a head on its inner end adapted to enter a depression of the piston for anchoring the ring from turning thereon, and provided with a flattened outer end for retaining the pin in the inner section, the outer sections having relatively shallow depressions in their meeting edges adapted to receive the flattened portion of the pin therein for anchoring the sections from relative circumferential movement.

1,277,292. BABY-BASKET ATTACHMENT. GEORGE W. CHECKLEY, New York, N. Y. Filed May 23, 1917. Serial No. 170,521. (Cl. 5—59.)



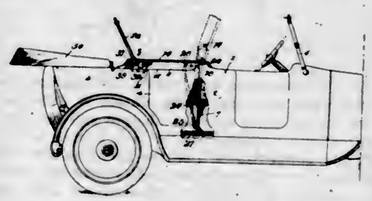
A device of the character described including a pair of clamping members each including a sleeve, a pair of angular members each having one end inserted in a sleeve, a reduced portion on the other end of the angular members, a pair of angular tubular members receiving at one end the reduced extensions to dispose the opposite ends in vertical positions, a partition block in each vertical portion of each tubular member, slotted and bifurcated rods slidably mounted in the tubular members, pins entering the tubular members to limit movement of the rods, coiled springs interposed between the partition blocks and rods to urge the latter upward, a crib, trunnions at the ends for engagement in the bifurcated portions of the rods, and set screws extending across the bifurcated portions to prevent a displacement of the crib.

1,277,293. FENCE-POST. FRANK CHILDERS, Carterville, Ill. Filed Jan. 29, 1917, Serial No. 145,269. Renewed Feb. 20, 1918. Serial No. 218,357. (Cl. 189—31.1.)



A fence post comprising a standard angular in cross section, the lower end of the standard, where the right angle parts integrally join slitted, said parts bent laterally at right angles to each other forming arms, strips secured to the outer ends of said arms and having their adjacent ends secured together, thereby bracing the arms, and providing a rectangular anchoring frame, a brace strip connecting said frame and the standard, and brace rods for the standard.

1,277,294. AUTOMOBILE-BODY. RAYMOND G. COGHLAN, Newark, N. J. Filed Apr. 25, 1916. Serial No. 93,454. (Cl. 21—148.)



1. In an automobile body having a rear compartment or tonneau, a rear cowl adapted in its operative position to cover the forward portion of such compartment and movable into an inoperative position, catches for retaining the cowl in operative position, and a plurality of releasing devices for the catches located at opposite sides of the center of the body.

2. In an automobile body having a rear compartment or tonneau, a rear cowl adapted in its operative position to cover the forward portion of such compartment and movable into an inoperative position, catches for retaining the cowl in operative position, and a plurality of releasing devices for the catches located at opposite sides of the center of the body and accessible from the rear of the cowl.

3. In an automobile body having a rear compartment or tonneau, a rear cowl adapted in its operative position

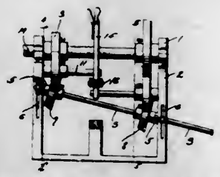
to cover the forward portion of such compartment and movable into an inoperative position, and catches for retaining the cowl in operative position embodying dogs fixed to the respective sides of the compartment, locking members carried by the cowl and adapted to coöperate with the respective dogs, and means for effecting simultaneous retraction of said members relatively to said dogs.

4. In an automobile body having a rear compartment or tonneau, a rear cowl adapted in its operative position to cover the forward position of such compartment and movable into an inoperative position, and catches for retaining the cowl in operative position embodying dogs fixed to the respective sides of the compartment, locking members carried by the cowl and adapted to coöperate with the respective dogs, means connecting said members to effect simultaneous movement thereof, and a pair of handles located at opposite sides of the center of the body coöperative with the respective locking members, whereby manipulation of either handle will retract both locking members.

6. In an automobile body equipped with a rear compartment or tonneau having a seat therein and doors in its opposite sides, a rigid rear deck or cowl normally disposed in a substantially horizontal position in which it extends over the forward portion of said compartment from side to side thereof, with its sides directly resting upon and engaged with the top edges of said doors and of the immediately-adjacent portions of the tonneau sides, thereby covering said forward portion and preventing entrance and exit to and from the same through said doors; said cowl being movable bodily away from such position to an inoperative position in which said doors can be opened to permit such entrance and exit; and catches for positively holding said cowl in its first-named or operative position, comprising co-acting parts carried by the cowl and the tonneau sides.

[Claim 5 not printed in the Gazette.]

1,277,295. TRANSMISSION MECHANISM. MARTIN E. COX, Carmichael, Md. Filed Mar. 20, 1918. Serial No. 223,588. (Cl. 74—26.)



1. In a transmission mechanism, the combination with the power shaft having power wheels of different sizes, and the driven shaft adjacent thereto and having driven wheels; of two swinging shafts each having an idler adjacent one power wheel and the driven wheel therefor, and a hand lever for swinging said shafts simultaneously and in opposite directions, for the purpose set forth.

[Claims 2 to 5 not printed in the Gazette.]

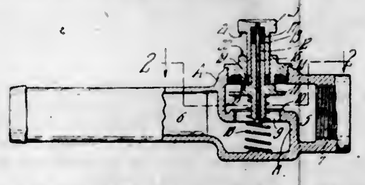
1,277,296. TIRE-CHAIN TIGHTENER AND LOCK. GROVER C. CURTNER, New York, N. Y. Filed May 18, 1917. Serial No. 169,544. (Cl. 24—68.)

In a device of the class described, a block formed with a plurality of notches at one end, a lever, including a pair of contiguous members spaced and connected along



one of their edges, to receive the block therebetween, means pivotally connecting one end of the block to one end of the lever, a clevis embracing the connected edges of the lever, oppositely extending trunnions on the terminals of the clevis, and links pivotally connecting said trunnions.

1,277,297. VALVE. JOHN B. DAVIS, Springfield, Mass., assignor to Gilbert & Barker Manufacturing Company, West Springfield, Mass., a Corporation of Massachusetts. Filed Feb. 28, 1918. Serial No. 219,618. (Cl. 137—4).



3. In a device of the class described, a casing having inlet and outlet passages and an opening connecting said passages, a valve in the casing to close said opening, a valve actuating member extending outside the casing and slidably mounted therein, seats provided on the exterior and interior of the casing adjacent said member, a part on said valve adapted for engagement with the interior seat, means yieldingly holding said valve in open position and said part against its seat, a part on said member adapted for engagement with the exterior seat, when the valve is in closed position, and means to permit relative movement between the valve and member after the former has been moved into position to close said opening, whereby the last-named part may be tightly pressed against its seat on the casing, all constructed and arranged so that leakage between the member and casing is prevented when the valve is in either open or closed position.

6. A quick acting stop valve, comprising, a casing having inlet and outlet passages, a valve to control the communication between said passages, a quick acting plunger slidable in the casing, a stem provided on the valve and telescoped within the plunger, a spring in the plunger between the latter and said stem, a second spring more readily compressible than the first-named spring and arranged to hold the valve in open position, whereby the plunger may be moved to seat the valve without compressing the first-named spring, and a part on the plunger adapted to seat against the casing and prevent leakage therefrom between the casing and the plunger when the valve is in closed position, said first-named spring arranged to permit relative movement in one direction between the plunger and stem as necessary to seat said part, and means to limit the relative movement of the plunger and stem in the other direction.

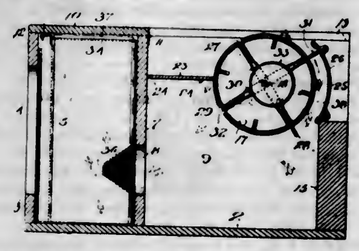
8. In combination, a casing, a valve therein movable between fixed limits from one position to another, means yieldingly holding the valve in one position, a valve actuating member movable through the casing to move the valve to its other position, seats provided on the exterior and interior of the casing adjacent said member, means carried by the latter to engage one of said seats when the valve is in one position and the other of said seats when the valve is in its other position, said member including relatively movable parts one of which is fixed to said valve and a yieldable connection between said parts.

[Claims 1, 2, 4, 5, and 7 not printed in the Gazette.]

1,277,298. FLY-TRAP. AXEL C. G. DRSILICK, Gottenborg, Sweden, assignor to Ernst J. Ohnell, trustee. Filed Dec. 16, 1916. Serial No. 137,310. (Cl. 43—32.)

1. In a device of the class described the combination of means for holding insects and means for entrapping them, comprising relatively movable members arranged to form an entrapping space between them, and means movably connected with one of said members and movable toward the other member for the closing the entrance

portion of said entrapping space whereby when the insects are carried within said entrapping space they will be entrapped by said closing means.

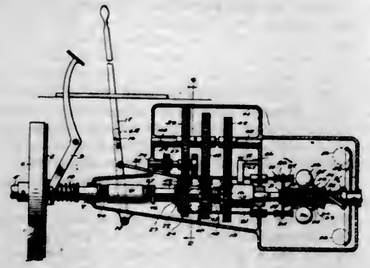


2. In a device of the class described, the combination of means for holding insects and means for entrapping them comprising coöperating members spaced apart to form an entrapping space, at least one of said members being movable, and means traveling with said movable member and movable toward the other member adapted to periodically close said entrapping space whereby when the insects are carried within the entrapping space by said movable member they will be entrapped by said closing means.

6. In a device of the class described, the combination of a receptacle having an insect receiving compartment, a guard, a revoluble cylinder spaced from the guard to form an entrapping space opening into said compartment, vanes for periodically closing said entrapping space, said vanes being movable laterally of said cylinder, and an eccentric coöperative with said vanes to operate them during rotation of said cylinder.

[Claims 3 to 5 and 7 not printed in the Gazette.]

1,277,299. AUTOMATIC CHANGE-SPEED GEARING. HERBERT L. DUNCAN, Uniontown, Ky. Filed Dec. 8, 1917. Serial No. 206,201. (Cl. 74—97.)



1. In a change speed gearing, a driven shaft, a countershaft, spur gear wheels of varying sizes fixed upon the countershaft, three gear wheels of varying sizes on the first named shaft having spur teeth for engagement with the gear wheels of the countershaft and having teeth upon their abutting faces adapted to be brought successively into engagement by an axial movement of the latter gear wheels toward each other, a centrifugal governor having engagement with one of the last named gears and manually operable means for locking said last named gears against movement toward each other under the influence of the centrifugal governor.

3. In a change speed gearing, the combination with a rotated shaft of a low speed gear-wheel splined thereon, an intermediate gear wheel loose and slidable thereon, a driven shaft, a gear wheel fixed thereto, a spring between the last named gear wheel, and the intermediate gear wheel, the latter having teeth upon its opposite side faces and the low speed gear wheel and the gear wheel fixed to the driven shaft having teeth for engagement by the aforesaid teeth, a counter-shaft carrying gear wheels with which the aforesaid gear wheels are adapted to mesh, a centrifugal governor and means under control of the governor for moving the gears on the rotated shaft toward and from each other.

6. In a change speed gearing, the combination with a rotated shaft, a driven shaft having endwise rotative engagement with the rotated shaft, a gear wheel fixed to the driven shaft, an intermediate gear wheel loose and slidable upon the rotated shaft, a spring bearing between said gear wheels, teeth carried by the abutting faces of said gear wheels, a low speed gear wheel splined upon the rotated shaft, teeth carried by the abutting faces of the low speed gear wheel and the intermediate gear wheel, a countershaft, gear wheels carried thereby with which the gear wheels of the rotated and driven shafts mesh, a governor, a yoke actuated endwise thereby, and engaged with the low speed gear and a detent engaged with said yoke said yoke and detent having coöperating parts which tend to hold the yoke against movement by the governor when the gear wheels are in their several effective driving positions.

8. A device of the character described, comprising an engine shaft, an intermediate shaft, and a driven shaft, in longitudinal alinement with each other, a centrifugal governor carried by, and actuated by the driven shaft, a collar arranged to be shifted under the action of said governor a cross bar mounted to move with said collar, a yoke the ends of which pass through said cross bar, spring means interposed between the cross bar and the yoke, and a set of change speed gears to which the yoke is connected, and by which the change speed gears are shifted.

10. In a device of the character described, the combination with a rotative shaft, of a counter-shaft disposed in parallelism therewith, three gear wheels fixed upon the counter-shaft, a low speed gear splined to the rotative shaft, and having teeth upon one of its side faces, and having teeth upon its periphery which mesh in certain positions of the gears with one of the gears on the counter-shaft, an intermediate gear on the rotative shaft having teeth upon its periphery adapted to mesh with another of the gears on the counter-shaft and having teeth upon both of its side faces, a driven shaft in endwise alinement with the rotative shaft and capable of rotation with respect thereto and a gear wheel fixed to the driven shaft and meshing with the third of said gear wheels upon the counter-shaft, said fixed gear being provided with teeth upon its face adapted to mesh with the teeth upon one of the faces of the intermediate gear wheel, a spring bearing between the intermediate gear wheel and the gear wheel that is carried by the driven shaft, a second counter-shaft and a pair of gear wheels carried by the second counter-shaft one of which meshes with one of the gear wheels upon the first named counter-shaft and the other of which is adapted to have engagement with the low speed gear of the rotative shaft.

[Claims 2, 4, 5, 7, and 9 not printed in the Gazette.]

1,277,300. YIELDING COUPLING FOR DRIVING-SHAFTS. HERBERT L. DUNCAN, Uniontown, Ky. Filed Mar. 8, 1918. Serial No. 221,257. (Cl. 64—96.)

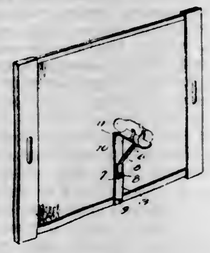


1. A coupling of the character described comprising a two part shaft, oppositely threaded portions upon said shaft, a sleeve engaged with said oppositely threaded portions and spring means resisting endwise movement of said sleeve with respect to the shaft.

2. A two part shaft comprising a driving section and a driven section, oppositely threaded portions carried by said sections, a sleeve having internal oppositely threaded portions for engagement with the oppositely threaded portions of the section of the shaft and spring means resisting endwise movement of said sleeve in either direction.

8. In a device of the character described a shaft comprising a driving section and a driven section, a projection carried by one of said sections and taking into a recess formed in the other of said sections, oppositely threaded portions carried by the respective sections, a sleeve engaged with said oppositely threaded portions, collars carried by the respective sections of the shaft and spring means disposed between said collars and the respective ends of the sleeve.

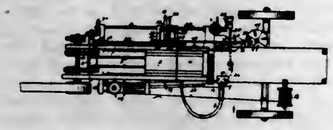
1,277,301. INSECT-TRAP. IDA B. FELDMAN, Atlanta, Ga. Filed July 20, 1917. Serial No. 181,773. (Cl. 43—22.)



1. The combination with an apertured substantially dark support, of an angular bracket secured to the same and having one portion alining with the aperture, a transparent receptacle supported thereon and extending through said aperture, and resilient gripping means on the alining portion of the bracket to secure the receptacle in position.

[Claims 2 and 3 not printed in the Gazette.]

1,277,302. BALE-FORMING MACHINE. LAWRENCE K. FREEMAN, Bellaire, Tex. Filed Feb. 1, 1917. Serial No. 145,948. (Cl. 100—20.)



1. A device of the character described including a baling chamber wherein bales are formed, a plunger, a plunger driving mechanism, a wire twister, means for operating the twister, a clutch for connecting sand mechanism and operating means, a disengaging member normally in position to disengage said cluth, said member being released by the moving bale, from its operative connection with said clutch, and means actuated by the driving mechanism temporarily suspending the clutch engagement after said member has been released.

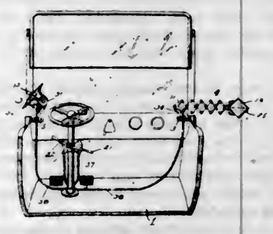
3. A device of the character described including a chamber wherein bales are formed, a plunger, a plunger driving mechanism, a wire twister, twister operating means, a clutch for connecting said mechanism and means, and means normally disconnecting said clutch, said means being released, respectively, from operative connection with the clutch, by the moving bale and the driving mechanism.

5. A device of the character described including a compress chamber, a compressing mechanism, a twister, a twister operating means, a clutch for connecting and disconnecting said mechanism and means, a clutch latch having a plurality of shoulders and mounted upon the driven member of said clutch and arranged to lock said driven member to and cause the same to rotate with the driving member of said clutch, a hook arranged to engage against one of the shoulders on said latch and hold the same in a disengaged position, and means for releasing said hook and means actuated by the compressing mechanism and temporarily suspending the connection of said clutch members as said hook has been released.

7. A device of the character described including a compress chamber, a mechansm for compressing material therein, a twister, a twister operating means, a clutch for connecting said mechanism and means, a clutch latch having a plurality of shoulders thereon and being mounted on the driven member of said clutch and arranged to lock said driven member to and cause the same to rotate with the driving member of the clutch, a hook arranged to engage with one of the shoulders of said latch and normally hold the same in a disengaged position, means for releasing said hook, and means actuated by the compressing mechanism and successively engaging said shoulders on said latch and temporarily suspending the connection of said clutch after said hook has been released.

[Claims 2, 4, 6, and 8 not printed in the Gazette.]

1,277,303. AUTOMOBILE-SIGNAL. EUGENE FABY, Oakland, Cal. Filed May 23, 1917. Serial No. 170,774. (Cl. 177—329.)



1. A signal of the character described comprising a lazy-tongs having one end fixed, a folding structure carried on the opposite end of said lazy-tongs, a foldable membrane between the sides of said structure and means for extending said lazy-tongs.

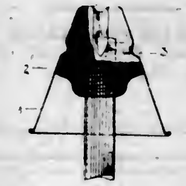
3. A signal of the character described comprising a lazy-tongs having one end fixed, a lever for moving said lazy-tongs, a collapsible rectangular member having two of its sides attached to the outer links of said lazy-tongs, a lamp socket mounted on the outer end of said lazy-tongs so as to be held in alinement with the axis thereof, an illuminating lamp in said socket adapted to be positioned in the center of said rectangular member when the latter is unfolded, and means for completing an electric circuit to said lamp when said lazy-tongs are extended.

5. A signal for vehicles comprising a series of pairs of links, the links of each pair being pivotally connected to each other at their centers and the ends of each pair being pivotally connected to the end of the adjacent pair, an operating lever pivotally attached to the end of one of the links of the first pair, a fixed arm to which the end of the other link of the first pair is attached, a square foldable member having its sides pivotally attached to each other, spring hinges attaching the end of the outer pair of links to adjacent sides of said square member, a lamp socket attached to the pivotal point of said last pair of links, a pivot pin extending through the hinge of said adjacent sides and said socket, a flexible translucent membrane attached to the sides of said square member, an electric lamp in said socket adapted to be positioned in the center of said square member when the latter is unfolded, and means for completing an electric current to said lamp when said links are moved to unfold said square member.

[Claims 2 and 4 not printed in the Gazette.]

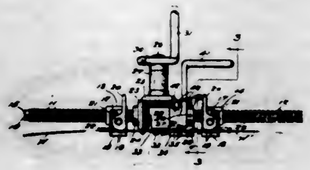
1,277,304. METAL-PROTECTED HIGH-POTENTIAL INSULATOR. BÉLA GÁTI, Budapest, Hungary. Filed July 22, 1915. Serial No. 41,792. (Cl. 173—318.)

1. An improved insulator for high frequency or high potential currents, comprising an insulating body and a metal casing covering a portion of the said insulating body, the exposed portions of the surface of the said body having the from of a curved surface, whose outwardly exteading portions are formed in accordance with the electrostatic strains, while the portions lying in the region of the inflection are disposed substantially vertical.



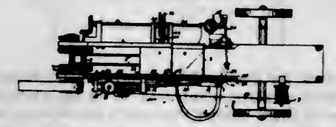
2. An improved insulator for high frequency or high potential currents, comprising an insulating body and a metal casing covering a portion of the said insulating body, the exposed portions of the surface of the said body having the form of a reverse curved surface, whose outwardly extending portions are formed in accordance with the electrostatic strains, while the portions lying in the region of the inflection are disposed substantially vertical.

1,277,305. WIRE-STRETCHER. ALEC J. GERRARD, Seattle, Wash. Filed July 5, 1917. Serial No. 178,551. (Cl. 81—9.1.)



In a machine of the character described, the combination with a shaft having right and left hand screw threads, a pair of blocks carrying wire-gripping devices threaded upon said screw threads, a support in which said shaft is journaled, a stub-shaft journaled in said support, a handle for rotating the stub shaft, driving connections between the two shafts, a jaw connected to said support, a second jaw hingedly connected to the first-named jaw, said jaws being provided with opposing corrugated faces, an arm provided on the second-named jaw, a lever fulcrumed on the screw shaft, and link connections between the lever and said arm for actuating the jaws.

1,277,306. WIRE-SPACING ATTACHMENT FOR BALING-PRESSES. WILLIAM A. GRANT, Houston, Tex. Filed Feb. 1, 1917. Serial No. 145,899. (Cl. 100—20.)



1. A wire spacing attachment embodying a movable spacing member arranged to engage against the wire, a resilient member attached to said spacing member and tending to hold it against the wire, means in operative connection with the spacing member for withdrawing it from said wire, a means for locking said spacing member in its withdrawn position, and means for releasing said locking means.

2. A wire spacing attachment embodying a spacing bar, a yieldable member to which said bar is attached, means in operative connection with the bar for moving the same in opposition to said member, means for locking the bar against the influence of said member, and means for releasing said locking means.

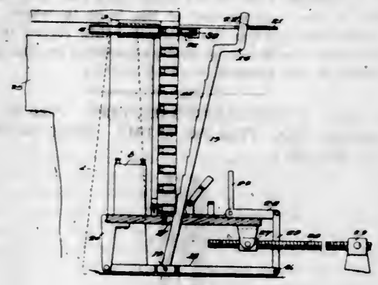
3. A wire spacing attachment embodying a spacing member, yieldable means for moving said spacing member in one direction, and means for releasably locking said spacing member in a given position.

4. In a device of the character described the combination with a baling chamber having a plunger therein, means for securing baling wire around the formed bale means operating against the baling wire to space the same across the chamber, and an operative connection between the plunger and spacing means whereby the latter is withdrawn from contact with the wire through the operation of the former.

8. A device of the character described including a compress chamber, a compressing mechanism, a securing means comprising a twister mounted on one side of said chamber, a co-acting needle mounted on the opposite side thereof and arranged to move back and forth across said chamber and carry a securing wire therewith, means for operating said securing means, in combination with a movable spacing bar mounted on one side of said compress chamber, means in operative connection with said mechanism for moving said spacing bar in one direction, yieldable means for moving the same in the opposite direction, means for locking said spacing bar against the influence of said yieldable means, the wire being advanced by said spacing bar, means for retaining said wire in its advanced position, and means actuated by the operating mechanism of said securing means whereby the spacing bar is released to said yieldable means.

[Claims 5 to 7 not printed in the Gazette.]

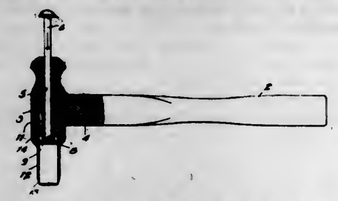
1,277,307. MACHINE-GUN. CLARENCE GREGG, Pitt Bridge, Tex. Filed Jan. 4, 1918. Serial No. 210,289. (Cl. 89—9.)



1. In a machine gun, a base having standards arranged thereon, a frame pivoted between said standards, a plurality of radially disposed barrels arranged on said frame, a vertically movable magazine arranged on the frame adapted to aline cartridges with the breech portions of said barrels, a lever connected to said frame, an upright ratchet bar pivoted at its lower end to the lever and passing upwardly through the frame adapted for engagement with the magazine, means for rocking said lever, ratchet bars arranged adjacent the inner faces of the frame, and pawls carried by the magazine engageable with the second mentioned ratchet bars.

[Claim 2 not printed in the Gazette.]

1,277,308. COCOANUT-PUNCH. NICOLAS GUNTURIZ, Sagua La Grande, Cuba, assignor to Gunturiz & Caraballo, Sagua La Grande, Cuba, a Partnership consisting of Nicolas Gunturiz and Antonio M. Caraballo. Filed Dec. 24, 1917. Serial No. 208,667. (Cl. 146—7.)



1. A cocoanut punch of the nature of a hammer, comprising a head having a handle receiving socket extending laterally therefrom, and a handle in said socket an annular hollow cutter at one end of the head, and an ejector having a stem sliding in said head with an enlarged ferrule in the cutter for dislodging cuttings from the chamber of the cutter.

2. A cocoanut punch comprising a head having a handle extending laterally therefrom, an annular detachable hollow cutter at one end of the head, and an ejector having a stem sliding in said head for dislodging cuttings from the chamber of the cutter, the stem having a tappet head on its end above the head and having a ferrule threaded on its inner end.

3. A cocoanut punch comprising a head having a handle attached thereto, an ejector pin working axially in the head, an annular hollow cutter at the lower end of the head, and a disk attached to said pin and circumferentially fitting, and for ejecting cuttings from, the cutter.

4. A cocoanut punch comprising a head having a laterally extending handle, receiving socket, and a small axial bore and a threaded neck, a tubular cutter threaded on the neck of the head, and an ejector pin extending through the head and having an enlarged end disk operative in said cutter.

6. A cocoanut punch consisting of a tool of the nature of a hammer comprising a momentum body or head having a lateral handle whereby it may be wielded with swinging blows, the head centrally bored from end to end, a stem in said bore having a stop at its upper end and an ejecting disk on its lower end, and a cylindrical cutter on the striking end of the head in which cutter the disk reciprocates, the cuttings being forced into the cutter when the device is used and ejected by the ejector.

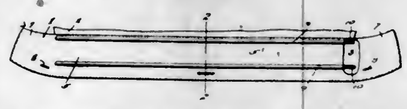
[Claim 5 not printed in the Gazette.]

1,277,309. STAND-VALVE-BALL LIFT. FRED W. HALL, Sapulpa, Okla. Filed Feb. 9, 1918. Serial No. 216,377. (Cl. 103—60.)



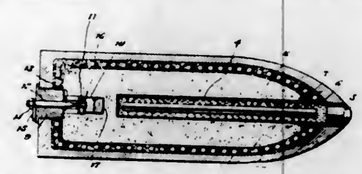
A valve lift comprising a packing, a cage mounted on the packing, a ball valve located in the cage, a pipe attached to the cage and provided with openings, a rod movably mounted in the pipe and having a pointed end adapted to enter the cage and move the ball from its seat, a serrated disk mounted upon the rod and located within the pipe, means for locking the serrated disk at an adjusted position upon the rod, a tube mounted upon the rod at a point below the pipe and means for securing the tube at an adjusted position upon the rod.

1,277,310. TIE-SLIDE FOR COLLARS. RALPH J. HALL, Falls City, Oreg. Filed Aug. 27, 1915. Serial No. 47,682. (Cl. 2—71.)



A turned down collar including an inner and outer fold having a reinforcing ply secured to the inner side thereof, a second ply secured to the ply carried by the inner fold of the collar, said second ply provided adjacent its upper and lower edges with outstanding ridges, a filler secured in the ridges to prevent the latter from collapsing and to urge the ridges into engagement with the ply carried by the outer fold, said ridges providing a tie space between the folds and preventing a tie from slipping below the bottom edges of the folds.

1,277,311. THERMIT-SHELL. PETER C. HANSEN, Spokane, Wash. Filed Mar. 8, 1918. Serial No. 221,278. (Cl. 102—29.)



1. A shell comprising a casing, a tube located in the casing and adapted to contain water, a hermetically sealed chamber located in the tube, inflammable material surrounding the tube and means for igniting the inflammable material.

2. A shell comprising a casing, a tube located in the casing and adapted to contain water, inflammable material surrounding the tube, a firing mechanism comprising a cartridge, a pin slidably mounted and adapted to engage the cartridge and a priming material located between the cartridge and the inflammable material.

1,277,312. MEANS FOR THE PROTECTION OF CARPETS AND THE LIKE. NATHAN HARROP, Hoylake, England. Filed May 27, 1918. Serial No. 236,943. (Cl. 16—3.)



1. Means for the protection of carpets, comprising a metal hook or plate adapted to lie on the stair flat, and its front to come against the front edge of same, and having a hook or tongue on one side extending inward: a protector portion having a metal socket let into its edge between the upper and lower surfaces of the protector, so as not to project, and a hook or hooks at the edge of the under side of the protecting device and adapted to engage the edge of the carpet; substantially as set forth.

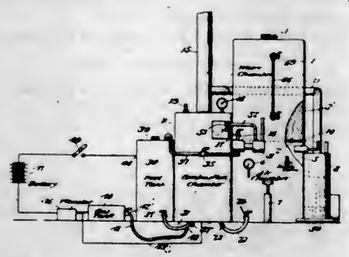
2. Means for the protection of carpets comprising a protector proper having in each edge a metal socket sunk or recessed into same, and adapted to receive the tongue of a hook device, and a downwardly extending hook or hooks at the edges of the protector device and secured to the underside of same; substantially as and for the purposes set forth.

1,277,313. BOX. JOHN E. HEWETT, Wilmington, N. C., assignor of one-half to W. J. Hutaff, Wilmington, N. C. Filed Oct. 8, 1917. Serial No. 195,408. (Cl. 229—26.)



A paper box comprising, a bottom portion, inclined sides carried by the bottom portion and diverging upwardly with each side having its longitudinal edges parallel, substantially rectangular end flaps formed integral with the longitudinal parallel edges of said sides and adapted to be arranged in overlapping relation for providing ends having upper tapered portions projecting above the sides for a substantial distance, the pairs of assembled overlapping flaps being arranged substantially parallel, suspension flaps formed integral with the bottom portion and disposed upon the exterior of the substantially rectangular flaps and having their upper ends terminating nearer the bottom portion than the upper ends of said flaps, a top portion formed integral with the upper end of one inclined side and having its opposite longitudinal edges substantially parallel and adapted for arrangement between the tapered upper portions of said end flaps, and a resilient U-shaped handle attached to the upper portions of the suspension flaps and the end flaps and arranged exteriorly of said end flaps to force the same inwardly whereby the upper portions thereof contact with the top portion and retain the same in the closed position.

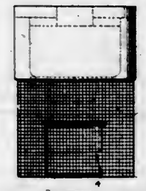
1,277,314. PRESSURE-GENERATOR. FREDERICK HOMEWOOD, Syracuse, N. Y. Filed July 31, 1917. Serial No. 183,740. (Cl. 60—31.)



1. In a pressure generator, the combination with a tank divided by a horizontal partition into water chamber at the top and an air chamber at the bottom, a combustion chamber adjacent said tank, a fuel tank also adjacent said combustion chamber, a heater in the lower portion of the latter, and means for supplying fuel from the fuel tank to said heater and air from the air chamber to said heater; of a jacket within said combustion chamber, means for supplying water from the water chamber to said jacket, a main outlet pipe leading from the upper portion of the combustion chamber, a compressor for maintaining pressure within the air chamber, a branch from the main outlet pipe to the compressor for actuating the latter and means actuated by the pressure in the air chamber for controlling the amount of air passing to the compressor.

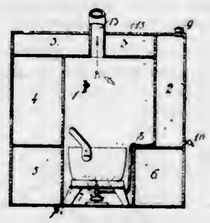
[Claim 2 not printed in the Gazette.]

1,277,315. DISINFECTING APPARATUS. FRED W. HOOPER, McKeesport, Pa. Filed Aug. 8, 1917. Serial No. 185,092. (Cl. 167—8.)



A disinfecting apparatus comprising a cylindrical wire mesh support, a water container resting on and closing the top of said support, an acid receptacle supported by the bottom of the container and having an outlet disposed in a horizontal plane with the top edge of the container, said receptacle being of a diameter less than the diameter of said support, a burner at the bottom of the support and a cylindrical shield arranged concentrically of the receptacle and supported by the top portion of the support to form a heat chamber around said receptacle.

1,277,316. COOKING-STOVE FOR OPEN BOATS OR THE LIKE PURPOSES. ALLAN FOLKE JOHANSSON, Gottenborg, Sweden. Filed Mar. 20, 1918. Serial No. 223,643. (Cl. 126—37.)

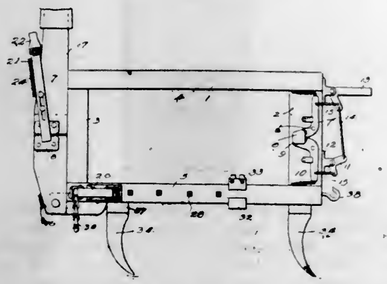


1. A cooking and heating apparatus comprising a casing provided with a central compartment having a cooking space provided with an open bottom and a door, a heating space arranged beneath the cooking space and having closed sides, the top of the heating space being open and communicating with the cooking space, a fuel burner located near the bottom of the heating space and away from the open top of the same, a draft opening arranged in one wall of the heating space near the bottom of the same for feeding air to the burner, a fuel reservoir located in the casing, a pipe leading from the fuel reservoir to the burner, and a smoke pipe arranged at the top of the casing to permit the smoke to exit from the central compartment.

2. A cooking and heating apparatus comprising a casing provided with a central compartment having a cooking space provided with an open bottom and a door, a heating space arranged beneath the cooking space and having closed sides, the top of the heating space being open and communicating with the cooking space, a fuel burner located near the bottom of the heating space and away from the open top of the same, a draft opening arranged in one wall of the compartment near the bottom of the

same for feeding air to the burner, a fuel reservoir located in the casing, a pipe leading from the fuel reservoir to the burner, provision compartments located at the sides of the heating space, another provision compartment arranged at one side of the cooking space, the tops of the last named compartment and the cooking space forming a shelf within the casing and a smoke pipe passing from the central compartment through the top of the casing.

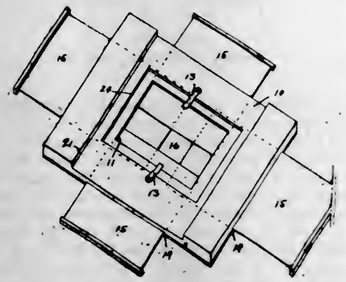
1,277,317. WIRE-STRETCHING DEVICE. ARTHUR JOHNSON, Remsen, Iowa. Filed Apr. 16, 1917. Serial No. 162,468. (Cl. 254—73.)



2. A wire stretching device of the class described comprising a frame, a pair of spring tensioned wire gripping jaws at one end thereof, an operating lever formed of two pivoted sections fulcrumed to the other end of said frame, coacting jaws carried by said sections and adapted for engagement with the free end of the wire, said jaws being operable when the sections are alined for movement from the frame and releasable when the same are disalined for return movement, and spring pressed slidable holding strips slidably mounted on the upper section of said lever and normally positioned adjacent the outer sides of said jaws to hold the wire therebetween.

[Claim 1 not printed in the Gazette.]

1,277,318. MATTING DEVICE. STEPHEN S. JOHNSON, South Orange, N. J. Filed Jan. 20, 1915. Serial No. 3,423. (Cl. 33—174.)



1. A matting device of the character described, comprising an apertured frame having means for temporarily supporting an image bearer at the frame aperture, shutters adjustable across the frame aperture to determine the desired exposure field of the image, in combination with a carrier for a mat blank adapted to support the latter in juxtaposition to said shutters after the removal of the image bearer and in a position substantially in register with that occupied by the image bearer while in the frame, for the purpose described.

7. A matting device of the character described, comprising an apertured frame having means for temporarily supporting an image bearer at the frame aperture, and shutters slidable across said aperture to determine the desired field of display of said image, in combination with a carrier for a mat blank having means for detachably supporting the mat blank thereon and adapted, after the removal of the image bearer, to hold the said mat blank in juxtaposition to the shutters and in a position substantially in register with that occupied by the image bearer while in the frame.

[Claims 2 to 6 not printed in the Gazette.]

1,277,319. WALL AND FLOOR PANEL. JOHN K. JOICE, Chicago, Ill. Filed Jan. 19, 1918. Serial No. 212,570. (Cl. 20—15.)



1. A wall or floor panel comprising a series of layers of material haivng as a unitary part thereof a spring clamping binding around its edges.

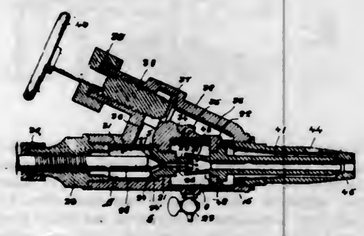
5. A wall or floor panel comprising a series of layers of wood and fiber and having as a unitary part thereof a spring binding channel around its edges, said channel being substantially U shaped in crosa section and having resilient flanges for engaging the surfaces of the panel when forced on the edges of the same, one of the flanges of the channel having an inturned portion for biting into the panel and forming a groove thereby preventing the easy removal or displacement of the channel.

8. A wall or floor panel comprising a series of layers of wood and fiber and having as a unitary part thereof a spring binding channel around its edges, said channel being substantially U shaped in cross section and having flanges for engaging the surfaces of the panel and tongue and groove means carried by the channel for joining the edges of the panels when placed in position on a wall or floor.

9. A wall or floor panel comprising a series of layers of material and having as a unitary part thereof a watertight spring binding around its edges.

[Claims 2 to 4, 6, and 7 not printed in the Gazette.]

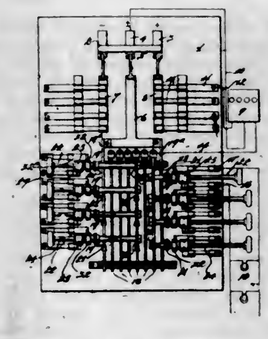
1,277,320. OIL-BURNER. WILLIAM A. KINNEY and JOHN F. STRAITZ, Philadelphia, Pa. Filed Dec. 17, 1917. Serial No. 206,633. (Cl. 158—76.)



1. In a hydrocarbon burner, a casing having an air inlet near its head end, an oil inlet near its tail end, a partition between the air inlet and the oil inlet, a second partition between the oil inlet and the tail end of the casing, a nozzle seated in the last-named partition and having a flaring intake extending within the oil chamber between the partitions, a bushing seated in the partition adjacent to the air inlet and having a nipple extending within the flaring intake, a valve to control the passage of air through the bushing, an enlargement on the casing having a longitudinal inclined bore communicating at its low end with the tail end of the casing, a port connecting the bore with the oil chamber, a passage way connecting the bore with the air inlet of the casing, a valve for controlling the passage of air through said passage to the bore, and an auxiliary nozzle threaded into the tail end of the casing and surrounding the main nozzle.

[Claim 2 not printed in the Gazette.]

1,277,321. METER-PANEL. HUBERT F. KRANTZ, Brooklyn, N. Y., assignor to Krantz Manufacturing Company, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Jan. 23, 1913, Serial No. 743,700. Renewed Aug. 29, 1917. Serial No. 188,868. (Cl. 247—13.)



1. In a meter panel board a plurality of bus-bars, arranged side by side, including meter bus-bars and a neutral bus-bar, a longitudinally movable and rotatable carrier adapted for movement across said bus-bars, a contact blade for the meter bars carried by said carrier, and a contact blade for the neutral bus bar loosely mounted upon said carrier but insulated therefrom.

4. In a meter panel board, a plurality of bus-bars arranged side by side, a supporting bracket, a rotatable carrier slidably mounted in said bracket and adapted for longitudinal movement therein, a contact blade secured to said carrier, a locking device adapted to prevent the longitudinal movement of said carrier when the blade thereon is in contact with a bus-bar, and to permit the longitudinal movement of said carrier when said carrier has been rotated sufficiently to cause the blade thereon to clear the bus-bars, and a neutral contact blade carried by said carrier but insulated therefrom.

[Claims 2, 3, 5, and 6 not printed in the Gazette.]

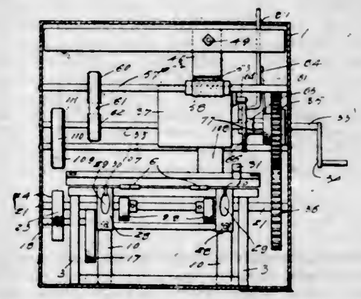
1,277,322. IMPREGNATING COMPOSITION AND METHOD OF MAKING SAME. WINTWORTH V. LANDER, Newton, Mass., assignor to General Indurating Corporation, a Corporation of New York. Filed Dec. 20, 1916. Serial No. 137,959. (Cl. 134—13.)

1. A composition of matter, adapted for use in the impregnation of porous or bibulous bodies, composed essentially of petroleum residue and a resin in solution in an evaporable carrier.

8. A composition of matter, adapted for use in the impregnation of porous or bibulous bodies, composed essentially of petroleum residue and colophony in solution in gasolene.

[Claims 2 and 4 to 13 not printed in the Gazette.]

1,277,323. POSTAGE-STAMPER. EDWIN GEORGE L. LANGLEY, North Hadley, Mass. Filed May 4, 1917. Serial No. 166,413. (Cl. 216—56.)



1. A stamp applying machine comprising a casing, a letter supporting means within said casing, an elliptical stamp applying roller eccentrically mounted within said casing, means for depositing stamps upon said roller, and means for holding said stamps upon the roller prior to applying them to letters.

2. A stamp applying machine comprising a casing, a letter supporting means within said casing, a stamp applying drum journaled in said casing, a hopper carried by said casing, a chute formed on said hopper and located adjacent the roller, spring fingers carried by said hopper and adapted to engage the stamps as they pass over the chute, and means for dispensing the stamps from the hopper on to the drum.

11. A stamp applying machine comprising a casing, a letter supporting means within said casing, a drive shaft journaled in said casing, a stamp applying roller carried by said shaft, means for applying stamps to said roller, a cam secured to said casing, a locking means located in said casing and adapted to hold the shaft against rotation, an automatic releasing member carried by said cam, a catch carried by said cam, an operating lever carried by the automatic releasing member and connected with the locking means and adapted to move the automatic releasing member into engagement with the catch upon releasing the locking means from the shaft, and a lug carried by said roller and adapted to engage the catch to release the automatic releasing means to permit the locking means to lock the shaft against rotation upon a complete revolution of the roller.

15. A stamp applying machine comprising a casing, supporting members within said casing, spring pressed presser boards carried by said supports, means for reciprocating said boards, and a stamp applying roller journaled in said casing and adapted to apply stamps upon letters upon the presser boards.

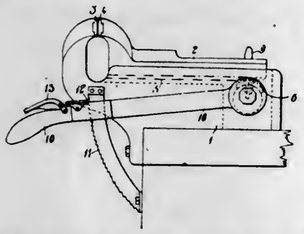
17. A stamp applying machine comprising a casing, supporting members within said casing, presser boards slidably mounted upon said supporting members, means for sliding said presser boards upon the supporting members, a stamp applying roller journaled in said casing, and means for raising the presser boards toward the stamp applying roller.

[Claims 3 to 10, 12 to 14, 16, and 18 to 20 not printed in the Gazette.]

1,277,324. BENCH-VISE. IVAN AUGUST MAURITZ LARSSON, Stockholm, Sweden. Filed Apr. 18, 1918. Serial No. 229,456. (Cl. 81—26.)

1. A vise comprising a fixed jaw, a movable jaw, slidably mounted in the fixed jaw and provided with a rack, a toothed segment adapted to actuate said rack, means for bringing the toothed segment into and out of engagement with the rack, means for turning the segment and means for holding it in desired position.

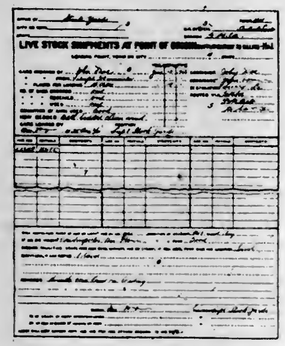
2. A vise comprising a fixed jaw, another jaw slidably mounted in a slot in the fixed jaw, a rack provided on said movable jaw, a toothed segment adapted to coöperate with said rack, said segment being eccentrically mounted



in a member pivotally mounted in the fixed jaw, means for turning said member, means for turning the toothed segment in said member and means for holding the segment in desired position.

[Claims 3 and 4 not printed in the Gazette.]

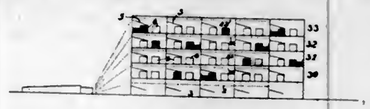
1,277,325. RECORD FOR LIVE-STOCK AND OTHER SHIPMENTS. GEORGE HENRY LLOYD, Houston, Tex. Filed Nov. 21, 1916. Serial No. 132,674. (Cl. 283—23.)



1. A series of inter-related forms for records of live stock and other shipments by common carriers, consisting of a form supplementary to billing and provided with designated spaces for describing the condition of the equipment at the point of origin, said form to be signed by a responsible person, another form also supplementary to billing and provided with designated spaces for describing the condition of the shipment at the point of origin to be signed by an official of the common carrier, a form with designated spaces for describing the condition and handling of both the equipment and shipment *en route*, to be filled out and signed at chosen intervals by various officials at the points touched, and still another form to constitute a receipt for the delivery of the shipment, to be signed by the consignee, the several forms constituting a complete record of the shipment for use in adjusting claims against the common carrier.

2. A series of inter-related forms for records of live stock shipments by common carriers, consisting of a form supplementary to billing and provided with designated spaces for describing the character and condition of the equipment at the point of origin, and also conditions material to the transportation of live stock, said form to be signed by a responsible person, another form also supplementary to billing and provided with designated spaces for describing the condition and the treatment of the shipment at the point of origin, said form to be signed by an official of the common carrier and also containing a table for the description of the shipment by symbols, another form with a table like that of the second named form and said third form being provided with designated spaces for describing the condition and the handling of both the equipment and shipment *en route*, to be filled out at stated times and signed by various officials at the points touched *en route*, and a receipt for the delivery of the shipment, to be signed by the consignee, said receipt containing a table like those of the second and third named forms and provided with designated spaces for the identification of the shipment, the several forms constituting a complete record of the shipment for use in adjusting claims against the common carrier.

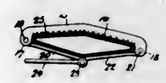
1,277,326. LUMBER-SORTING DEVICE. CARL A. LOHMAN, Seattle, Wash. Filed Nov. 14, 1916. Serial No. 131,209. (Cl. 83—92.)



1. A lumber sorting device comprising lumber supporting guides coöperating to convey the lumber transversely of its length, said lumber supporting guides being elevated and having openings of successively increasing size to thereby sort the lumber by length, said openings being separated to provide lumber sorting and handling spaces beneath the guides and between the successive openings and elevated sorting tables beneath the several openings upon which the lumber is received and over the face of which the lumber may move.

2. A lumber sorting mechanism comprising a plurality of superimposed sorting floors, overhead lumber conveyers extending lengthwise of each of said floors, said conveyers comprising supporting elements having openings of successively increasing size to thereby sort the lumber by length by the precipitation of said lumber through the openings, said openings being spaced at intervals along said floors, the height of the several floors above one another and the distance between said openings being such as to provide lumber sorting and handling spaces for each of the said openings within which workmen may work and an elevated sorting table beneath each of said openings and in each of said spaces.

1,277,327. CLOSURE FOR FLEXIBLE RECEPTACLES. HILDING LUNDQVIST, Floral Park, N. Y. Filed Aug. 3, 1916. Serial No. 112,914. (Cl. 24—30.5.)



3. A closure for flexible receptacles comprising a rear member provided with a longitudinal groove on its front face, and a pair of front members each pivotally secured to said rear member, the free ends of said front members being pivotally and slidably secured to each other and adapted to lock one on the other.

[Claims 1, 2, 4, and 5 not printed in the Gazette.]

1,277,328. PROCESS OF SATURATING OILS. ALMER MCDUFFIE MCAFEE, New York, N. Y., assignor to Gulf Refining Company, Pittsburgh, Pa., a Corporation of Texas. Filed Dec. 6, 1915. Serial No. 65,289. (Cl. 196—26.)

1. The process of decolorizing and improving kerosene, which comprises warming such kerosene with aluminum chlorid at a temperature around 150° F.

2. The process of stabilizing, decolorizing and deodorizing illuminating oils containing unsaturated oils, which comprises warming such an oil with anhydrous aluminum chlorid at a temperature sufficient to transform such unsaturated oils into saturated oils while insufficient to cause a substantial lowering of the original flash point of such illuminating oil.

3. The process of decolorizing and improving kerosene which comprises warming the same with aluminum chlorid at a temperature insufficient to produce any substantial lowering of the boiling point.

1,277,329. PURIFYING OILS. ALMER MCDUFFIE MCAFEE, Port Arthur, Tex., assignor to Gulf Refining Company, Pittsburgh, Pa., a Corporation of Texas. Filed Mar. 22, 1918. Serial No. 224,038. (Cl. 196—26.)

2. The process of improving petroleum materials, which comprises warming such a petroleum material with aluminum chlorid at a temperature around 150° F.

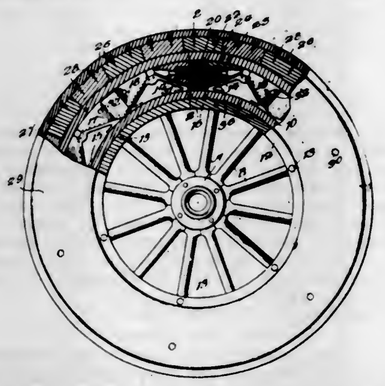
7. The process of stabilizing, decolorizing and deodorizing petroleum oils containing unsaturated oils, which comprises warming such an oil with anhydrous aluminum chlorid at a temperature sufficient to transform such unsaturated oils into saturated oils while insufficient to cause a substantial lowering of the original flash point of such petroleum oil.

13. In the purification of high boiling mineral lubricating oils, the process which comprises warming dry aluminum chlorid with a plurality of portions of such oil and such portions of oil with a plurality of portions of aluminum chlorid, the operation being so conducted that fresh oil is first contacted with nearly exhausted chlorid and nearly purified oil is finally treated with fresh chlorid.

28. In the manufacture of medicinal oils, the process which comprises boiling an asphaltic crude oil containing naphthenes with once-used aluminum chlorid from a later operation till a portion but not all of said oil is removed as low boiling products, removing the aluminum chlorid, warming a distilled fraction of the oil which has been so treated with fresh aluminum chlorid at a temperature insufficient to make volatile oils to purify such oil and furnish such once-used chlorid, removing the chlorid, treating with sulfuric acid, washing, and steaming the oil and filtering through a decolorant.

[Claims 1, 3 to 6, 8 to 12, 14 to 27, and 29 not printed in the Gazette.]

1,277,330. RESILIENT WHEEL. FRANK J. MCNULTY, Lowell, Ariz. Filed Oct. 25, 1917. Serial No. 198,430. (Cl. 152—38.)



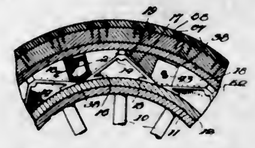
1. In a resilient wheel, the combination, of an inner rim, an outer rim, blocks arranged between the rims and slidably engaging with one of them, guides carried by the other rim having inclined faces engaging the blocks to move the same in pairs toward each other when the rims are compressed, and means for yieldingly separating the blocks of each pair.

7. In a resilient wheel, the combination, of inner and outer rims, a plurality of guides secured in end to end abutting relation upon the peripheral surface of the inner rim, a block mounted upon the outer face of each guide and adapted to slide longitudinally thereon, the outer faces of said guides being inclined to move the blocks outwardly when slid on the guides, said blocks bearing at their outer faces against the outer rim to retain the latter concentric about the inner rim, cushioning means arranged between the adjacent ends of each pair of blocks to urge the latter outwardly from the inner rim, and detachable means carried by one of the rims for holding the outer rim from lateral displacement from the blocks.

8. In a resilient wheel, the combination, of inner and outer rims, inclined guides mounted upon one of the rims, blocks slidably mounted on the guides and engaging the other rim, cushioning means engaging the blocks to urge the latter outwardly upon the guides and against said other rim, and means for retaining the blocks and the outer rim from lateral displacement with respect to the inner rim.

[Claims 2 to 6 and 9 not printed in the Gazette.]

1,277,331. RESILIENT WHEEL. FRANK J. MCNULTY, Lowell, Ariz. Original application filed Oct. 25, 1917, Serial No. 198,430. Divided and this application filed Feb. 26, 1918. Serial No. 219,243. (Cl. 152—34.)



1. In a resilient wheel, the combination, of inner and outer rims, guides arranged on one rim and having oppositely inclined faces, sliding blocks mounted on the inclined faces of the guides and adapted to engage the other rim, and pneumatic cushions arranged between the blocks to yieldingly hold the same in wedged relation between the guides and said other rim.

3. In a resilient wheel, the combination, of inner and outer rims, inclined guides arranged in pairs upon one rim and facing the other rim, slide blocks arranged in pairs on the guides and adapted to engage the other rim, and pneumatic cushions arranged between the pair of slide blocks for urging the latter apart over the inclined faces of the guides and against said other rim.

5. In a resilient wheel, the combination, of inner and outer rims, slidable members carried by one rim and engaging the other rim, a hollow flexible block disposed between each pair of said members to normally urge the same toward said other rim, each of said resilient blocks having an inner rubber lining and an exterior reinforced flexible shell for engagement with said members, and a valve carried by each flexible hollow block for admitting and maintaining air under pressure therein.

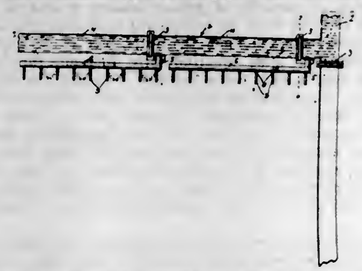
[Claims 2 and 4 not printed in the Gazette.]

1,277,332. IRRIGATING SYSTEM. JAMES D. MCNUTT, Lees Summit, Mo. Filed Oct. 25, 1917. Serial No. 198,411. (Cl. 61—9.)

1. An irrigating system including a water supply pipe, check gates arranged at intervals therein, outlet pipes leading from said pipe near said gates, a plurality of longitudinally spaced elbow-shaped branch pipes leading from the bottom of said outlet pipe with their free arms disposed horizontally, and faucets arranged in said branch pipes.

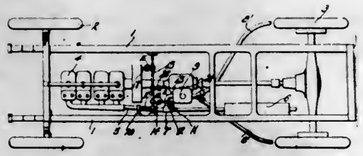
2. An irrigating system including a water supply pipe, check gates arranged at intervals therein, outlet pipes

leading from said pipe near said gates, a plurality of longitudinally spaced elbow-shaped branch pipes leading from the bottom of said outlet pipe with their free arms



disposed horizontally, faucets arranged in said branch pipes, and flexible extensions carried by said branch pipes in advance of said faucets.

1,277,333. NON-SKIDDING DEVICE. EDGAR T. MEAKIN, Berkeley, Cal. Filed Dec. 14, 1915, Serial No. 66,682. Renewed Jan. 26, 1918. Serial No. 214,032. (Cl. 291—11.)



1. The combination with a vehicle, a gas engine for driving the same, an exhaust pipe for said engine, a by-pass leading from said exhaust pipe, a sand-box adapted to deliver into said by-pass, said by-pass being adapted to deliver sand from said box beneath the wheels, and a valve normally closing said by-pass to prevent passage of gases therethrough, said valve progressively obstructing the exhaust pipe as it opens the by-pass.

2. The combination with a vehicle, a gas engine for driving the same, an exhaust pipe for said engine, a by-pass leading from said exhaust pipe, a sand-box adapted to deliver into said by-pass, said by-pass being adapted to deliver sand from said box beneath the wheels, a valve normally closing said by-pass to prevent passage of gases therethrough, and a valve normally closing said sand box.

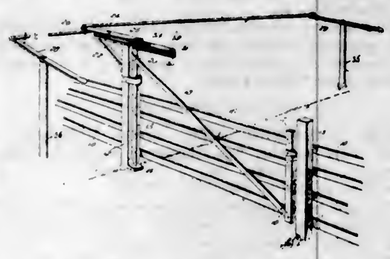
3. The combination with a vehicle, a gas engine for driving the same, an exhaust pipe for said engine, a by-path leading from said exhaust pipe, a sand box adapted to deliver into said by-pass, said by-pass being adapted to deliver sand from said box beneath the wheels, a valve normally closing said by-pass to prevent passage of gases therethrough, a valve normally closing said sand box, and means for simultaneously opening said valves when desired.

4. The combination with a vehicle, a gas engine for driving the same, an exhaust pipe for said engine, a by-pass leading from said exhaust pipe, a sand box opening into said by-pass, and a valve normally closing said by-pass, said by-pass delivering sand to the driving wheels when the said valve is open, said valve obstructing the exhaust pipe beyond the by-pass when the by-pass is open.

5. The combination with a vehicle, a gas engine for driving the same, an exhaust pipe for said engine, a by-pass leading from said exhaust pipe, a sand box connected to said by-pass, a valve normally closing said by-pass to prevent the passage of gases therethrough, a chamber between said sand box and said by-pass, a valve for holding the sand in said box mounted in said chamber, said by-pass having an aspirator formed therein at the mouth of said chamber, said by-pass delivering sand to the drive wheels when the valve is open, and means for operating said valves simultaneously.

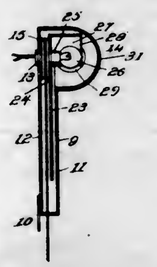
[Claims 6 and 7 not printed in the Gazette.]

1,277,334. GATE-OPERATING DEVICE. HENRY T. MILLER, Yacolt, Wash. Filed Mar. 29, 1918. Serial No. 225,582. (Cl. 30—32.)



In a device of the class described, a plurality of gate posts, a gate including a plurality of vertically mounted members and horizontal cross bars, means for rotatably mounting one of said vertical members with reference to one of the gate posts, a bracket carried by the gate post last named, an arm carried by said rotatable member and extending toward the opposite end of the gate, a lever pivotally mounted on the bracket, a link connecting the lever with the arm and adapted to rotate the latter and the rotatable member of the gate, a plurality of operating levers, and means connecting each of said levers with the lever first named, said link and that portion of the lever between the fulcrum and its point of connection with the link, constituting a toggle joint, the elements of which are in alinement when the gate is closed.

1,277,335. AUTOMOBILE-SIGNAL. BUREN MOAD, Toledo, Ohio. Filed Aug. 25, 1917. Serial No. 188,141. (Cl. 116—31.)



3. An automobile signal embodying a pair of housings having open opposite sides, a shaft passing through the upper end of said housing, a substantially V-shaped visible indicator on said shaft, means for swinging the V-shaped visible indicator through the opposite open sides of the housing, illuminating means for said visible indicator, a shield fixedly secured to the end of the visible indicator provided in the bottom thereof with an opening, the opening in the bottom of the shield alining with the indicator for projecting the rays of light through its opening and upon the visible indicator when the latter is swung to indicating position.

[Claims 1 and 2 not printed in the Gazette.]

1,277,336. SUBSTITUTE HIGHLY-NITROGENOUS FOOD AND PROCESS OF PRODUCING THE SAME. NICOLAUS MOSKOVITS and KAI A. JACOBSEN, Nagy-Várad, Hungary, assignors to the Firm of Moskovits Mór és Fia, Nagy-Várad, Hungary. Filed Feb. 26, 1916. Serial No. 80,597. (Cl. 99—11.)

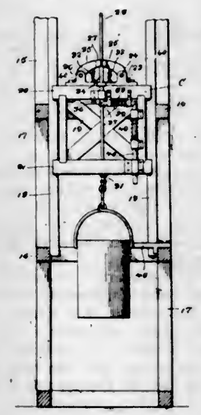
1. A substitute highly nitrogenous food, consisting of an emulsion of fats, in purified blood serum.

6. A substitute highly nitrogenous food, consisting of an emulsion of fats in purified concentrated blood serum with an addition of lecithin.

10. A process for the production of a substitute material of the character described, comprising emulsifying fats, in purified concentrated blood serum.

[Claims 2 to 5, 7 to 9, and 11 to 16 not printed in the Gazette.]

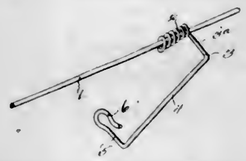
1,277,337. CROSS-HEAD SAFETY DEVICE. WILLIAM C. MURPHY, Gold Hill, Utah. Filed Apr. 2, 1918. Serial No. 226,223. (Cl. 187—96.)



3. In a safety device for mines, a cross head, guides for the same, a hoisting rope guided through the cross head, a clutch mounted on the cross head and comprising two opposed spring actuated dogs between the heads of which the rope is guided, said heads having beveled under faces, a slidably supported trigger having a head engaging the under faces of the heads of the dogs, and means moving the trigger in an upward direction to release the clutch of the dogs on the rope, said means including a spring actuated push rod, a beveled face on said push rod, a correspondingly beveled face at the lower end of the trigger for engagement with the beveled face of the push rod, a spring actuated operating rod having a beveled face, a correspondingly beveled outer end face of the push rod, said operating rod extending below the cross head, and a stop member arranged in the path of said operating rod.

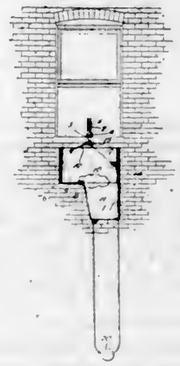
[Claims 1 and 2 not printed in the Gazette.]

1,277,338. CLOTHES-PIN. JOHN WESLEY NEWSOM, Graham, Tex. Filed July 14, 1915. Serial No. 39,826. (Cl. 24—139.)



In combination with a metallic clothes line, an article of manufacture, comprising combined tensioning and suspensioning means, consisting of a spring coil, the convolutions of which are axially arranged and receive the clothes line at an angle of the coil, an arm depending from one end of the coil at an obtuse angle thereto, said arm merging into a second elongated arm at an obtuse angle to the first arm, the second arm terminating in a right angle extending arm, the terminal of which is provided with a hook, which, when said arms extending at an obtuse angle to each other are tensioned or bent to assume right angle positions, is adapted to engage the clothes line, said spring coil and the tensioning of the obtuse angularly disposed arms constituting means exerting pressure to hold the hook in engagement with the clothes line.

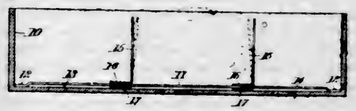
1,277,339. FIRE-ESCAPE. SAMUEL ODGERS and PETER LA PIERRE, Kansas City, Mo. Filed Oct. 13, 1917. Serial No. 196,443. (Cl. 227—25.)



1. A fire escape comprising a car formed of metal and having an opening in its bottom, a canvas extension surrounding said opening, a supporting beam, a pulley on said beam, a cable having one end connected with the car and passing through said pulley and having its other end connected with the canvas extension, and a weight on said cable, said weight, when the car is suspended from a window, dropping through the opening and the canvas extension and straightening the cable.

2. A fire escape comprising a holding receptacle adjacent the window, a supporting beam movably secured to said receptacle, a curved hand-grip connected with said beam and having its lower end extended to engage the window-sill to hold the beam above the same, a pulley carried by the end of said beam, a cable engaging said pulley, and a car connected with said cable, all of said parts occupying the receptacle when not in use.

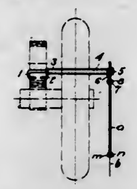
1,277,340. SPACING DEVICE FOR DISPLAY-TRAYS. WILLIAM T. HORMES, Govans, Md., assignor to Solomon Himmel, Baltimore, Md. Filed Dec. 22, 1915. Serial No. 68,193. (Cl. 211—28.)



The combination with a tray having a bottom wall provided with a uniformly flat surface throughout its area, and a guide strip attached to said flat surface and having its body portion spaced therefrom, of a plurality of spacing members slidably mounted on said guide strip, each spacing member comprising a strip of sheet metal bent at right angles to provide a body portion of approximately the same width as the guide strip, and to provide a foot portion having laterally extended sheet metal portions provided with inturned extremities cooperating with the body portion of the foot to form a strip-engaging guide

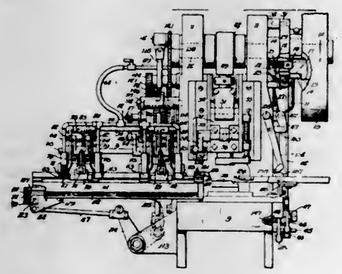
of sufficient diameter to permit slight vertical play, said spacing members being positioned along the guide strip to separate merchandise placed on both sides of the body portions thereof.

1,277,341. SPLASH-SHIELD. BENGT SALOMON ANDERSSON, Stockholm, Sweden, assignor to Herman Sundius, Stockholm, Sweden. Filed Sept. 22, 1917. Serial No. 192,807. (Cl. 21—23.)



In a splash shield for automobiles of the character described, the combination of a bi-partite band having its parts hingedly connected, a tongue on one of the parts overlapping the other, a bolt and nut for connecting both parts, a hook adapted to grip over the inner edge and a hook adapted to grip over the outer edge of the automobile spring, a tubular shaft on one of said hooks, a shaft on the second hook guided within said tubular shaft and entering through a hole of one of said parts and a nut for securing both shafts to the band, substantially as described.

1,277,342. SHEET-FEEDING MECHANISM. WILLIAM CAMERON, Chicago, Ill., assignor to Torris Wold & Company, Chicago, Ill., a Corporation of Illinois. Filed May 25, 1917. Serial No. 170,838. (Cl. 271—26.)



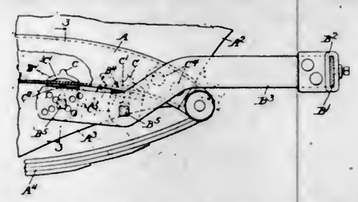
1. In a machine of the character described, the combination of a continuously operating member, a reciprocatory pneumatic sheet-engaging device, a suction-creating device arranged to apply suction to said sheet-engaging device, driving connections between said devices and said continuously operating member, and means whereby one of said devices may be disconnected from said member at will without affecting the operation of the other device.

5. In a machine of the character described, the combination of a drive shaft, a sprocket wheel mounted thereon, a second sprocket wheel, a chain connecting said sprocket wheels, a gear connected with said second sprocket wheel, a driven gear, means including a changeable gear for driving said driven gear from said first mentioned gear, blank lifting and blank transferring mechanism operated from said driven gear, and blank feeding mechanism connected directly to said driving shaft.

11. In a machine of the character described, the combination of a blank lifting device, a reciprocatory blank transferring device movable at right angles to said lifting device, feeding mechanism adapted to receive a transferred blank, a driven gear, a cam and a crank pin mounted thereon, mechanism operated from said cam for reciprocating said transferring device, and mechanism operated from said crank pin for operating said lifting devices.

[Claims 2 to 4, 6 to 10, and 12 to 16 not printed in the Gazette.]

1,277,343. ADJUSTABLE SUPPORT FOR AUTOMOBILE-BUMPERS. LEWIS P. HALLADAY, Streator, Ill. Filed Feb. 18, 1918. Serial No. 217,798. (Cl. 293—55.)



1. A support for automobile bumpers comprising a bar extending forwardly from the vehicle frame, a plurality of clamping members rigidly attached to the frame and means for separately attaching the supporting bar to each of said members independent of the means for fastening the members to the frame.

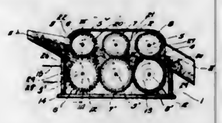
5. A support for automobile bumpers comprising a bar, a plurality of clamps separately and independently mounted on the vehicle frame, said clamps projecting outwardly beyond the frame and separate means for attaching said bar to said clamps, said bar being widely removed from the frame, the means for attaching the clamps to the frame and the bar to the clamps being altogether independent.

9. A clamp for supporting automobile bumpers comprising a U-shaped member adapted to inclose one of the flanges of an auto frame, means for locking said U-shaped member upon the frame, means for separately attaching a supporting bar to said clamp, and an enlarged bearing surface, integral with said U-shaped member, against which said supporting bar bears.

22. In an automobile bumper, a supporting bar extending forwardly from the frame, a clamping member rigidly attached to the frame, means for pivoting the supporting bar thereon, a second clamping member rigidly attached to the frame, adjustable means for attaching the supporting bar thereto, said means comprising a perforation in the clamping member, a plurality of perforations in the supporting bar, and a holding member adapted to engage the aperture in the clamping member, and an aperture in the supporting bar to secure the supporting bar to the clamping member.

[Claims 2 to 4, 6 to 8, 10 to 21, and 23 to 25 not printed in the Gazette.]

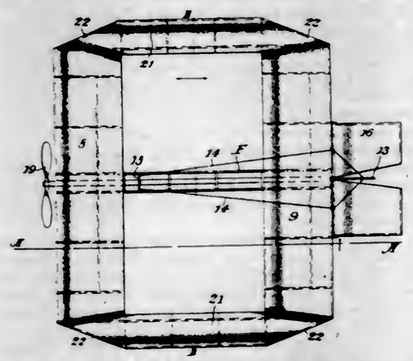
1,277,344. FEED-CUTTING MACHINE. LORAEN B. MCCARGAR, Kansas City, Mo. Filed Jan. 31, 1918. Serial No. 214,593. (Cl. 83—6.)



1. A feed cutting machine including a casing having an inlet at one end and an outlet at the other end, a lower series of cutting cylinders, an upper series of mating cylinders, said cylinders being provided at intervals with cutter disks having projecting peripheral teeth progressively increasing in fineness from the said inlet to the outlet and the disks of the upper cylinders being spaced apart and the disks of the lower cylinders overlapping with each other and with the disks of the mating upper cylinders, said cylinders being arranged to carry the material through the machine and gradually reduce the material in its passage from the inlet to the outlet, and means for rotating the upper and lower cylinders.

2. A feed cutting machine including a casing having an inlet at one end and an outlet at the other end, a lower series of cutting cylinders, an upper series of mating cylinders, said cylinders being provided at intervals with cutter disks having projecting peripheral teeth progressively increasing in fineness from the said inlet to the outlet and the disks of the upper cylinders being spaced apart and the disks of the lower cylinders overlapping with each other and with the disks of the mating upper cylinders, said cylinders being arranged to carry the material through the machine and gradually reduce the material in its passage from the inlet to the outlet, and means for rotating the said cylinders at a greater rate of speed than its co-acting lower cylinder.

1,277,345. FLYING-MACHINE. WILLARD IRVING TWOMBLY, New York, N. Y., assignor, by mesne assignments, to D. Stuart Dodge, Weatogue, Conn. Filed Apr. 22, 1913. Serial No. 762,906. (Cl. 244—14.)



1. In a flying machine comprising a main supporting surface having a positive angle of incidence, and lying transversely from side to side of said machine, a pair of rigid lateral balancing planes extending rearwardly from said main supporting surface and rigidly supported with respect to the machine at a point to the rear of said main surface, the longitudinal elements of which are substantially parallel with the axis of the machine and the outer lateral edges of which balancing planes are higher than the inner edges.

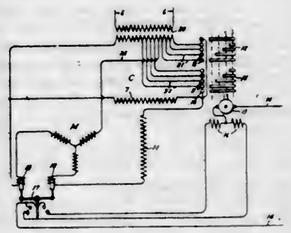
6. In a flying machine a pair of following supporting planes having a positive angle of incidence, and having greater lateral extent than longitudinal breadth of plane, a pair of lateral balancing planes one located at either side of the machine and extending straight fore and aft substantially parallel with the axis of the machine and secured at one end by merging into the adjacent end of one of the supporting planes and being curved transversely from the outer edge inwardly downwardly toward the inner edge of said lateral planes.

9. In a flying machine a central main frame work extending longitudinally the full length of the machine, a shaft and propeller supported at the forward end thereof, means of alighting and original support below said main frame, two transverse supporting planes secured fixedly above the main frame, the one at the forward end and the other at the rear and lying with elements parallel and distanced greater than the width of either of said planes, lateral narrow planes lying with their length parallel to the main frame and merging respectively with the adjacent ends of the supporting planes.

[Claims 2 to 5, 7, and 8 not printed in the Gazette.]

REISSUES.

14,510. AUTOMATIC CONTROL OF PHASE-CONVERTERS. ERNST F. W. ALEXANDERSON, Schenectady, N. Y. assignor to General Electric Company, a Corporation of New York. Filed Apr. 2, 1918. Serial No. 226,807. Original No. 1,233,952, dated July 17, 1917, Serial No. 832,935, filed Apr. 18, 1914. (Cl. 172—238.)



1. The combination with a single phase source and a polyphase load circuit, of a phase converter of the polyphase motor type electrically connected therebetween, and means, including a plurality of current responsive devices, for automatically maintaining the polyphase currents substantially balanced under all conditions of load.

2. The combination with a single phase source and a polyphase load circuit, of a phase converter of the polyphase motor type electrically connected therebetween, and means, including a plurality of current responsive devices in operative relation to the branches of the polyphase load, for automatically maintaining the polyphase currents substantially balanced under all conditions of load

3. In combination, a single phase source of supply, a balanced polyphase load, means, including a phase converter of the polyphase motor type, adapted to receive energy from the single phase source of supply and deliver energy to the polyphase load, and means including a plurality of current responsive devices operatively related to the branches of the polyphase load and a controller governed thereby, for automatically varying the effective voltages delivered to the load to maintain balanced currents therein.

4. In combination, a single phase source of supply, a balanced polyphase load, means, including a phase converter of the polyphase motor type, having a plurality of phase windings, adapted to receive energy from the single phase source of supply and deliver energy to the polyphase load, and means, including a plurality of current responsive devices operatively related to the branches of the polyphase load and a controller governed thereby, for automatically varying the volts per turn applied to one phase winding of the phase converter.

5. In combination, a single phase source of supply, a balanced polyphase load, means, including a phase converter of the polyphase motor type, adapted to receive energy from the single phase source of supply and deliver energy to the polyphase load, and means, including a plurality of current responsive devices operatively related to the branches of the polyphase load and a controller governed thereby, for automatically varying the relative values of two of the induced voltages in the phase converter.

6. In a system of phase conversion, the combination with a single-phase supply circuit and a polyphase load circuit, of a phase converter of the polyphase motor type electrically interposed therebetween, and means comprising an electro-responsive device operatively connected to one of said circuits for automatically maintaining the polyphase currents substantially balanced under all conditions of load.

7. The combination with a single-phase source and a polyphase load circuit, of a phase converter of the polyphase motor type electrically interposed therebetween, and

means comprising an electro-responsive device operatively connected to said polyphase load circuit for automatically varying the effective voltages delivered to said load circuit to maintain balanced polyphase currents therein.

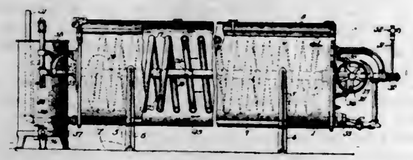
8. The combination with a single-phase source and a polyphase lead circuit, of a phase converter of the polyphase motor type electrically connected therebetween, and means comprising a device responsive to current in said load circuit for automatically maintaining the polyphase currents substantially balanced under all conditions of load.

14,511. DESIGN FOR A HOOD OR SHADE FOR A LAMP. GEORGE W. CASSIDY, New York, N. Y. Filed June 8, 1918. Serial No. 238,998. Term of patent 7 years. Original No. 51,255, dated Sept. 11, 1917, Serial No. 183,374, filed July 28, 1917, for 7 years.



The ornamental design for a hood or shade for a lamp, as shown.

14,512. APPARATUS FOR PASTEURIZING, COOLING, AND RIPENING MILK, CREAM, AND OTHER LIQUIDS. FRANK CHADIMA, Cedar Rapids, Iowa, assignor to J. G. Cherry Company, Cedar Rapids, Iowa, a Corporation of Iowa. Filed Sept. 13, 1917. Serial No. 191,284. Original No. 1,224,901, dated May 8, 1917, Serial No. 22,780, filed Apr. 21, 1915. (Cl. 257—79.)



1. In an apparatus of the character described, the combination of a receptacle, a shaft having hollow ends, hollow bearing nipples connected to said shaft and journaled in the ends of said receptacle, a hollow coil connected at each end to the interiors of the hollow ends of said shaft, a circulation tank, stationary means disposed within said tank adjacent the bottom thereof and adapted to be constantly immersed in the liquid contained therein to draw said liquid from the lower portion of said tank, a pipe connecting said means to one of said bearing nipples, a pipe connected to the other of said bearing nipples and arranged to deliver liquid to the upper portion of said tank, and means for rotating said shaft whereby liquid is caused to circulate constantly between said tank and coil.

2. In an apparatus of the character described, the combination of a receptacle, a shaft having hollow ends rotatably supported in said receptacle, a hollow coil connected at each end to the interiors of the hollow ends of said shaft, a circulation tank, an injector disposed within said tank adjacent the bottom thereof and adapted to be constantly immersed in the liquid contained therein, means for supplying steam to said injector whereby said liquid is withdrawn from the lower portion of said tank and simultaneously heated, a pipe connecting said injector to one end of said shaft, a pipe connected to the opposite end of said shaft and arranged to deliver liquid to the upper portion of said tank, and means for rotating said shaft whereby liquid is caused to circulate constantly between said tank and coil.

3. In an apparatus of the character described, the combination of a receptacle, a shaft having hollow ends rotatably supported in said receptacle, a hollow coil connected at each end with the interiors of the hollow ends of said shaft, a circulation tank, stationary means disposed within said tank adjacent the bottom thereof and adapted to be constantly immersed in the liquid contained therein to draw said liquid from the lower portion of said tank, a pipe connecting said means to one end of said shaft, a pipe connected to the opposite end of said shaft and arranged to deliver liquid to the upper portion of said tank, and means for rotating said shaft whereby liquid is caused to circulate constantly between said tank and coil.

4. In an apparatus of the character described, the combination of a hollow shaft, openings in said shaft adjacent the ends thereof, a hollow spiral coil having its ends disposed through said openings and flanged to engage the inner periphery of said shaft, a member disposed within said shaft at each end thereof with one edge abutting the flanged end of said coil, the opposite edge of said member being disposed in a plane normal to the axis of said shaft, and a bearing nipple secured to the end of said shaft with its edge abutting the edge of said member.

5. In an apparatus of the character described, the combination of a hollow shaft, a sleeve on said shaft, openings in said shaft and sleeve adjacent the ends thereof, a hollow spiral coil having its ends disposed through said openings and flanged to engage the inner periphery of said shaft, a member disposed within said shaft at each end thereof with one edge abutting the flanged end of said coil, the opposite edge of said member being disposed in a plane normal to the axis of said shaft, a bearing nipple secured to each end of said shaft with its edge abutting the edge of said member, and plugs in said shaft behind the flanged ends of said coil.

6. In an apparatus of the character described, the combination of a receptacle, a circulation tank, stationary means for withdrawing liquid from the lower portion only of said tank, a rotatable hollow shaft within said receptacle, plugs in said shaft spaced from the ends thereof, openings in the wall of said shaft adjacent both ends thereof, a hollow spiral coil having its ends disposed through said openings and flanged to engage the inner periphery of said shaft, members disposed within said shaft with one edge abutting the flanged ends of said coil, the opposite edges of said members being disposed in planes normal to the axis of said shaft, bearing nipples secured to the ends of said shaft and abutting the edges of said members, a pipe connecting said liquid withdrawing means to one of said nipples, and means for rotating said shaft.

14,513. RIVET. CLARA S. EATON, New York, N. Y. Filed Mar. 20, 1917. Serial No. 156,189. Original No. 1,120,378, dated Dec. 8, 1914, Serial No. 818,189, filed Feb. 12, 1914. (Cl. 85—38.)



1. A rivet having an enlarged head and a shank, the shank having opposing rounded sides and opposing substantially flat sides extending to the head, the shank being bifurcated part of the distance leaving a solid portion between the head and the crotch of the bifurcation, the length of the said solid portion of the shank being substantially longer than the thickness of a prong.

2. A rivet having an enlarged head and a shank, the shank being bifurcated part of the distance forming the prongs, leaving a solid portion between the head and the crotch of the bifurcation, the length of the said solid portion of the shank being substantially less than the length of the prongs, and the width of said portion being substantially greater than the thickness of the prongs, the opposing sides of the solid portion of the shank and the opposing outer sides of the extended prongs opposite the inner walls of the bifurcation being continuous and unbroken throughout their length, the said opposing sides of the solid portion of the shank being flat and parallel.

14,514. FORMALDEHYDE COMPOSITION AND THE PREPARATION THEREOF. DANIEL M. MCCARTHY, Brooklyn, N. Y. Filed July 5, 1918. Serial No. 243,477. Original No. 1,265,463, dated May 7, 1918, Serial No. 67,381, filed Dec. 17, 1915. (Cl. 167—3.)

1. A new composition of matter consisting of a 5% solution of agar-agar mixed with a 40% solution of formaldehyde, in equal proportions.

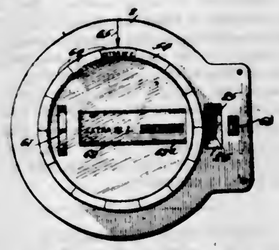
2. A new composition of matter consisting of a 5% solution of vegetable substance containing gelose, and a 40% solution of formaldehyde, in equal proportions.

3. A new composition of matter consisting of a mixture of formaldehyde and agar-agar and which is characterized by the fact that the formaldehyde does not harden the agar-agar.

4. A new composition of matter consisting of a vegetable substance containing gelose saturated with formaldehyde and which is characterized by the fact that it is not rendered horny by the formaldehyde.

5. A new composition of matter in the shape of a jelly comprising agar-agar and formaldehyde.

14,515. METER. MARVIN SMITHEY, Lawrenceville, Va. Filed Aug. 15, 1917. Serial No. 186,426. Original No. 1,195,161, dated Aug. 15, 1916, Serial No. 66,288, filed Dec. 11, 1915. (Cl. 235—95.)



1. A device of the character specified, comprising a driving shaft adapted to be connected with a wheel of a vehicle, a cylindrical support journaled on the shaft, a plurality of series of odometers carried by the support, the series being at the opposite ends of the support and the members of one series alternating with the members of the other series, a drum journaled on the shaft within the support and having a driving connection between the shaft and the drum for rotating the drum, mechanism in connection with the drum at each series of odometers for operating the odometers in succession, a connection between the driving shaft and the cylindrical support for rotating the said support to bring the odometers in succession into reading position, and manually operated means for rotating the said support to bring any predetermined odometer into reading position, said means comprising a ring mounted to rotate and connected with the support to move the support at the same speed as the ring, said ring having identifying labels on its periphery for the several odometers, and a casing inclosing the support and the operating mechanism and having reading openings for the odometers extending diametrically of the ring, the ring being mounted to rotate on the casing, and said casing having an indicator for coöperating with the ring to indicate the particular odometer at reading position.

2. A device of the character specified, comprising a driving shaft adapted to be connected with a wheel of a vehicle, a cylindrical support journaled on the shaft, a plurality of series of odometers carried by the support, the series being at the opposite ends of the support and the members of one series alternating with the members of the other series, a drum journaled on the shaft within the support and having a driving connection between the shaft and the drum for rotating the drum, mechanism in connection with the drum at each series of odometers for operating the odometers in succession, a connection between the driving shaft and the cylindrical support for rotating the said support to bring the odometers in succession into reading position, and manually operated means for rotating the said support to bring any predetermined odometer into reading position.

3. A device of the character specified, comprising a driving shaft adapted to be connected with a wheel of a vehicle, a cylindrical support journaled on the shaft, a series of odometers carried by the support, a drum journaled on the shaft within the support and having a driving connection between the shaft and the drum for rotating the drum, mechanism in connection with the drum for operating the odometers in succession, and a connection between the driving shaft and the cylindrical support for rotating the said support to bring the odometers in succession into reading position.

4. A device of the character specified, comprising a driving shaft adapted to be connected with the wheel of a vehicle, a support journaled on the shaft, a series of odometers carried by the support, means journaled on the shaft within the support for operating the odometers in succession, a driving connection between the said means and the shaft, a casing having a reading opening for the odometers and a driving connection between the shaft and the support for bringing the odometers in succession into reading position.

5. A device of the character specified, comprising a driving shaft adapted to be connected with the wheel of a vehicle, a support journaled on the shaft, a series of odometers carried by the support, means journaled on the shaft within the support, for operating the odometers in succession, a driving connection between the said means and the shaft, a casing having a reading opening for the odometers, a driving connection between the shaft and the support for bringing the odometers in succession into reading position, manually operated means for bringing the odometers in succession into reading position, said means comprising a ring mounted to rotate and having a driving connection with the support, and having identifying labels identified with the odometers, and a fixed indicator coöperating with the ring.

6. A device of the character specified, comprising a driving shaft adapted to be connected with the wheel of a vehicle, a support journaled on the shaft, a series of odometers carried by the support; means journaled on the shaft within the support for operating the odometers in succession, a driving connection between the said means and the shaft, a casing having a reading opening for the odometers, a driving connection between the shaft and the support for bringing the odometers in succession into reading position, and manually operated means for bringing the odometers in succession into reading position.

7. A device of the type described comprising a plurality of odometers and means for actuating the odometers in succession.

8. A meter comprising a series of odometers and means for actuating the odometers intermittently and in succession.

9. A meter comprising a series of individual odometers spaced apart about a common center, and a common means rotatable on an axis through said common center for operating said odometers successively.

10. A meter comprising a power shaft, a series of odometers arranged concentrically about said power shaft, means carried by said power shaft for actuating said odometers in succession, and means for putting any odometer out of operative relation with the common actuating means.

11. A meter comprising a power shaft, a plurality of odometers mounted concentrically about said power shaft, and means disposed within the circle of said concentrically mounted odometers, and actuated by said power shaft for actuating said odometers in succession.

12. A meter comprising a power shaft, a drum mounted for rotation about the axis of the power shaft, a plurality of odometers disposed concentrically of said power shaft and externally to said drum, and means carried by the drum for operating said odometers in succession.

13. A meter comprising a power shaft, a drum mounted for rotation about the axis of the power shaft, a plurality of odometers disposed concentrically of said power shaft and externally to said drum, and means carried by the drum for operating said odometers in succession, said last named means comprising a series of spring pressed pawls, arranged to engage the odometers in succession.

14. A meter comprising a power shaft, a drum mounted for rotation about the axis of the power shaft, a plurality of odometers disposed concentrically of said power shaft and externally to said drum, and means carried by the drum for operating said odometers in succession, said last named means comprising a series of spring pressed pawls, arranged to engage the odometers in succession, and means for preventing engagement of the spring pressed pawls with the odometers at will.

15. A meter comprising a power shaft, a drum mounted for rotation about the power shaft, means connected with the power shaft for rotating the drum, a support mounted for rotation about the power shaft, a series of odometers carried by said support, and means carried by the drum for engaging the odometers in succession to actuate them.

16. A meter comprising a power shaft, a drum mounted for rotation about the power shaft, means connected with the power shaft for rotating the drum, a support mounted for rotation about the power shaft, a series of odometers carried by said support, means carried by the drum for engaging the odometers in succession to actuate them, and means for manually rotating the support with respect to the drum.

17. A meter comprising a power shaft, a drum mounted for rotation about the power shaft, means connected with the power shaft for rotating the drum, a support mounted for rotation about the power shaft, a series of odometers carried by said support, means carried by the drum for engaging the odometers in succession to actuate them, means for manually rotating the support with respect to the drum, said last named means comprising a gear ring mounted concentrically of the power shaft and arranged to engage a portion of the support to rotate the latter.

18. In a meter, the combination of a power shaft, a drum mounted concentrically of the shaft and rotatable with respect thereto, means including a series of gears for transmitting the movement of the shaft to the drum, a rotatable frame mounted concentrically of the shaft, a plurality of odometers carried by said rotatable frame, said rotatable frame being movable with respect to the drum, means carried by the drum for actuating said odometers, means for transmitting the power to the shaft to the rotatable frame for rotating the same, and additional means for manually rotating the frame to bring it to a desired position.

19. A meter for vehicles, comprising a plurality of odometers mounted upon a support, a common means for actuating the said odometers, means for bringing any of the said odometers into reading position, means for connecting the said meter to a wheel or other moving part of the vehicle, and means for identifying the said odometers with the different elements of the vehicle.

20. A meter for vehicles, comprising a plurality of odometers, a rotatable support for said odometers, a common means for actuating said odometers, means for rotating said common support to bring any of the odometers into reading position, means for connecting said common actuating means to a moving part of the vehicle, and means for identifying the said odometers with the different elements of the vehicle.

21. A meter for vehicles, comprising a plurality of odometers, a rotatable support for said odometers, a common means for actuating said odometers, means comprising a rotatable gear ring, and driving connections between the said gear ring and said rotatable support for moving the support to bring any predetermined odometer into reading position, means for connecting the meter to a moving part of the vehicle, and means for identifying the odometers with the different elements of the vehicle.

22. A meter for vehicles, comprising a casing, a plurality of odometers, a rotatable support for said odometers, a common means for actuating said odometers, means comprising a rotatable gear ring, and driving connections between said gear ring and said rotatable support for moving the support to bring any predetermined odometer into reading position, means for connecting the meter to a moving part of the vehicle, means for identifying the odometers with the different elements of the vehicle, said last named means comprising a series of identifying labels arranged on the outer face of the ring, each label corresponding to one of said odometers.

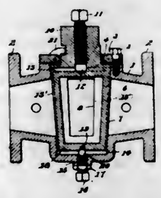
23. A meter for vehicles, comprising a casing, a rotatable support disposed within the casing, a plurality of odometers carried by said support, a common means for actuating said odometers, a ring rotatably mounted on the casing, the axis of the gear ring being at right angles to the axis of the support, a gear carried by said support and arranged to be engaged by the gear ring for rotating the support when the ring is turned, a plurality of labels arranged on the outer face of the gear ring, each of said labels corresponding to one of said odometers and to a particular element of the vehicle, and means for connecting the odometers to a moving part of the vehicle.

24. A meter for vehicles, comprising a plurality of odometers, a common means for actuating the odometers, means for bringing any of the odometers into reading position, and means for identifying the odometers with the different elements of the vehicle.

25. A meter for vehicles, comprising a plurality of shiftable odometers, a casing having a dial provided with a reading opening, a plurality of shiftable odometers carried within the casing, a ring rotatable about said dial, and means actuated by the movement of the ring for bringing any odometer before the reading opening.

26. A meter for vehicles, comprising a plurality of shiftable odometers, a casing having a dial provided with a reading opening, a ring rotatable about said dial, means actuated by the movement of the ring for bringing any odometer before the reading opening, and a common driving means for said odometers.

14,516. LUBRICATED HYDRAULIC PLUG-VALVE. SVEN JOHAN NORDSTROM, Mexico, Mexico. Filed June 1, 1918. Serial No. 237,832. Original No. 1,180,812, dated Apr. 25, 1916, Serial No. 59,294, filed Nov. 2, 1915. (Cl. 137—7.)



1. In a plug valve, a valve casing having a seat and provided at the lower end of said seat with a lubricant chamber, a plug mounted in said seat and extending into said lubricant chamber, radial channels formed in the upper end of said plug and extending downward exteriorly of the plug into communication with said lubricant chamber, the upper end of the plug having a vertical bore constituting a lubricant receiving pocket communicating with the radial channels, the lubricant chamber and lubricant receiving pocket being in communication through the channels at all times, and a screw in said bore acting as a closure and as a lubricant compressor.

2. In a plug valve, a valve casing having a tapering seat, and provided at the lower end of said seat with a lubricant chamber, a tapering plug mounted in said seat with its lower end extending into said chamber, said plug at its upper end having a perforated shank projecting through the casing and provided in said upper end with channels communicating exteriorly of the plug with said chamber, an adjustable supporting bearing for the lower end of said plug, and a closure in the perforation of said shank forming a lubricant compressor.

3. In a plug valve, a valve casing having a tapered seat and provided with a lubricant chamber at the lower end of said seat, a tapered plug fitted in said seat and having its lower end received in said lubricant chamber, an adjustable supporting bearing for the lower end of said plug maintaining a space between the bottom of the plug and the base of the lubricant chamber, radial channels at the upper end of said plug in communication exteriorly of the plug with the lubricant chamber, and lubricant compressing means associated with said channels.

4. In a plug valve, a valve casing having a seat provided with a lubricant chamber, a plug fitting said seat with one end extending into the lubricant chamber, a lubricant receiving pocket in one end of the plug, a radial channel leading from the lubricant receiving pocket to the exterior of the plug, a channel in the exterior face of the plug communicating with the radial channel and the lubricant chamber, said channels establishing constant communication between the lubricant receiving pocket and the lubricant chamber.

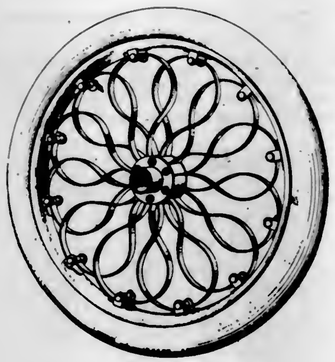
5. In a plug valve, a valve casing having a tapering seat and provided at the smaller end of said seat with a lubricant chamber, a tapering plug mounted in said seat with its smaller end extending into said chamber and lubricant compressing means communicating with said lubricant chamber, said compressing means serving to compress the lubricant and cause the latter to exert pressure in the lubricant chamber against the end of the plug to force same from its seat.

6. In a plug valve, a valve casing having a tapering seat and provided at the smaller end of said seat with a lubricant chamber, a tapering plug mounted in said seat with its smaller end extending into said chamber, lubricant compressing means communicating with said lubricant chamber, lubricant channels in the seating surface communicating with the lubricant chamber, and means preventing the turning of the plug into position to expose the lubricant channels to liquid in the valve.

7. In a plug valve, a valve casing having a tapering seat and provided at the smaller end of said seat with a lubricant chamber, a plug mounted in said seat with its smaller end extending into said chamber, a radial channel formed in one end of said plug, and a channel in the seating surface communicating with the lubricant chamber, a lubricant receiving pocket in the plug in open communication at all times with the radial channels, the channels in the seating surface and the lubricant chamber, and lubricant compressing means in the lubricant receiving pocket.

DESIGNS.

52,297. WHEEL. ALBERT H. ACKERMAN, Massillon, Ohio. Filed May 16, 1916. Serial No. 97,945. Term of patent 14 years.



The ornamental design for a wheel, as shown.

52,298. NON-SKID TIRE. GEORGE F. ARMSTRONG, Rutherford, N. J., assignor to Armstrong Rubber Co., Newark, N. J. Filed June 4, 1918. Serial No. 238,221. Term of patent 14 years.



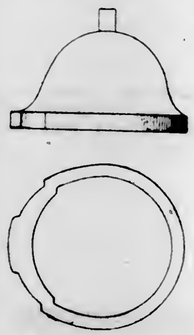
The ornamental design for a non-skid tire, as shown.

52,299. LIGHTING-FIXTURE. DIXON L. BEAN, Chicago, Ill., assignor, by direct and mesne assignments, to American Lamp Company, a Corporation of Illinois. Filed June 20, 1917. Serial No. 175,819. Term of patent 7 years.



The ornamental design for a lighting fixture, as shown.

52,300. AUTOMOBILE-LAMP CASING. EDWARD H. BELDEN, Toledo, Ohio, assignor to The Willys-Overland Company, Toledo, Ohio, a Corporation of Ohio. Filed Aug. 2, 1917. Serial No. 184,159. Term of patent 14 years.



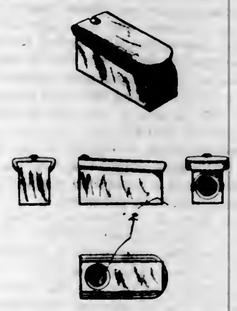
I claim the ornamental design of an automobile lamp casing as shown.

52,301. ARTICLE OF MANUFACTURE. EDGAR MOTT BOTTOME, Moundsville, W. Va., assignor to Fostoria Glass Company, Moundsville, W. Va., a Corporation of West Virginia. Filed Dec. 31, 1917. Serial No. 209,803. Term of patent 3½ years.



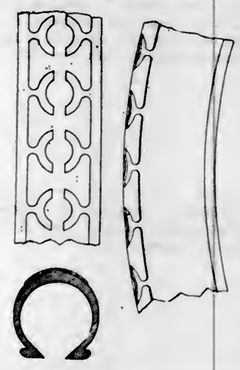
The ornamental design for an article of manufacture, substantially as shown.

52,302. CONDUIT-FITTING. JOHN C. BOYTON, Cleveland, Ohio. Filed Apr. 16, 1917. Serial No. 162,574. Term of patent 14 years.



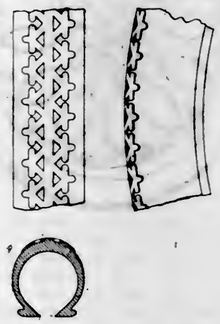
The ornamental design for a conduit fitting as shown.

52,303. TIRE-CASING. ARTHUR L. BREITENSTEIN, Akron, Ohio, assignor to Arthur E. Pearce and Herbert H. Swan, Ashtabula, Ohio. Filed Apr. 18, 1918. Serial No. 229,451. Term of patent 14 years.



The ornamental design for a tire casing, as shown.

52,304. TIRE-CASING. ARTHUR L. BREITENSTEIN, Akron, Ohio, assignor to Arthur E. Pearce and Herbert H. Swan, Ashtabula, Ohio. Filed June 21, 1918. Serial No. 241,297. Term of patent 14 years.



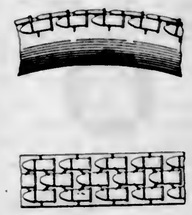
The ornamental design for a tire casing as shown.

52,305. SIFTER-TOP OR SIMILAR RECEPTACLE. MARTHA HALOWELL CONNOR, Baltimore, Md., assignor to Tin Decorating Company of Baltimore, Baltimore, Md. Filed Feb. 9, 1918. Serial No. 216,381. Term of patent 7 years.



The ornamental design for a sifter top or similar receptacle as shown.

52,306. ARTICLE OF MANUFACTURE. GEORGE K. CULP, Kansas City, Mo., assignor to United States Tire Company, a Corporation of New York. Filed May 23, 1917. Serial No. 170,558. Term of patent 3½ years.



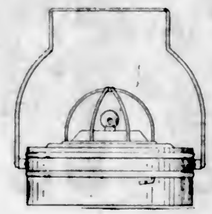
The ornamental design for an article of manufacture, as shown.

52,307. WOVEN FABRIC OR SIMILAR ARTICLE. EDGAR F. CURTIS, Salem, Mass., assignor to Joseph W. Woods & Sons Company, Boston, Mass., a Corporation of Massachusetts. Filed Mar. 18, 1918. Serial No. 223,245. Term of patent 7 years.



The ornamental design for woven fabric or similar article, as shown.

52,308. ELECTRIC LANTERN. MAX DECKERT, Chicago, Ill., assignor to Lindstrom, Smith Company, Chicago, Ill. Filed May 9, 1918. Serial No. 233,578. Term of patent 7 years.



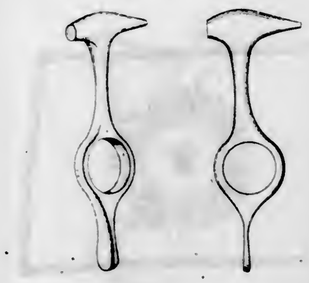
The ornamental design for an electric lantern, as shown.

52,309. BOWL. ELLA S. DRUBL, Portland, Oreg. Filed June 8, 1918. Serial No. 239,059. Term of patent 14 years.



The ornamental design for a bowl, as shown.

52,310. NAIL-SET. WILLIAM DZIEZYC, Middletown, N. J. Filed Nov. 22, 1917. Serial No. 203,453. Term of patent 7 years.



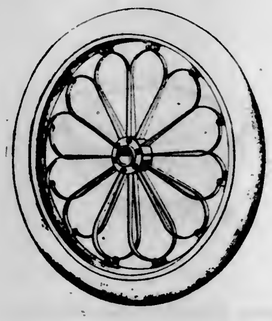
The ornamental design for a nail set, as shown.

52,311. DOLL. LELIA MAY FELLOM, Los Angeles, Cal. Filed Feb. 19, 1918. Serial No. 218,176. Term of patent 14 years.



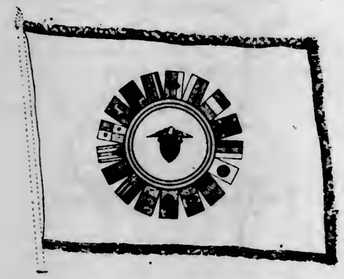
The ornamental design for a doll, as shown.

52,312. WHEEL. ARTHUR W. FERRIN and ALBERT H. ACKERMAN, Massillon, Ohio. Filed May 16, 1916. Serial No. 97,944. Term of patent 14 years.



The ornamental design for a wheel, as shown.

52,313. FLAG, BANNER, PENNANT, SIGN, EMBLEM, OR ARTICLE OF A SIMILAR NATURE. WILMUTH GARY, Washington, D. C. Filed June 6, 1918. Serial No. 238,601. Term of patent 3½ years.



The ornamental design for a flag, banner, pennant, sign, emblem, or article of a similar nature, as shown and described.

52,314. FINGER-RING, BROOCH, OR SIMILAR ARTICLE OF JEWELRY. CARL C. GILDNER, Los Angeles, Cal. Filed Feb. 7, 1918. Serial No. 215,909. Term of patent 3½ years.



The ornamental design for a finger ring, brooch, or similar article of jewelry, as shown.

52,315. EMBLEM. WALLACE G. GINDER, Los Angeles, Cal. Filed Apr. 23, 1918. Serial No. 230,849. Term of patent 3½ years.



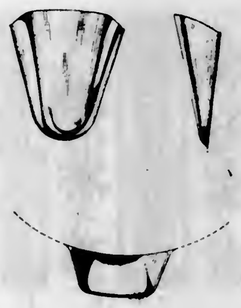
The ornamental design for an emblem, as shown.

52,316. WATCH-CASE. BENJAMIN GLASMAN, Brooklyn, N. Y. Filed May 23, 1918. Serial No. 236,234. Term of patent 3½ years.



The ornamental design for a watch case, as shown.

52,317. SPOUT FOR COOKING UTENSILS. GEORGE L. HARRISON, East Cleveland, Ohio. Filed Apr. 28, 1915 Serial No. 24,596. Term of patent 14 years.



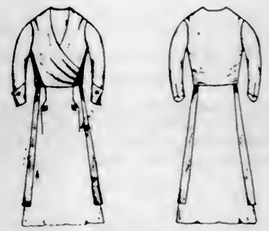
The ornamental design for a spout for cooking utensils as shown.

52,318. ELECTRIC FIRE-LOG. LEONARD C. HECTOR and CHARLES E. DAVIS, Toronto, Ontario, Canada, assignors of one-third to Robert H. McFarland, Toronto, Ontario, Canada. Filed Feb. 25, 1918. Serial No. 219,144. Term of patent 3½ years.



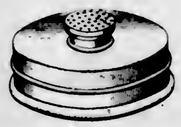
The ornamental design for an electric fire log as shown.

52,319. GARMENT FOR LADIES. RICHARD J. HICKSON, New York, N. Y. Filed Apr. 2, 1918. Serial No. 226,313. Term of patent 7 years.



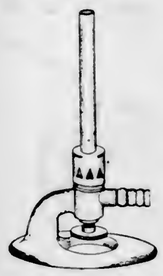
The new, original and ornamental design for a garment for ladies, as shown.

52,320. CONTAINER. EDMUND HOFFMAN, Brooklyn, N. Y., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Feb. 19, 1915. Serial No. 9,451. Term of patent 14 years.



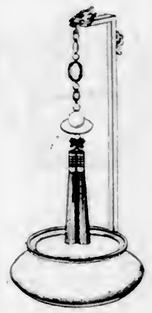
The ornamental design for a container, as shown.

52,321. BUNSEN BURNER. FRANCIS B. JOY and CHRISTIAN H. VOGEL, Detroit, Mich., assignors to The Detroit Heating & Lighting Company, Detroit, Mich., a Corporation of Michigan. Filed May 4, 1918. Serial No. 232,653. Term of patent 14 years.



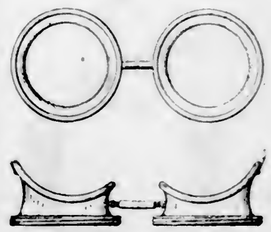
The ornamental design for a Bunsen burner, substantially as shown.

52,322. INCENSE-BURNER. HIDEJI KATAKAWA and KOKICHI MANJIMA, New York, N. Y. Filed May 20, 1918. Serial No. 235,739. Term of patent 3½ years.



The ornamental design for an incense burner as shown.

52,323. PAIR OF GOGGLES. LOUISE C. KING, Cleveland, Ohio, assignor to The F. W. King Optical Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 31, 1917. Serial No. 172,113. Term of patent 7 years.



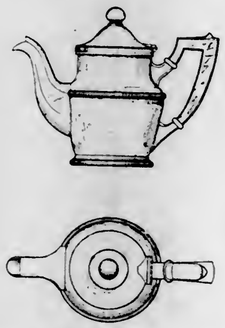
The ornamental design for a pair of goggles substantially as shown.

52,324. PITCHER OR SIMILAR ARTICLE. ROBERT R. KINTZ, Meriden, Conn., assignor to International Silver Co., Meriden, Conn., a Corporation of New Jersey. Filed Apr. 11, 1918. Serial No. 228,057. Term of patent 7 years.



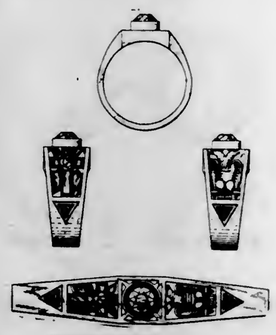
The ornamental design for a pitcher or similar article, as shown.

52,325. TEAPOT OR SIMILAR ARTICLE. ROBERT R. KINTZ, Meriden, Conn., assignor to International Silver Co., Meriden, Conn., a Corporation of New Jersey. Filed Apr. 11, 1918. Serial No. 228,058. Term of patent 7 years.



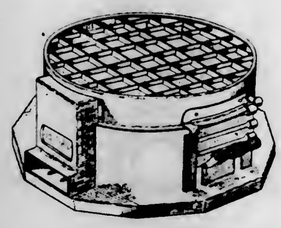
The ornamental design for a teapot or similar article, as shown.

52,326. SCOTTISH-RITE RING. LEOPOLD KRAUSS, Indianapolis, Ind. Filed Apr. 26, 1918. Serial No. 231,040. Term of patent 14 years.



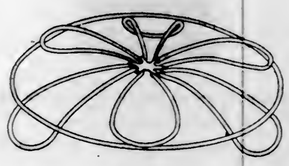
The ornamental design for a Scottish Rite ring, as shown.

52,327. ELECTRIC COOKER. FRANK KUHN and JAY A. HAND, Detroit, Mich., assignors to American Electrical Heater Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 21, 1918. Serial No. 218,584. Term of patent 14 years.



The ornamental design for an electric cooker, substantially as shown.

52,328. ELECTRICAL-HEATER GUARD. FRANK KUHN and JAY A. HAND, Detroit, Mich., assignors to American Electrical Heater Company, Detroit, Mich., a Corporation of Michigan. Filed June 15, 1918. Serial No. 240,241. Term of patent 14 years.



The ornamental design for an electrical heater guard, substantially as shown.

52,329. TIRE. HERBERT J. LEAB, Chicopee Falls, Mass., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Nov. 20, 1917. Serial No. 203,050. Term of patent 14 years.



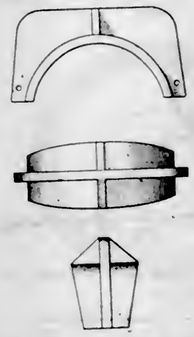
The new, original, and ornamental design for a tire, as shown.

52,330. INHALER. FREDERICK LOBL, Middleboro, Mass. Filed Apr. 6, 1918. Serial No. 227,140. Term of patent 14 years.



The ornamental design for an inhaler, as shown.

52,331. TIRE TREAD-BLOCK. MABELLE G. LOEW, New York, N. Y. Filed May 2, 1916. Serial No. 95,005. Term of patent 3½ years.



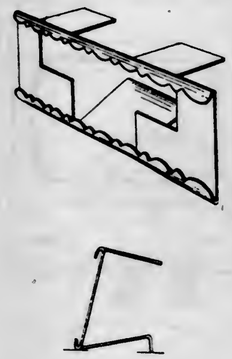
The ornamental design for a tire tread block, as shown.

52,332. ROAD-SIGN. KEENE LUTES, Danville, Ky. Filed May 10, 1918. Serial No. 233,814. Term of patent 7 years.



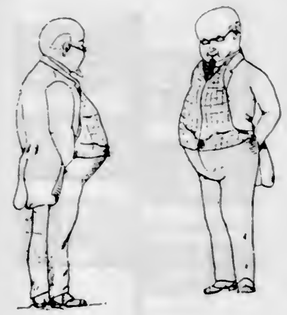
The ornamental design for a road sign, as shown.

52,333. PRICE-CARD HOLDER. WILLIAM N. MARR, Spokane, Wash. Filed May 16, 1918. Serial No. 235,048. Term of patent 14 years.



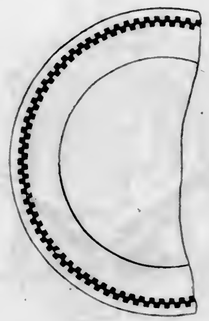
Price card holder as shown for shelving and counters.

52,334. DOLL. BERT RANDOLPH MAXWELL, Fairbury, Ill. Filed Jan. 16, 1918. Serial No. 212,143. Term of patent 7 years.



The ornamental design for a doll as shown.

52,335. PLATE OR SIMILAR ARTICLE. ARTHUR E. MAYER, Beaver, Pa., assignor to The Mayer China Company, Beaver Falls, Pa., a Corporation of Pennsylvania. Filed Nov. 30, 1917. Serial No. 204,770. Term of patent 7 years.



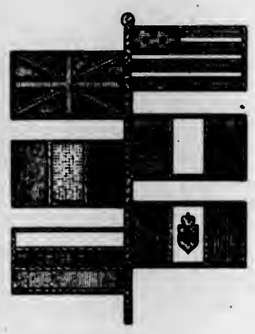
The ornamental design for a plate or similar article, as shown and described.

52,336. WATCH BOW AND BOAT. JEREMIAH MCGREVY, Brooklyn, N. Y., assignor to Solidarity Watch Case Company, Brooklyn, N. Y., a Corporation of New York. Filed Apr. 18, 1918. Serial No. 229,447. Term of patent 14 years.



The ornamental design for a watch bow and boat, as shown.

52,337. INTERNATIONAL PATRIOTIC EMBLEM. JEAN MIGNOLET, Denver, Colo. Filed Nov. 30, 1917. Serial No. 204,772. Term of patent 7 years.



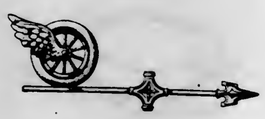
The ornamental design for an international patriotic emblem as shown.

52,338. LOCKET, FOB, OR SIMILAR ARTICLE. COSIMO MITRANO, Brooklyn, N. Y. Filed Apr. 25, 1918. Serial No. 230,847. Term of patent 3½ years.



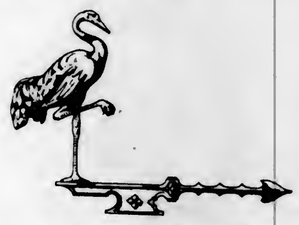
The ornamental design for a locket, fob, or similar article, as shown.

52,339. WEATHER-VANE OR LIGHTNING-ROD ORNAMENT. PAUL MOHRMANN, Chicago, Ill., assignor to Friedley-Voshardt Co., Chicago, Ill., a Corporation of Illinois. Filed Feb. 28, 1918. Serial No. 219,698. Term of patent 7 years.



The ornamental design for a weather vane or lightning rod ornament, as shown.

52,340. WEATHER-VANE OR LIGHTNING-ROD ORNAMENT. PAUL MOHRMANN, Chicago, Ill., assignor to Friedley-Voshardt Co., Chicago, Ill., a Corporation of Illinois. Filed Feb. 28, 1918. Serial No. 219,699. Term of patent 7 years.



The ornamental design for a weather vane or lightning rod ornament, as shown.

52,341. WEATHER-VANE OR LIGHTNING-ROD ORNAMENT. PAUL MOHRMANN, Chicago, Ill., assignor to Friedley-Voshardt Co., Chicago, Ill., a Corporation of Illinois. Filed Feb. 28, 1918. Serial No. 219,700. Term of patent 7 years.



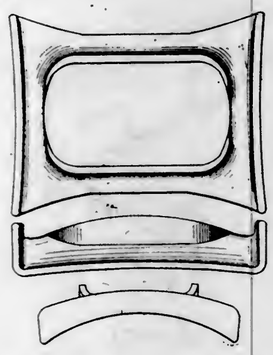
The ornamental design for a weather vane or lightning rod ornament, as shown.

52,342. HONOR-PIN. HENRY W. PETERS, Boston, Mass. Filed Apr. 27, 1918. Serial No. 231,261. Term of patent 3½ years.



The ornamental design for an honor pin as shown.

52,343. TIRE-LUG. FRED C. POLING, Menlo, Iowa. Filed Feb. 13, 1917. Serial No. 148,449. Term of patent 3½ years.



The ornamental design for a tire lug, as shown.

52,344. GLASS PLATE OR OTHER SIMILAR ARTICLE. CHARLES L. REIZENSTEIN, Pittsburgh, Pa. Filed July 16, 1917. Serial No. 180,948. Term of patent 14 years.



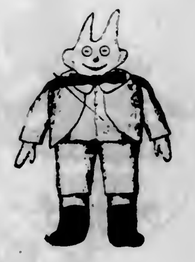
The ornamental design for a glass plate or other similar article, as shown.

52,345. CURTAIN-HOLDER. SAMUEL ROSEN, Utica, N. Y. Filed Apr. 26, 1918. Serial No. 231,044. Term of patent 14 years.



The ornamental design for a curtain holder, as shown.

52,346. DOLL. ANNA FEIGHOR RUSS, Rock Island, Ill. Filed Mar. 15, 1918. Serial No. 222,750. Term of patent 3½ years.



The new and ornamental design for a doll, as shown.

52,347. PITCHER. ANDREW J. SANFORD, Newark, Ohio, assignor to A. H. Heisey & Co., Newark, Ohio. Filed May 26, 1916. Serial No. 100,159. Term of patent 14 years.



The design for a pitcher, as shown.

52,348. SPOT-LIGHT BODY. HENRY J. SAUER, Fairfield, Conn. Filed May 28, 1918. Serial No. 237,154. Term of patent 7 years.



The ornamental design for a spot-light body, as shown.

52,349. CUP. ALBERT F. SAUNDERS, Syracuse, N. Y., assignor to T. N. Benedict Mfg. Co., East Syracuse, N. Y., a Corporation of New York. Filed Apr. 15, 1918. Serial No. 228,779. Term of patent 7 years.



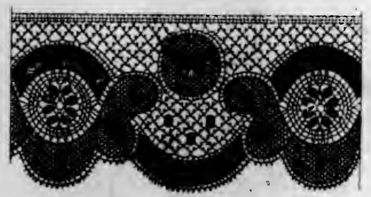
The ornamental design for a cup, substantially as shown and described.

52,350. CUP. ALBERT F. SAUNDERS, Syracuse, N. Y., assignor to T. N. Benedict Mfg. Co., East Syracuse, N. Y., a Corporation of New York. Filed Apr. 15, 1918. Serial No. 228,780. Term of patent 7 years.



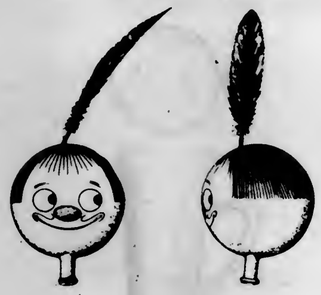
The ornamental design for a cup substantially as shown and described.

52,351. LACE FABRIC. ERNEST A. SAYWELL, Pawtucket, R. I., assignor to Seekonk Lace Company, a Corporation of Rhode Island. Filed June 12, 1918. Serial No. 239,681. Term of patent 3½ years.



The ornamental design for a lace fabric, as shown.

52,352. TOY BALLOON OR SIMILAR ARTICLE. JOHN S. SEARS, New York, N. Y. Filed Dec. 1, 1916. Serial No. 134,528. Term of patent 7 years.



The ornamental design for a toy balloon or similar article, substantially as shown.

52,353. FINGER-RING OR SIMILAR ARTICLE OF JEWELRY. HERBERT J. A. SKIPP, Providence, R. I., assignor to J. A. Schwarz Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 11, 1916. Serial No. 83,669. Term of patent 14 years.



The ornamental design for a finger ring or similar article of jewelry, as shown.

52,354. SWORD-HANDLE JOZEF SORDYKA, Grand Rapids, Mich. Filed Dec. 6, 1917. Serial No. 205,897. Term of patent 7 years.



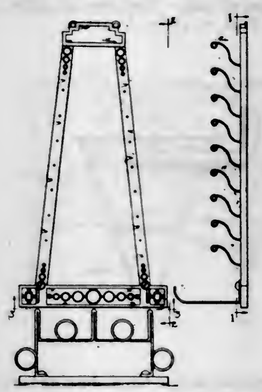
The ornamental design for a sword handle, as shown.

52,355. PATRIOTIC BADGE. GEORGE F. STEEDMAN, St. Louis, Mo., assignor to Curtis & Company Manufacturing Company, Wellston, Mo., a Corporation of Missouri. Filed Apr. 29, 1918. Serial No. 231,555. Term of patent 7 years.



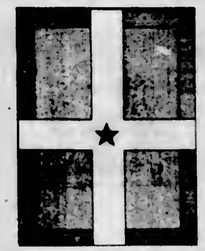
The ornamental design for a patriotic badge, as shown.

52,356. KETTLE-COVER HOLDER. STEFAN STRELAK, Chicago, Ill. Filed June 13, 1917. Serial No. 174,628. Term of patent 3½ years.



The ornamental design for a kettle cover holder, as shown.

52,357. MEMORIAL-SERVICE FLAG. ADOLPH FREDRICK STROMBERG, Atwater, Minn. Filed May 9, 1918. Serial No. 233,600. Term of patent 3½ years.



The ornamental design for a memorial service flag, as shown.

52,358. TOY. ESTHER H. SWETLAND, North Tonawanda, N. Y. Filed Feb. 21, 1918. Serial No. 218,580. Term of patent 7 years.



The ornamental design for a toy as shown.

52,359. TOY. ESTHER H. SWETLAND, North Tonawanda, N. Y. Filed Feb. 21, 1918. Serial No. 218,581. Term of patent 7 years.



The ornamental design for a toy as shown.

52,360. LAMP-LENS. THOMAS CURTIS TUSSEY and WILLIAM D. SHAW, Westerville, Ohio. Filed May 2, 1918. Serial No. 232,167. Term of patent 7 years.



The ornamental design for a lamp lens as shown.

52,361. WEATHER-VANE OR LIGHTNING-ROD ORNAMENT. HERMAN F. VOSHARDT, Chicago, Ill., assignor to Friedley-Voshardt Co., Chicago, Ill., a Corporation of Illinois. Filed Feb. 28, 1918. Serial No. 219,704. Term of patent 7 years.



The ornamental design for a weather vane or lightning rod ornament, as shown.

52,362. SPOON, FORK, OR SIMILAR ARTICLE. HENRY L. WALLACE, Wallingford, Conn. Filed May 9, 1918. Serial No. 233,589. Term of patent 7 years.



The ornamental design for a spoon, fork, or similar article, as shown.

52,363. CHAIR. ALBERT WANNER, Jr., New York, N. Y. Filed Nov. 1, 1917. Serial No. 199,765. Term of patent 14 years.



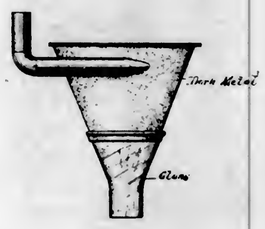
The ornamental design for a chair, substantially as herein shown.

52,364. CHAIR. ALBERT WANNER, Jr., New York, N. Y. Filed Nov. 1, 1917. Serial No. 199,766. Term of patent 14 years.



The ornamental design for a chair, substantially as herein shown.

52,365. DUST AND AIR SEPARATOR. FRANK F. WEAR and BERNARD M. ELY, Cincinnati, Ohio, assignors to The Alvey-Ferguson Company, Oakley, Cincinnati, Ohio, a Corporation of Ohio. Filed Nov. 14, 1914. Serial No. 872,259. Term of patent 14 years.



The ornamental design for a dust and air separator, substantially as shown.

52,366. SOCKET-COVER FOR LIGHTING-FIXTURES. GOTTFRIED WESTPHAL, Guttenberg, N. J., assignor to Shapiro & Aronson, Inc., New York, N. Y., a Corporation of New York. Filed Apr. 30, 1918. Serial No. 231,751. Term of patent 3½ years.



The ornamental design for a socket cover for lighting fixtures, as shown.

52,367. PHONOGRAPH-CABINET. JOSEPH WOLFF, Brooklyn, N. Y., assignor to Sonora Phonograph Corporation, a Corporation of New York. Filed May 31, 1918. Serial No. 237,653. Term of patent 14 years.



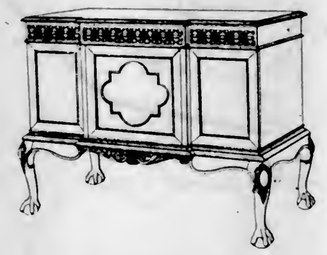
The ornamental design for a phonograph cabinet, substantially as shown.

52,368. PHONOGRAPH-CABINET. JOSEPH WOLFF, Brooklyn, N. Y., assignor to Sonora Phonograph Corporation, a Corporation of New York. Filed May 31, 1918. Serial No. 237,654. Term of patent 14 years.



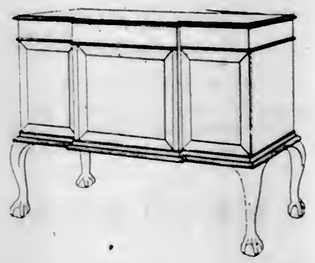
The ornamental design for a phonograph cabinet, substantially as shown.

52,369. PHONOGRAPH-CABINET. JOSEPH WOLFF, Brooklyn, N. Y., assignor to Sonora Phonograph Corporation, a Corporation of New York. Filed May 31, 1918. Serial No. 237,655. Term of patent 14 years.



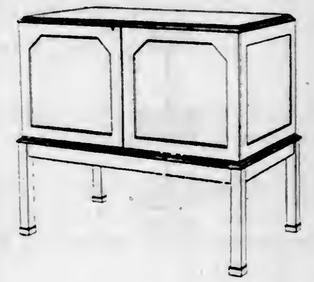
The ornamental design for a phonograph cabinet, substantially as shown.

52,370. PHONOGRAPH-CABINET. JOSEPH WOLFF, Brooklyn, N. Y., assignor to Sonora Phonograph Corporation, a Corporation of New York. Filed May 31, 1918. Serial No. 237,656. Term of patent 14 years.



The ornamental design for a phonograph cabinet, substantially as shown.

52,371. PHONOGRAPH-CABINET. JOSEPH WOLFF, Brooklyn, N. Y., assignor to Sonora Phonograph Corporation, a Corporation of New York. Filed May 31, 1918. Serial No. 237,657. Term of patent 14 years.



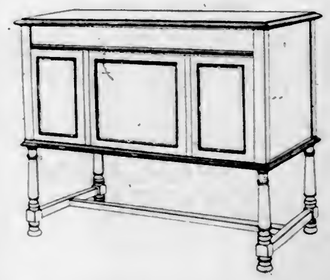
The ornamental design for a phonograph cabinet, substantially as shown.

52,372. PHONOGRAPH-CABINET. JOSEPH WOLFF, Brooklyn, N. Y., assignor to Sonora Phonograph Corporation, a Corporation of New York. Filed May 31, 1918. Serial No. 237,658. Term of patent 14 years.



The ornamental design for a phonograph cabinet, substantially as shown.

52,373. PHONOGRAPH-CABINET. JOSEPH WOLFF, Brooklyn, N. Y., assignor to Sonora Phonograph Corporation, a Corporation of New York. Filed May 31, 1918. Serial No. 237,659. Term of patent 14 years.



The ornamental design for a phonograph cabinet, substantially as shown.

52,374. DISPLAY-STAND. LOUIS WULKAN, Lawrence, N. Y. Filed May 17, 1918. Serial No. 235,199. Term of patent 3½ years.



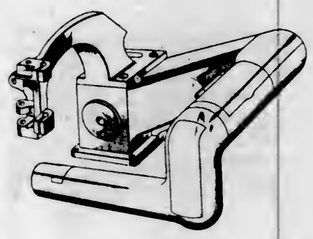
The ornamental design for a display stand as shown and described.

52,375. SIGN-DIGIT. AUGUST F. WIRSCHING, Los Angeles, Cal. Filed Jan. 4, 1916. Serial No. 70,299. Term of patent 14 years.



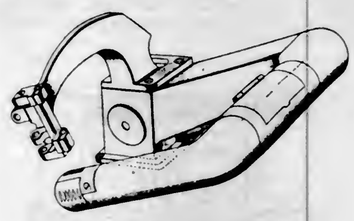
The ornamental design for a sign digit as shown.

52,376. SEWING-MACHINE FRAME. JOSEPH BERGER, Jr., Utica, N. Y., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed May 21, 1915. Serial No. 29,674. Term of patent 14 years.



The ornamental design for a sewing machine frame as shown.

52,377. SEWING-MACHINE FRAME. JOSEPH BERGER, Jr., Utica, N. Y., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed May 10, 1916. Serial No. 96,735. Term of patent 14 years.



The ornamental design for a sewing machine frame, as shown.

TRADE-MARKS

OFFICIAL GAZETTE, AUGUST 27, 1918.

(PUBLISHED SEPTEMBER 21, 1918.)

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

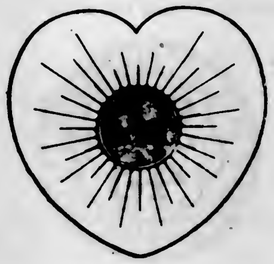
As provided by section 14 of said act, a fee of ten dollars must accompany each notice of opposition.

Ser. No. 93,972. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) WILLIAM G. MCGECHIE, Broken Arrow, Okla. Filed Mar. 29, 1916.

ANIMETTA

Particular description of goods.—A Medicinal Tonic for the Blood, a Liniment for Rheumatism, and an Ointment for Bruises and Skin Eruptions.
Claims use since about Jan. 1, 1916.

Ser. No. 97,037. (CLASS 38. PRINTS AND PUBLICATIONS.) MICHIGAN STATE AUTO SCHOOL, INC., Detroit, Mich. Filed Aug. 2, 1916.



Particular description of goods.—Catalogues and Monthly Magazines.
Claims use since September, 1915.

Ser. No. 103,693. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) THE INTERNATIONAL PYROTAN COMP., LTD., London, England. Filed May 10, 1917.

PYROTAN

Particular description of goods.—Leather Produced by a Mineral Tanning Agent.
Claims use since Apr. 27, 1916.

Ser. No. 103,952. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) WILLIAM G. KROUSE, Wyoming, Iowa. Filed May 19, 1917.

KANI KIK

Particular description of goods.—Spark-Adjusters.
Claims use since September, 1916.

Ser. No. 104,681. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) JOHN M. MICHAEL, Aberdeen, Md. Filed June 25, 1917.

Good as Gold

Particular description of goods.—Canned Vegetables.
Claims use since 1890.

Ser. No. 104,881. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) THE WESTERN RESERVE WOOLEN COMPANY, Cleveland, Ohio. Filed July 5, 1917.

MEADOW BROOKE

Particular description of goods.—Serges, Worsteds, Silk Serges for Suitings and other Purposes.
Claims use since about 1906.

Ser. No. 104,950. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) VIELÉ, BLACKWELL & BUCK, New York, N. Y. Filed July 9, 1917.



Particular description of goods.—Electric Generators, Electric Motors, Electric Fans, Transformers, Lightning-Arresters, Electric Lamps, Electric-Lamp Sockets and Attachments, Electrical-Lamp Holders, Electrical-Lamp-Shade Rings, Dry and Wet Batteries, Battery-Carbons, Glass and Porcelain Insulators, Rosettes, Electric Switches, Fuse-Blocks, Fuses, Push-Buttons, Push-Button Plates, Porcelain Wire-Knobs, Porcelain Wire-Cleats, Porcelain and Steel Electrical Receptacles; Insulation Cloth, Tape, Silk, Paper, and Presspahn, All Being Adapted for Electric Insulation; Steel and Fiber Electric Conduits, Bare and Insulated Electric Wire and Cable; Bare and Insulated Electric Wire and Cable Made of Alloys of Copper—Namely, Resistance-Wire, Phosphor-Bronze Wire, Silicon-Bronze Wire, and German-Silver Wire—Switchboards, Switchboard-Panels and Parts Thereof, Electric Chafing-Dishes, Electric Percolators, Electric Toasters, Electric Ranges, Electric Heating-Pads Adapted for General Use, and Electric Irons.
Claims use since May 28, 1917.

Ser. No. 105,920. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) IMPERIAL COLOR WORKS, INC., Glens Falls, N. Y. Filed Aug. 28, 1917.



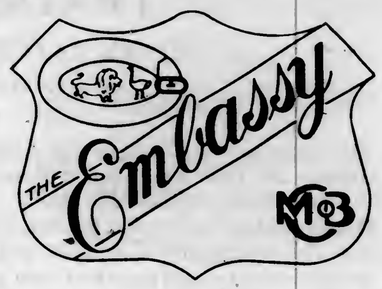
Particular description of goods.—Paint-Colors.
Claims use since Jan. 1, 1917.

Ser. No. 105,945. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE LAWDEN COMPANY, New York, N. Y. Filed Aug. 29, 1917.

SUCRO

Particular description of goods.—Syrups for Sweetening and Flavoring Foods.
Claims use since Aug. 1, 1914.

Ser. No. 106,310. (CLASS 39. CLOTHING.) M. BERTISH & CO., LIMITED, Bristol, England. Filed Sept. 19, 1917.



Particular description of goods.—Men's Jackets, Waistcoats, Trousers, Overcoats, and Rain-Coats.
Claims use since 1903.

Ser. No. 107,225. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) CALIFORNIA FRUIT EXCHANGE, Sacramento, Cal. Filed Nov. 8, 1917.

Blue Anchor

Particular description of goods.—Cherries, Peaches, Plums, Pomegranates, Nectarines, Apricots, Pears, Quinces, Persimmons, Grapes.
Claims use since 1901.

Ser. No. 107,720. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) FRISBEE MANUFACTURING COMPANY, Boston, Mass. Filed Dec. 3, 1917.



Particular description of goods.—Games of a Nature in Which a Weighted Bag, Ball, or other Article is Thrown or Projected to Operate the Same.
Claims use since Sept. 3, 1917.

Ser. No. 108,202. (CLASS 27. HOROLOGICAL INSTRUMENTS.) BYRON L. STRASBURGER, New York, N. Y. Filed Dec. 28, 1917.

NORTH SHORE

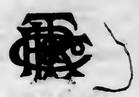
Comprising the words "North Shore."
Particular description of goods.—Watch-Movements, Watchcases, and Watches.
Claims use since about the year 1905.

Ser. No. 108,267. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) VICTOR SAW WORKS, Springfield, Mass. Filed Jan. 2, 1918.



No claim is made to the representation of saw-blades apart from the mark shown in the drawing.
Particular description of goods.—Saws.
Claims use since on or about Nov. 15, 1917.

Ser. No. 108,388. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) LUDGATE, RYDER, THOMAS & CO., Redditch, England. Filed Jan. 9, 1918.



Particular description of goods.—Mounted Tackle, Furnished Fishing-Lines, Hooks to Wire Gimp, Mounted Rod-Rings, Split Rings, Landing-Nets, Cork Floats, Gut Casting-Lines, Fishing-Lines, and Fishing-Reels.
Claims use since Jan. 1, 1905.

Ser. No. 108,418. (CLASS 5. ADHESIVES.) MIFFLIN CHEMICAL CORPORATION, Philadelphia, Pa. Filed Jan. 11, 1918.



Particular description of goods.—A Core-Binder and Mold-Wash for Use in Foundry Practice.
Claims use since Nov. 10, 1917.

Ser. No. 108,419. (CLASS 5. ADHESIVES.) MIFFLIN CHEMICAL CORPORATION, Philadelphia, Pa. Filed Jan. 11, 1918.



Particular description of goods.—A Core-Binder and Mold-Wash for Use in Foundry Practice.
Claims use since the 1st day of December, 1917.

Ser. No. 108,474. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE DEIS-FERTIG CO., Dover, Ohio. Filed Jan. 15, 1918.



Particular description of goods.—Canned Vegetables, Spices, and Tomato Catsup.
Claims use since Nov. 1, 1917.

Ser. No. 108,617. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) LONSDALE COMPANY, Providence, R. I. Filed Jan. 24, 1918. Under ten-year proviso.



Particular description of goods.—Cotton Goods in the Piece.
Claims use since 1870.

Ser. No. 108,618. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) LONSDALE COMPANY, Providence, R. I. Filed Jan. 24, 1918. Under ten-year proviso.



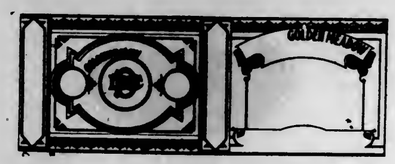
Particular description of goods.—Cotton Goods in the Piece.
Claims use since about 1870.

Ser. No. 109,000. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) PACIFIC MILLS, Lawrence and Boston, Mass. Filed Feb. 14, 1918.

WOOL-LESS

Particular description of goods.—Cotton Piece Goods.
Claims use since Dec. 20, 1917.

Ser. No. 109,149. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) DUNBAR-DUKATE COMPANY, New Orleans, La. Filed Feb. 21, 1918.



Particular description of goods.—Canned Pumpkin.
Claims use since Dec. 1, 1916.

Ser. No. 109,469. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) LOFT, INCORPORATED, New York, N. Y.. Filed Mar. 9, 1918.

THREE IN ONE

Particular description of goods.—Candy.
Claims use since July, 1917.

Ser. No. 109,773. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) NORTHERN EQUIPMENT COMPANY, Erie, Pa. Filed Mar. 25, 1918.



Particular description of goods.—Feed-Water Regulators and Pump-Governors.
Claims use since Jan. 1, 1918.

Ser. No. 109,844. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) W. R. GRACE & Co., New York, N. Y. Filed Mar. 28, 1918.

CRYSTAL

Comprising the word "Crystal."
Particular description of goods.—Raw and Boiled Linseed-Oil.
Claims use since Mar. 31, 1916.

Ser. No. 109,983. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) LANGE CANNING CO., Eau Claire, Wis. Filed Apr. 4, 1918.



Particular description of goods.—Canned Vegetables.
Claims use since Sept. 11, 1901.

Ser. No. 110,055. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) MORIMURA BROS., New York, N. Y. Filed Apr. 8, 1918.

"The Little Hostess"

Particular description of goods.—Toy Tea Sets.
Claims use since Oct. 11, 1917.

Ser. No. 110,216. (CLASS 38. PRINTS AND PUBLICATIONS.) F. R. MORGAN, Chicago, Ill. Filed Apr. 15, 1918.

NUT SCOUT PETE

Particular description of goods.—Newspaper Comic Drawings.
Claims use since June, 1917.

Ser. No. 110,391. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) DICKSON-SADLER COMPANY, INC., Clarksville, Tenn. Filed Apr. 23, 1918.

DISCOLAX

Particular description of goods.—A Liver Medicine and Laxative.
Claims use since the 15th day of February, 1916.

Ser. No. 110,422. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) VIRGIN M. ANDERSON, Greenville, S. C. Filed Apr. 25, 1918.

D. X. O.

Particular description of goods.—A Preparation for the Treatment of Colds, Coughs, La Grippe, Malaria, and Female Trouble.
Claims use since February, 1918.

Ser. No. 110,426. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) MATTHEW J. CAGLE, San Francisco, Cal. Filed Apr. 25, 1918.



Particular description of goods.—Self-Vulcanizing Tire-Patches.
Claims use since Dec. 16, 1917.

Ser. No. 110,550. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) WASHINGTON CLEANSER CO., Seattle, Wash. Filed Apr. 29, 1918.



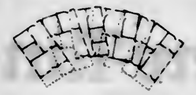
The letters "E. Z." being disclaimed.
Particular description of goods.—Washing-Powder for Clothes.
Claims use since Nov. 1, 1917.

Ser. No. 110,586. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) CHAS. A. KRAUSE MILLING CO., Greenfield, Wis. Filed May 1, 1918.



Particular description of goods.—Corn-Flour.
Claims use since about Mar. 11, 1918.

Ser. No. 110,603. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) ROBERT I. JOHNS, Long Island City, N. Y. Filed May 2, 1918.



Particular description of goods.—Portable Houses.
Claims use since May 11, 1917.

Ser. No. 110,841. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) R. GINSBERG & BRO., New York, N. Y. Filed May 11, 1918.

The American Lady

Particular description of goods.—Ladies' Hair-Nets.
Claims use since Apr. 10, 1918.

Ser. No. 111,052. (CLASS 5. ADHESIVES.) NIRUWHOF, SURIE & Co. LTD., London, England. Filed May 18, 1918.



Particular description of goods.—A Casein Derivative in Powder Form to be Used in the Manufacture of Ply-Wood.
Claims use since 9th of August, 1917.

Ser. No. 111,084. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) LEE H. WAKEFIELD, Seattle, Wash. Filed May 21, 1918.

WIRELESS

Particular description of goods.—Canned Salmon.
Claims use since Aug. 26, 1915.

Ser. No. 111,132. (CLASS 32. FURNITURE AND UPHOLSTERY.) THE CELLULOID COMPANY, Newark, N. J., and New York, N. Y. Filed May 23, 1918.

IVALEUR

Particular description of goods.—Hand or Small Mirrors and Easel or Small Picture-Frames. The Said Articles are Made of Compounds of Pyroxylin.
Claims use since Oct. 27, 1917, on hand or small mirrors and since Dec. 11, 1917, on the other articles.

Ser. No. 111,210. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) CALIFORNIA WALNUT SAUCE CO., Los Angeles, Cal. Filed May 27, 1918.



Particular description of goods.—A Walnut Sauce Used as a Condiment for Soups, Salads, Meats, Fish, Beans, Curries, and Cheese.
Claims use since about December, 1917.

Ser. No. 111,348. (CLASS 39. CLOTHING.) FRANCIS T. SIMMONS & Co., Chicago, Ill. Filed June 3, 1918.



Particular description of goods.—Underwear—Namely, Union-Suits Made of Textile Material.
Claims use since May 6, 1918.

Ser. No. 111,429. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) EDWARD PERCY ROBINSON, New York, N. Y. Filed June 8, 1918.

SAL-CELLA

Consisting of the words "Sal-Cella."
Particular description of goods.—A Preparation for the Treatment of Inflammations—viz., Cancer, Bright's Disease, Rheumatism, Neuralgia, Pyorrhea—and also to Equalize the Potassium and Sodium Elements in the Blood and Fluids of the Body.
Claims use since May 24, 1918.

Ser. No. 111,455. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) DALLWIG DISTRIBUTING CO., Chicago, Ill. Filed June 10, 1918.

Automatic

Particular description of goods.—Thread-Guiding Devices for Hand Use Only, and Particularly Used for Tatting, Knitting, Crocheting, and other Needlework.
Claims use since Mar. 27, 1918.

Ser. No. 111,526. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) MCCORD-BRADY CO., Omaha, Nebr. Filed June 12, 1918.

ADVO

Particular description of goods.—Canned Fruits, Canned Vegetables, Canned Pork and Beans, Fruit Preserves, Canned Salmon, Canned Tuna, Dry Shrimp, Pickled Shrimp, Sugar, Gelatin, Jell, Ice-Cream Powder, Rice, Wheat Food, Self-Rising Buckwheat-Flour, Self-Rising Pancake-Flour, Self-Rising Biscuit-Flour, Self-Rising Pastry-Flour, Barley, Pastry-Cocoanut, Shelled Popcorn, Apple-Butter, Fruit Jams; French Maroons, Glacé; Fresh-Fruit Salad, Mélange, Cumquats, Chow-Chow, Sauer-Kraut, Horse-Radish, Capers, Pepper Sauce, Prepared Mustard, Salad-Dressing, Salad-Mustard, Mayonnaise Dressing, Pickles, Pickled Peaches, Olives, Salad and Cooking Oil, Peanut-Butter, Sweet Relish, Celery-Salt, Onion Seasoning, Curry-Powder; Chilli-Powder, Mexican; Corn-Starch, Syrups, Molasses, Honey, Sorghum, Vinegar, Flavoring Extracts for Foods, Glacé Citron, Sugared Dates, Stuffed Pecan Dates, and Raisins.
Claims use since December, 1899.

Ser. No. 111,531. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ULYSSES GILBERT RUFF, Jr., Philadelphia, Pa. Filed June 12, 1918. Under ten-year proviso.

McMECHEN

Particular description of goods.—Compound Glycerol Hypophosphites, Compound Hero-Pinus, Antiseptic Mouth-Wash, Pruni Morrhua, Compound Elixir Acetanilid, Essence Pepsin, Blue Capsules for Gonorrhea.
Claims use since on or about Mar. 1, 1881.

Ser. No. 111,685. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) APPLETON COMPANY, Lowell, Mass. Filed June 20, 1918.

APPLEZEPHYRS

Comprising the word "Applezephyrs," no claim being made to the exclusive use of the word "Zephyrs" except in connection with the mark, as shown in the drawing.
Particular description of goods.—Cotton Piece Goods.
Claims use since June 13, 1917.

Ser. No. 111,750. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) THE SAMUEL A. CROCKER COMPANY, Cincinnati, Ohio. Filed June 22, 1918.

IDEAL

Particular description of goods.—A Polishing and Grinding Tool for Dentists.
Claims use since the year 1897.

Ser. No. 111,795. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) CHICAGO PROCESS COMPANY, Chicago, Ill. Filed June 25, 1918.

Pere-Tan

No claim is made to the word "Tan" apart from the mark shown in the drawing.
Particular description of goods.—A Tanning Extract.
Claims use since on or about Mar. 14, 1918.

Ser. No. 111,807. (CLASS 39. CLOTHING.) BIRKENFELD, STRAUSS & Co., New York, N. Y. Filed June 26, 1918.

Given One

Particular description of goods.—Ladies' Combination-Underwear.
Claims use since May 29, 1918.

Ser. No. 111,820. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) J. A. MIGEL, INC., New York, N. Y. Filed June 26, 1918.

Kart Ridge

Particular description of goods.—Broad Silk in the Piece, Silk and Cotton Piece Goods, and Cotton Piece Goods.
Claims use since Feb. 12, 1918.

Ser. No. 111,892. (CLASS 43. THREAD AND YARN.) BERNHARD ULMANN CO., INC., New York, N. Y. Filed June 29, 1918.

LAMADOWN

Particular description of goods.—Worsted, Woolen, Cotton, Silk, and Artificial-Silk Yarns.
Claims use since June 25, 1918.

Ser. No. 111,936. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) MILLER & MCLEAN, New York, N. Y. Filed July 3, 1918.

CEBALINE

Particular description of goods.—An Anti-Acid Paint.
Claims use since Jan. 1, 1906.

Ser. No. 111,998. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) CHARLES R. REDHEFFER, Philadelphia, Pa. Filed July 8, 1918.



Particular description of goods.—Chemical Carbon-Solvent and Gas-Exhilarator and Insecticide.
Claims use since Feb. 1, 1918.

Ser. No. 112,006. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) THE CELLULOID COMPANY, Newark, N. J., and New York, N. Y. Filed July 9, 1918.

IVALEUR

Particular description of goods.—Salad Fork and Spoon and Crumb Tray and Scraper. The Said Articles are Made of Compounds of Pyroxylin.
Claims use since Dec. 20, 1917, on crumb tray and scraper and since Jan. 4, 1918, on salad fork and spoon.

Ser. No. 112,011. (CLASS 39. CLOTHING.) MAURICE N. HYMAN, New York, N. Y. Filed July 9, 1918.

CHICK-A-DEE
It's a Bird

Particular description of goods.—Ladies' Wearing-Apparel—Namely, Dresses, Coats, Suits, Wraps, Capes, Skirts, Waists, Petticoats, Sweaters, Hats, Millinery, Corsets Hosiery, Bathing-Suits, Neckwear, Rain-Coats, House-Dresses, Middies, and Kimonos.
Claims use since June 7, 1918.

Ser. No. 112,021. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) THE CELLULOID COMPANY, Newark, N. J., and New York, N. Y. Filed July 10, 1918.

IVALEUR

Particular description of goods.—Salad Fork and Spoon and Crumb Tray and Scraper. The Said Articles are Made of Compounds of Pyroxylin.
Claims use since Dec. 20, 1917, on crumb tray and scraper and since Jan. 4, 1918, on salad fork and spoon.

Ser. No. 112,078. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) RAMON VELEZ, New York, N. Y. Filed July 11, 1918.

DIGESTILLAS

Particular description of goods.—Preparation for the Relief of Billousness and other Ailments of Stomach, Intestines, and Blood.
Claims use since the 1st day of June, 1918.

Ser. No. 112,098. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) ALJO CHEMICAL CO., Buffalo, N. Y. Filed July 13, 1918.

ALJOLAc

Comprising the word "Aljolac."
Particular description of goods.—A Varnish-Preservative.
Claims use since about May 1, 1918.

Ser. No. 112,111. (CLASS 39. CLOTHING.) M. J. FEELEY & Co., Boston, Mass. Filed July 13, 1918.

SUPER-SIX

Particular description of goods.—Rubber Heels and Soles.
Claims use since July 1, 1918.

Ser. No. 112,112. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) GEORGE W. HEDGKINS, Washington, D. C. Filed July 13, 1918.

POLKA

Particular description of goods.—Laundry Bluing.
Claims use since July 1, 1918.

Ser. No. 112,113. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) IODINIZED PRODUCTS COMPANY, Chicago, Ill. Filed July 13, 1918.

COLONIDIN

Particular description of goods.—A Medicinal Preparation for the Treatment of Gastric and Duodenal Ulcers, Constipation, Intestinal Stasis, Parasites, and Auto-Intoxication.
Claims use since July 1, 1916.

Ser. No. 112,117. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE NORTHWESTERN CHEMICAL COMPANY, Marietta, Ohio. Filed July 13, 1918.

TWELVE-TWENTY

Particular description of goods.—Antifreezing Compound for Automobile-Radiators.
Claims use since March, 1918.

Ser. No. 112,133. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) JOHN C. FRETER, Bridgeport, Ohio. Filed July 15, 1918.

ERADO

Particular description of goods.—An Ointment Used as a Remedy for Psoriasis and other Skin Diseases.
Claims use since Feb. 25, 1918.

Ser. No. 112,192. (CLASS 39. CLOTHING.) THE ROSEMARY DRESSMAKERS, New York, N. Y. Filed July 17, 1918.

Rosemary

Particular description of goods.—Women's and Misses' Dresses.
Claims use since about the 1st day of April, 1918.

Ser. No. 112,215. (CLASS 39. CLOTHING.) CHAS. CHIPMAN'S SONS CO., INC., New York, N. Y. Filed July 19, 1918.

LITTLE DAISY

The picture of the child being fanciful.
Particular description of goods.—Infants' and Children's Hosiery.
Claims use since January, 1913.

Ser. No. 112,232. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) LANMAN & KEMP, New York, N. Y. Filed July 20, 1918. Under ten-year proviso.

FLORIDA WATER Prepared by Lanman & Kemp.

Particular description of goods.—Florida Water.
Claims use since the year 1857.

Ser. No. 112,250. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) EASTMAN KODAK COMPANY, Rochester, N. Y. Filed July 22, 1918.

ACROL

Particular description of goods.—Photographic Developer.
Claims use since Aug. 27, 1912.

Ser. No. 112,264. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) PALATINE ANILINE & CHEMICAL CORPORATION. Poughkeepsie, N. Y. Filed July 22, 1918.

PALISADE

Particular description of goods.—Dyes.
Claims use since June 2, 1918.

Ser. No. 112,265. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) PALATINE ANILINE & CHEMICAL CORPORATION, Poughkeepsie, N. Y. Filed July 22, 1918.

PALACHROME

Particular description of goods.—Dyes.
Claims use since June 2, 1918.

Ser. No. 112,268. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) PALATINE ANILINE & CHEMICAL CORPORATION, Poughkeepsie, N. Y. Filed July 22, 1918.

PACCO

Particular description of goods.—Dyes.
Claims use since June 2, 1918.

Ser. No. 112,327. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) SHORES-MUELLER COMPANY, Cedar Rapids, Iowa. Filed July 25, 1918.

TORPEDO

Particular description of goods.—Medicines for Removing Stomach and Intestinal Worms from Hogs.
Claims use since Mar. 1, 1918.

Ser. No. 112,344. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) FREDERICK STEARNS & Co., Detroit, Mich. Filed July 26, 1918.

CHLOR-E-DENTA

Particular description of goods.—Dentifrice.
Claims use since June 28, 1918.

Ser. No. 112,399. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) SPIROS C. MARKATOS, New York, N. Y. Filed July 29, 1918.

5th AVENUE

Particular description of goods.—Straw-Hat Dyes.
Claims use since June 5, 1918.

Ser. No. 112,403. (CLASS 47. WINES.) FRANK PASSALACQUA, Healdsburg, Cal. Filed July 29, 1918.

BARBERONE

Particular description of goods.—Wines.
Claims use since Jan. 1, 1916.

Ser. No. 112,420. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) WILLIAM N. VAILE, Denver, Colo. Filed July 29, 1918.

SAMAGRAMS

Particular description of goods.—A Card Game.
Claims use since about Apr. 1, 1918.

TRADE-MARK REGISTRATIONS GRANTED

AUGUST 27, 1917.

122,563. WHITE CORN-FLOUR. AMERICAN HOMINY COMPANY, Indianapolis, Ind.
Filed April 16, 1918. Serial No. 110,230. PUBLISHED MAY 21, 1918.

122,564. CANNED RIPE OLIVES. AMERICAN OLIVE COMPANY, Los Angeles, Cal.
Filed February 12, 1918. Serial No. 108,949. PUBLISHED MARCH 19, 1918.

122,565. SHAVING-BRUSHES. AMERICAN SAFETY RAZOR CO. INCORPORATED, Brooklyn, N. Y.
Filed September 7, 1917. Serial No. 106,124. PUBLISHED MAY 21, 1918.

122,566. CERTAIN NAMED CLOTHING. BAKER, MURRAY & IMBRIE, INC., New York, N. Y.
Filed December 15, 1917. Serial No. 107,976. PUBLISHED APRIL 23, 1918.

122,567. OVERALLS AND COATS. BALTIMORE BARGAIN HOUSE, Baltimore, Md.
Filed March 16, 1918. Serial No. 109,583. PUBLISHED MAY 14, 1918.

122,568. FUR COATS FOR OUTER WEAR, FUR CAPS, FUR MUFFS, FUR NECK-PIECES, FUR GLOVES. HERMAN BASCH & CO., INC., Brooklyn, N. Y.
Filed February 5, 1918. Serial No. 108,819. PUBLISHED MAY 14, 1918.

122,569. MEN'S COTTON, LINEN, AND SILK FABRIC OVERSHIRTS, UNDERSHIRTS, UNDERDRAWERS, AND NIGHT-ROBES. BATES STREET SHIRT COMPANY, Lewiston, Me.
Filed February 14, 1918. Serial No. 108,987. PUBLISHED APRIL 30, 1918.

122,570. DRESS, NEGLIGÉE, AND WORK SHIRTS. BEACON SHIRT CO., New York, N. Y.
Filed December 10, 1917. Serial No. 107,860. PUBLISHED APRIL 23, 1918.

122,571. CORSETS. BIRDSEY-SOMERS COMPANY, New York, N. Y.
Filed January 26, 1918. Serial No. 108,644. PUBLISHED APRIL 30, 1918.

122,572. PAPER BAGS. J. W. BUTLER PAPER CO., Chicago, Ill.
Filed January 4, 1918. Serial No. 108,283. PUBLISHED MAY 21, 1918.

122,573. PAPER BAGS. J. W. BUTLER PAPER CO., Chicago, Ill.
Filed January 4, 1918. Serial No. 108,286. PUBLISHED MAY 21, 1918.

122,574. PAPER BAGS. J. W. BUTLER PAPER CO., Chicago, Ill.
Filed January 4, 1918. Serial No. 108,289. PUBLISHED MAY 21, 1918.

122,575. RUBBER BOOTS AND SHOES. L. CANDEE & COMPANY, New Haven, Conn.
Filed April 1, 1916. Serial No. 94,080. PUBLISHED JANUARY 29, 1918.

122,576. TOBACCO USED IN SMOKING AND CHEWING AND AS SNUFF. CAPEVERDIAN TRADING CO., East Wareham, Mass.
Filed November 7, 1917. Serial No. 107,218. PUBLISHED MAY 14, 1918.

122,577. ICE-CREAM. CHAPIN-SACKS MANUFACTURING COMPANY, Washington, D. C.
Filed October 17, 1917. Serial No. 106,805. PUBLISHED JANUARY 29, 1918.

122,578. REMEDY FOR BURNS, A SEDATIVE AND GERMICIDE. OTIS CLAPP & SON INC., Boston, Mass.
Filed March 24, 1917. Serial No. 102,405. PUBLISHED MAY 21, 1918.

122,579. CERTAIN NAMED CLOTHING. SAMUEL COLLAT, New York, N. Y.
Filed February 4, 1918. Serial No. 108,791. PUBLISHED APRIL 23, 1918.

122,580. RUBBER SHOES. CONVERSE RUBBER SHOE COMPANY, Malden, Mass.
Filed September 7, 1917. Serial No. 106,107. PUBLISHED MAY 14, 1918.

122,581. LADIES' HOSIERY. DAISY WHITEHEAD K'T'G CO., New York, N. Y.
Filed January 4, 1918. Serial No. 108,296. PUBLISHED MAY 14, 1918.

122,582. CHEMICAL COMPOUND FOR REMOVING AND PREVENTING RUST. DEARBORN CHEMICAL COMPANY, Chicago, Ill.
Filed December 14, 1917. Serial No. 107,956. PUBLISHED MAY 21, 1918.

122,583. FABRIC GLOVES. ELITE GLOVE CO., Gloversville and New York, N. Y.
Filed February 12, 1918. Serial No. 108,951. PUBLISHED MARCH 19, 1918.

122,584. CANDY. ELMER CANDY CO., INC., New Orleans, La.
Filed February 5, 1918. Serial No. 108,822. PUBLISHED MAY 7, 1918.

122,585. PANAMA HATS. RUNOSUKE FUJITA, New York, N. Y.
Filed December 26, 1917. Serial No. 108,141. PUBLISHED MAY 7, 1918.

122,586. BLOUSES AND MIDDY-SUITS FOR WOMEN AND GIRLS. GOLDSTEIN & KRES, Baltimore, Md.
Filed November 15, 1917. Serial No. 107,391. PUBLISHED MAY 14, 1918.

122,587. HOSIERY. EDWARD E. HOGUE, Los Angeles, Cal.
Filed November 30, 1917. Serial No. 107,681. PUBLISHED MAY 21, 1918.

122,588. KNICKERS. HURWITCH BROTHERS, Boston, Mass.
Filed December 18, 1917. Serial No. 108,038. PUBLISHED MAY 7, 1918.

122,589. CANNED PEAS AND CANNED CORN. INDERRIEDEN CANNING CO., Chicago, Ill.
Filed April 2, 1918. Serial No. 109,919. PUBLISHED MAY 14, 1918.

122,590. CANNED PEAS AND CANNED CORN. INDERRIEDEN CANNING CO., Chicago, Ill.
Filed April 2, 1918. Serial No. 109,920. PUBLISHED MAY 14, 1918.

122,591. VEGETABLE COMPOUND TAKEN INTERNALLY AS A TONIC FOR TORPID LIVER AND NERVES. W. H. JOHNSON, Pine Bluff, Ark.
Filed January 21, 1918. Serial No. 108,578. PUBLISHED MAY 21, 1918.

122,592. LEATHER BOOTS AND SHOES. KNIPE BROS., INC., Haverhill, Mass.
Filed March 2, 1918. Serial No. 109,323. PUBLISHED APRIL 30, 1918.

122,593. COMPOUND TO PREVENT LEAKS IN AUTOMOBILE-RADIATORS. CASPER A. KNUTSON, Valley Springs, S. D.
Filed January 30, 1918. Serial No. 108,695. PUBLISHED MAY 21, 1918.

122,594. CORSETS. THE KREEGER STORE, INCORPORATED, New Orleans, La.
Filed March 12, 1918. Serial No. 109,524. PUBLISHED MAY 14, 1918.

122,595. SHOE-POLISHERS—NAMELY, BRUSHES FOR APPLYING POLISH. KWICK-WORK FOUNTAIN BRUSH MFG. CO., Kansas City, Mo.
Filed March 12, 1918. Serial No. 109,523. PUBLISHED MAY 21, 1918.

122,596. CIGARS. CHARLES LANDAU, New York, N. Y.
Filed April 18, 1918. Serial No. 110,299. PUBLISHED MAY 21, 1918.

122,597. LADIES' SHIRT-WAISTS. ARTHUR LETTS, Los Angeles, Cal.
Filed March 26, 1918. Serial No. 109,808. PUBLISHED MAY 21, 1918.

122,598. LADIES' SHIRT-WAISTS. ARTHUR LETTS, Los Angeles, Cal.
Filed March 26, 1918. Serial No. 109,809. PUBLISHED MAY 21, 1918.

122,599. LEGGINGS OF CLOTH OR LEATHER. A. E. LITTLE COMPANY, Lynn, Mass.
Filed March 15, 1918. Serial No. 109,576. PUBLISHED MAY 14, 1918.

122,600. CORSETS. R. H. MACY & CO., New York, N. Y.
Filed August 20, 1917. Serial No. 105,750. PUBLISHED MAY 21, 1918.

122,601. SELF-RISING WHEAT-FLOUR. WM. HANDLEY MANN, Roanoke, Ala.
Filed April 16, 1918. Serial No. 110,253. PUBLISHED MAY 21, 1918.

122,602. NON-ALCOHOLIC, NON-INTOXICANT, MALTLESS CEREAL BEVERAGE SOLD AS A SOFT DRINK. EDWARD R. MAIBB, Los Angeles, Cal.
Filed March 9, 1918. Serial No. 109,472. PUBLISHED MAY 21, 1918.

122,603. CHEESE. THE MONROE CHEESE CO., Monroe, N. Y.
Filed April 11, 1918. Serial No. 110,124. PUBLISHED MAY 21, 1918.

122,604. CIGARS, CIGARETTES, AND MANUFACTURED TOBACCO. NATRONA TOBACCO CO., Philadelphia, Pa.
Filed March 9, 1918. Serial No. 109,478. PUBLISHED MAY 14, 1918.

122,605. ICE-CREAM. PAUL NELSON, Portage borough, Pa.
Filed May 25, 1917. Serial No. 104,081. PUBLISHED FEBRUARY 19, 1918.

122,606. OLEOMARGARIN. NORTHERN COCOANUT-BUTTER COMPANY, Minneapolis, Minn.
Filed April 16, 1918. Serial No. 110,260. PUBLISHED MAY 21, 1918.

122,607. CERTAIN NAMED CLOTHING. D. NUSBAUM & CO., New York, N. Y.
Filed September 18, 1917. Serial No. 106,299. PUBLISHED APRIL 23, 1918.

122,608. ANTI-ANEMIC PREPARATIONS. ORIENTAL DRUG CO. INC., New York, N. Y.
Filed July 27, 1916. Serial No. 96,901. PUBLISHED MAY 21, 1918.

122,609. NON-ALCOHOLIC AND MALTLESS SOFT DRINKS AND SYRUPS THEREFOR. OZONE SPRING WATER & BEVERAGE CO. INC., New Orleans, La.
Filed March 2, 1918. Serial No. 109,338. PUBLISHED MAY 21, 1918.

122,610. CHEESE. THE PORTLAND CHEESE COMPANY, Portland, Oreg.
Filed March 12, 1917. Serial No. 102,092. PUBLISHED FEBRUARY 26, 1918.

122,611. LOCKS—NAMELY, SWITCH-LOCKS IN CONNECTION WITH AUTOMOBILES. THE RAM ENGINEERING COMPANY, Columbus, Ohio.
Filed July 12, 1917. Serial No. 105,007. PUBLISHED MAY 14, 1918.

122,612. WHEAT-FLOUR. THE RED STAR MILLING COMPANY, Wichita, Kans.
Filed June 13, 1917. Serial No. 104,431. PUBLISHED AUGUST 21, 1917.

122,613. LOGANBERRY AND GRAPE JUICE. RENKEN & YATES SMITH, INC., New York, N. Y.
Filed March 28, 1918. Serial No. 109,852. PUBLISHED MAY 21, 1918.

122,614. GRAPE-JUICE. RENKEN & YATES SMITH, INC., New York, N. Y.
Filed March 28, 1918. Serial No. 109,853. PUBLISHED MAY 21, 1918.

122,615. SYNTHETIC LIQUID HYDROCARBON FUEL SIMILAR TO GASOLENE OR KEROSENE. FRED C. ROBOGE, Cleveland, Ohio.
Filed November 25, 1916. Serial No. 99,558. PUBLISHED MAY 7, 1918.

122,616. CORSETS. ROYAL WORCESTER CORSET CO., Worcester, Mass.
Filed April 13, 1916. Serial No. 94,394. PUBLISHED MAY 14, 1918.

122,617. CIGARETTES. VALENTINE J. SCHULTHEIS, New York, N. Y.
Filed January 29, 1918. Serial No. 108,689. PUBLISHED MAY 14, 1918.

122,618. MATTRESSES. SEALY MATTRESS COMPANY, Sugar Land, Tex.
Filed April 19, 1918. Serial No. 110,332. PUBLISHED MAY 21, 1918.

122,619. MATTRESSES. SEALY MATTRESS CO., Sugar Land, Tex.
Filed April 19, 1918. Serial No. 110,335. PUBLISHED MAY 21, 1918.

122,620. MATTRESSES. SEALY MATTRESS CO., Sugar Land, Tex.
Filed April 19, 1918. Serial No. 110,336. PUBLISHED MAY 21, 1918.

122,621. APRONS. SEARS, ROEBUCK AND CO., Chicago, Ill.
Filed January 31, 1918. Serial No. 108,725. PUBLISHED APRIL 30, 1918.

122,622. CANNED BEEF. SWIFT AND COMPANY, Chicago, Ill.
Filed November 8, 1917. Serial No. 107,248. PUBLISHED MAY 21, 1918.

122,623. OLEOMARGARIN. SWIFT AND COMPANY, Chicago, Ill.
Filed November 8, 1917. Serial No. 107,249. PUBLISHED MARCH 19, 1918.

122,624. BAKING AND COOKING PREPARATION TO TAKE THE PLACE OF EGGS. EDWIN A. STAFFLIN, Toledo, Ohio.
Filed April 4, 1918. Serial No. 109,991. PUBLISHED MAY 21, 1918.

122,625. [WITHDRAWN.]

122,626. SALT. THE UNION SALT COMPANY, Cleveland, Ohio.
Filed April 8, 1918. Serial No. 110,060. PUBLISHED MAY 21, 1918.

122,627. PAPER BAGS AND PAPER BOXES. WALTHAM BAG & PAPER COMPANY, Waltham, Mass.
Filed February 1, 1918. Serial No. 108,764. PUBLISHED MAY 21, 1918.

122,628. RAIN-COATS. WEBER & HEILBRONER, New York, N. Y.
Filed March 13, 1918. Serial No. 109,545. PUBLISHED MAY 14, 1918.

122,629. FRESH APPLES. YAKIMA VALLEY FRUIT GROWERS ASSOCIATION, North Yakima, Wash.
Filed March 17, 1917. Serial No. 102,235. PUBLISHED MAY 21, 1918.

122,630. FRESH APPLES. YAKIMA VALLEY FRUIT GROWERS ASSOCIATION, North Yakima, Wash.
Filed March 17, 1917. Serial No. 102,236. PUBLISHED MAY 21, 1918.

DECISIONS

OF THE

COMMISSIONER OF PATENTS

AND OF

UNITED STATES COURTS IN PATENT CASES.

COMMISSIONER'S DECISIONS.

EX PARTE HOLST AND LEERS.

Decided March 19, 1918.

1. CLAIMS—ALTERNATIVE.
   Where claims 1 and 2 are for combinations in the usual form and claim 3 is for "the combination above set forth," plus certain additional matter, *Held* that this imports into claim 3 an alternative meaning, depending on whether the additional matter is to be combined with the features of claim 1 or claim 2.
2. SAME—SAME.
   Held that a subsequent claim can only refer back to a single combination for additional matter, in accordance with the long-established practice against allowing alternative claims. (*Ex parte Hulbert*, 63 O. G., 1687.)
3. SAME—PRACTICE IN EX PARTE BROWN NOT EXTENDED.
   Held that the practice outlined in *ex parte Brown* (235 O. G., 1355) is not extended beyond what was indicated therein.

ON PETITION.

DOUBLE-DECK DRAWBRIDGE.

Mr. Myron F. Hill for the applicant.

NEWTON, *Commissioner:*

Petitioners ask that I overrule the Primary Examiner's holding that certain claims which petitioners contend are drawn in accordance with what was permitted in *ex parte Brown* (235 O. G., 1355) are indefinite, as they refer to a plurality of other claims for their full disclosure.

Claims 1 and 2 are for combinations in the usual form. Claim 3 is for "the combinations above set forth, each having the parts," etc. This evidently imports into claim 3 an alternative meaning, depending on whether the additional element is to be combined with the features of claim 1 or claim 2.

The combinations set up in the remaining claims by reference to several previous claims become still more complex in meaning. Thus claim 9 calls for "the combinations set forth in claims 6, 7 and 8, each having the means," etc. Thus claim 9 is for either one of three different combinations, and claim 10 specifies "the combinations set forth in claim 9 each having means," etc.

To clearly comprehend each of the separate and alternative combinations set up for example in claim 10 would require more mental effort than if each of the combinations were set forth in a separate self-contained claim of the ordinary type.

I am unwilling to extend the practice outlined in *ex parte Brown, supra*, beyond what was indicated therein—viz., that a subsequent claim can only refer back to a single combination for additional matter. It should never involve alternative combinations. This is only adhering to the long-established practice against allowing alternative claims. (*Ex parte Hulbert*, 63 O. G., 1687.)

The petition is denied.

EX PARTE VACUUM OIL COMPANY.

Decided July 3, 1918.

1. TRADE-MARKS—APPLICATION—MUST BE RESTRICTED TO ONE CLASS OF GOODS.
   Action of Examiner of Trade-Marks requiring applicant to restrict the use of his mark to a single class of goods affirmed.
2. SAME—FEES—ACT OF MAY 4, 1906, SECTION 2, CONSTRUED.
   Act of May 4, 1906, section 2, construed and *Held* to require an applicant to pay a fee for the registration of his mark for every class of articles on which the mark is used.

ON APPEAL.

TRADE-MARK FOR LUBRICATING-OILS, ETC.

Messrs Davis & Simms for the applicant.

NEWTON, *Commissioner:*

This is an appeal from the decision of the Examiner of Trade-Marks requiring applicant to restrict the use of its mark to a single class of articles.

Applicant states that its goods are—

> oils used indiscriminately as lubricating oils, oils for finishing and dressing leather, as batching oils for softening jute and hemp fiber, and as wool oils for scouring, in Class No. 15, Oils and greases.

The Examiner states that lubricating-oils are classified in Class 15, Oils and greases; oils for finishing and dressing leather are classified in Class 4, Abrasive, detergent, and polishing materials, and other oils for softening jute and hemp fiber and wool-oils are classified in Class 6, Chemicals, medicines, and pharmaceutical preparations.

Applicant's contention is that—

> the trade mark "Vacmul" is used by the Vacuum Oil Company as a trade mark brand for oil of a certain kind made according to a certain formula and process of manufacture. "Vacmul" oil is made in several different grades, and is branded "Vacmul A," "Vacmul B," "Vacmul X-35," "Vacmul X-40," etc. Primarily, the "Vacmul" brands of oil are cutting oils, and a cutting oil is, broadly speaking, a lubricating oil. Some of these oils are, however, suitable for and are sold for other lubricating

purposes also: for example, "Vacmul F." Some of these oils are also suitable for and are sold as batching oils for softening into and hemp fiber: for example, "Vacmul X-40" and "Vacmul X-35." Some of these oils are also suitable for and are sold as wool oils for scouring; for example, "Vacmul 40" and "Vacmul 35."

Section 2 of the act of May 4, 1906, is as follows:

SEC. 2. That the Commissioner of Patents shall establish classes of merchandise for the purpose of trade-mark registration, and shall determine the particular descriptions of goods comprised in each class. On a single application for registration of a trade-mark the trade-mark may be registered at the option of the applicant for any or all goods upon which the mark has actually been used comprised in a single class of merchandise, provided the particular descriptions of goods be stated.

The object of this statute was to require an applicant to pay a fee for the registration of his mark for every class of articles on which the mark is used, and to thus locate a mark, so that it can be readily found in case some one else applies for registration of the same or a similar mark for the same class of goods. Were it not followed, one would have to search through the entire list of trade-marks to find whether any particular mark has been registered; but by requiring registration for each class only that class need be searched to find it.

If applicant is allowed to register this mark for goods found in the three classes specified, a search would have to be made through the three classes enumerated by the Examiner, and this is contrary to the intent of this statute.

Applicant contends that making it split up its registration in this country would necessitate doing likewise in case it files foreign applications; but, in the first place, it is questioned whether the foreign country would follow our classification, even if a single registration be allowed here, and, second, whether the foreign country would not require it to be split up, even if we allowed a single registration to include all the three classes here; but be that as it may, the statute is binding on the Office to require a separate fee for each class in which the mark is registered. The statute is based on sound reason—indeed, on a practical necessity—and the Examiner was right in his refusal to register the trade-mark in all three classes under one application and for one fee, and his action is affirmed.

EX PARTE BLOOM & MILLMAN.

Decided July 31, 1918.

TRADE-MARKS—SIMILARITY—"JACKIE" AND "JACK TAR." The word "Jackie" refused registration as a trade-mark in view of the prior registration of the words "Jack Tar Togs" for the same class of goods, (the word "Togs" being disclaimed.)

ON APPEAL.

TRADE-MARK FOR WAISTS AND BLOUSES FOR MISSES AND LADIES.

Mr. Solomon K. Lichtenstein for the applicants.

NEWTON, *Commissioner:*

This is an appeal from the decision of the Examiner of Trade-Marks refusing registration of the word "Jackie" over the head of a sailor-boy, used on blouses and waists, on the prior mark of The Strouse-Baer Co., No. 112,329, for the words "Jack Tar Togs," used on several kinds of goods, including blouses and waists. The word "Togs" being disclaimed, the rejection is based on the similarity between the words "Jackie" and "Jack Tar" on the same kind of goods.

Funk & Wagnalls's dictionary, published in 1917, defines "Jackie" as meaning a sailor, and under the word "Tar" it gives "Jack Tar" also as meaning a sailor. The words "Jackie" and "Jack Tar" have practically the same meaning, and although they vary slightly in sound and appearance they are too near alike to allow the registration of one in view of the other, since the idea conveyed by the words is the same.

In considering infringement of marks, appearance, sound, and meaning must all be taken into consideration. If the words have the same meaning, even though they may appear very different or sound very different, they are held to infringe; as, for example, "Iwanta" was held to infringe "Uneeda," (95 Fed. Rep., 135;) but the present words have not only the same meaning but are similar in sound and should clearly be refused, and the decision of the Examiner of Trade-Marks must be affirmed.

EX PARTE BRADY.

Decided June 10, 1918.

1. TRADE-MARKS—DESCRIPTIVE WORDS—"METALOID." The word "Metaloid," as applied to a paste material for mending metal, *Held* to be not registrable, as it simply informs one that the paste is like a metal.
2. SAME—SAME—CORRECTNESS OF DESCRIPTION. It makes no difference whether the mark actually describes the applicant's particular goods if it describes like goods of others.

ON APPEAL.

DRY POWDER AND A LIQUID TO BE USED TOGETHER IN REPAIRING LEAKS OR CRACKS IN LEAD OR IRON PIPES, ETC.

Mr. E. G. Siggers for the applicant.

CLAY, *Assistant Commissioner:*

On appeal the Examiner's refusal to register the word "Metaloid" as a trade-mark for a paste material for mending metal, on the ground of descriptiveness, is affirmed. I think there can be no question that the alleged trade-mark simply informs one that the paste is like a metal, and this any other has the equal right to do. If a trade-mark is descriptive of metal mending-paste generally, I do not see how it makes any difference if it in fact describes falsely the particular paste this applicant has. There is nothing in the record to show that this paste is not like a metal, and manifestly the applicant might make it "like a metal" to-morrow if he chooses to do so. The vice of such marks is that they describe like goods of others; wherefore their registry would curtail the rights of others to free use of the language. In the case of *Adams-Jewel Co.* (120 MS. D., 374) it was considered that there was not and never had been any actual thing which was described by the term "Plastic Fire Brick."

Affirmed.

DECISIONS OF THE U. S. COURTS.

Court of Appeals of the District of Columbia.

IN RE MCNEAL.

Decided April 1, 1918.

PATENTABILITY—SAND-DISINTEGRATOR.

The appealed claim for a sand-disintegrator compared with the cited art and *Held* to be unpatentable thereover.

Mr. Edwin C. Crawford and *Mr. Percy H. Moore* for the appellant.

Mr. T. A. Hostetler for the Commissioner of Patents.

VAN ORSDEL, *J.:*

This appeal is from the decision of the Commissioner of Patents rejecting the following claim:

1. In a disintegrator for sand, the combination of the hopper, two rollers secured in the frame work of the hopper, shafts upon which said rollers are mounted journaled in such frame work, two sprocket wheels different in diameter, mounted on said shafts, and a sprocket chain connecting said sprocket wheels, the hopper in which said shafts are journaled, and the belt connecting one of the shafts with the operating machinery of an engine, substantially as and for the purpose specified.

Two references are cited—one a German patent (88,171) to one Gomez, and the other a patent (1,000,913) to one Hovendick. The elements of the claim are present in the Hovendick device. The claim, it will be observed, does not specify that the rollers revolve in the same direction, but, in his specification, appellant describes the rollers as "revolving in the same direction but at different velocities." The rollers in Hovendick's device revolve in opposite directions; but it was held, and properly so, that it did not involve invention to so arrange the sprocket-chain as to revolve the rollers in the same direction at different velocities. Indeed, the patent to Gomez was inserted to demonstrate the old expedient of so arranging the sprocket-chain as to drive the rollers in the same direction.

The decision of the Commissioner of Patents is affirmed, and the clerk is directed to certify these proceedings as by law required.

Affirmed.

U. S. Circuit Court of Appeals—Ninth Circuit.

WONDER MFG. CO. *v.* BLOCK *et al.*

Decided May 6, 1918.

249 FED. REP., 748.

1. TRADE-MARKS AND TRADE-NAMES—INFRINGEMENT—WHAT CONSTITUTES. Where plaintiff's had a trade-mark in the word "Wizard," defendant's sale of goods identical in appearance under the name "Wonder" was an infringement.
2. SAME—APPROPRIATION—WORDS SUSCEPTIBLE OF. The words "Arch Builder" and "Heel Leveler," used in connection with insoles in shoes, are susceptible of exclusive appropriation as trade-marks, since they are used in a secondary sense, for the terms of themselves do not suggest the purpose of correcting defects of the human foot, the first signifying one who builds arches and the second suggesting the shoemaker's trade.
3. PATENTS—REVIEW—INJUNCTION. On appeal from an interlocutory injunction in a patent case the appellate court will go no further than to ascertain whether the court below abused its discretion. Therefore where it was not disputed that there was an infringement by defendant the question of the extent of the infringement will not be reviewed.
4. SAME—INFRINGEMENT—ACTIONS—EVIDENCE. Though an earlier patent was not set up in the answer or by notice, it is admissible in an infringement suit as evidence of the state of the prior art and to aid in construing the claims of the patent asserted to have been infringed.
5. SAME—ACTIONS—EVIDENCE. Though a prior patent was a mere paper patent and there was no evidence that the invention had ever been used, it is admissible on the question whether a device infringes a subsequently-issued patent.
6. SAME—VALIDITY—ANTICIPATION. The Block Patent No. 1,127,349, for the support of the anterior metatarsal arch of the foot, *Held*, in view of the prior art, to have been anticipated and not to show invention, as to claim 1, for a flexible insole having a portion located beneath the anterior metatarsal arch of the foot of the wearer and means for adjusting the thickness of the insole at one or more points along the line of such arch.
7. SAME—SCOPE—INFRINGEMENT. Block Patent No. 1,127,349, claim No. 2 *Held* limited by the language of the claim, and, as limited, not infringed.
8. SAME—CONSTRUCTION—LIMITATION. Where a patentee was not the first in the field and there had been earlier similar inventions, the scope of the invention must be deemed limited by the language of the claim to the construction therein specified.
9. SAME—ISSUANCE—PRESUMPTIONS. The issuance of a patent creates a *prima facie* presumption of a patentable difference between the device for which a patent was issued and an earlier patented invention.
10. SAME—INFRINGEMENT. The Block Patent No. 1,061,358, for an arch-support, claims 1 and 4, which present the combination of an insole member, an insertion, and self-contained means carried by the insole member and insertion, whereby the insertion may be detachably secured at predetermined points, *Held* not infringed.

APPEAL from the District Court of the United States for the Second Division of the Northern District of California; Wm. C. Van Fleet, judge.

Suit by Alexander E. Block and the Wizard Foot Appliance Company, a corporation, against the Wonder Manufacturing Company, a corporation. From a decree for injunction and order directing an account of profits and damages for infringement of trade-marks and patents, defendant appeals. Remanded with instructions to dissolve the injunction as to certain patents; the decree being otherwise affirmed.

Mr. Charles E. Townsend and *Messrs. Dewey, Strong & Townsend* for the appellant.

Mr. Wm. A. Smith and *Mr. James Love Hopkins* (*Mr. N. A. Acker* of counsel) for the appellees.

Before GILBERT, ROSS, and HUNT, Circuit Judges.

GILBERT, *Cir. J.:*

This is an appeal from a decree of injunction and an order directing an account of profits and damages for infringement of three trade-marks and four patents, all issued to Alexander Block, and all relating to insoles for shoes. The trade-marks are the word "Wizard," Certificate No. 110,976, issued June 20, 1916, and the technical trade-marks, "Arch Builder" and "Heel Leveler."

(1, 2) We think that the court below properly disposed of all questions which arise in connection with the use of the trade-marks. The word "Wonder," upon goods identical in appearance with the plaintiff's goods, conveys the same idea as does the word "Wizard," and its use is an infringement. (*National Biscuit Co.* v. *Baker*, C. C., 95 Fed., 135; *Florence Mfg. Co.* v. *J. C. Dowd & Co.*, 178 Fed., 73; 101 C. C. A., 565; *Aluminum Cooking U. Co.* v. *National Aluminum Works*, D. C., 226 Fed., 815; *Daniel O'Donnell* v. *Riscal Mfg. Co.*, D. C., 228 Fed., 127.) And the terms "Arch Builder" and "Heel Leveler," as used by the plaintiffs, are susceptible of exclusive appropriation, since they are used in a secondary sense. The primary meaning of "arch builder" is one who builds arches. No suggestion is conveyed that the arch referred to is the arch of the foot. The primary meaning of "heel leveler" is perhaps more obscure, but it is more suggestive of the shoemaker's trade than that of the chiropodist. It is only in its application to the plaintiffs' device that its significance becomes apparent.

(3) It is said that the decree of the court below as to infringement of Patent No. 1,043,058, for an arch-support, issued November 5, 1912, should be modified, so as to permit the use by the defendant of the arch-support shown in plaintiff's Exhibit 5; the contention being that, in view of the limitations placed upon the scope of plaintiff's patent by the proceedings in the Patent Office and the language of the claim, which covers "a plurality of overlapping pockets," etc., the plaintiffs should be limited to the feature which distinguishes that combination from the prior art, to wit, the overlapping pockets, and, inasmuch as Exhibit 5 shows no overlapping pockets, its use is not an infringement. The contention cannot be considered on this appeal. The decree contains no finding that Exhibit 5 infringes the plaintiffs' patent. It finds only that the defendant has infringed the claim of the plaintiffs' patent. It is not disputed that plaintiffs' Exhibit 3 presents a device which does infringe the patent. This court can consider only the question whether the court below erred in finding that there was infringement, and on the appeal from an interlocutory injunction in a patent case an appellate court will go no further than to ascertain whether or not the court below abused discretion in granting the injunction. (*Kings County Raisin & Fruit Co.* v. *United States Consol. S. R. Co.*, 182 Fed., 59; 104 C. C. A., 499; *Blount* v. *Société Anonyme, etc.*, 53 Fed., 98; 3 C. C. A., 455; *Consolidated Rubber Tire Co.* v. *Diamond Rubber Co.*, 157 Fed., 677; 85 C. C. A., 349; *Interurban Ry. & T. Co.* v. *Westinghouse E. & Mfg. Co.*, 186 Fed., 166; 108 C. C. A., 298.)

The defendant admits its infringement of Patent No. 1,191,655, issued July 18, 1916, for "combined heel and arch support," and abandons its appeal from the decree as to that patent.

(4) We are of the opinion that the defendant has not infringed Letters Patent No. 1,127,349, issued February 2, 1915, for a "support for the anterior metatarsal arch of the foot." The patent has two claims. The first is for the combination of—

a flexible insole having a portion located beneath the anterior metatarsal arch of the foot of the wearer, and means for adjusting the thickness of the insole at one or more points along the line of said anterior metatarsal arch.

The patent to B. Nathan, for an innersole, December 17, 1907, may be referred to as showing the prior art. Nathan's innersole contains a continuous transverse pocket beneath the metatarsal arch, wider at the outer edges than at the center, and removable wedge-shaped fitting members for the pockets. The plaintiffs contend that the Nathan patent is to be disregarded, for the reason that it was not set up in the answer or by notice. But that is no objection to its use as evidence of the state of the art, and to aid in the construction of Block's claim. (*Grier* v. *Wilt*, 120 U. S., 412, 429; 7 Sup. Ct., 718; 30 L. Ed., 712; 38 O. G., 1365; *Brown* v. *Piper*, 91 U. S., 37, 41; 23 L. Ed., 200.)

(5, 6) It is contended, also, that the Nathan patent is without probative value, for the reason that it is but a paper patent, and that there is no evidence that the invention has ever been used. But that fact does not affect its value as evidence upon the question of infringement. (*Universal Winding Co.* v. *Willimantic Co.*, C. C., 82 Fed., 228, affirmed; 92 Fed., 391; 34 C. C. A., 415; *Packard* v. *Lacing Stud Co.*, 70 Fed., 66; 16 C. C. A., 639; *E. L. Watrous Mfg. Co.* v. *American Hardware Mfg. Co.*, C. C., 161 Fed., 362.) The Nathan patent presents all the features of claim 1 of the Block patent. It has a flexible insole located beneath the anterior metatarsal arch and means for adjusting the thickness of the insole at one or more points along the line of that arch.

(7–9) Block's second claim presents the combination of—

a flexible insole beneath the anterior metatarsal arch, and a series of superimposed and overlapping members forming pockets mounted on the lower face of said insole, and insert members adapted to be removably seated in said pockets, substantially as described.

The defendant's device has a single inclosed transverse pocket beneath the metatarsal arch, and four slits therein to permit the insertion and adjustment of an insert member, so that the same may be placed at any desired point along the line of the arch. It contains no superimposed or overlapping members forming pockets. If the Block invention were of such a character as to be entitled to broad construction, it might properly be held that the defendant's device presents a series of pockets, although in fact it is but one pocket, with a series of slits opening into the same. But Block was not the first to place pads in pockets in leather insoles, nor was he the first to place a pad beneath a metatarsal-arch support. Pockets were old, and pads were old. He was the first, however, to use an insole containing a transverse series of pockets beneath the metatarsal arch. But his claim called for a series of "superimposed pockets," and we are of the opinion that, in view of the express terms of his claim and the state of the prior art, he should be held to have limited intentionally the scope of his invention by the language of his claim. (*Keystone Bridge Co.* v. *Phœnix Iron Co.*, 95 U. S., 274; 24 L. Ed., 344; 12 O. G., 980; *McClain* v. *Ortmayer*, 141 U. S., 419; 12 Sup. Ct., 76; 35 L. Ed., 800.) By the superimposition of the pockets he obtained a structure which holds the pads in position without other attachment, and permits the location thereof at desired points on the line of the arch; whereas the defendant holds its pads in place by the metallic points which attach them to the lower covering of a single pocket.

We may advert also to the fact that on July 11, 1916, a patent, No. 1,191,122, was issued to James Brown, for a "foot corrector;" the invention showing an inclosed pocket beneath the metatarsal arch, the same containing slits at a plurality of points to permit the insertion of a pad, and the adjustment of the same in position, the device being identical with that used by the defendant, with the unimportant exception of the shape of the slits, and the means for attaching the pad. The issuance of that patent created a *prima facie* presumption of patentable difference from the Block invention. (*Hardison* v. *Brinkman*, 156 Fed., 962; 87 C. C. A., 8; *Miller* v. *Eagle Mfg. Co.*, 151 U. S., 186, 208; 14 Sup. Ct., 310; 38 L. Ed., 121.)

(10) The defendant was held to have infringed claims 1 and 4 of Patent No. 1,061,353, for an "arch support." Claim 1 presents the combination of—

an insole member, an insertion and self-contained means carried by the insole member, and the insertion whereby the insertion may be detachably secured to the insole member at predetermined points.

Claim 4 differs from claim 1 only in calling for a plurality of inserts, instead of a single insert. In the specifications the insole is described as containing embedded therein a number of the sockets of ordinary glove-fasteners, distributed at the heel, the instep, and at the ball of the foot. The insert is described as mounted with the obverse half of the glove-fastener. No other locking device is mentioned, but the applicant said:

It is obvious that the securing means may be any two-part separable locking device of which one part is seated in the insole member, and the opposite part in the lift or insertion, and which is therefore practically self-contained within the parts themselves, so that I am enabled to dispense with the use of bars, pockets, or other mountings in securing the lift or insertion to the insole member.

The defendant's device has no socket in the insole, has no two-part separable locking device of which one is in the insole and the other in the insertion, and it is not enabled to dispense with the use of pockets. It makes an insole with a pocket therein, and fastens its insertions by means of small sharply-pointed metallic projections which penetrate the lower covering of the pocket. It uses no two-part device, and no interlocking device, and it does not attach the insert at predetermined points on the insole. These differences, we think, are sufficient to avoid infringement.

The cause will be remanded to the court below, with instructions to dissolve the injunction as to Patents 1,127,349 and 1,061,353. In other respects the decree is affirmed. In the view of the defendant's inequitable use of advertising-matter, we are not disposed to award costs to either party on the appeal.

ADJUDICATED PATENTS.

(U. S. C. C. A. Mich.) Patent No. 852,450, for store-front construction, *Held* valid and infringed. *Detroit Showcase Co.* v. *Kawneer Mfg. Co.*, 250 Fed. Rep., 234.

(U. S. C. C. A. Ohio.) The Ferguson patent, No. 638,228, for a rubber heel attachment, *Held* not infringed. *Panther Rubber Mfg. Co.* v. *I. T. S. Rubber Co.*, 250 Fed. Rep., 253.

(U. S. C. C. A. Mich.) The Plym patent, No. 860,150, relating not only to store-front but to show-case construction and designed to provide a simple, strong, durable, inexpensive, and ornamental connection between glass plates, *Held* not infringed. 250 Fed. Rep., 234.

(U. S. C. C. A. Mont.) Sulman, Picard, and Ballot patent, No. 835,120, for process of ore concentration by air-bubble flotation, while valid as to claims 1, 2, 3, 5, 6, 7, and 12, is limited to process, results of which are obtained by use of oil amounting to fraction of 1 per cent. on ore, and use of greater quantity of oil in ore reduction is not an infringement. *Butte & Superior Mining Co.* v. *Minerals Separation*, 250 Fed. Rep., 241.

(U. S. D. C. Ohio.) The Willis and Felix patent, No. 1,045,234, for a process for rubber sponges, *Held* invalid, the disclosure of the patent not being sufficient to enable one skilled in the art to manufacture sponges with commercial success. *Featheredge Rubber Co.* v. *Miller Rubber Co.*, 250 Fed. Rep., 255.

Application Made to the Federal Trade Commission for License Under Enemy-Controlled Patents and Trade-Marks Pursuant to the "Trading with the Enemy Act."

Patent No. 1,060,985, dated May 6, 1913, to Lothar von Köppen, of Hanover, Germany, for "Ship's hull." License applied for by Max de Chimang, 116 Nassau street, New York city.

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DIGEST

OF THE

DECISIONS OF THE COMMISSIONER OF PATENTS AND OF THE UNITED STATES COURTS.

AUGUST, 1918.

[Decisions of the United States District Courts are indicated by the letter [b], of the Court of Appeals of the District of Columbia by a star (*), and of the United States Circuit Court of Appeals by the letter [d].]

ALTERNATIVE CLAIMS.

See Claims, 1, 2.

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CANCELATION OF CLAIMS.

1. APPEAL—REQUIREMENT.
The recourse from a requirement of cancelation of claims, on the ground that they are to a different invention from that originally presented, is by appeal to the Examiners-in-Chief, not by petition. [*Ex parte* Pearson, 259.

2. REQUIREMENT—REFERABLE TO LAW EXAMINER—RULE 42.
The basis of the requirement of cancelation of claims, on the ground that they are to a different invention from that originally prosecuted, is the same as that of the requirement of division—viz., that the inventions are independent or are of such a nature that they may not be joined in one application. Both requirements should be referred to the Law Examiner for approval, under Rule 42. [Id.

CLAIMS.

See Cancelation of Claims; Construction of Claims; Construction of Specifications and Patents; Delay in Applying for Reissue, 3; Particular Patents, 1; Priority of Invention, 1, 3.

1. ALTERNATIVE.
Where claims 1 and 2 are for combinations in the usual form and claim 3 is for "the combination above set forth," plus certain additional matter, *Held* that this imports into claim 3 an alternative meaning, depending on whether the additional matter is to be combined with the features of claim 1 or claim 2.
[*Ex parte* Holst and Leers, 953.

2. SAME.
Held that a subsequent claim can only refer back to a single combination for additional matter, in accordance with the long-established practice against allowing alternative claims. (*Ex parte* Hulbert, 63 O. G., 1687.) [Id.

3. PRACTICE IN EX PARTE BROWN NOT EXTENDED.
Held that the practice outlined in *ex parte* Brown (235 O. G., 1355) is not extended beyond what was indicated therein. [Id.

CLASS OF MERCHANDISE.

See Construction of Trade-Mark Statutes; Registration of Trade-Marks, 1, 3; Trade-Marks, 1.

COMBINATION.

See Claims, 1, 2; Particular Patents, 1.

CONSTRUCTION OF CLAIMS.

See Infringement, 3; Priority of Invention, 1.

1. INTERFERENCE—SCOPE OF ISSUE.
While the claims in an interference must be construed as broadly as the state of the art will allow, they cannot be construed so as to ignore the limitations which give them life in order to cover the disclosure of one of the parties. [Gammeter *v.* Lister, 259.

2. PATENTABILITY—SAND-DISINTEGRATOR.
The appealed claim for a sand-disintegrator compared with the cited art and *Held* to be unpatentable thereover.
[**In re* McNeal, 955.

CONSTRUCTION OF RULES.

See Cancelation of Claims, 2.

CONSTRUCTION OF SPECIFICATIONS AND PATENTS.

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SCOPE OF INVENTION—LIMITATION.
Where a patentee was not the first in the field and there had been earlier similar inventions, the scope of the invention must be deemed limited by the language of the claim to the construction therein specified. [[d] Wonder Mfg. Co. *v.* Block *et al.*, 955.

CONSTRUCTION OF TRADE-MARK STATUTES.

FEES—REGISTRATION.
Act of May 4, 1906, section 2, construed and *Held* to require an applicant to pay a fee for the registration of his mark for every class of articles on which the mark is used.
[*Ex parte* Vacuum Oil Company, 953.

DELAY IN APPLYING FOR REISSUE.

1. REISSUE—BROADER CLAIMS.
Where two years and eight months after the grant of a patent an application for reissue is made with broader claims, *Held* that the reissue was properly refused. [*Ex parte* Schneider, 513.

2. SAME—INTERVENING RIGHTS.
Where there is a delay of two years in filing a reissue application after the grant of the original patent, *Held* that intervening rights will be presumed, in accordance with the trend of recent decisions. [Id.

3. SAME—INSUFFICIENT EXCUSE.
Where it appears that a patentee did not discover that the claims of his patent were unduly limited until his attention was called to it more than two years after the grant of the patent, *Held* that this did not constitute a sufficient excuse for the delay in filing his reissue application. [Id.

DESCRIPTION.

See Disclosure of Invention; Registration of Trade-Marks, 3.

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DISCLOSURE OF INVENTION.

See Construction of Claims, 1; Priority of Invention, 1, 2.

SUFFICIENCY OF TO OTHERS.
Held that ordinarily a disclosure to others to be sufficient must so describe the purported invention as to make its nature clear to persons competent to understand it. (*Eastman* v. *Houston*, 95 O. G., 2064; 18 App. D. C., 135, 140.)
[*Henggi *v.* Dalimeyer, 514.

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GOODS OF THE SAME DESCRIPTIVE PROPERTIES.

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Delay in Filing Application for Reissue.

ISSUANCE—PRESUMPTION.
The issuance of a patent creates a *prima facie* presumption of a patentable difference between the device for which a patent was issued and an earlier patented invention.
[d Wonder Mfg. Co. *v.* Block *et al.*, 955.

INDEPENDENT INVENTIONS.

See Construction of Claims, 2.

INFRINGEMENT.

See Particular Patents, 1, 3, 4.

1. TRADE-MARKS AND TRADE-NAMES—INFRINGEMENT—WHAT CONSTITUTES.
Where plaintiffs had a trade-mark in the word "Wizard," defendant's sale of goods identical in appearance under the name "Wonder" was an infringement.
[dWonder Mfg. Co. *v.* Block *et al.*, 955.

2. REVIEW—INJUNCTION.
On appeal from an interlocutory injunction in a patent case the appellate court will go no further than to ascertain whether the court below abused its discretion. Therefore where it was not disputed that there was an infringement by defendant the question of the extent of the infringement will not be reviewed.
[dId.

3. ACTIONS—EVIDENCE.
Though an earlier patent was not set up in the answer or by notice, it is admissible in an infringement suit as evidence of the state of the prior art and to aid in construing the claims of the patent asserted to have been infringed. [dId.

4. SAME—SAME.
Though a prior patent was a mere paper patent and there was no evidence that the invention had ever been used, it is admissible on the question whether a device infringes a subsequently-issued patent. [dId.

INJUNCTION.

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PARTICULAR PATENTS.

1. BLOCK—NO. 1,061,353—ARCH-SUPPORT—INFRINGEMENT.
The Block patent, No. 1,061,353, for an arch-support, claims 1 and 4, which present the combination of an insole member, an insertion, and self-contained means carried by the insole member and insertion, whereby the insertion may be detachably secured at predetermined points, *Held* not infringed.
[dWonder Mfg. Co. *v.* Block *et al.*, 955.

2. SAME—NO. 1,127,349—SUPPORT OF ARCH OF FOOT—VALIDITY—ANTICIPATION.
The Block patent, No. 1,127,349, for the support of the anterior metatarsal arch of the foot, *Held*, in view of the prior art, to have been anticipated and not to show invention, as to claim 1, for a flexible insole having a portion located beneath the anterior metatarsal arch of the foot of the wearer and means for adjusting the thickness of the insole at one or more points along the line of such arch. [dId.

3. SAME—SAME—SAME—INFRINGEMENT—SCOPE.
Block patent, No. 1,127,349, claim No. 2 *Held* limited by the language of the claim, and, as limited, not infringed. [dId.

4. BURCHENAL—NO. 1,135,351—HYDROGENATION OF OIL—PATENTABILITY.
The patent to Burchenal, No. 1,135,351, relating to hydrogenation of oil, claims 1 and 2 *Held* unpatentable in view of the prior art, and, if properly construed, not infringed.
[bProcter & Gamble Company *v.* Berlin Mills Company, 747.

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PRIORITY OF INVENTION.

1. NO RIGHT TO MAKE THE CLAIMS.
Held that the tire-forming mechanism disclosed by Lister has no means for imparting to the fabric before its application a curvature of the outline of the core, as specified in the claims of the issue, and that Lister is therefore not entitled to make the claims.
[Gammeter *v.* Lister, 259.

2. SAME.
When the application of one of the parties to an interference does not disclose the subject-matter of the interference, *Held* that this lack of disclosure is sufficient ground for an award of priority to the other party. (Gold & Gold *v.* Cosper, 36 App. D. C., 302; 168 O. G., 787.) [Id.

3. AWARD.
Record reviewed and *Held* that priority was properly awarded to G. as to claims 1 to 12, inclusive, and to L., the senior party, as to claim 15. [*Gammeter *v.* Lister. Lister *v.* Gammeter, 261.

4. SAME.
Record reviewed and *Held* to establish that Henggi was entitled to an award of priority. [*Henggi *v.* Dalimeyer, 514.

REGISTRATION OF TRADE-MARKS.

See Construction of Trade-Mark Statutes; Trade-Marks, 1.

1. SIMILARITY—"JACKIE" AND "JACK TAR."
The word "Jackie" refused registration as a trade-mark in view of the prior registration of the words "Jack Tar Togs" for the same class of goods, (the words "Togs" being disclaimed.)
[*Ex parte* Bloom & Millman, 954.

2. DESCRIPTIVE WORDS—"METALOID."
The word "Metaloid," as applied to a paste material for mending metal, *Held* to be not registrable, as it simply informs one that the paste is like a metal. [*Ex parte* Brady, 954.

3. SAME—CORRECTNESS OF DESCRIPTION.
It makes no difference whether the mark actually describes the applicant's particular goods if it describes like goods of others.
[Id.

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Delay in Filing Application for Reissue.

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1. APPLICATION—MUST BE RESTRICTED TO ONE CLASS OF GOODS.—Action of Examiner of Trade-Marks requiring applicant to restrict the use of his mark to a single class of goods affirmed.
[*Ex parte* Vacuum Oil Company, 953.

2. APPROPRIATION—WORDS SUSCEPTIBLE OF.
The words "Arch Builder" and "Heel Leveler," used in connection with insoles in shoes, are susceptible of exclusive appropriation as trade-marks, since they are used in a secondary sense, for the terms of themselves do not suggest the purpose of correcting defects of the human foot, the first signifying one who builds arches and the second suggesting the shoemaker's trade.
[dWonder Mfg. Co. *v.* Block *et al.*, 955.

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ALPHABETICAL LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED DURING THE MONTH OF AUGUST, 1918.

[Abbreviations: "v."—Official Gazette.]

A. Schrader's Son. (See Gilling, Preston E., assignor.)
A. Schrader's Son. (See Myers, Eugene V., assignor.)
A. C. Lawrence Leather Company. (See Merrill, Edward H., assignor.)
A. G. Spalding & Bros. (See Pierce and Djerf, assignors.)
A. O. Norton, Inc. (See Gormley, Frank L., assignor.)
A. V. M. Spring Wheel Company, The. (See Hancock, Winfield S., assignor.)
Aasen, Niels W., Christiania, Norway. Hand-grenade with time-fuse and automatic release. No. 1,275,190; Aug. 13; v. 253; p. 265.
Abney, James W., Many, La. Automatic railway-crossing signal. No. 1,276,155; Aug. 20; v. 253; p. 563.
Abram Cox Stove Company. (See Casserly, Thomas D., assignor.)
Abram Cox Stove Company. (See Mott, Abram C., Jr., assignor.)
Abrams, Peter. (See Butler, Smedley D., assignor.)
Adair, Charles T., Tucumcari, N. Mex. Refrigerator. No. 1,275,191; Aug. 13; v. 253; p. 265.
Adams, Charles D., Jacksonville, Fla. Stock-car door and gangway. No. 1,276,305; Aug. 20; v. 253; p. 604.
Adams, Charles W., assignor to The United States Graphite Company, Saginaw, Mich. Electric conductor. No. 1,274,493; Aug. 6; v. 253; p. 44.
Adams, Edward M., assignor to M. H. Petigor, New York, N. Y. Valve for soda-fountains. No. 1,274,362; Aug. 6; v. 253; p. 3.
Adams, Frank H., Cleveland, Ohio. Repeating and stopping attachment for disk phonographs. No. 1,275,823; Aug. 13; v. 253; p. 439.
Adams, Harry, U. S. Navy. Phonograph. No. 1,274,361; Aug. 6; v. 253; p. 3.
Adams, Merion. (See Peckham, Samuel C., assignor.)
Adams, Reed, Lapeer, Mich. Attachment for printing-presses. No. 1,275,824; Aug. 13; v. 253; p. 440.
Adams & Westlake Company, The. (See Hamm, William S., assignor.)
Addressograph Company. (See Hubbard, Henry E. O., assignor.)
Addressograph Company. (See Lee, Ulysses G., assignor.)
Adler, Milton D., New York, N. Y. Toy. No. 1,275,997; Aug. 20; v. 253; p. 519.
Adreon, Robert E., St. Louis, Mo., assignor, by mesne assignments, to The Westinghouse Air Brake Company, Wilmerding, Pa. Automatic train-pipe connector. No. 1,276,306; Aug. 20; v. 253; p. 604.
Adriance Machine Works. (See Calleson, Amos, assignor.)
Adrianson, Alfred L., Racine, Wis. Elevator-bucket attachment. No. 1,276,351; Aug. 27; v. 253; p. 791.
Aeolian Company, The. (See Head, Robert, assignor.)
Aeolian Company. (See Langner, Lawrence, assignor.)
Aeolian Company, The. (See Schaefer, Frederick W., assignor.)
Aeolian Company, The. (See Young and Prettie, assignors.)
Ainsworth, William A., assignor of one-half to C. N. Mather, Grand Rapids, Mich. Winding and dyeing machine. No. 1,274,972; Aug. 6; v. 253; p. 179.
Aktiebolaget Svenska Tobaksmonopolet. (See Sandberg, Oscar, assignor.)
Aktiengesellschaft der Maschinenfabriken Escher Wyss & Cie. (See Zoelly, Heinrich, assignor.)
Alaimo, Joseph J., San Jose, Cal. Automobile-signal device. No. 1,276,473; Aug. 20; v. 253; p. 652.
Albert, Walter P., Chicago, Ill., assignor, by mesne assignments, to J. R. Garfield, trustee, Cleveland, Ohio. Telephone-exchange system. No. 1,274,658; Aug. 6; v. 253; p. 91.
Alberti, Emilio. (See Rasmussen and Alberti.)
Albrecht, Oscar A., Grand Rapids, Mich., assignor to O. A. Albrecht Company, Omaha, Nebr. Friction-gearing. No. 1,277,167; Aug. 27; v. 253; p. 876.
Alexander, John, Oak Creek, Colo. Railway-switch. No. 1,276,998; Aug. 20; v. 253; p. 519.
Alexander, William E., Brooklyn, N. Y. Projectile. No. 1,277,023; Aug. 27; v. 253; p. 836.
Alexanderson, Ernst F. W., Schenectady, N. Y., assignor to General Electric Company. Automatic control of phase-converters. (Reissue.) No. 14,510; Aug. 27; v. 253; p. 921.
Alexandre, James W., Old Church, Va. Mower-knife sharpener. No. 1,274,659; Aug. 6; v. 253; p. 92.
Alexis, Henry F., Grandy, Minn. Automobile-leaf-spring oiler. No. 1,275,192; Aug. 13; v. 253; p. 265.
Algoma Steel Corporation Limited. (See Smallwood, Frank, assignor.)
Allen, Charles H., Claremont, N. H. Sound-reproducing mechanism. No. 1,276,156; Aug. 20; v. 253; p. 564.
Allen, Claxton E., Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company. Relay. No. 1,274,660; Aug. 6; v. 253; p. 92.
Allen, Edward B., and B. F. Crosby, Bridgeport, Conn., assignors to The Singer Manufacturing Company. Thread-controlling mechanism. No. 1,275,999; Aug. 20; v. 253; p. 519.
Allen, James M., assignor to Fellhauer-Allen Manufacturing Company, St. Louis, Mo. Refractory material. No. 1,275,354; Aug. 13; v. 253; p. 310.
Allen, Watson H., assignor of one-half to B. E. Hepner, Marseilles, Ill. Wagon-seat connection. No. 1,275,825; Aug. 13; v. 253; p. 440.
Allen, William E., assignor to Kingman's Sample Furniture Co., Grand Rapids, Mich. Folding table. No. 1,274,973; Aug. 6; v. 253; p. 179.
Allen, William R., assignor to The American Multigraph Company, Cleveland, Ohio. Retaining-clip for type or printing plates. No. 1,274,863; Aug. 6; v. 253; p. 3.
Allen, William W., Washington, D. C. Demountable rim. No. 1,277,024; Aug. 27; v. 253; p. 836.
Allis-Chalmers Manufacturing Company. (See Barr, Joseph C., assignor.)
Almetal Manufacturing Company, The. (See Nunn, Nevvens N., assignor.)
Almetal Manufacturing Company, The. (See Thompson, Nathan D., Jr., assignor.)
Alpine, John, Stevens Point, Wis. Fourdrinier machine. No. 1,275,826; Aug. 13; v. 251; p. 440.
Alsobrook, Francis L., Alamo, Tenn. Water-heater. No. 1,275,193; Aug. 13; v. 253; p. 266.
Altenberg, George P., assignor to The Icy-Hot Bottle Company, Cincinnati, Ohio. Lunch-kit. No. 1,276,852; Aug. 27; v. 253; p. 791.
Amend, Gus H., Des Moines, Iowa. Display-case. No. 1,276,606; Aug. 20; v. 253; p. 690.
American Assembling Machine Company. (See Juengst, Charles A., assignor.)
American Brake Company, The. (See Burton, Thomas L., assignor.)
American Can Company. (See Ford, Ben K., assignor.)
American Can Company. (See Wood, Frederick P., assignor.)
American Car and Foundry Company. (See Bateman, Paul, assignor.)
American Car and Foundry Company. (See Stevenson, Frederick A., assignor.)
American Circular Loom Company. (See Lutz, George A., assignor.)
American Cyanamid Company. (See Cox, George E., assignor.)
American Dan Stopper Company. (See Nordstrom, Elof, assignor.)
American Electrical Heater Company. (See Kuhn and Hand, assignors.)
American Electrical Heater Company. (See Kuhn and Shailor, assignors.)
American Graphophone Company. (See Hinckley and Graham, assignors.)
American Graphophone Company. (See Steventon, Thomas, assignor.)
American Linseed Company. (See Schaub, Jacob, assignor.)
American Lithographic Company. (See Carter, Willis M., assignor.)
American Locomotive Company. (See Mellin, Carl J., assignor.)

American Manganese Steel Company. (See Nichols, Wesley G., assignor.)
American Molding Machine Co. (See Norcross, William C., assignor.)
American Multigraph Company, The. (See Allen, William R., assignor.)
American Multigraph Company, The. (See Reichert, Gabriel A., assignor.)
American Nitro-Products Company. (See Brownlee and Uhlinger, assignors.)
American Postage Meter Co. (See Woodward, Irving C., assignor.)
American Products Company, The. (See Hodge and Rugglee, assignors.)
American Railway Equipment Company, The. (See Whistler, David B., assignor.)
American Seeding Machine Company, The. (See Faas and Braley, assignors.)
American Steam Conveyor Corporation. (See Girtanner and Miller, assignors.)
American Steam Gauge & Valve Manufacturing Company. (See Manning, Francis J., assignor.)
American Steel Foundries. (See Bender, Frederic H., assignor.)
American Steel and Wire Company of New Jersey, The. (See Sturdevant, Charles R., assignor.)
American Telephone and Telegraph Company. (See Toomey and Read, assignors.)
American Thread Company. (See Hardman, Peter, assignor.)
American Tobacco Co. (See Tuck, Bennett J., assignor.)
American Tobacco Company, The. (See Pinney, Henry J., assignor.)
American Valve & Meter Company, The. (See Anderson, Frank C., assignor.)
American Warp-Drawing Machine Company. (See Walsh, Thomas P., assignor.)
Ames, Stephen, and T. Lovelady, Oklahoma, Okla. Machine for making fence-stays. No. 1,275,517; Aug. 13; v. 253; p. 354.
Amet, Edward H., Redondo Beach, Cal. Means for translating wave impulses. No. 1,274,661; Aug. 6; v. 253; p. 92.
Ams, Charles M. (See Arndt, Henry P., assignor.)
Anaconda Copper Mining Company. (See Gillis, Julius H., assignor.)
Anchor Cap & Closure Corporation. (See Hull, Herbert H., assignor.)
Anderegg, Gustavus A., Oak Park, and W. E. Mougey, Chicago, Ill., assignors to Western Electric Company, New York, N. Y. Telephone and telegraph cable. No. 1,277,025; Aug. 27; v. 253; p. 836.
Anderson, Brooke, assignor to Chicago Steel Post Company, Chicago, Ill. Fence-post. No. 1,276,853; Aug. 27; v. 253; p. 791.
Anderson, Erick G., Spokane, Wash. Water-motor. No. 1,275,355; Aug. 13; v. 253; p. 310.
Anderson, Frank C., assignor to The American Valve & Meter Company, Cincinnati, Ohio. Interlocking and target-operating mechanism for switch-stands. No. 1,276,157; Aug. 20; v. 253; p. 564.
Anderson, Irving A. (See Clark, Louis F., assignor.)
Anderson, James B., Shickshinny, Pa. Mine-pulley. No. 1,274,836; Aug. 6; v. 253; p. 141.
Anderson, John F., Norway, Iowa. Pipe-coupling. No. 1,275,118; Aug. 6; v. 253; p. 219.
Anderson, John R., Moline, assignor of one-half to J. Mordhorst, Rock Island, Ill. Clothes-line stretcher. No. 1,276,702; Aug. 27; v. 253; p. 753.
Anderson, Louis A., assignor to The R & G Company, Attleboro, Mass. Collar-fastener. No. 1,277,168; Aug. 27; v. 253; p. 877.
Anderson, Louis O., Brunswick, Minn. Chicken-feeder. No. 1,275,194; Aug. 13; v. 253; p. 266.
Anderson, Per A., New York, N. Y. Fan. No. 1,276,703; Aug. 27; v. 253; p. 753.
Anderson, Robert, New York, N. Y. Bracelet. No. 1,276,607; Aug. 20; v. 253; p. 690.
Anderson, Thomas T., Bement, Ill. Cultivator. No. 1,275,356; Aug. 13; v. 253; p. 311.
Anderson, Walter J., Galveston, Tex. Touch-system handrest. No. 1,277,169; Aug. 27; v. 253; p. 877.
Andersson, Bengt S., assignor to H. Sundius, Stockholm, Sweden. Splash-shield. No. 1,277,341; Aug. 27; v. 253; p. 920.
Anderwert, Eugen, H. Fritzsche, and H. Schobel, assignors to Society of Chemical Industry in Basle, Basel, Switzerland. Producing on the fibers new copper compounds of substantive orthooxyazo dyestuffs. No. 1,276,307; Aug. 20; v. 253; p. 605.
Andes, Joseph, Hasleton, Pa. Snap-hook. No. 1,276,474; Aug. 20; v. 253; p. 653.
Andrade-Lalama, Rafael, Quito, Ecuador. Telltale compass. No. 1,275,570; Aug. 13; v. 253; p. 368.
Andrén, August, Brooklyn, assignor, by mesne assignments, to Elevator Supply & Repair Company, New York, N. Y. Elevator-signal. No. 1,276,158; Aug. 20; v. 253; p. 564.
Andres, Edward M., assignor of one-half to C. I. Stokley, Denver, Colo. Spark-controlling attachment for automobiles. No. 1,275,518; Aug. 13; v. 253; p. 354.
Angulo, Alejandro *et al.* (See Sanchez, Leonardo, assignor.)
Ankele, Frederick C., Philadelphia, Pa. Adjustable electroller. No. 1,275,827; Aug. 13; v. 253; p. 440.
Antonelli, John, Chicago, Ill. Garment. No. 1,276,854; Aug. 27; v. 253; p. 792.
Apple, Vincent G., Dayton, Ohio. Armature construction for dynamo-electric machines. No. 1,275,195; Aug. 13; v. 253; p. 266.
Apple, Vincent G., Dayton, Ohio. Speed-reducing gearing. No. 1,276,855; Aug. 27; v. 253; p. 792.
Apple, Vincent G., Dayton, Ohio. Making commutators. No. 1,276,856; Aug. 27; v. 253; p. 792.
Apple, Vincent G., Dayton, Ohio. Armature construction. No. 1,276,857; Aug. 27; v. 253; p. 792.
Appomattox Iron Works and Supply Company. (See Steere, Albert L., assignor.)
Apted, Frank, Geelong, Victoria, Australia. Reinforcement of clothes pegs or pins. No. 1,277,170; Aug. 27; v. 253; p. 877.
Aramaki, Takekichi, Kiku-Gun, Fukuoka-Ken, Japan. Zinc-melting apparatus. No. 1,275,196; Aug. 13; v. 253; p. 266.
Arbetter Felling Machine Company. (See Hayes, Thomas J., assignor.)
Arcaro, Joseph G., New York, N. Y. Shock and movement absorbing support for automobile-bodies. No. 1,276,704; Aug. 27; v. 253; p. 753.
Archer, John, assignor of three-eighths to E. DeLong and one-fourth to R. B. Welliver, Red Deer, Alberta, Canada. Means for transmitting power. No. 1,277,283; Aug. 27; v. 253; p. 905.
Archibald, David D., and F. L. Louandes, Toledo, Ohio. Valve-grinding machine. No. 1,276,705; Aug. 27; v. 253; p. 754.
Arcus, James S., Chicago, Ill. Cashier's ticket. No. 1,276,159; Aug. 20; v. 253; p. 565.
Arden Manufacturing Corporation. (See Arden, Thomas R., assignor.)
Arden, Thomas R., assignor to Arden Manufacturing Corporation, New York, N. Y. Toy cannon. No. 1,276,308; Aug. 20; v. 253; p. 605.
Arens, Rudolph J., assignor to The Firestone Tire & Rubber Company, Akron, Ohio. Manufacturing tire-casings. No. 1,274,496; Aug. 6; v. 253; p. 44.
Arkin, Louis, Boston, Mass. Fastener. No. 1,275,357; Aug. 13; v. 253; p. 311.
Armbruster, Charles E. H., Denver, Colo. Measuring instrument. No. 1,276,311; Aug. 20; v. 253; p. 606.
Armour Fertilizer Works. (See Shoeld, Mark, assignor.)
Armour, John A., Baltimore, Md. Plumb-bob. No. 1,274,662; Aug. 6; v. 253; p. 92.
Armstrong, Harry H., assignor to Fidelity Brass Manufacturing Company, Chicago, Ill. Pressure-regulator. No. 1,275,641; Aug. 13; v. 253; p. 388.
Armstrong, John H., Cloquet, Minn. Rim-remover for wheels. No. 1,274,494; Aug. 6; v. 253; p. 44.
Arndt, Henry P., Amston, Conn., assignor of two-thirds to C. M. Ams, New York, N. Y. Vehicle-spring. No. 1,276,309; Aug. 20; v. 253; p. 605.
Arndt, Henry P., Amston, Conn., assignor of two-thirds to C. M. Ams, New York, N. Y. Pneumatic vehicle-spring. No. 1,276,310; Aug. 20; v. 253; p. 605.
Arnold, Frederic E., Salt Lake City, Utah. Water-tube boiler. No. 1,276,858; Aug. 27; v. 253; p. 793.
Arolan, Ernest A., Kingston, N. Y. Automobile-signal. No. 1,277,171; Aug. 27; v. 253; p. 877.
Aromint Company, The. (See Earl, Leon P., assignor.)
Arrow Electric Company, The. (See Gates, Frederic P., assignor.)
Arrow Fuse & Mfg. Co. (See Jung, Oscar H., assignor.)
Ascheim, Jules, Cedarhurst, N. Y. Making combination-leggings. No. 1,274,837; Aug. 6; v. 253; p. 141.
Aschner, Morris H., Long Island, N. Y. Number-illuminating device for motor-vehicles. No. 1,274,838; Aug. 6; v. 253; p. 141.
Ashby, Earnest J., Henderson, Ky. Trowel. No. 1,277,026; Aug. 27; v. 253; p. 837.
Ashinger, Herman H., assignor to George Cutter Company, South Bend, Ind. Film-socket. No. 1,274,495; Aug. 6; v. 253; p. 44.
Ashton, Hannah, executrix. (See Ashton, Orrell.)
Ashton, Orrell, deceased; H. Ashton, executrix, Swampscott, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Tacking mechanism. No. 1,276,000; Aug. 20; v. 253; p. 520.
Atlas Tack Company. (See Raiche, Andrew, assignor.)
Atwood, Smith F., Chicago, Ill. Liquid-fuel burner. No. 1,276,160; Aug. 20; v. 253; p. 565.
Audemars, Edmond J. F., Paris, France. Removable coupling-sleeve. No. 1,275,996; Aug. 13; v. 253; p. 488.
Auer, John, Portland, Oreg. Fruit and vegetable peeling brush. No. 1,274,663; Aug. 6; v. 253; p. 93.
Auer, John, Portland, Oreg. Drill. No. 1,275,197; Aug. 13; v. 253; p. 266.
Auld, Frederick H., Columbus, Ohio. Device for securing name-plates and the like. No. 1,274,497; Aug. 6; v. 253; p. 45.
Austin, Frederick C. (See French, James C., assignor.)
Auto Specialties Manufacturing Co. (See Bair, Clarence L., assignor.)
Auto-Speed Recorder Company, The. (See Jeske, Charles A. and C. P., assignors.)
Auto Utilities Manufacturing Company. (See Breidert, George C., assignor.)
Automatic Electric Co. (See Erickson, John, assignor.)
Automatic Electric Company. (See Lamb, Willis E., assignor.)

Automatic Exploder Company. (See Schraga, Ernest H., assignor.)
Automatic Packing & Labeling Company. (See Gwinn, George W., assignor.)
Automatic Train Control & Signal Company. (See Thurber, Guy P., assignor.)
Automatic Utilities Co. (See Eddy, Kenneth L., assignor.)
Automatic Vending Machine Co. (See Hartman, Hans, assignor.)
Averill, William H., Boston, Mass. Loose-leaf binder. No. 1,275,198; Aug. 13; v. 253; p. 267.
Avis, Braxton D., Clarksburg, W. Va. Coloration method. No. 1,277,172; Aug. 27; v. 253; p. 878.
Ayars, Walter F., Bridgeton, N. J. Street-cleaning machine. No. 1,274,664; Aug. 6; v. 253; p. 93.
Aydelotte, Gurdy L., Miami, Fla. Land-torpedo. No. 1,276,706; Aug. 27; v. 253; p. 754.
Ayer, Fernando P. (See Ryan and Ayer)
Ayres, Harold B., Columbia, S. C. Check-book. No. 1,277,284; Aug. 27; v. 253; p. 905.
B. F. Goodrich Company, The. (See Gammeter, John R., assignor.)
B. F. Goodrich Company, The. (See Lohmann, Alfred P., assignor.)
B. F. Goodrich Company, The. (See Wagenhorst, James H., assignor.)
Babb, John W., Chicago, Ill. Cutting garments. No. 1,274,364; Aug. 6; v. 253; p. 3.
Babcock, John, Long Island City, N. Y. Lumber-stacking machine. No. 1,274,839; Aug. 6; v. 253; p. 142.
Babcock & Wilcox Company, The. (See Jacobus, David S., assignor.)
Bache, Leigh S., Middlesex borough, N. J., assignor to Bound Brook Oil-Less Bearing Company, Boundbrook, N. J. Top-roll saddle and stirrup. No. 1,276,707; Aug. 27; v. 253; p. 754.
Back, Seid G., and H. L. Dolloff, Portland, Oreg. Fraud-preventing device for coin-controlled apparatus. No. 1,276,001; Aug. 20; v. 253; p. 520.
Backlund, Isaac A., assignor to Carrick Engineering Co., Chicago, Ill. Boiler-pressure regulator. No. 1,276,002; Aug. 20; v. 253; p. 520.
Backlund, Isaac A., assignor to Carrick Engineering Co., Chicago, Ill. Boiler-pressure regulator. No. 1,276,003; Aug. 20; v. 253; p. 520.
Backoff, Theresa, San Francisco, Cal. Clothes-line hanger. No. 1,275,358; Aug. 13; v. 253; p. 311.
Badger, Samuel M., St. Paul, Minn. Drum. No. 1,277,285; Aug. 27; v. 253; p. 905.
Badische Anilin & Soda Fabrik. (See Bosch, Mittasch, and Neresheimer, assignors.)
Baer, Harry H., Cleveland, Ohio. Carbureter. No. 1,277,173; Aug. 27; v. 253; p. 878.
Baggott, Edmund W. (See Dittman and Baggott.)
Bailey, Charles F., assignor to Keystone Steel & Wire Company, Peoria, Ill. Wire-feeding mechanism. No. 1,275,984; Aug. 13; v. 253; p. 485.
Bailey, Myrl E., Kane, Pa. Nut and bolt lock. No. 1,275,359; Aug. 13; v. 253; p. 311.
Bally, Thaddeus F., and F. T. Cope, assignors to The Electric Furnace Company, Alliance, Ohio. Sheet-feeding machine. No. 1,276,608; Aug. 20; v. 253; p. 690.
Bain, Charles W., Norfolk, Va. Tire-tread protector. No. 1,275,199; Aug. 13; v. 253; p. 267.
Bair, Clarence L., St. Joseph, Mich., assignor to Auto Specialties Manufacturing Co., San Francisco, Cal. Expansion-bolt. No. 1,276,708; Aug. 27; v. 253; p. 754.
Bair, Phillip W., Kansas City, Kan. Davenport. No. 1,276,859; Aug. 27; v. 253; p. 793.
Baird, Frank T., Blue Island, Ill. Electric lantern. No. 1,275,360; Aug. 13; v. 253; p. 311.
Baker, Andrew, Spring Valley, N. Y. Cleaner attachment for silk-throwing machines. No. 1,275,361; Aug. 13; v. 253; p. 312.
Baker, Frederick M. (See Lay and Baker.)
Baker, Philip H., Cleveland, Ohio. Refrigerator. No. 1,275,828; Aug. 13; v. 253; p. 441.
Baker, Roy M. (See Sundness and Baker.)
Baker, Thomas, and E. Cooke, Horwich, England. Safety catch device to prevent the accidental starting of forging and other machines. No. 1,274,498; Aug. 6; v. 253; p. 45.
Bakst, Max, Brooklyn, assignor to United States Bolt Lock Company, Inc., New York, N. Y. Lock. No. 1,277,174; Aug. 27; v. 253; p. 878.
Bakula, Frank A., assignor to Gross Chandelier Company, St. Louis, Mo. Electric-lamp fixture. No. 1,275,362; Aug. 13; v. 253; p. 312.
Baldwin Company, The. (See Gally, Robert, assignor.)
Baldwin Company, The. (See Gally, Robert A., assignor.)
Baldwin, Frank S., assignor to Monroe Calculating Machine Company, New York, N. Y. Zero-setting mechanism. No. 1,275,119; Aug. 6; v. 253; p. 219.
Ball, Albert, Claremont, N. H., assignor, by mesne assignments, to Sullivan Machinery Company, Boston, Mass. Electric channeling-machine. No. 1,275,156; Aug. 6; v. 253; p. 229.
Ball Brothers Glass Manufacturing Company. (See Wadsworth, Frank L. O., assignor.)
Ball, Francis, Glenside, Pa. Incubator. No. 1,275,829; Aug. 13; v. 253; p. 441.
Ballenberg, Adolph, deceased, New York, N. Y.; F. Ballenberg, executrix. Attaching device. No. 1,276,312; Aug. 20; v. 253; p. 606.
Ballenberg, Fannie, executrix. (See Ballenberg, Adolph.)
Ballman, Edwin C., Kirkwood, and E. P. Evers, St. Louis, Mo. Projecting apparatus. No. 1,275,120; Aug. 6; v. 253; p. 220.
Baltin, Otto. (See Köhler and Baltin.)
Bangs, Chester T., Hobart, Ind. Traction-wheel. No. 1,274,840; Aug. 6; v. 253; p. 142.
Bangs, Chester T., Hobart, Ind. Traction-wheel. No. 1,274,841; Aug. 6; v. 253; p. 143.
Bangs, Francis M., Deep River, Conn. Mold for ingots, &c. No. 1,276,609; Aug. 20; v. 253; p. 690.
Barber-Colman Company. (See Colman, Howard D., assignor.)
Barber-Colman Company. (See Peterson, Burt A., assignor.)
Barcalo Mfg. Co. (See Safford, Lewis A., assignor.)
Barfield, Robert C., Salem, Oreg. Automobile-signal. No. 1,277,175; Aug. 27; v. 253; p. 879.
Barker, Walter G., assignor to Manning Bowman & Company, Meriden, Conn. Vacuum-insulated vessel. No. 1,275,830; Aug. 13; v. 253; p. 441.
Barker, William J. (See Bigham and Barker.)
Barnard, Charles S., assignor to The Bassick Company, Bridgeport, Conn. Latch. No. 1,275,363; Aug. 13; v. 253; p. 312.
Barnard, Walter E., Hartford, Conn., assignor, by mesne assignments, to Underwood Computing Machine Company, New York, N. Y. Combined type-writing and computing machine. No. 1,274,365; Aug. 6; v. 253; p. 4.
Barnes, Arthur C., Baltimore, Md. Game. No. 1,276,475; Aug. 20; v. 253; p. 653.
Barnes, Chester A., Blue Grass, Iowa. Feeding-trough. No. 1,276,610; Aug. 20; v. 253; p. 691.
Barnes, John S., Detroit, Mich. Internal-combustion engine. No. 1,276,004; Aug. 20; v. 253; p. 521.
Barnes, Lovrick P. (See Jenkins, Samuel H., assignor.)
Barnum, Thomas E., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Electric switch. No. 1,275,200; Aug. 13; v. 253; p. 267.
Barr, Joseph C., Riverton, Minn., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Chain grizzly. No. 1,276,005; Aug. 20; v. 253; p. 521.
Barrett Company, The (See Dodge and Rhodes, assignors.)
Barrett, Joseph M., assignor to The "S-C" Regulator Company, Postoria, Ohio. Valve. No. 1,275,831; Aug. 13; v. 253; p. 441.
Barrows, Isaac P., Mount Hope, W. Va. Photographic-printing machine. No. 1,276,476; Aug. 20; v. 253; p. 653.
Barry-Wehmiller Machinery Company. (See Gallup and Wachs, assignors.)
Barsby, Thomas F., assignor, by mesne assignments, to University Garage Company, Seattle, Wash. Motor-vehicle. No. 1,276,709; Aug. 27; v. 253; p. 754.
Barsby, Thomas F., assignor, by mesne assignments, to University Garage Company, Seattle, Wash. Extensible driving-shaft for automobiles. No. 1,276,710; Aug. 27; v. 253; p. 755.
Bartholomew, Wilbur F., Brooklyn, N. Y. Date and rubber-type holder. No. 1,277,027; Aug. 27; v. 253; p. 837.
Bartlett, Walter E., Lowell, and J. H. Taryne, Groton, Mass. Envelop-sealing device. No. 1,275,832; Aug. 13; v. 253; p. 442.
Basch, David, New York, N. Y. Ear and neck protector. No. 1,274,842; Aug. 6; v. 253; p. 143.
Basley, Harvey V., Jersey City, N. J. Holder for ironing-boards and the like. No. 1,276,611; Aug. 20; v. 253; p. 691.
Bassett, Richard W. C. (See Keall, Harrington, and Bassett.)
Bassick Company, The. (See Barnard, Charles S., assignor.)
Bassisty, Michael S., Philadelphia, Pa. Pocket implement. No. 1,275,364; Aug. 13; v. 253; p. 313.
Bateman, Paul, Webster Groves, assignor to American Car and Foundry Company, St. Louis, Mo. Car-roof with interlocking frame. No. 1,276,313; Aug. 20; v. 253; p. 606.
Bätjer, Henry B., New York, N. Y., assignor to H. Maimin Co., Inc. Knife-sharpener. No. 1,275,833; Aug. 13; v. 253; p. 442.
Batlouney, Shoukry S., Portland, Me. Direction-signal for vehicles. No. 1,276,711; Aug. 27; v. 253; p. 755.
Bauer, Eugen. (See Kazenmaier and Bauer.)
Bauer, John G., Warsaw, N. Y. Forming boxes. No. 1,277,176; Aug. 27; v. 253; p. 879.
Baumann, Karl, Urmston, assignor to The British Westinghouse Electric & Manufacturing Company, Limited, London, England. Feed-water heater. No. 1,276,860; Aug. 27; v. 253; p. 793.
Baumgardner, Frank J., assignor of four-tenths to W. Hoyt and one-tenth to A. J. Hudson, Cleveland, Ohio. Color. No. 1,276,861; Aug. 27; v. 253; p. 794.
Baumgarten, Gustav A., Schulenburg, Tex. Cotton-seed flour and making the same. No. 1,276,477; Aug. 20; v. 253; p. 653.
Bausch & Lomb Optical Company. (See Kandler, Edmund, assignor.)
Bausch & Lomb Optical Company. (See Patterson, William L., assignor.)
Baush Machine Tool Company. (See Calkins, Charles H., assignor.)

Bausman, Alonzo L., Chicopee, assignor to National Equipment Company, Springfield, Mass. Plaque-cleaning machine. No. 1,275,865; Aug. 13; v. 253; p. 813.
Bausman, Alonzo L., assignor to National Equipment Company, Springfield, Mass. Apparatus for making confections. No. 1,276,006; Aug. 20; v. 253; p. 522.
Bausman, Alonzo L., Chicopee, assignor to National Equipment Company, Springfield, Mass. Packing-table. No. 1,276,007; Aug. 20; v. 253; p. 522.
Baxter, John B., assignor to Covert Manufacturing Co., Watervliet, N. Y. Snap-hook. No. 1,276,008; Aug. 20; v. 253; p. 522.
Baxter, John B., assignor to Covert Manufacturing Co., Watervliet, N. Y. Snap-hook. No. 1,276,009; Aug. 20; v. 253; p. 523.
Baxter, John B., assignor to Covert Manufacturing Co., Watervliet, N. Y. Snap-hook. No. 1,276,010; Aug. 20; v. 253; p. 523.
Baxter, John B., assignor to Covert Manufacturing Co., Troy, N. Y. Thimble. No. 1,276,011; Aug. 20; v. 253; p. 523.
Baxter, John B., assignor to Covert Manufacturing Co., Troy, N. Y. Snap-hook. No. 1,276,012; Aug. 20; v. 253; p. 523.
Baynard, William H., Braintree, Mass. Shoe and making the same. No. 1,274,665; Aug. 6; v. 253; p. 93.
Bazzoni, Lewis J., Swampscott, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Buffing-machine. No. 1,274,366; Aug. 6; v. 253; p. 4.
Beach, Charles P., Littleton, N. H. Rendering worn bushings usable. No. 1,276,013; Aug. 20; v. 253; p. 523.
Beach, Clarence E., Binghamton, N. Y., assignor, by mesne assignments, to The Gamewell Fire Alarm Telegraph Company, Newton Upper Falls, Mass. Signal system. No. 1,274,367; Aug. 6; v. 253; p. 5.
Beach, George W., Saybrook, Conn. Submarine. No. 1,277,028; Aug. 27; v. 253; p. 837.
Beach, Maude E. (See Beach, Ralph H., assignor.)
Beach, Ralph H., assignor to M. E. Beach, New York, N. Y. Self-propelled vehicle. No. 1,275,201; Aug. 6; v. 253; p. 268.
Beard, Robert N., Omaha, Nebr. Wall-paper-display rack. No. 1,276,161; Aug. 20; v. 253; p. 566.
Beasley, John L., Memphis, Tenn. Automobile mower. No. 1,274,499; Aug. 6; v. 253; p. 45.
Bechman, Henry F., assignor to Duplex Printing Press Company, Battle Creek, Mich. Ink-fountain-adjusting device. No. 1,275,642; Aug. 13; v. 253; p. 389.
Bechman, Henry F., assignor to Duplex Printing Press Company, Battle Creek, Mich. Plate-clamping means for rotary cylinders. No. 1,275,643; Aug. 13; v. 253; p. 389.
Bechtold, Reuben E., Fort Wayne, Ind., assignor to The Guardian Frigerator Company, Detroit, Mich. Flap-valve for two-cylinder compressors. No. 1,276,478; Aug. 20; v. 253; p. 653.
Bechtold, Reuben E., Fort Wayne, and A. W. Mellowes, assignors to The Guardian Frigerator Company, Detroit, Mich. Cooling apparatus. No. 1,276,612; Aug. 20; v. 253; p. 691.
Beck, Harry L., Pittsburgh, J. Weible, Coraopolis, and J. J. Houlahen, Millvale, Pa. Fuse. No. 1,274,368; Aug. 6; v. 253; p. 5.
Becker, Donald B., Watervliet, assignor to Geo. P. Ide & Co., Troy, N. Y. Soft turn-down collar. No. 1,276,479; Aug. 20; v. 253; p. 654.
Becker, Donald B., Watervliet, assignor to Geo. P. Ide & Co., Troy, N. Y. Soft collar. No. 1,276,480; Aug. 20; v. 253; p. 654.
Becker, Frederick W., New York, N. Y. Skate. No. 1,275,519; Aug. 13; v. 253; p. 354.
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Beckett, William A., Kingsville, Ontario, Canada. Cooker. No. 1,275,203; Aug. 13; v. 253; p. 268.
Bekkering, Earl H., assignor to Duluth Show Case Company, Duluth, Minn. Display-drawer. No. 1,274,843; Aug. 6; v. 253; p. 143.
Belden, Edward H., assignor to Packard Motor Car Company, Detroit, Mich. Motor-vehicle. No. 1,276,014; Aug. 20; v. 253; p. 523.
Belknap, Charles H., Brooklyn, N. Y. Game. No. 1,276,015; Aug. 20; v. 253; p. 524.
Bell, Harmon. (See Loftus, Thomas J., assignor.)
Bell & Howell Company. (See Howell, Albert S., assignor.)
Bell, John E., New York, N. Y. Water-tube boiler. No. 1,275,866; Aug. 13; v. 253; p. 313.
Bell, Landon C., Columbus, Ohio. Folding bootjack. No. 1,274,500; Aug. 6; v. 253; p. 45.
Bell, Louis, Newton, Mass. Endotoroidal lens. No. 1,275,204; Aug. 13; v. 253; p. 269.
Bell, William L., Santa Cruz, Cal. Gauze-dam surgical instrument. No. 1,275,520; Aug. 13; v. 253; p. 335.
Bender, David G., Blue Island, Ill. Concrete-forming apparatus. No. 1,275,121; Aug. 6; v. 253; p. 220.
Bender, Frederic H., assignor to American Steel Foundries, Chicago, Ill. Truck-pedestal. No. 1,275,644; Aug. 13; v. 253; p. 389.
Bender, Robert C., St. Louis, Mo. Invoice-holder. No. 1,275,367; Aug. 13; v. 253; p. 314.
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Benedetti, Vincenzo, Palisade, N. J. Shoe-retainer. No. 1,277,177; Aug. 27; v. 253; p. 879.
Benjamin, George H., New York, N. Y. Blocking attachment for strip-mills. No. 1,277,029; Aug. 27; v. 253; p. 837.
Benner, Raymond C., Fremont, Ohio, assignor, by mesne assignments, to National Carbon Company. Electric battery. No. 1,276,714; Aug. 27; v. 253; p. 756.
Bennett, Ashey C., Minneapolis, Minn. Air-cleaner. No. 1,276,016; Aug. 20; v. 253; p. 524.
Benoit, Oliver A., Lawrence, Mass. Stretch-roll. No. 1,275,368; Aug. 13; v. 253; p. 314.
Benson, Sherman S., York, Nebr. Aerial bomb-dropper. No. 1,274,501; Aug. 6; v. 253; p. 46.
Benton, D. C. (See Heath, Frank, assignor.) (Reissue.)
Berg, John, assignor to Metal Specialties Manufacturing Company, Chicago, Ill. Electric connector. No. 1,274,844; Aug. 6; v. 253; p. 143.
Berg, Louis, Taylor Falls, Minn., assignor to H. Rose, Rosemount, Nebr. Traction device for vehicle-wheels. No. 1,275,369; Aug. 13; v. 253; p. 314.
Berger, Joseph, Jr., Utica, N. Y., assignor to Union Special Machine Company, Chicago, Ill. Trimming mechanism for sewing-machines. No. 1,274,666; Aug. 6; v. 253; p. 94.
Berger, Simon, New York, N. Y. Window-shade. No. 1,277,030; Aug. 27; v. 253; p. 838.
Bergland, Carl, assignor to Gulbransen-Dickinson Company, Chicago, Ill. Tempo-lever mechanism for automatic playing-pianos. No. 1,276,314; Aug. 20; v. 253; p. 607.
Bergman, Guy H., Tanana, Alaska. Combined shaft-log, stuffing-box, and adjustable bearing. No. 1,276,613; Aug. 20; v. 253; p. 691.
Bergstrom, Edwin N., East Lynn, Mass. Automobile-wheel. No. 1,274,974; Aug. 6; v. 253; p. 179.
Berlin, George C., and C. H. Sebree, Caldwell, Idaho Vehicle-wheel. No. 1,274,667; Aug. 6; v. 253; p. 94.
Bernhard, Charles F. and H. J., Pasadena, Cal. Lubricating system for internal-combustion engines. No. 1,277,178; Aug. 27; v. 253; p. 879.
Bernhard, Harry J. (See Bernhard, Charles F. and H. J.)
Bernstein, Bernard J. (See Crandon and Bernstein.)
Bernstein, Marks M. (See Crandon and Bernstein.)
Best, Arthur T. (See Wadhams and Best.)
Best, James E. R., Boyceville, Wis. Lumber-measuring instrument. No. 1,275,370; Aug. 13; v. 253; p. 314.
Best, Otto, San Francisco, Cal. Feed device for water-softeners. No. 1,276,315; Aug. 20; v. 253; p. 607.
Best, William N., assignor of one-fourth to C. Wupper, Brooklyn, and one-fourth to C. W. Fairbank, New York, N. Y. Safety-signal for vehicles. (Reissue.) No. 14,505; Aug. 20; v. 253; p. 714.
Betts, Norman D. (See Tiemann and Betts.)
Beusch, Hermann, Lübeck, Germany. Bearing-shell or bearing-box. No. 1,276,614; Aug. 20; v. 253; p. 692.
Bey, George, Jersey City, N. J. Rotary pump. No. 1,276,615; Aug. 20; v. 253; p. 692.
Beymer, Adelbert S., Kansas City, Mo. Cultivator. No. 1,276,017; Aug. 20; v. 253; p. 524.
Beynon, Rees, Chicago, Ill., assignor to The Mechanical Rubber Company. Method and apparatus for making hollow rubber articles. No. 1,277,179; Aug. 27; v. 253; p. 880.
Bianchi, Attilio, New York, N. Y. Submarine. No. 1,276,863; Aug. 27; v. 253; p. 794.
Bibby, Thomas H., Denver, Colo. Acetylene-gas lamp. No. 1,277,286; Aug. 27; v. 253; p. 906.
Bicker, Edgar B., St. Louis, Mo. Self-closing container. No. 1,274,374; Aug. 6; v. 253; p. 7.
Bickford, Oramel S., Greenfield, Mass. Machine for fluting twist-drill blanks. No. 1,274,502; Aug. 6; v. 253; p. 46.
Bickle, Benjamin H. (See Stewart and Bickle.)
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Biedma, Carlos M., Buenos Aires, Argentina. School-bench. No. 1,276,713; Aug. 27; v. 253; p. 756.
Bienvaux, Paul, Paris, France. Telegraphic-code apparatus. No. 1,276,616; Aug. 20; v. 253; p. 692.
Biesel, Charles, El Paso, Tex. Extracting metals from ores. No. 1,276,162; Aug. 20; v. 253; p. 566.
Biesel, Charles, El Paso, Tex. Continuous vacuum-dehydrator. No. 1,276,163; Aug. 20; v. 253; p. 566.
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Biggins, James E., Port Arthur, Tex., assignor to Gulf Refining Company, Pittsburgh, Pa. Distilling oil. No. 1,274,976; Aug. 6; v. 253; p. 180.
Biggs, Florence B., New York, N. Y. Wrist-mitt. No. 1,275,837; Aug. 13; v. 253; p. 443.

Biggs, Florence B., New York, N. Y. Helmet-cap. No. 1,275,838; Aug. 13; v. 253; p. 443.
Bigham, James W., and W. J. Barker, Jacksonville, Fla. Sanitary pillow-covering. No. 1,275,205; Aug. 13; v. 253; p. 269.
Bigoe, Andrsej, Lorain, Ohio. Wire-cutting attachment for rifles. No. 1,277,031; Aug. 27; v. 253; p. 838.
Bijur Motor Appliance Company. (See Marcus, Charles, assignor.)
Bilderback, Eddy R., Buffalo, Tex. Hame attachment. No. 1,275,646; Aug. 13; v. 253; p. 390.
Billingham, Milton C. J., assignor of one-half to H. Vander Horst, Kalamazoo, Mich. Paper-stock-treating machine. No. 1,276,804; Aug. 27; v. 253; p. 794.
Billings, Frederick C., Milwaukee, Wis. Music-roll for player-pianos. No. 1,277,180; Aug. 27; v. 253; p. 880.
Bingham, Jeremiah, assignor to The Bock Bearing Company, Toledo, Ohio. Roll-housing for roller-bearings and forming the same. No. 1,275,371; Aug. 13; v. 253; p. 315.
Bird, Charles E., Minneapolis, Minn. Scale. No. 1,274,977; Aug. 6; v. 253; p. 180.
Bird, William F., Bruceton Mills, W. Va. Automatic feed-dropper. No. 1,274,845; Aug. 6; v. 253; p. 144.
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Bishop, Clifford M., Brooklyn, N. Y. Mechanism for the control of automobiles. No. 1,274,978; Aug. 6; v. 253; p. 181.
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Black, John C., Los Angeles, assignor to Standard Oil Company, Richmond, Cal. Producing gasolene. No. 1,276,648; Aug. 13; v. 253; p. 390.
Black, Paul, Algona, Iowa. Power device. No. 1,276,164; Aug. 20; v. 253; p. 566.
Black, Walter G. (See York and Black.)
Blackburn, Juditha, Los Angeles, Cal. Dress-pattern. No. 1,276,316; Aug. 20; v. 253; p. 607.
Blackmore, Henry S., Mount Vernon, N. Y. Finishing, cleaning, or polishing composition and making same. No. 1,276,481; Aug. 20; v. 253; p. 654.
Blaetus, Evangelos, Scranton, Pa. Spoon-holder for cups, &c. No. 1,276,018; Aug. 20; v. 253; p. 524.
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Blair, Stuart B., Marquez, Tex. Automobile seal-holder. No. 1,274,668; Aug. 6; v. 253; p. 94.
Blair, William R., assignor to Landis Machine Company, St. Louis, Mo. Wax-pot for sewing-machines. No. 1,275,372; Aug. 13; v. 253; p. 315.
Blake, Charles O., El Reno, Okla. Wind-motor. No. 1,277,181; Aug. 27; v. 253; p. 880.
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Blaw Steel Construction Company. (See Brynoldt, Christian, assignor.)
Blease, Herbert F. H. (See Mercer and Blease.)
Bliley, George B., Richmond, Va. Toy. No. 1,274,979; Aug. 6; v. 253; p. 181.
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Bock, William E., Toledo, assignor to The Bock Worm Gear Company, Cleveland, Ohio. Machine for cutting worms. No. 1,275,985; Aug. 13; v. 253; p. 485.
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Böckman, Oulf C., Notodden, Norway. Electrical induction-furnace. No. 1,275,206; Aug. 13; v. 253; p. 269.
Bockoven, George A., Whitehall, Mont. Burial-casket. No. 1,275,207; Aug. 13; v. 253; p. 269.
Bockshe, Ely, assignor to Modern Grinder Manufacturing Co., Milwaukee, Wis. Tool-support for grinders. No. 1,275,208; Aug. 13; v. 253; p. 269.
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Boeker, Carl H. (See Jaeger, Roth, and Boeker.)
Boericke, John J., Merion, Pa. Crucible. No. 1,277,032; Aug. 27; v. 253; p. 838.
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Bohmker, John C., and J. Gelstwhite, Kankakee, assignors to Sears, Roebuck and Company, Chicago, Ill. Plow. No. 1,275,209; Aug. 13; v. 253; p. 270.
Bohn, Frank, Baltimore, Md. Surgical instrument. No. 1,274,669; Aug. 6; v. 253; p. 94.
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Boland, Francis E., Rahway, N. J., assignor to Boland Aeroplane & Motor Company, New York, N. Y. Aeronautic apparatus. No. 1,277,036; Aug. 27; v. 253; p. 839.
Bolser, Benjamin M., Centerville, Wash. Steering device. No. 1,276,318; Aug. 20; v. 253; p. 608.
Bolyki, John, Bruceville, Ind. Carousel. No. 1,275,834; Aug. 13; v. 253; p. 442.
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Bordelean, Henry, Arguseville, N. D. Adjustable engine-bed. No. 1,275,122; Aug. 6; v. 253; p. 220.
Borden, William H., Winchester, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Fastening-inserting machine. No. 1,276,019; Aug. 20; v. 253; p. 525.
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Borge, John, assignor to Borge Incinerator Corporation, New York, N. Y. Furnace-door. No. 1,275,650; Aug. 13; v. 253; p. 391.
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Börst, Andrew J., Jr., Buffalo, N. Y. Non-skidding traction device. No. 1,276,319; Aug. 20; v. 253; p. 608.
Borstad, Hans, Christiania, Norway. Berry-gathering apparatus. No. 1,276,320; Aug. 20; v. 253; p. 608.
Bosch, Carl, A. Mittasch, and C. Neresheimer, assignors to Badische Anilin & Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany. Manufacture of urea. No. 1,274,503; Aug. 6; v. 253; p. 46.
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Bosch, Firm of Robert. (See Kazenmaier and Bauer, assignors.)
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Bostian, Homer C., Lyons, N. Y. Rule-holder. No. 1,275,835; Aug. 13; v. 253; p. 442.
Boston Wire Stitcher Company. (See Maynard, Arthur H., assignor.)
Boswell, Francis G., assignor to R. A. Boswell, Washington, D. C. Stamp and check canceling and postmarking machine. No. 1,274,847; Aug. 6; v. 253; p. 144.
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Bosworth, Wendell P., assignor to Brockton Heel Company, Brockton, Mass. Cushion-mat. No. 1,276,865; Aug. 27; v. 253; p. 795.
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Bousfield, John H. A., assignor to E. and T. Fairbanks and Company, St. Johnsbury, Vt. Platform-scale. No. 1,277,038; Aug. 27; v. 253; p. 840.
Bowen, Grover C., Coffeyville, Kans. Heating device for tank-cars. No. 1,274,504; Aug. 6; v. 253; p. 46.
Bowen, Robert A., Spokane, Wash. Valve. No. 1,276,482; Aug. 20; v. 253; p. 654.
Bowes, John E., and L. P. Searfoss, Laporte, Ind. Baby-carriage attachment. No. 1,275,521; Aug. 13; v. 253; p. 355.
Bowles, William M., assignor to International Crude Oil Storage Company, Sapulpa, Okla. Electric signal. No. 1,275,179; Aug. 6; v. 253; p. 237.
Boyce, Harrison H., Oyster Bay, N. Y. Indicating means for motor-propelled vehicles. No. 1,275,654; Aug. 13; v. 253; p. 392.
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Boye, James H., assignor to The Boye Needle Company, Chicago, Ill. Combination chart and commodity-cabinet. No. 1,275,655; Aug. 13; v. 253; p. 392.
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Boyle, Alexander M., assignor to Crane Shale Oil Corporation, Reno, Nev. Apparatus for the extraction of hydrocarbon materials. No. 1,276,866; Aug. 27; v. 253; p. 795.
Boyle, William J., assignor of one-half to G. I. Evans, Collingswood, Ontario, Canada. Die. No. 1,274,848; Aug. 6; v. 253; p. 145.
Brackett, Quinck A., Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company. Inertia-actuated charging device for electrolytic lightning-arresters. No. 1,274,670; Aug. 6; v. 253; p. 95.
Bradford, Leslie, Broken Hill, New South Wales, Australia. Separation of mixed metallic sulfids. No. 1,274,505; Aug. 6; v. 253; p. 47.

Bradley, Charles S., New York, N. Y. Producing commercially-pure copper. No. 1,275,874; Aug. 13; v. 253; p. 315.

Bradley, Franklin F., assignor to Bradley & Vrooman Company, Chicago, Ill. Measuring device. No. 1,276,867; Aug. 27; v. 253; p. 795.

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Bradley, William J., Troy, assignor to The Rail Joint Company, New York, N. Y. Rolling rail-joint bars. No. 1,277,287; Aug. 27; v. 253; p. 906.

Bradshaw, Charles E., Waterbury, assignor to Robert N. Bassett Company, Incorporated, Shelton, Conn. Buckle. No. 1,274,671; Aug. 6; v. 253; p. 95.

Bradshaw, Frank F., Boulder, Colo. Roll-paper holder and printer. No. 1,276,868; Aug. 27; v. 253; p. 796.

Bradshaw, William M., and W. G. Mylius, Wilkinsburg, Pa., assignors to Westinghouse Electric and Manufacturing Company. Prepayment watt-hour meter. No. 1,274,672; Aug. 6; v. 253; p. 95.

Bragan, Asher S. (See Martin and Bragan.)

Bragg, Frederick A., Springfield, Mass. Automobile-tire and making the same. No. 1,275,523; Aug. 13; v. 253; p. 356.

Braine, Bancroft G., assignor to The Rail Joint Company, New York, N. Y. Splice-bar for rail-joints. No. 1,276,020; Aug. 20; v. 253; p. 525.

Braitmayer, Otto E., assignor to The Tabulating Machine Company, Washington, D. C. Paper-testing machine. No. 1,277,039; Aug. 27; v. 253; p. 840.

Braley, William L. (See Faas and Braley.)

Brambach Piano Co. (See Hattemer, Justus, assignor.)

Brancart, Arthur, Fauquez-by-Virginal, Belgium. Glass-molding plunger. No. 1,274,673; Aug. 6; v. 253; p. 96.

Brandenstein, Manfred. San Francisco, Cal. Process of and apparatus for preserving food products. No. 1,277,183; Aug. 27; v. 253; p. 881.

Brandstetter, Josef, assignor to Conley Camera Company, Rochester, Minn. Shutter for cameras. No. 1,275,836; Aug. 13; v. 253; p. 443.

Brasen, Axel, Astoria, N. Y. Antiskid device No 1,277,288; Aug. 27; v. 253; p. 906.

Brashear, William R., Dayton, Ohio. Anchor-rod. No. 1,276,021; Aug. 20; v. 253; p. 525.

Brasier, William H., Corpus Christi, Tex. Combination safety-razor and hair-trimmer. No. 1,276,022; Aug. 20; v. 250; p. 525.

Brass Goods M'f'g Co. (See Frey, August J., assignor.)

Braunschweiler, John W., Palo Alto, Cal. Game. No. 1,275,210; Aug. 13; v. 253; p. 270.

Breen, James A., assignor of one-half to H. H. Miller, Washington, D. C. Morse-transmitter. No. 1,276,617; Aug. 20; v. 253; p. 692.

Breese, Alfred B., Cincinnati, Ohio, and J. Carr, Syracuse, N. Y., assignors to The Cincinnati Ball Crank Co., Oakley, Cincinnati, Ohio. Universal joint. No. 1,276,695; Aug. 20; v. 253; p. 712.

Breidenbach, William F. Indianapolis, Ind. Valve for oxygen-tanks. No. 1,276,715; Aug. 27; v. 253; p. 756.

Breidert, George C., assignor to Auto Utilities Manufacturing Company, Chicago, Ill. Ventilator. No. 1,275,211; Aug. 13; v. 253; p. 270.

Breitstein, Abraham, Richmond, Va. Relief-valve. No. 1,274,378; Aug. 6; v. 253; p. 8.

Brevard, Procter, Weatherford, Tex. Internal-combustion engine. No. 1,274,980; Aug. 6; v. 253; p. 181.

Brewen, Marvin M., Martinez, Cal. Clutch-pedal lock. No. 1,277,184; Aug. 27; v. 253; p. 881.

Brewster Film Corporation. (See Brewster, Percy D., assignor.)

Brewster, Percy D., East Orange, assignor to Brewster Film Corporation, Newark, N. J. Light-splitting device for color photography. No. 1,277,040; Aug. 27; v. 253; p. 840.

Brewster, Percy D., East Orange, assignor to Brewater Film Corporation, Newark, N. J. Photographic camera. No. 1,277,041; Aug. 27; v. 253; p. 841.

Breyley, Edward W., and J. U. Duffy, Cleveland, Ohio. Car-stop. No. 1,276,023; Aug. 20; v. 253; p. 526.

Bride, Cotter T., Washington, D. C. Reinforced ship. No. 1,274,981; Aug. 6; v. 253; p. 181.

Bridgeport Brass Company. (See Limont, Alexander W., assignor.)

Bridgewood, Charlotte A., Westwood, N. J. Cleaning device. No. 1,274,983; Aug. 6; v. 253; p. 182.

Briggs, Arthur J., Syracuse, assignor to Remington Typewriter Company, Ilion, N. Y. Type-writing machine. No. 1,274,379; Aug. 6; v. 253; p. 9.

Brillhart, William M., York, Pa. Trolley-head. No. 1,276,483; Aug. 20; v. 253; p. 654.

Brinkman, George W. (See Lockwood and Brinkman.)

Brislin, Leo F., Ashland, Ky. Socket-transformer. No 1,274,880; Aug. 6; v. 253; p. 9.

British Westinghouse Electric & Manufacturing Company, The. (See Baumann, Karl, assignor.)

Brittin, Walter S., Vallejo, Cal. Temperature-indicator. No. 1,276,024; Aug. 20; v. 253; p. 526.

Broc, Victor H., Levallois-Perret, France. Electric connector for security retaining plugs. No. 1,275,524; Aug. 13; v. 253; p. 356.

Brockett, Charles W., Brooklyn, assignor to W. R. Ostrander & Company, New York, N. Y. Electric switch. No. 1,274,674; Aug. 6; v. 253; p. 96.

Brockton Heel Company. (See Bosworth, Wendell P., assignor.)

Broekema, Jacob, assignor to Challenge Refrigerator Company, Grand Haven, Mich. Ice-chamber for refrigerators. No. 1,275,212; Aug. 13; v. 253; p. 270.

Bronski, Andrej, East St. Louis, Ill. Porch-swing. No. 1,275,375; Aug. 13; v. 253; p. 316.

Brooks, Jerome B., Syracuse, N. Y. Electric lock-strike. No. 1,274,381; Aug. 6; v. 253; p. 9.

Bropson, James, assignor of one-half to J. J. Bropson, Jr., Cleveland, Ohio. Roof-joint. No. 1,276,321; Aug. 20; v. 253; p. 609.

Bropson, James J., Jr. (See Bropson, James, assignor.)

Bronssard, L. L. (See Vidrine, Homer, assignor.)

Brown, Alfred G., assignor to Yusi Fibre Company, Los Angeles, Cal. Preparing and extracting vegetable fiber from yucca and the like. No. 1,277,185; Aug. 27; v. 253; p. 881.

Brown, Charles A., *et al.* (See Wassell, Clifford R., assignor.)

Brown, George F., St. Cloud, Minn., assignor to The International Patent Investment Company, Fargo, N. D. Grain-bin. No. 1,275,157; Aug. 6; v. 253; p. 280.

Brown, Harold W., Ithaca, N. Y., assignor to Westinghouse Electric and Manufacturing Company. Electrical measuring instrument. No. 1,274,675; Aug. 6; v. 253; p. 96.

Brown, Hugh P. (See Gorman, John H., assignor.)

Brown, Leonard, deceased, Webb City, Mo.; M. A. Brown, administratrix. Safety appliance for automobiles. No. 1,274,982; Aug. 6; v. 253; p. 182.

Brown, Leonard, deceased, Webb City, Mo.; M. A. Brown, administratrix. Combined tractor, binder, and plow-truck. No. 1,275,123; Aug. 6; v. 253; p. 220.

Brown, Mary A., administratrix. (See Brown, Leonard.)

Brown, Norman E., St. Joseph, Mich., assignor, by mesne assignments, to Wirebounds Patents Company, Kittery, Me. Machine for use in making metal-bound packages. No. 1,276,484; Aug. 20; v. 253; p. 655.

Brown, Perry, Coraopolis, Pa. Car. No. 1,275,376; Aug. 13; v. 253; p. 316.

Brown, Spencer K., Syracuse, N. Y. Surface-finishing machine. No. 1,276,167; Aug. 20; v. 253; p. 567.

Brown, William W., Burlington, N. C. Demountable rim. No. 1,276,485; Aug. 20; v. 253; p. 655.

Browne, Ernest G., Plymouth, England. Means for the attachment of bracelets to watches. No. 1,276,486; Aug. 20; v. 253; p. 656.

Browning, John M., Ogden, Utah. Firearm. No. 1,276,716; Aug. 27; v. 253; p. 756.

Brownlee, Roy H., and R. H. Uhlinger, assignors to American Nitro-Products Company, Pittsburgh, Pa. Manufacture of hydrogen and carbon-black. No. 1,276,487; Aug. 20; v. 253; p. 656.

Bruce, Vivian R., and R. G. Dickens, assignors to Hilliard Clutch and Machinery Company, Elmira, N. Y. Clutch. No. 1,275,213; Aug. 13; v. 253; p. 271.

Bruckman, Frederick A., Portland, Oreg. Mold for ice-cream-cone machines. No. 1,274,506; Aug. 6; v. 253; p. 47.

Brueck, Theodor M. (See Klein and Brueck.)

Brunk, Oscar E. W., assignor to J. J Marx, St. Louis, Mo. Pad-support for pressing-machines. No. 1,276,717; Aug. 27; v. 253; p. 757.

Brunswick-Balke-Collender Company, The. (See Nystrom, Martin, assignor.)

Brush, Alanson P., Detroit, Mich. Automobile steering mechanism. No. 1,275,839; Aug. 13; v. 253; p. 443.

Brynoldt, Christian, Pittsburgh, Pa., assignor to Blaw Steel Construction Company. Tunnel-mold form. No. 1,277,186; Aug. 27; v. 253; p. 881.

Bubenheim, Henry J., Pittsburgh, Pa. Railway-tie and rail-fastener. No. 1,275,656; Aug. 13; v. 253; p. 393.

Buch, Max, Detroit, Mich. Top for vehicles and the like. No. 1,275,214; Aug. 13; v. 253; p. 271.

Buchanan, William A., Asheville, N. C. Combined heel-plate and shank-brace. No. 1,277,289; Aug. 27; v. 253; p. 906.

Buchholz, Clarence A., Columbus, Wis. Propelling mechanism. No. 1,276,168; Aug. 20; v. 253; p. 567.

Buchmann, Edward G., Milwaukee, Wis. Carbureter. No. 1,276,169; Aug. 20; v. 253; p. 567.

Buck, Francis M. (See Lea, Frank D., assignor.)

Bucklew, Howard F., Kingwood, W. Va. Automobile-light controller. No. 1,275,525; Aug. 13; v. 253; p. 356.

Buckley, Thomas F., and S. S. Riegel, Scranton, Pa. Spring-forming machine. No. 1,275,377; Aug. 13; v 253; p. 316.

Buckman, Fred H. (See Good and Buckman.)

Budde, Lawrence, Chickasaw, Ohio. Hay-bed. No. 1,275,840; Aug. 13; v. 253; p. 444.

Buffum, Frank W. (See Culling, Merritt A., assignor.)

Buffum, Frank W. (See Finley, Ernest D., assignor.)

Bull, Arthur A., Detroit, Mich. Water-circulation system for internal-combustion engines. No. 1,274,507; Aug. 6; v. 253; p. 47.

Bullerdick, Henry, Bellevue, Iowa. Drier for seed-corn. No. 1,274,849; Aug. 6; v. 253; p. 145.

Bulley, George W., Chicago, Ill. Sanitary mouthpiece-cover for telephone-transmitters. No. 1,275,124; Aug. 6; v. 253; p. 221.

Bulley, George W., assignor to Mercury Manufacturing Company, Chicago, Ill. Automatic coupling for trackless vehicles. No. 1,277,187; Aug. 27; v. 253; p. 882.

Bulley, George W., assignor to Mercury Manufacturing Company, Chicago, Ill. Controller for electric vehicles. No. 1,277,188; Aug. 27; v. 253; p. 882.

Bulley, George W., assignor to Mercury Manufacturing Company, Chicago, Ill. Steering-gear. No. 1,277,189; Aug. 27; v. 253; p. 882.

Bullock, Arthur R., Cleveland, Ohio. Electrically-operating printing device. No. 1,275,657; Aug. 13; v. 253; p. 393.

Bullock, Norvell H., Bala, Pa. Bag-carrier. No. 1,276,322; Aug. 20; v. 253; p. 609.

Bulman, William V., Philadelphia, Pa. Multiple die-stock. No. 1,274,850; Aug. 6; v. 253; p. 145.

Burdon, William M., assignor to Burdons Limited, Bellshill, Scotland. Liquid-fuel furnace. No. 1,275,841; Aug. 13; v. 253; p. 444.

Burdons Limited. (See Burdon, William M., assignor.)

Buresch, William W., Baltimore, Md. Bottle-capping tool. No. 1,276,323; Aug. 20; v. 253; p. 609.

Buresch, William W., Baltimore, Md. Bottle-capping machine. No. 1,276,489; Aug. 20; v. 253; p. 656.

Burgess Battery Company. (See Burgess, Charles F., assignor.)

Burgess, Charles F., assignor, by mesne assignments, to Burgess Battery Company, Madison, Wis. Dry cell. No. 1,277,042; Aug. 27; v. 253; p. 841.

Burgess, Edward W., Chicago, Ill., assignor to International Harvester Company of New Jersey. Hay-loader. No. 1,275,658; Aug. 13; v. 253; p. 393.

Burgett, Clark, assignor of one-half to E. E. Haugen, Anacortes, Wash. Headlight. No. 1,277,190; Aug. 27; v. 253; p. 883.

Burgoyne, John L., San Francisco, Cal. Adjustable tray. No. 1,274,382; Aug. 6; v. 253; p. 9.

Burkart, William J. (See Hook and Burkart.)

Burnitol Manufacturing Company. (See Sheline, Orville O., assignor.)

Burns, Josiah O., assignor to Germain Seed and Plant Company, Los Angeles, Cal. Display-rack. No. 1,274,509; Aug. 6; v. 253; p. 48.

Burns, Robert L., and G. I. Keniston, Taft, Cal. Cement-dump bailer for oil-wells. No. 1,275,378; Aug. 13; v. 253; p. 317.

Buron, Joseph N., Eholt, British Columbia, Canada. Spittoon lifter and carrier. No. 1,276,170; Aug. 20; v. 253; p. 568.

Burque, Sylvain, Lynn, Mass. Car-fender. No. 1,274,508; Aug. 6; v. 253; p. 48.

Burr, Harold L., Middletown, Conn. Gasket and screen combination. No. 1,276,171; Aug. 20; v. 253; p. 568.

Burrell, William C., Kankakee, Ill. Vehicle. No. 1,276,172; Aug. 20; v. 253; p. 568.

Burt, Joseph P., Eldorado, Kans. Tug-rope holder. No. 1,274,984; Aug. 6; v. 253; p. 182.

Burton, Thomas L., assignor to The American Brake Company, St. Louis, Mo. Clasp-brake design for six-wheeled trucks. No. 1,274,676; Aug. 6; v. 253; p. 96.

Burton, Thomas L., assignor to The American Brake Company, St. Louis, Mo. Brake-rigging for six-wheeled trucks. No. 1,274,677; Aug. 6; v. 253; p. 96.

Buscher, Edna E., Indianapolis, Ind. Apparatus for purifying water. No. 1,276,025; Aug. 20; v. 253; p. 526.

Bushey, Eli J., New York, N. Y. Gas-moistening apparatus. No. 1,275,379; Aug. 13; v. 253; p. 317.

Buss, Wendell R., Holland, Mich. Motor-drive for shapers. No. 1,275,215; Aug. 13; v. 253; p. 271.

Busse, Edwin G., assignor to Chicago Railway Equipment Company, Chicago, Ill. Brake-shoe key-lock. No. 1,275,380; Aug. 13; v. 253; p. 317.

Butcher, William L., Bringhurst, Ind. Fence. No. 1,276,718; Aug. 27; v. 253; p. 757.

Butler, George P., Lebanon, N. H. Sign-post. No. 1,275,125; Aug. 6; v. 253; p. 221.

Butler, Harry J., V. J. Stevens, and M. D. Walsh, Maple Park, Ill. Vehicle-jack. No. 1,275,381; Aug. 13; v. 253; p. 318.

Butler, Joseph C., Pomona, Cal. Water circulating and cooling pump. No. 1,274,678; Aug. 6; v. 253; p. 97.

Butler, Smedley D., West Chester, assignor of one-half to P. Abrams, Philadelphia, Pa. Infantry-fire control rule or scale. No. 1,277,191; Aug. 27; v. 253; p. 883.

Butler, Theodore, Detroit, Mich. Shoe-fastener. No. 1,276,026; Aug. 20; v. 253; p. 526.

Byrd, Britton E., assignor to Mill Devices Company, Durham, N. C. Machine for making and packing cigarette-wrappers. No. 1,274,510; Aug. 6; v. 253; p. 48.

Byrd, Sol. (See Byrd, Verol H., assignor.)

Byrd, Verol H., Warrior, Ala., assignor of one-half to S. Byrd, Hickory, Ky. Invalid's bed. No. 1,274,851; Aug. 6; v. 253; p. 146.

C. C. Blake, Inc. (See Fernald, Mark E., assignor.)

C. C. Fouts Company, The. (See Fouts, Calvin C., assignor.)

C. H. Wheeler Manufacturing Company. (See Suczek, Robert, assignor.)

C. J. Tagliabue Manufacturing Company. (See Chapman, Cloyd M., assignor.)

Cadillac Motor Car Company. (See White, D'Orsay M., assignor.)

Cady, Elisha J., Oak Park, Ill. Machine for saturating stock. No. 1,275,216; Aug. 13; v. 253; p. 271.

Cagllerl, Guido E., San Francisco, and H. Murray, Ross, Cal.; said Murray assignor to said Cagllerl. Automatic controller. No. 1,276,869; Aug. 27; v. 253; p. 796.

Calder, Thomas K. (See Northrup and Calder.)

Caldwell, John O., Jr., Boston, Mass. Safety-grip. No. 1,275,217; Aug. 13; v. 253; p. 272.

California Corrugated Culvert Company. (See Thorsby, Karl J., assignor.)

Calkins, Charles H., Ludlow, Mass., assignor to Baush Machine Tool Company. Machine for grinding worm-threads. No. 1,275,218; Aug. 13; v. 253; p. 272.

Callahan, Charles J., Attleboro, assignor to Freeman-Daughaday Co., Chartley, Mass. Snap-hook. No. 1,275,842; Aug. 13; v. 253; p. 444.

Callan, William H., Franklin, Pa., assignor to Chicago Pneumatic Tool Company, Chicago, Ill. Apparatus for unloading compressors. No. 1,274,383; Aug. 6; v. 253; p. 10.

Callan, William H., Franklin, Pa., assignor to Chicago Pneumatic Tool Company, Chicago, Ill. Unloading mechanism for compressors. No. 1,275,843; Aug. 13; v. 253; p. 445.

Callender, Wallace V., Chicago, Ill. Attachment for ladies' hats. No. 1,275,219; Aug. 13; v. 253; p. 272.

Calleson, Amos, assignor to Adriance Machine Works, Inc., Brooklyn, N. Y. Bottle-capping machine. No. 1,275,220; Aug. 13; v. 253; p. 273.

Calthrop, Everard R., London, England. Parachute-launching device. No. 1,274,679; Aug. 6; v. 253; p. 97.

Calvert, Abraham L., Welland, Ontario, Canada. High-pressure valve. No. 1,274,680; Aug. 6; v. 253; p. 97.

Cameron, Frank K., Washington, D. C. Treating phosphoric-acid solutions. No. 1,276,870; Aug. 27; v. 253; p. 796.

Cameron, Jarrett L., Edgerley, assignor of one-half to Evangeline Iron Works, Ltd., Vinton, La. Well-cleaning device. No. 1,276,028; Aug. 20; v. 253; p. 527.

Cameron, William, assignor to Torris Wold & Company, Chicago, Ill. Sheet-feeding mechanism. No. 1,277,342; Aug. 27; v. 253; p. 920.

Camp, Claude W., Petoskey, Mich. Sprinkling apparatus. No. 1,275,382; Aug. 13; v. 253; p. 318.

Campbell, Carlyle B., Sully, Iowa. Tuning-transformer. No. 1,276,618; Aug. 20; v. 253; p. 693.

Campbell, Charles E., Lynn, Mass. X-ray apparatus. No. 1,274,852; Aug. 6; v. 253; p. 146.

Campbell, Charles G., Chicago, Ill., assignor to Kewaunee Mfg. Co., Kewaunee, Wis. Table-top. No. 1,276,719; Aug. 27; v. 253; p. 757.

Campbell, John A., Carbondale, Ill. Automobile-lock. No. 1,275,126; Aug. 6; v. 253; p. 221.

Campbell, Julian A., Long Beach, Cal. Eye-protector. No. 1,275,127; Aug. 6; v. 253; p. 222.

Campbell, Lawrence S. (See Campbell, Robert M. and L. S.)

Campbell, Oliver M., Kansas City, Kans. Vacuum water-purification system. No. 1,276,871; Aug. 27; v. 253; p. 796

Campbell, Robert M. and L. S., Los Angeles, Cal. Admission-registering mechanism. No. 1,275,128; Aug. 6; v. 253; p. 222.

Campbell, Sanders, Carrollton, Miss. Resilient wheel. No. 1,275,526; Aug. 13; v. 253; p. 356.

Campbell, William. (See Jackson, Leonard D., assignor.)

Campbell, William A., Pittsburgh, Pa. Combination-tool. No. 1,277,290; Aug. 27; v. 253; p. 906.

Campbell, William T., Wisley, Kans. Corn-cutter. No. 1,276,324; Aug. 20; v. 253; p. 609.

Canby, Amos G., Detroit, Mich. Ornament for the radiator-caps of automobiles No. 1,275,384; Aug. 13; v. 253; p. 318.

Candee, Andrew R. (See Hellmund, Meyer, and Candee.)

Canfield, Philemon B., Syracuse, N. Y. Piston-ring. No. 1,277,291; Aug. 27; v. 253; p. 907.

Canion, William G., Baltimore, Md. Triple valve. No. 1,275,129; Aug. 6; v. 253; p. 222.

Capen, George H. (See Thomson, Alfred J., assignor.)

Caracristi, Virginius Z., Albany, N. Y., assignor to Locomotive Pulverized Fuel Company. Burning pulverized fuel. No. 1,274,384; Aug. 6; v. 253; p. 10.

Carbo-Hydrogen Company of America. (See Harris, John, assignor.)

Carborundum Company, The. (See Linbarger, Silas C., assignor.)

Carborundum Company, The. (See Tone, Frank J., assignor.)

Cardwell, James R., assignor to Union Draft Gear Company, Chicago, Ill. Draft-gear. No. 1,275,527; Aug. 13; v. 253; p. 356.

Carhart, George E. (See Smith, Friend W., Jr., assignor.) (Reissue.)

Carhart, Herbert A., Syracuse, assignor to Remington Typewriter Company, Ilion, N. Y. Type-writing machine. No. 1,174,985; Aug. 6; v. 253; p. 183.

Carichoff, Eugene R., Schenectady, N. Y., assignor to General Electric Company. Electromagnetic switch. No. 1,275,844; Aug. 13; v. 253; p. 445.

Carichoff, Eugene R., Schenectady, N. Y., assignor to General Electric Company. Electromagnetic switch. No. 1,275,845; Aug. 13; v. 253; p. 445.

Carlin, Samuel E., Chicago, Ill., assignor, by mesne assignments, to Underwood Computing Machine Company, New York, N. Y. Calculating-machine. No. 1,275,528; Aug. 13; v. 253; p. 357.

Carling, Rose S., Los Angeles, Cal. Valve. No. 1,276,325; Aug. 20; v. 253; p. 610.

Carlson, John, and M. Samuels, Idaho. Package-tie. No. 1,275,130; Aug. 6; v. 253; p. 229.
Carlson, John D., Turlock, Cal. Bean-cleaner. No. 1,275,385; Aug. 13; v. 253; p. 319.
Carlson, Mathias. (See Carlson, John and M.)
Carlson, Oscar B., and F. Otterdahl, Månsbo, Avesta, Sweden. Explosive. No. 1,277,043; Aug. 27; v. 253; p. 841.
Carmichael, Theodore. (See Dishman, Dana W., assignor.)
Carnegie, Alfred Q. (See Parsons, Carnegie, and Cook.)
Carney, John G. (See Wagner and Carney.)
Carolin, Norbert, New York, N. Y. Airplane. No. 1,274,986; Aug. 6; v. 253; p. 183.
Carpenter, Alexander, assignor to National Tractor & Plow Company, Carey, Ohio. Traction-wheel. No. 1,276,173; Aug. 20; v. 253; p. 569.
Carpenter, Alexander, assignor to National Tractor & Plow Company, Carey, Ohio. Plow. No. 1,276,720; Aug. 27; v. 253; p. 757.
Carr, Fred S., Newton, Mass. Rubber heel. No. 1,274,853; Aug. 6; v. 253; p. 146.
Carr, James. (See Breeze and Carr.)
Carrick Engineering Co. (See Backlund, Isaac A., assignor.)
Carroll, Edward M., Port Tampa City, Fla. Locomotive arch-brick. No. 1,275,386; Aug. 13; v. 253; p. 319.
Carroll, Fred M., Dayton, Ohio. Pencil. No. 1,276,029; Aug. 20; v. 253; p. 527.
Carroll, James T., Billings, Mont. Hollow-slab building structure. No. 1,274,987; Aug. 6; v. 253; p. 183.
Carson, Edward A. (See Gray, George E., asignor.)
Carswell, Joseph S., Boone, Iowa. Rear-axle stand. No. 1,274,681; Aug. 6; v. 253; p. 98.
Carter, Willis M., assignor to American Lithographic Company, New York, N. Y. Hinge. No. 1,276,174; Aug. 20; v. 253; p. 569.
Cartwright, Burr M., Syracuse, N. Y. Power-shears. No. 1,275,659; Aug. 13; v. 253; p. 394.
Cartwright, Chapin A., Chicago, Ill. Motor. No. 1,276,721; Aug. 27; v. 253; p. 757.
Carty, Samuel C., Washington, N. C. Refrigerating apparatus. No. 1,277,192; Aug. 27; v. 253; p. 883.
Cary, James H., Boston, Mass., assignor of one-half to W. H. Griffith, Narragansett Pier, R. I. Lock-nut. No. 1,276,175; Aug. 20; v. 253; p. 569.
Cary, Spencer C., Brooklyn, N. Y. Electric welder. No. 1,276,030; Aug. 20; v. 253; p. 528.
Case, Frank E., Schenectady, N. Y., assignor to General Electric Company. Switch structure. No. 1,275,846; Aug. 13; v. 253; p. 445.
Casper, Albert, assignor of one-third to W. W. Weir, Vallejo, Cal. Meter-box. No. 1,276,031; Aug. 20; v. 253; p. 528.
Casper, Irwin G., Philadelphia, Pa. Container for talking-machine records. No. 1,276,326; Aug. 20; v. 253; p. 610.
Cassel, Gunnar E., Stockholm, Sweden, assignor to A. L. O. A. Leffler, Djursholm, Sweden. Power-transmission gear. No. 1,277,193; Aug. 27; v. 253; p. 883.
Casserly, Thomas D., Chicago, Ill., assignor to Abram Cox Stove Company, Philadelphia, Pa. Boiler-furnace. No. 1,276,490; Aug. 20; v. 253; p. 657.
Cassidy, George W., New York, N. Y. Hood or shade for a lamp. (Reissue.) No. 14,511; Aug. 27; v. 253; p. 922.
Caswell, Wallace, Cherokee, Iowa. Baling-machine. No. 1,274,682; Aug. 6; v. 253; p. 98.
Catron, John, Rosenberg, Tex. Burner. No. 1,276,619; Aug. 20; v. 253; p. 693.
Cavanagh, James, Boston, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Method of and apparatus for operating upon the bottoms of boots and shoes. No. 1,275,221; Aug. 13; v. 253; p. 273.
Cayo, Julius N., Gary, Ind. Can-opener. No. 1,276,620; Aug. 20; v. 253; p. 693.
Chadeloid Chemical Company. (See McAdam, Charles, assignor.)
Chadima, Frank, assignor to J. G. Cherry Company, Cedar Rapids, Iowa. Apparatus for pasteurizing, cooling, and ripening milk, cream, and other liquids. (Reissue.) No. 14,512; Aug. 27; v. 253; p. 922.
Chadwick, Lee S., East Cleveland, assignor to The Cleveland Metal Products Company, Cleveland, Ohio. Thermometer installation. No. 1,274,512; Aug. 6; v. 253; p. 49.
Chadwick, Lee S., assignor to The Cleveland Metal Products Company, Cleveland, Ohio. Joint. No. 1,274,988; Aug. 6; v. 253; p. 184.
Chadwick, Lee S., East Cleveland, assignor to The Cleveland Metal Products Company, Cleveland, Ohio. Oil-stove. No. 1,274,989; Aug. 6; v. 253; p. 184.
Chadwick, Lee S., East Cleveland, assignor to The Cleveland Metal Products Company, Cleveland, Ohio. Oil-stove. No. 1,276,872; Aug. 27; v. 253; p. 796.
Challenge Refrigerator Company. (See Broekema, Jacob, assignor.)
Chalman, John E., assignor to Union Special Machine Company, Chicago, Ill. Presser-foot for sewing-machines. No. 1,275,387; Aug. 13; v. 253; p. 319.
Chamberlen, Perry R., Seattle, Wash. Fireless cooker. No. 1,275,222; Aug. 13; v. 253; p. 273.
Chamberlin, Newton F., Libertyville, Ill. Submarine tower-barge for raising sunken vessels. No. 1,276,327; Aug. 20; v. 253; p. 610.
Chambers, Samuel B., Chicago, Ill. Producing laundry starch. No. 1,276,722; Aug. 27; v. 253; p. 758.
Champagne, Arthur J., assignor to C. W. Schildwachter, New York, N. Y. Demountable top for motor-vehicles. No. 1,274,854; Aug. 6; v. 253; p. 146.
Champion, Abraham L., Boston, Mass. Step-ladder. No. 1,274,683; Aug. 6; v. 253; p. 98.
Chapin, Sumner R., Springfield, Mass. Direction-indicator for motor-vehicles. No. 1,275,131; Aug. 6; v. 253; p. 222.
Chapman, Cloyd M., Douglaston, N. Y., assignor to C. J. Tagliabue Manufacturing Company. Burner for closed oil-testers. No. 1,275,223; Aug. 13; v. 253; p. 274.
Chappelle, Charles C. (See Wade and Chappelle.)
Charest, Joseph, San Francisco, Cal. Vehicle attachment. No. 1,274,990; Aug. 6; v. 253; p. 184.
Chase, Carl W. (See Hovey and Chase.)
Chase, Cassius S. (See McLaughlin, William H., assignor.)
Checkley, George W., New York, N. Y. Baby-basket attachment. No. 1,277,292; Aug. 27; v. 253; p. 907.
Cheek, George C., assignor of one-sixth to O. E. Cheek and one-sixth to R. J. Morrissey, Sacramento, Cal. Direction-indicator. No. 1,276,873; Aug. 27; v. 253; p. 797.
Cheek, Omer E., *et al.* (See Cheek, George C., assignor.)
Chemical Products Company. (See Esselen and Mork, assignors.)
Chernack, Abel E., New York, N. Y. Rack for music-rolls or the like. No. 1,275,132; Aug. 6; v. 253; p. 223.
Chertok, Moses A., Roxbury, Mass. Receiving-hopper for metal scraps and filings. No. 1,275,847; Aug. 13; v. 253; p. 446.
Chesbrough, Fremont B., New York, N. Y. Seed-planter. No. 1,274,855; Aug. 6; v. 253; p. 147.
Chevalier, John F. (See Griswold, Albert A., assignor.)
Chevrolet Motor Company. (See Mason and Sturt, assignors.)
Chicago Pneumatic Tool Company. (See Callan, William H., assignor.)
Chicago Railway Equipment Company. (See Busse, Edwin G., assignor.)
Chicago Railway Equipment Company. (See Cornwall, Frederick R., assignor.)
Chicago Railway Equipment Company. (See Van Sweringen, George N., assignor.)
Chicago Steel Post Company. (See Anderson, Brooke, assignor.)
Childers, Frank, Carterville, Ill. Fence-post. No. 1,277,293; Aug. 27; v. 253; p. 907.
Chile Exploration Company. (See Monrath, Gustav, asignor.)
Chladek, Martin, Shamokin, Pa. Tree-trimming shears. No. 1,275,529; Aug. 13; v. 253; p. 357.
Chmielinski, Gregory, Chicago, Ill. Flying-machine. No. 1,276,032; Aug. 20; v. 253; p. 528.
Christensen, Emil, Portland, Oreg. Variable-stroke mechanism. No. 1,275,224; Aug. 13; v. 253; p. 274.
Christman, Peter, Green Bay, Wis. Rotary pump. No. 1,275,388; Aug. 13; v. 253; p. 319.
Church & Dwight Company. (See Schroeder and Tooker, assignors.)
Church, Harold D., assignor to Packard Motor Car Company, Detroit, Mich. Motor-vehicle. No. 1,275,133; Aug. 6; v. 253; p. 223.
Cincinnati Ball Crank Co. (See Breeze and Carr, asignors.)
Cishek, John, Grantwood, N. J. Necktie-holder. No. 1,277,194; Aug. 27; v. 253; p. 884.
Clark, Archie P., Alvaston, British Columbia, Canada. Shell. No. 1,275,660; Aug. 13; v. 253; p. 394.
Clark, Benjamin, Des Moines, Iowa. Combination rounding and molding machine. No. 1,275,530; Aug. 13; v. 253; p. 357.
Clark, Charles E., Hubbard, Iowa. Seed-corn-sampling machine. No. 1,276,328; Aug. 20; v. 253; p. 610.
Clark, Louis F., Wilmington, Del., assignor of one-half to I. A. Anderson, Grand Rapids, Mich. Internal-combustion engine. No. 1,275,848; Aug. 13; v. 253; p. 446.
Clark, Nelson D., assignor to Union Special Machine Company, Chicago, Ill. Cross-thread-laying mechanism for sewing-machines. No. 1,275,389; Aug. 13; v. 253; p. 320.
Clark, Robert G., Brooklyn, N. Y. Apparatus for packing ground or comminuted material. No. 1,275,601; Aug. 13; v. 253; p. 395.
Clark, Thomas T., Andover, Mass. Circular-counter locking device. No. 1,274,991; Aug. 6; v. 253; p. 184.
Clarke, Louis, College Point, N. Y. Bottle-cleaner. No. 1,276,874; Aug. 27; v. 253; p. 797.
Clary Von Carlsberg, John P., Worcester, Mass. Picture-frame. No. 1,275,662; Aug. 13; v. 253; p. 395.
Clausen, Henry P., Mount Vernon, N. Y., assignor, by mesne assignments, to Western Electric Company, Incorporated. Contact-bank. No. 1,276,491; Aug. 20; v. 253; p. 657.
Clear Vision Windshield Company. (See Frost, Harry W., assignor.)
Clere, Henry C., Washington, D. C. Sheath-removing tool. No. 1,275,225; Aug. 13; v. 253; p. 274.

Cleveland Folding Machine Company, The. (See Hitchcock, Reuben, assignor.)
Cleveland Metal Products Company, The. (See Chadwick, Lee S., assignor.)
Cleveland Tractor Company, The. (See White, Rollin H., assignor.)
Clews, Charles E., Paeroa, Auckland, New Zealand. Combined window-sash fastener, lifter, and antirattler. No. 1,275,531; Aug. 13; v. 253; p. 358.
Cline, Allan J., Chicago, Ill. Motor-controller. No. 1,274,684; Aug. 6; v. 253; p. 99.
Cline, James M., Turtle Creek, Pa., assignor to Westinghouse Electric and Manufacturing Company. Chuck for machine-tools. No. 1,274,685; Aug. 6; v. 253; p. 99.
Cloakey, William J. P., Brantford, Ontario, Canada. Dust-collector. No. 1,275,663; Aug. 13; v. 253; p. 395.
Clough, Alfred N. and C. W., Chowchilla, Cal. Folding cot. No. 1,276,033; Aug. 20; v. 253; p. 528.
Clough, Charles W. (See Clough, Alfred N. and C. W.)
Cluett, Sanford L., Hoosick Falls, N. Y. Attachment for mowers and the like. No. 1,275,390; Aug. 13; v. 253; p. 320.
Clulee, Stephen J., Attleboro, Mass. Tag. No. 1,275,226; Aug. 13; v. 253; p. 275.
Coalite, Limited. (See Wellington, Stephen N., assignor.)
Coanda, Henri, Paris, France. Construction of wagons. No. 1,276,621; Aug. 20; v. 253; p. 693.
Coburn Trolley Track M'f'g Co. (See Stewart, John H., assignor.)
Cochran, Clyde E., assignor to The Elwell-Parker Electric Company, Cleveland, Ohio. Industrial truck. No. 1,275,849; Aug. 13; v. 253; p. 447.
Coffee, Robert W., assignor of three-tenths to W. P. Redd and three-tenths to C. C. Satterfield, Richmond, Va. Viscous stereotyping-mat compound. No. 2,276,492; Aug. 20; v. 253; p. 658.
Coghlan, Raymond G., Newark, N. J. Automobile-body. No. 1,277,294; Aug. 27; v. 253; p. 907.
Cohen, Barney. (See Puretz and Cohen.)
Colin Machine Manufacturing Company. (See Potter, Thomas L., assignor.)
Colburn, Irving W., assignor to The Toledo Glass Company, Toledo, Ohio. Sheet-glass-drawing machanism. No. 1,274,385; Aug. 6; v. 253; p. 10.
Colby, Fred, Tuxedo Park, N. Y. Pneumatic tire. No. 1,276,875; Aug. 27; v. 253; p. 797.
Cole, Robert C., assignor to The Johns-Pratt Company, Hartford, Conn. Cut-out. No. 1,275,391; Aug. 13; v. 253; p. 321.
Cole, Robert C., assignor to The Johns-Pratt Company, Hartford, Conn. Inclosed electric fuse. No. 1,277,044; Aug. 27; v. 253; p. 841.
Cole, Robert C., assignor to The Johns-Pratt Company, Hartford, Conn. Electric-fuse link. No. 1,277,045; Aug. 27; v. 253; p. 841.
Cole, William H., Waltham, Mass. System of electrical distribution. No. 1,276,331; Aug. 20; v. 253; p. 611.
Coleman, Clyde J., New Rochelle, N. Y. Combined kinetoscopic and phonographic apparatus. No. 1,275,227; Aug. 13; v. 253; p. 275.
Coleman, Clyde J., New York, N. Y. Photographic film. No. 1,276,330; Aug. 20; v. 253; p. 611.
Colgan, James W., *et al.* (See Scott, Jacob R., assignor.)
Colle, Achilles, Doylestown, Pa. Marine vessel. No. 1,275,134; Aug. 6; v. 253; p. 223.
Colley, Clayton D., Narrows, Va. Liner for transmission and brake bands. No. 1,274,686; Aug. 6; v. 253; p. 99.
Collings, William A., Kansas City, Mo. Reinforcement for concrete columns. No. 1,274,687; Aug. 6; v. 253; p. 100.
Collins, Dan, Baker, Oreg. Lineman's device. No. 1,275,392; Aug. 13; v. 253; p. 321.
Collins, John. (See Dement, Isaac S., assignor.)
Collins, John W. B., assignor to L. E. Davis, Baltimore, Md. Carousel. No. 1,275,393; Aug. 13; v. 253; p. 321.
Collins, Michael H., Tiffin, Ohio. Jack. No. 1,276,176; Aug. 20; v. 253; p. 569.
Collis Company, The. (See Collis, George, assignor.)
Collis, Florence M., executrix. (See Collis, George.)
Collis, George, deceased; F. M. Collis, executrix, assignor to The Collis Company, Clinton, Iowa. Poultry-coop. No. 1,276,723; Aug. 27; v. 253; p. 758.
Colman, Howard D., assignor to Barber-Colman Company, Rockford, Ill. Winder. No. 1,274,386; Aug. 6; v. 253; p. 11.
Colman, Howard D., assignor to Barber-Colman Company, Rockford, Ill. Yarn-carrier support. No. 1,274,387; Aug. 6; v. 253; p. 11.
Colman, Howard D., assignor to Barber-Colman Company, Rockford, Ill. Creel. No. 1,275,850; Aug. 13; v. 253; p. 447.
Columbian Rope Company. (See Everett, Frederick M., assignor.)
Comfort, Michael, Southington, Conn. Lawn-mower. No. 1,275,851; Aug. 13; v. 253; p. 447.
Commercial Wireless & Development Co. (See Pridham, Edwin S., assignor.)
Commonwealth Steel Company. (See Frede, Charles F., assignor.)
Commonwealth Steel Company. (See Pflager, Harry M., assignor.)
Commonwealth Steel Company. (See Westlake, Charles T., assignor.)
Compana, Domenic M., Chicago, Ill. China-kiln attachment. No. 1,275,383; Aug. 13; v. 253; p. 318.
Congoleum Company, The. (See Prifold, George, assignor.)
Conill, Enrique J. (See Rogers, Clarence T., assignor.)
Conkling, C. W. (See Nelson, Willoughby C., assignor.)
Conley Camera Company. (See Brandstetter, Josef, assignor.)
Connell, Thomas, Iowa City, Iowa. Damper-regulator. No. 1,274,511; Aug. 6; v. 253; p. 49.
Connor, Herschel M., and D. D. Miles, assignors to Safety-graph Educational Film Company, Inc., San Francisco, Cal. Film-feeding mechanism. No. 1,277,195; Aug. 27; v. 253; p. 884.
Conrad, Frank, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company. Starting system for automobiles. No. 1,274,992; Aug. 6; v. 253; p. 185.
Conran, William F., Brooklyn, N. Y. Fitting for standpipe systems. No. 1,275,532; Aug. 13; v. 253; p. 358.
Constantine, Henry A., Niagara Falls, N. Y. Wet-machine. No. 1,275,394; Aug. 13; v. 253; p. 321.
Continental Can Company. (See Taliaferro, John C., assignor.)
Continental Lens Company, The. (See Quimby, Clarence E., asignor.)
Continental Motors Corporation. (See Hopkins, Henry, assignor.)
Convex Incandescent Mantle Company Limited, The. (See Hersey, Maxim H., assignor.)
Coogan, Jesse C., Milwaukee, Wis. Heating system. No. 1,275,852; Aug. 13; v. 253; p. 447.
Cook, Clarence C. (See Scott and Cook.)
Cook, Claude H., Youngstown, Ohio., assignor of one-fourth to S. D. L. Jackson and one-fourth to J. W. Fawcett. Fuel-vaporizer. No. 1,276,332; Aug. 20; v. 253; p. 611.
Cook, Frank B., assignor, by mesne assignments, to Frank H. Cook Company, Chicago, Ill. Nutcracker. No. 1,274,856; Aug. 6; v. 253; p. 147.
Cook, Frederick B., *et al.* (See Smith, Elta C., assignor.)
Cook, Judson, Albany, N. Y. Brake-shoe. No. 1,275,853; Aug. 13; v. 253; p. 447.
Cook, Stanley S. (See Parsons, Carnegie, and Cook.)
Cook, Stanley S. (See Parsons, Cook, and Douglas.)
Cooke, Edwin. (See Baker and Cooke.)
Cooke, Samuel B., Richmond, Va. Ticket-holder. No. 1,276,493; Aug. 20; v. 253; p. 658.
Cooley, James B., Bath, N. Y. Coffee-pot. No. 1,276,177; Aug. 20; v. 253; p. 570.
Cooley, William L., Saltville, assignor to W. R. Dawson, Roanoke, Va. Hollow-piston water-valve. No. 1,275,854; Aug. 13; v. 253; p. 448.
Cooney, Charles A., assignor of one-half to R. A. Cooney, Erie, Pa. Shingle-packing machine. No. 1,274,388; Aug. 6; v. 253; p. 12.
Cooney, Richard A. (See Cooney, Charles A., assignor.)
Coons, Charles O., Springfield, Ill. Driving mechanism. No. 1,276,622; Aug. 20; v. 253; p. 693.
Cooper, Carl F., Pesotum, Ill. Clothes-fastener. No. 1,275,533; Aug. 13; v. 253; p. 358.
Cooper, Francis W., and W. H. Yawger, Montreal, Quebec, Canada; said Yawger assignor to said Cooper. Rail-anchor. No. 1,276,178; Aug. 20; v. 253; p. 570.
Cooper, Hugh S., Cleveland, Ohio, assignor to The General Alloys Company. Alloy. No. 1,277,046; Aug. 27; v. 253; p. 842.
Cooper, Isidor, and O. F. Presbrey, Brooklyn, assignors to Otis-Flagg Corporation, New York, N. Y. Clamp. No. 1,274,688; Aug. 6; v. 253; p. 100.
Cooper, Isidor, and O. F. Presbrey, Brooklyn, assignors to Otis-Flagg Corporation, New York, N. Y. Clamp. No. 1,274,689; Aug. 6; v. 253; p. 100.
Cope, Frank T. (See Baily and Cope.)
Copping, John L., New Orleans, La. Monkey-wrench. No. 1,275,855; Aug. 13; v. 253; p. 448.
Copps, Mike, Reidsville, Ga. Cure or repair for automobile-tire rim-cuts and blow-outs. No. 1,276,179; Aug. 20; v. 253; p. 570.
Corbett, Jay R., New Wilson, Okla. Spudding-shoe. No. 1,275,395; Aug. 13; v. 253; p. 322.
Corbin, John C., Mansfield, La. Sugar-cane-windrowing machine. No. 1,276,624; Aug. 20; v. 253; p. 694.
Corcoran, Edward W., and F. W. Pund, Cincinnati, Ohio. Stabilizing-spring for bobbins. No. 1,275,396; Aug. 13; v. 253; p. 322.
Cork, Frank P., Audley, Newcastle, England. Field telephone and telegraph. No. 1,274,857; Aug. 6; v. 253; p. 147.
Corn Huskers Investment Co. (See Godbersen, Henry, assignor.)
Cornwall, Frederick R., St. Louis, Mo., assignor to Chicago Railway Equipment Company, Chicago, Ill. Fourth-point support for brake-beams. No. 1,277,196; Aug. 27; v. 253; p. 884.
Corona Typewriter Company. (See Latta, Emmit G., assignor.)
Corrugated Veneer Packing Products Co. (See De Vos and Dering, assignors.)
Cortella, Alfonso, Philadelphia, Pa. Talking-machine. No. 1,274,690; Aug. 6; v. 253; p. 100.
Cory, Joseph J., Rochester, N. Y. Non-refillable bottle. No. 1,275,856; Aug. 13; v. 253; p. 448.
Costello, George J. (See Costello, Joseph P., assignor.)

Costello, Joseph P., assignor of one-half to G. J. Costello, Philadelphia, Pa. Warp-let-off control. No. 1,275,534; Aug. 13; v. 253; p. 358.

Costello, Walter J., *et al.* (See Duffy, Charles H., assignor.)

Costmeter Company. (See Quigley, John T., assignor.)

Coull, Thomas C., and W. E. McLean, Dunedin, New Zealand. Paper-file. No. 1,275,397; Aug. 13; v. 253; p. 322.

Counard, Xavier F., Brussels, Wis. Grading-machine. No. 1,276,876; Aug. 27; v. 253; p. 798.

Courtney, Thomas S., assignor to Marseilles Company, East Moline, Ill. Chain-tightener. No. 1,275,398; Aug. 13; v. 253; p. 322.

Coventry Electric Clock Company Limited. (See Rushton, Thomas, assignor.)

Covert Manufacturing Co. (See Baxter, John B., assignor.)

Covert, Stephen D., Denver, Colo. Railway-tie and rail-fastener. No. 1,276,877; Aug. 27; v. 253; p. 798.

Cowley, James T., Minot, assignor to The Lamson Company, Boston, Mass. Conveyer. No. 1,276,724; Aug. 27; v. 253; p. 758.

Cox, Charles E., San Pedro, Cal. Machine-drill. No. 1,275,857; Aug. 13; v. 253; p. 448.

Cox, George E., Niagara Falls, assignor to American Cyanamid Company, New York, N. Y. Improving the grade of calcium cyanamid. No. 1,275,535; Aug. 13; v. 253; p. 359.

Cox, Martin E., Carmichael, Md. Transmission mechanism. No. 1,277,295; Aug. 27; v. 253; p. 908.

Cox, Victor L., assignor of one-half to A. Schonenberger, Akron, Ohio. Core. No. 1,274,858; Aug. 6; v. 253; p. 147.

Coy, Harris S., Anderson, Ind. Temperature-regulating system. No. 1,276,878; Aug. 27; v. 253; p. 798.

Crabbs Reynolds Taylor Company. (See Gray, Harold L., assignor.)

Craig, Richard M., San Antonio, Tex. Advertising-sign. No. 1,276,494; Aug. 20; v. 253; p. 658.

Craig, St. George, Henderson, Ky. Garment-holder. No. 1,276,034; Aug. 20; v. 253; p. 529.

Cramer, Charles F., Indiana, Pa. Sharpening appliance. No. 1,274,513; Aug. 6; v. 253; p. 49.

Cramer, George H., assignor to Hershell-Spillman Co., North Tonawanda, N. Y. Electric-lighting system for carousels. No. 1,274,993; Aug. 6; v. 253; p. 185.

Cramer, William. (See Jacobs and Cramer.)

Crandon, Joseph B., M. M., and B. J. Bernstein, Portland, Me. Non-freezable faucet. No. 1,277,197; Aug. 27; v. 253; p. 884.

Crane, Adolphus G., assignor to Crane Shale Oil Corporation, Reno, Nev. Extracting hydrocarbon materials from shale and similar earthy material. No. 1,276,879; Aug. 27; v. 253; p. 798.

Crane, Arthur B., Belleville, N. J. Calendar. No. 1,274,994; Aug. 6; v. 253; p. 185.

Crane, Newton, Boston, Mass. Tractor attachment for motor-cars. No. 1,276,035; Aug. 20; v. 253; p. 529.

Crane Shale Oil Corporation. (See Boyle, Alexander M., assignor.)

Crane Shale Oil Corporation. (See Crane, Adolphus G., assignor.)

Crawford, David F., Pittsburgh, Pa. Water-scoop apparatus. No. 1,276,880; Aug. 27; v. 253; p. 799.

Cregier, Nathaniel B., Chicago, Ill. Signal system. No. 1,274,514; Aug. 6; v. 253; p. 50.

Cretsinger, Louis A., Deshler, and J. A. Workman, Cleveland, Ohio. Timber-preserving composition. No. 1,276,725; Aug. 27; v. 253; p. 759.

Creveling, John L., New York, N. Y., assignor to Safety Car Heating and Lighting Company. Brush-holder for dynamos. No. 1,276,726; Aug. 27; v. 253; p. 759.

Creveling, John L., New York, N. Y., assignor to Safety Car Heating and Lighting Company. Reversible brush-holder for use with dynamos. No. 1,276,727; Aug. 27; v. 253; p. 759.

Crittenden, Philip L., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Protective device for motor-compressors. No. 1,275,530; Aug. 13; v. 253; p. 359.

Crockett, John T., Cartersville, Ky. Suction apparatus. No. 1,276,495; Aug. 20; v. 253; p. 658.

Crombie, Benjamin B., Port Chester, N. Y. Platinumizing metal surfaces. No. 1,274,995; Aug. 6; v. 253; p. 186.

Crompton, Randolph, Chatham, Mass. Filling-replenishing mechanism for looms. No. 1,276,180; Aug. 20; v. 253; p. 570.

Crooks, Moffat, Enfield Wash, Ponders End, England. Means for launching boats from ships. No. 1,275,396; Aug. 13; v. 253; p. 322.

Crosby, Benjamin F. (See Allen and Crosby.)

Crosley, Fowel, Jr., Cincinnati, Ohio. Flag-holder. No. 1,276,496; Aug. 20; v. 253; p. 658.

Cross, Francis J., Charlton, England, assignor to Eastman Kodak Company, Rochester, N. Y. Focusing mechanism for cameras. No. 1,275,858; Aug. 13; v. 253; p. 449.

Cross, W. M. (See Hopkins, Truman P., assignor.)

Crosta, William, Stamford, Conn. Sash-fastener. No. 1,276,333; Aug. 20; v. 253; p. 612.

Crouse-Hinds Company. (See Hastings and Smith, assignors.)

Crouse-Hinds Company. (See Smith and Dossert, assignors.)

Crowe, Frederic C., and B. H. De Haven, Pittsburgh, Pa. Cork-puller. No. 1,275,228; Aug. 13; v. 253; p. 275

Crowell, Charles H., Brooklyn, N. Y. Manual tape-moistening machine. No. 1,276,728; Aug. 27; v. 253; p. 759.

Crowell, Charles H., Brooklyn, N. Y. Transverse-delivery gummed-strip severing and moistening machine. No. 1,276,729; Aug. 27; v. 253; p. 760.

Crowell, Charles H., Brooklyn, N. Y. Making cloth-gummed tape. No. 1,276,730; Aug. 27; v. 253; p. 760.

Crowell, Charles H., Brooklyn, N. Y. Cloth-gummed tape and process of making same. No. 1,276,731; Aug. 27; v. 253; p. 760.

Crowell, William D., St. Louis, Mo. Back-draft shield for vehicles. No. 1,275,400; Aug. 13; v. 253; p. 323.

Crown Cork and Seal Company of Baltimore City, The. (See Keller, George M., assignor.)

Croyl, Joseph R., Altoona, Pa. Folding cultivator. No. 1,275,401; Aug. 13; v. 253; p. 323.

Cru Patents Corporation. (See Wenderhold, William, assignor.)

Culling, Merritt A., assignor to F. W. Buffum, Louisiana, Mo. Air-brake for railway-trains. No. 1,276,036; Aug. 20; v. 253; p. 529.

Culver, William, Sioux City, Iowa, assignor of one-half to W. H. Kirchman, Wahoo, Nebr. Dirigible balloon. No. 1,276,497; Aug. 20; v. 253; p. 659.

Cumfer, Harry A., and O. D. McFarland, assignors to Guyton & Cumfer Manufacturing Company, Chicago, Ill. Making composition shingle-strips. No. 1,276,881; Aug. 27; v. 253; p. 799.

Cummings, Robert A., Pittsburgh, Pa. Constructing reinforced-concrete hulls for boats, &c. No. 1,276,624; Aug. 20; v. 253; p. 694.

Cunningham, Andrew O., St. Louis county, Mo. Protecting shores. No. 1,275,859; Aug. 13; v. 253; p. 449.

Cunningham, Andrew O., St. Louis county, Mo. Mattress for shore protection. No. 1,275,860; Aug. 13; v. 253; p. 449.

Cunningham, Emaline B. (See Cunningham, Martin J., assignor.)

Cunningham, Martin J., assignor of one-half to E. B. Cunningham, Springfield, Mo. Lock-valve. No. 1,275,135; Aug. 6; v. 253; p. 224.

Curran, Frank J. M., assignor to Grand Rapids Refrigerator Co., Grand Rapids, Mich. Refrigerator construction. No. 1,274,380; Aug. 6; v. 253; p. 12.

Curran, John W., Newport, Ky. Waste-container. No. 1,276,498; Aug. 20; v. 253; p. 659.

Currier, Hiram D., and M. B. Stazak, assignors to Kellogg Switchboard & Supply Company, Chicago, Ill. Automatic ringing system. No. 1,276,037; Aug. 20; v. 253; p. 529.

Curtis, Clyde C., and H. J. Sackett, Anacortes, Wash. Fish-dressing machine. No. 1,275,229; Aug. 13; v. 253; p. 275.

Curtis, William J., assignor to National Adjustable Bed and Spring Company, Wilmington, Del. Adjustable bed and locking means therefor. No. 1,277,198; Aug. 27; v. 253; p. 885.

Curtis, William W., Willis, Tex. Combination plow and pulverizer. No. 1,276,334; Aug. 20; v. 253; p. 612.

Curtner, Grover C., New York, N. Y. Tire-chain tightener and lock. No. 1,277,296; Aug. 27; v. 253; p. 908.

Cutler-Hammer Mfg. Co., The. (See Barnum, Thomas E., assignor.)

Cwikliński, Kazimirz, Blue Island, Ill. Ship-protector. No. 1,275,402; Aug. 13; v. 253; p. 323.

Cwikliński, Kazimirz, Blue Island, Ill. Lock. No. 1,275,403; Aug. 13; v. 253; p. 323.

Cycle Supplies Company, The. (See Warren, Frank D., assignor.)

D'Espujols, Robert L., Joinville-le-Pont, France. Condenser. No. 1,276,186; Aug. 20; v. 253; p. 572.

Da Costa, Arthur V. (See Loomis and Da Costa.)

Damerell, Mark H., Detroit, Mich. Portable shaper. No. 1,275,404; Aug. 13; v. 253; p. 324.

Damerell, Mark H., Detroit, Mich., assignor to Wyman-Gordon Company, Worcester, Mass. Crank-shaft-twisting machine. No. 1,274,390; Aug. 6; v. 253; p. 12.

Damme, Edward, Battle Creek, Mich. Shock-absorber. No. 1,274,515; Aug. 6; v. 253; p. 50.

Daniels, Lee G., Rockford, Ill. Multiple-spindle turret-lathe. No. 1,274,859; Aug. 6; v. 253; p. 148.

Daniels, William C., Huntington Park, and G. T. Reed, Inglewood, Cal. Aligning device for printing presses. No. 1,277,199; Aug. 27; v. 253; p. 885.

Danielson, Gust A., and M. L. Hirsch, Los Angeles, Cal. Attachment for car-brakes. No. 1,276,625; Aug. 20; v. 253; p. 694.

Danielson, John, Port Huron, Mich. Shoe-polishing device. No. 1,275,861; Aug. 13; v. 253; p. 450.

Dantsizen, Christian, Schenectady, N. Y., assignor to General Electric Company. Process and apparatus for preparing magnesium chlorid. No. 1,276,499; Aug. 20; v. 253; p. 659.

Danz, Jacob, 2d, Los Angeles, Cal. Shell-bag. No. 1,275,862; Aug. 13; v. 253; p. 450.

Darley, William S., Chicago, Ill. Velocity-pressure and calculating gage. No. 1,276,732; Aug. 27; v. 253; p. 761.

Davis, Charles E., assignor to Goodman Manufacturing Company, Chicago, Ill. Mining-machine. No. 1,274,516; Aug. 6; v. 253; p. 51.

Davis, Charles T. (See Rogers, Allen, assignor.)

Davis, Cora M. (See Schenck, George E., assignor.)

Davis, David C., Swissvale, Pa., assignor to Westinghouse Electric and Manufacturing Company. Converting system. No. 1,274,691; Aug. 6; v. 253; p. 101.

Davis, Donald A. (See Fulkerson, James C., assignor.)

Davis, Ernest W., Chicago, Ill. Focusing device. No. 1,276,733; Aug. 27; v. 253; p. 761.

Davis, Ernest W., assignor to Universal Camera Company, Chicago, Ill. Dissolving apparatus. No. 1,275,863; Aug. 13; v. 253; p. 450.

Davis, Gilbert G., Vancouver, British Columbia, Canada. Log-raft. No. 1,276,181; Aug. 20; v. 253; p. 571.

Davis, Henderson G., Springfield, assignor to Gilbert & Barker Manufacturing Company, West Springfield, Mass. Metal-working apparatus. No. 1,275,867; Aug. 13; v. 253; p. 452.

Davis, Irvin W., Milwaukee, Wis. Nut-lock. No. 1,276,882; Aug. 27; v. 253; p. 799.

Davis, John A., Boston, Mass. Automatic stop and tempo control for talking-machines. No. 1,276,182; Aug. 20; v. 253; p. 571.

Davis, John B., Springfield, assignor to Gilbert & Barker Manufacturing Company, West Springfield, Mass. Dispensing and measuring pump. No. 1,275,864; Aug. 13; v. 253; p. 451.

Davis, John B., Springfield, assignor to Gilbert & Barker Manufacturing Company, West Springfield, Mass. Registering apparatus. No. 1,275,865; Aug. 13; v. 253; p. 451.

Davis, John B., Springfield, assignor to Gilbert & Barker Manufacturing Company, West Springfield, Mass. Measuring-pump for oil and the like. No. 1,275,866; Aug. 13; v. 253; p. 452.

Davis, John B., Springfield, assignor to Gilbert & Barker Manufacturing Company, West Springfield, Mass. Scale-indicator for dispensing-pumps. No. 1,275,868; Aug. 13; v. 253; p. 452.

Davis, John B., Springfield, assignor to Gilbert & Barker Manufacturing Company, West Springfield, Mass. Valve. No. 1,277,297; Aug. 27; v. 253; p. 908.

Davis, Joseph F. (See Tverdahl, Edward A., assignor.)

Davis, Josephine K., Maywood, Ill. Shield or cover for hot-air flues. No. 1,274,996; August 6; v. 53; p. 186.

Davis, Laurence W., Vega Alta, Porto Rico. Gasolene-tank filler. No. 1,274,517; Aug. 6; v. 253; p. 51.

Davis, Lawrence E. (See Collins, John W. B., assignor.)

Davis Machine Tool Co. (See Plantinga, Peter, assignor.)

Davis, Morton, New York, N. Y. Nut and fruit bowl. No. 1,277,200; Aug. 27; v. 253; p. 885.

Davis, Owen, Waelder, Tex. Cultivator-canopy. No. 1,275,664; Aug. 13; v. 253; p. 395.

Davis, Raymond V., Denver, Colo. Heel-protector. No. 1,274,692; Aug. 6; v. 253; p. 101.

Davis, Raymond V., Denver, Colo. Safety-catch for pins. No. 1,276,183; Aug. 20; v. 253; p. 571.

Davis-Watkins Dairymen's Mfg. Co. (See Nicoll, William R., assignor.)

Davis, William M., Cambridge, assignor of one-eighth to R. M. Gardiner, Belmont, Mass., one-eighth to W. D. Hemming, Colorado Springs, Colo., and one-fourth to R. M. Gardiner, executor. Hydraulic transmission mechanism. No. 1,274,391; Aug. 6; v. 253; p. 13.

Dawson, Arthur T., Westminster, London, and J. Horne, Barrow-in-Furness, assignors to Vickers Limited, Westminster, London, England. Elevating mechanism of heavy guns. No. 1,274,518; Aug. 6; v. 253; p. 51.

Dawson Metallurgical Furnace Company. (See Dawson, Oliver B., assignor.)

Dawson, Oliver B., El Paso, Tex., assignor to Dawson Metallurgical Furnace Company. Metallurgical process. No. 1,277,047; Aug. 27; v. 253; p. 842.

Dawson, William R. (See Cooley, William I., assignor.)

Daxe, Mayer, New York, N. Y. Antiskid device for vehicle-wheels. No. 1,274,392; Aug. 6; v. 253; p. 13.

Daysh, Norman J., Poughkeepsie, N. Y., assignor to The De Laval Separator Company. Milking machinery. No. 1,276,184; Aug. 20; v. 253; p. 571.

Dayton Manufacturing Company, The. (See Eckert, Joseph, assignor.)

De Arrigunaga, Manuel, New York, N. Y. Motor-vehicle. No. 1,276,335; Aug. 20; v. 253; p. 612.

De Brayer, Alfred, Paris, France. Substance for use in photography and making the same. No. 1,277,048; Aug. 27; v. 253; p. 842.

De Graw, Harold M., New London, Conn., assignor to Electric Boat Company. Bridge for submarines. No. 1,274,694; Aug. 6; v. 253; p. 101.

De Haven, Benjamin H. (See Crowe and De Haven.)

De Laval Separator Company, The. (See Daysh, Norman J., assignor.)

De Lavaud, Dimitri S., New York, N. Y. Centrifugal casting-machine. No. 1,276,038; Aug. 20; v. 253; p. 530.

De Lay, Theodore S., Creston, Iowa. Level and rule measuring instrument. No. 1,274,696; Aug. 6; v. 253; p. 102.

De Long, Ernest, *et al.* (See Archer, John, assignor.)

De Martini, Paul, Jamaica, N. Y. Drier for alimentary paste. No. 1,276,500; Aug. 20; v. 253; p. 659.

De Nobili, Frank P., Vancouver, British Columbia, Canada. Mail-box. No. 1,275,186; Aug. 6; v. 253; p. 224.

De Voe, Albert H., Westfield, N. J., assignor to The Singer Manufacturing Company. Sewing-machine binder. No. 1,275,159; Aug. 6; v. 253; p. 230.

De Vos, Arnold W., and C. M. Dering, assignors to Corrugated Veneer Packing Products Co., Milwaukee, Wis. Veneer-corrugating machine. No. 1,276,187; Aug. 20; v. 253; p. 573.

De Witt, Walter M. (See Porter, Arthur D., assignor.)

Desi, Winnie D., Spencer, N. C. Playing-cards. No. 1,275,869; Aug. 13; v. 253; p. 453.

Dean, John O. (See Struck and Dean.)

Decker, James H. (See Decker, James M. and J. H.)

Decker, James M. and J. H., Douglas, Ariz. Latch. No. 1,274,693; Aug. 6; v. 253; p. 101.

Deere & Company. (See Evans, Harry F., assignor.)

Defiance Machine Works. (See Ensign, George A., assignor.)

Degener, Gustave O., assignor to Underwood Computing Machine Company, New York, N. Y. Combined typewriting and computing machine. No. 1,276,870; Aug. 13; v. 253; p. 453.

Degener, Gustave O., assignor to Underwood Computing Machine Company, New York, N. Y. Combined typewriting and computing machine. No. 1,276,185; Aug. 20; v. 253; p. 572.

Degener, Gustave O., assignor to Underwood Computing Machine Company, New York, N. Y. Combined typewriting and computing machine. No. 1,276,734; Aug. 27; v. 253; p. 761.

Deibler, David P., Jersey Shore, Pa. Railway dumping-car. No. 1,274,695; Aug. 6; v. 253; p. 102.

Dekum, Adolph A. (See Halverson and Dekum.)

Delany, Patrick B., South Orange, N. J. Telegraphy. No. 1,274,520; Aug. 6; v. 253; p. 52.

Delany, Patrick B., South Orange, N. J., assignor to Secret Telegraph Company, New York, N. Y. Telegraphy. No. 1,274,519; Aug. 6; v. 253; p. 51.

Dement, Isaac S., assignor of one-half to J. Collins, Dayton, Ohio. Driving mechanism. No. 1,275,158; Aug. 6; v. 253; p. 230.

Denburger, Joseph D., Lents, Oreg. Machine for calking seams. No. 1,277,049; Aug. 27; v. 253; p. 842.

Dengler, Mary E., Tivoli, N. Y. Lamp-chimney protector. No. 1,276,883; Aug. 27; v. 253; p. 799.

Dennis, Charles F. (See Kling and Dennis.)

Dennison, Kyle J., Youngstown, Ohio. Illuminated sign. No. 1,275,537; Aug. 13; v. 253; p. 359.

Denton, Albert A., Eagle River, Wis. Wood-drying machine. No. 1,274,860; Aug. 6; v. 253; p. 148.

Dering, Charles M. (See De Vos and Dering.)

Derr, William R., assignor of one-half to W. J. Lillie, New York, N. Y. Clothes-line and locking clothes-pin therefor. No. 1,275,538; Aug. 13; v. 253; p. 360.

Detroit Fuse & Manufacturing Company. (See Zenker, Fredrick, assignor.)

Detroit Heating and Lighting Company. (See Joy and Vogel, assignors.)

Detroit Torch & Manufacturing Co. (See Horn and Lindhorst, assignors.)

Devere, Arthur C. (See Poudrier, Alfred, assignor.)

Devney, Richard E., Cleveland, Ohio. Advertising-sign hanger. No. 1,276,735; Aug. 27; v. 253; p. 762.

Dewar, James, London, and A. Liebmann, Weybridge, England, assignors to The Procter and Gamble Company, Cincinnati, Ohio. Hydrogenation of fats and oils. No. 1,275,405; Aug. 13; v. 253; p. 324.

Dewar Manufacturing Company. (See Hendler, Max, assignor.)

Di Benedetto, Paolo, assignor of one-fourth to C. R. Horten and one-fourth to A. Duri, Fair Haven, Vt. Potato-planter. No. 1,275,645; Aug. 13; v. 253; p. 389.

Diamond Match Company, The. (See Paridon, Michael, assignor.)

Diamond Match Company, The. (See Teeple, Oliver P., assignor.)

Dickens, Richard G. (See Bruce and Dickens.)

Dickson, Laurence A., Memphis, Tenn. Musical mechanical toy. No. 1,276,626; Aug. 20; v. 253; p. 694.

Diebel, Henry, assignor of one-half to W. H. Wilcox, Detroit, Mich. Wire-fence fastener for cement posts. No. 1,275,137; Aug. 6; v. 253; p. 224.

Dierks, John, Kansas City, Mo. Stock-feeder. No. 1,276,884; Aug. 27; v. 253; p. 800.

Dieterich, Albert E., Washington, D. C. Extracting cones from their baking-molds. No. 1,275,138; Aug. 6; v. 253; p. 224.

Dietz, Charles, deceased, assignor of one-half to P. S. Theurer, Chicago, Ill.; M. Dietz, administratrix. Center-bearing. No. 1,276,188; Aug. 20; v. 253; p. 573.

Dietz, Herbert, Cincinnati, Ohio. Foot-rest for automobile-accelerator pedals. No. 1,276,189; Aug. 20; v. 253; p. 574.

Dietz, Myra, administratrix. (See Dietz, Charles.)

Dihlmann, Eugen G., Leipzig-Reudnitz, Germany. Shoe-press. No. 1,276,627; Aug. 20; v. 253; p. 695.

Dike, Charles F. (See Lamar, Alexis L., assignor.) (Reissue.)

Dilley, Arzeno J., Muir, Mich. Vehicle-spring. No. 1,276,696; Aug. 20; v. 253; p. 712.

Disbrow, Reuben B., St. Paul, Minn. Combined churn and butter-worker. No. 1,274,393; Aug. 6; v. 253; p. 14.

Dishman, Dana W., Owensburg, assignor of one-half to T. Carmichael, Hobbieville, Ind. Ensilage spreader and packer. No. 1,276,190; Aug. 20; v. 253; p. 574.

Dittman, Frank W., Fordham, and E. W. Baggott, Brooklyn, N. Y., assignors of one-third to R. W. Scott, Montclair, N. J. Door. No. 1,276,191; Aug. 20; v. 253; p. 574.

Dixon, Hannah M., Kittanning, Pa. Skirt-marker. No. 1,275,539; Aug. 13; v. 253; p. 360.

Dixon, Robert, Armells, Mont. Scraper attachment for brake-shoes. No. 1,274,997; Aug. 6; v. 253; p. 186.

Djerf, Knut. (See Pierce and Djerf.)

Dobbin, James F. (See Ricker and Dobbin.)

Dobinsky, John W., Hamilton, Ontario, Canada Bomb. No. 1,276,786; Aug. 27; v. 253; p. 762.

Dodds, Ethan I. (See Flannery and Dodds.)

Dodds, Ethan I., assignor to Flannery Bolt Company, Pittsburgh, Pa. Portable lamp. No. 1,275,872; Aug. 13; v. 253; p. 454.

Dodds, Ethan I., assignor to Flannery Bolt Company, Pittsburgh, Pa. Portable lamp. No. 1,275,873; Aug. 13; v. 253; p. 454.

Dodds, Ethan I., Pittsburgh, Pa., and R. S. Ferguson, Washington, D. C., assignors to Flannery Bolt Company, Pittsburgh, Pa. Illuminating device. No. 1,275,871; Aug. 13; v. 253; p. 453.

Dodds, Thomas, Thessalon, Ontario, Canada. Invalid-bed. No. 1,276,885; Aug. 27; v. 253; p. 800

Dodelin, Emil A., Mooretown, N. J. Needle-holder for sound-boxes. No. 1,276,192; Aug. 20; v. 253; p. 575.

Dodge, D. Stuart. (See Twombly, Williard I., assignor.)

Dodge, Frank E., New York, N. Y., and F. H. Rhodes, Philadelphia, Pa., assignors to The Barrett Company. Recovering pyridin bases. No. 1,274,998; Aug. 6; v. 253; p. 186.

Dodge, Frank E., New York, N. Y., and F. H. Rhodes, Philadelphia, Pa., assignors to The Barrett Company. Recovering pyridin bases. No. 1,274,999; Aug. 6; v. 253; p. 187.

Dodge, Frank E., New York, N. Y., and F. H. Rhodes, Philadelphia, Pa., assignors to The Barrett Company. Apparatus for the recovery of pyridin bases. No. 1,275,000; Aug. 6; v. 253; p. 187.

Dolby, Jesse H., Elgin, Ill. Shutter for cameras. No. 1,275,230; Aug. 13; v. 253; p. 276.

Dolloff, Bert L. (See Back and Dolloff.)

Doolittle, Howard C., assignor to The Stanley Works, New Britain, Conn. Wrapping-machine. No. 1,276,193; Aug. 20; v. 253; p. 575.

Doran, James A., Providence, R. I. Military ornament. No. 1,275,139; Aug. 6; v. 253; p. 225.

Dorey, George B., Montreal, Quebec, Canada, assignor to Hodger Ballast Car Company, Chicago, Ill. Car construction. No. 1,275,540; Aug. 13; v. 253; p. 360.

Dormer, George H., Eveleth, Minn. Detonating blasting-fuse. No. 1,275,001; Aug. 6; v. 253; p. 187.

Dorr Company, The. (See Peck, Charles L., assignor.)

Dosch, Oliver L., Elizabeth, N. J., assignor to The Singer Manufacturing Company. Foundry system. No. 1,276,039; Aug. 20; v. 253; p. 530.

Dosch, Oliver L., Elizabeth, N. J., assignor to The Singer Manufacturing Company. Continuous foundry process. No. 1,276,040; Aug. 20; v. 253; p. 531.

Doser, John, Los Angeles, Cal. Railway-crossing gate. No. 1,277,201; Aug. 27; v. 253; p. 885.

Dossert, John J. (See Smith and Dossert.)

Dotterer, Benjamin P., Charleston, S. C. Automatic scale. No. 1,274,521; Aug. 6; v. 253; p. 52.

Dougherty, Frank H. (See Riesberg, Van Vechton, assignor.)

Douglas, George B., Seattle, Wash. Bracket. No. 1,276,501; Aug. 20; v. 253; p. 660.

Douglas, Louis M. (See Parsons, Cook and Douglas.)

Dow Chemical Company, The. (See Dow, Herbert H., assignor.)

Dow Chemical Company, The. (See Dow and Griswold, assignors.)

Dow, Herbert H., assignor to The Dow Chemical Company, Midland, Mich. Making carbolic acid. No. 1,274,394; Aug. 6; v. 253; p. 14.

Dow, Herbert H., and T. Griswold, Jr., assignors to The Dow Chemical Company, Midland, Mich. Apparatus for absorbing heat. No. 1,275,231; Aug. 13; v. 253; p. 276.

Dowdy, Roy F., assignor to Safety Gas Lighter Corporation, Roanoke, Va. Electric gas-lighter. No. 1,276,737; Aug. 27; v. 253; p. 762.

Dowell, Allen B., St. Louis, Mo. Concrete lining for shafts. No. 1,275,874; Aug. 13; v. 253; p. 454.

Doyle, John, Hoboken, N. J. Rug-holder. No. 1,275,875; Aug. 13; v. 253; p. 454.

Drais, Robert A., Halleck, Cal. Device for cooling engines. No. 1,275,876; Aug. 13; v. 253; p. 455.

Drake, Ira C., Rochester, Wash. Undercutter guide for crosscut-saws. No. 1,277,050; Aug. 27; v. 253; p. 843.

Drane, Merritt, Louisville, Ky. Circuit-controller. No. 1,275,541; Aug. 13; v. 253; p. 360.

Drange, Carl E., assignor to I. Scott and D. J. Scott, executors, Plainfield, N. J. Plate-printing machine. No. 1,275,877; Aug. 13; v. 253; p. 455.

Drange, Carl E., Plainfield, N. J., assignor to I. Scott and D. J. Scott, executors. Means for attaching printing-plates to cylinders. No. 1,276,336; Aug. 20; v. 253; p. 613.

Draper Corporation. (See Hedler, Henry J., assignor.)

Draper Corporation. (See Stimpson, Edward S., assignor.) (Reissue.)

Drellick, Axel C. G., Gottenborg, Sweden, assignor to E. J. Ohnell, trustee. Fly-trap. No. 1,277,298; Aug. 27; v. 253; p. 908.

Driver, Wilbur B., East Orange, N. J. Spark-plug electrode and alloy therefor. No. 1,274,395; Aug. 6; v. 253; p. 14.

Droiteour, Michael A., Delphos, Ohio. Gripper-motion. No. 1,275,002; Aug. 6; v. 253; p. 187.

Dronsfield, James, Oldham, England. Machine for stripping the waste yarn left on condenser-bobbins. No. 1,274,522; Aug. 6; v. 253; p. 52.

Du Bois, Thomas R. (See Turbayne and Du Bois.)

Ducorron, Charles A. F. (See Laughlin and Ducorron.)

Dudley, Howard M., Philadelphia, Pa. Dyeing-machine. No. 1,274,396; Aug. 6; v. 253; p. 15.

Dudley, Howard M., Philadelphia, Pa. Dyeing-machine. No. 1,274,523; Aug. 6; v. 253; p. 52.

Dudley, Howard M., Philadelphia, Pa. Fiber-treating machine. No. 1,274,524; Aug. 6; v. 253; p. 53.

Dudley, Howard M., Philadelphia, Pa. Fabric-dyeing machine. No. 1,274,525; Aug. 6; v. 253; p. 54.

Dudley, Howard M., Philadelphia, Pa. Dyeing-machine. No. 1,275,878; Aug. 13; v. 253; p. 455.

Duffies, Alfred S., Markesan, Wis., and F. Mead, Chicago, Ill. Cushioned wheel. No. 1,276,628; Aug. 20; v. 253; p. 695.

Duffy, Charles H., Chevy Chase, Md., assignor of two-thirds to W. J. Costello and J. C. McGuire, Washington, D. C. Gasolene-measuring apparatus. No. 1,276,502; Aug. 20; v. 253; p. 660.

Duffy, James U. (See Breyley and Duffy.)

Duffy-Powers Company. (See Mench, John L., assignor.)

Duggan, Thomas R., assignor to The Permutit Company, New York, N. Y. Method of and apparatus for softening water. No. 1,276,629; Aug. 20; v. 253; p. 695.

Dulany, H. Rozier, Jr., *et al.*, trustee. (See Hancock, Winfield S., assignor.)

Dull, Raymond W., La Grange, Ill. Gravel washing and screening apparatus. No. 1,277,051; Aug. 27; v. 253; p. 843.

Duluth Show Case Company. (See Bekkering, Earl H., assignor.)

Dunbar Manufacturing Company. (See Schroyer, Harry H., assignor.)

Duncan, Herbert L., Uniontown, Ky. Automatic change-speed gearing. No. 1,277,299; Aug. 27; v. 253; p. 909.

Duncan, Herbert L., Uniontown, Ky. Yielding coupling for driving-shafts. No. 1,277,300; Aug. 27; v. 253; p. 909.

Dunham, Abraham L., Chelmsford, Mass. Slowing mechanism for roving-rollers of woolen-mules. No. 1,275,406; Aug. 13; v. 253; p. 324.

Dunker, John G., assignor to The Wahl Company, Chicago, Ill. Calculating-machine. No. 1,274,526; Aug. 6; v. 253; p. 54.

Dunlap, Joseph B., Tulsa, Okla. Equalizing pump-jack. No. 1,274,861; Aug. 6; v. 253; p. 149.

Dunn, Edward L., assignor, by mesne assignments, to Standard Plunger Elevator Company, Worcester, Mass. Automatic limit-switch. No. 1,275,407; Aug. 13; v. 253; p. 325.

Dunn, Sola B., Chicago, Ill. Horse-sling. No. 1,277,052; Aug. 27; v. 253; p. 844.

Dunn, William G., Clarinda, Iowa. Counterbalanced crank-shaft. No. 1,275,140; Aug. 6; v. 253; p. 225.

Dunston, Wayne E., receiver. (See Hartzell, Forest H., assignor.)

Duplex Printing Press Company. (See Bechman, Henry F., assignor.)

Duprey, Robert E. (See Mentzer and Duprey.)

Durl, Augusta, *et al.* (See Di Benedetto, Paolo, assignor.)

Dutton Dredge Co. (See Gottschalk, William, assignor.)

Dye, Glen M., Minneapolis, Minn. Machine for drying photographic prints and the like. No. 1,277,202; Aug. 27; v. 253; p. 885.

Dyett, James H., assignor to Hard Manufacturing Company, Buffalo, N. Y. Bed-spring. No. 1,274,397; Aug. 6; v. 253; p. 15.

Dykes, John L. G., Chicago, Ill. Expansible mandrel. No. 1,276,041; Aug. 20; v. 253; p. 531.

Dynowsky, Peter, Newark, N. J. Shaving-brush. No. 1,274,697; Aug. 6; v. 253; p. 102.

E. I. du Pont de Nemours and Company. (See Holmes, Fletcher B., assignor.)

E. I. du Pont de Nemours and Company. (See Stewart, Jeffrey, assignor.)

E. and T. Fairbanks and Company. (See Bousfield, John H. A., assignor.)

Earl, Leon P., assignor to The Aromint Company, Cincinnati, Ohio. Display and dispensing device. No. 1,276,630; Aug. 20; v. 253; p. 696.

Early, Thomas F. (See Reilly, Matthew J., assignor.)

Eastman Kodak Company. (See Cross, Francis J., assignor.)

Eastman Kodak Company. (See Fisher, Austin C., assignor.)

Eastman Kodak Company. (See Kroedel, Robert, assignor.)

Eastman Kodak Company. (See Lovejoy, Frank W., assignor.)

Eastman Kodak Company. (See Robertson, John A., assignor.)

Eaton, Clara S., New York, N. Y. Rivet. (Reissue.) No. 14,513; Aug. 27; v. 253; p. 922.

Eaton, George M., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Locomotive. No. 1,274,398; Aug. 6; v. 253; p. 15.

Eaton, George M., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Locomotive driving mechanism. No. 1,274,399; Aug. 6; v. 253; p. 16.

Eaton, George M., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Locomotive driving mechanism. No. 1,274,400; Aug. 6; v. 253; p. 16.

Eaton, George M., Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company. Dynamo-electric machine. No. 1,275,003; Aug. 6; v. 253; p. 187.

Eaton, George M., Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company. Gear-wheel lubrication. No. 1,275,004; Aug. 6; v. 253; p. 188.

Eaton, John, Schenectady, N. Y., assignor to General Electric Company. Electromagnetic switch. No. 1,275,879; Aug. 13; v. 253; p. 456.

Eaton, John, Schenectady, N. Y., assignor to General Electric Company. Control system for electric motors. No. 1,275,880; Aug. 13; v. 253; p. 456.

Eaton, William S., Sag Harbor, N. Y. Etching steel or other like plates. No. 1,276,408; Aug. 13; v. 253; p. 325.

Eberhard Faber Pencil Company. (See Faber, Lothar W., assignor.)

Eberhardt, William C. A., Racine, Wis. Heat-distributing device. No. 1,276,886; Aug. 27; v. 253; p. 800.

Ebsen, William A., Montclair, N. J., assignor, by mesne assignments, to The National Oil Company. Wooden tank vessel. No. 1,276,042; Aug. 20; v. 253; p. 531.

Eckart, Charles F., Olaa, Hawaii. Mulch for sugar-cane and the like. No. 1,274,527; Aug. 6; v. 253; p. 55.

Eckart, Charles F., Olaa, Hawaii. Impervious mulch for regulating soil-water. No. 1,276,887; Aug. 27; v. 253; p. 800.

Eckert, Joseph, assignor to The Dayton Manufacturing Company, Dayton, Ohio. Car-brake handle. No. 1,276,337; Aug. 20; v. 253; p. 613.

Eckman, John W., Decatur, Ill. Swimming-glove. No. 1,275,005; Aug. 6; v. 253; p. 188.

Eclipse Machine Company. (See Bendix and Van Ness, assignors.)

Eddy, Kenneth L., Chicago, Ill., assignor, by mesne assignments, to Automatic Utilities Co. Loose-leaf device. No. 1,276,503; Aug. 20; v. 253; p. 660.

Eden, James A., Jr., assignor, by mesne assignments, to J. Oakley, Springfield, Mass. Broach. No. 1,275,006; Aug. 6; v. 253; p. 188.

Edgar, Grant E., New London, Conn., assignor to Electric Boat Company. Storage-battery installation. No. 1,275,007; Aug. 6; v. 253; p. 189.

Edgecomb, Henry B., Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company. Gaging-machine. No. 1,274,698; Aug. 6; v. 253; p. 102.

Edgecombe, Edward F., Jr., La Grange, Ill. Metering-panel. No. 1,276,043; Aug. 20; v. 253; p. 532.

Edison Storage Battery Company. (See Edison, Thomas A., assignor.)

Edison Storage Battery Company. (See Hutchison, Miller R., assignor.)

Edison, Thomas A., Llewellyn Park, assignor to Edison Storage Battery Company, West Orange, N. J. Production of finely-divided metals. No. 1,275,232; Aug. 13; v. 253; p. 276.

Edward G. Budd Manufacturing Company. (See Ledwinka, Joseph, assignor.)

Edwards, Evan A., Prescott, Ariz. Burner. No. 1,275,881; Aug. 13; v. 253; p. 457.

Edwards, Jennie L., Valley, Wash. Corset-retainer and hose-supporter. No. 1,276,504; Aug. 20; v. 253; p. 661.

Edwards, Levi T., Philadelphia, Pa. Air-lift pump. No. 1,276,505; Aug. 20; v. 253; p. 661.

Edwards, Levi T., Penfield, Pa. Air-lift pump. No. 1,276,506; Aug. 20; v. 253; p. 661.

Egan, James, Chicago, Ill., assignor to Egan Wrecking Truck Company. Wrecking-truck. (Reissue.) No. 14,500; Aug. 20; v. 253; p. 714.

Egan Wrecking Truck Company. (See Egan, James, assignor.) (Reissue.)

Ehrentraut, Charles F., Pittsburgh, Pa. Outage-gage. No. 1,275,409; Aug. 13; v. 253; p. 325.

Elbye, Carl. (See Huntress and Elbye.)

Eichbaum, Herman W., Venice, Cal. Dynamo-electric machine. No. 1,275,665; Aug. 13; v. 253; p. 396.

Eisenhardt, William J., Baltimore, Md. Straw-dispenser. No. 1,276,338; Aug. 20; v. 253; p. 613.

Elder, Joseph H., Avery, Tex. Prescription-filing machine. No. 1,275,008; Aug. 6; v. 253; p. 189.

Electric Boat Company. (See De Graw, Herold M., assignor.)

Electric Boat Company. (See Edgar, Grant E., assignor.)

Electric Controller & Manufacturing Company, The. (See Hall, Jay H., assignor.)

Electric Controller & Manufacturing Company, The. (See Spurr, Edgar A., assignor.)

Electric Controller & Manufacturing Company, The. (See Stratton, Harry F., assignor.)

Electric Controller & Manufacturing Company, The. (See Wright, Reuben I., assignor.)

Electric Furnace Company, The. (See Bally and Cope, assignors.)

Electric Service Supplies Company. (See Mayer, Walter S., assignor.)

Electric Service Supplies Company. (See McFarlin, John R., assignor.)

Electrical Engineers Equipment Company. (See Jacobs, Ernest H., assignor.)

Elevator Supplies Company. (See Schenck, Charles, assignor.)

Elevator Supply & Repair Company. (See Andrén, August, assignor.)

Ellinger, Julius B., Seattle, Wash. Aircraft. No. 1,275,233; Aug. 13; v. 253; p. 276.

Elliott-Fisher Company. (See Foothorap, Harry A., assignor.)

Elliott-Fisher Company. (See Julihn, Louis G., assignor.)

Elliott, Percy M., Chicago, Ill. Hanger mechanism for car-doors. No. 1,276,738; Aug. 27; v. 253; p. 762.

Elliott, Samuel H., Roanoke, Va. Air-brake mechanism. No. 1,277,053; Aug. 27; v. 253; p. 844.

Ellis, Carleton. (See McCourt and Ellis.)

Ellis, Carleton, Montclair, N. J. Hydrogenated-oil composition. No. 1,276,507; Aug. 20; v. 253; p. 662.

Ellis, Carleton, Montclair, N. J. Hydrogenated-oil composition. No. 1,276,508; Aug. 20; v. 253; p. 662.

Ellis, Carleton, Montclair, N. J. Products containing hydrogenated oil. No. 1,276,509; Aug. 20; v. 253; p. 662.

Ellis, Carleton, Montclair, N. J., assignor to National Carbon Company, Inc., New York, N. Y. Making manganese compounds. No. 1,276,739; Aug. 27; v. 253; p. 763.

Ellis, Carleton, and A. A. Wells, Montclair, N. J., assignors, by mesne assignments, to National Carbon Company, Inc., Long Island City, N. Y. Preparation of higher oxid-of-manganese depolarizing material. No. 1,275,666; Aug. 13; v. 253; p. 396.

Ellis Drier and Elevator Company. (See Ellis, Hubert C. and N. C., assignors.)

Ellis, Evenio, Sheffield, England. Fluid-pressure gage. No. 1,275,180; Aug. 6; v. 253; p. 237.

Ellis, Hubert C., and N. C. Evanston, assignors to Ellis Drier and Elevator Company, Chicago, Ill. Cotton-seed drier. No. 1,276,044; Aug. 20; v. 253; p. 532.

Ellis, Norman C. (See Ellis, Hubert C. and N. C.)

Ellis, Wilber P., *et al.* (See Melson, John T., assignor.)

Ellison, Forrest L., Exeter, N. H. Caster. No. 1,275,882; Aug. 13; v. 253; p. 457.

Elsom, James D., Chicago, Ill., assignor to Railway Improvement Company, New York, N. Y. Registering mechanism. No. 1,275,234; Aug. 13; v. 253; p. 277.

Elwell-Parker Electric Company, The. (See Cochran, Clyde E., assignor.)

Embree, Herbert, assignor of one-half to W. Hutchinson, Hamilton, Ontario, Canada. Hacksaw and broaching machine. No. 1,275,883; Aug. 13; v. 253; p. 457.

Emerson-Brantingham Company. (See Waterman, Lewis E., assignor.)

Emerson Electric Manufacturing Company, The. (See Meston and Finch, assignors.)

Emerson, George L., Los Angeles, Cal. Spring-motor. No. 1,276,510; Aug. 20; v. 253; p. 662.

Emery, Edward C., Los Angeles, Cal. Method of treating food remnants. No. 1,276,888; Aug. 27; v. 253; p. 800.

Emery, Raymond D., assignor to W. M. Whitney, Winchendon, Mass. Profiling-jig. No. 1,275,160; Aug. 6; v. 253; p. 231.

Endfire Extinguisher Company. (See Tibbals, Walter H., assignor.)

Ensign, George A., assignor to Defiance Machine Works, Defiance, Ohio. Multiple-copying lathe. No. 1,277,203; Aug. 27; v. 253; p. 886.

Entz, Justus B., Cleveland, Ohio. Transmission and control for motor-vehicles. No. 1,276,045; Aug. 20; v. 253; p. 533.

Erbach, Fredrich T., Sheboygan, Wis. Line-fastener. No. 1,274,862; Aug. 6; v. 253; p. 149.

Ericksen, John, Blue Mounds, Wis. Fastening device. No. 1,276,740; Aug. 27; v. 253; p. 763.

Erickson, Carl A., Burwell, Nebr. Printing-machine. No. 1,275,410; Aug. 13; v. 253; p. 325.

Erickson, John, Chicago, Ill., assignor, by mesne assignments, to Automatic Electric Co. Telephone-exchange apparatus and system. No. 1,275,141; Aug. 6; v. 253; p. 225.

Erickson, John, Chicago, Ill., assignor, by mesne assignments, to Automatic Electric Co. Telephone-exchange apparatus and system. No. 1,275,142; Aug. 6; v. 253; p. 226.

Ericson, John, New York, N. Y. Match holder and dispenser. No. 1,275,010; Aug. 6; v. 253; p. 189.

Eriksson, Erik O., Baltimore, Md. Boiler-cleaning device. No. 1,275,009; Aug. 6; v. 253; p. 189.

Esselen, Gustavus J., Jr., Swampscott, and H. S. Mork, Brookline, assignors to Chemical Products Company, Cambridge, Mass. Preparation of cellulose acetate. No. 1,275,884; Aug. 13; v. 253; p. 458.

Estelle, Axel T. C., Hagen, Germany, assignor to M. F. Wijkstrom, Stockholm, Sweden. Electrolytically producing iron. No. 1,275,161; Aug. 6; v. 253; p. 231.

Estes, Dana, Brookline, Mass. Fire-extinguisher. No. 1,274,699; Aug. 6; v. 253; p. 103.

Estes, Henry D., and W. H. Parks, Hartford, Ky. Demountable-wheel rim. No. 1,274,863; Aug. 6; v. 253; p. 149.

Estes, Joseph B., Babylon, N. Y. Ink-well and other receptacle. No. 1,277,204; Aug. 27; v. 253; p. 886.

Evangeline Iron Works. (See Cameron, Jarrett L., assignor.)

Evans, Catherine, Pittsburgh, Pa. Combination fork and spoon. No. 1,277,205; Aug. 27; v. 253; p. 886.

Evans, Cullen C., assignor to Master Equipment Company, Los Angeles, Cal. Driving-axle-hub construction for motor-driven vehicles. No. 1,275,143; Aug. 6; v. 253; p. 226.

Evans, Edwin R., Detroit, Mich. Front-axle construction. No. 1,276,046; Aug. 20; v. 253; p. 533.

Evans, Garfield I. (See Boyle, William J., assignor.)

Evans, Guy J., Buffalo, N. Y. Stencil-holder. No. 1,274,864; Aug. 6; v. 253; p. 149.

Evans, Guy J., Buffalo, N. Y. Stencil. No. 1,276,194; Aug. 20; v. 253; p. 575.

Evans, Harry F., Davenport, Iowa, assignor to Deere & Company, Moline, Ill. Wearing-plate for mowing-machines. No. 1,276,195; Aug. 20; v. 253; p. 575.

Everett, Francis D., Saranac Lake, N. Y. Slack-adjuster. No. 1,274,865; Aug. 6; v. 253; p. 150.

Everett, Frederick M., assignor to Columbian Rope Company, Auburn, N. Y. Indicating means for rope. No. 1,274,401; Aug. 6; v. 253; p. 16.

Everett, William J., Indianapolis, Ind. Feed-water heater and purifier for boilers. No. 1,276,339; Aug. 20; v. 253; p. 613.

Evers, Edward P. (See Ballman and Evers.)

Exley, William H. (See Leitner and Exley.)

F. L. Schmidt Company. (See Novick, Abraham, assignor.)

Faas, Henry N., and W. L. Braley, assignors to The American Seeding Machine Company, Springfield, Ohio. Feed-regulator for fertilizer-sowers. No. 1,276,047; Aug. 20; v. 253; p. 533.

Faber, Lothar W., New York, assignor to Eberhard Faber Pencil Company, Brooklyn, N. Y. Eraser-guard. No. 1,276,511; Aug. 20; v. 253; p. 663.

Fairbank, Clair W., *et al.* (Reissue.) (See Best, William N., assignor.)

Fairbanks, Morse & Company. (See Hobart, Franklin G., assignor.)

Fairbanks, Morse & Company. (See Hobart and Jahnke, assignors.)

Fairchild, Donald H., Denver, Colo. Ball-mill. No. 1,275,184; Aug. 6; v. 253; p. 238.

Fairmont Gas Engine & Railway Motor Car Co. (See Kasper, Walter F., assignor.)

Fairmont Mining Machine Company. (See Finley, Walter H., assignor.)

Fairweather, Edgar, London, England. Yieldable change-speed gearing. No. 1,275,885; Aug. 13; v. 253; p. 458.

Falk, Kaufman G., and K. Sugiura, assignors to G. B. Pegram, New York, N. Y. Tetra-iodo-hexamethylene-tetramin composition. No. 1,275,162; Aug. 6; v. 253; p. 231.

Farnsworth, Sidney W., Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company. Arc-controlling means for vapor-converters. No. 1,275,886; Aug. 13; v. 253; p. 458.

Farnum, William C., assignor to W. M. Whitney, Winchendon, Mass. Wood-planing machine. No. 1,275,163; Aug. 6; v. 253; p. 231.

Farrelly, Francis J., and A. Greiner, Hartford, Conn. Cathode for X-ray tubes. No. 1,275,542; Aug. 13; v. 253; p. 360.

Farrelly, Francis J., and A. Greiner, Hartford, Conn. X-ray tube. No. 1,276,196; Aug. 20; v. 253; p. 576.

Faure, Marie, New Orleans, La. Adjustable mirror-reflector. No. 1,276,512; Aug. 20; v. 253; p. 663.

Faust, Henry W., Seattle, Wash., assignor to S. B. Faust. Concentrator. No. 1,275,255; Aug. 13; v. 253; p. 277.

Faust, Sybil B. (See Faust, Henry W., assignor.)

Favre, Lyle A., Grey Eagle, Minn. Street-car indicator. No. 1,276,889; Aug. 27; v. 253; p. 800.

Fawcet, J. W., *et al.* (See Cook, Claude H., assignor.)

Fay, Owen H., trustee. (See Lewis, James N., assignor.)

Fay, Thomas J. Brooklyn, N. Y., assignor, by mesne assignments, to The Standard Parts Company, Cleveland, Ohio. System for supplying liquid fuel. No. 1,276,890; Aug. 27; v. 253; p. 801.

Fazekas, Steven, New York, N. Y. Boat propelling and steering device. No. 1,276,741; Aug. 27; v. 253; p. 763.

Fear, Frederick, Brooklyn, N. Y., A. E. Naldrett, and W. C. Nicodemus, assignors to Fred Fear Match Co., Bloomsburg, Pa. Ignition-tape for miners' safety-lamps. No. 1,275,543; Aug. 13; v. 253; p. 361.

Fedchenko, George, Detroit, Mich. Aeroplane. No. 1,277,206; Aug. 27; v. 253; p. 886.

Fedders, John M., assignor to Fedders Manufacturing Company, Inc., Buffalo, N. Y. Radiator. No. 1,274,402; Aug. 6; v. 253; p. 17.

Fedders, John M., assignor to Fedders Manufacturing Company, Inc., Buffalo, N. Y. Radiator. No. 1,276,197; Aug. 20; v. 253; p. 576.

Fedders Manufacturing Company. (See Fedders, John M., assignor.)

Federal Sign System, Electric. (See Ogle, Elmer L., assignor.)

Federson, James, Beresford, S. D. Combination hog-trough. No. 1,275,144; Aug. 6; v. 253; p. 227.

Feegles, De Witt C. (See Wood, Victor, assignor.)

Feldman, Ida B., Atlanta, Ga. Insect-trap. No. 1,277,301; Aug. 27; v. 253; p. 910.

Felix, Paul, Knoxville, Tenn. Multicylinder-engine. No. 1,276,891; Aug. 27; v. 253; p. 801.

Fellhauer-Allen Manufacturing Company. (See Allen, James M., assignor.)

Felton, Thomas W., San Gabriel, Tex. Rail tie and fastener. No. 1,275,544; Aug. 13; v. 253; p. 361.

Fend, Roland S., assignor to Woods Motor Vehicle Company. Chicago, Ill. Automobile. No. 1,275,011; Aug. 6; v. 253; p. 190.

Fender, Brown, Kaufman, Tex. Projectile. No. 1,276,892; Aug. 27; v. 253; p. 801.

Fender, Nicholas, Gary, Ind. Freight-car. No. 1,275,411; Aug. 13; v. 253; p. 325.

Fentress, Henry C., Alton, Ill. Device for conveying sounds to moving-picture screens. No. 1,276,198; Aug. 20; v. 253; p. 576.

Ferguson, George E., New York, N. Y., assignor to Pyrene Manufacturing Company. Fire-extinguishing and fireproofing composition. No. 1,276,742; Aug. 27; v. 253; p. 763.

Ferguson, Gilbert H., Samantha, Ala. Harrow. No. 1,274,866; Aug. 6; v. 253; p. 150.

Ferguson, Joseph B., New York, N. Y. Oiling system. No. 1,275,236; Aug. 13; v. 253; p. 277.

Ferguson, Robert S. (See Dodds and Ferguson.)

Fernald, Mark E., Saugus, assignor to C. C. Blake, Incorporated, Boston, Mass. Laced upper and method of lacing uppers. No. 1,274,700; Aug. 6; v. 253; p. 103.

Ferretti, Joseph, Jersey City, N. J. Stringed musical instrument. No. 1,275,667; Aug. 13; v. 253; p. 396.

Ferris, Ralph E. (See Hellmund, Ferris, and Perkins.)

Fetterly, John F. (See Pease and Fetterly.)

Fey, Charles A. (See Vaughn, John L., assignor.)

Fibre Machinery Company. (See Grove, Winfield S., assignor.)

Fidelty Brass Manufacturing Company. (See Armstrong, Harry H., assignor.)

Fidiam, James F., and F. F. Peralta, Greeley, Colo. Two-way folding seat. No. 1,277,054; Aug. 27; v. 253; p. 844.

Fields, Charles C. (See Fields, Robert J., assignor.)

Fields, Robert J., assignor of one-half to C. C. Fields, Baltimore, Md. Shirt. No. 1,276,631; Aug. 20; v. 253; p. 696.

Figgins, Archibald, Richmond, assignor to J. H. Nathan, St. Kilda, Victoria, Australia. Flux for use in brazing cast-iron and other metals. No. 1,275,412; Aug. 13; v. 253; p. 326.

Filippone, Peter, Newark, N. J. Concrete floor and ceiling construction. No. 1,275,668; Aug. 13; v. 253; p. 396.

Filmusic Company. (See Myers, Edgar W., assignor.)

Filzer, Christian G., Erie, Pa. Hydrocarbon-torch. No. 1,274,403; Aug. 6; v. 253; p. 17.

Finch, Herbert I. (See Meston and Finch.)

Finegan, Samuel B., Eugene, Oreg. Spring-forming machine. No. 1,276,639; Aug. 20; v. 253; p. 698.

Finlayson, Murdo G., Chicago, Ill. Safety-anchor for window-cleaners. No. 1,274,404; Aug. 6; v. 253; p. 17.

Finley, Ernest D., assignor of one-half to F. W. Buffum, Louisiana, Mo. Air-brake for railway-trains. No. 1,276,048; Aug. 20; v. 253; p. 534.

Finley, Ernest D., assignor of one-half to F. W. Buffum, Louisiana, Mo. Air-brake for railway-trains. No. 1,276,049; Aug. 20; v. 253; p. 534.

Finley, Walter H., assignor to Fairmont Mining Machine Company, Fairmont, W. Va. Safety-gate for mine-shafts. No. 1,276,199; Aug. 20; v. 253; p. 576.

Finnell, Walter S., assignor to Finola Manufacturing Company, Hannibal, Mo. Pulley for floor-scrubbing machines. No. 1,275,887; Aug. 13; v. 253; p. 458.

Finola Manufacturing Company. (See Finnell, Walter S., assignor.)

Firestone Steel Products Company. (See Richards, Archer W., assignor.)

Firestone Tire & Rubber Company, The. (See Arens, Rudolph J., assignor.)

Firestone Tire & Rubber Company, The. (See Stevens, William C., assignor.)

Fischer, Emmett N., Bristol, Ind. Trousers and necktie holder. No. 1,276,513; Aug. 20; v. 253; p. 663.

Fischer, Michael, Richmond, Cal. Welding-torch. No. 1,276,893; Aug. 27; v. 253; p. 801.

Fischer, Otto, assignor to Firm of R. Bosch, Stuttgart, Germany. Shaping fiber articles. No. 1,275,888; Aug. 13; v. 253; p. 458.

Fischer, Samuel, Los Angeles, Cal. Safety-guard for foot-pedals. No. 1,277,207; Aug. 27; v. 253; p. 887.

Fisher, Austin C., assignor to Eastman Kodak Company, Rochester, N. Y. Folding camera. No. 1,276,743; Aug. 27; v. 253; p. 763.

Fisher Body Corporation. (See Fox, Edward W., assignor.)

Fisher Body Corporation. (See Simpson, Emory G., assignor.)

Fitch, Benjamin F., Evanston, Ill., assignor to The Motor Terminals Company, Cleveland, Ohio. Transfer system for freight-terminals. No. 1,275,145; Aug. 6; v. 253; p. 227.

Fite, Frank J., assignor of one-half to J. C. Griffith, Fort Worth, Tex. Sliding-door-operating mechanism. No. 1,277,055; Aug. 27; v. 253; p. 845.

Fix, Frank, Irwin, Pa., assignor to Westinghouse Electric and Manufacturing Company. Circuit-interrupter. No. 1,274,701; Aug. 6; v. 253; p. 103.

Flagg, Ernest, New York, N. Y. Roof-covering. No. 1,276,632; Aug. 20; v. 253; p. 696.

Flanagan, Patrick C., New York, N. Y. Individual protective armor. No. 1,276,200; Aug. 20; v. 253; p. 577.

Flander, Ervin J., Oneida, N. Y. Auger. No. 1,275,889; Aug. 13; v. 253; p. 459.

Flanders, George D., Ellsworth, Kans. Veneer-block. No. 1,276,894; Aug. 27; v. 253; p. 861.

Flannery Bolt Company. (See Dodds, Ethan I., assignor.)

Flannery Bolt Company. (See Dodds and Ferguson, assignors.)

Flannery Bolt Company. (See Flannery, John R., assignor.)

Flannery Bolt Company. (See Flannery and Dodds, assignors.)

Flannery Bolt Company. (See Flannery, Stafford, and Dodds, assignors.)

Flannery Bolt Company. (See Lacerda, Harry A., assignor.)

Flannery, James J., and E. I. Dodds, assignors to Flannery Bolt Company, Pittsburgh, Pa. Illuminating means. No. 1,275,890; Aug. 13; v. 253; p. 459.

Flannery, James J., and E. I. Dodds, assignors to Flannery Bolt Company, Pittsburgh, Pa. Lamp structure. No. 1,275,891; Aug. 13; v. 253; p. 459.

Flannery, John R., assignor to Flannery Bolt Company, Pittsburgh, Pa. Stay-bolt structure. No. 1,276,744; Aug. 27; v. 253; p. 764.

Flannery, John R., assignor to Flannery Bolt Company, Pittsburgh, Pa. Stay-bolt structure. No. 1,276,745; Aug. 27; v. 253; p. 764.

Flannery, John R., assignor to Flannery Bolt Company, Pittsburgh, Pa. Stay-bolt structure. No. 1,276,746; Aug. 27; v. 253; p. 764.

Flannery, John R., B. E. D. Stafford, and E. I. Dodds, assignors to Flannery Bolt Company, Pittsburgh, Pa. Stay-bolt structure. No. 1,275,892; Aug. 13; v. 253; p. 459.

Fleckenstein, Adelaide J., guardian. (See Fleckenstein, Jackson.)

Fleckenstein, Jackson, minor, Ionia, Mich.; A. J. Fleckenstein, guardian, assignor to Fleckenstein Visible Gasometer Company, Chicago, Ill. Measuring apparatus. No. 1,275,545; Aug. 13; v. 253; p. 361.

Fleckenstein Visible Gasometer Company. (See Fleckenstein, Jackson, assignor.)

Fleming, Norman O., Los Angeles, Cal. Bucket for deep-well pumps. No. 1,275,546; Aug. 13; v. 253; p. 361.

Flexible Metal Hose Company, The. (See Forth, Charles, assignor.)

Flint, Charles, Spokane, Wash. Spring-motor. No. 1,276,201; Aug. 20; v. 253; p. 577.

Foley, Olga G., administratrix. (See Gathmann, Louis.)

Folger, Harry S., assignor to R. D. Swisher Manufacturing Company, Chicago, Ill. Self-inking hand-stamp. No. 1,275,893; Aug. 13; v. 253; p. 459.

Foljambe, Eugene S., Drexel Hill, Pa. Sounding wheeled toy. No. 1,276,747; Aug. 27; v. 253; p. 764.

Foothorap, Harry A., assignor to Elliott-Fisher Company, Harrisburg, Pa. Line-spacing mechanism. No. 1,275,413; Aug. 13; v. 253; p. 326.

Forbes, Charles O., Glasgow, Mont. Permutation-lock. No. 1,276,633; Aug. 20; v. 253; p. 696.

Forbes, Gilbert D., Kendall, N. Y. Surgical clamp. No. 1,275,414; Aug. 13; v. 253; p. 326.

Forbes, Harry B., Ogden, Utah. Projectile. No. 1,275,669; Aug. 13; v. 253; p. 396.

Ford, Ben K., Oak Park, Ill., assignor to American Can Company, New York, N. Y. Container-closure. No. 1,274,867; Aug. 6; v. 253; p. 151.

Forrest, Thomas W. W., Oakland, Cal. Apparatus for drying fruit. No. 1,275,547; Aug. 13; v. 253; p. 362.

Forster, Adam, Pittsburgh, Pa., assignor to J. E. Hanger, Incorporated. Clasp for the corsets of artificial limbs. No. 1,277,208; Aug. 27; v. 253; p. 887.

Forsyth, Joseph C., assignor of one-fourth to V. C. Gilpin and one-fourth to J. E. McAuliffe, Brooklyn, N. Y. Electric-light socket. No. 1,276,634; Aug. 20; v. 253; p. 697.

Fort Pitt Bedding Company. (See Silvester, Joseph, assignor.)

Forth, Charles, assignor to The Flexible Metal Hose Company, Limited, Ottawa, Ontario, Canada. Self-locking railway-switch handle. No. 1,275,237; Aug. 13; v. 253; p. 278.

Forward, Chauncey B., Urbana, Ohio. Apparatus for reducing crude petroleum. No. 1,274,405; Aug. 6; v. 253; p. 18.

Foster, Charles, Croydon, England, assignor to Powers Accounting Machine Company, New York, N. Y. Tabulating-machine. No. 1,274,528; Aug. 6; v. 253; p. 55.

Foster, Charles H., St. Louis, Mo. Boiler-stand. No. 1,276,202; Aug. 20; v. 253; p. 577.

Foster, Clarence M., Toledo, Ohio. Buckle-plate. No. 1,276,748; Aug. 27; v. 253; p. 765.

Fougner, Nicolay K., Christiania, Norway. Sea-mine of steel-concrete. No. 1,275,894; Aug. 13; v. 253; p. 460.

Fountain Faucet Company. (See Melander, August W., assignor.)

Fourneaux, Emile A., Manchester, England. Production of black upon textile fibers. No. 1,277,056; Aug. 27; v. 253; p. 845.

Fouts, Calvin C., assignor to The C. C. Fouts Company, Middletown, Ohio. Grain-bin. No. 1,274,868; Aug. 6; v. 253; p. 151.

Fowler, Henry A. (See Mead, Frank M., assignor.)

Fox, Edward P., Lake Arthur, La. Irrigating device. No. 1,274,702; Aug. 6; v. 253; p. 104.

Fox, Edward W., assignor to Fisher Body Corporation, Detroit, Mich. Adjustable seat. No. 1,276,203; Aug. 20; v. 253; p. 578.

Fox, Raphael A., New York, N. Y. Shoe-tongue pad. No. 1,275,895; Aug. 13; v. 253; p. 460.

Foxworth, Eldrige S., Glenmore, La. Aeroplane-bomb. No. 1,276,635; Aug. 20; v. 253; p. 697.

Franck, William L., Philadelphia, Pa. Textile product and making the same. No. 1,277,057; Aug. 27; v. 253; p. 845.

Frank B. Cook Company. (See Cook, Frank B., assignor.)

Frank B. Cook Company. (See Sands, Roy G., assignor.)

Frank, Emil, Cincinnati, Ohio. Powder-package. No. 1,276,204; Aug. 20; v. 253; p. 578.

Frazer, Pinkney P., St. Louis, Mo. Bearing. No. 1,274,529; Aug. 6; v. 253; p. 55.

Frazier, James W., and F. E. Hansen, Cleveland, Ohio. Hose-coupling. No. 1,274,406; Aug. 6; v. 253; p. 18.

Fred Fear Match Co. (See Fear, Naldrett, and Nicodemus, assignors.)

Frede, Charles F., assignor to Commonwealth Steel Company, St. Louis, Mo. Car-truck. No. 1,276,636; Aug. 20; v. 253; p. 697.

Freeman-Daughaday Co. (See Callahan, Charles J., assignor.)

Freeman, Lawrence K., Bellaire, Tex. Bale-forming machine. No. 1,277,302; Aug. 27; v. 253; p. 910.

Freeman, Leon, Chicago, Ill. Hat and hat-lining. No. 1,275,238; Aug. 13; v. 253; p. 278.

Freese, Robert E. L., Fayette, Mo. Fence-wire stretcher. No. 1,275,896; Aug. 13; v. 253; p. 460.

Freirich, Abraham, Demarest, N. J. Non-skidding attachment for wheel-tires. No. 1,275,897; Aug. 13; v. 253; p. 460.

Freiwald, Gustav, Portland, Oreg. Hat-fastener. No. 1,276,638; Aug. 20; v. 253; p. 698.

French, Charles S., Eckman, W. Va. Sand-drier. No. 1,276,514; Aug. 20; v. 253; p. 663.

French, James C., Kenosha, Wis., assignor to F. C. Austin, Chicago, Ill. Drag-line-bucket excavator. No. 1,275,548; Aug. 13; v. 253; p. 362.

Frensdorf, Herman R., Green Bay, Wis. Gun-sight. No. 1,275,147; Aug. 6; v. 253; p. 227.

Frère, Raoul, Paris, France. Door for fireproof chambers. No. 1,275,549; Aug. 13; v. 253; p. 362.

Frey, August J., assignor to Brass Goods M'f'g Co., Brooklyn, N. Y. Wire-compression clamp for tubing and the like. No. 1,275,898; Aug. 13; v. 253; p. 460.

Frey, Eugene, Oakland, Cal. Automobile-signal. No. 1,277,303; Aug. 27; v. 253; p. 910.

Freydberg, Aaron, New York, N. Y. Apparatus for cutting cloth or other fabrics. No. 1,275,899; Aug. 13; v. 253; p. 460.

Frickle, Charles H., Bonifas, Mich. Extension-socket. No. 1,276,637; Aug. 20; v. 253; p. 697.

Friedlein, Fred J., assignor of one-half to L. Schroeder, Guttenberg, Iowa. Silo. No. 1,275,148; Aug. 6; v. 253; p. 227.

Frierson, Eugene P. (See Gray, Walter, assignor.)

Fritsche, John T., Cleveland, Ohio. Advertising device. No. 1,274,530; Aug. 6; v. 253; p. 55.

Fritz, John, New Bedford, Mass. Paper-clip. No. 1,275,012; Aug. 6; v. 253; p. 190.

Fritzsche, Hermann. (See Anderwert, Fritzsche, and Schobel.)

Frost, Harry W., assignor to Clear Vision Windshield Company, Detroit, Mich. Lookout attachment. No. 1,275,013; Aug. 6; v. 253; p. 190.

Frost, William, assignor of one-half to J. F. Null, Athens, Ill. Cornstalk-rake. No. 1,276,205; Aug. 20; v. 253; p. 578.

Fry, William G., Milwaukee, Wis., and V. A. Senberth, Chicago, Ill. Pulley. No. 1,275,670; Aug. 13; v. 253; p. 397.

Frye, Wyatt R. R., Washington, D. C. Photographic-printing apparatus. No. 1,275,239; Aug. 13; v. 253; p. 288.

Fryer, Charles H., Providence, R. I. Wind-shield for automobiles and other passenger-vehicles. No. 1,274,869; Aug. 6; v. 253; p. 151.

Fues, Ernst, Hanau-on-the-Main, Germany. Absorbent-material-sizing composition. No. 1,276,206; Aug. 20; v. 253; p. 578.

Fuhrmann, Karl P., *et al.* (See Grabe, Clarence G., assignor.)

Fujiura, Moto, Los Angeles, Cal. Noiseless railway-crossing. No. 1,275,240; Aug. 13; v. 253; p. 278.

Fulkerson, James C., assignor to D. A. Davis, Kansas City, Mo. Steering device for automobiles. No. 1,276,895; Aug. 27, v. 253; p. 802.

Furber, Frederick M., Revere, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Device for applying fluids to shoes. No. 1,274,407; Aug. 6; v. 253; p. 18.

Fusselman, Jerry, Akron, Ohio. Gate. No. 1,276,207; Aug. 20; v. 253; p. 579.

Gadke, William, Philadelphia, Pa. Electrical coupling. No. 1,276,340; Aug. 20; v. 253; p. 614.

Gall, Charles H., Cincinnati, Ohio. Spring structure. No. 1,276,896; Aug. 27; v. 253; p. 802.

Gallagher, Farrel T., Herbert's Creek, Queensland, Australia. Automatic quick-acting air-brake. No. 1,276,640; Aug. 20; v. 253; p. 698.

Gallagher, Joseph M., Radville, Saskatchewan, Canada. Window attachment. No. 1,276,641; Aug. 20; v. 253; p. 698.

Gallenzzi, Joseph, San Francisco, Cal. Barrel-filling machine. No. 1,276,341; Aug. 20; v. 253; p. 614.

Gallup, Rockwell L., and W. G. Wachs, Chicago, Ill., assignors to Barry-Wehmiller Machinery Company, St. Louis, Mo. Bottle-washing machine. No. 1,276,897; Aug. 27; v. 253; p. 802.

Gallup, Rockwell L., and W. G. Wachs, Chicago, Ill., assignors to Barry-Wehmiller Machinery Company, St. Louis, Mo. Bottle-washing machine. No. 1,276,898; Aug. 27; v. 253; p. 803.

Gally, Robert A., assignor to The Baldwin Company, Cincinnati, Ohio. Music-player sticker-action. No. 1,275,181; Aug. 6; v. 253; p. 237.

Gally, Robert A., assignor to The Baldwin Company, Cincinnati, Ohio. Music-roll gearing. No. 1,276,342; Aug. 20; v. 253; p. 615.

Galvin, John A., Spalding, Nebr. Tractor-wheel. No. 1,276,515; Aug. 20; v. 253; p. 663.

Gamble, Joseph W., assignor to Harrison Safety Boiler Works, Philadelphia, Pa. Flow-measuring apparatus. No. 1,274,703; Aug. 6; v. 253; p. 104.

Gamewell Fire Alarm Telegraph Company. (See Beach, Clarence E., assignor.)

Gammeter, John R., Akron, Ohio, assignor to the B. F. Goodrich Company, New York, N. Y. Pipe-coupling. No. 1,275,149; Aug. 6; v. 253; p. 228.

Gampert, Henry, Fitchburg, Mass. Ice-fishing device. No. 1,275,014; Aug. 6; v. 253; p. 190.

Gardiner, Raynor M., *et al.*, executor. (See Davis, William M., assignor.)

Gardner, Florinda, Salt Lake City, Utah. Piano-stool music-cabinet. No. 1,275,671; Aug. 13; v. 253; p. 397.

Gardner, Guy O. (See Tainter, Simon S., assignor.)

Gardner, Howard S., East Orange, N. J. Hoisting apparatus. No. 1,275,241; Aug. 13; v. 253; p. 279.

Gardner, Levi S., Cedar Grove, La. Carbureter. No. 1,274,408; Aug. 6; v. 253; p. 19.

Garfield, James R., trustee. (See Albert, Walter P., assignor.)

Garford, Francis S., Lougheed, Canada. Automatic release-coupling. No. 1,277,058; Aug. 27; v. 253; p. 845.

Garford Manufacturing Company, The. (See Manson, Ray H., assignor.)

Garren, George S., Oak Park, assignor to Sargent Company, Chicago, Ill. Grease-cup. No. 1,277,059; Aug. 27; v. 253; p. 846.

Garrett, Carlton M. (See Stark and Garrett, assignors.)

Garrett, Myers A. (See Stark and Garrett.)

Garvey, James, Los Angeles, Cal. Bread-making machine. No. 1,274,704; Aug. 6; v. 253; p. 104.

Gaston, William E., Torrington, Conn. Bottle-closure. No. 1,276,343; Aug. 20; v. 253; p. 615.

Gates, Frederic P., assignor to The Arrow Electric Company, Hartford, Conn. Electric-lamp socket. No. 1,276,516; Aug. 20; v. 253; p. 664.

Gathmann, Louis, deceased, Washington, D. C.; O. G. Foley, administratrix. Method of and apparatus for casting armor-plates. No. 1,276,517; Aug. 20; v. 253; p. 664.

Gáti, Béla, Budapest, Hungary. Metal-protected high-potential insulator. No. 1,277,304; Aug. 27; v. 253; p. 910.

Gay, Wesley C., Augusta, Ga. Rod or wire panel fence. No. 1,275,900; Aug. 13; v. 253; p. 461.

Gedney, William S., Belleville, N. J. Tire-valve control. No. 1,275,416; Aug. 13; v. 253; p. 326.

Gee, Norman E., Altoona, Pa. Fuel-transfer mechanism for stokers. No. 1,276,642; Aug. 20; v. 253; p. 699.

Gehbauer, John, St. Louis, Mo. Fan attachment for lawn-swings. No. 1,276,050; Aug. 20; v. 253; p. 534.

Geiger, Sylvester F., Lake Geneva, Wis. Folding crate. No. 1,274,531; Aug. 6; v. 253; p. 55.

Geirmann, Charles, Lodi, Cal. Vineyard-plow. No. 1,276,051; Aug. 20; v. 253; p. 535.

Geiser, Fred E., *et al.* (See Wentz, Robert F., assignor.)

Geist, Carlton. (See Wiederwax, Robert W., assignor.)

Geist, Harry F., assignor, by mesne assignments, to Webster Electric Company, Racine, Wis. Magneto-machine. No. 1,275,901; Aug. 13; v. 253; p. 461.

Geistwhite, John. (See Bohmker and Geistwhite.)

Geiszt, Philo M., La Crosse, Wis. Indicator for oiling systems. No. 1,274,871; Aug. 6; v. 253; p. 152.

Gendreau, Jacques, Shanghai, China. Process and apparatus for making calcium acetate and by-products. No. 1,276,648; Aug. 20; v. 253; p. 699.

General Alloys Company, The. (See Cooper, Hugh S., assignor.)

General Chemical Company. (See Taylor, Alvin M., assignor.)

General Electric Company. (See Alexanderson, Ernst F. W., assignor.) (Reissue.)

General Electric Company. (See Carichoff, Eugene R., assignor.)

General Electric Company. (See Case, Frank E., assignor.)

General Electric Company. (See Dantsizen, Christian, assignor.)

General Electric Company. (See Eaton, John, assignor.)

General Electric Company. (See Green, Frank C., assignor.)

General Electric Company. (See Guay, Emile J., assignor.)

General Electric Company. (See Hewlett, Edward M., assignor.)

General Electric Company. (See Howell, Fred B., assignor.)

General Electric Company. (See Hughes, Dale C., assignor.)

General Electric Company. (See McKelvey, Newell A., assignor.)

General Electric Company. (See Merriam, Ezra B., assignor.)

General Electric Company. (See Montsinger, Vincent M., assignor.)

General Electric Company. (See Orth, Johannes, assignor.)

General Electric Company. (See Steinmetz, Charles P., assignor.)

General Electric Company. (See Wilkinson, James, assignor.)

General Electric Company. (See Wood, James J., assignor.)

General Electric Company. (See Woolley, Rew E., assignor.)

General Indurating Corporation. (See Lander, Wintworth V., assignor.)

General Motors Corporation. (See Pence, Lafe V., assignor.)

General Railway Signal Company. (See Howe, Winthrop K., assignor.)

General Railway Signal Company. (See Parsons, Eli B., assignor.)

Gensch, Hermann, assignor of one-half to A. J. Mills, Bonita, Ariz. Hat-retainer. No. 1,276,052; Aug. 20; v. 253; p. 535.

Geo. P. Ide & Co. (See Becker, Donald P., assignor.)

George Cutter Company. (See Ashinger, Herman H., assignor.)

George H. Frothingham Company. (See Prescott, Arthur T., assignor.)

George H. Frothingham Company. (See Tomkinson, Charles C., assignor.)

George, Martha B., Indianapolis, Ind. Cooking utensil. No. 1,276,749; Aug. 27; v. 253; p. 765.

Gerace, Gaetano, Timmins, Ontario, Canada. Disappearing gun. No. 1,276,518; Aug. 20; v. 253; p. 664.

Geraldine, Dion. (See Shurtleff, Wilfred, assignor.)

Germain Seed and Plant Company. (See Burns, Josiah O., assignor.)

Gerrard, Alec J., Seattle, Wash. Wire-stretcher. No. 1,277,305; Aug. 27; v. 253; p. 911.

Ghegan, John J., East Orange, N. J. Electric signaling apparatus. No. 1,275,902; Aug. 13; v. 253; p. 461.

Ghegan, John J., East Orange, N. J. Electric signaling apparatus. No. 1,275,903; Aug. 13; v. 253; p. 462.

Gibbs, Alfred J., Hay Springs, Nebr. Push-rake attachment. No. 1,276,519; Aug. 20; v. 253; p. 665.

Gibson, Katharine E. (See Hardy and Gibson.)

Giclas, Louis, Washington, D. C. Receiver for milk-bottles and the like. No. 1,276,750; Aug. 27; v. 253; p. 765.

Gilbert, Arthur D., Dunseith, N. D. Pipe. No. 1,276,751; Aug. 27; v. 253; p. 765.

Gilbert & Barker Manufacturing Company. (See Davis, Henderson G., assignor.)

Gilbert & Barker Manufacturing Company. (See Davis, John B., assignor.)

Gilbert, Charles, Chicago, Ill. Fender. No. 1,274,705; Aug. 6; v. 253; p. 104.

Gilbert, John W., assignor of one-half to D. H. Parker, Windsor, Vt. Hardening steel. No. 1,275,242; Aug. 13; v. 253; p. 279.

Gilbert Shade Holder Company, The. (See Moorman, Benjamin F., assignor.)

Gilda, John R., assignor to Pullman Couch Company, Chicago, Ill. Convertible furniture. No. 1,274,532; Aug. 6; v. 253; p. 56.

Giles, Ellsworth F., Altoona, Pa. Brake-timing attachment for talking-machines. No. 1,274,706; Aug. 6; v. 253; p. 105.

Gillett, David C., Tampa, Fla. Apparatus for preserving organic materials by the use of X-rays. No. 1,275,417; Aug. 13; v. 253; p. 327.

Gilling, Preston E., East Orange, N. J., assignor to A. Schrader's Son, Brooklyn, N. Y. Pressure-gage. No. 1,276,899; Aug. 27; v. 253; p. 803.

Gillis, Julius H., assignor to Anaconda Copper Mining Company, Anaconda, Mont. Conductor-bar. No. 1,276,208; Aug. 20; v. 253; p. 579.

Gilman, George H., Claremont, N. H., assignor, by mesne assignments, to Sullivan Machinery Company, Boston, Mass. Combined chuck and drill extractor. No. 1,175,164; Aug. 6; v. 253; p. 282.

Gilman, Myron A., Westfield, Mass. Educational toy. No. 1,276,844; Aug. 20; v. 253; p. 615.

Gilpin, V. C., *et al.* (See Forsyth, Joseph C., assignor.)

Gilson, Henry R. (See Hubbard and Gilson.)

Girtanner, Alexander, and R. H. Miller, St. Louis, Mo., assignors, by mesne assignments, to American Steam Conveyor Corporation, Chicago, Ill. Discharge apparatus for ash-conveyers. No. 1,275,015; Aug. 6; v. 253; p. 191.

Gist, William V., Sparta, Tenn. Planter. No. 1,276,900; Aug. 27; v. 253; p. 803.

Giuffrè, Carlo, Detroit, Mich. Safety-gate. No. 1,275,418; Aug. 13; v. 253; p. 327.

Glass, Arnold F., Birmingham, Ala. Oil-burning stove. No. 1,276,901; Aug. 27; v. 253; p. 803.

Glass, William C., Woonsocket, R. I., assignor to United Printing Machinery Company, Boston, Mass. Sheet-feeding mechanism. No. 1,275,550; Aug. 13; v. 253; p. 362.

Gleason Works. (See Stewart and Bickle, assignors.)

Godbersen, Henry, Charter Oak, assignor to Corn Huskers Investment Co., Ute, Iowa. Corn picking and husking machine. No. 1,275,551; Aug. 13; v. 253; p. 363.

Godfrey, Harvey, Pittsburgh, Pa. Advertising device. No. 1,275,244; Aug. 13; v. 253; p. 279.

Godfrey, Warren P. (See Watts, Ben, assignor.)

Goelkel, Rinaldo A., New York, N. Y., and W. N. Lurcott, Weehawken, N. J.; said Lurcott assignor to said Goelkel. Eyeglass-case. No. 1,277,210; Aug. 27; v. 253; p. 887.

Going, George G., assignor to The Noiseless Typewriter Company, Middletown, Conn. Type-writing machine. No. 1,277,200; Aug. 27; v. 253; p. 887.

Gold Car Heating & Lighting Company. (See Gold, Edward E., assignor.)

Gold, Edward E., assignor to Gold Car Heating & Lighting Company, New York, N. Y. Train-pipe valve. No. 1,275,245; Aug. 13; v. 253; p. 279.

Goldberg Calculating Machine Company. (See Goldberg, Hyman E., assignor.)

Goldberg, Hyman E., assignor to Goldberg Calculating Machine Company, Chicago, Ill. Calculating-machine. No. 1,276,520; Aug. 20; v. 253; p. 665.

Golding, Daniel G., Fremont, Nebr. Lens-mounting for eyeglasses. No. 1,274,870; Aug. 6; v. 253; p. 152.

Goldschmidt, Victor M., assignor to Titan Co. A/S. of Norway, Christiania, Norway. Freeing liquids from suspended particles. No. 1,276,644; Aug. 20; v. 253; p. 699.

Goldsmith, George H. (See Shambow and Goldsmith.)

Good, William W., and F. H. Buckman, Chicago, Ill. Drain-pipe plug. No. 1,275,419; Aug. 13; v. 253; p. 327.

Goodall, Howard W., Aldan, Pa. Covered hose. No. 1,276,752; Aug. 25; v. 253; p. 765.

Gooding, Harry M., Attica, Ohio. Harrow-tooth. No. 1,276,645; Aug. 20; v. 253; p. 699.

Goodman Manufacturing Company. (See Davis, Charles E., assignor.)

Goodnow, Henry W., assignor of one-half to J. P. Ryan, Worcester, Mass. Match-box holder. No. 1,274,409; Aug. 6; v. 253; p. 19.

Goodrum, Charles L., assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone-exchange system. No. 1,275,016; Aug. 6; v. 253; p. 191.

Goodrum, Charles L., assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone system. No. 1,276,521; Aug. 20; v. 253; p. 665.

Goodwin, Walter L., and A. Holman, Seattle, Wash. Dump-wagon body. No. 1,276,345; Aug. 20; v. 253; p. 616.

Goodyear Tire and Rubber Company, The. (See Kilborn, Karl B., assignor.)

Goodyear Tire & Rubber Company, The. (See Thomson, James D., assignor.)

Gordon, Peter A., Detroit, Mich. Mounting for sliding doors. No. 1,274,872; Aug. 6; v. 253; p. 152.

Gorman, John H., assignor of one-half to H. P. Brown, Salisbury, N. C. Fuel-heater for gasolene engines. No. 1,274,707; Aug. 6; v. 253; p. 105.

Gormley, Frank L., Brookline, assignor to A. O. Norton, Inc., Roxbury, Mass. Lifting-jack. No. 1,276,902; Aug. 27; v. 253; p. 804.

Gorton, Robert, Brookline, Mass. Stud. No. 1,277,060; Aug. 27; v. 253; p. 846.

Goss, William F. M., Urbana, Ill. Locomotive-engine. No. 1,275,672; Aug. 13; v. 253; p. 397.

Gottschalk, Albert, assignor to National Pneumatic Company, New York, N. Y. Motor for door-operating mechanism. No. 1,277,061; Aug. 27; v. 253; p. 846.

Gottschalk, William, assignor to Dutton Dredge Co., San Francisco, Cal. Drainage-gate. No. 1,276,053; Aug. 20; v. 253; p. 535.

Goughler, Eli, Youngstown, Ohio. Automobile-jack. No. 1,274,873; Aug. 6; v. 253; p. 152.

Gould Coupler Company. (See Jepson, John W., assignor.)

Gould Coupler Company. (See McGary and Sunderland, assignors.)

Gould, Edward G., Oakland, Cal. Rotary engine. No. 1,276,346; Aug. 20; v. 253; p. 616.

Gouldbourn, Joseph. (See Jerram and Gouldbourn.)

Government of the United States. (See Tiemann and Betts, assignors.)

Gow, Alexander M., Duluth, Minn. Steam-shovel dipper. No. 1,274,533; Aug. 6; v. 253; p. 56.

Grabau, Lawrence E., Bouair, Iowa. Snow-plow. No. 1,274,708; Aug. 6; v. 253; p. 105.

Grabe, Clarence G., Wilkinsburg borough, assignor of three-ninths to L. A. Parish, Port Allegany, Pa., and two-ninths to K. P. Fuhrmann, Sault Ste. Marie, Ontario, Canada. Moving-picture machine. No. 1,276,054; Aug. 20; v. 253; p. 536.

Grabe, Georg, Nikolassee, assignor to Siemens & Halske A. G., Siemensstadt, near Berlin, Germany. Electro-magnetic relay. No. 1,274,874; Aug. 6; v. 253; p. 162.

Grace, Charles J., Truro, England. Carbureter. No. 1,274,709; Aug. 6; v. 253; p. 106.

Graham, John. (See Hinckley and Graham.)

Graham, Tom C., Arlington, N. J. Poker-chip holder. No. 1,277,211; Aug. 27; v. 253; p. 887.

Grand Rapids Refrigerator Co. (See Curran, Frank J. M., assignor.)

Grand Rapids Refrigerator Co. (See McGowah, George J., assignor.)

Grant, William A., Houston, Tex. Wire-spacing attachment for baling-presses. No. 1,277,306; Aug. 27; v. 253; p. 911.

Gravert, Reimer N., assignor of forty-nine one-hundredths to R. Tremont, Minneapolis, Minn. Grinder attachment for meat-choppers. No. 1,275,245; Aug. 13; v. 253; p. 280.

Graves, William E., Bloomfield, Nebr. Plunger-valve. No. 1,275,420; Aug. 13; v. 253; p. 328.

Gray, Emmet P., Detroit, Mich. Muffler. No. 1,276,200; Aug. 20; v. 253; p. 579.

Gray, George E., Compton, assignor of one-third to E. A. Carson, Los Angeles, Cal. Carbureter. No. 1,275,150; Aug. 6; v. 253; p. 228.

Gray, Harold L., assignor to Crabbs Reynolds Taylor Company, Crawfordsville, Ind. Seed-separator. No. 1,277,062; Aug. 27; v. 253; p. 847.

Gray, Walter, assignor of one-half to E. P. Frierson, Fort Huachuca, Ariz. Automatic train-stop. No. 1,277,063; Aug. 27; v. 253; p. 847.

Greb, Louis, Appleton, Wis. Potato-planter. No. 1,276,646; Aug. 20; v. 253; p. 700.

Green, Austin E., Easton, Me. Potato-digger. No. 1,276,903; Aug. 27; v. 253; p. 804.

Green, Bessie M., administratrix. (See Green, Frank C.)

Green, Frank C., deceased; B. M. Green, administratrix, Pittsfield, Mass., assignor to General Electric Company. Protective means for electrical apparatus. No. 1,275,151; Aug. 6; v. 253; p. 228.

Greenfield, Isidore, Brooklyn, N. Y. Locking and latching mechanism. No. 1,275,246; Aug. 13; v. 253; p. 280.

Gregg, Clarence, Pitt Bridge, Tex. Machine-gun. No. 1,277,307; Aug. 27; v. 253; p. 911.

Greiner, Alfred. (See Farrelly and Greiner.)

Griesel, John C., Pottsville, Pa. Automatic switch for electric irons. No. 1,275,552; Aug. 13; v. 253; p. 363.

Griffin, Gerald G., New York, N. Y. Explosive shell. No. 1,276,347; Aug. 20; v. 253; p. 616.

Griffith, John C. (See Fite, Frank J., assignor.)

Griffith, William H. (See Cary, James H., assignor.)

Griffiths, Samuel, Kansas City, Kans. Shock-absorbing spring. No. 1,275,247; Aug. 13; v. 253; p. 280.

Griswold, Albert A., Providence, R. I., assignor of one-half to J. F. Chevalier, Brookline, Mass. Flexible shingle. No. 1,274,410; Aug. 6; v. 253; p. 19.

Griswold, Thomas. (See Dow and Griswold.)

Groch, Frank, Cobalt, Ontario, Canada. Ore concentration. No. 1,276,753; Aug. 27; v. 253; p. 766.

Groleau, Wilfred S., La Salle, Ill. Life-saving device. No. 1,276,055; Aug. 20; v. 253; p. 536.

Gross, R. B., *et al.* (See Stanek, Dominek G., assignor.)

Gross Chandelier Company (See Bakula, Frank A., assignor.)

Gross, W. R., *et al.* (See Stanek, Dominek G., assignor.)

Grothe, Walter, Fremont, Ohio, assignor, by mesne assignments, to National Carbon Company, Inc. Electric battery. No. 1,276,754; Aug. 27; v. 253; p. 766.

Grotta, Sidney S., Hartford, Conn. Wrapper. No. 1,275,904; Aug. 13; v. 253; p. 462.

Grotz, Albert R., Wellsburg, W. Va. Method and means for producing lantern-globes. No. 1,276,647; Aug. 20; v. 253; p. 700.

Grove, Oliver, Indianapolis, Ind. Toy engine. No. 1,275,017; Aug. 6; v. 253; p. 191.

Grove, Winfield S., Manila, Philippine Islands, assignor to Fibre Machinery Company, Inc., New York, N. Y. Method and apparatus for decorticating fibrous plants. No. 1,276,348; Aug. 20; v. 253; p. 616.

Growder, John, Avoca, Ireland. Swivel for use in well-drilling. No. 1,275,018; Aug. 6; v. 253; p. 192.

Gruman, Lloyd B., Newark, N. J. Indicator. No. 1,274,875; Aug. 6; v. 253; p. 162.

Grunhow, Conrad, Chicago, Ill. Outlet-box hanger. No. 1,276,904; Aug. 27; v. 253; p. 804.

Gruntler, Adam H., Hartford, Conn. Reversible clutch. No. 1,275,905; Aug. 13; v. 253; p. 462.

Guardian Frigerator Company, The. (See Bechtold, Reuben E., assignor.)

Guardian Frigerator Company, The. (See Bechtold and Mellowes, assignors.)

Guay, Emile J., Lynn, Mass., assignor to General Electric Company. Gear, blank for gears, rolls, &c., and manufacturing the same. No. 1,275,906; Aug. 13; v. 253; p. 462.
Guay, Emile J., Lynn, Mass., assignor to General Electric Company. Arc-lamp. No. 1,276,522; Aug. 20; v. 253; p. 666.
Guernsey, Clarence L., Beaverton, Mich. Combined trousers and coat hanger. No. 1,274,534; Aug. 6; v. 253; p. 56.
Gugel, Leonard L., Louisville, Ky. Fountain-pen. No. 1,277,064; Aug. 27; v. 253; p. 847.
Guild, George R., U. S. Army, assignor of one-half to C. T. Payton, St. Louis, Mo. Signaling device. No. 1,276,648; Aug. 20; v. 253; p. 700.
Gulbransen, Axel G. and C., assignors to Gulbransen-Dickinson Company, Chicago, Ill. Player-piano mechanism. No. 1,274,535; Aug. 6; v. 253; p. 57.
Gulbransen, Christian. (See Gulbransen, Axel G. and C.)
Gulbransen-Dickinson Company. (See Bergland, Carl, assignor.)
Gulbransen-Dickinson Company. (See Gulbransen, Axel G. and C., assignors.)
Gulf Refining Company. (See Biggins, James E., assignor.)
Gulf Refining Company. (See McAfee, Almer M., assignor.)
Gullett, George W., Meigs, Ga. Stalk-chopping machine. No. 1,274,876; Aug. 6; v. 253; p. 163.
Gumprecht, Arthur E., Steamboat Springs, Colo. Engine. No. 1,276,056; Aug. 20; v. 253; p. 536.
Gundlach, Conrad J., assignor to Mississippi Glass Company, New York, N. Y. Light-refracting glass. No. 1,277,065; Aug. 27; v. 253; p. 848.
Gunturiz & Caraballo. (See Gunturiz, Nicolas, assignor.)
Gunturiz, Nicolas, assignor to Gunturiz & Caraballo, Sagua la Grande, Cuba. Cocoanut-punch. No. 1,277,308; Aug. 27; v. 253; p. 912.
Gurley, Harry L., Marion, Ohio. Cut-out for downspouts. No. 1,274,536; Aug. 6; v. 253; p. 57.
Gustafson, Anders H., Tofte, Norway. Edge ruler for the wire part of paper-machines. No. 1,277,212; Aug. 27; v. 253; p. 888.
Guyton & Cumfer Manufacturing Company. (See Cumfer and McFarland, assignors.)
Gwinn, George W., New York, N. Y., assignor to Automatic Packing & Labeling Company, Durham, N. C. Can-closing mechanism. No. 1,276,523; Aug. 20; v. 253; p. 666.
H. Koppers Company. (See Sperr, Frederick W., Jr., assignor.)
H. Maimin Co. (See Bätjer, Henry B., assignor.)
Haas, Rudolph J., Milwaukee, Wis. Kitchen utensil. No. 1,275,907; Aug. 13; v. 253; p. 463.
Hackney, Isaac M., Wichita, Kans. Tire-setter. No. 1,276,755; Aug. 27; v. 253; p. 766.
Hadaway, John B., Swampscott, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Tack-pulling machine. No. 1,276,057; Aug. 20; v. 253; p. 536.
Hager, Frank A., Portland, Oreg. Tire-filler. No. 1,276,349; Aug. 20; y. 253; p. 617.
Hagman, Edwin V., assignor to A. A. Ziegler, trustee, Boston, Mass. Apparatus for sending and receiving information. No. 1,276,350; Aug. 20; v. 253; p. 617.
Hain, David E., New Cumberland, Pa. Window-cleaner. No. 1,275,558; Aug. 13; v. 253; p. 364.
Hajek, Joseph, North Braddock, Pa. Safety elevator device. No. 1,275,673; Aug. 13; v. 253; p. 397.
Hakeman, Edgar G., Hartwick, Iowa. Automobile non-skid device. No. 1,275,554; Aug. 13; v. 253; p. 364.
Halbleib, Edward A., and T. L. Lee, assignors to North East Electric Company, Rochester, N. Y. Commutator and manufacturing the same. No. 1,274,411; Aug. 6; v. 253; p. 19.
Haley, Joseph W., and C. B. Yelton, Erlanger, Ky. Lumber-register. No. 1,274,412; Aug. 6; v. 253; p. 20.
Hall, Albert E., National Stock Yards, Ill. Roll-paper attachment for type-writers. No. 1,274,540; Aug. 6; v. 253; p. 58.
Hall, Arthur J., Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company. Liquid rheostat. No. 1,275,908; Aug. 13; v. 253; p. 463.
Hall Canner Company. (See Hall, George M., assignor.)
Hall, Fred W., Sapulpa, Okla. Stand-valve ball-lift. No. 1,277,309; Aug. 27; v. 253; p. 912.
Hall, George G., Los Angeles, Cal. Shoe-brushing machine. No. 1,275,674; Aug. 13; v. 253; p. 398.
Hall, George M., assignor to Hall Canner Company, Grand Rapids, Mich. Rack. No. 1,276,905; Aug. 27; v. 253; p. 805.
Hall, Harold M., Los Angeles, Cal. Shutter-trip. No. 1,275,555; Aug. 13; v. 253; p. 364.
Hall, Jay H., assignor to The Electric Controller & Manufacturing Company, Cleveland, Ohio. Motor-control system. No. 1,275,909; Aug. 13; v. 253; p. 463.
Hall, Lewis B., Pittsburgh, Pa. Photographic-print washer. No. 1,275,556; Aug. 13; v. 253; p. 364.
Hall, Ralph J., Falls City, Oreg. Tie-slide for collars. No. 1,277,310; Aug. 27; v. 253; p. 912.
Hall, Robert G., St. Louis, Mo. Concentrating ores. No. 1,276,058; Aug. 20; v. 253; p. 537.
Hall Switch & Signal Co. (See Lundy, Beverly A., assignor.)
Hall Switch & Signal Co. (See Ritter, John A., assignor.)
Hall, Tom, New York, N. Y. Cardboard can-holder. No. 1,275,675; Aug. 13; v. 253; p. 398.
Halladay, Lewis P., Streator, Ill. Adjustable support for automobile-bumpers. No. 1,277,343; Aug. 27; v. 253; p. 920.
Halsey, James T., deceased; S. M. M. Halsey, administratrix, Philadelphia, Pa. Internal-combustion engine. No. 1,276,351; Aug. 20; v. 253; p. 617.
Halsey, Sue M. M., administratrix. (See Halsey, James T.)
Halverson, Joseph O. and A. A. Dekum, Portland, Oreg. Sterilizer. No. 1,275,676; Aug. 13; v. 253; p. 398.
Hamelback, Jacob A., Newark, Ohio. Automobile-raising truck. No. 1,276,210; Aug. 20; v. 253; p. 579.
Hamilton, Harry E., Bridgeport, Ill. Stand-valve tap. No. 1,276,756; Aug. 27; v. 253; p. 766.
Hamilton, James W., Brooklyn, N. Y. Method of and apparatus for constructing tunnels. No. 1,275,910; Aug. 13; v. 253; p. 464.
Hamilton, Robert A., New York, N. Y. Pipe. No. 1,276,059; Aug. 20; v. 253; p. 537.
Hamilton, Rush E., Geyerville, assignor to Hamilton Tractor Company, San Francisco, Cal. Self-cleaning tractor-wheel. No. 1,274,710; Aug. 6; v. 253; p. 106.
Hamilton Tractor Company. (See Hamilton, Rush E., assignor.)
Hamilton, William L., and G. McCullough, Austin, Tex. Valve-closure for ventilators. No. 1,275,557; Aug. 13; v. 253; p. 365.
Hamm, Carl F., Beverly, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Machine for cutting sheet material. No. 1,275,250; Aug. 13; v. 253; p. 281.
Hamm, William S., Hubbard Woods, assignor to The Adams & Westlake Company, Chicago, Ill. Band-feeding device. No. 1,276,906; Aug. 27; v. 253; p. 805.
Hammon, James H., Vincennes, Ind. Lens grinding and polishing machine. No. 1,275,019; Aug. 6; v. 253; p. 192.
Hammond, William P., Passaic, N. J. Bumper for automobiles. No. 1,276,211; Aug. 20; v. 253; p. 579.
Hampton, William J., assignor to Spang, Chalfant and Co., Incorporated, Pittsburgh, Pa. Thread-cutting device. No. 1,275,677; Aug. 13; v. 253; p. 398.
Hancock, Charles T., Galena, Mo. Animal nose-ring. No. 1,276,352; Aug. 20; v. 253; p. 618.
Hancock, Harry H., Swampscott, assignor of one-half to A. S. Webster, Halifax, Mass. Lining apparatus. No. 1,276,060; Aug. 20; v. 253; p. 537.
Hancock, Lee B. (See Jenkins, Charles W., assignor.)
Hancock, Winfield S., assignor of one-half to A. V. Mitchell; said A. V. Mitchell and H. R. Dulany, Jr., trustees of W. S. Hancock, assignors to The A. V. M. Spring Wheel Company, Washington, D. C. Spring-wheel. No. 1,274,877; Aug. 6; v. 253; p. 163.
Hand, Jay A. (See Kuhn and Hand.)
Handlan-Buck Manufacturing Company. (See Holfes, George H., assignor.)
Hanlon & Goodman Co. (See Wright, Ernest B., assignor.)
Hansen, Augie L., Evanston, assignor to Justrite Manufacturing Company, Chicago, Ill. Receptacle. No. 1,274,878; Aug. 6; v. 253; p. 154.
Hansen, Augie L., Evanston, assignor to Justrite Manufacturing Company, Chicago, Ill. Fire-extinguisher. No. 1,276,353; Aug. 20; v. 253; p. 618.
Hansen, Augie L., Evanston, assignor to Justrite Manufacturing Company, Chicago, Ill. Tatting-shuttle. No. 1,276,524; Aug. 20; v. 253; p. 666.
Hansen, Fred E. (See Frasier and Hansen.)
Hansen, Marius H., Chicago, Ill. Nursery-scale. No. 1,275,911; Aug. 13; v. 253; p. 464.
Hansen, Peter C., Spokane, Wash. Thermit-shell. No. 1,277,311; Aug. 27; v. 253; p. 912.
Hanson, Haakon P., Albert Lee, Minn. Hay-carrier. No. 1,274,541; Aug. 6; v. 253; p. 58.
Hanson, Oscar W., Jr. (See McClellan and Hanson.)
Hanson, Theodore B., and O. Knutson, Northwood, Iowa. Support for cream-separator strainers. No. 1,275,678; Aug. 13; v. 253; p. 399.
Hansson, Henrik A., Greenfield, Cal. Cleat. No. 1,276,354; Aug. 20; v. 253; p. 619.
Harb, Alfred, assignor to L. Harb, New York, N. Y. Automatic flying-machine. No. 1,275,251; Aug. 13; v. 253; p. 282.
Harb, Louisa. (See Harb, Alfred, assignor.)
Hard Manufacturing Company. (See Dyett, James H., assignor.)
Harding, Charles K., Chicago, Ill. Non-carbonizing spark-plug. No. 1,275,020; Aug. 6; v. 253; p. 192.
Harding, Foster W., Santa Ana, Cal. Forming water-tight bulkheads. No. 1,275,912; Aug. 13; v. 253; p. 464.
Hardman, George H., Fall River, Mass., assignor to Hardman Railroad Tie Corporation. Tie. No. 1,275,021; Aug. 6; v. 253; p. 193.
Hardman, Peter, Willimantic, Conn., assignor to American Thread Company, New York, N. Y. Stop mechanism for measuring apparatus. No. 1,276,525; Aug. 20; v. 253; p. 666.
Hardman Railroad Tie Corporation. (See Hardman, George H., assignor.)
Hardy, Clara B., and K. E. Gibson, Los Angeles, Cal. Mechanism for manipulating the spinal muscles of the human body. No. 1,276,526; Aug. 20; v. 253; p. 667.

Hardy, Emery E., Brooklyn, N. Y. Roller-skate. No. 1,276,212; Aug. 20; v. 253; p. 580.
Hare, Bert A., Bradford, Pa. Oil-well strainer. No. 1,276,213; Aug. 20; v. 253; p. 580.
Harmon, William O., La Pryor, Tex. Protecting device for tires. No. 1,275,913; Aug. 13; v. 253; p. 405.
Harpham, Samuel E., Heartwell, Nebr. Incubator. No. 1,276,907; Aug. 27; v. 253; p. 805.
Harrington, Alfred. (See Keall, Harrington, and Bassett.)
Harris, Alfred W., Peoria, Ill. Headlight. No. 1,276,757; Aug. 27; v. 253; p. 767.
Harris Automatic Press Company, The. (See Harrold, Charles W., assignor.)
Harris, Chester E., *et al.* (See Ludwick, Edward C., assignor.)
Harris, Henry E., Indianapolis, Ind. Hinge. No. 1,277,067; Aug. 27; v. 253; p. 848.
Harris, Hollis H., assignor to The Thew Automatic Shovel Company, Lorain, Ohio. Steam-shovel mechanism. No. 1,276,527; Aug. 20; v. 253; p. 667.
Harris, John, Lakewood, Ohio. Gas for cutting purposes. No. 1,275,252; Aug. 13; v. 253; p. 282.
Harris, John, Cleveland, Ohio. Combination welding and cutting blowpipe. No. 1,276,214; Aug. 20; v. 253; p. 580.
Harris, John, Cleveland, Ohio, assignor to Carbo-Hydrogen Company of America, Pittsburgh, Pa. Welding-torch. No. 1,277,068; Aug. 27; v. 253; p. 848.
Harris, John, Cleveland, Ohio, assignor to Carbo-Hydrogen Company of America, Pittsburgh, Pa. Valve mechanism for blowpipes and the like burners. No. 1,277,069; Aug. 27; v. 253; p. 849.
Harris, Leo, Lancaster, Cal. Folding-bed attachment for automobiles. No. 1,274,539; Aug. 6; v. 253; p. 58.
Harrison, Henry C., assignor to Western Electric Company, Incorporated, New York, N. Y. Method of and apparatus for manufacturing telephone-diaphragms. No. 1,275,022; Aug. 6; v. 253; p. 193.
Harrison, John P. S. (See Rockwood, Enrique L., assignor.)
Harrison Safety Boiler Works. (See Gamble, Joseph W., assignor.)
Harrison, William E., Manchester, England. Combined variable-speed gear and brake mechanism for velocipedes. No. 1,277,070; Aug. 27; v. 253; p. 849.
Harrold, Charles W., Warren, assignor to The Harris Automatic Press Company, Niles, Ohio. Sheet-feeder. No. 1,275,679; Aug. 13; v. 253; p. 399.
Harrop, Nathan, Hoylake, England. Means for the protection of carpets and the like. No. 1,277,312; Aug. 27; v. 253; p. 912.
Harsh, Howard, Osakis, Minn. Bundle-loader. No. 1,275,680; Aug. 13; v. 253; p. 399.
Hart, Frederick A., Newark, N. J., assignor, by mesne assignments, to Underwood Computing Machine Company, New York, N. Y. Combined type-writing and computing machine. No. 1,275,681; Aug. 13; v. 253; p. 400.
Hart, Gerald L. (See Hoyle and Hart.)
Hart, Harry H. and W. S., Sacramento, Cal. Napkin-holder. No. 1,274,413; Aug. 6; v. 253; p. 20.
Hart, Herbert H., Orcutt, Cal. Fan-housing cooling extension. No. 1,275,682; Aug. 13; v. 253; p. 400.
Hart, Hubert C., *et al.* (See Shepard, Wilbur L., assignor.)
Hart & Hutchinson Company, The. (See Page, Logan E., assignor.)
Hart, William S. (See Hart, Harry H. and W. S.)
Hartford-Fairmont Company. (See Peller, Karl E., assignor.)
Hartman, Hans, New York, N. Y., assignor to Automatic Vending Machine Co., Newark, N. J. Vending-machine. No. 1,275,153; Aug. 6; v. 253; p. 229.
Hartmann, Thomas W. C., Philadelphia, Pa. Spring. No. 1,274,542; Aug. 6; v. 253; p. 58.
Hartung, Charles F. (See Kay and Hartung.)
Hartzell, Forest H., Dayton, Ohio, assignor to W. E. Dunston, receiver. Electroplating apparatus. No. 1,276,649; Aug. 20; v. 253; p. 701.
Harvey, Charles, Somerville, Mass. Fuel-oil burner. No. 1,277,066; Aug. 27; v. 253; p. 848.
Harvey Hubbell, Inc. (See Knapp, George P., assignor.)
Harvey Hubbell, Inc. (See Newton, William J., assignor.)
Harvey, Willis W., Malad City, Idaho. Resilient wheel. No. 1,276,061; Aug. 20; v. 253; p. 537.
Hasler A. G. vormals Telegraphen-Werkstatte von G. Hasler. (See Kohler and Stöcklin, assignors.)
Hassam Paving Company. (See Hassam, Walter E., assignor.)
Hassam, Walter E., assignor to Hassam Paving Company, Worcester, Mass. Pavement. No. 1,275,165; Aug. 6; v. 253; p. 237.
Hastings, Harold P., and F. C. Smith, assignors to Crouse-Hinds Company, Syracuse, N. Y. Electric plug. No. 1,277,071; Aug. 27; v. 253; p. 850.
Hattemer, Justus, Cliffside Park, N. J., assignor to Brambach Piano Co., New York, N. Y. Sounding-board mounting for grand pianos. No. 1,276,650; Aug. 20; v. 253; p. 701.
Hatton, Elmer T., Ithaca, N. Y. Nose-ring. No. 1,276,215; Aug. 20; v. 253; p. 580.
Haubold, Paul C., Naponee, Nebr. Dough-raiser. No. 1,276,651; Aug. 20; v. 253; p. 701.
Haugen, Edmund E. (See Burgett, Clark, assignor.)
Hausinger, George H., Galveston, Tex. Shape-retaining device for felt hats. No. 1,275,023; Aug. 6; v. 253; p. 193.
Havener, Arthur R., Wayland, Mass., assignor to Judson L. Thomson Mfg. Co. Clutch mechanism. No. 1,274,879; Aug. 6; v. 253; p. 154.
Havener, Arthur R., Wayland, Mass., assignor to Judson L. Thomson M'f'g Co. Rivet and cap setting machine. No. 1,276,652; Aug. 20; v. 253; p. 702.
Hawkins, Robert H., Crocker, Mo. Manure-distributer. No. 1,275,683; Aug. 13; v. 253; p. 400.
Hawthorne, Ellsworth A., Bridgeport, Conn. Electrical connection. No. 1,276,216; Aug. 20; v. 253; p. 580.
Haydenville Company, The. (See Page, George M., assignor.)
Hayes, Thomas J., Roslindale, assignor to Arbetter Felling Machine Company, Boston, Mass. Blindstitch sewing-machine. No. 1,276,217; Aug. 20; v. 253; p. 581.
Hayhurst, Clark R., Texas City, Tex. Direction-signal. No. 1,276,908; Aug. 27; v. 253; p. 805.
Haynes, Louis W., Grand Rapids, Mich. Automobile-headlight. No. 1,275,421; Aug. 13; v. 253; p. 328.
Hazel-Atlas Glass Company. (See Stenhouse, Thomas, assignor.)
Head, Robert, New York, N. Y., assignor to The Aeolian Company. Sound-box. No. 1,275,914; Aug. 13; v. 253; p. 465.
Heath, Frank, assignor of one-half to D. C. Benton, San Diego, Cal. Collapsible vehicle-box. (Reissue.) No. 14,500; Aug. 6; v. 253; p. 241.
Heath, Samuel, Roxborough, Pa. Can-opener. No. 1,275,915; Aug. 13; v. 253; p. 465.
Heddon, Charles, Dowagiac, Mich. Fish-lure. No. 1,276,062; Aug. 20; v. 253; p. 538.
Hedler, Henry J., Taftville, Conn., assignor, by mesne assignments, to Draper Corporation, Hopedale, Mass. Filling-end controller. No. 1,275,684; Aug. 13; v. 253; p. 400.
Heilman, Abraham T. (See Ulrich, Paul D., assignor.)
Heineman, George, Philadelphia, Pa. Shell-holder for electric cut-outs. No. 1,274,543; Aug. 6; v. 253; p. 59.
Heisdorf, Nicholas P., New York, N. Y. Waterproof and buoyant fabric. No. 1,276,909; Aug. 27; v. 253; p. 806.
Helfrich, Gustav P., New York, N. Y. Mower. No. 1,275,253; Aug. 13; v. 253; p. 282.
Heller, Ernst B., assignor, by mesne assignments, to The Vacuum Churn Corporation, New York, N. Y. Treating lacteal fluids. No. 1,276,910; Aug. 27; v. 253; p. 806.
Hellmund, Rudolf E., Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company. Dynamo-electric machine. No. 1,275,916; Aug. 13; v. 253; p. 465.
Hellmund, Rudolf E., Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company. Control system. No. 1,276,911; Aug. 27; v. 253; p. 806.
Hellmund, Rudolf E., Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company. Field-control system for single-phase commutator-motors. No. 1,276,912; Aug. 27; v. 253; p. 806.
Hellmund, Rudolf E., Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company. Supply system for pulsating-torque motors. No. 1,276,914; Aug. 27; v. 253; p. 807.
Hellmund, Rudolph E., Pittsburgh, H. R. Meyer, Wilkinsburg, and A. H. Candee, Pittsburgh, Pa., assignors to Westinghouse Electric and Manufacturing Company. System of control for single-phase commutator-motors. No. 1,276,913; Aug. 27; v. 253; p. 807.
Hellmund, Rudolf E., R. E. Ferris, Swissvale, and L. M. Perkins, Wilkinsburg, Pa., assignors to Westinghouse Electric and Manufacturing Company. System of control. No. 1,274,711; Aug. 6; v. 253; p. 106.
Hellstrom, John A., Wheeling, W. Va. Annealing-box. No. 1,274,537; Aug. 6; v. 253; p. 57.
Hellstrom, John A., Wheeling, W. Va. Annealing-box. No. 1,274,538; Aug. 6; v. 253; p. 57.
Helm, C. Wells, Chicago, Ill. Baking-oven. No. 1,274,880; Aug. 6; v. 253; p. 154.
Helm, Louis P., Pontiac, Mich. Change-speed-gear set for motor-vehicles. No. 1,275,024; Aug. 6; v. 253; p. 193.
Helsley, William R., Los Angeles, Cal. Device for operating waste-plugs. No. 1,275,685; Aug. 13; v. 253; p. 401.
Hemming, Wilmer D., *et al.* (See Davis, William M., assignor.)
Henderson, Alexander L., Cambridge, Mass. Display-stand. No. 1,275,422; Aug. 13; v. 253; p. 328.
Henderson, Charles F., Madisonville, assignor to The Kemper-Thomas Company, Norwood, Ohio. Combined pincushion and paper-weight. No. 1,276,758; Aug. 27; v. 253; p. 767.
Hendler, Max, Staunton, Ill., assignor to Dewar Manufacturing Company, Wilmington, Del. Miner's lamp-lighter. No. 1,274,544; Aug. 6; v. 253; p. 59.
Henry Disston & Sons. (See Rogers, George L., assignor.)
Henry, Ferdinand G., Philadelphia, Pa. Signal. No. 1,274,420; Aug. 6; v. 253; p. 22.
Henry L. Hughes Co. (See Sherman, William T., assignor.)
Henry Likly & Co. (See Likly, Henry, assignor.)
Henry, Nelson B., Atlanta, Ga., assignor to The Murray Company, Dallas, Tex. Cotton-seed linter. No. 1,276,855; Aug. 20; v. 253; p. 619.
Henry, Riley, Williford, Ark. Pea-huller. No. 1,274,881; Aug. 6; v. 253; p. 154.

Hensley, Charles G., *et al.* (See Lichtenstein, Henry E., assignor.)
Hepner, Benjamin E. (See Allen, Watson H., assignor.)
Herbert, Henry E., and J. B. Hogeboom, Martin, Mich. Spraying implement. No. 1,276,653; Aug. 20; v. 253; p. 702.
Herman, Fred, Shenandoah, Pa. Ice-creeper. No. 1,275,917; Aug. 13; v. 253; p. 465.
Hernandes, Rafael, and F. E. Ortega, Santi Spiritus, Cuba. Cigar holder and lighter. No. 1,275,154; Aug. 6; v. 253; p. 229.
Herr, Abram B., assignor of one-third to E. M. Royer and one-third to J. H. Moseman, Lancaster, Pa. Brush mechanism for can-washing machines. No. 1,275,025; Aug. 6; v. 253; p. 193.
Hersey, Maxim H., Amhurst Park, assignor to The Convex Incandescent Mantle Company Limited, Covent Garden, London, England. Burning off, seasoning, and hardening incandescent gas-mantles. No. 1,274,414; Aug. 6; v. 253; p. 20.
Hershell-Spillman Co. (See Cramer, George H., assignor.)
Hertline, Louis J., Brooklyn, N. Y. Producing printing-plates. No. 1,276,697; Aug. 20; v. 253; p. 718.
Herwehe, Frederick A., Monroe, Iowa. Electrical generating system. No. 1,274,545; Aug. 6; v. 253; p. 59.
Herzog, Joseph J., and W. M. Medlock, Mobile, Ala. Centrifugal governor. No. 1,275,026; Aug. 6; v. 253; p. 194.
Hess, Blanch I. (See Hess, Clyde W., assignor.)
Hess, Clyde W., assignor of one-half to B. I. Hess, Elizabeth, N. J. Grenade-thrower. No. 1,274,882; Aug. 6; v. 253; p. 155.
Heuser, Herman, Chicago, Ill. Manufacture of dry extracts of partly-fermented beverages. No. 1,276,254; Aug. 13; v. 253; p. 282.
Hewett, John E., assignor of one-half to W. J. Hutaff, Wilmington, N. C. Box. No. 1,277,313; Aug. 27; v. 253; p. 913.
Hewlett, Edward M., Schenectady, N. Y., assignor to General Electric Company. Switch. No. 1,275,918; Aug. 13; v. 253; p. 466.
Hewlett, Edward M., Schenectady, N. Y., assignor to General Electric Company. Disconnecting-switch. No. 1,275,919; Aug. 13; v. 253; p. 466.
Hey, William, *et al.* (See Marsh, Frederick, assignor.)
Hiatt, Guy V., Attica, Ind. Combination shade and curtain hanger. No. 1,275,423; Aug. 13; v. 253; p. 328.
Hiatt, Stephen T., Jersey City, N. J., assignor to R. G. von Kökeritz & Co., New York, N. Y. Stuffing-box packing. No. 1,277,072; Aug. 27; v. 253; p. 850.
Hibbard, Frederick B., Philadelphia, Pa. Valve. No. 1,275,920; Aug. 13; v. 253; p. 466.
Hick, Harry J., assignor, by mesne assignments, to The McCaskey Register Company, Alliance, Ohio. Filing appliance. No. 1,276,356; Aug. 20; v. 253; p. 618.
Hickey and Schneider. (See Schneider, John, assignor.)
Hicks, James A., Cincinnati, Ohio. Wringer safety device. No. 1,277,073; Aug. 27; v. 253; p. 850.
Higley, Harvey V., Detroit, Mich., assignor, by mesne assignments, to The Isko Company, Chicago, Ill. Gas-measuring apparatus. No. 1,275,255; Aug. 13; v. 253; p. 282.
Hilger, Henry B., Fort Wayne, Ind. Phonograph-disk-record cabinet. No. 1,274,712; Aug. 6; v. 253; p. 107.
Hill, Arthur H., New York, N. Y. Ultra-distancing projectile. No. 1,275,686; Aug. 13; v. 253; p. 401.
Hill, Earl V., Chicago, Ill. Dust-counter. No. 1,274,415; Aug. 6; v. 253; p. 21.
Hill, George R. (See Rook, William H., Jr., assignor.)
Hill, George S., Strafford, N. H., assignor, by mesne assignments, to United State Machinery Corporation, Patterson, N. J. Sewing-machine. No. 1,276,357; Aug. 20; v. 253; p. 620.
Hill, George S., Strafford, N. H., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Sewing-machine. No. 1,276,358; Aug. 20; v. 253; p. 620.
Hill, George S., Strafford, N. H., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Sewing-machine. No. 1,276,359; Aug. 20; v. 253; p. 620.
Hill, George S., Strafford, N. H., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Sewing-machine. No. 1,276,360; Aug. 20; v. 253; p. 621.
Hilliard Clutch and Machinery Company. (See Bruce and Dickens, assignors.)
Hilliker, Verner C., Calumet, Quebec, Canada. Lifting device. No. 1,274,546; Aug. 6; v. 253; p. 59.
Himmel, Solomon. (See Hormes, William T., assignor.)
Hinckley, Frank C., and J. Graham, assignors to American Graphophone Company, Bridgeport, Conn. Duplex graphophone. No. 1,276,759; Aug. 27; v. 253; p. 767.
Hinds, George N., Marion, Ohio. Coin-separating device. No. 1,275,155; Aug. 6; v. 253; p. 229.
Hines, Martin, Brooklyn, N. Y. Flying-machine. No. 1,276,760; Aug. 27; v. 253; p. 767.
Hinkle, Andrew J., Whitesville, Ind. Rake. No. 1,276,915; Aug. 27; v. 253; p. 807.
Hinrichsen, Edward E., assignor to Western Electric Company, New York, N. Y. Telephone-exchange system. No. 1,276,761; Aug. 27; v. 253; p. 768.
Hirsch, Morris L. (See Danielson and Hirsch.)
Hirsch, William A., Avalon, Pa. Expanding metal core. No. 1,276,654; Aug. 20; v. 253; p. 702.
Hitchcock Experiment Company. (See Hitchcock, Halbert K., assignor.)
Hitchcock, Halbert K., Tarentum, Pa., assignor of one-half to Hitchcock Experiment Company. Feeding glass. No. 1,275,424; Aug. 13; v. 253; p. 328.
Hitchcock, Reuben, assignor to The Cleveland Folding Machine Company, Cleveland, Ohio. Folding-machine. No. 1,275,425; Aug. 13; v. 253; p. 329.
Hitzeman, Malinda, Fort Wayne, Ind. Closed undergarment. No. 1,277,074; Aug. 27; v. 253; p. 851.
Hlavaty, Rudolf F., assignor of one-half to J. Kanta, Chicago, Ill. Mechanism for converting motion. No. 1,275,248; Aug. 13; v. 253; p. 280.
Hlavaty, Rudolf F., assignor of one-half to J. Kanta, Chicago, Ill. Finding and focusing means. No. 1,275,249; Aug. 13; v. 253; p. 281.
Hobart, Franklin G., Beloit, Wis., assignor to Fairbanks, Morse & Company, Chicago, Ill. Oil-engine-feeding device. No. 1,275,426; Aug. 13; v. 253; p. 329.
Hobart, Franklin G., and C. B. Jahnke, Beloit, Wis., assignors to Fairbanks, Morse & Company, Chicago, Ill. Lubricator. No. 1,275,427; Aug. 13; v. 253; p. 329.
Hobbs, Edward W., Balham, England. Artificial arm. No. 1,275,027; Aug. 6; v. 253; p. 194.
Hobert, Clayton, Philadelphia, Pa. Mattress. No. 1,276,361; Aug. 20; v. 253; p. 621.
Hochriem, Gustav F. (See Paupa and Hochriem.)
Hodge, Arthur J., and H. B. Ruggles, Pasadena, Cal., assignors to The American Products Company, St. Louis, Mo. Head for barrels and the like. No. 1,276,362; Aug. 20; v. 253; p. 621.
Hodge, Arthur J., and H. B. Ruggles, Pasadena, Cal., assignors to The American Products Company, St. Louis, Mo. Head for barrels and the like. No. 1,276,363; Aug. 20; v. 253; p. 622.
Hodge, Arthur J., and H. B. Ruggles, Pasadena, Cal., assignors to American Products Company. Barrel-head seal. No. 1,276,364; Aug. 20; v. 253; p. 622.
Hodges, Edward G., Marshalltown, Iowa. Automatic air-supply device and combination-governor therefor. No. 1,276,762; Aug. 27; v. 253; p. 768.
Hodgkinson, William, Waterbury, Conn. Piston-ring compressor. No. 1,277,213; Aug. 27; v. 253; p. 888.
Hodgson, Wilfred D., Akron, Ohio. Electrical connection and making the same. No. 1,275,687; Aug. 13; v. 253; p. 401.
Hodson, Frank S., Philadelphia, Pa. Metallic alloy. No. 1,276,916; Aug. 27; v. 253; p. 808.
Hoe, Robert, assignor to R. Hoe and Co., New York, N. Y. Inking mechanism for printing-presses. No. 1,275,256; Aug. 13; v. 253; p. 293.
Hoelting, Frank W., Granite City, Ill. Garter and garment supporter. No. 1,276,763; Aug. 27; v. 253; p. 768.
Hoffmann, Oscar, and C. Wolter, Stuttgart, Germany. Portable lantern. No. 1,274,713; Aug. 6; v. 253; p. 107.
Hofmeister, Leo, Milwaukee, Wis. Automobile-tire. No. 1,274,883; Aug. 6; v. 253; p. 155.
Hofstatter, Ernest W., Nyack, N. Y. Automobile-rim. No. 1,276,917; Aug. 27; v. 253; p. 808.
Hogeboom, James B. (See Herbert and Hogeboom.)
Hohle, Antone T., Minneapolis, Minn. Tongue-depressor. No. 1,274,547; Aug. 6; v. 253; p. 60.
Holbrook, Charles W., Providence, R. I., assignor to Holbrook Raw Hide Company. Mallet. No. 1,276,218; Aug. 20; v. 253; p. 581.
Holbrook Raw Hide Company. (See Holbrook, Charles W., assignor.)
Holbrook, William H., Sr., Venice, Ill. Nail. No. 1,276,764; Aug. 27; v. 253; p. 769.
Holland-Letz, Lud, Oak Park, Ill., assignor to International Harvester Company of New Jersey. Platform-latch for reapers. No. 1,275,689; Aug. 13; v. 253; p. 402.
Holland, Newman H., assignor to New Jersey Patent Company, West Orange, N. J. Phonograph. No. 1,275,257; Aug. 13; v. 253; p. 283.
Hollander, Marcus, Brooklyn, N. Y. Propulsion device for vessels. No. 1,274,416; Aug. 6; v. 253; p. 21.
Holman, Axel. (See Goodwin and Holman.)
Holman, Russell, Minneapolis, Minn. Roaster. No. 1,274,714; Aug. 6; v. 253; p. 107.
Holmes, Alfred E., Chicago, Ill. Wrench. No. 1,276,918; Aug. 27; v. 253; p. 808.
Holmes, Fletcher B., Woodbury, N. J., assignor, by mesne assignments, to E. I. du Pont de Nemours and Company, Wilmington, Del. Obtaining aromatic hydrocarbons. No. 1,276,219; Aug. 20; v. 253; p. 581.
Holmes, Morris P. (See Officer and Holmes.)
Holmes, Thomas E., Nether Edge, Sheffield, England, assignor to United Engineering & Foundry Company, Pittsburgh, Pa. Forging-press. No. 1,275,258; Aug. 13; v. 253; p. 283.
Holmes, Thomas E., Nether Edge, Sheffield, England, assignor to The United Engineering & Foundry Company, Pittsburgh, Pa. Combined steam-hammer and forging-press. No. 1,275,688; Aug. 13; v. 253; p. 401.
Holmgreen, Julius H., San Antonio, Tex. Silo. No. 1,275,558; Aug. 13; v. 253; p. 365.
Holmagel, William A., and C. W. McClure, Saginaw, Mich. Feeding apparatus. No. 1,274,548; Aug. 6; v. 253; p. 60.
Holsclaw, John F., Albia, Iowa. Switch-operator. No. 1,275,428; Aug. 13; v. 253; p. 330.

Holt, Charles L., assignor to Holt Roof Connection Co., Lawrence, Mass. Roof connection for drain-pipes. No. 1,275,922; Aug. 13; v. 253; p. 467.
Holt Roof Connection Co. (See Holt, Charles L., assignor.)
Holter, Ben, Whitefish, Mont. Rifle-barrel. No. 1,275,028; Aug. 6; v. 253; p. 194.
Holy, George H. F., Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company. Resilient driving connection. No. 1,275,029; Aug. 6; v. 253; p. 195.
Homer Laughlin Engineers Corporation. (See Laughlin and Ducorron, assignors.)
Homewood, Frederick, Syracuse, N. Y. Pressure-generator. No. 1,277,314; Aug. 27; v. 253; p. 913.
Honold, Gottlob. (See Kratz and Honold.)
Hood, Cyrus S., Corning, N. Y. Register. No. 1,276,063; Aug. 20; v. 253; p. 538.
Hook, Charles H., and W. J. Burkhart, Pittsburgh, Pa. Conduit-support. No. 1,274,715; Aug. 6; v. 253; p. 107.
Hook, Jacob, Reno, Nev. Cover for radiators. No. 1,275,923; Aug. 13; v. 253; p. 467.
Hooker, Harry A., Wilmette, assignor to Rand McNally and Company, Chicago, Ill. Album, sample-book, or scrap-book. No. 1,275,259; Aug. 13; v. 253; p. 283.
Hooper, Fred W., McKeesport, Pa. Disinfecting apparatus. No. 1,277,315; Aug. 27; v. 253; p. 913.
Hopkins, Claude S., Dayton, Ohio. Couch fabric. No. 1,276,919; Aug. 27; v. 253; p. 808.
Hopkins, Frank F., Seattle, Wash. Refuse-burner. No. 1,276,920; Aug. 27; v. 253; p. 809.
Hopkins, Henry, assignor to Continental Motors Corporation, Detroit, Mich. Balancing-clip for shafts. No. 1,275,429; Aug. 13; v. 253; p. 330.
Hopkins, Truman P., assignor of one-half to W. M. Cross, Seattle, Wash. Curtain-fixture. No. 1,276,365; Aug. 20; v. 253; p. 622.
Hopkins, Walter L., Sutton, W. Va. Transporting-vehicle for grain-shocks. No. 1,276,064; Aug. 20; v. 253; p. 538.
Hopping, Daniel A., Sturgis, Mich. Sheet-stapling machine. No. 1,276,528; Aug. 20; v. 253; p. 667.
Hormes, William T., Govans, assignor to S. Himmel, Baltimore, Md. Spacing device for display-trays. No. 1,277,340; Aug. 27; v. 253; p. 919.
Horn, Edward J., Royal Oak, and F. Lindhorst, assignors to Detroit Torch & Manufacturing Co., Detroit, Mich. Torch. No. 1,275,260; Aug. 13; v. 253; p. 284.
Horn, Joe, Ray, Ariz. Rubber-set rifle. No. 1,276,529; Aug. 20; v. 253; p. 668.
Horne, James. (See Dawson and Horne.)
Horner, Everett V., *et al.* (See Smith, Elta C., assignor.)
Hornor, Levi, Wichita, Kans. Automatic safety-stop for automobiles. No. 1,276,921; Aug. 27; v. 253; p. 809.
Horsley, William. (See Taylor and Wheatly, assignors.)
Horten, Charles R., *et al.* (See Di Benedetto, Paolo, assignor.)
Horton, Aaron and S., Coleman, Mich. Transportation system. No. 1,274,716; Aug. 6; v. 253; p. 108.
Horton, Salyer. (See Horton, Aaron and S.)
Hoster, Manfred T., St. Peters, Pa. Shoveling or mucking machine. No. 1,277,214; Aug. 27; v. 253; p. 888.
Hough, William B., Chicago, Ill., assignor to Patented Devices Company, Portland, Me. Reinforced concrete construction. No. 1,275,430; Aug. 13; v. 253; p. 330.
Hough, William B., Chicago, Ill., assignor, by mesne assignments, to Patented Devices Company, Portland, Me. Combination tie and gage member for reinforced concrete construction. No. 1,276,922; Aug. 27; v. 253; p. 809.
Houghtaling, Walter A., Dunellen, N. J., assignor to The Western Union Telegraph Company, New York, N. Y. Auxiliary signal arrangement for printing-telegraph systems. No. 1,275,559; Aug. 13; v. 253; p. 365.
Houlihahen, Jerry J. (See Back, Weible, and Houlahen.)
Housholder, Minnie A., Chicago, Ill. Portable adjustable adjusting-table for chiropractic use. No. 1,276,655; Aug. 20; v. 253; p. 702.
Houston, Joseph F., Philadelphia, Pa. Compound for waxing or lubricating yarns and threads. No. 1,277,215; Aug. 27; v. 253; p. 888.
Hovey, Otis E., New York, N. Y., and C. W. Chase, Gary, Ind. Center-bearing. No. 1,276,530; Aug. 20; v. 253; p. 668.
Howard, Horace E., and J. T. Titsworth, San Dimas, Cal. Furrowing-machine. No. 1,276,531; Aug. 20; v. 253; p. 668.
Howe, Clarence B., Morrisville, N. Y. Rotary internal-combustion engine. No. 1,276,765; Aug. 27; v. 253; p. 769.
Howe, Olaf L., Missoula, Mont. Air-motor. No. 1,275,030; Aug. 6; v. 253; p. 195.
Howe, Perley G., Anderson, Ind. Motor-vehicle gearing. No. 1,274,417; Aug. 6; v. 253; p. 21.
Howe, Winthrop K., Rochester, assignor to General Railway Signal Company, Gates, N. Y. Burned-out-lamp replacer. No. 1,276,766; Aug. 27; v. 253; p. 769.
Howe, Winthrop K., Rochester, assignor to General Railway Signal Company, Gates, N. Y. Circuit-controller. No. 1,276,767; Aug. 27; v. 253; p. 769.
Howell, Albert S., assignor to Bell & Howell Company, Chicago, Ill. Splicing apparatus for cinematographic films. No. 1,275,431; Aug. 13; v. 253; p. 331.
Howell, Albert S., assignor to Bell & Howell Company, Chicago, Ill. Tripod-head mechanism. No. 1,276,220; Aug. 20; v. 253; p. 581.
Howell, Fred B., Schenectady, N. Y., assignor to General Electric Company. Electric locomotive. No. 1,275,924; Aug. 13; v. 253; p. 467.
Howlett, Lewis G., Bay City, Mich. Winch. No. 1,274,549; Aug. 6; v. 253; p. 60.
Hoy, John E., and R. P. Place, Detroit, Mich. Grinding-wheel dresser. No. 1,276,366; Aug. 20; v. 253; p. 622.
Hoyer, Christian, assignor to Ship Builders Iron Works, Incorporated, New York, N. Y. Davit. No. 1,274,550; Aug. 6; v. 253; p. 60.
Hoyle, Charles C. G., and G. L. Hart, assignors to A. F. Newell, Calcutta, India. Closure for receptacles. No. 1,276,768; Aug. 27; v. 253; p. 769.
Hoyt, John F., Newington, N. H. Bread-cuter. No. 1,274,551; Aug. 6; v. 253; p. 61.
Hoyt, Worthington, *et al.* (See Baumgardner, Frank J., assignor.)
Hruby, John O., *et al.* (See Mueller, August E., assignor.)
Hruby, Thomas J., *et al.* (See Mueller, August E., assignor.)
Hubback, Malcolm H., assignor of one-sixth to N. Sparks, Seattle, Wash. Internal-combustion engine. No. 1,275,925; Aug. 13; v. 253; p. 467.
Hubbard, Cecil R., and H. R. Gilson, Baden, assignors to National Metal Molding Company, Pittsburgh, Pa. Electrical fitting. No. 1,274,552; Aug. 6; v. 253; p. 61.
Hubbard, Henry E., Oak Park, assignor to Addressograph Company, Chicago, Ill. Machine for curving printing-plates. No. 1,276,532; Aug. 20; v. 253; p. 668.
Hubbell, Harvey, Bridgeport, Conn. Flush receptacle. No. 1,275,690; Aug. 13; v. 253; p. 402.
Hubbell, Harvey, Bridgeport, Conn. Means for leveling and alining face-plates. No. 1,275,691; Aug. 13; v. 253; p. 402.
Hubbell, Harvey, Bridgeport, Conn. Adjustable supporting device for switches and receptacles. No. 1,275,692; Aug. 13; v. 253; p. 403.
Hubbell, Harvey, Bridgeport, Conn. Convertible cap for attachment-plugs. No. 1,275,693; Aug. 13; v. 253; p. 403.
Hudgens, Albert C., Honea Path, S. C. Lever-lock. No. 1,275,031; Aug. 6; v. 253; p. 195.
Hudler, Charles L., assignor, by mesne assignments, to Jiffy Water Heater Company, St. Louis, Mo. Water-heater. No. 1,276,065; Aug. 20; v. 253; p. 539.
Hudson, Arthur J., *et al.* (See Baumgardner, Frank J., assignor.)
Hudson, Frederick, assignor of one-half to J. A. Missar, Philadelphia, Pa. Plastic composition. No. 1,276,221; Aug. 20; v. 253; p. 582.
Hudson, William W., Salt Lake City, Utah. Oil or acid pump. No. 1,274,884; Aug. 6; v. 253; p. 155.
Huene, Edward A., Los Angeles, Cal. Carbureter. No. 1,275,032; Aug. 6; v. 253; p. 195.
Huff, Gilbert L., Holdenville, Okla. Vending-machine. No. 1,276,923; Aug. 27; v. 253; p. 809.
Huggins, Edward M. (See Macdonald and Huggins.)
Hughes, Dale C., Cleveland, Ohio, assignor to General Electric Company. Shaping wire. No. 1,275,926; Aug. 13; v. 253; p. 468.
Hughes, Robert R., Jr., New York, N. Y., assignor to Union Special Machine Company, Chicago, Ill. Presser-foot for sewing-machines. No. 1,275,694; Aug. 13; v. 253; p. 403.
Hugunin, Richard F., Spokane, Wash. Lumber-conveyer. No. 1,276,222; Aug. 20; v. 253; p. 582.
Hull, Herbert H., Lakewood, Ohio, assignor, by mesne assignments, to Anchor Cap & Closure Corporation, Brooklyn, N. Y. Closure. No. 1,276,223; Aug. 20; v. 253; p. 582.
Hull, Wallace R., Pittsburgh, Pa. Machine for assembling bolts and nuts. No. 1,274,562; Aug. 6; v. 253; p. 63.
Hulse, George E., Newark, N. J., assignor to The Safety Car Heating & Lighting Company. Carton or container for incandescent mantles. No. 1,276,066; Aug. 20; v. 253; p. 539.
Hummel, Samuel, Fort Yates, N. D. Automobile-tire. No. 1,276,533; Aug. 20; v. 253; p. 669.
Humphrey, Alexander F. (See Michsels and Humphrey.)
Hungerford, Oliver T., Belleville, N. J. Concrete building-block. No. 1,275,432; Aug. 13; v. 253; p. 331.
Hunold, Ernest, Providence, R. I. Convertible soap-holder. No. 1,275,433; Aug. 13; v. 253; p. 331.
Hunt, Arthur J., Altoona, Pa. Trundle toy. No. 1,276,769; Aug. 27; v. 253; p. 770.
Hunt, John H., assignor to Packard Motor Car Company, Detroit, Mich. Lamp. No. 1,276,924; Aug. 27; v. 253; p. 810.
Hunt, Paul, Brookline, Mass. Humidifier for gasolene-engines. No. 1,274,418; Aug. 6; v. 253; p. 21.
Huntley, Charles W. (See Morgan and Huntley.)
Huntoon, William C., Providence, R. I. Pneumatic-tire valve. No. 1,275,033; Aug. 6; v. 253; p. 196.
Huntress, George L., Jr., Winchester, and C. Elbye, East Boston, Mass. Water-level gage. No. 1,275,927; Aug. 13, v. 253; p. 468.
Hupperts, Henry A., Cincinnati, Ohio. Support for fishing-rods. No. 1,275,928; Aug. 13; v. 253; p. 468.
Hurd, Chauncey M., San Jose, Cal. Transporting device. No. 1,276,067; Aug. 20; v. 253; p. 539.
Hurley, Albert B., assignor of one-half to L. W. Hurley, Seaford, Del. Combined hose-clamp and support. No. 1,274,717; Aug. 6; v. 253; p. 108.
Hurley, Luther W. (See Hurley, Albert B., assignor.)
Hurst, George S. (See Williams and Hurst.)

Hurst, Woodford G., Oxford, Kans. Brake. No. 1,274,885; Aug. 6; v. 253; p. 155.
Hutaff, W. J. (See Hewett, John E., assignor.)
Hutchings, James, Chicago, Ill. Amalgamator. No. 1,276,856; Aug. 20; v. 253; p. 703.
Hutchinson, Wilfred. (See Embree, Herbert, assignor.)
Hutchison, Miller R., West Orange, N. J. Stapling device. (Reissue.) No. 14,507; Aug. 20; v. 253; p. 715.
Hutchison, Miller R., assignor to Edison Storage Battery Company, West Orange, N. J. Filling device or valve for storage batteries or other receptacles. No. 1,275,261; Aug. 13; v. 253; p. 284.
Hutton, Clyde S., Conyngham, Pa. Fly-swatter. No. 1,277,216; Aug. 27; v. 253; p. 889.
Hutton, Frank O., Sacramento, Cal., assignor to Libby, McNiel & Libby, Chicago, Ill. Washing and blanching machine. No. 1,275,560; Aug. 13; v. 253; p. 366.
Huxley, Maurice F., Hendon, London, England. Safety-belt for aviators and others. No. 1,275,034; Aug. 6; v. 253; p. 196.
Hyatt Roller Bearing Division, United Motors Corporation. (See Lockwood, Charles S., assignor.)
Hyder, Charles N., Springfield, Mass. Embroidery-frame. No. 1,275,929; Aug. 13; v. 253; p. 468.
Ibanez, Manuel C., New York, N. Y. Map-index. No. 1,276,657; Aug. 20; v. 253; p. 703.
Icy-Hot Bottle Company, The. (See Altenberg, George P., assignor.)
Ide, Harry H., La Grange, assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Governor for automatic diels. No. 1,276,367; Aug. 20; v. 253; p. 622.
Ide, Harry L. (See Maurer, Henry E., Jr., assignor.)
Ilex Optical Company. (See Klein and Brueck, assignors.)
Ingalls, Howard D. (See Ingalls, Joseph B., assignor.)
Ingalls, Joseph B., assignor to H. D. Ingalls, Chicago, Ill. Finger-ring gage. No. 1,277,075; Aug. 27; v. 253; p. 851.
Inglefield, Charles L., Midland, Pa. Watt-hour meter. No. 1,276,925; Aug. 27; v. 253; p. 810.
Ingoldsby Automatic Car Company, The. (See Ingoldsby, Frank S., assignor.)
Ingoldsby, Frank S., West Bloomfield township, Oakland county, Mich., assignor to The Ingoldsby Automatic Car Company, Cleveland, Ohio. Dump-car-door-raising mechanism. No. 1,275,930; Aug. 13; v. 253; p. 460.
Ingram, Elihu, Detroit, Mich. Collar-fastener. No. 1,274,553; Aug. 6; v. 253; p. 61.
International Clay Machinery Company. (See McElroy, Roy H., assignor.)
International Coal Products Corporation. (See Smith, Charles H., assignor.)
International Conveyor Corporation. (See Stuart, Francis L., assignor.)
International Cork Company. (See Rasmusssen and Alberti, assignors.)
International Crude Oil Storage Company. (See Bowles, William M., assignor.)
International Harvester Company of New Jersey. (See Burgess, Edward W., assignor.)
International Harvester Company of New Jersey. (See Holland-Letz, Lud, assignor.)
International Harvester Company of New Jersey. (See Mowry, Edward, assignor.)
International Harvester Company of New Jersey. (See Ryther, Frank A., assignor.)
International Patent Investment Company, The. (See Brown, George F., assignor.)
International Time Recording Company of New York. (See Larrabee, Clinton E., assignor.)
Ireland, Harvey, North Emporia, Va. Sheet-metal shock-binder. No. 1,277,076; Aug. 27; v. 253; p. 851.
Ireland, Harvey, North Emporia, Va. Wire shock-binder. No. 1,277,077; Aug. 27; v. 253; p. 852.
Ireland, Ward S., St. Louis, Mo., and W. E. Lippert, Cincinnati, Ohio, assignors to National Shorthand Machine Company, St. Louis, Mo. Type-writing machine. No. 1,275,434; Aug. 13; v. 253; p. 331.
Irey, William S., Apallt, Pampangs, Philippine Islands. Change-speed gearing. No. 1,276,368; Aug. 20; v. 253; p. 623.
Irey, William S., San Fernando, Pampanga, Philippine Islands. Change-speed gearing. No. 1,276,369; Aug. 20; v. 253; p. 623.
Irwin, Herbert G., Spur, Tex. Device for cleaning electrodes of make-and-break spark-plugs. No. 1,275,035; Aug. 6; v. 253; p. 197.
Irwin, Samuel D., Floydada, and S. E. Johnson, Jr., Spur, Tex. Cotton-bur separator. No. 1,276,370; Aug. 20; v. 253; p. 623.
Isaacs, Josiah, Birmingham, England. Figure toy. No. 1,276,224; Aug. 20; v. 253; p. 582.
Isaacs, William M., Cleveland, Ohio. Combined collar button and buttoner. No. 1,275,931; Aug. 13; v. 253; p. 469.
Isko Company, The. (See Higley, Harvey V., assignor.)
Isko Company, The. (See Tibbetts, Milton, assignor.)
Iverson, Barney, Arnegard, N. D. Feed-bucket. No. 1,275,695; Aug. 13; v. 253; p. 403.
Iverson Piano Player Company. (See Peterson, Claus E., assignor.)
Ives, George W., Milwaukie, Oreg. Shaft-jack. No. 1,274,554; Aug. 6; v. 253; p. 61.
J. B. Williams Company. (See Williams and Hurst, assignors.)
J. E. Hanger, Inc. (See Forster, Adam, assignor.)
J. G. Brill Company, The. (See Kling and Dennis, assignors.)
J. G. Brill Company, The. (See Smith, Warren M., assignor.)
J. G. Cherry Company. (See Chadima, Frank, assignor.) (Reissue.)
J. H. Sager Company. (See Sager, Clinton M., assignor.)
Jackson, Henry, Philadelphia, Pa. Automatic fan. No. 1,276,225; Aug. 20; v. 253; p. 583.
Jackson, Leonard D., assignor of one-fourth to W. Campbell, Alexandria, Va. Anti-aircraft projectile. No. 1,274,419; Aug. 6; v. 253; p. 21.
Jackson, Philip A., Atlanta, Ga. Manifolding-register. No. 1,275,262; Aug. 13; v. 253; p. 284.
Jackson, S. D. L., *et al.* (See Cook, Claude H., assignor.)
Jackson, Simeon S., assignor to The Stafford Company, Readville, Boston, Mass. Weft-replenishing loom. No. 1,276,534; Aug. 20; v. 253; p. 669.
Jacobs, Ernest H., assignor to Electrical Engineers Equipment Company, Chicago, Ill. Choke-coil mounting. No. 1,274,555; Aug. 6; v. 253; p. 61.
Jacobs, George, Detroit, Mich. Mixing device. No. 1,275,036; Aug. 6; v. 253; p. 197.
Jacobs, Isidor M., Kansas City, and W. Cramer, St. Louis, Mo., assignors, by mesne assignments, to Truck, Tractor and Manufacturing Company, St. Louis, Mo. Support for brake-rigging in motor-vehicles. No. 1,275,932; Aug. 13; v. 253; p. 469.
Jacobsen, Kai A. (See Moskoris and Jacobsen.)
Jacobson, August, Albinn, assignor of one-third to H. V. Nurmi, Virginia, Minn. Airship-propeller. No. 1,274,886; Aug. 6; v. 253; p. 155.
Jacobus, David S., Jersey City, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Furnace-wall structure. No. 1,275,037; Aug. 6; v. 253; p. 197.
Jaeckel, Charles, Warmsprings, Mont. Shoe-vise. No. 1,276,068; Aug. 20; v. 253; p. 539.
Jaeger, Christian, M. J. Roth, and C. H. Boeker, New York, N. Y. Imitation article. No. 1,276,658; Aug. 20; v. 253; p. 703.
Jagschitz, Konrad, Mainz, assignor to Maschinenfabrik Augsburg-Nürnberg A. G., Nürnberg, Germany. Gas-reservoir. No. 1,275,696; Aug. 13; v. 253; p. 403.
Jahn & Ollier Engraving Company. (See Jones, Burgoyne, assignor.)
Jahnke, Charles B. (See Hobart and Jahnke.)
James Manufacturing Company. (See Kammer, Edgar W., assignor.)
James Manufacturing Company. (See Olson, John B., assignor.)
James R. Kendrick Company. (See Kendrick, Arthur B., assignor.)
James, Robert J., Seattle, Wash. Spectacles. No. 1,275,933; Aug. 13; v. 253; p. 469.
Jansen, Herman, Schiedam, Netherlands. Stationery. No. 1,275,934; Aug. 13; v. 253; p. 469.
Jeffrey Manufacturing Company, The. (See Waxbom, Carl J. E., assignor.)
Jelenc, John, Port Washington, assignor of one-half to M. Jelenc, Milwaukee, Wis. Collapsible cabinet. No. 1,276,072; Aug. 20; v. 253; p. 540.
Jelenc, Martin. (See Jelenc, John, assignor.)
Jenkins, Charles W., Ellerson, assignor of one-half to L. B. Hancock, Richmond, Va. Instrument-supporting device. No. 1,276,073; Aug. 20; v. 253; p. 541.
Jenkins, Samuel H., assignor of one-fourth to L. P. Barnes, Chattanooga, Tenn. Vehicle-wheel. No. 1,275,435; Aug. 13; v. 253; p. 332.
Jennings, David J., Cleveland, Ohio. Automatic machine for the manufacture of paper receptacles. No. 1,276,535; Aug. 20; v. 253; p. 669.
Jennings, Jesse M., Des Moines, Iowa. Gun for destroying wire entanglements. No. 1,275,561; Aug. 13; v. 253; p. 366.
Jennings, Victor H., Worcester, Mass., assignor to Universal Patents Company, Woonsocket, R. I. Woven carrier. No. 1,275,436; Aug. 13; v. 253; p. 322.
Jensen, Ange, Long Island City, N. Y. Sterilizing method. No. 1,276,659; Aug. 20; v. 253; p. 703.
Jensen, Elmer C., *et al.* (See Wassell, Clifford R., assignor.)
Jensen, George C., Oakland, Cal. Lever-locking construction. No. 1,275,038; Aug. 6; v. 253; p. 197.
Jensen, George C., Oakland, Cal. Locking construction for levers. No. 1,275,039; Aug. 6; v. 253; p. 198.
Jensen, George C., Oakland, Cal. Shift-device lock mechanism. No. 1,276,926; Aug. 27; v. 253; p. 810.
Jenssen, Sigvald T., Philadelphia, Pa. Card-holder. No. 1,274,887; Aug. 6; v. 253; p. 156.
Jepson, John W., Depew, N. Y., assignor to Gould Coupler Company. Ignition system. No. 1,277,078; Aug. 27; v. 253; p. 852.
Jergins, Andrew T., Los Angeles, Cal. Hydraulic oil-well washer. No. 1,276,536; Aug. 20; v. 253; p. 670.
Jerram, Arthur E., and J. Gouldbourn, Leicester, England, assignors, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Leveling-machine. No. 1,275,562; Aug. 13; v. 253; p. 366.
Jeske, Charles A. and C. P., assignors to The Auto-Speed Recorder Company, Chicago, Ill. Recording device. No. 1,275,263; Aug. 13; v. 253; p. 284.
Jeske, Clarence P. (See Jeske, Charles A. and C. P.)
Jiffy Water Heater Company. (See Hudler, Charles L., assignor.)

Jillson, Lee E., Hartford, and E. Williams, New Haven, Conn. Boiler-tube cleaner. No. 1,275,437; Aug. 13; v. 253; p. 332.
Johanson, Emil, Minneapolis, Minn. Button-stripper. No. 1,275,438; Aug. 13; v. 253; p. 332.
Johansson, Allan F., Gottenborg, Sweden. Cooking-stove for open boats or the like purposes. No. 1,277,316; Aug. 27; v. 253; p. 913.
Johansson, Carl A., Christiania, Norway. Stabilization of aircraft. No. 1,274,888; Aug. 6; v. 253; p. 156.
John A. Roebling's Sons Company. (See Sunderland, Charles C., assignor.)
Johns-Pratt Company, The. (See Cole, Robert C., assignor.)
Johnsen, John F., Craig, Mo. Guiding means for sleds. No. 1,276,927; Aug. 27; v. 253; p. 811.
Johnson, Adam E., Hoboken, N. J., assignor to Mark Cross Company, New York, N. Y. Card-table. No. 1,277,079; Aug. 27; v. 253; p. 852.
Johnson, Alfred, Detroit, Mich. Overshoe. No. 1,276,928; Aug. 27; v. 253; p. 811.
Johnson, Arthur, Remsen, Iowa. Wire-stretching device. No. 1,277,317; Aug. 27; v. 253; p. 914.
Johnson, Axel, Oakland, Cal. Cooker. No. 1,275,040; Aug. 6; v. 253; p. 198.
Johnson, Charles H., Newton, Mass. Coaster. No. 1,274,889; Aug. 6; v. 253; p. 156.
Johnson, Charles W. (See Johnson, John O., O. H., and C. W.)
Johnson, Francis E., Altoona, Pa. Riveting-hammer. No. 1,277,080; Aug. 27; v. 253; p. 852.
Johnson, Frederick G. L., Chelsea, London, England, assignor to Palmer-Perchlorate Powder Company of Canada Limited, Montreal, Canada. Explosive. No. 1,276,537; Aug. 20; v. 253; p. 670.
Johnson, Gustave A., Irvington, N. J. Coupling device for electric-wire conduits, &c. No. 1,275,439; Aug. 13; v. 253; p. 333.
Johnson, Harry O., Calhan, Colo. Air-pump. No. 1,275,440; Aug. 13; v. 253; p. 333.
Johnson, Iver, Vancouver, British Columbia, Canada. Wheel. No. 1,276,371; Aug. 20; v. 253; p. 623.
Johnson, Jay M., Chicago, Ill. Driving mechanism. No. 1,276,074; Aug. 20; v. 253; p. 541.
Johnson, John O., O. H., and C. W., New Hampton, Iowa. Tamping-machine for concrete blocks. No. 1,277,081; Aug. 27; v. 253; p. 853.
Johnson, Otto H. (See Johnson, John O., O. H., and C. W.)
Johnson, Sarah, executrix. (See Johnson, Sinclair J.)
Johnson, Sinclair J., deceased; S. Johnson, executrix, assignor of one-half to W. C. Shultz, Montclair, N. J. Rotary pump. No. 1,276,372; Aug. 20; v. 253; p. 624.
Johnson, Stephen E., Jr. (See Irwin and Johnson.)
Johnson, Stephen S., South Orange, N. J. Matting device. No. 1,277,318; Aug. 27; v. 253; p. 914.
Johnson, Swan G., Los Angeles, Cal. Time-operated light-switch. No. 1,277,082; Aug. 27; v. 253; p. 853.
Johnson, William C., McKeesport, Pa. Flange-lubricating device. No. 1,276,538; Aug. 20; v. 253; p. 670.
Johnson, William H., San Francisco, Cal. Tractor. No. 1,276,929; Aug. 27; v. 253; p. 811.
Johnston, William R., Eagle Rock, Cal. Attachment for automobile-radiators. No. 1,275,441; Aug. 13; v. 253; p. 333.
Joice, John K., Chicago, Ill. Wall and floor panels. No. 1,277,319; Aug. 27; v. 253; p. 914.
Jones, Alva D., Philadelphia, Pa. Sound-box for talking-machines. No. 1,275,936; Aug. 13; v. 253; p. 470.
Jones, Burgoyne, Hinsdale, Ill., assignor to Jahn & Ollier Engraving Company. Preparing etched or engraved plates. No. 1,276,226; Aug. 20; v. 253; p. 583.
Jones, Charles E., Chicago, Ill. Gravity-clamp for light-reflecting bowls. No. 1,274,890; Aug. 6; v. 253; p. 157.
Jones, David W., Los Angeles, Cal. Method of and apparatus for pumping fluids. No. 1,276,373; Aug. 20; v. 253; p. 624.
Jones, Howard F., Warrenton, N. C. Oil-gage. No. 1,275,935; Aug. 13; v. 253; p. 470.
Jones, John H., Oakland City, Ind. Device for automatically diluting charges for internal-combustion engines with moistened air. No. 1,275,563; Aug. 13; v. 253; p. 367.
Jones, Joseph, New Orleans, La. Combined garbage-can and trap. No. 1,276,770; Aug. 27; v. 253; p. 770.
Jones, Martin A., McGregor, Tex. Cotton-chopper. No. 1,274,718; Aug. 6; v. 253; p. 108.
Jones, Robert W., Wilkes-Barre, Pa. Winding and re-winding machine. No. 1,274,891; Aug. 6; v. 253; p. 157.
Jones, Whitfield E., Jr., assignor to Pittsburgh Can Company, Sharpsburg, Pa. Can. No. 1,276,660; Aug. 20; v. 253; p. 703.
Jons, Detlef, Jr., Spangle, Wash. Conveyer. No. 1,274,556; Aug. 6; v. 253; p. 62.
Joseph Lay Company, The. (See Lay and Baker, assignors.)
Joy, Francis B., and C. H. Vogel, assignors to Detroit Heating and Lighting Company, Detroit, Mich. Bunsen burner. No. 1,276,075; Aug. 20; v. 253; p. 541.
Joyce, Patrick H., Rushville, Ind. Check-valve. No. 1,275,697; Aug. 13; v. 253; p. 404.
Joyner, Lanson B., St. Cloud, Minn. Internal-combustion engine. No. 1,275,264; Aug. 13; v. 253; p. 285.
Judson L. Thomson Mfg. Co. (See Havener, Arthur R., assignor.)
Juenget, Charles A., Croton Falls, N. Y., assignor to American Assembling Machine Company. Delivery mechanism. No. 1,275,988; Aug. 13; v. 253; p. 486.
Juengst, Charles A., Croton Falls, N. Y., assignor to American Assembling Machine Company. Delivery mechanism. No. 1,277,217; Aug. 27; v. 253; p. 889.
Julian, Gideon, Beverly, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Sole-trimming machine. No. 1,275,564; Aug. 13; v. 253; p. 367.
Julihn, Louis G., Washington, D. C., assignor to Elliott-Fisher Company, New York, N. Y. Combined type-writing and adding machine. No. 1,275,937; Aug. 13; v. 253; p. 470.
Junek, Frank, Jr., Cable, Wis. Automatic funnel. No. 1,275,565; Aug. 13; v. 253; p. 367.
Jung, Oscar H., assignor to Arrow Fuse & Mfg. Co., Milwaukee, Wis. Cartridge-fuse. No. 1,275,442; Aug. 13; v. 253; p. 334.
Juselius, Erland, Brooklyn, N. Y. Lock. No. 1,275,938; Aug. 13; v. 253; p. 471.
Justrite Manufacturing Company. (See Hansen, Augie L., assignor.)
Juten, John A., Gilbert, Minn. Collapsible cot. No. 1,276,539; Aug. 20; v. 253; p. 670.
Ka Dell, Harold W., Edgeley, N. D. Storage battery. No. 1,276,771; Aug. 27; v. 253; p. 770.
Kalamazoo Carton Company. (See Sutherland, Louis W., assignor.)
Kalbach, Samuel E., Reading, Pa. Portable electric hoist. No. 1,277,219; Aug. 27; v. 253; p. 889.
Kalck, Fred R. (See Theresault, Adrien J., assignor.)
Kall, Gustav, Alexandria Bay, N. Y. Safety-stirrup. No. 1,276,540; Aug. 20; v. 253; p. 670.
Kalvin, Louis, New York, N. Y. Eye mechanism for dolls. No. 1,275,698; Aug. 13; v. 253; p. 404.
Kammer, Edgar W., assignor to James Manufacturing Company, Fort Atkinson, Wis. Manger-guard for calves and other animals. No. 1,276,541; Aug. 20; v. 253; p. 671.
Kamrass, Harris, New York, N. Y. Seat-attaching device. No. 1,276,661; Aug. 20; v. 253; p. 704.
Kandler, Edmund, assignor to Bausch & Lomb Optical Company, Rochester, N. Y. Ophthalmic-test-lens tray. No. 1,274,557; Aug. 6; v. 253; p. 62.
Kansas City Gasoline Company, The. (See Wellman, Frank E., assignor.)
Kanta, Joseph. (See Hlavaty, Rudolf F., assignor.)
Kaolin Products Corporation. (See Meadows, Thomas C., assignor.)
Karpy, Frank, Cleveland, Ohio. Horseshoe. No. 1,277,219; Aug. 27; v. 253; p. 889.
Kasper, Walter F., assignor to Fairmont Gas Engine & Railway Motor Car Co., Fairmont, Minn. Attachment for binders. No. 1,275,699; Aug. 13; v. 253; p. 404.
Katzenstein, Aaron, Shreveport, La. Attachment for wind-shields. No. 1,277,083; Aug. 27; v. 253; p. 853.
Kaufmann, Emil, New York, N. Y. Spring-puttee. No. 1,276,662; Aug. 20; v. 253; p. 704.
Kavanagh, Edward H., *et al.* (See Scott, Jacob R., assignor.)
Kay, Charles H., Los Angeles, and C. F. Hartung, Alhambra, Cal. Spring-clip for storage batteries. No. 1,275,939; Aug. 13; v. 253; p. 471.
Kaye, John A., Sault Ste. Marie, Ontario, Canada. Mining-drill. No. 1,277,220; Aug. 27; v. 253; p. 889.
Kazenmaier, August, and E. Bauer, assignors to Firm of R. Bosch, Stuttgart, Germany. Starting apparatus for internal-combustion engines. No. 1,275,940; Aug. 13; v. 253; p. 472.
Kazenmaier, August, and E. Bauer, assignors to Firm of R. Bosch, Stuttgart, Germany. Starting apparatus for internal-combustion engines. No. 1,275,941; Aug. 13; v. 253; p. 472.
Keall, Frank B., A. Harrington, and R. W. C. Bassett, Leicester, England, assignors, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Combined edge setting and indenting device. No. 1,276,027; Aug. 20; v. 253; p. 527.
Keckler, Charles W., Newark, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone-exchange system. No. 1,276,772; Aug. 27; v. 253; p. 770.
Keenan, James C. and M. H., Toronto, Ontario, Canada. Line-wire connector. No. 1,276,228; Aug. 20; v. 253; p. 583.
Keenan, Michael H. (See Keenan, James C. and M. H.)
Kehoe, Thomas J., assignor to The Willys-Overland Company, Toledo, Ohio. Motor-vehicle-door holder. No. 1,275,700; Aug. 13; v. 253; p. 404.
Kell, Daniel, Sleepy Eye, Minn. Chain-fastener. No. 1,275,265; Aug. 13; v. 253; p. 285.
Kelper, Frank, *et al.* (See Sears, George H., assignor.)
Kelth, Fred A., South Poland, Me. Stretcher. No. 1,277,084; Aug. 27; v. 253; p. 853.
Kelzer, Fred E., Los Angeles, Cal. Safety attachment for locks. No. 1,277,221; Aug. 27; v. 253; p. 890.
Keller, Daniel J., and F. A. Waters, Malden, Mo.; said Waters assignor of one-sixth to said Keller. Gear-shifting mechanism for motor-vehicles. No. 1,276,076; Aug. 20; v. 253; p. 541.

Keller, Daniel W., Hartshorne, Okla. Water-wheel for fishways. No. 1,276,374; Aug. 20; v. 253; p. 625.
Keller, George M., Baltimore, Md., assignor to The Crown Cork and Seal Company of Baltimore City. Closure. No. 1,276,077; Aug. 20; v. 253; p. 542.
Keller, John, Houston, Tex. Sash-lock. No. 1,275,443; Aug. 13; v. 253; p. 334.
Kelley, Charles H., Pittsburgh, Pa. Grease-cup. No. 1,274,558; Aug. 6; v. 253; p. 62.
Kelley, Martin V., trustee. (See Riley, Francis B., assignor.)
Kellogg Switchboard & Supply Company. (See Currier and Stazak, assignors.)
Kellogg Switchboard and Supply Company. (See Ide, Harry H., assignor.)
Kellogg Switchboard and Supply Company. (See Schoenwolf, Fred, assignor.)
Kellogg Switchboard & Supply Company. (See Tune, Thomas J., assignor.)
Kellogg Toasted Corn Flake Company. (See Lorensen, Frederick G., assignor.)
Kelly, William J., Clinton, Iowa. Convertible furniture. No. 1,276,227; Aug. 20; v. 253; p. 583.
Kemper, Charles W. and J. T., Oakland, Cal. Steering-wheel hand-warmer. No. 1,276,930; Aug. 27; v. 253; p. 811.
Kemper, John T. (See Kemper, Charles W. and J. T.)
Kemper-Thomas Company, The. (See Henderson, Charles F., assignor.)
Kempster, Wallace R., Whiteside county, Ill. Tractor. No. 1,275,566; Aug. 13; v. 253; p. 867.
Kendrick, Arthur B., East Orange, N. J., assignor of one-half to James R. Kendrick Company, Philadelphia, Pa. Abdominal belt. No. 1,274,892; Aug. 6; v. 253; p. 157.
Keniston, George I. (See Burns and Keniston.)
Kerr, Andrew, Belfast, Ireland. Railway and like signaling. No. 1,274,719; Aug. 6; v. 253; p. 109.
Kesling, Elmer G., Bloomfield, Mo. Inscription means for cameras and method of photographing written inscriptions. No. 1,276,542; Aug 20; v. 253; p. 671.
Kessler, Emil, Brooklyn, N. Y. Toy cannon. No. 1,276,078; Aug. 20; v. 253; p. 542.
Ketchum, Jesse B., Hampshire, Ill. Automobile-axle. No. 1,274,559; Aug. 6; v. 253; p. 62.
Keus, Henry I. (See Van Swaay and Keus.)
Kewaunee Mfg. Co. (See Campbell, Charles G., assignor.)
Keyes, Frederick G., Boston, Mass., assignor to National Automatic Refrigerator Company. Refrigerating-machine. No. 1,277,085; Aug. 27; v. 253; p. 854.
Keystone Steel & Wire Company. (See Bailey, Charles F., assignor.)
Kibitz, Frank X. (See La Hodny and Kibitz.)
Kielb, Lawrence, Orleans, Minn. Combined comb and brush. No. 1,274,720; Aug. 6; v. 253; p. 109.
Kiesel, William F., Jr., Altoona, Pa. Throttle-valve. No. 1,275,041; Aug. 6; v. 253; p. 199.
Kilborn, Karl B., assignor to The Goodyear Tire and Rubber Company, Akron, Ohio. Ring-core. No. 1,275,942; Aug. 13; v. 253; p. 472.
Kile, Andrew J., Harrisonburg, Va. Incubator-regulator. No. 1,276,543; Aug. 20; v. 253; p. 671.
Killian, Pius F., Owensboro, Ky. Acetylene-gas generator. No. 1,274,893; Aug. 6; v. 253; p. 157.
Killingsworth, Wilber, Columbus, assignor to The Phinney Engineering Company, Chillicothe, Ohio. Mechanism for feeding string-beans, &c. No. 1,276,375; Aug. 20; v. 253; p. 625.
Kimball, William H., trustee. (See Sawyer, Howard D., assignor.)
Kindt, Charles F., Jenkintown, Pa. Transfer for loose-leaf bindings. No. 1,276,931; Aug. 27; v. 253; p. 812.
King, Clarence W., assignor to The National Grave Vault Co., Galion, Ohio. Fastening device for the closures of burial-vaults. No. 1,276,932; Aug. 27; v. 253; p. 812.
King, Ernest J. (See Lillard, William W., assignor.)
King, Fred B., Albion, Mich. Trimming-rail for cushion-seats and similar structures. No. 1,275,266; Aug. 13; v. 253; p. 286.
Kingsbacher, Alvin, and W. W. Macfarren, Pittsburgh, Pa. Shuttle-box for looms. No. 1,275,701; Aug. 13; v. 253; p. 405.
Kinney, William A., and J. F. Straitz, Philadelphia, Pa. Oil-burner. No. 1,277,320; Aug. 27; v. 253; p. 914.
Kirby, James W., Harlan, Iowa. Automatic stock-watering trough. No. 1,274,894; Aug. 6; v. 253; p. 158.
Kirchhuber, Albert P., Brooklyn, N. Y. Turnbuckle. No. 1,275,042; Aug. 6; v. 253; p. 199.
Kirchman, Wencel H. (See Culver, William, assignor.)
Kirchner, Lena M., Kansas City, Mo. Duster. No. 1,276,933; Aug. 27; v. 253; p. 812.
Kirschbraun, Lester, Evanston, Ill., assignor to The Raybestos Company, Bridgeport, Conn. Friction-facing and making same. No. 1,275,043; Aug. 6; v. 253; p. 199.
Kirtley, Simeon B., Columbia, Mo. Visible-account bound ledger. No. 1,276,229; Aug. 20; v. 253; p. 583.
Kissel, William L., Hartford, Wis. Driver's cab for motor-trucks. No. 1,274,421, Aug. 6; v. 253; p. 22.
Kitaoka, Toraki, Los Angeles, Cal. Noiseless railway-crossing. No. 1,275,267; Aug. 13; v. 253; p. 286.
Kleemann, Felix, London, England. Corset and like stiffener. No. 1,276,700; Aug. 20; v. 253; p. 713.
Klein, Rudolph, and T. M. Brueck, assignors to Ilex Optical Company, Rochester, N. Y. Photographic shutter. No. 1,276,663; Aug. 20; v. 253; p. 704.
Kleven, Knut, Minneapolis, Minn. Anchoring apparatus for silos. No. 1,275,268; Aug. 13; v. 253; p. 286.
Kline, Harmon J., Lansing, Mich. Driving-axle for motor-vehicles. No. 1,275,444; Aug. 13; v. 253; p. 334.
Kling, Louis A., East Cleveland, and C. F. Dennis, Cleveland, Ohio, assignors to The J. G. Brill Company, Philadelphia, Pa. Means for locking window-sashes to screens. No. 1,276,376; Aug. 20; v. 253; p. 625.
Klingman's Sample Furniture Co. (See Allen, William E., assignor.)
Klink, Henry G., Moundsville, W. Va. Process of and apparatus for concentrating sulfuric acid. No. 1,276,377; Aug. 20; v. 253; p. 625.
Klonack, August J., New York, N. Y. Safety brake apparatus for vehicles. No. 1,275,702; Aug. 13; v. 253; p. 405.
Knapp, Edward B., San Jacinto, Cal. Cuspidor-lifter. No. 1,274,895; Aug. 6; v. 253; p. 158.
Knapp, George P., assignor to Harvey Hubbell, Incorporated, Bridgeport, Conn. Convertible cap for attachment-plugs. No. 1,275,703; Aug. 13; v. 253; p. 405.
Knapp, George W., Baltimore, Md., assignor to National Enameling and Stamping Company, New York, N. Y. Faucet-receptacle for barrels. No. 1,276,698; Aug. 20; v. 253; p. 713.
Knapp, William A., assignor to C. Schwartz, trustee, Washington, D. C. Permanently heat-expanding cast-iron articles. No. 1,274,896; Aug. 6; v. 253; p. 158.
Knight, Alfred W., London, England. Horseshoe-nail. No. 1,276,544; Aug. 20; v. 253; p. 671.
Knox, Luther L., Bellevue, assignor to Blaw-Knox Company, Pittsburgh, Pa. Door-frame and door structure for furnaces. No. 1,275,943; Aug. 13; v. 253; p. 472.
Knox, Orville M., Knoxboro, N. Y. Railway cross-tie. No. 1,274,897; Aug. 6; v. 253; p. 158.
Knudsen, Berney, Denver, Colo., assignor of one-half to F. G. Warrick, Scottsbluff, Nebr. Sanitary can-tap. No. 1,277,222; Aug. 27; v. 253; p. 890.
Knutson, Oliver. (See Hanson and Knutson.)
Kobelt, Valerius, Berlin, Germany. Purifying water. No. 1,274,560; Aug. 6; v. 253; p. 63.
Koch, John, Jr., Brookline, Mass. Toy. No. 1,275,567; Aug. 13; v. 253; p. 368.
Kocialek, George J., Avoca, Pa. Aerial torpedo. No. 1,275,445; Aug. 13; v. 253; p. 334.
Koelsch, Henry J., Milwaukee, Wis. Neck-yoke. No. 1,275,446; Aug. 13; v. 253; p. 335.
Koenig, Frank R., Masonville, Colo. Gun-sight. No. 1,276,545; Aug. 20; v. 253; p. 672.
Koenig, Harry A., Philadelphia, Pa. Edge turning and pressing machine. No. 1,275,044; Aug. 6; v. 253; p. 200.
Köhler, Rudolf, and O. Baltin, Lipine, Germany. Utilizing the residues obtained in the distillation of zinc. No. 1,275,045; Aug. 6; v. 253; p. 200.
Kohler, Ulrich, and C. Stöcklin, assignors to Hasler A. G. vormals Telegraphen-Werkstätte von G. Hasler, Berne, Switzerland. Speed-counter. No. 1,275,269; Aug. 13; v. 253; p. 286.
Kohman, Henry A., Pittsburgh, Pa., assignor to Ward Baking Company, New York, N. Y. Manufacture of leavened bread. No. 1,274,898; Aug. 6; v. 253; p. 159.
Kolaczynski, Jan. (See Niec, Michael, assignor.)
Komorous, Joseph, assignor to Parisian Novelty Company, Chicago, Ill. Bank. No. 1,276,664; Aug. 20; v. 253; p. 704.
Kops, Daniel, New York, N. Y. Brassière. No. 1,275,046; Aug. 6; v. 253; p. 200.
Kovnat, William, New York, N. Y. Oil-collector. No. 1,276,079; Aug. 20; v. 253; p. 542.
Kownaczki, Joseph, Tamaroa, Ill. Wire-cutter. No. 1,276,080; Aug. 20; v. 253; p. 542.
Kozmonski, John L., Boston, Mass., assignor to The Randall-Faichney Company, Inc. Hypodermic-syringe case. No. 1,275,270; Aug. 13; v. 253; p. 286.
Kraft, August H., Rosemount, Minn. Governor for explosive-engines. No. 1,274,422; Aug. 6; v. 253; p. 23.
Kralovich, John, Binghamton, N. Y. Direction-indicator. No. 1,276,230; Aug. 20; v. 253; p. 584.
Kramer, Louis A., Chicago, Ill. Hog-dehairing machine. No. 1,276,546; Aug. 20; v. 253; p. 672.
Krantz, Hubert F., assignor to Krantz Manufacturing Company, Inc., Brooklyn, N. Y. Electrical switch. No. 1,275,047; Aug. 6; v. 253; p. 201.
Krantz, Hubert F., assignor to Krantz Manufacturing Company, Brooklyn, N. Y. Meter-panel. No. 1,277,321; Aug. 27; v. 253; p. 915.
Krantz Manufacturing Company. (See Krantz, Hubert F., assignor.)
Kratz, Franz, and G. Honold, assignors to the firm of R. Bosch, Stuttgart, Germany. Electric switch. No. 1,277,223; Aug. 27; v. 253; p. 890.
Kretz, Harold C., Rochester, N. Y. License-holder and illuminating-light therefor. No. 1,274,899; Aug. 6; v. 253; p. 159.
Krippene, Benjamin J., *et al.* (See Krippene, Herman, assignor.)
Krippene, Herman, assignor of one-half to B. J. Krippene and one-half to O. B. Krippene, Oshkosh, Wis. Cut-off. No. 1,275,166; Aug. 6; v. 253; p. 232.
Krippene, Otto B., *et al.* (See Krippene, Herman, assignor.)
Kristmann, Nicholas A., Menlo Park, Cal. Dental-floss case. No. 1,274,423; Aug. 6; v. 253; p. 23.

Kroedel, Robert, assignor to Eastman Kodak Company, Rochester, N. Y. Camera-carriage. No. 1,274,561; Aug. 6; v. 253; p. 63.
Krueger, William F., Chicago, Ill. Bottle-container. No. 1,275,048; Aug. 6; v. 253; p. 201.
Kruse, Edward H., Fort Wayne, Ind. Adjustable support for electric switches. No. 1,276,378; Aug. 20; v. 253; p. 626.
Krzan, Anton, Chicago, Ill. Movable fort. No. 1,274,721; Aug. 6; v. 253; p. 109.
Kuck, William F., Etna Green, Ind. Brush. No. 1,275,049; Aug. 6; v. 253; p. 201.
Kuehn, Gustav, East St. Louis, Ill. Burial-vault. No. 1,274,424; Aug. 6; v. 253; p. 23.
Kuester, Emil C., Olney Springs, Colo. Log-rolling device. No. 1,275,271; Aug. 13; v. 253; p. 287.
Kuhn, Frank, and J. A. Hand, assignors to American Electrical Heater Company, Detroit, Mich. Machine for moistening adhesive tape. No. 1,276,773; Aug. 27; v. 253; p. 771.
Kuhn, Frank, and F. E. Shallor, assignors to American Electrical Heater Company, Detroit, Mich. Coffee-percolator. No. 1,276,774; Aug. 27; v. 253; p. 771.
Kuhn, Gebrüder. (See Kuhn, Hermann, assignor.)
Kuhn, Hermann, assignor to Gebrüder Kuhn, Turbenthal, Switzerland. Device for turning and planing metals, wood, and the like. No. 1,276,081; Aug. 20; v. 253; p. 542.
Kuhn, Jacob, assignor of one-third to H. C. Norton and one-third to R. Norris, Connellsville, Pa. Projectile. No. 1,276,082; Aug. 20; v. 253; p. 543.
Kunz, William J., Milwaukee, Wis. Fuel-support for furnaces. No. 1,274,563; Aug. 6; v. 253; p. 64.
Kupec, George, and J. Slosar, New Salem, Pa. Flying bomb. No. 1,276,547; Aug. 20; v. 253; p. 672.
Kurowski, Alfred G. F., Brooklyn, N. Y., assignor to himself, A. F. Marx, and A. L. Martin, Chicago, Ill. Recording-taximeter. No. 1,275,185; Aug. 6; v. 253; p. 239.
Kyle, John P., Arcadale, Iowa. Seat attachment. No. 1,275,704; Aug. 13; v. 253; p. 406.
Kytilca, John F., Chicago, Ill. Tool. No. 1,274,425; Aug. 6; v. 253; p. 23.
L. Grauman Company, The. (See Wompey, John J., assignor.)
La Hodny, William, and F. X. Kibitz, assignors to Standard Mirror Co., Buffalo, N. Y. Machine for beveling mirrors and for analogous purposes. No. 1,275,447; Aug. 13; v. 253; p. 335.
La Hodny, William, and F. X. Kibitz, assignors to Standard Mirror Co., Buffalo, N. Y. Machine for beveling mirrors and for analogous purposes. No. 1,275,569; Aug. 13; v. 253; p. 368.
La Pierre, Peter. (See Odgers and La Pierre.)
La Rouche, Joseph H., Lynn, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Sole-pressing machine. No. 1,274,723; Aug. 6; v. 253; p. 110.
Lacerda, Harry A., assignor to Flannery Bolt Company, Schenectady, N. Y. Stay-bolt for boilers. No. 1,275,944; Aug. 13; v. 253; p. 473.
Lacey, Paul H., Chicago, Ill. Automatic safety device for preventing overload on motors and other driving elements. No. 1,274,722; Aug. 6; v. 253; p. 110.
Ladame, Walter W., Pittsburgh, Pa. Yieldable coupling. No. 1,275,568; Aug. 13; v. 253; p. 368.
Laird, Joseph S., Ann Arbor, Mich. Hydrating clay. No. 1,275,705; Aug. 13; v. 253; p. 406.
Lake, Simon, Milford, Conn. Internal-combustion engine. No. 1,276,083; Aug. 20; v. 253; p. 543.
Lamar, Alexis L., Pittsburg, Kans., assignor to C. F. Dike, Joplin, Mo. Kerosene-vaporizer. (Reissue.) No. 14,501; Aug. 13; v. 253; p. 489.
Lamb, Willis E., Los Angeles, Cal., assignor to Automatic Electric Company, Chicago, Ill. Automatic telephone system. No. 1,275,186; Aug. 6; v. 253; p. 239.
Lambert, George H., Asheville, N. C. Teeing-platform. No. 1,276,775; Aug. 27; v. 253; p. 771.
Lambert, Harry B. (See Lambert, John, Jr., and H. B.)
Lambert, John, Jr., New Rochelle, and H. B. Lambert, North Pelham, N. Y. Valve. No. 1,274,426; Aug. 6; v. 253; p. 24.
Lamme, Benjamin G., Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company. Switching device. No. 1,275,945; Aug. 13; v. 253; p. 473.
Lamson Company, The. (See Cowley, James T., assignor.)
Lamson Company, The. (See Marcy, Willard A., assignor.)
Lamson Company, The. (See Pearsall, Albert W., assignor.)
Lander, Wintworth V., Newton, Mass., assignor to General Indurating Corporation. Impregnating composition and method of making same. No. 1,277,322; Aug. 27; v. 253; p. 915.
Landers, Douglas J., *et al.* (See Norman, Frank, assignor.)
Landis Machine Company. (See Blair, William R., assignor.)
Landmann, Henry, Philadelphia, Pa. Automobile-lock. No. 1,274,427; Aug. 6; v. 253; p. 24.
Landmesser, Walter N., Oskaloosa, Iowa. Stuffing-box. No. 1,274,564; Aug. 6; v. 253; p. 64.
Lane, Ernest W., Waverly, Iowa. Electric-lighting system for automobiles. No. 1,276,934; Aug. 27; v. 253; p. 812.
Lane, Henry M., Detroit, Mich. Conveying mechanism. No. 1,274,900; Aug. 6; v. 253; p. 159.
Langdon, William C., Wichita, Kans. Connection assembly for awnings and tents. No. 1,275,050; Aug. 6; v. 253; p. 202.
Langenbach, Arnold. (See Pedersen, Henning E., assignor.)
Langley, Edwin G. L., North Hadley, Mass. Postage-stamper. No. 1,277,323; Aug. 27; v. 253; p. 915.
Langner, Lawrence, London, England, assignor to Aeolian Company, New York, N. Y. Synchronously-operated reproducing apparatus. No. 1,277,224; Aug. 27; v. 253; p. 891.
Langolf, Fred T., assignor of one-half to W. A. Rauch, Elwood, Ind. Automobile-controlling device. No. 1,275,706; Aug. 13; v. 253; p. 406.
Larrabee, Clinton E., Binghamton, assignor to International Time Recording Company of New York, Endicott, N. Y. Elimination device for time-recorders. No. 1,277,086; Aug. 27; v. 253; p. 854.
Larson, Edward E., Thompson, Iowa. Flexible shaft. No. 1,275,051; Aug. 6; v. 253; p. 202.
Larson, Per L., Metuchen, N. J. Detachable bed-seat. No. 1,274,901; Aug. 6; v. 253; p. 159.
Larson, Peter S., Williston, N. D. Frame and body structure for automobiles. No. 1,275,272; Aug. 13; v. 253; p. 287.
Larsson, Ivan A. M., Stockholm, Sweden. Bench-vise. No. 1,277,324; Aug. 27; v. 253; p. 915.
Latta, Emmit G., Syracuse, N. Y., assignor to Corona Typewriter Company, Inc. Type-writing machine. No. 1,274,565; Aug. 6; v. 253; p. 64.
Latta, Emmit G., Syracuse, N. Y., assignor to Corono Typewriter Company, Inc. Type-writing machine. No. 1,274,566; Aug. 6; v. 253; p. 65.
Latta, Emmit G., Syracuse, N. Y., assignor to Corona Typewriter Company, Inc. Type-writing machine. No. 1,274,567; Aug. 6; v. 253; p. 65.
Latta, Emmit G., Syracuse, N. Y., assignor to Corona Typewriter Company, Inc. Type-writing machine. No. 1,274,902; Aug. 6; v. 253; p. 160.
Latta, Milton N., Valentine, Nebr. Reversible hydraulic well-digging machine. No. 1,274,903; Aug. 6; v. 253; p. 160.
Lauesen, Hans, Wisdom, Mont. Self-steering bomb. No. 1,277,225; Aug. 27; v. 253; p. 891.
Laughlin, Homer, Jr., and C. A. F. Ducorron, assignors to Homer Laughlin Engineers Corporation, Los Angeles, Cal. Spring suspension. No. 1,277,087; Aug. 27; v. 253; p. 854.
Laverdiere, Aristide, Gilbertville, Mass. Loom-shuttle. No. 1,276,084; Aug. 20; v. 253; p. 543.
Lawrence, Frederick K., Chicago, Ill. Demountable-rim wrench. No. 1,275,707; Aug. 13; v. 253; p. 406.
Lawson, Charles S., Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company. High-reactance core-type transformer. No. 1,275,946; Aug. 13; v. 253; p. 473.
Lawton, Peter S., New Orleans, La. Riverside slitless basin. No. 1,275,273; Aug. 13; v. 253; p. 287.
Lay, Samuel C., Ridgeville, Ind., and F. M. Baker, Detroit, Mich., assignors to The Joseph Lay Company, Ridgeville, Ind. Broom-stapling machine. No. 1,275,052; Aug. 6; v. 253; p. 202.
Le Cras, Thomas J., Toronto, Ontario, Canada. Antislip device for crutch-tips. No. 1,276,231; Aug. 20; v. 253; p. 584.
Le Pontois, Leon J., Lakewood, assignor, by mesne assignments, to The Teagle Company, Cleveland, Ohio. Combined ignition and lighting generator. No. 1,276,085; Aug. 20; v. 253; p. 543.
Lea, Frank D., assignor of one-half to F. M. Buck, Los Angeles, Cal. Matrix for line-casting machines. No. 1,275,947; Aug. 13; v. 253; p. 474.
Leary, Dennis F., Chelsea, Mass. Muffler. No. 1,276,935; Aug. 27; v. 253; p. 813.
Lederer, Sigmund L., and G. U. Meyer, assignors to Providence Stock Company, Providence, R. I. Buckle. No. 1,276,232; Aug. 20; v. 253; p. 584.
Ledig, Karl K., assignor of one-half to O. A. Ledig, Newark, N. J. Smoking-pipe attachment. No. 1,274,904; Aug. 6; v. 253; p. 160.
Ledig, Otto A. (See Ledig, Karl K., assignor.)
Ledwinka, Joseph, assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Automobile-body. No. 1,275,274; Aug. 13; v. 253; p. 287.
Lee, Gertrude M. (See Lee, Thomas F. F., assignor.)
Lee, Robert E. (See Vineyard, Pleas E., assignor.)
Lee, Thomas F. F., Brooklyn, assignor to G. M. Lee, New York, N. Y. Furnace. No. 1,275,986; Aug. 13; v. 253; p. 485.
Lee, Thomas L. (See Halbleib and Lee.)
Lee, Thomas L., assignor to North East Electric Company, Rochester, N. Y. Induction-coil. No. 1,274,428; Aug. 6; v. 253; p. 24.
Lee, Ulysses G., assignor to Addressograph Company, Chicago, Ill. Two-platen hand addressing-machine. No. 1,274,905; Aug. 6; v. 253; p. 161.
Lee, William H., Union, N. J. Collar and necktie holder. No. 1,274,906; Aug. 6; v. 253; p. 161.
Leeak, Francis J., Detroit, Mich. Automobile-lock. No. 1,277,088; Aug. 27; v. 253; p. 854.
Leeks, George A., Hamilton, Ontario, Canada. Machine for grinding glass disks. No. 1,276,776; Aug. 27; v. 253; p. 771.
Leffler, Artur L. O. A. (See Cassel, Gunnar E., assignor.)

Legate, William H., *et al.* (See Shepard, Wilbur L., assignor.)

Leiding, Carl H., Baltimore, Md. Safety appliance for window-cleaners. No. 1,275,053; Aug. 6; v. 253; p. 202.

Leitner, Henry, Westminster, London, and W. H. Exley, Mabury Hill, Woking, England. Electric accumulator. No. 1,275,448; Aug. 13; v. 253; p. 335.

Lemay, Joseph, Sault Ste. Marie, Ontario, Canada. Coal-pusher. No. 1,275,708; Aug. 13; v. 253; p. 406.

Lemb, William, Brooklyn, N. Y. Arch construction for furnaces. No. 1,275,709; Aug. 13; v. 253; p. 407.

Lemon, Herbert L., Chicago, Ill. Metal package. No. 1,275,449; Aug. 13; v. 253; p. 335.

Lenard, Louis, Chicago, Ill. Extension-table. No. 1,275,948; Aug. 13; v. 253; p. 474.

Leopold, Frederick B., Perrysville, Pa. Manifold for filters. No. 1,276,665; Aug. 20; v. 253; p. 705.

Leprevost, William H., Niles, Ohio. Power-jack. No. 1,275,450; Aug. 13; v. 253; p. 336.

Leslie, Franklin J., New York, N. Y. Device for removing obstructions from tubes. No. 1,275,571; Aug. 13; v. 253; p. 369.

Lester Piano Company. (See Wamsley, Wayne D., assignor.)

Levine, John, Detroit, Mich. Newspaper-vending machine. No. 1,274,724; Aug. 6; v. 253; p. 110.

Levinson, Samuel, Brooklyn, N. Y. Mouth toilet preparation. No. 1,275,275; Aug. 13; v. 253; p. 288.

Lewis, Arthur L., Newtonville, Mass. Filing device for bound catalogues, books, &c. No. 1,275,054; Aug. 6; v. 253; p. 203.

Lewis, Charles W., Tampa, Fla. Base-ball game. No. 1,276,777; Aug. 27; v. 253; p. 772.

Lewis, James N., Detroit, Mich., assignor to O. H. Fay, trustee, Chicago, Ill. Captive-balloon controller and conveyer. No. 1,275,710; Aug. 13; v. 253; p. 407.

Libby, Albion D. T., East Orange, and E. J. Tomlinson, assignors to Splitdorf Electrical Company, Newark, N. J. Electromagnetic structure. No. 1,275,572; Aug. 13; v. 253; p. 369.

Libby, McNiel & Libby. (See Hutton, Frank O., assignor.)

Lichtenstein, Henry E., Woodmere, assignor of one-half to C. G. Hensley, Brooklyn, and S. K. Lichtenstein, New York, N. Y. Photographic apparatus. No. 1,275,573; Aug. 13; v. 253; p. 369.

Lichtenstein, Solomon K., *et al.* (See Lichtenstein, Henry E., assignor.)

Lickley, Ralph M., East Cleveland, assignor, by mesne assignments, to The Talmage Manufacturing Company, Cleveland, Ohio. Locomotive drifting device. No. 1,275,055; Aug. 6; v. 253; p. 203.

Lickley, Ralph M., East Cleveland, assignor, by mesne assignments, to The Talmage Manufacturing Company, Cleveland, Ohio. Smoke-abating system for locomotives. No. 1,275,056; Aug. 6; v. 253; p. 203.

Liddell, Nathaniel M., Danville, Ill. Paving-machine. No. 1,276,086; Aug. 20; v. 253; p. 544.

Lie, Egil, Odda, Norway. Producing a phosphoric-acid fertilizer containing urea. No. 1,275,276; Aug. 13; v. 253; p. 288.

Liebmann, Adolf. (See Dewar and Liebmann.)

Light, Claus H., Des Moines, assignor of one-half to E. Sparling, Garden Grove, Iowa. Tire-protector and antiskid device. No. 1,277,226; Aug. 27; v. 253; p. 891.

Ligon, Curtis M., Warren, Ariz. Wrench. No. 1,274,908; Aug. 6; v. 253; p. 161.

Likly, Henry, assignor to Henry Likly & Company, Rochester, N. Y. Trunk-drawer lock. No. 1,276,233; Aug. 20; v. 253; p. 584.

Lillard, William W., Irvington, assignor of one-half to E. J. King, Jersey City, N. J. Warmer for footwear. No. 1,275,451; Aug. 13; v. 253; p. 336.

Lilley, Parez B., Prosser, Nebr. Feeding-trough. No. 1,276,087; Aug. 20; v. 253; p. 544.

Lillie, William J. (See Derr, William R., assignor.)

Lilly, Joseph, Small Health, Birmingham, England. Controlling-spring for doors and the like. No. 1,274,429; Aug. 6; v. 253; p. 25.

Limont, Alexander W., assignor to Bridgeport Brass Company, Bridgeport, Conn. Making projectile-bands. No. 1,275,057; Aug. 6; v. 253; p. 203.

Linbarger, Silas C., assignor to The Carborundum Company, Niagara Falls, N. Y. Refractory article and making the same. No. 1,277,227; Aug. 27; v. 253; p. 891.

Linden, Lucien, Putney, London, England, assignor to W. J. Stewart, Belfast, Ireland. Apparatus for purifying water. No. 1,276,234; Aug. 20; v. 253; p. 585.

Linderme, Emil, assignor to E. Schwarz, Detroit, Mich. Bottle-washing brush. No. 1,274,909; Aug. 6; v. 253; p. 162.

Lindhorst, Frederick. (See Horn and Lindhorst.)

Lindquist, Gustave F., assignor to Union Special Machine Company, Chicago, Ill. Power-transmitting device. No. 1,276,379; Aug. 20; v. 253; p. 626.

Linfoot, Theodosia E., Lambert, Okla. Animal nose-yoke. No. 1,275,277; Aug. 13; v. 253; p. 288.

Lipp, Desider, New York, N. Y. Removable window-bracket. No. 1,275,574; Aug. 13; v. 253; p. 369.

Lippert, Walter E. (See Ireland and Lippert.)

Liquid Carbonic Company. (See Smith, Horace M., assignor.)

Lisberg, Manuel, Slidell, La. Planting-machine. No. 1,277,228; Aug. 27; v. 253; p. 891.

Lister, John T., Cleveland, Ohio. Forming tire fabric and tires. No. 1,274,910; Aug. 6; v. 253; p. 162.

Liston, Thomas. (See Mullin, Colman J., assignor.)

Lisy, James V., Ravenna, Nebr. Clamp. No. 1,275,452; Aug. 13; v. 253; p. 336.

Litten, Ira E., assignor to M. M. Litten, Orange, Cal. Trailer connection. No. 1,276,548; Aug. 20; v. 253; p. 672.

Litten, Maggie M. (See Litten, Ira E., assignor.)

Little, George M., Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Cimpany. Electrode for arc-lamps. No. 1,274,725; Aug. 6; v. 253; p. 111.

Littlefield, Charles W., Seattle, Wash. Therapeutic light apparatus. No. 1,277,089; Aug. 27; v. 253; p. 855.

Litwacz, Katherina, Philadelphia, Pa. Ash-sifter. No. 1,275,575; Aug. 13; v. 253; p. 370.

Lloyd, Burt E., West Hoboken, N. J. Sounding device for dolls. No. 1,277,229; Aug. 27; v. 253; p. 891.

Lloyd, George H., Houston, Tex. Record for live-stock and other shipments. No. 1,277,325; Aug. 27; v. 253; p. 910.

Lockwood, Charles S., Newark, assignor to Hyatt Roller Bearing Division, United Motors Corporation, Harrison, N. J. Mortise-riveting. No. 1,275,576; Aug. 13; v. 253; p. 370.

Lockwood, Harry B., and G. W. Brinkman, Chicago, Ill. Elevator-controller interlock. No. 1,276,088; Aug. 20; v. 253; p. 544.

Locomobile Company of America, The. (See Riker, Andrew L., assignor.)

Locomotive Pulverized Fuel Company. (See Caracristi, Virginius Z., assignor.)

Loftus, Thomas J., Castella, assignor of one-half to H. Bell, Oakland, Cal. Rotary engine. No. 1,276,380; Aug. 20; v. 253; p. 626.

Loftus, Thomas J., Castella, assignor of one-half to H. Bell, Oakland, Cal. Rotary engine. No. 1,276,381; Aug. 20; v. 253; p. 627.

Lohman, Alfred P., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Ladder-foot. No. 1,276,666; Aug. 20; v. 253; p. 705.

Lohman, Carl A., Seattle, Wash. Dry-kiln. No. 1,274,911; Aug. 6; v. 253; p. 162.

Lohman, Carl A., Seattle, Wash. Lumber-sorting device. No. 1,277,326; Aug. 27; v. 253; p. 916.

Lohstroh, Carl W., Cincinnati, Ohio. Holder. No. 1,277,230; Aug. 27; v. 253; p. 892.

Lombard, Levi W., Waltham, assignor to J. A. Moir, Boston, Mass. Thread-applying mechanism for can-labeling machines. No. 1,275,949; Aug. 13; v. 253; p. 474.

Long, Charles, Jefferson, Ind. Grease-gun. No. 1,275,058; Aug. 6; v. 253; p. 204.

Loomis, Allen, assignor to Packard Motor Car Company, Detroit, Mich. Motor-vehicle. No. 1,275,950; Aug. 13; v. 253; p. 474.

Loomis, Evarts G., Newark, and A. V. Da Costa, Arlington, N. J. Pressure-gage. No. 1,276,089; Aug. 20; v. 253; p. 545.

Lopez, Guillermo C., *et al.* (See Sanchez, Leonardo, assignor.)

Loranger, Joseph D., Central Falls, R. I. Dolly-bar. No. 1,276,235; Aug. 20; v. 253; p. 585.

Lord, Alfred B., Cambridge, Mass., assignor of one-third to F. J. Pickman and one-third to W. A. Southam, Cleveland, Ohio. Wrench. No. 1,276,236; Aug. 20; v. 253; p. 585.

Lord, Chester R., Mineral City, Ohio. Hill climbing and antiskidding device for automobiles. No. 1,274,568; Aug. 6; v. 253; p. 65.

Lorenzen, Frederick G., assignor to Kellogg Toasted Corn Flake Company, Battle Creek, Mich. Preparing food products of starchy material. No. 1,275,711; Aug. 13; v. 253; p. 407.

Louandes, Frank L. (See Archibald and Louandes.)

Lovan, Alphonso B., *et al.* (See Norman, Frank, assignor.)

Loveczky, Paul, Brooklyn, N. Y. Aeroplane. No. 1,276,778; Aug. 27; v. 253; p. 772.

Lovejoy, Frank W., Rochester, N. Y. Photographic film. No. 1,275,989; Aug. 13; v. 253; p. 486.

Lovejoy, Frank W., assignor to Eastman Kodak Company, Rochester, N. Y. Photographic film. No. 1,276,779; Aug. 27; v. 253; p. 772.

Lovejoy, George W., assignor of one-half to C. Schoff, Tehachapi, Cal. Windmill attachment. No. 1,274,569; Aug. 6; v. 253; p. 65.

Lovejoy, Ralph M., Meredith, N. H. Worm-gearing. No. 1,276,237; Aug. 20; v. 253; p. 585.

Lovelady, Thomas. (See Ames and Lovelady.)

Loveland, Byron S., assignor to W. M. Whitney, Winchendon, Mass. Wood-planing machine. No. 1,275,167; Aug. 6; v. 253; p. 233.

Loveland, Harold, Bremerton, Wash. Measuring and dispensing device. No. 1,276,382; Aug. 20; v. 253; p. 627.

Lovell, James L., Astoria, Ore. Gas-engine. No. 1,275,278; Aug. 13; v. 253; p. 288.

Lowder, Lillian C., Indianapolis, Ind. Hygienic garment-supporter. No. 1,276,238; Aug. 20; v. 253; p. 586.

Lucas, Arthur C., *et al.* (See Smith, Elta C., assignor.)

Lucas, August L., New Haven, Conn. Fishpole. No. 1,276,780; Aug. 27; v. 253; p. 772.

Lucas, Noah E., Norwich, Conn. Underclearer-roll. No. 1,274,570; Aug. 6; v. 253; p. 66.

Lucey Manufacturing Corporation. (See White, Carl, Jr., assignor.)

Ludekens, Oona, assignor to The Wite-Kat Soap Company, San Francisco, Cal. Soap and making the same. No. 1,276,383; Aug. 20; v. 253; p. 628.

Ludlow Typograph Company, The. (See Reade, William A., assignor.)

Ludwick, Edward C., assignor of one-third to C. E. Harris and one-third to F. A. Wise, Basin, Wyo. Collapsible automobile-rim. No. 1,277,090; Aug. 27; v. 253; p. 855.

Luick, Frank J., Belding, Mich. Current water-wheel. No. 1,275,951; Aug. 13; v. 253; p. 475.

Lundell, Alben E., assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone-exchange system. No. 1,276,549; Aug. 20; v. 253; p. 673.

Lundquist, Frank A., assignor to The Western Electric Company, Incorporated, New York, N. Y. Telephone-exchange system. No. 1,277,091; Aug. 27; v. 253; p. 855.

Lundqvist, Hilding, Floral Park, N. Y. Closure for flexible receptacles. No. 1,277,327; Aug. 27; v. 253; p. 916.

Lundy, Beverly A., Albany, N. Y., assignor to Hall Switch & Signal Co. Adjustable resistance unit. No. 1,276,384; Aug. 20; v. 253; p. 628.

Lurcott, Winfred N. (See Goelkel and Lurcott.)

Luscomb, Otis K., Allston, Mass. Power plant. No. 1,275,577; Aug. 13; v. 253; p. 370.

Lutz, George A., Cranford, N. J., assignor to American Circular Loom Company, Pittsburgh, Pa. Conduit or conductor. No. 1,275,279; Aug. 13; v. 253; p. 288.

Luxmore, William, Chicago, Ill. Vehicle driving mechanism. No. 1,275,952; Aug. 13; v. 253; p. 475.

Lynds, Alva L., Akron, Ohio. Routing or filling case. No. 1,276,781; Aug. 27; v. 253; p. 772.

M. Scheuer & Bro. (See Germain, Don A., assignor.)

Maag, Max, Zurich, Switzerland. Worm-gearing. No. 1,274,918; Aug. 6; v. 253; p. 164.

MacAlpine, Hermann B. (See Phelan and MacAlpine.)

MacGregor, John G., New York, N. Y. Grease-gun. No. 1,275,455; Aug. 13; v. 253; p. 337.

MacLauchlan, James H., New York, N. Y. Thawing apparatus. No. 1,277,097; Aug. 27; v. 253; p. 856.

MacMillan, Abram, Chicago, Ill. Tire-shoe. No. 1,276,789; Aug. 27; v. 253; p. 775.

Macbeth-Evans Glass Company. (See Macbeth, George A., assignor.)

Macbeth, George A., assignor to Macbeth-Evans Glass Company, Pittsburgh, Pa. Lamp construction. No. 1,276,240; Aug. 20; v. 253; p. 586.

Macdonald, Harry P., Montclair, N. J., and E. M. Huggins, New York, N. Y., assignors to The Snead & Co. Iron Works, Jersey City, N. J. Method of and apparatus for electric heating and tempering. No. 1,274,919; Aug. 6; v. 253; p. 164.

Macfarren, Walter W. (See Kingshacher and Macfarren.)

Mack, Charles E. (See Rohan, James J., assignor.)

Macomber, William I., Cranston, assignor of one-half to F. G. Rowley, Pawtucket, R. I. Feed-control device. No. 1,275,581; Aug. 13; v. 253; p. 371.

Madden, George J. (See Weaver, Ezra L., assignor.)

Madra, Andrew T. (See Ware, William B., assignor.)

Magel, H. S. (See Poulallion, Francis N., assignor.)

Magnuson, Ida O., Smolan, Kans. Hair-fastener. No. 1,274,920; Aug. 6; v. 253; p. 165.

Maher, Charles A., Wallowa, Oreg. Combination soap and applicator holder. No. 1,275,456; Aug. 13; v. 253; p. 337.

Maiden, Arthur E., C. Schindler, Oakland, and W. D. Newhouse, San Francisco, Cal. Day and night sign. No. 1,276,091; Aug. 20; v. 253; p. 545.

Maier, Karl F. G., South Ashburnham, Mass. Woodworking-machine. No. 1,276,550; Aug. 20; v. 253; p. 673.

Majorana, Peppino, Louisville, Ky. Pyroxylin composition. No. 1,275,063; Aug. 6; v. 253; p. 205.

Makutchan Roller Bearing Company. (See Makutchan, William H., assignor.)

Makutchan, William H., assignor to Makutchan Roller Bearing Company, Chicago, Ill. Roller-bearing. No. 1,275,715; Aug. 13; v. 253; p. 409.

Maliszewski, Vincent F., Detroit, Mich. Detachable resilient heel-tread. No. 1,274,734; Aug. 6; v. 253; p. 113.

Malkin, John E., New York, N. Y. Sash-holder. No. 1,276,790; Aug. 27; v. 253; p. 775.

Mallory, William, Topeka, Kans. Oil-burner. No. 1,276,939; Aug. 27; v. 253; p. 814.

Malocsay, Frank, New York, N. Y., assignor to Sonora Phonograph Corporation. Tone-arm for talking-machines. No. 1,276,551; Aug. 20; v. 253; p. 673.

Maltby, George K., New York, N. Y. Lamp. No. 1,276,669; Aug. 20; v. 253; p. 706.

Maltby, George K., New York, N. Y. Lamp. No. 1,276,670; Aug. 20; v. 253; p. 706.

Mandeville, Paul, assignor to The Paul Mandeville Co., Chicago, Ill. Regulating the humidity of air in chambers. No. 1,276,241; Aug. 20; v. 253; p. 586.

Manlove, Joe J., *et al.* (See Short, Byron O., assignor.)

Mann, Seward W., New York, N. Y. Resurfacing-machine. No. 1,276,092; Aug. 20; v. 253; p. 546.

Manning Bowman & Company. (See Barker, Walter G., assignor.)

Manning, Francis J., Medford, assignor, by mesne assignments, to American Steam Gauge & Valve Manufacturing Company, Boston, Mass. Pressure-gage. No. 1,274,921; Aug. 6; v. 253; p. 165.

Mansager, Hoff M., Colton, S. D. Combined whip-socket and rein-holder. No. 1,276,940; Aug. 27; v. 253; p. 814.

Mansager, Hoff M., Colton, S. D. Door-spring. No. 1,276,941; Aug. 27; v. 253; p. 814.

Mansell, Leonidas W. (See Mishoe and Mansell.)

Manson, Ray H., assignor to The Garford Manufacturing Company, Elyria, Ohio. Automatic brake for talking-machines. No. 1,274,735; Aug. 6; v. 253; p. 113.

Manuel, William P., Los Angeles, Cal. Feeding device for pencils. No. 1,275,957; Aug. 13; v. 253; p. 476.

Marcus, Charles, Far Rockaway, N. Y., assignor, by mesne assignments, to Bijur Motor Appliance Company. Brush-mounting for dynamos and the like. No. 1,276,552; Aug. 20; v. 253; p. 674.

Marcy, Willard A., Newton Upper Falls, assignor to The Lamson Company, Boston, Mass. Safety device for tray-conveyers and the like. No. 1,277,100; Aug. 27; v. 253; p. 857.

Margeson, James E., Jasper, N. Y. Barb-wire stretcher. No. 1,274,736; Aug. 6; v. 253; p. 113.

Mark Cross Company. (See Johnson, Adam E., assignor.)

Markel, Charles, Clinton, Iowa. Driving-box side-motion plate. No. 1,275,958; Aug. 13; v. 253; p. 478.

Marseilles Company. (See Courtney, Thomas S., assignor.)

Marsh, Frederick, Leeds, assignor of one-third to W. Hey and one-third to J. Willie, Meadowcroft, York, England. Tap-sole. No. 1,274,922; Aug. 6; v. 253; p. 165.

Martin, Adolph L., *et al.* (See Kurowski, Alfred G. F., assignor.)

Martin, Fred P., Ottawa, Kans. Culvert-form. No. 1,275,457; Aug. 13; v. 253; p. 338.

Martin, George V., assignor to The National Malleable Castings Company, Cleveland, Ohio. Pocket for engine-couplings. No. 1,274,737; Aug. 6; v. 253; p. 113.

Martin, James N., and A. S. Bragan, Birmingham, Ala. Smoke and heat generator. No. 1,275,959; Aug. 13; v. 253; p. 476.

Martin, Richard D., El Reno, Okla. Plant for utilizing waste heat. No. 1,275,962; Aug. 13; v. 253; p. 477.

Martin, Roy J., Lamar, Okla. Hand-rake attachment. No. 1,276,671; Aug. 20; v. 253; p. 706.

Marx, August F., *et al.* (See Kurowski, Alfred G. F., assignor.)

Marx, Henry, *et al.* (See Kurowski, Alfred G. F., assignor.)

Marx, Joseph J. (See Brunk, Oscar E. W., assignor.)

Marx, Sidney S., San Diego, Cal. Camping-trailer. No. 1,276,388; Aug. 20; v. 253; p. 629.

Mascellino, Adolph F., North Bergen, N. J. Clothes-pin. No. 1,275,582; Aug. 13; v. 253; p. 372.

Maschinenfabrik Augsburg-Nürnberg A. G. (See Jagschitz, Konrad, assignor.)

Mason, Arthur C., and A. T. Sturdt, Flint, Mich., assignors to Chevrolet Motor Company, New York, N. Y. Piston. No. 1,275,064; Aug. 6; v. 253; p. 205.

Mason, Arthur C., and A. T. Sturt, Flint, Mich., assignors to Chevrolet Motor Company, New York, N. Y. Automobile-engine. No. 1,276,389; Aug. 20; v. 253; p. 629.

Mason, Volney W., Jr., Kingston, N. Y. Snow-plow. No. 1,276,672; Aug. 20; v. 253; p. 706.

Massey, Alfred N., San Francisco, Cal. Rotary valve for internal-combustion engines. No. 1,276,242; Aug. 20; v. 253; p. 587.

Massey, George, Beecroft, New South Wales, Australia. Hydraulic elevator. No. 1,276,390; Aug. 20; v. 253; p. 629.

Massey-Harris Company. (See Rieske, Otto G., assignor.)

Mastenbrook, Jacob, Big Rapids, Mich. Lamp-chimney guard. No. 1,276,553; Aug. 20; v. 253; p. 674.

Master Equipment Company. (See Evans, Cullen C., assignor.)

Masuda, Kikujiro. (See Taira and Masuda.)

Mather, Carl N. (See Ainsworth, William A., assignor.)

Mathias, Berton M., Minneapolis, Minn. Guy-strand clamp. No. 1,275,283; Aug. 13; v. 253; p. 290.

Mathys, Albert W., Catford, London, England. Apparatus for cooling and otherwise treating gases with liquids. No. 1,275,583; Aug. 13; v. 253; p. 372.

Mattison, Charley E., De Ridder, La. Rail-moistener. No. 1,277,236; Aug. 27; v. 253; p. 893.

Matulaitis, Jonas, Scranton, Pa. Railway-crossing. No. 1,275,584; Aug. 13; v. 253; p. 372.

Maurer, Erwin, Jamaica, N. Y. Brooder. No. 1,275,065; Aug. 6; v. 253; p. 206.

Maurer, Henry E., Jr., assignor of one-half to H. L. Ide, Springfield, Ill. Lifting-jack. No. 1,275,716; Aug. 13; v. 253; p. 409.

Mausen, Theodore R., New Brunswick, N. J. Tie-clamp for insulators. No. 1,277,237; Aug. 27; v. 253; p. 893.

Maxcornell, Louis D., Chicago, Ill. Unseating device for valves. No. 1,276,391; Aug. 20; v. 253; p. 630.

Maxim, Hiram P., assignor to The Maxim Silencer Company, Hartford, Conn. Scabbard. No. 1,276,554; Aug. 20; v. 253; p. 674.

Maxim Silencer Company, The. (See Maxim, Hiram P., assignor.)

Mayer, Edward R., assignor of one-half to J. C. Storm, Amarillo, Tex. Oil-burner. No. 1,276,243; Aug. 20; v. 253; p. 587.

Mayer, John L., Chicago, Ill. Agitating or stirring device for boiling liquids. No. 1,275,284; Aug. 13; v. 253; p. 290.

Mayer, Walter S., assignor to Electric Service Supplies Company, Philadelphia, Pa. Light-focusing mechanism. No. 1,276,791; Aug. 27; v. 253; p. 775.

Mayhew, Frank J. (See Taylor, Horace H., assignor.)

Maynard, Arthur H., Warwick, R. I., assignor to Boston Wire Stitcher Company, Portland, Me. Automatic feeding mechanism for wire-stitchers and like machines. No. 1,275,960; Aug. 13; v. 253; p. 477.

Maynard, Nicholas, Sabetha, Kans. Snap binding-post. No. 1,275,961; Aug. 13; v. 253; p. 477.

Mayo, Benjamin F., Salem, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Last-pulling machine. No. 1,274,738; Aug. 6; v. 253; p. 113.

McAdam, Charles, Chicago, Ill., assignor to Chadeloid Chemical Company, New York, N. Y. Composition for removing paint and varnish. No. 1,274,430; Aug. 6; v. 253; p. 25.

McAfee, Almer M., Port Arthur, Tex., assignor to Gulf Refining Company, Pittsburgh, Pa. Purifying paraffin. No. 1,277,092; Aug. 27; v. 253; p. 855.

McAfee, Almer M., New York, N. Y., assignor to Gulf Refining Company, Pittsburgh, Pa. Saturating oils. No. 1,277,328; Aug. 27; v. 253; p. 916.

McAfee, Almer M., Port Arthur, Tex., assignor to Gulf Refining Company. Purifying oils. No. 1,277,329; Aug. 27; v. 253; p. 917.

McAlpine, Edward M. C., New York, assignor to McAlpine Milking Machine Company, Chateaugay, N. Y. Measuring and indicating device. No. 1,276,782; Aug. 27; v. 253; p. 773.

McAlpine Milking Machine Company. (See McAlpine, Edward M. C., assignor.)

McArthur, William, Tenino, Wash. Plastic composition. No. 1,274,726; Aug. 6; v. 253; p. 111.

McAtee, William A., *et al.* (See Norman, Frank, assignor.)

McAuliffe, J. E., *et al.* (See Forsyth, Joseph C., assignor.)

McBean, Duncan D., New York, N. Y. Lumber-ship. No. 1,277,093; Aug. 27; v. 253; p. 855.

McCabe, Joseph S., Minneapolis, Minn. Concrete-culvert mold. No. 1,275,280; Aug. 13; v. 253; p. 289.

McCabe, Mary, New York, N. Y. Foldable stand for sewing-machines. No. 1,275,059; Aug. 6; v. 253; p. 204.

McCarger, Lorren B., Kansas City, Mo. Feed-cutting machine. No. 1,277,344; Aug. 27; v. 253; p. 920.

McCarthy, Daniel M., Brooklyn, N. Y. Formaldehyde composition and the preparation thereof. (Reissue.) No. 14,514; Aug. 27, v. 253; p. 623.

McCarthy, Thomas A., Toronto, Ontario, Canada. Mechanical calculator. No. 1,276,239; Aug. 20; v. 253; p. 586.

McCarty, Callious J., Morgantown, W. Va. Horseshoeing-stand. No. 1,274,727; Aug. 6; v. 253; p. 111.

McCarty, William F. M., Baltimore, Md. Treating petroleum-oils. No. 1,274,912; Aug. 6; v. 253; p. 162.

McCarty, William F. M., Baltimore, Md. Apparatus for treating petroleum-oils. No. 1,274,913; Aug. 6; v. 253; p. 163.

McCaskey Register Company, The. (See Hick, Harry J., assignor.)

McClary, Robert G., Wellston, Mo. Making piston-rings. No. 1,277,231; Aug. 27; v. 253; p. 892.

McClay, Clarence G. (See McClay, William W. and C. G.)

McClay, William W., and C. G., Chicago, Ill. Crate. No. 1,277,094; Aug. 27; v. 253; p. 856.

McClellan, Harry W., and O. W. Hanson, Jr., Altoona, Pa. Clamp for holding piston-rings when removing pistons. No. 1,275,953; Aug. 13; v. 253; p. 475.

McCloud, Edward H., Columbus, Ohio. Brake for fire-shutters. No. 1,275,168; Aug. 6; v. 253; p. 233.

McClure, Charles W. (See Holnagel and McClure.)

McConahy, Elmer B., Mulino, Oreg. Buckle. No. 1,275,578; Aug. 13; v. 253; p. 370.

McCormack, George B., Jersey City, N. J. Printing-press. No. 1,275,281; Aug. 13; v. 253; p. 289.

McCourt, Cyril D., London, England, and C. Ellis, Montclair, N. J., assignors, by mesne assignments, to Surface Combustion, Inc., Wilmington, Del. Manufacturing gas-black, hydrogen, &c. No. 1,276,385; Aug. 20; v. 253; p. 628.

McCoy, James P. A., Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company. Plastic composition and making the same. No. 1,274,728; Aug. 6; v. 253; p. 111.

McCraw, John T., Aylesworth, Okla. Cattle-guard. No. 1,275,060; Aug. 6; v. 253; p. 204.

McCullough, George. (See Hamilton and McCullough.)

McCune, Royal L. (See Pierce, Overstreet, and McCune.)

McDaniel, Fannie E., executrix. (See McDaniel, James.)

McDaniel, James, deceased, Minneapolis, Minn.; F. E. McDaniel, executrix. Box-car unloader. No. 1,274,571; Aug. 6; v. 253; p. 66.

McDevitt, James B., Chicago, Ill. Telephone-booth. No. 1,274,914; Aug. 6; v. 253; p. 163.

McDonald, Thomas M., D'Aste, Mont. Tracte train. No 1,276,667; Aug. 20; v. 253; p. 705.

McDonough, Alexander J. (See Sullivan, Joseph M., assignor.)

McElroy, Roy H., assignor to The International Clay Machinery Co., Dayton, Ohio. Compartment-kiln. No. 1,275,712; Aug. 13; v. 253; p. 408.

McEnery, Jeremiah G., Chicago, Ill. Liquid-dispenser. No. 1,274,915; Aug. 6; v. 253; p. 163.

McFarland, Owen D. (See Cumfer and McFarland.)

McFarlin, John R., assignor to Electric Service Supplies Company, Philadelphia, Pa. Lightning-arrester. No. 1,276,783; Aug. 27; v. 253; p. 773.

McFarlin, John R., assignor to Electric Service Supplies Company, Philadelphia, Pa. Lightning-arrester. No. 1,277,095; Aug. 27; v. 253; p. 856.

McGary, Alexander, and J. P. Sunderland, New York, N. Y., assignors, by mesne assignments, to Gould Coupler Company. Closet. No. 1,276,784; Aug. 27; v. 253; p. 773.

McGary, Alexander, and J. P. Sunderland, New York, N. Y., assignors, by mesne assignments, to Gould Coupler Company. Closet. No. 1,277,232; Aug. 27; v. 253; p. 892.

McGee, Brutus A., Chicago, Ill. Nursing-bottle support. No. 1,276,936; Aug. 27; v. 253; p. 813.

McGinnis, Eugene H., New York, N. Y. Nuts. No. 1,276,785; Aug. 27; v. 253; p. 774.

McGowan, Edward J., New York, N. Y. Ballot-box. No. 1,275,570; Aug. 13; v. 253; p. 371.

McGowan, George J., assignor to Grand Rapids Refrigerator Co., Grand Rapids, Mich. Door-latch. No. 1,275,954; Aug. 13; v. 253; p. 475.

McGowan, Owen J., Brooklyn, N. Y. Device for suspending ships' boats from davits. No. 1,275,987; Aug. 13; v. 253; p. 486.

McGrath, John F., Dorchester, Mass. Educational appliance. No. 1,275,955; Aug. 13; v. 253; p. 476.

McGrath, Raymond C., Okemah, Okla. Pressure-gage for air-pumps. No. 1,275,282; Aug. 13; v. 253; p. 289.

McGraw, Frank J. (See Thompson and McGraw.)

McGreal, Hugh J., assignor of one-half to M. S. Sheridan, Milwaukee, Wis. Sound-reproducing machine. No. 1,277,096; Aug. 27; v. 253; p. 856.

McGuire, J. Charles, *et al.* (See Duffy, Charles H., assignor.)

McIlill, William R., Moran, Kans. Oil-burner. No. 1,275,453; Aug. 13; v. 253; p. 336.

McKay, Henry N., Oakland, Cal., assignor to The Wahl Company, Wilmington, Del. Total-proof device for adding mechanism. No. 1,274,729; Aug. 6; v. 253; p. 111.

McKay, Henry N., Oakland, Cal., assignor to The Wahl Company, Wilmington, Del. Lock-actuator for total-proof devices on computing-machines. No. 1,274,730; Aug. 6; v. 253; p. 111.

McKay, Henry N., Oakland, Cal., assignor to The Wahl Company, Wilmington, Del. Total-proof lock for computing type-writers. No. 1,274,731; Aug. 6; v. 253; p. 112.

McKee, Arthur G., Cleveland, Ohio. Coke-screen. No. 1,275,713; Aug. 13; v. 253; p. 408.

McKee, Harold T., near McCloud, Cal. Milking-stool. No. 1,277,233; Aug. 27; v. 253; p. 893.

McKelvey, John H., Kirkwood, and C. F. Ryan, St. Louis, Mo. Apparatus for making plate-glass. No. 1,274,916; Aug. 6; v. 253; p. 164.

McKelvey, Newell A., Battle Creek, Mich., assignor to General Electric Company. Operating mechanism for electric controllers. No. 1,275,061; Aug. 6; v. 253; p. 205.

McKenna, Michael H., Cleveland, Ohio. Machine for bending metal bars. No. 1,277,234; Aug. 27; v. 253; p. 893.

McKenna, Michael H., Cleveland, Ohio. Machine for bending metal bars. No. 1,277,235; Aug. 27; v. 253; p. 893.

McKenney, John, Anaconda, Mont. Carbureter. No. 1,276,937; Aug. 27; v. 253; p. 813.

McKibben, Charles W., Houston, Tex. Apparatus for separating liquids. No. 1,276,386; Aug. 20; v. 253; p. 628.

McKibben, Charles W., Houston, Tex. Separating associated liquids. No. 1,276,387; Aug. 20; v. 253; p. 629.

McLain, Albert L., Wetmore, Kans. Tire-chain tightener. No. 1,275,454; Aug. 13; v. 253; p. 337.

McLaren, James W., Columbus, Ohio. Motor-vehicle. No. 1,275,580; Aug. 13; v. 253; p. 371.

McLaughlin, John R., Holbrook, assignor of one-half to G. E. Rollins, Brockton, Mass. Making shoes. No. 1,276,090; Aug. 20; v. 253; p. 545.

McLaughlin, William H., assignor to C. S. Chase, Hartford, Conn. Fastening means. No. 1,276,786; Aug. 27; v. 253; p. 774.

McLaughlin, William H., assignor to C. S. Chase, Hartford, Conn. Connecting device. No. 1,276,787; Aug. 27; v. 253; p. 774.

McLaughlin, William H., assignor to C. S. Chase, Hartford, Conn. Fastening means. No. 1,276,788; Aug. 27; v. 253; p. 775.

McLean, Finis, Valley Junction, Iowa. Tie-plate. No. 1,276,938; Aug. 27; v. 253; p. 813.

McLean, Philip S., Bloomfield, N. J. Music-roll package. No. 1,277,098; Aug. 27; v. 253; p. 857.

McLean, William E. (See Coull and McLean.)

McMahoney, Joseph N., Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company. Circuit-interrupter. No. 1,274,733; Aug. 6; v. 253; p. 112.

McMichael, Stillwell W. (See Young, Porus J., assignor.)

McMillan, Frank, Glenellyn, assignor of nine-tenths to H. L. Replogle, Chicago, Ill. Moving-picture machine. No. 1,275,956; Aug. 13; v. 253; p. 476.

McMillen, Volley V. (See Overtree and McMillen.)

McMyler Interstate Company, The. (See Bogart, Henry W., assignor.)

McNally, Leo F., Brooklyn, N. Y., assignor to D. W. Pye, Red Bank, N. J. Trap-door for grade-level vestibule-cars. No. 1,275,714; Aug. 13; v. 253; p. 408.

McNee, Robert H., Nyssa, Oreg. Cutter-bar mechanism. No. 1,275,062; Aug. 6; v. 253; p. 205.

McNulty, Frank J., Lowell, Ariz. Resilient wheel. No. 1,277,330; Aug. 27; v. 253; p. 917.

McNulty, Frank J., Lowell, Ariz. Resilient wheel. No. 1,277,331; Aug. 27; v. 253; p. 917.

McNutt, James D., Lees Summit, Mo. Irrigating system. No. 1,277,332; Aug. 27; v. 253; p. 917.

McNutt, William H., New York, N. Y. Receptacle. No. 1,277,099; Aug. 27; v. 253; p. 857.

McOsker, Joseph D., Brighton, Mass. Necktie and collar. No. 1,276,668; Aug. 20; v. 253; p. 705.

McQuay-Norris Manufacturing Company. (See Mummert, Arden J., assignor.)

McRae, Finlay A., Montreal, Quebec, Canada. Dump-car. No. 1,274,732; Aug. 6; v. 253; p. 112.

Mead, Francis. (See Duffies and Mead.)

Mead, Frank M., Boylston, assignor of one-half to H. A. Fowler, Worcester, Mass. Coin-holder. No. 1,274,739; Aug. 6; v. 253; p. 114.

Meador, Joseph G., Jr. (See Shaw and Meador.)

Meadows, Thomas C., assignor to Kaolin Products Corporation, New York, N. Y. Producing fertilizer materials. No. 1,276,555; Aug. 20; v. 253; p. 674.

Meakin, Edgar T., Berkeley, Cal. Non-skidding device. No. 1,277,333; Aug. 27; v. 253; p. 918.

Mechanical Rubber Company, The. (See Beynon, Rees, assignor.)

Medlock, Walter M. (See Herzog and Medlock.)

Meier, Edward C., Phoenixville, Pa. Superheater construction for boilers. No. 1,274,740; Aug. 6; v. 253; p. 114.

Melander, August W., San Francisco, Cal., assignor to Fountain Faucet Company. Valve. No. 1,276,673; Aug. 20; v. 253; p. 707.

Mellen, Ernest W., Rogerson, Idaho. Comb-cleaner. No. 1,274,573; Aug. 6; v. 253; p. 66.

Mellin, Carl J., Schenectady, assignor to American Locomotive Company, New York, N. Y. Steam-engine valve-chest. No. 1,275,963; Aug. 13; v. 253; p. 477.

Mellor, William, Sebring, Ohio. Porcelain-kiln. No. 1,275,285; Aug. 13; v. 253; p. 290.

Mellowes, Alfred W. (See Rechtold and Mellowes.)

Melson, John T., assignor of one-eighth to W. E. Vallant, one-eighth to A. H. Phillips, and one-eighth to W. P. Ellis, Laurel, Del. Package-tie. No. 1,275,169; Aug. 6; v. 253; p. 233.

Mench, John L., assignor to Duffy-Powers Company, Inc., Rochester, N. Y. Tag and holder. No. 1,276,244; Aug. 20; v. 253; p. 587.

Mendeck, Fred C., Haskell, Tex. Ticket-distributer. No. 1,275,717; Aug. 13; v. 253; p. 410.

Mendelsohn, Harry, New York, N. Y. Attachment for sewing-machines. No. 1,277,101; Aug. 27; v. 253; p. 858.

Mentzer, Albert C., and R. E. Duprey, Hudson, Mass. Load-handling apparatus. No. 1,276,674; Aug. 20; v. 253; p. 707.

Mercer, Frank H., and H. F. H. Blease, Melksham, England. Manufacture of pneumatic tires. No. 1,276,942; Aug. 27; v. 253; p. 814.

Mercury Manufacturing Company. (See Bulley, George W., assignor.)

Merriam, Ezra B., Schenectady, N. Y., assignor to General Electric Company. Electric switch. No. 1,276,675; Aug. 20; v. 253; p. 707.

Merrill, Edward H., assignor to A. C. Lawrence Leather Company, Peabody, Mass. Device for supporting leather-frames and the like. No. 1,275,066; Aug. 6; v. 253; p. 206.

Mertz, Harry, Baltimore, Md. Adjustable back for chairs. No. 1,275,067; Aug. 6; v. 253; p. 206.

Messiter, William F., Brooklyn, N. Y. Hose-holder. No. 1,275,068; Aug. 6; v. 253; p. 206.

Meston, Charles R., and H. I. Finch, assignors to The Emerson Electric Manufacturing Company, St. Louis, Mo. Brush-holder for commutator mechanisms. No. 1,275,458; Aug. 13; v. 253; p. 338.

Metal Specialties Manufacturing Company. (See Berg, John, assignor.)

Metropolitan Sewing Machine Corporation. (See Weis, John P., assignor.)

Metzger, Frederick, Hondo, Tex. Spout for railway water-tanks. No. 1,275,964; Aug. 13; v. 253; p. 478.

Mewes, Richard W., Des Moines, Iowa. Tractor attachment. No. 1,274,574; Aug. 6; v. 253; p. 67.

Meyer, Edwin C., Thane, Alaska. Camera. No. 1,275,965; Aug. 13; v. 253; p. 478.

Meyer, Friedrich W., Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company. Converting system. No. 1,274,741; Aug. 6; v. 253; p. 114.

Meyer, Friedrich W., Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company. System of control for induction-motors. No. 1,275,966; Aug. 13; v. 253; p. 479.

Meyer, Friedrich W., Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company. Frequency-changer. No. 1,275,967; Aug. 13; v. 253; p. 479.

Meyer, Friedrich W., Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company. System of distribution. No. 1,275,968; Aug. 13; v. 253; p. 479.

Meyer, Friedrich W., Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company. System of locomotive control. No. 1,275,969; Aug. 13; v. 253; p. 480.

Meyer, Friedrich W., Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company. System of locomotive control. No. 1,275,970; Aug. 13; v. 253; p. 480.

Meyer, George, Berlin-Charlottenburg, and E. Waltz, Berlin-Steglitz, assignors to Siemens-Schuckertwerke G. m. b. H., Berlin, Germany. Towing system for ships. No. 1,275,286; Aug. 13; v. 253; p. 290.

Meyer, George U. (See Lederer and Meyer.)

Meyer, Harry R. (See Hellmund, Meyer, and Candee.)

Meyner, Walter, New York, N. Y. Screw. No. 1,274,923; Aug. 6; v. 253; p. 165.

Michaels, Raymond C., and A. F. Humphrey, assignors of one-fifth to said Humphrey, three-fifths to said Michaels, and one-fifth to W. L. Swartz, Pittsburgh, Pa. Tank-valve. No. 1,274,924; Aug. 6; v. 253; p. 165.

Michaud, Onesime E., St. Louis, Mo., assignor of one-half to F. A. Muller, McGehee, Ark. Oscillating engine. No. 1,277,238; Aug. 27; v. 253; p. 894.

Michelin, André J., Paris, assignor to Michelin & Cie, Clermont-Ferrand, France. Jack for automobiles. No. 1,275,971; Aug. 13; v. 253; p. 481.

Michelin & Cie. (See Michelin, André J., assignor.)

Michod, Charles L., Chicago, Ill. Supporting-rack. No. 1,276,556; Aug. 20; v. 253; p. 674.

Midgley, Albert H., assignor of one-half to C. A. Vandervell, Acton Vale, England. Electric starter. No. 1,274,575; Aug. 6; v. 253; p. 67.

Miesner, Martin D., Wittenberg, Mo. Combination table and bed. No. 1,274,431; Aug. 6; v. 253; p. 25.

Mikelson, Nordal, Meckling, S. D. Corn-husking machine. No. 1,274,432; Aug. 6; v. 253; p. 26.

Mikkelsen, Christian, Beloit, Wis. Toe-box inserter. No. 1,275,069; Aug. 6; v. 253; p. 207.

Miles, Don D. (See Connor and Miles.)

Mill Devices Company. (See Byrd, Britton E., assignor.)

Millard, Bruce E., and F. B. Taylor, assignors of one-half to G. Sharp, San Diego, Cal. Spraying-nozzle. No. 1,276,245; Aug. 20; v. 253; p. 587.

Miller, Archibald R., Helensburgh, Scotland. Clinometer. No. 1,277,102; Aug. 27; v. 253; p. 858.

Miller, Charles T., Macon, Ga. Water-supply valve. No. 1,275,718; Aug. 13; v. 253; p. 410.

Miller, Charles T., Macon, Ga. Bubbler drinking-fountain. No. 1,275,719; Aug. 13; v. 253; p. 410.

Miller, David C., Tulsa, Okla. Wrench. No. 1,277,103; Aug. 27; v. 253; p. 858.

Miller, Ernest B. (See Patten and Miller.)

Miller, Harry H. (See Breen, James A., assignor.)

Miller, Henry T., Yacolt, Wash. Gate-operating device. No. 1,277,334; Aug. 27; v. 253; p. 918.

Miller, John J. A., Denver, Colo. Combination-wrench. No. 1,276,093; Aug. 20; v. 253; p. 546.

Miller, Lewis A., Scottdale, Pa. Implement for cutting slate. No. 1,275,459; Aug. 13; v. 253; p. 338.

Miller, Robert H. (See Girtanner and Miller.)

Miller, S. E., *et al.* (See Wentz, Robert F., assignor.)

Miller, Sigfrid, Oakland, Cal. Auto-bed. No. 1,276,095; Aug. 20; v. 253; p. 546.

Miller, Sigfrid A., Oakland, Cal. Folding bed. No. 1,276,094; Aug. 20; v. 253; p. 546.

Miller, William J., Swissvale borough, Pa. Glass-machine. No. 1,276,392; Aug. 20; v. 253; p. 630.

Milligan, George R., Los Angeles, Ca. Traction attachment for automobiles. No. 1,275,720; Aug. 13; v. 253; p. 411.

Mills, A. J. (See Gensch, Hermann, assignor.)

Mills, Richard L., Roosevelt, Utah. Adjustable shade. No. 1,274,925; Aug. 6; v. 253; p. 166.

Mills, William H., Sherman, N. Y. Rail-joint. No. 1,274,926; Aug. 6; v. 253; p. 166.

Millspaugh, James H., Guthrie, Okla. Circuit-breaker. No. 1,276,557; Aug. 20; v. 253; p. 675.

Millville Machine Company. (See Thompson, Parke H., assignor.)

Milton, John L., assignor to The Teagle Company, Cleveland, Ohio. Coil-case and terminal. No. 1,275,170; Aug. 6; v. 253; p. 233.

Minerals Separation North American Corporation. (See Scott, Walter A., assignor.)

Mininberg, Nathan, Dickinson, N. D. Surgical appliance. No. 1,276,943; Aug. 27; v. 253; p. 814.

Minton, Robert R., Cleveland, Ohio. Telemetric signal. No. 1,276,558; Aug. 20; v. 253; p. 675.

Mischanski, Stephen A., assignor of one-half to A. Wojtkowski, Bayonne, N. J. Game apparatus. No. 1,276,676; Aug. 20; v. 253; p. 707.

Mishawaka Woolen Manufacturing Company. (See Warner, Adna D., assignor.)

Mishoe, Henry W., and L. W. Mansell, West Enfield, Me. Self-propelled sleigh. No. 1,276,246; Aug. 20; v. 253; p. 588.

Missar, Joseph A. (See Hudson, Frederick, assignor.)

Mississippi Glass Company. (See Gundlach, Conrad J., assignor.)
Mitchell, Augusta V., *et al.*, trustees. (See Hancock, Winfield S., assignor.)
Mittasch, Alwin. (See Bosch, Mittasch, and Neresheimer.)
Mittleburg, Saul, Altoona, Pa. Bracket. No. 1,276,677; Aug. 20; v. 253; p. 707.
Mix, Edwin S., assignor to North East Electric Company, Rochester, N. Y. Power-transmission mechanism. No. 1,274,433; Aug. 6; v. 253; p. 26.
Mix, George W. (See Rowe, Walter A., assignor.)
Mond, Buren, Toledo, Ohio. Automobile-signal. No. 1,277,335; Aug. 27; v. 253; p. 918.
Modern Grinder Manufacturing Co. (See Bockshe, Ely, assignor.)
Moeller, Max E., Brooklyn, N. Y. Making thermometers. No. 1,274,576; Aug. 6; v. 253; p. 67.
Moffat, Frederick W., Weston, Ontario, Canada. Sectional electric heating element. No. 1,276,096; Aug. 20; v. 253; p. 547.
Moffatt, James R., assignor to Union Special Machine Company, Chicago, Ill. Overseaming-machine. No. 1,275,287; Aug. 13; v. 253; p. 290.
Moffatt, James R., assignor to Union Special Machine Company, Chicago, Ill. Multiple-needle guard. No. 1,276,393; Aug. 20; v. 253; p. 630.
Moffatt, James R., assignor to Union Special Machinery Company, Chicago, Ill. Fabric-folding gulde for trimming mechanism for sewing-machines. No. 1,276,944; Aug. 27; v. 253; p. 815.
Moffitt, Floyd A. and R., Albion, Mich. Automobile-sleigh runner. No. 1,275,721; Aug. 13; v. 253; p. 411.
Moffitt, Ross. (See Moffitt, Floyd A. and R.)
Mohnike, Louie F., Shickley, Nebr. Windmill connecting-bolt. No. 1,277,239; Aug. 27; v. 253; p. 894.
Moir, John A. (See Lombard, Levi W., assignor.)
Molyneux, George E., Bayonne, N. J., assignor to The Singer Manufacturing Company. Bag-sewing machine. No. 1,274,742; Aug. 6; v. 253; p. 115.
Monahan Rotary Engine Corporation. (See Sullivan, Patrick J. M., assignor.)
Monerief, Sherman, Center Junction, Iowa. Broom-holder. No. 1,275,070; Aug. 6; v. 253; p. 207.
Monrath, Gustav, Chuquicamata, Chile, assignor to Chile Exploration Company, New York, N. Y. Corrosion-resisting conduit sections and fittings. No. 1,276,394; Aug. 20; v. 253; p. 631.
Monroe Calculating Machine Company. (See Baldwin, Frank S., assignor.)
Monson, Lewis, Decorah, Iowa. Extension steering device for tractors and automobiles. No. 1,275,071; Aug. 6; v. 253; p. 207.
Montague, Clarence W., Denver, Colo. Clay-pot-finishing machine. No. 1,275,187; Aug. 6; v. 253; p. 240.
Montsinger, Vincent M., Pittsfield, Mass., assignor to General Electric Company. Cooling electrical apparatus. No. 1,275,972; Aug. 13; v. 253; p. 481.
Moomy, Joseph G., Erie, Pa. Machine for wrapping tubes. No. 1,275,072; Aug. 6; v. 253; p. 207.
Moomy, Joseph G., Erie, Pa. Making tubes. No. 1,275,073; Aug. 6; v. 253; p. 208.
Moon, James E., Morrisville, Pa. Shovel. No. 1,274,927; Aug. 6; v. 253; p. 166.
Mooney, James C., assignor of one-half to C. S. Rouse, Hot Springs, Ark. Tire for vehicle-wheels. No. 1,276,247; Aug. 20; v. 253; p. 588.
Moore, Burrough P., St. Petersburg, Fla. Wrench. No. 1,276,678; Aug. 20; v. 253; p. 708.
Moore, George C., Westerly, R. I. Running-gear for flying-machines. No. 1,275,973; Aug. 13; v. 253; p. 481.
Moore, James, Stratford, Conn. Envelop. No. 1,277,240; Aug. 27; v. 253; p. 894.
Moore, William J. P., New York, N. Y. Internal-combustion engine. No. 1,275,288; Aug. 13; v. 253; p. 291.
Moore, William M., Newark, Ohio. Nut-lock. No. 1,276,097; Aug. 20; v. 253; p. 547.
Moorhead, Robert L. (See Tilford, George H., assignor.)
Moorman, Benjamin F., assignor to The Gilbert Shade Holder Company, Cincinnati, Ohio. Window-shade holder. No. 1,276,098; Aug. 20; v. 253; p. 547.
Moorshead, Thomas C., Alton, Ill. Making glassware. No. 1,274,577; Aug. 6; v. 253; p. 68.
Mordhorst, John. (See Anderson, John R., assignor.)
Morehouse, William H., Pasadena, Cal. Light-ray regulator. No. 1,275,074; Aug. 6; v. 253; p. 208.
Morgan, Edmund C., Morgan Park, Ill. Mining-machine. No. 1,276,248; Aug. 20; v. 253; p. 588.
Morgan, Edmund C., Morgan Park, Ill. Mining-machine. No. 1,276,249; Aug. 20; v. 253; p. 588.
Morgan, John H. and C. W. Huntley, Holyoke, Mass. Means and apparatus for extracting static electricity. No. 1,275,585; Aug. 13; v. 253; p. 372.
Morgan, Roy T., St. Louis, Mo. Spring-wheel. No. 1,276,679; Aug. 20; v. 253; p. 708.
Morgenstern, Severin, Leipzig, Germany. Refining fats and oils. No. 1,275,289; Aug. 13; v. 253; p. 291.
Mork, Harry S. (See Esselen and Mork.)
Morner and Smith. (See Smith, Charles D., assignor.)
Morrell, Samuel B., Gloversville, N. Y. Gauntlet-glove. No. 1,276,099; Aug. 20; v. 253; p. 548.
Morris, Howard I., assignor to The Savage Tire Company, San Diego, Cal. Loom element. No. 1,276,945; Aug. 27; v. 253; p. 815.
Morrissey, Rodney J., *et al.* (See Cheek, George C., assignor.)
Morse, Thomas R., Bexley, near Sydney, New South Wales, Australia. Band-brake. No. 1,276,792; Aug. 27; v. 253; p. 775.
Mortensen, Frantz, Copenhagen, Denmark. Safety-lock. No. 1,277,241; Aug. 27; v. 253; p. 894.
Morton, Walter S., Harrisburg, Pa. Steering and starting mechanism for tractors. No. 1,274,434; Aug. 6; v. 253; p. 26.
Morton, Walter S., Harrisburg, Pa. Brake for motor-trucks. No. 1,274,435; Aug. 6; v. 253; p. 27.
Moseman, John H., *et al.* (See Herr, Abram B., assignor.)
Mosher, Harvey G., Birmingham, Mich. Automobile-mirror. No. 1,275,974; Aug. 13; v. 253; p. 481.
Moskovits Mór és Fia. (See Moskovits and Jacobsen, assignors.)
Moskovits, Nicolaus, and K. A. Jacobsen assignors to Moskovits, Mór és Fia, Nagy-Várad, Hungary. Substitute highly-nitrogenous food and producing the same. No. 1,277,330; Aug. 27; v. 253; p. 918.
Mosnat, Hugo R., Kansas City, Mo. Composition of matter for treating leather. No. 1,277,242; Aug. 27; v. 253; p. 895.
Motor Terminals Company, The. (See Fitch, Benjamin F., assignor.)
Mott, Abram C., Jr., assignor to Abram Cox Stove Company, Philadelphia, Pa. Boiler-furnace. No. 1,276,395; Aug. 20; v. 253; p. 631.
Mougey, Wilbur E. (See Anderegg and Mougey.)
Mount, Thomas L., New York, N. Y. System for charging car-lighting batteries. No. 1,275,586; Aug. 13; v. 253; p. 372.
Mowry, Edward, Sterling, Ill., assignor to International Harvester Company of New Jersey. Hay-loader. No. 1,275,722; Aug. 13; v. 253; p. 411.
Mueller, August E., assignor of one-third to T. J. Hruby and one-third to J. O. Hruby, Jr., Chicago, Ill. Motor-vehicle. No. 1,276,250; Aug. 20; v. 253; p. 589.
Mueller, Theodor M., Detroit, Mich. Tilting lamp. No. 1,276,070; Aug. 20; v. 253; p. 540.
Muhl, Gustav A., Toronto, Iowa. Pig's forceps. No. 1,277,243; Aug. 27; v. 253; p. 895.
Muir, Wellington W., Baltimore, Md. Cooling system. (Reissue.) No. 14,508; Aug. 20; v. 253; p. 716.
Mulchahey, Earl R., Providence, R. I. Engraving-machine. No. 1,276,793; Aug. 27; v. 253; p. 776.
Mullen, Benjamin J., Leetonia, Ohio. Machine for tapping blast-furnaces. No. 1,276,251; Aug. 20; v. 253; p. 589.
Mullen, Benjamin J., Leetonia, Ohio. Machine for tapping blast-furnaces. No. 1,276,252; Aug. 20; v. 253; p. 590.
Muller, Fritz A. (See Michaud, Onesime E., assignor.)
Miller, Henry, Waterbury, Conn. Emery-cloth holder. No. 1,274,928; Aug. 6; v. 253; p. 167.
Mullin, Colman J., Locust, N. J., assignor to T. Liston, New York, N. Y. Paper receptacle. No. 1,274,744; Aug. 6; v. 253; p. 115.
Mulloy, William H., St. Louis, Mo. Gas-stove. No. 1,274,929; Aug. 6; v. 253; p. 167.
Mulvaney, Evelyn. (See Mulvaney and Borner, assignors.)
Mulvaney, Seth, and E. L. Borner, assignors to E. Mulvaney, Inglewood, Cal. Motor-controlled switch for headlights of automobiles. No. 1,277,104; Aug. 27; v. 253; p. 859.
Mummert, Arden J., assignor to McQuay-Norris Manufacturing Company, St. Louis, Mo. Spark-plug. No. 1,276,396; Aug. 20; v. 253; p. 631.
Mummert, Harvey C., Buffalo, N. Y. Airplane. No. 1,274,745; Aug. 6; v. 253; p. 115.
Munday, James G. R., Kingston-upon-Hull, England. Method of and means for annealing steel. No. 1,277,244; Aug. 27; v. 253; p. 895.
Murdock, Frederick L., Meriden, Conn. Artificial denture. No. 1,277,245; Aug. 27; v. 253; p. 895.
Murdock, George J., Newark, N. J. Periscope. No. 1,275,975; Aug. 13; v. 253; p. 482.
Murphy, Clinton C., Chicago, Ill., assignor to P. H. Murphy Company, Parnassus, Pa. Car-roof. No. 1,277,246; Aug. 27; v. 253; p. 895.
Murphy, John F., and B. A. Ryan, Syracuse, N. Y. Tool-holder for screw-machines. No. 1,274,436; Aug. 6; v. 253; p. 27.
Murphy, Walter P., Chicago, Ill., assignor to P. H. Murphy Company, Parnassus, Pa. Car-roof. No. 1,275,976; Aug. 13; v. 253; p. 482.
Murphy, William C., Red Lodge, Mont. Safety device for elevators. No. 1,274,746; Aug. 6; v. 253; p. 116.
Murphy, William C., Gold Hill, Utah. Cross-head safety device. No. 1,277,337; Aug. 27; v. 253; p. 919.
Murray Company, The. (See Henry, Nelson B., assignor.)
Murray, Donald, London, England, assignor to The Western Union Telegraph Company, New York, N. Y. Perforating apparatus. No. 1,276,794; Aug. 27; v. 253; p. 776.
Murray, Harry. (See Caglieri and Murray.)
Murray, Monte A., Reedpoint, Mont. Scraper-dumper. No. 1,276,559; Aug. 20; v. 253; p. 675.
Murray, Thomas E., New York, N. Y. Metal vehicle-wheel. No. 1,274,930; Aug. 6; v. 253; p. 167.
Musser, George R., Kingman, Ariz. Egg-beater guard. No. 1,275,587; Aug. 13; v. 253; p. 373.

Myers, Edgar W., San Jose, Cal., assignor to Filmusic Company. Machine for perforating sheet material. No. 1,275,977; Aug. 13; v. 253; p. 482.
Myers, Eugene V., East Orange, N. J., assignor to A. Schrader's Son, Inc., Brooklyn, N. Y. Stopper for water-bottles or the like. No. 1,274,437; Aug. 6; v. 253; p. 27.
Myers, Ford, Mishawaka, Ind. Clamping device. No. 1,276,560; Aug. 20; v. 253; p. 675.
Myers, Frederick H., Barberton, Ohio. Cultivator. No. 1,275,588; Aug. 13; v. 253; p. 373.
Myers, Joseph C., West Albany, N. Y. Operating-handle for brake-wheels. No. 1,276,680; Aug. 20; v. 253; p. 708.
Myllus, Walter G. (See Bradshaw and Myllus.)
Nafe, Robert E., Preston, Ontario, Canada. Combination pen and pencil holder. No. 1,277,247; Aug. 27; v. 253; p. 896.
Nafis, Louis F. and M. S., Evanston, Ill. Color-comparing rod. No. 1,275,723; Aug. 13; v. 253; p. 412.
Nafis, Mabel S. (See Nafis, Louis F. and M. S.)
Nahas, Kamil J., Detroit, Mich. Demountable-rim lock. No. 1,275,075; Aug. 6; v. 253; p. 208.
Naldrett, Albert E. (See Fear, Naldrett, and Nicodemus.)
Nash, Charles J., Chicago, Ill., assignor to Universal Draft Gear Attachment Co. Underframing for cars. No. 1,274,747; Aug. 6; v. 253; p. 115.
Nathan, Jacob H. (See Figgins, Archibald, assignor.)
Nathan, Paul, assignor to Wood, Nathan & Virkus Company, New York, N. Y. Machine for embossing without dies. No. 1,276,253; Aug. 20; v. 253; p. 590.
National Adjustable Bed and Spring Company. (See Curtis, William J., assignor.)
National Automatic Refrigerator Company. (See Keyes, Frederick G., assignor.)
National Carbon Co. (See Benner, Raymond C., assignor.)
National Carbon Company. (See Ellis, Carleton, assignor.)
National Carbon Company. (See Ellis and Wells, assignors.)
National Carbon Company. (See Grothe, Walter, assignor.)
National Enameling and Stamping Company. (See Knapp, George W., assignor.)
National Equipment Company. (See Bausman, Alonzo L., assignor.)
National Grave Vault Co., The. (See King, Clarence W., assignor.)
National Khaki Watch Strap Company. (See Scott, Arthur H., assignor.)
National Malleable Castings Company, The. (See Martin, George V., assignor.)
National Metal Moulding Company. (See Hubbard and Gilson, assignors.)
National Oil Company, The. (See Ebsen, William A., assignor.)
National Pneumatic Company. (See Gottschalk, Albert, assignor.)
National Shorthand Machine Company. (See Ireland and Lippert, assignors.)
National Spring & Wire Company. (See Stevens, Robert L., assignor.)
National Tank and Pipe Co. (See North, Henry, assignor.)
National Tractor & Plow Company. (See Carpenter, Alexander, assignor.)
National Tube Company. (See Saunders, Augustus M., assignor.)
National Wire Wheel Works. (See Ringling, Walter L., assignor.)
Nauer, Morris, New York, N. Y. Stationary washboiler. No. 1,275,076; Aug. 6; v. 253; p. 208.
Naugle, Roy L., Blackstone, Va. Steam-generator. No. 1,275,290; Aug. 13; v. 253; p. 291.
Naylor, Carl G., Chicago, Ill. Mill for rolling flanges. No. 1,276,397; Aug. 20; v. 253; p. 632.
Neal, Morris E., Wellington, Kans. Steam-engine. No. 1,276,681; Aug. 20; v. 253; p. 708.
Neat, Clifford L., Yelm, Wash. Boltless railway-splice. No. 1,275,724; Aug. 13; v. 253; p. 412.
Neill, Paul, East Orange, N. J., assignor to Westinghouse Electric and Manufacturing Company. Escapement device. No. 1,274,749; Aug. 6; v. 253; p. 116.
Neiss, Charles M., Newark, N. J. Tent. No. 1,276,255; Aug. 20; v. 253; p. 591.
Nelson, Bert, Spokane, Wash. Clothes-washer. No. 1,275,077; Aug. 6; v. 253; p. 208.
Nelson, George E. H., Racine, Wis. Toy. No. 1,276,561; Aug. 20; v. 253; p. 676.
Nelson, Lewis W., assignor, by mesne assignments, to U. S. Light & Heat Corporation, Niagara Falls, N. Y. Dynamo-electric machine. No. 1,276,682; Aug. 20; v. 253; p. 709.
Nelson, Swan A., Tunnelhill, Pa. Violin-support. No. 1,275,291; Aug. 13; v. 253; p. 292.
Nelson, Willoughby C., Omaha, assignor of one-half to C. W. Conkling, Tekamah, Nebr. Camp-stove. No. 1,276,795; Aug. 27; v. 253; p. 777.
Neresheimer, Carl. (See Bosch, Mittasch, and Neresheimer.)
Nesbitt, William J., Los Angeles, Cal. Heel-cutter. No. 1,275,078; Aug. 6; v. 253; p. 209.
Nestor, Alexander, Chicago, Ill. Bread-cutter. No. 1,276,398; Aug. 20; v. 253; p. 632.
Nettleton, Stanley, Johannesburg, Transvaal, South Africa. Means for ventilating mine-workings and the like. No. 1,274,438; Aug. 6; v. 253; p. 27.
Neuland, Alfons H., San Francisco, Cal. Ignition and lighting apparatus. No. 1,275,292; Aug. 13; v. 253; p. 292.
Neumann, Math, Buffalo, Minn. Automatic calf-feeder. No. 1,276,946; Aug. 27; v. 253; p. 816.
New Jersey Patent Company. (See Holland, Norman H., assignor.)
New Jersey Patent Company. (See Pierman, Alexander N., assignor.)
Newberry, Roy D., Bronte, Tex. Shock-absorber for bicycles and motor-cycles. No. 1,275,460; Aug. 13; v. 253; p. 338.
Newbigin, Henry T., Newcastle-upon-Tyne, England. Film-lubricated thrust and journal bearing. No. 1,275,079; Aug. 6; v. 253; p. 209.
Newell, Alexander F. (See Hoyle and Hart, assignors.)
Newell, J. J. (See Schwimmer, Oscar, assignor.)
Newgass, George W., New York, N. Y. Frame for fabric screens. No. 1,277,248; Aug. 27; v. 253; p. 896.
Newhouse, William D. (See Maiden, Schindler, and Newhouse.)
Newsom, John W., Graham, Tex. Clothes-pin. No. 1,277,338; Aug. 27; v. 253; p. 919.
Newton, George F., Kansas City, Kans., assignor, by mesne assignments, to Universal Form Clamp Company, Chicago, Ill. Collar-adjusting clamp. No. 1,275,461; Aug. 13; v. 253; p. 339.
Newton, Herbert B. (See Sawyer, Howard D., assignor.)
Newton, Richard T., Nutley, N. J. Lifting-jack. No. 1,276,796; Aug. 27; v. 253; p. 777.
Newton, Richard T., New York, N. Y. Steering-wheel. No. 1,276,797; Aug. 27; v. 253; p. 777.
Newton, William J., assignor to Harvey Hubbell, Incorporated, Bridgeport, Conn. Adjuster for electrical attachments. No. 1,275,725; Aug. 13; v. 253; p. 412.
Newton, William J., assignor to Harvey Hubbell, Incorporated, Bridgeport, Conn. Surface toggle-switch. No. 1,275,726; Aug. 13; v. 253; p. 412.
Nichols, Clarence H., *et al.* (See Norman, Frank, assignor.)
Nichols, James S., Atlanta, Ga. Steam-superheater. No. 1,275,080; Aug. 6; v. 253; p. 209.
Nichols, James S., Atlanta, Ga. Steam-superheater. No. 1,275,081; Aug. 6; v. 253; p. 209.
Nichols, Wesley G., Chicago Heights, Ill., assignor to American Manganese Steel Company, Augusta, Me. Dipper-tooth. No. 1,276,589; Aug. 13; v. 353; p. 373.
Nicholson, George R., Croft-upon-Tees, England. Siphon. No. 1,274,578; Aug. 6; v. 253; p. 68.
Nicholson, Lloyd C., Buffalo, N. Y. Overload definite-time-limit relay. No. 1,277,249; Aug. 27; v. 253; p. 896.
Nickerson, Victor H., Cotuit, Mass. Cartridge for cleaning well-strainers. No. 1,275,462; Aug. 13; v. 253; p. 339.
Nicodemus, Wilmer C. (See Fear, Naldrett, and Nicodemus.)
Nicoll, William R., Owatonna, Minn., assignor, by mesne assignments, to Davis-Watkins Dairymen's Manufacturing Company. Combined faucet and strainer. No. 1,275,463; Aug. 13; v. 253; p. 339.
Nicoll, William R., Owatonna, Minn., assignor to Davis-Watkins Dairymen's Mfg. Co., North Chicago, Ill. Butter-making machine. No. 1,275,978; Aug. 13; v. 253; p. 482.
Nicolle, Frank, assignor to Salisbury & Satterlee Co., Minneapolis, Minn. Child's crib. No. 1,276,947; Aug. 27; v. 253; p. 816.
Niec, Michal, assignor of one-half to J. Kolaczynski, St. Catharines, Ontario, Canada. Water-skate. No. 1,275,727; Aug. 13; v. 253; p. 413.
Nilll, Magnus, Stockholm, Sweden. Compasses. No. 1,275,979; Aug. 13; v. 253; p. 483.
Nielsen, Niels D., Elyria, Ohio. Treating milk. No. 1,274,748; Aug. 6; v. 253; p. 116.
Nielsen, Niels D., Elyria, Ohio. Treating milk and the like. No. 1,274,750; Aug. 6; v. 253; p. 117.
Nielsen, Niels D., Elyria, Ohio. Mixing or stirring means. No. 1,276,254; Aug. 20; v. 253; p. 590.
Niermeyer, Henry W. (See Pangborn and Niermeyer.)
Nilson, John L., and J. Prince, Chicago, Ill. Pressure-gage. No. 1,274,579; Aug. 6; v. 253; p. 68.
Nimchek, Frank, Benbush, W. Va. Grass-cutter. No. 1,277,105; Aug. 27; v. 253; p. 859.
Niswander, John L., Quincy, Ill. Demountable-rim remover. No. 1,274,751; Aug. 6; v. 253; p. 117.
Niznik, Paul, Binghamton, N. Y. Portable barrier. No. 1,276,100; Aug. 20; v. 253; p. 548.
Nobriga, Roberto A. (See Valenzuela, Alberto, assignor.)
Noiseless Typewriter Company, The. (See Going, George G., assignor.)
Noonan, Dennis C. (See Porter and Noonan.)
Norcross, William C., assignor to American Molding Machine Co., Terre Haute, Ind. Combination jolt-ramming and stripping machine. No. 1,274,752; Aug. 6; v. 253; p. 117.
Norden, Joseph. (See Norden, Mortimer, assignor.)
Norden, Mortimer, assignor of one-half to J. Norden, New York, N. Y. Electric sign. No. 1,274,580; Aug. 6; v. 253; p. 69.
Nordstrom, Elof, Newark, N. J., assignor to American Dan Stopper Company, Bridgeport, Conn. Article-feeding hopper. No. 1,276,562; Aug. 20; v. 253; p. 676.
Nordstrom, Sven J., Mexico, Mexico. Lubricated hydraulic plug-valve. (Reissue.) No. 14,516; Aug. 27; v. 253; p. 924.

Norman, Frank, Des Moines, Iowa, assignor of eight thirty-seconds to D. J. Landers, seven thirty-seconds to W. A. McAtee, four thirty-seconds to A. B. Lovan, two thirty-seconds to G. W. Young, one thirty-second to W. T. Shores, Springfield, Mo., and two thirty-seconds to C. H. Nichols, New York, N. Y. Acetylene-generator. No. 1,274,753; Aug. 6; v. 253; p. 118.

Norman, William F., Nevada, Mo. Grave-marker. No. 1,276,798; Aug. 27; v. 253; p. 777.

Norris, Daniel E. (See Norris, Frank H. assignor.)

Norris, Frank H., assignor of one-half to D. E. Norris, Robinson, Ill. Sucker-rod elevator. No. 1,275,728; Aug. 13; v. 253; p. 413.

Norris, Robert, *et al.* (See Kuhn, Jacob, assignor.)

North East Electric Company. (See Halbleib and Lee, assignors.)

North East Electric Company. (See Lee, Thomas L., assignor.)

North East Electric Company. (See Mix, Edwin S., assignor.)

North, Henry, assignor to National Tank and Pipe Co., Portland, Oreg. Clamping door-hinge. No. 1,277,106; Aug. 27; v. 253; p. 859.

North, Oliver D., assignor to Straker-Squire Limited, London, England. Lubricating crank-pin. No. 1,275,082; Aug. 6; v. 253; p. 210.

Northrup, Burton A., and T. K. Calder, Detroit, Mich. Industrial truck. No. 1,276,799; Aug. 27; v. 253; p. 778.

Northwood, Harry, Wheeling, W. Va. Drilling glass. No. 1,276,683; Aug. 20; v. 253; p. 709.

Norton Door Check Company. (See Norton, Lewis C., assignor.)

Norton, Henry C., *et al.* (See Kuhn, Jacob, assignor.)

Norton, Lewis C., assignor to Norton Door Check Company, Chicago, Ill. Door stop and holder. No. 1,275,980; Aug. 13; v. 253; p. 483.

Norwood, William M., Greenville, S. C. Dental plate. No. 1,275,590; Aug. 13; v. 253; p. 373.

Novick, Abraham, assignor to F. L. Schmidt Company, New York, N. Y. Envelop-fastener strip. No. 1,274,754; Aug. 6; v. 253; p. 118.

Null, Joseph F. (See Frost, William, assignor.)

Nunn, Nevvens N., assignor to The Almetal Manufacturing Company, Maplewood, Mo. Washing-machine. No. 1,275,729; Aug. 13; v. 253; p. 413.

Nurmi, Henry V. (See Jacobson, August, assignor.)

Nuta, Meyer, Chicago, Ill. Internal-combustion engine. No. 1,276,048; Aug. 27; v. 253; p. 816.

Nystrom, Martin, assignor to Brunswick-Balke-Collender Company, Chicago, Ill. Brake mechanism for talking-machines. No. 1,274,581; Aug. 6; v. 253; p. 69.

O. A. Albrecht Company. (See Albrecht, Oscar A., assignor.)

O'Brien, Michael W., Rochester, N. Y. Ejecting mechanism for presses or the like. No. 1,276,399; Aug. 20; v. 253; p. 632.

O'Dowd, Henry W., Jersey City, N. J., assignor to William M. Crane Company. Water-heater. No. 1,275,293; Aug. 13; v. 253; p. 292.

O'Malley, John F., Geneva, N. Y. Direction-signal for vehicles. No. 1,276,563; Aug. 20; v. 253; p. 676.

O'Reardon, Charles, Philadelphia, Pa. Adjustable knife and jaw for pliers. No. 1,276,256; Aug. 20; v. 253; p. 591.

O'Rourke, John F., New York, N. Y. Tunneling. No. 1,277,107; Aug. 27; v. 253; p. 860.

O'Toole, Edward, Gary, W. Va. System of mining coal. No. 1,276,952; Aug. 27; v. 253; p. 818.

Oakley, John. (See Eden, James A., Jr., assignor.)

Oakley, Theophield D., Chicago, Ill. Envelop. No. 1,276,101; Aug. 20; v. 253; p. 548.

Odgers, Samuel, and P. La Pierre, Kansas City, Mo. Fire-escape. No. 1,277,339; Aug. 27; v. 253; p. 919.

Officer, Thomas, and M. P. Holmes, Claremont, N. H., assignors, by mesne assignments, to Sullivan Machinery Company, Boston, Mass. Tool-actuating device. No. 1,275,171; Aug. 6; v. 253; p. 234.

Ogden, John E., Cornwall, N. Y. Single-section strut-supported door. No. 1,274,755; Aug. 6; v. 253; p. 118.

Ogden, John E., Cornwall, N. Y., and C. C. Tomkinson, Plainfield, N. J.; said Tomkinson assignor to said Ogden. Strut-door. No. 1,274,439; Aug. 6; v. 253; p. 28.

Ogden, John E., Mountainville, and C. C. Tomkinson, Plainfield, N. J.; said Tomkinson assignor to said Ogden. Door. No. 1,275,591; Aug. 13; v. 253; p. 373.

Ogle, Elmer L., Chicago, Ill., assignor to Federal Sign System (Electric), New York, N. Y. Electric fuse. No. 1,276,800; Aug. 27; v. 253; p. 778.

Oglesby, Richard A., assignor to Quick Action Ignition Company, South Bend, Ind. Combined internal-combustion engine and magneto. No. 1,275,204; Aug. 13; v. 253; p. 292.

Ohmart, Lester E., Hope, Kans. Silo attachment. No. 1,276,801; Aug. 27; v. 253; p. 778.

Ohnell, Ernst J., trustee. (See Drellick, Axel C. G., assignor.)

Olander, Alden C., Billings, Mont. Reserve-storage valve. No. 1,276,102; Aug. 20; v. 253; p. 549.

Oliphant, John, Chicago, Ill., assignor to Sullivan Machinery Company. Air-lift booster. No. 1,275,592; Aug. 13; v. 253; p. 374.

Oliver, Doctor F., deceased, Oakland, Cal.; L. F. Oliver, executrix. Vehicle-top. No. 1,275,981; Aug. 13; v. 253; p. 484.

Oliver, Lillie F., executrix. (See Oliver, Doctor F.)

Oliver, William H., Oshkosh, Wis. Holder-clamp for ironing-machines. No. 1,274,441; Aug. 6; v. 253; p. 28.

Olson, Anders, Minneapolis, Minn. Sand and water heater. No. 1,275,464; Aug. 13; v. 253; p. 340.

Olson, John B., assignor to James Manufacturing Company, Fort Atkinson, Wis. Drinking-receptacle for cattle. No. 1,274,440; Aug. 6; v. 253; p. 28.

Olson, John J., Belview, Minn. Combined shirt and trousers supporter. No. 1,274,582; Aug. 6; v. 253; p. 69.

Olson, Nels L., Detroit, Mich. Tractor. No. 1,276,949; Aug. 27; v. 253; p. 816.

Olson, Palmer M., Fort Ransom, N. D. Wire-raiser. No. 1,274,756; Aug. 6; v. 253; p. 119.

Onderdonk, Lansing, New York, N. Y., assignor to Union Special Machine Company, Chicago, Ill. Feeding mechanism for overseaming-machines. No. 1,275,295; Aug. 13; v. 253; p. 293.

Onderdonk, Lansing, New York, N. Y., assignor to Union Special Machine Company, Chicago, Ill. Needle-clamp for sewing-machines. No. 1,276,950; Aug. 27; v. 253; p. 817.

Onderdonk, Lansing, New York, N. Y., assignor to Union Special Machine Company, Chicago, Ill. Variable thread-controlling mechanism for sewing-machines. No. 1,277,250; Aug. 27; v. 253; p. 896.

Orenbuch, Samuel, and N. Rozinsky, Pittsburgh, Pa. Armor or protector for infantrymen. No. 1,274,757; Aug. 6; v. 253; p. 119.

Ormiston, Perley L., Days Creek, Oreg. Combined pencil-sharpener and attaching-clip. No. 1,275,982; Aug. 13; v. 253; p. 484.

Ortega, Felix R. (See Hernández and Ortega.)

Orth, Johannes, Berlin, Germany, assignor to General Electric Company. Electrical apparatus. No. 1,275,083; Aug. 6; v. 253; p. 210.

Oster, Matthew C., Denton, Mont. Transmission mechanism. No. 1,276,951; Aug. 27; v. 253; p. 817.

Otis Elevator Company. (See Sundh, August, assignor.)

Otis-Flagg Corporation. (See Cooper and Presbrey, assignors.)

Ott, Johann K., Bischofszell, Switzerland. Change-speed gear. No. 1,277,251; Aug. 27; v. 253; p. 897.

Otterdahl, Emil F. (See Carlson and Otterdahl.)

Otterson, George W., Springfield, Ohio. Method and apparatus for cleaning sewer-conduits. No. 1,274,931; Aug. 6; v. 253; p. 107.

Otto Heineman Phonograph Supply Co. (See Vasselli, Anthony, assignor.)

Overman, Max C., New York, N. Y. Fire-securing means. No. 1,276,802; Aug. 27; v. 253; p. 778.

Overstreet, Arthur E. (See Pierce, Overstreet, and McCune.)

Overtree, Guy M., Fort Collins, and V. V. McMillen, Lafayette, Colo. Brace. No. 1,275,593; Aug. 13; v. 253; p. 374.

P. H. Murphy Company. (See Murphy, Clinton C., assignor.)

P. H. Murphy Company. (See Murphy, Walter P., assignor.)

P & M Company, The. (See Warr, Harold G., assignor.)

P. P. R. Manufacturing Company. (See Reichheim, George L., assignor.)

Paarmann, Carl H., Delmar, Iowa. Milking-machine. No. 1,276,803; Aug. 27; v. 253; p. 778.

Packard Motor Car Company. (See Belden, Edward H., assignor.)

Packard Motor Car Company. (See Church, Harold D., assignor.)

Packard Motor Car Company. (See Hunt, John H., assignor.)

Packard Motor Car Company. (See Loomis, Allen, assignor.)

Packer, Mortimer L., Columbus, Ohio. Fuel-mixing device. No. 1,276,257; Aug. 20; v. 253; p. 591.

Paddock, Edward G., Kansas City, Kans. Wire-tying mechanism for baling-presses. No. 1,275,296; Aug. 13; v. 253; p. 293.

Page, Albert A., East Haven, assignor to Sargent & Company, New Haven, Conn. Lock. No. 1,276,684; Aug. 20; v. 253; p. 710.

Page, George M., assignor to The Haydenville Company, Haydenville, Mass. Drinking-fountain. No. 1,276,258; Aug. 20; v. 253; p. 591.

Page, Herman C., assignor to The Whitehead & Hoag Company, Newark, N. J. Means for attaching name-plates. No. 1,275,172; Aug. 6; v. 253; p. 234.

Page, Logan E., assignor to The Hart & Hutchinson Company, New Britain, Conn. Door-locking means. No. 1,274,758; Aug. 6; v. 253; p. 119.

Paige, James H., Manchester, N. H. Fruit-jar closure. No. 1,276,103; Aug. 20; v. 253; p. 549.

Painter, George M., Chicago, Ill. Electrically-operated hammer. No. 1,276,104; Aug. 20; v. 253; p. 549.

Painter, George M., Chicago, Ill. Electric hammer. No. 1,276,804; Aug. 27; v. 253; p. 779.

Palmer, Clinton D., assignor to Sears, Roebuck and Company, Chicago, Ill. Commercial instrument. No. 1,275,297; Aug. 13; v. 253; p. 294.

Palmer-Perchlorate Powder Company of Canada Limited. (See Johnson, Frederick, G. L., assignor.)

Pangborn, Earl L., and H. W. Niermeyer, Indianapolis, Ind. Trolley-replacer. No. 1,276,564; Aug. 20; v. 253; p. 677.

Paquette, Mathias, Carner, Mich. Projectile. No. 1,276,400; Aug. 20; v. 253; p. 632.

Pardoe, William D., Trenton, assignor to Thermoid Rubber Company, Hamilton township, Trenton, N. J. Brake-lining and preparing the same. No. 1,277,108; Aug. 27; v. 253; p. 860.

Paridon, Michael, Barberton, Ohio, assignor to The Diamond Match Company, Chicago, Ill. Box-making machine. No. 1,277,252; Aug. 27; v. 253; p. 897.

Parish, Leo A., *et al.* (See Grabe, Clarence G., assignor.)

Parisian Novelty Company. (See Komorous, Joseph, assignor.)

Parker, Daniel H. (See Gilbert, John W., assignor.)

Parker, Orrel A., Cleveland, Ohio. Wrench with universal joint. No. 1,276,953; Aug. 27; v. 253; p. 818.

Parker, Stanley F., Milwaukee, Wis. Beet-topper. No. 1,275,298; Aug. 13; v. 253; p. 294.

Parker, Troy L., Chicago, Ill. Photometer. No. 1,276,259; Aug. 20; v. 253; p. 592.

Parker, Truman J., Dallas, Tex. Steam-boiler. No. 1,274,759; Aug. 6; v. 253; p. 119.

Parker, William H., assignor to The Temco Electric Motor Company, Leipsic, Ohio. Lock-switch. No. 1,276,401; Aug. 20; v. 253; p. 633.

Parkhurst, Orren L. (See Sloppy, William E., assignor.)

Parkinson, Newton H., Kent, Ill. Incendiary bomb. No. 1,276,402; Aug. 20; v. 253; p. 633.

Parks, Walter H. (See Estes and Parks.)

Parrella, Joseph A., Washington, D. C. Pen-extractor. No. 1,274,760; Aug. 6; v. 253; p. 120.

Parriott, William, Detroit, Mich. Agricultural implement. No. 1,276,403; Aug. 20; v. 253; p. 633.

Parrish, Russell J., Richmond, Ind. Internal-combustion turbine. No. 1,276,260; Aug. 20; v. 253; p. 592.

Parsons, Carl B., Detroit, Mich. Concealed hinge. No. 1,276,404; Aug. 20; v. 253; p. 634.

Parsons, Charles A., A. Q. Carnegie, Newcastle-upon-Tyne, and S. S. Cook, Wallsend, England; said Carnegie and said Cook assignors to said Parsons. Gear-cutting machine. No. 1,274,583; Aug. 6; v. 253; p. 70.

Parsons, Charles A., A. Q. Carnegie, Newcastle-upon-Tyne, and S. S. Cook, Wallsend, England; said Carnegie and said Cook assignors to said Parsons. Gear-cutting machine. No. 1,274,584; Aug. 6; v. 253; p. 70.

Parsons, Charles A., A. Q. Carnegie, Newcastle-on-Tyne, and S. S. Cook, Wallsend, England; said Carnegie and said Cook assignors to said Parsons. Gear-cutting machine. No. 1,274,585; Aug. 6; v. 253; p. 70.

Parsons, Charles A., S. S. Cook, and L. M. Douglas, Wallsend, England; said Cook and said Douglas assignors to said Parsons. Blade-shrouding for steam-turbines. No. 1,276,405; Aug. 20; v. 253; p. 634.

Parsons, Eli B., Rochester, assignor to General Railway Signal Company, Gates, N. Y. Incandescent-lamp signal. No. 1,276,805; Aug. 27; v. 253; p. 779.

Partch, Archie F., Los Angeles, Cal. Apparatus for applying paste to box ends. No. 1,276,954; Aug. 27; v. 253; p. 818.

Paryzek, Leo J., Cleveland, Ohio. Liquid-depth or amount gage. No. 1,274,932; Aug. 6; v. 253; p. 167.

Pascale, Miguel, Tucson, Ariz. Bolt for boilers. No. 1,275,084; Aug. 6; v. 253; p. 210.

Paschal, David N., Richmond, Va. Cooking utensil. No. 1,277,253; Aug. 27; v. 253; p. 897.

Paschall, William, Birmingham, Ala. Metal-bound joint or lock straight-edge. No. 1,276,565; Aug. 20; v. 253; p. 677.

Passnicki, Piotr, Toronto, Ontario, Canada. Rifle-sight attachment. No. 1,275,730; Aug. 13; v. 253; p. 413.

Patented Devices Company. (See Hough, William B., assignor.)

Patten, John, and E. B. Miller, Baltimore, Md. Recording apparatus for safe-deposit boxes. No. 1,274,761; Aug. 6; v. 253; p. 120.

Patterson, Thomas S., Rosemont, Pa. Power-transmitting apparatus. No. 1,276,701; Aug. 20; v. 253; p. 718.

Patterson, William L., assignor to Bausch & Lomb Optical Company, Rochester, N. Y. Operating-table illuminator. No. 1,277,109; Aug. 27; v. 253; p. 860.

Patterson, William L., assignor to Bausch & Lomb Optical Company, Rochester, N. Y. Operating-table illuminator. No. 1,277,110; Aug. 27; v. 253; p. 860.

Patterson, William L., assignor to Bausch & Lomb Optical Company, Rochester, N. Y. Operating-table illuminator. No. 1,277,111; Aug. 27; v. 253; p. 861.

Paul Mandeville Co., The. (See Mandeville, Paul, assignor.)

Paupa, Joseph, and G. F. Hochriem, Chicago, Ill. Coin-controlled vending-machine. No. 1,275,731; Aug. 13; v. 253; p. 414.

Pavlik, Frank, Jr., Westminster, Colo. Dry closet. No. 1,276,069; Aug. 20; v. 253; p. 540.

Pawel, George W., Hudson Falls, and E. A. Rekate, Lancaster, N. Y., assignors to United States Nickel Company, New Brunswick, N. J. Separation of metals. No. 1,276,809; Aug. 27; v. 253; p. 780.

Pawling and Harnischfeger Company. (See Weickel, Henry, assignor.)

Payment, Louis, assignor to C. W. Richards, Manchester, N. H. Roving cutter or stripper. No. 1,276,685; Aug. 20; v. 253; p. 710.

Payton, C. T. (See Guild, George R., assignor.)

Pearsall, Albert W., Lowell, assignor to The Lamson Company, Boston, Mass. Pneumatic-dispatch delivery-terminal. No. 1,274,699; Aug. 20; v. 253; p. 718.

Pearsall, Harry R., Binghamton, N. Y. Spark-plug. No. 1,276,105; Aug. 20; v. 253; p. 550.

Pease, Herbert D. (See Spies and Pease.)

Pease, Oscar D. A., and J. F. Fetterly, Altoona, Pa. Car-wheel-quenching device. No. 1,276,106; Aug. 20; v. 253; p. 550.

Peaslee, Hugh D., Oakland, Cal. Combined clutch, brake, and gear-operating lever for automobiles. No. 1,274,762; Aug. 6; v. 253; p. 120.

Peck, Charles L., assignor to The Dorr Company, New York, N. Y. Recovery of proteids from waste liquors of the hide-treating art. No. 1,274,763; Aug. 6; v. 253; p. 121.

Peckham, Samuel C., assignor of one-eighth to M. Adams, Mexia, Tex. Peanut-roasting device. No. 1,275,085; Aug. 6; v. 253; p. 211.

Pedersen, Henning E., assignor of one-half to A. Langenbach, Kenosha, Wis. Utensil-protector. No. 1,274,764; Aug. 6; v. 253; p. 121.

Peel, Robert and T. F. Shevels, New Brancepth Colliery, England. Coke-oven door. No. 1,276,107; Aug. 20; v. 253; p. 550.

Pegram, George B. (See Falk and Sugiura, assignors.)

Peller, Karl E., Hartford, Conn., assignor to Hartford-Fairmont Company, Canajoharie, N. Y. Feeder for molten glass. No. 1,277,254; Aug. 27; v. 253; p. 898.

Peller, Karl E., Hartford, Conn., assignor to Hartford-Fairmont Company, Canajoharie, N. Y. Feeder for molten glass. No. 1,277,255; Aug. 27; v. 253; p. 898.

Peller, Karl E., Hartford, Conn., assignor to Hartford-Fairmont Company, Canajoharie, N. Y. Feeding molten glass. No. 1,277,256; Aug. 27; v. 253; p. 898.

Pejchar, Josef, Brooklyn, N. Y. Tweezers. No. 1,276,406; Aug. 20; v. 253; p. 634.

Pellerin, Adam, St. Flore, Quebec, Canada. Bull-screen cleaner. No. 1,275,299; Aug. 13; v. 253; p. 294.

Pembroke, Charles J., *et al.* (See Sears, George H., assignor.)

Pence, Lafe V., Flint, assignor to General Motors Corporation, Detroit, Mich. Propeller drive mechanism for motor-vehicles. No. 1,277,112; Aug. 27; v. 253; p. 861.

Peralta, Floyd F. (See Fidiam and Peralta.)

Perkins, Alvah L., assignor to The William Carter Company, Needham Heights, Mass. Union-undergarment. No. 1,276,407; Aug. 20; v. 253; p. 634.

Perkins, Bert B., Monticello, Minn. Door-screen. No. 1,274,933; Aug. 6; v. 253; p. 168.

Perkins, Laurence M. (See Hellmund, Ferris, and Perkins.)

Perlmutter, Joseph, Jersey City, N. J. Billiard-cue tip. No. 1,274,765; Aug. 6; v. 253; p. 121.

Permutit Company, The. (See Duggan, Thomas R., assignor.)

Perry, Hubert M., Chicago, Ill., assignor to A. G. Welch, trustee. Side bearing. No. 1,275,782; Aug. 13; v. 253; p. 414.

Petermann, Joseph, Philadelphia, Pa. Apparatus for cutting and breaking asphalt or concrete. No. 1,276,686; Aug. 20; v. 253; p. 710.

Petersen, Carl, San Francisco, Cal. Automobile-lock. No. 1,277,113; Aug. 27; v. 253; p. 861.

Peterson, Albin, Peshtigo, Wis. Stamp-moistener. No. 1,276,408; Aug. 20; v. 253; p. 635.

Peterson, Burt A., assignor to Barber-Colman Company, Rockford, Ill. Yarn-carrier support. No. 1,274,442; Aug. 6; v. 253; p. 29.

Peterson, Carl, Hume, Cal. Harrow. No. 1,274,586; Aug. 6; v. 253; p. 71.

Peterson, Carl E., Irvington, N. J. Razor-strop swivel. No. 1,274,587; Aug. 6; v. 253; p. 71.

Peterson, Claus E., Worcester, asignor, by mesne assignments, to Iverson Piano Player Company, Boston, Mass. Pneumatic piano-player. No. 1,274,766; Aug. 6; v. 253; p. 121.

Peterson, Fred S., assignor of one-half to W. S. Borba, Sebastopol, Cal. Automatic garage-door. No. 1,275,594; Aug. 13; v. 253; p. 374.

Peterson, Gust A., assignor to Schumann Piano Company, Rockford, Ill. Tracking, transposing, and sustaining device. No. 1,275,300; Aug. 13; v. 253; p. 294.

Peterson, Jonathan, Brooklyn, N. Y. Apparatus for tagging or labeling plugs of tobacco. No. 1,274,934; Aug. 6; v. 253; p. 168.

Peterson, Philip E., Whitehall, Mich. Marking-gage. No. 1,276,261; Aug. 20; v. 253; p. 592.

Petigor, Morris H. (See Adams, Edward M., assignor.)

Petit, Joseph, New York, N. Y. Hydroplane. No. 1,274,767; Aug. 6; v. 253; p. 122.

Petro, John, Waterbury, Conn. Window-screen. No. 1,274,768; Aug. 6; v. 253; p. 122.

Pettibone, Mulliken Company. (See Strom, Eugene N., assignor.)

Pettitt, Frank R., Spokane, Wash. Internal-combustion engine. No. 1,276,262; Aug. 20; v. 253; p. 593.

Petz, William, Firth, Nebr. Vaporizer. No. 1,275,465; Aug. 13; v. 253; p. 340.

Peyman, August. (See Wyballie, Francis M. A., assignor.)

Penzetti, Henry, Philadelphia, Pa. Ambulance. No. 1,275,733; Aug. 13; v. 253; p. 415.

Penzetti, Henry, Philadelphia, Pa. Stretcher. No. 1,275,734; Aug. 13; v. 253; p. 415.

Pfannenmuller, Charles, New York, N. Y. Retaining-clip for brassières and the like. No. 1,276,806; Aug. 27; v. 253; p. 780.

Pfeil, Frederick C., Buffalo, N. Y. Signaling device for automobiles and other vehicles. No. 1,274,769; Aug. 6; v. 253; p. 122.

Pflager, Harry M., assignor to Commonwealth Steel Company, St. Louis, Mo. Car-truck. No. 1,276,687; Aug. 20; v. 253; p. 710.

Pflager, Harry M., assignor to Commonwealth Steel Company, St. Louis, Mo. Car-truck. No. 1,276,688; Aug. 20; v. 253; p. 710.

Pflager, Harry M., assignor to Commonwealth Steel Company, St. Louis, Mo. Car-truck. No. 1,277,114; Aug. 27; v. 253; p. 862.

Pflager, Harry M., assignor to Commonwealth Steel Company, St. Louis, Mo. Car-truck. No. 1,277,115; Aug. 27; v. 253; p. 862.

Phelan, John C., East Cleveland, and H. B. MacAlpine, Lakewood, assignors to The Ribbon Life Company, Cleveland, Ohio. Moistening attachment for type-writer ribbons. No. 1,276,263; Aug. 20; v. 253; p. 593.

Phenicie, Charles E., Tacoma, Wash. Ice-cream cutter. No. 1,277,116; Aug. 27; v. 253; p. 862.

Phillipps, Albert H., *et al.* (See Melson, John T., assignor.)

Phillips, Preston S. (See Sowers and Phillips.)

Phillips, Wiley G., Littleton, Colo. Chalk-line holder. No. 1,275,735; Aug. 13; v. 253; p. 416.

Phinney Engineering Company, The. (See Kinningsworth, Wilber, assignor.)

Platt, Joseph W., assignor to L. H. Platt, New York, N. Y. Gas-mixing chamber for burners. No. 1,275,466; Aug. 13; v. 253; p. 340.

Platt, L. H. (See Platt, Joseph W., assignor.)

Pickett, Frederick A. (See Pickett, Hurdle B. and F. A.)

Pickett, Hurdle B. and F. A., Baltimore, Md. Fertilizer chemical and composite distributer. No. 1,275,736; Aug. 13; v. 253; p. 415.

Pickman, F. J., *et al.* (See Lord, Alfred B., assignor.)

Pickup, George E., assignor to The Wehrle Company, Newark, Ohio. Gas hot-plate. No. 1,275,301; Aug. 13; v. 253; p. 295.

Pidgeon, Charles M., Washington, D. C. Parallel-ruler. No. 1,276,955; Aug. 27; v. 253; p. 818.

Pierce, Charles H., A. E. Overstreet, and B. L. McCune, Savannah, Ga. Oar-lock. No. 1,275,737; Aug. 13; v. 253; p. 416.

Pierce, George L., and K. Djerf, Brooklyn, N. Y., assignors to A. G. Spalding & Bros., Jersey City, N. J. Last for forming leggings. No. 1,275,086; Aug. 6; v. 253; p. 211.

Pierman, Alexander N., Long Beach, N. Y. Alarm-signal. No. 1,276,807; Aug. 27; v. 253; p. 780.

Pierman, Alexander N., Newark, N. J. Signal or alarm apparatus. No. 1,276,808; Aug. 27; v. 253; p. 780.

Pierman, Alexander N., Newark, assignor to New Jersey Patent Company, West Orange, N. J. Sound-reproducer. No. 1,275,302; Aug. 13; v. 253; p. 295.

Pilalis, Odysseus, Pittsburgh, Pa. Torpedo-guard. No. 1,277,117; Aug. 27; v. 253; p. 862.

Pinney, Henry J., Worcester, Mass., assignor to The American Tobacco Company, New York, N. Y. Cigarette-package. No. 1,276,788; Aug. 13; v. 253; p. 416.

Piquerez, Emile, St.-Ursanne, Switzerland. Lubricator. No. 1,276,108; Aug. 20; v. 253; p. 550.

Pitti, Ethel R., Boyd, Mont. Swing. No. 1,275,789; Aug. 13; v. 253; p. 416.

Pittsburgh Can Company. (See Jones, Whitfield E., Jr., assignor.)

Pittsburgh Lamp Brass & Glass Company. (See Yokel, Frank, assignor.)

Place, Roland P. (See Hoy and Place.)

Plantinga, Peter, assignor to Davis Machine Tool Company, Inc., Rochester, N. Y. Lathe. No. 1,274,770; Aug. 6; v. 253; p. 122.

Plantinga, Peter, assignor to Davis Machine Tool Co., Inc., Rochester, N. Y. Shaper and the like. No. 1,274,771; Aug. 6; v. 253; p. 123.

Plate, John, Chicago, Ill. Coin-operated device. No. 1,274,772; Aug. 6; v. 253; p. 123.

Plyn, Francis J., Niles, Mich. Store-front construction. No. 1,274,773; Aug. 6; v. 253; p. 123.

Pocock, Augustine J., Dayton, Ohio. Casing for measuring-pumps. No. 1,275,595; Aug. 13; v. 253; p. 374.

Podlasek, Lawrence, Berlin, Conn. Boiler. No. 1,275,596; Aug. 13; v. 253; p. 375.

Ponton, Boyce D., Hallettsville, Tex. Pipe-clamp. No. 1,274,774; Aug. 6; v. 253; p. 123.

Poole, Arthur F., Chicago, Ill., assignor to The Wahl Company, Wilmington, Del. Calculating-machine. No. 1,274,572; Aug. 6; v. 253; p. 66.

Pope, Alfred T., assignor of one-half to C. Pope, Louisville, Ky. Egg-turning mechanism for incubators. No. 1,275,508; Aug. 13; v. 253; p. 295.

Pope, Curran. (See Pope, Alfred T., assignor.)

Porter, Arthur D., assignor to W. M. De Witt, Somerville, N. J. Spark-plug. No. 1,276,566; Aug. 20; v. 253; p. 677.

Porter, George W., Minneapolis, Minn., and D. C. Noonan, Watertown, S. D. Knockdown molding apparatus. No. 1,276,264; Aug. 20; v. 253; p. 593.

Porterfield, Ralph E., Independence, Oreg. Guard attachment for harvesters and the like. No. 1,277,257; Aug. 27; v. 253; p. 899.

Pospesel, Andrew, Oswego, N. Y. Relief-valve. No. 1,274,775; Aug. 6; v. 253; p. 124.

Potter, Thomas I., assignor to Coin Machine Manufacturing Company, Portland, Oreg. Turnstile mechanism. No. 1,275,740; Aug. 13; v. 253; p. 416.

Poudrier, Alfred, Slaterville, R. I., assignor of one-half to A. C. Devere, Millville, Mass. Ordnance. No. 1,276,689; Aug. 20; v. 253; p. 711.

Poulalion, Francis N., Des Moines, Iowa, assignor to H. S. Magel, Omaha, Nebr. Deglutitory cup. No. 1,275,467; Aug. 13; v. 253; p. 340.

Powell, Harry W., Paton, Iowa. Colter-oiler. No. 1,275,597; Aug. 13; v. 253; p. 375.

Powell, Leopold, New York, N. Y. Cigar-box. No. 1,276,409; Aug. 20; v. 253; p. 635.

Powers Accounting Machine Company. (See Foster, Charles, assignor.)

Powers Accounting Machine Company. (See Williams, Robert N., assignor.)

Pratt, Dorothea C., Summit, N. J. Abdominal supporter. No. 1,276,410; Aug. 20; v. 253; p. 635.

Preisssner, Leo B., Hartford, Conn. Carpenter's chalk-line. No. 1,274,776; Aug. 6; v. 253; p. 124.

Presbrey, Otis F. (See Cooper and Presbrey.)

Prescott, Arthur T., East Orange, N. J., assignor to Geofge H. Frothingham Company, New York, N. Y. Door. No. 1,274,443; Aug. 6; v. 253; p. 29.

Prescott, Sydney I., New York, N. Y. Internal-combustion engine. No. 1,274,777; Aug. 6; v. 253; p. 124.

Prescott, Sydney I., New York, N. Y. Clutch. No. 1,274,778; Aug. 6; v. 253; p. 124.

Prestwich, Frank M., New York, N. Y. Cuff. No. 1,276,956; Aug. 27; v. 253; p. 819.

Prettie, Richard J. (See Young and Prettie.)

Pribil, Alexis R., Wilkinsburg, Pa. Connecting-rod. No. 1,276,109; Aug. 20; v. 253; p. 551.

Price, Charles S., Rutherford, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Protective device. No. 1,276,567; Aug. 20; v. 253; p. 678.

Price, Lonis, Brooklyn, N. Y. Extension-leg for compasses. No. 1,275,741; Aug. 13; v. 253; p. 417.

Price, Raymond B., New York, N. Y., assignor to Rubber Regenerating Company. Treatment of tires. No. 1,276,411; Aug. 20; v. 253; p. 635.

Pridham, Edwin S., assignor to Commercial Wireless & Development Co., San Francisco, Cal. Telegraphic sending-circuit. No. 1,276,412; Aug. 20; v. 253; p. 636.

Prifold, George, Linwood, assignor to The Congoleum Company, Philadelphia, Pa. Machine for printing fabrics. No. 1,276,413; Aug. 20; v. 253; p. 636.

Prince, John. (See Nilson and Prince.)

Pritchard, John E., assignor of one-half to T. Rock, New York, N. Y. Power ramming-machine. No. 1,275,742; Aug. 13; v. 253; p. 417.

Probst, George W., Lock Haven, Pa. Cooking utensil. No. 1,275,598; Aug. 13; v. 253; p. 375.

Procter and Gamble Company, The. (See Dewar and Liebmann, assignors.)

Protecto Manufacturing Company. (See Schroyer, Harry H., assignor.)

Protex Manufacturing Company. (See Sonnichsen, Andreas M., assignor.)

Proud, Henry P., Philadelphia, Pa. Automatic stop for talking-machines. No. 1,274,444; Aug. 6; v. 253; p. 29.

Providence Stock Company. (See Lederer and Meyer, assignors.)

Pruessman, Albert, Berwyn, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Condenser and making the same. No. 1,275,468; Aug. 13; v. 253; p. 341

Pruessman, Albert, Berwyn, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Flexible conductor. No. 1,275,469; Aug. 13; v. 253; p. 341.

Pruyn, Francis L., New York, N. Y. Apparatus for setting piles. No. 1,275,470; Aug. 13; v. 253; p. 341.

Pryce, Edmund H., New York, N. Y. Signal apparatus. No. 1,274,779; Aug. 6; v. 257; p. 125.

Puff, George W., Jeannette borough, Pa. Headlight-lens. No. 1,275,304; Aug. 13; v. 253; p. 295.

Pullman Couch Company. (See Gilda, John R., assignor.)

Pund, Frederick W. (See Corcoran and Pund.)

Purcell, John H., Ono, Cal. Sanitary soap-container. No. 1,275,471; Aug. 13; v. 253; p. 341.

Puretz, Julius, Brooklyn, and B. Cohen, New York, N. Y. Sad-iron. No. 1,275,743; Aug. 13; v. 253; p. 418.

Purnell, Benjamin, Benton Harbor, Mich. Closet-seat pivot. No. 1,276,265; Aug. 20; v. 253; p. 593.

Purpura, Liborio, Wheeling, W. Va. Hydraulic motor. No. 1,274,588; Aug. 6; v. 253; p. 71.

Pye, David W. (See McNally, Leo F., assignor.)

Pym, Charles F., Essex, Ontario, Canada, assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Lasting-machine. No. 1,274,589; Aug. 6; v. 253; p. 71.

Pym, Charles F., Essex, Ontario, Canada, assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Lasting-machine. No. 1,274,590; Aug. 6; v. 253; p. 72.

Pyrene Manufacturing Company. (See Ferguson, George E., assignor.)

Pysel, Daniel, San Francisco, Cal. Dephlegmator and rectifying-column. No. 1,276,690; Aug. 20; v. 253; p. 711.

Quam, Elmer R., Verdi, Minn. Fountain-brush. No. 1,274,780; Aug. 6; v. 253; p. 125.

Quenneville, Evangiliste, Ste. Thérèse De Blainville, Quebec, Canada. Ditch-plow. No. 1,277,118; Aug. 27; v. 253; p. 863.

Querns, Eva A. Y., Philadelphia, Pa. Woman's undervest. No. 1,276,266; Aug. 20; v. 253; p. 593.

Quick Action Ignition Company. (See Oglesby, Richard A., assignor.)

Quigley, John T., assignor, by mesne assignments, to Costmeter Company, Boston, Mass. Apparatus for printing or marking. No. 1,277,119; Aug. 27; v. 253; p. 863.

Quimby, Clarence E., assignor to The Continental Lens Company, Toledo, Ohio. Grinder. No. 1,274,591; Aug. 6; v. 253; p. 72.

R. Hoe and Co. (See Hoe, Robert, assignor.)

R. D. Swisher Manufacturing Company. (See Folger, Harry S., assignor.)

R & G Company, The. (See Anderson, Louis A., assignor.)

R. G. von Kökeritz & Co. (See Hiatt, Stephen T., assignor.)

R. J. Reynolds Tobacco Company. (See Richter, Hans F., assignor.)

Raccagni, Giovanni, Bridgeport, Conn. Railway-tie and rail-fastener. No. 1,274,592; Aug. 6; v. 253; p. 73.

Rader, Harvey S., Palmerton, Pa. Vehicle-spring. No. 1,275,744; Aug. 13; v. 253; p. 418.

Ragan, Frederick H., Seattle, Wash. Reversing screw-and-nut gearing. No. 1,276,810; Aug. 27; v. 253; p. 781.

Ragan, Frederick H., Detroit, Mich. Power operating device. No. 1,276,811; Aug. 27; v. 253; p. 781.

Ragsdale, Charles R., St. Louis, Mo. Demountable rim. No. 1,275,745; Aug. 18; v. 253; p. 418.

Raiche, Andrew, assignor to Atlas Tack Company, Fairhaven, Mass. Stud-and-socket fastener. No. 1,277,258; Aug. 27; v. 253; p. 899.

Rail Joint Company, The. (See Bradley, William J., assignor.)

Rail Joint Company, The. (See Braine, Bancroft G., assignor.)

Railway Improvement Company. (See Elsom, James D., assignors.)

Railway Improvement Company. (See Wade and Chappelle, assignors.)

Rainer, John T., Grapeland, Tex. Peanut-digging attachment. No. 1,277,120; Aug. 27; v. 253; p. 863.

Rainey, James E. J., Dallas, Tex. Airship. No. 1,275,746; Aug. 13; v. 253; p. 418.

Raje, Thor, Los Angeles, Cal. Talking-machine record. No. 1,275,087; Aug. 6; v. 253; p. 211.

Ramos, Humberto, San Francisco, Cal. Safety hat-pin. No. 1,275,088; Aug. 6; v. 253; p. 211.

Ramsay, Hugh V. (See Tripp and Ramsay.)

Ranch, Bertram F., Seattle, Wash. Safety coat-hook. No. 1,276,414; Aug. 20; v. 253; p. 636.

Rand, Howard B., Merrimac, Mass. Electric incandescent lamp. No. 1,275,305; Aug. 13; v. 253; p. 296.

Rand, Howard B., Merrimac, Mass. Lamp-socket guide for headlights. No. 1,276,415; Aug. 20; v. 253; p. 636.

Rand McNally and Company. (See Hooker, Harry A., assignor.)

Randall-Faichney Company, The. (See Kozmouski, John L., assignor.)

Randall-Faichney Company, The. (See Richards, John J., Jr., assignor.)

Randall, John G., assignor of one-half to J. T. Shepherd, Dallas, Tex. Window washer and wiper. No. 1,274,445; Aug. 6; v. 253; p. 30.

Randolph, Grover, Flournoy, Cal. Wire-fence clamp. No. 1,274,594; Aug. 6; v. 253; p. 73.

Randolph, Oliver W., Toledo, Ohio. Grain and seed drier. No. 1,276,812; Aug. 27; v. 253; p. 781.

Ranz, Jacob, St. Louis, Mo. Sanitary pillow. No. 1,274,595; Aug. 6; v. 253; p. 73.

Raschick, Charles T., St. Paul, Minn. Combined pad-holder and ticket-punch. No. 1,276,691; Aug. 20; v. 253; p. 711.

Rasmussen, Christian, assignor of one-half to C. S. Somers, Cleveland, Ohio. Circuit maker and breaker. No. 1,276,110; Aug. 20; v. 253; p. 551.

Rasmussen, George V., New York, N. Y. Automatic vacuum-cleaner. No. 1,275,747; Aug. 13; v. 253; p. 419.

Rasmussen, Holger A. W., Rockford, Ill. Drying and transportation truck. No. 1,275,983; Aug. 13; v. 253; p. 484.

Rasmussen, Olaf, and E. Alberti, New York, assignors to International Cork Company, Brooklyn, N. Y. Machine for removing sealing-disks from crown-corks and similar closures. No. 1,276,267; Aug. 20; v. 253; p. 594.

Rassmann, Hugo C., Beaver Dam, Wis. Watering device for cattle. No. 1,276,813; Aug. 27; v. 253; p. 782.

Rathbun, Edward, Toledo, Ohio. Forward and reverse drive mechanism. No. 1,274,781; Aug. 6; v. 257; p. 125.

Ratignn, John P., Claremont, N. H. Filing-cabinet. No. 1,274,446; Aug. 6; v. 253; p. 30.

Rauch, William A. (See Langolf, Fred T., assignor.)

Rauwald, Frank. (See Rauwald, Joseph, Sr., and F.)

Rauwald, Joseph, Sr., and F., Milwaukee, Wis. Window-sash. No. 1,274,782; Aug. 6; v. 253; p. 126.

Raybestos Company, The. (See Kirschbraun, Lester, assignor.)

Raymond, Herbert N., Olympia, Wash. Solar transit. No. 1,274,935; Aug. 6; v. 253; p. 169.

Read, Walter V. H. (See Toomey and Read.)

Reade, William A., assignor to The Ludlow Typograph Company, Cleveland, Ohio. Typograph mechanism. No. 1,276,268; Aug. 20; v. 253; p. 594.

Rector, Alcorn, Cleveland, Ohio. Sound-modifying means. No. 1,275,089; Aug. 6; v. 253; p. 212.

Redd, William P., *et al.* (See Coffee, Robert W., assignor.)

Redfield, Robert S., Chicago, Ill. Hog dehairing, polishing, and scraping machine. No. 1,274,596; Aug. 6; v. 253; p. 74.

Reed, Andrew H., assignor of one-half to H. Sahler, Kansas City, Mo. Mowing-machine. No. 1,275,599; Aug. 13; v. 253; p. 376.

Reed, Andrew H., assignor of one-half to H. Sahler, Kansas City, Mo. Tractor. No. 1,275,600; Aug. 13; v. 253; p. 376.

Reed, George T. (See Daniels and Reed.)

Reed, John B., Lancaster, Wis. Planter. No. 1,274,447; Aug. 6; v. 253; p. 30.

Reed-Lethbridge, William, Wellington, New Zealand. Illuminated sign. No. 1,274,907; Aug. 6; v. 258; p. 161.

Reed, Luther C., Dallas, Tex. Drier. No. 1,276,957; Aug. 27; v. 253; p. 819.

Reed, Oscar B., Mount Pleasant, Tenn. Wire-stretcher. No. 1,276,111; Aug. 20; v. 253; p. 551.

Reed, Peter, Quincy, Mass. Tire-motor. No. 1,276,112; Aug. 20; v. 253; p. 551.

Rees, Frank W., Portland, Oreg., assignor of one-half to M. I. Rees, Seattle, Wash. Clamp. No. 1,276,692; Aug. 20; v. 253; p. 712.

Rees, Myrtle I. (See Rees, Frank W., assignor.)

Reeves, Frederick W., Pittsburgh, Pa. Current-rectifying commutator. No. 1,275,601; Aug. 13; v. 253; p. 377.

Regnier, Joseph, assignor to himself and P. Render, Paris, France. Regulator for X-ray tubes. No. 1,276,568; Aug. 20; v. 253; p. 678.

Reichert, Gabriel A., Chicago, Ill., assignor to The American Multigraph Company, Cleveland, Ohio. Adjustable supporting device for type-holding segments. No. 1,275,472; Aug. 13; v. 253; p. 341.

Reichhelm, George L., assignor, by mesne assignments, to P. P. R. Manufacturing Company, Detroit, Mich. Stamp vending and affixing machine. No. 1,274,448; Aug. 6; v. 253; p. 30.

Reid, Ralph E., Brooklyn, N. Y. Puzzle. No. 1,274,593; Aug. 6; v. 253; p. 73.

Reid, Robert V., Cottonwood, Ala. Resilient wheel. No. 1,274,449; Aug. 6; v. 253; p. 31.

Reifsnyder, James D. (See Smith and Reifsnyder.)

Reilly, Matthew J., assignor of one-half to T. F. Early, New York, N. Y. Safety attachment for gas-engine cranks. No. 1,276,694; Aug. 20; v. 253; p. 712.

Reilly, Philip C., Brooklyn, N. Y. Salt-cellar. No. 1,274,597; Aug. 6; v. 253; p. 74.

Reily, John P., St. Louis, Mo. Boot or shoe heel. No. 1,275,748; Aug. 13; v. 253; p. 419.

Reinert, John F., South Elgin, Ill. Automatic weighing-machine. No. 1,276,958; Aug. 27; v. 253; p. 819.

Reisner, Max, Coney Island, N. Y. Cutter-chuck. No. 1,274,598; Aug. 6; v. 253; p. 74.

Rekate, Edward A. (See Pawel and Rekate.)

Rekenthaler, Anthonie W., Dunlo, Pa. Can-opener. No. 1,276,693; Aug. 20; v. 253; p. 712.

Remington, Joseph P., Philadelphia, Pa. Beach-building. No. 1,274,450; Aug. 6; v. 253; p. 31.

Remington, Joseph P., Philadelphia, Pa. Tablet-assembling device. No. 1,277,121; Aug. 27; v. 253; p. 864.

Remington Typewriter Company. (See Briggs, Arthur J., assignor.)

Remington Typewriter Company. (See Carhart, Herbert A., assignor.)

Remo, Charles C., Brooklyn, N. Y. Bed-table. No. 1,275,602; Aug. 13; v. 253; p. 377.

Renard, Edward, Burnham, Pa. Piston-head. No. 1,274,783; Aug. 6; v. 253; p. 126.

Render, Paul. (See Regnier, Joseph, assignor.)

Renner, Claude A., Perkasie, Pa. Animal-trap. No. 1,277,122; Aug. 27; v. 253; p. 864.

Replogle, Hartley L. (See McMillan, Frank, assignor.)

Repsholdt, Soren C., Omaha, Nebr. Traffic signal-tower. No. 1,275,749; Aug. 13; v. 253; p. 419.

Respess, Roland B., New York, N. Y. Leather substitute and making the same. No. 1,276,113; Aug. 20; v. 253; p. 552.

Reynolds, George W., Rock Glen, N. Y. Control-lever. No. 1,276,114; Aug. 20; v. 253; p. 552.

Reynolds, James N., Jersey City, N. J. Rod-bending machine. No. 1,274,936; Aug. 6; v. 253; p. 169.

Rhodes, Fredrick H. (See Dodge and Rhodes.)

Ribbon Life Company, The. (See Phelan and MacAlpine, assignors.)

Richards, Archer W., assignor, by mesne assignments, to The Firestone Steel Products Company, Akron, Ohio. Clamping mechanism for welders. No. 1,274,451; Aug. 6; v. 253; p. 31.

Richards, Charles W. (See Payment, Louis, assignor.)

Richards, John J., Jr., Brookline, assignor, by mesne assignments, to The Randall-Faichney Company, Inc., Boston, Mass. Grease-gun filler. No. 1,274,452; Aug. 6; v. 253; p. 31.

Richards, William H., Philadelphia, Pa. Reversible shirt. No. 1,275,090; Aug. 6; v. 253; p. 212.

Richardson, Chauncey E., Chevy Chase, Md. System of transportation. No. 1,276,115; Aug. 20; v. 253; p. 552.

Richardson, Clarence M., Cleveland, Ohio. Lawn-border trimmer. No. 1,274,784; Aug. 6; v. 253; p. 126.

Richardson, Edgar J., Sioux City, Iowa. Hose-clamp. No. 1,275,091; Aug. 6; v. 253; p. 212.

Richardson, William, South Benwell, Newcastle-on-Tyne, England. Means for securing billiard-cue tips. No. 1,274,599; Aug. 6; v. 253; p. 74.

Riches, Arthur W., Los Angeles, Cal. Foot-operated beater for drums and cymbals. No. 1,277,123; Aug. 27; v. 253; p. 864.

Richter, Hans F., assignor to R. J. Reynolds Tobacco Company, Winston-Salem, N. C. Label-affixing machine. No. 1,274,600; Aug. 6; v. 253; p. 75.

Ricker, Ernest A., and J. F. Dobbin, Jacksonville, Fla. Bottle-filler. No. 1,276,269; Aug. 20; v. 253; p. 594.

Riebe, Ernest, New York, N. Y. Fencing implement. No. 1,276,959; Aug. 27; v. 253; p. 820.

Riebe, Theodore C., assignor to Rogers Motor Lock Company, Chicago, Ill. Automobile-lock. No. 1,276,116; Aug. 20; v. 253; p. 552.

Riebe, Theodore C., assignor to Rogers Motor Lock Company, Chicago, Ill. Flexible armored conduit. No. 1,276,117; Aug. 20; v. 253; p. 553.

Riegel, Samuel S. (See Buckley and Riegel.)

Riesberg, Van Vechton, assignor of one-half to F. H. Dougherty, Philadelphia, Pa. Air-valve for radiators. No. 1,275,750; Aug. 13; v. 253; p. 419.

Rieske, Otto G., assignor to Massey-Harris Company, Limited, Toronto, Ontario, Canada. Cultivator. No. 1,276,270; Aug. 20; v. 253; p. 595.

Rigby, Thomas. (See Testrup and Rigby.)

Rigert, Herman, Waterbury, Conn. Snap-fastener. No. 1,275,473; Aug. 13; v. 253; p. 341.

Rigg, Joseph H., Goldengate, Ill. Hoisting apparatus. No. 1,276,569; Aug. 20; v. 253; p. 678.

Riggs, Frank F., Lead, S. D. Combination implement. No. 1,276,960; Aug. 27; v. 253; p. 820.

Riker, Andrew L., assignor to The Locomobile Company of America, Bridgeport, Conn. Wind-shield. No. 1,275,173; Aug. 6; v. 253; p. 234.

Riley, Francis B., assignor to M. V. Kelley, trustee, Toledo, Ohio. Refrigeration apparatus. No. 1,277,124; Aug. 27; v. 253; p. 865.

Ringling, Walter L., assignor to National Wire Wheel Works, Inc., Geneva, N. Y. Wrench. No. 1,276,071; Aug. 20; v. 253; p. 540.

Riopelle, Harry F., Detroit, assignor, by mesne assignments, of one-half to A. T. Sanscrainte, Ecorse, Mich. Hoist for motor-vehicles. No. 1,275,751; Aug. 13; v. 253; p. 420.

Rios, Tomas, Monterey, Mexico. Tortilla-baking machine. No. 1,277,125; Aug. 27; v. 253; p. 865.

Ritchie, Nelvia E., Kansas City, Mo. Clothes-retainer for railway-car sleeping-apartments. No. 1,274,937; Aug. 6; v. 253; p. 169.

Ritter, John A., New York, N. Y., assignor to Hall Switch & Signal Co. System of distribution. No. 1,274,601; Aug. 6; v. 253; p. 75.

Ritter, John A., New York, N. Y., assignor to Hall Switch & Signal Co. System of distribution. No. 1,274,602; Aug. 6; v. 253; p. 75.

Rives, Isabel, Washington, D. C. Preservation of flags. No. 1,275,603; Aug. 13; v. 253; p. 377.

Riviere, Hal, Columbus, Ga. Bobbin-holder and tension device. No. 1,276,416; Aug. 20; v. 253; p. 636.

Rixson, Oscar C., New Rochelle, N. Y. Cremorne bolt. No. 1,277,126; Aug. 27; v. 253; p. 865.

Roach, Samuel L., Grinnell, Iowa. Compound tool. No. 1,276,961; Aug. 27; v. 253; p. 820.

Roades, Weslie M., Okmulgee, Okla. Tank. No. 1,276,814; Aug. 27; v. 253; p. 782.

Robert N. Bassett Company. (See Bradshaw, Charles E., assignor.)

Roberts, Arthur L., Jackson, Tenn. Engine attachment. No. 1,275,752; Aug. 13; v. 253; p. 420.

Roberts, Edward, Detroit, Mich. Electrical safety device. No. 1,276,962; Aug. 27; v. 253; p. 820.

Roberts, John G., Dobbs Ferry, assignor to Western Electric Company, Incorporated, New York, N. Y. Registering and recording device. No. 1,276,570; Aug. 20; v. 253; p. 679.

Roberts, Wilbert R., assignor of one-half to F. M. Shafer, South Bend, Ind. Signal for automobiles. No. 1,274,785; Aug. 6; v. 253; p. 126.

Robertson, John A., assignor to Eastman Kodak Company, Rochester, N. Y. Film-developing apparatus. No. 1,275,768; Aug. 13; v. 253; p. 420.

Robinson, Charles J. (See Robinson, Edward W. and C. J.)

Robinson, Edward W. and C. J., Savannah, Ga. Machine for jointing staves and like objects. No. 1,277,259; Aug. 27; v. 253; p. 899.

Robinson, Howard E., Hartford, Conn. Safety-pin. No. 1,274,483; Aug. 6; v. 253; p. 32.

Robinson, John A., Ottawa, and M. L. Robinson, Arnprior, Ontario, Canada. Can-opener. No. 1,276,963; Aug. 27; v. 253; p. 820.

Robinson, Julia A., Manchester, Iowa. Clothes-prop holder. No. 1,276,571; Aug. 20; v. 253; p. 679.

Robinson, Milton L. (See Robinson, John A. and M. L.)

Rock, Thomas. (See Pritchard, John E., assignor.)

Rockwell, Walter S., assignor to W. S. Rockwell Company, New York, N. Y. Tire-heating furnace. No. 1,274,608; Aug. 6; v. 253; p. 76.

Rockwood, Enrique L., Bogotá, Colombia, assignor to J. P. S. Harrison, New York, N. Y. Locomotive power-transmitter. No. 1,275,754; Aug. 13; v. 253; p. 421.

Rodger Ballast Car Company. (See Dorey, George B., assignor.)

Rodrigues, Matias B., London, England. Telegraphic printing apparatus. No. 1,275,474; Aug. 13; v. 253; p. 342.

Roe, Charles O., Indianapolis, Ind. Trench-sandal. No. 1,276,964; Aug. 27; v. 253; p. 821.

Roebuck, Alvah C., Park Ridge, assignor to Woodstock Typewriter Company, Woodstock, Ill. Ribbon holder and vibrator. No. 1,275,755; Aug. 13; v. 253; p. 421.

Roebuck, Alvah C., Chicago, assignor to Woodstock Typewriter Company, Woodstock, Ill. Universal bar. No. 1,276,118; Aug. 20; v. 253; p. 553.

Roeseler, Carl, New York, N. Y. Hat-securing means. No. 1,274,604; Aug. 6; v. 253; p. 76.

Roessler & Hasslacher Chemical Co. (See Schaidhauf, Alois, assignor.)

Rogers, Allen, assignor to C. T. Davis, Brooklyn, N. Y. Antiseptic and germicidal tablet. No. 1,276,119; Aug. 20; v. 253; p. 553.

Rogers, Clarence T., New York, N. Y., assignor of one-half to E. J. Conili, Habana, Cuba. Transmission mechanism. No. 1,277,127; Aug. 27; v. 253; p. 865.

Rogers, Elijah O., Ada, Okla. Drenching-bottle. No. 1,274,454; Aug. 6; v. 253; p. 32.

Rogers, George L., assignor to Henry Disston & Sons, Incorporated, Philadelphia, Pa. Chuck for holding file-blanks. No. 1,277,128; Aug. 27; v. 253; p. 866.

Rogers Motor Lock Company. (See Riebe, Theodore C., assignor.)

Rogers, William C., Fort Sheridan, Ill. Supplemental stock for small-arms. No. 1,276,572; Aug. 20; v. 253; p. 679.

Rohan, James J., assignor of one-half to C. E. Mack, St. Louis, Mo. Electrically-heated radiator. No. 1,276,573; Aug. 20; v. 253; p. 679.

Rolfes, George H., St. Louis, Mo., assignor to Handlan-Buck Manufacturing Company. Lantern-burner. No. 1,276,417; Aug. 20; v. 253; p. 637.

Roller-Smith Company. (See Spurrier, John R., assignor.)

Rollins, George E. (See McLaughlin, John R., assignor.)

Rolls-Royce Limited. (See Royce, Frederick H., assignor.)

Rook, William H., Jr., assignor to G. R. Hill, Akron, Ohio. Structural block. No. 1,274,455; Aug. 6; v. 253; p. 32.

Rorick, Harvey S., Detroit, Mich. Shade and curtain support. No. 1,275,475; Aug. 13; v. 253; p. 342.

Rosa, Peter, Tonopah, Nev. Aeroplane shock-absorber. No. 1,277,260; Aug. 27; v. 253; p. 899.

Rose, Harm. (See Berg, Louis, assignor.)

Rose, William, Gainsborough, England. Mechanism for folding and closing the ends of bags or wrappers. No. 1,275,756; Aug. 13; v. 253; p. 421.

Rosen, Meyer, Bloomington, Ill. Self-lowering journal-jack. No. 1,276,574; Aug. 20; v. 253; p. 680.

Rosenberg, Abraham, Brooklyn, N. Y. Exerciser. No. 1,275,757; Aug. 13; v. 253; p. 421.

Rosenberg, Beatrice, Minneapolis, Minn. Child's bath-garment. No. 1,274,938; Aug. 6; v. 253; p. 169.

Rosenbluth, Edwin M., Philadelphia, Pa. Vehicle-lamp. No. 1,275,758; Aug. 13; v. 253; p. 422.

Rosenshine, Morris W., San Francisco, Cal. Pneumatic support for stretchers and beds. No. 1,275,306; Aug. 13; v. 253; p. 296.

Ross, Frederick M., Cincinnati, Ohio. Projectile. No. 1,276,575; Aug. 20; v. 253; p. 680.

Ross, Sidney J., deceased, London, England; H. Schofield, executor. Lock-nut. No. 1,275,182; Aug. 6; v. 253; p. 238.

Rossignol, Charles F., Augusta, Ga. Liquid-dispensing apparatus. No. 1,276,271; Aug. 20; v. 253; p. 595.

Roth, Max J. (See Jaeger, Roth, and Boeker.)

Rouse, Chester S. (See Mooney, James C., assignor.)

Rowe, George B., Oklahoma, Okla. Needle-threader. No. 1,274,786; Aug. 6; v. 253; p. 126.

Rowe, George B., Oklahoma, Okla. Separable button. No. 1,274,787; Aug. 6; v. 253; p. 127.

Rowe, Walter A., assignor of one-half to G. W. Mix, Tiffin, Ohio. Water-closet. No. 1,276,965; Aug. 27; v. 253; p. 821.

Rowe, William A., Springfield, Mo. Ironing-board. No. 1,275,604; Aug. 13; v. 253; p. 377.

Rowley, Frank G. (See Macomber, William I., assignor.)

Roy, Jackson L., De Queen, Ark. Cyclone-protector. No. 1,275,476; Aug. 13; v. 253; p. 342.

Royce, Frederick H., assignor to Rolls-Royce Limited, Derby, England. Cam-shaft driving-gear of internal-combustion engines. No. 1,277,129; Aug. 27; v. 253; p. 866.

Royer, Elam M., *et al.* (See Herr, Abram B., assignor.)

Royer, George F., Wilkes-Barre, assignor of two-thirds to J. H. Webb, Pittsburgh, Pa. Recording apparatus for mine-hoists. No. 1,275,605; Aug. 13; v. 253; p. 378.

Rozinsky, Nathan. (See Orenbuch and Rozinsky.)

Rubber Regenerating Company. (See Price, Raymond B., assignor.)

Rubin, Harry, Baltimore, Md. Electric-light fixture. No. 1,276,966; Aug. 27; v. 253; p. 821.

Ruble, William P., and W. B. Stevens, Esmond, N. D. Grain-car door. No. 1,275,477; Aug. 13; v. 253; p. 343.

Ruck, Richard M., South Kensington, London, England. Change-speed gear. No. 1,277,130; Aug. 27; v. 253; p. 866.

Rudai, Imrie, and A. Szarka, Vestaburg, Pa. Coal-mining machine. No. 1,274,939; Aug. 6; v. 253; p. 170.

Ruggles, Henry B. (See Hodge and Ruggles.)

Runsvold, Martin S., Bisbee, Ariz. Mine-car. No. 1,276,418; Aug. 20; v. 253; p. 637.

Ruppelt, Ernest A., assignor of one-tenth to M. B. Schaff, Fitchburg, Mass. Composition for making toys and other articles. No. 1,275,092; Aug. 6; v. 253; p. 212.

Rush, Homer J., Cleveland, Ohio. Figure toy. No. 1,276,967; Aug. 27; v. 253; p. 821.

Rushton, Thomas, Tollington Park, London, assignor to Coventry Electric Clock Company Limited, London, England. Electric clock. No. 1,275,606; Aug. 13; v. 253; p. 378.

Russ, Frank A., Weatherly, Pa. Automatic air-brake system and train-stop. No. 1,277,261; Aug. 27; v. 253; p. 900.

Russell, Calvin, assignor to C. H. Russell, Penn Yan, N. Y. Making a plurality of shingles from a single sheet of material. No. 1,274,605; Aug. 6; v. 253; p. 76.

Russell, Carrie H. (See Russell, Calvin, assignor.)

Russell, Clarence H., Syracuse, N. Y. Carton-forming machine. No. 1,275,759; Aug. 13; v. 253; p. 422.

Rustant, Ferdinand, Manila, Philippine Islands. Non-refillable bottle. No. 1,275,760; Aug. 13; v. 253; p. 422.

Ruth, Max, Jersey City, N. J. Saw-handle. No. 1,277,131; Aug. 27; v. 253; p. 867.

Ruthven, George W., Donna, Tex. Chain-tightening tool. No. 1,276,815; Aug. 27; v. 253; p. 782.

Rutzen, August C., Cleveland, Ohio. Means of recording and reproducing sound and motion in synchronism. No. 1,275,189; Aug. 6; v. 253; p. 240.

Rutzen, August C., Cleveland, Ohio. Record for phonographic machines. No. 1,276,968; Aug. 27; v. 253; p. 822.

Ryan, Bernard A. (See Murphy and Ryan.)

Ryan, Catherine C., St. Paul, Minn. Lock nut and bolt. No. 1,275,478; Aug. 13; v. 253; p. 343.

Ryan, Charles F. (See McKelvey and Ryan.)

Ryan, Dennis, Salt Lake City, Utah. Rail-fastening. No. 1,276,576; Aug. 20; v. 253; p. 680.

Ryan, John P. (See Goodnow, Henry W., assignor.)

Ryan, Martin W., *et al.* (See Smith, Elta C., assignor.)

Ryan, Michael H., San Bernardino, Cal. Safety-valve for air-brakes. No. 1,275,479; Aug. 13; v. 253; p. 343.

Ryan, William L., and F. P. Ayer, Manchester, N. H., assignors to W. H. McElwain Company, Boston, Mass. Inseaming shoes. No. 1,276,816; Aug. 27; v. 253; p. 782.

Ryon, Eppa H., Waltham, Mass. Valve mechanism. No. 1,275,093; Aug. 6; v. 253; p. 212.

Ryther, Frank A., Chicago, Ill., assignor to International Harvester Company of New Jersey. Tractor-hitch. No. 1,275,761; Aug. 13; v. 253; p. 423.

"S-C" Regulator Company, The. (See Barrett, Joseph M., assignor.)

Sackett, Harold J. (See Curtis and Sackett.)

Safety Car Heating and Lighting Company. (See Crevelling, John L., assignor.)

Safety Car Heating & Lighting Company, The. (See Hulse, George E., assignor.)

Safety Gas Lighter Corporation. (See Dowdy, Roy F., assignor.)

Safetygraph Educational Film Company. (See Connor and Miles, assignors.)

Safford, Lewis A., assignor to Barcalo Mfg. Co., Buffalo, N. Y. Child's crib and the like. No. 1,275,762; Aug. 13; v. 253; p. 423.

Sage, M. Jay, Brooklyn, N. Y. Strainer. No. 1,274,940; Aug. 6; v. 253; p. 170.

Sager, Clinton M., assignor of J. H. Sager Company, Rochester, N. Y. Connection between automobile-bumpers and vehicle-frames. No. 1,274,456; Aug. 6; v. 253; p. 33.

Sahler, H. (See Reed, Andrew H., assignor.)

Saile, Frederick, Syracuse, N. Y. Lawn-trimmer. No. 1,275,307; Aug. 13; v. 253; p. 296.

Salerno, Ferdinando G., Chicago, Ill. Depositing-machine. No. 1,274,606; Aug. 6; v. 253; p. 76.

Salisbury & Satterlee Co. (See Nicolle, Frank, assignor.)

Salts, James D., Bois D'Arc, Mo. Airship. No. 1,276,120; Aug. 20; v. 253; p. 553.

Sanburn, Frederick E. (See Sandburg, Frederick E.)

Sanches, Leonardo, assignor of one-third to A. Angulo and one-third to G. C. Lopez, Habana, Cuba. Ignition device. No. 1,274,941; Aug. 6; v. 253; p. 170.

Sanscrainte, Antoinette T. (See Riopelle, Harry F., assignor.)

Sandberg, Christer P., London, England. Heat treatment of track-rails. No. 1,277,262; Aug. 27; v. 253; p. 900.

Sandberg, Oscar, Södertelje, assignor to Aktiebolaget Svenska Tobaksmonopolet, Stockholm, Sweden. Machine for manufacturing mouthpieces for cigarette-casings. No. 1,277,132; Aug. 27; v. 253; p. 867.

Sandburg, Frederick E., Brooklyn, N. Y., now by judicial change of name F. E. Sanburn. Holder for drinking-glasses. No. 1,276,419; Aug. 20; v. 253; p. 637.

Sandifur, Oliver B., North Manchester, Ind. Fastener. No. 1,275,094; Aug. 6; v. 253; p. 212.

Sands, Roy G., Waukegan, assignor to Frank B. Cook Company, Chicago, Ill. Protective device. No. 1,277,133; Aug. 27; v. 253; p. 867.

Sanford, Frank C., Bridgeport, Conn. Gear-shifting mechanism for automobiles. No. 1,277,134; Aug. 27; v. 253; p. 867.

Sargent & Co. (See Page, Albert A., assignor.)

Sargent Company. (See Garren, George S., assignor.)

Sato, Ryuji, New York, N. Y. Game. No. 1,277,263; Aug. 27; v. 253; p. 900.

Satow, Sadakichi. (See Takamine and Satow.)

Satow, Sadakichi, Sendai, Japan. Manufacturing vegetable proteid substances. No. 1,275,308; Aug. 13; v. 253; p. 297.

Satterfield, Charles C., *et al.* (See Coffee, Robert W., assignor.)

Saunders, Augustus M., McKeesport, assignor to National Tube Company, Pittsburg, Pa. Marking tubular articles. No. 1,274,788; Aug. 6; v. 253; p. 127.

Saunders, Percy R., Antigonish, Nova Scotia, Canada. Head-rest. No. 1,275,607; Aug. 13; v. 253; p. 379.

Savage Tire Company, The. (See Morris, Howard I., assignor.)

Sawyer, Howard D., Revere, assignor to W. H. Kimball, Boston, trustee, fifteen thirty-seconds, H. D. Sawyer, Revere, fifteen thirty-seconds, and H. B. Newton, Brookline, Mass., two thirty-seconds. Fire-box for locomotive-engines. No. 1,275,763; Aug. 13; v. 253; p. 423.

Saxton, Lionel D., New York, N. Y. Attachment for steering mechanisms. No. 1,276,121; Aug. 20; v. 253; p. 554.

Schaefer, Frederick W., Cranford, N. J., assignor to The Aeolian Company. Sound-box. No. 1,275,764; Aug. 13; v. 253; p. 423.

Schaefer, William K., Fairmont, W. Va. Oven and associated heating apparatus. No. 1,276,969; Aug. 27; v. 253; p. 822.

Schaff, Max B. (See Ruppelt, Ernst A., assignor.)

Schäfler, Carlos, Merida, Mexico. Hulling-machine. No. 1,276,577; Aug. 20; v. 253; p. 681.

Schaidhauf, Alois, Frankfort-on-the-Main, Germany, assignor to Roessler & Hasslacher Chemical Co., New York, N. Y. Stable hydrogen peroxid and making the same. No. 1,275,765; Aug. 13; v. 253; p. 424.

Schaub, Jacob, Newark, N. J., assignor to American Linseed Company. Apparatus for consuming fuel. No. 1,275,608; Aug. 13; v. 253; p. 379.

Schedlbauer, Michael, Warren, Mich. Cover for railway-cars. No. 1,274,789; Aug. 6; v. 253; p. 127.

Scheid, John H., Minneapolis, Minn. Nose-ring. No. 1,276,122; Aug. 20; v. 253; p. 554.

Schemel, Abraham, Yonkers, N. Y. Ice-creeper. No. 1,277,135; Aug. 27; v. 253; p. 868.

Schenck, Charles, Chicago, Ill., assignor, by mesne assignments, to Elevator Supplies Company, Inc., Hoboken, N. J. Lubricator for elevator-guides and the like. No. 1,274,942; Aug. 6; v. 253; p. 170.

Schenck, George E., East Rutherford, N. J., assignor to C. M. Davis, New York, N. Y. Reducing-corset. No. 1,274,457; Aug. 6; v. 253; p. 33.

Schevenell, James, New York, N. Y. Antifrictional binding for collars. No. 1,277,264; Aug. 27; v. 253; p. 900.

Schiffers, Joseph A., Knoxville, Tenn. Dyeing composition. No. 1,276,123; Aug. 20; v. 253; p. 554.

Schild, Hermann E., Pittsburgh, Pa. Reversing-valve. No. 1,275,609; Aug. 13; v. 253; p. 379.

Schildwachter, Christian W. (See Champagne, Arthur J., assignor.)

Schilling, Frederick, Newark, N. J. Foldable umbrella. No. 1,276,971; Aug. 27; v. 253; p. 822.

Schindler, Carl. (See Maiden, Schindler, and Newhouse.)

Schisgall, Theodore, New York, N. Y., assignor to Travelight Mfg. Co., Philadelphia, Pa. Combined child's rocking-chair, stationary chair, crib, and baby-carriage. No. 1,274,458; Aug. 6; v. 253; p. 33.

Schmalz, Albert A. (See Schumacher and Schmalz.)

Schmid, Albert W., Basel, Switzerland. Apparatus for treating silk and other textile goods in hanks by means of liquids. No. 1,277,136; Aug. 27; v. 253; p. 868.

Schmidt, Gustav E., Chicago, Ill. Sheet-metal work and means for making same. No. 1,277,137; Aug. 27; v. 253; p. 868.

Schmidt, Herman A., Detroit, Mich. Muffler. No. 1,274,943; Aug. 6; v. 253; p. 171.

Schmidt, Lawrence S., assignor to Schmidt-McCormick Company, Pittsburgh, Pa. Safety means for furnace-cooling structures. No. 1,276,420; Aug. 20; v. 253; p. 638.

Schmidt, Lawrence S., Pittsburgh, Pa. Means for heating boilers by waste gases. No. 1,276,421; Aug. 20; v. 253; p. 638.

Schmidt-McCormick Company. (See Schmidt, Lawrence S., assignor.)

Schmitt, Henry, Detroit, Mich. Piston-ring. No. 1,276,832; Aug. 27; v. 253; p. 786.

Schneider, Eberhard, New York, N. Y. Moving-picture-projecting apparatus. No. 1,274,607; Aug. 6; v. 253; p. 77.

Schneider, Eugène, Paris, France. Eccentric-reversing gear. No. 1,275,095; Aug. 6; v. 253; p. 213.

Schneider, John, assignor to Hickey and Schneider, New York, N. Y. Switch. No. 1,275,309; Aug. 13; v. 253; p. 297.

Schneider, John F., St. Louis, Mo. Vulcanizer. No. 1,277,265; Aug. 27; v. 253; p. 900.

Schneider, Lawrence M., Baudette, Minn. Automatic furnace draft and fuel regulator. No. 1,275,096; Aug. 6; v. 253; p. 213.

Schnupp, Herbert H., Jeanette, Pa. Lamp-shade. No. 1,274,790; Aug. 6; v. 253; p. 127.

Schobel, Heinrich. (See Anderwert, Fritzsche, and Schobel.)

Schoenwolf, Fred, assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Combined electromagnetically and manually operable organ stop-key. No. 1,275,766; Aug. 13; v. 253; p. 424.

Schoff, Clarence. (See Lovejoy, George W., assignor.)

Schofield, Harry, executor. (See Ross, Sidney J.)

Schon, Pierre, Detroit, Mich. Tool for truing shafts. No. 1,275,310; Aug. 13; v. 253; p. 297.

Schonenberger, Aloys. (See Cox, Victor L., assignor.)

Schottenfels, Henry, New York, N. Y. Hose-supporter. No. 1,274,944; Aug. 6; v. 253; p. 171.

Schraga, Ernest H., assignor to Automatic Exploder Company, Salt Lake City, Utah. Signal apparatus. No. 1,277,138; Aug. 27; v. 253; p. 868.

Schramm, Andrew A., Philadelphia, Pa. Partition construction for filing-cabinets. No. 1,274,608; Aug. 6; v. 253; p. 77.

Schramm, Joseph J., St. Louis, Mo. Convertible automobile-body. No. 1,276,970; Aug. 27; v. 253; p. 822.

Schreibman, Frederic, Toronto, Ontario, Canada. Wood-bending apparatus. No. 1,274,459; Aug. 6; v. 253; p. 34.

Schroeder, John, Davenport, Iowa. Motor. No. 1,275,767; Aug. 13; v. 253; p. 424.

Schroder, George, Berkeley, Cal. Dispensing ink-bottle. No. 1,275,610; Aug. 13; v. 253; p. 379.

Schroeder, Ernest A., and J. N. Tooker, Syracuse, assignors to Church & Dwight Company, New York, N. Y. Carton-handling machine. No. 1,277,139; Aug. 27; v. 253; p. 869.

Schroeder, Louis. (See Friedlein, Fred J., assignor.)

Schroeder, Otto A., Green Bay, Wis. Sick-bed tray. No. 1,274,609; Aug. 6; v. 253; p. 77.

Schroyer, Harry H., Chicago, Ill., assignor, by mesne assignments, to Protecto Manufacturing Company. Extending-bracket for awnings. No. 1,274,945; Aug. 6; v. 253; p. 171.

Schroyer, Harry H., assignor to Dunbar Manufacturing Company, Chicago, Ill. Unifold car-diaphragm. No. 1,276,272; Aug. 20; v. 253; p. 595.

Schueler, William B., Sterling, Ill. Latch. No. 1,274,610; Aug. 6; v. 253; p. 78.

Schuh, Frank, Trenton, N. J. Clean-out. No. 1,275,768; Aug. 13; v. 253; p. 424.

Schultz, Ferdinand H., Treynor, Iowa. Animal-oiling device. No. 1,276,972; Aug. 27; v. 253; p. 823.

Schumacher, Charles H., and A. A. Schmalz, Dundee, Ill. Glare-shield. No. 1,275,311; Aug. 13; v. 253; p. 298.

Schumann, Martin N., New Lisbon, Wis. Wire-winder. No. 1,276,973; Aug. 27; v. 253; p. 823.

Schumann Piano Company. (See Peterson, Gust A., assignor.)

Schwab, William C., Canton, Ohio. Cooking utensil. No. 1,275,611; Aug. 13; v. 253; p. 379.

Schwartz, Charles, trustee. (See Knapp, William A., assignor.)

Schwarz, Emil. (See Linderme, Emil, assignor.)

Schwensen, Louis C., Brooklyn, N. Y. Hinge for suit-cases. No. 1,276,273; Aug. 20; v. 253; p. 596.

Schwimmer, Oscar, assignor to J. J. Newell, Los Angeles, Cal. Towel-operating mechanism. No. 1,274,611; Aug. 6; v. 253; p. 78.

Scott, Arthur H., South Portland, assignor to National Khaki Watch Strap Company, Portland, Me. Wrist-watch strap. No. 1,275,769; Aug. 13; v. 253; p. 425.

Scott, David J., *et al.*, executors. (See Drange, Carl E., assignor.)

Scott, Fletcher J., Hurdland, Mo. Saw. No. 1,276,579; Aug. 20; v. 253; p. 681.

Scott, Herbert A., Saltsburg, Pa. Electric control for generators. No. 1,276,578; Aug. 20; v. 253; p. 681.

Scott, Isabella, *et al.*, executors. (See Drange, Carl E., assignor.)

Scott, Jacob R., North Weymouth, assignor of two-tenths to E. H. Kavanagh and two-tenths to J. W. Colgan, Weymouth, Mass. Air-heater for internal-combustion engines. No. 1,276,124; Aug. 20; v. 253; p. 554.

Scott, John A., Oklahoma, Okla. Grain-saving device for threshing-machines. No. 1,275,770; Aug. 13; v. 253; p. 425.

Scott, Raymond W., and C. C. Cook, Seattle, Wash. Guiding apparatus for vehicles. No. 1,276,422; Aug. 20; v. 253; p. 638.

Scott, Rumsey W. (See Dittman and Baggott, assignors.)

Scott, Walter A., Chicago, Ill., assignor to Minerals Separation North American Corporation. Ore concentration. No. 1,276,974; Aug. 27; v. 253; p. 823.

Scott, William H., Jr., assignor to Susquehanna Silk Mills, New York, N. Y. Making fabric. No. 1,275,771; Aug. 13; v. 253; p. 425.

Scoville, Frank F., Schenectady, N. Y. Locomotive-engine. No. 1,275,612; Aug. 13; v. 253; p. 880.

Scribner, Charles E., Jericho, Vt., assignor, by mesne assignments, to Western Electric Company, Incorporated. Synchronizing system. No. 1,276,580; Aug. 20; v. 253; p. 682.

Scribner, Charles E., Jericho, Vt., assignor by mesne assignments, to Western Electric Company, Incorporated. Synchronizing system. No. 1,276,581; Aug. 20; v. 230; p. 682.

Scrimgeour, Mary A., Lewiston, Me. Radiator attachment. No. 1,274,791; Aug. 6; v. 253; p. 128.

Sealy, Ester M., Honolulu, Hawaii. Calipers. No. 1,274,460; Aug. 6; v. 253; p. 34.

Seaman, Lloyd M., Stoneharbor, N. J. Concrete construction. No. 1,274,946; Aug. 6; v. 253; p. 172.

Searfoss, Lawrence P. (See Bowes and Searfoss.)

Sears, George H., assignor, by mesne assignments, of one-half to C. J. Pembroke and one-half to F. Keiper, Rochester, N. Y. Press-guard. No. 1,274,612; Aug. 6; v. 253; p. 78.

Sears, Roebuck and Company. (See Bohmker and Geistwhite, assignors.)

Sears, Roebuck and Company. (See Palmer, Clinton D., assignor.)

Sears, Roebuck and Company. (See Waring, Stewart, assignor.)

Seaton, Benjamin C., Nashville, Tenn. Vehicle-body support. No. 1,275,097; Aug. 6; v. 253; p. 213.

Seavey, Eugene, New York, N. Y. Belt-fastener. No. 1,275,772; Aug. 13; v. 253; p. 425.

Sebree, Charles H. (See Berlin and Sebree.)

Secret Telegraph Co. (See Delany, Patrick B., assignor.)

Sedlak, John P., Jr., Winburne, Pa. Game. No. 1,275,613; Aug. 13; v. 253; p. 380.

Seeley, Alfred, Rochdale, England. Apparatus for attaching yarn to spindles. No. 1,274,792; Aug. 6; v. 253; p. 128.

Seiberling, John F., Akron, Ohio. Paving-machine. No. 1,276,817; Aug. 27; v. 253; p. 782.

Seitz, William, Anderson, Ind. Funnel-cap for automobile-radiators. No. 1,274,947; Aug. 6; v. 253; p. 172.

Sell, Joseph, Rush Center, Kans. Heating means for incubators. No. 1,277,266; Aug. 27; v. 253; p. 901.

Seppman, William E., Lake Crystal, Minn. Knee throttle-gear. No. 1,276,423; Aug. 20; v. 253; p. 639.

Sessions, Hugh E., Columbia, S. C. Separating mechanism for linters. No. 1,276,975; Aug. 27; v. 253; p. 823.

Seuberth, Victor A. (See Fry and Seuberth.)

Seymour, Dudley S., Oak Park, assignor to Union Special Machine Company, Chicago, Ill. Thread-controlling mechanism for sewing-machines. No. 1,276,127; Aug. 20; v. 253; p. 555.

Seymour, Dudley S., Oak Park, assignor to Union Special Machine Company, Chicago, Ill. Toggle-grinder. No. 1,277,140; Aug. 27; v. 253; p. 869.

Seymour, James M., Jr., Newark, N. J. Electrical system for controlling boats or torpedoes. No. 1,275,480; Aug. 13; v. 253; p. 343.

Seymour, James M., Jr., Newark, N. J. Internal-combustion engine. No. 1,275,481; Aug. 13; v. 253; p. 344.

Seymour, James M., Jr., Newark, N. J. Torpedo. No. 1,275,482; Aug. 13; v. 253; p. 344.

Shafer, Frank M. (See Roberts, Wilbert R., assignor.)

Shaffer, Absalom D., Kittanning, Pa. Trolley head and guard. No. 1,276,128; Aug. 20; v. 253; p. 555.

Shaffer, Joseph, McKittrick, Cal. Adjustable pipe-wrench. No. 1,276,274; Aug. 20; v. 253; p. 596.

Shallor, Frank E. (See Kuhn and Shallor.)

Shambow, John C., and G. H. Goldsmith, assignors to Shambow Shuttle Company, Woonsocket, R. I. Loom-shuttle. No. 1,276,582; Aug. 20; v. 253; p. 682.

Shambow Shuttle Company. (See Shambow and Goldsmith, assignors.)

Shamrock Narrow Fabric Company. (See Waterfield, John, assignor.)

Sharp, Gilmour. (See Millard and Taylor, assignors.)

Shattuck, George H., Tumwater, Wash. Gate. No. 1,276,424; Aug. 20; v. 253; p. 639.

Shauck, Charles G., Des Moines, Iowa. Direction-signal for automobiles. No. 1,276,425; Aug. 20; v. 253; p. 639.

Shaw, Fred T., and J. G. Meador, Jr., Winchester, Miss. Attachment for air-brakes. No. 1,276,976; Aug. 27; v. 253; p. 824.

Shaw, Oliver E., Chicago, Ill. Car part. No. 1,275,312; Aug. 13; v. 253; p. 298.

Sheline, Orville O., Chicago, Ill., assignor to Burnitol Manufacturing Company, Everett, Mass. Receptacle. No. 1,274,613; Aug. 6; v. 253; p. 79.

Shell Company of California. (See Thompson and McGraw, assignors.)

Shepard, Wilbur L., Elmwood, Conn. Clutch. No. 1,274,462; Aug. 6; v. 253; p. 35.

Shepard, Wilbur L. Elmwood, assignor of one-third to H. C. Hart, Unionville, and one-third to W. H. Legate, Hartford, Conn. Clutch. No. 1,274,461; Aug. 6; v. 253; p. 34.

Shephard, Henry F., New York, N. Y. Truck-windlass. No. 1,276,584; Aug 20; v. 253; p. 683.

Shepherd, Frank D., Salt Lake City, Utah. Internal-combustion engine. No. 1,276,583; Aug. 20; v. 253; p. 682.

Shepherd, John T. (See Randall, John G., assignor.)

Shepherd, Marshall L., Montgomery, Ala., assignor, by mesne assignments, to United States Switch Company of Delaware, Eau Claire, Wis. Railway-switch mechanism. No. 1,275,773; Aug. 13; v. 253; p. 425.

Sherburne, Anna, and R. H. Varicle, Los Angeles, Cal. Towel-holder. No. 1,276,125; Aug. 20; v. 253; p. 554.

Sheridan, Michael S. (See McGreal, Hugh J., assignor.)

Sherman, Alec E., London, England. Antiseptic or sterilizing agent for use in the preservative treatment of food. No. 1,274,793; Aug. 6; v. 253; p. 128.

Sherman, Howard B., Battle Creek, Mich. Double-acting drawing-press. No. 1,275,614; Aug. 13; v. 253; p. 380.

Sherman, John Q., Dayton, Ohio. Autographic register. No. 1,275,615; Aug. 13; v. 253; p. 381.

Sherman, Marvin E., Oklahoma, Okla. Car for perishable granular material. No. 1,274,614; Aug. 6; v. 253; p. 79.

Sherman, William T., Troy, by mesne assignments, to Henry L. Hughes Co., Inc., New York, N. Y. Brush. No. 1,277,141; Aug. 27; v. 253; p. 870.

Sherman, William T., Troy, by mesne assignments, to Henry L. Hughes Co., Inc., New York, N. Y. Brush. No. 1,277,142; Aug. 27; v. 253; p. 870.

Sherwood, Alexander B., Chicago, Ill. Coin wrapping and counting device. No. 1,274,615; Aug. 6; v. 253; p. 79.

Shevels, Thomas F. (See Peel and Shevels.)

Shields, Curtis W., Brooklyn, assignor to Underwood Typewriter Company, New York, N. Y. Type-writing machine. No. 1,276,275; Aug. 20; v. 253; p. 596.

Ship Builders Iron Works. (See Hoyer, Christian, assignor.)

Shoeld, Mark, assignor to Armour Fertilizer Works, Chicago, Ill. Electric furnace. No. 1,274,794; Aug. 6; v. 253; p. 128.

Shoeld, Mark, Chicago. Furnace for chemical reactions. No. 1,274,795; Aug. 6; v. 253; p. 129.

Shoeld, Mark, assignor to Armour Fertilizer Works, Chicago, Ill. Electric furnace. No. 1,274,796; Aug. 6; v. 253; p. 129.

Shoeld, Mark, assignor to Armour Fertilizer Works, Chicago, Ill. Producing aluminum nitrid. No. 1,274,797; Aug. 6; v. 253; p. 129.

Shoeld, Mark, assignor to Armour Fertilizer Works, Chicago, Ill. Electric furnace. No. 1,274,798; Aug. 6; v. 253; p. 130.

Shoemaker, Robert J., Topeka, Kans. Coating metal articles. No. 1,276,977; Aug. 27; v. 253; p. 824.

Shoemaker, Robert J., Milwaukee, Wis. Plating metal castings. No. 1,276,978; Aug. 27; v. 253; p. 824.

Shook, Anna N., New York, N. Y. Hand-loom. No. 1,274,948; Aug. 6; v. 253; p. 172.

Shores, William T., *et al.* (See Norman, Frank, assignor.)

Short, Byron O., assignor of one-third to J. J. Manlove and one-third to J. A. Wright, Pierce City, Mo. Internal-combustion engine. No. 1,275,616; Aug. 13; v. 253; p. 381.

Shriner, Frank E., Detroit, Mich. Column-clamp. No. 1,275,313; Aug. 13; v. 253; p. 298.

Shroyer, Jacob L., Pittsfield, Mass. Tire-pumping mechanism. No. 1,276,126; Aug. 20; v. 253; p. 555.

Shultz, Walter C. (See Johnson, Sinclair J., assignor.)

Shurtleff, Wilfred, Moline, assignor to D. Geraldine, Chicago, Ill. Massaging apparatus. No. 1,274,799; Aug. 6; v. 253; p. 130.

Sidman, Edward D., London, Ontario, Canada. Lumber-curing kiln. No. 1,276,979; Aug. 27; v. 253; p. 824.

Siemens & Halske, A. G. (See Grabe, Georg, assignor.)

Siemens-Schuckertwerke G. m. b. H. (See Meyer and Waits, assignors.)

Silvester, Joseph, assignor to Fort Pitt Bedding Company, Pittsburgh, Pa. Superimposable bed. No. 1,275,774; Aug. 13; v. 253; p. 426.

Simko, Andrew, Passaic, N. J. Motor street-cleaner. No. 1,275,322; Aug. 13; v. 253; p. 301.

Simmonds, John J., Lawrence, Kans. Tile-cutter. No. 1,275,775; Aug. 13; v. 253; p. 426.

Simmons, Ralph C., Beverly, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Blank-cutting machine. No. 1,275,617; Aug. 13; v. 253; p. 382.

Simon, Victor F., Chicago, Ill. Nut-blanching machine. No. 1,275,314; Aug. 13; v. 253; p. 298.

Simpson, Emory G., assignor to Fisher Body Corporation, Detroit, Mich. Door-flapper. No. 1,276,276; Aug. 20; v. 253; p. 596.

Simpson, Emory G., assignor to Fisher Body Corporation, Detroit, Mich. Window-lifter. No. 1,276,277; Aug. 20; v. 253; p. 597.

Simpson, Henry H. (See Skahen, Patrick D., assignor.)

Singer Manufacturing Company, The. (See Allen and Crosby, assignors.)

Singer Manufacturing Company, The. (See De Voe, Albert H., assignor.)

Singer Manufacturing Company, The. (See Dosch, Oliver L., assignor.)

Singer Manufacturing Company, The. (See Molyneux, George E., assignor.)

Skadberg, John, Duluth, Minn. Resilient wheel. No. 1,276,980; Aug. 27; v. 253; p. 825.

Skahen, Patrick D., Syracuse, assignor, by mesne assignments, to H. H. Simpson, Brooklyn, N. Y. Antiskidding device for vehicles. No. 1,275,483; Aug. 13; v. 253; p. 344.

Skahen, Patrick D., Syracuse, assignor, by mesne assignments, to H. H. Simpson, Brooklyn, N. Y. Antiskidding attachment. No. 1,275,484; Aug. 13; v. 253; p. 345.

Skahen, Patrick D., Syracuse, assignor, by mesne assignments, to H. H. Simpson, Brooklyn, N. Y. Antiskidding device. No. 1,275,485; Aug. 13; v. 253; p. 345.

Skells, Arthur L., Henry, S. D. Automatic speed control for automobiles. No. 1,277,267; Aug. 27; v. 253; p. 901.

Skelton, L. S. (See Westbury, William, assignor.)

Sketteno, Joseph, Michigan City, Ind. Collapsible receptacle. No. 1,274,800; Aug. 6; v. 253; p. 130.

Skinderviken, Johan, Chicago, Ill., assignor to said Johan Skinderviken, trustee. Telephone-transmitter. No. 1,275,776; Aug. 13; v. 253; p. 426.

Sklar, Samuel, Brooklyn, N. Y. Safety-stirrup. No. 1,276,819; Aug. 27; v. 253; p. 788.

Slaight, Leland V. (See Spies and Pease, assignors.)

Slimp, James E., New York, N. Y. Securing rail-bonds to rails. No. 1,276,426; Aug. 20; v. 253; p. 639.

Slocum, William W., Muskegon, Mich. Damper. No. 1,275,618; Aug. 13; v. 253; p. 382.

Sloppy, William E., Mount Jewett, assignor of forty-nine one-hundredths to O. L. Parkhurst, Kane, Pa. Glass apparatus. No. 1,274,616; Aug. 6; v. 253; p. 80.

Slosar, John. (See Kupec and Slosar.)

Slotnaes, Jens, Grefsen, Christiania, Norway. Lathe. (Reissue.) No. 14,509; Aug. 20; v. 253; p. 717.

Smallwood, Frank, assignor to Algoma Steel Corporation Limited, Sault Ste. Marie, Ontario, Canada. Machine for breaking steel into shell-blanks. No. 1,276,278; Aug. 20; v. 253; p. 597.

Smart, Aaron L., Vickery, Ohio. Wrench. No. 1,277,268; Aug. 27; v. 253; p. 901.

Smeltzer, James G., Germantown, Pa. Air-brake. No. 1,277,143; Aug. 27; v. 253; p. 870.

Smiley, Charles C., Gary, Ind. Rotary gas-engine. No. 1,275,619; Aug. 13; v. 253; p. 382.

Smiley, Richard W., Duluth, Minn. Holding means for cutting mechanism. No. 1,274,617; Aug. 6; v. 253; p. 80.

Smith, Carolyn S., Brooklyn, N. Y. Filtering apparatus. No. 1,276,129; Aug. 20; v. 253; p. 556.

Smith, Charles D., assignor to Morner and Smith, Dayton, Ohio. Carbureter. No. 1,275,620; Aug. 13; v. 253; p. 382.

Smith, Charles H., Short Hills, N. J., assignor to International Coal Products Corporation, Richmond, Va. Treating coal. No. 1,276,427; Aug. 20; v. 253; p. 640.

Smith, Charles H., Short Hills, N. J., assignor to International Coal Products Corporation, Richmond, Va. Treating coal. No. 1,276,428; Aug. 20; v. 253; p. 640.

Smith, Charles H., Short Hills, N. J., assignor to International Coal Products Corporation, Richmond, Va. Briquet and making the same. No. 1,276,429; Aug. 20; v. 253; p. 640.

Smith, Clayton A., Decatur, Ill. Combined concrete-form stake. No. 1,274,618; Aug. 6; v. 253; p. 80.

Smith, Edgar A., Windsor, N. C. Universal-joint brace. No. 1,274,619; Aug. 6; v. 253; p. 81.

Smith, Edwin W., Beverly, Mass., assignor, by mesne assignments, to United Machinery Corporation, Paterson, N. J. Retaining device. No. 1,276,981; Aug. 27; v. 253; p. 825.

Smith, Elda G., and J. J. Dossert, assignors to Crouse-Hinds Company, Syracuse, N. Y. Housing for electrical appliances. No. 1,275,777; Aug. 13; v. 253; p. 426.

Smith, Elta C., assignor of one-half to F. B. Cook and M. W. Ryan and one-half to A. C. Lucas and E. V. Horner, Springfield, Mo. Belt for transmission of power. No. 1,275,621; Aug. 13; v. 253; p. 383.

Smith, Floyd C. (See Hastings and Smith.)

Smith, Frank T., Jamaica Plain, Mass. Treating foul solutions. No. 1,276,130; Aug. 20; v. 253; p. 556.

Smith, Friend W., Jr., Bridgeport, Conn., assignor, by mesne assignments, to G. E. Carhart, New York, N. Y. Account deposit-book. (Reissue.) No. 14,502; Aug. 13; v. 253; p. 490.

Smith, George R., Bay City, Mich. Brake-block. No. 1,276,430; Aug. 20; v. 253; p. 641.

Smith, Gibson C., Frederick, Md. Automatic controller. No. 1,276,279; Aug. 20; v. 253; p. 597.

Smith, Harry B., Brooklyn, N. Y., and J. D. Reifsnyder, Philadelphia, assignors to Stokes & Smith Company, Summerdale, Pa. Form-block for box-covering machines. No. 1,274,801; Aug. 6; v. 253; p. 131.

Smith, Harry M., Chicago, Ill. Controlling mechanism for phonographs. No. 1,276,983; Aug. 27; v. 253; p. 825.

Smith, Harvey M., Mooresville, Ind. Milk-cooling can. No. 1,276,982; Aug. 27; v. 253; p. 825.

Smith, Herbert E., Spokane, Wash. Mail-exchanging device. No. 1,276,280; Aug. 20; v. 253; p. 598.

Smith, Horace M., assignor to Liquid Carbonic Company, Chicago, Ill. Filling carbonated beverages in receptacles. No. 1,275,622; Aug. 13; v. 253; p. 383.

Smith, James C., Paterson, N. J. Packless antidrip-valve. No. 1,274,949; Aug. 6; v. 253; p. 173.

Smith, Robert M., San Francisco, Cal. Centrifugal extractor. No. 1,275,486; Aug. 13; v. 253; p. 345.

Smith, Thomas O. L., San Francisco, Cal. Bottle. No. 1,275,315; Aug. 13; v. 253; p. 299.

Smith, Walter P., Phoenix, Ariz. Harvesting-machine. No. 1,275,623; Aug. 13; v. 253; p. 383.

Smith, Warren M., Moores, assignor to The J. G. Brill Company, Philadelphia, Pa. Door-operating means. No. 1,276,431; Aug. 20; v. 253; p. 641.
Smithey, Marvin, Lawrenceville, Va. Meter. (Reissue.) No. 14,515; Aug. 27; v. 253; p. 928.
Smythe, Richard M., Brooklyn, N. Y. Drinking-fountain. No. 1,276,820; Aug. 27; v. 253; p. 783.
Snead & Co. Iron Works, The. (See Macdonald and Huggins, assignors.)
Snow, Isaac, Lawrence, Mass. Filling stop-motion. No. 1,275,487; Aug. 13; v. 253; p. 345.
Snyder, Frederick S., New Kensington, Pa. Pipe-ball. No. 1,276,585; Aug. 20; v. 253; p. 683.
Snyder, Frederick T., Oak Park, Ill. Apparatus for charging electric furnaces and the like. No. 1,276,586; Aug. 20; v. 253; p. 683.
Society of Chemical Industry in Basle. (See Anderwert Fritzsche, and Schobel, assignors.)
Sole, William C., Sullivan, Ind. Well-drilling machine. No. 1,274,950; Aug. 6; v. 253; p. 173.
Somers, Clark S. (See Rasmussen, Christian, assignor.)
Sonnichsen, Andreas M., Milwaukee, Wis., assignor to Protex Manufacturing Company, Chicago, Ill. Tire-gage. No. 1,274,620; Aug. 6; v. 253; p. 81.
Sonora Phonograph Corporation. (See Malocsay, Frank, assignor.)
Sopata, Louis F., East Hammond, Ind. Soldier's protector. No. 1,274,621; Aug. 6; v. 253; p. 81.
Sopwith, Thomas O. M., Kingston-upon-Thames, England. Adjustable seat for gunners in armed aeroplanes and the like. No. 1,275,624; Aug. 13; v. 253; p. 384.
Southam, William A., *et al.* (See Lord, Alfred B., assignor.)
Southworth, Eugene C., Southington, assignor to The Steel Products Company, Plantsville, Conn. Fastening means. No. 1,275,488; Aug. 13; v. 253; p. 345.
Sowers, Leroy E., and P. S. Phillips, Livermore, Cal. Separating manganese dioxid from ore containing the same. No. 1,277,144; Aug. 27; v. 253; p. 870.
Sowers, Leroy E., and P. S. Phillips, Livermore, Cal. Separator for separating manganese dioxid from ores containing the same. No. 1,277,146; Aug. 27; v. 253; p. 871.
Spalding, George W., Worcester, Mass, assignor to Universal Patents Company. Woven carrier. No. 1,275,489; Aug. 13; v. 253; p. 346.
Spang, Chalfant and Co. (See Hampton, William J., assignor.)
Spangler, Ernest L., Chicago, Ill. Animal-trap. No. 1,275,993; Aug. 13; v. 253; p. 487.
Sparks, Nelson. (See Hubback, Malcolm H., assignor.)
Sparks, William, Jackson, Mich., assignor to The Sparks-Withington Company. Signal. No. 1,274,951; Aug. 6; v. 253; p. 173.
Sparks-Withington Company, The. (See Sparks, William, assignor.)
Sparling, Eva: (See Light, Claus H., assignor.)
Spaulding, Charles W., Clinton, Me. Toy tricycle. No. 1,276,587; Aug. 20; v. 253; p. 684.
Speed, James B., assignor to Western Electric Company, Incoporated, New York, N. Y. Magnet-core. No. 1,274,952; Aug. 6; v. 253; p. 174.
Sperlich, Herman A., Highland Park, Mich. Washing-machine. No. 1,276,684; Aug. 27; v. 253; p. 826.
Sperr, Frederick W., Jr., Oakmont, assignor to H. Koppers Company, Pittsburgh, Pa. Paint and making same. No. 1,275,778; Aug. 13; v. 253; p. 437.
Sperry, Elmer A., assignor to The Sperry Gyroscope Company, Brooklyn, N. Y. Speed and direction indicator for aircraft. No. 1,274,622; Aug. 6; v. 253; p. 81.
Sperry Gyroscope Company, The. (See Sperry, Elmer A., assignor.)
Sperry Gyroscope Company. (See Tanner, Harry L., assignor.)
Spiegel, Alexander S., Chicago, Ill. Roofing-machine. No. 1,274,623; Aug. 6; v. 253; p. 82.
Spiegel, Arthur E., Shelbyville, Ind. Bed-rail-attaching device. No. 1,274,802; Aug. 6; v. 253; p. 131.
Spies, William F., New York, and H. D. Pease, Richmond Hill, assignors to L. V. Slaight, New York, N. Y. Dentifrice and making the same. No. 1,275,779; Aug. 13; v. 253; p. 427.
Spitz, Fannie S., Albuquerque, N. Mex. Method and apparatus for shelling nuts. No. 1,274,803; Aug. 6; v. 253; p. 131.
Spitzer, Benjamin L., New York, N. Y. Combined radiograph mount and container. No. 1,274,804; Aug. 6; v. 253; p. 132.
Splitdorf Electrical Company. (See Libby and Tomlinson, assignors.)
Splitdorf Electrical Company. (See Van Deventer, Harry R., assignor.)
Spranger, Frank and N. M., Detroit, Mich. Demountable rim. No. 1,276,985; Aug. 27; v. 253; p. 826.
Spranger, Nicholas M. (See Spranger, Frank and N. M.)
Sprenger, Walther, Lynn, Mass. Differential gearing for motor-vehicles. No. 1,276,432; Aug. 20; v. 253; p. 641.
Springer, John, Batavia, N. Y. Pneumatic clutch. No. 1,275,316; Aug. 13; v. 253; p. 299.
Spurr, Edgar A., Euclid, assignor to The Electric Controller & Manufacturing Company, Cleveland, Ohio. Electric controller. No. 1,275,780; Aug. 13; v. 253; p. 427.
Spurrier, John R., Bethlehem, Pa., assignor to Roller-Smith Company. Electric switch. No. 1,275,098; Aug. 6; v. 253; p. 214.
St. Armande, Arthur V., Paisley, Scotland. Multi-cell electric battery. No. 1,277,147; Aug. 27; v. 253; p. 871.
St. Germain, Don A., assignor to M. Scheuer & Bro., New York, N. Y. Sleeping-eyes mounting for dolls. No. 1,276,590; Aug. 20; v. 253; p. 684.
Stafford, Benjamin E. D. (See Flannery, Stafford, and Dodds.)
Stafford Company, The. (See Jackson, Simeon S., assignor.)
Stainbrook, Dallas W., and R. H. Winter, Caldwell, Idaho. Combination implement. No. 1,276,433; Aug. 20; v. 253; p. 641.
Standard Manufacturing Company. (See Voorhees, Walter K., assignor.)
Standard Mirror Co. (See La Hodny and Kibitz, assignors.)
Standard Oil Company. (See Black, John C., assignor.)
Standard Parts Company, The. (See Fay, Thomas J., assignor.)
Standard Plunger Elevator Company. (See Dunn, Edward L., assignor.)
Standard Scale & Supply Company, The. (See Svenson, John A. F., assignor.)
Standish, John F., Winthrop, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Machine for operating on heels. No. 1,275,490; Aug. 13; v. 253; p. 346.
Stanek, Dominek G., Ekalaka, assignor of one-half to B. B. Gross and W. R. Gross, Sykes, Mont. Nut-lock. No. 1,277,146; Aug. 27; v. 253; p. 871.
Stanley, George E., Coventry, England. Change-speed gear. No. 1,274,463; Aug. 6; v. 253; p. 35.
Stanley Works, The. (See Doolittle, Howard C., assignor.)
Stark, Alvin E., and M. A. Garrett, Brazoria, Tex.; said M. A. Garrett assignor to C. M. Garrett, Detroit, Mich. Cotton-harvester. No. 1,275,781; Aug. 13; v. 253; p. 427.
Starr, Ferdinand W., Oklahoma, Okla. Method of derinding oranges and product thereof. No. 1,277,148; Aug. 27; v. 253; p. 871.
Stavish, Joseph B., Plainfield, N. J. Universal coupling. No. 1,274,805; Aug. 6; v. 253; p. 182.
Stazak, Michael B. (See Currier and Stazak.)
Steadman, Frank M., Caracas, Venezuela. Device for determining the actinic power of light. No. 1,274,464; Aug. 6; v. 253; p. 35.
Stearns, Marcus C., New York, N. Y. Device for destroying submarines. No. 1,275,317; Aug. 13; v. 253; p. 299.
Stedman, Burton P., Peoria, Ill. Steering device for automobiles. No. 1,275,625; Aug. 13; v. 253; p. 384.
Steel Products Company, The. (See Southworth, Eugene C., assignor.)
Steele, Edward F., Terre Haute, Ind. Potato-sorter. No. 1,275,099; Aug. 6; v. 253; p. 214.
Steere, Albert L., assignor to Appomattox Iron Works and Supply Company, Petersburg, Va. Peanut-planter. No. 1,276,588; Aug. 20; v. 253; p. 684.
Stein, Charles, Akron, Ohio. Collapsible core. No. 1,275,491; Aug. 13; v. 253; p. 346.
Steinmetz, Charles P., Schenectady, N. Y., assignor to General Electric Company. Alternating-current rectifier. No. 1,275,782; Aug. 13; v. 253; p. 428.
Steinmetz, Charles P., Schenectady, N. Y., assignor to General Electric Company. Thermoregulator. No. 1,276,589; Aug. 20; v. 253; p. 684.
Steinmetz, Joseph A., Philadelphia, Pa. Submarine-net. No. 1,274,624; Aug. 6; v. 253; p. 82.
Steinmetz, Joseph A., Philadelphia, Pa. Valve. No. 1,275,783; Aug. 13; v. 253; p. 428.
Steinmetz, Joseph A., Philadelphia, Pa. Grenade. No. 1,276,434; Aug. 20; v. 253; p. 642.
Stenhouse, Thomas, Washington, Pa., assignor to Hazel-Atlas Glass Company, Wheeling, W. Va. Mechanism for delivering glass. No. 1,274,625; Aug. 6; v. 253; p. 82.
Stersing, Albert A. E., New York, N. Y. Steam-generator. No. 1,275,492; Aug. 13; v. 253; p. 346.
Steup, Arthur, Jersey City, N. J. Wick-coupling. No. 1,274,626; Aug. 6; v. 253; p. 83.
Stevens and Company. (See Stevens, Frederick A., assignor.)
Stevens, Frederick A., Providence, R. I., assignor to Stevens and Company, Incorporated. Mounting. No. 1,274,806; Aug. 6; v. 253; p. 132.
Stevens, Frederick A., Providence, R. I., assignor to Stevens and Company, Incorporated. Mounting. No. 1,274,807; Aug. 6; v. 253; p. 132.
Stevens, Frederick A., Providence, R. I., assignor to Stevens and Company, Incorporated. Mountaing. No. 1,274,808; Aug. 6; v. 253; p. 133.
Stevens, George L., Long Beach, Cal. Soft-tire alarm. No. 1,276,435; Aug. 20; v. 253; p. 642.
Stevens, Robert L., assignor to National Spring & Wire Company, Albion, Mich. Cushion-spring. No. 1,275,318; Aug. 13; v. 253; p. 300.
Stevens, Valentine J. (See Butler, Stevens, and Walsh.)
Stevens, William B. (See Ruble and Stevens.)
Stevens, William C., assignor to The Firestone Tire & Rubber Company, Akron, Ohio. Machine for inserting cross-wires in solid tires. No. 1,274,465; Aug. 6; v. 253; p. 36.
Stevens, William C., assignor to The Firestone Tire & Rubber Company, Akron, Ohio. Fabric-spreader for tire-making machines. No. 1,276,436; Aug. 20; v. 253; p. 642.

Stevens, William C., Summit, assignor to The Firestone Tire and Rubber Company, Akron, Ohio. Making solid tires. No. 1,276,821; Aug. 27; v. 253; p. 783.
Stevenson, Frederick A., Detroit, Mich., assignor to American Car and Foundry Company, St. Louis, Mo. Toggle mechanism. No. 1,276,437; Aug. 20; v. 253; p. 642.
Stevenson, Lemuel L., Emporia, Kans. Photoprint-adjuster. No. 1,275,784; Aug. 13; v. 253; p. 428.
Steventon, Thomas, assignor to American Graphophone Company, Bridgeport, Conn. Die for pressing sound-records. No. 1,275,100; Aug. 6; v. 253; p. 215.
Stewart, Arthur L., and B. H. Bickle, assignors to Gleason Works, Rochester, N. Y. Gear-cutter. No. 1,274,466; Aug. 6; v. 253; p. 36.
Stewart, Georgiana, Shawnee, Okla. Quilting-frame. No. 1,275,493; Aug. 13; v. 253; p. 347.
Stewart, Jeffrey, Philadelphia, Pa., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del. Obtaining oils. No. 1,276,822; Aug. 27; v. 253; p. 784.
Stewart, Jesse J., Yale, Ark. Baling-press. No. 1,276,986; Aug. 27; v. 253; p. 826.
Stewart, John H., Jamaica, N. Y., assignor to The Coburn Trolley Track M'f'g Co., Holyoke, Mass. Self-closing pendulum-hanger for doors. No. 1,275,174; Aug. 6; v. 253; p. 235.
Stewart, John H., Jamaica, N. Y., assignor to The Coburn Trolley Track M'f'g Company, Holyoke, Mass. Self-closing pendulum-hanger for doors. No. 1,275,175; Aug. 6; v. 253; p. 235.
Stewart, William J. (See Linden, Lucien, assignor.)
Stickney, Burnham C., Elizabeth, N. J., assignor, by mesne assignments, to Underwood Computing Machine Company, New York, N. Y. Combined type-writing and computing machine. No. 1,275,994; Aug. 13; v. 253; p. 488.
Stimpson, Edward S., assignor, by mesne assignments, to Draper Corporation, Hopedale, Mass. Battery-feed for looms. (Reissue.) No. 14,504; Aug. 13; v. 253; p. 490.
Stinson, Charles H., Watertown, S. D. Transmission mechanism. No. 1,274,467; Aug. 6; v. 253; p. 36.
Stöcklin, Charles. (See Kohler and Stöcklin.)
Stockman, James S., Brooklyn, N. Y. Means for chocking and starting life-boats, &c. No. 1,275,101; Aug. 6; v. 253; p. 215.
Stockton, Frank W., Chicago, Ill. Apparatus for preserving objects containing fluid under pressure. No. 1,276,987; Aug. 27; v. 253; p. 827.
Stoehr, Robert A., Cincinnati, Ohio. Means for laying flooring. No. 1,274,953; Aug. 6; v. 253; p. 174.
Stokes & Smith Company. (See Smith and Reifsnyder, assignors.)
Stokley, Cecil I. (See Andres, Edward M., assignor.)
Storle Engine Company, The. (See Storle, Ole O., assignor.)
Storle, Ole O., Tacoma, Wash., assignor to The Storle Engine Company, Kewaunee, Wis. Internal-combustion engine. No. 1,275,494; Aug. 13; v. 253; p. 347.
Storm, J. C. (See Mayer, Edward R., assignor.)
Storm, James M., Jr., New Haven, Wyo. Tombstone. No. 1,274,809; Aug. 6; v. 253; p. 133.
Stout, Edward, Brighton, Iowa. Hoist. No. 1,276,281; Aug. 20; v. 253; p. 598.
Stover, Ulysses G., Waynesboro, Pa. Fruit-drier. No. 1,276,988; Aug. 27; v. 253; p. 827.
Straitz, John F. (See Kinney and Straitz.)
Straker-Squire Limited. (See North, Oliver D., assignor.)
Strange, George H. (See Welch and Strange.)
Stratton, Harry F., assignor to The Electric Controller & Manufacturing Company, Cleveland, Ohio. Resistance unit. No. 1,275,785; Aug. 13; v. 253; p. 429.
Strobl, Alexander, New York, N. Y. Solidified alcohol. No. 1,277,149; Aug. 27; v. 253; p. 872.
Strom, Eugene N., assignor to Pettibone, Mulliken Company, Chicago, Ill. Switch-stand. No. 1,277,150; Aug. 27; v. 253; p. 872.
Struck, Leonard J., and J. O. Dean, Rochester, N. Y. Trimming attachment for apple-paring machines. No. 1,276,131; Aug. 20; v. 253; p. 557.
Stuart, Francis L., Washington, D. C., assignor to International Conveyor Corporation, New York, N. Y. Storing and reclaiming apparatus. No. 1,275,319; Aug. 13; v. 253; p. 300.
Stuart, Harry G., Paterson, N. J. Ohmmeter. No. 1,275,786; Aug. 13; v. 253; p. 429.
Stuart, Lawrence W., Orchard, Iowa. Attachment for corn-planters. No. 1,274,954; Aug. 6; v. 253; p. 174.
Sturcke, Herman E., Brooklyn, N. Y. Spraying or atomizing system. No. 1,277,269; Aug. 27; v. 253; p. 902.
Sturdevant, Charles R., Worcester, Mass., assignor to The American Steel and Wire Company of New Jersey, Hoboken, N. J. Applying rail-bonds. No. 1,275,990; Aug. 13; v. 253; p. 487.
Sturgis, Gordon R., Hillsboro, Tex. Power transmission. No. 1,276,438; Aug. 20; v. 253; p. 642.
Sturt, Alfred T. (See Mason and Sturt.)
Sturt, Alfred T. (See Mason and Sturt.)
Stuvland, Ingwall O., Everett, Wash. Saw-set. No. 1,274,468; Aug. 6; v. 253; p. 37.
Suckert, Harold C., New York, N. Y. Vacuum fuel-feeding system for gasolene-engines. No. 1,274,810; Aug. 6; v. 253; p. 133.
Suczek, Robert, assignor to C. H. Wheeler Manufacturing Company, Philadelphia, Pa. Condensate and air removing apparatus. No. 1,277,151; Aug. 27; v. 253; p. 872.
Suderov, Abraham, New York, N. Y. Setting for precious stones. No. 1,276,182; Aug. 20; v. 253; p. 567.
Sugiura, Kanematsu. (See Falk and Sugiura.)
Sullivan, Daniel, St. Louis, Mo. Answering-board. No. 1,277,152; Aug. 27; v. 253; p. 872.
Sullivan, Joseph M., assignor to A. J. McDonough, Detroit, Mich. Valve. No. 1,277,153; Aug. 27; v. 253; p. 872.
Sullivan Machinery Company. (See Ball, Albert, assignor.)
Sullivan Machinery Company. (See Gilman, George H., assignor.)
Sullivan Machinery Company. (See Officer and Holmes, assignors.)
Sullivan Machinery Company. (See Oliphant, John, assignor.)
Sullivan, Maurice P., New York, N. Y. Spark-plug. No. 1,275,102; Aug. 6; v. 253; p. 215.
Sullivan, Patrick J., Boston, Mass. Automatic fire-extinguisher. No. 1,275,787; Aug. 13; v. 253; p. 429.
Sullivan, Patrick J. M., Woodcliffe-on-Hudson, N. J., assignor to Monahan Rotary Engine Corporation, New York, N. Y. Internal-combustion engine. No. 1,274,811; Aug. 6; v. 253; p. 133.
Sullivan, Patrick J. M., Woodcliffe-on-Hudson, N. J., assignor to Monahan Rotary Engine Corporation, New York, N. Y. Internal-combustion engine. No. 1,274,812; Aug. 6; v. 253; p. 134.
Sullivan, Patrick J. M., Woodcliffe-on-Hudson, N. J., assignor to Monahan Rotary Engine Corporation, New York, N. Y. Internal-combustion engine. No. 1,274,813; Aug. 6; v. 253; p. 134.
Sullivan, William T., New York, N. Y. Double-roller shade-bracket. No. 1,276,823; Aug. 27; v. 253; p. 784.
Sundee, John R., assignor to Warner Jewelry Case Company, Buffalo, N. Y. Device for displaying finger-rings. No. 1,275,320; Aug. 13; v. 253; p. 300.
Sunden, Alexius, Coquille, Oreg. Lamp-support. No. 1,277,270; Aug. 27; v. 253; p. 902.
Sunderland, Charles C., Trenton, N. J., assignor to John A. Roebling's Sons Company. Swing-hook. No. 1,274,469; Aug. 6; v. 253; p. 37.
Sunderland, John P. (See McGary and Sunderland.)
Sundh, August, Hastings-upon-Hudson, N. Y., assignor to Otis Elevator Company. Fluid motor or pump. No. 1,274,955; Aug. 6; v. 253; p. 174.
Sundius, Herman. (See Andersson, Bengt S., assignor.)
Sundness, Odin A., and R. M. Baker, Chisholm, Minn. Dewaterer and classifier. No. 1,274,814; Aug. 6; v. 253; p. 134.
Surface Combustion, Inc. (See McCourt and Ellis, assignors.)
Susquehanna Silk Mills. (See Scott, William H., Jr., assignor.)
Sutch, Elwood R., Philadelphia, Pa. Bomb. No. 1,277,271; Aug. 27; v. 253; p. 902.
Suter, Oscar M., Chicago, Ill. Foot or road crossing. No. 1,275,321; Aug. 13; v. 253; p. 300.
Sutherland, Louis W., assignor to Kalamazoo Carton Company, Kalamazoo, Mich. Coating-machine. No. 1,276,489; Aug. 20; v. 253; p. 643.
Svenson, John A. F., assignor to The Standard Scale & Supply Company, Pittsburgh, Pa. Distributing mechanism for concrete-mixers. No. 1,276,440; Aug. 20; v. 253; p. 643.
Svenson, Sven, La Crosse, Wis. Air-gun. No. 1,276,989; Aug. 27; v. 253; p. 827.
Swaldmark, Albin P., assignor to Universal Industrial Corporation, Hackensack, N. J. Hose-clamp. (Reissue.) No. 14,503; Aug. 13; v. 253; p. 490.
Swan, John B., Gladstone, Mich. Sanding device for locomotives. No. 1,276,824; Aug. 27; v. 253; p. 784.
Swanson, Clas, Ritzville, Wash. Inserting rings in rope. No. 1,275,103; Aug. 6; v. 253; p. 215.
Swartz, William L. (See Michaels and Humphrey, assignors.)
Swenson, Otto J., assignor of one-half to U. C. Swenson, Los Angeles, Cal. Cotton-planter. No. 1,275,626; Aug. 13; v. 253; p. 384.
Swenson, Urbane C. (See Swenson, Otto J., assignor.)
Swift, George W., Jr., Bordentown, N. J. Making open-face envelops. No. 1,275,323; Aug. 13; v. 253; p. 301.
Swift, George W., Jr., Bordentown, N. J. Window-envelop machine. No. 1,275,788; Aug. 13; v. 253; p. 430.
Swift, George W., Jr., Bordentown, N. J. Making window-envelops. No. 1,276,282; Aug. 20; v. 253; p. 598.
Swift, George W., Jr., Bordentown, N. J. Manufacturing window-envelops. No. 1,276,990; Aug. 27; v. 253; p. 827.
Swift, William S., Independence, Mo. Hog-oiler. No. 1,276,591; Aug. 20; v. 253; p. 685.
Swinehart, James A., Akron, Ohio. Means for making rubber tires. No. 1,276,592; Aug. 20; v. 253; p. 685.
Swope, David, Merchantville, N. J. Automatic take-up attachment for portable-telephone conductors. No. 1,276,825; Aug. 27; v. 253; p. 784.
Sylvester, Walter I., Marcus, Iowa. Foot-throttle for Ford autos. No. 1,276,991; Aug. 27; v. 253; p. 828.
Szarka, August. (See Rudai and Szarka.)
Tabulating Machine Company, The. (See Braitmayer, Otto E., assignor.)

Tacy, Charles, Batavia, N. Y. Potato-digger. No. 1,276,441; Aug. 20; v. 253; p. 643.

Tadejevich, Simeon, San Francisco, Cal. Strainer. No. 1,276,992; Aug. 27; v. 253; p. 828.

Taggart, Dawson M., East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone-exchange system. No. 1,276,442; Aug. 20; v. 253; p. 644.

Tainter, Simon S., Weld, assignor of one-half to G. O. Gardner, Dixfield, Me. Collapsible paste-tube. No. 1,275,495; Aug. 13; v. 253; p. 347.

Taira, Kamezo, and K. Masuda, Denver, Colo. Passenger life-buoy. No. 1,276,826; Aug. 27; v. 253; p. 784.

Takamine, Jokichi, New York, N. Y., and S. Satow, Sendai, Japan. Obtaining proteid matter from corn. No. 1,275,324; Aug. 13; v. 253; p. 301.

Talge, John H., Indianapolis, Ind. Structural member for airplanes. No. 1,276,993; Aug. 27; v. 253; p. 828.

Taliaferro, John C., Baltimore, Md., assignor to Continental Can Company, Incorporated, Syracuse, N. Y. Exhaust-box for canning machinery. No. 1,274,956; Aug. 6; v. 253; p. 175.

Talmage Manufacturing Company, The. (See Lickley, Ralph M., assignor.)

Tanabe, Hakulyo C., Marysville, Cal. Amusement apparatus. No. 1,277,272; Aug. 27; v. 253; p. 903.

Tanner, Harry L., assignor to Sperry Gyroscope Company, Brooklyn, N. Y. System of electrical distribution. No. 1,276,827; Aug. 27; v. 253; p. 785.

Tannler, Marie, Portland, Oreg. Hat-securing means. No. 1,276,828; Aug. 27; v. 253; p. 785.

Tanzer, Gottwerth L., Seattle, Wash. Motor-driven cable-supported carrier. No. 1,276,443; Aug. 20; v. 253; p. 644.

Tatro, Rene E., Kankakee, Ill. Vending-machine. No. 1,275,323; Aug. 13; v. 253; p. 301.

Taube, Clarence W., Niagara Falls, N. Y. Battery-cover. No. 1,276,593; Aug. 20; v. 253; p. 685.

Taylor, Alvin M., Hegewisch, Ill., assignor to General Chemical Company, New York, N. Y. Gas-producer. No. 1,275,789; Aug. 13; v. 253; p. 430.

Taylor, Carroll M., Coatesville, Pa. Armored war-automobile. No. 1,276,444; Aug. 20; v. 253; p. 644.

Taylor, Charles H., Toronto, Ontario, Canada. Thread-cutter. No. 1,276,445; Aug. 20; v. 253; p. 645.

Taylor, Daniel, Dunedin, New Zealand. Binder-file. No. 1,275,104; Aug. 6; v. 253; p. 216.

Taylor, Francisco L., Monclova, Mex. Combination-lock. No. 1,275,991; Aug. 13; v. 253; p. 487.

Taylor, Frank B. (See Millard and Taylor.)

Taylor, Horace H., Oakland, assignor of one-third to F. J. Mayhew, San Francisco, Cal. Hydraulic vehicle-wheel. No. 1,275,790; Aug. 13; v. 253; p. 430.

Taylor, Huston, Redford, Mich. Automatic oil-lubricator. No. 1,276,446; Aug. 20; v. 253; p. 645.

Taylor, Ridley F., and W. W. Wheatley, assignors, by mesne assignments, to W. Horsley, Los Angeles, Cal. Apparatus for producing motion-picture puppet-plays. No. 1,275,496; Aug. 13; v. 253; p. 348.

Taylor, Walter E., Avalon, Pa. Pump. No. 1,277,273; Aug. 27; v. 253; p. 903.

Taylor, William, Ford City, Ontario, Canada, assignor to W. A. Case & Son M'f'g Company, Buffalo, N. Y. Lever-operating mechanism. No. 1,276,133; Aug. 20; v. 253; p. 557.

Teagle Company, The. (See Le Pontois, Leon J., assignor.)

Teagle Company, The. (See Milton, John L., assignor.)

Techmer, Fred W. A., La Crosse, Wis. Plow. No. 1,274,815; Aug. 6; v. 253; p. 135.

Teed, Charles E. (See Timmerhoff, Ernest, assignor.)

Teel, John F., Los Angeles, Cal. Ratchet mechanism for engine-starters. No. 1,275,627; Aug. 13; v. 253; p. 384.

Teeple, Oliver P., Barberton, Ohio, assignor to The Diamond Match Company, Chicago, Ill. Tray and shuck assembling mechanism for box-machines. No. 1,277,154; Aug. 27; v. 253; p. 873.

Tellin, Frank D., Kalona, Iowa. Metal-basket corrugator. No. 1,275,497; Aug. 13; v. 253; p. 348.

Temco Electric Motor Company, The. (See Parker, William H., assignor.)

Terry, Graydon M., Dallas, Tex. Sight-feed measuring device. No. 1,276,448; Aug. 20; v. 253; p. 645.

Terwilliger, Fred G., Almond, N. Y. Cattle-stanchion. No. 1,276,449; Aug. 20; v. 253; p. 646.

Tesla, Nikola, New York, N. Y., assignor to Waltham Watch Company, Waltham, Mass. Speed-indicator. No. 1,274,816; Aug. 6; v. 253; p. 135.

Testrup, Nils, London, England, and T. Bigby, Dumfries, Scotland, assignors to Wetcarbonizing Limited, Westminster, London, England. Fertilizer from peat, and making the same. No. 1,277,155; Aug. 27; v. 253; p. 873.

Thereault, Adrien J., assignor, by mesne assignments, to F. R. Kalck, Amityville, N. Y. Clock mechanism. No. 1,275,791; Aug. 13; v. 253; p. 431.

Thermoid Rubber Company. (See Pardoe, William D., assignor.)

Theurer, Peter S. (See Dietz, Charles, assignor.)

Thew Automatic Shovel Company, The. (See Harris, Hollis H., assignor.)

Thiel, Louis F., Chicago, Ill. Envelop-fastener. No. 1,277,156; Aug. 27; v. 253; p. 874.

Tholl, Nikolaus, Hoosick Falls, N. Y. Throat for brush-making machines. No. 1,276,994; Aug. 27; v. 253; p. 828.

Thomas, Charles O., Jr., United States Army. Field-kitchen. No. 1,276,995; Aug. 27; v. 253; p. 828.

Thomas, Howard D., Seattle, Wash. Wind-shield cleaner. No. 1,276,283; Aug. 20; v. 253; p. 599.

Thomas, Walter H., Spencer, Iowa. Foot-accelerator. No. 1,276,829; Aug. 27; v. 253; p. 785.

Thompson, Andrew F., Englewood, Kans. Nut-lock. No. 1,275,105; Aug. 6; v. 253; p. 216.

Thompson, Harrison F., Vineland, N. J. Water-pail support. No. 1,276,285; Aug. 20; v. 253; p. 599.

Thompson, James D., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Tire-machine. No. 1,275,794; Aug. 13; v. 253; p. 432.

Thompson, James E., Mayville, Wis. Purifying crude hydrocarbons. No. 1,276,284; Aug. 20; v. 253; p. 599.

Thompson, Luther C., Washington, D. C. Pounder washing-machine. No. 1,275,792; Aug. 13; v. 253; p. 431.

Thompson, Myrtus E., Huntsburg, Ohio. Grease-gun. No. 1,276,286; Aug. 20; v. 253; p. 599.

Thompson, Nathan D., Jr., St. Louis, Mo., assignor to The Almetal Manufacturing Company, Maplewood, Mo. Washing-machine. No. 1,275,628; Aug. 13; v. 253; p. 385.

Thompson, Nelson W., Oakland, and F. J. McGraw, Martinez, assignors, by mesne assignments, to Shell Company of California, San Francisco, Cal. Pump. No. 1,275,793; Aug. 13; v. 253; p. 431.

Thompson, Parke H., assignor to Millville Machine Company, Millville, N. J. Shears for glass blanks. No. 1,275,629; Aug. 13; v. 253; p. 385.

Thompson, William S., Leipsic, Ohio. Power-transmission mechanism. No. 1,274,627; Aug. 6; v. 253; p. 83.

Thomson, Alfred J., assignor of one-half to G. H. Capen, Canton, Mass. Fastening or securing means. No. 1,275,176; Aug. 6; v. 253; p. 235.

Thornberry, Charles L., Lincoln, Nebr. Means for securing wood flooring and trimming in place in fireproof buildings. No. 1,274,470; Aug. 6; v. 253; p. 47.

Thorpe, Harold, New York, N. Y. Aerial cableway carrier system. No. 1,276,830; Aug. 27; v. 253; p. 786.

Thoroughgood, John E., Sr., Edgecomb, Wash. Aerial life-saving device. No. 1,275,498; Aug. 13; v. 253; p. 348.

Thorp, William T., Hillsboro, Ill. Ticket-holder. No. 1,274,628; Aug. 6; v. 253; p. 83.

Thorsby, Karl J., assignor to California Corrugated Culvert Company, Oakland, Cal. Radial head-gate. No. 1,275,499; Aug. 13; v. 253; p. 348.

Thurber, Guy P., assignor, by mesne assignments, to Automatic Train Control & Signal Company, Pittsburgh, Pa. Automatic signal. No. 1,274,629; Aug. 6; v. 253; p. 83.

Tibbals, Walter H., Onondaga, assignor to Endfire Extinguisher Company, Syracuse, N. Y. Fire-extinguisher. No. 1,274,957; Aug. 6; v. 253; p. 175.

Tibbetts, Milton, Detroit, Mich., assignor, by mesne assignments, to The Isko Company, Chicago, Ill. Refrigerating apparatus. No. 1,276,450; Aug. 20; v. 253; p. 646.

Tiemann, Harry D., Madison, Wis., and N. D. Betts, Linwood, Utah, assignors, by mesne assignments, to the Government of the United States. Dry-kiln. No. 1,276,451; Aug. 20; v. 253; p. 646.

Tigerstedt, Eric M. C., Copenhagen, Denmark. Sound-directing appliance. No. 1,276,287; Aug. 20; v. 253; p. 599.

Tilford, George H., Providence, R. I., assignor of one-half to R. L. Moorhead, Brooklyn, N. Y. Safety-catch. No. 1,274,630; Aug. 6; v. 253; p. 84.

Tillery, Noah F., Humansville, Mo. Self-cleaning oil-gage. No. 1,276,831; Aug. 27; v. 253; p. 786.

Tillmann, Charles M., Chicago, Ill. Bottle-carrier. No. 1,274,631; Aug. 6; v. 253; p. 84.

Timmerhoff, Ernest, assignor of one-half to C. E. Teed, Elkhart, Ind. Buffer. No. 1,275,500; Aug. 13; v. 253; p. 349.

Tingley, Allen J., Owasso, Mich. Fence. No. 1,275,795; Aug. 13; v. 253; p. 432.

Tirrill, Allen A., Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company. Electrical regulator. No. 1,275,796; Aug. 13; v. 253; p. 432.

Titan Co. A/S. of Norway. (See Goldschmidt, Victor M., assignor.)

Titsworth, John T. (See Howard and Titsworth.)

Todd, Frederick J., Egg Harbor, N. J. Gear actuating and locking mechanism. No. 1,274,471; Aug. 6; v. 253; p. 37.

Toledo Glass Company, The. (See Colburn, Irving W., assignor.)

Toledo Metal Wheel Company, The. (See Weber, John, Jr., assignor.)

Tollefson, Gilbert, Bagley, Minn. Runner attachment for motor-driven vehicles. No. 1,275,797; Aug. 18; v. 253; p. 433.

Tomkins, Edwin F., Coaticook, Quebec, Canada. Lacing-tip. No. 1,276,833; Aug. 27; v. 253; p. 786.

Tomkins, Edwin F., Coaticook, Quebec, Canada. Lace-tipping machine. No. 1,276,834; Aug. 27; v. 253; p. 786.

Tomkinson, Charles C. (See Ogden and Tomkinson.)

Tomkinson, Charles C., Plainfield, N. J., assignor to George H. Frothingham Company, New York, N. Y. Door-control mechanism. No. 1,276,996; Aug. 27; v. 253; p. 829.

Tomlinson, Edward J. (See Libby and Tomlinson.)

Tone, Frank J., assignor to The Carborundum Company, Niagara Falls, N. Y. Purified crystalline alumina and making the same. No. 1,276,134; Aug. 20; v. 253; p. 557.

Tooker, John N. (See Schroeder and Tooker.)

Toomey, John F., New York, N. Y., and W. V. H. Read, Newark, N. J., assignors to American Telephone and Telegraph Company. Artificial-line-selecting system. No. 1,277,274; Aug. 27; v. 253; p. 903.

Torchia, Julius C., Hazleton, Pa. Fastener-inserting machine. No. 1,274,817; Aug. 6; v. 253; p. 135.

Tormoen, Joseph. (See Tormoen, Nickolai and J.)

Tormoen, Nickolai and J., Taylor, Wis. Gear-shifting mechanism. No. 1,274,632; Aug. 6; v. 253; p. 84.

Tosch, William F., Kansas City, Mo. Lawn-mower. No. 1,275,798; Aug. 13; v. 253; p. 433.

Toth, Joe F., Detroit, Mich. Map-indicator. No. 1,276,835; Aug. 27; v. 253; p. 787.

Townsend, John R., Chicago, Ill. Air-brake switch. No. 1,275,326; Aug. 13; v. 253; p. 301.

Travelight Mfg. Co. (See Schisgall, Theodore, assignor.)

Trayne, John H. (See Bartlett and Trayne.)

Tregoning, Frank, Seattle, Wash. Boat. No. 1,274,818; Aug. 6; v. 253; p. 136.

Tremont, Roxie. (See Gravert, Reimer N., assignor.)

Tribe, Charles J., Ogden, Utah. Cow-tail holder. No. 1,274,633; Aug. 6; v. 253; p. 84.

Tripke, Paul, Jersey City, N. J. Egg beater and mixer. No. 1,274,634; Aug. 6; v. 253; p. 84.

Tripp, Burton H., Philadelphia, Pa., and H. V. Ramsay, Gloucester City, N. J. Air-feeding device for forges, furnaces, and the like. No. 1,276,836; Aug. 27; v. 253; p. 787.

Tronmo, Morris M., New Point, Ind. Coping-tile for roofs and the like. No. 1,276,288; Aug. 20; v. 253; p. 600.

Troxler, John F., Greensboro, N. C. Receptacle-cover. No. 1,274,819; Aug. 6; v. 253; p. 136.

Truck, Tractor and Manufacturing Company. (See Jacobs Trussell, Clyde B., Omaha, Nebr. Gearing. No. 1,275,106; Aug. 6; v. 253; p. 216.

Tschudy, William, Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company. Measuring device. No. 1,274,635; Aug. 6; v. 253; p. 85.

Tuck, Bennett J., Richmond, Va., assignor to American Tobacco Co., New York, N. Y. Plunger moistening and cleaning device for packing-machines. No. 1,276,452; Aug. 20; v. 253; p. 646.

Tucker, Margaret R., Birmingham, Ala. Face-stay. No. 1,274,636; Aug. 6; v. 253; p. 85.

Tune, Thomas J., Cleveland, Ohio, assignor to Kellogg Switchboard & Supply Company, Chicago, Ill. Telephone system with instantaneous disconnect and recall. No. 1,276,997; Aug. 27; v. 253; p. 829.

Tunnell, Raymond W., Philadelphia, Pa. Vegetable glue or adhesive. No. 1,275,799; Aug. 13; v. 253; p. 433.

Turanycz, Theodore, Goodeve, Saskatchewan, Canada. Apparatus for stringing wires. No. 1,275,501; Aug. 13; v. 253; p. 349.

Turbayne, William A., and T. R. Du Bois, assignors to U. S. Light & Heat Corporation, Niagara Falls, N. Y. Dynamo-electric machine. No. 1,276,594; Aug. 20; v. 253; p. 685.

Turner, Harold H., Chicago, Ill. Motor or engine. No. 1,275,502; Aug. 13; v. 253; p. 349.

Turner, Harold H., Chicago, Ill. Motor or engine. No. 1,275,503; Aug. 13; v. 253; p. 350.

Turner, Walter V., Wilkinsburg, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Fluid-pressure brake apparatus. No. 1,276,998; Aug. 27; v. 253; p. 830.

Turner, Walter V., Wilkinsburg, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Retaining-valve device. No. 1,276,999; Aug. 27; v. 253; p. 830.

Turner, Walter V., Wilkinsburg, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Motor for door and step controllers. No. 1,277,000; Aug. 27; v. 253; p. 830.

Turner, Walter V., Wilkinsburg, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Locomotive brake device. No. 1,277,001; Aug. 27; v. 253; p. 830.

Tussing, Benjamin F., Fruitland, Idaho. Fruit-gathering device. No. 1,276,453; Aug. 20; v. 253; p. 647.

Tverdahl, Edward A., assignor of one-half to J. F. Davis, Chicago, Ill. Rebound-check shock-absorber. No. 1,275,177; Aug. 6; v. 253; p. 236.

Twombly, Willard I., New York, N. Y., assignor, by mesne assignments, to D. S. Dodge, Westogue, Conn. Flying-machine. No. 1,277,845; Aug. 27; v. 253; p. 921.

U. S. Light & Heat Corporation. (See Nelson, Lewis W., assignor.)

U. S. Light & Heat Corporation. (See Turbayne and Du Bois, assignors.)

U. S. Slicing Machine Company. (See Van Berkel, Cornelis F. M., assignor.)

Uhlinger, Roy H. (See Brownlee and Uhlinger.)

Ulderup, Johannes P., New York, N. Y. Actuating and reversing mechanism for pumps. No. 1,275,800; Aug. 13; v. 253; p. 433.

Ulrich, Paul D., assignor of one-half to A. T. Hellman, Hershey, Pa. Photograph-washer. No. 1,276,289; Aug. 20; v. 253; p. 600.

Underwood Computing Machine Company. (See Barnard, Walter E., assignor.)

Underwood Computing Machine Company. (See Carlin, Samuel E., assignor.)

Underwood Computing Machine Company. (See Degener, Gustave O., assignor.)

Underwood Computing Machine Company. (See Hart, Frederick A., assignor.)

Underwood Computing Machine Company. (See Stickney, Burnham C., assignor.)

Underwood Computing Machine Company. (See Wright, Walter, assignor.)

Underwood Typewriter Company. (See Shields, Curtis W., assignor.)

Underwood Typewriter Company. (See Wernery, Lester A., assignor.)

Union Draft Gear Company. (See Cardwell, James R., assignor.)

Union Special Machine Company. (See Berger, Joseph, Jr., assignor.)

Union Special Machine Company. (See Chalman, John E., assignor.)

Union Special Machine Company. (See Clark, Nelson D., assignor.)

Union Special Machine Company. (See Hughes, Robert R., Jr., assignor.)

Union Special Machine Company. (See Moffatt, James R., assignor.)

Union Special Machine Company. (See Onderdonk, Lansing, assignor.)

Union Special Machine Company. (See Lindquist, Gustave F., assignor.)

Union Special Machine Company. (See Moffatt, James R., assignor.)

Union Special Machine Company. (See Seymour, Dudley S., assignor.)

Union Special Machine Company. (See Onderdonk, Lansing, assignor.)

Union Special Machine Company. (See Seymour, Dudley S., assignor.)

United Engineering & Foundry Company, The. (See Holmes, Thomas E., assignor.)

United Printing Machinery Company. (See Glass, William C., assignor.)

United Shoe Machinery Corporation. (See Ashton, Orrell, assignor.)

United Shoe Machinery Corporation. (See Bazzoni, Lewis J., assignor.)

United Shoe Machinery Corporation. (See Borden, William H., assignor.)

United Shoe Machinery Corporations. (See Cavanagh, James, assignor.)

United Shoe Machinery Corporation. (See Furber, Frederick M., assignor.)

United Shoe Machinery Corporation. (See Hadaway, John B., assignor.)

United Shoe Machinery Corporation. (See Hamm, Carl F., assignor.)

United Shoe Machinery Corporation. (See Hill, George S., assignor.)

United Shoe Machinery Corporation. (See Jerram and Gouldbourn, assignors.)

United Shoe Machinery Corporation. (See Julian, Gideon, assignor.)

United Shoe Machinery Corporation. (See Keall, Harrington, and Bassett, assignors.)

United Shoe Machinery Corporation. (See La Rouche, Joseph H., assignor.)

United Shoe Machinery Corporation. (See Mayo, Benjamin F., assignor.)

United Shoe Machinery Corporation. (See Pym, Charles F., assignor.)

United Shoe Machinery Corporation. (See Simmons, Ralph C., assignor.)

United Shoe Machinery Corporation. (See Smith, Edwin W., assignor.)

United Shoe Machinery Corporation. (See Standish, John F., assignor.)

United States Bolt Lock Company. (See Bakst, Max, assignor.)

United States Graphite Company, The. (See Adams, Charles W., assignor.)

United States Machine Gun Company. (See Wallace, Herbert, assignor.)

United States Nickel Company. (See Pawel and Rekate, assignors.)

United Switch Company of Delaware. (See Shepherd, Marshall L., assignor.)

Universal Camera Company. (See Davis, Ernest W., assignor.)

Universal Draft Gear Attachment Co. (See Nash, Charles J., assignor.)

Universal Form Clamp Company. (See Newton, George F., assignor.)

Universal Industrial Corporation. (See Swaidmark, Albin P., assignor.) (Reissue.)

Universal Patents Company. (See Jennings, Victor H., assignor.)

Universal Patents Company. (See Spalding, George W., assignor.)

University Garage Company. (See Barsby, Thomas F., assignor.)

Unsinger, Philip H., Fremont, Ohio. Pickle-spear. No. 1,275,504; Aug. 13; v. 253; p. 350.
Utts, William A., Ardmore, Okla. Display novelty for moving vehicles. No. 1,275,827; Aug. 13; v. 253; p. 302.
Vacuum Churn Corporation, The. (See Heller, Ernst B., assignor.)
Vail, Robert W., New York, N. Y. Non-sinkable ship. No. 1,274,821; Aug. 6; v. 253; p. 136.
Valenzuela, Alberto, assignor of one-half to R. A. Nobriga, Valparaiso, Chile. Automatic trap for rats, mice, and wild animals. No. 1,274,959; Aug. 6; v. 253; p. 176.
Vallast, William E., *et al.* (See Melson, John T., assignor.)
Van Auken, Clarence E., assignor to C. F. Van Auken, Chicago, Ill. Duplex oscillating saw. No. 1,274,820; Aug. 6; v. 253; p. 136.
Van Auken, Cora F. (See Van Auken, Clarence E., assignor.)
Van Berkel, Cornelis F. M., assignor to U. S. Slicing Machine Company, Laporte, Ind. Holder for slicing-machines. No. 1,274,958; Aug. 6; v. 253; p. 175.
Van Berkel, Cornelis F. M., assignor to U. S. Slicing Machine Company, Laporte, Ind. Grip for slicing-machines. No. 1,276,135; Aug. 20; v. 253; p. 557.
Van Buren, Robert W., White Plains, N. Y. Garment-pressing device. No. 1,275,801; Aug. 13; v. 253; p. 434.
Van den Berg, Henry, Montreal, Quebec, Canada. Safety-razor. No. 1,276,712; Aug. 27; v. 253; p. 755.
Van Deventer, Harry R., Sumter, S. C., assignor to Splitdorf Electrical Company, Newark, N. J. Automatic winding means for talking-machines. No. 1,275,630; Aug. 13; v. 253; p. 385.
Van Deventer, John H., Yonkers, N. Y. Equipment-index. No. 1,276,454; Aug. 20; v. 253; p. 647.
Van Name, Joshua V., Mariners Harbor, N. Y. Rifle-grip. No. 1,277,002; Aug. 27; v. 253; p. 830.
Van Ness, Henry E. (See Bendix and Van Ness.)
Van Swaay, Gerardus J., Delft, and H. I. Keus, Hengelo, Netherlands. Device for transmitting fluctuations in the voltage or current of an alternating-current system to electro-responsive or magnetically-operated devices. No. 1,275,631; Aug. 13; v. 253; p. 386.
Van Sweringen, George N., assignor to Chicago Railway Equipment Company, Chicago, Ill. Brake-beam-hanger-locking key. No. 1,277,157; Aug. 27; v. 253; p. 874.
Van Valkenburg, Burt R., Oakland, Cal. Note-accenting device. No. 1,276,595; Aug. 20; v. 253; p. 686.
Vandeground, George, Cleveland, Ohio. Machine for displaying wall-paper. No. 1,274,637; Aug. 6; v. 253; p. 85.
Vander Horst, Henry. (See Billingham, Milton C. J., assignor.)
Vandervell, Charles A. (See Midgley, Albert H., assignor.)
Varicle, Roger H. (See Sherburne and Varicle.)
Varley, Thomas W., New York, N. Y., assignor to Westinghouse Electric and Manufacturing Company. Electrical measuring instrument. No. 1,274,822; Aug. 6; v. 253; p. 137.
Vass, Harry, Summit, N. J. Aeroplane-propeller. No. 1,276,455; Aug. 20; v. 253; p. 647.
Vass, Leslie E., Henderson, Ky. Hair-clipper. No. 1,275,107; Aug. 6; v. 253; p. 216.
Vasselli, Anthony, Newark, N. J., assignor to Otto Heineman Phonograph Supply Co., Inc. Fastening device. No. 1,276,456; Aug. 20; v. 253; p. 648.
Vaughan, David F., Riverton, N. J. Anticreeper for railway-rails. No. 1,276,457; Aug. 20; v. 253; p. 648.
Vaughn, John L., assignor of one-half to C. A. Fey, San Francisco, Cal. Automatic talking-machine. No. 1,274,960; Aug. 6; v. 253; p. 176.
Veyret, Louis, Paris, France. Back-pedaling change-speed gear applicable to bicycles. No. 1,275,505; Aug. 13; v. 253; p. 350.
Vickers Limited. (See Dawson and Horne, assignors.)
Vidrine, Homer, assignor of one-half to L. L. Broussard, Houston, Tex. Folding crib. No. 1,275,632; Aug. 13; v. 253; p. 386.
Vineyard, Pleas E., assignor of one-half to R. E. Lee, Windom, Tex. Accelerating foot-throttle for use on automobile-engines. No. 1,274,823; Aug. 6; v. 253; p. 137.
Vinsering, Harry, Chicago, Ill. Triple sanding apparatus. No. 1,275,108; Aug. 6; v. 253; p. 217.
Vivarttas, William O., Weehawken, N. J. Work-gripping tool. No. 1,276,596; Aug. 20; v. 253; p. 686.
Vogel, Arthur M., Centralia, Wash. Flushing mechanism. No. 1,277,275; Aug. 27; v. 253; p. 903.
Vogel, Christian H. (See Joy and Vogel.)
Voight, George F., San Francisco, Cal. Spring suspension for road-vehicles. No. 1,274,638; Aug. 6; v. 253; p. 86.
Vonde Veld, Edwin A., Willard, N. Mex. Liquid measuring and dispensing device. No. 1,276,136; Aug. 20; v. 253; p. 558.
Voorhees, Walter K., assignor to Standard Manufacturing Company, Cedar Falls, Iowa. Fastening device for gates. No. 1,275,506; Aug. 13; v. 253; p. 350.
Vuilleumier, Rudolph, New Rochelle, N. Y. Method and apparatus for inducing heat changes. No. 1,275,507; Aug. 13; v. 253; p. 351.
W. A. Case & Son M'f'g Company. (See Taylor, William, assignor.)
W. H. McElwain Company. (See Ryan and Ayer, assignors.)
W. R. Ostrander & Company. (See Brockett, Charles W., assignor.)
W. S. Rockwell Company. (See Rockwell, Walter S., assignor.)
Wachs, Walter G. (See Gallup and Wachs.)
Waddell, John M., Greenfield, Ohio. Phonograph. No. 1,274,640; Aug. 6; v. 253; p. 86.
Wade, William O., Los Angeles, Cal., and C. C. Chappelle, assignors to Railway Improvement Company, New York, N. Y. Indicating device. No. 1,275,828; Aug. 13; v. 253; p. 302.
Wadhams, George, and A. T. Best, Birmingham, England. Driving-chain. No. 1,275,329; Aug. 13; v. 253; p. 303.
Wadsworth, Frank L. O., Pittsburgh, Pa., assignor to Ball Brothers Glass Manufacturing Company, Muncie, Ind. Glass-working. No. 1,275,178; Aug. 6; v. 253; p. 236.
Wagenhorst, James H., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Vehicle-wheel rim. No. 1,275,109; Aug. 6; v. 253; p. 217.
Wagenhorst, James H., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Tire-rim. No. 1,276,597; Aug. 20; v. 253; p. 686.
Wagner, Elbert L., Packard, Ky. Tube-splitter. No. 1,276,458; Aug. 20; v. 253; p. 649.
Wagner, Frank J., and J. G. Carney, Erie, Pa. Fluidmeter. No. 1,274,642; Aug. 6; v. 253; p. 87.
Wagner, George, assignor of one-half to J. A. Borkman, Oakland, Cal. Speed-limit warning and theft alarm. No. 1,275,330; Aug. 13; v. 253; p. 303.
Wagner, John C., Cleveland, Ohio. Hat-clamp. No. 1,277,276; Aug. 27; v. 253; p. 904.
Wagner, John H., Aspinwall, Pa. Filing device. No. 1,275,507; Aug. 13; v. 253; p. 351.
Wagner, Martin, Larson, N. D. Washing-machine. No. 1,274,641; Aug. 6; v. 253; p. 87.
Wahl Company, The. (See Dunker, John G., assignor.)
Wahl Company, The. (See McKay, Henry N., assignor.)
Wahl Company, The. (See Poole, Arthur F., assignor.)
Wahle, Gervas P., New Albany, Ind. Signaling device. No. 1,276,459; Aug. 20; v. 253; p. 649.
Waid, Calvin R., Birmingham, Ala. Mine-car running-gear. No. 1,275,188; Aug. 6; v. 253; p. 240.
Waid, Calvin R., assignor to Birmingham Key Hook Company, Birmingham, Ala. Key-hook. No. 1,276,137; Aug. 20; v. 253; p. 558.
Wait, Henry H., Chicago, Ill. Steam-turbine. No. 1,274,643; Aug. 6; v. 253; p. 87.
Waite, Guy B., New York, N. Y. Tire-protector. No. 1,275,633; Aug. 13; v. 253; p. 386.
Waite, Guy B., New York, N. Y. Wheel-tire. No. 1,275,634; Aug. 13; v. 253; p. 386.
Waite, Harry F., New York, N. Y. X-ray system. No. 1,277,003; Aug. 27; v. 253; p. 831.
Walden, Jesse F., Merryville, La. Aeroplane. No. 1,277,277; Aug. 27; v. 253; p. 904.
Walker, Edwin L., Denver, Colo. Air-heater. No. 1,276,460; Aug. 20; v. 253; p. 649.
Walker, James W., Montreal, Quebec, Canada. Gas-generating and heating apparatus. No. 1,276,837; Aug. 27; v. 253; p. 787.
Walker, Samuel, New York, N. Y. Mouthpiece-guard for smoking-pipes. No. 1,277,159; Aug. 27; v. 253; p. 875.
Walker, Thomas B., Austin, Tex. Process of and apparatus for hydrogenating fats, oils, waxes, and the like. No. 1,276,290; Aug. 20; v. 253; p. 600.
Wall, John D., Minneapolis, Minn. Timed egg-boiler. No. 1,277,158; Aug. 27; v. 253; p. 874.
Wall, Ormond E., Honolulu, Hawaii. Toy. No. 1,275,331; Aug. 13; v. 253; p. 303.
Wall, Robert C., Philadelphia, Pa. Wheel. No. 1,274,472; Aug. 6; v. 253; p. 38.
Wallace, George, High Holborn, London, England. Measuring and marking gage. No. 1,275,802; Aug. 13; v. 253; p. 434.
Wallace, Halbert C., Kansas City, Mo. Fertilizer-distributing mechanism. No. 1,275,332; Aug. 13; v. 253; p. 304.
Wallace, Herbert, Springfield, assignor, by mesne assignments, to United States Machine Gun Company, Boston, Mass. Cartridge-shell extractor. No. 1,275,808; Aug. 13; v. 253; p. 434.
Wallace, Thomas, Wabash, Ind. Slide. No. 1,274,824; Aug. 6; v. 253; p. 137.
Wallach, Roger N., Wappingers Falls, N. Y. Manufacture of phenol and allied products. No. 1,274,961; Aug. 6; v. 253; p. 176.
Waller, Francis M., Stafford, England. Mechanical tractor for agricultural purposes. No. 1,274,473; Aug. 6; v. 253; p. 38.
Walling, Frederick J., Lomax, Ill. Pipe-fitting. No. 1,276,291; Aug. 20; v. 253; p. 601.
Walsh, Michael D. (See Butler, Stevens, and Walsh.)
Walsh, Thomas P., Boston, Mass., assignor, by mesne assignments, to American Warp-Drawing Machine Company. Machine for selecting, spooling, shearing, and drawing in yarn for Axminster looms. No. 1,274,474; Aug. 6; v. 253; p. 39.
Walsh, Thomas P., Boston, Mass., assignor, by mesne assignments, to American Warp-Drawing Machine Company. Machine for selecting, spooling, shearing, and drawing in yarn for Axminster looms. No. 1,275,183; Aug. 6; v. 253; p. 238.
Walsh, Walter W., Wilkinsburg, Pa. Electric fuse. No. 1,275,110; Aug. 6; v. 253; p. 217.

Walter, Sylvester C., Malone, Wash. Steam washing-machine. No. 1,275,804; Aug. 13; v. 253; p. 435.
Walters, Abram R., Alhambra, Cal. Visible-signal mechanism. No. 1,275,111; Aug. 6; v. 253; p. 217.
Waltham Watch Company. (See Tesla, Nikola, assignor.)
Waltz, Emil. (See Meyer and Waltz.)
Wamsley, Wayne D., Lester, Pa., assignor to Lester Piano Company. Automatic musical instrument. No. 1,275,509; Aug. 13; v. 253; p. 351.
Wanner, Albert, Jr., New York, N. Y. Folding-leaf table. No. 1,274,475; Aug. 6; v. 253; p. 39.
Ward Baking Company. (See Kohman, Henry A., assignor.)
Ward, John T., Hardin, Ky. Automatic hose-coupling. No. 1,276,138; Aug. 20; v. 253; p. 559.
Ware, William B., assignor of one-half to A. T. Madra, Memphis, Tenn. Sampling-machine. No. 1,274,962; Aug. 6; v. 253; p. 176.
Wargo, John, Jr., Trenton, N. J. Portable carousel. No. 1,276,292; Aug. 20; v. 253; p. 601.
Waring, Stewart, Evanston, assignor to Sears, Roebuck and Company, Chicago, Ill. Apparatus for trimming and marking wall-paper. No. 1,274,476; Aug. 6; v. 253; p. 39.
Warne, John T., Burnaby, British Columbia, Canada. Lock. No. 1,274,477; Aug. 6; v. 253; p. 40.
Warner, Adna D., Mishawaka, Ind., assignor to Mishawaka Woolen Manufacturing Company. Last connection. No. 1,276,293; Aug. 20; v. 253; p. 601.
Warner Brothers Company, The. (See Warner, De Ver H., assignor.)
Warner, De Ver H., assignor to The Warner Brothers Company, Bridgeport, Conn. Corset. No. 1,277,100; Aug. 27; v. 253; p. 875.
Warner Jewelry Case Company. (See Sundee, John R., assignor.)
Warr, Harold G., assignor to The P & M Company, Chicago, Ill. Rail-anchor. No. 1,274,825; Aug. 6; v. 253; p. 137.
Warren, Frank D., assignor to The Cycle Supplies Company, Colorado Springs, Colo. Pedal for cycles. No. 1,276,139; Aug. 20; v. 253; p. 559.
Warrick, F. G. (See Knudsen, Berney, assignor.)
Wason, Georgi E., assignor of one-third to P. Wenger, Sault Ste. Marie, Ontario, Canada. Kitchen-stove. No. 1,275,510; Aug. 13; v. 253; p. 352.
Wassell, Clifford R., assignor to himself, E. C. Jensen, Chicago, W. H. Winslow, River Forest, and C. A. Brown, Hinsdale, Ill. Oil-burner. No. 1,274,644; Aug. 6; v. 253; p. 87.
Wasylowich, Pankracy, Chelsea, Mass. Soldier's protector. No. 1,274,645; Aug. 6; v. 253; p. 88.
Waterfield, John, Providence, assignor, by mesne assignments, to Shannock Narrow Fabric Company, Pawtucket, R. I. Knitted fabric. No. 1,276,294; Aug. 20; v. 253; p. 601.
Waterman, Lewis E., Rockford, assignor to Emerson-Brantingham Company, Chicago, Ill. Planter. No. 1,275,333; Aug. 13; v. 253; p. 304.
Waters, Farrell A. (See Keller and Waters.)
Waters, George H., Glenfield, N. Y. Non-clogging corn-harvester knife. No. 1,276,295; Aug. 20; v. 253; p. 602.
Watkins, Harvey L., Philadelphia, Pa. Game. No. 1,275,805; Aug. 13; v. 253; p. 435.
Watkins, Leigh, El Paso, Tex. Trailer. No. 1,276,598; Aug. 20; v. 253; p. 686.
Watrous, Earl G., Chicago, Ill. Lavatory-fixture. No. 1,274,646; Aug. 6; v. 253; p. 88.
Watts, Arthur, Bellingham, Wash. Stump-burner. No. 1,276,140; Aug. 20; v. 253; p. 559.
Watts, Ben, assignor of forty-nine one-hundredths to W. P. Godfrey, Jarbidge, Nev. Pipe-wrench. No. 1,275,334; Aug. 13; v. 253; p. 304.
Watts, Howard W., Bloomsburg, Pa. Fly-trap. No. 1,275,112; Aug. 6; v. 253; p. 218.
Waxbom, Carl J. E., Westerville, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Mining apparatus. No. 1,276,141; Aug. 20; v. 253; p. 559.
Waxbom, Carl J. E., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Mining-machine truck. No. 1,276,142; Aug. 20; v. 253; p. 560.
Way, Alfred F., Charlotte, Mich. Ash-pan. No. 1,275,335; Aug. 13; v. 253; p. 304.
Waydlich, Aloys, New York, N. Y. Kinetoscope for projecting stereoscopic moving pictures. No. 1,276,838; Aug. 27; v. 253; p. 788.
Weaser, William H., Pittsfield, Mass. Attachment for phonographs. No. 1,275,635; Aug. 13; v. 253; p. 387.
Weatherill, Henry G., Elgin, Ill. Attachment for vises. No. 1,275,336; Aug. 13; v. 253; p. 305.
Weaver, Ezra L., assignor of one-half to G. J. Madden, Toledo, Ohio. Brake mechanism for vehicles. No. 1,276,296; Aug. 20; v. 253; p. 602.
Webb, Frank I., McKeesport, Pa. Air-generator. No. 1,274,478; Aug. 6; v. 253; p. 40.
Webb, Jennie H. (See Boyer, George F., assignor.)
Weber, George L., Philadelphia, Pa. Flying-machine frame. No. 1,274,963; Aug. 6; v. 253; p. 177.
Weber, John, Jr., assignor to The Toledo Metal Wheel Company, Toledo, Ohio. Juvenile vehicle. No. 1,277,161; Aug. 27; v. 253; p. 875.
Weber, William H., Detroit, Mich. Musical block. No. 1,276,839; Aug. 27; v. 253; p. 788.
Webster, Arthur S. (See Hancock, Harry H., assignor.)
Webster Electric Company. (See Geist, Harry F., assignor.)
Wee, Ell L., Huxley, Iowa. Wire-fence structure. No. 1,276,840; Aug. 27; v. 253; p. 788.
Weeks, Jackson S., *et al.*, trustees. (See Weeks, Joseph H., assignor.)
Weeks, Joseph H., Rutledge, assignor to J. S. Weeks, Delaware county, and R. M. Weeks, Philadelphia, Pa., trustees. Process and apparatus for etching. No. 1,276,599; Aug. 20; v. 253; p. 687.
Weeks, Joseph H., Rutledge, assignor to J. S. Weeks, Delaware county, and R. M. Weeks, Philadelphia, Pa., trustees. Electrical etching apparatus. No. 1,276,600; Aug. 20; v. 253; p. 687.
Weeks, Raymond M., *et al.*, trustees. (See Weeks, Joseph H., assignor.)
Wegner, Lewis E., Hot Springs, Ark. Wrench. No. 1,277,162; Aug. 27; v. 253; p. 875.
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Weible, John. (See Beck, Weible, and Houlahen.)
Weickel, Henry, Milwaukee, assignor to Pawling and Harnischfeger Company, West Milwaukee, Wis. Grapple. No. 1,276,143; Aug. 20; v. 253; p. 560.
Welland, Alfred, East Orange, N. J. Carbureter for internal-combustion engines. No. 1,274,964; Aug. 6; v. 253; p. 177.
Welland, Alfred, East Orange, N. J. Carbureter for internal-combustion engines. No. 1,274,965; Aug. 6; v. 253; p. 177.
Welland, Alfred, Philadelphia, Pa. Carbureter for internal-combustion engines. No. 1,276,841; Aug. 27; v. 253; p. 788.
Welland, Alfred, Philadelphia, Pa. Carbureter for internal-combustion engines. No. 1,276,842; Aug. 27; v. 253; p. 788.
Weinberg, Hosea I., Minneapolis, Minn. Ash-sifter for furnaces and the like. No. 1,276,461; Aug. 20; v. 253; p. 649.
Weiser, Frank J. W., Elmhurst, Ill. Piano. No. 1,275,806; Aug. 13; v. 253; p. 435.
Weir, William W. (See Casper, Albert, assignor.)
Weis, John P. Nyack, N. Y., assignor, by mesne assignments, to Metropolitan Sewing Machine Corporation, Dover, Del. Strip-feeding means for sewing-machines. No. 1,277,004; Aug. 27; v. 253; p. 831.
Weis, John P., Nyack, N. Y., assignor, by mesne assignments, to Metropolitan Sewing Machine Corporation, Dover, Del. Sewing-machine. No. 1,277,005; Aug. 27; v. 253; p. 831.
Weis, John P., assignor to Metropolitan Sewing Machine Corporation, Nyack N. Y. Wearing-apparel. No. 1,277,006; Aug. 27; v. 253; p. 832.
Weis, John P., assignor to Metropolitan Sewing Machine Corporation, Nyack, N. Y. Wearing-apparel. No. 1,277,007; Aug. 27; v. 253; p. 832.
Weis, John P., assignor to Metropolitan Sewing Machine Corporation, Nyack, N. Y. Elastic-strip-feeding means. No. 1,277,008; Aug. 27; v. 253; p. 832.
Weiss, Nettie, Harrisburg, Pa. Automobile-fender. No. 1,275,113; Aug. 6; v. 253; p. 218.
Welch, Albert G., trustee. (See Perry, Hubert M., assignor.)
Welch, Frank H., and G. H. Strange, Lone Wolf, Okla. Weaning-muzzle. No. 1,276,462; Aug. 20; v. 253; p. 649.
Welch, James, Waterbury, Conn. Refrigerator. No. 1,275,511; Aug. 13; v. 253; p. 352.
Weldon, Francis, Reading, England. Crutch. No. 1,277,009; Aug. 27; v. 253; p. 833.
Wellington, Stephen N., assignor to Coalite Limited, London, England. Apparatus for discharging and quenching coke. No. 1,274,826; Aug. 6; v. 253; p. 138.
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Wellman, Frank E., assignor to The Kansas City Gasoline Company, Kansas City, Kans. Oil-refining apparatus. No. 1,275,337; Aug. 13; v. 253; p. 305.
Wells, Alfred A. (See Ellis and Wells.)
Wells, Levi P., Gering, Nebr. End-gate fastener. No. 1,275,338; Aug. 13; v. 253; p. 305.
Wells, Newton C., Globe, Ariz. Wedge-cutting machine. No. 1,275,807; Aug. 13; v. 253; p. 435.
Wells, Wilber E., Minneapolis, Minn. Attachment for bath-room fixtures. No. 1,276,463; Aug. 20; v. 253; p. 649.
Wenderhold, William, New York, N. Y., assignor to Cru Patents Corporation. Film-take-up device. No. 1,275,636; Aug. 13; v. 253; p. 387.
Wenger, Panko. (See Wason, Georgi E., assignor.)
Wenman, Harry O. H., Bishop's Castle, England. Manufacture of phosphorus. No. 1,274,479; Aug. 6; v. 253; p. 40.
Wentworth, Jesse S., Decatur, Ill. Process and machine for soil-tillage. No. 1,276,843; Aug. 27; v. 253; p. 789.
Wentz, Jere L., Passaic, N. J. Conveyer. No. 1,275,808; Aug. 13; v. 253; p. 435.
Wentz, Robert F., Allentown, assignor of one-third to F. E. Geiser and one-third to S. E. Miller, Easton, Pa. Paper-clipper. No. 1,274,966; Aug. 6; v. 253; p. 177.
Wensel, Ernest M., Kansas City, Mo. Garment-stretcher. No. 1,277,010; Aug. 27; v. 253; p. 833.
Werner, Oscar F., San Jose, Cal. Fuel product and making same. No. 1,274,480; Aug. 6; v. 253; p. 40.

Wernery, Lester A., Brooklyn, assignor to Underwood Typewriter Company, New York, N. Y. Type-writing machine. No. 1,275,637; Aug. 13; v. 253; p. 337.
Wernts, Robert L., Freeport, Ill. Automobile-signal. No. 1,275,114; Aug. 6; v. 253; p. 218.
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West, Bailey H., Makanda, Ill. Stump-pulling machine. No. 1,277,163; Aug. 27; v. 253; p. 875.
West, George L., Rockport, Mo. Ice-mitten. No. 1,274,481; Aug. 6; v. 253; p. 41.
West, Leonidas D., Denver, Colo. Smoke-abator. No. 1,275,339; Aug. 13; v. 253; p. 306.
Westbury, William, assignor to L. S. Skelton, Okmulgee, Okla. Glass-drawing apparatus. No. 1,276,465; Aug. 20; v. 253; p. 650.
Western Electric Company. (See Anderegg and Mougey, assignors.)
Western Electric Company. (See Clausen, Henry P., assignor.)
Western Electric Company. (See Goodrum, Charles L., assignor.)
Western Electric Company. (See Harrison, Henry C., assignor.)
Western Electric Company. (See Hinrichsen, Edward E., assignor.)
Western Electric Company. (See Keckler, Charles W., assignor.)
Western Electric Company. (See Lundell, Alben E., assignor.)
Western Electric Company, The. (See Lundquist, Frank A., assignor.)
Western Electric Company. (See Price, Charles S., assignor.)
Western Electric Company. (See Pruessman, Albert, assignor.)
Western Electric Company. (See Roberts, John G., assignor.)
Western Electric Company. (See Scribner, Charles E., assignor.)
Western Electric Company. (See Speed, James B., assignor.)
Western Electric Company. (See Taggart, Dawson M., assignor.)
Western Electric Company. (See Wickstrom, Charles A., assignor.)
Western Electric Company. (See Wright, Joseph L., assignor.)
Western Union Telegraph Company. The. (See Houghtaling, Walter A., assignor.)
Western Union Telegraph Company, The. (See Murray, Donald, assignor.)
Westinghouse Air Brake Company, The. (See Adreon, Robert E., assignor.)
Westinghouse Air Brake Company, The. (See Crittenden, Philip L., assignor.)
Westinghouse Air Brake Company, The. (See Turner, Walter V., assignor.)
Westinghouse Electric and Manufacturing Company. (See Allen, Claxton E., assignor.)
Westinghouse Electric and Manufacturing Company. (See Brackett, Quincy A., assignor.)
Westinghouse Electric and Manufacturing Company. (See Bradshaw and Mylius, assignors.)
Westinghouse Electric and Manufacturing Company. (See Brown, Harold W., assignor.)
Westinghouse Electric and Manufacturing Company. (See Cline, James M., assignor.)
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Westinghouse Electric and Manufacturing Company. (See Edgecomb, Henry R., assignor.)
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Westinghouse Electric and Manufacturing Company. (See Hall, Arthur J., assignor.)
Westinghouse Electric and Manufacturing Company. (See Hellmund, Rudolf E., assignor.)
Westinghouse Electric and Manufacturing Company. (See Hellmund, Ferris, and Perkins, assignors.)
Westinghouse Electric and Manufacturing Company. (See Hellmund, Meyer, and Candee, assignors.)
Westinghouse Electric and Manufacturing Company. (See Holy, George H. F., assignor.)
Westinghouse Electric and Manufacturing Company. (See Lamme, Benjamin G., assignor.)
Westinghouse Electric and Manufacturing Company. (See Lawson, Charles S., assignor.)
Westinghouse Electric and Manufacturing Company. (See Little, George M., assignor.)
Westinghouse Electric and Manufacturing Company. (See McCoy, James P. A., assignor.)
Westinghouse Electric and Manufacturing Company. (See McMahoney, Joseph N., assignor.)
Westinghouse Electric and Manufacturing Company. (See Meyer, Friedrich W., assignor.)
Westinghouse Electric and Manufacturing Company. (See Nelll, Paul, assignor.)
Westinghouse Electric and Manufacturing Company. (See Tirrill, Allen A., assignor.)
Westinghouse Electric and Manufacturing Company. (See Tschudy, William, assignor.)
Westinghouse Electric and Manufacturing Company. (See Varley, Thomas W., assignor.)
Westinghouse Electric and Manufacturing Company. (See Whittaker, Charles C., assignor.)
Westinghouse, Tracy G., New York, N. Y. Reduced-draft device. No. 1,276,844; Aug. 27; v. 253; p. 789.
Westlake, Charles T., assignor to Commonwealth Steel Company, St. Louis, Mo. Car-truck. No. 1,275,340; Aug. 13; v. 253; p. 306.
Westlake, Charles T., assignor to Commonwealth Steel Company, St. Louis, Mo. Trailer-truck for locomotives. No. 1,275,341; Aug. 13; v. 253; p. 306.
Westover, Perry, Clymer, Pa. Signal. No. 1,276,464; Aug. 20; v. 253; p. 650.
Wetcarbonizing Limited. (See Testrup and Rigby, assignors.)
Wetmore, Leslie R., Okmulgee, Okla. Roost for fowls. No. 1,275,342; Aug. 13; v. 253; p. 306.
Wheary, George H., Racine, Wis. Garment-hanger fixture. No. 1,276,845; Aug. 27; v. 253; p. 789.
Wheatly, Wilkins W. (See Taylor and Wheatly.)
Whelpley, Frederick W., and F. A. Bicknell, Greenfield, Mass. Reversing mechanism for taps, drills, etc. No. 1,277,011; Aug. 27; v. 253; p. 833.
Whetstone, Newell E., Poland, Ohio. Conduit or culvert mold. No. 1,275,115; Aug. 6; v. 253; p. 218.
Whipple, Henry P., Rochester, N. Y. Universal center-finder. No. 1,274,647; Aug. 6; v. 253; p. 88.
Whistler, David B., assignor to The American Railway Equipment Company, Dayton, Ohio. Fare-separating device. No. 1,276,144; Aug. 20; v. 253; p. 560.
Whistler, John F., Havana, Kans. Antiskid device. No. 1,277,278; Aug. 27; v. 253; p. 904.
White, Adelaide W., Syracuse, N. Y. Hose-supporter. No. 1,276,145; Aug. 20; v. 253; p. 561.
White, Alexander P., Caldwell, N. J. Composite lath. No. 1,276,146; Aug. 20; v. 253; p. 561.
White, Alexander P., Caldwell, N. J. Composite lath. No. 1,276,147; Aug. 20; v. 253; p. 561.
White, Carl, Jr., assignor to Lucey Manufacturing Corporation, Chattanooga, Tenn. Automatic finger-latch elevator. No. 1,276,297; Aug. 20; v. 253; p. 602.
White, D'Orsay M., assignor to Cadillac Motor Car Company, Detroit, Mich. Hydrocarbon-motor. No. 1,276,846; Aug. 27; v. 253; p. 790.
White, Edwin L., Brooklyn, N. Y. Hanger for light-transmitting bowls. No. 1,275,809; Aug. 13; v. 253; p. 436.
White, Franklin P., Shallotte, N. C. Radius-rod for automobiles. No. 1,274,482; Aug. 6; v. 253; p. 41.
White, Frederick H., New York, N. Y. Screw-driver. No. 1,275,810; Aug. 13; v. 253; p. 436.
White, Henderson N., Cleveland, Ohio. Cornet. No. 1,277,012; Aug. 27; v. 253; p. 833.
White, Henderson N., Cleveland, Ohio. Cornet. No. 1,277,013; Aug. 27; v. 253; p. 834.
White, James L., Buffalo, Tex. Self-lighting lamp-burner. No. 1,277,014; Aug. 27; v. 253; p. 834.
White, Rollin H., Cleveland, assignor to The Cleveland Tractor Company, Euclid, Ohio. Tractor-frame. No. 1,275,343; Aug. 13; v. 253; p. 307.
White, Rollin H., Cleveland Heights, assignor to The Cleveland Tractor Company, Euclid, Ohio. Track-laying tractor. No. 1,275,344; Aug. 13; v. 253; p. 307.
White, Samuel T., Davenport, Iowa. Driving mechanism for washing-machines. No. 1,275,512; Aug. 13; v. 253; p. 352.
White, Warren H., Tacoma, Wash. Beverage extract. No. 1,276,298; Aug. 20; v. 253; p. 602.
White, William E., Graham, N. C. Mitten. No. 1,277,015; Aug. 27; v. 253; p. 834.
Whitehead, Albert H., Hood River, Oreg. Sizing-machine. No. 1,275,513; Aug. 13; v. 253; p. 353.
Whitehead & Hoag Company, The. (See Page, Herman C., assignor.)
Whiting, Theo C., Philadelphia, Pa. Phonograph-motor mechanism. No. 1,276,601; Aug. 20; v. 253; p. 688.
Whitlock, Ralph G., Los Angeles, Cal. Loose-leaf book. No. 1,274,827; Aug. 6; v. 253; p. 138.
Whitney, Leslie D., San Mateo, Cal. Rubbing-container. No. 1,276,299; Aug. 20; v. 253; p. 603.
Whitney, William M. (See Emery, Raymond D., assignor.)
Whitney, William M. (See Farnum, William C., assignor.)
Whitney, William M. (See Loveland, Byron S., assignor.)
Whittaker, Charles C., Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company. System of control. No. 1,275,811; Aug. 13; v. 253; p. 436.
Whitter, Shedrick, Safety Harbor, Fla. Electrical-conductor support. No. 1,275,116; Aug. 6; v. 253; p. 219.
Wickey, Andrew, East Chicago, Ind. Building construction. No. 1,275,345; Aug. 13; v. 253; p. 307.
Wickstrom, Charles A., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Spraying-machine. No. 1,276,466; Aug. 20; v. 253; p. 650.
Wideen, Edward, Vancouver, British Columbia, Canada. Clothes-drier. No. 1,276,300; Aug. 20; v. 253; p. 603.

Widell, Swan O., Rockford, Ill. Gate. No. 1,276,602; Aug. 20; v. 253; p. 688.
Widstrand, Herbert, Chicago, Ill. Wall-light. No. 1,276,467; Aug. 20; v. 253; p. 651.
Wiederwax, Robert W., assignor of one-half to C. Geist, Atlantic City, N. J. Apparatus for heating castings. No. 1,275,638; Aug. 13; v. 253; p. 338.
Wiesenberg, Samuel, New York, N. Y. Horseshoe. No. 1,274,483; Aug. 6; v. 253; p. 41.
Wijkstrom, Martin F. (See Estelle, Axel T. C., assignor.)
Wilbert, Horace, San Francisco, Cal. Vehicle-wheel attachment. No. 1,276,468; Aug. 20; v. 253; p. 651.
Wilcox, Elmer A., Los Angeles, Cal. Automobile-jack. No. 1,276,469; Aug. 20; v. 253; p. 651.
Wilcox, Newton K., Providence, R. I. Traction-wheel. No. 1,275,812; Aug. 13; v. 253; p. 437.
Wilcox, W. H. (See Diebel, Henry, assignor.)
Wilday, Robert, New York, N. Y. Time or date stamp. No. 1,275,813; Aug. 13; v. 253; p. 437.
Wiley, Calvin F., Columbus, Ohio. Ash-sifting shovel. No. 1,277,279; Aug. 27; v. 253; p. 904.
Wilfley, Arthur R., Denver, Colo. Centrifugal pump. No. 1,276,847; Aug. 27; v. 253; p. 790.
Wilkinson, George, Harrogate, England. Thermal switch. No. 1,275,814; Aug. 13; v. 253; p. 437.
Wilkinson, James, Pittsfield, Mass., assignor to General Electric Company. Diaphragm-horn. No. 1,275,815; Aug. 13; v. 253; p. 437.
William Carter Company, The. (See Perkins, Alvah L., assignor.)
William M. Crane Company. (See O'Dowd, Henry W., assignor.)
Williams, Benjamin A., Chester, England. Ammunition case or receptacle. No. 1,274,828; Aug. 6; v. 253; p. 138.
Williams, Elijah. (See Jillson and Williams.)
Williams, Hallie O., Watson, N. Y. Animal catcher and holder. No. 1,277,017; Aug. 27; v. 253; p. 835.
Williams, Joseph S., Riverton, N. J. Resilient cushioning wheel equipment. No. 1,276,148; Aug. 20; v. 253; p. 561.
Williams, Joseph S., Riverton, N. J. Resilient cushioning wheel equipment. No. 1,276,149; Aug. 20; v. 253; p. 562.
Williams, Milton F., assignor to Williams Patent Crusher and Pulverizer Company, St. Louis, Mo. Cage for reducing-machinea. No. 1,275,346; Aug. 13; v. 253; p. 308.
Williams, Milton F., assignor to Williams Patent Crusher and Pulverizer Company, St. Louis, Mo. Cage for reducing-machines. No. 1,275,347; Aug. 13; v. 253; p. 308.
Williams Patent Crusher and Pulverizer Company. (See Williams, Milton F., assignor.)
Williams, Philip K., and G. S. Hurst, assignors to The J. B. Williams Company, Glastonbury, Conn. Powder-receptacle. No. 1,277,281; Aug. 27; v. 253; p. 904.
Williams, Robert N., London, England, assignor to Powers Accounting Machine Company, New York, N. Y. Tabulating machine and cards therefor. No. 1,274,484; Aug. 6; v. 253; p. 41.
Williams, Warren S., Zanesville, Ohio. Pencil. No. 1,274,485; Aug. 6; v. 253; p. 41.
Williamson, Samuel S., and H. D. Boyer, Philadelphia, Pa. Closure for containers. No. 1,275,816; Aug. 13; v. 253; p. 437.
Willie, John, et al. (See Marsh, Frederick, assignor.)
Willis, Carter A. and R. M., Chanute, Kans. Separator. No. 1,274,486; Aug. 6; v. 253; p. 42.
Willis, Reuben M. (See Willis, Carter A. and R. M.)
Willys-Overland Company, The. (See Kehoe, Thomas J., assignor.)
Wilms, Leo W. V., Chicago, Ill. Shoe. No. 1,276,603; Aug. 20; v. 253; p. 689.
Wilputte, Louis, New Rochelle, N. Y. Nozzle and nozzle-mounting. No. 1,274,487; Aug. 6; v. 253; p. 42.
Wilson, Alexander C., Toronto, Ontario, Canada. Dimmer-lens. No. 1,274,648; Aug. 6; v. 253; p. 89.
Wilson, David H., New York, N. Y. Electric battery. No. 1,276,604; Aug. 20; v. 253; p. 689.
Wilson, Green B., Nevada, Iowa. Register-fan. No. 1,274,649; Aug. 6; v. 253; p. 89.
Wilson, Harold L., Holt, Mich. Holder for cleaning blackboard-erasers. No. 1,276,470; Aug. 20; v. 253; p. 652.
Wilson, William, Marietta, Ga. Motor-vehicle driving mechanism. No. 1,274,650; Aug. 6; v. 253; p. 89.
Wilson, William W., Los Angeles, Cal. Well-boring apparatus. No. 1,276,471; Aug. 20; v. 253; p. 652.
Windham, Calvin M., Lamar, S. C. Plow-stock. No. 1,277,016; Aug. 27; v. 253; p. 834.
Windrim, Samuel, and D. D. Young, Belfast, Ireland. Device for developing photographic films and the like. No. 1,274,651; Aug. 6; v. 253; p. 89.
Winget, Nell F., Minneapolis, Minn. Launderable hat. No. 1,274,652; Aug. 6; v. 253; p. 89.
Winslow, William H., et al. (See Wessell, Clifford R., assignor.)
Winston, Overton, Minneapolis, Minn. Headlight. No. 1,276,605; Aug. 20; v. 253; p. 689.
Winter, Ray H. (See Stainbrook and Winter.)
Winters, David L., Philadelphia, Pa. Gas-engine attachment. No. 1,275,117; Aug. 6; v. 253; p. 219.
Winters, David L., Philadelphia, Pa. Key. No. 1,277,164; Aug. 27; v. 253; p. 876.
Winters, Edward B., Coffeyville, Kans. Tractor attachment for automobiles. No. 1,274,968; Aug. 6; v. 253; p. 178.
Winters, Irving B., Wyckoff, N. J. Flush-tank. No. 1,277,165; Aug. 27; v. 253; p. 876.
Wirebounds Patents Company. (See Brown, Norman, assignor.)
Wirt, Charles, Philadelphia, Pa. Electric heating-pad. No. 1,276,150; Aug. 20; v. 253; p. 562.
Wirt, George A., Greensburg, Ind. Broadcast sower. No. 1,274,969; Aug. 6; v. 253; p. 178.
Wise, Clarence E., Washington, D. C. Portable hand-tool for applying binding material to receptacles. No. 1,276,301; Aug. 20; v. 253; p. 603.
Wise, Clarence E., Washington, D. C. Binder-element-tightening mechanism. No. 1,276,302; Aug. 20; v. 253; p. 603.
Wise, Frank A., et al. (See Ludwick, Edward C., assignor.)
Wise, Lovern V., Cleveland, Ohio. Ironing-board. No. 1,276,848; Aug. 27; v. 253; p. 790.
Wite-Kat Soap Company, The. (See Ludekens, Oona, assignor.)
Witherspoon, William C., Bakersfield, Cal. Extensible incandescent lamp. No. 1,276,849; Aug. 27; v. 253; p. 791.
Witt, Arthur G., Hamilton, Ontario, Canada. Shock-absorber. No. 1,276,151; Aug. 20; v. 253; p. 562.
Wojtkowski, Alex. (See Mischanski, Stephen A., assignor.)
Wolak, Piotr, Shelton, Conn. Stretcher. No. 1,275,514; Aug. 13; v. 253; p. 353.
Wold & Company, Torris. (See Cameron, William, assignor.)
Wolf, Augustus, Chambersburg, Pa. Middlings-mill. No. 1,274,829; Aug. 6; p. 253; p. 139.
Wolf, Linus, Chicago, Ill. Producing and separating liquefied gas. No. 1,274,970; Aug. 6; v. 253; p. 179.
Wolington, Arlie A., Quinton, Okla. Rotary engine. No. 1,277,018; Aug. 27; v. 253; p. 835.
Wolter, Carl. (See Hoffmann and Wolter.)
Wompey, John J., Denver, Colo., assignor to The L. Grauman Company. Lining structure for ice-receptacles. No. 1,276,303; Aug. 20; v. 253; p. 604.
Wood, Alexander H., Petros, Tenn., assignor to Wood Equipment Company. Dump. No. 1,274,488; Aug. 6; v. 253; p. 42.
Wood Equipment Company. (See Wood, Alexander H., assignor.)
Wood, Frederick P., Oak Park, Ill., assignor to American Can Company, New York, N. Y. Container-coating machine. No. 1,274,830; Aug. 6; v. 253; p. 139.
Wood, Henry A. W., assignor, by mesne assignments, to Wood Newspaper Machinery Corporation, New York, N. Y. Apparatus for inking printing-presses. No. 1,275,348; Aug. 13; v. 253; p. 308.
Wood, James J., Fort Wayne, Ind., assignor to General Electric Company. Electromagnetic switch. No. 1,275,817; Aug. 13; v. 253; p. 437.
Wood, Nathan & Virkus Company. (See Nathan, Paul, assignor.)
Wood Newspaper Machinery Corporation. (See Wood, Henry A. W., assignor.)
Wood, Victor, assignor of one-half to D. C. Feegles, Fort Worth, Tex. Automatic change-over signal for motion-picture machines. No. 1,275,995; Aug. 13; v. 253; p. 488.
Woodrow, Oliver B., Newton, Iowa. Washing-machine. No. 1,275,515; Aug. 13; v. 253; p. 353.
Woods Motor Vehicle Company. (See Fend, Roland S., assignor.)
Woodstock Typewriter Company. (See Roebuck, Alvah C., assignor.)
Woodward, Elmer C., Hatton, Wash. Feed device for harvesting-machines and the like. No. 1,275,689; Aug. 13; v. 253; p. 388.
Woodward, Hugh L., Lewis, Iowa. Slicer. No. 1,276,152; Aug. 20; v. 253; p. 562.
Woodward, Irving C., Chicago, Ill., assignor to American Postage Meter Co. Postage-meter. No. 1,274,831; Aug. 6; v. 253; p. 139.
Woolley, Rew E., Schenectady, N. Y., assignor to General Electric Company. Measuring instrument. No. 1,275,818; Aug. 13; v. 253; p. 438.
Workman, John A. (See Cretsinger and Workman.)
Worrick, Elmer O., Daet, Philippine Islands. Fiber-cleaning device. No. 1,274,832; Aug. 6; v. 253; p. 140.
Wortman, George C., Denver, Colo. Dumping push-car. No. 1,274,833; Aug. 6; v. 253; p. 140.
Wosinski, John, Detroit, Mich. Ship-protector. No. 1,274,653; Aug. 6; v. 253; p. 90.
Wren, William F., Spokane, Wash. Fountain shaving-brush. No. 1,275,516; Aug. 13; v. 253; p. 353.
Wright, Elsie, Condon, Oreg. Grain-pickling machine. No. 1,275,819; Aug. 13; v. 253; p. 438.
Wright, Ernest B., New Rochelle, assignor to Hanlon & Goodman Co., New York, N. Y. Brush-holder. No. 1,277,019; Aug. 27; v. 253; p. 835.
Wright, George W., Lapel, Ind. Liquid-fuel-supplying apparatus. No. 1,275,349; Aug. 13; v. 253; p. 308.
Wright, James A., et al. (See Short, Byron O., assignor.)
Wright, Joseph L., Cleveland, Ohio, assignor to Western Electric Company, Incorporated. Telephone-exchange system. No. 1,274,654; Aug. 6; v. 253; p. 90.

Wright, Reuben L., Wickliffe-on-the-Lake, assignor to The Electric Controller & Manufacturing Company, Cleveland, Ohio. Motor-control system. No. 1,274,489; Aug. 6; v. 253; p. 43.

Wright, Walter, assignor to Underwood Computing Machine Company, New York, N. Y. Combined type-writing and computing machine. No. 1,274,655; Aug. 6; v. 253; p. 90.

Wright, Walter, assignor to Underwood Computing Machine Company, New York, N. Y. Combined type-writing and computing machine. No. 1,274,834; Aug. 6; v. 253; p. 140.

Wright, Walter, assignor to Underwood Computing Machine Company, New York, N. Y. Combined type-writing and computing machine. No. 1,274,971; Aug. 6; v. 253; p. 179.

Wright, William A., Cypress Inn, Tenn. Wheel spoke and rim repairer. No. 1,277,282; Aug. 27; v. 253; p. 905.

Wupper, Cecilia, *et al.* (See Best, William N., assignor.) (Reissue.)

Wyatt, Donald J., Fremont, Nebr. Car-door hanger. No. 1,274,490; Aug. 6; v. 253; p. 43.

Wyhaillie, Francis M. A., New York, N. Y., assignor of one-half to A. Peyman, Jersey City, N. J. Incandescent lamp. No. 1,275,820; Aug. 13; v. 253; p. 438.

Wylie, Oren E., Washington, Kans. Curtain-bracket. No. 1,275,821; Aug. 13; v. 253; p. 439.

Wyman-Gordon Company. (See Damerell, Mark H., assignor.)

Wynant, William A., Deertrail, Colo. Bean-harvester. No. 1,275,640; Aug. 13; v. 253; p. 388.

Wynne, John F., Atlanta, Ga. Perpetual calendar. No. 1,275,350; Aug. 13; v. 253; p. 309.

Yawger, William H. (See Cooper and Yawger.)

Yeakey, Robert L., Cave in Rock, Ill. Violin. No. 1,275,351; Aug. 13; v. 253; p. 309.

Yeider, Harry A., Grand Rapids, Mich. Coffin-holding device for hearses. No. 1,274,835; Aug. 6; v. 253; p. 141.

Yelton, Charles B. (See Haley and Yelton.)

Yokel, Frank, assignor to Pittsburgh Lamp, Brass & Glass Company, Pittsburgh, Pa. Combined lamp and mirror fixture for automobiles. No. 1,276,850; Aug. 27; v. 253; p. 791.

York, Victor, and W. G. Black, Brea, Cal. Oil-well drive. No. 1,277,166; Aug. 27; v. 253; p. 876.

Young, David D. (See Windrim and Young.)

Young, Francis L., New York, and R. J. Prettie, Jamaica, N. Y., assignors to The Aeolian Company. Disk-record-filing cabinet. No. 1,276,153; Aug. 20; v. 253; p. 568.

Young, George W., *et al.* (See Norman, Frank, assignor.)

Young, Luther A., St. Louis, Mo. Dental disk and holder. No. 1,277,020; Aug. 27; v. 253; p. 835.

Young, Porus J., Santa Susana, Cal. Rubber-retainer. No. 1,277,021; Aug. 27; v. 253; p. 835.

Young, Porus J., Santa Susana, assignor of one-half to S. W. McMichael, Fullerton, Cal. Swimming appliance. No. 1,277,022; Aug. 27; v. 253; p. 836.

Ysul Fibre Company. (See Brown, Alfred G., assignor.)

Zabielski, Alexsander, Watervliet, N. Y. Kaleidoscope. No. 1,274,656; Aug. 6; v. 253; p. 91.

Zeek, Clyde, San Diego, Cal. Armature-circuit-testing apparatus. No. 1,276,304; Aug. 20; v. 253; p. 604.

Zeen, John. (See Zeen, Martinus, assignor.)

Zeen, Martinus, assignor of one-half to J. Zeen, Grand Rapids, Mich. Device for raising and lowering water-closet seats and lids. No. 1,276,472; Aug. 20; v. 253; p. 652.

Zell, Frank D., Jr., Philadelphia, Pa. Controlling device for accelerators. No. 1,274,491; Aug. 6; v. 253; p. 43.

Zenker, Fredrick, Highland Park, assignor to Detroit Fuse & Manufacturing Company, Detroit, Mich. Connector. No. 1,274,492; Aug. 6; v. 253; p. 44.

Ziegler, Alfred A., trustee. (See Hagman, Edwin V., assignor.)

Zoelly, Heinrich, assignor to Aktiengesellschaft der Maschinenfabriken Escher Wyss & Cie., Zurich, Switzerland. Exhaust-connecting branch for turbines. No. 1,276,154; Aug. 20; v. 253; p. 568.

Zorn, Fredrick M., Little Rock, Ark. Track-cleaner for sawmill-carriages. No. 1,274,657; Aug. 6; v. 253; p. 91.

Zumwalt, James M., assignor of one-half to L. M. Zumwalt, Buena Vista, Fla. Adjustable try-square. No. 1,275,822; Aug. 13; v. 253; p. 439.

Zumwalt, Lilla M. (See Zumwalt, James M., assignor.)

Zwermann, Carl H., Kalamazoo, Mich. Kiln. No. 1,275,352; Aug. 13; v. 253; p. 310.

Zwicker, Julius G., Berkeley, Cal. Concrete-pipe machine. No. 1,275,353; Aug. 13; v. 253; p. 310.

ALPHABETICAL LIST OF PATENTEES OF DESIGNS.

Ackerman, Albert H. (See Ferrin and Ackerman.)

Ackerman, Albert H., Massillon, Ohio. Wheel. No. 52,297; Aug. 27; v. 253; p. 925.

Adams, James D., assignor to The Wabash Cabinet Co., Wabash, Ind. Phonograph-cabinet. No. 52,260; Aug. 20; v. 253; p. 717.

Albert Pick & Company. (See Kraus, Jay L., assignor.)

Alvey-Ferguson Company, The. (See Wear and Ely, assignors.)

American Can Company. (See Hoffman, Edmund, assignor.)

American Electrical Heater Company. (See Kuhn and Hand, assignors.)

American Lamp Company. (See Bean, Dixon L., assignor.)

Armstrong, George F., Rutherford, N. J., assignor to Armstrong Rubber Company, Newark, N. J. Non-skid tire. No. 52,298; Aug. 27; v. 253; p. 925.

Armstrong Rubber Company. (See Armstrong, George F., assignor.)

Arney, John W., assignor to Alexander B. Leith, Chicago, Ill. Child's vehicle. No. 52,247; Aug. 6; v. 253; p. 241.

Aronson, Louis V., Newark, N. J. Lamp. No. 52,248; Aug. 6; v. 253; p. 241.

Ball, George E., Bridgeport, Conn., assignor to Whiting Manufacturing Company, New York, N. Y. Handle for a spoon, fork, or similar article. No. 52,249; Aug. 6; v. 253; p. 242.

Barnard, Melville C., Douglas, Ariz. Badge or similar ornament. No. 52,261; Aug. 20; v. 253; p. 718.

Baumler, Carl A., St. Lucas, Iowa. Tool for applying and removing lock-nuts. No. 52,262; Aug. 20; v. 253; p. 718.

Bean, Dixon L., Chicago, Ill., assignor to American Lamp Company. Lighting-fixture. No. 52,299; Aug. 27; v. 253; p. 926.

Belden, Edward H., assignor to The Willys-Overland Company, Toledo, Ohio. Automobile-lamp casing. No. 52,300; Aug. 27; v. 253; p. 926.

Berberian, Vartan, Providence, R. I. Badge or similar article. No. 52,263; Aug. 20; v. 253; p. 718.

Berger, Joseph, Jr., Utica, N. Y., assignor to Union Special Machine Company, Chicago, Ill. Sewing-machine frame. Nos. 52,376–7; Aug. 27; v. 253; p. 938.

Bluhm, Joseph, assignor to The Dana Manufacturing Corporation, Troy, N. Y. Ice-cream spoon, disher, or similar device. No. 52,250; Aug. 6; v. 253; p. 242.

Blumenthal, Isadore, New York, N. Y. Ash-tray and cigar-cutter. No. 52,264; Aug. 20; v. 253; p. 718.

Bosnjak, Martin, Cleveland, Ohio. Window shade and pole bracket. No. 52,265; Aug. 20; v. 253; p. 718.

Bottome, Edgar M., assignor to Fostoria Glass Company, Moundsville, W. Va. Article of manufacture. No. 52,301; Aug. 27; v. 253; p. 926.

Boyton, John C., Cleveland, Ohio. Conduit-fitting. No. 52,302; Aug. 27; v. 253; p. 926.

Breitenstein, Arthur L., Akron, assignor to The Rubber Products Company, Barberton, Ohio. Elastic vehicle-tire. No. 52,266; Aug. 20; v. 253; p. 718.

Breitenstein, Arthur L., Akron, assignor to A. E. Pearce and H. H. Swan, Ashtabula, Ohio. Tire-casing. Nos. 52,303–4; Aug. 27; v. 253; p. 926.

Church, Webb & Close. (See Webb and Close, assignors.)

Close, George L. (See Webb and Close.)

Connor, Martha H., assignor to Tin Decorating Company of Baltimore, Baltimore, Md. Sifter-top or similar receptacle. No. 52,305; Aug. 27; v. 253; p. 927.

Culp, George K., Kansas City, Mo., assignor to United States Tire Company. Article of manufacture. No. 52,306; Aug. 27; v. 253; p. 927.

Curtis & Company Manufacturing Company. (See Steedman, George F., assignor.)

Curtis, Edgar F., Salem, assignor to Joseph W. Woods & Sons Company, Boston, Mass. Woven fabric or similar article. No. 52,307; Aug. 27; v. 253; p. 927.

Dana Manufacturing Corporation, The. (See Bluhm, Joseph, assignor.)

Davis, Charles E. (See Hector and Davis.)

Deckert, Max, assignor to Lindstrom, Smith Company, Chicago, Ill. Electric lantern. No. 52,308; Aug. 27; v. 253; p. 927.

Detroit Heating & Lighting Company, The. (See Joy and Vogel, assignors.)

Deuel, Ella S., Portland, Oreg. Bowl. No. 52,309; Aug. 27; v. 253; p. 927.

Dziezyc, William, Middletown, N. J. Nail-set. No. 52,310; Aug. 27; v. 253; p. 927.

E. C. Tecktonius Manufacturing Co. (See Tecktonius, Emil C., assignor.)

Ely, Bernard M., (See Wear and Ely.)

Engler, William B., Baltimore, Md., assignor to General Motors Corporation, Detroit, Mich. Radiator. No. 52,267; Aug. 20; v. 253; p. 718.

F. W. King Optical Company, The. (See King, Louise C., assignor.)

Farber, Simon W., Brooklyn, N. Y. Electric-lamp fixture. No. 52,251; Aug. 6; v. 253; p. 242.

Fellom, Lelia M., Los Angeles, Cal. Doll. No. 52,311; Aug. 27; v. 253; p. 928.

Ferdinand Strauss Inc. (See Schanschieff, Alexander N., assignor.)

Ferrin, Arthur W., and A. H. Ackerman, Massillon, Ohio. Wheel. No. 52,312; Aug. 27; v. 253; p. 928.

Fisk Rubber Company, The. (See Lenb, Herbert J., assignor.)

Fostoria Glass Company. (See Bottome, Edgar M., assignor.)

Friedley-Voshardt Co. (See Mohrmann, Paul, assignor.)

Friedley-Voshardt Co. (See Wellman, Lester R., assignor.)

Gary, Wilmuth, Washington, D. C. Flag, banner, pennant, sign, emblem, or article of a similar nature. No. 52,313; Aug. 27; v. 253; p. 928.

General Motors Corporation. (See Engler, William B., assignor.)

Gildner, Carl C., Los Angeles, Cal. Finger ring, brooch, or similar article of jewelry. No. 52,314; Aug. 27; v. 253; p. 928.

Ginder, Wallace G., Los Angeles, Cal. Emblem. No. 52,315; Aug. 27; v. 253; p. 928.

Glasman, Benjamin, Brooklyn, N. Y. Watch-case. No. 52,316; Aug. 27; v. 253; p. 928.

Goodall, Harry H. (See McKinley and Goodall.)

Gross, Miriam, assignor to M. P. Rae, Chicago, Ill. Dress. Nos. 52,268–70; Aug. 20; v. 253; p. 719.

Hand, Jay A. (See Kuhn and Hand.)

Harrison, George L., East Cleveland, Ohio. Spout for cooking utensils. No. 52,317; Aug. 27; v. 253; p. 928.

Hector, Leonard C., and C. E. Davis, assignors of one-third to R. H. McFarland, Toronto, Ontario, Canada. Electric fire-log. No. 52,318; Aug. 27; v. 253; p. 929.

Heimberg, Samuel, Chelsea, Mass. Wrist-watch protector. No. 52,271; Aug. 20; v. 253; p. 719.

Heisey and Company, A. H. (See Sanford, Andrew J., assignor.)

Hickson, Richard J., New York, N. Y. Garment for ladies. No. 52,319; Aug. 27; v. 253; p. 929.

Hoffman, Edmund, Brooklyn, assignor to American Can Company, New York, N. Y. Container. No. 52,320; Aug. 27; v. 253; p. 929.

Hymer, Harry E., Mamaroneck, assignor to Maddock & Miller, New York, N. Y. Dish. Nos. 52,272–5; Aug. 20; v. 253; p. 719.

International Silver Co. (See Kintz, Robert R., assignor.)

J. A. Schwartz Company. (See Skipp, Herbert J. A., assignor.)

Johnston, George W., Seattle, Wash. Book-support. No. 52,276; Aug. 20; v. 253; p. 720.

Joseph W. Woods & Sons Company. (See Curtis, Edgar F., assignor.)

Joy, Francis B., and C. H. Vogel, assignors to The Detroit Heating & Lighting Company, Detroit, Mich. Bunsen burner. No. 52,321; Aug. 27; v. 253; p. 929.

Katakawa, Hideji, and K. Maejima, New York, N. Y. Incense-burner. No. 52,322; Aug. 27; v. 253; p. 929.

Kaufman, August F., Wheeling, W. Va. Statuette or table ornament. No. 52,277; Aug. 20; v. 253; p. 720.

Kibble, John, Richmond, Va. Weather-vane. No. 52,252; Aug. 6; v. 253; p. 242.

King, Louise C., assignor to The F. W. King Optical Company, Cleveland, Ohio. Pair of goggles. No. 52,323; Aug. 27; v. 253; p. 929.

Kintz, Robert R., assignor to International Silver Co., Meriden, Conn. Pitcher or similar article. No. 52,324; Aug. 27; v. 253; p. 929.

Kintz, Robert R., assignor to International Silver Co., Meriden, Conn. Teapot or similar article. No. 52,325; Aug. 27; v. 253; p. 930.

Kraus, Jay L., assignor to Albert Pick & Company, Chicago, Ill. Bread and butter plate. No. 52,278; Aug. 20; v. 253; p. 720.

Krauss, Leopold, Indianapolis, Ind. Scottish-rite ring. No. 52,326; Aug. 27; v. 253; p. 930.

Kuhn, Frank, and J. A. Hand, assignors to American Electrical Heater Company, Detroit, Mich. Electric cooker. No. 52,327; Aug. 27; v. 253; p. 930.

Kuhn, Frank, and J. A. Hand, assignors to American Electrical Heater Company, Detroit, Mich. Electrical-heater guard. No. 52,328; Aug. 27; v. 253; p. 930.

Labudde, Robert, Fellows, Cal. Match-box. No. 52,253; Aug. 6; v. 253; p. 242.

Lapham, Charles W., Jr., Phoenix, Ariz. Jewelry pin, brooch, or similar article for personal wear. No. 52,279; Aug. 20; v. 253; p. 720.

Leab, Herbert J., assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Tire. No. 52,329; Aug. 27; v. 253; p. 930.

Leith, Alexander B. (See Arney, John W., assignor.)

Lindstrom, Smith Company. (See Deckert, Max, assignor.)

Lobl, Frederick, Middleboro, Mass. Inhaler. No. 52,330; Aug. 27; v. 253; p. 930.

Loew, Mabelle G., New York, N. Y. Tire thread-block. No. 52,331; Aug. 27; v. 253; p. 931.

Loomis, William H., Grand Rapids, Mich. Shoulder-strap. Nos. 52,280–1; Aug. 20; v. 253; p. 721.

Lutes, Keene, Danville, Ky. Road-sign. No. 52,332; Aug. 27; v. 253; p. 931.

Maddock & Miller. (See Hymer, Harry E., assignor.)

Maejima, Kokichi. (See Katakawa and Maejima.)

Marr, William N., Spokane, Wash. Price-card holder. No. 52,333; Aug. 27; v. 253; p. 931.

Marshall, Albert W., Detroit, Mich. Lens for auto-headlights. No. 52,282; Aug. 20; v. 253; p. 721.

Maxwell, Bert R., Fairbury, Ill. Doll. No. 52,334; Aug. 27; v. 253; p. 931.

Mayer, Arthur E., Beaver, assignor to The Mayer China Company, Beaver Falls, Pa. Plate or similar article. No. 52,335; Aug. 27; v. 253; p. 931.

Mayer China Company, The. (See Mayer, Arthur E., assignor.)

McFarland, Robert H. (See Hector and Davis, assignors.)

McGrevy, Jeremiah, assignor to Solidarity Watch Case Company, Brooklyn, N. Y. Watch bow and boat. No. 52,336; Aug. 27; v. 253; p. 931.

McKinley, Charles W., and H. H. Goodall, assignors to The Willys-Overland Company, Toledo, Ohio. Automobile. No. 52,283; Aug. 20; v. 253; p. 721.

Mignolet, Jean, Denver, Colo. International patriotic emblem. No. 52,337; Aug. 27; v. 253; p. 932.

Mitrano, Cosimo, Brooklyn, N. Y. Locket, fob, or similar article. No. 52,338; Aug. 27; v. 253; p. 932.

Mohrmann, Paul, assignor, Friedley-Voshardt Co., Chicago, Ill. Weather-vane or lightning-rod ornament. Nos. 52,339–41; Aug. 27; v. 253; p. 932.

Nathan, Miriam, New York, N. Y. Textile fabric. Nos. 52,284–7; Aug. 20; v. 253; p. 721.

Pearce, Arthur E., *et al.* (See Breitenstein, Arthur L., assignor.)

Peters, Henry W., Boston, Mass. Honor-pin. No. 52,342; Aug. 27; v. 253; p. 932.

Pitt, Edward L., Cincinnati, Ohio. Game device. No. 52,288; Aug. 20; v. 253; p. 722.

Polacheck, William, Milwaukee, Wis. Statuette. No. 52,289; Aug. 20; v. 253; p. 722.

Poling, Fred C., Menlo, Iowa. Tire-lug. No. 52,343; Aug. 27; v. 253; p. 932.

Price, Louis, Brooklyn, N. Y. Pin-point protector. No. 52,290; Aug. 20; v. 253; p. 722.

Rae, Matthew P. (See Gross, Miriam, assignor.)

Reizenstein, Charles L., Pittsburgh, Pa. Glass plate or other similar article. No. 52,344; Aug. 27; v. 253; p. 933.

Roehrich, Victor H., St. Paul, Minn. Lighting-post. No. 52,254; Aug. 6; v. 253; p. 242.

Rosen, Samuel, Utica, N. Y. Curtain-holder. No. 52,345; Aug. 27; v. 253; p. 933.

Rubber Products Company, The. (See Breitenstein, Arthur L., assignor.)

Russ, Anna F., Rock Island, Ill. Doll. No. 52,346; Aug. 27; v. 253; p. 933.

Sanford, Andrew J., assignor to A. H. Heisey and Company, Newark, Ohio. Pitcher. No. 52,347; Aug. 27; v. 253; p. 933.

Sauer, Henry J., Fairfield, Conn. Spot-light body. No. 52,348; Aug. 27; v. 253; p. 933.

Saunders, Albert F., Syracuse, assignor to T. N. Benedict Mfg. Co., East Syracuse, N. Y. Cup. Nos. 52,349–50; Aug. 27; v. 253; pp. 933–4.

Saywell, Ernest A., Pawtucket, R. I., assignor to Seekonk Lace Company. Lace fabric. No. 52,351; Aug. 27; v. 253; p. 934.

Schanschieff, Alexander N., Valley Stream, assignor to Ferdinand Strauss Inc., New York, N. Y. Child's toy. No. 52,291; Aug. 20; v. 253; p. 722.

Sears, John S., New York, N. Y. Toy balloon or similar article. No. 52,352; Aug. 27; v. 253; p. 934.

Seekonk Lace Company. (See Saywell, Ernest A., assignor.)

Shapiro & Aronson. (See Westphal, Gottfried, assignor.)

Shaw, William D. (See Tussey and Shaw.)

Simms, Charles F., Concord, N. H. Figure or doll. No. 52,292; Aug. 20; v. 253; p. 723.

Skipp, Herbert J. A., Providence, R. I., assignor to J. A. Schwartz Company, Philadelphia, Pa. Finger-ring or similar article of jewelry. No. 52,353; Aug. 27; v. 253; p. 934.

Solidarity Watch Case Company. (See McGrevy, Jeremiah, assignor.)

Sonora Phonograph Corporation. (See Wolff, Joseph, assignor.)

Sordyka, Joseph, Grand Rapids, Mich. Sword-handle. No. 52,354; Aug. 27; v. 253; p. 934.

Steedman, George F., St. Louis, Mo., assignor to Curtis & Company Manufacturing Company, Wellston, Mo. Patriotic badge. No. 52,355; Aug. 27; v. 253; p. 934.

Strelak, Stefan, Chicago, Ill. Kettle-cover holder. No. 52,356; Aug. 27; v. 253; p. 935.

Stromberg, Adolph F., Atwater, Minn. Memorial-service flag. No. 52,357; Aug. 27; v. 253; p. 935.

Strong, William J. H., Chicago, Ill. Support or stand. No. 52,255; Aug. 6; v. 253; p. 243.

Swan, Herbert H., *et al.* (See Breitenstein, Arthur L., assignor.)

Swetland, Esther H., North Tonawanda, N. Y. Toy. Nos. 52,358–9; Aug. 27; v. 253; p. 935.

T. N. Benedict Mfg. Co. (See Saunders, Albert F., assignor.)

Tecktonius, Emil C., assignor to E. C. Tecktonius Manufacturing Co., Racine, Wis. Band-fastener. Nos. 52,256–7; Aug. 6; v. 253; p. 243.

Tin Decorating Company of Baltimore. (See Connor, Martha H., assignor.)

Tussey, Thomas C., and William D. Shaw, Westerville, Ohio. Lamp-lens. No. 52,360; Aug. 27; v. 253; p. 935.

Union Special Machine Company. (See Berger, Joseph, Jr., assignor.)

United States Tire Company. (See Culp, George K., assignor.)

Upton, George V., Fitchburg, Mass. Bow-holder. No. 52,258; Aug. 6; v. 253; p. 248.
Vogel, Christian H. (See Joy and Vogel.)
Voshardt, Herman F., assignor to Friedley-Voshardt Co., Chicago, Ill. Weather-vane or lightning-rod ornament. No. 52,361; Aug. 27; v. 253; p. 935.
Wabash Cabinet Co., The. (See Adams, James D., assignor.)
Wallace, Henry L., Wallingford, Conn. Spoon, fork, or similar article. No. 52,362; Aug. 27; v. 253; p. 936.
Wanner, Albert, Jr., New York, N. Y. Chair. Nos. 52,363–4; Aug. 27; v. 253; p. 936.
Waring, Edward M., Brooklyn, N. Y. Electric-motor casing. No. 52,293; Aug. 20; v. 253; p. 723.
Wear, Frank F., and B. M. Ely, Cincinnati, Ohio, assignors to The Alvey-Ferguson Company, Oakley, Cincinnati, Ohio. Dust and air separator. No. 52,365; Aug. 27; v. 253; p. 936.
Webb, William E., Jr., Larchmont Manor, and G. L. Close, Mount Vernon, assignors to Church, Webb & Close, Inc., New York, N. Y. Trench-helmet. No. 52,294; Aug. 20; v. 253; p. 723.
Weeks, Frank A., Plainfield, N. J. Pen-rack. No. 52,295; Aug. 20; v. 253; p. 723.
Wellman, Lester R., assignor to Friedley-Voshardt Co., Chicago, Ill. Electric lamp. No. 52,259; Aug. 6; v. 253; p. 243.
Westphal, Gottfried, Guttenberg, N. J., assignor to Shapiro & Aronson, Inc., New York, N. Y. Socket-cover for lightning-fixtures. No. 52,366; Aug. 27; v. 253; p. 936.
Whiting Manufacturing Company. (See Ball, George E., assignor.)
Willys-Overland Company, The. (See Belden, Edward H., assignor.)
Willys-Overland Company, The. (See McKinley and Goodall, assignors.)
Wirsching, August F., Los Angeles, Cal. Sign-digit. No. 52,375; Aug. 27; v. 253; p. 938.
Wise, Albert, Cortlandt township, Westchester county, N. Y. Emblem, brooch, button, fob, badge, charm, stick-pin, or similar article. No. 52,296; Aug. 20; v. 253; p. 723.
Wolff, Joseph, Brooklyn, N. Y., assignor to Sonora Phonograph Corporation, Phonograph-cabinet. Nos. 52,367–73; Aug. 27; v. 253; pp. 936–7.
Wulkan, Louis, Lawrence, N. Y. Display-stand. No. 52,374; Aug. 27; v. 253; p. 938.

ALPHABETICAL LIST OF REGISTRANTS OF TRADE-MARKS.

A. E. Little Company, Lynn, Mass. Leggings of cloth or leather. No. 122,599; Aug. 27; v. 253; p. 950.
Adolphe Schwob, Inc., New York, N. Y. Watches, watch cases and movements. No. 122,528; Aug. 20; v. 253; p. 744.
Adolphe Schwob, Inc., New York, N. Y. Watches, watch-cases and watch-movements. No. 122,536; Aug. 20; v. 253; p. 744.
Albert Dickinson Company, The, Chicago, Ill. Certain named foods. No. 122,447; Aug. 20; v. 253; p. 742.
Amalgamated Machinery Corporation, Chicago, Ill. Certain named metal-working machinery. No. 122,414; Aug. 20; v. 253; p. 741.
Amalgamated Oil Gas Corporation, New York, N. Y. Apparatus for vaporizing and burning oil in ranges, stoves, &c. No. 122,415; Aug. 20; v. 253; p. 741.
American Hominy Company, Indianapolis, Ind. White corn-flour. No. 122,563; Aug. 27; v. 253; p. 949.
American Metal Company, Limited, The, New York, N. Y. Zinc-oxid paint-pigment. No. 122,416; Aug. 20; v. 253; p. 741.
American Olive Company, Los Angeles, Cal. Canned ripe olives. No. 122,564; Aug. 27; v. 253; p. 949.
American Rubber and Tire Company, The, Akron, Ohio. Elastic vehicle-tires. No. 122,418; Aug. 20; v. 253; p. 741.
American Safety Razor Co., Incorporated, Brooklyn, N. Y. Shaving-brushes. No. 122,565; Aug. 27; v. 253; p. 949.
American Steel Products Co., Macomb, Ill. Steel fence-posts. No. 122,419; Aug. 20; v. 253; p. 741.
American Thread Company, The, Jersey City, N. J. Cotton thread and yarn. No. 122,417; Aug. 20; v. 253; p. 741.
Argo Mills Co., The, Philadelphia, Pa. Cotton yarns. No. 122,420; Aug. 20; v. 253; p. 741.
Atlantic Drier & Varnish Co., Philadelphia, Pa. Paste, ready-mixed, and liquid paints. No. 122,421; Aug. 20; v. 253; p. 741.
Baker, Murray & Imbrie, Inc., New York, N. Y. Certain named clothing. No. 122,566; Aug. 27; v. 253; p. 949.
Baltimore Bargain House, Baltimore, Md. Overalls and coats. No. 122,567; Aug. 27; v. 253; p. 949.
Barber, Bessie L., Los Angeles, Cal. Lotion for removing skin blemishes. No. 122,422; Aug. 20; v. 253; p. 741.
Batchelor Flour Mill Co., Waterville, Me. Certain named food. No. 122,406; Aug. 13; v. 253; p. 509.
Bates Street Shirt Company, Lewiston, Me. Men's cotton, linen, and silk fabric overshirts, undershirts, underdrawers, and night-robes. No. 122,569; Aug. 27; v. 253; p. 949.
Beacon Shirt Co., New York, N. Y. Dress, negligée, and work shirts. No. 122,570; Aug. 27; v. 253; p. 949.
Berry, Ella R., St. Louis, Mo. Certain named pharmaceutical preparations for toilet purposes. No. 122,407; Aug. 13; v. 253; p. 509.
Big Four Canning Company, Stanley and Eau Claire, Wis. Canned peas. No. 122,423; Aug. 20; v. 253; p. 741.
Birdsey-Somers Company, New York, N. Y. Corsets. No. 122,571; Aug. 27; v. 253; p. 949.
Bisceglia Bros., San Jose, Cal. Certain named foods. No. 122,424; Aug. 20; v. 253; p. 741.
Bliven & Carrington, Inc., New York, N. Y. Lubricating-oils. No. 122,427; Aug. 20; v. 253; p. 741.
Blue Diamond Coal Company, Knoxville, Tenn., and Cardiff, Ky. Coal. No. 122,428; Aug. 20; v. 253; p. 741.
Bonney Vise & Tool Works, Inc., Philadelphia and Allentown, Pa., and New York, N. Y. Vises. No. 122,429; Aug. 20; v. 253; p. 741.
Brewster, Gordon & Co., Rochester, N. Y. Tea. Nos. 122,430–1; Aug. 20; v. 253; p. 741.
Brunson, Asa, Pine Bluff, Ark. Medicine as a preparation for the treatment of certain named diseases. No. 122,482; Aug. 20; v. 253; p. 741.
California Fruit Exchange, Sacramento, Cal. Fresh grapes. No. 122,433; Aug. 20; v. 253; p. 741.
Capeverdian Trading Co., East Wareham, Mass. Tobacco used in smoking and chewing and as snuff. No. 122,576; Aug. 27; v. 253; p. 949.
Celluloid Company, The, Newark, N. J., and New York, N. Y. Certain named musical instruments and supplies made of compounds of pyroxylin. No. 122,434; Aug. 20; v. 253; p. 741.
Celluloid Company, The, Newark, N. J., and New York, N. Y. Certain named measuring and scientific appliances made of pyroxylin. No. 122,435; Aug. 20; v. 253; p. 741.
Chapin & Company, Hammond, Ind., and Chicago, Ill. Dairy feed. No. 122,436; Aug. 20; v. 253; p. 741.
Chapin-Sacks Manufacturing Company, Washington, D. C. Ice-cream. No. 122,577; Aug. 27; v. 253; p. 949.
Cheney Brothers, South Manchester, Conn. Spun-silk yarn, machine-twist knitting, reeled, and sewing silk. No. 122,437; Aug. 20; v. 253; p. 741.
Chesapeake & Potomac Telephone Company, The, New York, N. Y., and Washington, D. C. Certain named prints and publications. No. 122,438; Aug. 20; v. 253; p. 741.
Chicago Tube and Iron Company, Chicago, Ill. Boiler-tubes and copper ferrules for use with same. No. 122,439; Aug. 20; v. 253; p. 741.
Chief Tractor Mfg. Co., Detroit, Mich. Farm-tractors, internal-combustion engines, and their parts. No. 122,440; Aug. 20; v. 253; p. 741.
Cirelli, Francesco, Philadelphia, Pa. Phonographs. No. 122,441; Aug. 20; v. 253; p. 741.
Cohn Flour & Feed Co., Baton Rouge, La. Wheat-flour. No. 122,442; Aug. 20; v. 253; p. 742.
Collat, Samuel, New York, N. Y. Certain named clothing. No. 122,579; Aug. 27; v. 253; p. 949.
Colorado Milling & Elevator Co., The, Denver, Colo., and Burley, Idaho. Wheat-flour. No. 122,443; Aug. 20; v. 253; p. 742.
Combination Rubber Mfg. Co., The, Bloomfield, N. J. Rubber tires and inner tubes. No. 122,444; Aug. 20; v. 253; p. 742.
Converse Rubber Shoe Company, Malden, Mass. Rubber shoes. No. 122,580; Aug. 27; v. 253; p. 949.
Coxe & Lloyd Leather Company, Wilmington, Del. Glaced kid and fancy leathers. No. 122,445; Aug. 20; v. 253; p. 742.
Cudahy Brothers Company, Cudahy, Wis. Bacon and ham. No. 122,446; Aug. 20; v. 253; p. 742.
D. Nusbaum & Co., New York, N. Y. Certain named clothing. No. 122,607; Aug. 27; v. 253; p. 950.
Daisy Cup Company Inc., The, New York, N. Y. Paper or paper-pulp cups, bowls, and dishes. No. 122,408; Aug. 13; v. 253; p. 509.
De Nazaria, Marcelino B., New York, N. Y. Board games. No. 122,518; Aug. 20; v. 253; p. 744.
Dearborn Chemical Company, Chicago, Ill. Chemical compound for removing and preventing rust. No. 122,582; Aug. 27; v. 253; p. 949.
E. Ingraham Co., The, Bristol, Conn. Clocks. No. 122,483; Aug. 20; v. 253; p. 743.
E. A. Stevenson & Company, Wilmington, Del., and New York, N. Y. Nut butter or margarin. No. 122,544; Aug. 20; v. 253; p. 745.
Eagle Photo Studio, The, Brooklyn, N. Y. Photographic portraits and pictures. No. 122,448; Aug. 20; v. 253; p. 742.
Elite Glove Co., Gloversville and New York, N. Y. Fabric gloves. No. 122,583; Aug. 27; v. 253; p. 949.
Elmer Candy Co., Inc., New Orleans, La. Candy. No. 122,584; Aug. 27; v. 253; p. 949.

Errickson, Helmer E., Chicago, Ill. Powder for the relief of excessive perspiration. No. 122,449; Aug. 20; v. 253; p. 742.
F. E. Partridge Rubber Co., Ltd., The, Guelph, Ontario, Canada. Tires composed of rubber, fabric, &c. No. 122,524; Aug. 20; v. 253; p. 744.
Fellom, Roy, San Francisco, Cal. Periodical publication published monthly. No. 122,450; Aug. 20; v. 253; p. 742.
Ferguson & Timpson Limited, Glasgow, Scotland, and London, England. Composition machinery packing. No. 122,451; Aug. 20; v. 253; p. 742.
First National Exhibitors Circuit, Inc., New York, N. Y. Motion-picture films. No. 122,454; Aug. 20; v. 253; p. 742.
Fleischer & Sons, I., Cincinnati, Ohio. Dress-fasteners. No. 122,452; Aug. 20; v. 253; p. 742.
Fleming, Charles, Ardmore, Okla. Herb tonic for kidney trouble. No. 122,453; Aug. 20; v. 253; p. 742.
Foote Mineral Co., Philadelphia, Pa. Monthly publication. No. 122,455; Aug. 20; v. 253; p. 742.
Fort Dodge Grocery Co., Fort Dodge, Iowa. Certain named foods. No. 122,456; Aug. 20; v. 253; p. 742.
Fujita, Runosuke, New York, N. Y. Panama hats. No. 122,585; Aug. 27; v. 253; p. 949.
G. H. Hammond Company, The, Chicago, Ill. Canned pineapples, apricots, plums, pears, &c. No. 122,470; Aug. 20; v. 253; p. 742.
G. H. Hammond Company, The, Chicago, Ill. Canned corn, peas, peaches, &c. No. 122,472; Aug. 20; v. 253; p. 742.
General Chemical Company, New York, N. Y. Agricultural insecticides. No. 122,457; Aug. 20; v. 253; p. 742.
Globe Manufacturing Co., The, Peoria, Ill. Dry, paste, and ready-mixed paints. No. 122,460; Aug. 20; v. 253; p. 742.
Goldine Manufacturing Company, Youngstown, Ohio. Tonic and medicine used internally for treating certain named diseases and affections. No. 122,462; Aug. 20; v. 253; p. 742.
Goldstein & Kres, Baltimore, Md. Blouses and middy-suits for women and girls. No. 122,586; Aug. 27; v. 253; p. 949.
Goldwyn Pictures Corporation, New York, N. Y. Moving-picture films. No. 122,458; Aug. 20; v. 253; p. 742.
Gosnell, Mabel B., Minneapolis, Minn. Fruit preserves, jams, vegetable pickle relishes, pickles. No. 122,459; Aug. 20; v. 253; p. 742.
Grady Mfg. Co., The, Long Island City, N. Y. Tile and porcelain cleanser. No. 122,461; Aug. 20; v. 253; p. 742.
Haanel, Chas. F., St. Louis, Mo. Printed books, booklets, circulars, pamphlets, and periodicals. No. 122,464; Aug. 20; v. 253; p. 742.
Hampden Watch Company, The, Canton, Ohio. Watches and watch-movements. Nos. 122,466–71; Aug. 20; v. 253; p. 742.
Hean, George W., Sydney, New South Wales, Australia. Medicinal preparations for the relief of coughs and colds. No. 122,474; Aug. 20; v. 253; p. 742.
Hecker-Jones-Jewell Milling Company, New York, N. Y. Wheat and rye flours. No. 122,473; Aug. 20; v. 253; p. 742.
Heller & Company, B., Chicago, Ill. Insecticide. No. 122,475; Aug. 20; v. 253; p. 743.
Hendricks Liniment Company. (See Hendricks, Oregon, assignor.)
Hendricks, Oregon, assignor to Hendricks Liniment Company, Chicago, Ill. Medicinal liniments for use in the treatment of inflammations due to colds. No. 122,476; Aug. 20; v. 253; p. 743.
Hercules Manufacturing Company, Oklahoma, Okla. Tire-patch. No. 122,477; Aug. 20; v. 253; p. 743.
Herkimer Fibre Company, The, Herkimer, N. Y., and Boston, Mass. Manufactured water-resisting leather-board. No. 122,463; Aug. 20; v. 253; p. 742.
Herman Basch & Co., Inc., Brooklyn, N. Y. Fur coats for outer wear, fur caps, muffs, neck-pieces, gloves. No. 122,568; Aug. 27; v. 253; p. 949.
Hewitt & Runnels, Bay City, Mich. Liquid polish for stoves. No. 122,478; Aug. 20; v. 253; p. 743.
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Holmes Company, Chicago, Ill. Plain and engraved stationery. No. 122,479; Aug. 20; v. 253; p. 743.
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Howlett & Hockmeyer Co., New York, N. Y. Pile fabrics and coverings treated so as to be waterproof. No. 122,481; Aug. 20; v. 253; p. 743.
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International Textbook Company, Scranton, Pa. Monthly periodical. No. 122,488; Aug. 20; v. 253; p. 743.
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J. C. Blair Company, Huntingdon, Pa. Certain named paper and stationery. No. 122,425; Aug. 20; v. 253; p. 741.
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Kellogg Switchboard & Supply Co., Chicago, Ill. Magazine printed monthly. No. 122,490; Aug. 20; v. 253; p. 743.
Kellow & Brown Novelty Company, Los Angeles, Cal. Dolls. No. 122,491; Aug. 20; v. 253; p. 743.
Keratso, George J., San Francisco, Cal. Syrups made of prunes for beverages. No. 122,492; Aug. 20; v. 253; p. 743.
Keystone Steel & Wire Company, South Bartonville, Ill. Barbed and fence wires, wire fence. Nos. 122,493–501; Aug. 20; v. 253; p. 743.
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L. Candee & Company, New Haven, Conn. Rubber boots and shoes. No. 122,575; Aug. 27; v. 253; p. 949.
L. C. Blancke Co. Inc., New York, N. Y. Drills, tool-bits, reamers, taps dies, hacksaw-blades. No. 122,426; Aug. 20; v. 253; p. 741.
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Lambert, Eric, Kansas City, Mo. Dry-kilns for drying wood veneer and lumber. No. 122,505; Aug. 20; v. 253; p. 743.
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Letts, Arthur, Los Angeles, Cal. Ladies' shirt-waists. No. 122,597–8; Aug. 27; v. 253; p. 950.
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Lundborg Company, New York, N. Y. Perfumery in liquid and powder forms. No. 122,509; Aug. 20; v. 253; p. 744.
Lundborg Company, New York, N. Y. Perfumery in liquid form. No. 122,510; Aug. 20; v. 253; p. 744.
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Milkolate Company, The, Cleveland, Ohio. Food beverage containing a special preparation of milk. No. 122,512; Aug. 20; v. 253; p. 744.
Miller Rubber Company, The, Akron, Ohio. Tube-repair kits. No. 122,513; Aug. 20; v. 253; p. 744.
Monroe Cheese Co., The, Monroe, N. Y. Cheese. No. 122,603; Aug. 27; v. 253; p. 950.
Morey Mercantile Company, The, Denver, Colo. Cereal breakfast food, popcorn, citron, lemon, and orange peels. No. 122,514; Aug. 20; v. 253; p. 744.
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National Aluminum Works, Elmira, N. Y. Coffee-pots. No. 122,516; Aug. 20; v. 253; p. 744.
National Water Main Cleaning Co., New York, N. Y. Machines for cleaning water-mains and boiler-tubes. No. 122,517; Aug. 20; v. 253; p. 744.
Natrona Tobacco Co., Philadelphia, Pa. Cigars, cigarettes, and manufactured tobacco. No. 122,604; Aug. 27; v. 253; p. 950.
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Ocean Leather Co. Inc., The, New York, N. Y., and Newark, N. J. Tanned fish and mammal skins. No. 122,519; Aug. 20; v. 253; p. 744.
Oriental Drug Co. Inc., New York, N. Y. Anti-anemic preparations. No. 122,608; Aug. 27; v. 253; p. 950.
Oriental Oil Company, Dallas, Tex. Heavy lubricating-grease. No. 122,520; Aug. 20; v. 253; p. 744.
Otis Clapp & Son, Inc., Boston, Mass. Remedy for burns, a sedative and germicide. No. 122,578; Aug. 27; v. 253; p. 949.
Ozone Spring Water & Beverage Co., Inc., New Orleans, La. Non-alcoholic and maltless soft drinks and syrups therefor. No. 122,609; Aug. 27; v. 253; p. 950.
Palmer, Marvin E., Topeka, Kans. Certain named prints and publications. No. 122,521; Aug. 20; v. 253; p. 744.
Patent Cereals Co., The, Geneva, N. Y. Adhesive paste. No. 122,410; Aug. 13; v. 253; p. 509.
Pearson, Jno. F., Montgomery, Ala. Bean-meal and cut-pod feed for stock and poultry feed. No. 122,525; Aug. 20; v. 253; p. 744.
Peloso Bros., New York, N. Y. Candy. No. 122,526; Aug. 20; v. 253; p. 744.
Peterson, Clarence, Minneapolis, Minn. Cold self-vulcanizing texture-back patch for tires and the like. No. 122,523; Aug. 20; v. 253; p. 744.
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Quaker City Supply Co., Philadelphia, Pa. Leather. No. 122,530; Aug. 20; v. 253; p. 744.
Radway, Frederick S., New York, N. Y. Seeds. No. 122,531; Aug. 20; v. 253; p. 744.
Ram Engineering Company, Columbus, Ohio. Locks—namely, switch-locks in connection with automobiles. No. 122,611; Aug. 27; v. 253; p. 950.
Red Star Milling Company, The, Wichita, Kans. Wheat-flour. No. 122,612; Aug. 27; v. 253; p. 950.
Redmanol Chemical Products Co., Chicago, Ill. Phenolic condensation products for certain named uses. No. 122,529; Aug. 20; v. 253; p. 744.
Renken & Yates Smith, Inc., New York, N. Y. Loganberry and grape juice. No. 122,613; Aug. 27; v. 253; p. 950.
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Roegge, Fred C., Cleveland, Ohio. Synthetic liquid hydrocarbon fuel similar to gasolene or kerosene. No. 122,615; v. 253; p. 950.
Rowe-Fawcett Company, The, New Albany, Ind. Certain named foods. No. 122,532; Aug. 20; v. 253; p. 744.
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Samstag & Hilder Bros., New York, N. Y. Snap-fasteners. No. 122,527; Aug. 20; v. 253; p. 744.
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Schadt & Mathewson, Detroit, Mich. Feathers. No. 122,535; Aug. 20; v. 253; p. 744.
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Scott, Henry H., assignor to The Scoban Co., New York, N. Y. Smokers' pouches. No. 122,539; Aug. 20; v. 253; p. 744.
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Shapleigh Hardware Company, St. Louis, Mo. Clocks and watches. No. 122,538; Aug. 20; v. 253; p. 744.
Society of Chemical Industry in Basle, Basel, Switzerland. Coal-tar colors. No. 122,540; Aug. 20; v. 253; p. 745.
Staffin, Edwin A., Toledo, Ohio. Baking and cooking preparation to take the place of eggs. No. 122,624; Aug. 27; v. 253; p. 950.
Standard Hide & Fur Co., New Orleans, La. Hides, raw furs, wool, crude rubber. No. 122,541; Aug. 20; v. 253; p. 745.
Steel Fabricating Company, Chicago Heights, Ill. Sectional steel buildings. No. 122,542; Aug. 20; v. 253; p. 745.
Stenotype Company, The, Indianapolis, Ind. Stenographic writing-machines. No. 122,543; Aug. 20; v. 253; p. 745.
Sweney, Helene L., Boston, Mass. Hooks for portières and draperies and similar purposes. No. 122,545; Aug. 20; v. 253; p. 745.
Swift and Co., Chicago, Ill. Oleomargarin. No. 122,623; Aug. 27; v. 253; p. 950.
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U. T. Hungerford Brass & Copper Co., New York, N. Y. Electric insulated weatherproof underwriters' wire. No. 122,465; Aug. 20; v. 253; p. 742.
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Ulmer Leather Co., The, Norwich, Conn. Waterproof cement for leather goods, belting, &c. Nos. 122,547–8; Aug. 20; v. 253; p. 745.
Ulmer Leather Co., The, Norwich, Conn. Leather belting. No. 122,549; Aug. 20; v. 253; p. 745.
Ulmer Leather Co., The, Norwich, Conn. Cement for leather goods and belting. No. 122,550; Aug. 20; v. 253; p. 745.
Union Salt Company, The, Cleveland, Ohio. Salt. No. 122,626; Aug. 27; v. 253; p. 950.
W. P. Tanner-Gross & Company, New York, N. Y. Publications issued weekly. No. 122,546; Aug. 20; v. 253; p. 745.
Waclepo Mfg. Co., Fort Wayne, Ind. Liquid preparation for removing dirt, grease, &c., from automobiles. No. 122,554; Aug. 20; v. 253; p. 745.
Waldes & Company of New Jersey, New York, N. Y., assignors, by mesne assignments, to Waldes & Company. Snap and placket fasteners. No. 122,555; Aug. 20; v. 253; p. 745.
Walker Brothers & Haviland, Philadelphia, Pa. Closures for ends of electrical conduits. No. 122,551; Aug. 20; v. 253; p. 745.
Walker-Wadsworth Company, The, Wilmington, Del., and Baltimore, Md. Monthly periodical. No. 122,552; Aug. 20; v. 253; p. 745.
Waltham Bag & Paper Company, Waltham, Mass. Paper bags and boxes. No. 122,627; Aug. 27; v. 253; p. 951.
Washington Times Company, The, Washington, D. C. Newspapers published daily and Sunday. No. 122,556; Aug. 20; v. 253; p. 745.
Wausau Manufacturing Co., Wausau, Wis. Toothpicks. No. 122,553; Aug. 20; v. 253; p. 745.
Weber & Heilbroner, New York, N. Y. Rain-coats. No. 122,628; Aug. 27; v. 253; p. 951.
West Disinfecting Company, New York, N. Y. Preparations for the treatment of pediculosis of the head or body. No. 122,557; Aug. 20; v. 253; p. 745.
West Virginia Pulp & Paper Co., New York, N. Y. Coated book and magazine paper. No. 122,558; Aug. 20; v. 253; p. 745.
Western Clock Co., Peru, Ill. Clocks and watches. No. 122,559; Aug. 20; v. 253; p. 745.
Whitehead K't'g Co., Daisy, New York, N. Y. Ladies' hosiery. No. 122,581; Aug. 27; v. 253; p. 949.
Williams, William E., New York, N. Y. Certain named hardware and plumbing and steam-fitting supplies. No. 122,560; Aug. 20; v. 253; p. 745.
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Wrightsville Hardware Company, Wrightsville, Pa. Coffee-mills. No. 122,562; Aug. 20; v. 253; p. 745.
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A. & S. Raucci, Pittsburgh, Pa. "Extra Fermentati Sigari Italiani." (For Cigars.) No. 20,807; Aug. 13; v. 253; p. 511.
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Buisson, Gustave J., assignor of one-fourth to Jewell A. Sperling, New Orleans, La. "Sacred Heart of Jesus." (For Wax Tapers.) No. 20,776; Aug. 13; v. 253; p. 511.
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Chessmore & Company, D. O., Atwood, Kans. "Cleanem." (For Preparation for Cleaning Woodwork, Metal, and Glassware.) No. 20,778; Aug. 13; v. 253; p. 511.
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Cole & Reed, Alcester, S. D. "Bug-O-Less." (For Insect-Poison.) No. 20,780; Aug. 13; v. 253; p. 511.
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S. Birkenwald Co., Portland, Oreg. "Extra Kettle Rendered Lard, S. Birkenwald Co., Butcher Supplies, Portland, Oregon." (For Lard.) No. 20,754; Aug. 6; v. 253; p. 257.
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S. Birkenwald Co., Portland, Oreg. "Kettle Rendered Pure Lard Put up by S. Birkenwald Co., Butcher Supplies, Portland, Oregon." (For Lard.) No. 20,757; Aug. 6; v. 253; p. 257.
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Starr, Frank M., Birmingham, Ala. "Doctor Starr's Manhood Liver and Kidney Pills." (For Pills.) No. 20,819; Aug. 13; v. 253; p. 512.
Taylor-Atkins Paper Company, The, Burnside and East Hartford, Conn. "Old Deerfield." (For Writing-Paper and Envelops.) No. 20,771; Aug. 6; v. 253; p. 257.
Taylor-Atkins Paper Company, The, Burnside and East Hartford, Conn. "Berkshire Valley." (For Writing-Paper and Envelops.) (No. 20,772; Aug. 6; v. 253; p. 257.
Thoro Corporation, The, Chicago, Ill. "Thoro." (For Powdered Skin-Cleaner.) No. 20,773; Aug. 6; v. 253; p. 257.
Three Minute Noodle Co., New York, N. Y. "Three Minute Noodles." (For Noodles.) No. 20,820; Aug. 13; v. 253; p. 512.
True Blue Biscuit Co., Spokane, Wash. "Branola." (For Health-Gems.) No. 20,774; Aug. 6; v. 253; p. 257.
Welch Grape Juice Co., The, Westfield, N. Y. "Welch's Grapelade." (For Grapelade.) No. 20,775; Aug. 6; v. 253; p. 257.

ALPHABETICAL LIST OF REGISTRANTS OF PRINTS.

American Tobacco Co., The, New York, N. Y. "Open your package this way." (For Cigarettes.) No. 4,924; Aug. 13; v. 253; p. 512.
Davis & Geck, Inc., Brooklyn, N. Y. "Trench Tubes." (For Trench-Tubes.) No. 4,919; Aug. 6; v. 253; p. 257.
Kadans, Louis, New York, N. Y. "Yankee." (For Cream-Cheese.) No. 4,922; Aug. 6; v. 253; p. 257.
Kaufmann & Strauss Company, New York, N. Y. "Our Cigars Always in the Lead 'The Leader.'" (For Cigars.) No. 4,925; Aug. 13; v. 253; p. 512.
National Carbon Company, Inc., Cleveland, Ohio. "Gasoline Today." (For Gasolene and Electric Batteries.) No. 4,923; Aug. 6; v. 253; p. 257.
Ostenreider Advertising Corporation, Chicago, Ill. "Liberty Axles." (For Axles.) No. 4,926; Aug. 13; v. 253; p. 512.
W. L. Douglas Shoe Co., Brockton and Boston, Mass.; Portland, Me.; New York and Buffalo, N. Y.; Denver, Colo., and Philadelphia, Pa. "In 1866 'The Boy Who Pegged Shoes Decides To Go West.'" (For Shoes). No. 4,920; Aug. 6; v. 253; p. 257.
W. L. Douglas Shoe Co., Brockton and Boston, Mass.; Portland, Me.; New York and Buffalo, N. Y.; Denver, Colo., and Philadelphia, Pa. "W. L. Douglas learned how to design, draft and fit shoes." (For Shoes.) No. 4,921; Aug. 6; v. 253; p. 257.

ALPHABETICAL LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED DURING THE MONTH OF AUGUST, 1918.

[Abbreviations: "v."—Official Gazette.]

Abdominal supporter. D. C. Pratt. No. 1,276,410; Aug. 20; v. 253; p. 635.
Accelerators, Controlling device for. F. D. Zell, Jr. No. 1,274,491; Aug. 6; v. 253; p. 43.
Acetylene-generator. F. Norman. No. 1,274,753; Aug. 6; v. 253; p. 118.
Adding mechanism, Total-proof device for. H. N. McKay. No. 1,274,472; Aug. 6; v. 253; p. 111.
Addressing-machine, Two-platen hand. U. G. Lee. No. 1,274,905; Aug. 6; v. 253; p. 161.
Adjustable seat. E. W. Fox. No. 1,276,203; Aug. 20; v. 253; p. 578.
Admission-registering mechanism. R. M. and L. S. Campbell. No. 1,275,128; Aug. 6; v. 253; p. 222.
Advertising device. J. T. Fritsche. No. 1,274,530; Aug. 6; v. 253; p. 55.
Advertising device. H. Godfrey. No. 1,275,244; Aug. 13; v. 253; p. 279.
Aerial-bomb dropper. S. S. Benson. No. 1,274,501; Aug. 6; v. 253; p. 46.
Aerial cable-way carrier system. H. Thorne. No. 1,276,830; Aug. 27; v. 253; p. 786.
Aerial life-saving device. J. E. Thoroughgood. No. 1,275,498; Aug. 13; v. 253; p. 348.
Aerial torpedo. G. J. Kocialek. No. 1,275,445; Aug. 13; v. 253; p. 334.
Aeronautic apparatus. F. E. Boland. No. 1,277,036; Aug. 27; v. 253; p. 839.
Aeroplane. G. Fedchenko. No. 1,277,206; Aug. 27; v. 253; p. 886.
Aeroplane. P. Loveczky. No. 1,276,778; Aug. 27; v. 253; p. 772.
Aeroplane. J. F. Walden. No. 1,277,277; Aug. 27; v. 253; p. 904.
Aeroplane-propeller. H. Vass. No. 1,276,455; Aug. 20; v. 253; p. 647.
Aeroplanes and the like, Adjustable seat for gunners in armed. T. O. M. Sopwith. No. 1,275,624; Aug. 13; v. 253; p. 384.
Agricultural implement. W. Parriott. No. 1,276,403; Aug. 20; v. 253; p. 633.
Air-brake. J. G. Smeltzer. No. 1,277,143; Aug. 27; v. 253; p. 870.
Air-brake attachment. F. T. Shaw and J. G. Meador, Jr. No. 1,276,976; Aug. 27; v. 253; p. 824.
Air-brake, Automatic quick-acting. F. T. Gallagher. No. 1,276,640; Aug. 20; v. 253; p. 608.
Air-brake for railway-trains. M. A. Culling. No. 1,276,036; Aug. 20; v. 253; p. 529.
Air-brake for railway-trains. E. D. Finley. No. 1,276,048; Aug. 20; v. 253; p. 534.
Air-brake for railway-trains. E. D. Finley. No. 1,276,049; Aug. 20; v. 253; p. 534.
Air-brake mechanism. S. H. Elliott. No. 1,277,053; Aug. 27; v. 253; p. 844.
Air-brake safety-valve. M. H. Ryan. No. 1,275,479; Aug. 13; v. 253; p. 343.
Air-brake system and train-stop, Automatic. F. A. Russ. No. 1,277,261; Aug. 27; v. 253; p. 900.
Air-break switch. J. R. Townsend. No. 1,275,326; Aug. 13; v. 253; p. 301.
Air-cleaner. A. C. Bennett. No. 1,276,016; Aug. 20; v. 253; p. 524.
Air-generator. F. I. Webb. No. 1,274,478; Aug. 6; v. 253; p. 40.
Air-heater. E. L. Walker. No. 1,276,460; Aug. 20; v. 253; p. 649.
Air in chambers, Regulating the humidity of. P. Mandeville. No. 1,276,241; Aug. 20; v. 253; p. 586.
Air-lift booster. J. Oliphant. No. 1,275,592; Aug. 13; v. 253; p. 374.
Air-motor. O. L. Howe. No. 1,275,030; Aug. 6; v. 253; p. 195.
Air-supply device and combination-governor therefor, Automatic. E. G. Hodges. No. 1,276,762; Aug. 27; v. 253; p. 768.
Aircraft. J. B. Ellinger. No. 1,275,233; Aug. 13; v. 253; p. 276.
Aircraft speed and direction indicator. E. A. Sperry. No. 1,274,629; Aug. 6; v. 253; p. 81.
Aircraft, Stabilization of. C. A. Johansson. No. 1,274,888; Aug. 6; v. 253; p. 156.
Airplane. N. Carolin. No. 1,274,986; Aug. 6; v. 253; p. 183.
Airplane. H. C. Mummert. No. 1,274,745; Aug. 6; v. 253; p. 115.
Airplanes, Structural member for. J. H. Talge. No. 1,276,993; Aug. 27; v. 253; p. 828.
Airship. J. E. J. Rainey. No. 1,275,746; Aug. 13; v. 253; p. 418.
Airship. J. D. Salts. No. 1,276,120; Aug. 20; v. 253; p. 553.
Airship-propeller. A. Jacobson. No. 1,274,886; Aug. 6; v. 253; p. 155.
Alarm: *See*—
Tire-alarm.
Alarm-signal. T. Bodde. No. 1,274,846; Aug. 6; v. 253; p. 144.
Alarm-signal. A. N. Pierman. No. 1,276,807; Aug. 27; v. 253; p. 780.
Album, sample-book, or scrap-book. H. A. Hooker. No. 1,275,259; Aug. 13; v. 253; p. 283.
Alcohol, Solidified. A. Strobl. No. 1,277,149; Aug. 27; v. 253; p. 872.
Alimentary-paste drier. P. De Martini. No. 1,276,500; Aug. 20; v. 253; p. 659.
Alloy. H. S. Cooper. No. 1,277,046; Aug. 27; v. 253; p. 842.
Alloy, Metallic. F. S. Hodson. No. 1,276,916; Aug. 27; v. 253; p. 808.
Alumina and making same, Purified crystalline. F. J. Tone. No. 1,276,134; Aug. 20; v. 253; p. 557.
Aluminum nitrids, Producing. M. Shoeld. No. 1,274,797; Aug. 6; v. 253; p. 129.
Amalgamator. J. Hutchings. No. 1,276,656; Aug. 30; v. 253; p. 703.
Ambulance. H. Pezzetti. No. 1,275,733; Aug. 13; v. 253; p. 415.
Ammunition case or receptacle. B. A. Williams. No. 1,274,828; Aug. 6; v. 253; p. 138.
Amusement apparatus. H. C. Tanabe. No. 1,277,272; Aug. 27; v. 253; p. 903.
Anchor-rod. W. R. Brashear. No. 1,276,021; Aug. 20; v. 253; p. 525.
Animal catcher and holder. H. O. Williams. No. 1,277,017; Aug. 27; v. 253; p. 835.
Animal-trap. C. A. Renner. No. 1,277,122; Aug. 27; v. 253; p. 864.
Animal-trap. E. L. Spangler. No. 1,275,993; Aug. 13; v. 253; p. 487.
Annealing-box. J. A. Hellstrom. No. 1,274,537; Aug. 6; v. 253; p. 57.
Annealing-box. J. A. Hellstrom. No. 1,274,538; Aug. 6; v. 253; p. 57.
Annealing steel, Method of and means for. J. G. R. Munday. No. 1,277,244; Aug. 27; v. 253; p. 895.
Answering-board. D. Sullivan. No. 1,277,152; Aug. 27; v. 253; p. 872.
Anticreeper for railway-rails. D. F. Vaughan. No. 1,276,457; Aug. 20; v. 253; p. 648.
Antiseptic and germicidal tablet. A. Rogers. No. 1,276,119; Aug. 20; v. 253; p. 553.
Antiskid device. A. Brasen. No. 1,277,288; Aug. 27; v. 253; p. 906.
Antiskid device. J. F. Whistler. No. 1,277,278; Aug. 27; v. 253; p. 904.
Antiskid device for vehicle-wheels. M. Daxe. No. 1,274,392; Aug. 6; v. 253; p. 13.
Antiskidding attachment. P. D. Skahen. No. 1,275,484; Aug. 13; v. 253; p. 345.
Antiskidding device. P. D. Skahen. No. 1,275,485; Aug. 13; v. 253; p. 345.
Antiskidding device for vehicles. P. D. Skahen. No. 1,275,483; Aug. 13; v. 253; p. 344.
Apparel, Wearing-. J. P. Wels. No. 1,277,006; Aug. 27; v. 253; p. 832.
Apparel, Wearing-. J. P. Wels. No. 1,277,007; Aug. 27; v. 253; p. 832.
Arm, Artificial. E. W. Hobbs. No. 1,275,027; Aug. 6; v. 253; p. 194.
Armature-circuit-testing apparatus. C. Zeek. No. 1,276,304; Aug. 20; v. 253; p. 604.
Armature construction. V. G. Apple. No. 1,276,857; Aug. 27; v. 253; p. 792.
Armature construction for dynamo-electric machines. V. G. Apple. No. 1,275,195; Aug. 13; v. 253; p. 266.
Armor, Individual protective. P. C. Flanagan. No. 1,276,200; Aug. 20; v. 253; p. 577.

Armor or protector for infantrymen. S. Orenbuch and N. Roginsky. No. 1,274,757; Aug. 6; v. 253; p. 119.
Armor-plates, Method of and apparatus for casting. L. Gathmann. No. 1,276,517; Aug. 20; v. 253; p. 664.
Ash-conveyers, Discharge apparatus for. A. Girtanner and R. H. Mellor. No. 1,275,015; Aug. 6; v. 253; p. 191.
Ash-pan. A. F. Way. No. 1,275,335; Aug. 13; v. 253; p. 304.
Asphalt or concrete, Apparatus for cutting and breaking. J. Petermann. No. 1,276,686; Aug. 20; v. 253; p. 710.
Attaching device. A. Ballinberg. No. 1,276,312; Aug. 20; v. 253; p. 606.
Auger. E. J. Flander. No. 1,275,889; Aug. 13; v. 253; p. 459.
Autographic register. J. Q. Sherman. No. 1,275,615; Aug. 13; v. 253; p. 381.
Automatic coupling for trackless vehicles. G. W. Bulley. No 1,277,187; Aug. 27; v. 253; p. 882.
Automatic limit-switch. E. L. Dunn. No. 1,275,407; Aug. 13; v. 253; p. 325.
Automatic release-coupling. F. S. Garford. No. 1,277,058; Aug. 27; v. 253; p. 845.
Automatic signal. G. P. Thurber. No. 1,274,629; Aug. 6; v. 253; p. 83.
Automatic trap for rats, mice, and wild animals. A. Valenzuela. No. 1,274,959; Aug. 6; v. 253; p. 176.
Automobile. R. S. Fend. No. 1,275,011; Aug. 6; v. 253; p. 190.
Automobile-accelerator pedals, Foot-rest for. H. Dietz. No. 1,276,189; Aug. 20; v. 253; p. 574.
Automobile, Armored war-. C. M. Taylor. No. 1,276,444; Aug. 20; v. 253; p. 644.
Automobile automatic safety-stop. L. Hornor. No. 1,276,921; Aug. 27; v. 253; p. 809.
Automobile-bodies, Shock and movement absorbing support for. J. G. Arcaro. No. 1,276,704; Aug. 27; v. 253; p. 753.
Automobile-body. R. G. Coghlan. No. 1,277,294; Aug. 27; v. 253; p. 907.
Automobile-body. J. Ledwinka. No. 1,275,274; Aug. 13; v. 253; p. 287.
Automobile-body, Convertible. J. J. Schramm. No. 1,276,970; Aug. 27; v. 253; p. 822.
Automobile-bumper. W. P. Hammond. No. 1,276,211; Aug. 20; v. 253; p. 579.
Automobile-bumpers, Adjustable support for. L. P. Halladay. No. 1,277,342; Aug. 27; v. 253; p. 920.
Automobile-bumpers and vehicle-frames, Connection between. C. M. Sager. No. 1,274,456; Aug. 6; v. 253; p. 33.
Automobile-controlling device. F. T. Langolf. No. 1,275,706; Aug. 13; v. 253; p. 406.
Automobile direction-signal. C. G. Shauck. No. 1,276,425; Aug. 20; v. 253; p. 639.
Automobile-engine. A. C. Mason and A. T. Sturt. No. 1,276,389; Aug. 20; v. 253; p. 629.
Automobile-engines, Accelerating foot-throttle for use on. P. E. Vineyard. No. 1,274,823; Aug 6; v. 253; p. 137.
Automobile-fender. N. Weiss. No. 1,275,113. Aug. 6; v. 253; p. 218.
Automobile-jack. E. Goughler. No. 1,274,873; Aug. 6; v. 253; p. 152.
Automobile-jack. A. J. Michelin. No. 1,275,971; Aug. 13; v. 253; p. 481.
Automobile-jack. E. A. Wilcox. No. 1,276,469; Aug. 20; v. 253; p. 651.
Automobile-light controller. H. F. Bucklow. No. 1,275,525; Aug. 13; v. 253; p. 356.
Automobile-lock. J. A. Campbell. No. 1,275,126; Aug. 6; v. 253; p. 221.
Automobile-lock. H. Landmann. No. 1,274,427; Aug. 6; v. 253; p. 24.
Automobile-lock. F. J. Lecak. No. 1,277,088; Aug. 27; v. 253; p. 854.
Automobile-lock. C. Petersen. No. 1,277,113; Aug. 27; v. 253; p. 861.
Automobile-lock. T. C. Riebe. No. 1,276,116; Aug. 20; v. 253; p. 552.
Automobile-radiators, Attachment for. W. R. Johnston. No. 1,275,441; Aug. 13; v. 253; p. 333.
Automobile-radiators, Funnel-cap for. W. Seitz. No. 1,274,947; Aug. 6; v. 253; p. 172.
Automobile-rim. E. W. Hofstatter. No. 1,276,917; Aug. 27; v. 253; p. 808.
Automobile-rim, Collapsible. E. C. Ludwick. No. 1,277,090; Aug. 27; v. 253; p. 855.
Automobile safety appliance. L. Brown. No. 1,274,982; Aug. 6; v. 253; p. 182.
Automobile-signal. E. A. Arolan. No. 1,277,171; Aug. 27; v. 253; p. 877.
Automobile-signal. R. C. Barfield. No. 1,277,175; Aug. 27; v. 253; p. 879.
Automobile-signal. E. Frey. No. 1,277,303; Aug. 27; v. 253; p. 910.
Automobile-signal. B. Moad. No. 1,277,335; Aug. 27; v. 253; p. 918.
Automobile-signal. W. R. Roberts. No. 1,274,785; Aug. 6; v. 253; p. 126.
Automobile-signal. R. L. Wernatz. No. 1,275,114; Aug. 6; v. 253; p. 218.
Automobile-signal device. J. J. Alaimo. No. 1,276,473; Aug. 20; v. 253; p. 652.
Automobile-sleigh runner. F. A. and R. Moffitt. No. 1,275,721; Aug. 13; v. 253; p. 411.
Automobile-starting system. F. Conrad. No. 1,274,992; Aug. 6; v. 253; p. 185.
Automobile steering device. J. C. Fulkerson. No. 1,276,895; Aug. 27; v. 253; p. 802.
Automobile steering device. B. P. Stedman. No. 1,275,625; Aug. 13; v. 253; p. 384.
Automobile steering mechanism. A. P. Brush. No. 1,275,830; Aug. 13; v. 253; p. 443.
Automobile-wheel. E. N. Bergstrom. No. 1,274,974; Aug. 6; v. 253; p. 179.
Automobiles and other passenger-vehicles, Wind-shield for. C. H. Fryer. No. 1,274,869; Aug. 6; v. 253; p. 151.
Automobiles and other vehicles, Signaling device for. F. C. Pfeil. No. 1,274,769; Aug. 6; v. 253; p. 122.
Automobiles, Automatic speed control for. A. L. Skells. No. 1,277,267; Aug. 27; v. 253; p. 901.
Automobiles, Combined clutch, brake, and gear operating lever for. H. D. Peaslee. No. 1,274,762; Aug. 6; v. 253; p. 120.
Automobiles, Electric-lighting system for. E. W. Lane. No. 1,276,934; Aug. 27; v. 253; p. 812.
Automobiles, Extensible driving-shaft for. T. F. Barsby. No. 1,276,710; Aug. 27; v. 253; p. 755.
Automobiles, Folding-bed attachment for. L. Harris. No. 1,274,539; Aug. 6; v. 253; p. 58.
Automobiles, Frame and body structure for. P. S. Larson. No. 1,275,272; Aug. 13; v. 253; p. 287.
Automobiles, Gear-shifting mechanism for. F. C. Sanford. No. 1,277,134; Aug. 27; v. 253; p. 867.
Automobiles, Hill-climbing and antiskidding device for. C. R. Lord. No. 1,274,568; Aug. 6; v. 253; p. 65.
Automobiles, Mechanism for the control of. C. M. Bishop. No. 1,274,978; Aug. 6; v. 253; p. 181.
Automobiles, Ornament for the radiator-caps of. A. G. Canby. No. 1,275,384; Aug. 13; v. 253; p. 318.
Automobiles, Radius-rod for. F. P. White. No. 1,274,482; Aug. 6; v. 253; p. 41.
Automobiles, Spark-controlling attachment for. E. M. Andres. No. 1,275,518; Aug. 13; v. 253; p. 354.
Automobiles, Traction attachment for. G. R. Milligan. No. 1,275,720; Aug. 13; v. 253; p. 411.
Automobiles, Tractor attachment for. E. B. Winters. No. 1,274,968; Aug. 6; v. 253; p. 178.
Autos, Foot-throttle for Ford. W. I. Sylvester. No. 1,276,991; Aug. 27; v. 253; p. 828.
Awnings and tents, Connection-assembly for. W. C. Langdon. No. 1,275,050; Aug. 6; v. 253; p. 202.
Awnings, Extending-bracket for. H. H. Schroyer. No. 1,274,845; Aug. 6; v. 253; p. 171.
Axle, Automobile-. J. B. Ketchum. No. 1,274,559; Aug. 6; v. 253; p. 62.
Axle construction, Front-. E. R. Evans. No. 1,276,046; Aug. 20; v. 253; p. 533.
Axle for motor-vehicles, Driving-. H. J. Kline. No. 1,275,444; Aug. 13; v. 253; p. 334.
Axle-hub construction for motor-driven vehicles, Driving-. C. C. Evans. No. 1,275,143; Aug. 6; v. 253; p. 226.
Axle stand, Rear-. J. S. Carswell. No. 1,274,681; Aug. 6; v. 253; p. 98.
Bag: *See*—
Shell-bag.
Bag-carrier. N. H. Bullock. No. 1,276,322; Aug. 20; v. 253; p. 609.
Bags or wrappers, Mechanism for folding and closing the ends of. W. Rose. No. 1,275,756; Aug. 13; v. 253; p. 421.
Baking machine, Tortilla-. T. Rios. No. 1,277,125; Aug. 27; v. 253; p. 865.
Bale-forming machine. L. K. Freeman. No. 1,277,302; Aug. 27; v. 253; p. 910.
Baling-machine. W. Caswell. No. 1,274,682; Aug. 6; v. 253; p. 98.
Baling-press. J. J. Stewart. No. 1,276,986; Aug. 27; v. 253; p. 826.
Baling-presses, Wire-spacing attachment for. W. A. Grant. No. 1,277,306; Aug. 27; v. 253; p. 911.
Baling-presses, Wire-tying mechanism for. E. G. Paddeck. No. 1,275,296; Aug. 13; v. 253; p. 293.
Ball: *See*—
Pipe-ball.
Ball lift, Stand-valve-. F. W. Hall. No. 1,277,309; Aug. 27; v. 253; p. 912.
Ball-mill. D. H. Fairchild. No. 1,275,184; Aug. 6; v. 253; p. 238.
Balloon controller and conveyer, Captive-. J. N. Lewis. No. 1,275,710; Aug. 13; v. 253; p. 407.
Balloon, Dirigible. W. Culver. No. 1,276,497; Aug. 20; v. 253; p. 659.
Ballot-box. E. J. McGowan. No. 1,275,579; Aug. 13; v. 253; p. 371.
Band-brake. T. R. Morse. No. 1,276,792; Aug. 27; v. 253; p. 775.
Band-feeding device. W. S. Hamm. No. 1,276,906; Aug. 27; v. 253; p. 805.
Bank. J. Komorous. No. 1,276,664; Aug. 20; v. 253; p. 704.
Bank, Contact-. H. P. Clausen. No. 1,276,491; Aug. 20; v. 253; p. 657.
Bar: *See*—
Conductor-bar. Rail-joint splice-bar.
Dolly-bar. Universal bar.
Barb-wire stretcher. J. E. Margeson. No. 1,274,736; Aug. 6; v. 253; p. 118.

Barrel-filling machine. J. Galleazzi. No. 1,276,341; Aug. 20; v. 253; p. 614.
Barrels and the like, Head for. A. J. Hodge and H. B. Ruggles. No. 1,276,362; Aug. 20; v. 253; p. 621.
Barrels and the like, Head for. A. J. Hodge and H. B. Ruggles. No. 1,276,363; Aug. 20; v. 253; p. 622.
Barrels, Faucet-receptacle for. G. W. Knapp. No. 1,276,698; Aug. 20; v. 253; p. 713.
Barrier, Portable. P. Niznik. No. 1,276,100; Aug. 20; v. 253; p. 548.
Basket attachment, Baby-. G. W. Checkley. No. 1,277,292; Aug. 27; v. 253; p. 907.
Basket corrugator, Metal-. F. D. Tellin. No. 1,275,497; Aug. 13; v. 253; p. 348.
Bath-room fixtures, Attachment for. W. E. Wells. No. 1,276,463; Aug. 20; 253; p. 649.
Batteries or other receptacles, Filling device or valve for storage-. M. R. Hutchison. No. 1,275,262; Aug. 13; v. 253; p. 284.
Batteries, Spring-clip for storage-. C. H. Kay and C. F. Hartung. No. 1,275,939; Aug. 13; v. 253; p. 471.
Batteries, System for charging car-lighting. T. L. Mount. No. 1,275,586; Aug. 13; v. 253; p. 372.
Battery: *See*—
Electric battery. Storage battery.
Battery-cover. C. W. Taube. No. 1,276,593; Aug. 20; v. 253; p. 685.
Battery installation, Storage-. G. E. Edgar. No. 1,275,007; Aug. 6; v. 253; p. 189.
Beach-building. J. P. Remington. No. 1,274,450; Aug. 6; v. 253; p. 31.
Bean-cleaner. J. D. Carlson. No. 1,275,385; Aug. 13; v. 253; p. 319
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Fence-clamp.
Guy-strand clamp.
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Hose-clamp.
Pipe-clamp.
Sewing-machine needle-clamp.
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Clamp. I. Cooper and O. F. Presbrey. No. 1,274,689; Aug. 6; v. 253; p. 100.
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Automatic release-coupling.
Electrical coupling.
Hose-coupling.
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Latch-elevator.
Elevator-bucket attachment. A. L. Adrianson. No. 1,276,851; Aug. 27; v. 253; p. 791.
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Gas-engine. Rotary internal-combustion engine.
Internal-combustion engine. Rotary steam-engine.
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Oscillating engine. Tractor-engine.
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Fort, Movable. A. Krzan. No. 1,274,721; Aug. 6; v. 253; p. 109.

Foundry process, Continuous. O. L. Dosch. No. 1,276,040; Aug. 20; v. 253; p. 531.

Foundry system. O. L. Dosch. No. 1,276,039; Aug. 20; v. 253; p. 530.

Fountain: *See*—
- Drinking-fountain.

Fourdrinier machine. J. Aipine. No. 1,275,826; Aug. 13; v. 253; p. 440.

Frame: *See*—
- Embroidery-frame.
- Flying-machine frame.
- Furnace-door frame.
- Picture-frame.
- Quilting-frame.
- Screen-frame.
- Tractor-frame.

Frequency-changer. F. W. Meyer. No. 1,275,967; Aug. 13; v. 253; p. 479.

Friction-facing and making same. L. Kirschbraun. No. 1,275,043; Aug. 6; v. 253; p. 199.

Fruit-drier. U. G. Stover. No. 1,276,988; Aug. 27; v. 253; p. 827.

Fruit-drying apparatus. T. W. W. Forrest. No. 1,275,547; Aug. 13; v. 253; p. 362.

Fruit-gathering device. B. F. Tussing. No. 1,276,453; Aug. 20; v. 253; p. 647.

Fuel, Burning pulverized. V. Z. Caracristi. No. 1,274,384; Aug. 6; v. 253; p. 10.

Fuel-consuming apparatus. J. Schaub. No. 1,275,608; Aug. 13; v. 253; p. 379.

Fuel-mixing device. M. L. Packer. No. 1,276,257; Aug. 20; v. 253; p. 591.

Fuel product and making same. O. F. Werner. No. 1,274,480; Aug. 6; v. 253; p. 40.

Fuel, System for supplying liquid. T. J. Fay. No. 1,276,890; Aug. 27; v. 253; p. 801.

Fuel-vaporizer. C. H. Cook. No. 1,276,332; Aug. 20; v. 253; p. 611.

Funnel, Automatic. F. Junek, Jr. No. 1,275,565; Aug. 13; v. 253; p. 367.

Furnace: *See*—
- Boiler-furnace.
- Electric furnace.
- Electrical induction-furnace.
- Liquid-fuel furnace.
- Tire-heating furnace.

Furnace. T. F. F. Lee. No. 1,275,986; Aug. 13; v. 253; p. 485.

Furnace-arch construction. W. Lemb. No. 1,275,709; Aug. 13; v. 253; p. 407.

Furnace-cooling structures, Safety means for. L. S. Schmidt. No. 1,276,420; Aug. 20; v. 253; p. 638.

Furnace-door. J. Borge. No. 1,275,650; Aug. 13; v. 253; p. 391.

Furnace door-frame and door structure. L. L. Knox. No. 1,275,943; Aug. 13; v. 253; p. 472.

Furnace-draft and fuel-regulator, Automatic. L. M. Schneider. No. 1,275,096; Aug. 6; v. 253; p. 213.

Furnace for chemical reactions. M. Shoeld. No. 1,274,795; Aug. 6; v. 253; p. 129.

Furnace-wall structure. D. S. Jacobus. No. 1,275,037; Aug. 6; v. 253; p. 197.

Furnaces, Fuel-support for. W. J. Kunz. No. 1,274,563; Aug. 6; v. 253; p. 64.

Furnaces, Machine for tapping blast-. B. J. Mullen. No. 1,276,251; Aug. 20; v. 253; p. 589.

Furnaces, Machine for tapping blast-. B. J. Mullen. No. 1,276,252; Aug. 20; v. 253; p. 590.

Furniture, Convertible. J. R. Gilda. No. 1,274,532; Aug. 6; v. 253; p. 56.

Furniture, Convertible. W. J. Kelly. No. 1,276,227; Aug. 20; v. 253; p. 583.

Furrowing-machine. H. E. Howard and J. T. Titsworth. No. 1,276,531; Aug. 20; v. 253; p. 668.

Fuse. H. L. Beck, J. Weible, and J. J. Houlahen. No. 1,274,368; Aug. 6; v. 253; p. 5.

Fuse, Cartridge-. O. H. Jung. No. 1,275,442; Aug. 13; v. 253; p. 334.

Fuse, Detonating blasting-. G. H. Dormer. No. 1,275,001; Aug. 6; v. 253; p. 187.

Fuse, Electric. E. L. Ogle. No. 1,276,800; Aug. 27; v. 253; p. 778.

Fuse, Electric. W. W. Walsh. No. 1,275,110; Aug. 6; v. 253; p. 217.

Fuse, Inclosed electric. R. C. Cole. No. 1,277,044; Aug. 27; v. 253; p. 841.

Fuse link, Electric-. R. C. Cole. No. 1,277,045; Aug. 27; v. 253; p. 841.

Gage: *See*—
- Fluid-pressure gage.
- Liquid depth or amount gage.
- Marking-gage.
- Measuring and marking gage.
- Oil-gage.
- Outage-gage.
- Pressure-gage.
- Ring-gage.
- Tire-gage.
- Velocity-pressure and calculating gage.
- Water-level gage.

Gaging-machine. H. R. Edgecomb. No. 1,274,698; Aug. 6; v. 253; p. 102.

Game. A. C. Barnes. No. 1,276,475; Aug. 20; v. 253; p. 653.

Game. C. H. Belknap. No. 1,276,015; Aug. 20; v. 253; p. 524.

Game. J. W. Braunschweiler. No. 1,275,210; Aug. 13; v. 253; p. 270.

Game. R. Sato. No. 1,277,263; Aug. 27; v. 253; p. 900.

Game. J. P. Sedlak, Jr. No. 1,275,613; Aug. 13; v. 253; p. 380.

Game. H. L. Watkins. No. 1,275,805; Aug. 13; v. 253; p. 435.

Game apparatus. S. A. Mischanski. No. 1,276,676; Aug. 20; v. 253; p. 707.

Game, Base-ball. C. W. Lewis. No. 1,276,777; Aug. 27; v. 253; p. 772.

Garage-door, Automatic. F. S. Peterson. No. 1,275,594; Aug. 13; v. 253; p. 374.

Garbage-can and trap, Combined. J. Jones. No. 1,276,770; Aug. 27; v. 253; p. 770.

Garment. J. Antonelli. No. 1,276,854; Aug. 27; v. 253; p. 792.

Garment, Child's bath-. B. Rosenberg. No. 1,274,938; Aug. 6; v. 253; p. 169.

Garment-hanger fixture. G. H. Wheary. No. 1,276,845; Aug. 27; v. 253; p. 789.

Garment-holder. S. Craig. No. 1,276,034; Aug. 20; v. 253; p. 529.

Garment-pressing device. R. W. Van Buren. No. 1,275,801; Aug. 13; v. 253; p. 434.

Garment-stretcher. E. M. Wenzel. No. 1,277,010; Aug. 27; v. 253; p. 833.

Garment-supporter. Hygienic. L. C. Lowder. No. 1,276,238; Aug. 20; v. 253; p. 586.

Garments, Cutting. J. W. Babb. No. 1,274,364; Aug. 6; v. 253; p. 3.

Garter and garment-supporter. F. W. Hoelting. No. 1,276,763; Aug. 27; v. 253; p. 768.

Gas-black, hydrogen, &c., Manufacturing. C. D. McCourt and C. Ellis. No. 1,276,385; Aug. 20; v. 253; p. 628.

Gas-engine. J. L. Lovell. No. 1,275,278; Aug. 13; v. 253; p. 288.

Gas-engine, Rotary. C. C. Smiley. No. 1,275,619; Aug. 13; v. 253; p. 382.

Gas for cutting purposes. J. Harris. No. 1,275,252; Aug. 13; v. 253; p. 282.

Gas generating and heating apparatus. J. W. Walker. No. 1,276,837; Aug. 27; v. 253; p. 787.

Gas generator, Acetylene-. P. F. Killian. No. 1,274,893; Aug. 6; v. 253; p. 157.

Gas hot-plate. G. E. Pickup. No. 1,275,301; Aug. 13; v. 253; p. 295.

Gas-lighter, Electric. R. F. Dowdy. No. 1,276,737; Aug. 27; v. 253; p. 762.

Gas-mantles, Burning off, seasoning, and hardening incandescent. M. H. Hersey. No. 1,274,414; Aug. 6; v. 253; p. 20.

Gas-measuring apparatus. H. V. Higley. No. 1,275,255; Aug. 13; v. 253; p. 282.

Gas-moistening apparatus. E. J. Bushey. No. 1,275,379; Aug. 13; v. 253; p. 317.

Gas-producer. A. M. Taylor. No. 1,275,789; Aug. 13; v. 253; p. 430.

Gas, Producing and separating liquefied. L. Wolf. No. 1,274,970; Aug. 6; v. 253; p. 178.

Gas-reservoir. K. Jagschitz. No. 1,275,696; Aug. 13; v. 253; p. 403.

Gases with liquids, Apparatus for cooling and otherwise treating. A. W. Mathys. No. 1,275,583; Aug. 13; v. 253; p. 372.

Gasolene-engines, Fuel-heater for. J. H. Gorman. No. 1,274,707; Aug. 6; v. 253; p. 105.

Gasolene, Producing. J. C. Black. No. 1,275,648; Aug. 13; v. 253; p. 390.

Gasket and screen combination. H. L. Burr. No. 1,276,171; Aug. 20; v. 253; p. 568.

Gate: *See*—
- Drainage-gate.
- Head-gate.
- Railway-crossing gate.
- Safety-gate.

Gate. J. Fusselman. No. 1,276,207; Aug. 20; v. 253; p. 578.

Gate. G. H. Shattuck. No. 1,276,424; Aug. 20; v. 253; p. 639.

Gate. S. O. Widell. No. 1,276,602; Aug. 20; v. 253; p. 688.

Gate-fastening device. W. K. Voorhees. No. 1,275,506; Aug. 13; v. 253; p. 350.

Gate-opening device. H. T. Miller. No. 1,277,334; Aug. 27; v. 253; p. 918.

Gear actuating and locking mechanism. F. J. Todd. No. 1,274,471; Aug. 6; v. 253; p. 37.

Gear, blank for gears, rolls, &c., and manufacturing the same. E. J. Guay. No. 1,275,906; Aug. 13; v. 253; p. 462.

Gear, Change-speed. J. K. Ott. No. 1,277,251; Aug. 27; v. 253; p. 897.

Gear, Change-speed. R. M. Ruck. No. 1,277,130; Aug. 27; v. 253; p. 866.

Gear, Change-speed. G. E. Stanley. No. 1,274,463; Aug. 6; v. 253; p. 35.

Gear-cutter. A. L. Stewart and B. H. Bickle. No. 1,274,466; Aug. 6; v. 253; p. 36.

Gear-cutting machine. C. A. Parsons, A. Q. Carnegie, and S. S. Cook. No. 1,274,583; Aug. 6; v. 253; p. 70.

Gear-cutting machine. C. A. Parsons, A. Q. Carnegie, and S. S. Cook. No. 1,274,584; Aug. 6; v. 253; p. 70.

Gear-cutting machine. C. A. Parsons, A. Q. Carnegie, and S. S. Cook. No. 1,274,585; Aug. 6; v. 253; p. 70.

Gear, Eccentric-reversing. E. Schneider. No. 1,275,095; Aug. 6; v. 253; p. 213.

Gear-shifting mechanism. N. and J. Tormoen. No. 1,274,632; Aug. 6; v. 253; p. 84.

Gear-wheel lubrication. G. M. Eaton. No. 1,275,004; Aug. 6; v. 253; p. 188.

Gearing. C. B. Trussell. No. 1,275,106; Aug. 6; v. 253; p. 216.

Gearing, Automatic change-speed. H. L. Duncan. No. 1,277,299; Aug. 27; v. 253; p. 909.

Gearing, Change-speed. W. S. Irey. No. 1,276,368; Aug. 20; v. 253; p. 623.

Gearing, Change-speed. W. S. Irey. No. 1,276,369; Aug. 20; v. 253; p. 623.

Gearing for motor-vehicles, Differential. W. Sprenger, No. 1,276,432; Aug. 20; v. 253; p. 641.

Gearing, Friction-. O. A. Albrecht. No. 1,277,167; Aug. 27; v. 253; p. 876.

Gearing, Motor-vehicle. P. G. Howe. No. 1,274,417; Aug. 6; v. 253; p. 21.

Gearing, Speed-reducing. V. G. Apple. No. 1,276,855; Aug. 27; v. 253; p. 792.

Gearing, Worm-. R. M. Lovejoy. No. 1,276,237; Aug. 20; v. 253; p. 585.

Gearing, Worm-. M. Maag. No. 1,274,918; Aug. 6; v. 253; p. 164.

Gearing, Yieldable change-speed. E. Fairweather. No. 1,275,885; Aug. 13; v. 253; p. 458.

Generator: *See*—
- Acetylene-generator.
- Air-generator.
- Gas-generator.
- Pressure-generator.
- Smoke and heat generator.
- Steam-generator.

Generators, Electric control for. H. A. Scott. No. 1,276,578; Aug. 20; v. 253; p. 681.

Glare-shield. C. H. Schumacher and A. A. Schmatz. No. 1,275,311; Aug. 13; v. 253; p. 298.

Glass apparatus. W. E. Sloppy. No. 1,274,616; Aug. 6; v. 253; p. 80.

Glass blanks, Shears for. P. H. Thompson. No. 1,275,629; Aug. 13; v. 253; p. 385.

Glass disks, Machine for grinding. G. A. Leeks. No. 1,276,776; Aug. 27; v. 253; p. 771.

Glass-drawing apparatus. W. Westbury. No. 1,276,465; Aug. 20; v. 253; p. 650.

Glass-drawing mechanism, Sheet-. I. W. Colburn. No. 1,274,385; Aug. 6; v. 253; p. 10.

Glass-drilling. H. Northwood. No. 1,276,683; Aug. 20; v. 253; p. 709.

Glass, Feeder for molten. K. E. Peller. No. 1,277,254; Aug. 27; v. 253; p. 898.

Glass, Feeder for molten. K. E. Peller. No. 1,277,255; Aug. 27; v. 253; p. 898.

Glass, Feeding. H. K. Hitchcock. No. 1,275,424; Aug. 13; v. 253; p. 328.

Glass, Feeding molten. K. E. Peller. No. 1,277,256; Aug. 27; v. 253; p. 898.

Glass-machine. W. J. Miller. No. 1,276,392; Aug. 20; v. 253; p. 630.

Glass-making apparatus, Plate-. J. H. McKelvey and C. F. Ryan. No. 1,274,916; Aug. 6; v. 253; p. 164.

Glass, Mechanism for delivering. T. Stenhouse. No. 1,274,625; Aug. 6; v. 253; p. 82.

Glass-molding plunger. A. Brancart. No. 1,274,673; Aug. 6; v. 253; p. 96.

Glass-working. F. L. O. Wadsworth. No. 1,275,178; Aug. 6, v. 253; p. 236.

Glassware, Making. T. C. Moorshead. No. 1,274,577. Aug. 6; v. 253; p. 68.

Glove, Gauntlet-. S. B. Morrell. No. 1,276,099; Aug. 20; v. 253; p. 548.

Glove, Skidproof. J. W. Eckman. No. 1,275,005; Aug. 6; v. 253; p. 188.

Glue or adhesive, Vegetable. R. W. Tunnell. No. 1,275,799; Aug. 13; v. 253; p. 433.

Governor, Centrifugal. J. J. Herzog and W. M. Medlock. No. 1,275,026; Aug. 6; v. 253; p. 194.

Governor for explosive-engines. A. H. Kraft. No. 1,274,422; Aug. 6; v. 253; p. 23.

Grading-machine. X. F. Counard. No. 1,276,876; Aug. 27; v. 253; p. 798.

Grain and seed drier. O. W. Randolph. No. 1,276,812; Aug. 27; v. 253; p. 781.

Grain-bin. G. F. Brown. No. 1,275,157; Aug. 6; v. 253; p. 230.

Grain-bin. C. C. Fouts. No. 1,274,868; Aug. 6; v. 253; p. 151.

Grain-pickling machine. E. Wright. No. 1,275,819; Aug. 13; v. 253; p. 438.

Grain-shock-transporting vehicle. W. L. Hopkins. No. 1,276,064; Aug. 20; v. 253; p. 538.

Graphophone, Duplex. F. C. Hinckley and J. Graham. No. 1,276,759; Aug. 27; v. 253; p. 767.

Grapple. H. Weickel. No. 1,276,143; Aug. 20; v. 253; p. 560.

Grass-cutter. F. Nimchek. No. 1,277,105; Aug. 27; v. 253; p. 859.

Grave-marker. W. F. Norman. No. 1,276,798; Aug. 27; v. 253; p. 777.

Gravel washing and screening apparatus. R. W. Dull. No. 1,277,051; Aug. 27; v. 253; p. 843.

Grease-cup. G. S. Garren. No. 1,277,059; Aug. 27; v. 253; p. 846.

Grease-cup. C. H. Kelley. No. 1,274,558; Aug. 6; v. 253; p. 62.

Grease-gun. C. Long. No. 1,275,058; Aug. 6; v. 253; p. 204.

Grease-gun. J. G. MacGregor. No. 1,275,455; Aug. 13; v. 253; p. 337.

Grease-gun. M. E. Thompson. No. 1,276,286; Aug. 20; v. 253; p. 599.

Grease-gun filler. J. J. Richards, Jr. No. 1,274,452; Aug. 6; v. 253; p. 31.

Grenade. J. A. Steinmetz. No. 1,276,434; Aug. 20; v. 253; p. 642.

Grenade-thrower. C. W. Hess. No. 1,274,882; Aug. 6; v. 253; p. 155.

Grenade with time-fuse and automatic release, Hand-. N. W. Aasen. No. 1,275,190; Aug. 13; v. 253; p. 265.

Grinder. C. E. Quimby. No. 1,274,591; Aug. 6; v. 253; p. 72.

Grinders, Tool-support for. E. Bockshe. No. 1,275,208; Aug. 13; v. 253; p. 269.

Grinding-wheel dresser. J. E. Hoy and R. P. Place. No. 1,276,366; Aug. 20; v. 253; p. 622.

Grinding worm-threads, Machine for. C. H. Calkins. No. 1,275,218; Aug. 13; v. 253; p. 272.

Grip, Safety-. J. O. Caldwell, Jr. No. 1,275,217; Aug. 13; v. 253; p. 272.

Gripper-motion. M. A. Droitcour. No. 1,275,002; Aug. 6; v. 253; p. 187.

Gummed-strip severing and moistening machine, Transverse-delivery. C. H. Crowell. No. 1,276,729; Aug. 27; v. 253; p. 760.

Gummed tape and making same, Cloth. C. H. Crowell. No. 1,276,731; Aug. 27; v. 253; p. 760.

Gummed tape, Making cloth. C. H. Crowell. No. 1,276,730; Aug. 27; v. 253; p. 760.

Gun, Air-. S. Svenson. No. 1,276,989; Aug. 27; v. 253; p. 827.

Gun, Disappearing. G. Gerace. No. 1,276,518; Aug. 20; v. 253; p. 664.

Gun for destroying wire entanglements. J. M. Jennings. No. 1,275,561; Aug. 13; v. 253; p. 366.

Gun, Machine-. C. Gregg. No. 1,277,307; Aug. 27; v. 253; p. 911.

Gun-sight. H. R. Frensdorf. No. 1,275,147; Aug. 6; v. 253; p. 227.

Gun-sight. F. R. Koenig. No. 1,276,545; Aug. 20; v. 253; p. 672.

Guns, Elevating mechanism of heavy. A. T. Dawson and J. Horne. No. 1,274,518; Aug. 6; v. 253; p. 51.

Guy-strand clamp. B. M. Mathias. No. 1,275,283; Aug. 13; v. 253; p. 290.

Hacksaw and broaching machine. H. Embree. No. 1,275,883; Aug. 13; v. 253; p. 457.

Hair-clipper. L. E. Vass. No. 1,275,107; Aug. 6; v. 253; p. 216.

Hair-fastener. I. O. Magnuson. No. 1,274,920; Aug. 6; v. 253; p. 165.

Hame attachment. E. R. Bilderback. No. 1,275,646; Aug. 13; v. 253; p. 390.

Hammer and forging-press, Combined steam-. T. E. Holmes. No. 1,275,688; Aug. 13; v. 253; p. 401.

Hammer, Electric. G. M. Painter. No. 1,276,804; Aug. 27; v. 253; p. 779.

Hammer, Electrically-operated. G. M. Painter. No. 1,276,104; Aug. 20; v. 253; p. 549.

Hammer, Riveting-. F. E. Johnson. No. 1,277,080; Aug. 27; v. 253; p. 852.

Hand-rest, Touch-system. W. J. Anderson. No. 1,277,169; Aug. 27; v. 253; p. 877.

Hand-warmer, Steering-wheel. C. W. and J. T. Kemper. No. 1,276,930; Aug. 27; v. 253; p. 811.

Handle: *See*—
- Brake-wheel-operating handle.
- Car-brake handle.
- Railway-switch handle.
- Saw-handle.
- Utensil-handle.

Hanger: *See*—
- Car-door hanger.
- Clothes-line hanger.
- Outlet-box hanger.
- Shade and curtain hanger.
- Sign-hanger.
- Trousers and coat hanger.

Harrow. G. H. Ferguson. No. 1,274,866; Aug. 6; v. 253; p. 150.

Harrow. C. Peterson. No. 1,274,586; Aug. 6; v. 253; p. 71.

Harrow-tooth. H. M. Gooding. No. 1,276,645; Aug. 20; v. 253; p. 699.

Harvester, Bean-. W. A. Wynan. No. 1,275,640; Aug. 13; v. 253; p. 388.

Harvester, Cotton-. A. E. Stark and M. A. Garrett. No. 1,275,781; Aug. 13; v. 253; p. 427.

Harvester knife, Non-clogging corn-. G. H. Waters. No. 1,276,295; Aug. 20; v. 253; p. 602.

Harvesters and the like, Guard attachment for. R. E. Porterfield. No. 1,277,257; Aug. 27; v. 253; p. 899.

Harvesting-machine. W. P. Smith. No. 1,275,623; Aug. 13; v. 253; p. 383.

Harvesting-machines and the like, Feed device for. E. C. Woodward. No. 1,275,639; Aug. 13; v. 253; p. 388.

Hat and hat-lining. L. Freeman. No. 1,275,238; Aug. 13; v. 253; p. 278.

Hat-clamp. J. C. Wagner. No. 1,277,276; Aug. 27; v. 253; p. 904.

Hat-fastener. G. Freiwald. No. 1,276,638; Aug. 20; v. 253; p. 698.

Hat, Launderable. N. F. Winget. No. 1,274,652; Aug. 6; v. 253; p. 89.
Hat-pin, Safety. H. Ramos. No. 1,275,088; Aug. 6; v. 253; p. 211.
Hat-retainer. H. Gensch. No. 1,276,052; Aug. 20; v. 253; p. 535.
Hat-securing means. C. Roeseler. No. 1,274,604; Aug. 6; v. 253; p. 76.
Hat-securing means. M. Tannler. No. 1,276,828; Aug. 27; v. 253; p. 785.
Hats, Attachment for ladies'. W. V. Callender. No. 1,275,219; Aug. 13; v. 253; p. 272.
Hats, Shape-retaining device for felt. G. H. Hausinger. No. 1,275,023; Aug. 6; v. 253; p. 193.
Hay-carrier. H. P. Hanson. No. 1,274,541; Aug. 6; v. 253; p. 58.
Hay-loader. E. W. Burgess. No. 1,275,658; Aug. 13; v. 253; p. 393.
Hay-loader. E. Mowry. No. 1,275,722; Aug. 13; v. 253; p. 411.
Head-gate, Radial. K. J. Thorsby. No. 1,275,499; Aug. 13; v. 253; p. 348.
Head-rest. P. R. Saunders. No. 1,275,607; Aug. 13; v. 253; p. 379.
Headlight. C. Burgett. No. 1,277,190; Aug. 27; v. 253; p. 883.
Headlight. A. W. Harris. No. 1,276,757; Aug. 27; v. 253; p. 767.
Headlight. O. Winston. No 1,276,605; Aug. 20; v. 253; p. 689.
Headlight, Automobile-. L. W. Haynes. No. 1,275,421; Aug. 13; v. 253; p. 328.
Headlight-lens. G. W. Puff. No. 1,275,304; Aug. 13; v. 253; p. 295.
Headlights, Lamp-socket guide for. H. B. Rand. No. 1,276,415; Aug. 20; v. 253; p. 636.
Headlights of automobiles, Motor-controlled switch for. S. Mulvaney and E. L. Borner. No. 1,277,104; Aug. 27; v. 253; p. 859.
Heat-absorbing apparatus. H. H. Dow and T. Griswold, Jr. No. 1,275,231; Aug. 13; v. 253; p. 276.
Heat changes, Method and apparatus for inducing. R. Vuillenmier. No. 1,275,507; Aug. 13; v. 253; p. 351.
Heat-distributing device. W. C. A. Eberhardt. No. 1,276,886; Aug. 27; v. 253; p. 800.
Heat, Plant for utilizing waste. R. D. Martin. No. 1,275,962; Aug. 13; v. 253; p. 477.
Heater: *See*—
Air-heater.
Feed-water heater.
Sand and water heater.
Water-heater.
Heating element, Sectional electric. F. W. Moffat. No. 1,276,096; Aug. 20; v. 253; p. 547.
Heating-pad, Electric. C. Wirt. No. 1,276,150; Aug. 20; v. 253; p. 562.
Heating system. J. C. Coogan. No. 1,275,852; Aug. 13; v. 253; p. 447.
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Spark-plug. H. R. Pearsall. No. 1,276,105; Aug. 20; v. 253; p. 550.
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Speed-counter. U. Kohler and C. Stöcklin. No. 1,275,269; Aug. 13; v. 253; p. 286.
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Cushion-spring.
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Photograph-washer.
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Well-washer.
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Article of manufacture. E. M. Bottome. No. 52,301; Aug. 27; v. 253; p. 926.
Article of manufacture. G. K. Culp. No. 52,306; Aug. 27; v. 253; p. 927.
Ash-tray and cigar-cutter. I. Blumenthal. No. 52,264; Aug. 20; v. 253; p. 718.
Automobile. C. W. McKinley and H. H. Goodall. No. 52,288; Aug. 20; v. 253; p. 721.
Badge or similar article. V. Berberian. No. 52,263; Aug. 20; v. 253; p. 718.
Badge or similar ornament. M. C. Barnard. No. 52,261; Aug. 20; v. 253; p. 718.
Badge, Patriotic. G. F. Steedman. No. 52,355; Aug. 27; v. 253; p. 934.
Band-fastener. E. C. Tecktonius. Nos. 52,256–7; Aug. 6; v. 253; p. 243.
Beverage sold as a soft drink. The Mihalovitch Co. No. 122,409; Aug. 13; v. 253; p. 509.
Book-support. G. W. Johnston. No. 52,270; Aug. 20; v. 253; p. 720.
Bow-holder. G. W. Upton. No. 52,258; Aug. 6; v. 253; p. 243.
Bowl. E. S. Deuel. No. 52,309; Aug. 27; v. 253; p. 927.
Bunsen burner. F. B. Joy and C. H. Vogel. No. 52,321; Aug. 27; v. 253; p. 929.
Card holder, Price-. W. N. Marr. No. 52,333; Aug. 27; v. 253; p. 931.
Cement, Belt-. The Ulmer Leather Co. No. 122,413; Aug. 13; v. 253; p. 509.
Chair. A. Wanner, Jr. Nos. 52,363–4; Aug. 27; v. 252; p. 936.
Conduit-fitting. J. C. Boyton. No. 52,302; Aug. 27; v. 253; p. 926.
Container. E. Hoffman. No. 52,320; Aug. 27; v. 253; p. 929.
Cooker, Electric. F. Kuhn and J. A. Hand. No. 52,327; Aug. 27; v. 253; p. 930.
Cotton cheviots. Tupelo Cotton Mills. No. 122,412; Aug. 13; v. 253; p. 509.
Cup. A. F. Saunders. Nos. 52,349–50; Aug. 27; v. 253; pp. 933–4.
Curtain-holder. S. Rosen. No. 52,345; Aug. 27; v. 253; p. 933.
Dish. H. E. Hymer. Nos. 52,272–5; Aug. 20; v. 253; pp. 719–20.
Display-stand. L. Wulkan. No. 52,374; Aug. 27; v. 253; p. 938.
Doll. L. M. Fellom. No. 52,311; Aug. 27; v. 253; p. 928.
Doll. B. R. Maxwell. No. 52,334; Aug. 27; v. 253; p. 931.
Doll. A. F. Russ. No. 52,346; Aug. 27; v. 253; p. 933.
Dress. M. Gross. Nos. 52,268–70; Aug. 20; v. 253; p. 719.
Dust and air separator. F. F. Wear and B. M. Ely. No. 52,365; Aug. 27; v. 253; p. 936.
Emblem. W. G. Ginder. No. 52,315; Aug. 27; v. 253; p. 928.
Emblem, brooch, button, fob, badge, charm, stick-pin, or similar article. A. Wiss. No. 52,296; Aug. 20; v. 253; p. 723.
Emblem, International patriotic. J. Mignolet. No. 52,337; Aug. 27; v. 253; p. 932.
Fabric, Textile. M. Nathan. Nos. 52,284–7; Aug. 20; v. 253; p. 723.
Figure or doll. C. F. Simms. No. 52,292; Aug. 20; v. 253; pp. 721–2.
Fire-log, Electric. L. C. Hector and C. E. Davis. No. 52,318; Aug. 27; v. 253; p. 929.
Flag, banner, pennant, sign, emblem, or article of a similar nature. W. Gary. No. 52,313; Aug. 27; v. 253; p. 928.
Flag, Memorial-service. A. F. Stromberg. No. 52,357; Aug. 27; v. 253; p. 935.
Foods, Certain named. Batchelor Flour Mill Co. No. 122,406; Aug. 13; v. 253; p. 509.
Game device. E. L. Pitt. No. 52,288; Aug. 20; v. 253; p. 722.
Garment, Lady's. R. J. Hickson. No. 52,319; Aug. 27; v. 253; p. 929.
Ginger-ale. W. E. Tanner. No. 122,411; Aug. 13; v. 253; p. 509.
Glass plate or other similar article. C. L. Reizenstein. No. 52,344; Aug. 27; v. 253; p. 933.
Goggles, Pair of. L. C. King. No. 52,323; Aug. 27; v. 253; p. 929.
Headlights, Lens for auto-. A. W. Marshall. No. 52,282; Aug. 20; v. 253; p. 721.
Heater guard, Electrical-. F. Kuhn and J. A. Hand. No. 52,328; Aug. 27; v. 253; p. 930.
Helmet, Trench-. W. E. Webb, Jr., and G. L. Close. No. 52,294; Aug. 20; v. 253; p. 723.
Honor-pin. H. W. Peters. No. 52,342; Aug. 27; v. 253; p. 932.
Ice cream spoon, disher, or similar device. J. Bluhm. No. 52,250; Aug. 6; v. 253; p. 242.
Incense-burner. H. Katakawa and K. Maejima. No. 52,322; Aug. 27; v. 253; p. 929.
Inhaler. F. Lobl. No. 52,330; Aug. 27; v. 253; p. 930.
Jewelry pin, brooch, or similar article of personal wear. C. W. Lapham, Jr. No. 52,279; Aug. 20; v. 253; p. 720.
Kettle-cover holder. S. Strelak. No. 52,356; Aug. 27; v. 253; p. 935.
Lace fabric. E. A. Saywell. No. 52,351; Aug. 27; v. 253; p. 934.
Lamp. L. V. Aronson. No. 52,248; Aug. 6; v. 253; p. 241.
Lamp casing, Automobile-. E. H. Belden. No. 52,300; Aug. 27; v. 253; p. 926.
Lamp, Electric. L. R. Wellman. No. 52,259; Aug. 6; v. 253; p. 243.
Lamp fixture, Electric-. S. W. Farber. No. 52,251; Aug. 6; v. 253; p. 242.
Lamp-lens. T. C. Tussey and W. D. Shaw. No. 52,360; Aug. 27; v. 253; p. 935.
Lantern, Electric. M. Deckert. No. 52,308; Aug. 27; v. 253; p. 927.
Lighting-fixture. D. L. Bean. No. 52,299; Aug. 27; v. 253; p. 926.
Lighting-fixtures, Socket-cover for. G. Westphal. No. 52,366; Aug. 27; v. 253; p. 936.
Lighting-post. V. H. Roehrich. No. 52,254; Aug. 6; v. 253; p. 242.
Locket, fob, or similar article. C. Mitrano. No. 52,338; Aug. 27; v. 253; p. 932.
Match-box. R. Labudde. No. 52,253; Aug. 6; v. 253; p. 242.
Motor casing, Electric-. E. M. Waring. No. 52,298; Aug. 20; v. 253; p. 723.
Nail-set. W. Dziezyc. No. 52,310; Aug. 27; v. 253; p. 927.
Nuts, Tool for applying and removing lock-. C. A. Baumler. No. 52,262; Aug. 20; v. 253; p. 718.
Paper or paper-pulp cups, bowls, and dishes. The Daisy Cup Company. No. 122,408; Aug. 13; v. 253; p. 509.
Paste, Adhesive. The Patent Cereals Co. No. 122,410; Aug. 13; v. 253; p. 509.
Pen-rack. F. A. Weeks. No. 52,295; Aug. 20; v. 253; p. 723.
Pharmaceutical preparations for toilet purposes, Certain named. E. R. Berry. No. 122,407; Aug. 13; v. 253; p. 509.
Phonograph-cabinet. J. D. Adams. No. 52,260; Aug. 20; v. 253; p. 717.
Phonograph-cabinet. J. Wolff. Nos. 52,367–73; Aug. 27; v. 253; pp. 936–7.
Pin-point protector. L. Price. No. 52,290; Aug. 20; v. 253; p. 722.
Pitcher. A. J. Sanford. No. 52,347; Aug. 27; v. 253; p. 933.
Pitcher or similar article. R. R. Kintz. No. 52,324; Aug. 27; v. 253; p. 929.
Plate, Bread and butter. J. L. Kraus. No. 52,278; Aug. 20; v. 253; p. 720.
Plate or similar article. A. E. Mayer. No. 52,335; Aug. 27; v. 253; p. 931.
Radiator. W. B. Engler. No. 52,267; Aug. 20; v. 253; p. 718.
Ring, brooch, or similar article of jewelry, Finger-. C. C. Gildner. No. 52,314; Aug. 27; v. 253; p. 928.
Ring or similar article of jewelry, Finger-. H. J. A. Skipp. No. 52,353; Aug. 27; v. 253; p. 934.
Ring, Scottish-rite. L. Krauss. No. 52,326; Aug. 27; v. 253; p. 930.
Sewing-machine frame. J. R. Berger, Jr. Nos. 52,376–7; Aug. 27; v. 253; p. 938.
Shade and pole bracket, Window. M. Bosnjak. No. 52,265; Aug. 20; v. 253; p. 718.
Shoulder-strap. W. H. Loomis. Nos. 52,280–1; Aug. 20; v. 253; p. 721.
Sifter-top or similar receptacle. M. H. Connor. No. 52,305; Aug. 27; v. 253; p. 927.
Sign-digit. A. F. Wirsching. No. 52,375; Aug. 27; v. 253; p. 938.
Sign, Road-. K. Lutes. No. 52,332; Aug. 27; v. 253; p. 931.
Spoon, fork, or similar article. H. L. Wallace. No. 52,362; Aug. 27; v. 253; p. 936.
Spoon, fork, or similar article, Handle for. G. E. Ball. No. 52,249; Aug. 6; v. 253; p. 242.
Spot-light body. H. J. Sauer. No. 52,348; Aug. 27; v. 253; p. 933.
Spout for cooking utensils. G. L. Harrison. No. 52,317; Aug. 27; v. 253; p. 928.

Statuette. W. Polacheck. No. 52,289; Aug. 20; v. 253; p. 722.
Statuette or table ornament. A. Kaufman. No. 52,277; Aug. 20; v. 253; p. 720.
Support or stand. W. J. H. Strong. No. 52,255; Aug. 6; v. 253; p. 243.
Sword-handle. J. Sordyka. No. 52,354; Aug. 27; v. 253; p. 934.
Teapot or similar article. R. R. Kintz. No. 52,325; Aug. 27; v. 253; p. 930.
Tire. H. J. Leab. No. 52,329; Aug. 27; v. 253; p. 930.
Tire-casing. A. L. Breitenstein. Nos. 52,303–4; Aug. 27; v. 253; p. 926.
Tire, Elastic vehicle-. A. L. Breitenstein. No. 52,266; Aug. 20; v. 253; p. 718.
Tire-lug. F. C. Poling. No. 52,343; Aug. 27; v. 253; p. 932.
Tire, Non-skid. G. F. Armstrong. No. 52,298; Aug. 27; v. 253; p. 925.
Tire tread-block. M. G. Loew. No. 52,331; Aug. 27; v. 253; p. 931.
Toy. E. H. Swetland. Nos. 52,358–9; Aug. 27; v. 253; p. 935.
Toy balloon or similar article. J. S. Sears. No. 52,352; Aug. 27; v. 253; p. 934.
Toy, Child's. A. N. Schanschieff. No. 52,291; Aug. 20; v. 253; p. 722.
Vehicle, Child's. J. W. Arney. No. 52,247; Aug. 6; v. 253; p. 241.
Watch bow and boat. J. McGrevy. No. 52,336; Aug. 27; v. 253; p. 931.
Watch protector, Wrist-. S. Heimberg. No. 52,271; Aug. 20; v. 253; p. 219.
Watchcase. B. Glasman. No. 52,316; Aug. 27; v. 253; p. 928.
Weather-vane. J. Kibble. No. 52,252; Aug. 6; v. 253; p. 242.
Weather-vane or lightning-rod ornament. P. Mohrmann. Nos. 52,339–41; Aug. 27; v. 253; p. 932.
Weather-vane or lightning-rod ornament. H. F. Voshardt. No. 52,361; Aug. 27; v. 253; p. 935.
Wheel. A. H. Ackerman. No. 52,297; Aug. 27; v. 253; p. 925.
Wheel. A. W. Ferrin and A. H. Ackerman. No. 52,312; Aug. 27; v. 253; p. 928.
Woven fabric or similar article. E. F. Curtis. No. 52,307; Aug. 27; v. 253; p. 927.

ALPHABETICAL LIST OF TRADE-MARKS.

Anti-anemic preparations. Oriental Drug Co. No. 122,608; Aug. 27; v. 253; p. 950.
Apples, Fresh. Yakima Valley Fruit Growers Association. Nos. 122,629–30; Aug. 27; v. 253; p. 951.
Aprons. Sears, Roebuck and Co. No. 122,621; Aug. 27; v. 253; p. 950.
Automobile-radiators, Compound to prevent leaks in. C. A. Knutson. No. 122,593; Aug. 27; v. 253; p. 950.
Bacon and ham. Cudahy Brothers Company. No. 122,446; Aug. 20; v. 253; p. 742.
Baking and cooking preparation to take the place of eggs. E. A. Staflin. No. 122,624; Aug. 27; v. 253; p. 950.
Bean-meal and cut-pod feed. J. F. Pearson. No. 122,525; Aug. 20; v. 253; p. 744.
Beer, Lager-. Jos. Schlitz Brewing Co. No. 122,537; Aug. 20; v. 253; p. 744.
Belting, Leather. The Ulmer Leather Co. No. 122,549; Aug. 20; v. 253; p. 745.
Beverage, Food. The Milkolate Company. No. 122,512; Aug. 20; v. 253; p. 744.
Beverage sold as a soft drink, Cereal. E. R. Maier. No. 122,602; Aug. 27; v. 253; p. 950.
Blouses and middy-suits for women and girls. Goldstein & Kres. No. 122,586; Aug. 27; v. 253; p. 949.
Books, booklets, circulars, &c., Printed. C. F. Haanel. No. 122,464; Aug. 20; v. 253; p. 742.
Boots and shoes, Leather. Knipe Bros. No. 122,592; Aug. 27; v. 253; p. 950.
Brushes, Shaving-. American Safety Razor Co. No. 122,565; Aug. 27; v. 253; p. 949.
Buildings, Sectional steel. Steel Fabricating Company. No. 122,542; Aug. 20; v. 253; p. 745.
Butter or margarin, Nut. E. A. Stevenson & Company. No. 122,544; Aug. 20; v. 253; p. 745.
Cabinets, Bath-. The Kwick-Bath Corporation. No. 122,503; Aug. 20; v. 253; p. 743.
Candles. S. Savarese. No. 122,534; Aug. 20; v. 253; p. 744.
Candy. Elmer Candy Co. No. 122,584; Aug. 27; v. 253; p. 949.
Candy. Peloso Bros. No. 122,526; Aug. 20; v. 253; p. 744.
Canned beef. Swift and Company. No. 122,622; Aug. 27; v. 253; p. 950.
Canned corn, peas, tomatoes, &c. The G. H. Hammond Company. No. 122,472; Aug. 20; v. 253; p. 742.
Canned peas. Big Four Canning Company. No. 122,423; Aug. 20; v. 253; p. 741.
Canned peas and canned corn. Inderrieden Canning Co. Nos. 122,589–90; Aug. 27; v. 253; p. 949.
Canned pineapples, apricots, plums, &c. The G. H. Hammond Company. No. 122,470; Aug. 20; v. 253; p. 742.
Canned ripe olives. American Olive Company. No. 122,564; Aug. 27; v. 253; p. 949.
Cement for leather goods and belting. The Ulmer Leather Co. No. 122,550; Aug. 20; v. 253; p. 745.
Cheese. The Monroe Cheese Co. No. 122,603; Aug. 27; v. 253; p. 950.
Cheese. The Portland Cheese Company. No. 122,610; Aug. 27; v. 253; p. 950.
Chemicals, medicines, and pharmaceutical preparations, Certain named. Dr. W. L. Hughes. No. 122,482; Aug. 20; v. 253; p. 743.
Cigarettes. V. J. Schulthels. No. 122,617; Aug. 27; v. 253; p. 950.
Cigars. C. Landau. No. 122,596; Aug. 27; v. 253; p. 950.
Cigars, cigarettes, and manufactured tobacco. Natrona Tobacco Co. No. 122,604; Aug. 27; v. 253; p. 950.
Cleaning-machines for water-mains and boiler-tubes. National Water Main Cleaning Co. No. 122,517; Aug. 20; v. 253; p. 744.
Cleanser, Tile and porcelain. The Grady Mfg. Co. No. 122,461; Aug. 20; v. 253; p. 742.
Clocks. The E. Ingraham Co. No. 122,483; Aug. 20; v. 253; p. 743.
Clocks and watches. Shapleigh Hardware Company. No. 122,538; Aug. 20; v. 253; p. 744.
Clocks and watches. Western Clock Co. No. 122,559; Aug. 20; v. 253; p. 745.
Clothing, Certain named. Baker, Murray & Imbrie. No. 122,566; Aug. 27; v. 253; p. 949.
Clothing, Certain named. S. Collat. No. 122,579; Aug. 27; v. 253; p. 949.
Clothing, Certain named. D. Nusbaum & Co. No. 122,607; Aug. 27; v. 253; p. 950.
Coal. Blue Diamond Coal Company. No. 122,428; Aug. 20; v. 253; p. 741.
Coffee-mills. Wrightsville Hardware Company. No. 122,562; Aug. 20; v. 253; p. 745.
Coffee-pots. National Aluminum Works. No. 122,516; Aug. 20; v. 253; p. 744.
Colors, Coal-tar. Society of Chemical Industry in Basle. No. 122,540; Aug. 20; v. 253; p. 745.
Corsets. Birdsey-Somers Company. No. 122,571; Aug. 27; v. 253; p. 949.
Corsets. The Kreeger Store. No. 122,594; Aug. 27; v. 253; p. 950.
Corsets. R. H. Macy & Co. No. 122,600; Aug. 27; v. 253; p. 950.
Corsets. Royal Worcester Corset Co. No. 122,616; Aug. 27; v. 253; p. 950.
Dolls. Kellow & Brown Novelty Company. No. 122,491; Aug. 20; v. 253; p. 743.
Dress-fasteners. I. Fleischer & Sons. No. 122,452; Aug. 20; v. 253; p. 742.
Drinks and syrups therefor, Soft. Ozone Spring Water & Beverage Co. No. 122,609; Aug. 27; v. 253; p. 950.
Electric wire. U. T. Hungerford Brass & Copper Co. No. 122,465; Aug. 20; v. 253; p. 742.
Electrical conduits, Closures for ends of. Walker Brothers & Haviland. No. 122,551; Aug. 20; v. 253; p. 745.
Feathers. Schadt & Mathewson. No. 122,535; Aug. 20; v. 253; p. 744.
Feed, Dairy. Chapin & Company. No. 122,436; Aug. 20; v. 253; p. 741.
Fence-posts, Steel. American Steel Products Co. No. 122,419; Aug. 20; v. 253; p. 741.
Flour, Self-rising wheat-. W. H. Mann. No. 122,601; Aug. 27; v. 253; p. 950.
Flour, Wheat-. Cohn Flour & Feed Co. No. 122,442; Aug. 20; v. 253; p. 742.
Flour, Wheat-. The Colorado Milling & Elevator Co. No. 122,443; Aug. 20; v. 253; p. 742.
Flour, Wheat-. J. F. Lennon. No. 122,506; Aug. 20; v. 253; p. 743.
Flour, Wheat-. The Red Star Milling Company. No. 122,612; Aug. 27; v. 253; p. 950.
Flour, Wheat and rye. The Hecker-Jones-Jewell Milling Company. No. 122,478; Aug. 20; v. 253; p. 742.
Flour, White corn-. American Hominy Company. No. 122,563; Aug. 27; v. 253; p. 949.
Food, popcorn, citron, &c., peels, Cereal breakfast. The Morey Mercantile Company. No. 122,514; Aug. 20; v. 253; p. 744.
Foods, Certain named. The Albert Dickinson Company. No. 122,447; Aug. 20; v. 253; p. 742.
Foods, Certain named. Biscaglia Bros. No. 122,424; Aug. 20; v. 253; p. 741.
Foods, Certain named. Fort Dodge Grocery Co. No. 122,456; Aug. 20; v. 253; p. 742.
Foods, Certain named. The Rowe-Fawcett Company. No. 122,532; Aug. 20; v. 253; p. 744.
Fuel similar to gasolene or kerosene, Hydrocarbon. F. C. Roegge. No. 122,615; Aug. 27; v. 253; p. 950.
Fur coats, caps, muffs, neck-pieces, gloves. Herman Basch & Co. No. 122,568; Aug. 27; v. 253; p. 949.
Games, Board. M. B. de Nazaris. No. 122,518; Aug. 20; v. 253; p. 744.

Gloves, Fabric. Elite Glove Co. No. 122,583; Aug. 27; v. 253; p. 949.
Goggles. Merry Optical Company. No. 122,522; Aug. 20; v. 253; p. 744.
Grape-juice. Renken & Yates Smith. No. 122,614; Aug. 27; v. 252; p. 950.
Grapes, Fresh. California Fruit Exchange. No. 122,433; Aug. 20; v. 253; p. 741.
Grease, Heavy lubricating. Oriental Oil Company. No. 122,520; Aug. 20; v. 253; p. 744.
Hardware and plumbing and steam-fitting supplies, Certain named. W. E. Williams. No. 122,560; Aug. 20; v. 253; p. 745.
Hats, Panama. R. Fujita. No. 122,585; Aug. 27; v. 253; p. 949.
Headlight-lenses. International Lens Company. No. 122,486; Aug. 20; v. 253; p. 743.
Headlight lenses, Motor-vehicle. G. A. Leeks. No. 122,507; Aug. 20; v. 253; p. 744.
Hides, raw furs, wool, crude rubber. Standard Hide & Fur Co. No. 122,541; Aug. 20; v. 253; p. 745.
Hooks for portières, draperies, &c. H. L. Sweney. No. 122,545; Aug. 20; v. 253; p. 745.
Hosiery. E. E. Hogue. No. 122,587; Aug. 27; v. 253; p. 949.
Hosiery, Ladies'. D. Whitehead K't'g Co. No. 122,581; Aug. 27; v. 253; p. 949.
Ice-cream. Chapin-Sacks Manufacturing Company. No. 122,577; Aug. 27; v. 253; p. 949.
Ice-cream. P. Nelson. No. 122,605; Aug. 27; v. 253; p. 950.
Insecticide. B. Heller & Company. No. 122,475; Aug. 20; v. 253; p. 743.
Insecticides, Agricultural. General Chemical Company. No. 122,457; Aug. 20; v. 253; p. 742.
Kid and fancy leathers, Glacéd. Coxe & Lloyd Leather Company. No. 122,445; Aug. 20; v. 253; p. 742.
Kilns for drying wood veneer and lumber, Dry-. E. Lambert. No. 122,505; Aug. 20; v. 253; p. 743.
Knickers. Hurwitch Brothers. No. 122,588; Aug. 27; v. 253; p. 949.
Lathes. M. D. Kopple. No. 122,502; Aug. 20; v. 253; p. 743.
Leather. Quaker City Supply Co. No. 122,530; Aug. 20; v. 253; p. 744.
Leather-board, Manufactured water-resisting. The Herkimer Fibre Company. No. 122,463; Aug. 20; v. 253; p. 742.
Leggings of cloth or leather. A. E. Little Company. No. 122,599; Aug. 27; v. 253; p. 950.
Liniments for inflammations due to colds, Medicinal. O. Hendricks. No. 122,476; Aug. 20; v. 253; p. 743.
Locks in connection with automobiles, Switch-. The Ram Engineering Company. No. 122,611; Aug. 27; v. 253; p. 950.
Loganberry and grape juice. Renken & Yates Smith. No. 122,613; Aug. 27; v. 253; p. 950.
Lotion for removing skin blemishes. B. L. Barber. No. 122,422; Aug. 20; v. 253; p. 741.
Magazine, Monthly. Independent Advertising Publ's. No. 122,484; Aug. 20; v. 253; p. 743.
Magazine, Monthly. Kellogg Switchboard & Supply Co. No. 122,490; Aug. 20; v. 253; p. 743.
Mattresses. Sealy Mattress Company. Nos. 122,618–20; Aug. 27; v. 253; p. 950.
Measuring and scientific appliances made of pyroxylin, Certain named. The Celluloid Company. No. 122,435; Aug. 20; v. 253; p. 741.
Medicinal preparation for certain named conditions. B. F. Michael. No. 122,511; Aug. 20; v. 253; p. 744.
Medicinal preparations for coughs and colds. G. W. Hean. No. 122,474; Aug. 20; v. 253; p. 742.
Medicine to be taken as a preparation for the treatment of certain named diseases. A. Brunson. No. 122,432; Aug. 20; v. 253; p. 741.
Metal-working machinery, Certain named. Amalgamated Machinery Corporation. No. 122,414; Aug. 20; v. 253; p. 741.
Musical instruments and supplies made of compounds of pyroxylin, Certain named. The Celluloid Company. No. 122,434; Aug. 20; v. 253; p. 741.
Newspapers. The Washington Times Company. No. 122,556; Aug. 20; v. 253; p. 745.
Oil in ranges, stoves, &c., Apparatus for vaporizing and burning. Amalgamated Oil Gas Corporation. No. 122,415; Aug. 20; v. 253; p. 741.
Oils, Lubricating. Bliven & Carrington. No. 122,427; Aug. 20; v. 253; p. 741.
Oiled textiles. B. M. Hovey. No. 122,480; Aug. 20; v. 253; p. 743.
Oleomargarin. Northern Cocoanut Butter Company. No. 122,606; Aug. 27; v. 253; p. 950.
Oleomargarin. Swift and Co. No. 122,623; Aug. 27; v. 253; p. 950.
Overalls and coats. Baltimore Bargain House. No. 122,567; Aug. 27; v. 253; p. 949.
Packing, Composition machinery. Ferguson & Timpson. No. 122,451; Aug. 20; v. 253; p. 742.
Paint, pigment, Zinc-oxid. The American Metal Company. No. 122,416; Aug. 20; v. 253; p. 741.
Paints. Atlantic Drier & Varnish Co. No. 122,421; Aug. 20; v. 253; p. 741.
Paints. The Globe Manufacturing Co. No. 122,460; Aug. 20; v. 253; p. 742.
Paper and stationery, Certain named. J. C. Blair Company. No. 122,425; Aug. 20; v. 253; p. 741.
Paper bags. J. W. Butler Paper Co. Nos. 122,572–4; Aug. 27; v. 253; p. 949.
Paper bags and boxes. Waltham Bag & Paper Company. No. 122,627; Aug. 27; v. 253; p. 951.
Paper, Coated book and magazine. West Virginia Pulp & Paper Co. No. 122,558; Aug. 20; v. 253; p. 745.
Paper, Writing, printing, and wrapping. M. E. Myers. No. 122,515; Aug. 20; v. 253; p. 744.
Pay-roll scheduling, money paying, registering, &c., machines. International Money Machine Co. No. 122,487; Aug. 20; v. 253; p. 743.
Perfumery. Lundborg Company. Nos. 122,508–10; Aug. 20; v. 253; p. 744.
Periodical, Monthly. International Textbook Company. No. 122,488; Aug. 20; v. 253; p. 743.
Periodical, Monthly. The Walker-Wadsworth Company. No. 122,552; Aug. 20; v. 253; p. 745.
Phenolic condensation product for certain named uses. Redmanol Chemical Products Co. No. 122,329; Aug. 20; v. 253; p. 744.
Phonographs. F. Cirelli. No. 122,441; Aug. 20; v. 253; p. 741.
Photographic portraits and pictures. The Eagle Photo Studio. No. 122,448; Aug. 20; v. 253; p. 742.
Picture films, Motion-. First National Exhibitors Circuit. No. 122,454; Aug. 20; v. 253; p. 742.
Picture films, Moving-. Goldwyn Pictures Corporation. No. 122,458; Aug. 20; v. 253; p. 742.
Powder for the relief of excessive perspiration. H. E. Erickson. No. 122,449; Aug. 20; v. 253; p. 742.
Preparation for removing dirt, grease, &c., from automobiles. Waclepo Mfg. Co. No. 122,554; Aug. 20; v. 253; p. 745.
Preparations for the treatment of pediculosis of the head or body. West Disinfecting Company. No. 122,557; Aug. 20; v. 253; p. 745.
Preserves, jams, relishes, pickles. M. B. Gosnell. No. 122,459; Aug. 20; v. 253; p. 742.
Prints and publications, Certain named. The Chesapeake & Potomac Telephone Company. No. 122,438; Aug. 20; v. 253; p. 741.
Prints and publications, Certain named. International Union of Mine, Mill and Smelter Workers. No. 122,489; Aug. 20; v. 253; p. 743.
Prints and publications, Certain named. M. E. Palmer. No. 122,521; Aug. 20; v. 253; p. 744.
Publication, Monthly. Foote Mineral Co. No. 122,455; Aug. 20; v. 253; p. 742.
Publication, Monthly. The Roycrofters. No. 122,533; Aug. 20; v. 253; p. 744.
Publication published monthly, Periodical. R. Fellom. No. 122,450; Aug. 20; v. 253; p. 742.
Publications, Weekly. W. P. Tanner-Gross & Company. No. 122,546; Aug. 20; v. 253; p. 745.
Pumps and windmills. Wistrand Manufacturing Co. No. 122,561; Aug. 20; v. 253; p. 745.
Rain-coats. Weber & Heilbroner. No. 122,628; Aug. 27; v. 253; p. 951.
Reamers, taps, dies, and hacksaws. L. C. Blancke Co. No. 122,426; Aug. 20; v. 253; p. 741.
Remedy for burns, a sedative and germicide. Otis Clapp & Son. No. 122,578; Aug. 27; v. 253; p. 949.
Rubber boots and shoes. L. Candee & Company. No. 122,575; Aug. 27; v. 253; p. 949.
Rubber shoes. Converse Rubber Shoe Company. No. 122,580; Aug. 27; v. 253; p. 949.
Rust removing and preventing compound. Chemical. Dearborn Chemical Company. No. 122,582; Aug. 27; v. 253; p. 949.
Salt. The Union Salt Company. No. 122,620; Aug. 27; v. 253; p. 950.
Seeds. F. S. Radway. No. 122,531; Aug. 20; v. 253; p. 744.
Shirt-waists, Ladies'. A. Letts. Nos. 122,597–8; Aug. 27; v. 253; p. 950.
Shirts. Beacon Shirt Co. No. 122,570; Aug. 27; v. 253; p. 949.
Shirts, undershirts, underdrawers, night-robes, Men's. Bates Street Shirt Company. No. 122,569; Aug. 27; v. 253; p. 949.
Shoe-polishers. Kwick-Work Fountain Brush Mfg. Co. No. 122,595; Aug. 27; v. 253; p. 950.
Skins, Tanned fish and mammal. The Ocean Leather Company. No. 122,519; Aug. 20; v. 253; p. 744.
Smokers' pouches. H. H. Scott. No. 122,539; Aug. 20; v. 253; p. 744.
Snap-fasteners. Samstag & Hilder Bros. No. 122,527; Aug. 20; v. 253; p. 744.
Snap-fasteners and placket-fasteners. Waldes & Company of New Jersey. No. 122,555; Aug. 20; v. 253; p. 745.
Soaps, Toilet. International Drug Company. No. 122,485; Aug. 20; v. 253; p. 743.
Stationery. Holmes Company. No. 122,479; Aug. 20; v. 253; p. 743.
Stove-polish, Liquid. Hewitt & Runnels. No. 122,478; Aug. 20; v. 253; p. 743.
Syrups for beverages, Prune-. G. J. Keratso. No. 122,492; Aug. 20; v. 253; p. 743.
Tea. Brewster, Gordon & Co. Nos. 122,430–1; Aug. 20; v. 253; p. 741.

Thread and yarn, Cotton. The American Thread Company. No. 122,417; Aug. 20; v. 253; p. 741.
Tire-patch. Hercules Manufacturing Company. No. 122,477; Aug. 20; v. 253; p. 743.
Tires and inner tubes, Rubber. The Combination Rubber Mfg. Co. No. 122,444; Aug. 20; v. 253; p. 742.
Tires and the like, Cold self-vulcanizing texture-back patch for. C. Peterson. No. 122,523; Aug. 20; v. 253; p. 744.
Tires, Elastic vehicle-. The American Rubber and Tire Company. No. 122,418; Aug. 20; v. 253; p. 741.
Tires, Rubber, &c. The F. E. Partridge Rubber Co. No. 122,524; Aug. 20; v. 253; p. 744.
Tobacco. Capeverdian Trading Co. No. 122,576; Aug. 27; v. 253; p. 949.
Tonic and medicine. Goldine Manufacturing Company. No. 122,462; Aug. 20; v. 253; p. 742.
Tonic for kidney trouble, Herb. C. Fleming. No. 122,453; Aug. 20; v. 253; p. 742.
Tonic for torpid liver and nerves. W. H. Johnson. No. 122,591; Aug. 27; v. 253; p. 949.
Toothpicks. Wausau Manufacturing Co. No. 122,553; Aug. 20; v. 253; p. 745.
Tractors, Internal-combustion engines, and their parts, Farm-. Chief Tractor M'f'g Co. No. 122,440; Aug. 20; v. 253; p. 741.
Tube-repair kits. The Miller Rubber Company. No. 122,513; Aug. 20; v. 253; p. 744.
Tubes and copper ferrules for same, Boiler-. Chicago Tube and Iron Company. No. 122,439; Aug. 20; v. 253; p. 741.
Vises. Bonney Vise & Tool Works. No. 122,429; Aug. 20; v. 253; p. 741.
Washing-powder and cleanser. J. D. La Croix. No. 122,504; Aug. 20; v. 253; p. 743.
Watches and watch-movements. The Hampden Watch Company. Nos. 122,466–9; Aug. 20; v. 253; p. 742.
Watches and watch-movements. The Hampden Watch Company. No. 122,471; Aug. 20; v. 253; p. 742.
Watches, watch cases and movements. Adolphe Schwob, Inc. No. 122,528; Aug. 20; v. 253; p. 744.
Watches, watchcases, and watch-movements. Adolphe Schwob, Inc. No. 122,536; Aug. 20; v. 253; p. 744.
Waterproof cement for leather goods, belting, &c. The Ulmer Leather Co. Nos. 122,547–8; Aug. 20; v. 253; p. 745.
Waterproofed pile fabrics and corduroys. Howlett & Hockmeyer. No. 122,481; Aug. 20; v. 253; p. 743.
Wires, wire fence, Barbed and fence. Keystone Steel & Wire Company. Nos. 122,493–501; Aug. 20; v. 253; p. 743.
Writing-machines, Stenographic. The Stenotype Company. No. 122,543; Aug. 20; v. 253; p. 745.
Yarn, machine-twist knitting, reeled, and sewing silks, Spun-silk. No. 122,437; Aug. 20; v. 253; p. 741.
Yarns, Cotton. The Argo Mills Co. No. 122,420; Aug. 20; v. 253; p. 741.

ALPHABETICAL LIST OF LABELS.

"Alfoina." (For an Antipyretic and Sedative Medicine.) Oriental Drug Co. No. 20,803; Aug. 13; v. 253; p. 511.
"Anti-Pneumonia." (For a Medicine.) F. W. Miller. No. 20,801; Aug. 13; v. 253; p. 511.
"Avalon." (For Canned Bonita.) South Coast Canning Co., No. 20,814; Aug. 13; v. 253; p. 511.
"Avalon." (For Canned Mackerel.) South Coast Canning Co. No. 20,815; Aug. 13; v. 253; p. 511.
"Avalon." (For Canned Yellowtail.) South Coast Canning Co. No. 20,817; Aug. 13; v. 253; p. 512.
"Berkshire Valley." (For Writing-Paper and Envelops.) The Taylor-Atkins Paper Company. No. 20,772; Aug. 6; v. 253; p. 257.
"Big 'K' Brand." (For Apples.) H. H. Davis. No. 20,781; Aug. 13; v. 253; p. 511.
"Blue Wing Brand Cherry Phosphate." (For a Soft Drink.) C. Anderson. No. 20,753; Aug. 6; v. 253; p. 257.
"Branola." (For Health Gems.) Tru Blu Biscuit Co. No. 20,774; Aug. 6; v. 253; p. 257.
"Bug-O-Loss." (For Insect-Poison.) Cole & Reed. No. 20,780; Aug. 13; v. 253; p. 511.
"Buttermilk." (For Toilet Creams.) Howard Bros. Chemical Co. No. 20,790; Aug. 13; v. 253; p. 511.
"Caldwell's 33 cents The World Round." (For Coffee.) H. L. Caldwell, Jr. No. 20,777; Aug. 13; v. 253; p. 511.
"Captain." (For Oranges.) Goldenwest Citrus Ass'n. No. 20,764; Aug. 6; v. 253; p. 257.
"Cinchonal." (For Antimalarial Pills.) Oriental Drug Co. No. 20,805; Aug. 13; v. 253; p. 511.
"Cleanem." (For Preparation for Cleaning Woodwork, Metal, and Glassware.) D. O. Chessmore & Company. No. 20,778; Aug. 13; v. 253; p. 511.
"Colonel." (For Oranges.) Goldenwest Citrus Ass'n. No. 20,765; Aug. 6; v. 253; p. 257.
"Corporal." (For Oranges.) Goldenwest Citrus Ass'n. No. 20,763; Aug. 6; v. 253; p. 257.
"Doctor Starr's Manhood, Liver and Kidney Pills." (For Pills.) F. M. Starr. No. 20,819; Aug. 13; v. 253; p. 512.
"Duffy's Bitter Gum." (For Chewing-Gum.) J. A. Duffy. No. 20,782; Aug. 13; v. 253; p. 511.
"Extra Fermentati Sigari Italiani." (For Cigars.) A. & S. Rauceci. No. 20,807; Aug. 13; v. 253; p. 511.
"Extra Kettle Rendered Lard, S. Birkenwald Co. Butcher Supplies, Portland, Oregon." (For Lard.) S. Birkenwald Co. No. 20,754; Aug. 6; v. 253; p. 257.
"Famous Bert Johnson Brand." (For Fresh Peaches.) T. H. Peppers. No. 20,770; Aug. 6; v. 253; p. 257.
"555." (For Snap-Fasteners.) A. H. Friedman. No. 20,761; Aug. 6; v. 253; p. 257.
"Ford's Auto Polish." (For Polish for Automobiles.) E. A. Ford. No. 20,785; Aug. 13; v. 253; p. 511.
"Fresh Roasted Peanuts." (For Roasted Peanuts.) F. D. Croce & Co. No. 20,759; Aug. 6; v. 253; p. 257.
"Fulton Pills." (For Cathartic Remedies.) Oriental Drug Co. No. 20,804; Aug. 13; v. 253; p. 511.
"Gale's Place-O-Egg." (For Baking and Cooking Compound.) Gale-Evans Company. No. 20,786; Aug. 13; v. 253; p. 511.
"Game of Skirmishers." (For a Game.) McLoughlin Brothers. No. 20,800; Aug. 13; v. 253; p. 511.
"General." (For Oranges.) Goldenwest Citrus Ass'n. No. 20,766; Aug. 6; v. 253; p. 257.
"Gibbs Aromatic Oil." (For Aromatic Oil.) J. Gibbs. No. 20,762; Aug. 6; v. 253; p. 257.
"Golf Club." (For Canned Sardines.) International Packing Corporation. No. 20,793; Aug. 13; v. 253; p. 511.
"Grand Prize Brand P. P. I. E. 1915." (For Fresh Mountain Bartlett Pears.) J. F. Siems. No. 20,813; Aug. 13; v. 253; p. 511.
"Guaranteed Clinton Bed Springs." (For Wire Bed-Springs.) Clinton Furniture Company. No. 20,779; Aug. 13; v. 253; p. 511.
"Jersey Creamery Creamery Butter." (For Creamery-Butter.) H. Graffenberg. No. 20,787; Aug. 13, v. 253; p. 511.
"Kettle Rendered, Our Own Make Pure Lard S. Birkenwald Co. Butcher Supplies Portland, Oregon." (For Lard.) No. 20,756; Aug. 6; v. 253; p. 257.
"Kettle Rendered Pure Lard Put up by S. Birkenwald Co. Butcher Supplies Portland, Oregon." (For Lard.) S. Birkenwald Co. No. 20,757; Aug. 6; v. 253; p. 257.
"Kettle Rendered Pure Lard S. Birkenwald Co. Butcher Supplies, Portland, Oregon." (For Lard.) S. Birkenwald Co. No. 20,755; Aug. 6; v. 253; p. 257.
"Kurrant." (For Raisins.) W. A. Higgins. No. 20,788; Aug. 13; v. 253; p. 511.
"La Meda Cold Creamed Powder." (For a Toilet Preparation.) A. M. Hull. Nos. 20,791–2; Aug. 13; v. 253; p. 511.
"Le Mietitrici." (For Macaroni.) Ronzoni Macaroni Co. No. 20,808; Aug. 13; v. 253; p. 511.
"Mikado." (For Tea.) The Keystone Co. No. 20,768; Aug. 6; v. 253; p. 257.
"Moorhead." (For Orange Marmalade.) E. S. Moorhead. No. 20,802; Aug. 13; v. 253; p. 511.
"Naval Maneuvers." (For a Game.) McLoughlin Brothers. No. 20,798; Aug. 13; v. 253; p. 511.
"Nilo-Lager." (For Beer.) A. Schreiber Brewing Co. No. 20,810; Aug. 13; v. 253; p. 511.
"Novelty Fashioned." (For Hosiery.) Juniata Hosiery Mills. No. 20,794; Aug. 13; v. 253; p. 511.
"Old Deerfield." (For Writing-Paper and Envelops.) The Taylor-Atkins Paper Company. No. 20,771; Aug. 6; v. 253; p. 257.
"Oxford." (For Oranges.) J. McInnes. No. 20,795; Aug. 13; v. 253; p. 511.
"Packard Bonny Brown." (For Shoe and Leather, Kid, Calf, and Cordovan Dressing.) Packard Dressing Co. No. 20,806; Aug. 13; v. 253; p. 511.
"Paramount." (For Canned Sardines.) South Coast Canning Co. No. 20,816; Aug. 13; v. 253; p. 512.
"Peerless." (For Orange-Juice.) Peerless Orange Juice Company. No. 20,769; Aug. 6; v. 253; p. 257.
"Personal Scale." (For Scales.) C. Elliott. No. 20,783; Aug. 13; v. 253; p. 511.
"Polka." (For Laundry Bluing.) G. W. Hodgkins. No. 20,789; Aug. 13; v. 253; p. 511.
"Puraqua Water." (For Distilled Water.) Fair City Bottling Works. No. 20,760; Aug. 6; v. 253; p. 257.
"Red Fox Brand." (For Oranges.) J. D. Spennetta. No. 20,818; Aug. 13; v. 253; p. 512.
"Regatta." (For Cigars.) J. J. Schaab. No. 20,809; Aug. 13; v. 253; p. 511.
"Rookies." (For Goober Kisses.) Frank E. Block Company. No. 20,758; Aug. 6; v. 253; p. 257.
"Sacred Heart of Jesus." (For Wax Tapers.) G. J. Bulsson. No. 20,776; Aug. 13; v. 253; p. 511.

"Schwarzenbach 'Brewing Co.' New National Brew." (For a Non-Intoxicating Beverage.) Schwarzenbach Brewing Co. No. 20,812; Aug. 13; v. 253; p. 511.

"Schwarzenbach New National Beverage." (For Non-Intoxicating Beverage.) Schwarzenbach Brewing Co. No. 20,811; Aug. 13; v. 253; p. 511.

"Star Game." (For a Game.) McLoughlin Brothers. No. 20,799; Aug. 13; v. 253; p. 511.

"Sunrise." (For Oranges.) J. McInnes. No. 20,796; Aug. 13; v. 253; p. 511.

"The Tri-Font." (For Nursing-Nipples.) Harris & Berntz Co. No. 20,767; Aug. 6; v. 253; p. 257.

"The Vogue Beach Attire." (For Beach Attire.) L. C. Asch. No. 20,821; Aug. 13; v. 253; p. 512.

"Thoro." (For a Powdered Skin-Cleanser.) The Thoro Corporation. No. 20,773; Aug. 6; v. 253; p. 257.

"Three Minute Noodles." (For Noodles.) Three Minute Noodle Co. No. 20,820; Aug. 13; v. 253; p. 512.

"Trench Proof." (For a Waterproofing Compound.) Erwva Chemical Manufacturing Company. No. 20,784; Aug. 13; v. 253; p. 511.

"Welch's Grapelade." (For Grapelade.) The Welch Grape Juice Co. No. 20,775; Aug. 6; v. 253; p. 257.

"Young Folks Standard Library." (For Books.) McLoughlin Brothers. No. 20,797; Aug. 13; v. 253; p. 511.

ALPHABETICAL LIST OF PRINTS.

"Gasoline Today." (For Gasolene and Electric Batteries.) National Carbon Company. No. 4,923; Aug. 6; v. 253; p. 257.

"In 1866 'The Boy Who Pegged Shoes' Decides To Go West." (For Shoes.) W. L. Douglas Shoe Co. No. 4,920; Aug. 6; v. 253; p. 257.

"Liberty Axles." (For Axles.) Ostenreider Advertising Corporation. No. 4,926; Aug. 13; v. 253; p. 512.

"Open your package this way." (For Cigarettes.) The American Tobacco Co. No. 4,924; Aug. 13; v. 253; p. 512.

"Our Cigars Always in the Lead 'The Leader.'" (For Cigars.) Kaufmann & Strauss Company. No. 4,925; Aug. 13; v. 253; p. 512.

"Trench Tubes." (For Trench-Tubes.) Davis & Geck. No. 4,919; Aug. 6; v. 253; p. 257.

"W. L. Douglas learned how to design, draft and fit shoes." (For Shoes.) W. L. Douglas Shoe Co. No. 4,921; Aug. 6; v. 253; p. 257.

"Yankee." (For Cream-Cheese.) L. Kadans. No. 4,922; Aug. 6; v. 253; p. 257.

CLASSIFICATION OF PATENTS

AUGUST, 1918.

NOTE.—First number—class, second number—subclass, third number—patent number.

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